NOTICE OF COUNCIL MEETING
PUBLIC COPY

The Meeting of City of Parramatta Council will be held in Cloister Function Rooms, St Patrick's Cathedral, 1 Marist Place Parramatta on Monday, 28 May 2018 at 6.30pm.

Sue Coleman
ACTING CHIEF EXECUTIVE OFFICER

Parramatta – Building Australia's Next Great City

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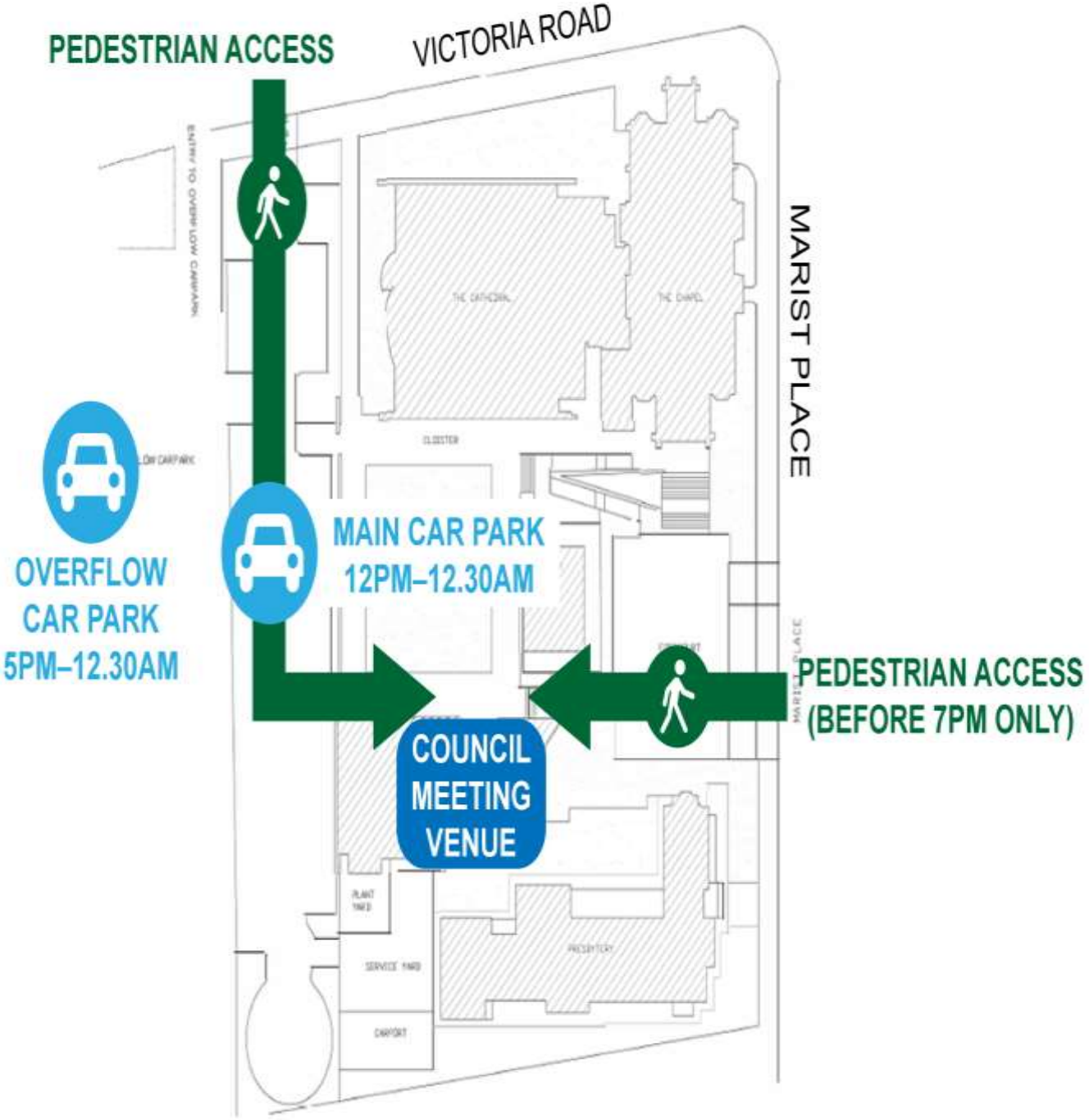
"Think Before You Print"


PEDESTRIAN ACCESS
VICTORIA ROAD
MARIST PLACE
OVERFLOW
CAR PARK
5PM–12.30AM
MAIN CAR PARK
12PM–12.30AM
PEDESTRIAN ACCESS
(BEFORE 7PM ONLY)
COUNCIL
MEETING
VENUE

Council Chambers

Chief Executive Officer	Lord Mayor Clr Andrew Wilson	Chief Operating Officer

Clr Phil Bradley	Clr Lorraine Wearne	Minute Clerk
Clr Sameer Pandey	Clr Bob Dwyer	Minute Clerk
Clr Paul Han	Clr Bill Tyrrell	
Clr Dr Patricia Prociv	Clr Andrew Jefferies	Sound
Clr Pierre Esber	Clr Benjamin Barrak	
Clr Donna Davis	Clr Martin Zaiter	
Clr Michelle Garrard, Deputy Lord Mayor	Clr Steven Issa	IT

Director City Services	Director Property and Significant Assets	Director Strategic Outcomes & Development	Director City Identity, Experience & Engagement	Chief Financial Officer

Press	Press

Public Gallery

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The City of Parramatta Council acknowledges the Burramattagal people of the Darug Nation as the traditional custodians of this land, and pays it respects to their ancient culture and their elders both past and present.

2 WEBCASTING ANNOUNCEMENT

This public meeting will be recorded and streamed live on the internet. The recording will be archived and available on Council's website.
All care is taken to maintain your privacy; however if you are in attendance in the public gallery, you should be aware that your presence may be recorded.

3 OTHER RECORDING OF MEETING

As per Council's Code of Meeting Practice, the recording of the Council Meeting by the public using any device, audio or video, is only permitted with Council permission. Recording a Council Meeting without permission may result in the individual being expelled from the Meeting.

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This report is confidential in accordance with section 10A (2) (c) (d) of the Local Government act 1993 as the report contains information that would, if disclosed, confer a commercial advantage on a person with whom the Council is conducting (or proposes to conduct) business; AND the report contains commercial information of a confidential nature that would, if disclosed (i) prejudice the commercial position of the person who supplied it; or (ii) confer a commercial advantage on a competitor of the Council; or (iii) reveal a trade secret.

15.2 189 Macquarie Street, Parramatta

This report is confidential in accordance with section 10A (2) (g) of the Local Government act 1993 as the report contains advice concerning litigation, or advice that would otherwise be privileged from production in legal proceedings on the ground of legal professional privilege.

15.3 Referral of Inspection Report by Fire and Rescue NSW

This report is confidential in accordance with section 10A (2) (a) of the Local Government act 1993 as the report contains personnel matters concerning particular individuals.

15.4 Property Matter - Legal Advice

This report is confidential in accordance with section 10A (2) (g) of the Local Government act 1993 as the report contains advice concerning litigation, or advice that would otherwise be privileged from production in legal proceedings on the ground of legal professional privilege.

15.5 Tender 17/2017 Interior Fit-out of Community Centre and Library, Wentworth Point

This report is confidential in accordance with section 10A (2) (d) of the Local Government act 1993 as the report contains commercial information of a confidential nature that would, if disclosed (i) prejudice the commercial position of the person who supplied it; or

(ii) confer a commercial advantage on a competitor of the Council; or (iii) reveal a trade secret.

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28 MAY 2018

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RESCISSION MOTION

ITEM NUMBER	10.1
SUBJECT	Identify opportunities for funding through the Open Spaces and Greener Sydney Package
REFERENCE	F2015/00964 - D06125612
REPORT OF	Councillor

To be Moved by Councillor Davis and seconded by Councillors Esber and Prociv.

RECOMMENDATION

That the resolution of the Council Meeting held on 14 May 2018 in relation to Item 15.4 Notice of Motion regarding 'Identify opportunities for funding through the Open Spaces and Greener Sydney package', namely:

> **That** the A/CEO prepare a report for the 12 June 2018 Council Meeting identifying prioritised opportunities in the City of Parramatta local government area for funding through the NSW Government's recently announced $290 million Open Spaces and Greener Sydney package. The report should consider the open space, playground, sportsground, and community space needs identified in Council's Draft Social Infrastructure Policy and other relevant research.

be and is hereby rescinded.

ATTACHMENTS:

1⇩ Notice of Motion submitted to Council on 14 May 2018 1 Page

NOTICE OF MOTION

ITEM NUMBER	15.4
SUBJECT	Identify opportunities for funding through the Open Spaces and Greener Sydney Package
REFERENCE	F2015/00964 - D06101001
REPORT OF	Councillor

To be Moved by Councillor Donna Davis

RECOMMENDATION

That the A/CEO prepare a report for the 12 June 2018 Council Meeting identifying prioritised opportunities in the City of Parramatta local government area for funding through the NSW Government's recently announced $290 million Open Spaces and Greener Sydney package. The report should consider the open space, playground, sportsground, and community space needs identified in Council's Draft Social Infrastructure Policy and other relevant research. The report should also consider the social infrastructure needs identified in the Epping Planning Review, and strategic land purchases in Epping suitable for open and green space.

BACKGROUND

The NSW Government recently announced a $290 million 'Open Spaces and Greener Sydney' package, consisting of:

- $100 million to identify and purchase strategic open and green space;
- $20 million to build more than 200 new or upgraded playgrounds;
- $37.5 million to plant five million new trees in Sydney; and
- $30 million to open up more than 80 school grounds for community use.

This report is for Council to receive a prioritised list of opportunities for potential funding from this package.

ATTACHMENTS:

There are no attachments for this report.

RESCISSION MOTION

ITEM NUMBER	10.2
SUBJECT	Outcome of Public Exhibition for the Planning Proposal, draft Development Control Plan and Draft Voluntary Planning Agreement for the land at 184 - 188 George Street, Parramatta
REFERENCE	RZ/7/2014 - D06125624
REPORT OF	Councillor

To be Moved by Councillor Garrard and seconded by Councillors Davis and Esber

RECOMMENDATION

That the resolution of the Council Meeting held on 14 May 2018 in relation to Item 10.1 Rescission Motion 'Outcome of Public Exhibition for the Planning Proposal, draft Development Control Plan and Draft Voluntary Planning Agreement for the land at 184 - 188 George Street, Parramatta'

(a) **That**, given that the site is located immediately next to Harrisford House and is river fronting, Council not proceed with the Planning Proposal in its current form and instead amend the Planning Proposal and defer the matter to allow for a further report dealing with the issues as detailed below:

i. Revising the planning proposal such that a maximum of up to 6:1 FSR is achieved;

ii. There must be a clearly delineated podium and its height shall not exceed the eave height of Harrisford House;

iii. For the purposes of the George Street frontage only:

1. Any podium and tower element must be set back along the George Street frontage as depicted at figure 2 of the Councillor Briefing Note dated 11 May 2018 - that is, increase the splayed set back 2.5 metres to increase views from George Street to Harrisford House; and

2. Increase the tower setback a minimum of a further 3 metres from the podium edge (9 metres from the boundary) along the Western edge;

iv. There shall be a minimum and continuous set back of 6 metres from the western boundary of this property adjoining the boundary of the land upon which Harrisford House is situated, and this should be dedicated to Council as a public access link to the riverfront;

v. Feedback from the proponent on what they would be willing to include in their VPA under this alternate development scenario;

vi. Public and departmental consultation relating to the above changes, including from the Heritage Council of NSW.

(b) **That**, if the above planning controls and public link dedication to Council cannot be achieved, that Council maintain the current planning controls for the site.

ATTACHMENTS:

1⇩	Rescission Motion submitted to Council Meeting on 14 May 2018 - Item 10.1	106 Pages

RESCISSION MOTION

ITEM NUMBER	10.1
SUBJECT	Outcome of Public Exhibition for the Planning Proposal, draft Development Control Plan and Draft Voluntary Planning Agreement for the land at 184-188 George Street, Parramatta
REFERENCE	RZ/7/2014 - D06092677
REPORT OF	Councillor

To be Moved by Councillor Michelle Garrard and Seconded by Councillors Esber and Han.

RECOMMENDATION

That the resolution of the Council Meeting held on 23 April 2018 in relation to Item 13.1 of Leading regarding Outcome of Public Exhibition for the Planning Proposal, draft Development Control Plan and Draft Voluntary Planning Agreement for the land at 184-188 George Street, Parramatta, namely:

(a) ***That,*** *given that the site is located immediately next to Harrisford House and is river fronting, Council not proceed with the Planning Proposal in its current form and instead amend the Planning Proposal and defer the matter to allow for a further report dealing with the issues as detailed below: -*

- *i. Revising the Planning Proposal such that a maximum of up to 6:1 FSR is achieved.*
- *ii. There must be a clearly delineated podium and its height shall not exceed the eave height of Harrisford House.*
- *iii. Any podium and tower element must be set back from George Street such that the entire eastern side of Harrisford House is exposed and visible from the proposed public access (see paragraph iv below) and the eastern part of George Street looking west.*
- *iv. There shall be a minimum and continuous set back of 6 metres from the western boundary of this property adjoining the boundary of the land upon which Harrisford House is situated, and this should be dedicated to Council as a public access link to the Riverfront.*
- *v. Feedback from the proponent on what they would be willing to include in their VPA under this alternative development scenario.*
- *vi. Public and departmental consultation relating to the above changes, including from Heritage Council of NSW.*

(b) ***Further, that*** *if the above planning controls and public link dedicated to Council cannot be achieved, that Council maintain the current planning controls for this site.*

be and is hereby rescinded.

ATTACHMENTS:

1 Previous Council Report from 23 April 2018 102 Pages
2 Correspondence recieved from the applicant 3 Pages

LEADING

ITEM NUMBER	13.1
SUBJECT	Outcome of Public Exhibition for the Planning Proposal, draft Development Control Plan and Draft Voluntary Planning Agreement for the land at 184-188 George Street, Parramatta
REFERENCE	RZ/7/2014 - D06071411
REPORT OF	Senior Project Officer - Land Use
APPLICANT	Mr R Touma
LAND OWNER	Riverport Parramatta Pty Ltd

Note: This report was deferred from the 9 April 2018 Council Meeting

PURPOSE:
To report to the Council the outcome of the public exhibition of a planning proposal to amend Parramatta Local Environmental Plan 2011, draft Development Control Plan (DCP) and Voluntary Planning Agreement (VPA) as it applies to land at 184-188 George Street, Parramatta. The planning proposal seeks to increase the maximum building height from 36 metres (11 storeys) to 120 metres (38 storeys) and increase the maximum floor space ratio from 4:1 to 10:1 (11.5: 1 including design excellence).

RECOMMENDATION

(a) **That** Council receives and notes the submissions (contained at **Attachment 1**) made during the public exhibition of the planning proposal, draft development control plan (DCP) and draft voluntary planning agreement (VPA) for 184-188 George Street, Parramatta.

(b) **That,** Council endorse the planning proposal at **Attachment 2** with an amendment of a site specific clause setting maximum car parking rates in line with the Council endorsed Parramatta CBD Strategic Transport Study;

(c) **That**, Council endorse the draft DCP, with amendments relating to the setback to and treatment of the boundary to Harrisford House and clarification of access between any proposed development and the river foreshore as described in paragraphs 56 to 58 of this report, and draft VPA contained at **Attachments 3** and **4**;

(d) **That**, Council advise the Department of Planning and Environment (DPE) that it will not be exercising its plan making delegations due to the issues raised by government agencies.

(e) **That,** Council forward the planning proposal to the DPE for finalisation.

(f) **That,** upon sending the planning proposal to the DPE, a request be made that the Department proceed with processing the planning proposal, but that the final notification in the Government Gazette (which will legally bring the LEP changes into force) only be undertaken once Council confirms that the draft DCP and VPA have been finalised.

(g) **Further, that** Council authorise the Chief Executive Officer (CEO) to make any minor amendments and corrections of a non-policy and administrative

nature that may arise during the plan amendment process, relating to the Planning Proposal, DCP and VPA.

THE SITE

1. The site is in the north-east of the Parramatta CBD at 184-188 George Street, Parramatta (refer **Figure 1**). It comprises three allotments of land, being Lot 11 DP 1115358, Lot 30 DP 1115365 and Lot 20 DP 1115360 and has a total area of 2,183m^2.

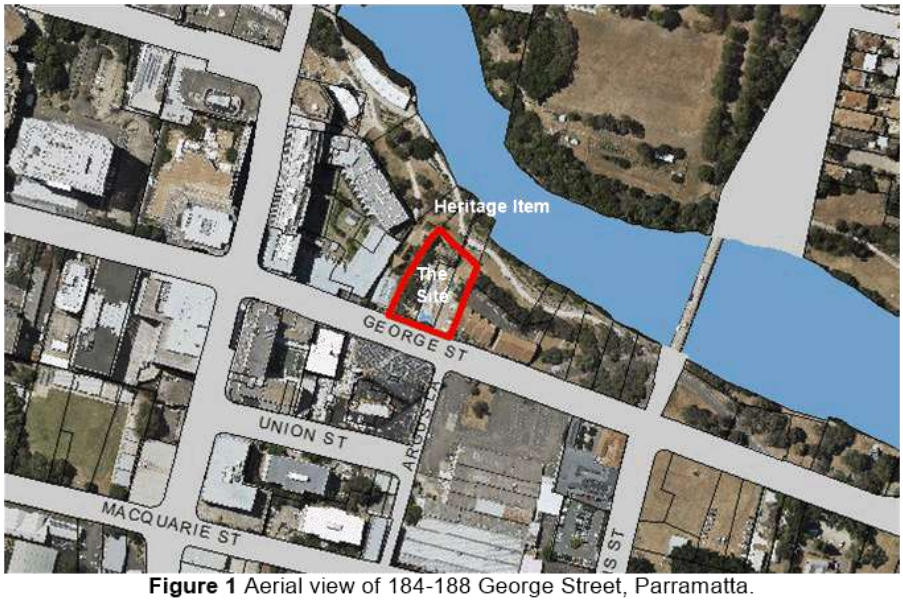

Figure 1 Aerial view of 184-188 George Street, Parramatta.

2. The site is located mid-block between George Street and the Parramatta River foreshore and is surrounded by a mix of buildings of varying heights and architectural styles. The site is within 150m of the Parramatta Ferry Wharf and 500m of Parramatta Railway Station. Robin Thomas and James Ruse Reserves are also located in proximity to the site.
3. Further west at 180 George Street is an 8,000m^2 development site, the subject of a recent planning proposal to accommodate a 63 storey mixed use development with an FSR of 10:1 and other changes relating to the use of the site for retail and serviced apartments. This planning proposal was endorsed by Council on 11 April 2016, endorsed by the Independent Hearing and Assessment Panel on 18 July 2017 and considered by Council at its meeting on 9 October and 11 December 2017. It is currently with the DPE for finalisation.

CURRENT PLANNING CONTROLS

4. Under PLEP 2011, the site is zoned B4 Mixed Use, has a maximum height of 36 metres (approximately 11 storeys) and a maximum floor space ratio (FSR) of 4:1. The site is subject to the design excellence provisions within PLEP 2011. Under the design excellence provisions, the site has a current potential maximum height of 41.4 m (12-13 storeys) and FSR of 4.6:1.
5. The site is not heritage listed or within a heritage conservation area.

6. The site is adjacent to two heritage items. To the west at 182 George Street is 'Harrisford House' – a 2 storey Old Colonial Georgian brick dwelling listed on the State Heritage Register (SHR no. 00248). 'Harrisford' is one of the oldest houses remaining in the Parramatta CBD, representing the early years of settlement. It is also listed as 'Harrisford (and potential archaeological site)' within Schedule 5 – Environmental Heritage of Parramatta Local Environmental Plan 2011 (PLEP 2011) (I00248). To the north is the Parramatta River 'Wetlands', a local heritage item listed within Schedule 5 of PLEP 2011 (I735).
7. The site also has high archaeological potential and high Aboriginal sensitivity.

BACKGROUND

8. On 5 September 2014, Council received a Planning Proposal from Planning Ingenuity Pty Ltd and accompanying documentation on behalf of the landowner, Riverport Parramatta Pty Ltd.
9. The planning proposal seeks the following amendments to PLEP 2011:
   - Increase the maximum building height from 36 metres (11 storeys) to 120 metres (38 storeys); and
   - Increase the maximum floor space ratio from 4:1 to 10:1.
   - In accordance with the design excellence provisions contained with PLEP 2011, the site has a potential maximum height of 138 m (43 storeys) and FSR of 11.5:1.
10. Council at its meeting of 9 February 2015 considered a report on a Planning Proposal for the site seeking to increase height and density from 4:1 and 36m to 10:1 and 120m. At this meeting Council resolved the following:

    (a) ***That*** *Council endorses the Planning Proposal at Attachment 2 to increase the building height to 120 metres and floor space ratio to 10:1 at 184-188 George Street, Parramatta and forward it to the Department of Planning and Environment for Gateway determination.*

    (b) ***That*** *Council grant delegated authority to the CEO to make any minor amendments and corrections of an administrative and non-policy nature that may arise during the plan making process.*

    (c) ***That*** *a site specific DCP be reported to Council prior to formal exhibition of the Planning Proposal.*

    (d) ***That*** *Council proceed with negotiations for a Voluntary Planning Agreement (VPA) with the landowner in relation to the Planning Proposal on the basis that any contribution in a VPA would be in addition to Section 94A contributions payable for the development.*

    (e) ***Further, that*** *delegated authority be given to the CEO to negotiate the VPA on behalf of Council and that the outcome of the negotiations be reported back to Council.*

11. A Gateway Determination was received on 12 June 2015 endorsing the Planning Proposal for public exhibition subject to a number of conditions. Amendments were made to the planning proposal prior to the commencement of the public exhibition. A copy of the exhibited planning proposal is provided at **Attachment 2**.

12. The applicant also lodged a site specific DCP in October 2015. The draft DCP would form an amendment to Parramatta Development Control Plan 2011.

13. A draft VPA offer was made by the applicant in October 2015 with a revised offer being provided in March 2016.

14. Council on 29 March 2016 considered a report seeking endorsement to publicly exhibit the planning proposal and draft DCP for the site and for the CEO to continue to negotiate the draft VPA. At this meeting Council resolved the following:

    (a) ***That*** *Council note the amendments required to the Planning Proposal for the subject site (that Council endorsed for exhibition on 9 February 2015) required by the Gateway Determination and Council endorse the amended Planning Proposal for public exhibition.*

    (b) ***That*** *Council endorse the draft site-specific Development Control Plan (DCP) provided at Attachment 1 for public exhibition purposes.*

    (c) ***That*** *Council endorse in principle the draft Voluntary Planning Agreement offers dated 9 and 15 March 2016, subject to:*

    - *further negotiations being held with the applicant to the CEO's satisfaction, that the value of the draft VPA offer at minimum equals or exceeds Council's position (to be resolved at a future Council Meeting) on the CBD value sharing mechanism.*
    - *Should the CEO not be satisfied that the current VPA offer is consistent with Council's resolved CBD Value Sharing mechanism, that the CEO be delegated authority to negotiate how the VPA offer might be amended to ensure it is consistent, with Council's preferred alternative, in this case to be an increase in the value of the proposed monetary contribution.*

    (d) ***That*** *a draft planning agreement be prepared for public exhibition purposes at the conclusion of the negotiations referred to in (c) above to implement the VPA offer and that the CEO be given delegation to authorise the draft Planning Agreement documentation for public exhibition on behalf of Council.*

    (e) ***That*** *the amended Planning Proposal, draft site-specific Development Control Plan (DCP) and draft VPA be placed on public exhibition concurrently for a minimum period of 28 days.*

    (f) ***That*** *a report be prepared to Council on the outcome of the public exhibition period prior to the finalisation of the Planning Proposal, Development Control Plan and VPA.*

    (g) ***Further, that*** *Council authorise the CEO to correct any minor anomalies of a non-policy and administrative nature relating to the Planning Proposal, Draft DCP and VPA documentation that may arise during the plan amendment process.*

15. As per Council's resolution dated 29 March 2016, negotiations continued for the VPA to ensure the offer reflected an appropriate value in relation to Council's value sharing mechanism, which was subject to a separate reporting and assessment process across 2016.

16. The final VPA offer and staff's assessment was reported to Council on 14 November 2016 (**Attachment 4**), where the following was resolved:

(a) ***That*** *Council endorse, in principle, the draft Voluntary Planning Agreement (VPA) offer dated 12 October 2016 to provide a $1 million cash contribution and a 3m wide through-site-link via an easement, in lieu of two VPA offers previously considered by Council at its meeting of 29 March 2016, in relation to 184-188 George Street, Parramatta.*

(b) ***That*** *any VPA be in addition to Section 94A development contributions payable in conjunction with the future development of the site.*

(c) ***That*** *Council note its preference for the monetary contribution to be paid prior to the issue of the first construction certificate relating to the development of the land; and that the through site link easement for access be provided (as practicable) prior to the issue of the first occupation certificate relating to the development of the land.*

(d) ***That*** *if necessary, an easement for support also be provided in conjunction with the easement for access.*

(e) ***That*** *Council authorise the Interim General Manager to prepare a draft VPA and Explanatory Note, in line with the letter of offer dated 12 October 2016, and recommendations (b), (c), and (d) above for public exhibition purposes.*

(f) ***That*** *the draft VPA and associated documentation be placed on public exhibition for a minimum period of 28 days.*

(g) ***That*** *the outcomes of the public exhibition be reported back to Council.*

(h) ***That*** *Council authorise the Interim General Manager to correct any minor anomalies of a non-policy and administrative nature that may arise during planning agreement process.*

(i) ***Further, that*** *should Council not support the VPA offer dated 12 October 2016, that the Planning Proposal and draft Development Control Plan relating to land at 184-188 George Street, Parramatta be publicly exhibited separately to the draft VPA.*

17. As endorsed by Council on 29 March 2016 and 14 November 2016, the planning proposal, draft DCP, and draft VPA were concurrently exhibited from 5 April 2017 to 10 May 2017.

DRAFT DEVELOPMENT CONTROL PLAN

18. The draft DCP, as exhibited, sets out the desired future character for the site, specific objectives as well as controls to address a number of urban design elements, including:

    a) Public domain, including the provision of a publicly accessible pedestrian link connecting George Street to the Parramatta River foreshore, treatment of the public forecourt to George Street and continuous active frontages;

    b) Heritage, including requirements for a 3m ground floor setback between the subject property boundary and Harrisford House (refer **Figure 2**), facade treatments and exterior finishes and for the requirements of the OEH to be addressed with respect to both Aboriginal and Archaeological heritage significance of the site;

    c) Building form, including building and tower setback controls, floor plate and overshadowing to Robin Thomas and James Ruse Reserves; and

    d) Controls also are included relating to flooding and stormwater management and vehicular access.

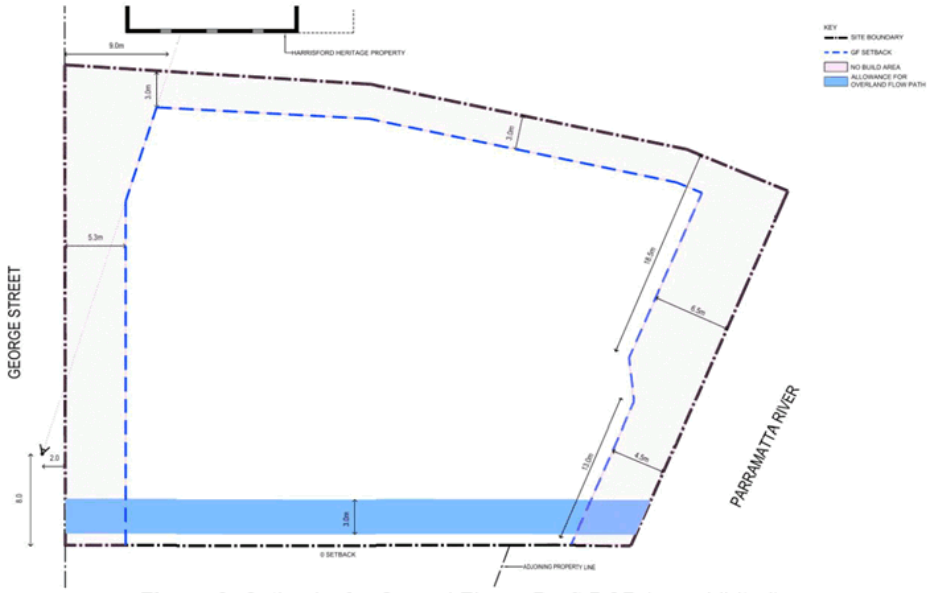

Figure 2: Setbacks for Ground Floor - Draft DCP (as exhibited)

DRAFT VOLUNTARY PLANNING AGREEMENT

19. The draft VPA for the site proposes to provide a minimum 3-metre-wide publicly accessible through-site link along the site's western boundary, adjacent to 'Harrisford House'. The draft VPA also includes a $1 million monetary contribution for public domain upgrades along the Parramatta River foreshore as identified in the Parramatta City River Strategy. A copy of the draft VPA and explanatory note (as exhibited) is included at **Attachment 4**.

20. The final VPA offer and staff's assessment was reported to Council on 14 November 2016. The Council report acknowledged that a position on value sharing as part of the Parramatta CBD Planning Proposal had not yet been resolved by Council. Therefore, for this site specific planning agreement it was resolved to base the VPA calculations on taking 20% from the agreed site specific land uplift value of $6m, as determined by both Council's Valuer as well as by a valuation by the applicant's valuer. The final cash contribution of $1m was therefore $1.2m minus the approximate value of the life of maintenance of the 3m through-site link, being $200,000.

21. Council has since adopted both the value sharing mechanism in the Parramatta CBD Planning Proposal on 10 April 2017 and the Draft Planning Agreement Policy (draft Policy) on 13 June 2017. Consistent with both the draft Policy and Parramatta CBD Planning Proposal 'Phase 1 value sharing', the agreed rate today would be $150 a square metre [$150 x site area (2,183sqm)] x 6 (to account for an uplift of 6:1. Based on the calculation this would result in $1,964,700 (or $1,764,700 and the maintenance of 3m through site link).

22. Council Officers do not recommend revisiting the negotiations of the draft VPA, considering that the VPA has been negotiated and been publicly exhibited. However, it is recognised that Council does have the option to seek a renegotiation if it wished to do so.

OUTCOME OF PUBLIC EXHIBITION AND ASSESSMENT OF ISSUES

23. Eleven (11) submissions were received from government agencies and two (2) submissions were received from members of the general public. A summary of key submissions and Council Officers' responses is provided below. **Attachment 1** provides a more comprehensive summary of, and response to, each submission.

State Agencies

Office of Environment and Heritage (OEH) - Heritage

24. While the OEH support a site specific DCP to be written to guide future development on the site in relation to 'Harrisford House', the agency does not support the conclusions of the Heritage Impact Statement provided with the application. Specifically, the OEH consider that the planning proposal permits development that is inconsistent with the scale of 'Harrisford House'.

25. Further, the OEH suggest that additional work should be undertaken in relation to historical archaeological relics, and that previous OEH comments provided in relation to the CBD planning proposal should be reviewed as part of this assessment.

26. The OEH support the draft VPA.

Council Officer response

27. Whilst it is acknowledged that there will be some impact on Harrisford House, such impact is not of such significance to warrant refusal of the planning proposal, particularly given the scale of existing and future adjoining development, and the proposed setbacks. Existing and proposed planning controls are appropriate for the protection and retention of the existing heritage item adjoining the site. The planning proposal is also consistent with the findings of the heritage study prepared as part of the Parramatta CBD Planning Proposal, namely the Heritage Study prepared by Urbis.

28. Proposed amendments to the DCP have been made in order to address the proposed development's relationship to Harrisford House. It is proposed that the western side setback be formalised at a minimum of 6 metres at the interface with 'Harrisford House'. To the north of Harrisford House, this setback will then gradually reduce to a minimum of 3 metres, following the irregular shape of the subject site. The 6 metres to Harrisford House is consistent with the site specific DCP which was recently endorsed by Council for development located at 180 George St, adjacent to 'Harrisford House' to the west. The controls include a "minimum 6 metre setback to the site's boundary with Harrisford House" which "will be occupied by a through-site link between George Street and the river foreshore reserve".

29. It is noted that all appropriate approvals will need to be sought from NSW Office of Environment and Heritage as the consent authority in matters of both disturbances of grounds and protection of Aboriginal heritage, prior to any physical works on the site, and that a Statement of Heritage Impact will need to be prepared in support of any future development application for the site.

30. Council officers note the existing previous approval (DA/769/2011) and requirement under S140 of the Heritage Act 977 to complete testings, and will formally write to the applicant to this effect.

31. Council officers consider that concerns expressed in relation to the Parramatta CBD Planning Proposal are beyond the scope of this planning proposal and should be considered as part of the CBD Planning Proposal.

Office of Environment and Heritage (OEH) - Planning

32. The OEH provided comments in relation to floodplain risk management and mitigation measures to be implemented. The OEH flagged that additional approvals may be required if the level of ground disturbance for the future reference scheme is more extensive than the level envisaged and approved under DA/769/2011.

Council Officers' response

33. The matters identified by OEH in relation to flood mitigation measures, should be considered and resolved at the detailed development application stage. Floodplain risk management is further discussed below (State Emergency Service comments).

Transport for NSW (TfNSW) including Roads and Maritime Services

34. TfNSW suggested that a site specific car parking rate should be implemented as per Part 7, Division 1 of the Sydney Local Environment Plan 2012.

35. The proposed pedestrian link should be increased from 3m to 6m to better support connectivity. A suggestion was also made in relation to pedestrian controls (signalised intersection).

36. In relation to the VPA, TfNSW considers that the offer should include additional contributions given the proposed increase in floor areas, should the State Infrastructure Contributions (SIC) Plan not be determined prior to gazettal of the planning proposal.

Council Officers' response

37. Council's position in relation to car parking rates was resolved as follows on 10 April 2017.

    (a) ***That*** *Council endorses the attached Parramatta CBD Strategic Transport Study and accompanying Technical Papers for the purposes of forwarding to the Department of Planning and Environment as part of the Parramatta CBD Planning Proposal.*

    (b) ***That*** *Council endorses the action recommended by the Parramatta CBD Strategic Transport Study to reduce maximum car parking rates to levels currently used by City of Sydney CBD and that the Parramatta CBD Planning Proposal be amended to reflect this prior to public exhibition.*

    (c) ***That*** *Council applies the recommended parking rates proposed in this report to existing site-specific Planning Proposals and Design Competitions within the Parramatta CBD as a provision applicable to each proposal or competition to ensure future development will be consistent with the strategic direction to reduce maximum car parking rates. (N.B. Only those site-specific planning proposals which are imminent to finalisation (gazettal), that is they have been endorsed by the Council to proceed to finalisation following public exhibition, will be exempt from this provision).*

38. Therefore the Council resolution of 10 April 2017 allows for a site specific clause to be included, providing for maximum car parking rates in line with the Parramatta CBD Strategic Transport Study. This is detailed in the Section below relating to the amendments to the Planning Proposal and DCP.

39. The width of the setback is proposed to be increased to a minimum of 6m at the interface with Harrisford House, tapering down to a minimum of 3m to the north of the Harrisford House building. Other pedestrian controls discussed by TfNSW can be addressed at the development application stage.

40. Council officers consider that it is inappropriate to expand the draft VPA to make provision for a SIC. It is considered inappropriate for two reasons:

    - The approach suggested by the Transport Agency singles out this one site and seeks to apply future (yet to be released) SIC requirement on this site via a VPA mechanism. This approach that would apply a future SIC requirement ahead of its release has not been requested for other sites and Council officers are concerned about the equity of this approach.

    - Council seeks to negotiate any VPA to deal with local infrastructure. If State Government infrastructure is required, the agreed practice is that the developer negotiates a separate VPA with the DPE for State infrastructure. Given that the SIC relates to State infrastructure, the DPE as part of its consideration of this matter will need to determine whether it wishes to further negotiate with the developer. The DPE could pursue a VPA or a satisfactory arrangement clause in the LEP amendment to address this issue. It is not a matter that Council can appropriately deal with via a VPA for local infrastructure.

Department of Primary Industries (DPI) – Water

41. DPI has requested that compliance with their *Water Guidelines for Controlled Activities on Waterfront Land (2012)* be included in the DCP which provides that the riparian area (20-metre-wide measured from the Parramatta River Mean High Water Mark) should be fully protected and vegetated with native endemic riparian plant species.

42. DPI raises an issue with any proposed future development of the site requiring basement car parking and the potential for induced take from the river and groundwater, therefore licences pertaining to a surface water and temporary construction dewatering activities may be required. In addition, any future development should include an assessment under the Aquifer Interference Policy.

Council Officers' response

43. The subject site boundary is approximately 30 metres from the edge of the Parramatta River Foreshore.

44. The Parramatta River City Strategy is Council's plan for revitalising the foreshore of the Parramatta River between Gasworks Bridge and Rings Bridge, O'Connell Street. It aims to improve connections between the river and the city and create more recreational opportunities for city residents, workers and visitors, including walking, cycling and for hosting major city events. A key objective of the Parramatta River City Strategy is to improve Parramatta River's water quality and natural environment, including the revegetation of some areas.

45. Given the important role that the River Foreshore will play as a critical open space for existing and future residents, visitors, not considered reasonable to for Council to reference DPI's *Water Guidelines for Controlled Activities on Waterfront Land* (2012). However, as Council progresses detailed design projects to deliver the Strategy's vision, treating the riparian area and planting will be key considerations.

46. In relation to licences in relation to ground water and assessment of aquifer interference, Council staff consider this would be raised as an issue as part of any current (or future) development applications allowable under the existing PLEP 2011 and not related to the subject proposal.

State Emergency Service (SES)

47. SES disagree with the proposed 'shelter in place' strategy, proposed for events greater than the 100-year flood event.

Council Officers' response

48. It is acknowledged that the SES does not support a shelter in place strategy for development within the Parramatta CBD, however as part of the Parramatta CBD Planning Proposal, Council has progressed work which supports a shelter in place strategy.

49. An independent assessment report was commissioned by Council in 2016 namely the draft Update of Parramatta Floodplain Risk Management Plans prepared by consultants Molino Stewart. One of the key findings of the report is that there is not sufficient advance warning of a major flood to evacuate large parts of the CBD, therefore potentially leaving many people trapped in the CBD until the flood waters subside. The recommendation of the report is that, for those areas that cannot be evacuated in time, that "shelter in place" (otherwise known as vertical evacuation) or, alternatively, "flood free evacuation routes" (otherwise known as high level horizontal evacuation) be provided.

50. Council resolved in April 2016 to prepare an Exceptional Circumstances application in support of advancing the flood controls in the Parramatta CBD PP. Council officers completed this application and relevant supporting studies, and the outcomes of this work was forwarded to OEH and DPE in November 2017.

51. Therefore, Council officers consider that the issues raised by the SES be considered by DPE and OEH as part of Council's Gateway Determination request for the Parramatta CBD PP.

Community Submissions

52. Two submissions were submitted by community members, objecting to the planning proposal, on the grounds that the proposal is inconsistent with the Charles Street Square Strategy and height that is inconsistent with and will create overshadowing of 'Harrisford House', thereby minimising its heritage value. Furthermore, the proposal will overshadow the property to the south (109-113 George Street) where solar panels have been established on the roof.

Council Officers' response

53. The planning proposal provides a connection to the foreshore in the form of a ground floor setback. This approach is consistent with both the Charles Street Square Strategy and the Parramatta City River Strategy. Amendments to the DCP are proposed in order to ensure a contiguous connection to the foreshore and proposed terrace and promote riverside activation. The associated draft VPA includes contributions for upgrades of the foreshore, including improved pedestrian access and creation of new connections to the foreshore, which are also identified in the strategy.

54. In relation to overshadowing of Harrisford House, a Solar Access Modelling report was submitted as part of the Planning Proposal. As Harrisford House lies directly to the west of the subject site, the proposal maintains solar access during mid-winter to the house. However, it is acknowledged that during summer that the proposal will overshadow Harrisford House fully between the hours of 9am and

10am and partially at 11am. Overshadowing of Harrisford House does occur as a result of 180 George Street, however the Urbis Heritage Study suggested that an FSR of 10:1 could be considered on the adjoining sites and acknowledged some level of overshadowing of Harrisford House.

55. In relation to the subject proposal overshadowing solar access to solar panels on the roof top of 109-113 George Street, Council staff calculated the potential solar access impacts. The subject site at 184 George Street, during mid-winter (21st June) between the hours of 10am and 12pm either partially or fully overshadows the roof top of 109 George Street. However, the proposal at 180 George Street (a Planning Proposal subject to finalisation) at mid-winter partially overshadows at 10am, then fully overshadows from 11am to 3pm. At mid-summer there is no overshadowing from either proposal at 180 and 184 George Street.

56. Council staff acknowledge that the efficiency of the solar panels at 109 George Street will be compromised through parts of the year due to both the subject site and 180 George Street. However, the proposed height and FSRs proposed under the Parramatta CBD Planning Proposal and the delivery of tall slender towers, it is unachievable to maintain solar access to roof tops to shorter buildings which were approved under the existing planning controls.

PROPOSED AMENDMENT TO THE PLANNING PROPOSAL

57. The proposed amendment to the Planning Proposal, as a result of submissions, relates to the insertion of a site specific clause relating to maximum car parking rates to the site consistent with the endorsed Parramatta CBD Strategic Transport Study at the following rates:

Residential development

Type of Apartment	Spaces/unit
3-bedroom	1 space/unit
2-bedroom	0.7 spaces/unit
1-bedroom	0.3 spaces/unit
Studio	0.1 spaces/unit

Commercial development (If the FSR > 3.5:1)

M = (G * A) / (50 * T)

where:

M = maximum number of parking spaces;

G = GFA of all office/business premises in the building (m^2);

A = Site Area (m^2);

T = Total GFA of all buildings on the site (m^2)

58. It is noted that if development on the site applied the existing Parramatta LEP 2011 controls relating to car parking, it would result in appropriately 320 residential (and visitor) car parking spaces. In accordance with the above endorsed rates, this would potentially (dependent on unit bedroom mix) reduce the maximum car parking spaces to 182.

PROPOSED AMENDMENTS TO THE DRAFT DEVELOPMENT CONTROL PLAN

59. As a result of submissions and Council's decisions relating to DCP provisions on 180 George Street, Parramatta, the following amendments are proposed to the draft DCP (as exhibited) to address the development's relationship to Harrisford House:

    a) The width of the site's western ground level side setback is proposed to be increased to a minimum of 6 metres between the subject property boundary and the interface with Harrisford House. This setback will then taper down to a minimum of 3 metres along the remainder of the western boundary (adjacent to the house grounds). Therefore, the minimum distance between the adjoining heritage item and any future building on the site is 9.5m. The 6m wide side setback is proposed to comprise a 3 m wide unencumbered publicly accessible through-site link and space for future landscaping, active uses and potential outdoor seating (refer **Figure 3**).

60. It is considered that the proposed DCP amendments relating to the 6m setback are not inconsistent with the draft DCP as exhibited which contemplated increasing the width of this setback to 6 m stating *"an increase in the width up to 6 m could be considered as part of any future architectural design excellence competition and subsequent development application"*.

61. The publicly accessible through site link along the western boundary of the subject site is considered sufficient given that a flood free path of access has been secured along the river foreshore as part of the Planning Proposal for 180 George Street. The extension of the flood free path from 180 George Street, across the frontage of Harrisford House is not supported, so there is no need for a publicly accessible path along the river frontage of the subject site in the opinion of Council Officers. The 180 George Street will be the primary pedestrian link. The proposed publicly accessible link on the western boundary of the subject site will be a supporting link and in that context the tapering of 3m is considered acceptable given the shape of the site.

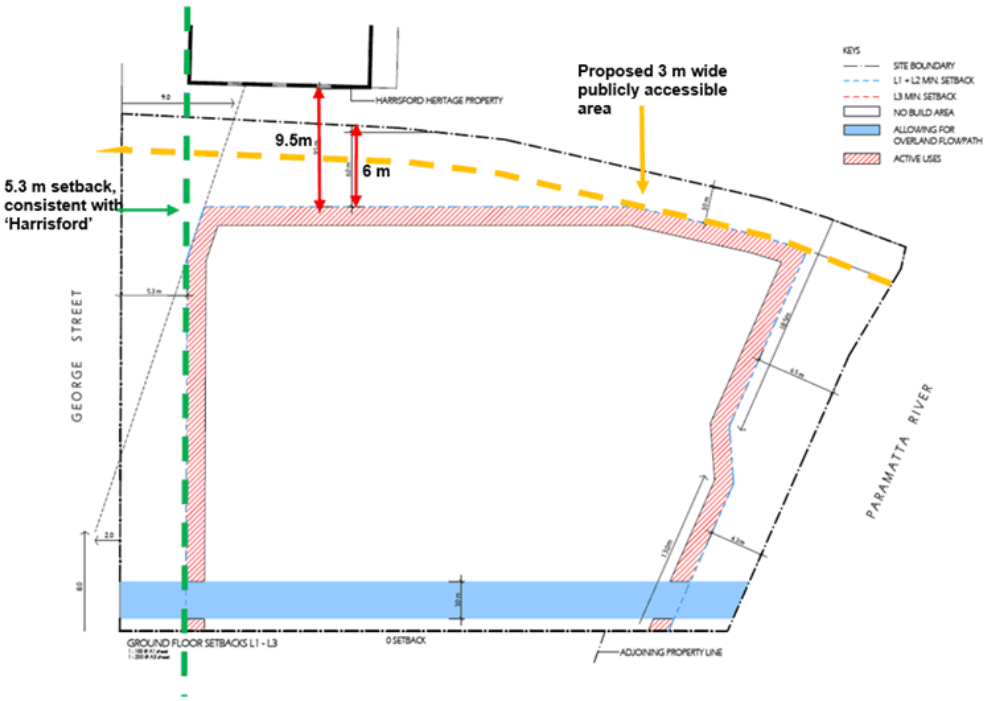

Figure 3 Proposed Amendment to Ground Floor Setbacks in DCP

62. Further, as a result of internal Council officer consultation in relation to proposed development's relationship with the public domain of the river foreshore, it is recommended that a minor amendment be considered to control C.5 of the exhibited draft DCP as follows (amendment underlined):

    "C.5 The finished levels of any future building and through site link are to provide an appropriate connection to the finished levels of 'Harrisford' and any future public promenade built along the Parramatta River foreshore edge. Careful consideration should also be given to flood planning levels. The intent is to provide access that is as seamless as possible between all activated spaces and public domain areas."

SUMMARY & CONCLUSION

63. The planning proposal, draft DCP and draft VPA relating to 184-188 George Street Parramatta have been exhibited in accordance with the provision of the Environment Planning and Assessment Act, 1979 and Gateway Determination. The submissions received have been responded to above and result in minor amendments to the Planning Proposal and DCP to address car parking and heritage issues. The draft VPA does not require amendment as a result of the exhibition of the documents. The planning proposal is consistent with the endorsed vision for the Parramatta CBD, as per the CBD Planning Proposal.

64. It is therefore recommended that Council endorse the Planning Proposal, draft DCP and draft VPA for finalisation.

NEXT STEPS

65. Subject to Council endorsement, Council Officers will:

    - Forward the planning proposal to the Department for finalisation.
    - Draft VPA to be finalised and executed by both parties to ensure it becomes a legally binding agreement.
    - The draft DCP will be formally amended by Council Officers and an advertisement placed in the local paper indicating that Council has endorsed the draft DCP and that it will come into force when the planning proposal legally comes into force.
    - Upon execution of the draft VPA Council officers will advise the Department that the planning proposal previously forwarded to it can now be finalised. The planning proposal is then legally made with the new planning controls coming into force when formal notice is published on the NSW Legislation website.

Bianca Lewis
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Sue Weatherley
Director Strategic Outcomes and Development

Jim Stefan
Acting Director City Services

ATTACHMENTS:

1	Summary of Submissions	11 Pages
2	Planning Proposal 184-188 George St Parramatta	32 Pages
3	Draft DCP (with amendments) 184-188 George St Parramatta	6 Pages
4	Draft Voluntary Planning Agreement 184 - 188 George St Parramatta	39 Pages

REFERENCE MATERIAL

ATTACHMENT 1: SUBMISSIONS

Table 1: Agency Submissions

Agency Submission	Council Officer response
Office of Environment & Heritage Comment	
OEH recommends that Council address previous OEH comments about the CBD Planning Proposal including cumulative assessment of the impact of increased densities across the entire CBD before consideration of planning proposal and any other planning proposal seeking a density increase.	The CBD Planning Proposal is supported by two heritage studies. Both studies concluded that subject to appropriate planning controls and treatments, increased densities and heights could be accommodated satisfactorily within the CBD with respect to heritage. • The Urbis (December 2015) study reviews, at a high level, the impact and issues associated with the scale of density and height increases proposed across the CBD. The study concluded that subject to appropriate planning controls and treatments (e.g. protection of solar access, appropriate setbacks, design principles etc.) that increased densities and heights could be accommodated satisfactorily with respect to heritage. The study recommended an FSR of 10:1 for the site and surrounding area. • A further heritage study was undertaken by Hector Abrahams on behalf of Council in July 2017 following concerns raised by the Office of Environment and Heritage (OEH) in relation to those areas of the Parramatta CBD that interface with heritage conservation areas. The subject site is not part of this study area. The concerns raised by OEH relate to a broader issue about how the Parramatta CBD can progress and develop into Sydney's Central City whilst preserving its heritage. Resolution of this issue is beyond the scope and matters for consideration of this site specific Planning Proposal. The previous approval of the site (for a 12 storey mixed use development) and proposals for other sites in the vicinity have been approved by Council as part of the evolving development of the CBD. Whilst taller buildings have impacted upon heritage items, they have been previously accepted as being reasonable considering the future character and form of development likely to occur in Sydney's second CBD.

1

Agency Submission	Council Officer response
Does not support the Heritage Impact Statement conclusion which states that the proposal "*does not adversely and unacceptably impact upon Harrisford*" because the planning proposal permits development that is inconsistent with the scale of 'Harrisford'.	Whilst there will be some impact on the adjoining 'Harrisford', the impact is not of such significance to warrant refusal of the planning proposal for the following reasons: • Context of the scale of surrounding taller building forms already approved by Council; • Parramatta CBD role as Sydney's Central City; • Current provisions of Parramatta LEP 2011 are appropriate for the protection and retention of the existing heritage item of Harrisford House. • DCP provisions which provide for a minimum 6 m ground level boundary setback to the western side boundary within the vicinity of 'Harrisford', transitioning to a 3m setback along the grounds of the House. This assists in creating a transition in built form, compatible with the existing scale of the adjoining heritage item; • DCP provisions which splay the front setback of 5.3m to align with 'Harrisford' which will retain views of the adjoining heritage item and allow its building form and detail to be read and appreciated; and • DCP controls which require scale and proportions of the future building, materials, finishes and facades treatments to be compatible with 'Harrisford' and to maximise opportunities to expand the curtilage of the adjoining heritage item. Council's urban design and heritage advisor reviewed the accompanying reference design and concluded that the proposal was able to be realised whilst providing appropriate setbacks and curtilage to the adjacent heritage item. Specific controls recommended for the site included: • Street frontage to comprise 2-3 storeys (or 11 m inclusive of parapet); • Front setback to be consistent with 'Harrisford', with upper level setback 9 m from front boundary with remainder of the podium to be 14 m; • Western corner to be 'eroded' to provide oblique views to 'Harrisford'; • Residential podium to allow for a 6 m setback from the eastern boundary above street frontage / podium height;

2

Agency Submission	Council Officer response
	• Minimum 3 m wide 'open air' pedestrian laneway along western boundary, with active ground floor use; and • River foreshore frontage to be consistent with Charles Street Square Strategy.
Notes that the impact of the planning proposal upon historical archaeological relics cannot be fully assessed as the planning proposal has insufficient detail on the matter.	The site has high archaeological potential and high Aboriginal sensitivity (refer to Archaeological Statement at Appendix 3 and Aboriginal Assessment at Appendix 4 noting these were originally submitted to support a previous development application for the site (DA/769/2011)) With regard to archaeology and Aboriginal heritage significance, prior to any physical works on the site all appropriate approvals will have to be sought from NSW Office of Environment and Heritage as the consent authority in matters of both disturbances of grounds and protection of Aboriginal heritage. Some of these matters have previously been investigated in conjunction with the previous DA for the site (DA/769/2011). The existing LEP provisions require a Statement of Heritage Impact to be prepared in support of any future development application for the site.
Supports the preparation of a site specific DCP that guides future development on the site to respond to 'Harrisford', in particular the site objectives which relate directly to 'Harrisford' and seek to: • create a mixed use building with setbacks are articulation that are compatible with 'Harrisford'; • to maximise opportunities to expand the curtilage of 'Harrisford'; and • to ensure the scale and proportions of future buildings elements on the site are compatible with 'Harrisford'. Supports the front setback and proposed splay that retains views of 'Harrisford'.	Noted. The draft DCP reflects these amendments.

3

Agency Submission	Council Officer response
Supports increasing the width of the western side boundary setback to 6 m, to provide a better visual setting for 'Harrisford' and provide access to foreshore.	The width of the western site boundary setback has been increased to a minimum of 6 m in the vicinity of the building footprint of 'Harrisford' (i.e. ground and three podium levels). Further north and away from building footprint of 'Harrisford', the western side boundary setback is reduced to a minimum 3 m. The western setback at ground level will include a 3 m wide publicly accessible through-site link (as originally proposed) and a 3 m wide 'zone' for future active uses, landscaping, outdoor eating – the detail of which would be resolved at the detailed DA stage.
Recommends that the setback from the site's Parramatta River frontage be based on detailed visual analysis of the impact of such developments on the character of the foreshore as a public space.	The proposed setback along the site's eastern (Parramatta River) frontage varies between 4.3m and 6.5m, consistent with the Parramatta City River Strategy.
Supports the provision of a through-site link as it will create an additional public interface.	Noted.
Recommends that the draft DCP include a control to not allow any boundary fencing or physical separation from 'Harrisford'.	This matter will be required to be addressed through the development application process. The requirement for no fencing will be required to be negotiated with the owner of Harrisford House and the owner of 184 George Street, and cannot be pre-empted by the DCP.
Supports the draft VPA as it stipulates the requirement for the construction and on-going maintenance of the pedestrian and cycle link by the developer.	Noted.
Notes that a previous approval under s140 of the *Heritage Act 1977* for archaeological testing and salvage of relics and deposits associated with a redevelopment proposal for 12 storey apartments (DA/769/2011) has not yet been completed in accordance with the approval.	Noted.

Agency Submission	Council Officer response
Office of Environment and Heritage (OEH) – Planning	
The proposal to shelter in place with internal PMF refuge may require an application by Council to State Government for 'exceptional circumstances' to apply and building controls above the flood planning level. Advice on this requirement should be sought from the Department and SES.	An independent assessment report was commissioned by Council in 2016 namely the draft Update of Parramatta Floodplain Risk Management Plans prepared by consultants Molino Stewart. One of the key findings of the report is that there is not sufficient advance warning of a major flood to evacuate large parts of the CBD, therefore potentially leaving many people trapped in the CBD until the flood waters subside. The recommendation of the report is that, for those areas that cannot be evacuated in time, that "shelter in place" (otherwise known as vertical evacuation) or, alternatively, "flood free evacuation routes" (otherwise known as high level horizontal evacuation) be provided. Council resolved in April 2016 to prepare an Exceptional Circumstances application in support of advancing the flood controls in the Parramatta CBD PP. Council officers completed this application and relevant supporting studies, and the outcomes of this work was forwarded to OEH and DPE in November 2017.
In addition to basement access ramps from George Street being elevated to provide additional flood protection for the basement, entry ramps, ventilation entry points and pedestrian exits should be designed and positioned in such a way to ensure the basement is sealed from flood waters up to at least the flood planning level. Electrical systems, lift components should be designed and installed above the flood planning (if possible at the PMF) to mitigate flood damages - the failure of which may result in a new crisis following a major flood.	Matters to be considered and resolved with at the detailed DA stage.
Further Aboriginal Cultural Heritage approvals from OEH may be required if the level of ground disturbance for the future reference scheme is more extensive than the level envisaged and approved under DA/769/2011.	Noted.

Agency Submission	Council Officer response
Transport for NSW (TfNSW) including Roads and Maritime Services	
TfNSW advises that Council implement a site specific control, permitting future development to provide car parking at the parking rates prescribed in Part 7, Division 1 of the Sydney Local Environment Plan 2012 are applied to the site with Council to determine which land categories would be applicable to the relevant land uses.	In April 2017, Council resolved to endorse the action recommended by the Parramatta CBD Strategic Transport Study to reduce maximum car parking rates to levels currently used by the City of Sydney and that the Parramatta CBD Planning Proposal. The Planning Proposal is to be assessed to reflect Council resolution on car parking.
TfNSW Parramatta Light Rail team is currently assessing whether additional pedestrian control, such as a signalised intersection George Street with Argus Lane, may be necessary to better support the pedestrian desire line between the light rail stop and the ferry terminal. This may affect vehicle access arrangements for any future development of the site.	Noted. Matter can be addressed at the DA stage. No change to the planning proposal is required.
TfNSW advises that the width of the proposed Pedestrian Link should be increased from 3m to 6m to better support the future connectivity for pedestrians transferring between ferry and light rail and future pedestrian demands as a result of growth in Parramatta.	Noted. The width of the western site boundary setback has been increased to a minimum of 6 m in the vicinity of the building footprint of 'Harrisford' (i.e. ground and podium levels). Further north and away from 'Harrisford', the proposed setback is reduced to a minimum 3 m. No change to the planning proposal is proposed. The draft DCP has been amended to incorporate a widened western site boundary (refer to discussion in paragraph 42). Given the access achieved at 180 George Street, provision of the walkway at 3 metres is considered acceptable as this is not the only link to be provided between the river and George Street.
TfNSW is concerned regarding the lack of provisions for regional road infrastructure within the VPA. The proposed increase in floor areas will result in increased traffic demands to/from the site and the road network. TfNSW advises Council that the proponent should provide infrastructure contributions in accordance with the Special	The traffic and parking assessment report prepared by Varga Traffic Planning Pty Ltd in support of the planning proposal concluded that there is adequate capacity in the surrounding road network to cater for the traffic generated by the proposed development. The Department is currently preparing a SIC framework for the Greater Parramatta Priority Growth Area, which includes the Parramatta CBD. It is not

Agency Submission	Council Officer response
Infrastructure Contribution (SIC) rates currently being prepared by the Department for the Greater Parramatta Priority Growth Area. Should the SIC Plan not be determine prior to gazettal of the planning proposal, the exhibited draft Voluntary Planning Agreement should be expanded to include contributions to any other road infrastructure, as identified by Council (in consultation with TfNSW/RMS), to accommodate the growth of Greater Parramatta (which includes this site).	considered necessary to expand the draft VPA to include contributions to any other road infrastructure on the basis that Council has not imposed this requirement on any other planning proposal within the CBD (and it would be unreasonable to impose such a requirement on the subject planning proposal) and that when the SIC framework is released it will apply to development within the CBD. In addition, it is not the role of Council to resolve regional infrastructure issues via a VPA. It is the role of the State Government to do so. The Department of Planning should consider this issue as part of its consideration of the Planning Proposal. It is not appropriate in this circumstance that it be dealt with Council's VPA process.
Transport of NSW – Sydney Trains	
Sydney Trains have no comment on the planning proposal due to the distance of the site from the rail corridor.	Noted.
State Emergency Services	
SES raised the following matters: • Proposal will increase the number of people that are potentially surrounded by high hazard floodwater and expose to the effects of flooding in Parramatta CBD, increasing the risk to life of future occupants. • The 'sheltering in place' strategy proposed presents a greater risk than a well-conducted evacuation and should only be used where evacuation is not possible due to greater risks of evacuating or where evacuation from an at-risk area has failed. • No consideration of risks to persons or facilities in the basement level car park (to be set 1820 mm above the 1% AEP flood, if this level is exceeded.	An independent assessment report was commissioned by Council in 2016 namely the draft Update of Parramatta Floodplain Risk Management Plans prepared by consultants Molino Stewart. One of the key findings of the report is that there is not sufficient advance warning of a major flood to evacuate large parts of the CBD, therefore potentially leaving many people trapped in the CBD until the flood waters subside. The recommendation of the report is that, for those areas that cannot be evacuated in time, that "shelter in place" (otherwise known as vertical evacuation) or, alternatively, "flood free evacuation routes" (otherwise known as high level horizontal evacuation) be provided. Council resolved in April 2016 to prepare an Exceptional Circumstances application in support of advancing the flood controls in the Parramatta CBD PP. Council officers completed this application and relevant supporting studies, and the outcomes of this work was forwarded to OEH and DPE in November 2017.

Agency Submission	Council Officer response
	Therefore, Council officers consider that the issues raised by the SES be considered by DPE and OEH as part of Council's Gateway Determination request for the Parramatta CBD PP.
Sydney Water	
Sydney Water have no comment in relation to objecting or supporting the planning proposal. Rather, the comments advised of the connections available to service the site for water and sewerage.	The matters raised in this submission are of most relevance to a future DA and will be dealt with via the imposition of conditions of consent on any approval granted. The submission received does not give rise to any matters directly affecting the planning proposal the subject of this report.
Endeavour Energy	
The submission received contains detailed requirements with respect to the (electrical) servicing of the site as well as details on matters relating to network requirements, licensing, tenure, easements and longer term management of the site with respect to electrical provision.	The matters raised in this submission are of most relevance to a future DA and will be dealt with via the imposition of conditions of consent on any approval granted. The submission received does not give rise to any matters directly affecting the planning proposal the subject of this report.
Department of Primary Industries (DPI) – Fisheries	
DPI Fisheries notes that the planning proposal does not trigger any matter to be considered under the *Fisheries Management Act* and as such has no objection or comment on the planning proposal.	Noted.
Department of Primary Industries (DPI) – Water	
The DPI Water Guidelines for Controlled Activities on Waterfront Land (2012) recommend a 40 m wide vegetated riparian zone be established along the river. If any part of the riparian corridor is located within the site, it is recommended it be consistent with DPI Water Guidelines and is revegetated and the DCP be amended to include a control	The subject site boundary is approximately 30 metres from the edge of the Parramatta River Foreshore. The Parramatta River City Strategy is Council's plan for revitalising the foreshore of the Parramatta River between Gasworks Bridge and Rings Bridge, O'Connell Street. It aims to improve connections between the river and the city and create more recreational opportunities for city residents, workers and visitors, including

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Agency Submission	Council Officer response
that the requirements of the DPI Water Guidelines for Controlled Activities on Waterfront Land (2012) are to be addressed. The proposal is likely to increase the number of people that will use the riparian corridor, and therefore place additional pressure on the corridor for it to be used for recreational/open space purposes and limit opportunities to rehabilitate the riparian corridor with native vegetation. Therefore, compliance with DPI Water Guidelines is recommended.	walking, cycling and for hosting major city events. A key objective of the Parramatta River City Strategy is to improve Parramatta River's water quality and natural environment, including the revegetation of some areas. Given the important role that the River Foreshore will play as a critical open space for existing and future residents, visitors, not considered reasonable to for Council to reference DPI's *Water Guidelines for Controlled Activities on Waterfront Land* (2012). However, as Council progresses detailed design projects to deliver the Strategy's vision, treating the riparian area and planting will be key considerations. The applicant will likely be required to obtain a controlled activity approval for the site from DPI Water at the DA stage.
DPI Water references the flooding affectation of the site and the risk of basement car parking collecting water. The submission references the potential need for licences to manage the removal of water, and also lists matters required to be addressed as part of the future development assessment process.	In relation to licences in relation to ground water and assessment of aquifer interference, Council staff consider this would be raised as an issue as part of any current (or future) development applications allowable under the existing PLEP 2011 and not related to the subject planning proposal.

Table 2: Community Submissions

Community Member Submission	Council officer response
Submission 1	
Objects to the planning proposal on the grounds that the proposal is not consistent with the Charles Street Square Strategy in relation to opening up the riverbank around Parramatta Wharf.	The Charles Street Square Strategy (the strategy) (adopted by Council on 13 June 2017) shows a 3 m wide connecting extending from the Parramatta River foreshore through to George Street (refer to Figure 2). The planning proposal provides a connection between 3m and 6m wide, which is consistent with the strategy. The draft VPA also includes a $1 million monetary contribution for public domain upgrades along the Parramatta River foreshore as identified in the Parramatta City River strategy.

Community Member Submission	Council officer response
The proposal will dwarf and overshadow 'Harrisford', negatively impacting upon this significant heritage asset and permanently compromising the aesthetic appeal of approaching Parramatta via the ferry.	A Solar Access Modelling report was submitted as part of the Planning Proposal. As Harrisford House lies directly to the west of the subject site, the proposal maintains solar access during mid-winter to the house. However, it is acknowledged that during summer that the proposal will overshadow Harrisford House fully between the hours of 9am and 10am and partially at 11am. Overshadowing of Harrisford House does occur as a result of 180 George Street, however the Urbis Heritage Study suggested that an FSR of 10:1 could be considered on the adjoining sites and acknowledged some level of overshadowing of Harrisford House.
Submission 2	
Objects to the planning proposal on the grounds that it is taller than nearby buildings and will overshadow and compromise solar access. In particular, the proposed heights will result in the overshadowing of the property located at 109-113 George Street, where solar panels have been established on the roof.	The planning proposal is consistent with the Parramatta CBD Planning Proposal. The CBD Planning Proposal is supported by two heritage studies. Both studies concluded that subject to appropriate planning controls and treatments, increased densities and heights could be accommodated satisfactorily within the CBD with respect to heritage. In relation to the subject proposal overshadowing solar access to solar panels on the roof top of 109-113 George Street, Council staff calculated the potential solar access impacts. The subject site at 184 George Street, during mid-winter (21st June) between the hours of 10am and 12pm either partially or fully overshadows the roof top of 109 George Street. However, the proposal at 180 George Street (a Planning Proposal subject to finalisation) at mid-winter partially overshadows at 10am, then fully overshadows from 11am to 3pm. At mid-summer there is no overshadowing from either proposal at 180 and 184 George Street. Council staff acknowledge that the efficiency of the solar panels at 109 George Street will be compromised through parts of the year due to both the subject site and 180 George Street. However, the proposed height and FSRs proposed under the Parramatta CBD Planning Proposal and the delivery of tall slender towers, it is unachievable to maintain solar access to roof tops to shorter buildings which were approved under the existing planning controls.

Community Member Submission	Council officer response
The densification of the area will also generally impact negatively on the amenity of the area (including social, security, environmental, traffic issues).	The primary outcome of this Planning Proposal, to enable a higher density of development and mix of residential and commercial land uses, stems from both Council's and NSW state government future vision for Parramatta CBD. These plans identify the Parramatta CBD as Sydney's Central City, a key area for future development to cater for the projected increase in the residential and working population. Further specific amenity issues can be resolved during the Design Excellence and development application stages.

PLANNING PROPOSAL

184-188 George Street, Parramatta

1

Planning Proposal drafts

Proponent versions:

No.	Author	Version
1.	Planning Ingenuity	April 2014 – reported to Council 9 February 2015 and Sent to DP&E for Gateway Determination

Council versions:

No.	Author	Version
1.	City of Parramatta Council	March 2017 – Exhibition Version
2.	City of Parramatta Council	March 2018 – Post Exhibition Updates (inclusion of maximum car parking rates)

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INTRODUCTION

This planning proposal explains the intended effect of, and justification for, the proposed amendment to *Parramatta Local Environmental Plan 2011*. It has been prepared in accordance with Section 55 of the *Environmental Planning and Assessment Act 1979* and the Department of Planning and Environment guides, *'A Guide to Preparing Local Environment Plans'* (April 2013) and *'A Guide to Preparing Planning Proposals'* (October 2012).

The planning proposal has been amended post gateway to include the following:

- A response to the conditions of the Department of Planning and Environment's Gateway Determination.
- Inclusion of a site specific clause to apply maximum car parking rates in line with the Parramatta CBD Strategic Transport Study.

Background and context

On 27 May 2014, Council received a Planning Proposal and supporting documents from Planning Ingenuity Pty Ltd affecting land at 184-188 George Street, Parramatta. The real property description for the subject site is Lot 11 DP 1115358, Lot 30 DP 1115365, and Lot 20 DP 1115360. The site is shown in Figure 1 below.

Under the *Parramatta Local Environmental Plan 2011* (Parramatta LEP 2011), the site:

- is zoned B4 Mixed Use (refer to Figure 3 in Part 4 – Mapping);
- has a maximum building height of 36 metres (refer to Figure 4 in Part 4 – Mapping); and
- has a maximum floor space ratio (FSR) of 4:1 (refer to Figure 5 in Part 4 – Mapping).

This *Planning* Proposal seeks to

- increase the maximum building height to 120 metres;
- increase the maximum floor space ratio (FSR) to 10:1; and
- apply maximum parking rates to the site.

Figure 1: Site Plan 184-188 George Street, Parramatta

PART 1 – OBJECTIVES OR INTENDED OUTCOMES

The objective of this Planning Proposal is to enable the redevelopment of the land at 184-188 George Street, Parramatta for mixed use development at a density consistent with the Parramatta CBD Planning Framework.

PART 2 – EXPLANATION OF PROVISIONS

This Planning Proposal seeks to amend Parramatta Local Environmental Plan (LEP) 2011 in relation to the height and floor space ratio (FSR) controls. In order to achieve the desired objectives, the following amendments to Parramatta LEP 2011 would need to be made.

A change to the maximum height limit on the subject land as follows:

- from 36m to 120m; and
- The proposed amendment to the *Parramatta LEP 2011* is to the **Height of Buildings Map –** (Sheet HOB _010).

A change to the maximum floor space ratio on the subject land as follows:

- from 4:1 to 10:1; and
- The proposed amendment to the *Parramatta LEP 2011* is to the **Floor Space Ratio Map –** (Sheet FSR_010).

A new site specific Clause relating to maximum parking rates to apply to the site as follows:

Residential development

Type of Apartment	Spaces/unit
3-bedroom	1 space/unit
2-bedroom	0.7 spaces/unit
1-bedroom	0.3 spaces/unit
Studio	0.1 spaces/unit

Commercial development (If the FSR > 3.5:1)

M = (G * A) / (50 * T)

where:

M = maximum number of parking spaces;

G = GFA of all office/business premises in the building (m^2);

A = Site Area (m^2);

T = Total GFA of all buildings on the site (m^2)

2.1 Other relevant matters

2.1.1 Voluntary Planning Agreement

A Draft Voluntary Planning Agreement accompanies this planning proposal. The draft VPA offer includes the creation for an easement for access to create a 3m wide through site

link connecting George Street to the Parramatta River foreshore. The draft VPA also includes a cash contribution of $1,000,000 toward the Parramatta River Foreshore Public Domain Strategy.

The value of the offer represents 20% from the agreed site specific land uplift value to be achieved by the planning proposal. The Draft VPA has been exhibited concurrently with the Planning Proposal.

2.1.2 Design Excellence

The land the subject of this Planning Proposal is located within the Parramatta City Centre Area as defined by Parramatta LEP 2011. Clause 7.10 of Parramatta LEP 2011 requires development above 55m in height to undergo an architectural design competition. Proposals demonstrating design excellence are then able to seek variations to development standards (height and FSR), up to 15%.

This may result in development occurring at a greater height and density than stated under this planning proposal. Should the additional 15% height and density bonuses be achieved via design excellence process, the maximum height and density on the site would be 138m and 11.5:1.

The design excellence brief along with the accompanying Development Control Plan (DCP) controls will ensure that an acceptable urban design and public domain outcome will be achieved.

2.1.3 Car Parking Rates

Council's position in relation to car parking rates for the Parramatta CBD Planning Proposal was resolved as follows on 10 April 2017.

a) *That Council endorses the attached Parramatta CBD Strategic Transport Study and accompanying Technical Papers for the purposes of forwarding to the Department of Planning and Environment as part of the Parramatta CBD Planning Proposal.*

b) *That Council endorses the action recommended by the Parramatta CBD Strategic Transport Study to reduce maximum car parking rates to levels currently used by City of Sydney CBD and that the Parramatta CBD Planning Proposal be amended to reflect this prior to public exhibition.*

c) *That Council applies the recommended parking rates proposed in this report to existing site-specific Planning Proposals and Design Competitions within the Parramatta CBD as a provision applicable to each proposal or competition to ensure future development will be consistent with the strategic direction to reduce maximum car parking rates. (N.B. Only those site-specific planning proposals which are imminent to finalisation (gazettal), that is they have been endorsed by the Council to proceed to finalisation following public exhibition, will be exempt from this provision).*

Therefore, the Council resolution of 10 April 2017 allows for a site specific clause to be included for the site, providing for maximum car parking rates in line with the Parramatta CBD Strategic Transport Study, at the following rates:

Residential development

Type of Apartment	Spaces/unit
3-bedroom	1 space/unit

2-bedroom	0.7 spaces/unit
1-bedroom	0.3 spaces/unit
Studio	0.1 spaces/unit

Commercial development (If the FSR > 3.5:1)

M = (G * A) / (50 * T)

where:

M = maximum number of parking spaces;

G = GFA of all office/business premises in the building (m²);

A = Site Area (m²);

T = Total GFA of all buildings on the site (m²)

PART 3 – JUSTIFICATION

This section describes the reasons for the proposed outcomes and development standards in the Planning Proposal. The following questions have been extracted from *'A Guide to Preparing Planning Proposals'* (Department of Planning and Environment 2013), addressing environmental, social, economic and locational factors.

3.1 Section A - Need for the planning proposal

This section establishes the need for a Planning Proposal in achieving the key outcome and objectives. The questions address the strategic origins of the Planning Proposal, whether amending the LEP is the best mechanism to achieve the aims on the Planning Proposal, and whether a net community benefit will result from the Planning Proposal.

3.1.1 Is the Planning Proposal a result of any study or report?

The primary outcome of this Planning Proposal, to enable a higher density of development and mix of residential and commercial land uses, stems from local and state government strategic plans including the NSW Government's Plan for Growing Sydney, Parramatta City Centre Vision 2007 and Parramatta CBD Planning Framework. These plans identify the Parramatta City Centre as a key area for future development to cater for the projected increase in the residential and working population.

3.1.2 Is the Planning Proposal the best means of achieving the objectives or intended outcomes, or is there a better way?

This Planning Proposal enables a higher intensity of development on the site consistent with the parameters identified in the Parramatta CBD Planning Framework. While the outcome could be achieved through the CBD Planning Framework Planning Proposal, the exact timing of the broader CBD Planning Proposal is not certain and may take longer to resolve.

The subject planning proposal is the most suitable way of achieving the planning amendments on the site in a timely manner.

Re-development of the subject land presents opportunities in the north-eastern corner of the Parramatta CBD to enhance and re-vitalise the river foreshore. This Planning Proposal

will provide a mix of uses and an appropriate contribution to state government dwelling and employment targets in a location well serviced by public transport.

3.2 Section B – Relationship to strategic planning framework

This section assesses the relevance of the Planning Proposal to the directions outlined in key strategic planning policy documents. Questions in this section consider state and local government plans including the NSW Government's Plan for Growing Sydney and West Central Subregional Strategy, relevant State Environmental Planning Policies, local strategic and community plans and applicable Ministerial Directions.

3.2.1 Is the planning proposal consistent with the objectives and actions contained within the applicable regional or sub-regional strategy?

A Plan for Growing Sydney

On 14 December 2014, the NSW Government released '*A Plan for Growing Sydney*' which outlines actions to achieve the Government's vision for Sydney which is a 'strong global city and a great place to live'.

The actions within the plan that specifically relate to Parramatta are:

1. *Grow Parramatta as Sydney's second CBD by connecting and integrating Parramatta CBD, Westmead, Parramatta North, Rydalmere and Camellia;*
2. *Grow the specialised health and education precincts at Westmead and Rydalmere;*
3. *Renew Parramatta North to create a vibrant mixed-use precinct; and*
4. *Grow the arts and cultural opportunities in Parramatta to include State-level facilities.*

The Planning Proposal will enable the development of residential dwellings and commercial and space that will contribute towards dwelling and employment targets. It will also allow for a greater development yield on land in close proximity to public transport and Parramatta CBD. The site is within approximately 200m of the Parramatta Ferry Wharf and 400m to Parramatta Transport Interchange, and therefore meets the objective to capitalise on public transport infrastructure.

The Planning Proposal creates opportunities to revitalise and better present the north-eastern corner of the Parramatta CBD and river foreshore. This will be aided by the proposed increase in density to an FSR of 10:1.

West Central Subregion

Within a Plan for Growing Sydney, key priorities identified for the West Central Subregion, of relevance to future development of the subject site and the broader development of Parramatta CBD include the following:

- *Work with Parramatta Council to:*
  - *transform Greater Parramatta as Sydney's second CBD and Western Sydney's number one location for employment and health and education services, supported by a vibrant mixture of land uses and cultural activity, with the Parramatta River foreshore as a focus for recreational activities;*
  - *provide capacity for long-term employment growth in Greater Parramatta, particularly in its CBD;*

- *provide capacity for additional mixed-use development in Parramatta CBD and surrounding precincts including offices and retail in Parramatta CBD, ….. and housing in all precincts;*

The proposed changes to the height and FSR controls of the Parramatta City Centre LEP 2007 will allow for the development of mixed use residential and commercial/retail uses, which will support the viability of Parramatta as a CBD.
The subject land is considered valuable in contributing towards dwelling and employment targets due to Parramatta CBD location and proximity to public transport. The proposal will also make a significant contribution towards provision of additional housing availability and housing mix.

- *Work with council to retain a commercial core in Parramatta CBD for long-term employment growth.*

The site is note located within the commercial core, however the surrounding mixed use zone in which the site is located provides for a mix of residential, commercial and retail uses that supports the core commercial activities. The development of the site for predominantly residential use is appropriate as it will provide retail and commercial employment, which will support the commercial core but not detract from its importance.

- *improve walking and cycling connections within Greater Parramatta including between Parramatta CBD , and Parramatta River and their surrounding area.*

The accompanying development control Plan and Design Excellence Brief will require a though site link creating a new midblock connection connecting /George street to the Parramatta River and increase pedestrian permeability through the CBD.

Draft West Central District Plan

The draft West Central District Plan has been prepared by the Greater Sydney commission and provides a 20-year vision for the West Central District of Greater Sydney, including Parramatta, Cumberland, Blacktown and The Hills local government areas. The draft West Central District Plan is one of six draft District Plans developed by the Greater Sydney Commission for each of Sydney's Districts.

The draft Plan identifies Greater Parramatta and the Olympic Peninsula (GPOP) as a place that *'will sit at the District's and Greater Sydney's heart.'* The GPOP area is *anticipated to experience the most significant urban transformation over the next 10 to 15 years.*

The draft Plan seeks to grow a vibrant Parramatta City with a productive and diversified economy and recognises the work of Council's 2015 Parramatta CBD Planning Strategy which seeks to amend the planning controls for Parramatta City to provide an expanded and more intense commercial core, surrounded by higher density mixed use development.

The draft Plan broadly identifies the need for the West Central District to provide an additional 49,400 dwellings in the next 5 years (approximately 10,000 dwellings per annum). A 21,650 dwelling target has been set under the draft Plan for the Parramatta LGA to be delivered in the next 5 years.

The subject planning proposal is consistent with the vision for Parramatta City under the draft District Plan.

NSW Long Term Transport Masterplan

This Plan identifies strategies for improving the capacity of roads and increasing connectivity and continuity in rail services through Parramatta to Campbelltown and Blacktown. The Masterplan also indicates support for the Parramatta Light Rail system and the Shared Pathways network. The site is well located for future occupants to take advantage of existing and new transport options. Development of the site to an optimum density will also optimise potential demand for transport services and improve overall viability.

3.2.2 Is the planning proposal consistent with the local council's Community Strategic Plan or other local strategic plan?

The following strategic planning documents are relevant to the Planning Proposal.

Parramatta 2038 Community Strategic Plan

The Parramatta 2038 is a long term Community Strategic Plan for the City of Parramatta and it links to the long-term future of Sydney. The plan formalises several big and transformational ideas for the City and the Region. The Planning Proposal is considered to meet the strategies and key objectives identified in the plan including to help build the City as a centre of high, value-adding employment and a driving force behind a generation of prosperity for Western Sydney.

The increase in development potential and incorporation of the provisions included in this Planning Proposal are consistent with the identified strategic objectives contained in the Parramatta 2038 Community Strategic Plan. The Planning Proposal is considered to meet the strategies by allowing for an appropriate mix of residential and commercial/retail uses that will support the city centre and revitalisation of the Parramatta River. The development will also allow for the concentration of housing around transport nodes and contributes towards dwelling targets for the Parramatta local government area.

Parramatta City Centre Vision 2007

This Vision sets the strategic framework for the future development of the Parramatta CBD, including details on cultural and economic growth. The subject site is located within the River Foreshore precinct, identified in the Vision.

The overarching vision for Parramatta City is as follows:

> *Parramatta will continue to strengthen its role as a regional city and successful second CBD for Sydney, based on a highly competitive commercial office market, retail, public space, and a range of facilities including cultural, medical, educational, tourism, and recreational. It will also benefit from a unique inner city residential living environment that values heritage assets and the natural environment. The centre will continue to plan strategically to maintain its position as an accessible primary business services centre for Western Sydney and a significant business location for metropolitan Sydney. The city centre will accommodate 30,000 more jobs and 20,000 new residents.*

The vision for the River Foreshore is as follows:

> *The river foreshore together with Parramatta Park is important open space contributing to the recreational potential of the city centre and region. The river plays a major role in the function and form of the city, offering opportunities for walking, cycling, social gatherings and events.*

> *The plan provides for continued measures to activate the river's edge, extend pedestrian and cycle connections along the foreshore to Parramatta Park and the University, and improve connectivity with the city centre. Buildings will be required to sensitively address the river edge with high quality facades and finishes and will be encouraged to incorporate uses such as cafes and restaurants and residential apartments that take advantage of the river setting.*

There are 23 future actions proposed by the Plan. Action 2 relates specifically to the River Foreshore as follows:

> **Action:** Activate and celebrate the river corridor.
> **Rationale:** The river plays a major role in the function and form of the city centre as residents and stakeholders have repeatedly identified Parramatta River as a unique and identifying part of the city. The future role of the river is to fully realise its potential as a great place to live, as a pedestrian link to other parts of the city and surrounding suburbs and as an important open space contributing to the recreation potential of the city. There is planning needed to ensure the Justice Precinct development, and plans for development of adjacent sites, supports river access and utilisation and also design improvements are needed to better connect the Civic Precinct with the waterfront and university of Western Sydney.

The Planning Proposal is consistent with the above Action in that it will allow for redevelopment of the site for mixed residential and commercial development. The new pathway will facilitate a direct new access to the river while providing for a new active edge to the foreshore.

Parramatta CBD Planning Proposal

The Parramatta CBD planning proposal was endorsed by Council on 11 April 2016 to be sent to the Department of Planning & Environment to seek Gateway Determination. The purpose of the Planning Proposal is to provide for an expanded and more intense commercial core to strengthen and facilitate the role of Parramatta as a dual CBD and supported by a higher density mixed use. It is expected that the Planning Proposal will provide capacity for an additional 48,763 jobs and 20,297 dwellings to 2036.

The preparation of the Planning Proposal was informed by the Parramatta CBD Planning Strategy (the Strategy) which was adopted by Council in April 2015. The objective of the Strategy is to establish a vision for growth, principles and actions to guide a new planning framework and an implementation plan for delivery.

The planning proposal is consistent with the above Strategy in that it will allow for redevelopment of the site for mixed residential and commercial development. It will also activate the locality adjacent to the Parramatta River foreshore.

Parramatta City River Strategy

This Strategy provides design recommendations for upgrading works and new projects and uses for the river foreshore area. This application for a Planning Proposal is consistent with the sections of the Strategy that apply to the Quay Quarter (Precinct 4).

3.2.3 Is the planning proposal consistent with the applicable State Environmental Planning Policies?

The following State Environmental Planning Policies are of relevance to the site.

State Environmental Planning Policy No. 32 Urban Consolidation (Redevelopment of Urban Land)

The intention of the State Environmental Planning Policy No. 32 Urban Consolidation (Redevelopment of Urban Land) is to ensure that urban consolidation objectives are met in all urban areas throughout the State. The policy focuses on the redevelopment of urban land that is no longer required for the purpose it is currently zoned or used, and encourages local councils to pursue their own urban consolidation strategies to help implement the aims and objectives of the policy.

The Planning Proposal is consistent with this SEPP, given its purpose is for the orderly and economic development of the land for high density residential housing in a location that benefits from suitable infrastructure, employment and leisure opportunities.

State Environmental Planning Policy No. 65 Design Quality of Residential Flat Buildings

Clause 28 of this SEPP requires that in preparing an environmental planning instrument that makes provision for residential flat development, a provision shall be included in the instrument to ensure the achievement of design quality in accordance with the design quality principles and have regard to the Apartment Design Guide. It is noted that SEPP 65 will be required to be considered during the development application assessment of any future development on the site that includes three or more storeys and four or more dwellings.

Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

SREP (Sydney Harbour Catchment) 2005 applies to all land within the Sydney Harbour Catchment (as mapped) inclusive of the Parramatta River. The Policy aims to protect natural assets, maintain and improve public access, protect and improve waterway health and continue the use of the harbour for transport and working maritime activities.

In particular as it relates to the subject site, *development should protect, maintain and enhance the natural, scenic, environmental, visual, and cultural qualities, of Sydney Harbour and its foreshores.* Furthermore, *archaeological sites and places of Aboriginal heritage significance should be conserved.*

The application for a Planning Proposal does not change the way in which the SREP applies to the land. The Planning Proposal will facilitate future development that is compatible with the adjacent foreshore reserve and the management of stormwater and floodwater flowing into the Parramatta River. The proposal has the potential to increase access to the river foreshore reserve with the provision of a publicly accessible path along the western side boundary.

The proposal will not have a detrimental impact on the potential to use the river and the foreshore reserve for transport and movement. The future redevelopment of the site does have potential to enhance the foreshore reserve environment through casual surveillance, provision of an active frontage to the foreshore reserve and potential upgrading works linked through a future voluntary planning agreement.

Any impacts to the archaeological or Aboriginal Heritage significance of the site would be subject to separate approvals required from the NSW Office of Environment and Heritage under the Heritage Act 1977.

3.2.4 Is the planning proposal consistent with applicable Ministerial Directions (s.117 directions)

In accordance with Clause 117(2) of the *EP&A Act 1979* the Minister issues directions for the relevant planning authorities to follow when preparing planning proposals for new LEPs. The directions are listed under the following categories:

- Employment and resources
- Environment and heritage
- Housing, infrastructure and urban development
- Hazard and risk
- Regional planning
- Local plan making
- Metropolitan planning

The following directions are considered relevant to the subject Planning Proposal.

Employment and Resources

Section 117 Direction 1.1 Business and Industrial Zones

Business and Industrial Zones The objectives of this direction are to:

a) encourage employment growth in suitable locations,
b) protect employment land in business and industrial zones, and
c) support the viability of identified strategic centres.

The Planning Proposal will maintain the existing zone which allows for a mix of residential and non-residential uses. A mix of residential and commercial uses will support the core commercial precinct.

This Planning Proposal is consistent with the strategic directions outlined in state and local planning strategies including A Plan for Growing Sydney, West Central Subregional Strategy and Parramatta City Centre Vision 2007.

Environment and Heritage

Section 117 Direction 2.3 Heritage Conservation

The objective of this direction is to conserve items, areas, objects and places of environmental heritage significance and indigenous heritage significance.

The subject site contains no listed heritage items but adjoins two heritage items (Harrisford House and Parramatta River Wetlands) (refer Heritage Statement at **Appendix 2**). The site also has high archaeological potential and high Aboriginal sensitivity (Refer Archaeological Statement at **Appendix 3** and Aboriginal Assessment at **Appendix 4** noting these were originally submitted to support a previous development application for the site (DA/769/2011)).

Any future development application will be required to comply with the provisions of Clause 5.10 of Parramatta LEP 2011 and the relevant controls contained within the site specific DCP as they relate to heritage conservation.

With regard to archaeology and Aboriginal heritage significance, prior to any works on the site all appropriate approvals will have to be sought from NSW Office of Environment and Heritage as the consent authority in matters of both disturbance of grounds and protection of Aboriginal heritage. Some of these matters have previously been investigated in conjunction with a previous development application (DA/769/2011) for the site.

The current provisions of Parramatta LEP 2011 are appropriate for the protection and retention of the existing heritage item adjoining the site. The existing LEP provisions require a Statement of Heritage Impact to be prepared in support of any future development application for the site.

A draft site specific Development Control Plan has also been prepared for the site and provides built form controls and objectives designed to protect the heritage significance of the adjoining State Significant Heritage item known as 'Harrisford'. Further amendments have been made to the DCP in order to address the proposed development's relationship to Harrisford House. The western side setback be formalised at a minimum of 6 metres at the interface with 'Harrisford House'. To the north of Harrisford House, this setback will then gradually reduce to a minimum of 3 metres, following the irregular shape of the subject site.

A Heritage Statement prepared by NBRS+ Partners dated September 2015 has been included with this Planning Proposal at **Appendix 2** and concludes as follows:

"The Planning Proposal in this submission to alter the maximum height and GFA for future development does not adversely and unacceptably impact upon the identified heritage significance of any nearby local heritage items, State Heritage Register listed items, Commonwealth heritage listed places, or National and World Heritage listed properties. The Proposal can be realised in a way which accords with the management recommendations and conservation policies provided for nearby heritage places and in particular the setting of "Harrisford".

The height, density and general form indicated in the Urban Design Study and the planning proposal and the site specific development control plan that follows those characteristics are likely to have a negligible and acceptable heritage impact.

A Statement of Heritage Impact should accompany any future formal development option for the site in accordance with the guidelines of the NSW Heritage Office publication, Assessing Heritage Impacts.

It is therefore appropriate that Council progress the amendments as set out in the Planning Proposal in light of this assessment which finds that there will be no significant heritage implications of the outcome."

Therefore the Planning Proposal is consistent with the objectives and intent of Direction 2.3 Heritage Conservation

Housing, Infrastructure and Urban Development

Section 117 Direction 3.1 Residential Zones

The objectives of this direction are:

a) *to encourage a variety and choice of housing types to provide for existing and future housing needs,*
b) *to make efficient use of existing infrastructure and services and ensure that new housing has appropriate access to infrastructure and services, and*
c) *to minimise the impact of residential development on the environment and resource lands.*

The Planning Proposal is consistent with the objectives of this direction as it will enable the development of infill residential dwellings, in a location that is in close proximity to public transport, shops and employment. In addition the planning proposal will enable the

development of an appropriate mix of high density dwellings which respond to current and predicted housing demands.

Section 117 Direction 3.4 Integrating Land Use and Transport

The objective of this direction is to ensure that urban structures, building forms, land use locations, development designs, subdivision and street layouts achieve the following planning objectives:

a) *improving access to housing, jobs and services by walking, cycling and public transport, and*
b) *increasing the choice of available transport and reducing dependence on cars, and*
c) *reducing travel demand including the number of trips generated by development and the distances travelled, especially by car, and*
d) *supporting the efficient and viable operation of public transport services, and*
e) *providing for the efficient movement of freight.*

Increasing the density of development in the walking catchment around transport nodes, namely the Parramatta Transport Interchange and Ferry Terminal will support the viability of existing and proposed public transport services and reduce dependence on cars. The Planning Proposal integrates land use and transport outcomes to a high degree.

Hazard and Risk

Section 117 Direction 4.1 Acid Sulfate Soils

The objective of this direction is to avoid significant adverse environmental impacts from the use of land that has a probability of containing acid sulfate soils.

With the exception of several small blocks, the majority of Parramatta CBD (including the subject site) is affected by Class 4 or Class 5 Acid Sulfate Soils. Despite this constraint, the Parramatta CBD and has accommodated medium to high density development throughout. This application for a Planning Proposal acknowledges that the site is affected by Acid Sulfate Soils and that an appropriate Management Plan will be required to support any development application for the site which involves excavation and changes to the ground water levels.

Hazard and Risk

Section 117 Direction 4.3 Flood Prone Land

This direction applies where a planning proposal creates, removes or alters a zone or a provision that affects flood prone land. The planning proposal seeks to introduce residential development in an area identified as being flood prone.

The objectives of this direction are:

a) *to ensure that development of flood prone land is consistent with the NSW Government's Flood Prone Land Policy and the principles of the Floodplain Development Manual 2005, and*

b) *to ensure that the provisions of an LEP on flood prone land is commensurate with flood hazard and includes consideration of the potential flood impacts both on and off the subject land.*

In accordance with condition 1(c) of the Gateway Determination issued on 12 June 2015, an address of the 117 Direction has been prepared by Mance Araj Engineers

dated 4 November 2016 (see **Appendix 5**) and demonstrates consistency with the Direction.

Council's Development Engineer has reviewed the information provided and advised that '*the revised submission by Mance Arraj satisfies the s 117 Directive and current Council flood development management practice.*' (see also **Appendix 5**).

Metropolitan Planning

Section 117 Direction 7.1 Implementing a Plan for Growing Sydney

The Planning Proposal is consistent with *A Plan for Growing Sydney* as detailed in Section 3.2.1of this proposal.

3.3 Section C – Environmental, social and economic impact

This section considers the potential environmental, social and economic impacts which may result from the Planning Proposal.

3.3.1 Is there any likelihood that critical habitat or threatened species, populations or ecological communities, or their habitats, will be adversely affected as a result of the proposal?

The subject site is located on the north-eastern edge of the Parramatta CBD in an established area within the Parramatta City Centre. No critical habitat or threatened species, populations or ecological communities, or their habitats are located on the land.

3.3.2 Are there any other likely environmental effects as a result of the planning proposal and how are they proposed to be managed?

The main potential environmental impacts to be examined in detail with any future development proposal for the site are:

- Heritage impacts;
- Built form;
- Overshadowing
- Flooding;
- Acid Sulfate Soils; and
- Traffic

Heritage

This matter has been addressed under Section 3.2.4 under the heading *Section 117 Direction 2.3 Heritage Conservation.*

Built Form

The Planning Proposal seeks a maximum FSR of 10:1. While this is consistent with the Parramatta CBD Planning Framework, future development of this scale may have implications for the adjacent residential development and public domain. Images have been prepared in accordance with the requirements of the Gateway Determination detailing how a future building may sit within the adjoining urban context. (refer to **Appendix 6**).

An Urban Design Study was also prepared by HBO + EMTB and submitted with the Planning Proposal. A copy of the Urban Design Study is provided at **Appendix 7**.
Matters to consider in detail in the future development of the site will include:

- Relationship to adjoining State Significant heritage item to the west;
- Overshadowing and solar access;
- Amenity of adjoining sites;
- Appropriate provision of car parking and traffic impacts;
- The interface between public and private land and particularly how buildings address the street, new through site link and river foreshore; and
- The mix land uses including residential, retail and commercial.

The draft site specific Development Control Plan (DCP) prepared for site, along with other existing controls contained within Parramatta Development Control Plan 2011, Parramatta LEP 2011, SEPP 65 and the Apartment Design Guidelines will guide future development on the site.

Furthermore, future redevelopment of the site will be subject to a Design Excellence process in accordance with Clause 7.10 of Parramatta LEP 2011. The Design Excellence brief will be guided in part by the site specific DCP that includes provisions as follows:

Heritage: Controls within the draft DCP seek to guide future development to ensure a suitable relationship between 'Harrisford' and future buildings on the site., specifically:

- The western side setback be formalised at a minimum of 6 metres at the interface with 'Harrisford House'; and
- To the north of Harrisford House, this setback will then gradually reduce to a minimum of 3 metres, following the irregular shape of the subject site.

Urban Design & Through Site Link: The draft DCP includes building envelope and setback controls to inform the future building including both the podium and tower elements. Given the sites public interface to George Street and the Parramatta River foreshore reserve, specific controls have been included to ensure appropriate relationship to theses spaces including need for active uses at these interfaces. The draft DCP also nominates a 3-6m wide through site link connecting George Street to the Parramatta River adjacent to the site's western boundary.

Overshadowing: Controls have been included in the draft DCP seeking that overshadowing of public open spaces including Robin Thomas and James Ruse Reserve be minimised.

Flooding & Drainage: The existing flooding requirements of Parramatta LEP 2011 and Parramatta DCP 2011 will be required to be addressed as part of the redevelopment of the site. An existing Council stormwater drainage pipe traverses the site. The draft DCP includes controls requiring the stormwater pipe to be relocated as part of the future redevelopment of the site and allowing inclusion for easement for drainage and overland flow path adjacent to the eastern boundary.

Flooding

This matter has been addressed under Section 3.2.4 under the heading *Section 117 Direction 4.3 Flood Prone Land.*

Acid Sulfate Soils

An Acid Sulfate Soils Management Plan will be required to support any future development application in accordance with the existing provisions of Parramatta LEP 2011.

Overshadowing

In accordance with condition 1(b) of the Gateway Determination issued on 12 June 2015, **Appendix 8** illustrates the cumulative impacts of the proposals in conjunction with the proposal at 142-154 Macquarie Street and 118 Harris Street & 135 George Street, Parramatta.

Traffic

A Traffic and Parking Assessment Report prepared by Varga Traffic Planning Pty Ltd dated October 2015 has been included with this Planning Proposal at **Appendix 9**. The Report assesses the potential impact of the Planning Proposal on the Local Traffic network and concludes as follows:

- *"the planning proposal seeks to increase the development yield of a previously approved mixed-use development located at 184-188 George Street, Parramatta*
- *a total of 267 apartments are envisaged in the new building, with a ground/first level commercial component comprising 700m2 of floor area*
- *the proposed development is expected to have a traffic generation potential of approximately 78 vph during commuter peak periods, a nett increase of 49 vph when compared with the previously approved development of the site*
- *there is adequate capacity in the surrounding road network to cater for the traffic generated by the development*
- *the future car parking facilities will be designed in accordance with the relevant standards and guidelines, and will not exceed the maximum car parking requirements*
- *the future bicycle parking facilities will be designed in accordance with the relevant standards and guidelines, and satisfy the minimum bicycle parking requirements*
- *the site is envisaged to be serviced a variety of light commercial vehicles such as white vans, utilities and the like, up to and including small rigid trucks, as per the previously approved development*
- *the loading facilities, manoeuvring areas and access arrangements for the light commercial vehicles will ultimately be designed in accordance with Council's requirements as well as the relevant standards and guidelines."*

While the Traffic and Parking Assessment Report provided at **Appendix 9** demonstrates that the proposal will not have an impact on the local road network, an assessment of the cumulative impact of this proposal in conjunction with the broader Parramatta CBD Planning Proposal is yet to be finalised.

Council finalised a Strategic Transport Study (STS) for Parramatta CBD in relation to the Parramatta CBD Planning Proposal, in consultation with Transport for NSW and Roads and Maritime Services (RMS). Following completion of the final Study, at its meeting on 10 April 2017 Council resolved to endorse the Study and to forward the Strategic Transport Study to the Department of Planning and Environment to form part of the Gateway submission for the CBD Planning Proposal.

The resolution also confirmed Council's position in relation to car parking rates for the Parramatta CBD as follows.

(a) ***That*** *Council endorses the attached Parramatta CBD Strategic Transport Study and accompanying Technical Papers for the purposes of forwarding to the Department of Planning and Environment as part of the Parramatta CBD Planning Proposal.*

(b) ***That*** *Council endorses the action recommended by the Parramatta CBD Strategic Transport Study to reduce maximum car parking rates to levels currently used by City of Sydney CBD and that the Parramatta CBD Planning Proposal be amended to reflect this prior to public exhibition.*

(c) ***That*** *Council applies the recommended parking rates proposed in this report to existing site-specific Planning Proposals and Design Competitions within the Parramatta CBD as a provision applicable to each proposal or competition to ensure future development will be consistent with the strategic direction to reduce maximum car parking rates. (N.B. Only those site-specific planning proposals which are imminent to finalisation (gazettal), that is they have been endorsed by the Council to proceed to finalisation following public exhibition, will be exempt from this provision).*

The Council resolution of 10 April 2017 allows for a site specific clause to be included for this site specific planning proposal, providing for maximum car parking rates in line with the Parramatta CBD Strategic Transport Study.

In addition to the Strategic Transport Study, Transport for NSW have completed Mesoscopic Modelling of the Greater Parramatta to Olympic Peninsula for the light rail route. Following completion of both the Strategic Transport Study and Mesoscopic Modelling, Council has commenced an Integrated Transport Plan to determine the existing and future transport system requirements that will be required to support future growth proposed by the Parramatta CBD Planning Proposal.

3.3.3 How has the planning proposal adequately addressed any social and economic effects?

There is adequate justification for this Planning Proposal, which will facilitate an increase in density and the future development of housing and employment.

The Planning Proposal has the potential to result in improvements to the public domain along George Street, new public walkway and the river foreshore. The future development will likely incorporate a mix of apartment types to respond to the diverse population and potentially contributing to housing choice and affordability. Based on the assumed development outcomes, the Planning Proposal has the potential to generate jobs during the construction phase and permanent jobs following completion of the development.

Community consultation and public authority consultation during the public exhibition of the application will explore the social and economic benefits in more detail.

3.4 Section D – State and Commonwealth Interests

3.4.1 Is there adequate public infrastructure for the planning proposal?

All essential services are available for connection to the subject site and arrangements will be required to be made direct with the providers of each service in conjunction with any future development application.

3.4.2 What are the views of State and Commonwealth public authorities consulted in accordance with the gateway determination?

State and Commonwealth authorities will be consulted in accordance with Section 57 of the *EP&A Act 1979*, in accordance with the requirements of the gateway determination.

PART 4 – MAPPING

This section contains the mapping for this planning proposal in accordance with the Department of Planning and Environment's guidelines on LEPs and Planning Proposals.

4.1 Existing controls

This section contains map extracts from *Parramatta LEP 2011* which illustrate the current controls applying to the site.

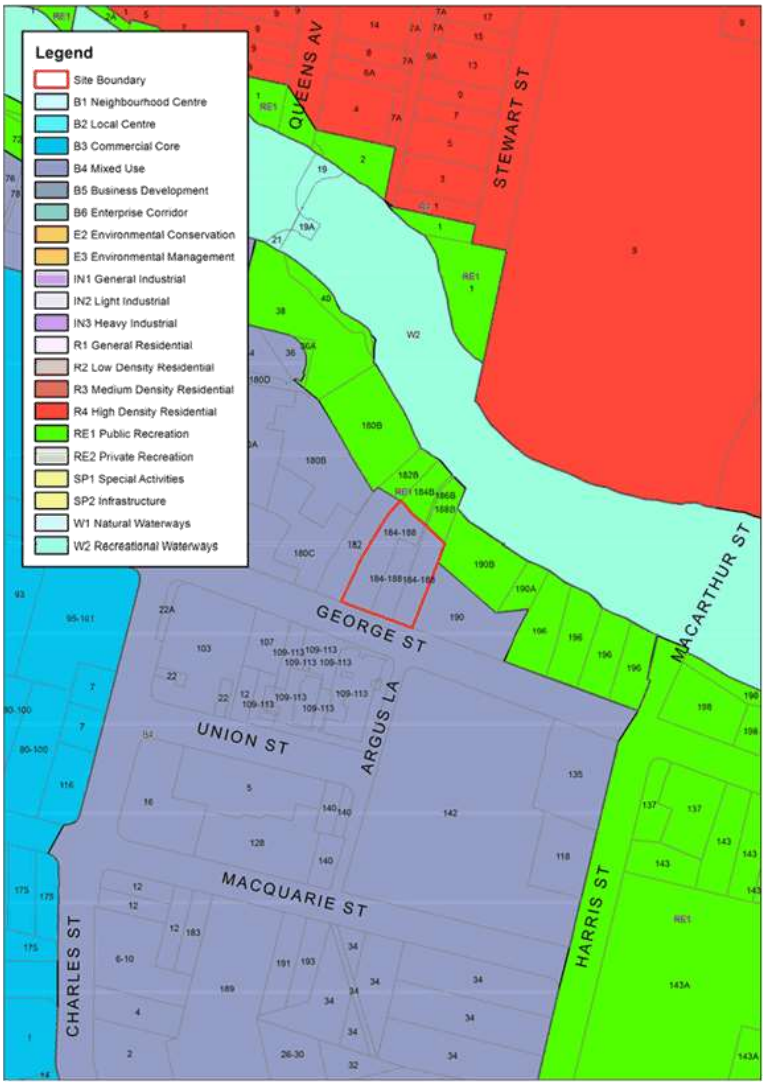


Figure 2 – Existing zoning extracted from the *Parramatta LEP 2011* Land Zoning Map

Figure 2 above illustrates the existing B4 Mixed Use zone over the site.

19

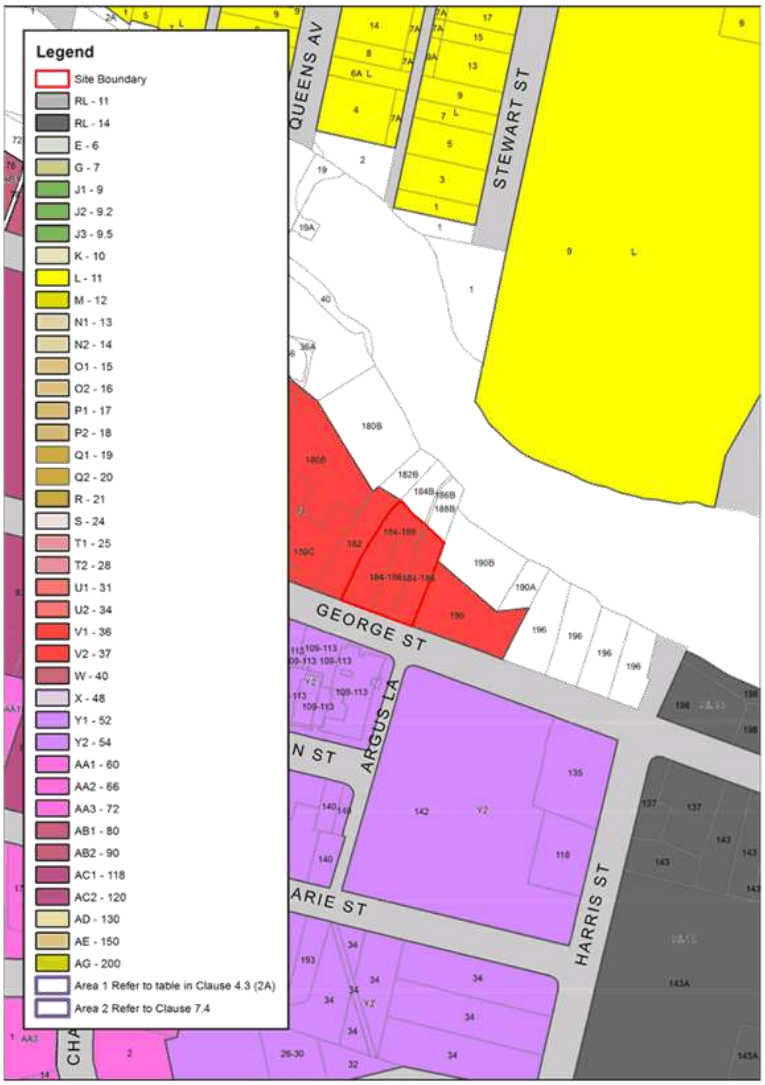


Figure 3 – Existing building heights extracted from the *Parramatta LEP 2011* Height of Buildings Map

Figure 3 above illustrates the existing 36 metre height limit applying to the site.

20

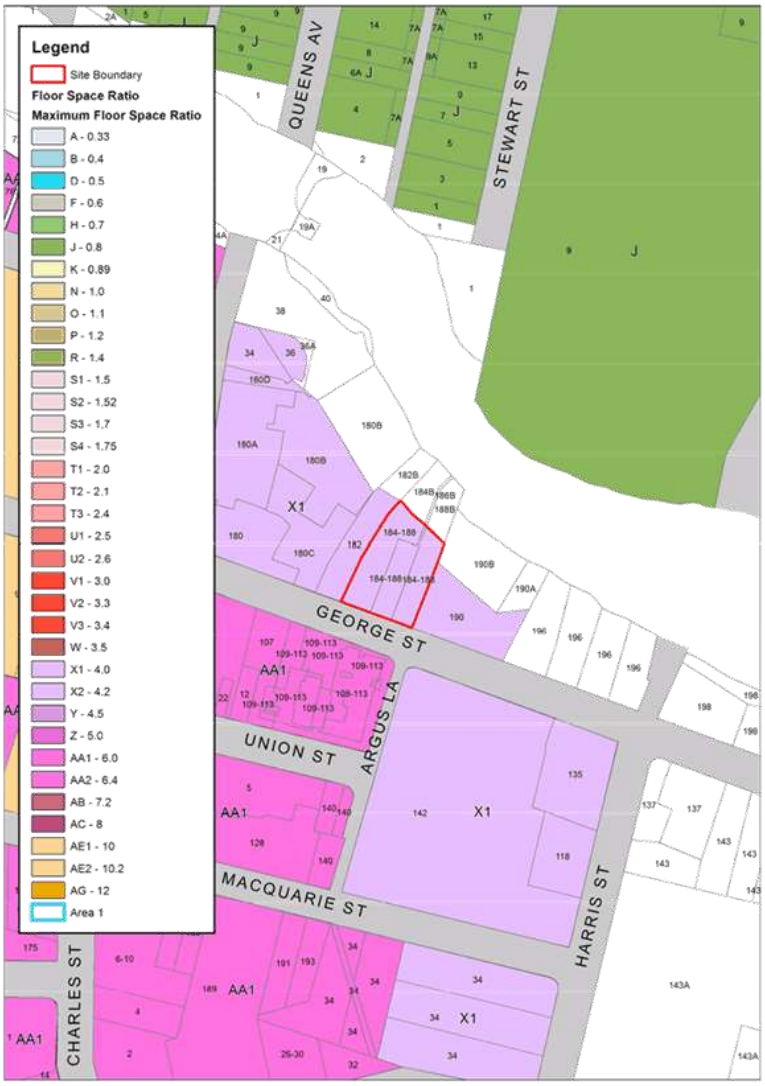


Figure 4 – Existing floor space ratio extracted from the *Parramatta LEP 2011* Floor Space Ratio Map

Figure 4 above illustrates the existing 4:1 FSR which applies to the entire site.

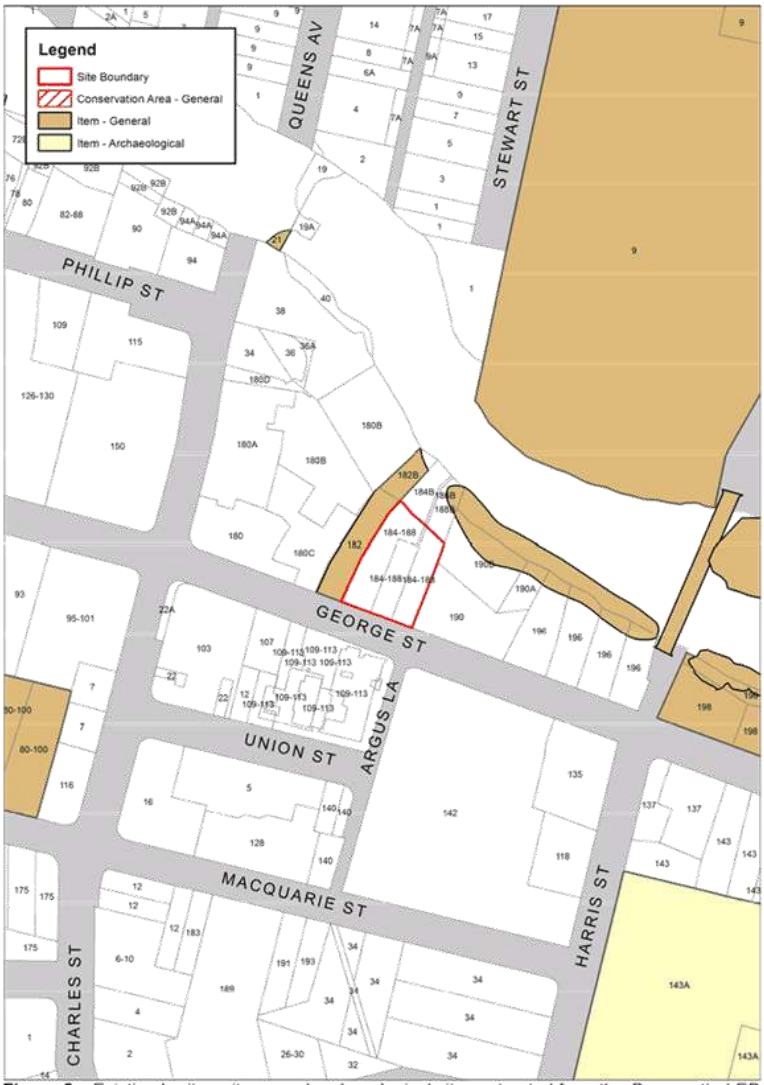


Figure 5 – Existing heritage items and archaeological sites extracted from the *Parramatta LEP 2011* Heritage Map

Figure 5 above illustrates the heritage sites which are located adjacent to the site.

22

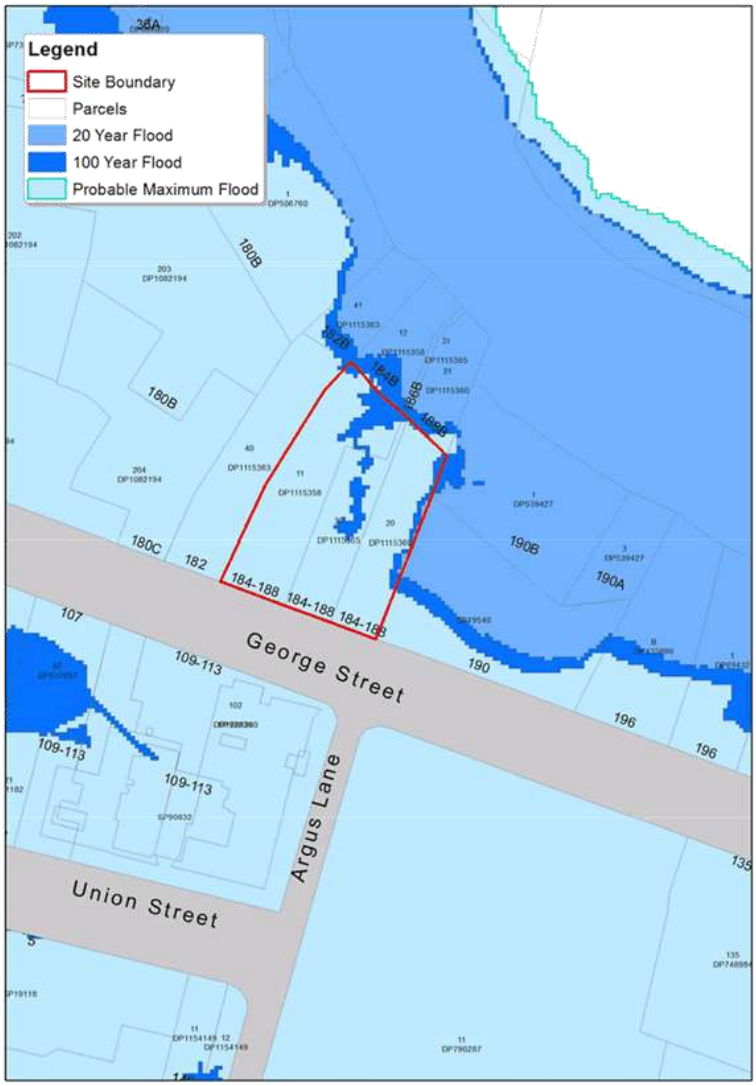


Figure 6 – Existing flood mapping extracted from the Parramatta Geographic Information system database

Figure 6 above illustrates the 1 in 20 year, 1 in 100 year and probable maximum flood events for the site and its immediate vicinity.

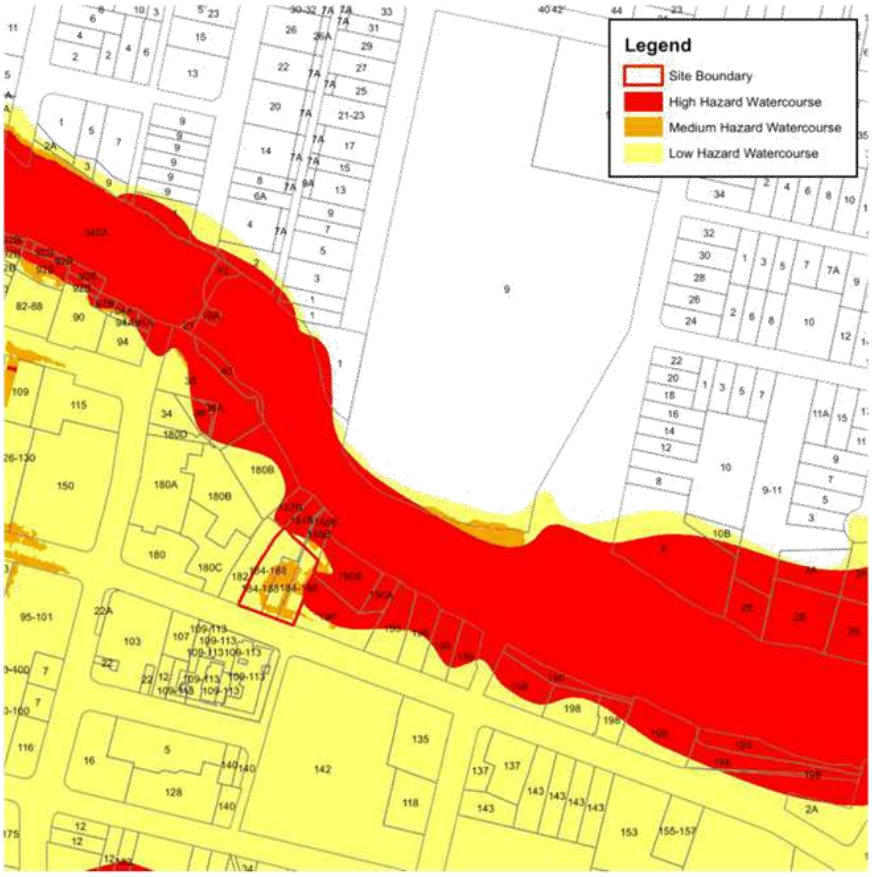


Figure 7 – Existing flood hazard mapping extracted from the Parramatta Geographic Information system database

Figure 7 above illustrates the low, medium and high hazard flood affectation of the site and its immediate vicinity.

4.2 Proposed controls

The figures in this section (Figures 8 and 9) illustrate the proposed building height and floor space ratio controls sought by this planning proposal.

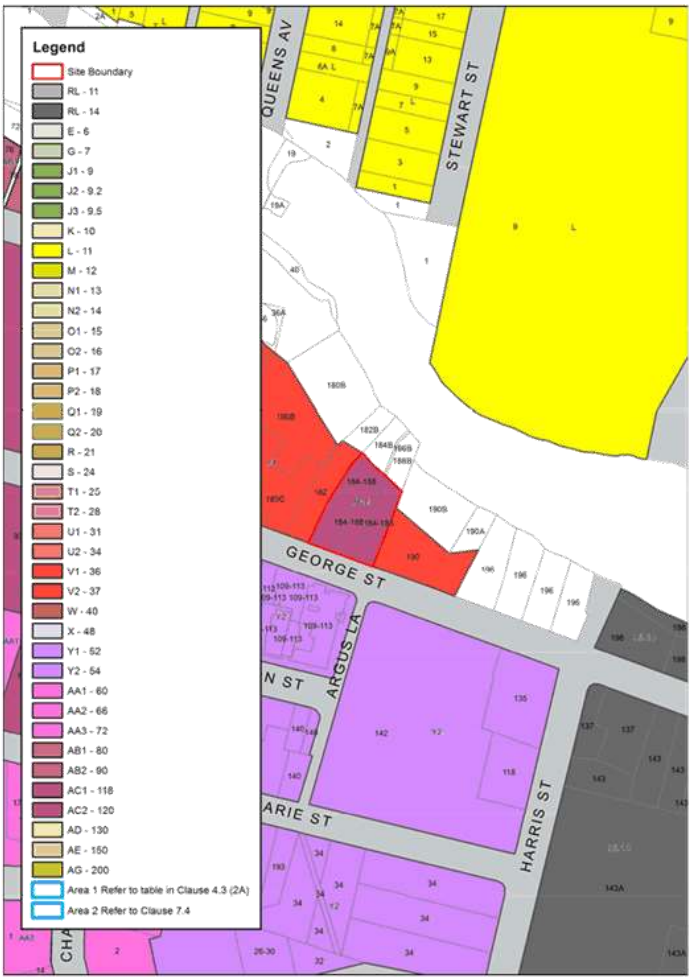


Figure 8 – Proposed amendment to the *Parramatta LEP 2011* Height of Building Map

Figure 8 above illustrates proposed maximum building height of 120 metres over the site. The proposed height excludes the additional 15% of GFA (which equates to a total height of 138 metres) as this will be achieved through the Design Excellence process in accordance with Clause 7.10 of Parramatta LEP 2011.

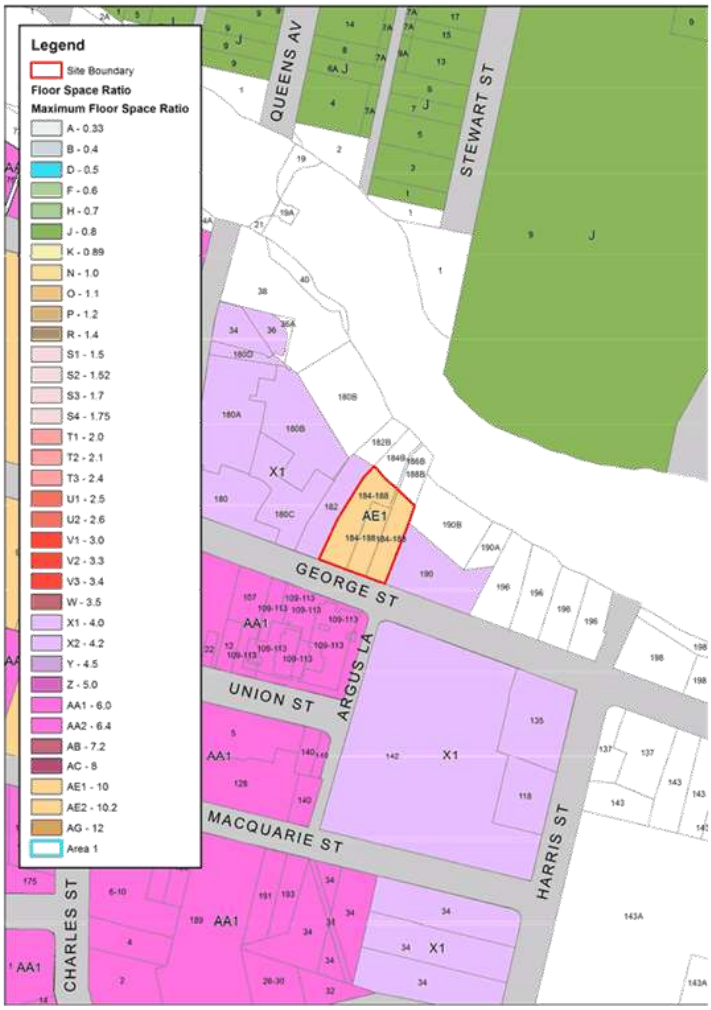


Figure 9 – Proposed amendment to the *Parramatta LEP 2011* Floor Space Ratio Map

Figure 9 above illustrates the proposed 10:1 FSR over the site. This excludes the additional 15% of GFA (which equates to a total FSR of 11.5:1) achieved through the design excellence clause at development application stage.

PART 5 – COMMUNITY CONSULTATION

In accordance with Section 57(2) of the Act, the Secretary of the Department of Planning and Environment must approve the form of the Planning Proposal, as revised to comply with the gateway determination, before community consultation is undertaken.

Public exhibition will include a newspaper advertisement, display on the Council's website and written notification to adjoining landowners. The Gateway determination specifies the level of public consultation that must be undertaken in relation to the Planning Proposal.

Pursuant to Section 57(8) of the Act, the Responsible Planning Authority must consider any submissions made concerning the proposed instrument and the report of any public hearing.

PART 6 – PROJECT TIMELINE

The following next steps are anticipated:

- Referral to Minister for a Gateway determination (February 2015)
- A Gateway Determination received from Department of Planning and Environment (12 June 2015)
- Commencement and completion dates for public exhibition period and government agency notification (5 April – 10 May 2017) - *complete*
- Council's consideration of submissions (March 2018) - *complete*
- Consideration of proposal post exhibition and reporting to Council (April 2018)
- Submission to the Department to finalise the LEP (April 2018)
- Notification of instrument (September 2018)

APPENDICES

The Appendices listed below are available via:

- Department of Planning and Environment's website http://leptracking.planning.nsw.gov.au; or
- Upon request of Council's Land Use Planning Team – please contact Bianca Lewis, blewis@cityofparramata.nsw.gov.au or 9806 5531.

Appendix 1 – Gateway Determination

Appendix 2 – Statement of Heritage Impact

Appendix 3 – Archaeological and Heritage Assessment

Appendix 4 – Aboriginal Archaeological Assessment

Appendix 5 – Address of 117 Direction: 4.3 – Flood Prone Land and Council's Development Engineer Response

Appendix 6 – Urban Design Contextual Modelling

Appendix 7 – Urban Design Study

Appendix 8 – Solar Access Images

Appendix 9 – Traffic & Parking Assessment Report

Planning Proposal – 184-188 George Street, Parramatta

Prepared by City of Parramatta Council

PARRAMATTA WE'RE BUILDING AUSTRALIA'S NEXT GREAT CITY

DRAFT AMENDMENTS TO PARRAMATTA DEVELOPMENT CONTROL PLAN 2011

**Amendments to the PDCP2011 text shown below in red italic text.*

***Proposed amendments to the Draft DCP (as per Council report 9 April 2018) shown in blue italic text and dash line where changes to Figures*

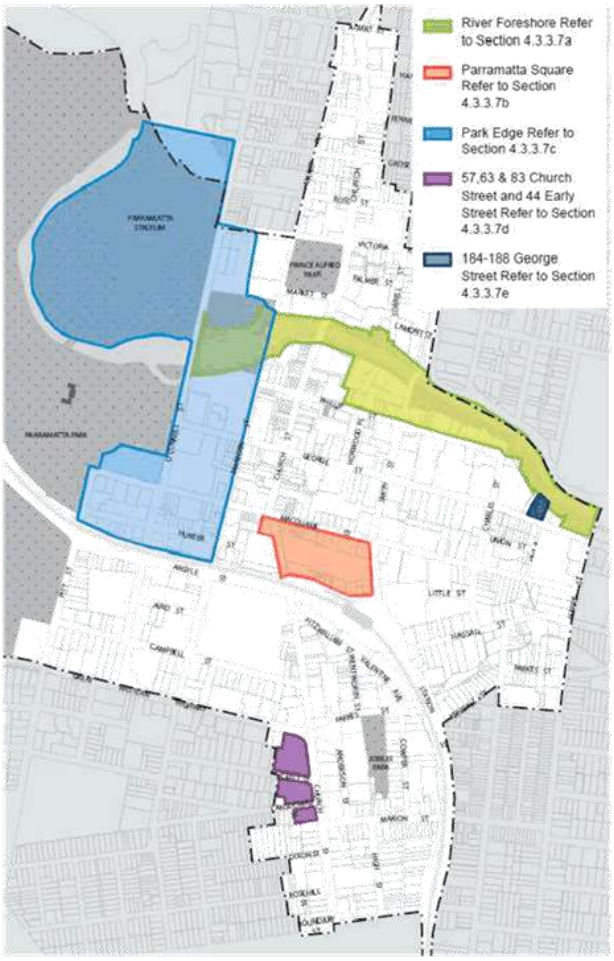
Section 4.3.3 –Parramatta City Centre

1. Insert Note to Figure 4.3.3.1.1 (Building Alignment & Front Setbacks – p219); Figure 4.3.3.1.3 (Street/River Frontage Heights – p222); Figure 4.3.3.3.1 (Public Domain – p234); and Figure 4.3.3.3.2 (Existing & Desired Links p 236) to read as follows:

   Refer also site specific controls contained in Section 4.3.3.7 City Centre Special Areas.

Section 4.3.3.7 City Centre Special Areas

2. Update figure 4.3.3.7.1 to identify the properties at 184-188 George Street, Parramatta and update map key to say *184-188 George Street refer to Section 4.3.3.7e*



3. Insert new Section 4.3.3.7e being site specific controls relating to 184-188 George Street, Parramatta as detailed below.

e) Nos 184 – 188 George Street, Parramatta

Figure 4.3.3.7.20 – Area covered by Section 4.3.3.7 e being 184 – 188 George Street

Land and Development covered by this plan

This part of the DCP applies to Nos 184 – 188 George Street, Parramatta. The site comprises three allotments of land between George Street and the Parramatta River foreshore reserve as shown in Figure 4.3.3.7.20.

Relationship to other Planning Documents

This part of the DCP is to be read in conjunction with other parts of the DCP and the Parramatta City Centre Local Environmental Plan (LEP) 2011.

If there is any inconsistency between part 4.3.3.7e of the DCP and other parts the DCP, part 4.3.3.7e will prevail.

Desired Future Character

The redevelopment of the site should provide for an appropriate relationship to the state significant heritage item known as 'Harrisford' to the west of the site. Future built form should seek to maximise the curtilage to 'Harrisford' and ensure that 'Harrisford' remains prominent in the George Street streetscape. Both podium and tower setbacks to 'Harrisford' should be maximised to achieve this outcome as well as provision of suitable setbacks to George Street.

A through site link is desired adjacent the site's western boundary, providing a midblock connection between George Street and Parramatta River and also creating an additional public interface to 'Harrisford'.

Future development should provide an appropriate interface to the public domain along both George Street and Parramatta River. High quality articulated facades are desired to all elevations given public domain interfaces to the street, the River foreshore, through site link, and the prominence of any future building from the north-eastern eastern approach into Parramatta CBD from Gasworks Bridge.

Future redevelopment should provide an appropriate connection and transition to any future public promenade along the Parramatta River foreshore, and enhance connection to the Parramatta Ferry Terminal.

Overshadowing impacts of any future development on the site on public open spaces including the Robin Thomas Reserve and James Ruse Reserve should be minimised

An appropriate design response is to be provided to address any flood affectation of the land, and existing stormwater drainage through the site is to be appropriately relocated in conjunction with the redevelopment of the land.

Site Objectives

Objectives

O.1 To create a mixed use building with setbacks and articulation that are compatible with maintaining a strong streetscape presence for the adjoining heritage item 'Harrisford'.

O.2 To maximise the opportunities to expand the curtilage of 'Harrisford'.

O.3 To ensure the scale and proportions of the future building elements on the site are compatible with 'Harrisford'.

O.4 To provide a high quality built form as viewed from all elevations and recognising the potential prominence of the building from the public domain and the north –eastern gateway into the Parramatta CBD.

O.5 To provide public domain elements including a pedestrian through site link, forecourt to the George Street frontage, and connection to a future public promenade along the Parramatta River foreshore.

O.6 To provide active ground floor uses to increase pedestrian activity and promote casual surveillance along George Street, Parramatta River foreshore and the through site link.

O.7 To minimise overshadowing impacts on public open spaces including Robin Thomas Reserve and James Ruse Reserve.

O.8 To appropriately address the level of flood affectation on the site and to manage stormwater flows between George Street and the foreshore reserve.

Controls

Public Domain

C.1 A new pedestrian through site link (link) is to be provided adjacent to the western side boundary of the site linking George Street and the Parramatta River foreshore. The link is to have a minimum width of 6 metres at its interface with Harrisford House and gradually reduce to a minimum of 3 metres as per Figure 4.3.3.7.21. ~~However, an~~ Any increase in the width of the ground level setback ~~up to 6m~~ could be considered as part of any future architectural design excellence competition and subsequent development application.

C.2 The pedestrian link is to provide public access 24 hours per day, 7 days per week and may be the subject of land dedication to Council or an easement.

C.3 The pedestrian through site link is to be the subject of a Public Domain Plan and Alignment Plan and consistent with the Parramatta Public Domain Guidelines (City Centres Lanes) and with the objectives of the Parramatta Laneways Strategy. Finished treatment of the laneway should provide a high quality finish and incorporate pedestrian level lighting.

C.4 Future development should comply with Section 4.3.3.7 (a) River Foreshore.

C.5 The finished levels of any future building and though site link are to provide an appropriate connection to the finished levels of 'Harrisford' and any future public promenade built along the Parramatta River foreshore edge. Careful consideration should also be given to flood planning requirements. The intent is to provide access that is as seamless as possible between all activated spaces and public domain areas.

C.6 The setback area/public forecourt to George Street is to be appropriately treated and activated.

C.7 Continuous active frontages are to include retail and commercial uses along the George Street frontage, the through site link and the interface with the Parramatta River foreshore reserve.

Heritage

C.8 Future development should maximise podium and tower setbacks to 'Harrisford'. Minimum setbacks are detailed in Figures 4.3.3.7.21 to 4.3.3.7.23 below. However any opportunity to increase both the podium and tower setbacks as they relate to 'Harrisford' could be considered as part of any future architectural design excellence competition and subsequent development application.

C.9 Building setbacks to George Street should maximise the prominence of 'Harrisford' in the George Street streetscape. Minimum setbacks are shown in Figures 4.3.3.7.21 to 4.3.3.7.23 below.

C.10 Requirements of the NSW Office of Environment and Heritage are to be addressed with respect to both Aboriginal and Archaeological heritage significance of the site.

C.11 Façade treatment and exterior finishes palette is to be approved by Council to ensure a suitable relationship to 'Harrisford'.

Building Form

Apartment Design

C.12 Future built form shall comply with the requirements of SEPP 65 (State Environmental Planning Policy No 65 - Design Quality of Residential Apartment Development) and the Apartment Design Guide prepared by the NSW Department of Planning & Environment

Building setbacks

C.13 Future built form should be consistent with the minimum building setbacks shown in Figures 4.3.3.7.21, 4.3.3.7.22 and 4.3.3.7.23. Opportunity to increase the width of the through site link and the podium and tower setbacks as they relate to 'Harrisford' could be considered as part of any future architectural design excellence competition and subsequent development application.

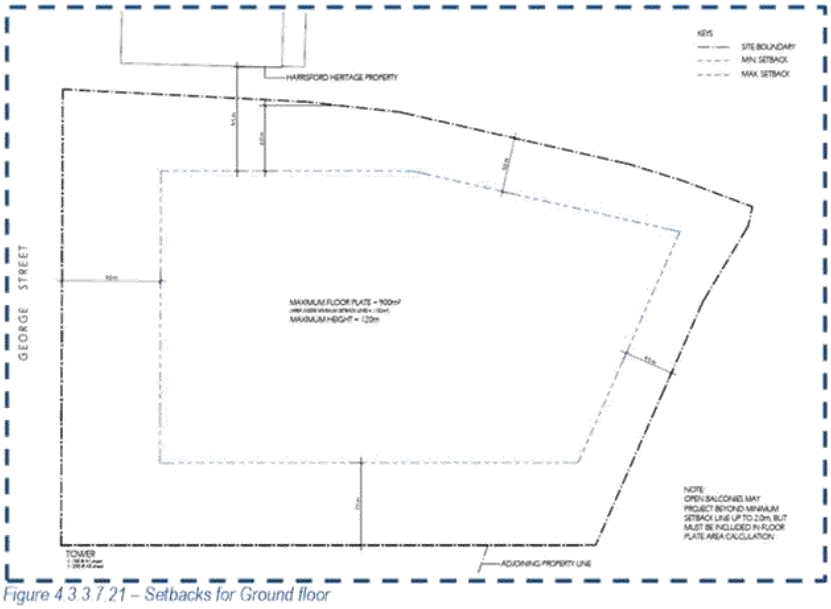


Figure 4.3.3.7.21 – Setbacks for Ground floor

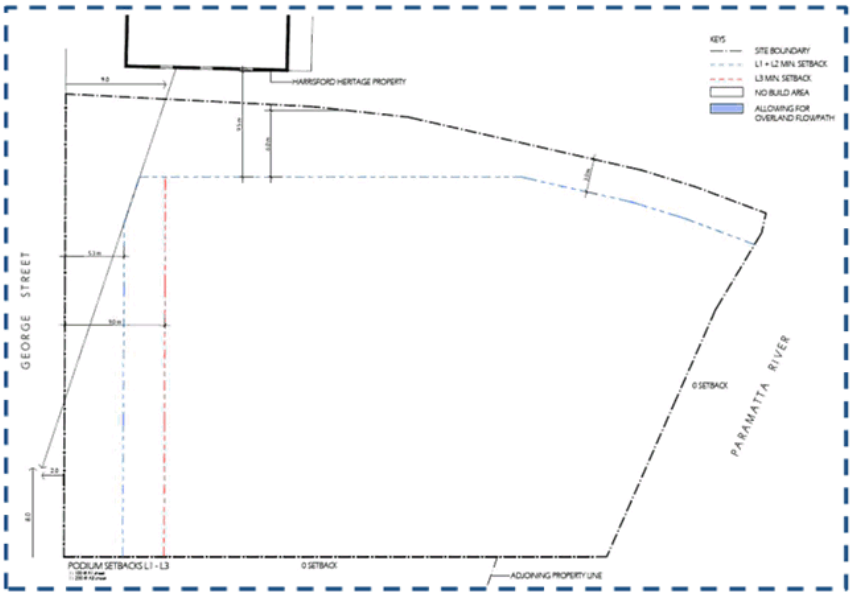


Figure 4.3.3.7.22 – Setbacks for Ground Level, Level 2 and 3

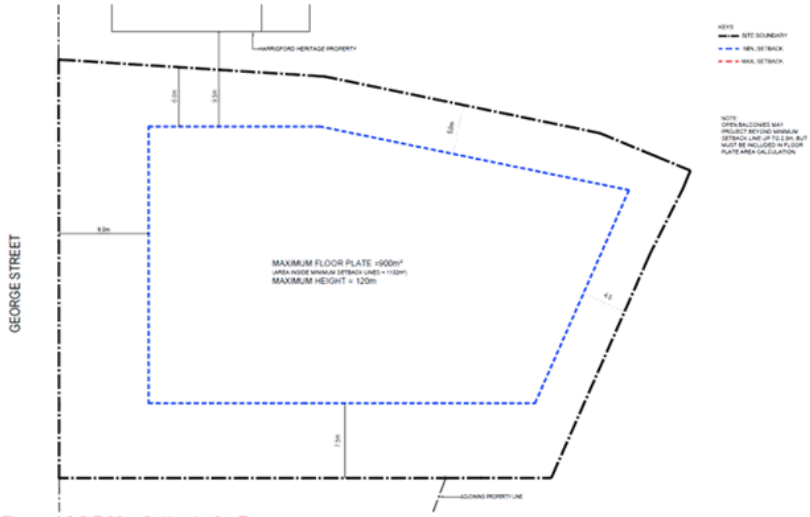


Figure 4.3.3.7.23 – Setbacks for Tower

Scale of Podium

C.15 The podium height to George Street is to be two (2) to three (3) storeys in height. Should a third storey be proposed, exterior finishes and architectural treatments are to be applied to the George Street façade of the podium to give the appearance of two storeys to match the proportions of the Harrisford façade.

C.16 The podium height to the foreshore boundary is to be a maximum of three (3) to four (4) storeys in height. Development should achieve an appropriate pedestrian scale adjacent to any future public domain promenade.

Floor Plate

C.17 The tower component is to have a maximum floor plate of 900m² and is to include external walls and balconies.

Wind Mitigation

C.18 Future development should comply with Section 4.3.3.1 (f) Building form and wind mitigation, and also have regard to the potential wind impact on any through site link.

Overshadowing Impacts

C.19 Development should seek to minimise the overshadowing impact of future development on public open spaces including Robin Thomas Reserve and James Ruse Reserve.

Flooding & Stormwater Management

C.20 Future development of the site is to meet the flooding controls contained within Parramatta LEP 2011, Parramatta DCP 2011 and the Lower Parramatta River Floodplain Risk Management Plan (and other relevant legislation and/or guidelines. Also refer to any future flood planning controls relating to the CBD arising from the CBD Planning Framework.

C.21 Future redevelopment of the site may be required to relocate the existing Council owned stormwater drainage line, which traverses the site, to Council's satisfaction. Should the stormwater drainage line be required to be located, a new easement for drainage and overland flow path adjacent to the eastern side boundary is to be provided to meet this requirement. The relocated stormwater drainage line system will need to be designed to have a 1 in 20 year ARI design capacity. The overland flow path is to be designed to enable the 1 in 100 year overland flows to be safely conveyed.

C.22 Car parking on the site associated with future redevelopment is to address Council's flooding concerns.

C.23 The lower ground level must relate to the river foreshore and not present blank walls/inaccessible undercroft areas as a result of the flood condition.

Vehicular Access

C.24 A combined vehicle entry/exit crossing is to be located in the south east corner of the site with direct access to George Street. The finished levels and the location of the driveway are to be compatible with the engineering design requirements for an overland flow path and easement for drainage adjacent to the eastern side boundary.

Voluntary Planning Agreement

City of Parramatta Council

ABN 49 907 174 773

Riverport Parramatta Pty Limited ATF The Riverport Unit Trust

ACN 159 635 024

DRAFT

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Agreement

Date

Parties

First party

Name	City of Parramatta Council (**Council**)
ACN	49 907 174 773
Contact	Manager, Land Use Planning
Telephone	(02) 9806 5050

Second party

Name	Riverport Parramatta Pty Limited ATF The Riverport Unit Trust (**Developer**)
ACN	159 635 024
Contact	Raymond Touma, Director
Telephone	0411 080 551

Background

A. The Developer has made an application to the Council for the Instrument Change for the purpose of making a Development Application to the Council for Development Consent to carry out the Development on the Land.

B. The Instrument Change application was accompanied by an offer by the Developer to enter into this agreement to make contributions for public purposes associated with the Instrument Change and the Development.

Operative part

1 Definitions

In this agreement, unless the context indicates a contrary intention:

Act means the *Environmental Planning and Assessment Act 1979* (NSW);

Address means a party's address set out in the Notices clause of this agreement;

Approval means any certificate, licence, consent, permit, approval or other requirement of any Authority having jurisdiction in connection with the activities contemplated by this agreement;

Authority means any government, semi-governmental, statutory, administrative, fiscal or judicial body, department, commission, authority, tribunal, public or other person;

Bank Guarantee means an irrevocable and unconditional undertaking that is not limited in time and does not expire by one of the following trading banks:

(a) Australia and New Zealand Banking Group Limited,

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(b) Commonwealth Bank of Australia,

(c) Macquarie Bank,

(d) National Australia Bank,

(e) St George Bank Limited,

(f) Westpac Banking Corporation, or

(g) Other financial institution approved by the Council,

to pay an amount or amounts of money to the Council on demand and containing terms and conditions reasonably acceptable to the Council;

Business Day means a day on which banks are open for general banking business in Sydney, excluding Saturdays and Sundays;

Certificate of Practical Completion means the written certificate confirming the Works, or part of the Works, have been completed to the Council's satisfaction issued under clause 8.1(d) of Schedule 2;

Claim means any claim, loss, liability, damage, proceeding, order, judgment or expense arising out of the operation of this agreement;

Construction Certificate means a construction certificate as defined under s 109C of the Act;

Construction Terms means the terms set out in Schedule 2;

CPI means the All Groups Consumer Price Index applicable to Sydney published by the Australian Bureau of Statistics;

Dealing, in relation to the Land, means, without limitation, selling, transferring, assigning, mortgaging, charging, encumbering or otherwise dealing with the Land;

Development means any future development of the Land for a mixed use building with basement car parking, ground floor commercial uses and residential apartments;

Development Application has the same meaning as in the Act;

Development Consent has the same meaning as in the Act;

Easement Terms means the terms of a public access easement as set out in Schedule 3;

Easement for Support Terms means the terms of an easement for support benefitting the Pedestrian Link Land as set out in Schedule 3A;

Fax Number means a party's facsimile number set out in the Notices clause of this agreement;

GST has the same meaning as in the GST Law;

GST Law has the meaning given to that term in *A New Tax System (Goods and Services Tax) Act 1999* (Cth) and any other Act or regulation relating to the imposition of or administration of the GST;

Insolvent means, in relation to a party:

(a) that party makes an arrangement, compromise or composition with, or assignment for, the benefit of its creditors or a class of them;

(b) a receiver, receiver and manager, administrator, provisional liquidator, trustee, controller, inspector or analogous person is appointed in relation to, or over, all or any part of that party's business, assets or securities;

(c) a presumption of insolvency has arisen under legislation because of the party's failure to comply with a statutory demand or analogous process;

(d) an application for the winding up of, or for the appointment of a receiver to, that party, other than winding up for the purpose of solvent reconstruction or re amalgamation, is presented and not withdrawn or dismissed within [21] days (or such longer period agreed to by the parties), or an order is made or an effective resolution is passed for the winding up of, or for the appointment of a receiver to, that party, or any analogous application is made or proceedings initiated;

(e) any shareholder or director of that party convenes a meeting for the purpose of considering or passing any resolution for the winding up or administration of that party;

(f) that is an individual, a creditor's petition or a debtor's petition is presented to the Official Receiver or analogous authority in relation to that party;

(g) an execution or analogous process is levied or enforced against the property of that party;

(h) that party ceases or suspends, or threatens to cease or suspend, the conduct of all or a substantial part of its business;

(i) that party disposes of, or threatens to dispose of, a substantial part of its assets;

(j) that party stops or suspends, or threatens to stop or suspend, payment of all or a class of its debts; or

(k) that party is unable to pay the party's debts as and when they become due and payable.

Instrument Change means an amendment to the LEP to increase the maximum building height for the Land from 36m to 120m and to increase the floor space ratio controls applying to the Land from 4:1 to 10:1 as set out in the planning proposal submitted to the Minister and the gateway determination relating to that proposal granted on 12 June 2015;

Land means Lot 11 DP 1115358, Lot 20 DP 1115360 and Lot 30 DP 1115365, known as 184-188 George Street, Parramatta;

Law means:

(a) any law applicable including legislation, ordinances, regulations, by-laws and other subordinate legislation;

(b) any Approval, including any condition or requirement under it; and

(c) any fees and charges payable in connection with the things referred to in paragraphs (a) and (b);

LEP means the *Parramatta Local Environmental Plan 2011*;

Modification Application means any application to modify the Development Consent under section 96 of the Act;

Monetary Contribution means the monetary contribution payable by the Developer under clause 6 of this agreement;

Occupation Certificate means an occupation certificate as defined under section 109C of the Act, and includes an interim Occupation Certificate or a final Occupation Certificate;

Pedestrian Link Land means that part of the Land necessary to establish a 3m wide through-site link situated on the western boundary of the Land connecting George Street with the Parramatta River shown generally on the plan at Annexure B;

Register means the Torrens title register maintained under the *Real Property Act 1900* (NSW);

Regulation means the *Environmental Planning and Assessment Regulation 2000*;

Transferee has the meaning given in clause 12.3; and

Works means the work set out in Schedule 1.

2 Interpretation

In this agreement, unless the context indicates a contrary intention:

(a) (**documents**) a reference to this agreement or another document includes any document which varies, supplements, replaces, assigns or novates this agreement or that other document;

(b) (**references**) a reference to a party, clause, paragraph, schedule or annexure is a reference to a party, clause, paragraph, schedule or annexure to or of this agreement;

(c) (**headings**) clause headings and the table of contents are inserted for convenience only and do not affect interpretation of this agreement;

(d) (**person**) a reference to a person includes a natural person, corporation, statutory corporation, partnership, the Crown and any other organisation or legal entity and their personal representatives, successors, substitutes (including persons taking by novation) and permitted assigns;

(e) (**party**) a reference to a party to a document includes that party's personal representatives, executors, administrators, successors, substitutes (including persons taking by novation) and permitted assigns;

(f) (**president, CEO or managing director**) the president, CEO or managing director of a body or Authority means any person acting in that capacity;

(g) (**requirements**) a requirement to do any thing includes a requirement to cause that thing to be done, and a requirement not to do any thing includes a requirement to prevent that thing being done;

(h) (**including**) including and includes are not words of limitation, and a list of examples is not limited to those items or to items of a similar kind;

(i) (**corresponding meanings**) a word that is derived from a defined word has a corresponding meaning;

(j) (**singular**) the singular includes the plural and vice-versa;

(k) (**gender**) words importing one gender include all other genders;

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(l) (**parts**) a reference to one or more things includes each part and all parts of that thing or group of things but nothing in this clause implies that part performance of an obligation constitutes performance of that obligation;

(m) (**rules of construction**) neither this agreement nor any part of it is to be construed against a party on the basis that the party or its lawyers were responsible for its drafting;

(n) (**legislation**) a reference to any legislation or provision of legislation includes all amendments, consolidations or replacements and all regulations or instruments issued under it;

(o) (**time and date**) a reference to a time or date in connection with the performance of an obligation by a party is a reference to the time and date in , Australia, even if the obligation is to be performed elsewhere;

(p) (**joint and several**) an agreement, representation, covenant, right or obligation:

(i) in favour of two or more persons is for the benefit of them jointly and severally; and

(ii) on the part of two or more persons binds them jointly and severally;

(q) (**writing**) a reference to a notice, consent, request, approval or other communication under this agreement or an agreement between the parties means a written notice, request, consent, approval or agreement;

(r) (**replacement bodies**) a reference to a body (including an institute, association or Authority) which ceases to exist or whose powers or functions are transferred to another body is a reference to the body which replaces it or which substantially succeeds to its power or functions;

(s) (**Australian currency**) a reference to dollars or $ is to Australian currency;

(t) (**month**) a reference to a month is a reference to a calendar month; and

(u) (**year**) a reference to a year is a reference to twelve consecutive calendar months.

3 Planning Agreement under the Act

(a) The parties agree that this agreement is a planning agreement within the meaning of section 93F of the Act.

(b) Schedule 4 of this agreement summarises the requirements for planning agreements under s 93F of the Act and the way this agreement addresses those requirements.

4 Application of this agreement

This agreement applies to:

(a) the Instrument Change, and

(b) the Land.

5 Operation of this agreement

This agreement commences on and from the date it is executed by all parties.

6 Contributions to be made under this agreement

6.1 *Monetary Contribution*

(a) The Developer will pay to Council a monetary contribution of $1,000,000 or an amount calculated in accordance with the following formula, whichever is the greater:

$$\$1{,}000{,}000 \times \frac{\text{The CPI at the time of payment}}{\text{The CPI at the date of this agreement}}$$

(b) The Monetary Contribution must be paid to Council prior to the issue of the first Construction Certificate for the Development.

(c) The Monetary Contribution must be paid by way of bank cheque in favour of Council or by deposit by means of electronic funds transfer into an account specified by Council.

(d) The Monetary Contribution will be taken to have been made when the Council notifies the Developer in writing that the bank cheque has been received and cleared funds or electronic funds have been deposited in the Council's bank account.

(e) The parties agree and acknowledge that the Monetary Contribution will be used by the Council towards Parramatta River foreshore works generally in accordance with the Parramatta City River Strategy adopted by Council on 25 May 2015, or as otherwise determined by Council.

(f) The Council agrees that it will give consideration to applying the monetary contribution towards foreshore pedestrian works on the northern side of the Parramatta River where practicable.

6.2 *Works*

(a) The Developer will carry out the Works in accordance with this agreement, including the Construction Terms and any Development Consent granted for the Works.

(b) The Works or any part of the Works required under this agreement will be taken to have been completed for the purposes of this agreement when a Certificate of Practical Completion has been issued for those Works.

(c) The Works must be completed prior to the grant of any easement for public access as required under clause 6.3.

(d) The parties agree and acknowledge that the Works serve the following public purposes:

(i) Improved pedestrian access and the creation of new connections to the Parramatta River foreshore; and

(ii) Improved pedestrian amenity in the vicinity of the Development.

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6.3 Public Access and Easements

(a) Subject to clause 6.2, the Developer will, at no cost to Council, register against the title to the Land:

(i) a covenant prohibiting any building or structures, including pillars, other than structures approved by the Council (acting reasonably) for the purposes of enhancing public domain areas, to be constructed on the Pedestrian Link Land, which covenant is to be limited in height and depth as required by the design for the Pedestrian Link Land and approved by Council; and

(ii) an easement in gross burdening the Pedestrian Link Land unlimited in height in favour of the Council permitting public access to the Pedestrian Link Land and generally in accordance with the Easement Terms;

(iii) an easement for support benefiting the Pedestrian Link Land generally in accordance with the Easement for Support Terms.

(b) Any requirement to register an easement, covenant or other instrument against the title to the Land will be satisfied when the Developer provides to the Council a copy of the relevant title search showing the registration of the instrument.

(c) Any covenant required under clause 6.3(a)(i) must be registered prior to the issue of the first Construction Certificate for any building on the Land forming part of the Development.

(d) Any easement, required under clause 6.3(a)(ii) and (iii) must be registered prior to the issue of an Occupation Certificate for any building on the Land forming part of the Development.

(e) The parties agree that the proposed covenant and easement under this clause will serve the following public purposes:

(i) To increase the amount of and improve existing public open space areas in the vicinity of the Land.

(ii) To improve pedestrian circulation and the amenity of the public domain in the vicinity of the Land.

(f) The Developer agrees and acknowledges that the obligations under this clause 6.3 are relevant considerations for the Council or any other consent authority when determining a Development Application or Modification Application relating to the Land and that a failure to comply with those obligations or any inconsistency with the requirements in those clauses may constitute a reason for refusal of such a Development Application or Modification Application.

7 Application of s 94, s 94A and s 94EF of the Act to the Development

(a) This agreement does not exclude the application of section 94 of the Act to the Development.

(b) This agreement does not exclude the application of section 94A of the Act to the Development.

(c) This agreement does not exclude the application of section 93EF of the Act to the Development.

(d) The benefits under this agreement are not to be taken into consideration in determining a development contribution under section 94 of the Act.

8 Registration of this agreement

8.1 *Developer Interest*

The Developer represents and warrants to the Council that on the date of this agreement it is the registered proprietor of the Land.

8.2 *Registration of this agreement*

(a) The Developer agrees to procure the registration of this agreement under the *Real Property Act 1900* (NSW) in the relevant folios of the Register of the Land in accordance with section 93H of the Act.

(b) The Developer, at its own expense, must:

(i) procure the lodgement of this agreement with the Registrar-General as soon as reasonably practicable after this agreement comes into operation, but in any event, no later than 10 Business Days after that date;

(ii) procure the registration of this agreement by the Registrar-General in the relevant folios of the Register for the Land as soon as reasonably practicable after this agreement is lodged for registration; and

(iii) provide documentary evidence that the registration of this agreement has been completed to Council within 5 Business Days of receiving confirmation that the registration has occurred.

(c) The Developer at its own expense will take all practical steps, and otherwise do anything that the Council reasonably requires to procure:

(i) The consent of each person who:

(A) has an estate or interest in the Land registered under the *Real Property Act 1900* (NSW); or

(B) is seized or possessed of an estate or interest in the Land,

(ii) An acceptance of the terms of this agreement and an acknowledgement in writing from any existing mortgagee in relation to the Land that the mortgagee will adhere to the provisions of this agreement if it takes possession of the Land as mortgagee in possession,

(iii) The execution of any documents; and

(iv) The production of the relevant duplicate certificates of title,

to enable the registration of this agreement in accordance with this clause 8.2.

(d) The Landowner consents to the registration of the agreement in accordance with this clause 8.2.

8.3 *Removal from Register*

The Council will provide a release and discharge of this agreement so that it may be removed from the folios of the Register for the Land (or any part of it) provided the Council is satisfied the Developer has duly fulfilled its obligations under this agreement, and is not otherwise in default of any of the obligations under this agreement.

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8.4 Caveat

(a) The Developer acknowledges and agrees that:

(i) when this agreement is executed, the Council is deemed to have acquired and the Developer is deemed to have granted, an equitable estate and interest in the Land for the purposes of section 74F(1) of the *Real Property Act 1900* (NSW) and consequently the Council will have a sufficient interest in the Land in respect of which to lodge a caveat over the Land notifying that interest;

(ii) it will not object to the Council lodging a caveat in the relevant folios of the Register for the Land nor will it seek to remove any caveat lodged by the Council provided the caveat does not prevent registration of any Dealing or plan other than a transfer.

(b) The Council must, at the Developer's cost, register a withdrawal of any caveat in respect of the Land within five Business Days after the Developer complies with clause 8.2 and must not lodge any other caveats on the titles to any of the Land, other than in accordance with clause 8.4(a).

9 Review of this agreement

(a) This agreement may be reviewed or modified. Any review or modification of this agreement will be conducted in the circumstances and in the manner determined by the parties.

(b) No modification or review of this agreement will be of any force or effect unless it is in writing and signed by the parties to this agreement.

(c) A party is not in breach of this agreement if it does not agree to an amendment to this agreement requested by a party in, or as a consequence of, a review.

10 Dispute Resolution

10.1 Reference to Dispute

If a dispute arises between the parties in relation to this agreement, the parties must not commence any court proceedings relating to the dispute unless the parties have complied with this clause, except where a party seeks urgent interlocutory relief.

10.2 Notice of Dispute

The party wishing to commence the dispute resolution process must give written notice (**Notice of Dispute**) to the other parties of:

(a) The nature of the dispute,

(b) The alleged basis of the dispute, and

(c) The position which the party issuing the Notice of Dispute believes is correct.

10.3 Representatives of Parties to Meet

(a) The representatives of the parties must promptly (and in any event within 20 Business Days of the Notice of Dispute) meet in good faith to attempt to resolve the notified dispute.

(b) The parties may, without limitation:

(i) resolve the dispute during the course of that meeting,

(ii) agree that further material or expert determination in accordance with clause 10.6 about a particular issue or consideration is needed to effectively resolve the dispute (in which event the parties will, in good faith, agree to a timetable for resolution); or

(iii) agree that the parties are unlikely to resolve the dispute and, in good faith, agree to a form of alternative dispute resolution (including expert determination, arbitration or mediation) which is appropriate for the resolution of the relevant dispute.

10.4 Further Notice if Not Settled

If the dispute is not resolved within 10 Business Days after the nominated representatives have met, either party may give to the other a written notice calling for determination of the dispute (**Determination Notice**) by mediation under clause 10.5 or by expert determination under clause 10.6.

10.5 Mediation

If a party gives a Determination Notice calling for the dispute to be mediated:

(a) The parties must agree to the terms of reference of the mediation within 15 Business Days of the receipt of the Determination Notice (the terms shall include a requirement that the mediation rules of the Institute of Arbitrators and Mediators Australia (NSW Chapter) apply);

(b) The mediator will be agreed between the parties, or failing agreement within 15 Business Days of receipt of the Determination Notice, either Party may request the President of the Institute of Arbitrators and Mediators Australia (NSW Chapter) to appoint a mediator;

(c) The mediator appointed pursuant to this clause 10.5 must:

(i) Have reasonable qualifications and practical experience in the area of the dispute; and

(ii) Have no interest or duty which conflicts or may conflict with his or her function as a mediator he or she being required to fully disclose any such interest or duty before his or her appointment;

(d) The mediator shall be required to undertake to keep confidential all matters coming to his or her knowledge by reason of his or her appointment and performance of his or her duties;

(e) The parties must within 15 Business Days of receipt of the Determination Notice notify each other of their representatives who will be involved in the mediation (except if a resolution of the Council is required to appoint a representative, the Council must advise of the representative within 5 Business Days of the resolution);

(f) The parties agree to be bound by a mediation settlement and may only initiate judicial proceedings in respect of a dispute which is the subject of a mediation settlement for the purpose of enforcing that mediation settlement; and

(g) In relation to costs and expenses:

(i) Each party will bear its own professional and expert costs incurred in connection with the mediation; and

(ii) The costs of the mediator will be shared equally by the parties unless the mediator determines that a party has engaged in vexatious or unconscionable behaviour in which case the mediator may require the full costs of the mediation to be borne by that party.

10.6 Expert determination

If the dispute is not resolved under clause 10.3 or clause 10.5, or the parties otherwise agree that the dispute may be resolved by expert determination, the parties may refer the dispute to an expert, in which event:

(a) The dispute must be determined by an independent expert in the relevant field:

(i) Agreed upon and appointed jointly by the parties; and

(ii) In the event that no agreement is reached or no appointment is made within 20 Business Days of the agreement to refer the dispute to an expert, appointed on application of a party by the then President of the Law Society of New South Wales;

(b) The expert must be appointed in writing and the terms of the appointment must not be inconsistent with this clause;

(c) The determination of the dispute by such an expert will be made as an expert and not as an arbitrator and will be in writing and contain the reasons for the determination;

(d) The expert will determine the rules for the conduct of the process but must conduct the process in accordance with the rules of natural justice;

(e) Each party will bear its own costs in connection with the process and the determination by the expert and will share equally the expert's fees and costs; and

(f) Any determination made by an expert pursuant to this clause is final and binding upon the parties except unless:

(i) Within 20 Business Days of receiving the determination, a party gives written notice to the other party that it does not agree with the determination and commences litigation; or

(ii) The determination is in respect of, or relates to, termination or purported termination of this agreement by any party, in which event the expert is deemed to be giving a non-binding appraisal.

10.7 Litigation

If the dispute is not *finally* resolved in accordance with this clause 10, then either party is at liberty to litigate the dispute.

10.8 No suspension of contractual obligations

Subject to any interlocutory order obtained under clause 10.1, the referral to or undertaking of a dispute resolution process under this clause 10 does not suspend the parties' obligations under this agreement.

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11 Enforcement

11.1 Default

(a) In the event a party considers another party has failed to perform and fulfil an obligation under this agreement, it may give notice in writing to the other party (**Default Notice**) giving all particulars of the matters in respect of which it considers default has occurred and by such notice require the default to be remedied within a reasonable time not being less than 15 Business Days.

(b) In determining a reasonable time, regard must be had to both the nature of the default and the work or other action required to remedy it and whether or not the continuation of the default constitutes a public nuisance or raises other circumstances of urgency or emergency.

(c) If a party disputes the Default Notice it may refer the dispute to dispute resolution under clause 10 of this agreement.

11.2 Bank Guarantee

(a) The Developer must provide the following Bank Guarantees to the Council:

(i) A Bank Guarantee in the amount of $1,000,000 to secure the payment of the Monetary Contribution, which must be provided to Council on execution of this agreement.

(ii) A Bank Guarantee in the amount of $350,000 to secure the carrying out of the Works and the cost of registering any easement over the Pedestrian Link Land, which must be provided to Council prior to the issue of a Construction Certificate for the Development, or any part of the Development.

(b) The Council may reject any Bank Guarantee that contains errors, or if it has received the Bank Guarantee, require at any time the Developer to obtain a replacement Bank Guarantee that rectifies any such errors or otherwise obtain rectification of the errors. The Developer must provide the replacement Bank Guarantee, or otherwise obtain rectification of the errors, within 5 Business Days of receiving the Council's request.

(c) The Council may call on a Bank Guarantee provided under this clause if:

(i) the Developer is in material or substantial breach of this agreement and has failed to rectify the breach within a reasonable period of time after having been given reasonable notice (which must not be less than 15 Business Days) in writing to do so in accordance with clause 11.1 of this agreement; or

(ii) the Developer becomes Insolvent.

(d) Within 20 Business Days of each anniversary of a Bank Guarantee provided under clause 11.2(a), the Developer must provide Council with one or more replacement Bank Guarantees (replacement Bank Guarantee) in an amount calculated in accordance with the following:

$$A = \frac{B \times D}{C}$$

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Where:

A is the amount of the replacement Bank Guarantee,

B is the amount of the Bank Guarantee to be replaced,

C is the CPI for the quarter ending immediately before the date of the Bank Guarantee to be replaced,

D is the CPI for the quarter ending immediately before the date of the replacement Bank Guarantee,

provided A is greater than B.

(e) On receipt of a replacement Bank Guarantee provided under clause 11.2(d), the Council must release and return to the Developer, as directed, the Bank Guarantee that has been replaced as soon as reasonably practicable.

(f) At any time following the provision of a Bank Guarantee under this clause, the Developer may provide the Council with one or more replacement Bank Guarantees totalling the amount of all Bank Guarantees required to be provided under this clause for the time being. On receipt of such replacement Bank Guarantee, the Council must release and return to the Developer, as directed, the Bank Guarantee(s) which it holds that have been replaced as soon as reasonably practicable.

(g) Subject to clause 11.2(c), the Council may apply the proceeds of a Bank Guarantee in satisfaction of:

(i) any obligation of the Developer under this agreement that is secured by a Bank Guarantee provided in accordance with clause 11.2(a); and

(ii) any associated liability, loss, cost, charge or expense directly or indirectly incurred by the Council because of the failure by the Developer to comply with this agreement; and

if necessary, the Council it's employees, officers, agents or contractors may enter the Land and carry out any Works required under this agreement.

(h) The Council must promptly return a Bank Guarantee provided under this clause if requested by the Developer and:

(i) the Developer has satisfied the obligation to which the Bank Guarantee relates; and

(ii) if the Bank Guarantee secures an item of Works;

(A) a Certificate of Practical Completion has been issued for the item of Works to which the Bank Guarantee relates; and

(B) if the Bank Guarantee relates to other items of Works for which a Certificate of Practical Completion has not been issued, a replacement Bank Guarantee is provided by the Developer in an amount determined by the Council acting reasonably, that is equivalent to the costs of constructing those other items of Works.

(i) Nothing in this clause 11.2 prevents or restricts the Council from taking any enforcement action in relation to:

(i) any obligation of the Developer under this agreement; or

(ii) any associated liability, loss, cost, charge or expense directly or indirectly incurred by the Council because of the failure by the Developer to comply with this agreement,

that is not or cannot be satisfied by calling on a Bank Guarantee.

11.3 Instrument Registering Easement

(a) Prior to the issue of a Construction Certificate, for any part of the Development, the Developer will deliver to Council:

(i) an instrument in the form required under the *Real Property Act 1900* for the registration of an easement in gross under section 88A of the *Conveyancing Act 1919* over the Pedestrian Link Land, properly executed by the Developer; and

(ii) any other document (for example the consent of any mortgagee) in registrable form as is necessary to ensure that Council is able to register the instrument creating the easement in gross, or an irrevocable undertaking from the relevant person issuing the document that the document together with any certificates of title held by the person will be produced for registration on request for the purposes of registering the easement as required by this agreement.

(b) The documents referred to in clause 11.3(a) are to be held by Council as security for the performance by the Developer of the obligations imposed on it under this agreement.

(c) If the Developer fails to register the easement over the Pedestrian Link Land as required by this agreement, the Council is entitled to lodge the documents referred to in clause 11.3(a) for registration and recover the cost of doing so from the Developer or by calling on any Bank Guarantee held by the Council under clause 11.2.

11.4 Restriction on the issue of Certificates

(a) In accordance with section 109F of the Act and clause 146A of the Regulation the obligations to:

(i) pay the Monetary Contribution under clause 6.1;

(ii) register the covenant under clause 6.3(a)(i);

(iii) provide the Bank Guarantee under clause 11.2(a)(ii); and

(iv) provide the instrument to register the easement over the Pedestrian Link Land under clause 11.3,

must be satisfied prior to the issue of a Construction Certificate for the Development or any part of the Development.

(b) In accordance with section 109H(2) of the Act the obligations to:

(i) carry out the Works under clause 6.2; and

(ii) register the easement under clause 6.3(a)(ii),

must be satisfied prior to the issue of an Occupation Certificate for the Development or any part of the Development.

11.5 General Enforcement

(a) Without limiting any other remedies available to the parties, this agreement may be enforced by any party in any Court of competent jurisdiction.

(b) Nothing in this agreement prevents:

(i) a party from bringing proceedings in the Land and Environment Court to enforce any aspect of this agreement or any matter to which this agreement relates; and

(ii) the Council from exercising any function under the Act or any other Act or law relating to the enforcement of any aspect of this agreement or any matter to which this agreement relates.

12 Assignment and Dealings

12.1 Assignment

(a) A party must not assign or deal with any right under this agreement without the prior written consent of the other parties.

(b) Any change of ownership or control (as defined in section 50AA of the *Commonwealth Corporations Act 2001*) of a party (excluding the Council) shall be deemed to be an assignment of this agreement for the purposes of this clause.

(c) Any purported Dealing in breach of this clause is of no effect.

12.2 Arrangements with Mortgagee

(a) The Developer agrees with the Council that if the Developer mortgages the Land after this agreement is entered into it must use all reasonable efforts at that time to arrange a multiple party deed of agreement between the Council, the Developer, and the mortgagee who will be providing finance for the Works so that the mortgagee accepts that the responsibilities set out in this agreement are binding upon the mortgagee in the event that the Developer defaults on the mortgage and the mortgagee takes possession of the Land.

(b) The terms of the adoption of the obligations of the Developer by the mortgagee shall be as reasonably required by the Council. The agreement shall be prepared at the cost of the Developer.

12.3 Transfer of Land

(a) The Developer may not transfer, assign or dispose of the whole or any part of its right, title or interest in the Land (present or future) or in the Development to another person (**Transferee**) unless before it sells, transfers or disposes of that right, title or interest:

(i) The Developer satisfies the Council that the proposed Transferee is financially capable of complying with the Developer obligations under this agreement;

(ii) The Developer satisfies the Council that the rights of the Council will not be diminished or fettered in any way;

(iii) The Transferee delivers to the Council a novation deed signed by the Transferee in a form and of such substance as is acceptable to the Council

containing provisions under which the Transferee agrees to comply with all the outstanding obligations of the Developer under this agreement;

(iv) The Transferee delivers to the Council replacement Bank Guarantees as required by this agreement;

(v) Any default under any provisions of this agreement has been remedied or waived by the Council, on such conditions as the Council may determine, and

(vi) The Developer and the Transferee pay the Council's reasonable costs in relation to the assignment.

13 Approvals and consents

Except as otherwise set out in this agreement, and subject to any statutory obligations, a party may give or withhold an approval or consent to be given under this agreement in that party's absolute discretion and subject to any conditions determined by the party. A party is not obligated to give its reasons for giving or withholding consent or for giving consent subject to conditions.

14 No fetter

14.1 Discretion

This agreement is not intended to operate to fetter, in any manner, the exercise of any statutory power or discretion of the Council, including, but not limited to, any statutory power or discretion of the Council relating to the Instrument Change or any Development Application applying to the Land (all referred to in this agreement as a "**Discretion**").

14.2 No fetter

No provision of this agreement is intended to constitute any fetter on the exercise of any Discretion. If, contrary to the operation of this clause, any provision of this agreement is held by a court of competent jurisdiction to constitute a fetter on any Discretion, the parties agree:

(a) They will take all practical steps, including the execution of any further documents, to ensure the objective of this clause is substantially satisfied,

(b) In the event that (a) cannot be achieved without giving rise to a fetter on the exercise of a Discretion, the relevant provision is to be severed and the remainder of this agreement has full force and effect, and

(c) To endeavour to satisfy the common objectives of the parties in relation to the provision of this agreement which is to be held to be a fetter on the extent that is possible having regard to the relevant court judgment.

14.3 Planning Certificates

The Developer acknowledges that Council may, at its discretion, include advice on any planning certificate issued under section 149(5) of the Act that this agreement affects the Land.

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15 Notices

15.1 *Notices*

Any notice given under or in connection with this agreement (**Notice**):

(a) must be in writing and signed by a person duly authorised by the sender;

(b) must be addressed as follows and delivered to the intended recipient by hand, by prepaid post or by email or fax at the address or fax number below, or at the address or fax number last notified by the intended recipient to the sender after the date of this agreement:

(i)	to City of Parramatta Council:	PO Box 32, Parramatta, NSW 2124 Fax: 02 9806 5917 Email: council@cityofparramatta.nsw.gov.au Attention: Manager, Land Use Planning
(ii)	to Riverport Parramatta Pty Limited	100/32-34 Mons Road, Westmead, NSW 2145 Fax: 02 9890 5466 Email: raytouma@hotmail.com Attention: Mr Raymond Touma, Director

(c) is taken to be given or made:

(i) in the case of hand delivery, when delivered;

(ii) in the case of delivery by post, three Business Days after the date of posting (if posted to an address in the same country) or seven Business Days after the date of posting (if posted to an address in another country); and

(iii) in the case of a fax, on production of a transmission report by the machine from which the fax was sent that indicates the fax was sent in its entirety to the recipient's fax number; and

(d) if under clause (c) a Notice would be taken to be given or made on a day that is not a Business Day in the place to which the Notice is sent, or later than 4.00 pm (local time), it is taken to have been given or made at the start of business on the next Business Day in that place.

15.2 *Notices sent by email:*

(a) A party may serve a Notice by email if the Notice:

(i) includes a signature block specifying:

(A) the name of the person sending the Notice; and

(B) the sender's position within the relevant party;

(ii) states in the body of the message or the subject field that it is sent as a Notice under this agreement;

(iii) contains an express statement that the person sending the Notice has the authority to serve a Notice under this agreement;

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(iv) is sent to the email address below or the email address last notified by the intended recipient to the sender:

(A)	to City of Parramatta Council:	Attention: Manager, Land Use Planning council@cityofparramatta.nsw.gov.au
(B)	to Riverport Parramatta Pty Limited:	Attention: Raymond Touma, Director raytouma@hotmail.com

(b) The recipient of a Notice served under this clause 15.2 must:

(i) promptly acknowledge receipt of the Notice; and

(ii) keep an electronic copy of the Notice,

(c) Failure to comply with clause 15.2 does not invalidate service of a Notice under this clause.

15.3 *Receipt of Notices sent by email*

(a) A Notice sent under clause 15.2 is taken to be given or made:

(i) when the sender receives an email acknowledgement from the recipient's information system showing the Notice has been delivered to the email address stated above;

(ii) when the Notice enters an information system controlled by the recipient; or

(iii) when the Notice is first opened or read by the recipient,

whichever occurs first.

(b) If under clause 15.3 a Notice would be taken to be given or made on a day that is not a Business Day in the place to which the Notice is sent, or later than 4.00 pm (local time), it will be taken to have been given or made at the start of business on the next Business Day in that place.

16 General

16.1 *Relationship between parties*

(a) Nothing in this agreement:

(i) constitutes a partnership between the parties; or

(ii) except as expressly provided, makes a party an agent of another party for any purpose.

(b) A party cannot in any way or for any purpose:

(i) bind another party; or

(ii) contract in the name of another party.

(c) If a party must fulfil an obligation and that party is dependent on another party, then that other party must do each thing reasonably within its power to assist the other in the performance of that obligation.

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16.2 Time for doing acts

(a) If the time for doing any act or thing required to be done or a notice period specified in this agreement expires on a day other than a Business Day, the time for doing that act or thing or the expiration of that notice period is extended until the following Business Day.

(b) If any act or thing required to be done is done after 5.00 pm on the specified day, it is taken to have been done on the following Business Day.

16.3 Further assurances

Each party must promptly execute all documents and do all other things reasonably necessary or desirable to give effect to the arrangements recorded in this agreement.

16.4 Joint and individual liability and benefits

Except as otherwise set out in this agreement, any agreement, covenant, representation or warranty under this agreement by two or more persons binds them jointly and each of them individually, and any benefit in favour of two or more persons is for the benefit of them jointly and each of them individually.

16.5 Variations and Amendments

A provision of this agreement can only be varied by a later written document executed by or on behalf of all parties and in accordance with the provisions of the Act.

16.6 Counterparts

This agreement may be executed in any number of counterparts. All counterparts taken together constitute one instrument.

16.7 Legal expenses and stamp duty

(a) The Developer must pay the Council's legal costs and disbursements in connection with the negotiation, preparation, execution, carrying into effect, enforcement and release and discharge of this agreement (including the cost to Council of obtaining advice about such matters), no later than 10 Business Days after receiving a demand from the Council to pay such costs.

(b) The Developer agrees to pay or reimburse the costs and expenses incurred by Council in connection with the advertising and exhibition of this agreement in accordance with the Act.

(c) The Developer agrees to pay Council any administrative fees as required by Council, acting reasonably, in connection with the administration of this agreement.

16.8 Entire agreement

The contents of this agreement constitute the entire agreement between the parties and supersede any prior negotiations, representations, understandings or arrangements made between the parties regarding the subject matter of this agreement, whether orally or in writing.

16.9 Representations and warranties

The parties represent and warrant that they have the power and authority to enter into this agreement and comply with their obligations under the agreement and that entry into this agreement will not result in the breach of any law.

16.10 Severability

If a clause or part of a clause of this agreement can be read in a way that makes it illegal, unenforceable or invalid, but can also be read in a way that makes it legal, enforceable and valid, it must be read in the latter way. If any clause or part of a clause is illegal, unenforceable or invalid, that clause or part is to be treated as removed from this agreement, but the rest of this agreement is not affected.

16.11 Invalidity

(a) A word or provision must be read down if:

(i) this agreement is void, voidable, or unenforceable if it is not read down;

(ii) this agreement will not be void, voidable or unenforceable if it is read down; and

(iii) the provision is capable of being read down.

(b) A word or provision must be severed if:

(i) despite the operation of clause (a), the provision is void, voidable or unenforceable if it is not severed; and

(ii) this agreement will be void, voidable or unenforceable if it is not severed.

(c) The remainder of this agreement has full effect even if clause 16.11(b) applies.

16.12 Waiver

(a) A right or remedy created by this agreement cannot be waived except in writing signed by the party entitled to that right. Delay by a party in exercising a right or remedy does not constitute a waiver of that right or remedy, nor does a waiver (either wholly or in part) by a party of a right operate as a subsequent waiver of the same right or of any other right of that party.

(b) The fact that a party fails to do, or delays in doing, something the party is entitled to do under this agreement, does not amount to a waiver of any obligation of, or breach of obligation by, another party. A waiver by a party is only effective if it is in writing. A written waiver by a party is only effective in relation to the particular obligation or breach in respect of which it is given. It is not to be taken as an implied wavier of any other obligation or breach or as an implied wavier of that obligation or breach in relation to any other occasion.

16.13 GST

(a) Words and expressions which are not defined in this agreement but which have a defined meaning in GST Law have the same meaning as in the GST Law.

(b) Unless otherwise expressly stated, all prices or other sums payable or consideration to be provided under this agreement are exclusive of GST.

(c) If GST is imposed on any supply made under or in accordance with this agreement, the Developer must pay the GST or pay to the Council an amount equal to the GST payable on or for the taxable supply, whichever is appropriate in the circumstances.

(d) If the Council is obliged to pay any GST on any supply made under or in accordance with this agreement, the Developer indemnifies the Council for the amount of any such payment is required to make.

16.14 Governing law and jurisdiction

(a) The laws applicable in New South Wales govern this agreement.

(b) The parties submit to the non-exclusive jurisdiction of the courts of New South Wales and any courts competent to hear appeals from those courts.

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Schedule 1 Scope of works

All works, including but not limited to design, demolition, excavation, construction, relocation of utilities and landscaping, to construct a 3m wide pedestrian and cycle path on the Pedestrian Link Land.

A detailed design for the Works will be finalised in accordance with clause 5 of Schedule 2.

All work and designs will meet the following criteria:

(a) The path is to be paved and have appropriate lighting suitable to pedestrian and cyclist standards;

(b) The path is to comply in terms of access with the Disability Discrimination Act 1992 (Cth) and Council's foreshore precinct access strategy;

(c) The path is to comply with Roads and Maritime Services cycling guidelines acceptable to the Council;

(d) The path, as far as practicable, is to be a straight continuous direction; and is to be open to the sky for its entire length;

(e) The path is to be consistent with the principles of Crime Prevention Through Environmental Design (CPTED);

(f) Treatment of the pavement, landscaping, lighting, furniture, and drainage along the path is to be consistent with the *Parramatta Public Domain Guidelines 2016* and material palette of foreshore upgrade works;

(g) Finished vertical levels are to be commensurate with the adjoining "*Harrisford*" land at 182 George Street, Parramatta and future river foreshore works;

(h) The Pedestrian Link Land shall not incorporate any boundary fencing or physical separation from the adjoining *"Harrisford"* land at 182 George Street, Parramatta;

(i) The path is to provide an appropriate response to archaeology;

(j) All works, including grades and cross falls are to be in accordance with Council's standard drawing specifications and relevant Australian Standards; and

(k) Design and material choice must have regard to probable flooding over the site and is not to be adversely affected in the event of a flood.

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Schedule 2 Construction terms

1 Interpretation

For the purposes of this Schedule 2, the defined terms in clause 1 of this agreement and the Interpretation principles in clause 2 of this agreement will apply and, unless context indicates a contrary intention:

Builder means any entity contracted under the Construction Contract to carry out the Works.

Construction Contract means the contract to carry out the Works (whether or not that is a contract for the Works only or forms part of a contract for the building of other components of the Development).

Detailed Design means the final specifications and finishes for the Works prepared in accordance with clause 5.2 of this Schedule 2 and will include the design of the Works, the location for the Works, installation specifications and estimated costs of construction and/or installation.

Services means all water, gas, electricity, television, drainage, sewerage, cable TV, data communications, telecommunications and other services which are required under a development consent within the meaning of the Act or an Approval and which are necessary or desirable for the construction or operation of the Development.

Superintendent means the Superintendent appointed under any Construction Contract.

2 Requirements of Authorities and Approvals

2.1 These Construction Terms must be read and construed subject to:

(a) any requirements or conditions of any Development Consent;

(b) the requirements of and conditions imposed by all relevant Authorities and all Laws relating to the Development and the construction of the Development.

2.2 If the Developer requires any Approvals in order to carry out the obligations under this agreement, then the Developer will acquire all Approvals necessary to carry out the Works at its own cost.

2.3 The Developer must ensure that the Works carried out under this agreement are carried out:

(a) in accordance with the relevant Development Consent for the Works and all Approvals and the requirements of all Laws, including without limitation, work health and safety legislation; and

(b) in a good and workmanlike manner and so that they are diligently progressed until completion;

AND it is acknowledged that to the extent that there is any inconsistency between this agreement and any Approval the terms of the Approval shall take precedence.

3 Costs of Works

All costs of the Works must be borne by the Developer.

4 Project Management and Contractor Engagement

4.1 The Developer will be responsible for managing the Works.

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4.2 The Developer will ensure that any contractor it engages to carry out the Works agrees to:

(a) carry out the Developer's obligations in these Construction Terms as part of any Construction Contract; and

(b) request a Council representative to be present at each on-site meeting attended by the Superintendent.

5 Design Development and Approvals

5.1 **Concept Design**

The Developer has prepared a concept design for the Development, for the submission of a planning proposal relating to the Instrument Change, an extract of which is at **Error! Reference source not found.**.

5.2 **Detailed Design**

(a) The Works must be designed as part of any design excellence process applying to the Development under the LEP and in accordance with:

(i) any site-specific Development Control Plan;

(ii) Council's Public Domain Guidelines 2016;

(iii) Council's stormwater and flood management design standards;

(iv) Council's standard drawing series;

(v) any approved Development Application; and

(vi) the Parramatta City River Strategy Design Report, Revision D adopted by Council on 25 May 2015.

(b) Prior to Works commencing the Developer must provide a copy of the draft Detailed Design to the Council for approval.

(c) Within 28 Business Days of receiving the Detailed Design, Council will respond to the Developer with any suggested amendments to the Detailed Design.

(d) Council and the Developer must work in consultation with each other to prepare and agree the Detailed Design and must both act reasonably and with due expedition in their consultations with each other.

(e) If the Detailed Design is not completed and agreed within 28 Business Days of Council providing its suggested amendments in accordance with clause 5.2(c) of this Schedule 2, to avoid possible delays to the issue of a Certificate of Practical Completion, the Council will, in its sole discretion, be entitled to decide on any outstanding or undecided matter or item relating to areas that are to be accessible to the public, provided that any decision made by Council under this clause:

(i) does not materially and adversely affect the Development; and

(ii) is not unreasonable.

5.3 Any acceptance by the Council of the Detailed Design under this clause 5 of Schedule 2 is not to be taken as approval of or to any Construction Certificate for the Works.

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5.4 **Good faith**

The parties must act promptly and in good faith to consult in relation to the Detailed Design.

6 Carrying out of Works

6.1 **Communication**

The Developer must keep Council reasonably informed of progress of the Works and provide to Council such information about the Works as Council reasonably requests.

6.2 **Standard of Works**

(a) Unless otherwise provided, the Developer shall, and must cause the Builder to, use suitable new materials and proper and tradesmanlike workmanship when carrying out the Works.

(b) The qualitative standard of the design and finishes for the Works must be no less than those described in the following documents:

(i) Any relevant Australian Standard;

(ii) Any relevant design standards or guidelines and any other requirements or policies applied by the Council from time to time in assessing the adequacy of any works or improvements proposed for the public domain or to be accessible to the public in accordance with this agreement.

(c) The Developer will obtain any relevant standards (including design standards), specifications, or guidelines and any other requirements or policies referred to in clause 6.2(b)(ii) of this Schedule 2 from Council if the Council fails to deliver them to the Developer.

6.3 **Damage to people, property & utilities**

(a) The Developer is to ensure to the fullest extent reasonably practicable that, in performing its obligations under this agreement:

(i) all necessary measures are taken to protect people and property;

(ii) unnecessary interference with the passage of people and vehicles is avoided; and

(iii) nuisances and unreasonable noise and disturbances are prevented.

(b) Without limiting clause 6.3(a) of this Schedule, the Developer is not to obstruct, interfere with, impair or damage any public road, public footpath, public cycleway or other public thoroughfare, or any pipe, conduit, drain, watercourse or other public utility or service on any land except as authorised in writing by the Council or any relevant Authority.

7 Inspection

(a) On completion of the Detailed Design, the Council will provide a schedule of inspections to be undertaken by Council (**Inspection Schedule**) to occur at specified stages of the construction of the Works (**Inspection Stage**). If the Council does not provide the Inspection Schedule, the Developer must request the Inspection Schedule from the Council prior to the Works commencing.

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(b) Five Business Days prior to reaching an Inspection Stage as set out in the Inspection Schedule, the Developer must notify the Council of the proposed inspection date (**Inspection Date**).

(c) On the Inspection Date, or other agreed date, the Developer must ensure that any employees, contractors, agents or representatives of Council have access to and may enter the Land to inspect the Works.

(d) In addition to carrying out inspections in accordance with the Inspection Schedule, the Council may enter the Land or any part of the Land on which the Works are located to inspect the progress of the Works, subject to:

(i) the terms of the Construction Contract (save for any clause of the Construction Contract which prevents the Council from accessing the Land);

(ii) giving reasonable notice to the Developer;

(iii) complying with all reasonable directions of the Developer; and

(iv) being accompanied by the Developer or a nominee, or as otherwise agreed.

(e) The Council may, acting reasonably, within 5 Business Days of carrying out an inspection (either under clause 7(c) or 7(d) of this Schedule 2), notify the Developer of any defect or non-compliance in the Works and direct the Developer to carry out work to rectify that defect or non-compliance within a reasonable period of time. Such work may include, but is not limited to:

(i) removal of defective or non-complying material;

(ii) demolishing defective or non-complying work;

(iii) reconstructing, replacing or correcting any defective or non-complying work; and

(iv) not delivering any defective or non-complying material to the site of the Works.

(f) If the Developer is issued a direction to carry out further work under clause 7(e) of this Schedule 2, the Developer must, at its cost, rectify the defect or non-compliance specified in the Notice within the time period specified in the Notice, provided that it is reasonable having regard to the nature of the works.

(g) If the Developer fails to comply with a direction to carry out work given under 7(e) of this Schedule 2, the Council will be entitled to refuse to accept that the Works (or the relevant part of the Works) meet the Council's standards and specifications and may refuse to issue a Certificate of Practical Completion, until the required Works have been completed to the Council's satisfaction, acting reasonably.

(h) For the avoidance of doubt, any acceptance by the Council that the Developer has rectified a defect or non-compliance identified in a notice issued under 7(e) of this Schedule 2 does not constitute:

(i) acceptance by the Council that the Works comply with all Approvals and Laws; or

(ii) an Approval by the Council in respect of the Works; or

(iii) an agreement or acknowledgment by the Council that the Works or the relevant part of the Works are complete and may be delivered to the Council in accordance with this agreement.

8 Completion

8.1 Practical Completion

(a) When the Developer considers that the Works, or any part of the Works, are complete, the Developer must send a Notice to the Council accompanied by complete works as executed plans prepared by a registered surveyor showing the horizontal and vertical positions of all Works, any relevant certificates or consents of any public utility authority and a request for written certification from the Council that the Works are complete.

(b) Within 10 Business Days of receipt of the notice under clause 8.1(a) of this Schedule 2, the Council will carry out an inspection of the Works and will, acting reasonably, either:

(i) provide written certification to the Developer that the Works have been completed; or

(ii) notify the Developer of any additional information required or matters which must be addressed by the Developer prior to the certification being issued.

(c) If the Developer is required to provide additional information or address any matters under clause 8.1(b)(ii) of this Schedule 2, the Developer will provide that information to Council or address those matters within 10 Business Days of receiving the notice or within a reasonable period of time and make a further request under clause 8.1(a) of this Schedule 2 for written certification that the Works have been completed.

(d) Practical completion will be achieved in relation to the Works or any part of the Works when a Certificate of Practical Completion has been issued for those Works.

9 Risk

The Developer undertakes the Works entirely at its own risk.

10 Insurance

(a) Prior to the commencement of the construction of any of the Works, the Developer must ensure the Builder effects and the Developer must produce evidence to the Council of the following insurances issued by an insurer approved by the Council (acting reasonably) in a form approved by the Council (acting reasonably):

(i) construction works insurance for the value of the Works;

(ii) public risk insurance for at least $20 million;

(iii) workers compensation insurance as required by Law.

(b) The Developer must provide evidence of currency of insurance required by clause 10(a) of this Schedule 2 upon request by the Council, acting reasonably, throughout the term of this agreement.

11 Indemnities

The Developer indemnifies the Council, its employees, officers, agents and contractors from and against all Claims in connection with the carrying out by the Developer of the Works except to the extent such Claim arises either directly or indirectly as a result of the Council or its employees, officers, agents and contractors' negligence, default, act or omission.

12 Intellectual Property Rights

The Council acknowledges that the Developer or its contractors hold all rights to copyright and any intellectual property which may exist in the Works.

13 Risk of contamination

The Developer acknowledges and agrees:

(a) that it is responsible for the management and remediation of any contamination present upon or under the land on which the Works are to be carried out;

(b) it will attend to any necessary remediation at its own costs; and

(c) to the fullest extent permitted by Law indemnify and release the Council from any Claim which might arise from any contamination with respect to the land on which the Works are to be carried out.

14 Plans

The parties acknowledge and agree that further detail and refinement of plans and documents in connection with this agreement may be necessary having regard to the following matters:

(a) matters affecting Works not capable of identification on or before the date of this agreement; or

(b) by agreement between the parties.

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Schedule 3 Easement Terms

Definitions

For the purpose of this Instrument, the following works have the following meanings:

Easement means the Easement created by this Instrument.

Owner of the Lot Burdened means the registered proprietor of the Lot Burdened from time to time.

Council means the City of Parramatta Council and its successors.

Lot Burdened means that part of the land having the burden of the Easement which the Plan indicates is the site of the Easement (being the part of the land used for access way from George Street to the foreshore of the Parramatta River having a width of 3m over 184-188 George Street, Parramatta).

Plan means the plan to which this Instrument relates.

1 Easement for Access 3 wide

(a) Full and free right for the public at all times to go, pass and repass over the Lot Burdened.

(b) Full right for the Council and the servants, agents and contractors of the Council at all times to enter, pass and repass over the Lot Burdened (in common with the public) with or without vehicles, plant and equipment and to remain on the Lot Burdened for so long as may be necessary for the purpose of performing Council's rights under clause 1(e) and the Council obligations under clause 1(f).

(c) The Owner of the Lot Burdened must at all times at its expense and to the satisfaction of Council, acting reasonably:

(i) keep the Lot Burdened (including any services in, on or under the Lot Burdened) in good repair and condition;

(ii) keep the Lot Burdened clean and free from rubbish; and

(iii) maintain sufficient public liability insurance covering the use of the Lot Burdened.

(d) The Owner of the Lot Burdened must ensure that any rules made by an Owner's Corporation relating to the Lot Burdened have been approved by the Council, acting reasonably.

(e) If the Owner of the Lot Burdened does not perform any obligation under clause 1(c) the Council may undertake the required work and recover the costs of all such work from the Owner of the Lot Burdened as a liquidated debt.

(f) The Owner of the Lot Burdened may with the Council's prior written consent, (except in the case of an emergency, in which case the Council's prior written consent is not required) temporarily exclude the public or any member of the public from the Lot Burdened.

(g) If any member or members of the public loiter or congregate, for any purpose which the Owner of the Lot Burdened considers to be inappropriate, the owner may either remove those members of the public, or arrange for their removal by an appropriate authority.

(h) The Owner of the Lot Burdened may erect safety signage and any other appropriate signage and may erect CCTV cameras in the Lot Burdened.

(i) The Owner of the Lot Burdened may monitor and direct the behaviour of the public including but not limited to prohibiting smoking, consumption of alcohol (except within licensed areas), passage of animals, bicycles and skateboards and the like (subject to any rules made by an Owner's Corporation relating to the Lot Burdened being approved by the Council, acting reasonably).

(j) The Owner of the Lot Burdened may engage security personnel to monitor and control the behaviour of the public when exercising any right of way over the Lot Burdened.

(k) The Owner of the Lot Burdened may temporarily close parts of the Lot Burdened for the purpose of construction, construction access, repairs, maintenance, replacement and alteration.

(l) The Owner of the Lot Burdened may (acting reasonably) temporarily close or temporarily restrict access through all or part of the Lot Burdened for the time and to the extent necessary but only on reasonable grounds including, without limitation, reasons of security, safety, construction, evacuation, emergency situations and maintenance.

(m) The Council is solely empowered to release the Easement.

(n) The Easement may only be varied by written agreement between the Council and the Owner of the Lot Burdened.

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Schedule 3A Easement for Support Terms

Definitions

For the purpose of this Schedule 3A of this Instrument, the following works have the following meanings:

Accessway means the part of the Lot Benefitted 3 wide limited in stratum which is used as public accessway;

Council means the City of Parramatta Council and its successors;

Easement means the Easement created in accordance with this Schedule 3A of this Instrument;

Lot Benefited means the part of the Land having the benefit of the Easement which the Plan indicates is the site of the Easement;

Lot Burdened means the part of the land having the burden of the Easement which the Plan indicates is the site of the Easement;

Owner of the Lot Burdened means the registered proprietor of the Lot Burdened from time to time;

Plan means the plan to which the Instrument relates;

Terms of Easement

Full right for Council to require the Accessway to be fully supported by the Lot Burdened at all times.

(a) The Owner of the Lot Burdened must at all times at its expense:

(1) provide and maintain support of the Accessway;

(2) promptly comply with all reasonable directions by the Council in relation to providing and maintaining support of the Accessway; and

(3) maintain appropriate insurance in the name of the Owner of the Lot Burdened and noting the Council's interest against damage and destruction of any structure which forms part of the Accessway to the full replacement value.

(b) If the Owner of the Lot Burdened does not perform any obligation under clause (a), the Council may undertake the required work and recover the cost of all such work from the Owner of the Lot Burdened as a liquidated debt.

(c) The Council must at its expense, from time to time and at all times as soon as practicable and so far as reasonably necessary promptly make good and remedy any damage caused to the Lot Burdened arising from any exercise of the Council's rights under clause (b).

(d) If the Council does not rectify any damage under clause (c), then the Owner of the Lot Burdened

Release and Variation of Easement

(a) The Council is solely empowered to release the Easement.

(b) The Easement may only be varied by written agreement between the Council and the Owner of the Lot Burdened.

Schedule 4 Summary of requirements (section 93F)

Subject and subsection of the Act	Planning Agreement
Planning instrument and/or Development Application – Section 93F(1) The Developer has:	
(a) Sought a change to an environmental planning instrument	☒ Yes ☐ No
(b) Made, or propose to make a Development Application	☐ Yes ☒ No
(c) Entered into an agreement with, or are otherwise associated with, a person to whom paragraph (a) or (b) applies	☐ Yes ☒ No
Description of the application	Proposed Instrument Change to increase the maximum building height for the Land from 36m to 120m and to increase the floor space ratio control for the Land from 4:1 to 10:1.
Description of the land to which the planning Agreement applies – Section 93F(3)(a)	"Land" is defined in clause 1.
The scope, timing and manner of delivery of contribution required by the Planning Agreement – Section 93F(3)(b)	Clause 6.
Applicability of section 94 of the Act – Section 93F(3)(d)	Not excluded – clause 7.
Applicability of section 94A of the Act – Section 93F(3)(d)	Not excluded – clause 7.
Applicability of section 94EF of the Act – Section 93F(3)(d)	Not excluded – clause 7.
Mechanism for dispute resolution – Section 93F(3)(f)	Clause 10.
Enforcement of the Planning Agreement – Section 93F(3)(g)	Clause 11.
Registration of the Planning Agreement – Section 93F(3)(g)	Clause 8.
No obligation to grant consent or exercise functions – Section 93F(9)	See clause 14 (no fetter)

DRAFT

Executed as an agreement

Executed by **City of Parramatta City Council** under seal in accordance with a resolution of the Council on [insert date]:)
)
)

.....	.....
Signature of [insert position]	Signature of [insert position]
.....	.....
Print name	Print name

EXECUTED by **Riverport Parramatta Pty Limited ATF The Riverport Unit Trust**
ACN 159 635 024 in accordance with Section 127 of the Corporations Act 2001

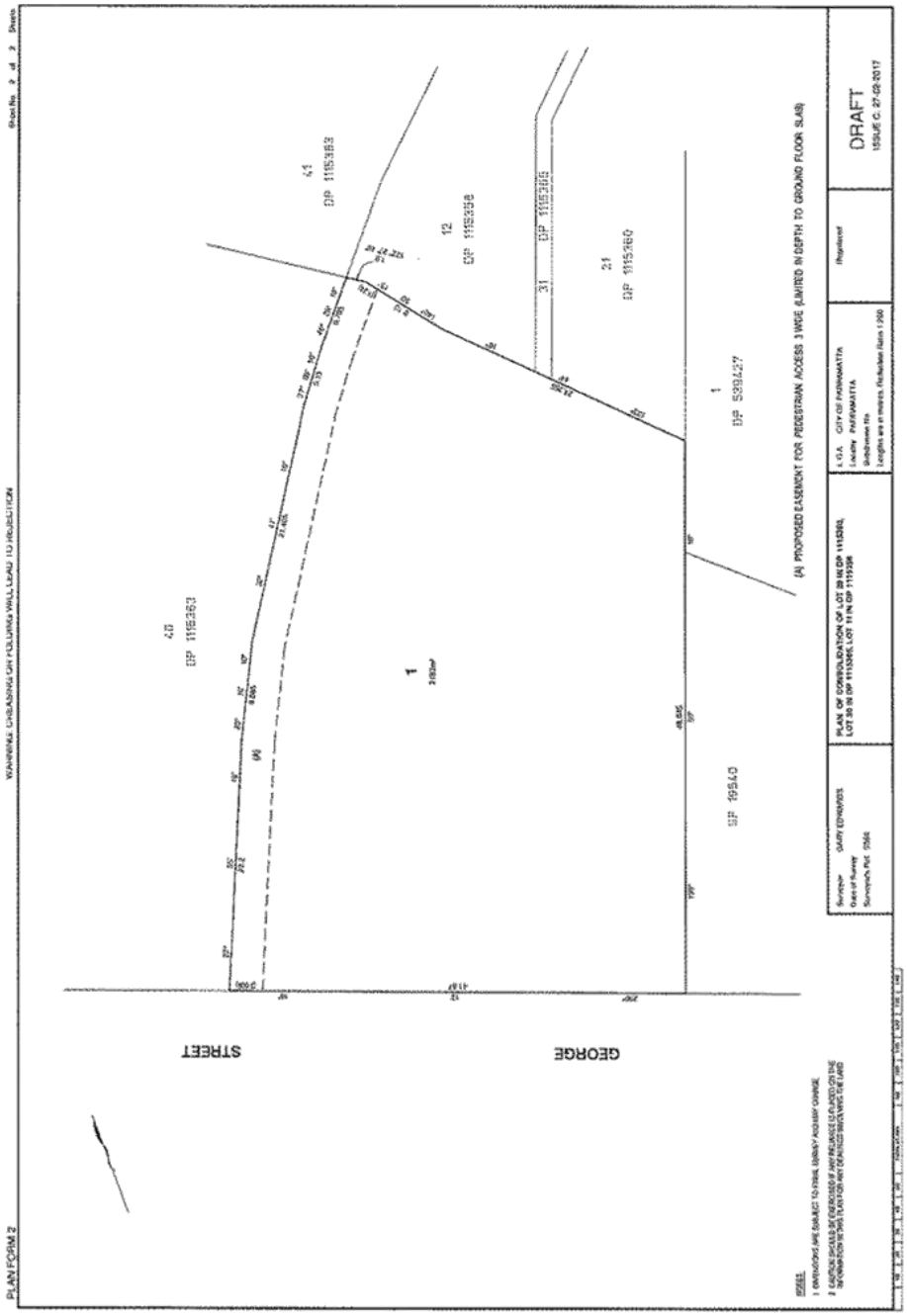
_____	_____
Signature of Secretary/Director	Signature of Director
_____	_____
Name of Secretary/Director	Name of Director

DRAFT

Annexure A Plan showing Land

NLS\NLS\54815482\1 Page 34 of 35

Annexure B Plan showing Pedestrian Link Land



NLS\NLS\54815482\1 Page 35 of 35

To the General Manager of Parramatta City Council
Sue Coleman

Reference: RZ/7/2014 - D05143955
LAND OWNER : Riverport Pty Ltd
SUBJECT LAND : 184-188 George Street Parramatta CBD

Proposed :
Planning proposal to amend Parramatta Local Environmental Plan 2011, Draft Development Control Plan (DCP) and Voluntary Planning Agreement (VPA)

I refer to the subject planning proposal and voluntary planning Agreement for the above site.

Firstly, I would like to convey my appreciation in the manner which Council managers, officers and staff have conducted themselves over the past 5 years.

However, at the previous council meeting held on 23 April 2018, I was shocked and disappointed of the outcome with the decision made by some of the councillors. The Councillors resolution put forward is totally contrary to the earlier resolution submitted to Gateway for determination.

The change of the decision certainly does not stem from any submissions received in response to the exhibition of the Planning Proposal or new information submitted. The decision seeks to adopt a new position in relation to the Planning Proposal which quite clearly conflicts with council staff's long term position. The newly appointed councillors have simply "changed their mind" with no apparent basis in relation with CBD Planning Framework.

This Planning process commenced in 2012, after numerous meetings with council staff, officers and previous councillors, we finally lodged our planning proposal in July 2014 . The Gateway proposal was successfully adopted by the department. On several occasions our planning proposal and VPA were submitted and approved by council to proceed to the final stage of the planning process.

I would also like to highlight that the business papers of the meeting held on 23 April 2018, council staff fully endorsed our application. During this meeting It was stated by the council

staff manager, to the councillors that our application is fully compliant with the CBD planning framework.

I feel the resolution was politically motivated and inconsistent with recent councillors approved decisions in relation to other planning proposals submitted. In fact, councillors have recently approved more height and FSR to the submitted planning proposals. These include:

- A recent Church St planning proposal was recommended FSR 13:1. Councillors resolved to support FSR 16:1.

- Various planning proposals on the Western CBD of up to FSR 18:1 close to heritage sensitivity.

- Marion St Planning Proposal recommend FSR 2:1 but Councillors resolved FSR 6:1 which included demolition of a heritage item.

1. - Phillip Street Planning Proposal FSR 18:1 with approval for construction over a heritage item.

There are also other parts of parramatta with high heritage sensitivity including the North and South Parramatta Heritage conservation areas which are located on the outskirts of the city centre which are alot more heritage sensitive to our current proposal.

During late December 2017, the Meriton planning proposal at 180 George Street, which is located next door to the heritage home at 182 George Street was fully endorsed by council staff and approved by the current councillors. The Meriton proposal is over 60 levels with a FSR 11.5 -1 and has an existing FSR 4-1 of service apartments, which brings the combined total FSR above 15-1. It also has a set back of 6 metres away from the heritage home at 182 George St. In contrast our application is for 38 levels with a of FSR 10-1 ratio and has a distance of 9.5 metres away from the heritage house located at 182 George St.

In comparison our planning proposal has less impact on heritage, less density, less height, larger set backs, more open space and good public amenities than other planning proposals that have been endorsed by council.

I assume that the Councillors decision on Meritons planning proposal at 180 George St was based on its merit and location . It is in our opinion that our planning proposal at 184-188 George St should received similar consideration and support. Our planning proposal was fully recommended and endorsed by council staff which does not warrant the Councillors resolution. We request that Councillors reconsider the previous endorsed

recommendations by Council staff for approval, which would be consistent with the CBD planning framework.

I note in the past that there have been many planning proposals that have gone to the department of planning with a resolution by councillors which were not consistent with the CBD planning framework, nor consistent with staff recommendations. Then only for these proposals to be returned from department of planning to council with the decision to proceed back in line with the CBD planning framework, which has been adopted by the department of planning for over two years.

The Councillors may not familiarised themselves with all aspects in relation to our planning proposal and the close similarities to other approved planning proposals.

I am aware that a rescission motion has recently been lodged on our proposal for next council meeting. I respectfully request that all councillors reconsider their decision based on the merits of our planning proposal in line with the Council staff adopted recommendation.

In the event that the rescission motion is not adopted then I formally request that my planning proposal for 184-188 George Street, Parramatta be sent to the Department of Planning for a determination and Gazettal along with the councillors Resolution and Council staff recommendation for the them to make a final decision.

Regards
Ray Touma

LIVEABLE

28 MAY 2018

11.1 Access Advisory Committee Meeting Minutes 17 April 2018.....120

LIVEABLE

ITEM NUMBER	11.1
SUBJECT	Access Advisory Committee Meeting Minutes 17 April 2018
REFERENCE	F2005/01944 - D06114162
REPORT OF	Community Capacity Building Officer, Community Capacity Building

PURPOSE:

Council's Access Advisory Committee met on 17 April 2018. This report provides a precis of the key discussion points of that meeting for Council's consideration.

RECOMMENDATION

That the minutes of the Access Advisory Committee meeting held on Tuesday 17 April 2018 (**Attachment 1**) are received and noted.

BACKGROUND

1. Council's Access Advisory Committee meets bi-monthly, and most recently met on 17 April 2018. This report provides a summary of the discussion and decisions made at this meeting.

MAIN DISCUSSION POINTS

2. The Committee elected Members Hamish Murray and Queenie Tran to serve as Chairperson and Deputy Chairperson respectively for the coming year.
3. Steven Ellis, Place Manager, and Adam Cook, Service Manager Capital Projects, presented on designs for the Ollie Webb Reserve All Abilities Playground. The Committee made recommendations on organisations to consult with, and requested to remain informed of progress on the playground.
4. Sabrina Forte, Project Officer Disability Inclusion Action Plan (DIAP) updated the Committee on progress of key projects and activities under Council's DIAP. The Committee stressed the need for consultation with people with disabilities in implementation of the Plan.
5. The Committee were updated on progress of the Access Guidelines for Small Business project, which is currently in the final distribution phase of hard copies being provided directly to shops and other small businesses across the Local Government Area. The Committee requested information regarding Council's policies of keeping building lines clear for the vision impaired, particularly cane users who use building lines as guides.
6. The Committee were advised that, under Council's DIAP, Major Events has undertaken to engage the services of an access consultant to audit a selection of major events, with an aim to ensure that all City events are accessible.
7. The Committee were provided with a brief update on progress of designs for the proposed civic building 5PS in Parramatta Square, and that speakers on

the designs for this building and the public domain are being sought for the June meeting of the Committee to discuss considerations for access.

8. The general condition of footpaths in the Parramatta CBD was raised as an area of concern, and a request for information on Council's process and approach to the repair of footpaths was made. Council Officer Tanya Owen advised that delays to repair can occur due to other works planned in the vicinity.

FINANCIAL IMPLICATION FOR COUNCIL

9. There are no financial implications for Council at this time arising from this meeting of the Access Advisory Committee.

Tanya Owen
Community Capacity Building Officer

David Moutou
Service Manager Community Capacity Building

Gary Moore
Manager Social and Community Services

Jim Stefan
Director City Services

ATTACHMENTS:

1⇩ Access Advisory Committee Meeting Minutes 17 April 2018 7 Pages

REFERENCE MATERIAL

MINUTES OF THE **ACCESS ADVISORY COMMITTEE** MEETING HELD IN PARRAMATTA LIBRARY, LEVEL 1, DARUG ROOM, 1 – 3 FITZWILLIAM STREET, PARRAMATTA ON TUESDAY 17 APRIL 2018 COMMENCING AT 5.30PM

PRESENT

Leone Clark, Joe Dimech, Timothy Hart, Mark Kunach, Deborah Manuel, John Moxon, Hamish Murray (Chairperson), Susan Thompson and Queenie Tran (Deputy Chairperson)

IN ATTENDANCE

Elizabeth Collins (Team Leader Community Care, City of Parramatta – arrived 5.35pm)
Adam Cook (Service Manager Capital Projects, City of Parramatta – retired at 6.27pm)
Steven Ellis (Place Manager, City of Parramatta – retired at 6.27pm)
Sabrina Forte (Project Officer, Disability Inclusion Action Plan, City of Parramatta
Tanya Owen (Community Capacity Building Officer, City of Parramatta)
Stephen Pearson (Minute Clerk, City of Parramatta)

The Convenor, Tanya Owen occupied the Chair for Items 1 to 5 until the election of a Chairperson and Deputy Chairperson for the new Committee for the ensuing year (at Item 5).

1.0 WELCOME

The Convenor, Tanya Owen introduced herself and welcomed everyone to the meeting. She apologised for her non-attendance at the first meeting of the newly formed Committee.

2.0 ACKNOWLEDGEMENT OF TRADITIONAL OWNERS

Tanya Owen acknowledged the Burramattagal Clan of the Darug people, the traditional land owners of Parramatta and paid respect to the elders both past and present.

3.0 INTRODUCTION AND APOLOGIES

A brief introduction of all attendees was held. Susan Thompson asked that as a matter of procedure, that every meeting of the Committee commence with a roll call of those present.

Apologies were received and accepted for the absence of Jenny Rose and Committee Member, Scott Green.

4.0 CONFLICT OF INTEREST DECLARATIONS

There were no declarations made of Conflicts of Interest at this meeting.

5.0 ELECTION OF CHAIRPERSON/DEPUTY CHAIRPERSON

Chairperson

Tanya Owen announced that three nominations had been received for the role of Chairperson as follows:

- Mark Kunach
- Hamish Murray

- Queenie Tran

An election was conducted by secret ballot and as a result Mark Kunach received 3 Votes, Hamish Murray received 6 Votes and Queenie Tran received 0 Votes.

Tanya Owen declared Hamish Murray elected as Chairperson for the ensuing year.

Deputy Chairperson

Tanya Owen announced that two nominations had been received for the role of Deputy Chairperson as follows:

- Timothy Hart
- Queenie Tran

An election was conducted by secret ballot and as a result Timothy Hart received 4 Votes and Queenie Tran received 5 Votes.

Tanya Owen declared Queenie Tran elected as Deputy Chairperson for the ensuing year.

The newly elected Chairperson, Hamish Murray then occupied the Chair for the remainder of the meeting.

6.0 CONFIRMATION OF PREVIOUS MINUTES

A copy of the Minutes of the Access Advisory Committee meeting held on Tuesday 20 February 2018 had previously been forwarded to each Member.

RESOLUTION (Tran/Moxham)

That the Minutes of the meeting of the Access Advisory Committee held on Tuesday 20 February 2018 be taken as read and confirmed as a true record of the meeting.

7.0 OLLIE WEBB RESERVE ALL ABILITIES PLAYGROUND – GUEST: STEVEN ELLIS, PLACE MANAGER, CITY OF PARRAMATTA

Steven Ellis, Place Manager, City of Parramatta and Adam Cook, Service Manager Capital Projects gave a presentation to the Committee on the designs for the Ollie Webb Reserve All Abilities Playground.

The presentation covered the areas of funding, concept and design elements, consultation outcomes, and the next steps for the project:

- Detailed Design and Documentation – April to May 2018
- Public Tender – May to August 2018
- Construction – September to December 2018

Steven Ellis advised that the NSW State Government has engaged Focus Groups to assist the Government in drafting State-wide guidelines for inclusive play spaces that will cater for people of all abilities.

Action Items:

A. The Committee suggested that the following organisations should also be consulted:
   - Vision Australia - Paediatric Occupational Therapist
   - The Deaf Society of NSW

B. Adam Cook agreed to maintain an email list of Committee members to enable him to keep Members informed of the progress of the development of the All Abilities Playground as it proceeds (in this regard, Committee Members indicated their consent to providing Adam with their email addresses). Tanya Owen will share email addresses of Committee Members with Steven.

Steven Ellis and Adam Cook retired from the meeting at the conclusion of this item, the time being 6.27pm.

8.0 DISABILITY INCLUSION ACTION PLAN – GUEST: SABRINA FORTE, PROJECT OFFICER, CITY OF PARRAMATTA

Sabrina Forte, Project Officer – Disability Inclusion Action Plan, updated the Committee on progress of Council's Disability Inclusion Action Plan (DIAP).

Sabrina advised that key projects and areas of work over the coming year include employment of a new Diversity Employment Officer, training for staff and managers on disability awareness and inclusion, changes to the project management tools to require consideration for access in new and upgraded Council facilities and assets, as well as the appointment of an expert in access and universal design to advise on development applications, projects and assets.

The Committee stressed the need for consultation with people with disabilities in the implementation of the DIAP. The Committee also stressed the importance of professionals engaged to implement various aspects of the Plan having the right attitude towards disability and access.

Action Items:

The Committee suggested that the Diversity Employment Officer should be invited to attend future meetings of the Access Advisory Committee.

9.0 BUSINESS ARISING

a. Training for Committee Members

It was suggested at the Committee Meeting held on 20 February 2018 (Item 3) that Committee Members should receive more formal training in how the Committee functions, how to participate in Committee meetings as an ordinary Member, how to put recommendations/motions forward, and how to chair meetings.

In this regard, Tanya Owen indicated that meetings of the Access Advisory Committee are fairly informal, with Committee Members (including the Chair) receiving on-the-job training from her in addition to the Induction Workshop completed by all Members at the beginning of their Membership term. It is her role to educate Committee Members in regard to Committee procedures and processes during the course of meetings and to provide feedback on various policies and plans.

Tanya emphasised that the Access Advisory Committee is advisory only, i.e. it can make recommendations to Council, but it cannot direct Council or staff to act.

Tanya advised that Committee Members are able to make requests to her as the Convenor of the Committee, or to other staff. Tanya indicated her willingness to work with the Chair and Deputy Chair of the Committee outside of meetings to increase knowledge and capacity in these roles if required upon request.

b. Parramatta Park Access Audit Update

It was requested at the Committee Meeting held on 20 February 2018 (Item 5.1) that a report be submitted to this meeting on whether Council has responded to the Committee's request, sent to the Administrator, for the Access Audit Report of Parramatta Park to be forwarded to the Parramatta Park Trust, and if so, whether the Trust would like to meet with the authors of the report, namely, Hamish Murray and John Moxon, to discuss the findings.

In this regard, Tanya Owen reported that the Access Audit Report had been forwarded to the Parramatta Park Trust. In follow-up communication with the Trust it was reiterated that the authors were more than happy to meet with the Trust, however to-date it has not indicated a need to meet with the Report's authors. Tanya noted that the report was thorough and detailed, and hence may be why the Trust has not sought clarification of the content with the authors.

c. Access Guidelines for Small Business Update

Tanya Owen reported that the draft guidelines on 'Increasing Business by Improving Access – Customer Service' and 'Increasing Business by Improving Access – Physical Design' (as referred to at Item 7C of the Committee meeting held on 15 August 2017) have now been finalised.

Tanya advised that the 'Customer Service Guide' and the 'Physical Design Guide' are now on Council's website and they are available in English, Chinese (simplified) and Korean, and found at the web address:
https://www.cityofparramatta.nsw.gov.au/access-guidelines

Tanya reported that the Guides have been distributed to over 140 shops and other small businesses so far, at Harris Park, Carlingford Court, Epping (eastern side of station), Ermington, and Westmead (shops near Hospital) and that some good progress has been made.

Action Item:

The Committee raised a question as to whether Council has a policy in keeping the building line of shops clear. Tanya Owen advised that she would take this question on notice and that she would report back to the next Committee meeting to be held on 19 June 2018.

d. Major Events Access Auditing

The Committee expressed disappointment at its last meeting of not being approached to contribute to an audit of Major Events (refer Item 6a of Committee Meeting of 20 February 2018).

In this regard, Tanya Owen clarified that the role of the Access Advisory Committee and the advice it can provide is not offered as a replacement for Council units engaging the services of a professional to conduct an access audit.

Per the DIAP, Major Events has undertaken to engage the services of a professional access consultant to audit a selection of major events and assist in the development of an appropriate checklist for future major events, with an aim to ensure that all events of the City are accessible.

e. Communication on Council Plans

The Committee asked at its meeting held on 20 February 2018 (refer Item 6a) as to what can be done to ensure that it is notified of the various plans and reports that are placed on exhibition so as to give the Committee opportunity to comment.

In this regard, Tanya Owen advised that she is endeavouring to make sure that all units across Council are aware of the Access Advisory Committee and of its role.

Tanya advised that there are also various references to the Access Advisory Committee within the DIAP.

Tanya also advised that other Advisory Committees such as the Aboriginal and Torres Strait Islander Advisory Committee and the Cycleways Advisory Committee, are very aware of the Access Advisory Committee, and often cross-refer projects and policies to relevant Committees.

f. Cycleways Advisory Committee – Access Representative

The Committee requested at its meeting held on 20 February 2018 at Item 6e that the question of nominating a Member of the Access Advisory Committee to attend meetings of the Cycleways Advisory Committee be listed for consideration at this meeting of the Committee.

Action Item:

Tanya Owen, Community Capacity Building Officer, agreed to provide Access Advisory Committee Members with details of the dates and times of meetings of the Cycleways Advisory Committee.

If any Member is interested in representing the Access Advisory Committee at meetings of the Cycleways Advisory Committee, they should inform Tanya accordingly.

Note: The Cycleways Advisory Committee meets at 6pm every second month on either the third or fourth Wednesday of the month. The remaining meetings for the year will be held on 23 May, 25 July, 19 September and 21 November.

10.0 OTHER BUSINESS

a. Communication In

5 Parramatta Square

Reference was made to the following recommendations arising from Item 6f of the Access Advisory Committee Meeting held on 20 February 2018:

A. That the appropriate consultants be invited to attend a future meeting of the Committee to update the Committee on proposals for provision of suitable access and facilities for people with disabilities within the proposed 5 Parramatta Square building including within the proposed new Council Chambers.

B. That the Committee also be provided with an update on the proposal for a digital carpet within the public domain of Parramatta Square.

Tanya Owen advised that she will seek relevant Council Officer(s) to attend the 19 June 2018 meeting of the Committee to provide information in relation to the above requests.

Tanya indicated that Council has engaged the services of Wall to Wall Design for the base building at 5 Parramatta Square, which is to provide feedback for the architect's consideration. The initial design is to be considered by the Project Control Group early next week.

Tanya advised that the design will be made available to the Access Advisory Committee once it has been approved by Council for public exhibition.

Parramatta Light Rail

Following a request of John Moxon, Tanya Owen advised that Council's Parramatta Light Rail Project Manager will be attending the 19 June 2018 meeting of the Committee to address the Committee on the project.

b. Other Committees

Nil

c. Request for Leave of Absence – John Moxon

John Moxon sought Leave of Absence for the Access Advisory Committee Meetings to be held on 19 June 2018 and 21 August 2018 as he will be away overseas.

Action:

The Committee granted Leave of Absence to John Moxon for the Access Advisory Committee Meetings to be held on 19 June 2018 and 21 August 2018.

d. Condition of Footpaths in Parramatta CBD

The general condition of footpaths in the Parramatta CBD was raised as an area of concern and questions were raised as to what guides Council in respect to conducting footpath repairs, including audits, KPIs and established timelines.

Specific mention was made of the footpath on the corner of Marsden and Argyle Streets, Parramatta which is currently missing kerb ramps.

Tanya Owen commented that sometimes, footpath restoration works are delayed if there are other works planned in the vicinity so that any new works are not affected or affected as little as possible. This can result in extensive delays in undertaking footpath repairs, particularly when works are large scale and involve other government departments, for example, the Westmead Hospital precinct.

Action:

Tanya Owen will report back to the Access Advisory Committee Meeting to be held on 19 June 2018 in respect of this matter.

e. Important Notice – Council's Customer Service Counter

Reference was made to an 'Important Notice' at Council's Customer Service Counter. The sign has white printing on a blue background and is difficult to read by anyone with impaired vision.

Members discussed the importance of colours and high contrast in signage and notices, to enable people with vision impairments to read them more easily, as well as for all people in dim lighting.

f. Touch Screen Eftpos Devices

A concern was raised in regard to the use by some organisations of touch screen Eftpos devices which are totally impossible to read by people with low vision.

It was requested that the Council bear this in mind if and when it is considering the use of such devices.

11.0 NEXT MEETING

5.30pm Tuesday 19 June 2018

The meeting closed at 7.20pm.

PRODUCTIVE

28 MAY 2018

12.1 Proposed Use of 1-3 Onslow Street Granville 130

PRODUCTIVE

ITEM NUMBER	12.1
SUBJECT	Proposed Use of 1-3 Onslow Street Granville
REFERENCE	F2011/03679 - D06022544
REPORT OF	Service Manager-Property Services & Space Management

PURPOSE:
Provide Council with further information on the proposed use of 1-3 Onslow Street Granville ("Premises").

RECOMMENDATION

(a) **That** Council notes the further information as outlined in this report following its deferral of 26 February 2018.

(b) **That** Council then select one of the options as outlined in paragraph 8 of this report.

(c) **Further, that** the Acting Chief Executive Officer be delegated to sign necessary documentation in respect to the subject Premises.

BACKGROUND

1. Council at its meeting of 26 February 2018 considered a report on the proposed use of 1-3 Onslow Street Granville and resolved that:

"***That*** *Council defer consideration of this matter for a further report to be provided to Council by May 2018, including:*

1. *Cost of repairs to the building;*
2. *Cost of demolition and remediation of the site;*
3. *Cost to construct a community building (with and without wooden floors); and*
4. *Available options for funding this project (S94 or otherwise)."*

ISSUES/OPTIONS/CONSEQUENCES

2. Points 1) to 4) of Council's resolution above are defined as follows.

3. Cost of repairs to the building

   A. The cost to repair the building was outlined within the previous report at $438,725. This estimate was obtained from Council's Capital Projects Team in October 2016. The amounts were derived from trade quotes and estimates based on previous projects carried out by Council. See schedule at **Attachment 1**.

   B. It is likely that when works commence that additional costs will be identified. These will not be known until detailed site works commence.

   C. The above amount is exclusive of the scope of works and associated costs then required by the successful EOI entity for their fit out of $455,000.

4. Cost of demolition and remediation of the site:

   A. Demolition and remediation of the site is estimated at $150,000. The demolition estimate was provided by Council's Capital Projects Team with the amount based on previous demolition works carried out by Council.

5. Cost to construct a community building (with and without wooden floors):

   A. Replicating the size of the facility that is located on the site at present would require a 600m2 facility.

   B. Estimated Construction & Fitout Cost to replace the existing is $795,000. Breakdown as follow:

      i. Construction Cost: 600m2 x $1,325 per m2 = $795,000 + GST.

      ii. Costing of floor boards may attract an additional $67 per m2 equating to $40,200 + GST.

   C. Source: Rawlinsons Australian Construction Handbook 2016 edition on page 53, section 11.5.2 Community Recreation Centre.

   D. It should be noted that Council's Social Infrastructure Strategy calls for a future facility to accommodate growth (medium to long term) of the area of circa 1,500m2 (i.e 80m2 per 1,000 people for an estimated population of 18,300 people).

   E. The current facility or a replacement of a like for like would be deficient by circa 900m2.

   F. A 1,500m2 facility required for the future population growth would equate to $1,987,500 at the above $1,325 per m2 rate.

   G. Delivery of any works requires formal planning approvals, funding allocation and resource allocation from Council's internal Project Management Office (PMO).

6. Available options for funding:

   A. Construction of a new facility could be funded from Section 94 as per the City of Parramatta Council Section 94A Development Contributions Plan (Amendment No. 5). Funding from Section 94 is subject to endorsement by Council's Section 94 Committee.

   B. Another potential source of funding for the project is part of the sale of Council's former site at 37 East Street, Granville. The sale of this site allocated $800,000 from the sale proceeds obtained in 2017 to be specifically used in the Granville area.

7. It is noted that the commencing rent for the current EOI agreement is $31,200.00 per annum with 4% increases for a period of 5 years. The total value of the lease is approximately $168,989.26.

8. Based on the above information, Council can either:

   A. Continue with the Expression of Interest Process and lease the Premises to the **Preferred Applicant** as per paragraph 10 of Council Report of 14 December 2015 (**Attachment 2**). The total cost of this option is estimated at:

i. Council make good:	$438,725*
ii. Total:	**$438,725**

** The current return on investment for Council based on the EOI rental offer is 14 years.*

A fitout cost of $455,000 will be attributable to the Applicant.

B. Proceed with demolition, embellish as open space in the interim (as per the Parramatta Road Growth Corridor and Council's Social Infrastructure Strategy), as well as commence planning for a new purpose built facility.

i. Demolition:	$150,000
ii. Cost of new build:	$795,000*
iii. Total:	**$945,000****

** Costing for a 600m2 facility only.*

*** The return on investment for this option would be subject to future cash flows and preferred operating model of a new facility in the medium to long term.*

Bindy Begg
Service Manager Property Services and Space Management

Mark Stapleton
Director Property and Significant Assets

Alistair Cochrane
Acting Chief Financial Officer

ATTACHMENTS:

1⇩	Attachment 1 - Cost to repair 1-3 Onslow Street Granville as at Oct 2016	2 Pages
2	Attachment 2 - Council Report of 14 December 2015	3 Pages

REFERENCE MATERIAL

ESTIMATE SHEET

Project Title: **11312 Community Buildings Capital Renewal Program** **F2016/02648**
Client: **Asset Strategy and Property Management** Date: **5/08/2016** By: **Craig Philipp**
Location: **1-3 Onslow Street, Granville** Sheet 1 of 2

Item No.	Description	Quantity	Unit	Rate	Total
	Council Scope of Works (Internal & External)				
1	Structural assessment of existing steel fire stair to certify structural integrity and				$ 2,000.00
	subsequent rectification of replacement.				$ 35,000.00
2	Provision for disabled car parking spot and access ramp to building.				$ 40,000.00
3	Removal of obsolete / damaged air conditioning units and cool room condensers.				$ 10,000.00
4	Removal of random concrete plinths to rear left courtyard area.				$ 4,000.00
5	Cap off existing exposed sewer pipe and make safe.				$ 500.00
6	Check and rectify external water service as copper piping has been cut in exposed areas.				$ 3,000.00
7	Repair and make good damaged existing electrical board. Test mains power coming into building and make good. Provide vandal proof locking mechanism to box.				$ 14,000.00
8	Check all external wiring to lighting and power to existing outdoor condensers and make safe.				incl with Item 18.0
9	Remove steel bars to entry doors (Emergency Exit).				$ 2,000.00
10	Repair roof leak.				$ 4,500.00
11	Check gas service and make safe.				$ 9,000.00
12	Rectify loose brickwork above meter box in conjunction with rectification of electrical service.				$ 500.00
13	Fencing enclosing outdoor area				$ 35,700.00
14	Provide disabled access to required areas.				incl with Item 15.0
15	Provision of disabled access toilet facilities. (to be determined when type of use is known)				$ 64,800.00

18/10/2016
Ref: F2016/02648/EstimateSheet.xlsx

Item No.	Description	Quantity	Unit	Rate	Total
16	Repair floor either side of ground floor bar.				$ 5,000.00
17	Exit doors to be repaired or replaced as required for compliance with BCA.				$ 10,000.00
18	Check and repair all electrical wiring and make safe. Ensure operation of all lighting, power points including exit signs and emergency lighting.				$ 37,000.00
19	Repair damaged plasterboard to ceiling areas.				$ 7,000.00
20	Make safe floor access panel at ground floor foyer.				$ 5,000.00
21	Repair sub main board to first floor and make safe all wiring restore and test entire power system to building on completion.				$ 4,000.00
22	Repair plumbing services and reconnect to all wet areas as required.				$ 17,500.00
23	Disconnect and make safe all water and electrical services to existing bar.				incl with Item 18.0
24	Replace missing handrail to existing staircase.				$ 3,000.00
25	Repair loose ceiling section adjacent to first floor stage.				$ 2,000.00
26	Removal of Board enclosing Ground Floor Door entry/exit outdoor pergola area & Provision of new glass doors.				$ 10,000.00
27	Reinstate PC items to existing toilets and make functional (to be determined when type of use is known)				$ 48,000.00
28	Removal of stage on First Floor				$ 4,000.00
29	Removal of bar at first floor				$ 8,000.00
	Based on the above scope of work the summary of works & estimated costs are as follows:				
A	Structural Engineering				$ 2,000.00
B	Mechanical Services				$ 10,000.00
C	Electrical Services				$ 55,000.00
D	Plumbing Services				$ 82,500.00
E	Buildling Services				$ 232,000.00
	Sub Total				$ 381,500.00
	Contingency @ 15%				$ 57,225.00
	TOTAL				**$ 438,725.00**

18/10/2016
Ref: F2016/02648/EstimateSheet.xlsx

LEADING

28 MAY 2018

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LEADING

ITEM NUMBER	13.1
SUBJECT	Proposed Amendment to the Homebush Bay West DCP 2013 - Block H, Precinct B - 3 Burroway Road, Wentworth Point
REFERENCE	RZ/27/2016 - D06097644
REPORT OF	Senior Project Officer Land Use

APPLICANT / LANDOWNER Fairmead Business Pty Ltd (Billbergia)

Note: This report was deferred from the 9 April 2018 Council Meeting and the 23 April 2018 Council Meeting.

PURPOSE:

The purpose of this report is to provide Council with a preliminary assessment of the application to amend the Homebush Bay West Development Control Plan (DCP) and associated draft Voluntary Planning Agreement (VPA). The report presents options for the Council's consideration of how to proceed with the application and VPA.

RECOMMENDATION

That Council resolve in accordance with one of the four (4) Options provided in this report as outlined in paragraphs 110 to 134.

BACKGROUND

1. The subject site, known as Block H, is one of seven 'Development Blocks' at Precinct B, 3 Burroway Road, Wentworth Point. Precinct B is owned by the applicant, Billbergia and is approximately 10.97ha, known as Wentworth Point Marinas. It is located on Homebush Bay, along the Parramatta River and is bounded by Hill and Burroway Roads and Precinct C (refer **Figure 1 & 2**).
2. Of the 7 Development Blocks, 4 are complete (Blocks A, B, D & G) and Blocks C and E are currently under construction. Block H is the final parcel to be developed (refer **Figure 2**).
3. The total site area of Block H is approximately 31,609m^2. The legal description of Block H is Lot 24 DP 270778.
4. Wentworth Point was formerly known as Homebush Bay West and forms part of the wider area of urban renewal of former industrial and commercial lands on the Sydney Olympic Peninsula, including Sydney Olympic Park, Wentworth Point and Carter Street Priority Precincts. After the staging of the Olympic Games during September and October 2000, the Department of Planning reviewed the planning controls and the Homebush Bay West Development Control Plan 2004 was adopted.
5. The former Auburn Council was the planning authority for the Wentworth Point Precinct. Following the local government proclamation in May 2016, Wentworth Point, including the subject site, became part of the new City of Parramatta LGA.

Figure 1: Precincts within Wentworth Point (Source: Homebush Bay West DCP (Amendment No 1))

Figure 2: Development Blocks within Precinct B (Source: Council GIS & Application, Billbergia 2017)

Application – Amendment to Homebush Bay West DCP

6. An application to amend the Homebush Bay West DCP was lodged with City of Parramatta Council on 23 December 2016 by Fairmead Business Pty Ltd (trading as Billbergia) applying to Blocks H and E and other DCP amendments.

7. An original draft VPA letter of offer was submitted with the application on 23 December 2016. It is noted that the original VPA offer included the operation of a 20-year community shuttle bus, two 75 place child care centres dedicated to Council, provision of embellished publicly accessible open space and 12 affordable housing units. The original VPA offer did not seek exclusion from s94 development contributions.

8. Following a Design Competition for the subject site (as detailed below), a revised application was submitted with Council by the applicant on 16 November 2017, applying to Block H and the adjoining foreshore land to Block C, as shown on **Figure 3** and comprises the following proposed Amendment to Homebush Bay West DCP:

   i. Increase building height from 6, 8, 9, 16 and 25 storeys to maximum height of building permitted of 35 storeys above the level of Wentworth Place at its highest point;

   ii. Seeking a Gross Floor Area (GFA) of 75,000m2;

   iii. A provision in the DCP which would alternatively allow 85,000m2 GFA and unspecified height controls when certain conditions are met (which is an overall increase from the allowable GFA of 55,257m2);

   iv. A minimum floor space for non-residential uses of 2,900sqm;

   v. Provision of a minimum public open space of 16,800 m2; and

   vi. Requirements for design excellence.

9. The application is accompanied by a letter of offer to enter into a Voluntary Planning Agreement (VPA) to the estimated value of $44.95M for the following items (refer **Attachment 1**):

   a. The operation of a 20-year community shuttle bus to the value of $21M;

   b. The construction, fit-out and dedication of a 75 place child care centre to the total value of $6.45M;

   c. Fit outs of the Wentworth Point community centre and library located in Precinct B - Block B valued at $8M;

   d. Wentworth Point Infrastructure Fund for general transport and social infrastructure valued at $9.5M; and

   e. Exemption from S94 contributions payable for any public amenities and services for the same purpose as the contributions required to be made under the draft VPA.

<u>Design Competition – Precinct B, Block H</u>

10. Following discussions with the applicant in 2017, it was agreed that a competitive design process would be undertaken for the subject site as shown in **Figure 3**.

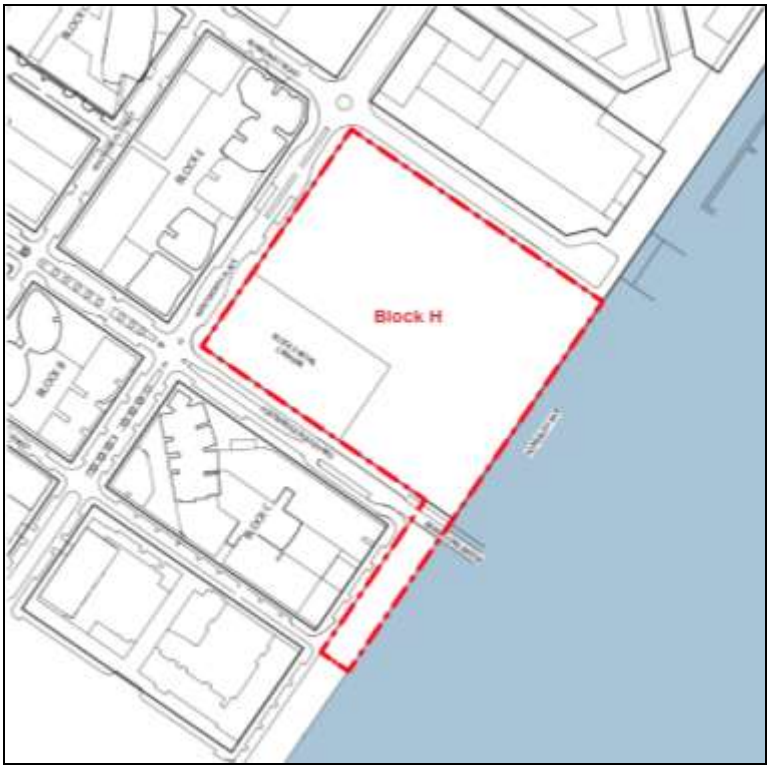


Figure 3 Subject Site

11. The purpose of the 'Masterplan Concept Design Competition' was to identify the vision for the site, resolve the architecture, including identification of spatial structure, building envelopes and the public domain. It is envisaged that the Masterplan Concept Design Competition was the first stage of a two stage process. Stage 2 is an Architectural Masterplan Concept Design Competition, which would be undertaken following any amendment to the HBW DCP and prior to lodgement of a development application.

12. The competition was based on the following development proposal:

    a. A high density residential apartment building with street orientated retail, commercial and include a 75-90 place child care centre.

    b. Minimum 16,800sqm of public open space, predominantly in the form a large park of 1.05 hectares.

    c. Floorspace benchmark of 50,000sqm and 65,000sqm, with a minimum of 2,900sqm of non-residential uses. Noting that the two development scenarios would be further considered by Council in terms of planning issues, such as transport, open space and residential amenity.

13. The competition was undertaken between July and October 2017, with six architectural firms invited to participate in the design competition and present their schemes to the Design Jury. The Design Jury comprised Council's City Architect, NSW Government Architect and the proponent's nominee. The Jury deliberated and the Jury Report was endorsed by all Jury Members on 12 October 2017 (refer **Attachment 2**).

14. In summary, the Design Jury recommended that (refer Part D, pp30-33 of **Attachment 2)** three architectural firms proceed to Stage 2 Architectural Design Competition. It was demonstrated by these three firms' schemes that densities of between 82,000sqm and 90,000sqm (at between 28-50 storeys) could be physically accommodated on the site with provision of between 16,800sqm and 32,000sqm of open space.

15. The Design Jury Report also provided the following responses regarding the site's capacity to sustain bulk, scale and density:

    a. The three (3) shortlisted competition entries clearly demonstrate that the site has a built form capacity to contain a floorspace of approximately 75,000sqm. The 75,000sqm is equivalent to the maximum GFA benchmark contained within the brief (65,000sqm) with an additional 15% Design Excellence bonus.

    b. Consider that additional floorspace, up to a total of 85,000sqm could be "tested" on the site subject to improved transport and social infrastructure (i.e. light rail, community facilities, increased provision of open space).

    c. Confirm that the maximum building height should be as per the endorsed design competition brief: That a maximum of 35 storeys above the level of Wentworth Place at its highest point, and a 75,000m2 GFA overall, which are reflected in the proposed DCP amendment.

Homebush Bay West Development Control Plan

16. Under the Auburn Local Environmental Plan 2010 the subject site is a 'Deferred Matter' and the site is subject to the State Regional Environmental Plan No. 24 – Homebush Bay Area (SREP 24) and the Homebush Bay West Development Control Plan (HBW DCP) and made by the (then) NSW Department of Planning and Infrastructure. The HBW DCP provides the planning controls governing development permissible by the SREP 24.

17. A masterplan was adopted for Precinct B by the Minister under Clause 16 SREP 24 in 2006, and is known as the No. 1 Burroway Road DCP 2006. Although the site-specific DCP technically applies to the site, the subsequent Amendment 1 to the HBW DCP revised planning controls and has made the DCP effectively redundant.

18. The HBW DCP 2004 Amendment 1 was prepared and came into effect on 31 July 2013 for the purposes of amending planning controls, including introducing higher densities and building heights to support the Voluntary Planning Agreement (VPA) for the construction of the Homebush Bay Bridge to link Wentworth Point to the Rhodes Peninsula (now known as the "Bennelong Bridge").

19. Under the Homebush Bay West DCP 2004 Amendment 1 a total maximum GFA of 200,649sqm is allowable within Precinct B (refer Table 1 below), which is to be distributed across all Development Blocks, including the subject site – Block H.

Precinct	Site Area (m²) (1)	Total Allowable floor space maximum	Commercial/ maritime/ educational floor space minimum	Retail/ café/dining associated with the waterfront	Residential floor space maximum (2)	Public open space minimum
B	109,730	200,649	3,165	100	197,384	10,973
C	31,946	74,424	0	100	74,324	3,195
D	62,375	97,087	405	200	96,482	6,237
E (3)	44,940	73,979	330	100	73,549	5,075

Table 1: Extract from Section 5.3 of the HBW DCP (Amendment 1)

Concept Approval – Development Application DA-296/2014

20. Development application (DA-296/2014) was lodged with Auburn Council on 3 September 2014 for a staged development proposal (concept plan) of the remaining undeveloped stages of Blocks B, C, E, F and H within the Precinct B site (i.e. Lot 10) and the construction of a 25 storey mixed use building at Block B (works component). The application was accompanied by a Voluntary Planning Agreement (VPA) for a community library facility (cold shell) on Block B.

21. The application was referred by Auburn Council to the Joint Regional Planning Panel for consideration where a deferred commencement approval was granted on 6 January 2015 and Auburn Council issued operational consent dated 11 March 2015.

22. Condition 4 of the concept approval resulted in a total cumulative GFA for Precinct B of 220,940sqm (an increase in 20,291sqm (effectively +10.1%) above the DCP provisions specified in Table 1 above) as follows:

    "(a) the total cumulative gross floor area for Precinct B shall not exceed the maximum: 220,940sqm.

    (b) the floor plate of each tower within each Block in Precinct B shall not exceed the maximum floor area of 950sqm.

    (c) Each block forming part of the Concept Plan shall be subject of a separate development application."

Proposed Modification to DA-296/2014

23. On 15 October 2015 the applicant lodged a s96 modification to (the then) Auburn Council (reference DA-296/2014/D) to modify the approved building envelopes for Blocks E and H within the original concept plan approval. The application was also accompanied by a VPA that offered various public benefits to the community, in consideration for the proposed additional height and density increase. Specifically, at that time, the proposed modification sought approval for the following:

    a) Increase in floor space of 50,000sqm within the site, in addition to the approved 220,940sqm sought under the original concept DA approval.

    b) Redesign and reshape the built form (massing and scale) of Block H through increased height and density.

    c) Increase height of the 20 storey tower in Block E to 25 storeys.

    d) Deletion of the local access road within Block H.

    e) Increase accessible public open space for Block F

24. City of Parramatta Council staff (following local government proclamation in May 2016), based on legal advice, then advised the applicant on 28 July 2016 to withdraw the application as the nature of the amendments fell outside what Council could consider as a s96 modification application as the development was not substantially the same. The applicant subsequently withdrew the application on 13 December 2016.

Strategic Planning Framework

25. The recently released *Greater Sydney Region Plan* (2018) identifies Wentworth Point as an area of urban renewal within the general Greater Parramatta Priority Growth Area.

26. Wentworth Point is identified in NSW Department of Planning and Environment's (DPE) Greater Parramatta Interim Land Use and Infrastructure Implementation Plan, 2017 (the Plan) with provision of an additional 7,316 homes and 300 jobs by 2036. This growth is envisaged to be delivered through the existing planning controls and it is also acknowledged in the Plan that a longer term priority is to improve transportation to the precinct.

27. As summarised in Table 2, the Plan forecasts a total number of dwellings of 23,638 and a total number of jobs of 41,756 for the growth precincts of Sydney Olympic Park, Carter Street and Wentworth Point by 2036. Based on the dwelling forecast this is an equivalent estimated residential population of 51,770 by 2036 (based on 2016 high density occupancy rates for City of Parramatta Council).

Growth Precincts	Forecast Total Dwellings by 2036	Forecast Total Jobs by 2036
Sydney Olympic Park & Carter Street	16,200	41,456
Wentworth Point	7,438	300
TOTAL	**23,638**	**41,756**

Table 2: Total Forecast Dwellings and Jobs Sydney Olympic Peninsula (Source: LUIIP, DPE 2017)

28. As outlined in the report below, the existing development and forecast growth under existing planning controls currently raise issues around the capacity of the peninsula to accommodate growth in terms of supporting infrastructure, in particular transport and traffic.

KEY ISSUES

Land Use – Allowable and Proposed Development

29. In order to quantify and qualify the allowable and proposed developments on the subject site, Block H, Council staff tested the following various potential development scenarios.

    a. Development consistent with the Concept DA approval (Scenario A)

    b. Development resulting from Council staff's analysis based on Homebush Bay West DCP (Amendment 1) height of buildings for Precinct B and additional optimum urban design considerations including the Apartment Design Guidelines (ADG) requirements – (Scenario B)

    c. Development as proposed by the applicant – (Scenario C1 and C2)

30. Each scenario is summarised in **Table 3** below and discussed in detail below.

Development Scenarios	Total Gross Floor Area (sqm)	Built Form Outcome	Estimated Dwellings	Additional Floor space (sqm) above allowed under Concept Approval
A. Concept Approval DA-296/2014	29,743*	6-7 storey buildings	341**	0
B. Council staff's analysis of HBW DCP (Amendment 1) and optimum urban design considerations	54,356**	6-8 storey buildings & two 16 & 25 storey towers	604***	24,613
C1. Proposed Development	75,000**	Tallest tower 35-storey (as measured from Wentworth Place) with a variety of heights for other buildings.	859***	45,257
C2. Proposed Development	85,000	Unspecified (potentially up to 50 storeys)	978+	55,257

Table 3: Various Potential Development Scenarios – Block H

*Based on historic development application approvals.

**Includes a minimum provision of 2,900sqm of non-residential GFA

***Based on dwelling mix of 1 (20%), 2 (60%) and 3 (20%) bedroom units and ground level commercial/retail GFA.

+Based on Design Competition min 2,900sqm non-residential and remainder for residential GFA

Scenario A. Development consistent with Concept DA Approval

31. This development scenario represents the available remaining GFA under the approved Concept DA approval (ref DA-296/2014), a total of 29,743sqm, for a mixed use development on Block H. The 29,743sqm figure is calculated by subtracting the GFA approved under the development application for Blocks A-G (191,197sqm) from the allowable GFA under the Concept DA approval (220,940sqm). Under this scenario a development application could be lodged with Council seeking development on Block H consistent with the Concept DA approval. No amendment to the HBW DCP would be required.

32. As indicated on **Figure 4** below and Table 2 if 29,743sqm of GFA was realised as a mixed use development on Block H, this would result in a 6-7 storey building form, ground floor retail, approximately 341 residential apartments and 9,863sqm of open space.

33. The 9,863sqm of open space is calculated based on existing approvals within Precinct B. The amount of open space approved as part of previous DAs is subtracted from the overall 10,973sqm that is to be provided under the current DCP. It is noted that the foreshore promenade on Block C has been approved separately (DA 268/2014). A remaining 8,185sqm are therefore to be provided on Block H.

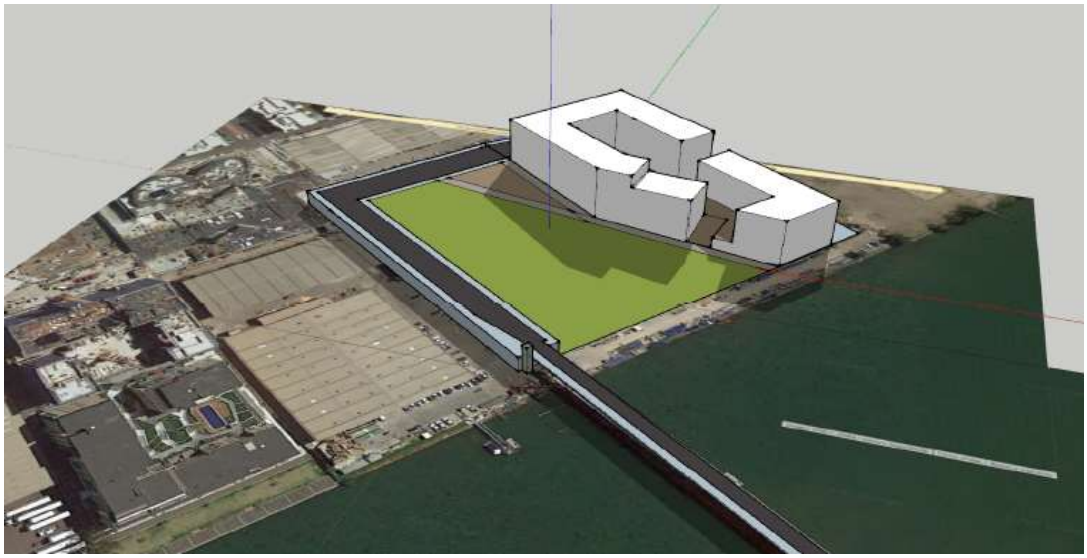


Figure 4: Indicative massing based on remaining GFA under Concept Approval (DA-296/2014) (Source Council Urban Design Unit)

<u>Scenario B – Development that responds to the building heights contained in Homebush Bay West DCP (Amendment 1) and optimum urban design considerations including the Apartment Design Guidelines (ADG)</u>

34. This development scenario estimates the optimum built form and GFA that would result from a design generally consistent with the current heights contained in the HBW DCP for Block H and the ADG. Council officers' preliminary analysis of this scenario resulted in 48,473sqm of GFA. This was reviewed by Billbergia, who indicated 65,000sqm of GFA could be achieved, through the following measures:

    a. All podium buildings to be modelled at a height of 8 and 9 storeys as per the DCP controls (as opposed to Council's Urban Designers' initial model based on 6 storeys).

    b. Towers above podium to be modelled at 950sqm floorplate (as opposed to Council's Urban Designers' initial model based on 1,120sqm floorplate (or 840sqm floorspace) and 880sqm floorplate (662sqm floorspace).

    c. Approximately 3,100sqm of additional floor space can be achieved by adding the town square floor space (50% coverage over 2 floors).

35. Council's Urban Designers reviewed Billbergia's response and agreed the following concessions could reasonably be made, therefore increasing the overall GFA from 48,500sqm GFA to 54,356sqm:

    a. 8 storey street wall along the park subject to minimising overshadowing impact on the park, in accordance with the DCP.

    b. Increase in floorplate area, to 950sqm (or 715sqm GFA whichever is greater) for a 16 storey tower, and 1,100sqm (or 825sqm GFA) for a 25 storey tower. Floorplate in this context is defined as "all areas to external face of building including external walls, internal voids and balconies".

    c. A minimum of 2,900sqm GFA of non-residential uses, to be provided below Wentworth Place.

Further, Council's Urban Designers incorporated the following assumptions:

a. Range of heights 16 and 25 storeys towers and 6 and 8 storey buildings generally consistent with those in the DCP for the subject site.

b. No higher than 20m or 6 storeys (whichever is greater) for street walls/ podium fronting streets and public domain measured above Wentworth Place.

c. All heights were measured from the elevated Wentworth Place alignment. No car parking was located above this level.

d. 6 metre setback of tower floorplates above the street wall/ podium.

e. Lower residential building depths to be a maximum of 22 metres deep except where a tower occurs above it.

f. The tower locations would need to adjust depending on the configuration of the public open space.

g. The analysis also attempted to enable improved inter-building separation.

h. All residential edges have habitable uses for determining inter-building separation. The use of blank walls to minimise separation is not supported at this stage as it results in a suboptimal outcome.

i. Provide solar access and amenity within the courtyard. Noting that this may be required to be supplemented with some limited additional rooftop communal open space. A full reliance of communal rooftop space results is not a desired urban design outcome.

36. The above assumptions ensure any future development application would be able to potentially meet the requirements under the ADG, as well as to minimise overshadowing of the communal and public open space. This results in better urban design outcomes.

37. Based on Council staff's analysis, this scenario would result in an estimated 54,356sqm (or an additional 24,613sqm above the Concept DA approval). Under this scenario an amendment to HBW DCP would be required to allow for the additional GFA.

38. As indicated on **Figure 5** below and Table 3 if 54,356sqm of GFA was realised as a mixed use development on Block H, this would result in 6-8 storey buildings, with two tower buildings of 16 and 25 storeys, ground floor retail, approximately 604 residential apartments.

39. In this scenario, Council Officers have assumed an indicative open space area of 13,260sqm, which is considered a reasonable increase in open space proportionate to the density uplift. Under this scenario a 24,613sqm uplift represents an approximate 82% increase in density from what is allowable under the concept approval (Scenario A). A 82% increase in open space as compared to Scenario A (i.e. 8,185sqm on Block H) represents 14,896sqm. It is noted this is additional to the already approved 1,678sqm on Block C. It is noted that the previously approved additional GFA (20,291sqm) under the concept approval, was granted without a commensurate increase in the provision of public open space. Therefore it is considered that an open space provision (on Block H) of 13,260sqm is an acceptable and reasonable design outcome.

Figure 5: Indicative massing based on Scenario B (Source Council Urban Design Unit)

Scenarios C1 & C2 – Applicant's Proposed Development

40. As proposed in the application, a GFA is sought under the proposed HBW DCP Amendment 2 of 75,000sqm and 85,000sqm respectively.

41. As summarised in Table 3, Council staff estimate that 75,000sqm results in approximately 859 residential units and maximum tower development of 35 storeys (as measured from Wentworth Place) with a variety of heights for the other buildings. It is estimated that this would result in an additional 518 residential units above what is permissible under the Concept DA approval.

42. Council staff estimate that 85,000sqm results in approximately 978 residential units. Although the maximum tower is not specified, it is anticipated to have the potential to reach up to 50 storeys, with remaining buildings to be a mixture of heights. It is estimated that this would result in an additional of 637 residential units above what is permissible under the Concept DA approval.

43. It is noted that Scenarios C1 and C2 include a minimum provision of 2,900sqm of non-residential uses (as does Scenario B) and 16,800sqm open space as recommended by the Design Jury (refer **Attachment 2)**.

Transport and Traffic

44. The information provided by the applicant within the original and revised applications has been reviewed by Council staff and Transport for NSW (TfNSW) and Roads and Maritime Services (RMS). This section of the report details the following:

    a. Preliminary feedback provided by Council officers

    b. Advice from TfNSW/RMS

    c. Response from the applicant to TfNSW/RMS

    d. Council officers' current assessment

Preliminary feedback from Council staff

45. Council staff reviewed the originally submitted application in September and October 2017 in relation to the initial proposal for Block E and H. Feedback received is still relevant for the revised proposal and is summarised below.

46. The applicant suggests that traffic generation rates may be lower in the north section of the Wentworth Point precinct. There is concern that there is no sufficient explanatory analysis to support this statement. In addition, should this statement be correct, the benefit should go towards having reduced congestion on the road network rather than allowing increased density contributing to congestion.

47. Existing transport issues are at a level which is not expected to be fully addressed and solved by the proposed shuttle bus, and will likely be amplified by the proposed additional density.

48. It is TfNSW's role, not a private sector or local government body, to continue to ensure an accurate provision of public transport services and to increase levels of services as population grows. It is Council's preference that public transport be provided by public agencies rather than private shuttle as this provides better legibility for users and ensures long term commitment to services.

49. Light Rail Stage 2 cannot form part of a justification for increased density, given the uncertainty of the funding, configuration and operation. The Metro West project, which is only at an announcement stage, requires further analysis to determine whether it will be able to support existing density, or any proposed increase density, particularly at Wentworth Point.

50. There is insufficient evidence provided to demonstrate that motorists would transfer to bus mode should there be additional bus capacity.

Advice from TfNSW/ RMS

51. Advice has also been received from TfNSW/RMS in relation to the subject application on 15 February 2018 (refer **Attachment 3**). Their advice is summarised as follows.

52. The traffic demands resulting from Wentworth Point, Carter Street and Sydney Olympic Park Master Plan Review are in excess of the road network capacity, estimated at 5,250 vehicles per hour in peak, with a minimum of 20,000 vehicles per hour predicted to be generated in peak.

53. There is insufficient evidence provided that the added shuttle bus service will result in a mode shift from private vehicle towards public transport.

54. The traffic and transport impact assessment undertaken by the applicant does not adequately address the impacts of an additional 56,000sqm on the surrounding road network or the sufficient measures to offset these impacts.

55. While it is acknowledged by TfNSW/RMS that the provision of the shuttle bus would supplement existing State Transit services, the advice concludes that they do not support the proposed density increase.

56. Council officers also note that TfNSW, RMS and the Greater Sydney Commission are currently preparing a Growth Infrastructure Compact for the Greater Parramatta and Olympic Peninsula, and that TfNSW is preparing a Transport Study to help inform where growth is feasible in the corridor. Council Officers suggest that the findings of these studies will be able to help assess future proposals for additional GFA or building height, which will need to be assessed by Council as the relevant planning authority.

Response from the applicant

57. The advice from TfNSW/RMS was forwarded to the applicant on 16 February 2018. On 22 February 2018, the applicant provided a response to the TfNSW/RMS letter (refer **Attachment 4**). Key elements of this response are summarised below.

58. A trial of the shuttle bus was started on 5 February 2018 and the applicant has undertaken a number of surveys and data collections since.

59. Survey results seem to indicate that a large number of current drivers are or will be willing to shift to public transport for one or more weekly trip. The shuttle bus, as trialled, has resulted in a shift from car to public transport use. The resulting change in travel demand justifies uplift on Block H.

60. The full Baylink Shuttle Bus offer will consist in 4 buses (the trial is 2 buses) with a doubled capacity that will address the estimated 250 person trips in peak hour generated by the uplift.

61. Given the Sydney Metro Northwest project will be completed in 2019, this will allow operational changes on the Sydney Train network. Therefore, additional train services are anticipated to serve Rhodes Station.

62. The uplift will also be addressed by the infrastructure funding available through the VPA. Billbergia has already made a considerable contribution towards transport infrastructure (e.g. Bennelong Bridge, car share agreement, Green Travel Plans) in addition to the proposed shuttle bus.

Council staff assessment

63. Preliminary assessment by Council officers identifies the following remaining concerns. Council traffic and transport planning officers are still in the process of reviewing the implications of a shuttle bus on the local and regional network, and whether the proposed uplift will be adequately addressed by the shuttle bus measure.

64. The response from the applicant was also provided to TfNSW/RMS. Council staff are awaiting comments from TfNSW/RMS. These will be provided to Councillors under separate cover should they be received prior to the meeting.

65. It is acknowledged by Council staff that the shuttle bus trial has been successful. The two mini-buses currently operating are well used and appreciated by the community. However, in peak hour, most of the capacity of these buses was already being used in the first three weeks of the trial. Some of this usage may come from walking or from other bus services. The survey conducted by the proponent does not show that all of the bus users would have driven if the bus was not provided.

66. Additional bus capacity would be quickly absorbed by existing demand (including current pedestrians, cyclists, bus users and drivers,) or future demand from development already in the pipeline, and would not address demand caused by increased densities.

67. There is a need for increased public transport services in the area to service existing densities, not for services in exchange for higher densities. The endorsement of the provision of temporary public transport services may set an undesirable precedent in the future for other developers seeking to justify additional uplift on surrounding sites or precincts with other temporary services which once cease, may fall to Council to manage.

68. Whilst Billbergia has contributed towards transport infrastructure, the levels of traffic complexities on the whole of the Peninsula are such that they have to be investigated at a broader level. The proposed increase density is only one proposal out of other development or uplift proposals which are amplifying existing issues.

69. The Metro West and Parramatta Light Rail projects are only at an announcement stage, with no current NSW Government funding commitment, and cannot be used to support further assumptions about changes in the light rail operations. Furthermore, it is also unclear if the Parramatta Light Rail – Stage 2 will deliver the carrying capacity to support existing development or any increase in proposed density.

70. Pending the results of the studies to be undertaken by TfNSW, RMS and the Greater Sydney Commission, as well as additional and confirmed details and funding regarding Light Rail and Metro, 'testing' an overall density of 85,000sqm or greater heights based on future transport improvements is not considered feasible or appropriate. It is also considered that the shuttle bus cannot justify the proposed density increase but rather a firm commitment from the NSW Government to public transport infrastructure for the precinct is needed.

<u>Council Resolution – Lord Mayoral Minute</u>

71. At the Council meeting of 26 February 2018, a Lord Mayoral Minute was considered in relation to the provision of a free shuttle bus service to Wentworth Point. In considering this matter, Council resolved:

    (a) That the Council thank Billbergia for their initiative of introducing the Baylink Shuttle that has been a popular service for the local community.

    (b) That Council resolve that the provision of public transport is not a function of local government and write to the State Government and the Minister for Transport requesting funding for the Baylink Shuttle initiative.

    (c) That the Minister for Transport and the Greater Sydney Commission be advised that the transport deficit of the Sydney Olympic Peninsula requires urgent attention, including increase in buses services and development of a transport strategy to serve the planned growth of the Peninsula.

    (d) Further, that Council receive a report on the provision of public transport and the transport deficit in the Sydney Olympic Peninsula including the impacts of the future light rail line.

72. Council staff have considered the above resolution in formulating this report and presenting the Options for moving forward.

Social Infrastructure

73. The social infrastructure improvements that are included in the associated draft VPA offer or in the existing S94 plan cannot be used to justify a density increase or increased building heights.

74. In terms of quantity, the proposed DCP amendment includes a "minimum public open space" requirement of 16,800sqm. While Council officers support this minimum provision, it is recommended that the definition of "public open space" be clarified to mean space that is accessible to the public and useable at all times, day or night, rather than it being in public ownership. As a significant portion of this open space is to sit above private car parking, it is not proposed

to be owned by Council given the significant costs and complexities of maintaining public land over private car parking. Similarly, the foreshore promenade may present similar challenges.

75. It is noted that the three options that came out of the design competition proposed an additional open space area of a combined area of approximately 3 hectares. While Council officers support the provision of additional publicly accessible open space, this again should not be referred as public open space.

76. In terms of quality and amenity, the proposed DCP does not sufficiently address the quality and amenity of the proposed public open space. Additional prescriptive controls have been included by Council officers, particularly in relation to overshadowing and deep soil zones consistent with the intent of the original HBW DCP. Council officers have also included provisions for a minimum 1.05ha 'main park', consistent with the Design Jury Report.

Proposed draft Homebush Bay West DCP Amendment 2

77. The applicant's proposed DCP amendment has been prepared based on the Design Competition Stage 1 final report. The competition brief for Stage 1 was prepared by Council's Urban Design Unit.

78. Essentially, the Design Jury endorsed building heights of a maximum of 35 storeys above the level of Wentworth Place at its highest point, and 75,000m2 GFA overall, which are reflected in the applicant's proposed DCP amendment. The 35-storey height measured from Wentworth Place was included as part of the base scheme.

79. In relation to GFA, the Jury recommendation noted that:

The three (3) shortlisted competition entries clearly demonstrate that the site has a built form capacity to contain a floorspace of approximately 75,000sqm. The 75,000sqm FS is equivalent to the maximum GFA benchmark contained within the brief (65,000sqm FS) with an additional 15% Design Excellence bonus.

Further:

The Jury do however consider that additional floorspace, up to 85,000sqm FS could be "tested" on the site subject to improved transport and social infrastructure (i.e. light rail, community facilities, increased provision of open space).

80. The applicant's proposed DCP amendment therefore seeks a maximum of 85,000sqm with buildings of a greater height, if the consent authority is satisfied that:

    a. the resultant development continues to exhibit design excellence,
    b. improved transport and social infrastructure will become available (such as light rail and community facilities, or alternatives),
    c. the provision of public open space is increased at least proportionally, and
    d. non-residential uses at ground level are sufficient to activate all waterfront and street frontages.

81. Following a detailed review of the draft DCP amendment submitted by the applicant, Council officers have made a number of revisions. A copy of the

updated Draft DCP amendment is provided at **Attachment 5**. A summary of the key revisions made by Council officers include the following:

a. Inclusion of an introductory section, to provide context for the DCP amendment, including title, clarifying where the DCP applies, specifying its relationship to other plans, statement of purpose, and explanation of how its amends the existing DCP framework.

b. Clarification of the Opportunity Site provision.

c. Removal of the additional bonus provision to allow additional floor space up to 85,000sqm of GFA with an unspecified height limit, subject to the delivery of light rail (given that there is no NSW Government funding commitment to the Parramatta Light Rail – Stage 2 or other transport improvements).

d. Expansion of definitions sections to provide clear meanings for key terms in the DCP amendment, including community infrastructure.

e. Expansion of the urban design outcomes provisions to provide more detail and clarity around desired outcomes, including public domain and open space, the main park, foreshore promenade and built form.

f. Additional controls in relation to street wall/podium heights for towers, setbacks of tower floorplates above street wall/podium, and floorplate controls.

VPA Offer

82. The components of the current VPA offer (**Attachment 1**) are discussed below.

<u>Monetary Contributions for Community Centre and Library 'Warm Shell' Fit-Out</u>

83. This component of the VPA offer ($8M) is strongly supported for the following reasons.

84. The delivery of a community facility and library at Wentworth Point has been identified as a key social infrastructure priority in Council's draft Social Infrastructure Strategy.

85. Funds were not previously provided or available to develop the community centre and library to a functional state (i.e. from 'cold shell'). This monetary contribution will ensure that these facilities can effectively and efficiently benefit the current and future community of Wentworth Point.

86. There is significant and long-standing community expectation that these facilities will be delivered.

<u>Shuttle bus</u>

87. The revised draft VPA offer includes the provision of a temporary 20-year free shuttle bus service that is proposed to complement the existing NSW Government-provided bus service. The details of the draft VPA offer as it relates to the shuttle bus is described as follows (refer **Attachment 1**):

"This development contribution involves:

- *establishment of a not-for-profit entity for the management and governance of a free shuttle bus service for the Wentworth Point community,*
- *provision of 4 shuttle buses,*

- *provision of monetary contributions in the amount of $21 million less any initial capital costs of establishing the shuttle bus service (including the costs of acquiring the 4 shuttle buses) into a single purpose trust account for the benefit of the not-for-profit entity for the operation of the free shuttle bus service.*

The details of the shuttle bus service, the establishment of not-for-profit entity, provision of monetary contributions into the trust account and provision of 4 shuttle bus fleet are to be determined in a separate agreement between the parties.

For the avoidance of doubt the total costs to the Developer of providing this development contribution is not to exceed $21 million."

88. The applicant has also presented four proposed options for the governance and management options for the shuttle bus service:
    a. Transport for NSW – acknowledge that this option is unlikely.
    b. City of Parramatta Council – acknowledge that it is outside of Council's current activities.
    c. A dedicated business entity - overseen by a management committee including representatives from Council and the community. The Committee would administer funds and bus contract management. Funds from the VPA to operate the service would be held in a single-purpose Trust account. This model would not provide for the flexibility to adapt transport services over time based on the changing transport context and in particular, deliver additional or alternative services to a shuttle bus.
    d. A Transport Management Association (TMA) (preferred option by applicant) - this is a not for profit style entity. Ideally, the TMA would look to build up alternative funding over time, gradually reducing the proportion of VPA funds used per annum.
89. This component of the draft VPA offer is not supported by Council Officers for the following reasons.
90. The proposed shuttle bus should not be used to justify a density increase. As outlined in the section of this report titled 'Transport and Traffic', existing transport issues for the precinct are not fully addressed and solved by the proposed shuttle bus and these issues will likely be amplified by the proposed density increase. Furthermore, it is TfNSW's role to ensure an accurate provision of long term public transport services are provided as associated with population growth, not the Council's.
91. TfNSW and RMS advice (at **Attachment 3**) states there is insufficient evidence provided that the added shuttle bus service will result in a mode shift from private vehicle towards public transport. While the evident increased accessibility provided by the shuttle bus is acknowledged by TfNSW/RMS, the advice concludes that they do not support the proposed density increase.
92. The NSW Government has a mandate to deliver transport services to meet the community's needs. The allocation of resources acquired through a VPA should be spent on local infrastructure or services that are more closely aligned to the

responsibilities of, or expectations of, local government. Provision of bus services is a matter for NSW Government consideration.

93. The governance and management model for the first 20-year operation of the shuttle bus service is yet to be confirmed. However, the preferred option of the applicant, which is a Transport Management Association, raises concerns around the service's viability after 20 years, the resources required from Council to be involved and it is also unclear what potential sources of future alternative funding are available in NSW to continue to fund a service of this kind.

94. After 20 years when funding ceases under the proposed VPA, there is no clarity on which authority will operate and fund the free community shuttle bus. The draft VPA Letter of Offer does not indicate a per annum cost to fund the service, however it is anticipated to include maintenance of four buses (and eventual replacement) and ongoing operation costs. It is assumed this would not be an insignificant annual cost. The lack of long term commitment of the shuttle bus service means the financial burden and community impacts may ultimately fall to Council to manage.

95. Consistent with Council's resolution on 26 February 2018, it is recommended that the Lord Mayor write urgently to the NSW Minister for Transport seeking a commitment to fund and improve public bus services to Wentworth Point (both in financial terms and service frequency terms) which may include the ongoing operation of the Baylink Shuttle Bus Service. Furthermore, that the DCP amendment not be finalised until this commitment is received from the Minister in writing.

<u>Child Care Centre</u>

96. The revised VPA offer provides a broad description and criteria for the design of a proposed 75 place child care centre. The child care centre component of the VPA is strongly supported by Council officers for the following reasons. It is recommended that the child care centre be dedicated to Council's ownership.

97. The details provided are largely consistent with Council's standards and include a warm-shell fit-out. Identified functional areas and size specifications indicated in the Planning Agreement Offer document appear adequate.

98. The projected population for Wentworth Point indicates a high proportion of young workforce (25-34 years) and parents and home builders (35 - 49 years). Given this trend, it is reasonable to assume that the future population of young children will be correspondingly high. The proposed centre will provide space for 25 children across the three age cohorts of 0-2, 2-3 and 3-5. This is supported.

99. The peninsula-like nature of the suburb increases the need for social infrastructure to be located within the suburb itself.

100. It is recommended that the following requirement be added to Section 4 Standard of the Appendix B scope of works for the child care facility (included in the revised offer) to include that the centre fit out will comply with 6-star Green Star interior certification and zero net energy operation through the addition of sufficient renewable energy to meet annual operating energy requirements on a net annual basis.

Wentworth Point Infrastructure Fund

101. The VPA offer proposes to provide payment to Council of $9.5 million "for the public purpose of general transport and social infrastructure within and serving Wentworth Point." The provision of an additional $9.5 million of general social infrastructure funds is supported. Such an allocation allows Council the flexibility to direct these funds to address issues as needed.

Affordable housing

102. The original VPA offer by the applicant included an affordable housing component of 12 affordable housing units to be dedicated to Council and be managed by a community housing provider. This component of the VPA offer was supported by Council staff with the recommendation that the proportion of affordable housing be increased to reflect Council's draft Affordable Housing Policy 2017, and be dedicated to Council to be managed by a community housing provider. The revised VPA offer by the applicant removed this component. This is not supported by Council officers, for the following reasons.

103. The level of housing stress experienced across the City of Parramatta has increased, with Wentworth Point having a higher rate than LGA average. It is adjacent to Sydney Olympic Park, the suburb with the highest rate of mortgage stress in the local government area, at 22%.

104. It is proposed that the VPA be negotiated to include a component of affordable housing contribution, dedicated as dwellings in Council's ownership to be managed by a community housing provider in accordance with the previously provided advice as follows:

    a. That the number of affordable housing units be increased to reflect a minimum of 5 - 10% of the total dwelling yield.

    b. That any offer of affordable housing as part of a VPA reflects the following:

        - That the affordable housing units be dedicated to Council's ownership for this purpose in perpetuity.
        - That the affordable housing units be indistinguishable from all private market dwellings in the development.
        - That the affordable housing units be clearly marked on floor plans.
        - That the dwelling mix of affordable housing units mirrors the overall dwelling mix of the development, to meet the varying needs of prospective affordable housing tenants.

105. Council could consider reallocating the $21M fund initially directed to a shuttle bus, to some or all of the following works:

    a. Affordable housing;

    b. Increased provision and increased overall quality of green open space;

    c. Upgrade of the Wentworth Point to Rhodes bus and pedestrian bridge (i.e. "Bennelong Bridge") to include a covered walkway to enable pedestrian movements during rain and significant heat impacts in more comfort; or

    d. Support the proposed Wentworth Point Infrastructure Fund

S94 Exemption

106. The current s94 Auburn Contributions Plan aims to:
"continue levying for the construction of a multi purpose community centre within Homebush Bay West to determine the scale, location and detailed specifications for the construction of this centre."

107. This is further described as follows:
"Council has been levying for the acquisition of a site and construction of a new Community Centre in Homebush Bay West to cater for new residents. A 600m2 facility is required to cater for a population of 12,000 people and is likely to include childcare, meeting rooms, library outlet and recreation facilities."

108. The VPA offer includes an exemption of Section 94/94A and 94EF for contributions towards "any public amenities and services for the same purpose as the Development Contributions required to be made under the VPA". This is not supported by Council officers as the proposed increase in density is significantly above the quantum of development envisaged under the current s94 plan. Further, discounting of section 94 contributions in relation to proposals to change planning controls that significantly increase density is inconsistent with Council's practice in relation to negotiating VPAs.

109. The estimated calculations of what would be payable under the current s94 Auburn Contribution Plan is presented for each Option below.

OPTIONS

110. Four options for moving forward with this matter have been prepared below for consideration by Council. In summary:

    a. Option 1 is not to proceed with the proposal on the basis of the objection received from RMS and TfNSW on traffic impact grounds (this limits the GFA to that currently permissible under the existing concept DA approval of 29,743sqm).

    b. Option 2 is to proceed with the exhibition of the Draft DCP, but that the maximum GFA be limited to be generally consistent with the height requirements of the Homebush Bay West DCP Amendment No. 1 and of the Apartment Design Guidelines, so as to achieve an optimum urban design outcome, being 54,356sqm*.

    c. Option 3 is to proceed with the exhibition of the Draft DCP and to limit the maximum GFA to the lower limit permitted by the design competition (being 75,000sqm*), given there is not yet any firm commitment to Parramatta Light Rail (Stage 2) or Metro West or other transport improvements to justify the higher limit (being 85,000sqm*).

    d. Option 4 is to defer the matter, pending further advice from the RMS/TfNSW in response to the developer's response to their original objection.

    *Note: These figures are all inclusive of any design excellence bonus.

111. Each of these options has a bearing on the associated s94 Development Contributions (as detailed in **Table 4** below). As discussed above, an exemption of Section 94/94A and 94EF* under the draft VPA offer is not supported by Council officers as the proposed increase in density is significantly above the quantum of development envisaged under the current s94 Plan. Furthermore, it is inconsistent with Council's practice in relation to negotiating VPAs.

Option	Estimated Dwgs (Residential) (S94)				Non-Residential Floorspace (S94A)		Estimated S94/94A Contributions Payable
	1 bed dwgs	2 bed dwgs	3 bed dwgs	Total	Non-Resi (sqm)	Non-Resi Construction Cost	
Option 1	68	205	68	341	743	$ 1,165,024	$ 1,516,883.57
Option 2	121	362	121	604	2900	$ 4,547,200	$ 2,711,633.10
Option 3	172	515	172	859	2900	$ 4,547,200	$ 3,837,247.47
Option 4	Deferred	Deferred	Deferred	Deferred	Deferred	Deferred	Deferred

Table 4: Estimated s94/s94A Contributions for each Option

*Note: as a result of 1 March 2018 changes to the EP&A Act, sections 94, 94A, 94EF have respectively been amended to sections 7.11, 7.12, 7.24.

112. Each of these options has a bearing on the associated VPA offer, given that additional FSR increases proportionally with Options 2 and 3. Further, the developer has submitted a land value uplift report which suggests a land value uplift of $1,603/sqm. Council's Property officers have provided preliminary advice that suggests this is too low given that the site is on a prime waterfront location, and the land value uplift could be $2,343/sqm. Council officers suggest entering into negotiations with the developer for a VPA for the site, which takes into account this potential range in land uplift value, as summarised in **Table 5** below:

Option	GFA proposed (sqm)	Increase in GFA	Land Value uplift (at $1603/m²) – Low range	Land Value uplift (at $2343/m²) – High range
Option 1	29,743m²	0m²	$0	$0
Option 2	54,356m²	24,613m²	$39,454,639	$57,668,259
Option 3	75,000m²	45,257m²	$72,546,971	$106,037,151
Option 4	Deferred	Deferred	Deferred	Deferred

Table 5 Summary of Options and the associated potential range of land uplift values

113. Under the provisions of Council's Draft VPA Policy (as endorsed by Council for exhibition on 13 June 2017), VPA negotiations should aim for 50% of the land value uplift. Consistent with Council's practice, and noting the significant increase in density which is not accounted for in the current s94 plan, 50% of the value uplift would be on top of s94 contributions payable. Given this, it is recommended that the developer's request to seek a discount for section 94 contributions should be rejected and that negotiations for a VPA should be within the ranges provided in **Table 6** below:

Option	Low range – 50% of $1603/m², being $801.50/m²	High range – 50% of $2343/m², being $1171.50/m²
Option 1	$0	$0
Option 2	$19,727,320	$28,834,130
Option 3	$36,273,486	$53,018,576
Option 4	Deferred	Deferred

Table 6: Summary potential range of values for VPA negotiation for each Option

114. As discussed previously in this report, the developer has proposed to enter into a VPA valued at $44.95 million, including the following components:
    a. Shuttle Bus – $21M
    b. Child care centre (construction and fit-out) – $6.45M
    c. Community centre and library fit-out – $8M
    d. Wentworth Point Infrastructure Fund (general transport and social infrastructure) – $9.5M
    e. Exemption from S94 contributions payable for any public amenities and services for the same purpose as the contributions required to be made under the VPA

115. It is noted that this offer is on the basis of the developer's request for 85,000m² of GFA, which is not supported by Council officers given that there is no funding commitment to either the Metro West, the Parramatta Light Rail (Stage 2) projects or other associated public transport improvements by the State Government. Should Council resolve to proceed in accordance with Options 2 or 3, which would allocate additional GFA to the developer, that negotiations for the VPA be generally accordance with the ranges provided in the table above.

116. Detail of the proposed options for Council's consideration to resolve on the night of the meeting are provided below.

Option 1

117. That Council resolve not to proceed with the proposed Draft Homebush Bay West DCP Amendment No. 2 and associated VPA offer given the objection raised in the submission received from the RMS and TfNSW in relation to adverse traffic impacts (at **Attachment 3**).

118. That Council note that under the existing DA concept approval for Block H in Precinct B a total of 29,743sqm of GFA is still available for development on the subject site.

119. Further, that Council does not support any additional density at Wentworth Point until:
    a. the comprehensive Transport Study being undertaken by TfNSW, RMS and the GSC for the Sydney Olympic Park peninsula is completed;
    b. the NSW Government has funding committed to delivery of both Parramatta Light Rail (Stage 2), the Sydney Metro West for Sydney Olympic Park and any other necessary transport infrastructure.

Option 2

120. That Council resolve to proceed with the public exhibition of the proposed Draft Homebush Bay West DCP Amendment No. 2 (as refined by Council officers at **Attachment 5**), so as to seek community and government agency feedback on the proposal, subject to the GFA for Block H in Precinct B being amended to limit it to be generally consistent with the height of building requirements of the Homebush Bay West DCP Amendment No. 1 and optimum urban design considerations including the Apartment Design Guidelines, being 54,356sqm (this is inclusive of any design excellence bonus).

121. That Council notes that proceeding in accordance with the above grants the developer an additional 24,613sqm of GFA above that permitted under the existing concept DA approval for Block H in Precinct B.

122. That Council notes that proceeding in accordance with the above is contrary to the objection received from the RMS and TfNSW in relation to this proposal (refer **Attachment 3**), which objects to any additional density.

123. That Council resolve to delegate authority to the Acting CEO to enter into negotiations for a Voluntary Planning Agreement (VPA) for the subject site, in accordance with the following terms:

    a. Contribution valued between $19.7M to $28.8M.

    b. The VPA include contributions towards the following:

        - Child care centre (construction, fit-out and dedication)
        - Community centre and library fit-out
        - Wentworth Point Infrastructure Fund (community infrastructure)
        - Affordable housing

    c. The VPA exclude the contribution towards a shuttle bus, as public transport provision is a matter for the State Government.

    d. The VPA not include any discount for Section 94 Contributions payable given the significant increase in density is beyond the development quantum envisaged under the s94 contributions plan.

124. That consistent with Council's resolution on 26 February 2018, that the Lord Mayor write urgently to the NSW Minister for Transport seeking a commitment to fund and improve public bus services to Wentworth Point (both in financial terms and service frequency terms) which may include the ongoing operation of the Baylink Shuttle Bus Service. Further, that the DCP amendment not be finalised until this commitment is received from the Minister in writing.

125. Further, that the Acting CEO be authorised to make any minor administrative and technical amendments to the Draft DCP Amendment consistent with this resolution to enable it to proceed to public exhibition.

Option 3

126. That Council resolve to proceed with the public exhibition of the proposed Draft Homebush Bay West DCP Amendment No. 2 (as refined by Council officers at (at **Attachment 5**), so as to seek community and government agency feedback on the proposal, which limits the GFA for Block H in Precinct B to 75,000sqm (this is inclusive of any design excellence bonus) and building height to 35 storeys, noting this is consistent with the outcome of the design excellence competition process undertaken to inform the preparation of the Draft DCP Amendment.

127. That the draft DCP provision proposed by the developer to allow up to 85,000sqm of GFA with an unspecified height limit subject to the development of Parramatta Light Rail (Stage 2) be rejected given the uncertainty and lack of commitment by the NSW Government to this infrastructure project or other public transport projects

128. That Council notes that proceeding in accordance with the above grants the developer an additional 45,257sqm of GFA above that permitted under the existing concept DA approval for Block H in Precinct B.

129. That Council notes that proceeding in accordance with the above is contrary to the objection received from the RMS and TfNSW in relation to this proposal (at **Attachment 3**), which objects to any additional density.

130. That Council resolve to delegate authority to the Acting CEO to enter into negotiations for a Voluntary Planning Agreement (VPA) for the subject site, in accordance with the following terms:

    a. Contribution valued between $36M to $53M.

    b. The VPA include contributions towards the following:

        - Child care centre (construction, fit-out and dedication)
        - Community centre and library fit-out
        - Wentworth Point Infrastructure Fund (general community infrastructure)
        - Affordable housing

    c. The VPA exclude the contribution towards a shuttle bus, as public transport provision is a matter for the State Government.

    d. The VPA not include any discount for Section 94 Contributions payable given the significant increase in density is beyond the development quantum envisaged under the s94 contributions plan.

131. That consistent with Council's resolution on 26 February 2018, that the Lord Mayor write urgently to the NSW Minister for Transport seeking a commitment to fund and improve public bus services to Wentworth Point (both in financial terms and service frequency terms) which may include the ongoing operation of the Baylink Shuttle Bus Service. Further, that the DCP amendment not be finalised until this commitment is received from the Minister in writing.

132. Further, that the Acting CEO be authorised to make any minor administrative and technical amendments to the Draft DCP Amendment consistent with this resolution to enable it to proceed to public exhibition.

Option 4

133. That Council defer the matter pending receipt of further advice from the RMS and TfNSW in response to the further traffic and transport information received from the developer (**Attachment 4**) in response to the original RMS/TfNSW objection (at **Attachment 3**), so as to enable more time to consider traffic and transport impacts associated with this proposal.

RECOMMENDATION

134. Council officers recommend that Option 4 be resolved by Council, in light of the outstanding advice from TfNSW and RMS in relation to the traffic and transport impacts of the proposal.

CONSULTATION & TIMING

135. At the time of writing this report, 57 emails had been received from the public in relation to the Shuttle bus in February 2018, the majority of which (in excess of 45) support the Baylink shuttle bus and its extended operation.

136. Emails opposing the shuttle bus consider that the service is being used as a 'bargaining tool' to justify any density uplifts. The emails also advocate for Council to provide convenient transportation measures where possible.

137. As part of Options 2 and 3 the application would be placed on public exhibition for a minimum period of 28 days (consistent with Planning Proposals and Draft DCP requirements). Results of the public exhibition would be reported to Council for consideration. This would also include consultation with relevant NSW Government agencies.

FINANCIAL AND LEGAL IMPLICATIONS FOR COUNCIL

138. The applicant has proposed to enter into a significant VPA in association with the proposed change to the planning controls contained in the HBW DCP (given the associated increase in land value and infrastructure impacts). As detailed in the report, Options 2 and 3, both recommend Council to enter into negotiations for a VPA for the subject site.

139. Section 93F (now section 7.4) of the *Environmental Planning and Assessment Act 1979* (EP&A Act), provides that planning agreements can be made when someone has sought a change to an environmental planning instrument (EPI) or as part of a development application. As the key development controls for the site, being height and density, are contained within HBW DCP Amendment No. 1 and given that a DCP is not considered an 'EPI' under the EP&A Act 1979, Council Officers sought legal advice in relation to this matter.

140. Preliminary legal advice has indicated that a VPA can be entered into by Council with the applicant, which may be tied to the proposed amendments to the DCP, as Section 7.4(1) of the EP&A Act provides that a VPA can be entered into with a person *"who has made, or proposes to make, a development application…"* It expected that under Option 2 or Option 3, that a development application would be subsequently required to realise a development on the subject site. Therefore, on this basis, Council is satisfied that it can enter into negotiations with the applicant in relation to a VPA if required.

Sophie Le Mauff
Senior Project Officer Land Use

Roy Laria
Service Manager Land Use Planning

Sue Weatherley
Director Strategic Outcomes and Development

Jim Stefan
Acting Director City Services

ATTACHMENTS:

1⇩	Applicant Draft VPA Letter Of Offer	5 Pages
2⇩	Competition Design Jury Report	84 Pages
3⇩	Transport for NSW and Roads & Maritime Services Submission	4 Pages
4⇩	Applicant's Baylink Shuttle Bus Report	32 Pages
5⇩	Draft Homebush Bay West DCP Amendment 2	8 Pages

REFERENCE MATERIAL

Fairmead Business Pty Ltd
ABN: 76 069 006
426
Suite 101
25 Angas Street
Meadowbank NSW
2114
Ph: 02 8878 6900
Fax: 02 8878 6995

16 November 2017

The General Manager
City of Parramatta Council
PO Box 32
PARRAMATTA NSW 2124

Email

Dear Sir,

Block H VPA with Parramatta City Council – Planning Agreement Offer

1 Fairmead Business Pty Ltd ('**Fairmead**') offers to enter into a Planning Agreement ('**VPA**') with the Council in connection with the carrying out of development on Lot 24 DP270778 which includes development that is made permissible on that lot by amendments to the *Homebush Bay West Development Control Plan 2004* ('**DCP Amendment**') as described in **Annexure A** to this letter.

2 Fairmead notes that the DCP Amendment applies to Lot 24 DP270778, part of Lot 11 DP270778 and part of Lot 1 DP270778 ('**Block H**').

3 However, the proposed VPA will only apply to Lot 24 DP270778 on the basis that:

3.1 it is not proposed to carry out any development on Lot 11 or Lot 1 which would attract contributions under s94 of the *Environmental Planning and Assessment Act 1979* ('**EPA Act**'). Those lots will be developed generally for open space and associated facilities, and

3.2 all work to be carried out and land to be dedicated under the VPA will be located on Lot 24.

4 Fairmead's development on Lot 24 DP270778 will be subject to a design competition. As such, the design, location and number of buildings on that lot are not currently known, although it is reasonably certain that there will be at least 2 buildings with more than 20 storeys.

5 The Council has requested that Fairmead provide it with this letter of offer before the design of the development is finalised.

6 This letter supersedes all previous letters of offer from Fairmead in respect of Block H.

7 This offer is not an offer for the purposes of s93I(3) of the EPA Act. Such an offer will be made once the terms of the draft VPA have been agreed between the Council and Fairmead.

8 Fairmead accepts the terms as generally set out in the Council's Planning Agreement template set out in the **Annexure C** to this letter subject to the comments contained in that document and in the table below.

9 The comments in the Council's Planning Agreement template, in the table below and in Annexure C are preliminary only and Fairmead reserves its rights to make further comments and changes to them as negotiations between the Council and Fairmead progress.

Item	Terms
Parties	City of Parramatta Council (ABN 49 907 174 773) Fairmead Business Pty Ltd (ACN 069 006 426) - Developer (The Developer entity may change to a related entity to Fairmead) WP Block H Pty Ltd (ACN 606 790 872) - Landowner
Land	Lot 24 DP270778 ('**Land**').
Planning Proposal/ Development Application	The VPA is to be entered into in connection with: • the DCP Amendment, and • development on the Land which includes development that is made permissible by the DCP Amendment ('**Development**') and for which development consent is granted.
Monetary Contribution	**Community Centre and Library Fit-Out** <u>Public Purpose</u> Community facility <u>Description</u> • Payment of $8,000,000.00 (eight million dollars) towards the Council's costs of installing a 'warm shell' and final fit-out of the Wentworth Point Library & Community Centre. <u>Timing</u> • The timing of payment is to be negotiated between the parties but to be not sooner than before the issuing of the first construction certificate for the Development.

2

	Wentworth Point Infrastructure Fund Public Purpose Transport and social infrastructure Description • Payment of $9,500,000 (nine million five hundred-thousand dollars) for the public purpose of general transport and social infrastructure within and serving Wentworth Point. Timing • Payment to be made prior to the issuing of a final occupation certificate (within the meaning of s109H(1)(b) of the EPA Act) for Building 1 in the Development (the location of Building 1 is to be determined after the design competition for the Development has been concluded and the DCP amendment documents finalised).
	Furniture, fixtures and equipment for child care centre Public Purpose Furniture, fixtures and equipment for the child care centre to be constructed under the VPA Description • $1,033,000 Timing • Payment to be made before the issuing of any occupation certificate for Levels 1-20 in Building 2 in the Development (the location of Building 2 is to be determined after the design competition for the Development has concluded and the terms of the DCP Amendment are finalised).
Works	**1 child care centre** Public Purpose Community facility Description: • Construction of 1 x 75 place child care centre with approximately 1,100sqm of internal and external space and an additional 23 car parking spaces within a building in the Development and finished to a 'warm shell' standard in accordance with the specifications set out in **Annexure B** to this letter, excluding any furniture, fixtures and equipment. Timing: • Construction of the child care centre to be completed before the issuing of any occupation certificate for Levels 1 -20 in Building 2 in the Development (the location of Building 2 is to be determined after the design competition for the Development has been concluded and the terms of the DCP Amendment are finalised).

3

Dedication of Land	**1 child care centre** Public Purpose Community facility Description: • Dedication to the Council of one or more stratum lots with a total area of 1,100sqm for a child care centre and an additional 23 car parking spaces in accordance with Annexure C within a building in the Development in which the child care centre and 23 car parking spaces are constructed. Timing: • The stratum lot(s) to be dedicated prior to the issuing of any occupation certificate for Levels 1 -20 in Building 2 in the Development (the location of Building 2 is to be determined after the design competition for the Development has been concluded and the terms of the DCP Amendment are finalised).
Other Public Benefits	**Free community shuttle bus** Public Purpose Public transport Description This development contribution involves: • establishment of a not-for-profit entity for the management and governance of a free shuttle bus service for the Wentworth Point community, • provision of 4 shuttle buses, • provision of monetary contributions in the amount of $21 million less any initial capital costs of establishing the shuttle bus service (including the costs of acquiring the 4 shuttle buses) into a single purpose trust account for the benefit of the not-for-profit entity for the operation of the free shuttle bus service. The details of the shuttle bus service, the establishment of not-for-profit entity, provision of monetary contributions into the trust account and provision of 4 shuttle bus fleet are to be determined in a separate agreement between the parties. For the avoidance of doubt the total costs to the Developer of providing this development contribution is not to exceed $21 million. Timing • The timing of provision of this development contribution is to be determined in a separate agreement between the parties but to be not later than before the issuing of the last final occupation certificate (within the meaning of s109H(1)(b) of the EPA Act) in respect of the Development
Application of section 94, 94A and 94EF	The application of s94, s94A and s94EF of the EPA Act to the Development are not excluded except to the extent provided below.

	Section 94 of the EPA Act will not apply to the Development to the extent that it would authorise the imposition of a condition of Development Consent requiring contributions under s94 of the EPA Act to be payable for the provision of any public amenities and services for the same purpose as the Development Contributions required to be made under the VPA. The benefits provided under the VPA are not to be taken into account when determining s94 contributions under the EPA Act for the Development except as provided for above.
Registration	The VPA is to be registered only on Lot 24 DP270778. Fairmead's comments on the terms of the Template VPA are set out in electronic comments to the copy of the Template VPA in **Annexure C**.
Dispute Resolution	Fairmead's comments on the terms of the Template VPA are set out in electronic comments to the copy of the Template VPA in **Annexure C**.
Security	Fairmead's comments on the terms of the Template VPA are set out in electronic comments to the copy of the Template VPA in **Annexure C**.
Restrictions on Issue of Certificates	Yes. The VPA will provide that various development contributions will need to be provided before the issuing of various Part 4A certificates as described above in this table.
Other Terms	Fairmead's comments on the terms of the Template VPA are set out in electronic comments to the copy of the Template VPA in **Annexure C**.
Costs	Fairmead's comments on the terms of the Template VPA are set out in electronic comments to the copy of the Template VPA in **Annexure C**.

10 We look forward to Council's confirmation that the above offer is acceptable or any comments the Council may have.

11 Please do not hesitate to contact Saul Moran on 0411 431 203 if you have any queries

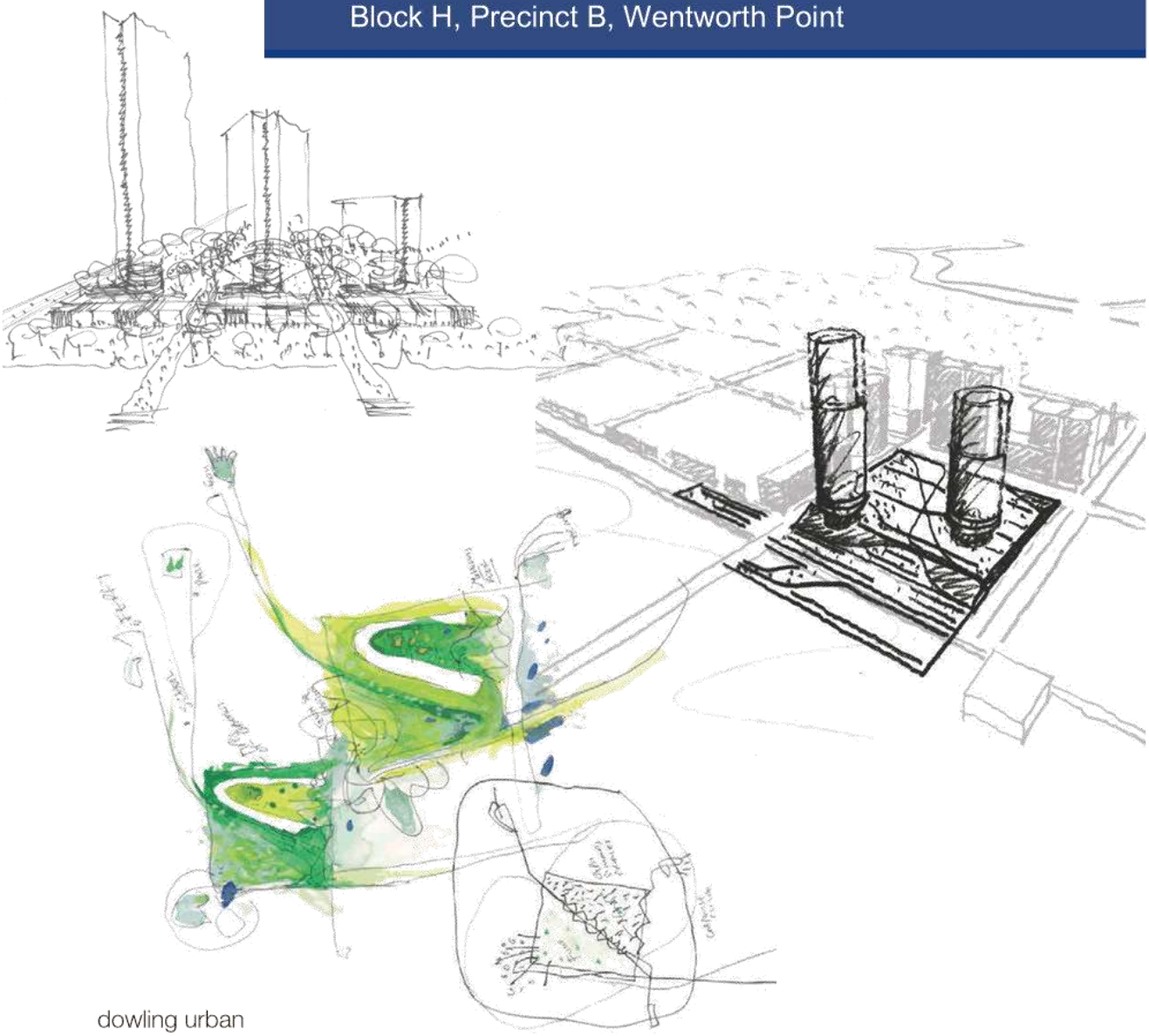
Yours Sincerely,

Fairmead Business Pty Ltd

DESIGN EXCELLENCE
COMPETITION JURY REPORT
City of Parramatta

Phase 1 Competition for Masterplan Concept

Block H, Precinct B, Wentworth Point



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Summary

Competition Summary

Site Address	Block H, Precinct B, Wentworth Point
Site Legal Description	Lot 24 and Part Lot 11 DP 270778
Project Name	"Block H"
Competition Type	Invited Master Plan Design Competition
Proponent	Billbergia Pty Ltd
Competition Manager	Greg Dowling, Dowling Urban Pty Ltd
Design Competitors	3XN Bates Smart DKO Durbach Block Jaggers FJMT Scott Carver/ ARM
Winners to advance to Stage 2	Bates Smart, Durbach Block Jaggers, FJMT
	Town Planner: Greg Dowling, Dowling Urban Quantity Surveying: RLB, Stephen Mee Engineering: WSP Group
Jury Members	Peter Poulet - NSW Government Architect (Chair) Kim Crestani - City Architect – City of Parramatta Council Bob Nation - Design Director, Barangaroo Delivery Authority
Technical Advisors to Jury	Brendan Randles – Architecture and Urban Design Garth Paterson – Landscape Architecture and Urban Design
Key Competition Dates	• 22 June 2017 - List of Competitors endorsed by Council; • 5 July 2017 - Briefing session for each Competitor; • 10 Aug 2017 – Final Architectural Competition Brief endorsed by Council; • 10 Aug 2017 – Council endorsed Design Brief issued to Competitors; • 8 Sept 2017 - Lodgement date for Proposals to Competition Manager; • 11 Sept 2017 - Proposals issued to Council by Competition Manager; • 11 Sept 2017 - Proposals issued to Jury by Competition Manager; • 12 Sept 2017 - Presentation by Competitors to Jury; • 26 Sept 2017 - Final deliberation by Jury & recommendation to Proponent; • 18October 2017 - Jury Report finalised for issued to Council for endorsement.
Site Area	Aprox 31,800 m²
Summary of Benchmark Development Statistics	

Statistic	Detail
GFA benchmarks *	50,000 m² & 65000 m² *
Public open space	16,800 m² min
FSR equivalence	1.7:1, 2.1:1
Maximum Height at 65,000 m2	Range: 35, 38 and 47 storeys
No. of Apartments at 65,000 m2	Range: 689, 700, 786 apartments
Apartment Mix (General	• 3 bed 35%, 2 bed 35% & 1 bed 30%
Non residential floor area	2900 m² minimum
* Billbergia requested participating architects to test an additional 90,000 m2 scheme	

PART A - Introduction

A1. Overview

This Jury Report provides a summary of the Master Plan Concept Design Competition undertaken by the Proponent, Billbergia in relation to the site at known as Block H, Precinct B at Burroway Road, Wentworth Point.

The purpose of this Jury Report is to inform the City of Parramatta Council on the competitive design process undertaken and the outcomes of the Masterplan Concept Design Competition for the site.

The Masterplan Concept Design Competition is the first of a two stage competitive process and was conducted in accordance with a Competitive Design Process Brief (dated 10 August 2017) (the "Brief"). The Brief at Appendix 1 was endorsed by the City of Parramatta Council ("Council') and issued to all competition entrants on 10 August 2017.

By way of background, in June 2017, the Proponent sought expressions of interest from seven selected architectural practices, from both Australia and overseas regarding their interest in competing in the design competition. The competitive design process was undertaken in the form of an invited Architectural Masterplan Concept Design Competition. All but one confirmed their acceptance to the invitation to participate in the competition as follows:

- 3XN
- Bates Smart
- DKO
- Durbach Block Jaggers
- FJMT
- Scott Carver/ ARM

The competition entrants formally had four weeks to prepare their submission for the competition. The submissions were lodged with the Competition Manager on 8 September 2017 and each of the entrants presented their schemes to the Competition Jury on 14 September 2017.

Following deliberation, the Jury agreed unanimously on 14th September 2017 that the schemes presented by Bates Smart, Durbach Block Jagger and FJMT exhibit design excellence and should proceed to the Stage 2 Detailed Architectural Design Competition subject to addressing design matters set out in Part B of this report that will need to be addressed in their respective entries.

As winners of this Design Competition, the three architectural firms will be commissioned by the Proponent to participate in the second stage competition and with the winner becoming the Project Architect for the Development Application for the redevelopment of the site.

As required by the Director General's Design Excellence Guidelines, this Jury Report will:

- Summarise the competition process incorporating a copy of the competition brief;
- Outline the assessment of the design merits of each of the entries;
- Present the jury's decision, including the rationale for the choice of a nominated designs and how this exhibits design excellence;
- Outline any recommended design amendments for stage 2 architectural design competition that are relevant to the achievement of design excellence; and
- Make recommendations in regard to the capacity of the site from a design consideration to inform DCP preparation.

This Jury Report has been endorsed by all Jury members (refer Part E) and will be submitted to the Proponent and the Consent Authority (City of Parramatta Council).

PART B - Design Competition Overview

B1. Overview

The first stage competitive design process was undertaken as an invited Masterplan Concept Design Competition, with six competitors. Three entrants are to be selected to advance to the second stage Detailed Architectural Design Competition.

The following has been undertaken as a part of the competitive design process:

A Competition Brief was prepared by Greg Dowling, Dowling Urban in collaboration with Council officers and endorsed by Council on 10 August 2017;

Six architectural firms were invited to participate in the competitive process (refer to Section B.2 below) for the Masterplan Concept Design Competition.

The Masterplan Conceptl Design Competition formally commenced on 14 September 2017;

- Each of the six competitors lodged a "Statement of Design Intent" which addressed the Competition Brief objectives and was accompanied by a set of plans, diagrams, and perspectives with technical analysis and yield assessments.
- Each architectural firm presented their scheme to the Jury and answered questions from the Panel; and
- Each scheme was assessed by the Jury and three preferred masterplan concepts design were chosen. The Panel also prepared a list of design matters that each needed to further develop during the second stage of the competition process.

The competitive design process was undertaken in an open and transparent manner.

B2. Participating Architectural Firms

The following architectural firms participated in the competitive design process:

- 3XN
- Bates Smart
- DKO
- Durbach Block Jaggers
- FJMT
- Scott Carver/ ARM

B3. Jury Composition

Section D6 of the Brief prescribed the composition of the Jury. The three members were as follows.

Table 1 Competition Jury members

Organisation	Representative
City of Parramatta	Kim Crestani - City Architect
NSW Department of Planning and Environment, delegated to the Office of the Government Architect	Peter Poulet - NSW Government Architect (Chair)
Proponent's Nominee	Bob Nation - Design Director, Barangaroo Delivery Authority

B4. Technical Advisors

Technical advisers were appointed to provide professional assistance and advice to the Jury and competition entrants.

Below is a list of the technical advisors.

Table 2 Technical Advisors

Discipline	Technical Advisors
Urban Design	Brendan Randles, Brendan Randles Architect
Landscape Architecture	Garth Paterson, Paterson Design Studio
Town Planning	Greg Dowling, Dowling Urban
Engineering	Damain Kenny, WSP Group
Quantity Surveying	Stephen Mee, RLB

B5. Design Competition Timeline

The key dates and processes for the competitive process are outlined in the below table:

Table 3 Key Competition Dates

Date	Action
10 Aug 2107	City of Parramatta Council endorsed the Competition Brief
5 July 2017	Initial briefing session with Competitors
14 Aug 2107	Commencement Date of Design Competition, brief issued to Competitors
8 Sept 2017	Final Submissions Lodgement Day
12 Sept 2017	Presentation Date by Competitors of proposed design
25 Sept 2017	Design Decision Date by which submissions are evaluated with a recommendation for formal appointment of successful Competitors (14 days from presentation).
18 Oct 2017	Completion of subject Jury Report and issue to Council.

B6. Requests for Information

A protocol for the provision of technical assistance to competitors and for the timely response to questions and queries was established, as indicated in the Competition Brief.

Competitors were invited to forward any questions regarding the Architectural Design Competition to the Competition Manager, with responses then provided to all Competitors to ensure transparency and fairness.

Inquiries were of a general process nature only and thereby did not necessitate a register.

PART C - Review of the Competition Entries

A description and the Jury's assessment follows for each of the six entries listed in alphabetical order.

C1. Entry 1 – 3XN

Presenters: Jeanette Hansen, Audun Opdal and Marie Hesseldahl Larsen

C1.1 Overview of Concept

- A public park connects the bridge landing to the northern corner while creating optimal conditions for solar penetration. The public park connects to the river walk and the public pool.
- Placing two towers towards the river walk and bay ensuring shadows are primarily cast in the water while placing apartments in close proximity to the water and ensuring unhindered water views for existing towers.
- *The high rise* marks the area in the skyline while *row housing* creates a lively environment and a sense of community in the park and *perimeter blocks define* streetscape and create urban character.
- Corners are important arrival points including the public park connection while the western corner becomes an urban square for the shoppers and the eastern corner a pocket plaza on the river walk.
- The public park consists of three zones. 1) A Water Park with public pool and play area. 2) An Urban Park with sport area and large steps facing the river and 3) a Green Park with community gardens and large trees.
- The park is very visible from the main access points and has elevated views towards the river.
- Communal open space on parking and the large amenity terrace at the foot of the towers is for the residents.
- The many entrances to the site activate the streets and park, creating lively, safe city spaces. Along the edges of the site, the ground floors are programmed with retail etc.
- The perimeter of the site is accessible and a solid path 3 m wide through the park allows entry for emergency vehicles, moving trucks or special drop offs.
- Nominated landscape architect SLA and emerging architects Silvester Fuller and Lava to participate in Stage 2.

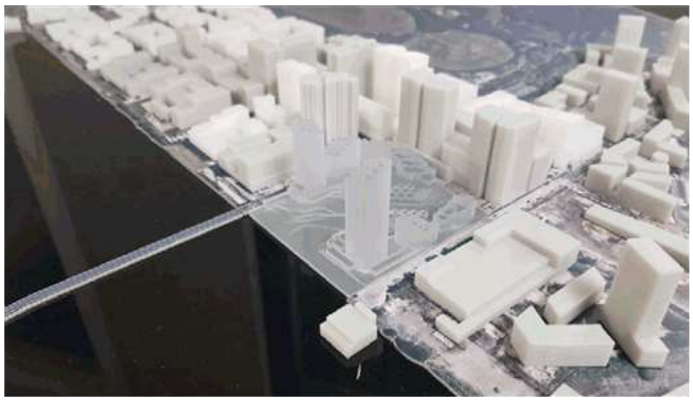
Table 4 Statistical summary of concepts

Statistic	Benchmark 50,000 m²	Benchmark 65,000 m²	Benchmark Non-conforming
GFA benchmarks	50,000 m²	68,000 m²	90,000 m²
FSR equivalence	1.7:1	2.1:1	2.9:1
Non residential floor area	2900 m² minimum	8,000 m²	8,000 m²
Public open space	17,200 m²	17,200 m²	17,200 m²
Solar Penetration to Park	>= 47%*	47%*	ns
Tower Heights	23 and 28 storeys	29 and 35 storeys	35 and 43 storeys
Apartment Estimates	ns	ns	ns
Apartment Mix	• 3 bedroom 35% • 2 bedroom 35% • 1 bedroom 30%	• 3 bedroom 35% • 2 bedroom 35% • 1 bedroom 30%	• 3 bedroom 35% • 2 bedroom 35% • 1 bedroom 30%

Notes: ns = not stated *Solar access 10 am: 60% solar access, 11 am: 62%, 12 noon: 52%, 1 pm: 43%, 2pm 20%.

Site plan of 3XN 65,000 m2 benchmark concept

Photomontages and model of 3XN 65,000 m2 benchmark concept



Cross section of 3XN 65,000 m2 benchmark concept

C1.2 Jury Evaluation

A summary of the Jury comments on the 3XN entry is as follows

Merits

- Concept diagrams reveal an intelligent strategic design approach, that is, perimeter block, eroded corners, visual links, tower locations.
- Sound urban design principles have been established and the concept responds to existing view corridors.
- Very well detailed and a positive approach to street activation is provided with retail and location of building entries along existing street frontages.
- The mix of dwelling typologies is a positive aspiration with perimeter dwellings, high rise apartments, and townhouses.
- Slender tower footprints are commendable.
- The gesture of the large public pool and sporting/recreation hub is also to be commended.

Considerations

- While well detailed, insufficient understanding is demonstrated with the site's connections including the relationship with the adjoining commercial and public uses at the s-w corner.
- The Jury does not encourage townhouses with a direct address to the park.
- The tower footprints are unlikely to comply with development standards under SEPP65 and the Apartment Design Guide.
- The diagonal configuration of the open space and its uses do not provide flexibility in use over time and tends to be transitional.
- The landscape type proposed of an open public pool (more typical of resort or gated developments) will likely create management issues. This is primarily due to the proximity of public activities (at all hours) and its impact to dwellings adjacent the pool. Therefore, it is likely that the schemes central organising space will be confined to daylight hours, or worse, privatised entirely, which would undermine the public portensions of the scheme.
- The proposition does not adequately recognise the extended role of the promenade.
- The management issues noted above, ADG tower non-compliances, townhouses with a direct interface to public space and the apparent lack of alignment between individual dwellings and their respective dedicated parking areas, undermine the scheme's otherwise robust urban design principles.
- The intensity of the large public pool and sporting/recreation hub will potentially cause conflict with the residential nature of this project.
- The provision of a large public pool, gym and communal facilities may have been better be explored on the river esplanade to engender it an extended role.

C2. Entry 2 – Bates Smart

Presenters: Philip Vivian, William Miller and Claudia Van Velthooven

C2.1 Overview of Concept

- Departs from traditional urban form in a rare case where a towers in the park typology can enhance the urban experience."
- Adopts a framework that maximises public space, provides cross site pedestrian and a shared street links, connects park to waterfront, defines an active built edge to the park and an animated soft built edge to the waterfront, and a minimal ground floor footprint
- The towers, pulled to the waterfront edge for activation & to alleviate density, 'float' above the public domain maximising permeability.
- The park is oriented to maximise solar access and alleviate density. The landscape extends across the site like an 'urban carpet' uniting the park & waterfront into a single 'urban common'.
- Towers are located on the waterfront relieve the density along Wentworth Place and step down from landmark tower at the end of the bridge, enhancing the pre-existing skyline.
- Public domain extends across the site as a continuous 'urban carpet. The park is tiered along the north to grade, facilitating the desire-line to the ferry wharf. An 'urban marketplace' is created between the pedestrian links, re-using the warehouse trusses.
- A landscape that responds to the social, economic, environmental and cultural needs of the community with an urban common. Pergola structures create sheltered public space on the waterfront and Wentworth Place.

- Triangular floorplates allow 70% of apartments to have water views, while the remainder have park views, and receives over 2 hours winter sunlight. Truncated corners maximise separation between towers and glass planes emphasise verticality with north facing roof gardens extend the park to the sky.

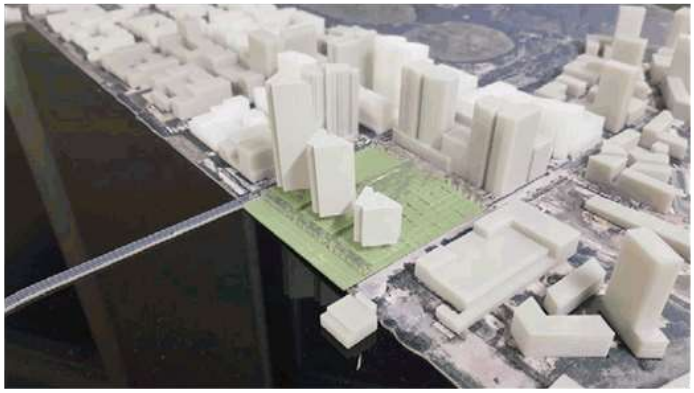
Table 5 Statistical summary of Bates Smart concepts

Statistic	Benchmark 50,000 m²	Benchmark 65,000 m²	Benchmark Non-conforming
GFA benchmarks	57,000 m²*	72,211 m²*	82,000 m²* (estimate)
FSR equivalence	1.8:1	2.3:1	2.6:1
Non residential floor area	7,245 m²	7,245 m²	7,245 m²
Public open space	20,000** m²	20,000** m²	20,000** m²
Winter Solar to Park	65%>5hrs	65%>5hrs	65%>5hrs
Tower Heights	15 and 35 storeys	23 and 35 storeys	33 and 50 storeys
Apartment Estimates	ns	786	ns
Apartment Mix	• 3 bedroom 35% • 2 bedroom 35% • 1 bedroom 30%	• 3 bedroom 35% • 2 bedroom 35% • 1 bedroom 30%	• 3 bedroom 35% • 2 bedroom 35% • 1 bedroom 30%

Notes: ns = not stated * includes additional club and child care 5,015m2 ** estimate excluding internal shared street & communal open space at base of buildings.

Site plan of Bates Smart 65,000 m2 benchmark concept

Images and model of Bates Smart 65,000 m2 benchmark concept



Cross section of Bates Smart 65,000 m2 benchmark concept

C2.2 Jury Evaluation

A summary of the Jury comments on the Bates Smart entry is as follows

Merits

- The proposal is highly commended for its urban design clarity, its permeability and clear public benefit.
- An insightful analysis of the reference design underpins the key design strategy to rotate the park. This not only provides spatial relief between high density adjacent fabric and relocated river fronting development, but also creates a much larger public open space (20,000sqm) with almost unrestricted solar access.
- The critique of the reference design also enabled better apartment layouts taking advantage of views and improved solar access.
- In addition, this strategy provides great park engagement to the three neighbouring blocks to the north, west and south, thereby spreading the influence of the proposal well beyond the site.
- The park is divided into three bands, with east west paths providing a line/link which emphasises the desire line from bridge to ferry, and a subtle manipulation of the terrain assists in achieving accessibility and a diagonal link from the Wentworth Point bridge.
- While the central covered market space provides the opportunity to reuse existing or reformed trusses in a new communal space, the north south shareway enhances permeability and access to tower lobbies.
- Capitalizing on the clear access provided, the river frontage uses the site's topography to create a truly civic edge at the water's edge. Here, a new promenade with proposed loggia, activated by a range of retail and communal uses, creates a sophisticated new focus to the site's most public edge. This is commended as it rebalances retail and active uses in the Wentworth Point precinct
- The three towers proposed provide a permeable eastern interface to the park, with markedly higher solar access and river aspect afforded by their detached triangular forms. Ascending in height from north to south, the towers present a kind of branding to the site, which given its public offering and the uniqueness of the site because of that, is perhaps warranted.
- The use of the proposed docks as a large integrated swimming / gym active public open space which enables close and meaningful contact and experience with the Bay is supported.

Considerations

- This scheme requires a symbiotic relationship between a skilled Landscape Architect & Architect to move beyond the elegant diagram. The significant level changes are a great opportunity for public and private separation and the creation of beautiful outlooks for all users of this place.
- The inclusion of large multi-use turfed plates in the raised podium should not be overlooked. Reference to Bryant Park in Manhattan is a good precedent to explore.
- More attention should be given to adjacent east west streets, especially to the north, which appears to lack activation. These public links will contribute to a successful integration of the river fronting promenade. Additional activation in the form of typologies such as townhouses could be considered.
- The north-south internal street is an essential component of the scheme and should provide a connection right through the site.
- The banding of the park into three spaces, together with the centrally located market structure, may needlessly restrict future uses; it may be better to relocate the market structure to the northern portion of the park. This would activate the street and increase the flexibility of the park generally.
- The stepping of the buildings should consider the likely height of future buildings to the north (RMS owned lands)
- Careful analysis of potential built form to the north of the site (RMS lands) will be required to ensure park is not overshadowed
- Wind studies must be undertaken to mitigate any adverse effects of the raised tower forms.

C3. Entry 3 – DKO

Presenters: Koos de Keijzer, Raymond Mah, Nicholas Byrne, Nicola Traise (DKO) and Louise Pearson (ASPECT Studios)

C3.1 Overview of Concept

- The masterplan framework responds intelligently and sensitively to the location and urban context of Wentworth Point to create a site that is inclusive, unique and successful to create a true sense of place.
- The masterplan consists of two towers on podium, located against Burroway Place and Footbridge Avenue, framing a central park space.
- Public parks and connectivity from Wentworth Square to the water is maximised through clearly defined paths.
- An undulating park plane connects Wentworth Place to the promenade and maximises views to the water. A promenade engages with the water and is connected to the footbridge by a spiral link and lift.
- Five park spaces create a network of living, active and distinct public spaces that provide a variety of programmes and experience while allowing for dynamic and flexible uses to suit different user needs and encourage round-the-week activation.
- Built form respect and reinforce the street grid. A hybrid podium + tower typology ensures streets and public spaces have distinct and activated urban edges, while allowing upper levels to be rotated to harness solar and view amenity.
- The unique tower forms are sculpted to provide view slots and express individuality and fluidity. They are designed to maximise views whilst graciously preserving views from adjoining dwellings and minimising impacts to park spaces.

- Each tower is sculpted individually to present a small footprint on the park, and gradually increases in floorplate upwards, to take advantage of views and solar amenity. Tower floorplates are designed with twin cores to increase cross-flow ventilation and apartments with dual frontages.

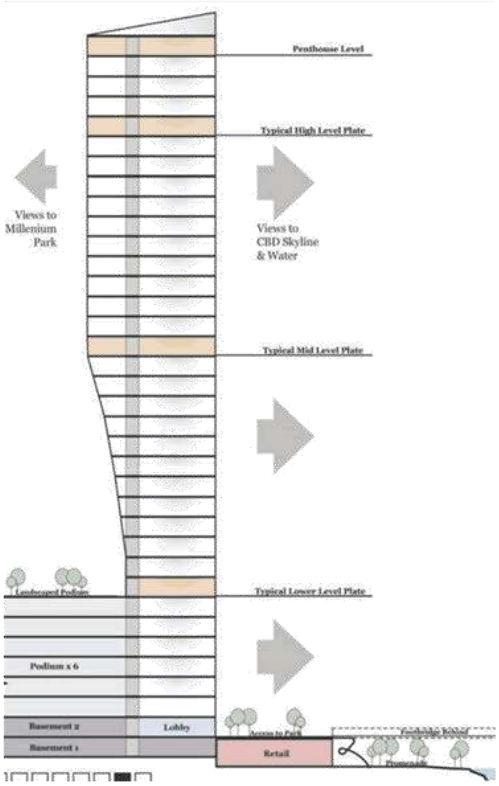
Table 6 Statistical summary of DKO concepts

Statistic	Benchmark 50,000 m²	Benchmark 65,000 m²	Benchmark Non-conforming
GFA benchmarks	50,140 m²	72,211 m²*	100,000 m²
FSR equivalence	1.6:1	2.0:1	3.1:1
Non residential floor area	4,100 m²*	6,200 m² *	9,100 m²
Public open space	17,250 m²	17,250 m²	17,250+ m²
Winter Solar to Park	41 – 74% over 5hrs	35 – 74% over 5hrs	ns
Tower Heights	17 and 35 storeys	25 and 35 storeys	25 and 35 storeys
Apartment Estimates	520	690	1,000
Apartment Mix	• 3 bedroom 35% • 2 bedroom 35% • 1 bedroom 30%	• 3 bedroom 35% • 2 bedroom 35% • 1 bedroom 30%	• 3 bedroom 35% • 2 bedroom 35% • 1 bedroom 30%

Notes: ns = not stated * includes retail and child care (1700) m2
** 65,000 m2: Solar access 10 am: 74% solar access, 11 am: 70%, 12 noon: 53%, 1 pm: 48%, 2pm 35%.

Site plan of DKO 65,000 m2 benchmark concept

Images and model of DKO 65,000 m2 benchmark concept



Cross section of DKO 65,000 m2 benchmark concept

C3.2 Jury Evaluation

A summary of the Jury comments on the DKO entry is as follows

Merits

- The concept's strategy has merit.
- An intelligent analysis and statement of methodology presents an insightful shifting of volumes to facilitate water aspect and permeability to the water's edge via a sloping east west park.
- Two 50m x 20m towers, angled and "modelled" provide for solar access and outlook to adjacent properties.
- The towers sit above two low scale but very wide podiums comprising 20m parking sleeved on both sides by commercial and communal facilities at the ground levels.
- The buildings give structure to adjacent east west streets and the treatment of podium roofs may be exploited as residential private and communal open spaces.

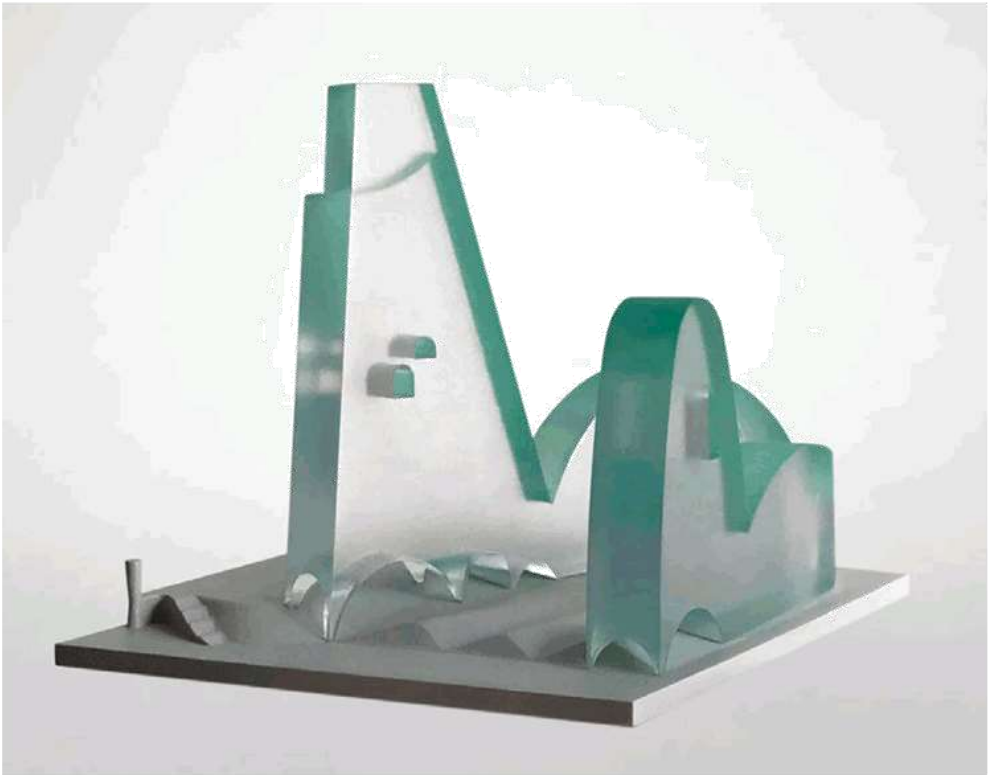
Considerations

- It appears that the modelling of the two towers, rather than the resolution of the public space and adjacent public domain, has been the chief focus of the proposal.
- The podiums of the two towers appear unresolved at the ground level.
- Greater opportunity is required of the public realm to integrate this large open space. Currently the scheme offers fragmented spaces or episodes that need to be better sequenced and integrated with the experience of the site's potential.
- While the strategy has merit, the proposal does not appear to meet the expectations of its analysis. It therefore has the following shortcomings:
  - the towers' conventional slab form appears too wide and therefore visually intrusive,
  - the relationship between tower and podium generally appear unresolved,
  - it is unclear how the proposed podiums will interact with the park or activate its adjacent streets and unknown typologies of uses in podium forms,
  - it is unclear how the proposal will meaningfully engage with the river frontage or create activation and engagement at this significant interface,
  - the central space may comprise too many programmed spaces, with limited definition or distinction, and
  - the desire lines from bridge to ferry appears unresolved.

C4. Entry 4 – Durbach Block Jaggers

Presenters: Presenters: Neil Durbach, Camilla Block, India Collins (DBJ) and Jane Irwin (JILA)

C4.1 Overview of Concept



- The proposal can be described with three key ideas of movement through the site, two courts, and sun and silhouette.
- The built form divides the site in a 'yin' (the public park opening to legible, enhanced and effortless connections to key destinations) and 'yang' (buildings and semi private residential garden court stimulating the public domain, circulation and access). Both halves are compressed or enclosed on one end and open or released on the other.
- The modulated form of the residential building provides for a sculptural composition when viewed from all vantage points. It consists of 4 apartment building elements accessed via 7 residential entry lobbies via Burroway Rd, Wentworth Place and Ralph Symonds Walk. The base of the residential building along Burroway Rd will house work/live apartments to allow small commercial and retail uses as well as residential along this street.
- The open spaces create a new public focus connecting the town centre to the foreshore, and bringing a sense of the green periphery into the heart.
- At the corner of Wentworth Place and Footbridge Boulevard, a broad and open park will be active and urban, with a plaza to Wentworth Place, and activated along the edge by cafes and community facilities. The park responds to the activity and liveliness of people promenading and cycling.
- The park provides large grassed informal open space; play space for younger children; café terrace adjacent to play space; pedestrian link to bridge; terraces from the plaza to the open areas maximise soil depth, and create discreet areas for gathering and casual socialisation; fitness pods.
- The park connects to the foreshore promenade by steps and a lift and has an immediate and strong visual connection. The proposed childcare centre and gym at the foreshore level activates the promenade, giving to the foreshore.

- A further setback to the building face creates a sense of openness, reinforcing the primacy of the public domain. The foreshore open space has promenade and seating; terraces from the sloping foreshore street (western side of bridge) connecting to foreshore open space; and open lawns and gardens.

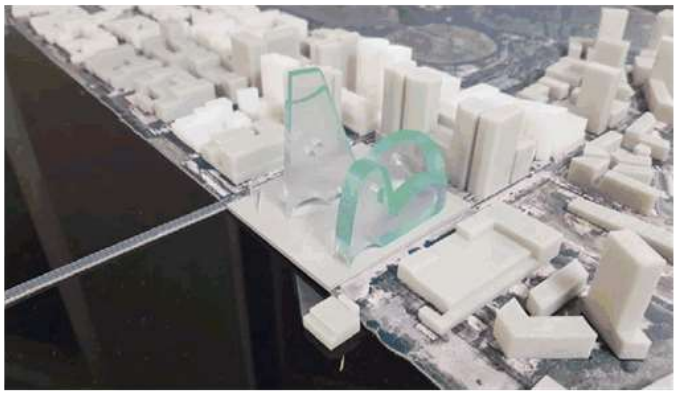
Table 7 Statistical summary of Durbach Block Jaggers concepts

Statistic	Benchmark 50,000 m²	Benchmark 65,000 m²	Benchmark Non-conforming
GFA benchmarks	50,000 m²	65,000 m²	75,000 m² (& 85,000 m²)
FSR equivalence	1.6:1	2.0:1	2.4:1 (2.7:1)
Non residential floor area*	2,950 m²	2,950 m²	2,950 m² (ns)
Public open space	16,800 m² min	16,800 m² min	16,800 m² min
Winter Solar to Park	ns	ns	ns
Tower Heights	20 and 35 storeys	23 and 38 storeys	25 & 41 storeys (28 & 50)
Apartment Estimates	505-530	665-699	773-812 (ns)
Apartment Mix	• 3 bedroom 35% • 2 bedroom 35% • 1 bedroom 30%	• 3 bedroom 35% • 2 bedroom 35% • 1 bedroom 30%	• 3 bedroom 35% • 2 bedroom 35% • 1 bedroom 30%

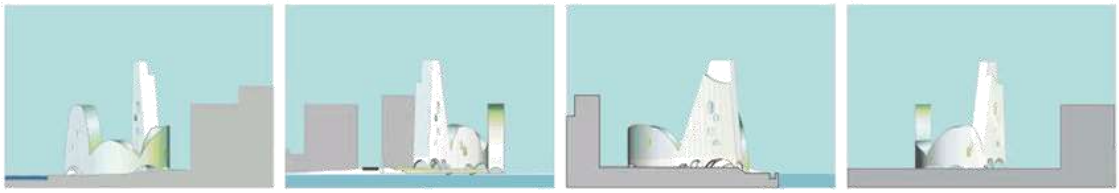
Notes: ns = not stated * includes café 100m2, child care 600m2, club 750 m2, gym 750m2, retail 750m

Ground plane plan of Durbach Block Jaggers 65,000 m2 benchmark concept

Images of DBJ benchmark concept and model at 75,000 m2



Elevations of DBJ 65,000 m2 benchmark concept and 'unrolled' elevation



C4.2 Jury Evaluation

A summary of the Jury comments on the Durbach Block Jaggers entry is as follows

Merits

- This is considered to be a beautiful, "lyrical, whimsical" and thoughtful proposal. In response to the site's environmental context, existing and emerging conditions of the site and a general sense of sameness permeating the locality's broader development context. It is a provocative and playful response, a distillation of clearly stated intentions into a single building form.
- Underpinned by skilfully designed apartment modules and a strong sense of spatial fluidity, it is credible and attractive despite its relentless expression and materiality, which somehow appears inevitable and correct.
- This project seamlessly weaves a compelling context and site analysis into a horse shoe shaped single building proposal to house its significant yield and shape its primary open spaces. Opening to the river at its eastern end, the building is flamboyantly mannered and super scaled, with an undulating silhouette ranging in height from twelve to thirty-five (or even fifty) storeys.
- While the proposal is largely porous at ground level, it encloses a large semi-public space within its form, creating internal dimensions that range from 35m to over 70m wide.
- With the south alignment defining a path to the bridge, the building neatly creates a public park to its south, which incorporates a shareway to serve a number of residential lobbies. While a mixture of retail and live work units activates its street edges, a subtle interplay of steps, undercroft connections and sloping landscapes lead to the river frontage, where wetlands and pools create a low impact response to the river ecology.
- The scheme offers some wonderful "headland" vistas and viewing points for residents and the public. This use of the changes in levels across the site is an exciting opportunity.

Considerations

- The scheme needs to explore the integration of a public pool / deck and series of spaces that embrace and engage with the river. This was indicated as a tentative series of small decks reaching into the river, however this should be explored further.
- The large residential communal open space will need extensive fine design to create clear public, semi public and private definition.
- Implementation and effect of the project will need to demonstrated as it is extremely large (in terms of height, length, the volume of its court, the number of balconies it houses along its long elevations) in relation to its site, in comparison to adjacent buildings, to distant precincts and the wider environment.
- The largeness is not necessarily negative and is a great polemic but the impact of its size on its courtyard space, the users of the courtyard, its future residents and their wellbeing, etc. is very hard to determine. Given its multi dwelling residential use, it requires certainty to proceed further as follows.
    - The building scale needs to be interrogated, by way of views from individual units and the courtyard as well as reference projects of similarly scaled residential structures to more fully illustrate what a building and space of this size is like.
    - Impacts on adjoining buildings and proposed park needs to be interrogated to more closely align proposed built form with the amelioration of adverse impacts.
    - Building language needs to be interrogated to determine if a singular expression can be sustained at such a scale.

C5. Entry 5 – FJMT

Presenters: Richard Francis-Jones, David Haseler and Jason Searl

C5.1 Overview of Concept

- Provides a new urban paradigm that differs from the traditional block, park and setback tower pattern but complements the existing urban pattern to create an expanded and exciting public parkland, connecting and integrating the waterfront.
- The urban paradigm is of folded parkland and thin towers emphasising public access and amenity. The parkland extends from Wentworth Place folding down towards the waterfront to create a generous, open and inviting heterogeneous public park integrating a diverse range of facilities and amenity.
- The two towers provide a landmark identity that may be optimised for orientation, views, amenity and scalability. Their positions maximise public space sunlight/amenity and create landmark identity for the connected urban quarters of Wentworth Point and Rhodes.
- The park is a fluid and dynamic space where planting, paving, canopy, water and built form are interwoven into organic interlocking patterns It has a central community building, a market square opposite the retail and library, an expansive children's playground, Playing fields and mounded lawns, with steps and amphitheatres to the waterfront.
- Burroway Rd is activated by street edge retail and commercial activity while food and beverage with club facilities are folded into the ground plane, activating a waterfront promenade.
- The park extends into the water with aquatic pool facilities, boardwalks, floating pontoons, and staging areas, creating an active and exciting public water interface.

- FMJT team includes Martha Schwartz Partners (urban landscape and the public realm design) and Atelier Ten environmental design consultants and building services engineers.

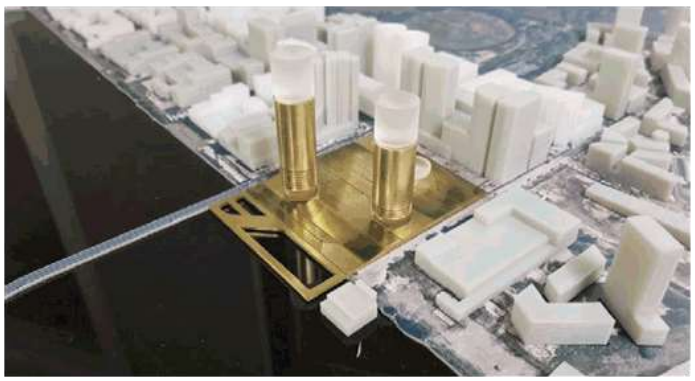
Table 8 Statistical summary of FJMT concepts

Statistic	Benchmark 50,000 m²	Benchmark 65,000 m²	Benchmark Non-conforming
GFA benchmarks	50,000 m²	65,000 m²	90,000 m²
FSR equivalence	1.6:1	2.0:1	2.8:1
Non residential floor area	2,431 m²	3,725 m²	5,475 / 5,917 m²
Public open space	31,700 m² *	31,700 m² *	32,400 / 31,700 m²*
Winter Solar to Park	74% (10-2)	74% (10-2)	76% / 64% (10-2)
Tower Heights	29 and 35 storeys	38 and 47 storeys	44 & 49 / 39 & 49 storeys
Apartment Estimates	535	689	951 / 946
Apartment Mix	• 3 bedroom 35% • 2 bedroom 35% • 1 bedroom 30%	• 3 bedroom 35% • 2 bedroom 35% • 1 bedroom 30%	• 3 bedroom 35% • 2 bedroom 35% • 1 bedroom 30%

Notes: * includes recreational areas to be created on Homebush Bay

Site plan of FJMT 65,000 m2 benchmark concept

Images of and model of FJMT 65,000 m2 benchmark and non-conforming concepts



Cross section of FJMT non-conforming concept

C5.2 Jury Evaluation

A summary of the Jury comments on the FJMT entry is as follows

Merits

- An insightful, rich and poetic analysis leads to a rejection of the reference design for amenity reasons.
- The proposal is compelling, not only for its density of thought and clarity of intent, but for its public benefit which is significantly greater than proposed within the reference design. It is formally masterful and benefits from the collaboration of two outstanding designers.
- A rotation of the park (such as in the Bates Smart scheme) is proposed and relocation of towers in an expanded public landscape.
- A reflection on the stable, orthogonal block pattern suggests that this site could pursue another logic being informed and structured by landscape with its unique relationship to the water, to the bridge, and to its aspect.
- Building footprints are reduced and public facilities proposed, while sinuous geometries interpret local landscapes and water movement into paths, markings and layouts.
- The strong integrated dynamic fluvial inspired cloaked public realm as an overall unifying approach to the site is supported.
- Also commended is the thoughtful integration of large public buildings into this space with large open lawns, play areas and importantly, the excellent exploitation of the river with the integration of the insertion of a large public pool and water experience decked area.
- The modernist paradigm of buildings in the park is thus proposed as highly appropriate in the context of the site.

Considerations

- In pursuing so completely the "modernist" principles to which it ascribes and achieves so well, the proposal risks a form of "detachment" between elements and street networks that could detract from the project's aims.
- Moreover, the increase to density if proposed results in much larger building footprints than were otherwise required, leading to a risk of physical and visual overbearing despite the fact that most of the site is open.
- Accordantly, it is suggested that:
  - street interfaces (especially to the north) are given more scale and capacity to activate, perhaps using the technique of folding up the landscape to create retail and townhouses/apartments above,
  - community building reappraised, perhaps as a volume that extends to street level and achieves a complementary street address,
  - landscape forms generate spaces as much as paths and complemented with shade giving trees, and
  - as far as possible, the cylindrical building forms are maintained to retain the pure relationship between form and landscape.

C6. Entry 6 – Scott Carver / ARM

Presenters: Mark Raggatt (ARM), Doug Southwell, Esther Dickens, Simon Hall, Rohit Iyer (Scott Carver), Iain Maxwell (Supermanoeuvre)

C6.1 Overview of Concept

- The Darug people called the area Baramada or Burramatta which means "head of waters" or "the place where the eels lie down".
- The building mass has been split, placing buildings along Footbridge Boulevard and Burroway Road to affirm the streets, improve amenity and optimise access to the 'Burramatta Park'. Taller buildings have been placed towards the waterfront and shaped to minimise shadows, and optimise access to views and sunlight.
- The arrangement creates a larger public park and greater precinct connections and to the waterfront promenade. The park turns toward the water, creating a unique relationship with the Bay and the riparian environment.
- The public realm of is an urban green designed for diverse activities to create an engaging, safe, and inspiring sequence of urban spaces. Burramatta Park is the community's meeting place and has enough space for informal play, kicking the ball, lazing, exercise, markets and outdoor cinemas, skating and playing basketball.
- Burroway Road is sleeved with apartments and provides street addresses to each of the buildings. The central building is set back to create a north-facing terrace for the childcare centre on the ground floor.
- Footbridge Boulevard is strengthened with built form along its edge set back and gaps between buildings to increase permeability and access to Burramatta Park. A pedestrian and bicycle slip lane extension to Bennelong Bridge feeds people directly into Burramatta Park and additional to a lift and stair.
- A new tree lined street parallel to Footbridge Boulevard creates an urban edge that defines the park, capturing the sun throughout the day and allows for street dining and parking, and a vehicular drop-off to The Tower and retail frontage onto the park.

- A consortium is proposed of Scott Carver and ARM Architecture with Landscape architect Topetek 1, placemakers Village Well and emerging architect's, March Studio and Supermanoeuvre.

Table 9 Statistical summary of Scott Carver / ARM concepts

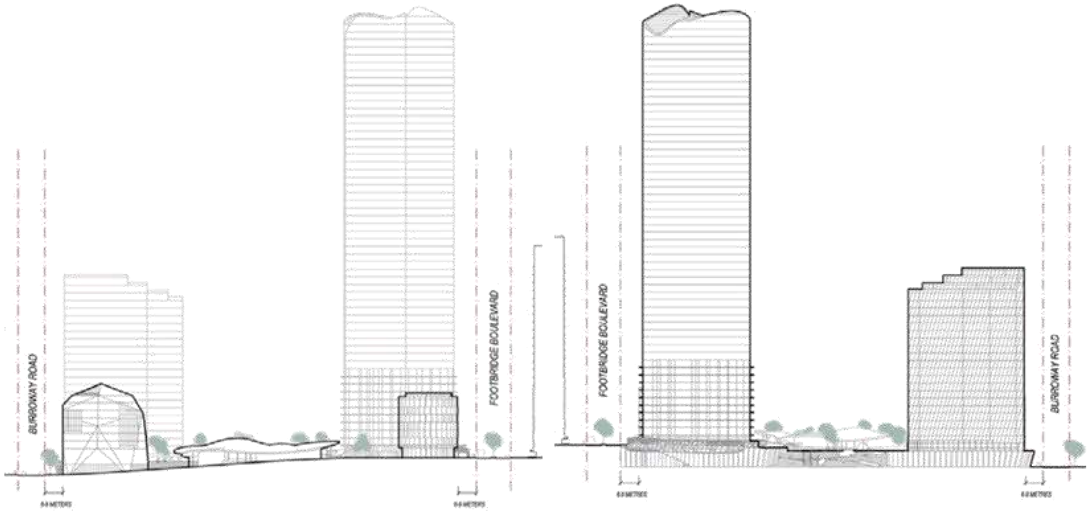
Statistic	Benchmark 50,000 m²	Benchmark 65,000 m²	Benchmark Non-conforming
GFA benchmarks	50,200 m²	64,845 m²	75,725 m²
FSR equivalence	1.6:1	2.0:1	2.4:1
Non residential floor area	4,150 m²*	5,650 m²*	6,150 m²*
Public open space	>= 16,800 m²	>= 16,800 m²	>= 16,800 m²
Winter Solar to Park	51% (9-3) 59% (10-2)	51% (9-3) 59% (10-2)	51% (9-3) 59% (10-2)
Tower Heights	35 storeys	22 and 35 storeys	19 and 50 storeys
Apartment Estimates	556	715	841
Apartment Mix	• 3 bedroom 35% • 2 bedroom 35% • 1 bedroom 30%	• 3 bedroom 35% • 2 bedroom 35% • 1 bedroom 30%	• 3 bedroom 35% • 2 bedroom 35% • 1 bedroom 30%

Notes * includes retail, f&b, gym, gallery, workspace and excludes Child Care and Bike Hub

Site plan of Scott Carver / ARM 65,000 m2 benchmark concept

Images of and model of Scott Carver / ARM 65,000 m2 benchmark concept

Elevations of Scott Carver / ARM benchmark concept



C6.2 Jury Evaluation

A summary of the Jury comments on the Scott Carver / ARM entry is as follows.

Merits

- The scheme has some strong and potentially interesting gestures that reinforce the site's history such as the introduction of mangroves, use of an eel motif, reference to water-based commercial uses etc.
- It has probably best realised the relationship with the commercial and community activity on Wentworth Place with the introduction an internal street "Ralph Symonds Street" into the site to provide an activated extension of town centre functions.
- The scheme would benefit from greater integration of the public realm of the foreshore esplanade and the podium level of the development but it is understood from the presentation that this is the intention.

Considerations

- The promising inspirational material did not produce a compelling urban strategy for the site.
- The urban structure appears to be largely dependent on object buildings with little alignment or spatial cohesion between them.
- The organisation of forms and sequences appears too complex to allow a simple reading of the site while the amount of content in the public space is potentially excessive.
- Development of the scheme would have to overcome the following shortcomings:
  - unresolved built form relationships,
  - the erosion of street definition through material treatments,
  - undeveloped building to ground interfaces,
  - unresolved private / public relationships,
  - demonstrated activation of river frontage.

PART D - JURY RECOMMENDATION

D1. Jury Comments

The Jury and invited design advisors all thank Council and the proponent (Billbergia) for the opportunity to be involved in this design competition.

This was the first staged competition of its kind being a voluntary competition divided into two stages:

- Stage 1 – Master Plan,
- Stage 2 – Architectural Design Competition

The competition brief included a "base" reference design that included the key attributes that must be addressed by each competitor. This base scheme was prepared by Council's Urban Design Unit. This included:

- Minimum 16,800sqm Public Open Space (including new 10,500sqm park),
- Development on site benchmarked at 50,000sqm FS and 65,000sqm FS, and
- Maximum height – 35 storeys measured from Wentworth Place.

All six competition submissions challenged the reference design and suggested alternative outcomes.

D2. Recommendations

Based on the evaluation of all of the submitted schemes in accordance with the Competition Brief, the following firms have been formally announced by the Design Excellence Jury as proceeding to the Stage 2 Architectural Design Competition:

- Bates Smart,
- Durbach Block Jaggers, and
- FJMT

Subject to the design development requirements discussed in Section D.3 below, the Competition Jury has determined that these three (3) respective schemes have the potential to exhibit design excellence. The design development recommendations are considered by the Jury to further improve the design quality of the submitted schemes.

This decision by the Jury was unanimous. The technical advisors to Council also ratified these findings.

Note: It was demonstrated by all shortlisted architects that the following maximums could be physically accommodated on site while generally meeting design objectives.

Table 10 Summary of non-conforming concepts

Statistic	Bates Smart	Durbach Block Jaggers	FJMT
Public open space estimates	20,000 m²	16,800 m²	32,000 m²*
Tower Heights	33 / 50 storeys	28 / 50 storeys	39 / 49 storeys
Maximum GFAs	82,000 m²	85,000 m²	90,000 m² (bulkier tower forms)
Notes: All schemes positioned the largest tower on the south-east corner of the site and rotated the park to orientate more to Wentworth Place. * includes recreational areas proposed to be created on Homebush Bay			

To assist in informing the proposed DCP amendment for the site, the Jury also provides the following responses regarding the sites capacity to sustain bulk, scale and density.

Density

The three (3) shortlisted competition entries clearly demonstrate that the site has a built form capacity to contain a floorspace of approximately 75,000sqm. The 75,000sqm FS is equivalent to the maximum GFA benchmark contained within the brief (65,000sqm FS) with an additional 15% Design Excellence bonus. It should be noted that the nominated floorspace is based on the proponents proposed improvements to infrastructure (i.e. bus service, community facilities and new public open space).

The Jury do however consider that additional floorspace, up to 85,000sqm FS could be "tested" on the site subject to improved transport and social infrastructure (i.e. light rail, community facilities, increased provision of open space). The Jury are happy to assist Council in assessing the suitability of any increased density on the site should the delivery of improved infrastructure be realised.

Height

The Jury confirm that the maximum building height should be as per the endorsed design competition brief. Building heights are to be maximum 35 storeys above the level of Wentworth Place at its highest point. The Jury are of the view that building heights at Wentworth Point should not exceed the approved height of towers at Rhodes Railway Station (39 storeys – Rhodes Central) and Sydney Olympic Park (38 storeys – The Boomerang).

Future improvements to public transport infrastructure at Wentworth Point would have the juries support for the consideration of building heights that exceed 35 storeys.

Public Open Space

The Jury recommend that a minimum of 16,800sqm public open space be delivered as part of the Stage 2 Architectural Design Competition. However, all three (3) shortlisted schemes highlight the opportunity for the increased delivery of public open space in the order of 16,800sqm to 31,700sqm.

Although the Jury consider increased levels of open space as a key attribute of the master plan, it should not be at the cost of other improvements and infrastructure planned for the site.

Mix of Uses

As per the Design Competition brief, the Jury recommends that a minimum 2,900sqm floorspace is allocated to non-residential uses. However, the Jury would hope that for any increase in floorspace above 65,000sqm, there is an equitable increase in non-residential uses at ground level to activate waterfront and street frontages.

The Jury agree that community facilities such as Council owned child care centres should be excluded from the calculation of floor space (as per the HBW DCP). The exclusion of club facilities from the calculation of floorspace should be considered by Council, but the Jury defer the decision to Council's Land Use planning team.

Urban Design Principles

Based on a detailed review of the three (3) shortlisted schemes the Design Excellence Jury would like to suggest the following urban design principles are incorporated into the future DCP amendment for the site;

1. New Urban Park - with an address to Burroway Road, Wentworth Place and Footbridge Boulevard,
2. Development zone – located adjacent to Waterside Promenade to minimise overshadowing and maximise views between existing and proposed developments,
3. Tallest development – located in south-eastern corner of the site marking the arrival to Wentworth Point via Bennelong Bridge. Development to step down in scale from south (tallest) to north (lowest),
4. New Pedestrian + Cycle connections – Fully accessible (lift access) from Bennelong Bridge to Foreshore Promenade,
5. Street Address – New pedestrian and vehicular links are required to ensure appropriate street address to all residential development,
6. Foreshore Promenade – Ensure the delivery of a high quality, active and unique waterside public space at Wentworth Point,
7. Waterside Activation – Maximise retail and community uses along the Foreshore Promenade,
8. Reinforce Pedestrian Desire Lines – from Bennelong Bridge (south-east) to Ferry Wharf (north-west),
9. Potential development zones – Investigate development with an address to Burroway Road (north) and Footbridge Boulevard (south) to create an active address to streets and the new Urban Park, and
10. Waterside Activation – Explore options for animating and activating the waterfront (eg – public pool, wharfs, jetties etc)

The Jury is happy to provide additional feedback and assistance to Council as part of the preparation of the proposed DCP for Block H, Wentworth Point.

D3. Concept Development

Despite the deliberation above, the Competition Jury has made further observations and recommendations for the proceeding concepts as set out under 'Considerations' in Section C – Review of Competition Entries for the shortlisted firms to participate in the Stage 2 Architectural Design Competition.

The Competition Jury considers that these matters are required to be resolved in order for the development concepts to exhibit "design excellence" in the Stage 2 Architectural Design Competition.

The Competition Jury will review the developed concepts as part of the Stage 2 Architectural Design Competition in which a winner will be announced.

PART E - ENDORSEMENT BY COMPETITION JURY

This Jury Report for the Architectural Design Competition at Block H, Wentworth Point has been endorsed by the Competition Jury as set out below.

Table 10 Jury Endorsement

Jury Member	Signature of Jury Member	Date of Endorsement
Kim Crestani, City Architect, City of Parramatta Council		11th October, 2017
Peter Poulet, NSW Government Architect, Office of the Government Architect		12th October, 2017
Bob Nation Design, Director Barangaroo Delivery Authority (for Proponent)		12th October, 2017

Appendix 1: Competition Brief

DESIGN EXCELLENCE
COMPETITION BRIEF

City of Parramatta

Phase 1 Competition for Master Plan

Block H , Precinct B, Wentworth Point

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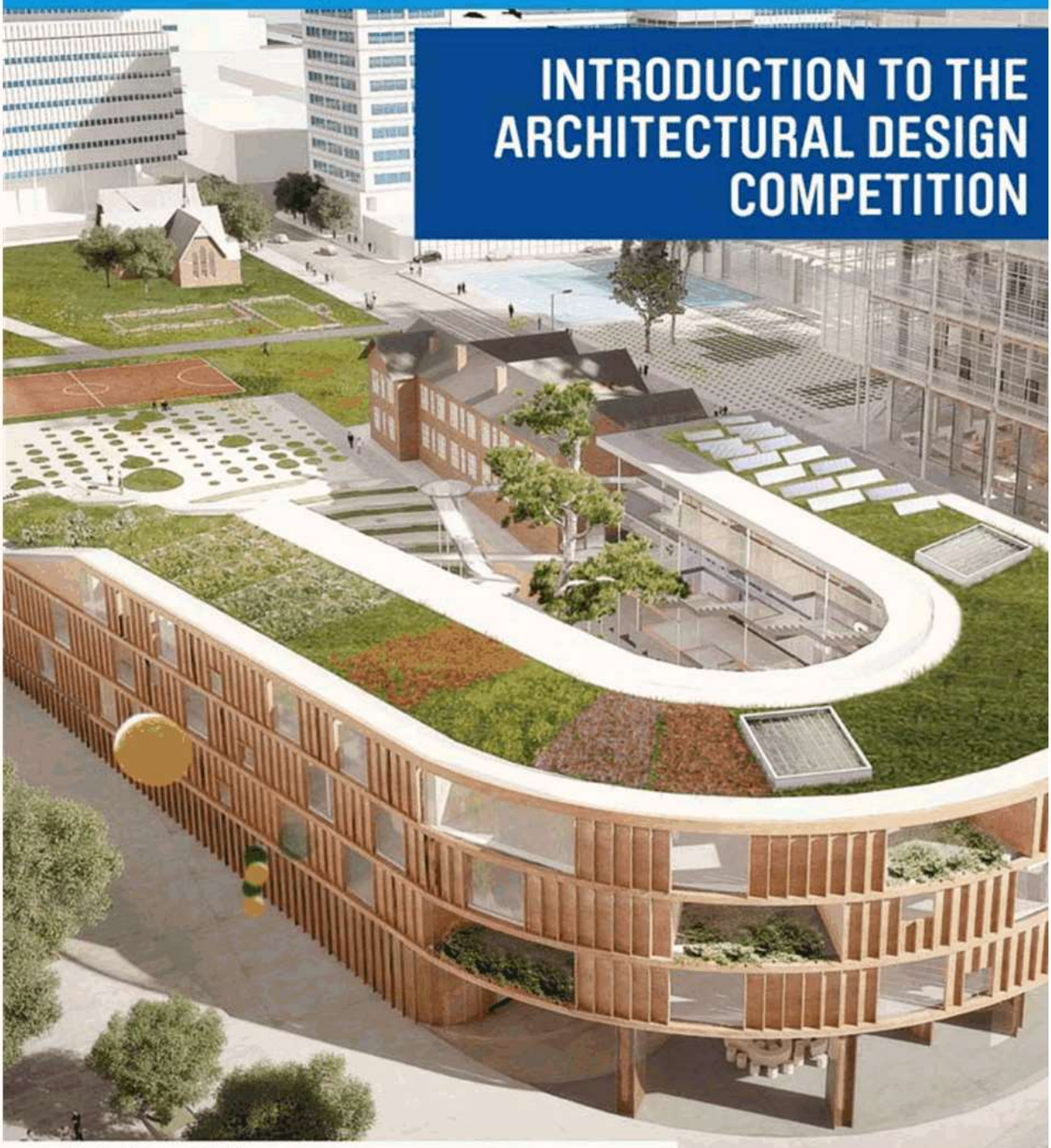
Competition Summary

Site Address	Block H, Precinct B, Wentworth Point
Site Legal Description	Lot 24 and Part Lot 11 DP 270778
Project Name	"Block H"
Competition Type	Invited Master Plan Design Competition
Proponent	Billbergia Pty Ltd
Competition Manager	Greg Dowling, Dowling Urban Pty Ltd Ph 02 9516 4377 ,m 0407 404 898, e greg@dowlingurban.com.au
CoP Competition Co-ordinator	Guy Pinkerton Ph: (02) 9806 5262, Email: gpinkerton@cityofparramatta.nsw.gov.au
Architectural Design Competition Competitors	3XN Bates Smart DKO Durbach Block Jaggers FJMT Scott Carver/ ARM
Competition Fee	Phase 1 $30,000 (ex GST) (Note subsequent detailed Phase 2 fee $50,000 (ex GST) for selected competitors)
Technical Advisors	Town Planner: Greg Dowling, Dowling Urban, 0407 404 898 – greg@dowlingurban.com .au Quantity Surveying: RLB, Stephen Mee Structural Engineering: WSP Group Mechanical and Electrical Engineering: WSP Group Hydraulic and Fire Services: WSP Group Wind Engineering: WSP Group Façade Engineering: WSP Group Lift Engineering: WSP Group Flood Engineer: WSP Group
Jury Members	City of Parramatta Council - City Architect – Kim Crestani NSW Government Architect – Peter Poulet or his nominee Proponent - Bob Nation One registered landscape architect and one urban designer will be engaged by Council to provide expert independent advice to the Jury.
Key Competition Dates	August 2017 – List of Competitors endorsed by CoPC 10 August 2017 - CoPC endorsed Design Brief issued to Competitors; 11 August 2017 - Briefing session for all Competitors; 8 September 2017 - Lodgement date for Proposals to Competition Manager (4 weeks); 11 September 2017 - Proposals issued to Jury by Competition Manager (Note: to be minimum 2 weeks before presentations); 12 September 2017 - Presentation by Competitors to Jury ; TBA - Final deliberation by jury and recommendation made to Proponent; TBA - Jury report issued to CoPC for endorsement.
Gross Site Area	Aprox 30,800 m² inclusive of foreshore linear and main parks

Floor Space Benchmarks	50,000 m2 FS and 65,000 m² FS. These two distinct floor space benchmarks are to be explored by the competition. These represent two distinct quantum of development of the site which will be further considered by Council in terms of planning issues such as transport, open space provision, and residential amenity. (Refer to Section C5.1 for definition of 'floor space' (FS))
Minimum Public Open Space	16,800m² (Refer to Section C5.1 for definition of 'public open space')
Maximum Building Height	Heights to be Maximum 35 Storeys above the level of Wentworth Place at its highest point. (Refer to Section C4 Design Objectives for guidance)
Voluntary Planning Agreement?	Yes
Construction Budget	Standard
Estimate of Apartments	Approximately 786 apartments based on 65,000 m² @ 79m² FS average (Billbergia standard = 83m2 GFA) or 764 @ 81m2 (Council standard = 85m2 GFA)
Desired Apartment Mix	3 bedroom 35% 2 bedroom 35% 1 bedroom 30%

PART A

INTRODUCTION TO THE ARCHITECTURAL DESIGN COMPETITION



Grimshaw & BVN
Arthur Phillip High School & Parramatta Primary School
175-177 Macquarie Street, Parramatta

PART A - Introduction to the Master Plan Design Competition

A1. Background

This Design Competition Brief relates to Block H, Precinct B, Wentworth Point which is owned by Billbergia.

The Homebush Bay West Development Control Plan (HBW DCP) is the primary statutory document guiding development in this part of Wentworth Point.

The site is subject to a request by the proponent to amend the DCP to permit additional floor area, altered building heights and increased public open space in consideration of an offer for public benefits under a voluntary planning agreement.

Acceptance of the proposal by Council is subject to the resultant development exhibiting design excellence in architectural, urban and landscape design as well as acceptable strategic outcomes, particularly in terms of transport, public open space provision and improved residential amenity.

Therefore, the Architectural Design Competition process has been adopted to inform a proposed amendment to the DCP inclusive of floor area, public open space and height controls as well as the preparation of a subsequent development application should the DCP amendment proceed.

There are two (2) different forms of Architectural Design Competitions that can be undertaken, including:

(a) an 'open' masterplan or architectural design competition;) or

(b) an 'invited' masterplan or architectural design competition.

The subject competitive design process will be undertaken as an 'invited' masterplan design competition, endorsed by Council and will comprise two phases.

Phase 1 consists of an invited competition for a masterplan. The masterplan will define the spatial structure, building envelope, land use and open space design concept for the site. Phase 2 is dependent on an agreed outcome from Phase 1 and will consist of a design excellence competition for participants selected by the Jury from Phase 1 for the resolution of the architecture and the detailed design of the public domain. Participants in Phase 2 must include an emerging architect or small practice as part of the team for an identified component or elements within the design.

Six participants have been selected by the Proponent to participate in Phase 1 of the Master Plan Design Competition. Three preferred architects will then be requested to participate in Phase 2.

For Phase 1, each participant will be asked to nominate a Landscape Architect with suitable experience or expertise to undertake major public park design to be approved prior to commencement and an Urban Designer with suitable experience or expertise to undertake major masterplan design.

Due to the importance of this project, a collaborative approach to the Masterplan Design Competition is considered to be an effective means of achieving design excellence and architectural variety.

The purpose of this document is to provide a Brief to the architects / urban designers / landscape architects that will participate in the Design Competition for the abovementioned site.

This Brief provides an outline of the project objectives and competition process, the Proponent's expectations, and information to assist Competitors in preparing their proposal submissions.

A2. Competition Objectives

The key objectives of this Design Competition are:

- To ensure the highest standard of design for the spatial structure, built form and public domain of Lot H.
- To ensure that the design contributes and enhances the natural, cultural, visual and built character of Wentworth Point and enhances residential amenity.
- To provide an agreed basis for the second phase of the design excellence process.
- To inform a draft amendment to the HBW DCP
- To provide a basis for Council to consider additional density and height sought by the proponent.

Site and development specific objectives that are required to be addressed in Phase 1 of the Competition entries are set out in Part C of this Brief.

A2.1 Competition Format

Details regarding the type, process and requirement of this competitive design process is provided in Part D of this Brief. Set out below, however, is a summary:

- The purpose of Phase 1 of the Competition is to select the highest quality spatial structure design and concept public domain design for the development of the site, compatible with the objectives set out in Part C of this Brief;
- This competition will be an invited Design Competition, with six consortium teams or competitors;
- Each Competitor is required to be led by a registered architect with demonstrated relevant expertise in high quality architecture, urban design and landscape architecture;
- The competition entries will be judged by a Jury panel comprising three members representing the Proponent, the Department of Planning and Environment (or their nominee) and CoPC based on the judging criteria
- The competitive design process will not fetter the discretion of the Consent Authority.

A2.2 Reference Documents

This Brief has been prepared in accordance with the requirements of the Director General's Design Excellence Guidelines and CoPC's Design Excellence Competition Guidelines. Its objectives are to ensure:

- Council's design excellence requirements are balanced with the Proponent's objectives; and
- Procedural fairness for Competitors.

This Brief contains details regarding the following information:

- A detailed description of the site and its context;
- A detailed description of relevant information or documentation including any relevant planning history;
- Competition type;
- Competition objectives;
- Full details for the conduct of the competition process; and
- The fees offered to participants in the competition.

A copy of the Director General's Design Excellence Guidelines and CoPC's Design Excellence Competition Guidelines can be found in Part F of this Brief.

A2.2.1 Project Information Package

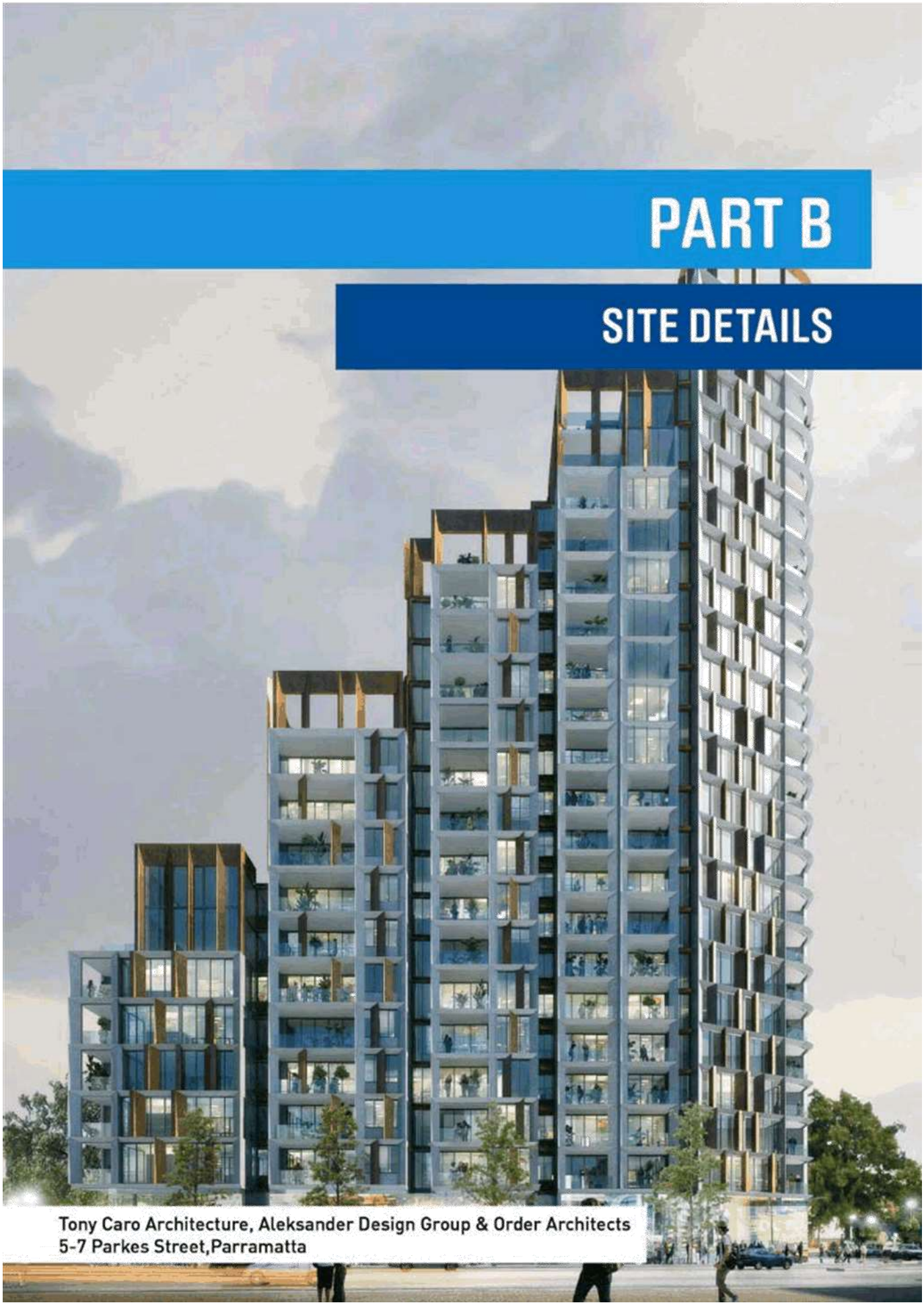
Each Competitor will be provided with the following information, which is annexed to this Brief:

- Template letter for the appointment of Jurors

- Template invitation letter to Architects/Competitors
- Project Documentation
- Current site survey
- Context plans and available Information on adjacent sites.
- Jury evaluation criteria- standard scoring sheet
- Parramatta Council's Digital 3D Model Requirements
- 3D site model DWG
- Site Survey DWG
- Strata Easement (showing 20 m public easement for Seawall)
- Flooding Advice
- Geotechnical Report
- Sewall Detail
- Consultant Contract
- Consultant Scope of Works and Services
- Billbergia Residential Principles Project Requirements
- Billbergia Past Projects
- Homebush Bay Development Control Plan incorporating Amendment 1.

A2.3 Brief Endorsement

This Brief has been reviewed and endorsed by City of Parramatta Council (CoPC) on 10th August, 2017.


PART B
SITE DETAILS
Tony Caro Architecture, Aleksander Design Group & Order Architects
5-7 Parkes Street,Parramatta

PART B - Site details

B1. Site Address

The site is located at Block H, Precinct B, Burroway Road, Wentworth Point.

B2. Legal Description

The site is legally described as Lot 24 (and Part 11) in Deposited Plan 270778.

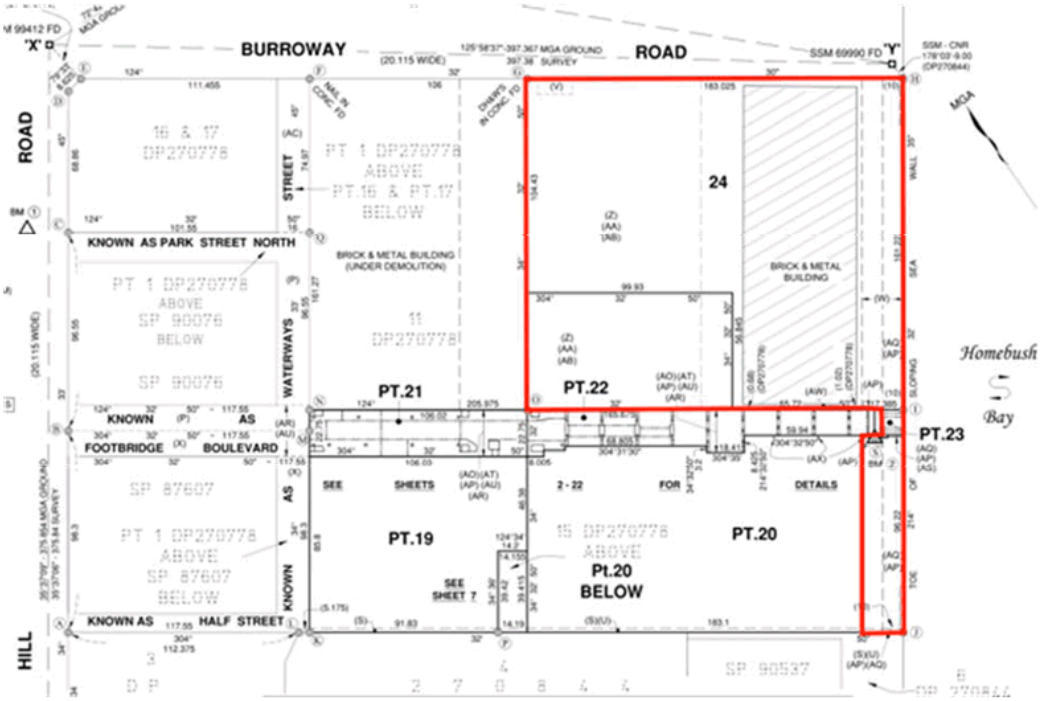
B3. Site Characteristics

B3.1 Site Area and Measurements

The site has an area of approximately 30,800 m² and boundary dimensions are irregular but the dimensions of the main parcel is as follows (refer to survey)

Table 1 Approximate Boundary Dimensions of main parcel

Boundary	Distance (m)
North	183 m
South	183 m
East	159m
West	159m



Excerpt from Plan of Subdivision showing subject land.

B3.2 Easements or Restrictions

The subject land is subject to a number of variable easements as shown in the plan of subdivision, including in particular 20m public right of way on the foreshore to Homebush Bay.

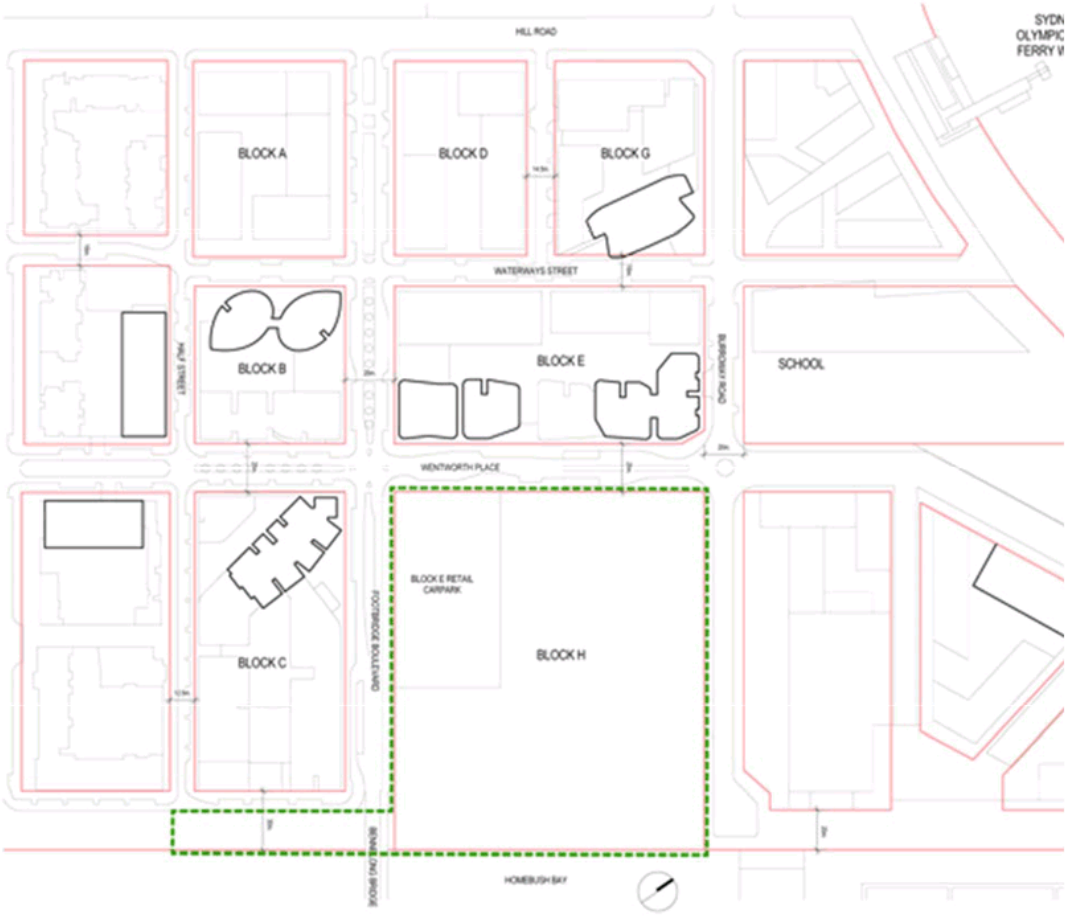
B3.3 Topography and Vegetation

The subject site comprises formerly reclaimed land from Homebush Bay created for industrial development. The development approach to date has been to construct a false terrain to limit excavation into the water table. The site does not contain vegetation of significance or capability/suitability for retention.

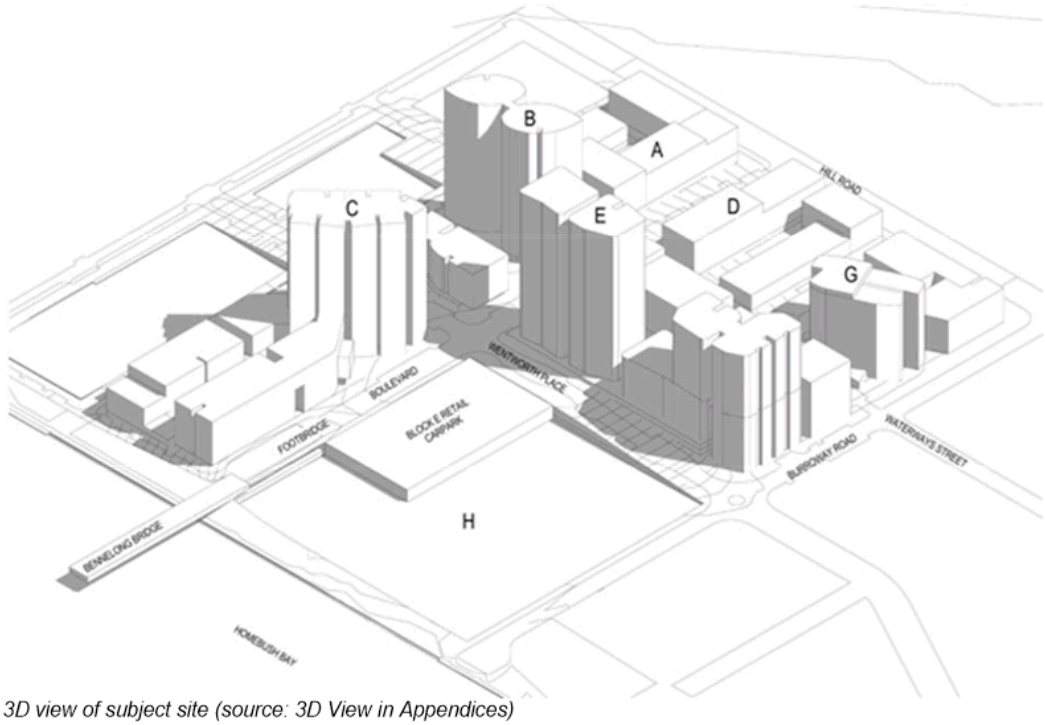
B3.4 Existing Buildings and Structures

The main parcel within the subject site is known as Block H and is the final stage of development of Precinct B shown in the attached plan and model.

The site is covered by a concrete slab, other than at the foreshore and the setback to Burroway Road. The land is to become vacant on redevelopment but is encumbered with a retail carpark below finished ground level servicing Block E adjoining and the Bennelong Bridge landing while the existing seawall to Homebush Bay is required to be rebuilt.



Plan of subject site (source: Site Plan in Appendices)



3D view of subject site (source: 3D View in Appendices)

B3.5 Vehicular Access

Vehicle access is available from Burroway Road, which is a public road, as well as the adjoining Waterways Street and Footbridge Boulevard, which are Public Accessways within the community title subdivision of Precinct B. Note that Footbridge Boulevard may have restrictions for direct car access given its role in servicing the bus only Bennelong Bridge.

B3.6 Special Site Characteristics

B3.6.1 **Contamination**

The site has been investigated for contamination given the history of the site and its relationship with land reclamation from the Bay and former industrial activities in the wider area.

Potential contaminants as well as the extent and results of soil and groundwater tests are outlined in the Environmental Report but do not preclude the use of the site for high density mixed use residential development.

B3.6.2 **Drainage & Flooding**

The site is free of natural hazards except some flooding on Burroway Road and the foreshore in their current conditions but from which habitable floors are able to be placed above potential flood levels with limited adjustment.

Auburn Council has previously advised that on-site detention will not be required for the site. Stormwater from the site will be collected and directed to the east to Homebush Bay through a new pipeline to be laid in Burroway Road.

The street system will be sized to cater for the 20 year ARI flow. Provision for flows in excess of the 20year ARI and up to the 100 year ARI will be treated as overland flow and contained within the street kerb and gutter.

B3.6.3 **Acid Sulfate Soils**

Details on acid sulphate soils, soil/groundwater aggressivity and seismicity are provided in the Geotechnical Report.

B3.6.4 **Geotechnical**

Most of the Wentworth Point peninsula is on reclaimed land and is subject to geotechnical constraints whereby excavation requires special considerations.

The geotechnical issues considered relevant to the proposed development in the Geotechnical Report in the Appendices include site preparation, excavation, excavation support, groundwater and foundations. Details on acid sulphate soils, soil/groundwater aggressivity and seismicity are also provided.

B4. Site Analysis

Plans of the site's context are provided with the brief.

A context, site and detailed analysis should be undertaken to inform the proposed concept masterplan Sufficient plans and sections to scale should document the important elements surrounding the site including (but not necessarily limited to);

- Context to include where publicly available relevant buildings recently approved, under construction or constructed as well as indicative outcomes of land planned for redevelopment,
- Circulation, Movement and Pedestrian desire lines
- Street network
- Street plans
- Levels
- Uses
- Building footprints
- Building heights, building edge and setback conditions,
- Building alignments
- Entry points vehicles and pedestrian
- Public transport routes
- Effect on adjacent sites.
- Easements or restrictions

B5. Surrounding Area

Wentworth Point was formerly known as Homebush Bay West and forms part of a wider area of urban rejuvenation of former industrial and reclaimed land. It is located to the north of Sydney Olympic Park and Newington, and is linked to Rhodes over Homebush Bay by the Bennelong Bridge which is restricted to pedestrian, bicycle and public transport busses.

The Parramatta River separates the Wentworth Point precinct from Meadowbank to the north while the Millennium Parklands are located to the immediate west.

The site immediately to the south of Precinct B is undergoing the final stages of construction by Sekisui House of residential buildings from 4 to 25 storeys with associated connecting streets and public opens spaces.

The land north of the site on Burroway Road comprises

- a 4 to 8 storey mixed use development adjacent to the public ferry wharf;
- a proposed primary school immediately adjacent to the north-west; and

B6. The Wentworth Point Urban Activation Precinct redevelopment site to the north-west across Burroway Road proposed for mixed residential of 5 and 25 storeys and maritime facilities.Relevant Existing Development Approvals

B6.1 For the Site

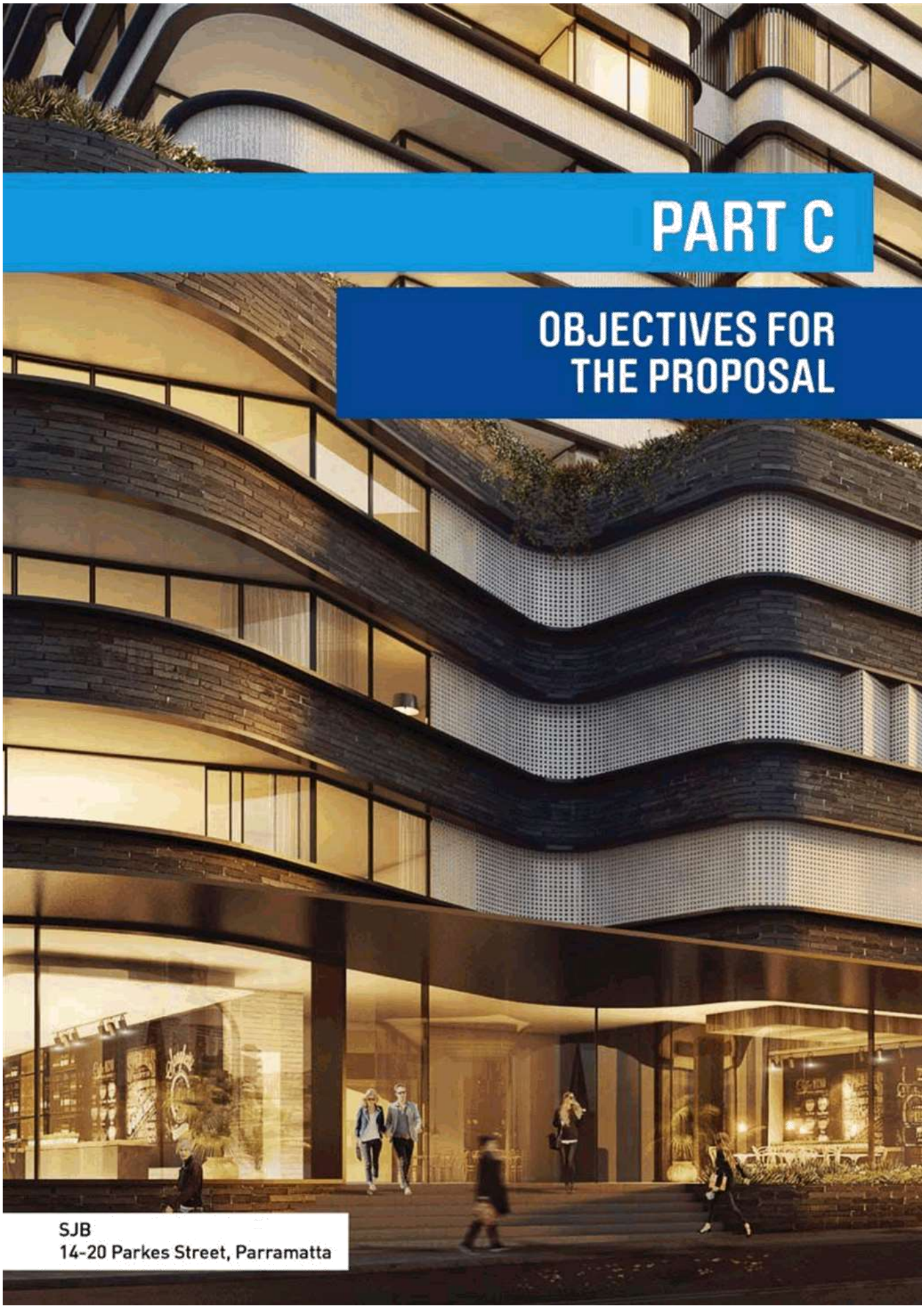
The site is subject to a redundant masterplan and a staged development consent which are not to be taken into account for this competition.

B6.2 The surrounding Area

A compilation drawing is included in the appendices providing an overview of current built, approved and planned indicative spatial and building forms.

B7. Voluntary Planning Agreement

Council and the proponent are currently in discussions regarding a voluntary planning agreement for this site.



PART C

OBJECTIVES FOR THE PROPOSAL

SJB
14-20 Parkes Street, Parramatta

PART C - Objectives for the Proposal

C1. Overview

The overarching purpose of this competitive design process Phase 1 and Phase 2 is to deliver the highest standard of architectural, urban and landscape design in accordance with the objectives set out in the following sections of this Brief.

C2. Scope of development proposal

Development of the site will comprise high density residential apartment buildings with street orientated retail, commercial, community and live/work activity and include a 75 - 90 place child care centre.

The development is required to accommodate an integrated street network and a minimum of 16,800 m² of public open space predominately in the form of a large park of1.05ha. A foreshore linear park not less than 20m wide is to be a continuation of the existing foreshore linear park.

The floorspace benchmarks that should be assessed are 50,000 m2 FS and 65,000 m2 FS. All non-residential uses are to be included in the calculation of total FS other than DCP exceptions as noted in Section C5.

These two distinct floor space benchmarks are to be explored by the competition. These represent two distinct quantum of development of the site which will be further considered by Council in terms of planning issues such as transport, open space provision, and residential amenity.

Public Domain

The public domain will comprise publicly accessible streets, lanes, pathways, plazas as well as a main park and waterfront linear park containing a promenade.

Council is seeking to ensure that the public domain and open space network.

- contributes to the legibility of the precinct
- provides places for people to gather formally and informally
- has a hierarchy of spaces which enable a range of uses over a long timeframe
- creates a setting for the recreation and community
- is designed as a suite of spaces with a commonality of approach

A flexible paved plaza area should be provided at the Wentworth Place interface.

Main Park

The main park should reflect the requirements of CoPC as follows.

- Large grassed open space area: kick about and informal play space fringed by large shade trees over basement car parking (precedent 'The Domain'), relaxation, outlook & views
- Automatic irrigation and drainage
- Peripheral gardens
- Community gardens
- Pedestrian paths – connect to foreshore bridge
- Perimeter fencing, pedestrian lighting, fitness equipment
- Terracing to permit pedestrian access across levels.
- Café – 1 storey, 100m² including uncovered outdoor seating area.
- Children's playground, 500m² ($250,000-$350,000)
- Amenities block – with toilets and baby change
- Seating, bins, perimeter fencing, lighting
- Large shade trees (not in separate planter boxes, refer PPDG July 2017 for acceptable soil volume and podium planting requirements).
- Gathering spaces for the local community.

Foreshore area

- Direct public lift and stair access to the foreshore from the Bridge entrance.
- Continuous foreshore promenade connection activated at key locations (materials to blend with existing, refer to the WWPt Public Domain Manual).
- Consistent provision of large scale shade trees (for example, Fig Trees) in the foreshore setback zone as envisaged in the Public Domain Manual.

- Consideration of the area under the bridge to incorporate activities that are typically considered problematic in more visual locations, such as youth facilities (precedent John Whiton Park) - hard scape seating, paved and planted areas – to be designed with close regard to safety and security considerations.

The waterfront linear park must provide a continuous foreshore promenade activated at key locations and interfaces and ameliorate the impact of the bridge landing particular in regard to safety and security.

The private domain will contain separate private and communal open space as well as minor facilities available only to residents.

DCP Definitions of floor space and public open space are provided at C5.1.

C3. Design Excellence

The objectives for this Competition are effectively those set out throughout this section of the Brief.

The masterplan will include at a minimum:

- A spatial structure that will:
  - Enable in Phase 2 the delivery of design excellence in terms of the resolution of the architecture and the public domain
  - Street and block network
  - Open space network
  - A concept design for the public domain and open space
- Identify building envelopes,
  - Location, separation distances and levels
  - Footprint, height and FS
  - Access points for people and vehicles
  - Vertical circulation points
  - Car parking
  - Shadow diagrams
- Uses:
  - Residential.
  - Minimum 2900m2 FS non-residential uses (eg retail, club, gym, child care and commercial uses.
  - A 75-90 place child care facility. See the CoPC report on requirements for child care facilities in high density precincts.
  - Car parking.

The masterplan will enable in Phase 2;

- The resolution of the architecture to a standard of design excellence, materials and detailing appropriate to the building typology, location and climate
- The ability of the built form to accommodate the requirements of the Apartment Design Guide for residential buildings;
- Inclusion of passive design, enhanced occupant amenity, energy efficiency and mitigation of the wind and heat island effect;
- Maintained and enhanced view corridors
- A positive spatial concept.
- An active interface with the public domain where non-residential uses are located
- Concealed car parking

C4. Design Objectives

C4.1 Overview

The objectives for this Masterplan Competition are to:

- Identify the vision
- State the objectives and principles
- Respond to the site's context and the constraints and opportunities of the site.
- Provide a clear legible public domain
- Provide a clear legible communal and private open space
- Maintain a positive spatial relationship of buildings with streets, public domain, adjoining sites and neighbouring buildings.
- Achieve best practice flooding and rainwater management outcomes;
- Achieve best practice Ecologically Sustainable Development outcomes; and
- Ensure the outcome is financially feasible and buildable.

C4.2 Specific objectives

The specific design objectives and requirements for the development concept and scheme are as follows.

- The masterplan is to be informed by a thorough analysis of the context and site.
- The grid pattern east of Hill Road should be maintained
- The spatial organisation of the built form and the public domain design is to:
    - Reinforce the street pattern
    - Assist in providing continuity of the built form on the east side of the peninsular and Hill Road
    - Minimise 'apparent density' from the public domain
    - MInimise impacts of density on the adjacent development
    - Maximise the views to the water from the public domain
    - Relate to the levels in the site as formed
- Mid-site access should be provided for physical and visual permeability and reflect both movement towards the waterfront as well as north-south connections. It should be in the form of streets, lanes and/or public paths as well as view corridors.
- The transition of levels from the peak of the synthetic terrain at Wentworth Place to the finished seawall levels at the waterfront should minimise barriers within the site and to the waterfront, provide for clear sight lines within and through the site, and accommodate accessibility needs especially through the main park.
- A clear distinction is to be provided between public and private domains particularly for the main park and waterfront, while allowing for active edges to the foreshore linear park and elsewhere as appropriate.
- The main park should be clearly defined without excessive indentation or complexity, edges to streets and the waterfront should be activated, and be sufficiently robust to accommodate a range of uses.
- The location of the main park and spatial relationship to the built form should consider access to winter sun while having regard to alternate local recreational opportunities in winter.
-
- Solar access to the main public park must achieve a minimum 30% solar access between 9am-3pm at any time of the year.
- Solar access to the main public park should also aim to achieve 40% solar access between 10am-2pm during mid-winter and be contiguous as far as possible.

- Cumulative over-shadowing of adjacent developments and DCP planned future buildings are to be included in the solar access assessment.
- Buildings should provide seamless, continuous and animated interfaces to the respective public domains.
- Car parking basements should not be any higher than two levels above existing ground level, unless it remains below the finished ground level, and be sleeved by apartments, other uses, the false terrain or other suitable means
- The Floor Space of the car parking is to be excluded from floor area calculations.
- The tallest building should be no higher than 35 storeys above the level of Wentworth Place at its highest point.
- The placement and height of towers is to consider alignment, suitable separation, effect on the skyline from viewing points from inside and outside the site, the impact of shadowing of public places and parks, wind turbulence and the like.
- Ground level building setbacks should accommodate additional width in footpaths for higher volume pedestrian activity and to compensate for road infrastructure where necessary
- Ground floors should respond to the planned and developed characteristics of the respective streets as follows:
  - Wentworth Place: retail and café frontages in development opposite and a potential park edge;
  - Burroway Road: commercial and flexible live/work typologies with potential maritime uses in proposed development opposite and a potential park edge;
  - Footbridge Boulevard: potential park edge and ancillary activity with predominately residential and corner retail in development opposite.

C4.3 Reference Site Set-out and Massing

In order to provide a comparison for overall performance of submitted concepts and schemes as well as to demonstrate achievement of the general and specific objectives, a reference site set-out and massing prepared by Council is set out below.

The assumptions adopted for the reference are:

- 14.5m Park Street is extended to the river foreshore to establish a new park edge street linking to Burroway Road.
- A central park of 1.05ha and a development site of 1.2ha approx. Park is level with Wentworth Place and Footbridge Boulevard, however the park could tier in places towards the foreshore promenade.
- Two towers no larger than 1150sqm each setback min 6m from the street wall.
- Street wall/ Perimeter edge buildings of 6-8 storeys (depending on the frontage) with a max 22m deep floorplate inclusive of balconies, external walls and internal voids.
- Building breaks would occur in the perimeter blocks for permeability and improved amenity – this has not been shown in the model.
- Min 1.5m deep soil, clear of drainage and slab, to be provided in Park to permit medium to large canopy trees.
- Undercover parking may be located underneath Park provided it meets soil depth. No car parking to be located above Wentworth Street level.
- Undercover car parking to be sleeved with active uses at ground floor along River Foreshore, Burroway Road and along park edges.

Key design principles used for the reference are:

- Clearly demarcated publicly accessible domain. □
- Incorporate desire lines in public domain design and through site links □
- Park to be accessible and provide a wide range of uses/ users. □

- Park to be level with Wentworth Place and Footbridge Boulevard □
- Provide 24/7 lift connecting foreshore and Footbridge Boulevard/ park. □
- All buildings to have street frontage and active edges along river foreshore and park edges □
- Deep soil on public domain for trees and vegetation. □
- Incorporate/ modify approved car parking within park to accommodate deep soil requirements
- Public streets around park. □
- Public conveniences both at upper and lower levels of park □
- No car parking to be located above Wentworth Place level. □
- Reuse the portals that were part of the original building on the site (the former Ralph Symons Industrial Building)
- Address impact of views on existing towers as□a result of increased development

(1) 1.17ha development site after provision of streets and park.

(2) Two towers (locations indicative) max 1150sqm floorplate each (including balconies, hallway, internal voids and external walls). Setback 6m from street wall/podium.

(3) 6 - 8 storey high (depending on edge of Wentworth Place and River Promenade) street wall and perimeter style development around private courtyard.

(4) 10m wide river foreshore setback accomodating street to Burroway Road.

(5) 20m wide River Promenade.

(6) Extend Park Street and establish a new park edge street connecting to Burroway Road.

(7) Locate 1.05ha park to council's satisfaction between the new street, Wentworth Place, Footbridge Boulevard and the River Foreshore Promenade and setback.

(8) Park may be accomodated above car parking. Allow soil fill of 1.5m above slab and drainage to allow medium/large canopy trees.

(9) Lift and stair access to foreshore.

AREA SCHEDULE

1.05 ha	[public park]
0.63 ha	[river promenade]
0.31 ha	[streets inc. footpath]
1.17 ha	[development site]
3.16 ha	[development site as measured from survey]

-- SURVEY SUBDIVISION PLAN

10 20 30 40 50m

reference scale only

Reference set-out and massing. (Source City of Parramatta Council)

A reference set-out and massing option with 25 and 35 storey towers and 6-8 storey street wall. (Source City of Parramatta Council)

C4.4 Structural and Geotechnical Objectives

The key objectives in terms of structural and geotechnical matters are as follows:

- Minimise the impacts of the any excavation works.
- Satisfy structural adequacy and constructability requirements in the design of the development.
- To facilitate the buildability of the project.

C4.5 Wind

Key wind engineering considerations include:

- Provide a built form that limits downdrafts;
- Introduce strategic interventions in the street scape to ameliorate adverse wind effects;
- Create a comfortable walking environment for pedestrians; and
- Maximise the amenity of private open space including balconies and wintergardens.

C4.6 Flooding and Rainwater Management Objectives

Key flooding and rainwater management objectives include:

- Appropriate assessment, acceptable to Council, of flood risks, flood hazard and affectation of the site from both mainstream (river) and overland flow (rainfall) events.
- A legitimate design response, acceptable to Council, that minimises risks and hazards to people and property for occupants and those in the building surrounds/public domain from both mainstream (river) and overland flow (rainfall) events.

- Achievement of beneficial rainwater and stormwater outcomes, including in regard to rate of stormwater discharge, water quality, landscape design, other environmental factors and resource use

Specific flooding and rainwater management considerations include:

- Habitable floors, all access to basement car parks and other flood-sensitive uses shall be set at a minimum of the applicable Flood Planning Level.
- Rainwater management is to be integrated with other aspects of the architectural and landscape design to optimise rainwater capture, stormwater runoff quantity and quality, flooding protection and other environmental benefits.

C5. Planning Objectives

C5.1 Statutory and Non-Statutory Framework

The planning objectives for this competition are to ensure that the Phase 1 process facilitates refined design parameters proposal for Phase 2 and the eventual development application that is capable of satisfying the governing planning framework as follows.

- State Environmental Planning Policy No. 65 - Design Quality of Residential Flat Development and the Apartment Design Guide.
- State Environmental Planning Policy No. 55 - Remediation of Land.
- State Environmental Planning Policy (Infrastructure) 2007.
- Homebush Bay West Development Control Plan (HBW DCP) with Amendment No.1.
- Public Domain Manual of the HBW DCP (Volume 2).
- NSW Floodplain Development Manual 2005.
- Other relevant and applicable State plans and policies.
- Justification of any instances of non-compliance against the objectives and strategic direction of the applicable control.

In regard to the HBW DCP it should be noted that:

- The location of the large park and street in the DCP diagrams is indicative / illustrative only.
- The existing height controls are provided in Section 5.3.2 and may be varied for the purposes of this competition.
- The intentions for the public domain including parks, foreshore and streets is set out in clauses 3.2 and 3.3 of the DCP. A street within the site would likely be regarded as a 'secondary east–west street' and may include a 'foreshore street' but in both instances may have a varied typology.

The definition of Floor Space is found in the DCP dictionary as follows.

"Floor Space (FS) the sum of the areas of each floor of a building, measured from the inside face of external enclosing walls and 1400mm above each floor level.
It includes:
- *habitable space below ground (auditoria, cinemas, supermarkets)*
- *retail space (cafés) associated with main entrance and/or lobby.*

It excludes:
- *main building entrances and associated foyers and lobbies*
- *common vertical circulation (stairs and lifts)*
- *non-habitable areas of the building which do not protrude more than 1.2 metres above ground level that are used for the purposes of:*
  - *car, coach and bicycle parking*
  - *space for loading and unloading of goods*
  - *waste management and storage areas*
- *one level of above-ground car parking entirely contained within a perimeter building, as an internal podium or courtyard, where all the uses 'wrapping' the parking are active and have a street address.*
- *plant rooms and vertical mechanical services and ducting*
- *communal recreational areas in residential buildings up to 5% of the total floor area of the building*

- *balconies, including those enclosed by operable screening devices □*
- *the void space above double height spaces."*

Note that

- all Floor Space of the car parking is to be excluded from floor area calculations
- apartment storage provided in accordance 4.4.9 (i) may be excluded from Floor Space
- coveted space for community uses within neighbourhood centres within neighbourhood centres may be offset against residential floor space (3.4.1 ii) and may include the childcare centre to be dedicated to Council.

The definition of Public Open Space and discussion is found in the DCP at page 43 noting that 'foreshore streets' are to be excluded for the purposes of this competition.

"Public open space is to include:

- *a point park at Wentworth Point, of approximately 4.8 hectares including foreshore promenade □*
- *three parks distributed evenly through the precinct, including one park on the waterfront for active recreation. Parks at the north and south to have minimum area of 2000m2 each; park in the middle of the precinct to be minimum 1000m2 (areas reflect constraints due to ownership patterns) □*
- *a 20-metre wide promenade ~~and foreshore street~~□*
- *foreshore parks or plazas terminating major east-west streets and linked to the promenade □*
- *pocket parks or plazas."*

The rates of parking will be determined prior to Phase 2 but the following DCP rates at sections 5.3.5 and 4.3 may be adopted for the purposes of this competition. (It should be noted that a reduction in residential car parking rates could be supported by Council contingent upon appropriate public transport options being available for future residents.)

"Generally provide a minimum of 1 space per dwelling.

Dwelling type	*Maximum car spaces per dwelling*
studio	*none*
I bedroom	*1.0*
2 bedroom	*1.2*
3 bedroom	*1.5*
visitors	*1 per 12 dwellings (minimum)*
car share	*1 per 200 dwellings (minimum)*

Visitor parking requirements may be satisfied by provision within basements, on newly created streets and additional parking created on existing streets. □

The car parking rates for commercial may be reduced to assist travel demand management objectives subject to agreement of Council."

Notwithstanding the HBW DCP allowance for tower floor area size in section 5.3.3 (i), Council currently uses the following guide to evaluate the bulk of building proposals and would be likely to use these at Wentworth Point:

- Buildings <75m high: 800m2 floorplate
- Buildings >75m 1150m2 floorplate
- (all areas are of the gross or total size of the floor plate)

The annexure to this Brief contains a copy of the Homebush Bay West DCP with Amendment No.1.

C5.2 Non-Compliances

All entries must be able to comply with any applicable State Environmental Planning Policy.

All entries should be able to satisfy HBW DCP, excepting any amendments foreshadowed by this brief in relation to building height, permitted floor area and minimum area of public open space and the like.

Competitors are permitted to identify any major variation from this brief and any other aspect of HBW DCP provided it is demonstrated to the Jury how:

- The relevant objectives are achieved, notwithstanding the variation;

- The variation adds value by resulting in a better outcome, in terms of both planning and design excellence; and
- How the objectives in Part C of this Brief are better satisfied by the non-conforming scheme.

C5.3 Landscape and Public Domain Objectives

The landscape and public domain objectives for this Design Competition are reflected within Volume 2 Public Domain Manual of the Homebush Bay West DCP the Public Design. However, it should be noted that significant departures from the manual have been approved in the past.

For additional guidance, reference should be made to the City of Parramatta Council Public Domain Guidelines https://www.parracity.nsw.gov.au/__data/assets/pdf_file/0006/92562/Public_Domain_Guidelines.pdf

- Note: Drop off zones or indented parking is not permitted in the public domain.

C5.4 Ecologically Sustainable Development and Environmental Performance

The ESD Objectives for this Design Competition and Targets for the subsequent Phase 2 Design Competition are as follows.

Objectives

- Building envelopes and façade articulation thatachieve high levels of solar protection (including via shading to exposed north and west facing glazing) and minimise reflected heat into public areas.
- Planning that provide high levels of natural light and offer high levels of amenity to occupants.
- Planning and designs that provide optimal natural ventilation and winter sun access that improves upon the minimum guidelines of the Apartment Design Guide.
- Uptake of renewable energy and/or low carbon energy solutions
- Inclusion of best practice energy and water efficient building services.
- Use of materials and finishes that minimise environmental impact, human and eco-toxicity in sourcing and manufacture. For example use of materials with recycled content
- Avoidance of the use of timber products that have no environmental certification, especially imported hardwoods
- Increase canopy and vegetation cover, especially via use of endemic low water demand and drought tolerant species.
- Reduced reliance on mechanical ventilation to car parking by planning for passive air movement
- Promote active transport, provide ample cycle storage and [for commercial parts buildings] end of trip facilities.
- Provide future proofing in the design to allow future connection capacity to battery storage, electric vehicle charging, district thermal and recycled water networks.
- Integration of Water Sensitive Urban Design within building architectural and landscape design and functions.
- Option(s) to achieve a level of 3rd party building certification that demonstrates best practice ecological sustainability.

Targets

Residential components:

- BASIX Energy Score 30
- BASIX Water Score 50

Non-residential components:

- Materially exceed National Construction Code Section J –Energy efficiency (evidenced by return of a completed copy of the City of Parramatta's Section J Compliance Table)

C5.5 Sustainable Transport

To support the reduction of car trips and encourage the use of sustainable transport, all proposals are to consider the inclusion of car share parking spaces consistent with Section 3.6.1 of the Parramatta DCP 2011.

Note that with any future Development Application, written evidence is to be provided with that DA demonstrating that offers of a car space to car share providers have been made together with the outcome of the offers or a letter of commitment to the service.

C5.6 Public Art

All proposals are to incorporate public art, consistent with the requirements of Parramatta Development Control Plan 2011, to the value of no less than 0.05% of the construction budget.

An opportunity exist to express and/or re-use the laminated timber beams of the former Ralph Symonds industrial buildings that remain on site which might inform the treatment the overall design concept.

C5.7 Commercial Objectives

Billbergia envision Block H as its most prestigious waterfront development, and envision it will become the central and urban focal point for Wentworth Point.

The commercial objectives for this Architectural Design Competition are set out below:

- View opportunities both to the immediate water, and to the distant city centres should be maximised in tower configurations.
- Urban design and architecture will be an integrated approach, linking to the existing stages, including the Library and Community Centre and the Marina Square retail development.
- Additional retail should be complementary to the existing commercial facilities being developed on site.
- An activated waterfront and a seamless transition from the main park to the waterfront.
- Modernist, distinct design, with glass technology, winter gardens and environmental considerations are the key focus points for design ideals.
- Communal amenity, rooftop gardens and landscape design integrated into built form.

- Simple, functional unit designs, maximising living and bedroom spaces, whilst minimising internal circulation. ADG compliance for unit layouts sizes should be adhered to.
-

C5.8 Construction Budget

All participants must undertake their Phase 1 design with regard to reasonable construction allowances.

For Phase 2, a development feasibility construction budget may be provided. This will be based upon a construct only building contract (allowing for full trade, preliminaries and profit but excluding design fees).

The proponent will also provide technical assistance to participants, including the services of a Quantity Surveyor.

Participants are advised that each Phase 2 design proposal will then be reviewed by an independent Quantity Surveyor.

C5.9 Construction Methodology

Buildability will be a key factor in the assessment of design proposals for Phase 1 which will be reviewed by the proponent who will provide advice to the Jury as to general acceptability.

For Phase 2, each submission will be reviewed by a Structural Engineer and the Proponent's in-house team of construction experts. This information will be made available to the Jury.

C5.10 Other Relevant Commercial Objectives

The design (including the public domain) is to be highly durable and functionally efficient to operate and maintain so as to keep running and maintenance costs at a minimum.

The building design is to be functionally efficient, and should maximise access to natural lighting and the view potential from each level.

C6. Assessment Criteria

For the purposes of Section D16 Jury Assessment and Decision, the following criteria should also be considered in conjunction with the Design and Planning Objectives.

Spatial Structure Plan

The ability of the spatial structure plan to:

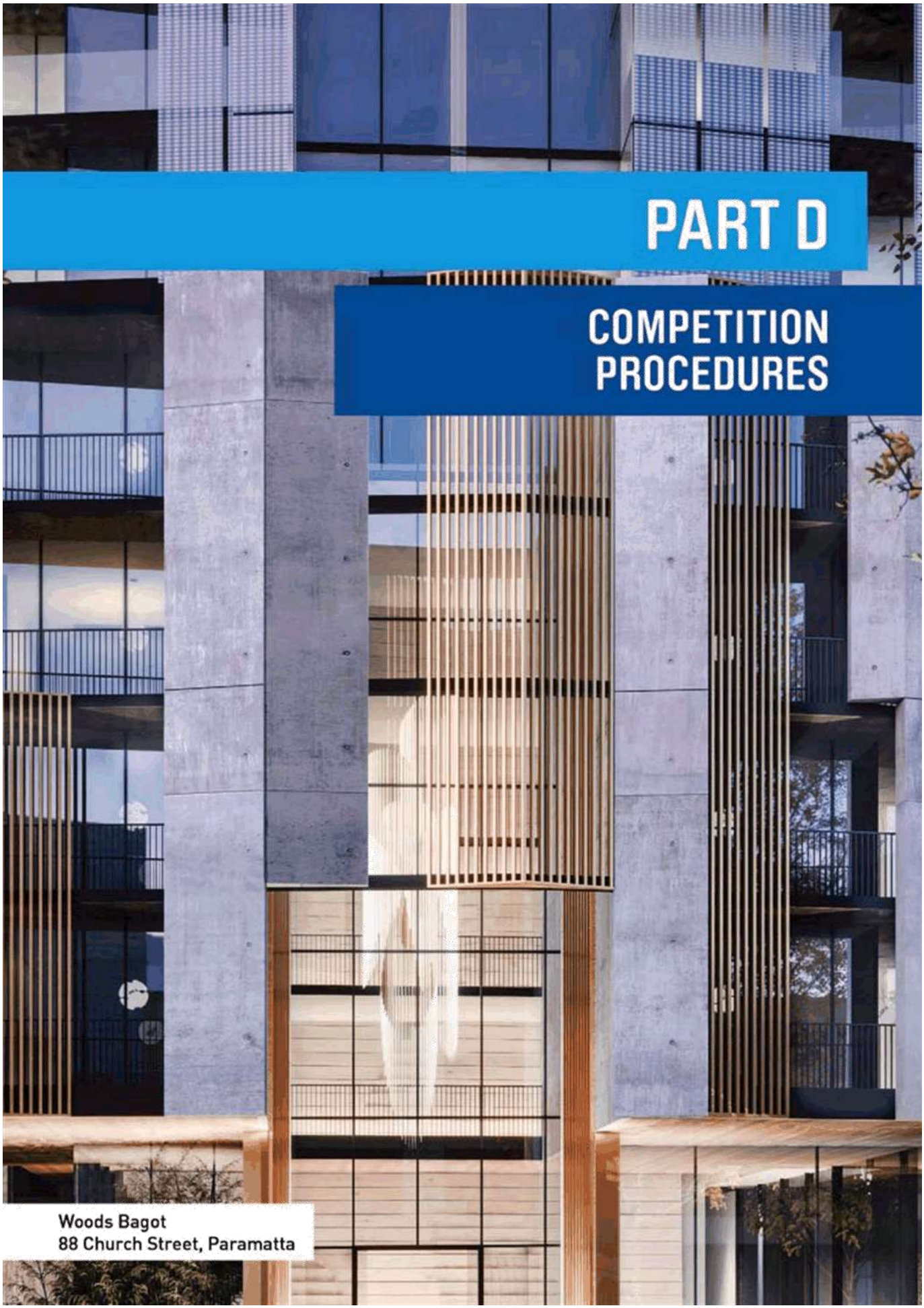
- Integrate the built form typology, massing and public domain to form a legible street network, and contributory open spaces that respond to the land-form and water setting.
- Provide discrete but legible entry and access to buildings and car parking
- Provide a street address for all buildings
- Maximise actual density and minimise apparent density
- Enable a high quality detail design for the public domain
- Provide a park that meets the requirements for users, planting and soil,

Building Envelopes

The ability of the building envelopes to:

- Facilitate a high quality architecture resolution that:
  - addresses the interface with the street and public domain, Homebush Bay and the maritime precinct
  - supports sustainability measures
  - supports a variety of appropriate uses
- Allow ADG requirements to be met
- Provide amenity for occupants internally

- Provide amenity for occupants externally in the private and communal spaces



PART D

COMPETITION PROCEDURES

Woods Bagot
88 Church Street, Paramatta

PART D - Competition Procedures

D1. Proponent

The Proponents of the Design Competition is Mr Saul Moran, Development Manager, on behalf of John Kinsella, Managing Director, Billbergia.

Billbergia Pty Ltd

Suite 101, 25 Angas Street

Meadowbank NSW 2114

02 8878 6900 | m 0411 431 203

D2. Competition Manager

The Competition Manager is the Proponent's Representative and is:

Greg Dowling BAS (Env Pl) M Urb Des (Syd) MPIA

Dowling Urban Pty Ltd

Suite 302 4-14 Buckingham Street | Surry Hills NSW 2010

02 9516 4377 | m 0407 404 898

All specific queries and communication must only be directed to the Competition Manager by email through greg@dowlingurban.com.au. Absolutely no contact shall be made with the Jury. However, the CoPC Competition co-ordinator may, on behalf of the Jury, contact a competitor to request further particulars after the presentations, in order to assist the jury in its deliberations.

D3. Competition Entry

This competition is an invitation-only competition.

Each Competitor must be a person, corporation or firm registered as an architect in accordance with the NSW Architects Act 2003 or, in the case of interstate or overseas Competitors, eligible for registration.

Where a team participating in competition includes overseas firms, that team must be led by an Australian firm. If that team is the successful entrant, then both the Australian firm and internal firm must be commissioned for the duration of the project.

To ensure the highest quality of design integrity throughout the design excellence process, all Competitors must have demonstrated experience in projects of a similar nature, scale and capital investment value. A range of architects are to be invited into competitions and at least one (1) Competitor in each competition must have previously won an industry award or been recognised for a building of similar scale and program.

A list of proposed Competitors from the Proponent must be endorsed by CoPC to ensure that these requirements are satisfied.

D4. Competition Details

The competition will involve six (and a minimum of three) Competitors who each will present their urban design / scheme, including plans and imagery.

Smaller architectural and landscape firms are encouraged to partner with larger firms to create "consortium" teams, particularly for larger sites, masterplan sites and proposals that will comprise multiple buildings. This will be a requirement for the Phase 2 Competition.

Consideration of any relevant concept approval, and planning, structural, cost and environmental concerns as well as the objectives set out in Part C of this Brief will be taken into account in the consideration of each submitted entry.

Each competitor will present their architectural, urban design and landscape scheme.

D5. Architectural Design Competition Brief

D5.1 Objectives of the Brief

This Brief sets out:

- The basis for participation; and

- The responsibilities of the Proponent and the duties of the Jury, the Director General's Design Excellence Guidelines and Council's Design Excellence Competition Guidelines. Note that Addendums may be issued by the Proponent.

D5.2 Amendments to the Brief

Any amendments to this Brief must be endorsed by CoPC and issued to all Competitors with an explanation of the amendments made.

D6. Competition Jury and Requirements

The competition Jury comprises three members. One Juror each will be nominated by the NSW Department of Planning and Environment (delegated to the Office of the Government Architect), CoPC and the Proponent.

Jury members are to be registered architects with substantial knowledge and skill in reviewing large scale city buildings and quality architectural projects.

Competitors or their intermediaries must not communicate with Jury members in relation to this competition. All communication must be through the Competition Manager (refer Part D.2). Competitors or their intermediaries must communicate with Penelope Bowen, not individual jury members.

Jury members will have no pecuniary interests in the development proposal or involvement in the approval processes.

Jury members are not to comprise any staff members or councillors with an approval role in Council's development assessment process.

The competition Jury Chair will be nominated by the Jury members.

The competition Jury members are as follows:

Table 3 Competition Jury members

Organisation	Representative
City of Parramatta Council	City Architect – Kim Crestani
NSW Department of Planning and Environment, delegated to the Office of the Government Architect, or their nominee	NSW Government Architect – Peter Poulet Or his nominee.
Proponent's Nominee	Bob Nation

If one of the above Jurors has to withdraw prior to the completion of the competition process, another Juror of equivalent credentials will be appointed by whoever originally appointed that Juror.

D7. Juror's Obligations

In accepting a position on the Jury, Jurors agree to:

- Have no contact with any of the Competitors in relation to the site and the Architectural Design Competition from their time of appointment until the completion of the process other than during presentations of the proposals, or where it is deemed necessary to request further work and/or additional presentations;
- Evaluate entries promptly in accordance with the timetable;
- Abide by the requirements of the Architectural Design Competition Brief;
- Consider advice provided by the Consent Authority and technical advisors;
- Inspect the site as required;
- Refrain from introducing irrelevant considerations in addition to, or contrary to those described in the Architectural Design Competition Brief, or contrary to the statutory framework;
- Make every effort to arrive at a consensus in the selection of a winner and within four (4) weeks of the competition presentations. This may include caveats on design amendments to be made before design excellence is declared by the Jury;

- If a consensus cannot be met, the decision is to be made by majority vote;
- Submit a report explaining their decisions no more than four (4) weeks after the competition presentations. This report may be prepared by another party, such as the Proponent's Representative. In such a case, the report must be signed by each Juror validating the findings of the report and endorsed by CoPC;
- For the Phase 2 competition only, provide written certification that the design for any subsequent DA lodged for the development is substantially the same as that Phase 2 winning design and exhibits design excellence at the following hold points;
    - During the pre-lodgement stage
    - During the Development Application stage
    - Prior to issue of the Construction Certificate
    - Prior to issue of the Occupation Certificate
    - Prior to lodgement of any Section 96 which modifies the design
- Sign a statement confirming they have read and understood the Juror's obligations and agree to respect those obligations for the duration of the Architectural Design Competition (refer Appendix 1).

D8. Proponent's Obligations

D8.1 General Obligations

The Proponent agrees to have no contact with the Jury members or Consent Authority members outside of the process described in this Brief in relation to the site and the Architectural Design Competition from the time of Brief endorsement until the completion of the final Jury Report.

D8.2 Competition Fee

The Proponent shall pay a competition fee to each of the six (minimum three) Competitors described at section 5.4 above.

The fee for each competition participant will be $30,000 ex GST and excludes the proposed fee of $50,000 for Phase 2 available to selected participants.

The Proponent shall ensure that all Competitors are paid before the schemes are submitted.

In addition to the above fee, the Proponent will pay any fees, before the schemes are submitted, of any nominated technical advisors listed in Part D.9.

D8.3 Payment of Jury Members

The Jury Members nominated by the Proponent and CoPC shall be reimbursed by the Proponent. The Proponent, or Proponent's Representative will contact these members directly, agree an appropriate remuneration rate and engaged on a time basis.

The Office of the Government Architect will be responsible for reimbursing its nominated Jury member.

D8.4 Payment of Technical Advisors for the Jury and Competition Participants

As noted below, technical advisers may be appointed to provide assistance to either or both the Jury and Competitors. The Proponent, or Proponent's Representative will contact these advisors/consultants directly, agree an appropriate remuneration rate and engage on a time basis.

D8.5 Administration Costs

The Proponent is required to pay all out of pocket design competition fees to CoPC.

The Proponent is also required to pay a fee of $5,000 (excl GST) per submission to CoPC for administrative costs associated with running the competition for concept schemes. For example, a competition with three (3) submissions will require the Proponent to pay CoPC $15,000 (excl GST). Proposals that include multiple buildings for larger sites may attract a higher administration fee. The Proponent is to make his/her own enquiries with Council as to the exact fee payable to CoPC.

CoPC will invoice the Proponent for this fee at the time of endorsement of the brief.

D9. Technical Assistance for the Jury

Technical advisers will be appointed to provide technical assistance / advice to the Jury as may be requested by it. The provision of such assistance will in no way reduce the responsibility of the Jury to the Proponent.

The technical advisers will be bound to secrecy and shall not be empowered to exclude any submission, and shall be limited to providing advice to the Jury.

The following Technical Advisors may be called upon by the Jury for further consultation:

Table 4 Technical Advisors

Discipline	Technical Advisors
Town Planning	Greg Dowling, Dowling Urban, greg@dowlingurban.com.au p 9516 4377, m 0407 404 898,
Quantity Surveying	Stephen Mee Director, Rider Levett Bucknall, Stephen.Mee@au.rlb.com p 9922 2277 m 0 418 295 643
Structural Engineering	Damien Kenny, WSP Group, Damien.Kenny@wspgroup.com (coordinator) p (02) 8907 0926 m 0407 626 960
Mechanical and Electrical Engineering	As above
Hydraulic and Fire Services	As above
Wind Engineering	As above
Facade Engineering	As above
Lift Engineering	As above
Flood Engineering	As above
Urban Design	To be confirmed by CoPC
Landscape Architecture	To be confirmed by CoPC

D10. Technical Assistance for Competition Participants

The Proponent will also make available the consultants noted in Part D.9 above to each Competitor and will pay for these consultancy services directly, to a maximum of 3 hours of advice, per discipline, per Competitor.

All requests for technical advice shall be made to the Competition Manager.

D11. Communications, Questions and Competitor Briefings

Competitors should submit any questions in writing to the Competition Manager in accordance with the Competition procedures. Answers will not be given orally.

Questions may be sent to the Competition Manager up to the competition close date.

Answers to these questions will be compiled and sent to all Competitors without revealing the source of the questions.

Competitors will be provided an initial briefing by the Proponent prior to the start of the competition.

Competitors must not contact each other, or the media.

D12. Closing Date for Proposals

The competition shall commence upon the issuance of the Architectural Design Competition Brief to Competitors.

Proposals for this Architectural Design Competition must be lodged with the Competition Manager not later than as set out in the competition summary The Competition Manager must issue the proposals to COPC no less than two (2) weeks before the presentations.

It is the sole responsibility of the Competitor to ensure actual delivery to the Proponent by the deadline.

D13. Lodgement of Proposals

Competitors shall lodge their proposals in a sealed package labelled "Block H Wentworth Point, Architectural Design Competition", to the Competition Manager, at a location to be advised.

Additional materials received which exceed the submission requirements (as set out in Part E of this Brief) will not be considered by the Jury.

D14. Disqualification

At the discretion of the Jury, proposals that breach competition procedures may be disqualified, in particular where:

- The submission is received after the lodgement time and date identified in the Brief; or
- The submission is not submitted in accordance with the submission requirements, as stated in this Brief; or
- A Competitor is found to be ineligible; or
- A Competitor may reasonably be expected to have an unfair advantage through access to privileged information; or
- In an Architectural Design Competition, a Competitor attempts to influence the decision of the Jury. The Competition Manager may confer with the Jury relating to disqualification, but this decision shall be final and no correspondence shall be entered into.

In an Architectural Design Competition, the Jury will determine any disqualifications.

D15. Jury Assessment and Decision

D15.1 Details of the Jury Meeting

The Competitors must present their entry to the Jury in person. The presentation must be no longer than 30 minutes followed by questions from the Jury for a period of 15 minutes. The presentation may include basic plans, renders and photomontages.

In scheduling the time of the presentations, the Competition Manager is to ensure that there is to be a minimum 15-minute break in between presentations.

The Design Competition Presentation will be held at Council's Rydalmere Operations Centre at 316 Victoria Rd, Rydalmere NSW (+61 2 9806 5000 at a date to be advise at the commencement of the competition.

The Competition Manager is to contact CoPC's Competition Co-ordinator to co-ordinate a presentation date and time (contact details can be found in the "Competition Summary" at the commencement of this Brief).

The date of the Competition presentation will be within 14 days after the competition closes.

CoPC will have a town planner representative in attendance at all Competition presentations.

The Competition Manager is to ensure that an attendance sheet is to be filled out by all attendees at the presentation.

D15.2 Jury Assessment and Decision

Six but a minimum of three, competitive proposals are to be considered in the Architectural Design Competition.

A copy of the proposals will be distributed to the Jury members at least two (2) weeks prior to the convened Jury meeting, a site inspection will be carried out for them, and the Competition Manager will provide a summary of planning compliance.

Observers of the Proponent and CoPC will be permitted to attend the presentations and/or mid-point review. As noted above, the Jury is not to attend the mid-point review.

The Proponent or their representative may choose to make a submission to the Jury; however, any such proposals will not fetter the discretion of Jury members or diminish their responsibilities as described in Part D.7.

Each Competitor's submission may be graded by the Jury in accordance with the Jury Evaluation Criteria/scoring sheet in Appendix 3.

The Jury is expected to reach a decision within 14 days and will submit a Jury report (referred to as the Architectural Design Competition Report) to the Proponent.

The Jury's decision will be via a majority vote. Unanimous agreement is not required but consensus is encouraged.

The Jury's decision will not fetter the discretion of the Consent Authority in the determination of any subsequent DCP amendment and future development application.

The Jury may:

- Nominate a winning scheme on the basis that 'design excellence' has been achieved - with or without the requirement for further design development and hold points;
- Recommend that none of the schemes achieve design excellence but with further work, recommended by the Jury, there is the potential for a scheme to achieve design excellence; or
- Recommend that none of the entries exhibit design excellence and thus end the competition.
- Request further information from two or more competitors to assist them in their deliberations

D15.3 Announcement

There is no guarantee that the winner will be announced on the day of the presentations.

The winner of the Architectural Design Competition will be announced as soon as possible, but within 4 weeks of the presentations.

The Proponent will advise all Competitors of the decision verbally, and then in writing.

The Architectural Design Competition results will be made public within 21 days of the Jury's decision.

D15.4 Request for Review

In the event that;

- the Jury does not reach a decision;
- the Proponent is not satisfied with the nomination;
- the Proponent wishes to make a substantive modification;
- CoPC considers the project submitted for approval (or as subsequently modified) to be substantially different, or
- CoPC indicates it will not grant consent to the design nominated, either the proponent or CoPC may request that the Jury reconvene and make a recommendation as to what further competitive processes or requirements would be necessary to permit an alternative or revised design to satisfy Council's the design excellence requirements.

The Jury shall make such recommendation as it sees fit within 28 days of such a request.

The cost of such review shall be borne by the Proponent.

D16. Invitation to Preferred Architects from Phase 1

Three preferred entrants to the Phase 1 competition will be invited to participate in the Phase 2 competition. These entrants may be requested by the Proponent, Jury and/or Council to assist in the formulation of the planning and design parameters of the proposed amendment to the HBW DCP (if proceeded with) which will in turn inform the more detailed brief for the Phase 2 Architectural Design Competition.

D17. Appointment of the Architect of the Phase 2 Winning Scheme

The appointment of the winning entrant to the subsequent Phase 2 competition is likely to be on the basis of the Proponent's standard contract for engagement of consultants.

The Proponent shall appoint the architect/or team of the Phase 2 winning proposal as selected by the Jury after that stage. Full design and documentation of the winning proposal should then occur. It is assumed that all competitor's fees for the entire architectural commission as set out above will have been pre-agreed by the Proponent.

The architectural commission is to include:

- Preparation of a DA;
- Preparation of the drawings for the Construction Certificate;
- Preparation of the drawings for the contract documentation; and
- Continuity during the construction phases through to the Occupation Certificate.

The Proponent is required to proceed with the winning proposal nominated by the Jury and is not to limit the architectural commission outlined above. If in exceptional circumstances the winning Competitor/Architect cannot proceed with the commission, the Proponent will generally be required to restart the Architectural Design Competition unless CoPC agrees to a replacement Competitor/Architect. In such circumstances, which are entirely within the discretion of CoPC, CoPC in association with the Office of the Government Architect will reconvene the competition Jury to obtain sign-off on any amended design by the replacement Competitor/Architect.

D18. Phase 2 Post-Competition Review

- The Jury, or their nominee, is to monitor design excellence and integrity at key project milestones including the following:
- During the pre-lodgement stage
- During the Development Application stage
- Prior to issue of the Construction Certificate
- Prior to issue of the Occupation Certificate
- Prior to lodgement of any Section 96 which modifies the design

The main role of the Jury during this post-competition phase will be to provide certification that the design at different stages through the subsequent approval and construction process is substantially the same and retains the design excellence exhibited in the winning submission.

In the event that the Jury is not able to be reconvened during the post-competition review phase, a Panel is to be established to monitor design excellence at the milestones identified above. The Panel is to be provided with a copy of the signed Jury Report and is to comprise three (3) members including one (1) CoPC representative, one OGA representative or their nominee and one (1) representative of the Proponent. The Panel is to be endorsed by CoPC prior to commencing the post-competition review.

If the Panel is not established, this certification must be provided by the Jury.

D19. Care of Material and Insurance

It is each Competitor's responsibility to wrap, ship, mail or deliver by other means, their submission, ensuring timely and intact arrival. The Proponent disclaims any responsibility for any loss or damage during transit.

No liability shall be attached to the Proponent regarding the proposals, whilst in the possession of the Proponent. All reasonable care shall be taken to maintain the proposals in good condition, but a limited amount of 'wear and tear' is inevitable. Competitors are advised to make copies of their proposals, so as to retain a copy of their work.

Responsibility for insuring proposals rests solely with Competitors.

Competitors must sign the Declaration Form to respect conditions and procedures governing this competition.

The Declaration Form is the invitation letter sent to each architect. Once completed, it should be placed in a plain envelope and forwarded with the Competitor's submission.

Proponent may retain all material submitted by the Competitors and use it at its discretion after payment of the competition fee.

D20. Return of Documents

The Proponent retains the right to hold all proposals for a period of up to six (6) months from the closing date of the Architectural Design Competition. The Proponent shall retain the winning submission(s). Other proposals shall be returned to the owner(s).

Competitors shall be notified of the date on which proposals will become available for collection.

D21. Copyright

Copyright for each submission shall remain in the ownership of the original authors.

The Proponent and the Consent Authority shall have the right to display, photograph or otherwise duplicate or record all proposals for publication, publicity or other such purposes. Any such reproductions shall acknowledge the copyright owner and further use of such designs shall be negotiated between the parties to the agreement on such terms.

Execution of the Declaration Form shall be deemed as legal permission for the Proponent to publish the Competitors' designs. The Proponent will seek to involve Competitors in any such media releases. Generally, no compensation shall be made for such reproduction or publication.

D22. Confidentiality

The Proponent, observer(s) and competition Jurors shall observe complete confidentiality in relation to all proposals received, prior to a decision in relation to the competition that is made public.

D23. Post Competition Processes

D23.1 Confirmation of Design Excellence

The Proponent is to ensure that once all competitors are notified that the jury is also simultaneously notified.

Where practical and feasible, the following processes shall be completed within four weeks of the presentations:

- The Jury will complete the scoring sheet with comments, scores and any caveats.
- A Jury report (see Jury Report Template) is completed by the proponent or their representative.
- The Jury report is reviewed by the Jury and signed by all members of the Jury
- The Jury report is sent to City of Parramatta Council for review
- Upon finalisation of the Jury report, the Office of the Government Architect will acknowledge design excellence by sending a letter to City of Parramatta Council.
- No media releases shall be issued by the proponent until it has received the final Jury report.

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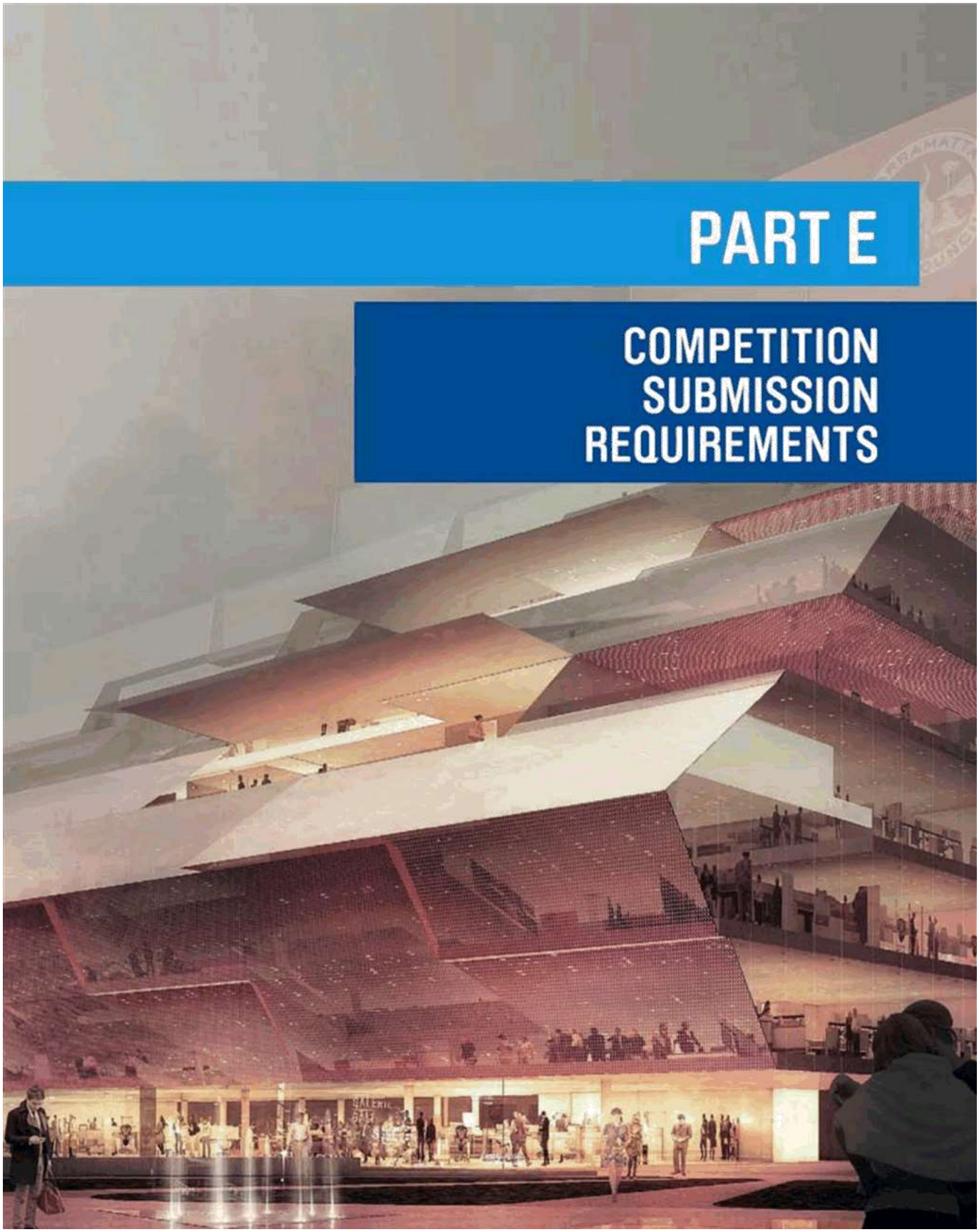

PART E

COMPETITION SUBMISSION REQUIREMENTS

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PART E - Competition Submission Requirements

Note: The below requirements are to be noted as "minimum" submission requirements. These may be embellished and/or extended depending on the site, the development and the Proponent's requirements.

E1. General Requirements

The proposal submission must be clear and concise, with comprehensive design information to complement and explain the graphic presentation.

A proposal a must not nominate works of any kind which are beyond the boundaries of the site.

Proposals are to comply with the following requirements. Competitors are advised to carefully study these requirements and strictly adhere to them. Failure to meet these requirements may, at the discretion of the Competition Manager, result in the disqualification of the submission.

All Competitors shall submit at least one (1) conforming design which is in accordance with the requirements of this brief.

If a Competitor considers that a scheme that is not generally in accordance with the brief's scope of proposal and/or relevant development control plan (HBW DCP) better meets the urban design, planning, architectural design and development objectives for the site, then the Competitor may still submit this scheme in addition to a conforming scheme. All schemes will be fully considered by the Jury providing they are accompanied by all reasonable information justifying any relevant non-compliance.

Eight (8) copies of all submission documents shall be provided, except where otherwise noted as below.

E2. Drawings and Graphics

The Competitor's Entries shall be limited to 8 x A3 sheets (landscape format) with suitable scale bars and include:

- Site and location plan (the Proponent will provide a survey plan in dwg file format).
- Site Analysis Plan / Local Context Sketch Plan
- A series of sketches that explain the design evolution process or design rationale as the case may be.
- Sketch Spatial Structure Plan, building envelopes and 3-D massing study as set out in Section C3.
- A comparison of schemes based on the two benchmark floor areas
- Plans, elevations and sections sufficient to explain the masterplan including setbacks
- Sketch to indicate nature and functions of public open space
- Composite ground floor plan demonstrating interface with street frontages including the relationship to the public domain
- Landscape / public domain plan approach demonstrating concepts and treatments for the public domain consisting of streets and the main and linear foreshore parks as well the treatment to the setback areas, communal open space and publicly accessible areas.

The 8xA3 sheets are to be printed on 2 x A0 landscape sheets for the jury presentations reading left to right, top to bottom. This must occur after submission closure after confirmation by the Competition Manager and prior to the presentations.

Each Competitor's submission shall include envelope schedules broken down to individual buildings as appropriate and uses in general for Floor Space (FS) using the definition from the Homebush Bay West DCP as set out in C5.1 an include estimates of resultant apartments.

Each Competitor's submission shall also be accompanied with:

- typical tower floor plate plans @ 1:200.
- 3-D computer model. Attached to this Brief is Council's format requirements for the model. Models are required at a scale of 1:1000.
- Spring/Autumn and Mid-winter shadow analysis between the hours of 9am, 12pm and 3pm. The shadow analysis should include sun-eye view perspectives.

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Architects must not provide more information than requested above.

E2.1 Technical Requirements for Documentation

Material for submission to the Proponent shall be provided within A3 bound copies (8 copies) and CD or USB (6 copies) containing ALL submission documentation.

Presentation material must be of a quality suitable for public exhibition.

Names of Competitors are to be clearly visible on entries.

Each plan, elevation and section is to show the relevant adjacent context.

E3. Statement of Design Intent

Each entry must include a concise design statement (maximum of 10 pages) signed by a Director/Principal of each firm comprising the Competitor and which includes comprehensive justification for the design in respect of its urban context and explaining how best practice urban design principles are achieved, how the design and planning parameters and objectives have been met and how the entry achieves design excellence. The Statement should include details as appropriate regarding:

- how the proposal responds to this Brief;
- the design approach taken for each building, tower and the public domain, and key elements in the master planning for the site;
- discuss the mix of uses and their integration;
- commentary on how the design is an economically feasible option and an analysis of the scheme's buildability and cost effectiveness;
- how the proposal satisfies the planning controls;
- demonstrate how the ESD objectives can be incorporated;
- a response to the nine design quality principles in SEPP 65, and
- the manner in which design excellence is achieved.

E4. Quantity Surveyor's Cost Advice

The entries may be costed by the Proponent's chosen quantity surveyor to ensure no abnormal cost would occur from the design concept.

E5. Physical and Digital Model Requirements

A 3-D computer model is required to be submitted. The model is to be prepared in accordance with Council's requirements which are set out in Appendix 4.

Please note that Competitors must provide a 1:2000 insert to a prepared physical model to the specifications in the following diagram.

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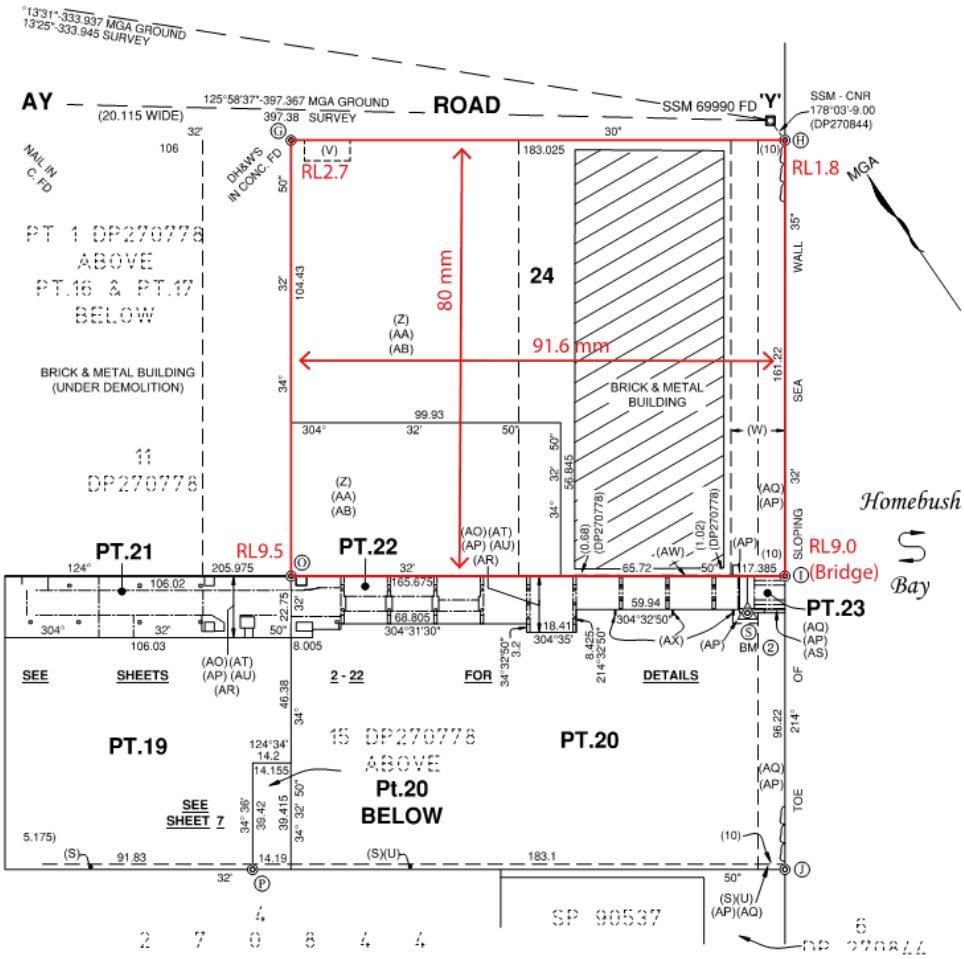

E6. Anonymity

Names of Competitors are to be clearly visible on entries.

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PART F - Reference and Technical Documents

Homebush Bay West Development Control Plan with Amendment No.1 (attached)

Department of Planning Director General's Design Excellence Guidelines

http://www.planning.nsw.gov.au/~/media/Files/DPE/Guidelines/director-generals-design-excellence-guidelines-2011.ashx

City of Parramatta Council Design Excellence Competition Guidelines

http://www.parracity.nsw.gov.au/__data/assets/pdf_file/0007/75274/ParramattaCouncilDesignExcellenceCompetitionGuidelines.pdf

City of Parramatta Council Public Domain Guidelines

http://www.parracity.nsw.gov.au/__data/assets/pdf_file/0006/92562/Public_Domain_Guidelines.pdf

City of Parramatta Council City Centre Laneways Policy

http://www.parracity.nsw.gov.au/__data/assets/pdf_file/0009/86166/COPC_Lanes_Policy.pdf

Proponents Technical Package (attached)

1. Context plans as well as site conditions and characteristics including:
   a) 3D site model DWG
   b) Site Survey Plan
   c) Strata Easement (showing 20 m public easement for Seawall)
   d) Flooding Advice
   e) Geotech Report
   f) Sewall Detail
2. Billbergia Standard Consultant Contract
3. Billbergia Standard Consultant Scope of Works and Services
4. Billbergia Standard Residential Principals Project Requirements
5. Billbergia Past Projects

PARRAMATTA WE'RE BUILDING AUSTRALIA'S NEXT GREAT CITY

Appendix 1: Template Letter for the Appointment of the Juror

[Date] Our Ref: [insert] File No: [insert] PID No: [insert]

[Name and address of invited juror]

Architectural Design Competition for Block H, Precinct B, Wentworth Point

Dear Sir/Madam,

City of Parramatta Council in conjunction with Billbergia (the Developer and Proponent of this project) would like to cordially invite you to sit on the Jury for an Architectural Design Competition of the above mentioned site.

A Juror's obligations throughout the competition process are as follows. In accepting a position on the Jury, Jurors agree to:

- Have no contact with any of the Competitors in relation to the site and the Architectural Design Competition from their time of appointment until the completion of the process other than during presentations of the submissions;
- Evaluate entries promptly in accordance with the timetable;
- Abide by the requirements of the Architectural Design Competition Brief (attached);
- Consider advice provided by the Consent Authority and technical advisors;
- Refrain from introducing irrelevant considerations in addition to, or contrary to those described in the Architectural Design Competition Brief, or contrary to the statutory framework;
- Make every effort to arrive at a consensus in the selection of a winner and within tow (2) weeks of the competition presentations. This may include caveats on design amendments to be made before design excellence is declared by the Jury;
- Submit a signed report explaining their decisions no more than four (4) weeks after the competition presentations. This report may be prepared by another party, such as the Proponent's Representative. In such a case, the report must be signed by each Juror validating the findings of the report and endorsed by CoPC;
- Sign a statement confirming they have read and understood the Juror's obligations and agree to respect those obligations for the duration of the Architectural Design Competition; and

If you would like to be appointed to the Jury please fill out the following pro-forma and return to (name and address of contact to be advised). If you have any questions regarding the process, contact (name and contact details of Council contact) to discuss.

Yours Sincerely,

[insert signature]

…….....

I, …… have read and understood the Juror's obligations (listed above) and agree to respect those obligations for the duration of the Architectural Design Competition.

Signed:…… Date:……

Appendix 2: Template Invitation Letter to Architect

[insert date]

[Date] Our Ref: [insert] File No: [insert] PID No: [insert]

[Name and address of invited Architect]

Architectural Design Competition for **Block H, Precinct B, Wentworth Point**

Dear Sir/Madam,

Bilbergia is pleased to advise that your practice has been selected to take part in the Phase 1 Architectural Design Competition for Block H, Precinct B, Wentworth Point.

The Architectural Design Competition is scheduled to commence on [insert date] and concluded at [insert date]. Dates and times for the formal presentation of your design submission will be confirmed at a later date by the Competition Manager.

The Architectural Design Competition Brief, endorsed by CoPC on [insert date], is attached to this letter.

We would ask that you review this Brief and confirm your acceptance of the terms and conditions contained therein and confirm your practice's participation in the competition, by way of signing and returning the base of this letter to the undersigned.

Billbergia appreciates the interest shown by your practice in this competition and we look forward to receiving your acceptance to participate.

Yours Sincerely,

[insert signature]

Greg Dowling

.....

Declaration Form

I/We hereby confirm that we have read the Architectural Design Competition Brief dated [insert date], and agree to be bound by the terms and conditions contained therein. Further, by signing below, we confirm our practices participation in the Architectural Design Competition for Block H, Precinct B, Wentworth Point.

Name of Practice: _____

Signature of authorised representative: _____

Name of authorised representative: _____

Date: _____

Note: If Competitors are to comprise consortium teams, the above declaration form is to be signed by both architectural practices

Appendix 3: Jury Evaluation Criteria

Evaluation Criteria	Weighting	Competitor 1	Competitor 2	Competitor 3
1) Compliance with the Design Brief - Urban Design & Public Domain - Architectural design - Planning and Design Potential (SEPP 65) Compliance, Land Use Mix & Parking Efficiency	50%			
2) Compliance with the Commercial Brief - Development budget - Marketability - FSA/FSR &Floor plate area	30%			
3) Buildability - Construction Methodology & Structural Design - Services & ESD	20%			
Total	100%			

Appendix 4: City of Parramatta Council Digital 3D Model Requirements

Design Competition 3D Model Acquisition

Model Format

The format of the model to be supplied to City of Parramatta Council should be a basic (.3DS). The size of the file should not exceed 5MB. A SketchUp File must be provided as well to check for consistency of data and detect possible corruption of the 3ds file.

1. Trimble Sketch Up **(.skp)**
2. General 3D format **(.3ds)**

Model Coordinates

The model must be orientated to north and centred to (0,0,0) coordinates.

- X – Axis: 0
- Y – Axis: 0
- Z – Axis: 0
- Model orientated to North Facing

Model Unit of Measure

Modelling units must be set in Meters (m), within 2 decimal places 00.00m

- Meters **(m)**

Model Details

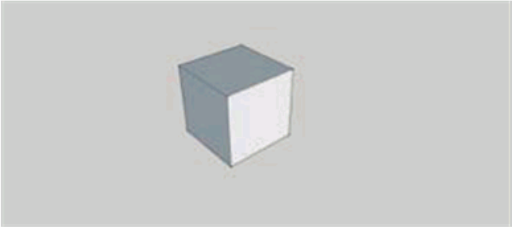
Elements that are to be shown in the model should be, massing / shrink wrap of the building, with floor plates and all faces in the model normalised.

- Defining Features of Building
- Cadastre Outline
- Floor Plates
- No Window Mullins
- No Sun Shading Devices
- Ground Plane Extends to Site Boundary
- All faces in the model to be **Normalised**

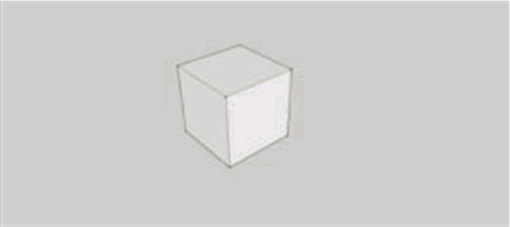
Elements in the model that should be **EXCLUDED:**

- All internal elements or modelling
- Duplicated line work
- Gaps or missing elements

- Camera positions deleted



(Faces in Blue = Not Normalised)



(Faces in White = **Normalised**)

Model Textures

Textures in the model must be sizes of powers of two, the format of the textures is to be (.jpg) (.png) (.tiff) and (.tga). All textures used in the model must be provided with the exception of colours.

- 512 x 512 pixels (preferred texture size)
- 1024 x 1024 pixels
- 2048 x 2048 pixels
- 4096 x 4096 pixels

Design Competition 3D Model Acquisition Checklist

- SketchUp File (.skp)
- General .3ds File (.3ds)
- Model North facing
- Model centred to 0,0,0
- Model Unit (Meters) & 2 Decimal Places 00.00m
- Model with Defining Features of the Building Shown
- Cadastre Outline
- No Window Mullions
- No Sun Shading Devices
- Floor Plates
- Faces in model all normalised
- Model texture supplied (if applicable)

Transport
Roads & Maritime
Services

Ms Sue Coleman
Acting General Manager
City of Parramatta Council
PO Box 32
PARRAMATTA NSW 2124

Attention: Roy Laria

RE: Block H, Precinct B - 3 Burroway Road, Wentworth Point – DCP amendment

I refer to the above named DCP amendment for Block H, Precinct B - 3 Burroway Road, Wentworth Point. This correspondence may be considered as jointly representing the views of Transport for NSW (TfNSW) and Roads and Maritime Services on this proposal. TfNSW and Roads and Maritime have reviewed this proposal and its supporting documentation including the Traffic and Transport Study by Arup.

TfNSW and Roads and Maritime are supporting Greater Sydney Commission to develop a Growth Infrastructure Compact for the Greater Parramatta and Olympic Peninsula, which will match housing and jobs growth with timely and cost-effective delivery of infrastructure. TfNSW is preparing a transport plan which will help to inform where growth is feasible in the corridor. The Growth Infrastructure Compact is expected to provide guidance as to where future development could be staged in the corridor.

The traffic demands resulting from Wentworth Point, Carter Street and Sydney Olympic Park Master Plan Review are in excess of the road network capacity.[1]

TfNSW and Roads and Maritime are of the view that the proponent has not undertaken an appropriate traffic and transport impact assessment that adequately demonstrates the cumulative traffic impacts to the surrounding road network or demonstrated sufficient measures to offset the potential traffic and transport impacts resulting from the proposed increase in density of approximately 56,000m^2 of residential floor space.

The Proponent's transport study indicates that the justification for the increase in residential density at this site is the increased accessibility from the proposed shuttle bus. Whilst the provision of the shuttle bus would supplement existing State Transit services, insufficient evidence has been provided that the addition of a shuttle bus service would result in sufficient mode shift from private vehicle towards public transport. More detailed comments on the proponent's transport study are provided in **Attachment A** for consideration.

TfNSW continues to monitor patronage on routes servicing Wentworth Point. From November 2017, additional services were added to the 533 route which links Wentworth Point to Rhodes and Chatswood.

In the absence of other measures to achieve mode shift to public transport and an insufficient assessment of the cumulative traffic impacts of the proposal on the local and state road network adjacent to in the

[1] The Traffic and Transport Study accompanying the Sydney Olympic Park Master Plan Review indicates that these precincts will generate a minimum of 20,000 vehicles per hour in the peak (refer pgs. 100-103) while the road network capacity remains at 5,250 vehicles per hour in the peak (refer pg. 107) – if further upgrades are completed

20-44 Ennis Road, Milsons Point, NSW 2061 | www.rms.nsw.gov.au | ABN: 76 236 371 088

Olympic Peninsula, TfNSW and Roads and Maritime do not support the proposed increase in development density.

For more information, please contact Mr Greg Flynn, Senior Manager Strategic Land Use, on (02) 8849-2318.

Yours sincerely

Lara Kirchner
Director South East Precinct

Attachment A - Detailed Preliminary Comments on the Traffic and Transport Study

The following comments are provided in relation to the Proponent's Traffic and Transport Study, dated September 2017 (prepared by Arup):

1. The Traffic and Transport Study (the Study) accompanying the planning proposal does not adequately assess the impacts of the development uplift associated with the planning proposal. The Study provides an overview of existing conditions and estimated future mode share, but there is limited detail in the assessment of the impact of additional travel demand on the surrounding local and regional transport networks. For the scale of development uplift proposed, a comprehensive traffic and transport study would be required and should include:
    - Assessment of the traffic and transport impacts of the maximum development uplift proposed on the surrounding transport networks (with consideration to all modes of transport, given potential for additional 1,000+ person trips per peak hour).
    - Consideration of the cumulative impacts of other known planning proposals within Wentworth Point, Rhodes and other adjoining Precincts. Roads and Maritime is aware of a number of preliminary proposals for additional uplift in this area and it is expected that this trend will continue.
    - Identification of a full suite of traffic and transport infrastructure improvements and travel demand management measures to mitigate the additional/cumulative traffic impacts of the proposed uplift.
    - Identification of a funding mechanism/planning agreement to ensure the delivery of range of traffic and transport improvements.
2. Given the considerable development uplift proposed in Rhodes, an assessment of the capacity of rail services to accommodate the cumulative additional transport demands should be considered.
3. Roads and Maritime requires clarification on the traffic generation assumptions included in the Study provided. The following comments are provided in this regard:
    - Roads and Maritime trip generation survey data for a high density residential development at Liberty Grove (within 800m from Rhodes Station), as well as recent data from a site at Wentworth Point, indicates that vehicle trip generation per unit is considerably higher for comparable sites in this locality than that suggested in the Study provided. The data confirms a higher rate (ie 0.3 vtph per unit) would be more appropriate to give a conservative estimate of potential trip generation for the subject planning proposal.
    - While the number of constructed dwellings was provided in the Study to support the traffic generation assumptions, it is unclear if the occupancy rate of the newly constructed dwellings at the time of survey was 100% (or close to).
    - Roads and Maritime suggests that trip generation should be assumed to be at the higher end of the surveyed range for this locality to ensure an estimate of worst case traffic generation from development uplift.
4. It is noted that one transport infrastructure/service improvement has been proposed (shuttle bus), and no other travel demand management measures or transport infrastructure improvements are proposed to be delivered.
5. Inadequate justification has been provided as to what the estimated mode shift would be as a result of the shuttle bus, or how this fully addresses the traffic impacts of private vehicle trips generated by the proposed development uplift. Any mode shift assumptions for the shuttle bus should be fully justified. The Traffic and Transport Study indicates potential for the shuttle bus to reduce the number of cars leaving Wentworth Point in the busiest morning peak hour by some 115 to 240 cars. Justification should be provided for how this was calculated.

6. At this stage, it remains unclear what impact it would have on private vehicle trips generated. It is anticipated the proposed shuttle service may supplement trips to and from Rhodes station as well as localised trips to shops and services in the Rhodes centre which might otherwise be undertaken by walking and cycling.

7. An assessment of total car parking provision and car parking rates to be adopted and measures to limit car parking spaces given existing and potential public transport services have not been addressed.

8. It is noted that intersection modelling was limited to the Silverwater Road / Holker Street intersection with a potential improvement briefly outlined in the Study, however, no detail is provided in relation to any proposed commitment to delivering a potential improvement There has been no analysis of the potential impacts of the proposal to other intersections and therefore, no local and regional road improvements proposed in this regard. More information / justification is sought as to the reason for this approach.

9. The Study provided is considered inadequate to justify changes to existing planning controls to allow additional development uplift at the subject site.

Executive Summary

The Billbergia Baylink Shuttle (BAYLINK) has commenced operational trials on 29 January 2018, an all-day community service to residents around the Wentworth Point and Rhodes precinct. The objective of this study is to assess the effects the Baylink shuttle buses will have on the travel choices and patterns of the residents within the Wentworth Point precinct. This study supplements the "Wentworth Point - Traffic and Transport Study" report produced by Arup on 5 September 2017.

The BAYLINK services have been operating from Monday to Friday at the following times, which will continue during the 3-month trial:

- 6:30am to 9:15am – bus every 10 minutes
- 9:30am to 2:15pm – bus every 20 minutes
- 2:40pm to 6:45pm – bus every 10 minutes

In the first three weeks of operation the number of passengers using the service has grown from 8,929 to 12,018 - 35% increase.

Previous surveys (before operation of BAYLINK) found that STA buses were generally at capacity with some buses not accepting boarding passengers at the Bennelong Bridge, as a result of being at capacity.

During the AM peak, The BAYLINK was recorded carrying 242 people, while the STA services carried 317 people. The BAYLINK trial is carrying a similar load to the two STA bus services. This was an overall increase in 112 people (+25%) taking the bus since the May 2017 surveys.

A positive reception to the adoption of the BAYLINK and public transport has been seen from the increased number of people using the buses, and with both the BAYLINK and STA buses being close to capacity.

However, the BAYLINK has taken off a significant strain from the surrounding road network by transporting 242 passengers during the AM peak hour, who might have otherwise used private vehicles.

The BAYLINK is being fully utilised even in the early trial stages with many residents still unaware of the service. Data shows that public transport is still in high demand within the WWP precinct.

The community survey questionaries (>1,000) have indicated strong support for the BAYLINK service, with many respondents requesting an increased peak service.

These results clearly indicate a willingness by a large number of current drivers to consider a shift in mode to bus for one or more of their trips each week. This highlights the success of providing enhanced public transport in the precinct as a means of reducing car dependency.

Arup provides the following observations on the Roads and Maritime Services letter (15 Feb 2018) which provides commentary on the Traffic and Transport Study prepared by Arup for the Block H, Precinct B DCP amendment

1.	*The Traffic and Transport Study (the Study) accompanying the planning proposal does not adequately assess the impacts of the development uplift associated with the planning proposal.*
	The Study focused on the change in travel demand resulting from the proposed shuttle bus and how this permits uplift on Block H. For the proposed uplift of some 650 apartments in Block H, 250 person trips would be generated in the peak hour. This level of increase in travel can be accommodated by the increased accessibility being offered by the BAYLINK trial and STA bus services. The full Baylink offer is four buses, not two – more than doubling the capacity being trialled.
2.	*Given the considerable development uplift proposed in Rhodes, an assessment of the capacity of rail services to accommodate the cumulative additional transport demands should be considered.*
	In 2019 Sydney Metro – Northwest project will be completed and train services will run between Rouse Hill and Chatswood via Epping and Macquarie Park. This will allow operational changes on the Sydney Trains network. Plans released in 2012 as part of the environmental approvals outlined a train plan that included an additional four trains per hour along the T1 Northern line between Epping and Central, serving Rhodes Station in the weekday morning peak.
3.	*Roads and Maritime requires clarification on the traffic generation assumptions included in the Study provided.*
	The Study included traffic surveys at driveway and precinct level to determine appropriate rates to use for ongoing development in the precinct. This is more robust than comparison sites in adjacent areas. Dwellings in the precinct have high occupancy rates with new dwellings all pre-sold and occupied very quickly. It is not appropriate to do a worst case assessment as requested by RMS where good data is available to allow a realistic assessment to be undertaken.
4.	*It is noted that one transport infrastructure/service improvement has been proposed (shuttle bus), and no other travel demand management measures or transport infrastructure improvements are proposed to be delivered.*
	Billbergia has contributed considerably towards infrastructure with its delivery of the Bennelong Bridge in may 2016 providing for the significant gains in accessibility by bus, bicycle and walking modes. Recently an agreement has been struck for car share introduction with growth allowances, which will lead to lower car ownership in the precinct. Green Travel Plans for new developments will lead to improved mode shift away from private car. This is in addition to the BAYLINK being included in the VPA for the development.
5.	*Inadequate justification has been provided as to what the estimated mode shift would be as a result of the shuttle bus, or how this fully addresses the traffic impacts of private vehicle trips generated by the proposed development uplift.*
	The recent introduction of the shuttle bus trial has allowed surveys of travel activity in the precinct. At this stage the trial involves 2 buses however the proposed operation will involve 4 buses thereby doubling the shuttle bus capacity. It is noted that TfNSW added additional services to Route 533 in November 2017 however the recent Arup surveys indicate people being left behind at the Marina Square Bus Stop, even with the shuttle bus trial operating.

	A community survey has been undertaken. Of survey respondents, those who identified themselves as drivers have indicated that they would shift mode to the BAYLINK if introduced on a permanent basis. Of the 298 people who indicated that they drive now, 256 indicated that they would take the Baylink Shuttle in some form. (86%) • 151 said daily • 30 said once per week • 75 said 2-4 times per week
6.	*At this stage, it remains unclear what impact it would have on private vehicle trips generated. It is anticipated the proposed shuttle service may supplement trips to and from Rhodes station as well as localised trips to shops and services in the Rhodes centre which might otherwise be undertaken by walking, cycling and private car – in the case of significant shopping trips.*
	Based on the surveyed data it may be concluded that the BAYLINK has resulted in a decrease in car usage mode and an increase in public transport usage mode.
7.	*An assessment of total car parking provision and car parking rates to be adopted and measures to limit car parking spaces given existing and potential public transport services have not been addressed.*
	Billbergia are in discussion with Parramatta City Council about the appropriate car parking rates for future development. An average rate of 1 car space per unit is being considered which represents a significant reduction from rates previously applied.
8.	*It is noted that intersection modelling was limited to the Silverwater Road / Holker Street intersection with a potential improvement briefly outlined in the Study, however, no detail is provided in relation to any proposed commitment to delivering a potential improvement. There has been no analysis of the potential impacts of the proposal to other intersections and therefore, no local and regional road improvements proposed in this regard. More information / justification is sought as to the reason for this approach.*
	A road network assessment was undertaken to determine the potential merits of expanding the capacity of the intersection at Holker Rd and Silverwater Road, which is a key access point into the Wentworth Point. Traffic generated by all potential development in Wentworth Point was assigned and it was determined that infrastructure works could be undertaken to maintain the level of service for the traffic uplift at this intersection. Billbergia would seek to allocate the VPA contributions towards this intersection and the improvements proposed at the Hill Road/ Bennelong Parkway intersection.
9.	*The Study provided is considered inadequate to justify changes to existing planning controls to allow additional development uplift at the subject site.*
	The residential uplift being proposed for Block H is more than offset by the a combination of the Shuttle Bus contribution to public transport and the infrastructure funding available through the VPA for road improvements. Previous transport planning for the Wentworth Point precinct has been proven to overestimate the vehicle trips generated and the introduction of the Bennelong Bridge and Shuttle bus services have further improved the mode shift away from private vehicle use.

Billbergia
Baylink Shuttle Report
Baylink trial findings

Issue | 22 February 2018

This report takes into account the particular instructions and requirements of our client.

It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Job number 249375-01

Arup
Arup Pty Ltd ABN 18 000 966 165

Arup
Level 10 201 Kent Street Sydney NSW 2000 Australia
www.arup.com

ARUP

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Executive Summary

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- 2:40pm to 6:45pm – bus every 10 minutes

In the first three weeks of operation the number of passengers using the service has grown from 8,929 to 12,018 - 35% increase.

Previous surveys (before operation of BAYLINK) found that STA buses were generally at capacity with some buses not accepting boarding passengers at the Bennelong Bridge, as a result of being at capacity.

During the AM peak, The BAYLINK was recorded carrying 242 people, while the STA services carried 317 people. The BAYLINK trial is carrying a similar load to the two STA bus services. This was an overall increase in 112 people (+25%) taking the bus since the May 2017 surveys.

A positive reception to the adoption of the BAYLINK and public transport has been seen from the increased number of people using the buses, and with both the BAYLINK and STA buses being close to capacity.

However, the BAYLINK has taken off a significant strain from the surrounding road network by transporting 242 passengers during the AM peak hour, who might have otherwise used private vehicles.

The BAYLINK is being fully utilised even in the early trial stages with many residents still unaware of the service. Data shows that public transport is still in high demand within the WWP precinct.

The community survey questionaries (>1,000) have indicated strong support for the BAYLINK service, with many respondents requesting an increased peak service.

These results clearly indicate a willingness by a large number of current drivers to consider a shift in mode to bus for one or more of their trips each week. This highlights the success of providing enhanced public transport in the precinct as a means of reducing car dependency.

Arup provides the following observations on the Roads and Maritime Services letter (15 Feb 2018) which provides commentary on the Traffic and Transport Study prepared by Arup for the Block H, Precinct B DCP amendment

1.	*The Traffic and Transport Study (the Study) accompanying the planning proposal does not adequately assess the impacts of the development uplift associated with the planning proposal.*
	The Study focused on the change in travel demand resulting from the proposed shuttle bus and how this permits uplift on Block H. For the proposed uplift of some 650 apartments in Block H, 250 person trips would be generated in the peak hour. This level of increase in travel can be accommodated by the increased accessibility being offered by the BAYLINK trial and STA bus services. The full Baylink offer is four buses, not two – more than doubling the capacity being trialled.
2.	*Given the considerable development uplift proposed in Rhodes, an assessment of the capacity of rail services to accommodate the cumulative additional transport demands should be considered.*
	In 2019 Sydney Metro – Northwest project will be completed and train services will run between Rouse Hill and Chatswood via Epping and Macquarie Park. This will allow operational changes on the Sydney Trains network. Plans released in 2012 as part of the environmental approvals outlined a train plan that included an additional four trains per hour along the T1 Northern line between Epping and Central, serving Rhodes Station in the weekday morning peak.
3.	*Roads and Maritime requires clarification on the traffic generation assumptions included in the Study provided.*
	The Study included traffic surveys at driveway and precinct level to determine appropriate rates to use for ongoing development in the precinct. This is more robust than comparison sites in adjacent areas. Dwellings in the precinct have high occupancy rates with new dwellings all pre-sold and occupied very quickly. It is not appropriate to do a worst case assessment as requested by RMS where good data is available to allow a realistic assessment to be undertaken.
4.	*It is noted that one transport infrastructure/service improvement has been proposed (shuttle bus), and no other travel demand management measures or transport infrastructure improvements are proposed to be delivered.*
	Billbergia has contributed considerably towards infrastructure with its delivery of the Bennelong Bridge in may 2016 providing for the significant gains in accessibility by bus, bicycle and walking modes. Recently an agreement has been struck for car share introduction with growth allowances, which will lead to lower car ownership in the precinct. Green Travel Plans for new developments will lead to improved mode shift away from private car. This is in addition to the BAYLINK being included in the VPA for the development.
5.	*Inadequate justification has been provided as to what the estimated mode shift would be as a result of the shuttle bus, or how this fully addresses the traffic impacts of private vehicle trips generated by the proposed development uplift.*
	The recent introduction of the shuttle bus trial has allowed surveys of travel activity in the precinct. At this stage the trial involves 2 buses however the proposed operation will involve 4 buses thereby doubling the shuttle bus capacity. It is noted that TfNSW added additional services to Route 533 in November 2017 however the recent Arup surveys indicate people being left behind at the Marina Square Bus Stop, even with the shuttle bus trial operating.

	A community survey has been undertaken. Of survey respondents, those who identified themselves as drivers have indicated that they would shift mode to the BAYLINK if introduced on a permanent basis. Of the 298 people who indicated that they drive now, 256 indicated that they would take the Baylink Shuttle in some form. (86%) • 151 said daily • 30 said once per week • 75 said 2-4 times per week
6.	*At this stage, it remains unclear what impact it would have on private vehicle trips generated. It is anticipated the proposed shuttle service may supplement trips to and from Rhodes station as well as localised trips to shops and services in the Rhodes centre which might otherwise be undertaken by walking, cycling and private car – in the case of significant shopping trips.*
	Based on the surveyed data it may be concluded that the BAYLINK has resulted in a decrease in car usage mode and an increase in public transport usage mode.
7.	*An assessment of total car parking provision and car parking rates to be adopted and measures to limit car parking spaces given existing and potential public transport services have not been addressed.*
	Billbergia are in discussion with Parramatta City Council about the appropriate car parking rates for future development. An average rate of 1 car space per unit is being considered which represents a significant reduction from rates previously applied.
8.	*It is noted that intersection modelling was limited to the Silverwater Road / Holker Street intersection with a potential improvement briefly outlined in the Study, however, no detail is provided in relation to any proposed commitment to delivering a potential improvement. There has been no analysis of the potential impacts of the proposal to other intersections and therefore, no local and regional road improvements proposed in this regard. More information / justification is sought as to the reason for this approach.*
	A road network assessment was undertaken to determine the potential merits of expanding the capacity of the intersection at Holker Rd and Silverwater Road, which is a key access point into the Wentworth Point. Traffic generated by all potential development in Wentworth Point was assigned and it was determined that infrastructure works could be undertaken to maintain the level of service for the traffic uplift at this intersection. Billbergia would seek to allocate the VPA contributions towards this intersection and the improvements proposed at the Hill Road/ Bennelong Parkway intersection.
9.	*The Study provided is considered inadequate to justify changes to existing planning controls to allow additional development uplift at the subject site.*
	The residential uplift being proposed for Block H is more than offset by the a combination of the Shuttle Bus contribution to public transport and the infrastructure funding available through the VPA for road improvements. Previous transport planning for the Wentworth Point precinct has been proven to overestimate the vehicle trips generated and the introduction of the Bennelong Bridge and Shuttle bus services have further improved the mode shift away from private vehicle use.

1 Introduction

1.1 Context

The Billbergia Baylink Shuttle (BAYLINK) has commenced operational trials on 5 February 2018, an all-day community service to residents around the Wentworth Point and Rhodes precinct. The objective of this study is to assess the effects the Baylink shuttle buses have on the travel choices and patterns of the residents within the Wentworth Point precinct. This study supplements the "Wentworth Point - Traffic and Transport Study" report produced by Arup on 5 September 2017.

1.2 Scope

The scope of the report is outlined as follows:

- Baylink Shuttle Bus occupancy surveys
- Discussion of traffic and pedestrian data collection findings – a comparison of traffic and pedestrian data collected in 4 May 2017 (prior to BAYLINK operation) and 10 February 2018
- On-Bus Interview Surveys – findings of the surveys which were collected on the shuttle buses
- Data Assessment and Summary Report – an analysis of the surveys and proposed
- Completion and full operation of the precinct with residents fully occupying the residential blocks

2 Billbergia BayLink Shuttle Buses

2.1 Routes

The Billbergia Baylink Shuttle (BAYLINK) provides a weekday community service which is proposed to operate on weekdays (including peak hours). The BAYLINK has started a free three-month trial from 29 January 2018, serving key routes around the Wentworth Point and Rhodes Precinct shown in Figure 1 below.

Figure 1: Baylink Shuttle route

Source: http://www.homebushbaybridge.com, viewed 2 February 2018.

2.2 Frequency

The services have been operating from Monday to Friday at the following times which will continue during the 3-month trial:

- 6:30am to 9:15am – bus every 10 minutes
- 9:30am to 2:15pm – bus every 20 minutes
- 2:40pm to 6:45pm – bus every 10 minutes

Note: According to the website, times are accurate as at 22 January 2018 and may vary slightly to meet ferry and train connections.

2.3 Fleet type

The BAYLINK trial operates with two different vehicle types. One with a maximum standing and seating capacity of 34 people and another with 47. In the light of the success of community response to the trial, the proposed permanent fleet will consist of 4 x 47-seaters – the smaller 34-seater will be discontinued.

2.4 Daily utilisation

The daily number of passengers boarding and alighting the Billbergia Baylink Shuttle (BAYLINK) have been recorded each week. The surveys record the number of passengers boarding and alighting at each stop along the route throughout the day. The average daily boarding and alighting numbers over the second week Monday 5 February to Friday 9 February 2018 at each stop is shown in Table 1. On average, some 2,200 people utilised the BAYLINK per day in this week.

Table 1: Average daily boarding and alighting numbers at each stop over a 5 day period

Stop location	Average number of passengers over a 5 day period, from Monday 05/02/2018 to Friday 09/02/2018	
	On	Off
Baywater Dr	137	174
Stromboli Strait	208	120
Hill Rd at Nuvolari	133	7
Hill Rd at Verona	49	10
SOP Ferry Wharf	191	140
Marina Square	614	34
Rhodes Station	772	1,153
Gauthorpe St	20	46
Community Centre	43	457
Hill Rd, if requested	3	77
Total Passengers	**2,170**	**2,219**

As seen from the data, the busiest stop is at Rhodes Station, which experiences the most number of boarding and alighting passengers. Marina Square is the next busiest stop for boarding passengers while the community centre is the second busiest stop for alighting passengers. Over the three weeks of operation, there has been an increase of passengers as shown in Table 2.

The increase during the first three weeks is within the range of some 2,000 passengers per week. This is a large increase, noting the service is yet to gain the maximum number of passengers possible.

Table 2: Weekly boarding and alighting numbers at each stop

Week number	Total number of passengers over a 5 day period		Weekly passenger increase	
	On	Off	Number	Percentage
Week 1 (5/2 – 9/2)	8,929	8,814		
Week 2 (12/2-15/2)	10,851	11,095	+1,922	+21.5%
Week 3 (19/2 - 23/2)	12,018	12,059	+1,167	+10.8%

2.5 Peak hour utilisation

An hourly shuttle utilisation at each stop was recorded by the BAYLINK operators on Thursday 1 February 2018, from 6:30am to 7:00pm. A summary of the BAYLINK boarding and alighting trends during commuter morning peak period is shown in the graphs Figure 2 and Figure 3 below.

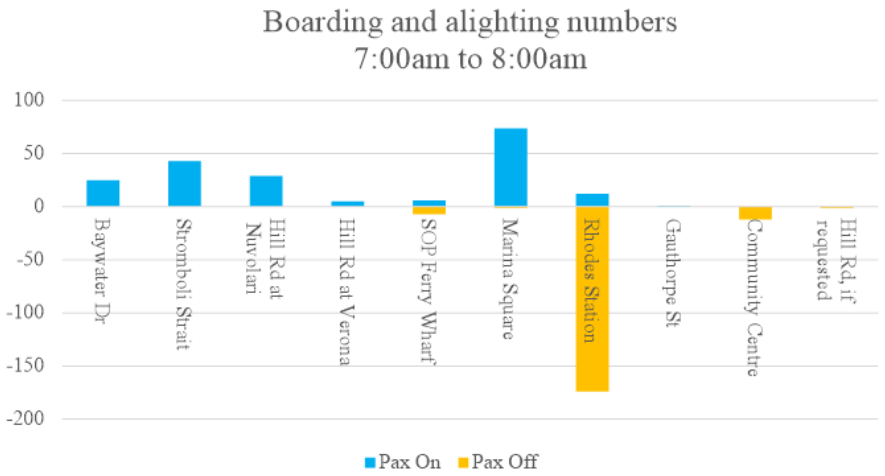


Figure 2: Peak hour boarding and alighting numbers at each stop

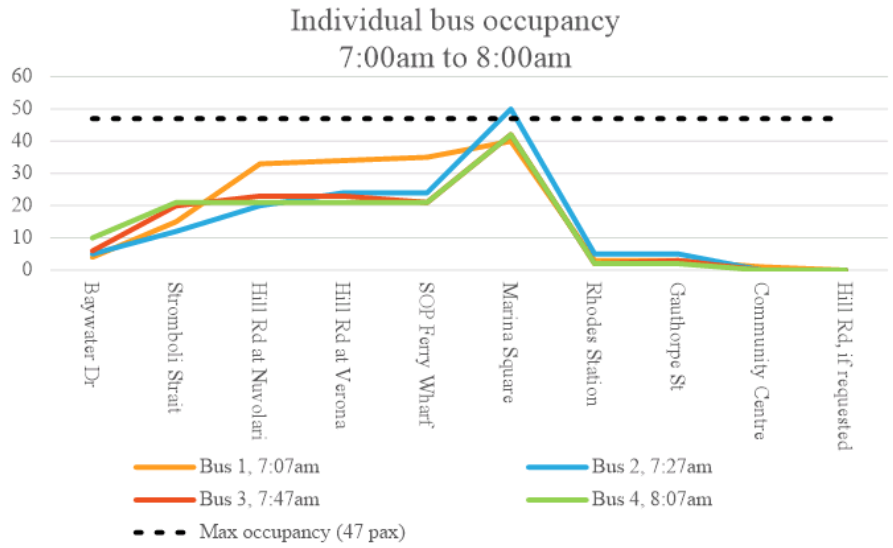


Figure 3: Cumulative bus occupancy[1]

The results show that almost all the passengers boarding from the WWP precinct got dropped off at Rhodes Station during the morning peak hour. This implies that the BAYLINK is used predominantly as a means to travel to the train station, filling the "last mile gap".

Occupancy surveys showed that the most number of boardings were observed at the Marina Square stop, just before the bridge. Surveys also found that the shuttle was close to or at capacity after departing the Marina Square bus stop.

[1] On day of observation, the 37 capacity BAYLINK was not in service. A larger bus was used.

Figure 4: Hourly boarding and alighting at each station

2.6 Bus occupancy surveys

2.6.1 Background

Arup conducted on site surveys of the number of passengers on both the STA buses and the Billbergia Baylink Shuttle (BAYLINK) on 8 February 2018, from 7am to 8am. These surveys were carried out at the Marina Square bus stop, similar to those carried out on November 2016 and May 2017.

Previous surveys (before operation of BAYLINK) found that STA buses were generally at capacity with some buses not accepting boarding passengers at the Bennelong Bridge, as a result of being at capacity.

2.6.2 Results

The latest survey findings with the operation of BAYLINK is shown in Table 3. Within the one-hour period, five out of six of the BayLink Shuttle buses were at capacity, upon leaving the Marina Square bus stop. Despite the BAYLINK being at capacity, a proportion of the STA bus services were close to capacity. On several occasions, passengers were not able to board any of the bus services due to capacity issues.

The introduction of the BAYLINK, which provides a 47 passenger capacity shuttle bus every 10 minutes, provides an additional 282 person capacity per peak hour.

Table 3: Bus occupancy surveys on 8 February 2018, with the operation of BAYLINK

Route	Scheduled Time	On Bus at arrival	Waiting to Board	Comments
533	7:03	2	15	
533	7:16	12	41	Full standing load.
BayLink Shuttle	7:18	30	5	
526	7:21	5	10	
BayLink Shuttle	7:25	10	15	
533	7:32	5	8	
BayLink Shuttle	7:37	15	45	Full standing load. People left at stop.
526	7:40	10	35	
533	7:45	12	22	
BayLink Shuttle	7:46	20	2	
526	7:52	20	50	Full standing load. People left at stop.
BayLink Shuttle	7:57	15	30	Full standing load
533	8:00	30	40	Full standing load. People left at stop
BayLink Shuttle	8:05	15	40	
STA only		96	221	
BayLink Only		105	137	

Based on the survey counts at the Marina Square bus stop, some 242 people were found travelling to Rhodes Station on the BAYLINK. This is approximately 76% of the observed STA bus capacity.

Table 4: Analysis of surveys on 8 February 2018, 7:00am to 8:00am

	STA only	BAYLINK only	Combined
Frequency	8 per hour	6 per hour	14 per hour
Estimated patronage*	317 people	242 people	559 people

*Based on number of people counted at the Marina Square bus stop

Pic 1. Long queues at Rhodes Station Baylink Bus Stop on Friday afternoon.

2.6.3 Key findings

Overall bus patronage

Over a period of an hour, there were more people using the buses in the February 2018 survey when compared to the May 2017 survey. This was an observed increase of 112 people (+25%). The increase in number of people taking the bus could be a result of various factors:

- More reliable services with the introduction of BAYLINK, where buses have an overall higher net capacity, reducing the chances of passengers not being able to board a bus due to capacity issues
- More frequent services, meaning less waiting time for passengers. This important factor reduces the need for a timetable. The BAYLINK supplements the STA services and reduces waiting times for a typical STA bus from 7.5 minutes to about 4 minutes.
- BAYLINK provides a free service and hence a much higher incentive to adopt public transport
- An increase in the number of occupied units within the WWP peninsula since the May 2017 surveys

3 Traffic Surveys

3.1 Locations

The first set of traffic surveys were commissioned on 4 May 2017, before the introduction of the BAYLINK. A second set of data has been collected on 1 February 2018, after the BAYLINK has been operational for one week. Arup commissioned Matrix Traffic Consultants to conduct intersection and tube counts at the following locations shown in Figure 5 which also shows the land parcels which are currently undergoing construction. The two counts were conducted during the following periods:

- Weekday peak commuter periods, 7:00am to 10:00am and 4:00pm to 7:00pm
- Saturday afternoon peak, 11:00am to 2:00pm

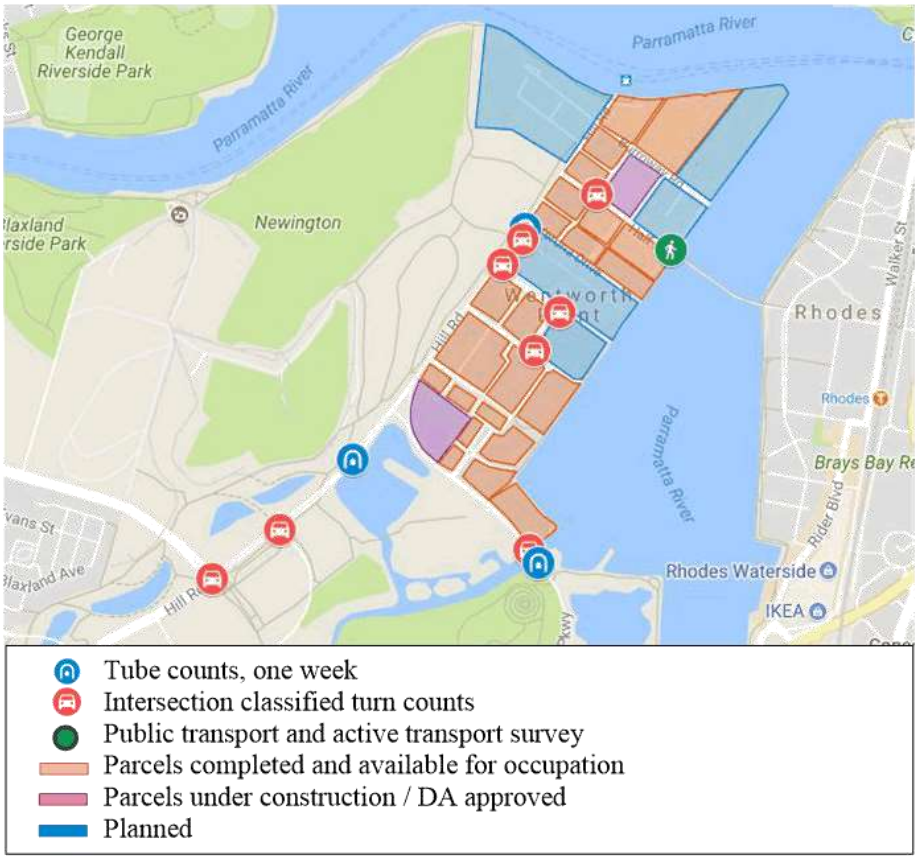


Figure 5: Surveyed locations

3.2 Classification of trades and services vehicles

The Wentworth Point Peninsula Precinct (the WWP precinct) is currently undergoing a significant amount of development. As such, construction-related vehicles need to be discounted to provide an indication of the amount of residential related traffic. This can then provide an indication of future traffic numbers upon completion of construction all the construction works within the WWP precinct.

During the traffic surveys, vehicles were classified in the following manner:

- Private vehicles, residential and construction related vehicles included which can't be identified for construction purposes
- Small construction related vehicles such as utes and vans
- Trucks
- Buses
- Scooter / motorcycle
- Cyclists
- Pedestrians

Examples of small construction related vehicles identified are shown in Figure 6 below. The photos were taken in the WWP precinct and were commonly observed to be parked on-street or near construction areas. These vehicles likely belong to tradesmen, plumbers and people working at construction sites.

Figure 6: Vehicles classified as small construction related vehicles

A detailed discussion of the limitations and methodology to this approach is discussed in the "Wentworth Point - Traffic and Transport Study" report produced by Arup on 5 September 2017.

3.3 Comparing residential only traffic growth

3.3.1 Completed units

The land parcels undergoing various stages of construction are shown in Figure 7. Since the previous survey in May 2017, several parcels have been completed, and are shown in the figure with blue text. This equates to a total of 1,337 units completed since May 2017. A breakdown of each parcel is shown in Table 5. The completion of 1,337 units since May 2017 is an increase of 22% of completed units since May 2017.

As of 1 February 2018, the WWP precinct has a total of 5,970 completed units with 1,041 still under construction. Despite the completion of these residential buildings, it is difficult to ascertain the effects on population increase since the May 2017 surveys. This is due to limited census information and variability of apartment occupancy rates at the time of surveys. As such a comparison of tube counts has been used to provide an indication of how travel trends have changed since May 2017.

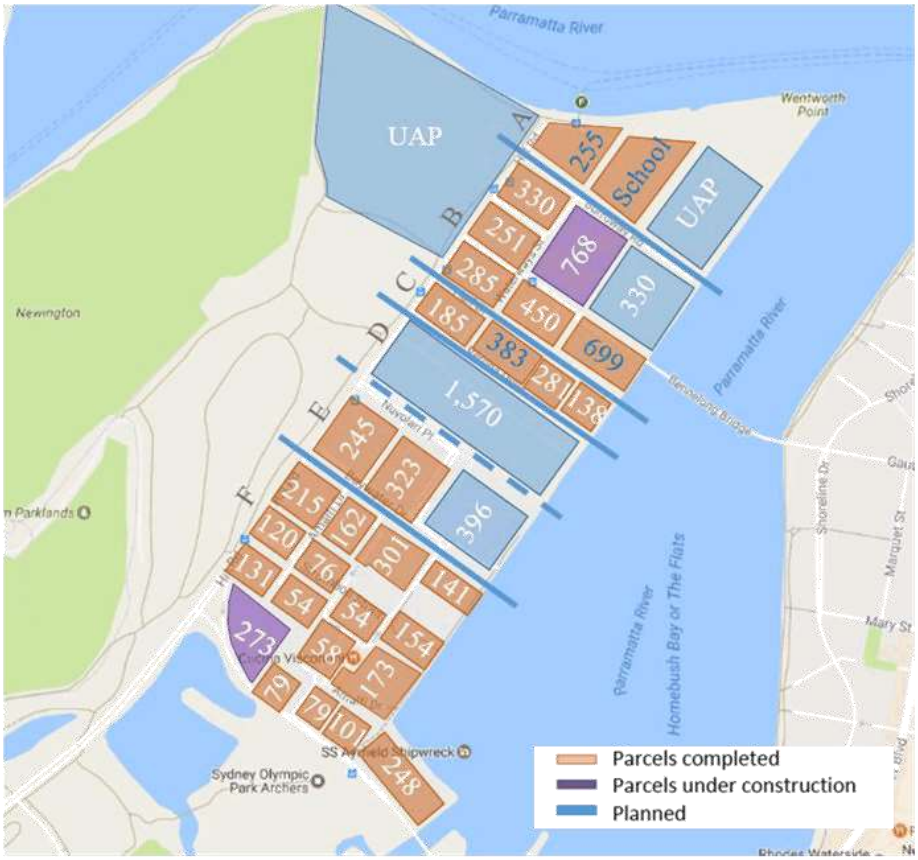


Figure 7: Land parcels and number of residential dwellings

Table 5: Breakdown of total number of residential dwelling within WWP Precinct

WWP Precinct Area	Completed & occupied	Under construction	Currently planned	Precinct total
A	255	0	2,300 (1)	2,556
B	2,015	768	330 (2)	3,113
C	987	0	0	987
D	0	0	1590 (3)	1,590
E	568	0	396	964
F	2,145	273	0	2,418
Total	**5,970**	**1041**	**4,616**	**11,628**

Notes:
(1) 2,300 UAP Planning Proposal
(2) Estimate of remaining residential floor space 26,000m^2 at 85m^2/dwelling
(3) Estimate of DCP residential floor space 93,482m^2 at 85m^2/dwelling

3.3.2 Weekend tube counts

Tube counts can provide an indication of the increase in traffic within the precinct. Weekday traffic can be subject to a significant amount of construction vehicles, therefore Sunday tube counts from May 2017 and February 2018 have been compared. Two count sites were assessed to gather a precinct wide daily traffic generation number:

- Hill Road, South of Bennelong Parkway
- Bennelong Pkwy (north of Haslams Creek)

The Sunday tube count comparison (Table 6) shows that there were some 33% more trips in February 2018 than May 2017. This may suggest an approximate increase in population of 33%.

In comparison, the completion of 1,337 units since May 2017 is an increase of 22%.

Table 6: Increase in daily traffic on Sunday

Time	Tube counts of the entire day		
	Entering	Leaving	Total
Sunday 7 May 2017	12,598	12,356	24,954
Sunday 4 Feb 2018	16,692	16,503	33,195

3.3.3 Weekday commuter peak counts

This section compares the residential only traffic between May 2017 and February 2018. The sum of vehicles leaving the two survey locations at Hill Road / Holker Street and Bennelong Parkway Bridge, at Haslams Creek provides information on the existing traffic volumes generated by the WWP precinct.

The total number of private vehicles (cars and motorbikes) entering and leaving the precinct at each peak hour is shown in Figure 8. This number does not include the light commercial vehicles classification, discussed in section 3.2. Further to that, the private vehicles recorded entering commercial blocks and construction compounds at the following locations are discounted:

- Nuvolari Place / Monza Boulevard, entrance to Acer car park
- Baywater Drive, entrance to Acer car park
- Entrance to 37 to 39 Hill Road factory
- Construction compound north of the Hill Road / Burroway Road intersection

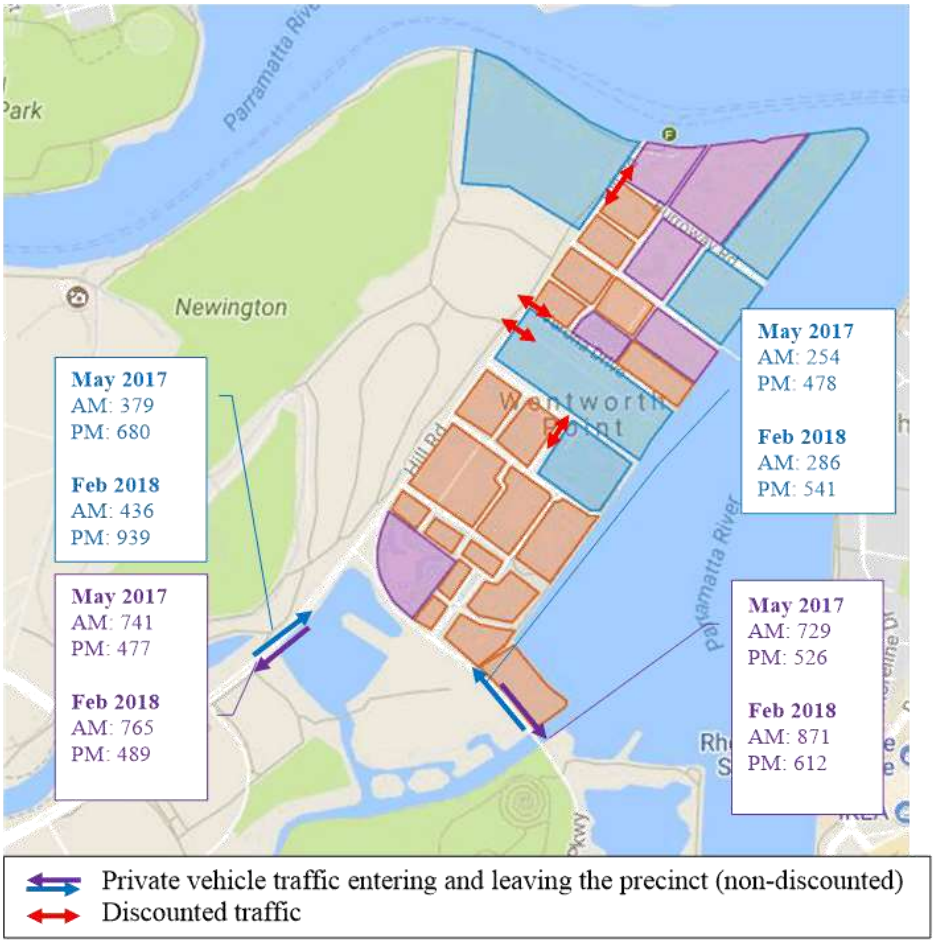


Figure 8: Sum of traffic leaving and entering the precinct

A summary of non-residential vehicles leaving the precinct is shown in the Figure 9. This includes vehicles which can be identified as construction related traffic, shown in Figure 6.

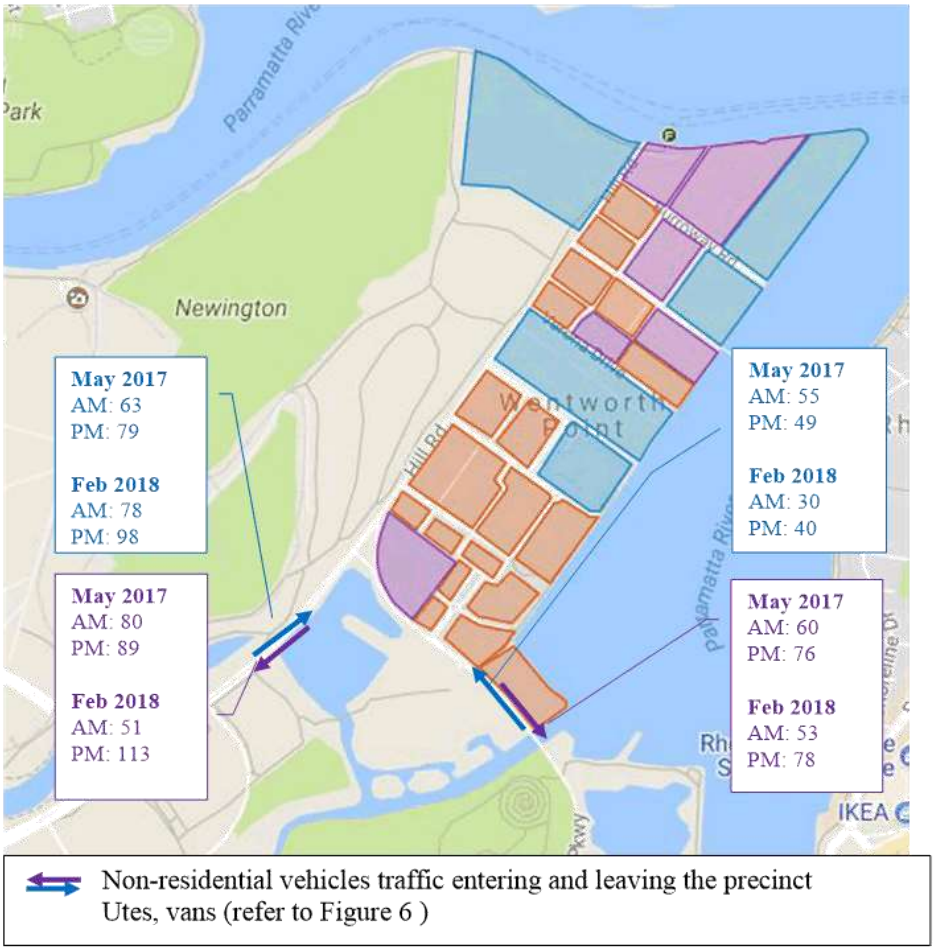


Figure 9: Sum of non-residential vehicles leaving and entering the precinct

Private vehicles (including construction workers driving typical looking cars)

The number of private vehicles leaving and entering the precinct summarised in Table 7 and Table 8. Without considering any further discount factors such as construction workers driving typical looking vehicles (see previous report), there is an increase in approximately 18% of traffic in February 2018 compared to May 2017 in the AM peak hour, and 28% in the PM peak hour.

By comparing these number, we obtain a like for like comparison in the increase in private vehicles entering and leaving the WWP precinct.

Table 7: May 2017 surveys, total number of private vehicles leaving WWP precinct including construction workers driving typical cars

Peak	Time	Entering (vehicles/hr)	Leaving (vehicles/hr)	Total
AM	7:30am to 8:30am:	511 (32%)	1,089 (68%)	1,600
PM	4:45pm to 5:45pm:	900 (57%)	666 (43%)	1,566

Table 8: February 2018 surveys, total number of private vehicles leaving WWP precinct including construction workers driving typical cars

Peak	Time	Entering (vehicles/hr)	Leaving (vehicles/hr)	Total
AM	7:30am to 8:30am:	619 (33%)	1,268 (67%)	1,887 (+18%)
PM	4:45pm to 5:45pm:	1,221 (61%)	789 (39%)	2,010 (+28%)

Non-residential vehicles

The non-residential vehicle numbers from each survey are summarised below. There was an observed decrease in construction related traffic during the AM peak period, but an increase during the PM peak period. The data shows that there has been no significant change in the levels of construction activity.

Table 9: May 2017 surveys, total number of non-residential vehicles leaving WWP precinct including construction workers driving typical cars

Peak	Time	Non – resi vehicles Entering (vehicles/hr)	Leaving (vehicles/hr)	Total
AM	7:30am to 8:30am:	113	140	248
PM	4:45pm to 5:45pm:	119	138	257

Table 10: February 2018 surveys, total number of non-residential vehicles leaving WWP precinct including construction workers driving typical cars

Peak	Time	Non – resi vehicles Entering (vehicles/hr)	Leaving (vehicles/hr)	Total
AM	7:30am to 8:30am:	108 (-4%)	104 (-26%)	212 (-14%)
PM	4:45pm to 5:45pm:	138 (+16%)	191(+38%)	329 (+28%)

3.4 Surveyed mode share

3.4.1 Comparison of surveyed data

The difference between surveyed travel modes in May 2017 and February 2018 recorded at the Marina Square bus stop (before Bennelong Bridge) are shown in Table 11. This is with exception to the number of private vehicles recorded which were derived from the survey data discussed in section 3.3.3. The data only captures trips leaving the WWP precinct, so as to obtain a like for like comparison.

The table shows there were 477 additional trips recorded in February 2018 than in May 2017, an increase in 25%.

The data collected also shows a proportional decrease in car users, from 82% to 78%. It noted that this is not a precinct wide mode share, but rather a mode share of observed trips, so as to obtain a like for like comparison between the two survey periods.

The February 2018 data shows 15% of the trips recorded were attributed to buses, an increase of 9% compared to May 2017. This would be a result of increased STA services and the introduction of the BAYLINK, as well as other factors discussed in section 2.6.3.

As such we may conclude that based on surveyed data, a decrease in car usage and an increase in public transport usage has been achieved.

Table 11: Observed mode splits

Travel mode	Surveys May 2017 (trips)		Surveys February 2018 (trips)	
STA (boarding at Marina Square)	109	6%	221	9%
BAYLINK	0	0%	137	6%
Cyclists (Eastbound)	28	1%	6	0%
Pedestrians (Eastbound)	204	11%	167	7%
Private vehicles leaving WWP precinct*	1600	82%	1887	78%
Total	**1941**	**100%**	**2418**	**100%**

*Note: these numbers include construction workers driving private vehicles. These numbers have been used for a like for like comparison in survey data, given that no significant change in construction traffic has been observed.

3.4.2 No BAYLINK Scenario

This section investigates the likely mode share if BAYLINK was not operating. Data recorded a decrease of 102 pedestrian and cyclist trips towards Rhodes Station, which could be a result of residents now having a space on a bus when compared to 2017 when there was lower capacity (no BAYLINK), hence reducing the need to walk or cycle.

At the Marina Square Station:

- 109 bus trips in May 2017
- 358 bus trips (including STA and BAYLINK) in February 2018
- 249 more bus trips in February 2018
  - +38% from BAYLINK
  - +62% from increased STA services
- 102 pedestrian and cyclist trips assumed to change to bus trips
  - 39 as a result of BAYLINK
  - 63 as a result of increased STA services

A total of 242 people were recorded using the BAYLINK in the AM peak. Subtracting the 39 pedestrian and cyclist trips, we obtain 203 people. The BAYLINK has therefore provided 203 passengers with a form of public transport. These people would otherwise may not have had a space available on the buses which were at capacity during the busier period of the AM peak hour.

4 Questionnaire Survey

The survey was designed to gain feedback from the local community about the continued operation of the Baylink Shuttle bus.

4.1 Questionnaire Survey

The Baylink Shuttle was an online survey. Arup was in Wentworth Point on the 6th, 7th, 8th, 9th and 12th of February 2018 conducting surveys with people in the local area between 6:30am and 6.30pm.

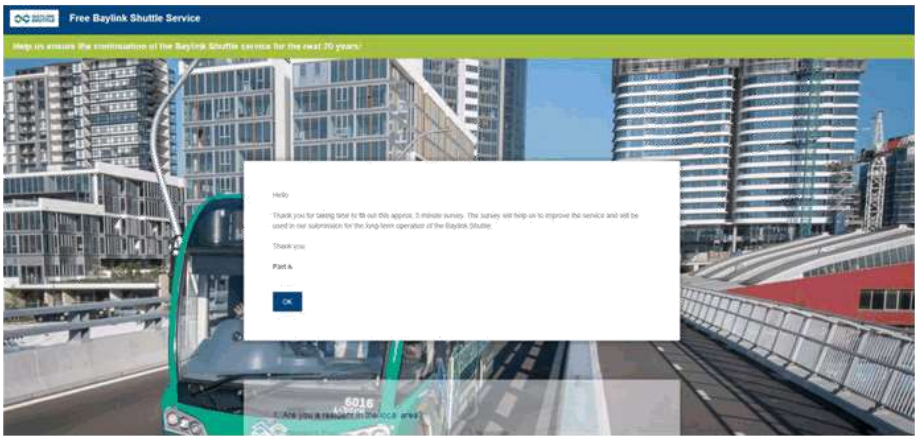


Figure 10 Baylink Shuttle online survey

4.1.1 Results summary

The questions were designed to establish how residents and workers felt about existing transport conditions in Wentworth Point and whether the continuation of the shuttle bus would make them more likely to utilise public transport in the area to travel to work. A total of 1,000 responses were collect, the key findings were:

- 90% of respondents reside in Wentworth Point
- 74% of the respondents own a car
- 83% of respondents travel to or from Wentworth Point for work
- 64% of respondents take the train to work
- 45% of respondents use their cars more than once a week to travel to work
- 85% of respondents use public transport to travel to work at least once a week. Of these, 55% of respondents use public transport daily
- 57% of respondents are not happy with the current public transport options in Wentworth Point
- 66% of respondents stated that they would use public transport daily if the shuttle were to continue on a regular basis. 90% of respondents stated that they would use public transport at least once a week

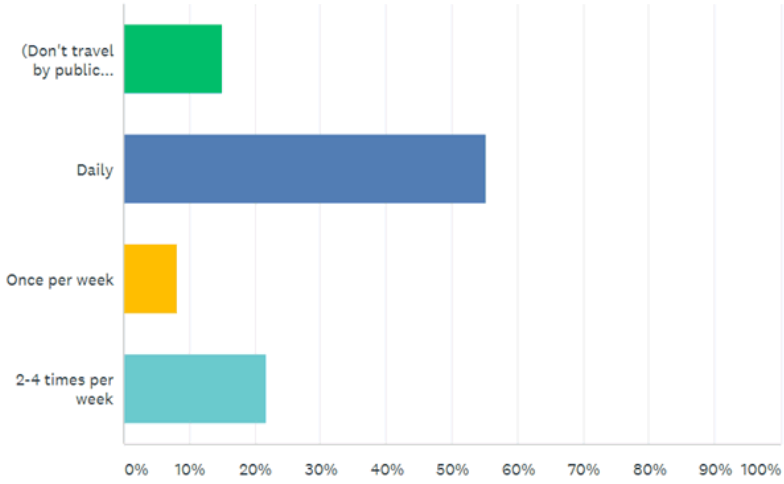
- 91% of respondents used the shuttle bus to connect to Rhodes train station
- 47% of respondents would like to see increased peak services

4.1.2 Travel patterns

Survey results indicate that 85% of respondents use public transport at least once a week to travel to or from work. 55% of the respondents used public transport daily to travel to or from work.

How often do you travel by public transport (bus, train or ferry) to or from work each week?

Answered: 936 Skipped: 9



ANSWER CHOICES	RESPONSES	
(Don't travel by public transport work)	15.06%	141
Daily	55.13%	516
Once per week	8.12%	76
2-4 times per week	21.69%	203
TOTAL		936

Figure 11: Respondents public transport usage

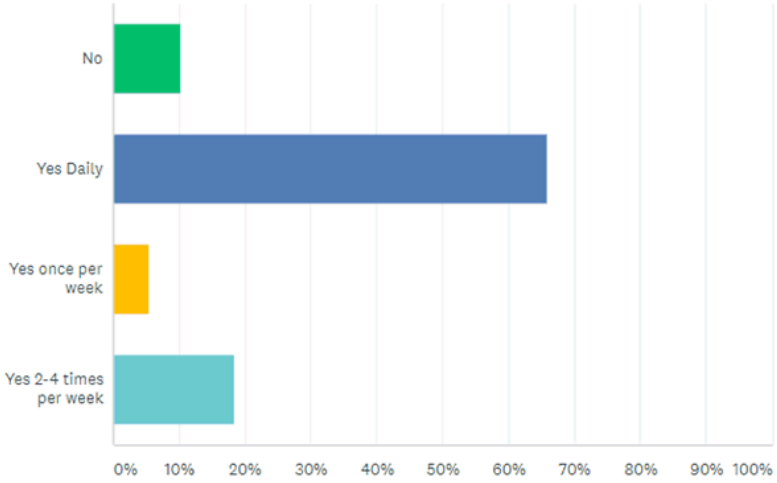
57% of respondents indicated that they are not happy with the existing public transport options in Wentworth Point, with many citing infrequency, overcrowding and unreliability as their main issues with the STA operated buses.

90% of respondents indicated that they would be more likely to use public transport if the Baylink Shuttle operated on a regular basis, with 66% indicating that their usage would be on a daily basis.

Of the 43% of respondents who indicated that they would like to see the shuttle travel to other locations, the most frequent answer (38%) was an extension to Rhodes Waterside shopping centre.

Would you be more likely to use public transport if there was a free Baylink Shuttle service on a regular basis?

Answered: 943 Skipped: 2



ANSWER CHOICES	RESPONSES	
No	10.18%	96
Yes Daily	65.85%	621
Yes once per week	5.51%	52
Yes 2-4 times per week	18.45%	174
TOTAL		**943**

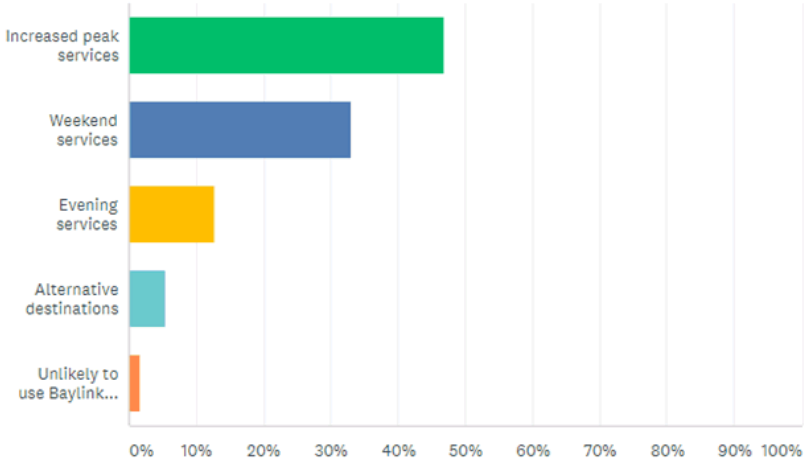
Figure 12: Reponses show willingness to adopt the BAYLINK usage on a daily basis

Respondents also noted that they would be more likely to use the BAYLINK if there was an increased peak service, due to the lack of current capacity on STA buses.

Q10

What would make you more likely to use the Free Baylink Shuttle?

Answered: 938 Skipped: 7



ANSWER CHOICES	RESPONSES	
Increased peak services	46.91%	440
Weekend services	33.16%	311
Evening services	12.69%	119
Alternative destinations	5.54%	52
Unlikely to use Baylink Shuttle	1.71%	16
TOTAL		938

Figure 13: Reponses on how BAYLINK can be improved

4.2 Potential for mode shift based on responses

We have cross referenced the responses to the community survey on the BAYLINK specifically looking at car users and owners who have indicated that they may shift mode to use the BAYLINK if it was implemented permanently. A number of conclusions from this are identified below.

- Of survey respondents, what is the proportion of people actually driving?
    - 298 people drive out of the 950 respondents (31%)
- Do people who own a car drive?
    - 298 people drive out of the 695 car owners. (51%).
- Of survey respondents, those who identified themselves as drivers have indicated that they would shift mode to the BAYLINK if introduced on a permanent basis. Of the 298 people who indicated that they drive now, 256 indicated that they would take the Baylink Shuttle in some form. (86%)
    - 151 said daily
    - 30 said once per week
    - 75 said 2-4 times per week

These results clearly indicate a willingness by a large number of current drivers to consider a shift in mode to bus for one or more of their trips each week. This highlights the success of providing enhanced public transport in the precinct as a means of reducing car dependency.

4.3 On–site observations and surveys

Whilst on-site in Wentworth Point on the 6th, 7th, 8th, 9th and 12th of February 2018, Arup was able to observe the operation of the shuttle bus during peak times in the morning and afternoon and throughout the middle of the day. Arup also interviewed some 100 passengers on board the BAYLINK. The most common responses and observations were:

- The shuttle bus is well used all day in both directions, between Wentworth Point and Rhodes, with definite peaks in the morning and evening as people want to access Rhodes Train Station.
- The community was very happy with the service being provided by Billbergia and many expressed hopes that it would continue after the three-month trial had concluded, stating that their trip to and from Rhodes Station is more reliable and frequent.
- Many people expressed concerns that the public bus services were often already full by the time they reached Footbridge Boulevard, one of the busiest stops in Wentworth Point, and stated this as one of the main reasons the shuttle bus was so successful.

- The shuttle bus was still very busy between 9.30am and 10.15am when the service frequency drops to once every twenty minutes. Continuing the higher frequency until this time may be considered to cater to the additional demand.

5 Conclusion and Findings

Travel data from May 2017 and February 2018 has been compared to analyse the effects of the newly introduced Billbergia Baylink Shuttle (BAYLINK). Key findings of the AM peak hour analysis are:

- Data collected at the Marina Square bus stop shows that the BAYLINK was close to or at capacity, with Marina Square being the busiest bus stop
- Almost all the trips made in the AM peak were to Rhodes Train Station
- During the AM peak, The BAYLINK was recorded carrying 242 people, while the STA services carried 317 people. This was an overall increase in 112 people (+25%) taking the bus
- A positive reception to the adoption of the BAYLINK and public transport has been seen from the increased number of people using the buses, and with both the BAYLINK and STA buses being close to capacity.
- However, the BAYLINK has taken off a significant strain from the surrounding road network by transporting 242 passengers during the AM peak hour, who might have otherwise used private vehicles.
- The BAYLINK is being fully utilised even in the early trial stages with many residents still unaware of the service. Data shows that public transport is still in high demand within the WWP precinct.
- The community survey questionaries have indicated strong support for the BAYLINK service, with many respondents requesting an increased peak service
- These results clearly indicate a willingness by a large number of current drivers to consider a shift in mode to bus for one or more of their trips each week. This highlights the success of providing enhanced public transport in the precinct as a means of reducing car dependency.

Draft Homebush Bay West Development Control Plan 2004 Amendment No. 2

Section 1 - Introduction

1.1 Name of this Development Control Plan

This Plan is known as Homebush Bay West Development Control Plan 2004 Amendment No. 2. The Plan was adopted by the City of Parramatta Council on [insert date] and came into effect on [insert date].

1.2 Where this Development Control Plan Applies

This plan applies to the site known as "Block H" and adjoining foreshore, as shown on the diagram provided at clause 5.4.1.

1.3 Relationship to Other Plans and Policies

This Plan is to be read in conjunction with Sydney Regional Environmental Plan No 24 – Homebush Bay Area (REP). If there is any inconsistency between this Plan and the REP, the REP will prevail.

This Plan amends the Homebush Bay West Development Control Plan as adopted by the Director General on 3 September 2004 and the Homebush Bay West Development Control Plan 2004 Amendment No. 1 as adopted by the Director General on 9 July 2013.

1.4 Purpose of this Development Control Plan

The purpose of this DCP is to identify the land to which this DCP applies as an Opportunity Site so to allow for additional development, subject to the achievement of design excellence through a competitive design process, making significant improvements to the size and quality of the public domain, and the provision of additional community infrastructure.

1.5 Amendment to Homebush Bay Development Control Plan 2004 and Homebush Bay West Development Control Plan 2004 Amendment No. 1

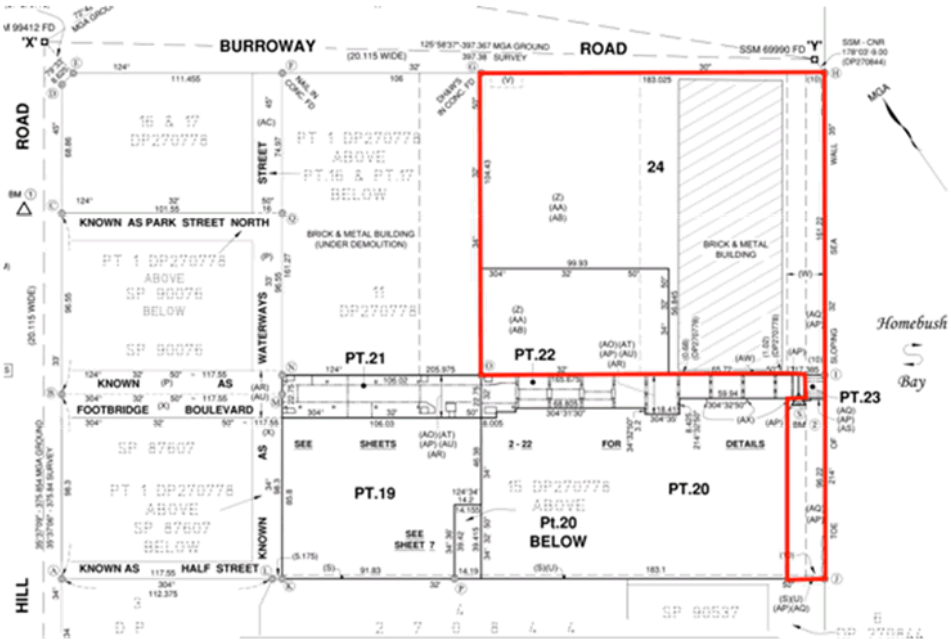
Homebush Bay Development Control Plan 2004 and Homebush Bay West Development Control Plan 2004 Amendment No. 1 are amended by the inclusion of a new section "Section 5.4 Lot H Wentworth Point" as set out in Section 2.

Section 2 – Amendment

5.4 LOT H WENTWORTH POINT

5.4.1 SUBJECT LAND

This section applies to the site known as "Block H" and adjoining foreshore, as shown on the diagram below.



Block H and adjoining foreshore site edged red.

5.4.2 OPPORTUNITY SITE

(1) The objectives of this clause are:

a) to provide for design excellence and improved urban design outcomes;

b) to encourage opportunities to improve the size and quality of the public domain; and

c) to facilitate opportunities to deliver additional community infrastructure.

(2) The subject land is identified as an Opportunity Site for the purposes of this section of the DCP.

(3) Notwithstanding the other provisions of this DCP, the consent authority may grant consent to additional development on the subject land, as an Opportunity Site, under clause 5.4.3, but only where:

a) The consent authority is satisfied that the development complies with all of the design requirements as set out in this section.

b) The development has been subject to a competitive design process and exhibits design excellence as set out in clause 5.4.9; and

c) The development includes, or contributes to, community infrastructure to the satisfaction of the consent authority, whether or not provided on the development site or not, but does not include infrastructure that would normally be required as a direct result of development.

5.4.3 LAND USE, DENSITY AND HEIGHTS

Objectives

Development of the site will comprise high quality residential apartment buildings with street orientated retail, commercial, community and live/work activity.

Development Controls

Despite sections 5.3.1 to 5.3.4:

i. The maximum floor space permitted on the subject land is *[54,356sqm OR 75,000sqm] [subject to option adopted by Council]*.

ii. The minimum floor space for non-residential uses required is 2,900sqm to be provided below Wentworth Place.

iii. The minimum public open space required is [*13,260sqm or 16,800 sqm*], which is to include a main park of 10,500 sqm. *[subject to option adopted by Council]*.

iv. The maximum height of buildings permitted is *[consistent with building and tower heights as provided for in diagrams to clause 5.3.2 OR 35 storeys] [subject to option adopted by Council]* above the level of Wentworth Place at its highest point.

5.4.4 DEFINITIONS

For the purposes of section 5.4, the following expressions have the stated meaning:

Community Infrastructure means a building, place or service owned or controlled by a public authority or non-profit organisation, including, but not limited to, community facilities, cycleways, centre-based child care facility, environmental facilities, footways, information and education facilities, public administration buildings, public roads, public squares, recreation areas and recreation facilities.

Competitive Design Process means an architectural design competition carried out in accordance with procedures approved by the Secretary of the Department of Planning and Environment.

Exhibits Design Excellence means where the design of the building is the winner of a competitive design process and the consent authority is satisfied that the building exhibits design excellence.

Floor space has the same meaning as provided in the Glossary to the Homebush Bay West DCP 2004, however:

- Floor space for car parking is to be excluded from the floor space calculations.
- Flood space of community facilities, such as a Council owned child care centre, is to be excluded from the floor space calculations.

Opportunity Site means a site where additional development is possible (above the yields provided in clause 5.3.1), subject to the achievement of design excellence through a competitive design process, making significant improvements to the size and quality of the public domain, and the provision of additional community infrastructure.

Public open space is space which is accessible to the public and useable at all times, day or night.

5.4.5 PUBLIC DOMAIN AND OPEN SPACE NETWORK

The public domain will comprise publicly accessible streets, lanes, pathways, plazas as well as a main park and waterfront linear park containing a promenade.

Objectives

The objectives for Block H public domain and open space network are that they:

- Provide:
  - A clear legible public domain.
  - Clear legible communal and private open spaces.
  - Places for people to gather formally and informally.
  - A main community park for a wide range of uses and users.
  - A foreshore promenade
  - Deep soil for trees and vegetation.
  - A 24/7 lift connection between the foreshore and Footbridge Boulevard.
  - Street frontages with active edges along the river foreshore and park edges.
  - Public conveniences both at the foreshore and the main park.
  - Mid-site access for physical and visual permeability and reflect both movement towards the waterfront as well as north-south connections. It should be in the form of streets, lanes and/or public paths as well as view corridors.
  - A hierarchy of spaces, designed as a suite, which enable a range of uses over a long timeframe.
- Guided by DCP Volume 2 Homebush Bay West December 2005 Public Domain Manual design principles.
- Are consistent with the Homebush Bay West DCP controls in relation to overshadowing and deep soil requirements.
- Achieve Best Practice:
  - Flooding and rainwater management outcomes, including diversion of all stormwater from the Bay and collection for reuse and/or groundwater recharge; and
  - Ecologically Sustainable Development outcomes.
- Incorporate desire lines in the public domain design and through site links.
- Locate all car parking below Wentworth Place level.
- Address impact of views on existing towers as a result of increased development.
- Maintain positive spatial relationships between buildings, streets, open spaces and neighbouring buildings.
- Reflect the history of the site.

5.4.6 MAIN PARK (Community)

Objectives

The Main Park is to:

- Reflect the recommendations of the Local Open Space Review prepared by Leisure Planners (December 2016) for the City of Parramatta.
- Be guided by DCP Volume 2 Homebush Bay West December 2005 Public Domain Manual design principles (except with respect to the specific location of the main park).
- Provide:
  - Flexible area for civic activities and community gathering spaces.
  - Active areas such as a children's playground / all age play spaces / multi-use court / fitness equipment and bike hub.
  - Areas for contemplation, relaxation, outlook and views.
  - Community gardens and community activity rooms.
  - Café/restaurant associated with the park – maximum size of 100m².
  - Connections through the park and linked to the street network.
- Incorporate the timber portals of the existing warehouse into the park design.

Development Controls

The Main Park must:

- Be located level with and at the edges of Wentworth Place and Footbridge Boulevard
- Provide:
  - A minimum area of 10,500 sqm.
  - A large grassed open space area: kick about and informal play space fringed by large shade trees, outlook & views. Large trees (not in separate planter boxes, refer PPDG July 2017 for soil volume and podium planting requirements).
  - Min 1.5m deep soil, clear of drainage and slab, to be provided in the main park to permit medium to large canopy trees.
  - Automatic irrigation and drainage.
  - Pedestrian paths to connect to the street network.
  - Amenities with toilets and baby change.
  - Seating, bins, perimeter fencing, lighting, fitness equipment and/or community gardens and a paved plaza area at Wentworth Avenue.
  - Equitable access to the park from the north and foreshore.
  - Café – 1 storey, maximum size of 100m², including uncovered outdoor seating area.
  - Children's playground, minimum size of 500m².
  - Solar access to the main park:
    - 30% solar access to the main park (minimum 10,500sqm) between 9am-3pm at any time of the year, as well as 40% solar access to the main park (minimum 10,500sqm) between 10am-2pm during midwinter.
    - Solar access to be assessed with cumulative overshadowing of adjacent developments and DCP building envelopes of those yet to be approved.
    - Solar access on main park to be contiguous as far as possible.
    - Solar access to the foreshore and new street is not be included in calculating solar access on public main park.
- Reuse the portals that were part of the original building in the park design.

- Incorporate/modify approved basement car parking within the park to accommodate deep soil requirements.

5.4.7 FORESHORE PROMENADE

Objectives

To provide:

- A continuous foreshore promenade activated at key locations.
- A well-lit accessible area under the bridge – safe and secure.

Development Controls

The foreshore promenade must:

- Be guided by DCP Volume 2 Homebush Bay West December 2005 Public Domain Manual.
- Be 20m wide against the sea wall.
- Have tree planting in the 20m foreshore setback.
- Have an additional 10m set back to the development.
- Be activated at key locations.
- Use materials and finishes that blend with existing.
- Provide 24/7 direct lift and stair access from the foreshore to Footbridge Boulevard at the south east corner.

5.4.8 BUILT FORM

Objectives

The built form is to:

- Maintain the grid pattern east of Hill Road.
- Be organised to:
  - Reinforce the street pattern.
  - Assist in providing continuity of the built form on the east side of the peninsula and Hill Road.
  - Minimise 'perceived density' from the public domain.
  - Minimise impacts of density on the adjacent development.
  - Maximise the views to the water from the public domain.
  - Relate to the levels in the site as formed.
  - Respond in contemporary architecture to climate and sustainability issues.
- Minimise barriers from the transition of levels from the peak of the synthetic terrain at Wentworth Place to the finished seawall levels at the waterfront within the site and to the waterfront.
- Provide clear sight lines within and through the site, and accommodate accessibility needs especially through the main park.
- Clearly distinguish between public and private domains particularly for the main park and waterfront, while allowing for active edges to the foreshore linear park and elsewhere as appropriate.

- Define the main park without excessive indentation or complexity, edges to streets and the waterfront should be activated, and be sufficiently robust to accommodate a range of uses.
- Provide seamless, continuous and animated interfaces to the respective public domains.
- Use robust resilient materials that complement the neighbourhood and reflect the location.
- Modulate and articulate buildings to provide depth in the external walls, interest at street level and highlighted entrances.

Development Controls

- The maximum height of street wall (podium) buildings is 8 storeys.
- The maximum footprint of any tower is 1150m^2, GFA efficiency 75%.
- The set-back of any tower from a podium is 6m.
- *[If Option 2 is adopted by Council] Tallest development – must be generally consistent with diagrams provided under clause 5.3.2 [OR, if Option 3 is adopted by Council] Tallest development – located in the south-eastern corner of the site marking the arrival to Wentworth Point via Bennelong Bridge. Development to step down in scale from south (tallest) to north (lowest).*
- Buildings must align with the orthogonal street grid.
- Buildings must have a street address.
- The placement and height of towers must consider alignment, suitable separation, effect on the skyline from viewing points from inside and outside the site, the impact of shadowing of public places and parks, wind turbulence and the like.
- Building setbacks must accommodate additional width in footpaths for higher volume pedestrian activity and to compensate for road infrastructure where necessary.
- Ground floor uses must respond to the planned and developed characteristics of the respective streets, as follows:
    - Wentworth Place: retail and café frontages in development opposite and a potential park edge;
    - Burroway Road: commercial and flexible live/work typologies with potential maritime uses in proposed development opposite and a potential park edge; and
    - Footbridge Boulevard potential park edge.
- Car Parking must be located in basements and/or above ground car parking must not be higher than two levels above existing ground level and be sleeved by apartments, other uses, the false terrain or other suitable means.

[If Option 2 is adopted by Council]

- Street wall / podiums fronting streets and the public domain measured above Wentworth Place shall be no higher than 20 metres or 6 storeys (whichever is greater). An 8 storey street wall may be provided along the public open space subject to minimising the overshadowing impact on the open space.
- Building depth of residential buildings must not exceed 22 metres, except where a tower occurs above it.
- Tower envelopes must not must not exceed:
    a. 45 metres in length; and
    b. Either a square metre floorplate or GFA per floor (whichever is greater), as per the Table below:

Tower Height	Floorplate*	GFA
16 storeys	950sqm	715sqm
25 storeys	1100sqm	825sqm

**includes all areas to external face of building including external walls, internal voids and balconies*

- Solar access to the internal ground level private communal open space must meet the requirements contained in the NSW Apartment Design Guide. This may be supplemented by a limited amount of communal rooftop spaces.

5.4.9 DESIGN EXCELLENCE

In considering whether development exhibits design excellence, the consent authority must have regard to the following:

i. whether a high standard of architectural design, materials and detailing appropriate to the building type and location will be achieved,

ii. whether the form and external appearance of the proposed development will improve the quality and amenity of the public domain,

iii. whether the proposed development detrimentally impacts on view corridors,

iv. how the proposed development addresses the following matters:

- the suitability of the land for development,
- the existing and proposed uses and use mix,
- any heritage and archaeological issues and streetscape constraints or opportunities,
- the location of any tower proposed, having regard to the need to achieve an acceptable relationship with other towers (existing or proposed) on the same site or on neighbouring sites in terms of separation, setbacks, amenity and urban form,
- the bulk, massing and modulation of buildings,
- alignment of buildings with the streets to reinforce the block and street pattern,
- street frontage heights,
- environmental impacts, such as sustainable design, overshadowing and solar access, visual and acoustic privacy, noise, wind and reflectivity,
- excellence of the principles of ecologically sustainable development including improvement on the minimum applicable energy and water target of BASIX,
- pedestrian, cycle, vehicular and service access and circulation requirements, including the permeability of any pedestrian network,
- the impact on, and any proposed improvements to, the public domain,
- the impact on any special character area,
- achieving appropriate interfaces at ground level between the building and the public domain, and
- excellence and integration of landscape design.

LEADING

ITEM NUMBER	13.2
SUBJECT	Exhibition Outcomes of a Planning Proposal for Land at Lot 582 DP 36692, Part of 22 Lord Avenue, Telopea
REFERENCE	RZ/18/2017 - D06085299
REPORT OF	Project Officer Land Use
PREVIOUS ITEMS	13.8 - Planning Proposal for Land at 22 Lord Avenue, Telopea - Council - 11 Dec 2017 6:30pm Planning Proposal for Land at 22 Lord Avenue, Telopea - Local Planning Panel - 21 Nov 2017 3.30pm
LANDOWNER	Dundas-Strathfield Gospel Trust
APPLICANT	Endeavour Property Advisory

PURPOSE:

The purpose of this report is to detail and consider submissions received during the public exhibition of the Planning Proposal for land at Lot 582 DP 36692, part of 22 Lord Avenue, Telopea. The Planning Proposal seeks to rezone the subject lot from SP1 Special Activities (Place of Public Worship) to R2 Low Density Residential and amend the relevant minimum lot size map and minimum lot size for dual occupancy development map to be consistent with the surrounding low density zone. This report recommends the adoption of the Planning Proposal utilising the CEO's plan-making delegations to finalise the Proposal.

RECOMMENDATION

(a) **That** Council note the outcomes of the consultation process in relation to the Planning Proposal for land at Lot 582 DP 36692 of 22 Lord Avenue, Telopea.

(b) **That** Council adopt the Planning Proposal for proposed amendments to Parramatta Local Environmental Plan 2011 to rezone the subject site from SP1 Special Activities (Place of Public Worship) to R2 Low Density Residential and amend the minimum lot size map (LSZ_014) and minimum lot size for dual occupancy development map (LDO_014) to include the subject site and finalise the amendment using the delegation provided to the CEO on 26 November 2012.

(c) **Further, that** Council authorise the Acting CEO to correct any minor anomalies of a non-policy and administrative nature that may arise during the plan making process.

BACKGROUND

1. On 11 October 2017, Council received a Planning Proposal from Endeavour Property Advisory on behalf of the landowner, Dundas-Strathfield Gospel Trust, seeking to amend Parramatta Local Environmental Plan (LEP) 2011 to rezone the subject site from SP1 Special Activities (Place of Public Worship) to R2 Low Density Residential.

2. At its meeting of 21 November 2017, the Independent Hearing and Assessment Panel (IHAP) considered a report on the Planning Proposal for this site where it was endorsed to proceed to Council as recommended.

3. The Planning Proposal was subsequently considered by Council at its meeting of 11 December 2017, where it was endorsed to proceed to the Department of Planning and Environment (DP&E) for Gateway Determination.

4. The Planning Proposal (refer to **Attachment 1**) was submitted to the DP&E on 9 January 2018 and Gateway Determination was issued on 25 January 2018.

5. The Gateway Determination included a condition that required the minimum lot size map (LSZ_014) and minimum lot size for dual occupancy development map (LDO_014) be amended to include the subject site, consistent with the surrounding R2 Low Density Residential zone, prior to public exhibition.

6. The Planning Proposal (as amended to address the Gateway Determination conditions) was publicly exhibited from 28 February 2018 to 14 March 2018 as required by the Gateway Determination.

THE SITE

7. The subject site is Lot 582 DP 36692, which is part of 22 Lord Avenue, Telopea on the corner of Lord Avenue and Evans Road (refer to **Figure 1** below). This property comprises three lots in total with the remaining two lots not subject to this Planning Proposal. The entire site has an approximate area of 2,032m^2 with Lot 582 comprising of approximately 700m^2.

Figure 1. Location of subject site in blue

CURRENT PLANNING CONTROLS AND USES

8. The site is currently zoned SP1 Special Activities (Place of Public Worship) (refer to **Figure 2**) and is surrounded by R2 Low Density Residential to the north, east and south and RE1 Public Recreation zoned land to the west. The applicable FSR on the site is 0.5:1 and maximum building height of 9 metres. The subject lot is currently occupied by a single storey residential dwelling, with the Telopea Anglican Church occupying the other two lots that make up 22 Lord Avenue.

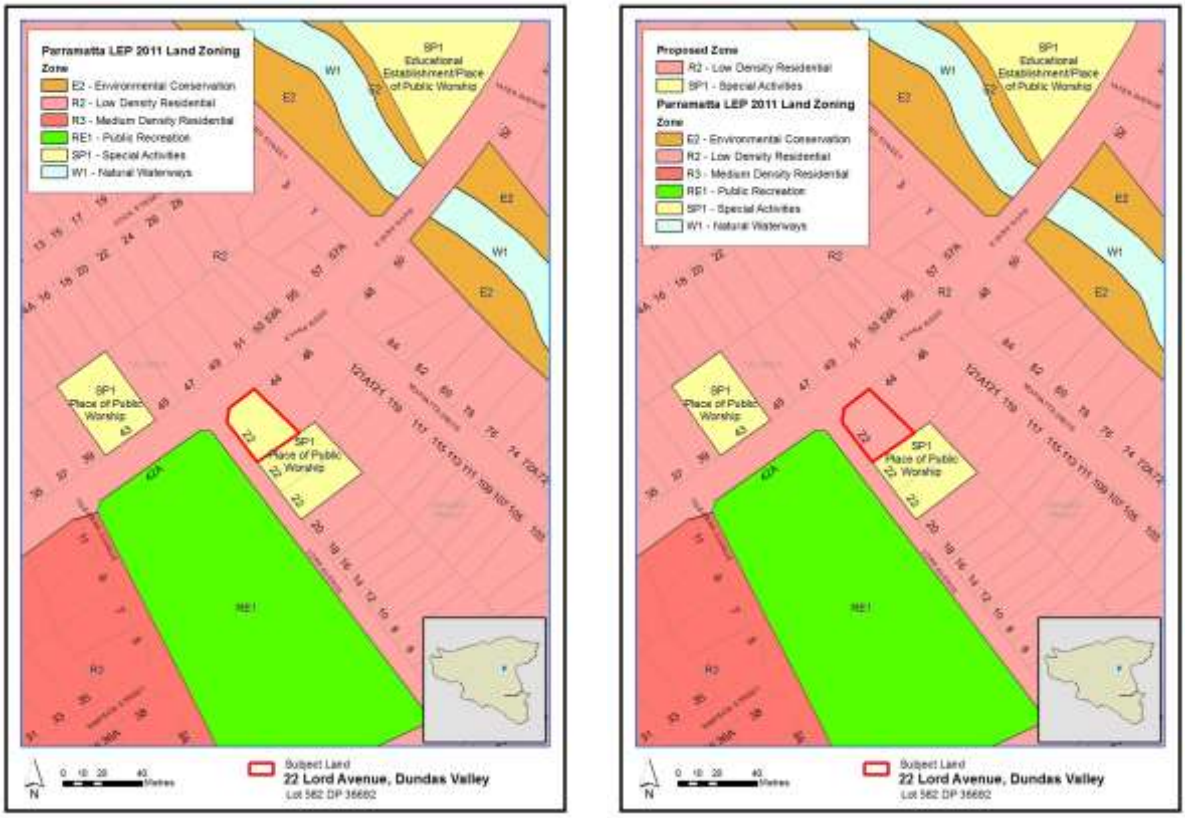


Figure 2. Current and proposed land use zones on the site

9. Due to the current SP1 Special Activities (Place of Public Worship) zoning, the site is not subject to minimum lot size or minimum lot size for dual occupancy development provisions. The Planning Proposal is seeking to include provisions for the site in keeping with those of the adjoining R2 Low Density Residential zone (550m^2 minimum lot size and 600m^2 lot size for dual occupancy development). Refer to **Figures 3 and 4** for current and proposed controls.

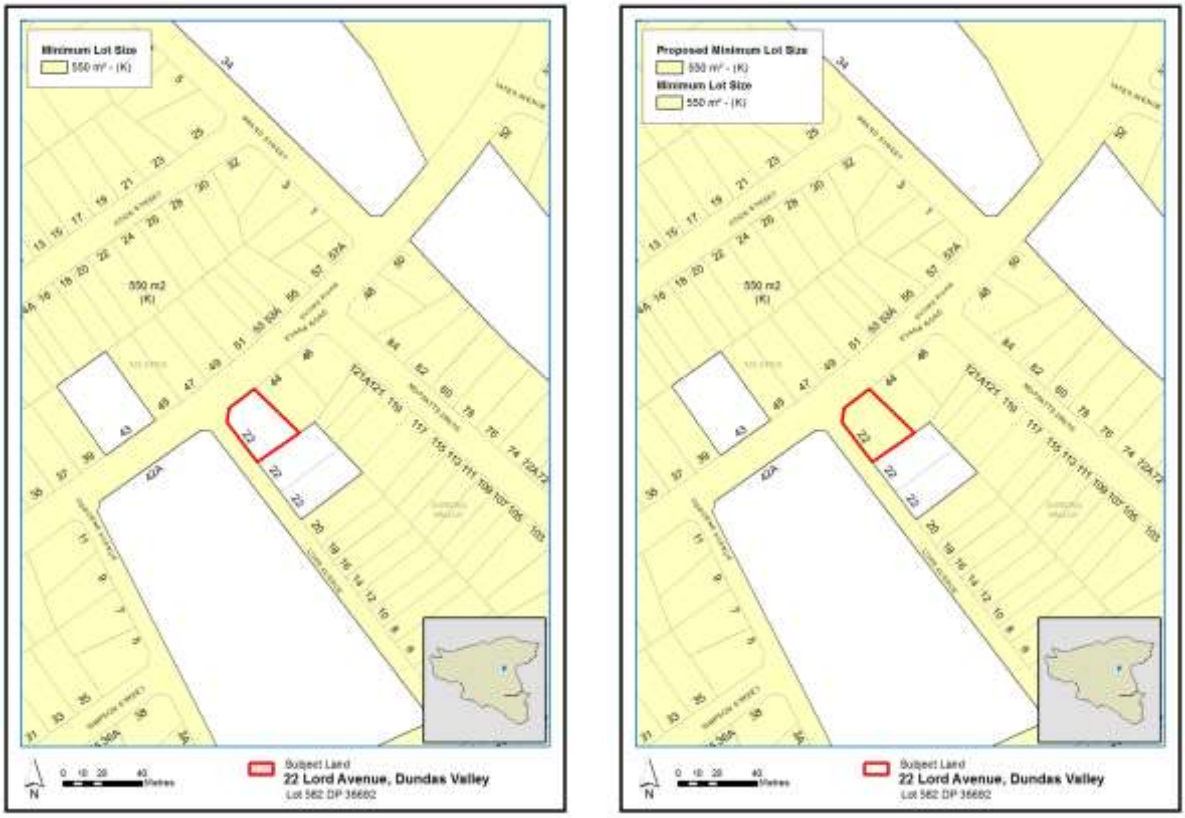


Figure 3. Current and proposed minimum lot size controls on the site

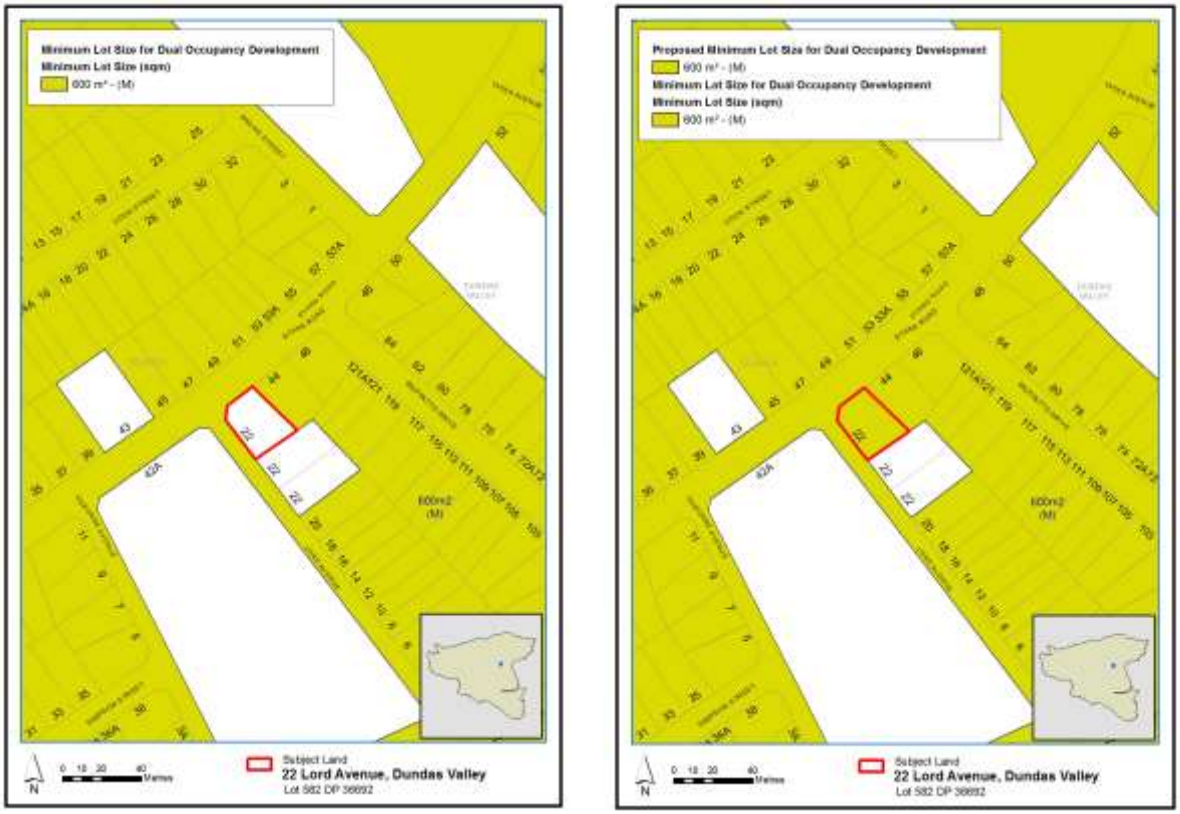


Figure 4. Current and proposed minimum lot size for dual occupancy development controls on the site

10. The existing dwelling on the subject lot was approved under DA435/82 when the land was zoned Residential 2(a). The land was subsequently rezoned to its current SP1 Special Activities (Place of Public Worship) as part of the comprehensive LEP 2011 to reflect the adjoining church use and ownership.

PLANNING PROPOSAL

11. The Planning Proposal as exhibited seeks to:
    - Amend PLEP 2011 by rezoning Lot 582 of 22 Lord Avenue, Telopea from SP1 Special Activities (Places of Public Worship) to R2 Low Density Residential (refer to **Figure 2**).
    - Amend the Minimum Lot Size Map (sheet LSZ_014) and amend the Minimum Lot Size for Dual Occupancy Development map (sheet LDO_014) to be consistent with surrounding residential zone (refer to **Figures 3 and 4**).
12. The proposal does not intend to amend other planning controls such as FSR and maximum building height that apply to the site as these are consistent with those of the surrounding R2 Low Density Residential zone.
13. The primary purpose of the Proposal is to formalise the existing use on the site for the purposes of a single dwelling residence.

CONSULTATION

14. The Planning Proposal (as amended) and supporting documents were publicly exhibited from Wednesday, 28 February 2018 to Wednesday, 14 March 2018, which was in accordance with the minimum 14-day consultation period stipulated in the Gateway Determination.
15. Consultation was undertaken as per the conditions of the Gateway Determination and relevant sections of the Environmental Planning and Assessment Act (EP&A) 1979. Notification methods included:
    a) Letters to properties adjacent and opposite the site.
    b) Advertisement in the *Parramatta Advertiser.*
    c) Placement of the Planning Proposal and supporting documents on Council's website.
    d) Hard copies of the Planning Proposal and supporting documentation made available for viewing at Council's Administration Building, Central Library and Dundas Valley Branch Library.
16. The Gateway Determination did not require any consultation to be undertaken with public authorities.
17. A public hearing was not considered necessary nor requested for this Proposal.

SUBMISSIONS AND COMMENTS RECEIVED

18. One submission was received during the consultation period (refer to **Attachment 2**), which objects to the Proposal and raises concerns over minimum lot size requirements, heritage impacts and views and impacts from potential future development on properties adjacent to the archaeologically-significant Acacia Park. The issues raised are detailed in the Table 1 below and includes Council officer's responses.

Table1. Issues raised in submission

ISSUE	RESPONSE
Minimum lot size / subdivision Questions the status of the subdivision of the site, proposed lot sizes and appropriateness of the amendment to the minimum lot size map	The Planning Proposal does not propose any subdivision of the subject site and the proposed amendments to the minimum lot size and minimum lot size for dual occupancy development controls (550sqm and 600sqm respectively) are to ensure consistency with the surrounding residential properties. As the subject lot is approximately 700m^2, it does not meet the minimum requirement for subdivision (1,100m^2) regardless of the propsed amendment, and although the site could be redeveloped for a dual occupancy development, this is considered to be low density residential development and is consistent with the type of development that can currently occur on surrounding properties. These amendments are a requirement of the Gateway Determination and it is not anticipated that they will have any negative impacts on the site or surrounding properties upon finalisation.
Heritage Impacts Raises concerns about the impact of future development surrounding the archaeologically significant site "Kishnaghur", known as Acacia Park. Suggests a separate Planning Proposal be prepared to restrict building heights to one and a half storeys by way of recessing houses into the ground on streets surrounding the park in order to protect view lines.	The subject site has no known heritage or archaeological significance. The nearest heritage item is opposite the subject site and is listed as Item A6 *Kishnaghur Archaeological Site* within Schedule 5 of Parramatta LEP 2011 (see **Figure 5** below). This site is commonly known as Acacia Park. The archaeological significance of this site is due to it being the location of *Kishnaghur*, a residence that was built in the mid-1880s and demolished prior to 1943. The site may contain archaeological remnants of this residence and is the justification for its heritage listing. There is no visual evidence of *Kishnaghur* remaining at surface level and therefore no established view lines that require protection. Accordingly, it is not considered that the Planning Proposal will facilitate development that will adversely impact on the site's heritage/archaeological significance. Furthermore, it is considered that the existing 9m (2 storey) height control is appropriate within this context and that it is not necessary to restrict building heights on adjacent properties for the purposes of protecting the view lines to/from the park or archaeological significance of the site. Any future development on surrounding properties will be subject to the existing provisions of the Parramatta LEP 2011 and Parramatta Development Control Plan (DCP) 2011.

Concerned that the heritage item was not given enough consideration as part of this Planning Proposal.	Council officers consider the proposed amendments to be minor in nature and are not expected to have any negative impacts on the archaeological significance of Acacia Park. It is therefore not considered necessary for the proponent to undertake a separate Heritage Impact Study and Council officers are satisfied that adequate consideration has been given to the heritage significance of Acacia Park, given that the proposed future built form outcome will be consistent with the existing low density residential character of the area.

19. The matters raised in this submission are not considered to affect the validity of the Planning Proposal in its current form and therefore should not prevent the Proposal from being finalised.

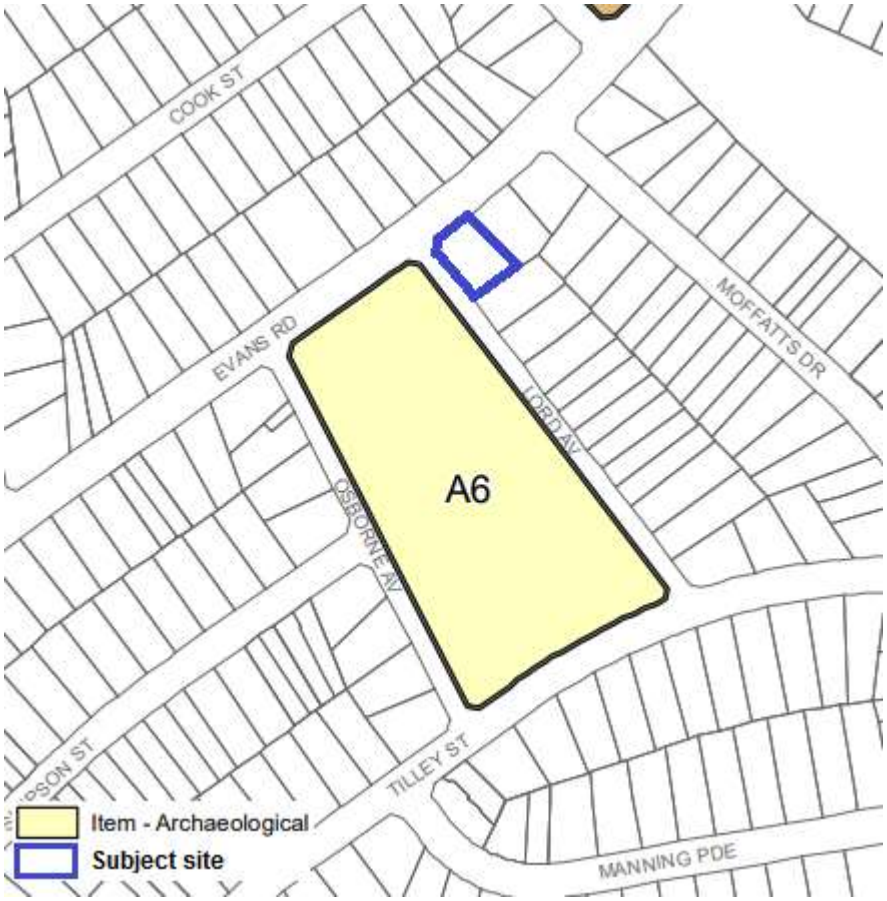


Figure 5. Location of Item A6 Kishnaghur Archeological Site

USE OF DELEGATIONS

20. Council has previously resolved to exercise the plan-making delegations for this Planning Proposal on 1 December 2017 as authorised by Council on 26 November 2012. If the Proposal is endorsed by Council, Council Officers will deal directly with the Parliamentary Counsel Office on the legal drafting and mapping of the amendment. The LEP amendment is then signed by the CEO

before being notified on the NSW Legislation website. The amendment is finalised once notified in the NSW Legislation website.

CONCLUSION

21. The Planning Proposal relating to Lot 582 DP 36692 of 22 Lord Avenue, Telopea has been exhibited in accordance with the provisions of the Gateway Determination and EP&A Act 1979.
22. One submission was received during the exhibition period. The matters raised have been considered and should not prevent the Planning Proposal from being finalised.
23. It is recommended that Council endorse the Proposal as exhibited and finalise the Proposal using the delegations provided to the CEO, including legal drafting of the LEP instrument to give full effect to the Planning Proposal.

Amberley Moore
Project Officer Land Use

Sue Weatherley
Director Strategic Outcomes and Development

Jim Stefan
Acting Director City Services

ATTACHMENTS:

1⇩	Revised Planning Proposal - Lot 582 DP 36692 of 22 Lord Avenue, Telopea	22 Pages
2⇩	Submission on Planning Proposal	2 Pages

REFERENCE MATERIAL

PLANNING PROPOSAL

Lot 582 DP 36692 of 22 Lord Avenue, Telopea

PARRAMATTA WE'RE BUILDING AUSTRALIA'S NEXT GREAT CITY

Planning Proposal drafts

Proponent versions:

No.	Author	Version
1.	Endeavour Property Advisory	October 2017

Council versions:

No.	Author	Version
1.	City of Parramatta Council	21 November 2017 IHAP Meeting recommending Gateway Determination
2.	City of Parramatta Council	11 December 2017 Council Meeting recommending Gateway Determination
3.	City of Parramatta Council	28 February 2018 for exhibition with Gateway amendments

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INTRODUCTION

This Planning Proposal explains the intended effect of, and justification for, the proposed amendment to *Parramatta Local Environmental Plan 2011*. It has been prepared in accordance with Section 55 of the *Environmental Planning and Assessment Act 1979* and the Department of Planning and Environment (DP&E) guides, 'A Guide to Preparing Local Environment Plans' (April 2013) and 'A Guide to Preparing Planning Proposals' (August 2016) and 'Guidance for merged councils on planning functions' (May 2016).

Background and context

On 11 October 2017, a Planning Proposal application was lodged with the City of Parramatta by Endeavour Property Advisory on behalf of landowner, Dundas-Strathfield Gospel trust to rezone part of 22 Lord Avenue, Telopea, being Lot 582 DP 36692 from SP1 Special Activities (Place of Public Worship) to R2 Low Density Residential. The site is shown in Figure 1.

The Site

The subject site is Lot 582 DP 36692 and is part of 22 Lord Avenue, Telopea. The property at 22 Lord Avenue comprises of three lots, with the remaining two lots having the legal descriptions of Lot 580 DP 36692 and Lot 581 DP 36692. The three lots have a total site area of approximately 2,023m^2, with Lot 582 comprising of approximately 700m^2 of the total area.

The Site is currently occupied by a single storey dwelling and is surrounded by low density residential development to the north-east and north-west, public open space to the south-west (Acacia Park) and the Telopea Anglican Church on the adjacent south-east properties, west and east.

The site is located on the corner of Lord Avenue and Evans Road and is approximately 750m from the Telopea town centre. The site is within close proximity to but outside the study area of the Telopea Priority Precinct, which is currently undergoing a rezoning process led by the State Government.

Figure 1. Site subject at Lot 582 DP36692 of 22 Lord Avenue, Telopea

Under *Parramatta Local Environmental Plan (PLEP) 2011* the site has the following planning controls (also refer to Part 4 – Mapping):

- is zoned SP1 – Special Activities – Place of Public Worship (refer to Figure 2 in Part 4 – Mapping);
- has a maximum building height of 9 metres (refer to Figure 2 in Part 3 – Mapping); and
- has a maximum floor space ratio (FSR) of 0.5:1 (refer to Figure 3 in Part 4 – Mapping).

The Planning Proposal has been amended in accordance with the Gateway determination issued by the Department of Planning and Environment on 25 January 2018. The changes include updating the *minimum lot size map* (sheet LSZ_014) and *minimum lot size for dual occupancy development map* (sheet LDO_014) to ensure the subject site is consistent with surrounding properties.

PART 1 – OBJECTIVE AND INTENDED OUTCOMES

The objective of this planning proposal is to amend PLEP 2011 by rezoning Lot 582 DP 36692 of 22 Lord Avenue, Telopea from SP1 Special Activities – Place of Public Worship to R2 Low Density Residential to formalise the use of the site for the purpose of a single dwelling residence.

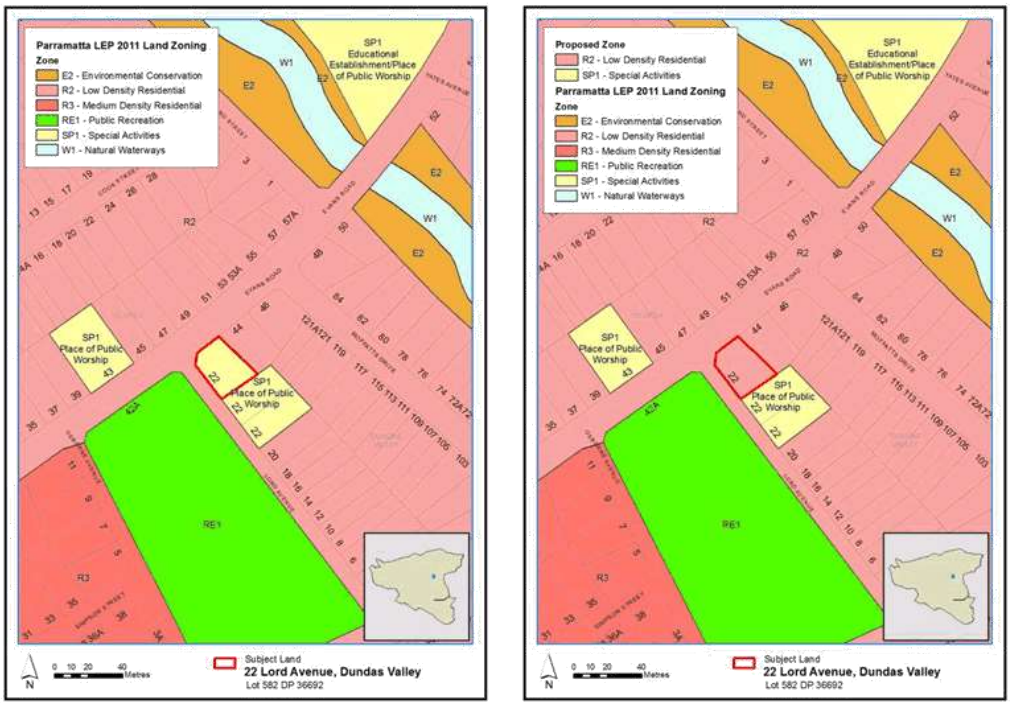
The proposed amendment does not seek to change other planning controls such as FSR and maximum building height that currently apply to the site.

PART 2 – EXPLANATION OF PROVISIONS

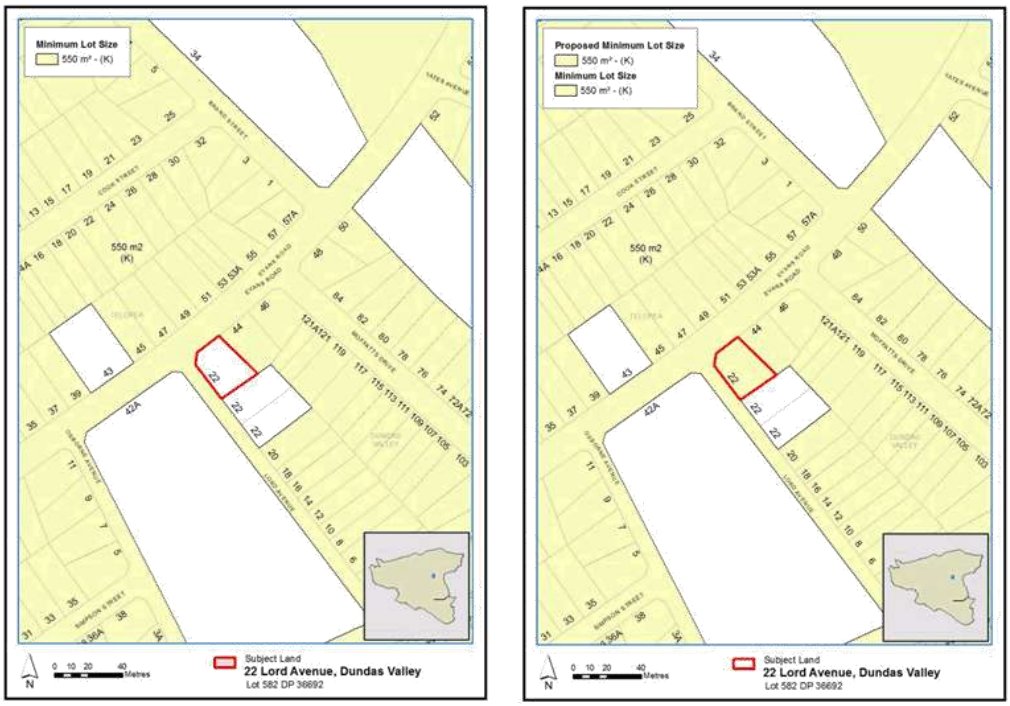
This Planning Proposal seeks to amend *PLEP 2011* in relation to the zoning.

In order to achieve the desired objectives, the following amendments to the *PLEP 2011* would need to be made:

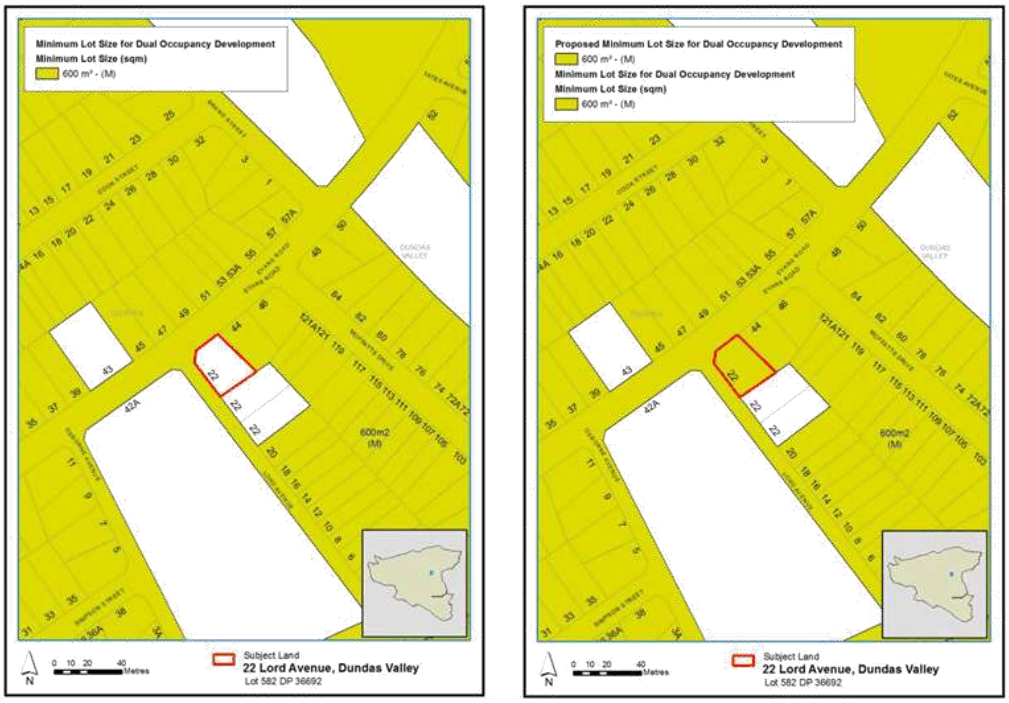
1. Amend the zone in the **Land Zoning Map** (Sheet LZN_014) SP1 Special Activities (Place of Public Worship) to R2 Low Density Residential (refer to Figures 2 & 3).
2. Amend the **Minimum Lot Size Map** (sheet LSZ_014) to 550sq m (refer to Figures 4 & 5)
3. Amend the **Minimum Lot Size for Dual Occupancy Development Map** (sheet LDO_014) to 600sq m (refer to Figures 6 & 7).



Figures 2 & 3. Existing (left) and proposed (right) land use zones on the site



Figures 4 & 5. Existing (left) and proposed (right) minimum lot sizes after subdivision on the site



Figures 6 & 7. Existing (left) and proposed (right) minimum lot size for dual occupancy development requirements on the site

PART 3 – JUSTIFICATION

This part describes the reasons for the proposed outcomes and development standards in the Planning Proposal.

3.1 Section A - Need for the planning proposal

This section establishes the need for a planning proposal in achieving the objective and intended outcomes. The set questions address the strategic origins of the proposal and whether amending the LEP is the best mechanism to achieve the aims on the proposal.

3.1.1 Is the Planning Proposal a result of any study or report?

No. The Planning Proposal is not the direct result of a strategic study or report; however, it is not inconsistent with the intentions of local and State government strategic plans including the NSW Government's *A Plan for Growing Sydney* and *Parramatta 2038* as it contributes to the provision of residential lands for housing opportunities.

3.1.2 Is the Planning Proposal the best means of achieving the objectives or intended outcomes, or is there a better way?

The Planning Proposal is the best and most appropriate means of achieving the desired outcome on the Site. The alternative of including this amendment in Council's next Housekeeping Amendment was considered; however, the precise timeframe for this amendment to be undertaken has not been established.

Consideration was given to the possibility of rezoning the site for commercial uses rather than applying additional permitted uses; however, this may result in the creation of another commercial centre, which is neither suitable nor desired for this location from a strategic perspective given the established surrounding residential character and proximity to existing commercial centres.

The rezoning of this site for low density residential uses will ensure the existing residential use and a low density character is maintained. It is considered that the impact of this proposal is relatively minor given the presence of the single dwelling on the site.

3.2 Section B – Relationship to strategic planning framework

This section assesses the relevance of the Planning Proposal to the directions outlined in key strategic planning policy documents. Questions in this section consider state and local government plans including the NSW Government's Plan for Growing Sydney and subregional strategy, State Environmental Planning Policies, local strategic and community plans and applicable Ministerial Directions.

3.2.1 Is the planning proposal consistent with the objectives and actions of the applicable regional, sub-regional or district plan or strategy (including any exhibited draft plans or strategies)?

A Plan for Growing Sydney

On 14 December 2014, the NSW Government released '*A Plan for Growing Sydney*' which outlines actions to achieve the Government's vision for Sydney which is a '*strong global city and a great place to live*'.

The Parramatta local government area is part of the West Central Subregion. *A Plan for Growing Sydney* identifies the following directions, actions and priorities for Parramatta and the West Central Subregion:

Grow Greater Parramatta – Sydney's Second CBD

- Grow Parramatta as Sydney's second CBD by connecting and integrating Parramatta CBD, Westmead, Parramatta North, Rydalmere and Camellia
- Grow the specialised health and education precincts at Westmead and Rydalmere
- Renew Parramatta North to create a vibrant mixed-use precinct (to deliver around 6,000 new homes and 2,000 new jobs).
- Establish A New Priority Growth Area – Greater Parramatta To The Olympic Peninsula
- Establish a new partnership to manage renewal of the Greater Parramatta to Olympic Peninsula Priority Growth Area
- Identify and deliver enabling infrastructure to support growth and urban renewal
- Deliver priority revitalisation precincts
- Grow the knowledge economy as part of the extension of the Global Economic Corridor.

Promote Sydney's Heritage, Arts and Culture

- Grow the arts and cultural opportunities in Parramatta to include State-level facilities.
- **Centres**: Parramatta is identified as Sydney's Western CBD and is also a Strategic Centre. The site is located approximately 2.5km to the north of the Parramatta CBD and adjacent to the Westmead Health Precinct.
- **Global Economic Corridor**: The Global Economic Corridor contains a concentration of jobs and activities in strategic centres, transport gateways and industrial lands between Port Botany/Sydney Airport, Macquarie Park and now extended to Parramatta, Norwest and Sydney Olympic Park. Growing Sydney notes that the Government will work with Parramatta Council to review expansion opportunities in the Westmead Health Precinct to encourage growth of this facility.
- **Transport**: As well as existing road and public transport infrastructure, several opportunities for light rail have been identified around Parramatta, including the Westmead Health Precinct. However, any proposed light rail routes are not considered certain at the time of assessment.
- **Urban Renewal Corridor**: Parramatta is part of an Urban Renewal Corridor (Greater Parramatta to Olympic Peninsula Priority Growth Area) where *A Plan for Growing Sydney* prioritises the revitalisation of established urban areas to provide for a greater range of housing and to improve liveability through better access to employment, improved services and social infrastructure.

The planning proposal supports the role identified for Greater Parramatta; however, as the proposed amendment is not seeking an intensification of use on the site it is not expected to have a significant influence on the outcomes contained within *'A Plan for Growing Sydney'*.

Draft Greater Sydney Region Plan 2017

The Draft Greater Sydney Region Plan is a twenty-year plan with a forty-year vision (2056) for the Greater Sydney area to manage growth and change in the context of social, economic and environmental matters. It sets the planning framework for Sydney and is used to inform the district and local plans. The draft Plan establishes a metropolis of three 30-minute cities with the greater Parramatta area identified as the Central River City.

The draft Plan identifies ten directions and forty objectives to guide the delivery of Plan with an emphasis on population, people and places, housing, jobs, connections and landscape. The ten directions are:

1. A city supported by infrastructure
2. A collaborative city
3. A city for people
4. Housing the city
5. A city of great places
6. A well-connected city
7. Jobs and skills in the city
8. A city in its landscape
9. An efficient city
10. A resilient city

Due to the minor nature of this Planning Proposal it is not considered to be inconsistent with the objectives of the Draft Greater Sydney Region Plan.

Draft Central City District Plan

The *Draft Central City District Plan* outlines the Greater Sydney Commission's (GSC) vision for the Blacktown, Cumberland, Auburn, Parramatta and The Hills Local Government Areas.

The draft Plan will implement the overarching 40-year vision and strategy of the draft Greater Sydney Region Plan through a 20-year plan. It will be used to inform preparation of Local Environmental Plans, Planning Proposals, and strategic land use and transport and infrastructure planning.

The District Plan contains four key themes, metrics to measure the successful delivery of the Plan and specific priorities and actions for the district. The four key themes are:

1. Infrastructure and collaboration
2. Liveability
3. Productivity
4. Sustainability

This vision includes cementing the West Central City District as Sydney's economic powerhouse, supported by planned investment in new transport infrastructure, the provision of new and diverse housing options, and the expansion and diversification of employment opportunities that build on and respect the regions significant cultural and landscape assets.

Due to the minor nature of this Planning Proposal, it is not considered to be inconsistent with the objectives of the Draft Central City District Plan.

3.2.2 Is the planning proposal consistent with the local council's Community Strategic Plan or other local strategic plan?

The following strategic planning documents are relevant to the Planning Proposal.

Parramatta 2038 Community Strategic Plan

Parramatta 2038 is a long-term Community Strategic Plan for the City of Parramatta and it links to the long-term future of Sydney. The plan formalises several big and transformational ideas for the City and the region.

The proposed amendment only seeks to reflect existing use rights, which does not intensify the usage compared to the surrounding area, and is generally consistent with the Community Strategic Plan.

3.2.3 Is the planning proposal consistent with the applicable State Environmental Planning Policies?

The following State Environmental Planning Policies (SEPPs) are of relevance to the site (refer to Table 1 below).

Table 1 – Comparison of planning proposals with relevant SEPPs

State Environmental Planning Policies (SEPPs)	Consistent: Yes - ✓ No - × or N/A	Comment
SEPP No 1 Development Standards	N/A	This SEPP is not applicable to the subject land under Clause 1.9 of the Parramatta LEP 2011.
SEPP 4 – Development Without Consent and Miscellaneous Exempt and Complying Development	N/A	This SEPP is not applicable to the subject land under Clause 1.9 of the Parramatta LEP 2011.
SEPP 6 – Number of Storeys in a Building	N/A	Standard instrument definitions apply.
SEPP 19 – Bushland in Urban Areas	N/A	This SEPP is not applicable to the subject land under Clause 1.9 of the Parramatta LEP 2011.
SEPP 32 – Urban Consolidation (Redevelopment of Urban Land)	N/A	This SEPP is not applicable to the subject land under Clause 1.9 of the Parramatta LEP 2011.
SEPP 55 Remediation of Land	N/A	This SEPP is not applicable to the subject land under Clause 1.9 of the Parramatta LEP 2011.
SEPP 60 Exempt and Complying Development	Yes	Any future redevelopment of this site will be consistent with the provisions under SEPP 60
SEPP 64 – Advertising and Signage	N/A	Not relevant to proposed amendment. May be relevant to any future DAs.
SEPP No 65 Design Quality of Residential Flat Development	N/A	This SEPP is not applicable to the subject land under Clause 1.9 of the Parramatta LEP 2011.
SEPP (Affordable Rental Housing) 2009	N/A	This SEPP is not applicable to the subject land under Clause 1.9 of the Parramatta LEP 2011.
SEPP (BASIX) 2004	✓	The requirements of BASIX will be met should any future redevelopment be undertaken on the site.

SEPP (Exempt and Complying Development Codes) 2008	✓	The Planning Proposal will not contain provisions that conflict or obstruct the application of this SEPP.
SEPP (Infrastructure) 2007	N/A	This SEPP is not applicable to the subject land under Clause 1.9 of the Parramatta LEP 2011.
SEPP (State and Regional Development) 2011	N/A	This SEPP is not applicable to the subject land under Clause 1.9 of the Parramatta LEP 2011.
Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005	N/A	This SEPP is not applicable to the subject land under Clause 1.9 of the Parramatta LEP 2011.
SEPP (Urban Renewal) 2010	N/A	This SEPP is not applicable to the subject land under Clause 1.9 of the Parramatta LEP 2011.

3.2.4 Is the planning proposal consistent with applicable Ministerial Directions (s.117 Directions)

In accordance with Clause 117(2) of the *EP&A Act 1979* the Minister issues directions for the relevant planning authorities to follow when preparing planning proposals for new LEPs. The directions are listed under the following categories:

4. Environment and heritage
5. Housing, infrastructure and urban development
6. Hazard and risk
6. Local plan making
7. Metropolitan Planning

The following directions in **Table 2** are considered relevant to the subject Planning Proposal:

Ministerial Direction	Consistent	Comment
2. Environment and Heritage		
2.3 Heritage Conservation	Yes	The site subject to this Proposal is within close proximity to an item of identified archaeological significance, being Item A6 Kishnaghur Archaeological Site, now Acacia Park. Due to the minimal impact this Proposal is likely to have on this item, a heritage impact assessment is not required for this Proposal.
3. Housing, Infrastructure and Urban Development		
3.1 Residential Zones	Yes	The Proposal is consistent with this Direction for the following reasons: • The rezoning will permit low density residential housing on the site. • The site is adequately serviced by essential infrastructure.
3.3 Home Occupations	Yes	The Proposal complies with this objective The Proposal will allow home occupations in accordance with the provisions of PLEP 2011.
4. Hazard and Risk		
4.1 Acid Sulphate Soils	Yes	The Proposal complies with this objective The Site has a low Classification of 5. The soil type and likely groundwater is such that this issue is not

		critical and able to be managed with new development Proposals.
4.3 Flood Prone Land	Yes	The Proposal complies with this objective The Site is not known to be flood liable.
6. Local Plan Making		
6.1 Approval and Referral Requirements	Yes	The Proposal complies with this objective The Proposal does not include consultation, concurrence or referral above and beyond the provisions of the PLEP 2011. The Proposal does not include designated development.
7. Metropolitan Planning		
7.1 Implementation of A Plan for Growing Sydney	Yes	The Proposal is consistent with the relevant Goals and directions in the Strategy.

Table 2 – Comparison of the Planning Proposal with relevant Section 117 Directions

3.3 Section C – Environmental, social and economic impact

This section considers the potential environmental, social and economic impacts which may result from the Planning Proposal.

3.3.1 Is there any likelihood that critical habitat or threatened species, populations or ecological communities, or their habitats, will be adversely affected as a result of the proposal?

No. There are no known critical habitat or threatened species, populations or ecological communities, or their habitats present on the site.

3.3.2 Are there any other likely environmental effects as a result of the planning proposal and how are they proposed to be managed?

No. This Planning Proposal is not seeking an intensification of use on the site and any impacts resulting from the proposed rezoning are likely to be minimal.

3.3.3 How has the planning proposal adequately addressed any social and economic effects?

This Planning Proposal is expected to have minimal social and economic impacts due to the minor nature of the proposed amendment.

3.4 Section D – State and Commonwealth Interests

3.4.1 Is there adequate public infrastructure for the planning proposal?

Yes. The site subject to the planning proposal is located in a well-serviced and established residential area with adequate existing infrastructure. No intensification of the use on this site is proposed as part of this amendment.

3.4.2 What are the views of State and Commonwealth public authorities consulted in accordance with the gateway determination?

No consultation has been undertaken at this stage due to the minor nature of the proposed

amendment. Future consultation with relevant agencies and stakeholders will be undertaken following Gateway determination as part of the formal public exhibition.

PART 4 – MAPPING

This section contains the mapping for this planning proposal in accordance with the DP&E's guidelines on LEPs and Planning Proposals.

The subject Planning Proposal seeks an amendment to land use zoning on the site. Thus, the following maps are provided below:

- Existing and proposed Land Zoning Map applying to the land
- Existing and proposed Minimum Lot Size Map (after subdivision) applying to the land
- Existing and proposed Minimum Lot Size for Dual Occupancy Development Map applying to the land

The proposed mapping is in sketch form. The maps will be provided in the format prescribed by the technical guidelines for LEP maps published by the DP&E for the purposes of finalisation as required.

4.1 Existing controls

This section contains map extracts from *PLEP 2011* which illustrate the current controls applying to the site.

Zoning

Figure 8 below illustrates the existing SP1 Special Uses (Place of public Worship) over the Site. Subject Site outlined in blue.

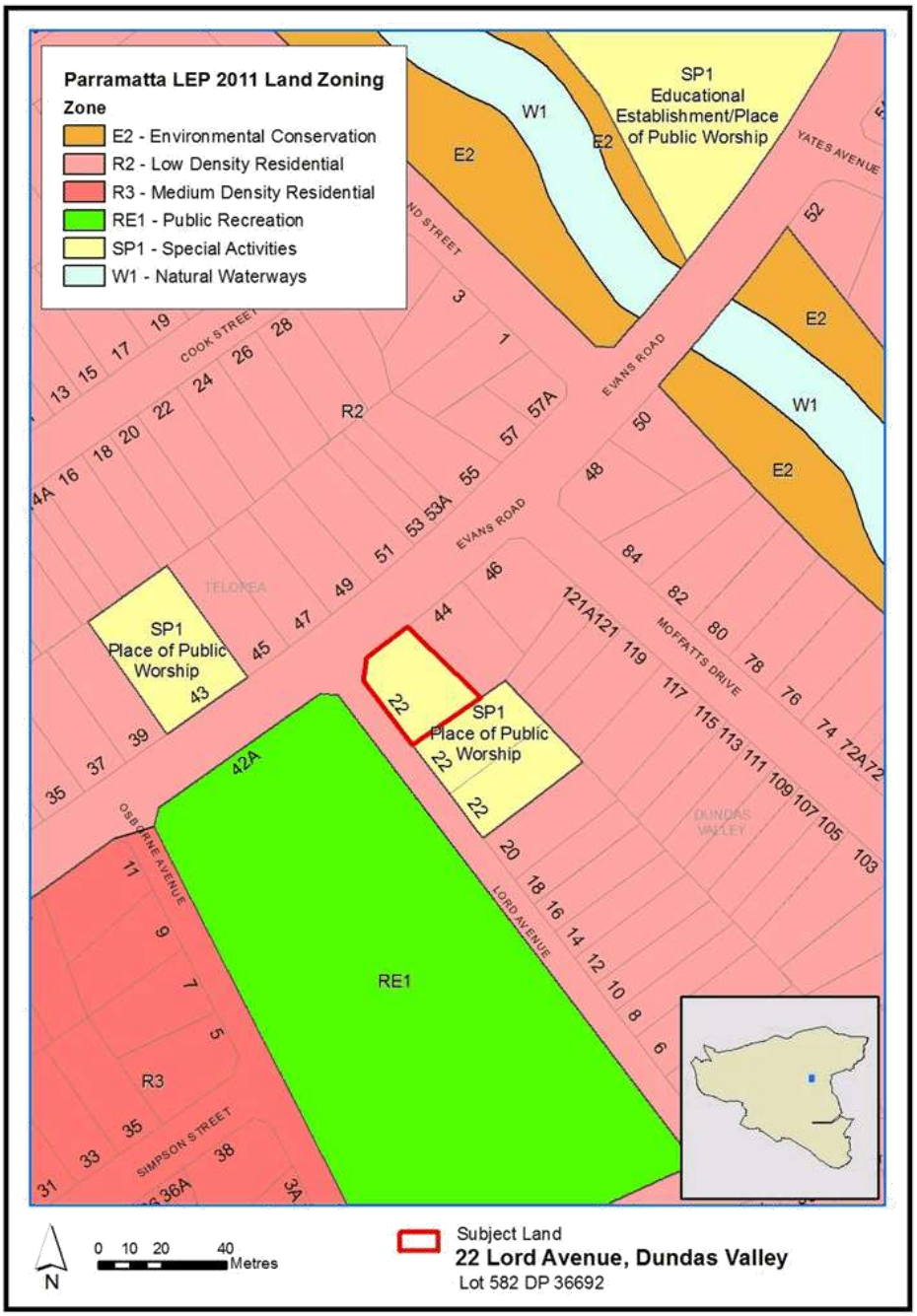


Figure 8. Existing zoning of Subject Site

Minimum Lot Size

Figure 9 below illustrates the existing controls for minimum lot size over the Site. Subject Site outlined in blue. Note this control doesn't currently apply to the site.

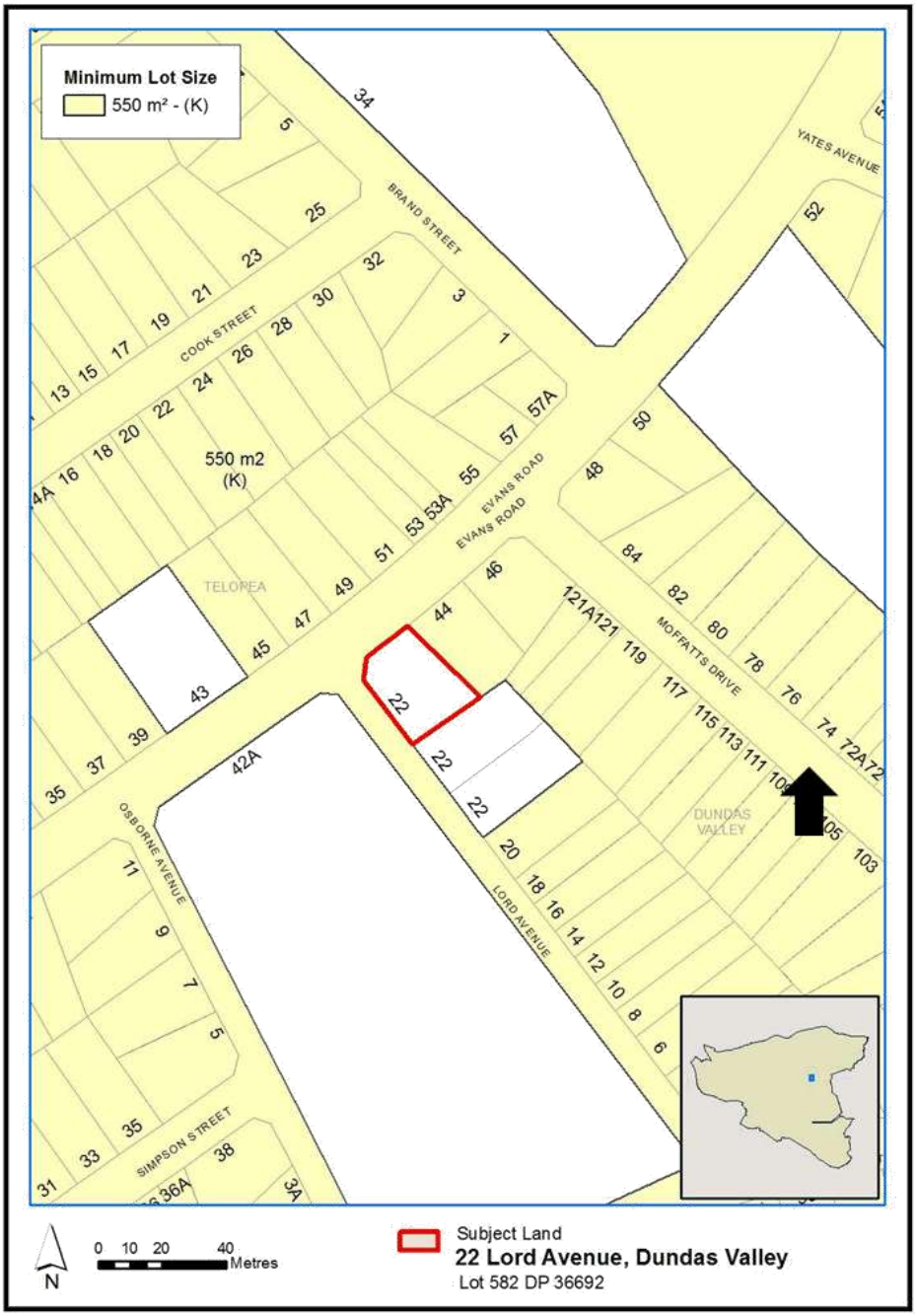


Figure 9. Existing application of minimum lot size controls on the Subject Site.

Minimum Lot Size for Dual Occupancy Development

Figure 10 below illustrates the existing controls for minimum lot size for dual occupancy development over the Site. Subject Site outlined in blue. Note this control doesn't currently apply to the site.

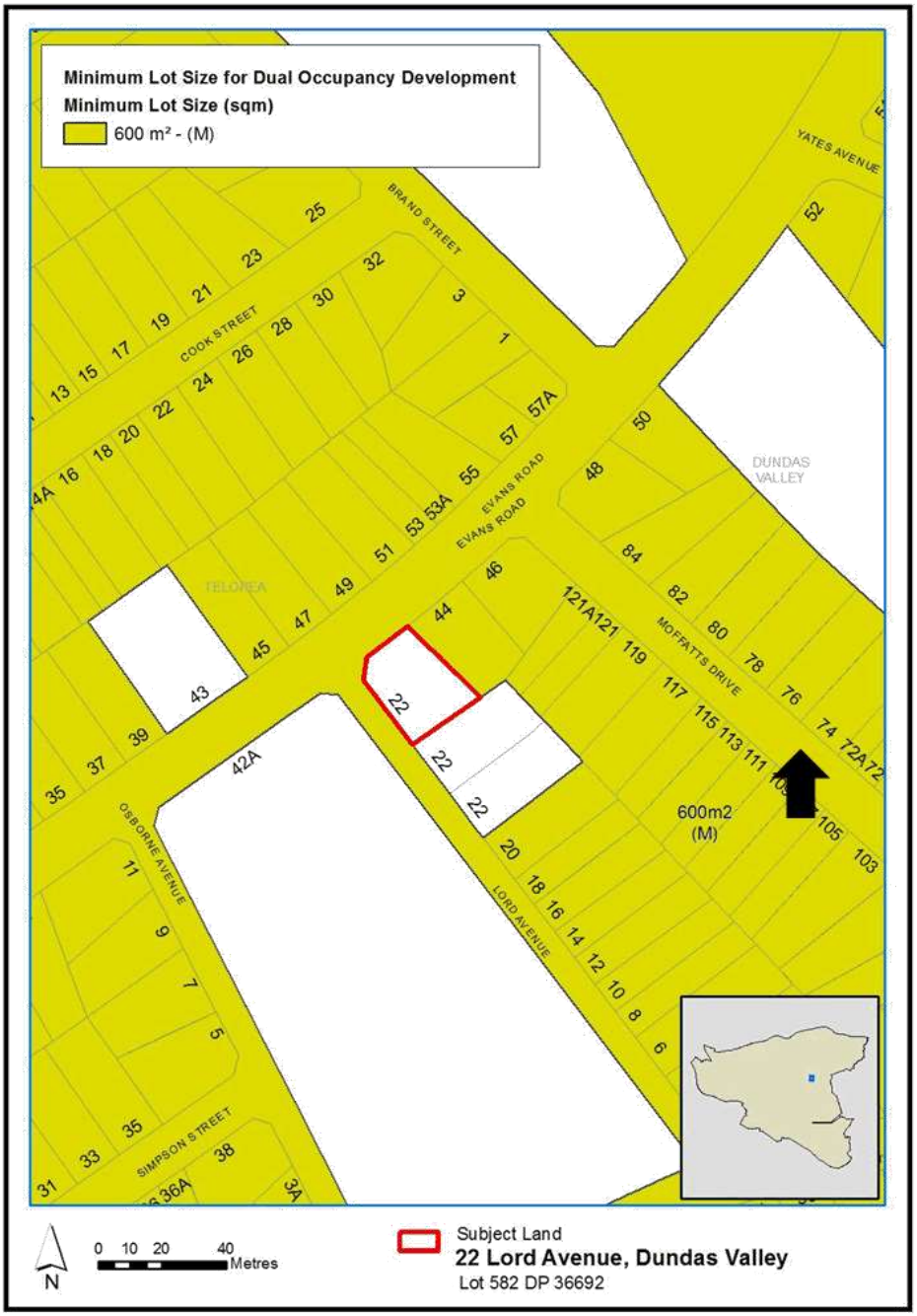


Figure 10. Existing application of minimum lot size for dual occupancy development control on the Subject Site.

4.2 Proposed controls

The figures in this section illustrate the proposed controls sought by this planning proposal.

Proposed Zoning

Figure 11 below illustrates the proposed R2 Low Density Residential zone over the Site. Subject site outlined in blue.

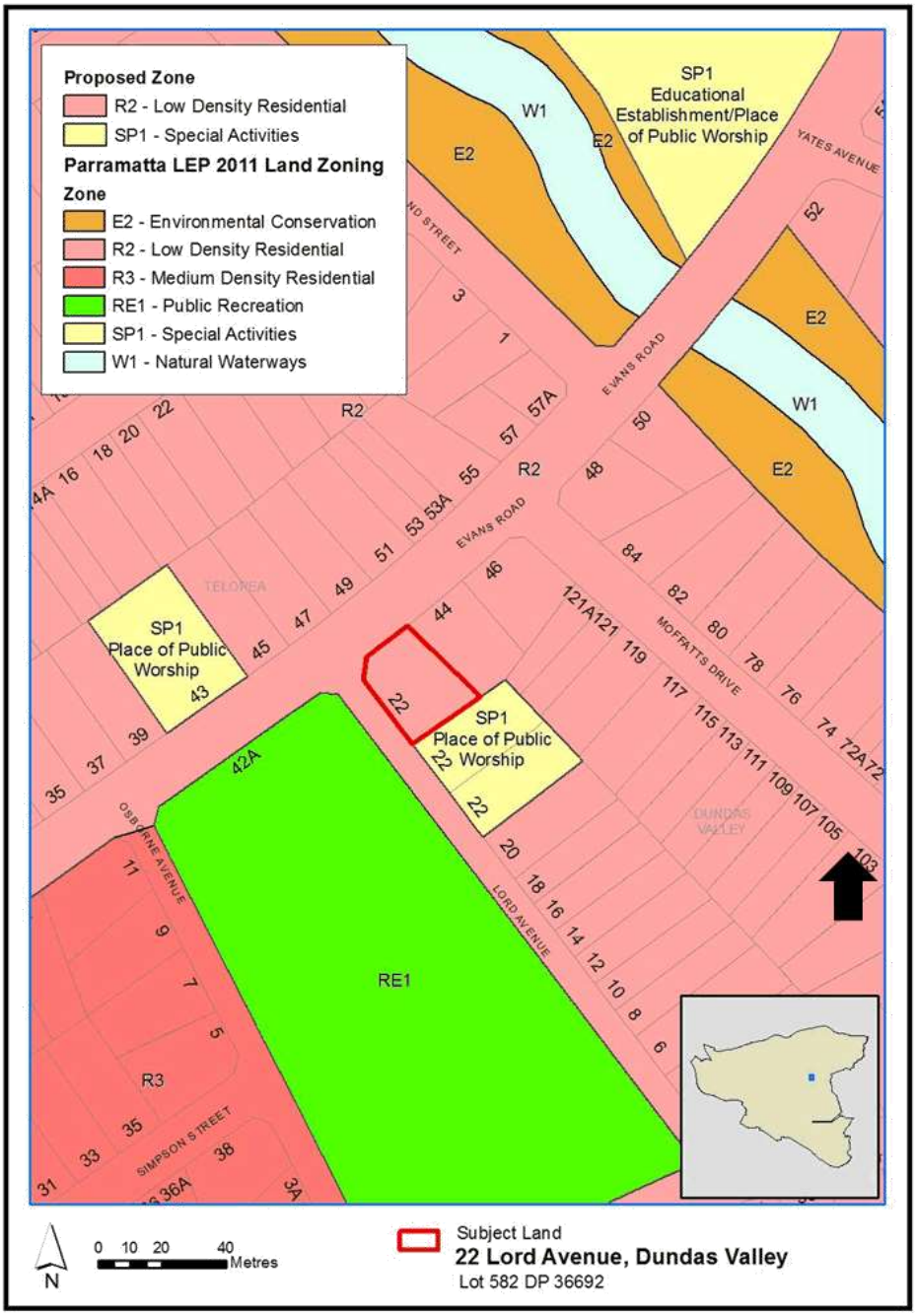


Figure 11. Proposed land use zone on the Site

Minimum Lot Size

Figure 12 below illustrates the proposed controls for minimum lot size over the Site. Subject Site outlined in blue. This control stipulates the minimum size requirement (550sq m) of a lot after subdivision has occurred.

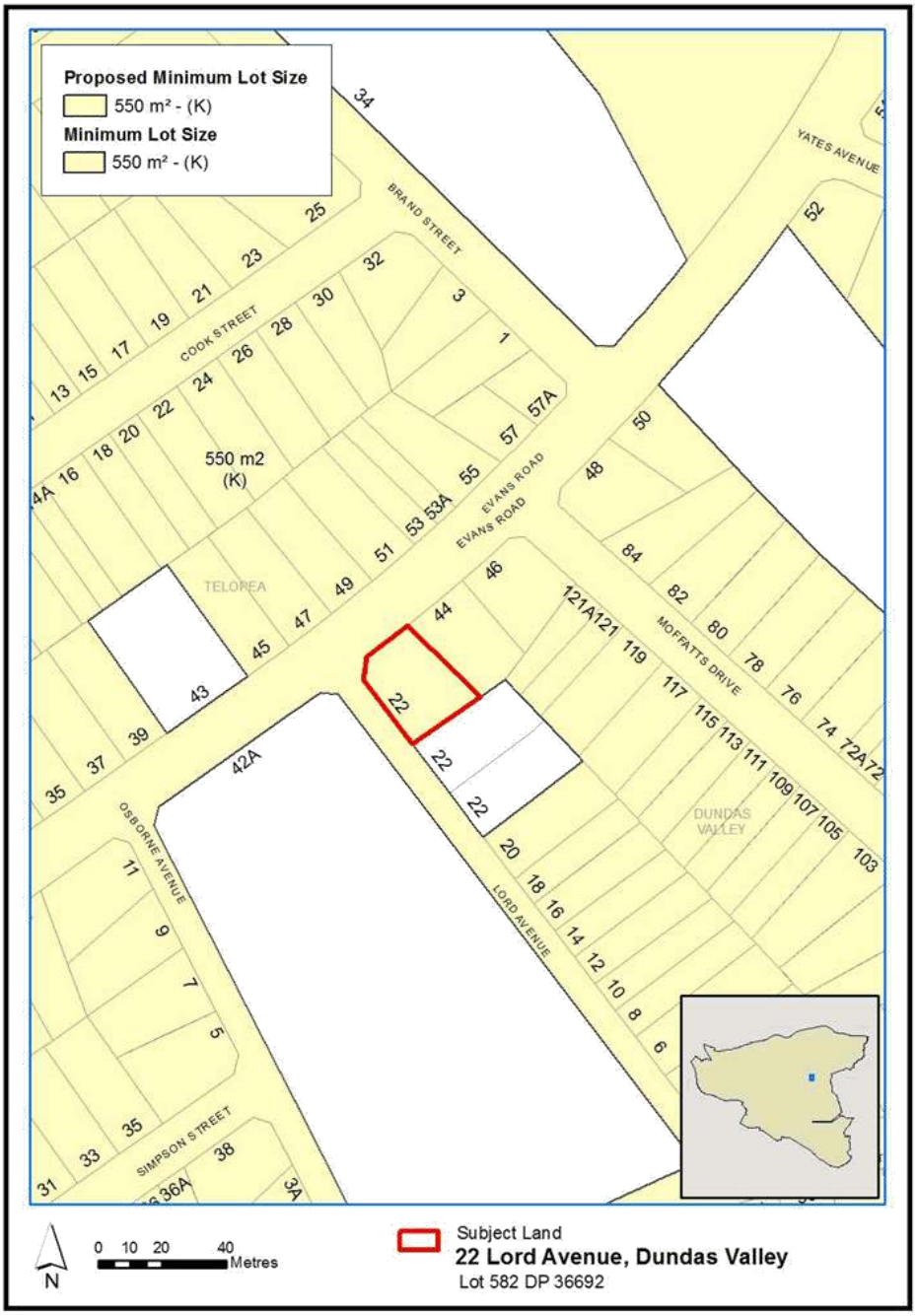


Figure 12. Proposed minimum lot size for subject site.

Minimum Lot Size for Dual Occupancy Development

Figure 13 below illustrates the proposed controls for minimum lot size for dual occupancy development (600sq m) over the Site. Subject Site outlined in blue.

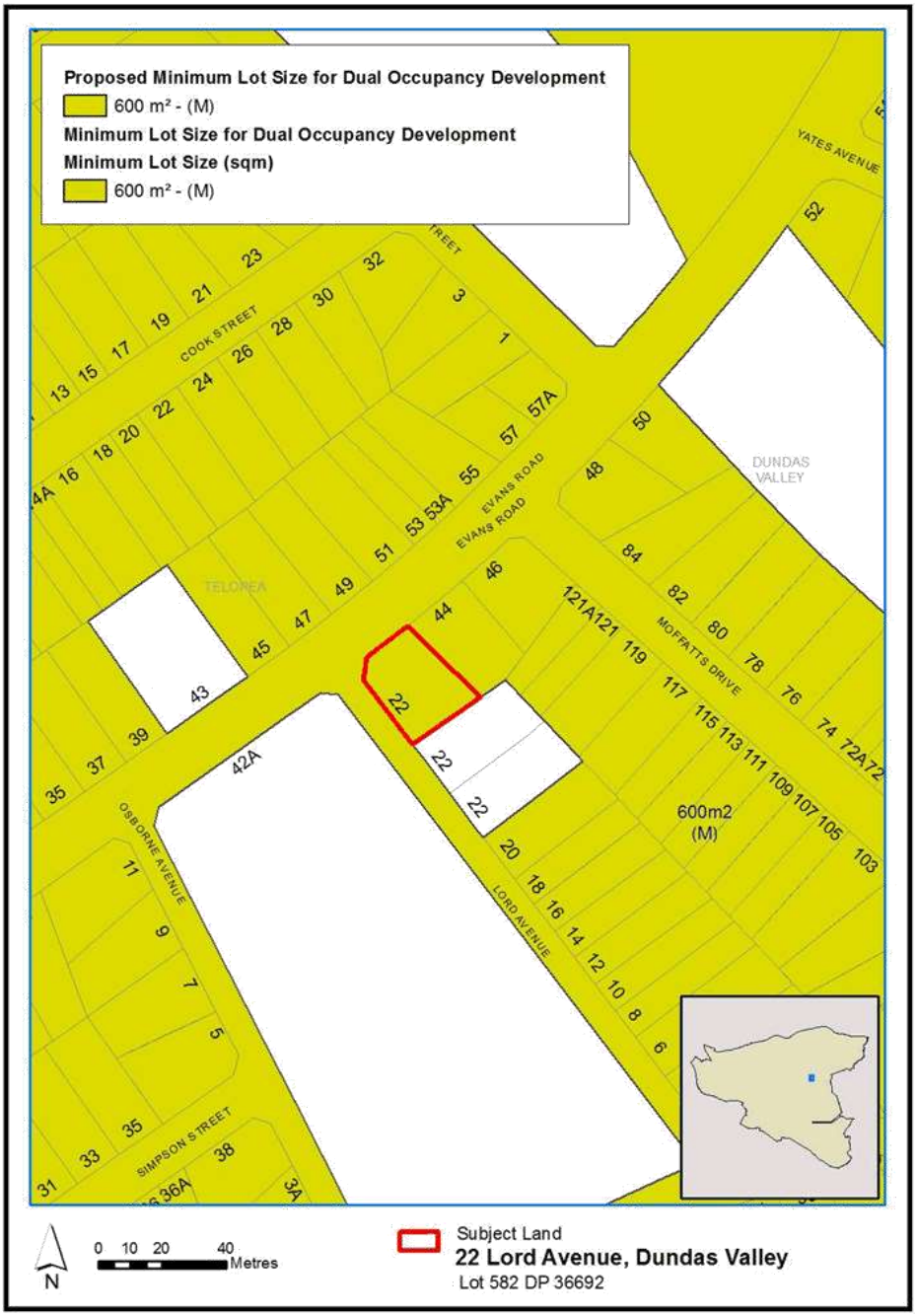


Figure 13. Proposed minimum lot size for dual occupancy development for the subject site.

PART 5 – COMMUNITY CONSULTATION

The planning proposal (as revised to comply with the Gateway determination) is to be publicly available for community consultation.

Public exhibition will include:

- newspaper advertisement;
- display on the Council's web-site;
- hard copy material at selected Council libraries; and
- written notification to adjoining landowners

The Gateway determination will specify the level of public consultation that must be undertaken in relation to the planning proposal including those with government agencies.

Pursuant to Section 57(8) of the *EP&A Act 1979* the Responsible Planning Authority must consider any submissions made concerning the proposed instrument and the report of any public hearing.

PART 6 – PROJECT TIMELINE

The detail around the project timeline is expected to be prepared following the referral to the Minister for review of the Gateway Determination.

The following steps are anticipated:

- Referral to Minister for review of Gateway determination
- Receive Gateway determination
- Commencement and completion dates for public exhibition period and government agency notification
- Consideration of submissions
- Post-exhibition reporting to Council
- Submission to the Department to finalise the LEP
- Notification of instrument

Prepared by City of Parramatta

PARRAMATTA WE'RE BUILDING AUSTRALIA'S NEXT GREAT CITY

[redacted]

March 10, 2018

Interim Chief Executive Officer,
City of Parramatta Council,
P.O. Box 32,
PARRAMATTA. N.S.W. 2124

Attention: Amberley Moore

Dear Ms. Moore,

Planning Proposal for Lot 582, DP36692
Part of Lord Avenue, Dundas Valley

I am objecting to this proposal on several grounds.

1. As the subdivision is not yet complete (as stated in the documentation) I need to have justified that the proposed lot is to be amended to 500m^2, from 600m^2.
2. When according to another piece the existing lot is approximately 700m^2.
3. Then there is to be an amendment to the minimum Lot size map to 600m^2. **??**

The main issue is *Kishnaghur* and height of buildings on the four sides of the park; and it is Evans Road which is to the north. Not one vestige of the various attributes of the house, reasons for its location or associations. Built about 1836 the house had a 360° stunning view. If you would examine the sketch of *Kishnaghur*, you will see on the right of the house on the far horizon a small A-shaped structure, which it turns out to be St. Paul's Church (most recently an antiquarian bookshop) on Marsden Road. Distant recovering forests - threatened ecological communities obscure the longer view but it is still spectacular.

Quote from Herbert J. Rumsey, historian. *The next grant to be taken in this district was John Ramsay's 50 acres now known as 'Kishnegar', recently the property of Mr. Stewart and now on the market for sale. Any person who stands near the house on that estate cannot wonder that it was one of the first country properties to be selected in Australia when the whole of the surrounding country was available to choose from.* Australian Historical Society, (1910-1913), V.3., Pt.2, p.33.

Paintings of the house were made by both artists Henry Curzon Allport and daughter Alice. The Allport family lived at *Kishnaghur* and later purchased it.

To say I am stunned not a single asset is considered under threat here from this proposal is an understatement. It seems no checks were made.

One house on the opposite side of the public park in Osborne Street has already been allowed to strike out the view to the west. Therefore I am assuming this type of development at the same height is permitted all around the *Kishnaghur* public park. A special Amendment Planning Proposal all around the park is a priority to preserve this most obvious feature. A requirement that houses must NOT obscure any views, but must be recessed further into the ground to achieve a much lower height limit would be a start. The streets are: Lord Avenue, Tilley Street either side of the crest to retain an arc to the south, Osborne Street and Evans Road. Future home owners will reap the benefit financially if they sell their newer low-profile buildings into the future.

I think of it like this:

- The land is a **public park** of significant archaeological and historical value.
- It is zoned through various steps involving both the Council of the City of Parramatta and the N.S.W. State Government
  for the people
- It is administered by the Council of the City of Parramatta
  for the people
- The documents appear to suggest that there is one small spot in the park which is archaeologically important and deserves no further enquiry. A sure way to eliminate it in the long term and not in the public interest.

That the full significance of associations with local industry, the heritage-listed Dundas (Quarry) Diatreme nearby, that stupendous view, the park is part of one of the First Crown Grants in Australia (mid-1791, 50 acres) to John Ramsay. He added 20 acres on the other side of the diatreme in 1794. He made a great success of his enterprise. After Ramsay moved to Parramatta Harbour in the early 1800s, Lalouette de Vernicourt de Clambe (*Baron of Castle Hill*) owned it for about six months until his sudden death.

The responsibility of both bureaucratic and elected bodies is to ensure all of this remains front and centre of any public or private works in the vicinity to preserve all assets and associations without trade-offs. It is those same people who pay for all those public organisations, their salaries and wages.

Recommendation
I have come to the conclusion that because of *Kishnaghur*, it's reach, back history and colonial history of many facets there must be

- a new planning proposal be prepared over all existing housing around the heritage site which includes Tilley Street and both sides past Lord and Osborne Streets, Evans Road both sides of the crest and past Lord and Osborne Streets, and Osborne and Lord Streets themselves;
- that provision be made that buildings be lowered (deeper excavation) not to exceed one-and-a-half storeys above their natural front boundary including roof;
- that it be impossible to have anything similar to that three-storey house in Osborne Street or its height - it must have had a major reduction;
- that people be told why such conditions apply right around the park;
- it is imperative that assessment officers and decision makers be fully aware of all significant details, the responsibility to inform others and protect public assets.

It is demeaning *Kishnaghur* has so little space in the documentation, as if to wish it away. But it is there. It is what it is. And the public are fortunate to have it.

I look forward to a response to the initial three questions on Page 1 and a new Planning Proposal commencing to protect one of the greatest assets; *Kishnaghur* (the whole park) and surrounding streets as indicated above.

The existing proposal is not supported as the site is too small to permit a lower profile. It does not meet any standard which will enhance or add to archaeological and other heritage. It sets the bar far too low to even pretend the site is important sending a message those privileged to live there are free to detract from what is most important. Please initiate a new, consistent plan for all development around the park.

Yours sincerely,

[redacted]

LEADING

ITEM NUMBER	13.3
SUBJECT	Response to Rezoning Review for the Planning Proposal for land at 1, 3, 5 and 7 Station Street West, Parramatta
REFERENCE	RZ/2/2016 - D06094174
REPORT OF	Project Officer-Land Use Planning
OWNER	Greenrock Property Pty. Ltd. (Nos. 1, 3 and 5) and Greek Orthodox Archdiocese of Australia (No. 7)
APPLICANT	Greenrock Property Pty. Ltd.

PURPOSE:
To seek Council's endorsement of a submission to the NSW Department of Planning and Environment (DPE) on a Rezoning Review request for the Planning Proposal for land at 1, 3, 5 and 7 Station Street, Parramatta. The applicant has requested a Rezoning Review (formerly known as a Pre-Gateway Review) from the DPE on 19 April 2018.

RECOMMENDATION

(a) **That** Council advise the NSW Department of Planning and Environment that it does not support the Planning Proposal for the reasons in this report with the principal objections being:

a. The Planning Proposal is inconsistent with the Parramatta CBD Planning Proposal and represents an overdevelopment of the site and will have significant impacts on the heritage item, adjoining Heritage Conservation Area and local streetscape character.

b. Any Planning Proposal for the site should be consistent with Council's endorsed position of the Parramatta CBD Planning Proposal at an FSR of 6:1 (6.9:1 with design excellence); and

c. The Planning Proposal should incorporate a site-specific DCP to minimise impacts on the affected heritage item and the low-scale, fine grain pattern of the streetscape.

(b) **Further, that** this report forms the submission to the Rezoning Review Request and be forwarded to the NSW Department of Planning and Environment.

THE SITE

1. The subject site is located at 1, 3, 5 and 7 Station Street West (from herein referred to as Station Street), Parramatta (refer Figure 1). The site is made up of 4 separate parcels and has a total area of 1,825sqm. The relevant legal descriptions are noted below:

   a. No. 1 Station Street – Lot 34, Section 1, DP 976

   b. No. 3 Station Street – Lot 33, Section 1, DP 976

   c. No. 5 Station Street – Lots A and B, DP 340959

d. No. 7 Station Street – Lot 31, Section 1, DP 976

2. Nos. 3, 5 and 7 Station Street contain single storey dwellings and No. 1 contains a two storey dwelling. Nos. 1 and 7 contain non-residential uses and Nos. 3 and 5 are used as private dwellings.

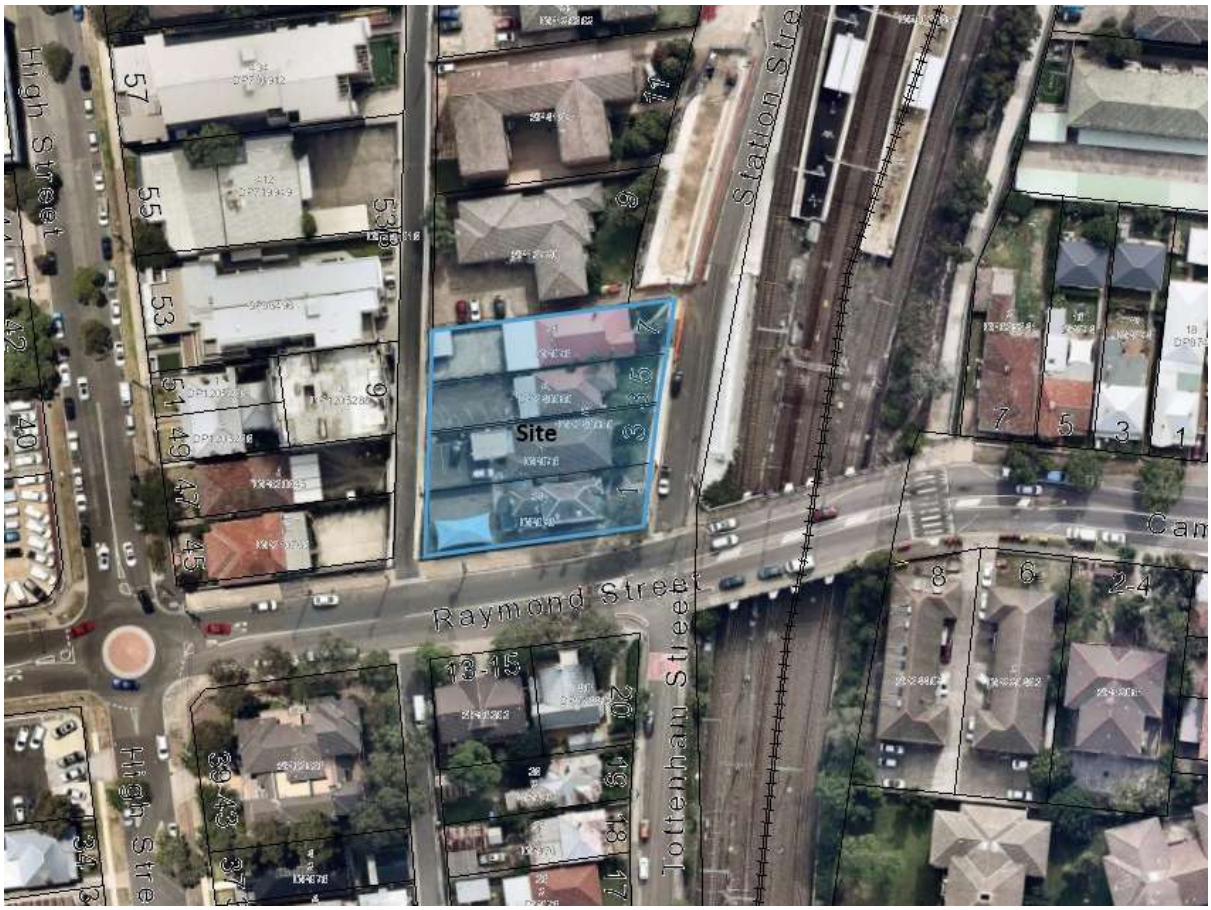


Figure 1: Location Map

CURRENT PLANNING CONTROLS

3. Under the Parramatta Local Environmental Plan 2011 (PLEP 2011) the site is subject to the following controls:

   a. Land use zoning is B4 Mixed use.

   b. Floor Space Ratio (FSR) is 2:1

   c. Height of Buildings is 12m.

   d. No. 1 Station Street and No. 7 Station Street are listed as items of local heritage significance under Schedule 5 of the PLEP 2011.

4. The site is also located within the vicinity of several other heritage items and also within the vicinity of a heritage conservation area known as the Tottenham Street Conservation Area (refer **Figure 2**).

5. To the rear of the site, across Raymond Lane is an item of local heritage significance at No. 49-51 High Street, Parramatta. This is an attached two-storey Victorian house and is of significance to the local area for historical and aesthetic reasons and as a representative example of residential architecture of the period. This site is subject to a development approval (DA/406/2014) for the construction of a 4 storey residential flat building at the rear of the site

addressing Raymond Lane to the rear. This development has yet to be constructed and has been approved with total Floor Space ratio of 1.6:1.

Figure 2: Heritage items (brown shading) & the Tottenham Street Heritage Conservation Area (red hatching).

PLANNING PROPOSAL

6. The applicant's planning proposal seeks to amend PLEP 2011 by:
    a. Increasing the height on the Height of Buildings Map from 12 metres (4 storeys) to 142 metres (43 storeys);
    b. Increasing the FSR on the Floor Space Ratio Map from 2:1 to 10:1 (11.5:1 when including Design Excellence bonus)
    c. Removing No. 7 Station Street from the heritage schedule.
7. The proposed **development concept** includes:
    a. A 43 storey (135.5 metre) high tower inclusive of a 2 storey podium comprising:
        i. 216 residential units comprised of:
        ii. 12 commercial tenancies on the ground and first floor (including the existing heritage building at No. 1 Station Street West) providing a total of 2,110m^2 in commercial floor area.
    b. Six levels of basement car parking.
8. The site contains two items of local heritage significance listed under PLEP 2011 being No. 1 and No. 7 Station Street West. The Planning Proposal includes the demolition of the heritage listed building at No. 7 Station Street West and its removal from Schedule 5 of the PLEP 2011.
9. The applicant's Planning Proposal comprises the following documents:
    a. Planning proposal (**Attachment 1**);
    b. Letter of offer to enter into a Voluntary Planning Agreement;

c. Urban Design Report **(Attachment 2)**;

d. Traffic Impact Assessment

e. Concept Landscape Drawings

f. Heritage Impact Assessment and two peer reviews (**Attachment 3**)

g. Heritage assessment (related to No. 7 Station Street West) and two peer reviews (**Attachment 4**)

h. Conservation Management Plan (**Attachment 5**);

i. Geotechnical Desktop Study;

j. Contamination Assessment.

10. The Planning Proposal includes a letter of offer to enter into a Voluntary Planning Agreement (**Attachment 6**). The letter proposes the following public benefits:

    a. Construction of a linear park along Station Street West including embellishment with landscaping, street furniture, wayfinding, CCTV and LED lighting. This would be made accessible to the public legally via an easement;

    b. Provision of car sharing spaces over and above Council's DCP requirement; and

    c. Maintenance and ongoing restoration works to the heritage building at No. 1 Station Street West.

11. The applicant's reference design is shown in **Figure 3, 4 and 5** below. This reflects a height of 135.5m and an FSR of 11.5:1. The proposal comprises two levels of commercial development and 41 levels of residential development.

Figure 3: Design concept (Source Urban Design Report at Attachment 2). Note: the two buildings in grey to the north indicate potential development on the adjoining sites.

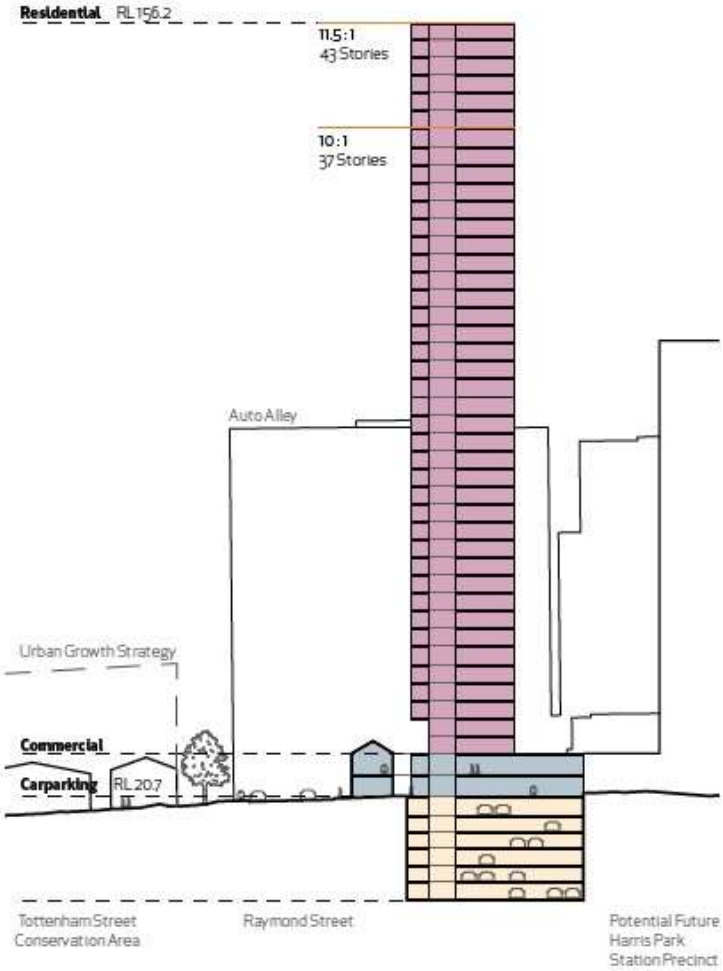


Figure 4: North-south section (Source: Applicant's Urban Design Report at Attachment 2)

Figure 5: Indicative Ground Level Floor Plan (Source: Applicant's Urban Design Report at Attachment 2)

BACKGROUND

12. On 14 March 2016, Council received a Planning Proposal for the site which sought to increase the Height of Buildings control from 12m to 140m and to increase the Floor Space Ratio from 2:1 to 10:1 (11.5:1 including Design Excellence). The Planning Proposal also requests to remove the local heritage listing from No. 7 Station Street by deleting it from Schedule 5 of the Parramatta Local Environmental Plan (LEP) 2011. It also includes the retention of the existing two storey dwelling at No. 1 Station Street which is listed as an item of local heritage significance within Schedule 5 of the PLEP 2011. This building is proposed to be used for commercial purposes incorporating a glazed link with the commercial podium of the proposed new building

13. Further to the Planning Proposal submission, the applicant forwarded a letter to Council on 21 July 2016 requesting that their site also be considered an Opportunity Site in accordance with the provisions of the CBD Planning Proposal which a total FSR of up to 15:1 subject to meeting certain criteria.

14. Council wrote to the applicant on 18 August 2016 advising that a preliminary assessment had been made and raising some issues of concern relating to heritage, urban design and the Parramatta CBD Planning Proposal.

15. Council conducted discussions with the applicant in November 2016. Council subsequently wrote to the applicant on 25 November 2016 further reinforcing previous concerns raised and noting that its previous concerns had not been adequately addressed.

16. It was also noted that the applicant had submitted a heritage assessment for No. 7 Station Street to support the removal of the item from the PLEP 2011 heritage schedule. They also submitted two separate peer reviews of this assessment which supported their request. Council subsequently sought the services of an independent heritage consultant to review the applicant's heritage assessment and peer reviews. The independent review was completed in June 2017 which agreed with the applicant's consultant's that it was appropriate to remove the heritage listing. This review is discussed further in this report under the heading "Heritage"

17. A meeting was held with the applicant on 27 June 2017 advising of the outcome of the independent heritage assessment and the Parramatta CBD Heritage Study of Interface Areas. A further letter was sent to the applicant on 17 August 2017 confirming the advice given and Council's position on the preferred FSR (6:1) as reflected in the Parramatta CBD Planning Proposal. Amended information was requested in order to reflect the preferred FSR of 6:1 and also address the heritage issues related to the design of the ground plane of the building raised in the Heritage Study of Interface Areas.

18. The applicant subsequently responded to Council by letter dated 12 October 2017 advising that they are not prepared to lower the FSR sought and wished Council to consider their original proposal seeking an FSR of 10:1 (11.5:1 including Design Excellence). Council replied to the applicant by way of a letter dated 20 October 2017 and acknowledged the applicant's preferred FSR, however, it was requested that they address the heritage recommendations within the Heritage Interface Study and indicate a reference design that compares the applicant's proposal (11.5:1 including Design Excellence) with the density endorsed by the CBD Planning Proposal (6.9:1 including Design Excellence).

19. The applicant submitted a Rezoning Review request with the NSW Department of Planning and Environment (DPE) on 19 April 2018.

20. The DPE has consulted Council on the Rezoning Review and requested comments by 11 May 2018. Due to the lead-in time for Council reports, this was not achievable, however, the DPE has granted Council an extension of time in order to report the matter to the Council Meeting of the 28 May 2018.

Rezoning Review Request Process

21. Under the NSW Government's "A Guide to preparing Local Environmental Plans", an applicant who has lodged a Planning Proposal with a council may request a Rezoning Review through the Department of Planning and Environment in the following circumstances:

    a. Where the council has notified the proponent that it does not support the proposal;

    b. Where the council has failed to indicate its support 90 days after the Planning proposal was lodged with the council; or

    c. Where the council has indicated its support for the Planning Proposal but has failed to submit the Planning proposal for a Gateway determination within a reasonable time frame.

22. In this case, the applicant has requested the Rezoning Review as Council has not indicated support for the Planning Proposal after 90 days of lodging their Planning Proposal.

23. It should be noted that a Rezoning Review differs from a Gateway review request which may occur later in the process after the Department of Planning and Environment has issued a Gateway determination.

KEY ISSUES

Applicant's Rezoning Review Request

24. The applicant has submitted a letter to the DPE in support of their Gateway request (refer **Attachment 7**) which raises the following issues:

    a. The Planning Proposal contributes to the objectives of the Greater Sydney Region Plan and Central City District Plan by increasing housing supply in the "Central City" adjacent to public transport. This will assist further in the creation of the "30 minute city".

    b. The NSW Government has planned upgrade works to the Harris Park train station as part of the Transport Access program which includes new lifts, weather protection, toilet facilities and improved lighting and surveillance. As such, the proposal aligns with investments in infrastructure which is a criteria promoted for assessing urban renewal under the District Plan.

    c. The Proposal will provide housing within 170m of the Auto Alley precinct which will provide approximately 26,000 jobs.

    d. The site is within the 10 minute walking catchment of several transport nodes including Harris Park train station, the Parramatta transport interchange, the Light Rail and proposed West metro.

    e. The CBD Planning Proposal locates most of the density in proximity to the Parramatta train station and does not use the Harris Park Station which

will result in platform overcrowding at Parramatta and underutilisation of Harris Park.

f. Council's own independent heritage assessment has agreed that it is appropriate to remove the heritage listing from No. 7 Station Street.

g. The Parramatta CBD Heritage Interface Study made several recommendations regarding the design of new buildings in the area in terms of heritage item curtilage, subdivision and setback patterns and modulation of facades. However, these issues are best addressed at the design competition and development application stage and do not need to be addressed at the Planning Proposal stage.

h. The recommendations of the Heritage Interface Study will result in a net loss of dwellings and jobs and the subject Planning Proposal has the potential to compensate for this loss.

i. The subject Planning Proposal is not identified as an Opportunity Site under the CBD Planning Proposal, however, complies with the size requirements of a minimum site area of 1,800m2 and a minimum frontage of 40m.

j. The Urban Design analysis submitted with the Planning Proposal indicates a potential building arrangement for the street block which relies on site amalgamation. The applicant submits that the street block could be identified as an Opportunity Site allowing the mapped incentive FSR of 6:1 to be increased to 10:1 provided the Opportunity Site criteria are met.

k. The FSR sought is equivalent to that proposed for Auto Alley, notwithstanding that Auto Alley does not have proximity to the train station.

l. The Planning Proposal is accompanied by a letter of intent to enter a Voluntary Planning Agreement with Council in accordance with the Phase 1 value sharing principles under Council's draft VPA Policy. This would result in a contribution of $2,208,000 to be allocated to various works including a linear park along Station Street, a car sharing space at the building frontage, maintenance of the heritage item at No. 1 Station Street and upgrade of the facilities at Rosella Park.

<u>Council Officer Assessment</u>

Land Use Planning - Consistency with the Parramatta CBD Planning Proposal

25. Council resolved to progress with the Parramatta CBD Planning Proposal (CBD PP) on 11 April 2016, providing a framework for future planning controls for the Parramatta CBD.

26. **Table 1** below indicates the current controls, the applicant's proposed controls and the proposed controls under the Parramatta CBD Planning Proposal applying to the subject site.

Control	Existing (PLEP 2011)	Applicant's Planning Proposal	Parramatta CBD Planning Proposal – draft proposed controls
Height	12m (approximately 4 storeys)	142m (approximately 43 storeys)	12m (Base height) No height (Incentive height)

FSR	2:1	11.5:1 (Base FSR 10:1 + design excellence 1.5:1)	2:1 + DE (Base FSR) 6:1 + DE (Incentive FSR)

Table 1: Table comparing existing and proposed controls

27. The Parramatta CBD PP is supported by several technical studies including the "Heritage Study – CBD Planning Controls" prepared by Urbis and the more recent "Parramatta CBD Heritage Study of Interface Areas" prepared by Hector Abrahams.

28. The "Parramatta CBD Heritage Study of Interface Areas" (Interface Study) was prepared in response to concerns raised by the Department of Planning and Environment (DPE) and the Heritage Council of NSW during the assessment of several earlier site-specific Planning Proposals within the CBD interface areas.

29. The interface areas within the Parramatta CBD defined to be located generally between the Parramatta CBD core and heritage conservation/lower scale residential areas and incorporate the subject site. (Refer **Figure 6**). The main objective of the Interface Study was to identify potential heritage impacts resulting from the Parramatta CBD Planning Proposal as related to the Interface Areas and to make recommendations to ameliorate adverse impacts on heritage through modifications to the draft planning controls.

30. The Interface Study was considered by Council at its Meeting on 10 July 2017 with certain recommendations endorsed as a part of the CBD Planning Proposal. It is noted that the Interface Study resulted in no change to the endorsed Incentive FSR of 6:1 applying to the site.

31. Notwithstanding, the Interface Study included a number of relevant recommendations relating to mitigating adverse impacts on heritage arising from the treatment of development in respect to lot amalgamation, corner sites, setbacks, subdivision patterns, overlooking and alienation. Of particular relevance to the subject Planning Proposal include:

    a. In all cases, retain an area of deep soil landscape to the rear of an historic house large enough to plant an appropriate tree in order to retain the detached nature of the dwelling and the presence of a garden setting.

    b. Interpret the historic subdivision pattern of a street in new developments that involve amalgamation of lots through careful architectural detailing.

    c. Amalgamation alone is not the only criteria as to whether a development may be suitably accommodated on a site.

    d. Any development that involves amalgamation with a heritage item must bestow some of the benefit of that development upon the heritage item.

    e. Development that overhangs the space above a heritage item is not permitted.

    f. Generally, preserve existing street setbacks in new developments to conserve street balance and character.

    g. Give expression to historic subdivision patterns in the fabric of new developments.

    h. Views both to and from any adjacent heritage item must be considered as part of any development.

32. An assessment of the Planning Proposal against the recommendations of the Interface Study is discussed further below under the heading "*Heritage*".

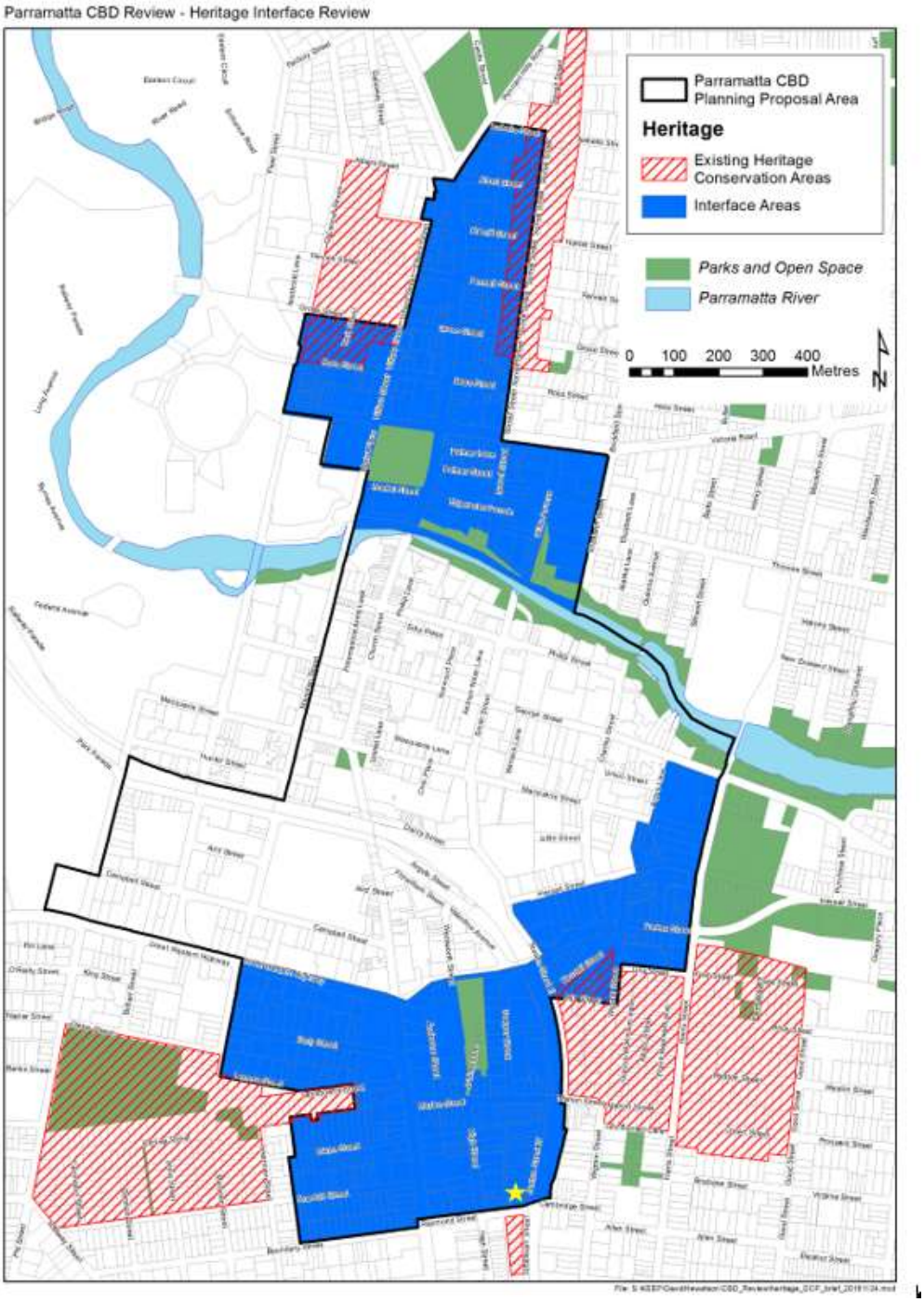


Figure 6: Interface Areas (Source: Parramatta CBD Heritage Study of Interface Areas, Hector Abraham Architects 2017). Subject site indicated as a yellow star.

Heritage Assessment

33. As discussed above, the site contains two locally listed as items of heritage significance under the PLEP 2011 (Nos. 1 and 7 Station Street West).

34. No. 1 Station Street West (refer **Figure 7**) is a two-storey Victorian dwelling built in approximately 1890. The statement of heritage significance notes that the building is of significance for the local area for historical, aesthetic and representativeness reasons. The building is readily identifiable as part of the historical building stock and is strongly contributing to the streetscape.

Figure 7 – Heritage listed dwelling at No. 1 Station Street West (Source: Applicant's heritage impact assessment)

35. No. 1 Station Street is proposed to be retained and included within the development as a standalone commercial building. The Planning Proposal indicates a "glass atrium" style connection between this existing building and the proposed new development.

36. No. 7 Station Street West (Refer **Figure 8**) is a single-storey Federation painted brick cottage built in approximately 1915. The statement of heritage significance notes that the building is of significance for the local area for historical and representativeness reasons.

37. No. 7 Station Street West (and the dwellings at Nos. 3 and 5 Station Street West) is proposed to be demolished to make way for the development.

Figure 8 – Heritage listed dwelling at No. 7 Station Street West (source: applicant's heritage impact assessment).

38. The applicant has submitted several documents with the Planning Proposal addressing the issue of heritage including the following:

    a. A Statement of Heritage Impacts prepared by NRBS & Partners;
    b. A peer review of the Statement of Heritage Impacts prepared by Weir Phillips;
    c. A Heritage Assessment for No. 7 Station Street prepared by NRBS & Partners;
    d. A peer review of the Heritage Assessment prepared by Jennifer Hill; and
    e. A peer review of the Heritage Assessment prepared by Graham Brooks.
    f. A peer review of the Heritage Assessment prepared by Urbis.
    g. A Conservation Management Plan prepared by Architectural Projects.

    The documents referred to above are at **Attachments 3, 4 and 5**.

39. A summary of the main arguments mounted in the applicant's heritage assessments are:

    a. The Harris Park West Heritage Conservation Area is a suitable distance away so as not to affect views from the Conservation Area. The subject development would be a background element and would not visually dominate the existing streetscapes.

    b. The development will not visually dominate the Tottenham Street conservation area and the retention of the existing building at No. 1

Station Street West will provide a transition. However, pedestrian level views should be tested.

c. Development adjoining No. 49-51 High Street already has a recent 4 storey development adjoining to the north and immediate views of the item from High Street are unlikely to be unreasonably affected. View studies should be tested.

d. With regard to No. 1 Station Street, the proposed development has been designed to maintain a two-storey context immediately adjoining the item and a recess provided to maintain its visual presentation to the street. Views to the rear of the item will be obscured but this area has less significance and any development connecting the new building to the item should be single storey and light-weight.

e. The original heritage listing of No. 7 Station Street west was ill-informed and the building does not meet the threshold for heritage listing due to the large number of significant alterations made to the dwelling.

f. A series of view diagrams indicate that the views towards the existing heritage item at No. 1 Station Street will be maintained.

Council Officer response – No. 1 & 7 Station Street

40. Council's assessment of the heritage impacts of the Planning Proposal responds the removal of No. 7 Station Street from the schedule of heritage items and its proposed demolition and the impacts of the Planning Proposal on the remaining heritage item at No. 1 Station Street.

41. With regard to the proposed removal of No. 7 Station Street from the heritage schedule and its proposed demolition, the applicant has submitted a Heritage Assessment prepared by NBRS & Partners and two peer assessments by Architectural Projects and Graham Brooks and Associates. (Refer to **Attachment 4**).

42. The applicant's heritage assessment conclude that the building does not have sufficient heritage significance to warrant listing based largely on the extent of alterations to the fabric and the existence of better examples of its type in the local government area.

43. In response, Council sought the advice of an independent consultant, City Plan, to conduct a heritage assessment of No. 7 Station Street to determine its level of heritage significance and to determine whether it is appropriate to remove it from the heritage schedule of the PLEP 2011.

44. The report of the independent heritage consultant is included at **Attachment 8** and provides the following advice:

a. The heritage item at No. 7 Station Street has lost its integrity due to alterations to the fabric and has a limited ability to demonstrate the detailing and configuration that it had originally.

b. The item was originally listed as an item of heritage significance in the 1993 City of Parramatta Heritage Study. The current heritage significance assessment criteria under the Heritage Manual was published in 2001 and it does not meet these criteria. Moreover, it is possible that the item was more intact at the time of the 1993 Study.

c. The existing cottage and its site fails to meet six of the seven Significance Assessment Criteria with the only association with the local area's cultural history being its construction at the end of the Federation period.

d. Although it is indicative of the residential growth of Harris Park during the early 1900s and is a common example of a modified Federation cottage, these values alone when comparing with the other heritage items of similar period do not warrant its retention on Schedule 5 of the Parramatta Local Environmental Plan 2011.

e. Schedule 5 has numerous intact and culturally significant heritage items that meet the significance assessment criteria representing Parramatta's unique cultural history regardless of their changing context.

f. Therefore, it is concluded that loss of 7 Station Street from the heritage schedule of the LEP will not erode Schedule 5's integrity, rather, it will increase its credibility by having items that clearly meet the threshold for heritage listing.

45. With regard to the impacts on the heritage significance of No. 1 Station Street, Council's Heritage Advisor has provided the following comments:

a. The heritage item at No. 1 Station Street is an item of two storey scale, surrounded mostly with single storey houses, built of solid materials with slate roof and featuring tall Gothic proportions, and located on the street corner. All of these allow it to readily present as the dominant visual and architectural element in the streetscape and to be a landmark in this part of Harris Park. The current controls and the controls of Council's endorsed Parramatta CBD Planning proposal (i.e. An FSR of 6:1) allow for development which will impact on the heritage item.

b. Adverse impacts on the item are best managed through appropriate separation from the item, front setback and articulation and massing of the new development.

c. An acceptable level of separation from the heritage item would be that which is equivalent to the height of the item (approximately 8m). Note that the Planning Proposal provides for a separation of 3m from the heritage item.

d. The front setback of the new development should be not less than the heritage item to allow for views of the item along the street.

e. Simple building facades are preferred from the heritage perspective as they don't compete visually with the item and allow its aesthetics and historical themes to be interpreted. Cantilevered forms are particularly undesirable.

f. The subdivision pattern carries a degree of significance and should be carried over into the future configuration of the site.

g. The Planning Proposal will not provide any benefits to the heritage item and the overshadowing will impact on dampness, humidity and subsequent durability of the historic fabric.

46. Council's Heritage Advisor notes that the Planning Proposal is not supported in its current form as it does not comply with any of the design criteria described above.

47. The Heritage Interface Study contains recommendations for the management of heritage (listed previously) that accord with Council's Heritage Advisor's recommendations above. A Council Officer's assessment of the Planning Proposal against the recommendations of the Interface Study is summarised below:

    a. The Planning Proposal does not retain sufficient deep soil area around the house large enough to plant an appropriate tree to retain the detached nature of the dwelling and the presence of a garden setting. In this regard, the proposal in its current form is 3m from the side of the heritage item and 6m from the rear of the item.

    b. The architectural detailing of the proposed building does not adequately interpret the historic subdivision pattern.

    c. The proposal does not preserve the existing street setback and does not conserve street balance and character. The existing setbacks are off-set at an angle to the front boundary and range from 6.5m to 8.5m. The proposed development is also off-set at a similar angle to the front boundary, however, ranges in setbacks from 0.2m to 8.6m.

    d. The views of the heritage item as viewed from the north on Station Street will be obscured due to the podium having a minimal front setback. In this regard, the applicant's own heritage assessment notes that pedestrian level views should be tested.

Urban Design Issues

48. Council's Urban Design Unit modelled the Planning Proposal at a Floor Space Ratio of 6.9:1 consistent with the controls endorsed under the Parramatta CBD Planning Proposal.

49. The massing likely to result from these controls, combined with an FSR of 6:1 (6.9:1 including Design Excellence as shown in the additional pale shading) is shown in **Figure 9 & 10** below. **Figure 10** indicates a hypothetical development of the adjoining site assuming site amalgamation occurs. This allows for a building separation of 12 metres from the boundary with sites to the north, compliant with the NSW Apartment Design Guide requirements for building separation between habitable rooms/balconies for buildings over nine storeys.

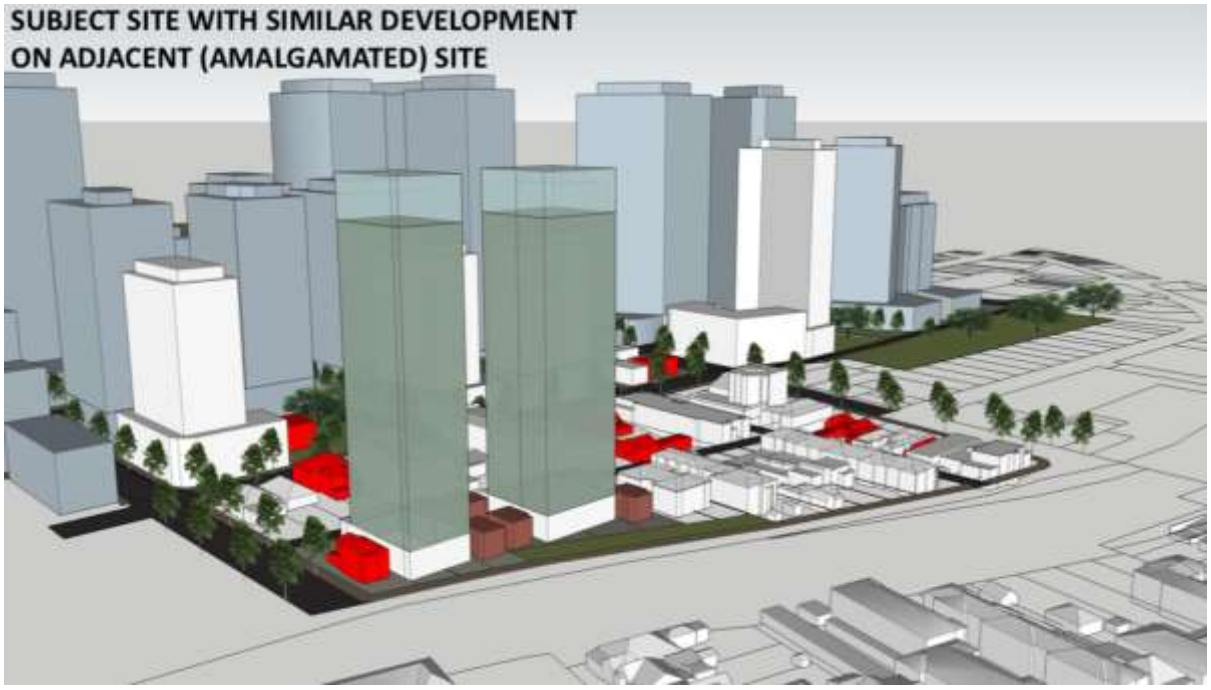


Figure 9 & 10: Subject Site modelled at 6:1, 6.9:1 in the additional pale shading (Source Council's Urban Design Unit)

50. The tower demonstrated in the massing diagram above is considered more appropriate than the reference design submitted by the applicant as it has the opportunity to better respond to the fine grain subdivision pattern and setbacks at the ground plane.

51. In summary, Council's Urban Design Unit advises that the current Planning Proposal will result in a tower that is too large to have a sympathetic relationship with the heritage item and as such is not supported and raises the following concerns:

    a. The applicant's assumption regarding the likely redevelopment of the sites immediately to the north is flawed and does not acknowledge the constraints posed by existing strata titles.

b. The inverse street wall/podium form is not supported as it overhangs the implied public domain and lacks a suitable relationship with the existing fine grain form and subdivision pattern.

c. The proposed height of the tower, at 142m, it will have a significant effect on the public domain of Station Street in terms of wind impacts.

d. The Planning Proposal will cause overshadowing of the Tottenham Street Heritage Conservation Area (HCA). These indicate that at 12 noon during the Winter solstice, the applicant's proposal will overshadow the entire HCA and a proposal of 6:1 will overshadow approximately two-thirds of the HCA. The overshadowing of the HCA is shown to be minimal at 1pm and nil at 2pm.

e. The shadow diagrams submitted with the applicant's Urban Design Report differentiate between shadows cast at an FSR of 6:1 and 10:1. These indicate that the lower FSR of 6:1 will cause significantly less overshadowing.

f. A full utilisation of the endorsed CBD Planning Proposal FSR of 6:1 (or 6.9:1 including Design Excellence) should only be sought in the case that the design provides an appropriate response to context and heritage impacts.

52. It is acknowledged that the proposal has impacts on the retained heritage item in terms of subdivision pattern, context, grain and street edge at both the proposed FSR of 10:1 (11.5:1 including Design Excellence) and the Parramatta CBD Planning Proposal endorsed FSR of 6:1 (6.9:1 including Design Excellence).

53. Notwithstanding, if the Planning Proposal is subsequently amended and proceeds in accordance with the endorsed Parramatta CBD PP position of 6:1, the building is recommended to comply with the setbacks as demonstrated in **Figure 11** below.

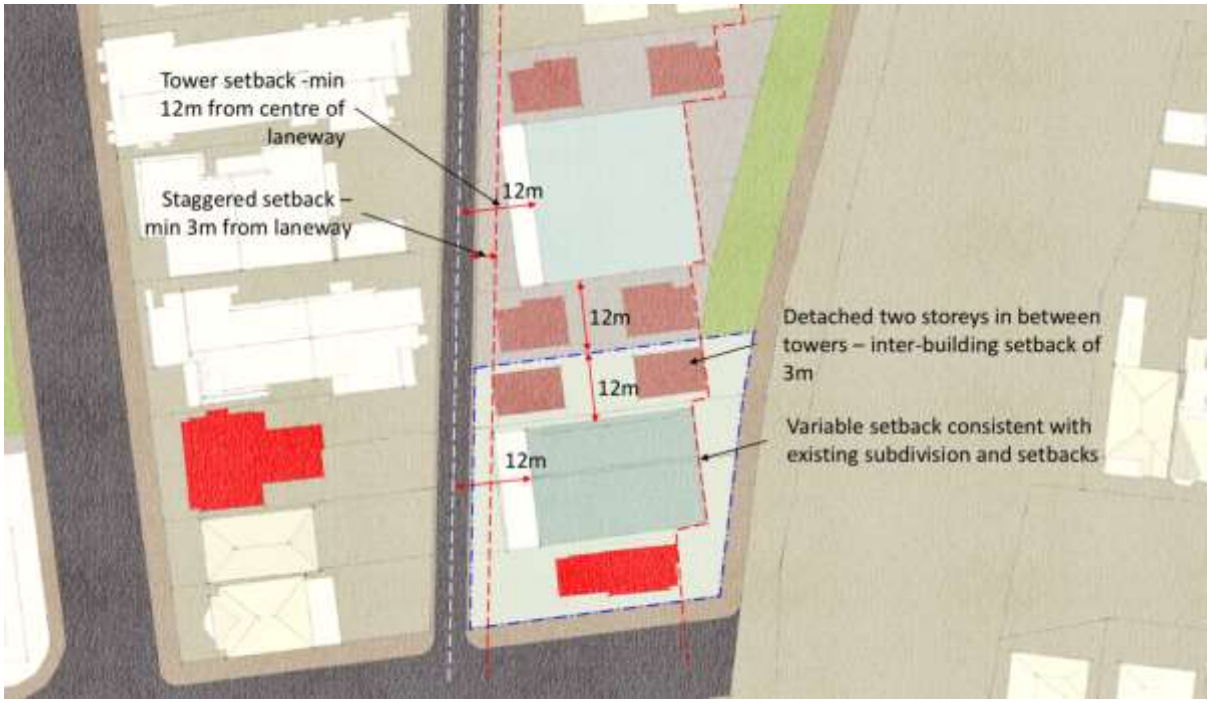


Figure 11: Building envelope controls recommended to be applied to a building with an FSR of 6:1 (6.9:1 inclusive of Design Excellence). Source: Council's Urban Design Unit.

54. The recommended controls indicated in **Figure 11** above are to be included in a site-specific Development Control Plan (DCP) and would achieve the following:

    a. The building would be setback 12m from the northern boundary with the adjacent site to comply with inter building separation requirements of the NSW Apartment Design Guide (ADG).

    b. One or two, two-storey buildings could be located within this setback to maintain a fine grain and reinforce the historic subdivision pattern. These buildings would not compromise the ADG setback requirements of the tower element.

    c. The tower is to be set back a minimum of 12m from the northern boundary and from the centre line of Raymond Lane.

    d. The tower is to be physically separate from the heritage items and the new smaller buildings in the northern portion of the site.

    e. The tower is to be located on the subdivision boundary between No. 1 and No. 3 Station Street.

    f. Proposed building footprints are to continue the pattern of existing setbacks from Station Street and Raymond Lane in terms of the angle of intersection with the front and rear property boundaries and are to step incrementally as reflected in the existing alignment.

    g. The later additions to the heritage item at No. 1 Station Street are to be removed so that the building does not physically join to the proposed tower.

    h. The architectural design of the proposal should align the two-storey elements with the existing eaves of the heritage item.

    i. The architectural design of the tower is to address wind mitigation.

55. It is acknowledged that any development above the existing PLEP 2011 controls will have significant impact on the heritage items on the site. The proposed Draft DCP controls provided would result in an improved relationship of the development to the historic subdivision pattern, fine grain at street level and responding to the heritage item.

Reconciling setbacks

56. It is noted the setbacks recommended by Council's Heritage Advisor and Urban Design Unit in relation to the side setback from the heritage item at No. 1 Station Street differ as follows:

    a. Council's Heritage Advisor recommended that the preferred setback from the heritage item is that which is equivalent to the height of the heritage item (estimated at approximately 7-8m).

    b. The Urban Design Unit incorporates a setback of approximately 3m allowing the new tower building to sit on the existing subdivision boundary.

57. Council's urban design analysis considered an increased setback of 8 metres to the heritage item and found that this did not allow for a practical building footprint which needed to comply with the 12m side setback on the northern boundary as would be required by the ADG. It is therefore not possible for a building to comply with both the side setback recommended by Council's Heritage Advisor and the side setback required by the ADG.

58. As such, an alternative approach has been provided which establishes a response that translates for the entire street rather than the one heritage item.

59. Further as demonstrated in **Figure 11**, the proposed setbacks will better preserve the broader context of the heritage item within the street in terms of subdivision patterns and the fine grain that contributes to the existing character of the immediate locality.

60. Any proposal that creates an 'inverse' street edge condition with an overhang over implied public domain/ front setback and detracts from the grain and setback conditions of the existing urban fabric is not supported.

61. For the purposes of this Council Report (as it relates to a submission to DPE for a Rezoning Review) it is not necessary to put forward a detailed draft DCP controls. Any draft DCP controls relating to the subject development at 6:1 (6.9:1 with design excellence) would need further testing and refinement. Furthermore, any Draft DCP would be put to Council for its consideration and endorsement.

CONCLUSION

62. The detailed assessment of this site-specific Planning Proposal has indicated that the applicant's proposed FSR (10:1 or 11.5:1 including design excellence) is inconsistent with the endorsed Parramatta CBD Planning Proposal and represents an overdevelopment of the site with significant impacts on the heritage item and local streetscape character.

63. There is an assumption underlying the subject Planning Proposal and the supporting documentation submitted by the applicant, that all areas affected by the Parramatta CBD Planning Proposal are appropriate for the same density and scale without regard for the interface with the heritage conservation areas and the lower scale development at the edges of the Parramatta CBD. This is inconsistent with the approach endorsed by the CBD Planning Proposal which reflects a more strategic approach that achieves significant growth in jobs and housing while still having regard for local character and heritage conservation.

64. The site contains two heritage items, one of which is considered of lesser significance and is to be demolished and the other remaining item is to be significantly impacted by the proposal.

65. Moreover, the assessment has provided an opportunity to conduct urban design testing of the FSR endorsed by Council as part of the Parramatta CBD Planning Proposal (6:1). Although it is acknowledged that an FSR of 6:1 would have some impact on the heritage item, it is proposed that any future development of the site at 6:1 should meet controls in terms of setbacks, relationship with the heritage item and relationship historic subdivision pattern and with the street. These controls could be further refined and form part of any future site specific draft DCP for the subject site.

66. It is recommended Council advise the DPE that it does not support the Planning Proposal in its current form (FSR of 10:1 or 11.5:1 incl. Design Excellence) and note Council's previously endorsed position which is reflected in the Parramatta CBD Planning Proposal (FSR of 6:1 or 6.9:1 including design excellence). Any Planning Proposal for the site should reflect this Council endorsed position.

CONSULTATION & TIMING

67. The DPE has consulted Council on the Rezoning Review and requested comments by 11 May 2018. Due to the lead-in time for Council reports, this was not achievable, however, the DPE has granted Council an extension of time in order to report the matter to the current Meeting.

68. Should Council resolve in accordance with the recommendation, this report will form the submission to the DPE.

Felicity Roberts
Project Officer Land Use

Sue Weatherley
Director Strategic Outcomes and Development

Jim Stefan
Acting Director City Services

ATTACHMENTS:

1⇩	Applicant's Planning Proposal	61 Pages
2⇩	Applicant's Urban Design Report	70 Pages
3⇩	Applicant's Heritage Impact Assessment and two peer reviews	60 Pages
4⇩	Applicant's Heritage Assessment of No. 7 Station Street and two peer reviews	64 Pages
5⇩	Applicant's Conservation Management Plan	60 Pages
6⇩	Letter of Intent to enter into Voluntary Planning Agreement	3 Pages
7⇩	Letter from Applicant to DPE requesting Rezoning Review	20 Pages
8⇩	Independent Heritage Assessment of No. 7 Station St	45 Pages

REFERENCE MATERIAL

Planning Proposal

Amendment to Parramatta LEP 2011

1-7 Station Street West, Parramatta

Planning Proposal to amend Height, FSR, and Heritage Controls

Submitted to Parramatta City Council
On Behalf of Greenrock Property Pty Ltd

ONE STATION PARRAMATTA

March 2016 ■ 15519

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JBA operates under a Quality Management System that has been certified as complying with ISO 9001:2008. This report has been prepared and reviewed in accordance with that system. If the report is not signed below, it is a preliminary draft.

This report has been prepared by:

Matthew Norman + Stephen Gouge 10/03/2016

This report has been reviewed by:

Gordon Kirkby 10/03/2016

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Appendices

A Urban Design Report
Allen Jack and Cottier

A Heritage Assessment + Heritage Impact Statements
NBRS + Partners

B Amended LEP Maps
JBA

C Contamination Report
Coffey

D Conservation Management Plan
Architectural Projects

E Traffic Impact Analysis
Traffix

F Landscape Plans
Context

G Geotechnical Report
Coffey

H VPA Letter of Offer
Greenrock Property Pty Ltd

Executive Summary

This Planning Proposal has been prepared on behalf of Greenrock Property Pty Ltd seeking to amend the Parramatta Local Environmental Plan 2011 Building Height, FSR, and Heritage Controls as they relate to the site at 1-7 Station Street West.

This planning proposal has been prepared in accordance with Section 55 (2) of the *Environmental Planning and Assessment Act 1979* and includes the requirements as set out in *A guide to preparing planning proposals* published by the Department of Planning and Infrastructure in October 2012.

- **Part 1** – A statement of the objectives and intended outcomes of the proposed instrument
- **Part 2** – An explanation of the provisions that are to be included in the proposed instrument
- **Part 3** – The justification for those objectives, outcomes and the process for their implementation
- **Part 4** – Maps, where relevant, to identify the intent of the planning proposal and the area to which it applies
- **Part 5** – Details of the community consultation that is to be undertaken on the planning proposal.

Accompanying this report is a detailed Urban Design Report prepared by AJC architects (**Appendix A**). The purpose of this report is to provide an initial urban design study and planning advice prepared to support the planning proposal and provides concept options for a future development.

1.0 Introduction

This Planning Proposal has been prepared by JBA on behalf of Greenrock Property Pty Ltd as owners of 1-7 Station Street West, Parramatta (the site).

The site comprises four properties bounded by Station Street West (Station Street) to the east and Raymond Street to the south. The site also has frontage to and vehicular access from an unnamed lane to the west, hereafter referred to as Raymond Lane. The site is currently occupied by three single storey dwelling houses and a two storey dwelling house, currently used for commercial tenancies. The site is subject to the *Parramatta Local Environmental Plan 2011* (LEP 2011) and contains two locally listed heritage items, located at 1 and 7 Station Street.

The site is located in a prominent position adjacent to the Harris Park Train Station, on the south eastern edge of the Parramatta City Centre. Parramatta is Sydney's Second CBD and is currently experiencing high levels of growth within the City Centre. Parramatta Council have prepared the Parramatta CBD Planning Strategy that will facilitate the growth of the City Centre into a major CBD. Parramatta Council is currently in the process of preparing a Planning Proposal that aligns with the Parramatta CBD Planning Strategy, it is anticipated that this planning proposal will form a separate amendment to the Parramatta LEP 2011.

Should the planning proposal be achieved, Greenrock Property Pty Ltd proposes to redevelop the site with a mixed use scheme incorporating a retail and commercial podium and a residential tower of approximately 43 storeys plus building plant (including design competition bonus). The process for the development would involve a competitive design competition to achieve design excellence on the site.

This proposed scheme is described in more detail in **Section 6.0** and is illustrated in the Urban Design Report prepared by AJC Architects, which is provided at **Appendix A.**

To facilitate the proposed scheme, this Planning Proposal seeks to amend the building height, floor space ratio (FSR) and heritage listing (Number 7 Station Street) that applies to the site under the Parramatta LEP 2011 in the manner described in **Table 1** below.

Table 1 – Summary of Existing and Proposed LEP Controls

	Existing	Proposed
Floor Space Ratio	Maximum FSR of 2:1 across the entire site	10:1 across the entire site. 11.5:1 then achievable with 15% design excellence bonus.
Building Height	Maximum building height of 18m	- Impose a height control of 142m across the entire site
Heritage	The site has two locally listed heritage items: – 1 Station Street (Item No 744) – 7 Station Street (Item No 745)	- Remove the heritage listing of the item at 7 Station Street (Item No 745) - Retain and adaptively reuse the item at 1 Station Street (Item No 744).

This Planning Proposal describes the site and the proposed changes to the Parramatta LEP, and provides a justification for the proposed changes. The report should be read in conjunction with the Urban Design Report prepared by AJC at **Appendix A** and specialist consultant inputs appended to this report (refer Table of Contents).

The report has been written, and structured, in accordance with the former Department of Planning and Infrastructure's publication *A Guide to Preparing a Planning Proposal* (October 2012) and *A Guide to Preparing Local Environmental Plans* (April 2013).

1.1 Background

The site comprises four parcels of land and was purchased by Greenrock Property Pty Ltd to amalgamate into a single development site.

The site is located adjacent to the Harris Park Train station and is in close walking proximity (170m) to Church Street and the future Auto Alley precinct identified in the Parramatta CBD Strategy.

The site is located in a strategic portion of the Parramatta CBD due to its close proximity to the Harris Park Train Station and prominent location at the south-eastern entrance to the CBD. Furthermore, the site is located in a precinct that is identified for further Urban Design testing within the CBD Planning Strategy.

Accordingly Greenrock Property Pty Ltd have engaged Allen Jack+ Cottier (AJC) and a team of specialists to undertake an Urban Design Report of the precinct and site to demonstrate to Council the constraints and opportunities and inform the future planning for this area.

1.2 Consultation with Council

Greenrock Property Pty Ltd (the proponent) and consultants have met with Council on a number of occasions to discuss the redevelopment options for the site. Consultation with Council has informed the iterative design approach for the site as well as the Urban Design Study of the Station Street precinct. The various meetings with Council are outlined below:

Initial Briefing Meeting 30 August 2015
Representative from Greenrock Property Pty Ltd and JBA met with Council Planning staff to discuss the potential redevelopment options for the site and the submission of a Planning Proposal. At this meeting, Council representatives identified the following areas to be addressed in the preparation of a Planning Proposal:

- The area is subject to further Urban Design Testing under the CBD Planning Strategy. Some portions of the precinct are constrained by heritage items and smaller lot sizes. The Planning Proposal should provide an Urban Design Report of the potential redevelopment opportunities for the precinct;
- An increase in the FSR above 6:1 would be required to demonstrate a public benefit; and
- The railway line provides an urban barrier to this end of the CBD.

Urban Design Testing Meeting
Representative from Greenrock Property Pty Ltd and the consultant team met with Council's Planning and Urban Design staff to discuss in further detail, the potential redevelopment options for the site.

At this meeting Council the preliminary development options and precinct Urban Design Report was presented with the following comments made by Council

- The incorporation of appropriate setbacks to the heritage item at 1 Station Street – noting that these should also form key principles as part of design competition brief) ;
- The provision of setbacks to the adjoining future development are to comply with the SEPP 65 and Apartment Design Guide (ADG) building separation controls; and

- The Urban Design Report should focus on the precinct (being the block bounded by Station Street West, Raymond Street, High Street and Marion Street) and provide a more detailed analysis of the development on these sites.

The Planning Proposal has incorporated the comments made by Council, as outlined within the various sections of this report.

1.3 Parramatta CBD Planning Strategy

The Parramatta CBD Planning Strategy was adopted by Council on 27 April 2015 and forms the key strategic planning strategy guiding growth in the Parramatta CBD. The key aims of the CBD Planning Strategy are:

1. *To set the vision for the growth of the Parramatta CBD as Australia's next great city.*
2. *To establish principles and actions to guide a new planning framework for the Parramatta CBD.*
3. *To provide a clear implementation plan for delivery of the new planning framework for the Parramatta CBD.*

The CBD Planning Strategy includes a detailed analysis of the potential planning controls that will apply to the Parramatta CBD. The CBD Planning Strategy will inform the preparation of a future amendment to the Parramatta LEP to facilitate the growth of Parramatta into a major CBD. The CBD Planning Strategy identifies the following controls for the site:

- The site is located within a precinct subject to further urban design refinement (south-eastern precinct) with an indicative FSR if 6:1 available for sites above 1,000m^2;
- A non-residential FSR of 1:1; and
- Investigate the removal of numeric building heights (subject to further urban design testing) and satisfaction of airspace operations and solar access controls.

The south-eastern precinct is the only precinct identified for further urban design analysis under the CBD Planning Strategy that is within the current CBD boundary. All of the other precincts form transitional locations that are an extension to the CBD boundary into the surrounding lower scale development. The south-eastern precinct is required to undertake further urban design testing as a result of the heritage items and smaller lot sizes. The CBD Planning Strategy is discussed further in **Section 1.3.**

We understand that Council intend to present the CBD Draft Planning Proposal to a Council meeting in March 2016. This Planning Proposal may form an amendment to Council's Draft CBD Planning Proposal post gateway or may progress as a separate Planning Proposal. The Urban Design Report (**Appendix A**) has been prepared to act as a framework for the redevelopment of the precinct and identifies the amalgamation and redevelopment potential of the sites along the Station Street corridor, adjacent to Harris Park Train Station. We consider that this analysis would be useful for Council to inform the planning controls for the precinct.

2.0 Site Description and Locality

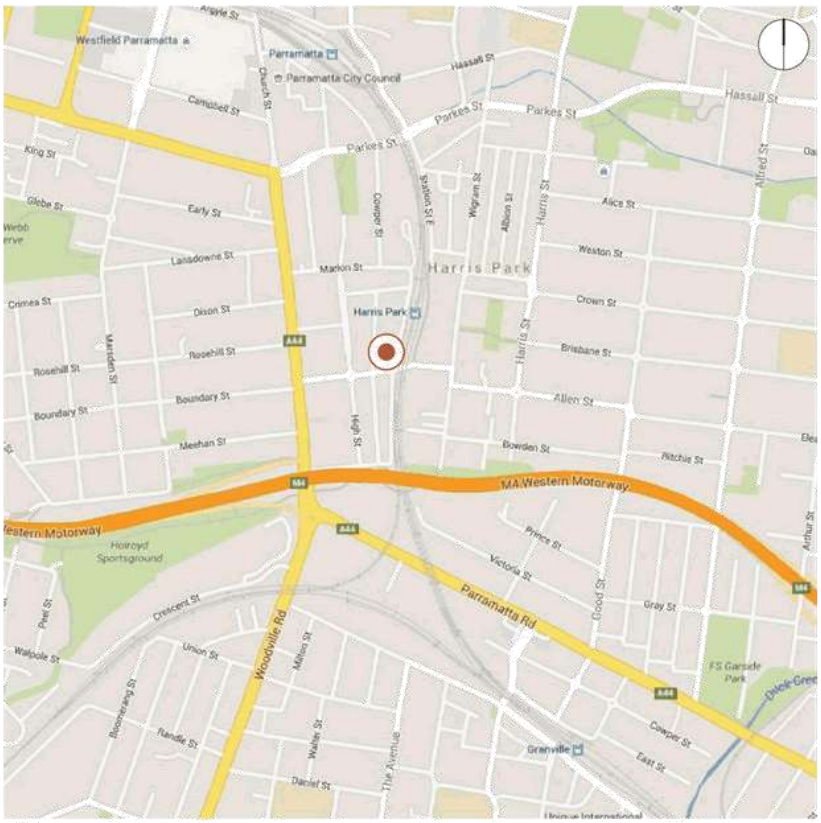
2.1 The Locality

The Site is located at 1-7 Station Street, Parramatta. The site falls within the Parramatta Local Government Area (LGA) and is located on the south-western edge of the Parramatta City Centre boundary, approximately 100m to the south of Harris Park Train Station. A location plan is provided in **Figure 1**. An aerial photo of the existing site is also provided in **Figure 2**

The Parramatta CBD is located approximately 20km to the west of the Sydney CBD. Parramatta's role as Sydney's Second CBD is reiterated under the *Metropolitan Strategy: A Plan for Growing Sydney 2014*, which provides specific direction to grow the Greater Parramatta area. A Plan for Growing Sydney supports significant growth in Parramatta which may provide up to 100,000 jobs over the next 20 years. Generally, the development within the CBD is in the planning phase or early construction stages, with a number of significant developments anticipated to come online over the coming years.

The site is located at the south-eastern edge of the Parramatta CBD, adjacent to the Harris Park Train Station. The site is located approximately 700m to the south of the Parramatta Train Station and future Parramatta Square redevelopment. The site is located approximately 170m to the east of the future Auto Alley precinct. The Auto Alley precinct focuses significant commercial development along Church Street that is anticipated to accommodate up to 26,000 jobs and significant residential development. It is anticipated that a large portion of the workers commuting to Auto Alley will utilise the Harris Park Train Station.

The Parramatta CBD includes a range of regionally significant facilities and amenities, namely the Parramatta Westfield Shopping Centre, the future Parramatta Square development including the Council Chambers Building, the Parramatta Public Library and various other civic amenities. The CBD also includes significant retail, commercial, education and services facilities, which are all located within close proximity to the site.



The Site

Figure 1 – Location plan
Source: JBA

Figure 2 – Aerial Photograph looking north – site shown in red
Source: Greenrock Property Pty Ltd

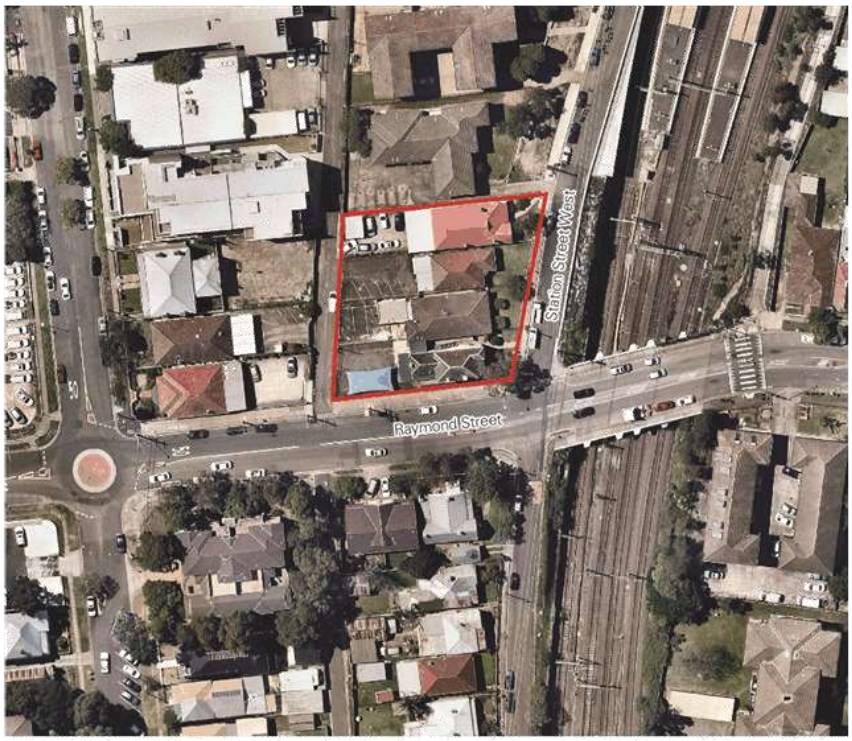
2.2 Site Description

The site is known as 1-7 Station Street, Parramatta and includes four parcels of land consisting of 1,840m² in area. The parcels of land that make up the site are identified below:

- 1 Station Street - Lot 34 in DP976;
- 3 Station street - Lot 33 in DP976;
- 5 Station Street - Lot A in DP340959; and
- 7 Station Street - Lot 31 in DP 976.

Due to the large amalgamated property area the site has substantial street frontages and access options. The site has frontage to Station Street and Raymond Street of approximately 45m and 42m, respectively and frontage to Raymond Lane for approximately 42m. Due to the amalgamation of the four properties, the site has the largest area in the Station Street West precinct.

The site is identified in **Figure 3** below.



The Site

Figure 3 – Site plan
Source: JBA

2.3 Existing Development

The site currently contains four dwelling houses with primary frontage to Station Street and rear access from Raymond Lane. The dwelling houses are generally single storey in height with the building at 1 Station Street two storeys. The dwellings at No.1 and No.7 Station Street West are local heritage items under Schedule 5 of Parramatta LEP 2011.The dwellings are occupied for a range of uses, as outlined below.

- 1 Station Street – Residential dwelling;
- 3 Station Street – Residential dwelling;
- 5 Station Street – Commercial Tenancy; and
- 7 Station Street – Greek Orthodox Archdiocese Welfare Centre.

Photos of the existing development on the site are provided below at **Figures 4 - 9**.

Figure 4 – Dwelling houses 3 - 5 Station Street, viewed from Station Street
Source: JBA

Figure 5 – 7 Station Street , viewed from Station Street W
Source: JBA

Figure 6 – Dwelling house at 1 Station Street W, viewed from Station Street W
Source: JBA

Figure 7 – Dwelling houses at 1 Station Street W, viewed from Raymond Street
Source: JBA

Figure 8 – Station Street, facing north
Source: JBA

Figure 9 – Rear lane, facing north
Source: JBA

2.4 Surrounding Development

There are a range of facilities and services within walking proximity to the site as shown in **Figure 10** below. The site benefits from a range of open space facilities including Jubilee Park, Rosella Park and the Robin Thomas Reserve. The site is also located in close walking distance (700m) to the Parramatta Westfield, a regionally significant retail facility. The growth of the Parramatta CBD will further improve the range of amenities in close proximity to the site including the development of Auto Alley, Parramatta Square, the redevelopment of the Arthur Phillip High School and Parramatta High School and the revitalisation of the Parramatta Riverfront. The site is also located in close proximity to the Granville Town Centre and the future Parramatta Road redevelopment.

The site's location within the Parramatta CBD will provide it with access to the facilities within Greater Parramatta. Greater Parramatta will provide significant employment opportunities and is anticipated to provide up to 100,000 jobs by 2031. The Greater Parramatta region will provide health, employment, services, education and recreational facilities at a Metropolitan level.

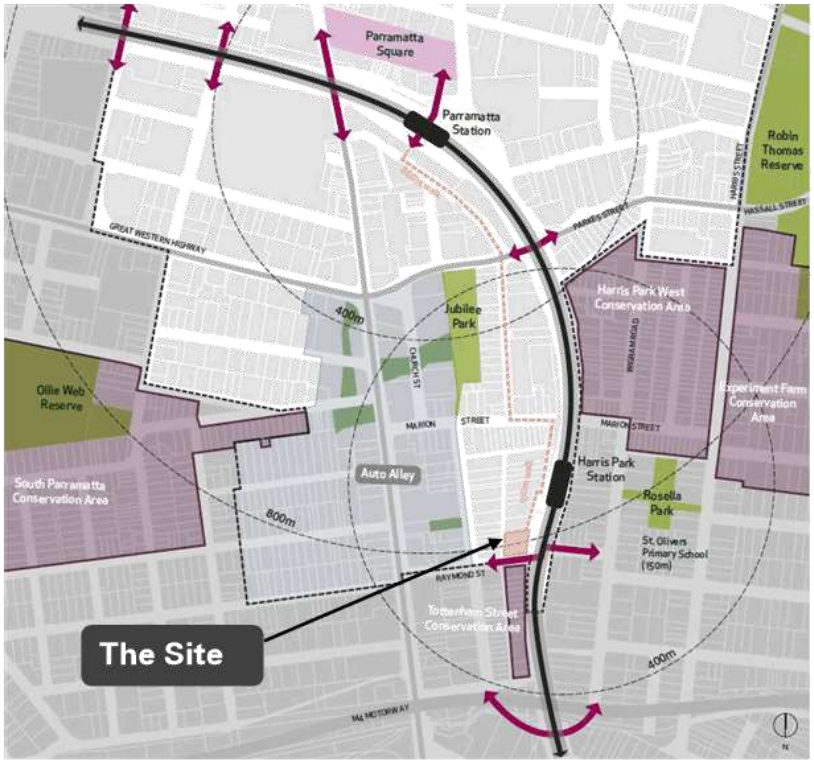


Figure 10 – Locational context plan
Source: AJC

Development Surrounding the Site

The development surrounding the site includes a range of residential, commercial, business and community uses. Residential uses to the north of the site generally comprise three storey residential flat buildings approximately 12m in height. The residential flat buildings are generally setback 10m from Station Street with at grade car parking areas and landscaping occupying the setback.

Residential development to the south of the site along Tottenham Street generally consists of low density residential dwellings. The land to the south and south-west

of the site is within the Holroyd LGA and is subject to the *Holroyd Local Environmental Plan 2013*. Under the Granville Urban Renewal Strategy, the south side of Raymond Street will be rezoned to 6 storey (29m) residential area. The development to the west of the site, on the opposite side of Raymond Lane generally comprises dwelling houses and includes a number of heritage items. Development to the north-west includes a number of residential flat buildings up to four storeys in height. The future development to the west of the site will comprise the Auto Alley Precinct.

The development to the east of the site includes the Harris Park Train Station and below ground train line cutting below street level. Further to the east is the Harris Park West heritage Conservation area, generally comprising single storey dwelling houses.

Photos of the development surrounding the site are provided at **Figure 10** to **Figure 14**.

Figure 11 – Residential flat building at 11 Station Street West, to the west of the site
Source: JBA

Figure 12 – Residential flat Building at 15 Station Street W
Source: JBA

Figure 13 – View of the south side of Raymond Street
Source: JBA

Figure 14 – Rear Lane view of the residential buildings in the west of the side
Source: JBA

2.5 Transport and Access

The site has ample access to high capacity public transport, as outlined in the sections below.

2.5.1 Harris Park Train Station

The site is located approximately 100m to the south of the Harris Park Train Station. The station is serviced every 4-5 minutes in peak hours by the following lines:

- T1 North Shore, Northern and Western line;
- T5 Cumberland Line.

Harris Park Station Upgrades

The NSW Government is improving accessibility at Harris Park Station. The works form part of the government Transport Access Program, designed to encourage greater public transport use and better integrate station interchanges with the role and function of town centres within the metropolitan area and developing urban centres in regional areas of NSW. The improvements wil also support a stronger customer experience outcome to deliver seamless travel, and encourage patronage.

The proposal will improve accessibility, experience, facilities and safety

Key features of the proposal include:

- Three new lifts.
- A family accessible toilet.
- New canopies for weather protection.
- Undercover bicycle racks.
- Improved interchange area.
- Upgrades to lighting and CCTV surveillance.

Works will also be undertaken to Council owned land on the western side of Station Street that will connect with the intended improvement to the public domain as part of a future development on the site

The for the station upgrades has also considered the forecast Sydney Trains patronage growth (which is the estimated 2036 daily customer patronage plus 15 per cent), additional trips expected to be generated by the Auto Alley Urban Renewal project, as well as changing travel patterns.

The Review of Environmental Factors undertaken by the Government, also identified the lack of an accessible path of travel to the station concourse and to the station platforms which will be addressed as part of the subject planning proposal.

Subject to planning approval, construction is expected to start in 2017 and take up to 18 months. It is not anticipated that the construction works with the station would affect future development of the subject site.

A perspective image of the proposed Harris Park Station upgrades is provided below in **Figure 15**.

Figure 15 – Harris Park Station upgrades
Source: TfNSW

2.5.2 Parramatta CBD Train Station

The Site is located approximately 700m to the south of Parramatta Train Station. The station provides regular services (every 4-5 minutes in peak times) on the T1 North Shore Line as well as the T1 Western Line and T5 Cumberland Line.

2.5.3 Ferry Services

The Parramatta River cat Ferry is located on the north-western side of the CBD and provides express ferry services to Circular Quay every hour with services provided 7 days per week.

2.5.4 Pedestrian and Cycle Infrastructure

The Site has access to local pedestrian footpaths throughout most parts of the CBD. The site is also located proximate to a range of bicycle routes that run throughout the CBD. Additional bicycle infrastructure, including covered storage is proposed to be included in the Harris Park Station upgrades.

2.5.5 Bus Services

The Site also located in close proximity (300m) to a number of bus stops located along both sides of Church Street. These bus stops are frequently serviced by the intra-regional M91 servicing Parramatta and Hurstville which operates seven days per week. Services to these bus stops depart every 10 minutes in morning and afternoon peaks.

The Parramatta Bus transport Interchange is located approximately 700m to the north of the site and provides high frequency regional bus routes. The interchange is serviced by the 520, 521, 523, 524, 525, 545, 546, 547, 549, 550, 552, M52 and M54 bus routes.

2.5.6 Western Sydney Light Rail

The Western Sydney Light Rail preferred network will link Parramatta to Camellia, Sydney Olympic Park and Strathfield as well as Carlingford along a northern extension of the line. The Light Rail will play an important role in linking these western Sydney centres to Parramatta and providing additional high capacity public transport.

2.5.7 Vehicular Access

The properties on the site all have existing vehicular access from Raymond Lane. Individual vehicular access is provided to each property with the site currently accommodating four different vehicular access points. The proposed redevelopment of the site will consolidate access for the entire site along Raymond Lane. Vehicular access is discussed further at **Section 6.6**.

3.0 Existing Planning Controls

The Parramatta LEP is the primary Environmental Planning Instrument (EPI) that applies to the site. The existing planning controls that apply to the site are outlined below. **Table 2** provide a summary of the existing controls

Table 2 – Summary of existing Controls

Parramatta Local Environmental Plan 2011	
Zoning	B4 Mixed Use
Building Height	12m
Floor Space Ratio	2:1
Heritage	Local Heritage Items ▪ 1 Station Street West (item 744); and ▪ 7 Station Street West (item 745).

3.1 Built Form Controls

3.1.1 Land Use Zoning

The site is zoned B4 Mixed Use which permits a range of residential and associated non-residential uses including residential flat buildings, shop top housing, neighbourhood shops and commercial premises. The Site's zoning is shown below in **Figure 16.** The objectives of the zone are:

a) *To provide a mixture of compatible land uses.*

b) *To integrate suitable business, office, residential, retail and other development in accessible locations so as to maximise public transport patronage and encourage walking and cycling.*

c) *To encourage development that contributes to an active, vibrant and sustainable neighbourhood.*

d) *To create opportunities to improve the public domain and pedestrian links.*

e) *To support the higher order Zone B3 Commercial Core while providing for the daily commercial needs of the locality.*

f) *To protect and enhance the unique qualities and character of special areas within the Parramatta City Centre.*

Figure 16 – Existing zoning map
Source: Parramatta LEP

3.1.2 Height of Buildings

The existing building height control for the site under the Parramatta LEP is 12m, as shown in **Figure 17** below.

Figure 17 – Existing height of buildings map
Source: Parramatta LEP

3.1.3 Floor Space Ratio

The FSR control that currently applies to the site is 2:1, as shown in **Figure 18.**

Figure 18 – Existing Floor Space Ratio map
Source: Parramatta LEP

3.2 Heritage

There are two locally listed heritage items on the site, identified in Schedule 5 of the Parramatta LEP, as outlined below:

- 1 Station Street West (item 744); and
- 7 Station Street West (item 745).

A Heritage Impact Statement has been prepared by NBRS+ Partners (**Appendix B**) and identifies the following heritage significance statements for the items:

> ***1 Station Street:*** *House at 1 Station Street West is of significance for the local area for historical, aesthetic and representativeness reasons. Built c.1890, it is readily identifiable as part of historic building stock and is strongly contributing to the streetscape.*
>
> ***7 Station Street****: House at 7 Station Street West is of significance for the local area for historical and representativeness reasons. Built c.1915, it is readily identifiable as part of historic building stock and is still contributing to the streetscape.*

The site is also located in proximity to a number of locally listed heritage items and conservation areas, as outlined below:

- 49 and 51 High Street (item 710). The heritage item is an attached two-story dwelling house.
- 1, 3 and 5 Cambridge Street being a group of three, single storey, late Victorian houses.
- 48 Wigram Street being a single storey Victorian House.
- The Tottenham Street Heritage Conservation area (C1) and locally listed federation period cottages located to the south of Raymond Street in the Holroyd LGA.

The heritage items listed under the Parramatta LEP are provided below in **Figure 19**.

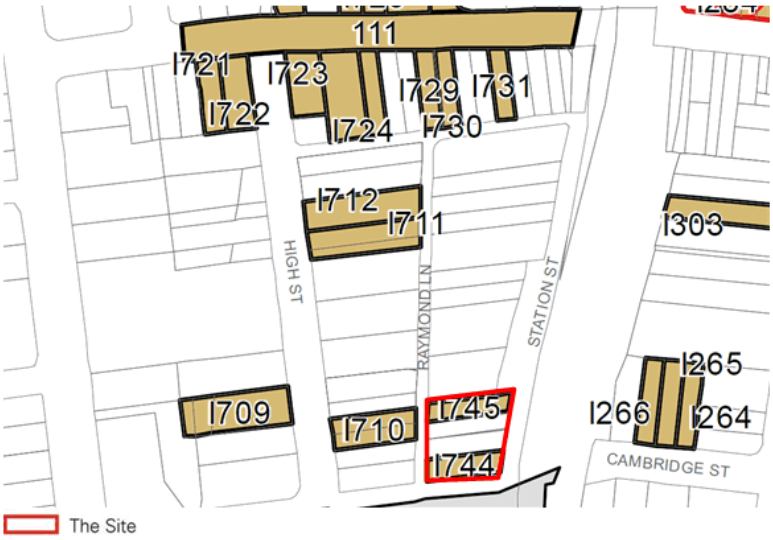


Figure 19 – Existing Heritage map
Source: Parramatta LEP

4.0 Planning Proposal

4.1 Explanation of Proposed Provisions

The Planning Proposal seeks to amend the Parramatta LEP to facilitate the proposed mixed use development outlined above, as well as to enable increased building height, FSR and to remove the heritage listing of the building at 7 Station Street.

The existing and proposed LEP controls, as well as the recommended amendments are outlined in **Table 3** below.

Table 3 – Existing and proposed LEP controls

	Existing	Proposed
Floor Space Ratio	2:1	10:1
Building Height	18m	140m
Heritage	Local Heritage items – 1Station Street (Item No 744) – 7 Station Street (Item No 745	Removal of the heritage listing of the item at **7 Station Street** (Item No 745) – retention of heritage item at No. 1

4.1.1 Building Height

It is proposed to increase the maximum building height control across the site to 140m (*RL160.7*) by amending the Height of Buildings Map as shown at **Appendix C.**

4.1.2 Floor Space Ratio

It is proposed to establish a maximum FSR of 10:1 across the site. This maximum FSR will comprise a 1:1 of non-residential uses and an FSR of 9:1 for residential uses. This will be achieved by amending the Parramatta LEP 2011 FSR Map as shown in the FSR Map at **Appendix C.**

4.1.3 Heritage

It is proposed to remove the local heritage listing of the building at 7 Station Street from Schedule 5 of the Parramatta LEP 2011. This will be achieved by amending Schedule 5 of the Parramatta LEP and the Heritage Map as shown in the heritage Map at **Appendix C.** Further assessment regarding the removal of heritage-listing of No. 7 Station Street is provided in **Section 6.4.**

4.1.4 Zoning

The planning proposal does not seek to amend the existing B4 Mixed Use zoning or permissible land uses on the site, nor does it seek to amend the operation of any other clauses in LEP 2011 than those outlines above.

5.0 Assessment of Planning Proposal against NSW Department of Planning and Infrastructure Guidelines

The following section includes an assessment against the requirements in *A guide to preparing planning proposals* published by the Department of Planning and Infrastructure in October 2012. This section demonstrates the need for the proposal and its relationship with the strategic planning framework.

5.1 **Part 1** - Objectives and Intended Outcomes

The objective of this planning proposal is to seek the amendments to building height, FSR, and heritage planning controls at Nos. 1 – 7 Station Street West, Parramatta, to facilitate a mixed use development commensurate with its location.

The intended outcome of the Planning Proposal is to enable a high quality development to be achieved on the site, as a result of a competitive design competition, providing housing and employment opportunities within Parramatta CBD.

A summary of the key objectives raised in this Planning Proposal is provided below:

- Strengthen Harris Park Station as the main transport hub for the Auto Alley precinct and Parramatta's second inner city station.
- Transform Station Street into a tree lined pedestrian priority street with high quality public domain and a range of active and passive gathering spaces.
- Encourage lot amalgamations that facilitate the development of high density, mixed use development close to major transport links.
- Through the Design Excellence process, One Station Street has the potential to be a 'bookend' tower that marks the southern edge of the Parramatta City Centre.
- Facilitate high density living within 100m of Harris Park Station and 10 minutes' walk to Parramatta City Centre, Sydney's second CBD.
- The heavy rail corridor forms an urban barrier that clearly separates Station Street West + Auto Alley (High Density) from the Harris Park Town Centre within the Harris Park West Conservation Area.

5.2 **Part 2** - Explanation of provisions

The proposed LEP provision to be amended are discussed in **Section 4.0**. These are summarised below in **Table 4**.

Table 4 – Existing and proposed LEP controls

	Existing	Proposed
Floor Space Ratio	2:1	10:1
Building Height	18m	142m
Heritage	Local Heritage items – 1Station Street (Item No 744) – 7 Station Street (Item No 745	Removal of the heritage listing of the item at **7 Station Street** (Item No 745)

5.3 Part 3 – Justification

5.3.1 The Need for the Planning Proposal

The site is located within the Parramatta CBD, approximately 100m south of the Harris Park Train Station. Parramatta is Sydney's second CBD and is experiencing rapid growth and change, particularly in the residential sector, and earmark growth in employment uses. The current applicable development controls for the site are 8 years old (developed under the *Parramatta City Centre Local Environmental Plan 2007*) and have since note been revised to reflect this rapid growth.

The site is located at the south-eastern entrance to the CBD and forms a prominent location in the growing CBD.

Building heights within the City Centre are increasing substantially under the strategic framework established by the CBD Planning Strategy, which seeks to investigate the removal of numerical building height limits, with height limits to be governed by airspace operations and solar access restrictions.

The building height outlined within this Planning Proposal does not encroach on airspace operations or solar access planes. The current FSR control does not allow for a growing CBD and is not consistent with the FSR controls afforded to sites adjacent to a train station as endorsed by the Department of Planning and Environment (DPE).

The proposed FSR (and corresponding building height) responds to the site's capacity, strategic location adjacent to a high capacity transport node, services, employment and recreation.

5.3.2 Q1 – Is the planning proposal a result of any strategic study or report?

This Planning Proposal is not the result of any site specific study or report however is contiguous to land identified Parramatta CBD Planning Strategy prepared by Council in 2015, discussed below.

However, as part of the investigations into the site, an Urban Design Report (**Appendix A**) including an analysis of future development pattern has been undertaken by AJC. Details of this analysis are included at **Section 6.0**.

Parramatta CBD Planning Strategy

The Parramatta CBD Planning Strategy was adopted by Council at its meeting of 27 April 2015, and provides the framework for Council's CBD Planning Proposal which will amend the Parramatta LEP to provide development controls that will facilitate the growth of Parramatta into Sydney's second CBD. The CBD Planning Strategy recommends a base FSR of 10:1 for most parts of the City Centre, with lower FSR controls recommended for some transitional zones located outside of the original CBD boundary and for other areas subject to renewal constraints such as lot fragmentation and heritage, as shown in **Figure 20** below.

Figure 20 – Parramatta CBD Planning Strategy
Source: Parramatta Council + AJC

The site is located in a precinct with a suggested FSR of 6:1 and a requirement for further urban design testing, as outlined in the CBD Planning Strategy. The land in the northern portion of this precinct contains a number of heritage items and smaller lots that constrain development and opportunities for renewal.

The precinct is one of four others identified for further urban design testing however is the only one of these precincts located inside the original Parramatta CBD boundary. Accordingly the precinct is not an entirely transitional area, and in fact includes the CBD's only other train station. Accordingly, the precinct presents opportunities for increased density.

Section 6.1 and 6.2 of this Planning Proposal provides a summary of the detail urban design testing undertaken by AJC for the Station Street precinct as well as proposed scheme for the subject site (to inform a future Development Application). It considers the future development pattern, built forms, FSR and height, uses and residential amenity controls.

The land to the west of the precinct includes the Auto Alley corridor (see **Figure 20**) assigned for commercial buildings up to 30 stores in height. The site located to the east of Auto Alley, as shown above in **Figure 20**. Notwithstanding the lower FSR controls recommended for the sites to the east of the precinct, the site and the surrounding sites present a significant opportunity for an increase in density.

As shown in **Figure 21** below, the site forms a key location at the entrance to the south-eastern corner of the CBD. Additionally, the site has the opportunity to

provide a visual marker for the Harris Park train station and its location adjacent to high capacity public transport is a key factor influencing an increase in density.

The increase in building height and density on the site proposed under this Planning Proposal will not have any adverse impacts on airspace operations or overshadowing, hence demonstrating consistency with the intended growth of the CBD.

Figure 21 – Auto Alley Precent
Source: Parramatta Council

The subject site and the Station Street precinct identified in the Urban Design Study (**Appendix A**) is not a transitional zone similar to other locations in the Parramatta CBD. The site is located more than 250m to the south of the Harris Park West Heritage Conservation area and as such does not create any overshadowing or significant visual intrusion on the conservation area, as is the case with land to the north.

The site is bound to the east by the 40m wide railway corridor which provides a natural urban barrier and transition zone to the lower scale development to the east of the site.

The site and the properties along Station Street present an opportunity for a visually prominent edge to the CBD and the creation of a skyline in the south-eastern portion of the City Centre that will identify Parramatta.

Station Street Urban Design Framework

A detailed Urban Design Framework for the site and adjoining Station Street Precinct is has been prepared by AJC (**Appendix A**). This is discussed in further detail at **Section 6.0**.

5.3.3 Q2 – Is the planning proposal the best means of achieving the objectives or intended outcomes, or is there a better way?

This Planning Proposal is the most suitable means of achieving the intended outcome, realising identified state and local objectives, and achieving identified aims, which is to facilitate a residential development on the site with a maximum building height of 140m and FSR of 10:1.

The current height and FSR controls do not allow for or encourage the achieving of these objectives.

5.4 Relationship with Strategic Planning Framework

5.4.1 Q3 – Is the planning proposal consistent with the objectives and actions of the applicable regional or sub-regional strategy (including the Sydney Metropolitan Strategy and exhibited draft strategies)?

State and Regional Strategic Framework

NSW State Plan 2021

The New South Wales State Plan sets the strategic direction and goals for the NSW Government across a broad range of services and infrastructure. The Plan identified planning for population growth as one of the key challenges for the State.

The redevelopment of the site is consistent with the State Plan as it will provide new housing in an area which is highly accessible to public transport infrastructure and social services.

NSW Long Term Transport Plan 2012

The NSW Long Term Transport Plan 2012 has the aim of better integrating land use and transport. The Draft Metropolitan Strategy was been prepared to integrate with the Long Term Transport Plan, which has since been incorporated in *A Plan for Growing Sydney*.

The Planning Proposal will serve the objectives of the Transport Plan by locating both residential and employment generating uses (including community services) adjacent to Harris Park Train Station. In conjunction with planned station upgrades, this will encourage the use of public transport and reduce reliance on private motor vehicles.

The site presents an opportunity with a large amalgamated land holding to facilitate higher density development that directly benefits from an underutilised train station.

The growth of Parramatta into Sydney's Second CBD must utilise Harris Park Train Station by locating higher density development in close proximity. The proposal will directly facilitate and support the change of mode share.

Metropolitan Strategy: A Plan for Growing Sydney

In December 2014 the Department of Planning and Environment released A Plan for Growing Sydney (the Plan). The Plan supersedes the current Metropolitan Plan for Sydney 2036 and Draft Metropolitan Strategy for Sydney to 2031, and presents a strategy for accommodating Sydney's future population growth for the next 20 years.

In order to achieve the vision for Sydney to become 'a strong global city and a great place to live', the Plan establishes four goals for Sydney. The goals of the Plan are that Sydney will be:

1. a competitive economy with world-class services and transport;
2. a city of housing choice, with homes that meet our needs and lifestyles;
3. a great place to live with communities that are strong, healthy and well connected; and
4. a sustainable and resilient city that protects the natural environment and has a balanced approach to the use of land and resources.

To support these goals, the Plan sets out planning principles that will guide Sydney's growth. These include:

- increasing housing choice around all centres through urban renewal in established areas;
- stronger economic development in strategic centres and transport gateways; and
- connecting centres with a networked transport system.

The plan forecasts increased levels of growth in the employment and residential sectors. The strategy has increased residential dwelling targets by 22%, with an additional 664,000 new dwellings needed in Sydney by 2031. It is noted that the Draft City Centre Planning Framework Review was released prior to A Plan for Growing Sydney and the revised growth targets implemented under the plan may therefore require an even greater amount of additional floor space within the CBD than that identified under the Planning Framework Review.

A Plan for Growing Sydney reiterates Parramatta's Role as Sydney's Second CBD and provides that the Greater Parramatta region (**Figure 22**) has the potential to reach 100,000 jobs over the next 20 years. The plan seeks to connect the Parramatta CBD with Westmead, Parramatta North, Rydalmere and Camellia.

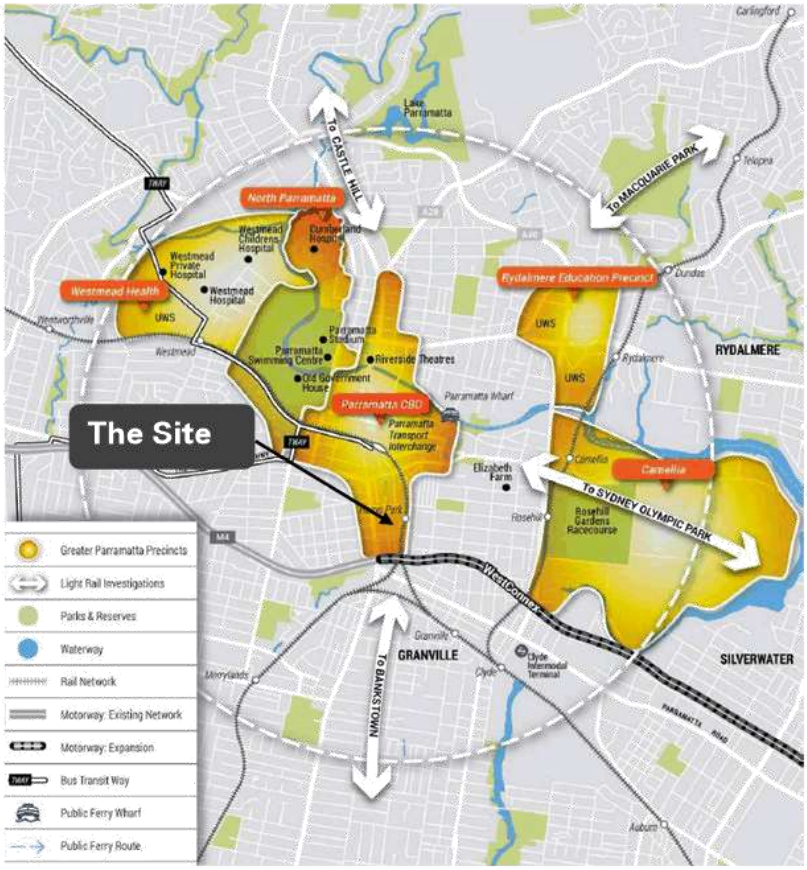


Figure 22 – Greater Parramatta Area
Source: A Plan for Growing Sydney

Under the Plan, Sydney has been divided into six subregions, with Parramatta located in the West Central Subregion. Councils, the community, the Greater Sydney Commission and NSW Government will work together to finalise and implement District Plans. Whilst the West Central District Plan is yet to be prepared, *A Plan for Growing Sydney* identifies the priorities for the Subregion.

Further, it identifies the following priority for the Greater Parramatta area which includes:

- plan Greater Parramatta as Sydney's second CBD and Western Sydney's number one location for employment and health and education services, supported by a vibrant mixture of land uses and cultural activity, with the Parramatta River foreshore as a focus for recreational activities; and
- provide capacity for additional mixed-use development in Parramatta CBD and surrounding precincts including offices and retail in Parramatta CBD, health services in Westmead, an education hub around the new University of Western Sydney Campus, a technology and education precinct in Rydalmere, arts and culture in Parramatta, a sports precinct around Parramatta Stadium and housing in all precincts.

This Planning Proposal is consistent with *A Plan for Growing Sydney*, in that it will:

- Enable the residential development of the site by facilitating a tower form that is able to achieve an appropriate level of residential amenity and as such

contributing to the significant growth targets for Parramatta and the Sub region.

- Enable more residential floor space on a site that is in close proximity to regionally significant and existing transport infrastructure including the Parramatta Train Station and Bus Interchange as well as the future potential Parramatta Light Rail Routes.
- Facilitate a residential development that is in close proximity to community and civic facilities within the Parramatta Square and throughout the CBD and educational and health facilities provided by the University of Western Sydney and the Westmead Hospital, respectively.
- Facilitate an increase in residential density that is in close proximity to jobs provided by the Westfield Shopping centre and throughout the growing Parramatta CBD;
- Maintain employment uses on the site, resulting in a strengthening of the Parramatta Commercial Core, which is currently under developed; and
- Revitalise an underutilised city centre block by enabling a built form outcome that respects the desired CBD skyline, is consistent with the locality's transitional status, and will be capable of providing high residential amenity and increased employment capacity.

The Planning Proposal seeks to achieve this by permitting additional density to provide housing in close proximity to existing services including education provided by the Western Sydney University within the Parramatta Square and the Rydalmere Education Precinct. Being adjacent to the Harris Park Train Station, the site is better located than a large portion of the Parramatta CBD, which has a substantial precedent for higher density development.

The site directly achieves *A Plan for Growing Sydney's* aim, to locate higher density development within 400m of high capacity public transport. In addition to this, the site presents a large amalgamated land holding, achieving Council's minimum allotment size for high density development.

The Urban Design Report opportunities analysis demonstrates sites that fall within a 400m catchment of one of Parramatta's Train Stations. As illustrated in the graphic, a large portion of the Parramatta CBD falls outside of the 400m catchment. As outlined in **Section 2.5.1** Harris Park Train Station has services that generally match the Parramatta Train Station however is significantly less utilised. The growth of Parramatta into Sydney's Second CBD must utilise the existing infrastructure provided by Harris Park Train station by locating higher density development within its catchment area.

The Harris Park Station catchment falls partially to the east of the railway line and is outside of the CBD growth area and includes a heritage conservation area (within Holroyd Council). As such, this portion of the catchment is not considered to be subject to significant change and subsequent utilisation of the transport infrastructure, leaving the area to the west of the station to accommodate the identified need for growth.

Notwithstanding this, the Parramatta CBD Planning Strategy recommends that high density development is appropriate for areas outside of the immediate station catchment. While this is considered reasonable as the CBD presents significant amenity and transport options, the indicated FSR of 6:1 does not represent the most appropriate outcome for the site.

As outlined at **Appendix A**, the site and the Station Street Precinct are appropriate sites for higher density development and as such must reflected in the controls.

Relevant Goals, Directions and Actions of *A Plan for Growing Sydney* are set out in **Table 5** below:

Table 5 – Relevant Goals, Direction and Action – *A Plan for Growing Sydney*

Goals and Direction	Comment
Goal 1 - A competitive economy with world-class services and transport	
Direction 1.2 - Grow Greater Parramatta - Sydney second CBD	Grow Parramatta as Sydney's second CBD by connecting and integrating Parramatta CBD, Westmead, Parramatta North, Rydalmere and Camellia.
Direction 1.7: Grow strategic centres - providing more jobs closer to home	Consistent with this direction, the proposal will unlock developable land by consolidating fragmented sites. Consistent with the Plan, this Planning Proposal "will encourage flexibility, higher density and a more diverse range of activities".
Goal 2 - A city of housing choice with homes that meet our needs and lifestyles;	
Direction 2.1: Accelerate housing supply across Sydney	As per the Plan, and Action 2.1.1 " *The most suitable areas for significant urban renewal are those areas best connected to employment and include:* ▪ *in and around centres that are close to jobs and are serviced by public transport services that are frequent and capable of moving large numbers of people; and* ▪ *in and around strategic centres.* " The proposed increase in height and FSR is entirely consistent with this statement, given its location.
Direction 2.2 - Accelerate urban renewal across Sydney - providing homes closer to jobs	Under Action 2.2.2, *A Plan for Growing Sydney* focuses new housing in centres which have public transport that runs frequently and can carry large numbers of passengers. Additional housing will also support the vitality and sense of community in the Precinct as per the Plan The proposed increase in height and FSR is entirely consistent with this statement, given its location.
Goal 3 - A great place to live with communities that are strong, healthy and well connected	
Direction 3.1 Revitalise existing suburbs	Focusing new housing within Sydney's established suburbs brings real benefits to communities and makes good social and economic sense. As noted in the plan, this type of development lowers infrastructure costs; reduces the time people spend commuting to work or travelling between places; gives people more time to spend with their families, relaxing and enjoying sport and other activities; and helps people get involved in the local community. Directing new housing to the existing lower density urban areas (further from transport links) will reduce the impact of development on the environment and protect productive rural land at the urban fringe.
Goal 4 - A sustainable and resilient city that protects the natural environment and has a balanced approach to the use of land and resources	
	The proposal supports this goal through the delivery of housing density around transport connections, encouraging public transport mode share, and minimising the impact of development on existing areas of low density and open space. The proposal supports the balance of land use.

Greater Sydney Commission and District Plans (future)

The Greater Sydney Commission Bill 2015 was introduced into Parliament on 22 October 2015 and was passed with amendments on 11 November 2015. The Bill establishes the functions and structure of the Greater Sydney Commission (GSC) and its various committees. It also inserts a new Part 3B into the *Environmental Planning and Assessment Act 1979* giving statutory weight to *A Plan for Growing Sydney* and district plans to be made under it.

The legislation creates two types of strategic plans: regional plans and district plans. In summary, *A Plan for Growing Sydney* (which was finalised in December

2014) will be given statutory weight as a regional plan for the Greater Sydney Region. The GSC must review *A Plan for Growing Sydney* before the end of 2017 and then every five years thereafter.

The principal objectives of the GSC are to:

- lead metropolitan planning for the Greater Sydney Region;
- promote orderly development in the Greater Sydney Region - integrating social, economic and environmental considerations with regard to the principles of ESD;
- promote the alignment of Government infrastructure decision-making with land use planning;
- promote the supply of housing, including affordable housing;
- encourage development that is resilient and takes into account natural hazards; and
- support ongoing improvement in productivity, liveability and environmental quality.

Priorities for the District – West Central Subregion

Whilst the District Plans have not yet been prepared, the DPE and GSC have released priorities for each of the subregions. It could be expected that these will foreshadow some of the key components to be included in the District Plan plans.

Specifically, the priorities for the West Central Subregion relevant to the Planning Proposal are:

- Work with councils to identify suitable locations for new services, homes and jobs close to transport
- Work with Parramatta Council to:
  - transform Greater Parramatta as Sydney's second CBD and Western Sydney's number one location for employment and health and education services, supported by a vibrant mixture of land uses and cultural activity, with the Parramatta River foreshore as a focus for recreational activities;
  - provide capacity for additional mixed-use development in Parramatta CBD and surrounding precincts
  - improve transport connections between Greater Parramatta and other Western Sydney centres and precincts, commencing with Macquarie Park via Carlingford, Castle Hill via Old Northern Road, Bankstown and Sydney Olympic Park;
  - improve walking and cycling connections within Greater Parramatta including between Parramatta CBD , and Parramatta River and their surrounding area.

The Planning Proposal supports these priorities and the broader goals of *A Plan for Growing Sydney*, by accelerating housing supply and mixed use development that will provide services needed for a growing population. Intrinsically, the priorities for the District, identified by the DPE, are fostered in the Planning Proposal.

The provision of additional open space and improved pedestrian and cyclists linkages, combined with the planned upgrades to Harris Park train station will substantially improve these linkages and experience, improving the Parramatta/Harris Park neighbourhoods (refer to **Section 6.6**).

Transit Orientated Development

Transit Orientated Development ('TOD') is a planning concept that promotes high quality, medium to high density mixed use development within a comfortable walk of public transport infrastructure (typically measured at a radius of 800 metres).

The site's location adjacent to Harris Park Train Station is a key catalyst for its redevelopment commensurate with the density of other areas in close proximity to high capacity public transport infrastructure across Sydney. As indicated in the preceding Sydney Metropolitan Strategy, *A Plan for Growing Sydney* identifies sites within 400m of public transport infrastructure as key locations for increases in density.

The Planning Proposal will support the principles of TOD, capitalising of the significant financial investments by the NSW Government in transport and productive infrastructure, including the forthcoming upgrades to Harris Park Station and surrounds.

Sydney's Walking Future

Figure 23 below is an extract from Transport for NSW's (TfNSW) publication *Sydney's Walking Future* which identifies that walking occupies between 19% and 25% of the mode share in Parramatta. For the remainder of the core of the Sydney Metro, this share is greater than 25%.

The intent behind this strategy document is to encourage a higher proportion of walk as a transport mode share, and looking at ways to increase walking (and access to public transport services), subsequently reducing congestion and improving health.

Locating density immediately adjacent public transport infrastructure, such as proposed in this Planning Proposal, is likely to significantly increase the public transport mode share of the future residents, aligning with TfNSW's intent. The Planning Proposal also proposed significant upgrades to Station Street West and access to the stations (See **Section 6.6**), therefore supporting the objectives and intent of this publication.

Figure 23 – Walking patterns across Sydney (mode share)
Source: Transport for New South Wales (TfNSW)

Utilisation of Harris Park Train Station

The Sydney CBD is serviced by four train lines across seven train stations (Central, Town Hall, Circular Quay, Martin Place, St James and Museum stations) with the planned Sydney Metro line providing another line and two new stations. Harris Park Station is serviced by two lines (on a single station).

Table 6 below identifies to total of movement (in/out), and rank of each stations. The table clearly shows that Harris Park Station has the capacity to service a greater number of patrons than existing, particularly in line with planned Station upgrades

Table 6 – Rank of Sydney train station usage over 24 hour period (of Transport Statistics 2014)

Location	In	Out	Rank	No. of Lines
Central	97,110	97,110	1	5
Town Hall	89,620	89,620	2	4
Wynyard	60,200	60,200	3	3
Parramatta	34,960	34,960	4	2
North Sydney	28,610	28,610	5	1
Redfern	25,680	25,680	6	5
Chatswood	22,200	22,200	7	1
Harris Park	1,710	1,710	130	2

5.4.2 Precedence in Strategic Planning and Density

Macquarie Park - Herring Road Priority Precinct

Whilst not related to the subject site or precinct specifically, a comparison between the recently endorsed Macquarie Park: Herring Road Priority Precinct and the Station Street Precinct (including the site) has been prepared as part of the Urban Design Report (**Appendix A**).

The rationale for the comparison is to clearly demonstrate the similarities in characteristics between the two locations, both adopting the same fundamental principles for appropriately locating density

Furthermore, it is noted that these principles have been endorsed by the Department of Planning and Environment, considerate of the same goals, directions and actions contained within *A Plan for Growing Sydney*.

These essential principles include:

- support for density and mixed uses around transport corridors;
- placement height and landmark building to indicate the arrival to the precinct and Parramatta CBD; and
- Support for significant uplift in height and FSR, supported by infrastructure (social, economic, and services) – including open space.

5.4.3 Q4 - Is the planning proposal consistent with a Council's local strategy or other local strategic plan?

Local Strategic Framework

Parramatta CBD Planning Strategy

Refer to discussion in **Section 1.3** above.

Draft Parramatta Employment Lands Strategy 2015

On 7 December 2015, Parramatta City Council considered the Draft Employment Lands Strategy 2015. This Strategy built on the previous Parramatta Economic Development Strategy endorsed by Council in 2011.

The aim of the Strategy is to provide Council with a consolidated set of planning actions and recommendations to guide the future of Parramatta's 21 Employment Lands Precincts. 'Employment lands' include all land that is zoned for industry and/or warehouse uses. This includes lands zoned IN1 – General Industrial, IN2 – Light Industrial, IN3 – Heavy Industrial, B5 – Business Development and B6 – Enterprise Corridor. Exhibition of this draft strategy concluded at the end of February 2016.

The study examined the role and demand for employment lands in the Parramatta LGA, including the changing economic geography, the employment lands policy framework and regional infrastructure. The study found that Parramatta's LGA is the largest economy in Western Sydney and is based around three strategic areas including service based jobs, health and medical activities and industrial related activities concentrated in employment lands.

Whilst not directly applying to the site (given the existing zoning as mixed use), supplying well located housing is fundamental in supporting retention and generation of employment within the Parramatta. The Planning Proposal supports the objective and intent of this Strategy.

Parramatta 2038 Strategic Community Plan

The *Parramatta 2038* Strategic Community Plan sets the community goals and aspirations for the development of the Parramatta LGA over a 25 year period. This plan highlights the need for:

- economic growth and employment growth;
- an environmentally-friendly city;
- connectivity, in terms of transport and digital networks;
- diversity of people, and a society that encourages opportunity for all;
- a city that celebrates its cultural and sporting heritage; and
- inspirational leadership and good governance.

Parramatta 2038 outlines the priorities for the LGA, including:

- creation of 10,000 new jobs over the next five years and 50,000 new jobs by 2038;
- promotion of walking, cycling and public transport, as well as a legible city centre; and
- concentration of housing around centres.

The proposed development of the site facilitated by this Planning Proposal will achieve many of these objectives. It will facilitate redevelopment that will provide a substantial amount of residential accommodation in close proximity to existing transport networks, as well as retaining retail uses on the site.

Parramatta Open Space Plan 2003

The Parramatta Open Space Plan was implemented to provide a more strategic approach to open space planning and management within the LGA. The Plan was prepared to provide a framework to guide the planning, development and management of open space in the short and long term.

The planning proposal supported the underlying objectives of this plan through the delivery of publically accessible open space along the street frontage of the site. Further discussion of the Landscape Concept as part of the Urban Design Report is provided in **Section 6.1**.

5.5 Relationship to Statutory Planning Framework

5.5.1 Relevant Legislation and Regulations

Environmental Planning and Assessment Act 1979

The *Environmental Planning and Assessment Act 1979* (the EP&A Act) and the *Environmental Planning and Assessment Regulation 2000* (EPA Reg) set out amongst other things the:

- requirements for rezoning land;
- requirements regarding the preparation of a local environmental study as part of the rezoning process;
- matters for consideration when determining a development application; and
- approval permits and/or licences required from other authorities under other legislation.

This Planning Proposal has been prepared in accordance with the requirements set out in section 55 of the EP& A Act in that it explains the intended outcomes of the proposed instrument. It also provides justification and an environmental analysis of the proposal.

5.5.2 Q5 – Is the planning proposal consistent with applicable State Environmental Planning Policies?

State and Regional Statutory Framework

The consistency of the Planning Proposal with the relevant State Environmental Planning Policies (SEPPs) is addresses in **Table 7** below.

Table 7 – Consistency with relevant SEPPs

State Environmental Planning Policies (SEPPs)	Consistent		N/A	Comment
	YES	NO		
SEPP No 1 Development Standards			✓	SEPP 1 does not apply to Parramatta LEP.
SEPP No 4 Development Without Consent and Miscellaneous Exempt and Complying Development			✓	SEPP (Exempt and Complying Development Codes) 2008 applies to the site however is not relevant to the Planning Proposal.
SEPP No 6 Number of Storeys			✓	The Standard instrument definition for the number of storeys applies.
SEPP No 32 Urban Consolidation (Redevelopment of Urban Land)	✓			The planning proposal is consistent with SEPP 32 in providing for the opportunity for the development of additional housing in an area where there is existing public infrastructure, transport, and community facilities, and is close to employment, leisure and other opportunities. – See further discussion below
SEPP No 55 Remediation of Land	✓			The Stage 1 contamination assessment (**Appendix C**) for the site confirms that the historical uses on the site are not potentially contaminating uses. Therefore the site is unlikely to be contaminated. Notwithstanding this, contamination will be further addressed at the DA stage.
SEPP No 60 Exempt and Complying Development			✓	SEPP (Exempt and Complying Development Codes) 2008 applies to the site however is not relevant to the Planning Proposal.
SEPP No 64 Advertising and signage			✓	SEPP 64 is not relevant to the Planning Proposal. The SEPP may be relevant to future DAs.
SEPP No 65 Design Quality of Residential Flat Development	✓			Detailed compliance with SEPP 65 will be demonstrated in a future DA for the building facilitated by this Planning Proposal. Detailed testing of SEPP 65 and the Residential Flat Design Code was conducted throughout the design of the scheme which is capable of demonstrating compliance with the SEPP, as outlined in **Section 6.0.**
SEPP No.70 Affordable Housing (Revised Schemes)			✓	SEPP 70 is not relevant to proposed amendment.
SEPP (Affordable Rental Housing) 2009			✓	SEPP (Affordable Rental Housing) is not relevant to proposed amendment.
SEPP (BASIX) 2004	✓			Detailed compliance with SEPP (BASIX) will be demonstrated in a future development application for the scheme facilitated under this Planning Proposal.
SEPP (Exempt and Complying Development Codes) 2008			✓	SEPP (Exempt and Complying Development Codes) may apply to the future development of the site however is note relevant to this proposal
SEPP (Infrastructure) 2007			✓	SEPP (infrastructure) may apply to the future development of the site.
SEPP (State and Regional Development) 2011			✓	The future development of the site is likely to be deemed as 'regional development' (meeting the relevant thresholds under Schedule 4A of the EP&A Act), with the JRPP acting as the determining authority.
Sydney Regional Environmental Plan No 18–Public Transport Corridors			✓	Although this SREP applies to Parramatta LGA, no public transport corridors are located on or adjacent to the site.
Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005	✓			The proposed development is not located directly on the Sydney Harbour Catchment foreshore. Any potential impacts as a result of development on the site, such as stormwater runoff, will be considered and addressed appropriately at DA stage.

Local Statutory Framework

Parramatta LEP 2011

Consistency with LEP 2011 - Aims

The Proposal's consistency with the overall aims of the City Centre LEP is demonstrated in **Table 8** below.

Table 8 – Consistency with the overall aims of Parramatta LEP 2011

LEP Aims		
Aim	Proposal	Consistency
(a) to encourage a range of development, including housing, employment and recreation, that accommodates the needs of the existing and future residents, workers and visitors of Parramatta,	The proposal will facilitate future renewed residential, commercial and community uses on the site, and will stimulate economic growth through additional jobs and housing adjacent to a train station in the City Centre. The proposal will facilitate an increase in employment, social, cultural and residential floor space within the Parramatta City Centre, located adjacent to transport infrastructure.	✓
(b) to foster environmental, economic, social and physical wellbeing so that Parramatta develops as an integrated, balanced and sustainable city,	As demonstrated in the Sections of this Planning Proposal the proposal provides a response to development in line with established states and local planning policies, to achieve this objective.	✓
(c) to identify, conserve and promote Parramatta's natural and cultural heritage as the framework for its identity, prosperity, liveability and social development,	The proposal will result in the redevelopment of a large (1,800sqm) amalgamated site adjacent to a train station within the Parramatta City Centre. The Planning Proposal will facilitate a building that strengthens the CBD skyline, enhances the identity of the Parramatta City Centre and facilitates an improved built form outcome for the site whilst minimising adverse environmental impacts such as overshadowing.	✓
(d) to improve public access to the city and facilitate the maximum use of improved public transport, together with walking and cycling,	The proposal will facilitate an increase in employment, social, cultural and residential floor space within the Parramatta City Centre, located adjacent to transport infrastructure.	✓
(e) to minimise risk to the community in areas subject to environmental hazards, particularly flooding and bushfire, by restricting development in sensitive areas,	The detailed design of the future development will be explored at DA stage. Notwithstanding this, an Urban Design Report has been undertaken (**Appendix A**) which demonstrates that the proposed building envelope is consistent with the desired CBD skyline and is capable of providing a high level of residential amenity for the future prospective residents and the local community.	✓
(f) to protect and enhance the natural environment, including areas of remnant bushland in Parramatta, by incorporating principles of ecologically sustainable development into land use controls,	The proposal provides an increase in jobs, community areas and housing in very close walking proximity to existing high capacity rail transport. Bicycle parking will be provided as part of a future DA.	✓
(g) to improve public access along waterways where natural values will not be diminished,	The site does not front any natural waterways	✓
(h) to enhance the amenity and characteristics of established residential areas,	The site is appropriately located to accommodate the proposal as it will not have any significant detrimental impact on environmentally sensitive areas or the surrounding cultural heritage items. Refer **Section 6.0.**	✓

LEP Aims		
Aim	Proposal	Consistency
(i) to retain the predominant role of Parramatta's industrial areas,	The Planning Proposal does not seek to amend the existing B4 Mixed Use zoning	N/A
(j) to ensure that development does not detract from the economic viability of Parramatta's commercial centres,	The Planning proposal will allow mixed use development. A future development will provide on-residential uses to lower levels, primarily to service the surrounding neighbourhood and will not impact or detract from the viability of Parramatta's commercial centre	
(k) to ensure that development does not detract from the operation of local or regional road systems,	The Planning Place will not result in a development that detracts from local or regional systems operation.	
(l) to ensure development occurs in a manner that protects, conserves and enhances natural resources, including waterways, riparian land, surface and groundwater quality and flows and dependant ecosystems,	The future Development application will be required to demonstrate compliance with relevant policies and standard with regard to stormwater and groundwater impacts. The Planning Proposal will not directly impact any existing natural resources or ecosystems	
(m) to protect and enhance the viability, identity and diversity of the Parramatta City Centre and recognise it as the pre-eminent centre in the Greater Metropolitan Region,	The Planning Proposal will subject this aim, by providing opportunity commensurate with the status of Parramatta CBD	
(n) to encourage development that demonstrates efficient and sustainable use of energy and resources in accordance with ecologically sustainable development principles.	The proposal will result in the redevelopment of a large (1,800sqm) amalgamated site adjacent to a train station within the Parramatta City Centre. The Planning Proposal will facilitate a building that strengthens the CBD skyline, enhances the identity of the Parramatta City Centre and facilitates an improved built form outcome for the site whilst minimising adverse environmental impacts such as overshadowing.	

Consistency with Zone Objectives – B4 Mixed Use

The proposal's consistency with the objectives for building heights under the City Centre LEP is demonstrated in **Table 9** below. It is noted that this planning proposal does not seek to amend the existing zoning on the site.

Table 9 – B4 Zone Objectives

B4 Mixed Use – Zone Objectives		
Objective	Proposal	Consistency
To provide a mixture of compatible land uses.	The proposal will facilitate the future delivery of a mixed use development with residential floor space, as well as significant non-residential floor space	✓
To integrate suitable business, office, residential, retail and other development in accessible locations so as to maximise public transport patronage and encourage walking and cycling.	The proposal will facilitate the delivery of a future DA that will include non-residential uses suitable to the location, and may include medical services, community uses, as well as convenience retail and/or food and beverage premises.	✓
To encourage development that contributes to an active, vibrant and sustainable neighbourhood.	The proposal will encourage the redevelopment of the existing site with ground floor active uses. Furthermore, the future will support the principles of sustainable development given the priority to Harris Park railway station.	✓
To create opportunities to improve the public domain and pedestrian links.	The proposal includes upgrades to the western side of station street for the length of the site, substantially improving the public domain and approach to the railway station.	✓
To support the higher order Zone B3 Commercial Core while providing for the daily commercial needs of the locality.	Future development on the site will be required to provide a minimum 1:1 non-residential floor space (as per current LEP 2011). These non-residential use will likely be convenience retailing and services to provide for the daily commercial needs of the locality.	✓
To protect and enhance the unique qualities and character of special areas within the Parramatta City Centre	The proposal and future DA on the site will not adversely affect the unique qualities of the City Centre, but rather will foster the character and objectives of the CBD.	✓

Consistency with building height objectives

The proposal's consistency with the objectives for building heights under the City Centre LEP is demonstrated in **Table 10** below.

Table 10 – Consistency with height objectives in the Parramatta LEP 2011

Building Height		
Objective	Proposal	Consistency
(a) to nominate heights that will provide a transition in built form and land use intensity within the area covered by this Plan,	The proposal will facilitate the redevelopment of the site and the creation of a skyline in the south-eastern portion of the Parramatta CBD. The future development of the site will be subject to an Architectural Design Competition and as such will exhibit a high quality built form outcome for the City Centre.	✓
(b) to minimise visual impact, disruption of views, loss of privacy and loss of solar access to existing development,	The proposal will facilitate the redevelopment of the site and the creation of a skyline in the south-eastern portion of the Parramatta CBD. The future development of the site will be subject to an Architectural Design Competition and as such will exhibit a high quality built form outcome for the City Centre. The proposal does not cause overshadowing to Lancer Barracks, Jubilee Park or the Parramatta Square. The building is designed as a slender tower form that will limit overshadowing of properties to the south. Overshadowing is discussed further in **Section 6.2.**	✓
(c) to require the height of future buildings to have regard to heritage sites and their settings,	The proposed building height responds to the future direction of the City Centre to increase building heights and strengthen the desired CBD skyline. The proposed building height transitions down from the landmark towers in the Parramatta Square and facilitates the 'bell curve' shape of the CBD. Additionally, the taller building form will provide a visual marker for the Harris Park Train Station. The building height and future design has regard to the retention of the heritage items on the site and nearby conservation areas	✓
(d) to ensure the preservation of historic views,	The site is not located in any historic view corridors.	✓
(e) to reinforce and respect the existing character and scale of low density residential areas,	The proposed height is commensurate with the site's City Centre location adjacent to a train station. The height of the building is commensurate with the scale of surrounding future built form in the CBD. Further, the site is located in close walking proximity to existing major transport infrastructure, services, and education and health facilities.	✓
(f) to maintain satisfactory sky exposure and daylight to existing buildings within commercial centres, to the sides and rear of tower forms and to key areas of the public domain, including parks, streets and lanes.	The proposal will facilitate a slender tower form with small residential floor plates to ensure that satisfactory sky exposure is maintained to the surrounding buildings and public spaces. The site's location on the edge of the CBD will ensure that it maintains adequate sky exposure.	✓

Consistency with FSR objectives

The proposal's consistency with the objectives for FSR under the City Centre LEP is demonstrated in **Table 11** below.

Table 11 – Consistency with FSR objectives in the Parramatta LEP 2011

Floor Space Ratio		
Objective	Proposal	Consistency
(a) to regulate density of development and generation of vehicular and pedestrian traffic,	The proposed parking rates and anticipated traffic generation studies are discussed further at **Section 6.6**. Car parking is provided in accordance with Council's LEP rates and will be further investigated post gateway and at DA stage. The proposed development will also take advantage of the multitude of transportation modes in the local area.	✓
(b) to provide a transition in built form and land use intensity within the area covered by this Plan,	Built form and urban design has been a key consideration in this proposal and is discussed further in **Section 6.1 +6.2**. The proposed FSR amendment facilitates the high quality redevelopment of the site for both residential and commercial uses. The future development of the site will require an Architectural Design Competition and will hence be required to demonstrate design excellence. The Urban Design Report at **Appendix A** incorporates urban design principles that have informed this Planning Proposal.	✓
(c) to require the bulk and scale of future buildings to have regard to heritage sites and their settings,	The Planning proposal, and indicative scheme prepared by AJC (Appendix A) have regard to the heritage building on the site, and surrounding conservation area. Refer to **Section 6.0** for further assessment.	✓
(d) to reinforce and respect the existing character and scale of low density residential areas.	The Urban Design Report (**Appendix A**) provides that the site is appropriately located to accommodate a building of increased height. The site is a large amalgamated site and the proposal has envisaged the amalgamation of the neighbouring sites. Consideration has been given	✓

5.5.3 Q6 – Is the planning proposal consistent with applicable Ministerial Directions (s.117 directions)?

The planning proposal is consistent with the relevant directions for planning proposals issued by the Minister for Planning under Section 117(2) of the EP&A Act.

Section 117 Directions

Ministerial directions under Section 117 of the EP&A Act require Councils to address a range of matters when seeking to rezone land. A summary assessment of the Planning Proposal against the Directions issued by the Minister for Planning and Infrastructure under Section 117 of the *EP&A Act* is provided in **Table 12** below.

Table 12 – Assessment against 117 Directions

Ministerial Directions	Consistent		N/A	Comment
	YES	NO		
1. Employment and Resources				
1.1 Business and Industrial Zones			✓	Not applicable
1.2 Rural Zones			✓	Not applicable
1.3 Mining, Petroleum Production and Extractive Industries			✓	Not applicable

Ministerial Directions	Consistent		N/A	Comment
	YES	NO		
1.4 Oyster Aquaculture			✓	Not applicable
1.5 Rural Lands			✓	Not applicable
2. Environment and Heritage				
2.1 Environment Protection Zones			✓	Not applicable
2.2 Coastal Protection			✓	Not applicable
2.3 Heritage Conservation	✓			See **Section 6.4**
2.4 Recreation Vehicle Areas			✓	Not applicable
3. Housing, Infrastructure and Urban Development				
3.1 Residential Zones	✓			The Planning Proposal does not seek to change the land use zoning from B4 Mixed Use. The proposal provides greater opportunity for a mix of non-residential uses in support of the zone objectives.
3.2 Caravan Parks and Manufactured Home Estates			✓	Not applicable
3.3 Home Occupations			✓	Not applicable
3.4 Integrating Land Use and Transport	✓			The Planning Proposal will concentrate residential and non-residential uses in a central location to support public transport and improve access to employment and services.
3.5 Development Near Licensed Aerodromes			✓	Not applicable
3.6 Shooting Ranges			✓	Not applicable
4. Hazard and Risk				
4.1 Acid Sulphate Soils	✓			Parramatta LEP 2011 contains acid sulphate soils provisions and this Proposal does seek any amendment to these, Investigations and analysis will accordingly be undertaken as part of any future development of the land. Refer to **Section 6.0** for further discussion on Geology and Contamination.
4.2 Mine Subsidence and Unstable Land			✓	Not applicable
4.3 Flood Prone Land	✓			The site is not identified as being flood prone land.
4.4 Planning for Bushfire Protection			✓	Not applicable
5. Regional Planning				
5.1 Implementation of Regional Strategies			✓	Not applicable
5.2 Sydney Drinking Water Catchments			✓	Not applicable
5.3 Farmland of State and Regional Significance on the NSW Far North Coast			✓	Not applicable
5.4 Commercial and Retail Development along the Pacific Highway, North Coast			✓	Not applicable

Ministerial Directions	Consistent		N/A	Comment
	YES	NO		
5.8 Second Sydney Airport: Badgerys Creek			✓	Not applicable
6. Local Plan Making				
6.1 Approval and Referral Requirements	✓			No new concurrence provisions are proposed.
6.2 Reserving Land for Public Purposes			✓	No new road reservation is proposed.
6.3 Site Specific Provisions			✓	Not applicable
7. Metropolitan Planning				
7.1 Implementation of the Metropolitan Plan for Sydney 2036	✓			The Planning Proposal is consistent with the objectives and strategies of A Plan for Growing Sydney in that it will facilitate the delivery mixed use development, well located to support existing public transport services and provide employment and residential opportunities further strengthening Parramatta's role as Sydney's second CBD and contribution to the vitality of the Parramatta City Centre.

5.6 Environmental, Social and Economic Impacts

5.6.1 Q7 – Is there any likelihood that critical habitat or threatened species, populations or ecological communities, or their habitats, will be adversely affected as a result of the proposal?

The planning proposal will not result in any impact on critical habitat or threatened species, populations or ecological communities or their habitats, given the site's urban location.

5.6.2 Q8 – Are there any other likely environmental effects as a result of the planning proposal and how are they proposed to be managed?

A detailed assessment of the environmental impacts of the Planning Proposal is provided in **Section 6.0**. No unacceptable impacts will result from the proposal and future development

5.6.3 Q9 – Has the planning proposal adequately addressed any social and economic effects?

The social and economic impacts of the proposal are addressed in **Section 6.8**.

The Planning Proposal will have a positive social and economic impact by providing a greater level of non-residential floor space, improving ground floor activation and providing an area of publically accessible open space.

In addition to the above long-term positive economic and social impacts of the Planning Proposal, the uplift in the site's development potential will permit a development which has a higher capital value and generates more construction jobs than a smaller development within the existing controls.

5.7 State and Commonwealth Interests

5.7.1 Q10 – Is there adequate public infrastructure for the planning proposal?

The site is located in an established urban area and has access to a range of existing services. Further investigations will be undertaken as part of the preparation of the DA material to determine whether any upgrade of existing facilities is required.

The subject site is well serviced by existing transport and public transport infrastructure, being in close proximity to Harris Park Station (within 100m) and just over 800m from Parramatta Station and CBD centre.

5.7.2 Q11 – What are the views of State and Commonwealth public authorities consulted in accordance with the Gateway determination?

State and Commonwealth authorities will have the opportunity to provide comment on the Planning Proposal as part of its formal exhibition. Any future Development Applications (DA) will be referred to the relevant authorities as required.

5.8 **Part 4** – Mapping

Maps of the proposed amendments to the LEP height controls applying to the site have been provided and are located at **Appendix B**.

5.9 **Part 5** – Community Consultation

It is noted that confirmation of the public exhibition period and requirements for the planning proposal will be given by the Minister as part of the LEP Gateway determination.

Any future DA for the site would also be exhibited in accordance with Council requirements, at which point the public and any authorities would have the opportunity to make further comment on the proposal.

6.0 Assessment of Planning Issues

This section considers the key planning issues associated with the Planning Proposal as well as those associated with a future development.

In establishing the Planning Proposal, an indicative architectural scheme and montages of the scheme were prepared to ensure that all relevant built form, separation, amenity, and design parameters were considered. The outcomes of these investigation and analysis (**Appendix A**) is what has largely guided the content of the Planning Proposal.

As part of the Urban Design Report, and in response to discussion with Council, an analysis of the Station Street Precinct was also carried out by AJC. The purpose of the analysis was to consider the possible future development pattern and the relationship between the Planning Proposal and future development.

By adopting this approach, the built outcomes and associated impacts of the Planning Proposal (and subsequent DA scheme) can be tested, understood and clearly presented.

6.1 Urban Design Analysis - Station Street West

The Urban Design Report (**Appendix A**) considers the opportunity for renewal and site amalgamation in the Station Street precinct based on a minimum allotment size of 1,800m^2. This minimum lot size is based on the FSR sliding scale contained within clause 7.2 of the Parramatta LEP, which permits sites in excess of 1,800m^2 to achieve the mapped (higher) FSR and hence encourages the amalgamation of smaller sites. As 76% of sites in the Parramatta CBD have an area of 1,000m^2 or less[1], Council has resolved to pursue FSR sliding scales in the current Parramatta LEP and the policy position for the CBD Planning Strategy to enforce planning controls that encourage the amalgamation of smaller sites to a minimum site area of 1,800m^2.

A site area of 1,800m^2 will generally provide a street frontage of greater than 20m and allow for appropriate separation to neighbouring buildings. Additionally, larger site areas combined with increased building height limits will allow for greater building separation and solar access to the ground level public domain.

Figure 24 below shows the potential amalgamation pattern of sites to achieve a minimum site area of 1,800m^2 and residential building floorplates that accommodate 12m boundary setbacks pursuant to the Apartment Design Guide building separation controls (24m total).

The amalgamation of properties commensurate with the pattern shown below in **Figure 24** is informed by the NSW Government's Reform of Strata Laws (Strata Scheme Development Bill 2015) that will change the *required level of support* in relation to a strata renewal scheme to 75% of the lots[2]. It is anticipated that the future strata reform laws (expected to be introduced in mid-2016) will facilitate the amalgamation of a number of sites in the precinct. Notwithstanding this, the amalgamation of these properties will still require a substantial incentive to instigate the amalgamation process. Accordingly an FSR of 10:1, commensurate with Council's Planning policy for the remainder of the CBD is considered appropriate to instigate the amalgamation of the properties into minimum lots of 1,800m^2.

[1] *Parramatta Council Business Paper 14 December 2015*

[2] *Strata Scheme Development Bill 2015 Clause 176*

Figure 24 – Amalgamation and renewal analysis
Source: AJC

6.2 Built Form

The proposal (as well as indicative architectural scheme) facilitates a slender building envelope to create an elegant tower form above a carefully design podium. The indicative architectural scheme (**Appendix A**) provides a typical residential floorplate of 451.4m^2, consistent with objective *A5 –Tower Slenderness* outlined in the CBD Planning Strategy.

The proposed slender tower built form enables the site to yield a high quality development outcome rather than a smaller and more bulky built form that will otherwise crowd the heritage item and restrict the development potential of the surrounding sites. The proposed slender tower will provided a high level of articulation and fine grain to the CBD skyline under a future Architectural Design Competition.

Montages of the proposed built form and the outcome of the Planning Proposal are provided in **Figure 25** and **26** below. Furthermore, a detailed massing study has also been included as part of the Urban Design Report.

Figure 25 – Perspective of a future development on the site – view looking north on Station Street West
Source: Greenrock Property Pty Ltd

Figure 26 – Perspective of future development on the site and adjoining sites to the north – view looking west
Source: Greenrock Property Pty Ltd

Site Amalgamation

The Parramatta CBD Planning Framework (section A2.2) provides that sites less than 1,000m² in size are unable to achieve an FSR above 3:1 unless design excellence can be demonstrated. In addition to this, the Parramatta LEP 2011 (Clause 7.2) provides that sites less than 1,800m² in size are not able to achieve the mapped FSR, and are subject to a sliding scale provision to encourage amalgamation above 1,800m².

The Urban Design Report (**Appendix A**) provides a potential amalgamation pattern for sites along Station Street to achieve a minimum consolidated size of 1,800m², which has been achieved by the subject site. The amalgamation and redevelopment of these sites is critical for the utilisation of the Harris Park Station and will provided an improved urban design response to the south-eastern entrance to the CBD and the rail corridor. Notwithstanding this, the amalgamation of these properties requires an incentive for an increased scale of development, as sought for the subject site.

Scale and Density
The development proposes an FSR of 10:1 (plus a potential 15% design competition bonus) which is commensurate with the scale of development throughout Parramatta and what would be reasonably expected in a CBD location adjacent to a Train Station.

As outlined within this chapter, the proposed development will not have any significant adverse impacts on heritage or traffic. Additionally, the proposed development will not cause any significant adverse overshadowing impacts or impacts on the amenity of the surrounding developments.

The building envelope provides a slender floor plate that achieves a high level of residential amenity and enables the building to reduce the perceived bulk of a tower form (See **Section 6.2.1** for further discussion).

Building Separation and Setbacks

As set out in the Urban Design Report, a set of carefully considered design parameters have been established, informed by the massing study undertaken. These parameters including elements such as podium height, heritage curtilage, street wall, setback and tower footprint.

An excerpt of the Design Report is provided below in **Figure 27** illustrating the key setback and separation parameters from adjoining lots and No 1 Station Street (heritage item on the site). Importantly, these parameters will also form the basis for a future design competition on the site.

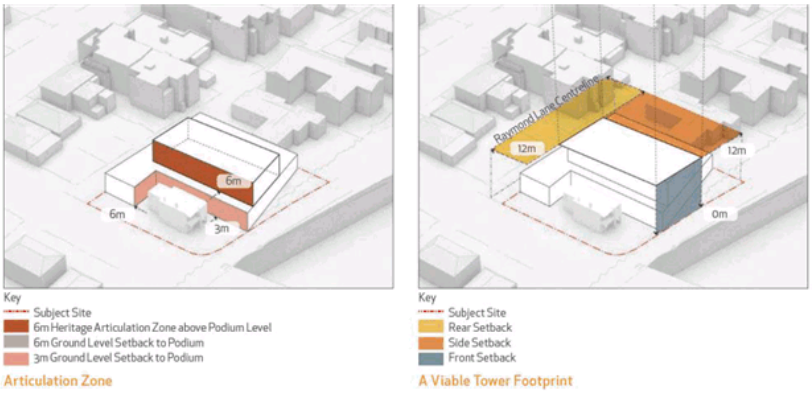


Figure 27 – Separation and setback design parameters.
Source: AJC

6.2.1 Building Height

The Parramatta CBD Planning Strategy seeks to investigate the removal of numeric building heights with height limits controlled by solar access provisions and airspace operations. This aim is consistent with the previous CBD Planning Framework Study and *A Plan for Growing Sydney*'s objective to grow the Parramatta CBD. The proposed building height of 140m aligns with the CBD Planning Strategy, as outlined below.

Parramatta CBD Context (Macro)

Development in the Parramatta CBD has traditionally formed a north-south axis along Church Street with the Railway line forming the south-eastern barrier to the CBD. The CBD Planning Framework Study, which informed the CBD Planning Strategy, envisaged a generally 'bell curve' shaped CBD skyline with building heights transitioning down from the taller buildings in the city centre. The Council endorsed Aspire tower will form the landmark CBD centre with a number of

endorsed Planning Proposals seeking building heights in excess of 200m within in the City Centre.

Despite the overall bell curve shape of the CBD skyline, a number of Council endorsed proposals will form prominent gateway buildings at major transport entrances to the CBD. The northern entrance to the CBD features two landmark developments fronting the Parramatta River.

The developments at 330 Church Street and 333-339 Church Street are both subject to gazetted Planning Proposals and feature building heights of 41storeys (150m) and 52 storeys (177m), respectively. A number of other taller buildings have also been endorsed on the fringe of the CBD at 11 Hassall Street and 142-154 Macquarie Street at 131 and 180m respectively. These buildings will form prominent visual markers at the major entrances to the CBD. The DA approved building at 11 Hassall Street is located at the primary eastern entrance to the CBD along Parkes/Hassall Street and the future redevelopment of the Cumberland Press site at 142-154 will identify the north-eastern entrance to the CBD along Mcarthur Street.

Figure 28 illustrates the positions of taller towers at the CBD edges, located along the major transport entrances to the CBD. The CBD currently has little visual prominence from the southern entrances along the railway line and when viewed from the M4 Western Motorway. While the Auto Alley precinct will reiterate the Church Street spine of the CBD, the envisaged heights up to 30 storeys in the precinct and the commercial nature of the buildings will not facilitate a taller visually prominent entrance to the CBDs south eastern entry, adjacent to Harris Park Station.

Figure 28 – Location of Landmark buildings within Parramatta CBD – Numbers indicate height in storeys
Source: JBA

The railway line forms a natural barrier to the south-eastern edge of the CBD and transitions the scale of the taller buildings to the Harris Park West conservation area. The railway line encourages a 'street wall' of taller buildings from the southern entrance of the CBD to the centre at Parramatta Train Station.

The location of the Harris Park Train Station at the south-eastern entrance to the CBD is a catalyst for the location of taller marker buildings in this area. **Figure 29** below is a view of the CBD from the south-east and illustrates the location of prominent taller buildings in the CBD centre, to the north and the north-east based on a combination of existing building, CBD Strategy and the AJC Urban Design Study. The Planning Proposal seeks to locate a taller building form that will identify the Harris Park Station and facilitates a prominent CBD entrance

Figure 29 – View of the CBD from the south-east looking north (site shown in orange)
Source: AJC

Local Context (Micro)

The proposal will provide a tower that is prominent in the immediate surrounding context to the south-east but commensurate with the future development for the Station Street precinct identified in the Urban Design Report (**Appendix A**). As shown in **Figure 24**, the proposed FSR and amalgamation pattern for the Station Street Precinct will facilitate the redevelopment of the sites adjacent to Harris Park Station, revitalising this areas and providing a high level of amenity through taller slender building forms.

The building facilitated under this proposal will also afford a greater setback and transition zone to the heritage item at 1 Station Street. A shorter building form on the site would result in increased floor plate sizes and hence greater crowding of the curtilage of the heritage item.

6.2.2 Overshadowing

A shadow analysis of the site is provided in the Urban Design Report (**Appendix A**). The shadow studies indicate that the shadow cast from a development in line with the Planning Proposal will not cause any significant overshadowing impact on areas of public open space and will cast shadows commensurate with that of the future development in the Parramatta CBD.

As shown in **Figure 30**, the proposed building will have a tall slender tower form that casts a fast moving shadow. The shadow, during the winter solstice, generally will not overshadow a single location for greater than 2 hours, hence maintaining solar access to existing developed to the south (in mid-winter).

It is noted that the site immediately to the south will experience greater shadow impacts as a result of the proposal. Notwithstanding this, the site is not shadowed for greater than 3 hours, and will likely be overshadowed with any increase in development on the site. This ensures that the site can achieve more than 2 hours of direct solar access, which would be reasonably expected in a dense urban environment.

Critically, and as shown in **Figure 30**, given the built form and slender tower, the shadow cast as a result of height between 6:1 and 10:1 will not have a significant impact on any one particular property. The speed of the shadow between 9am and 3pm results in a minimal impact to each existing dwelling.

Figure 30 – Overshadowing Diagrams
Source: AJC

The Urban Design Report demonstrates that the site can accommodate a building of a larger height and density while maintaining separation distances and solar access to the surrounding development.

The tower form facilitated under this Planning Proposal will achieve separation distances in accordance with the ADG and hence will not constrain the development potential of the surrounding sites.

6.3 Residential Amenity

The future residential development on the site is capable of achieving a high level of residential amenity through building separation and a northern aspect. The proposed taller tower form and ground level commercial and podium treatments enable the development to concentrate residential uses above the street level and into a slender tower form that achieves a high level of solar access, cross ventilation and regional views. The indicative tower floor plate provides 5-6 apartments accessed from a single corridor, hence achieving a highly efficient floor plate.

As shown in the indicative architectural Scheme (**Appendix A**), north facing apartments have been maximised, improving solar access and views to the north. Additionally, the indicative scheme is capable of complying with natural cross ventilation requirements below level 9.

The location of the tower on the site responds to the various location and setback requirements of the surrounding properties and avoids any potential overlooking or privacy impacts. The detailed design of the building is therefore capable of achieving a high level of residential amenity. A summary of key amenity attributes for the site, achievable as part of a future DA, are provided in **Table 13.**

Table 13 – Amenity attributes of the site and indicative scheme

Amenity Parameter	Future Development
Solar access	Small floorplate allows for apartments with dual aspect, with the opportunity for apartments on the northern elevation
Cross Flow ventilation	Small floorplate allows for corner apartments maximising cross flow ventilation and aspect
Views	Expansive views available in all directions, particular to the east
Car Parking and Access to Transport	Limited basement car parking provided given the sits location immediately adjacent Railway line and close proximity to bus and bicycle infrastructure

Apartment Size and layout	Floor plat size and layout allows for a mix of units sizes and types

6.4 Heritage

6.4.1 Removal of Heritage Listing – No. 7 Station Street

A Heritage Assessment has been prepared by NBRS+ Partners (**Appendix D**) in relation to provide an assessment of the removal of No 7 Station Street West from Schedule 5 of LEP 2011.

The Heritage Assessment is supported by three peer review studies prepared by Graham Brooks and Associates, Architectural Projects and Urbis (**Appendix D**) which support the recommendation that the building does not demonstrate the heritage values that warrant its listing as an item of local heritage significance. This Planning Proposal seeks to remove the heritage listing of the site at 7 Station Street.

The Heritage Assessment identifies that the building is a highly *modified, early 20th century, single storey house with a corrugated metal clad hipped roof form and projecting gabled bay to the street frontage and a large hipped and skillion extension to the rear.* The Heritage Assessment identifies that there has been a number of internal and external modifications as a result of the commercial occupation of building. These changes have substantially altered the form of the building and have removed the heritage significance of the item. The changes to the building form are summarised below:

- The original mirror image of the front form at the rear of the building has been obliterated by the later additions to the rear which have extended the size of the building by approximately 50%;
- The rear yard was divided by a fence into two areas of open lawn and is now fully concreted with a large unsympathetic awning roof covering an open area outside the additions;
- The front of the building was modified to remove the original Federation detailing and replace it with Inter War style details. The brickwork does not match the rest of the front façade which is carefully tuck pointed and the character is at odds with the original character of the former house. The alterations made to the detailing of the front façade are no longer legitimate representative of its original form and detail and have falsified the character of the building;
- The verandah supports have been replaced with modern routed detailing with no evidence of the original details;
- The tuck-pointed face brickwork has been painted;
- Internal detailing including modern replacement ceilings, cornice and ceiling rose detailing which has been carried out throughout the building and replacement window joinery;
- Installation of modern hardwood floors and replacement of all doors; and
- The physical modifications undertaken in the 1980s to convert the building to commercial uses has made changes to the detailing of the front façade and has falsified the character of the building. Accordingly there are no longer legitimate representative of its original form and detail.

The Heritage Assessment provides an assessment of the item against the NSW Heritage Office Guidelines and considers that the building does not meet any of the guidelines objectives for inclusion in LEP 2011 schedules as a heritage item. The Graham Brookes peer review concurs with the Heritage Assessment

conclusion that the property at 7 Station Street does not meet any of the thresholds for listing in a LEP Heritage schedule established by the Heritage Council.

Similarly Architectural projects agree with the conclusion in the HIA that the external and internal changes to the item obscure an understanding of the original house and that the building fails to reach the threshold of the threshold for heritage listing. The third peer review prepared by Urbis further supports the Heritage Assessment and provides that the building does not satisfy the criteria for heritage listing.

In summary the Heritage Assessment considers that there is no significant heritage justification for the individual heritage listing of the site at 7 Station Street due to its relative isolation, previous degree of modification and low level representative value. This finding is supported by three peer reviews prepared by Graham Brooks and Associates, Architectural Projects and Urbis (**Appendix B**) providing comprehensive support for the Heritage Assessment and the removal of the item from Schedule 5 of the Parramatta LEP to facilitate its demolition.

6.4.2 Heritage Impact Assessment of Planning Proposal – No 1 Station Street

A Heritage Impact Statement (HIS) has been prepared by NBRS (**Appendix D**) to the redevelopment of the site on the heritage item at 1 Station Street (**Appendix D**) and the heritage listed items in the locality surrounding the site. This report has also been peer reviewed by Urbis (**Appendix D**).

Heritage Impacts

The future development of the site will be located in the proximity of a number of heritage items and conservation areas (within Holroyd Council). The HIS identifies that the future development of the site as envisaged under this Planning Proposal (and as indicated in the indicative architectural scheme) will not have any significant detrimental impact on the item at 1 Station Street.

The HIS considers that the views to and from the item will be preserved with the proposed scheme (**Appendix A**) providing a setback two storey podium context that maintains the heritage curtilage of the item. The scheme does not impact on the setting of the item to Raymond Street nor does it impact on the 'tower' element of the front façade.

Whilst it is acknowledged that less significant views to the rear of the item (at No 1) will be partially obscured by the podium however this will not have any adverse impact on the relationship of the item to the Tottenham Road conservation area.

The indicative architectural scheme (with principles to be the subject of a design competition brief) will maintain the heritage curtilage and setting of the item and, with the implementation of the Heritage Conservation Management Plan (**Appendix E**) will preserve and enhance the heritage values of the property.

The HIS provides an assessment of the potential impacts of the proposal on the on the surrounding heritage items, and concludes the following:

- Old Government House – the site is not located in the Old Government House area of high sensitivity and as such will not detract from the world heritage values.
- Harris Park West Conservation Area - while the site will be visible from the conservation area, its background location will not have any visual dominance on the streetscapes in the area and as such will not detract from the heritage values of the conservation area or individual heritage listings.

- Tottenham Road Conservation Area – while the building will be visible from the conservation area, the retention of the heritage item at 1 Station Street with the scale of the podium and proposed tower form will maintain an appropriate heritage interface with the conservation area. Additional view testing of the final building envelope should be undertaken for the future development of the site.
- 49–51 High Street Parramatta – while the item is located in close proximity to the site, the existing development to the rear of the heritage item has separated the influence of the item from the subject site.
- 3, 5 &7 Cambridge Street Harris Park – the items are sufficiently removed from the site and the proposed tower will have a minimal impact on the setting of the items.

Built Form

An assessment of the scheme (**Appendix A**) and considers that, while the future development of the site will be subject to a design competition, the building envelope provides an appropriate relationship to the heritage item at 1 Station Street, the Tottenham Road conservation area, the surrounding heritage items and the views and vistas from the surrounding areas including the Harris Park West conservation area.

The peer review prepared by Urbis also notes that applications of the scale proposed have a 'recognition of excellence' emphasis and of having the ability to review past listings that did not have the benefit of the subject research.

The following key design aspects of the scheme (**Appendix A**) that enhance the building's relationship with the heritage items and vistas identified in the HIS are:

- The setback to the Station Street frontage will provide a substantial streetscape setting with the two storey podium height reflecting the scale of the heritage item;
- A 3m setback is provided to the northern façade of the heritage item with any future link to be well set back and single storey in height;
- A 6m setback from the podium to the rear of the heritage item;
- A two storey transitional zone is proposed above the podium creating a substantial visual setback, as viewed from visually prominent locations; and
- The tower form aligns with the Station Street and Raymond Lane alignment and cantilevers over the transition levels.

6.4.3 Conservation Management Plan

A Conservation Management Plan (CMP) has been prepared for the retention and adaptive reuse of the Heritage item at 1 Station Street. The implementation of the CMP will provide a significant ongoing public benefit through the retention and adaptive reuse of the heritage item and the ongoing heritage presence on the site.

The CMP identifies a number of items on the building that require maintenance attention and recommends that a schedule of ongoing maintenance should be prepared to document the alterations to the building. The CMP includes tenancy fitout guidelines and identifies that future use for professional suites or commercial uses would be appropriate.

The retention and ongoing maintenance of the heritage item at 1 Station Street, as outlined in the CMP (**Appendix E**) will ensure the presence of the heritage item is retained on the site and allow the appreciation of the heritage item to be returned to the public, through its adaptive reuse. The CMP identifies ongoing maintenance

of the building and recommends that the terms of the CMP is included in any sale of the building to ensure its ongoing maintenance.

6.5 Landscaping

As part of the site investigation and preparation of Planning Proposal, a Landscape Concept Plan has been prepared by Context and is provided at **Appendix G**. The concept provides the landscape treatment on the site (corresponding to the indicative architectural scheme) as creation of a linear park in the large area of vacant road reserve on the western side of Station Street West, currently owned by Council.

The delivery of Harris Park (linear park) (as shown in **Figure 31**) forms part of the Voluntary Planning Agreement offer by Greenrock Property Pty Ltd.
The park would extend the length of Station Street West on Council owned land and including landscaping, street furniture, CCTV cameras, LED lighting and wayfinding signage, along with paving, and raingardens.

As shown in **Figure 31** and **32**, the park and publically accessible area would also extent within the site frontage to Station Street, providing a high faulty connection and opportunity for activation of non-residential and retail uses on ground floor.

The park would provide significant public benefit to the community and substantially improve the pedestrian, vehicle and cycle experience and connection with Harris Park Railway Station. As noted earlier in this Planning Proposal, the works would dovetail with the planned upgrades to the Station to be undertaken by TfNSW.

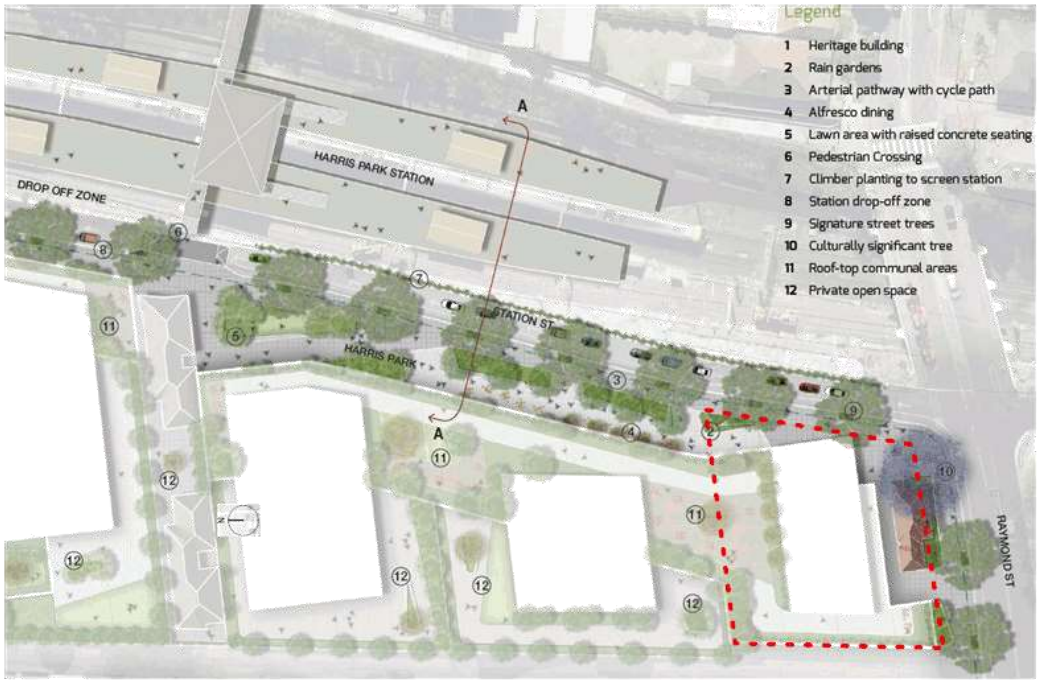


Figure 31 – Landscape Concept Plan – site shown in red
Source: Context

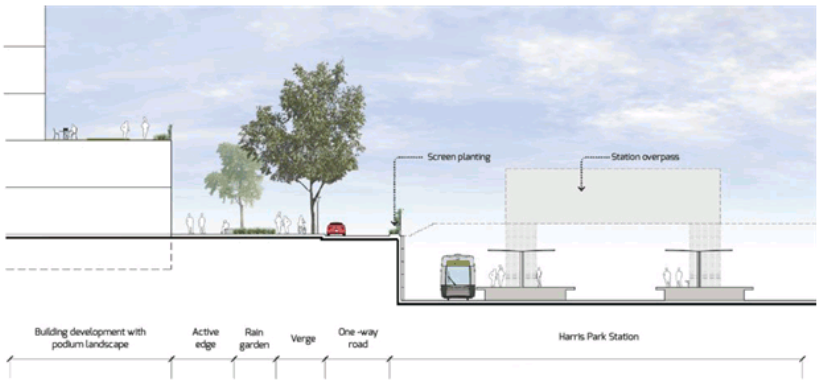


Figure 32 – Proposed Landscape Concept - Section
Source: Context

6.6 Traffic and Parking

A Traffic Impact Assessment has been prepared by Traffix to determine the appropriateness of the proposal from an access; traffic and parking perspective (refer to **Appendix F**). The results of the assessment indicate that the impacts of traffic generated by the additional density created by the proposal are considered relatively minor with respect to the existing road network and proximity to public transport. Furthermore it is considered that the proposal will not compromise the safety or function of the road network in the area surrounding the site.

As outlined in **Appendix F**, the Parramatta LEP 2011 specifies maximum car parking rates. Whilst the RMS Guide for car parking numbers has been considered by Traffix, the provision of the LEP 2011 have been used for the purpose of the assessment (given they are maximum).

As outlined in the Report, the maximum proposed development (11.5:1) including retail and uses is permitted to provide a maximum 300 car parking spaces and a minimum 119 bicycle spaces under LEP 2011. Based on an assessment of the indicative architectural scheme, a maximum of 198 car parking spaces can be provided within the proposed footprint, which will not exceed the maximum. The report confirms that the site can be suitably serviced and accessed (via driveway), and will have an internal design compliant with relevant Australian Standards.

Application of the maximum scheme (216 units) and maximum car parking rates in LEP 2011 results in the following generation and directional 80/20 split:

- 73 trips per hour (35 in, 38 out) during the AM peak
- 67 trips per hour (36 in, 31 out) during the PM peak

The assessment provides an intersection analysis of the surrounding road network and concludes that the proposed increase in development density on the site will have a minimal impact on the surrounding intersections and will not have any detrimental impact on the current level of service of these intersections (i.e. waiting times). It is also identified that the traffic calculation is conservative as it does not consider the potential traffic generated from the existing permitted development on the site.

The projected traffic generation is considered by Traffix to be relatively minor with respect to the existing road network and will not have an adverse impact on the safety of function of the road network.

In light of the site's close proximity to public transport, in particular Harris Park Train Station, it is considered that the proposal is appropriate from traffic and parking perspective.

6.7 Public Benefits

The Planning Proposal will deliver a public benefit through locating additional residential density in a location with excellent access to public transport, services, and employment, health, education, entertainment and recreation facilities. The proposal will provide a benefit to the public through providing additional high quality housing with a high level of amenity in a highly desirable location. The retention and maintenance of the heritage item at 1 Station Street, as outlined in the CMP will provide a substantial public benefit through the adaptive reuse of a heritage item.

The proposal will also deliver substantial direct public benefits as a result of the redevelopment of the site. The Concept Landscape Package prepared by Context (**Appendix G**) illustrates the proposed construction and embellishment of the Station Street linear park (Harris Park). The park will occupy the Council owned land along Station Street and will substantially improve the interface of the precinct with Harris Park Train Station. The park will be dedicated to Council under a future Voluntary Planning Agreement (VPA) with the relevant terms and monetary value to be negotiated with Council prior to the public exhibition of the LEP amendment.

A letter of offer to enter into a VPA agreement is provided at **Appendix I**. The proposed VPA items to be delivered under the future redevelopment of the site will provide a substantial public benefit to the residents of Parramatta. This includes the following:

- Construction works for the creation of a linear park along Station Street to be known as Harris Park, as designed by Context (value in excess of $1,000,000)
- Embellishment of the Linear park along Station Street with landscaping, street furniture, CCTV cameras, LED lighting and wayfinding signage;
- The registration of an easement or encumbrance across the portion of the site fronting Station Street to form part of the Linear Park and be accessible to the public;
- The provision and management of publically accessible car sharing spaces above that of Council's DCP requirement (a letter of offer from GoGet is provided attached to the VPA letter of offer);
- Maintenance and ongoing restoration works to the heritage item at 1 Station Street in accordance with the Conservation Management Plan for the item; and
- consider a monetary contribution to the upgrade and embellishment of toilets and amenities at Rosella Park.

6.8 Economic and Social Impacts

6.8.1 Economic Impacts

The proposed development will result in positive economic and social flow-on effects for the local area. The Planning Proposal will facilitate the redevelopment of underutilised inner-city land that is reaching the end of its economic life span and is located adjacent to a train station. The development facilitated under this Planning Proposal will deliver an increase in high quality commercial and residential floor space facilitating growth within an under developed portion of the City Centre.

The renewed commercial components of the development will contribute to employment and commerce in the area by providing better spaces for local businesses in an appropriate location adjacent to the Harris Park train Station. The residential component will deliver valuable housing in a well serviced location and will provide flow on economic benefits for the surrounding businesses with the addition of approximately 216 new residential apartments and therefore residents.

Overall, the proposed development will support and improve the viability of Parramatta as Sydney's premier regional CBD.

6.8.2 Social Impacts

The proposal will deliver a high quality development on the site that will result in a high quality development that exhibits design excellence and improved retail and residential floor space within the City Centre. The proposal will facilitate the delivery of residential dwellings in high demand and will not cause any significant adverse environmental impacts.

Housing Supply and Affordability

Australia faces a national housing affordability and supply crisis. The housing shortfall in Australia is substantial and existing planning controls in the Parramatta CBD are not expected to be capable of achieving the desired increase in dwellings to 2036[3].

The NSW State Plan provides a commitment to partner with local councils to ensure that targets for housing and growth are reflected in relevant Planning Proposals and local planning instruments. It also commits to promote expanded supply of land for housing by continuing to set local targets for each LGA.

The growth of Parramatta CBD will require the delivery of residential dwellings as well as high quality retail floor space to cope with the high levels of demand and growth projections. Currently an undersupply of housing is driving property prices upwards and forcing many prospective buyers out of the market. This Planning Proposal will facilitate a supply of housing in an appropriate location which is considered to help ameliorate this undersupply and as such will result in an improved social outcome.

6.9 Contamination and Geotechnical

Contamination

A Phase 1 Contamination Assessment of the site has been prepared by Coffey and is provided at **Appendix C**. The report considers the potential for contamination of the site based on past and present uses.

The investigation indicates the site may have the potential for contaminants through the use of unknown fill material, the weathering of buildings and the use of pesticides. Notwithstanding this the assessment considers that there is generally a low to medium risk of soil or groundwater contamination on site. On this basis, the site is considered suitable for a more intensive mixed use development and can be made suitable for the proposed redevelopment.

Geotechnical

An Initial Geotechnical Desktop Study of the site has been prepared by Coffey and is provided at **Appendix H**. The assessment identifies that the site is likely

[3] *Parramatta Business Paper 14 March 2016*

underlain by residual soil, shale rock and sandstone with depths to be confirmed through future intrusive investigation. The assessment considers that the groundwater level is likely below the cutting depth of the railway line and may be intersected by seven levels of basement.

The depth of basement excavation and the ground water level will be confirmed through intrusive investigation. The report recommends that the site is suitable for the proposed development and excavation.

7.0 Conclusion

This Planning Proposal seeks to amend the Parramatta LEP 2011 height and FSR controls that apply to the site to facilitate a high quality mixed-use residential development. The LEP2011 amendment also seeks to remove the building at 7 Station Street from Schedule 5 of the Parramatta LEP 2011 and implement conservation management and adaptive reuse provisions for the significant heritage item at 1 Station Street.

As demonstrated in the Urban Design Report, the Planning Proposal will provide an appropriate built form and residential amenity outcome for the site an increase in the height and FSR controls are required.

The Planning Proposal offers the opportunity to implement appropriate planning controls for a site located in the Parramatta CBD adjacent to Harris Park Train station. This will enable the development of a single tower form mixed-use residential development achieving a height of 140m and FSR of 10:1 + 15% (11.5:1), rather than a low tower form envisaged under the current planning provisions and CBD Strategy.

The indicative architectural scheme has urban design and amenity benefits improving future amenity impacts on adjoining residential buildings as well as minimising overshadowing and heritage impacts. The scheme will reinforce the desired CBD skyline and will facilitate a much needed improvement on the existing buildings situated on the site.

The Planning Proposal is consistent with relevant strategic and statutory planning documents and will deliver a number of public benefits, including revitalising an underutilised site and increasing housing and employment opportunities in the Parramatta City Centre as well as the embellishment of a linear park.

This Planning Proposal will facilitate development that has demonstrable urban design, social and economic benefits for the region. Without the amendments to the height, floor space and heritage controls proposed under this Planning Proposal, the opportunity will be missed to reinforce the NSW Government and Parramatta Council's position as Sydney's second CBD.

ONE STATION PARRAMATTA

URBAN DESIGN REPORT

AJ+C Allen Jack+Cottier | JBA | NBRS+PARTNERS | Architectural Projects | GB&A | context | coffey

7 March, 2016

"We shape our buildings, thereafter they shape us"

- WINSTON CHURCHILL

ONE STATION PARRAMATTA

URBAN DESIGN REPORT

Date	Revision	Status	By	Checked
15.01.2016	001	Draft Review Urban Design Report	CW	LZ
10.02.2016	002	Final Draft Urban Design Report	CW	LZ
11.02.2016	003	Final Draft Urban Design Report	CW	LZ
02.03.2016	004	Final Urban Design Report	CW	LZ

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ALLEN JACK + COTTIER ARCHITECTS

Raymond Street, Harris Park

ONE STATION PARRAMATTA

1.0 INTRODUCTION

Introduction

Executive Summary

AJ+C have been appointed by Younes Property to prepare an Urban Design Report for 1-7 Station Street, Parramatta, in addition to a broader precinct plan that investigates the consolidation and regeneration potential of adjacent sites.

The site at 1-7 Station Street, Parramatta is currently the location of two local heritage buildings and single dwelling residential houses, with associated surface car parking. The client wishes to explore options to redevelop the site incorporating the heritage item at 1 Station Street, considering the highest and best use for the site, and allowing for the potential future development of the precinct.

The purpose of this report is to provide an initial urban design study and planning advice prepared to support the planning proposal and provides concept options for the client's consideration. Within this study, AJ+C have undertaken a review of the local and contextual analysis of key urban features, and a preliminary overview of Parramatta's planning framework for the area. The analysis provides a valuable basis for the preparation of the urban design concepts for the site, which test the current planning controls and looks for opportunities to provide additional development. Although the Planning Proposal is for the lands identified at 1-7 Station Street, one of the core purposes of this Urban Design Report is to identify the future development potential of lands surrounding Harris Park Station. It is intended that this study will hopefully contribute to an important discussion with Council about the importance of transport orientated development and the potential of Harris Park Station, and Station Street West to become one of Australia's leading examples of sustainable urban renewal 'in the right location'.

The City of Parramatta (LGA) currently has a number of strategic documents that are intended to reinforce Parramatta's role as 'Sydney's Second CBD'. The following study has undertaken a detailed review of all publicly available state, regional and local planning policy and identified a significant opportunity for the urban renewal of land surrounding the Harris Park Station Precinct. It should be acknowledged that the Harris Park Train Station has the potential to be transformed into an 'Inner City Transport Hub', with active and vibrant streets and high quality buildings that facilitate jobs and housing close to established public transport networks.

With the projected growth in Parramatta expected to increase in the coming years from 190,500 to 236,900 in 2036 (forecast.id), land use planning will need to be closely aligned with transport planning to ensure that new urban development is located close to public transport and infrastructure such as schools and hospitals and local amenities such as parks, retail and community uses.

The contextual analysis and planning framework investigation identified key design principles that helped inform the preferred design concept.

These principles include:

Design Excellence

The design of One Station will be realised through a Design Excellence process.

Facilitate Jobs

The urban regeneration around Harris Park Station has the potential to stimulate investment in Auto Alley. 'True' Mixed Use Development providing 11 non-residential uses.

High Quality Public Space

Potential to set a new benchmark for public domain improvements, and redevelopment of existing housing stock will activate and improve Station Street West.

Regional Transport

Harris Park Station has the potential to be an inner city transport hub and the arrival point to Auto Alley.

One Station is 100m from Harris Park Station and a 10 minute walk to Parramatta Train Station and has the potential to improve pedestrian access and amenity of these interchanges.

Respect Heritage

The adaptive re-use of 1 Station Street will emphasise its contribution to the streetscape and maintain a suitable setting for the heritage item by increasing density at heavy rail stations. Council can better protect and enhance surrounding heritage conservation areas.

A Landmark Building

Provide housing that is walking distance to jobs, services and infrastructure. 'Bookend' tower marking the southern edge of the Parramatta City Centre.

Improve the Social Fabric

Deliver community facilities and amenities that will encourage and engage with the local community.

Sustainability

The provisions for car sharing vehicles within the development will reduce the reliance of private vehicle ownership in a CBD precinct.

Employment Lands

Provide more employment opportunity throughout Parramatta CBD and the surrounding areas.

This Urban Design Report will form the basis of the 'story' for the project and serve as an important reference for any future architectural studies, technical reports prepared by the project team (economics, transport, planning), any future engagement with Council and other government agencies, and inform future design briefs for a design competition.

Introduction

Context Map

High Street, Harris Park

2.0 UNDERSTANDING THE SITE

Understanding the Site

Strategic Planning Framework

A Plan for Growing Sydney

On 12 December, 2014, the State Government released 'A Plan for Growing Sydney' to guide the land use planning decisions for the growth of greater metropolitan Sydney for the next 20 years.

A Plan for Growing Sydney recognises the diversity of Sydney's centres, their different sizes and functions, and considers the specific attributes and opportunities in each.

The objectives of the plan includes:

- Focus activities in accessible centres;
- Strengthen major and specialised centres to support sustainable growth of the city;
- Plan for new centres and instigate a program for high quality urban renewal in existing centres serviced by public transport.
- Recognises the importance of Western Sydney

The Plan responds to projected population growth by guiding future housing, economic and environmental strategies to ensure a sustainable, prosperous and liveable Sydney.

Western Sydney - key to Sydney's success

The Plan recognises the pivotal role that Western Sydney plays in the success of the sustainable growth of Sydney. The following Goals, Directions and Actions contained within the plan emphasise the importance of Parramatta as the key to shaping Sydney's success.

Goal 1 - A competitive economy with world-class services and transport

Direction 1.2 - Grow Greater Parramatta - Sydney second CBD

Grow Parramatta as Sydney's second CBD by connecting and integrating Parramatta CBD, Westmead, Parramatta North, Rydalmere and Camellia.

Goal 2 - Sydney Housing Choices

Direction 2.2 - Accelerate urban renewal across Sydney - providing homes closer to jobs

Undertake urban renewal in transport corridors which are being transformed by investment, and around strategic centres.

Identify opportunities to connect new homes to job-rich locations via good public transport, within an approximate 30 minute rail or light rail journey

Direction 2.1 Revitalise existing suburbs

Focusing new housing within Sydney's established suburbs brings real benefits to communities and makes good social and economic sense.

A Plan for Growing Sydney, Greater Parramatta

Understanding the Site

Strategic Planning Framework

Parramatta CBD Planning Strategy

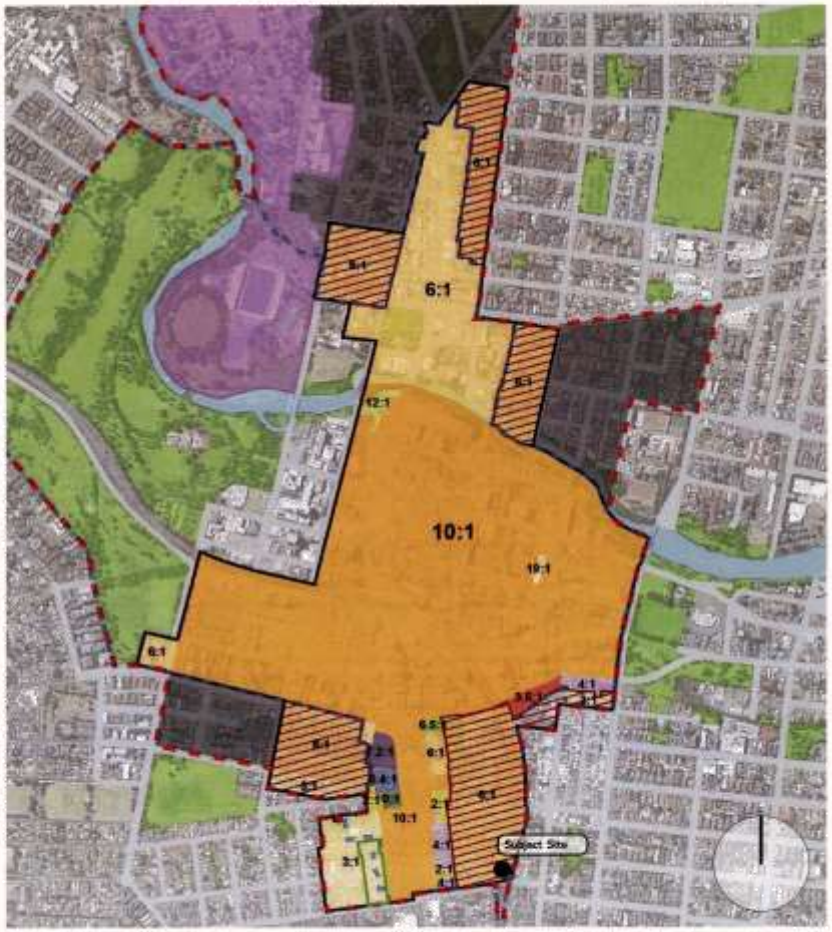
On the 27th April, 2015, Parramatta City Council adopted the Parramatta CBD Planning Strategy. The objectives of the strategy are as follows:

- To set the vision for the growth of the Parramatta CBD as 'Australia's Next Great City'
- To establish principles and actions to guide a new planning framework for the Parramatta CBD
- To provide a clear implementation plan for the delivery of the new planning framework for the Parramatta CBD.

The Vision for Parramatta is to be 'Australia's next great city, defined by landmark buildings and high quality public spaces with strong connections to regional transport. It will respect its heritage, be an exemplar in design excellence, facilitate job growth and ensure its streets are activated'.

A summary of the key controls relating to the subject site are:

- Proposed FSR of 6:1 (subject to further Urban Design refinement);
- Design Excellence provisions align with Parramatta LEP 2011 allowing for eligibility to potentially receive an additional floorspace bonus of 15%.



Parramatta City Centre Planning Framework, Implementation Plan

Understanding the Site

Strategic Planning Framework

Auto Alley Planning Framework

The draft Auto Alley Planning Framework was released for public consultation on 22nd October, 2014. Post exhibition the Auto Alley Planning Framework was consolidated in the Parramatta CBD Planning Strategy.

The key outcomes / directions of the Auto Alley Planning Framework that relate to the subject site are:

- High Density Mixed Use development is proposed along the western side of High Street, with residential towers of between 17-40 storeys.
- Improved pedestrian permeability and through-site connections between Church Street and High Street
- Provision of new and improved parks and open spaces
- Upgrade and improve existing public domain (increased footpaths, street planting, improved lighting)

The subject site is located outside the boundaries of Auto Alley, appropriate 100m east of High Street

Site photo of 'Church Street Auto Alley', Parramatta

Parramatta City Centre Planning Framework_Auto Alley Visualisation 2014

Parramatta City Centre Planning Framework_Auto Alley

LEGEND

- B5 Business Development
- B4 Mixed Use
- New Parks
- New Street/ Public Domain
- Existing Open Space
- Auto Alley Precinct extent
- Railroad Boundary
- Clay Cliff Creek watercourse
- Site Ownership
- Heritage Items - heights to be determined with regards to heritage listings.
- Identified sites require demonstration of compliance with Sec 117 Dir 4.3 - Flood Prone Land
- Site specific controls will be examined to achieve appropriate tower and podium form as well as gradual transition of height to conservation area. (Site consolidation shown on plan)
- Site specific controls will be examined to achieve gradual transition of height to conservation area as well as minimum lot sizes (amalgamation requirements).
- Development incentives for site consolidation + design excellence as per Note: **

Understanding the Site

Strategic Planning Framework

Draft Parramatta Road Urban Transformation Strategy

UrbanGrowth NSW is leading an integrated project team that includes Department of Planning and Environment, Transport for NSW, Roads and Maritime Services and WestConnex Delivery Authority; and also collaborating with councils along the corridor.

On September 17th 2014 the draft was released for comment. The draft strategy pieces together the various elements required to deliver successful and tangible urban transformation. It links the way we plan for land uses, buildings, transport, public areas, infrastructure, services and open spaces.

It builds on the preliminary draft strategy released in November 2014, addresses the feedback received during that consultation, and brings together an extensive body of research and investigation into the corridor's potential.

The study boundary is located south of the subject site along Raymond Street and includes the Tottenham Street Conservation area (Holroyd Council). The study has identified 6-8 storeys (29m) potential built form south of Raymond Street.

The exhibition of the Strategic Planning Framework concluded on the 18th December, 2015. UrbanGrowth are now in the process of reviewing the submissions, and it is anticipated the strategy to be finalised by mid-late 2016

UrbanGrowth, Granville Built Form

Understanding the Site

Statutory Planning Framework

Parramatta Local Environmental Plan 2011

The relevant planning instrument for the subject site is currently the Parramatta LEP 2011. The following key LEP controls pertain to the site.

Land Zoning

The site is zoned for B4: Mixed Use

Height of Buildings

The current building height limit for the site is 12m.

Floor Space Ratio

The current Floor Space Ratio (FSR) for the site is 2:1.

Heritage

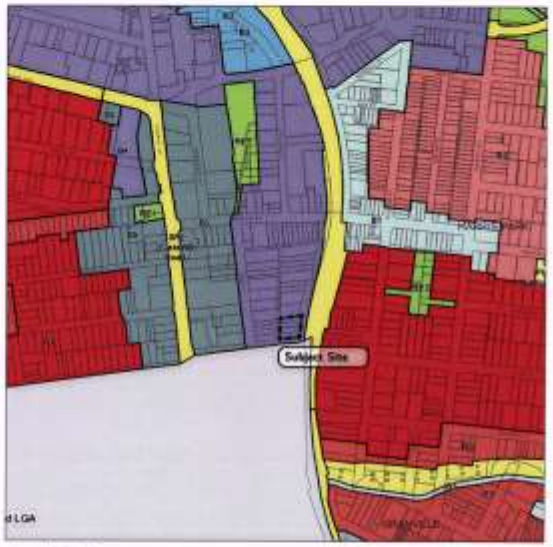
Both 1 and 7 Station Street are identified as local heritage items I744 and I745 respectively.

Acid Sulfate Soils

The site is identified as Class 5 for Acid Sulfate Soils.

Flood Prone Land

The site is not identified as being considered Flood Prone Land.



01_Land Zoning Map

B1	Neighbourhood Centre	R1	General Residential
B2	Local Centre	R2	Low Density Residential
B3	Commercial Centre	R3	Medium Density Residential
B4	Mixed Use	R4	High Density Residential
B6	Business Development	RE1	Public Recreation
B7	Enterprise Corridor	RE2	Private Recreation
E2	Environment Conservation	SP1	Special Activities
E3	Environment Management	SP2	Infrastructure
IN1	General Industrial	W1	Natural Waterways
IN2	Light Industrial	W2	Recreational Waterways
IN3	Heavy Industrial		

Understanding the Site

Statutory Planning Framework

02_Building Height Map

E	6	P2	18	R1	52		
G	7	Q1	19	R2	54		
H	9	Q2	20	AA1	60		
J2	9.2	R	21	AA2	66		
J3	9.5	S	24	AA3	72		
K	10	T1	25	AB	80		
L	11	T2	28	AC	90		
M	12	U1	31	AD	118		
N1	13	U2	34	AE	120		
N2	14	V	36	AF	130		
O1	15	W1	37	AG	150		
O2	16	W2	40		200		
P1	17	X	48				

03_Floor Space Ratio Map

A	0.33	S3	1.7	Y	4.5
B	0.4	S4	1.75	Z	5.0
D	0.5	T1	2.0	AA1	6.0
F	0.6	T2	2.1	AA2	6.4
H	0.7	T3	2.4	AB	7.2
J	0.8	U1	2.5	AC	8
K	0.89	U2	2.6	AD	10
N	1.0	V1	3.0	AE	10.2
O	1.1	V2	3.3	AG	12
P	1.2	W1	3.4		
R	1.4	W2	3.5		
S1	1.5	X1	4.0		
S2	1.52	X2	4.2		

04_Heritage Map

- Conservation Area- General
- Item- General
- Item- Archaeological

Understanding the Site

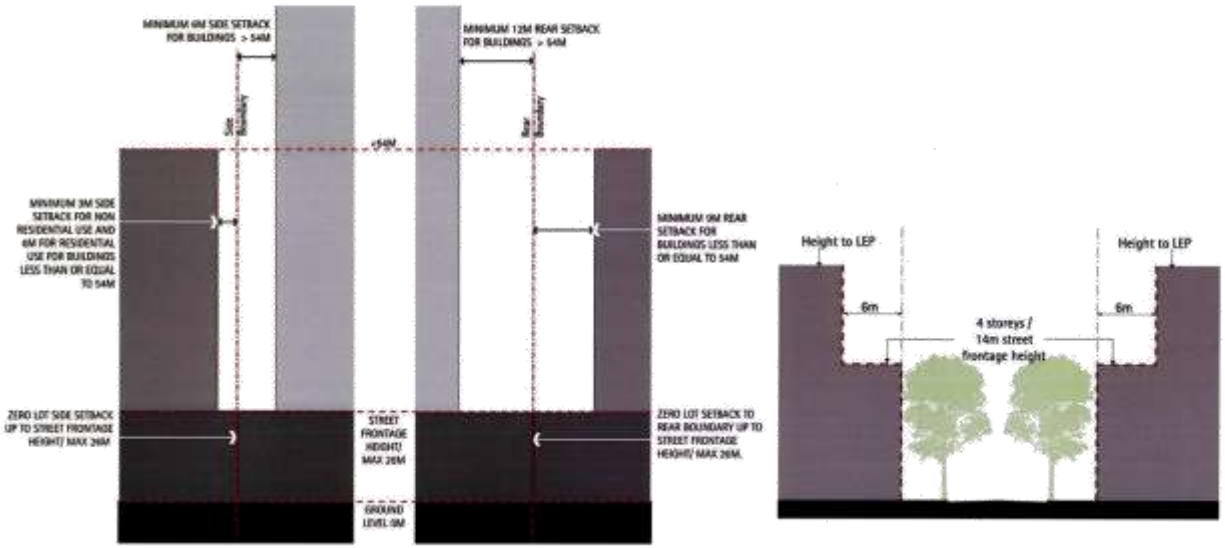
Parramatta Development Control Plan 2011

Setbacks and Alignment

The Parramatta Development Control Plan 2011 (DCP) includes provisions relating to setbacks (side and rear) as well as front setbacks. These provisions are shown on the images adjacent, that have been considered in establishing the proposed massing envelope as part of this Urban Design Report.

The Parramatta Development Control Plan 2014 prescribes the following setbacks for the subject site:

- 3m setback to Station Street and Raymond Street;
- 4 storey (14m) street frontage height;
- 6m setback above street frontage height;
- Zero metre side and rear setback to street frontage height (14m);
- 6m side setback;
- 9m rear setback to 54m and 12m above.

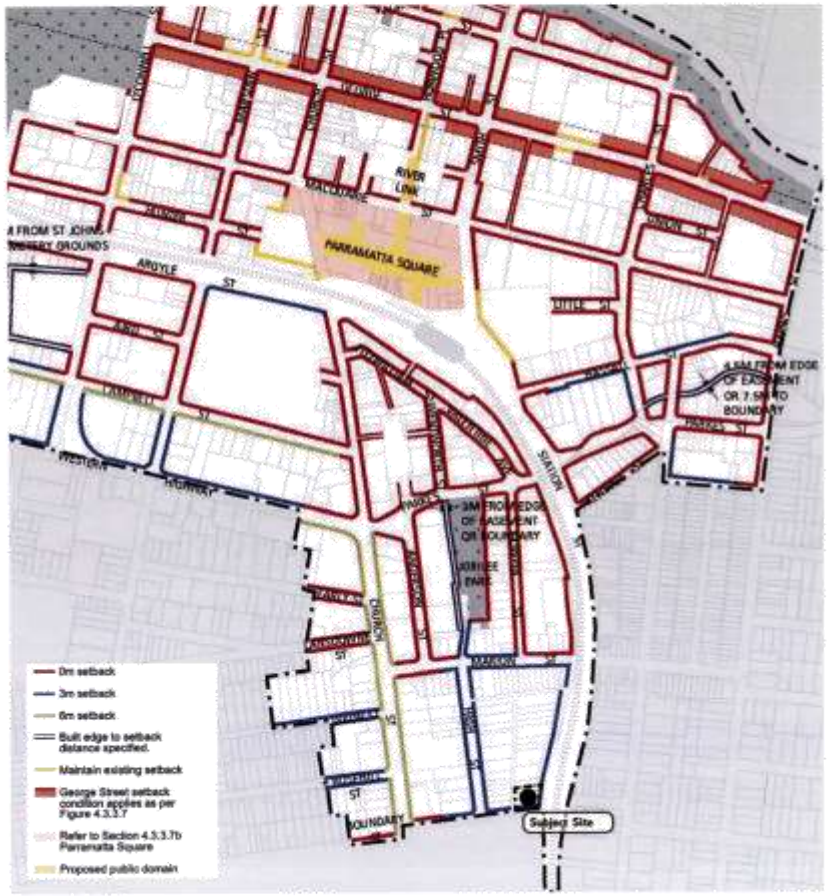


A. SIDE SETBACK B. REAR SETBACK

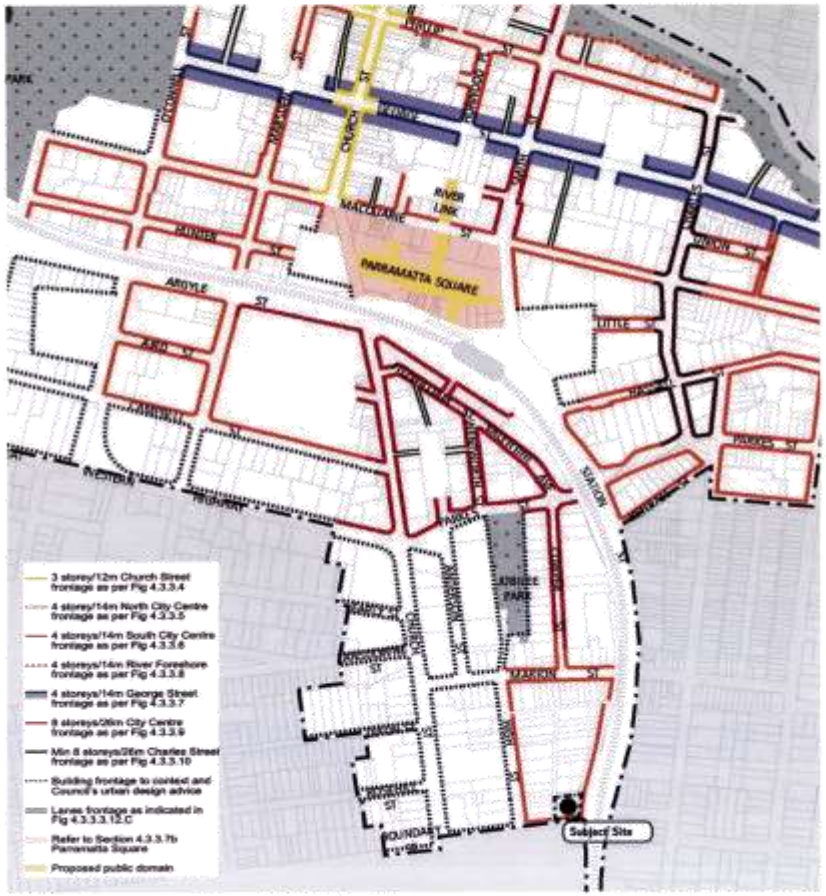
Parramatta City Centre DCP (page 22)
Building separations and Street Frontage heights and Upper level setbacks
City Centre (south)

Understanding the Site

Statutory Planning Framework



Parramatta City Centre DCP (page 219)
Building alignment and Front setbacks (to streets, public domain and watercourses)



Parramatta City Centre DCP (page 222)
Street / River frontage Heights

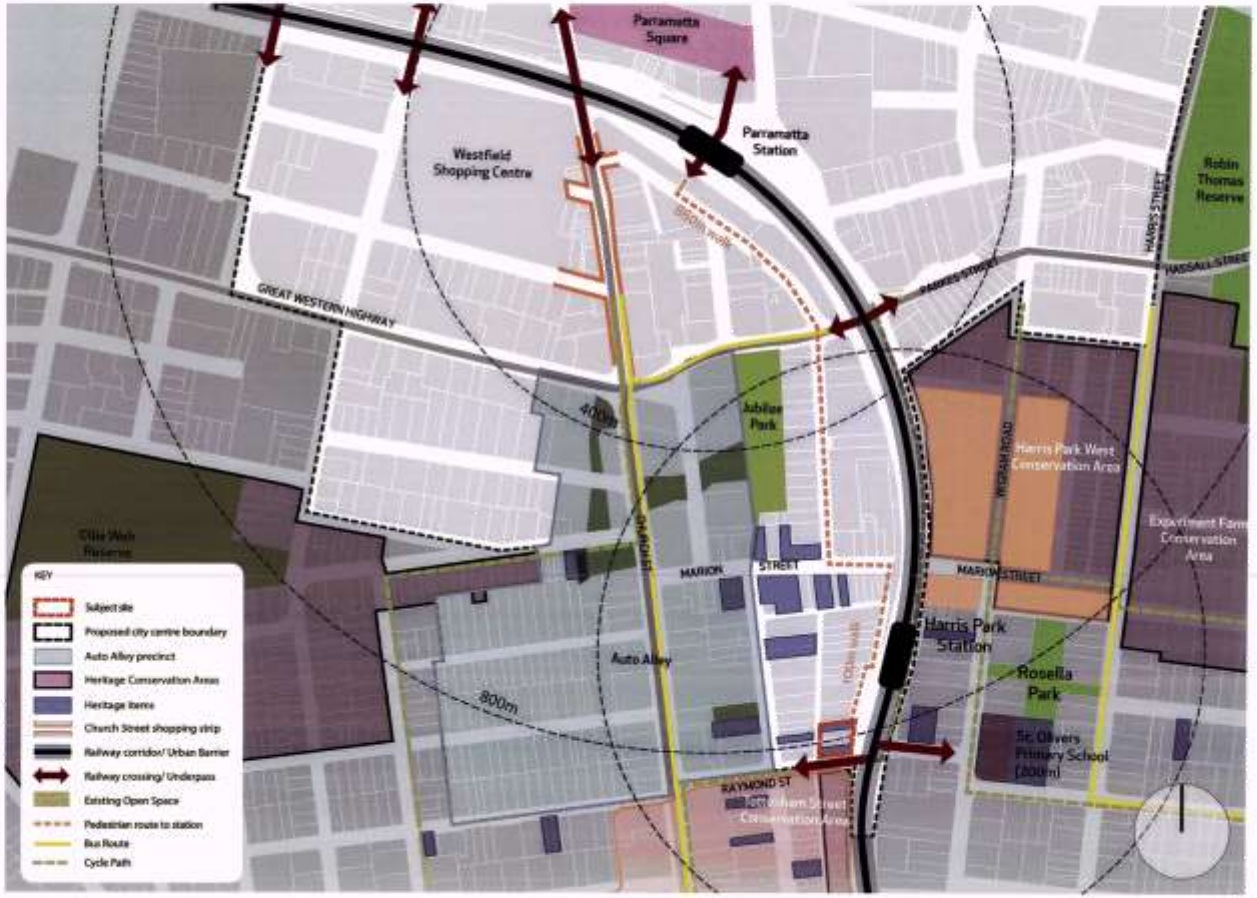
Understanding the Site

Site Analysis

The subject site, 1-7 Station Street, is located in close proximity to public transport, employment and all amenities associated with living close to Parramatta CBD and Harris Park Town Centre. An analysis has identified the following features and characteristics:

Local Context

- Is well connected to established bus, walking and cycling networks, including the M4 Motorway Cycleway.
- Defines the southern boundary of the current Parramatta City Centre and the Holroyd Local Government Area (LGA) boundary.
- 100m walk to Harris Park Station and 860m (approx. 10mins) walk to Parramatta Train Station and Jobs;
- 200m walk to St. Olivers Primary School;
- 400m (5min) walk to Westfield Shopping Centre and Church Street South retail precinct;
- Within 5min walk to established public open spaces at Jubilee Park and Rosella Park. The site is also within walking distance of a number of proposed new open spaces that will be delivered by new developments within the Auto Alley precinct.
- Harris Park Train Station is:
  - 2 minutes travel time to Parramatta City Centre / 10min frequency
  - 30mins to Central Station / 30min frequency
- Parramatta Train Station
  - 25mins to Central Station / 10mins frequency
- The Auto Alley precinct will see the transformation of Church Street into a southern extension of the Parramatta CBD facilitating jobs and services in close proximity to public transport. The precinct will also accommodate high density mixed use development with heights ranging from 6 storeys - 40 storeys.
- Raymond Street is the only at-grade vehicular and pedestrian crossing of the heavy rail line connecting South Parramatta to Harris Park Town Centre;



Existing Urban Context Conditions

Understanding the Site

Site Analysis

Existing Development Pattern

Site Description

- The site is 1,840 sqm and is bound by Station Street West, Raymond Street and an Raymond Lane with a total street frontage of 135 metres.
- There are 2 heritage items on the site Item 1744 and Item 1745. A brief description of these items can be found in pages 22 and 23 of this report and a full assessment in the Heritage Report submitted as part of this application
- There is an unusual cadastre condition along Station Street West, where the four lots directly north of the site are set-in approximately 10m from the road alignment. This strip of approximately 700sqm is owned by council
- Directly west of the site a DA has been submitted for 49-51 High Street for the development of a 4 storey residential building this development indicated a zero setback to the Raymond Lane, this will have an impact on the site.

KEY

- Subject Site
- Potential for renewal
- New developments
- New developments underway
- Heritage Items
- Conservation areas
- Existing buildings
- Council owned land
- Train Line
- Rail access

Understanding the Site

Site Analysis

Site Photographs

01 New 8 storey development along Marion Street that includes the adaptive re-use of significant heritage items

02 New 4 storey development along Station Street West opposite Harris Park Station entrance

03 View looking north from Jubilee Lane towards Jubilee Park, showing the built form immediately north of Harris Park Station Precinct

04 Existing 4 storey development along Station Street West

05 Unusual cadastre condition provides a large setback to Station Street

Understanding the Site

Site Analysis

06 Current development along the Raymond Lane

07 Current fence along the eastern edge of Station Street

08 View from the site towards Harris Park Train Station

09 View along Cowper Street, 16 storey development immediately north of Harris Park train station.

10 View from Harris Park Station towards Parramatta City Centre

Understanding the Site

Heritage Review

Item 1745 - 7 Station Street

- Relative isolation and no significant contribution to streetscape value
- Physical modification undertaken to the detailing of the front façade (1980) have falsified the character of the building and are no longer legitimate representative of its original form and detail.
- Previous degree of modification
- No significant historic uses
- Low level representative value – being modified form is not important as a representative example of early 20th century residential design in the area and does not provide significant evidence of the cultural environment of the area.

Item 1744 - 1 station street

- The building is a two storey late Victorian house (constructed circa 1890) with rendered brick walls and a pyramid slate roof.
- The building relates to the heritage items across Raymond Street. The heritage item is to be retained and adaptively reused

Tottenham Street conservation area

The subject area is located in the immediate vicinity of the boundary of Parramatta and Holroyd Councils. Holroyd Local Environmental Plan 2013 identifies a conservation area containing 9 Local heritage items in the form of Federation era houses, known as The Tottenham Road Conservation Area C1.

The following statement of Significance is that adopted by Council for this group of Federation era cottages:

Conservation Area 1 – Tottenham Street Conservation Area Tottenham Street Group – Federation Period Cottages Constructed c 1900 – 1925

The buildings in Tottenham street are significant as part of a group of small scale residential buildings in Tottenham street, Granville. The group is largely intact externally and is significant for the variety of building styles and as a good representative example of early cottages dating from around the turn of the (20th) century. The buildings are significant for their form, scale and character which gives a good indication of the socio-economic make up of the community at the time of their construction. The group gives a good representative cross section of modest scale residences of the turn of the (20th) century period and their location close to Parramatta and the railway provides evidence of the influence of these factors on the early development of Holroyd.

The houses within the conservation area are individually listed in Schedule 5 of the Holroyd Local Environmental Plan 2013.

Note: A detailed review of the heritage items have been undertaken by the nominated Heritage Consultants

01 Item 1745 7 Station Street

02 Item 1745 7 Station Street

Understanding the Site

Heritage Review

03 Item 1344 | Station Street

05 Item 1344 | Station Street

06 Tottenham Street Conservation Area

04 Item 1344 | Station Street

07 Tottenham Street Conservation Area

Understanding the Site

Summary

The purpose of this section is a review of the current state and local government planning policies, strategies and framework, and a constraints and opportunities analysis for the subject site, in order to gain a better understanding into the potential development opportunities for 1-7 Station Street, West Parramatta.

Key Findings:

- The location of the subject site within close proximity to Parramatta CBD and Parramatta Auto Alley plays an influential role in the potential development opportunities and contributes to the overall vision for Parramatta CBD;
- The subject site is located at the threshold of Parramatta CBD's eastern edge, and therefore is a suitable location to introduce tall towers to mark the edge of the Parramatta CBD;
- The subject site is located on the fringes of Holroyd Council designated Tottenham Street Conservation Area, and within a 400m catchment from Harris Park West Conversation Area. Therefore, the future development of 1-7 Station Street will need to consider the potential impacts and heritage sensitivities (such as visual and solar accessibilities and character) associated with the surrounding heritage items;
- The precinct would form a prominent and attractive southern arrival to the CBD;
- The unusual cadastre presents an opportunity to provide publicly accessible open space in the precinct and an improved arrival space to Harris Park and Auto Alley;
- The specific site conditions require setback controls to be carefully reviewed to achieve and appropriate response not only to the development of the site but of the precinct as a whole. Particularly considering current approved development and potential future development;
- A mixed use land zoning will allow for better opportunities to activate the ground plane between Auto Alley and Harris Park Train Station.

ONE STATION PARRAMATTA

22

Station Street, West Parramatta

3.0 KEY OPPORTUNITIES

Key Opportunities

01 Recognise the Significance of Harris Park Station

As it currently stands, Harris Park station is considered as a suburban train station, servicing local residents. However, due to the close proximity to Sydney's second city, Parramatta, there is the opportunity for Harris Park to be transformed into an important secondary train station within Parramatta's city centre boundary area.

With Harris Park station located within close proximity to Parramatta CBD (800m catchment area) and Auto Alley (400m catchment area), Harris Park has potential to accommodate higher density levels, for both residential and commercial land uses. In line with the current station upgrades underway, Harris Park Station has the potential to shift the perception of being a local station to a major inner-city train station for the Parramatta LGA.

The following case studies on the next page look at city centres that with multiple train stations within the local area, in order to support the quantum of commuters associated with high density neighbourhoods.

Harris Park Train Station Upgrades

As stated in the Harris Park Station Upgrades report, issued by Transport for NSW (TfNSW) in February 2016, the delivery of the Harris Park Station Upgrades by TfNSW will provide a better experience for public transport customers by delivering accessible, modern, secure and integrated transport infrastructure.

The key features for the station upgrades are;

- Retention and refresh of the existing station concourse
- New ramp and stairs at the western station entrance and new lift and stairs at the eastern station entrance
- Installation of two new platform lifts
- Upgrade of shared path from Station Street East to the station and a partial upgrade of the path between Cambridge Street and the station
- Provision of interchange facilities along adjacent streets including kiss and ride zones and taxi waiting facilities
- Ancillary works including adjustments to lighting and ticketing machines, improvements to station communication systems with new infrastructure and wayfinding signage

Parramatta Transport Network:

Two train station within a 800m catchment

- Parramatta (Interchange)
- Harris Park

Parramatta Ferry Network:

- Parramatta

Key
- Train Station
- Ferry Stop
- Catchment

Land Area: 523 hectare

Population: 19,301

(Based on 2011 ABS Census data)

Key Opportunities

Sydney CBD Transport Network:

The Sydney CBD train network consists of over 8 stations, all within an 800m catchment of each other. These include the following stations:

- Central (Haymarket)
- Town Hall
- Wynyard
- Circular Quay
- St James
- Museum
- Martin Place

Land Area: 297 hectare

Population: 14,306

(Based on 2010 ABS Census data)

Brisbane CBD Transport Network:

Two major train stations within 800m catchment

- Roma Street
- Central

Ferry Networks:

There are approximately 7 terminals along the Brisbane River, including:

- Holman Street
- Riverside
- Eagle Street Pier
- QUT Gardens Point
- North Quay 1 and 2

Land Area: 223 hectare

Population: 8,711

(Based on 2011 ABS Census data)

Geelong Transport Network:

Two major train stations within 1,200m catchment

- Geelong Station
- South Geelong Station

Land Area: 604 hectare

Population: 6,456

(Based on 2011 ABS Census data)

Key Opportunities

02 Establish Harris Park Station Precinct

01 Harris Park Station is Parramatta's City Centre second train station, and is located approximately 800m south of Parramatta Train Station, Transport Interchange and City Centre.

02 Within a 5min walk (400m) of Harris Park Station are the following strategic and character areas:

- Auto Alley Precinct
- Parramatta Road Urban Transformation Study Area,
- Tottenham Street Conservation Area (Holroyd LGA)
- Harris Park Town Centre and Harris Park West Conservation Area

03 There is an opportunity to identify Harris Park Station Precinct as a potential catalyst for sustainable, transport orientated urban renewal that supports the growth of surrounding strategic areas and responds to the character and amenity of them.

Council should consider the important role that Harris Park Station can serve as an arrival to Auto Alley precinct. Further investigations should be undertaken to assess the economic and environmental benefits of urban renewal in walking distance to established public transport networks.

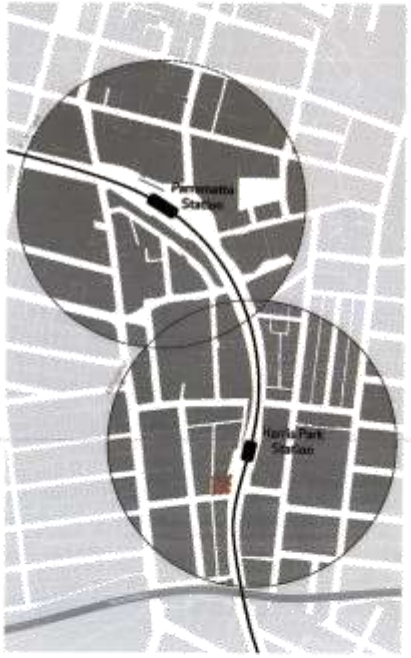
04 The existing railway corridor bisects the precinct into two distinct character areas.

- Harris Park Station Precinct (West) – Characterised by high density mixed use development that provides active streets and tall slender built form that sits appropriately in a City Centre context.
- Harris Park Station Precinct (East) – Characterised by "fine grain" lot pattern with limited opportunities to facilitate urban renewal without significant impact on the surrounding heritage conservation and character areas of Harris Park.

The railway corridor is an existing 'urban barrier' that acts as a transition element between the scale of a City (West) and an Inner-City Village (East). The juxtaposition of scale and character within the Harris Park Station precinct provides an opportunity for a vibrant and dynamic neighbourhood that integrates the character and liveliness of Harris Park with the modern and contemporary city scape that is envisioned for the Parramatta City Centre.

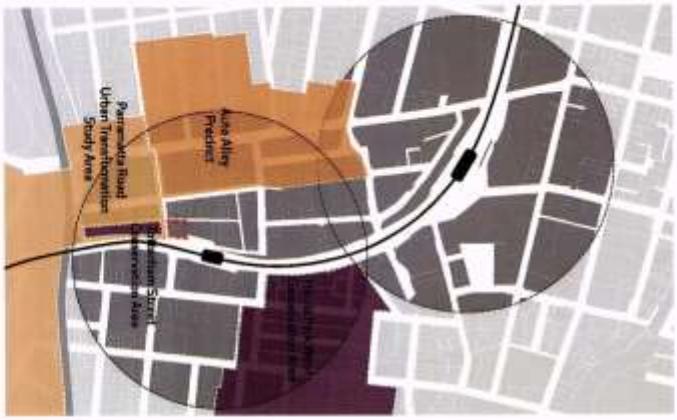
05 There is an opportunity for new development to help facilitate improved connections to surrounding precincts such as the Parramatta City Centre, Auto Alley and Harris Park Town Centre. It is expected that higher density development within the Harris Park Station Precinct will provide identifiable public benefit through the following measures – public domain upgrades, new community facilities, through-site links and active lanes, affordable housing, encouragement of car sharing, student accommodation, dedicated open and civic spaces and all necessary infrastructure upgrades.

01_Harris Park Station is the City Centre's 2nd Train Station

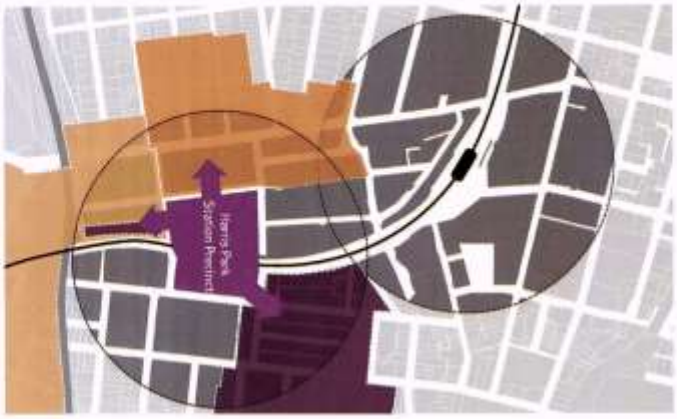


Key Opportunities

02_It is centrally located to key strategic areas

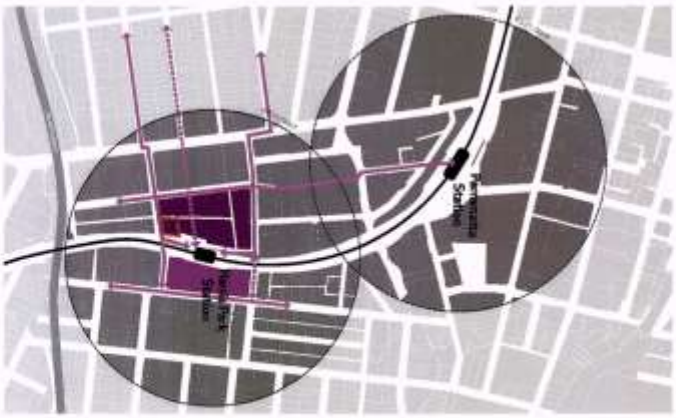


03_It can connect + consolidate the southern end of Parramatta CBD



04_It can identify + enhance character areas

05_Ensure appropriate growth



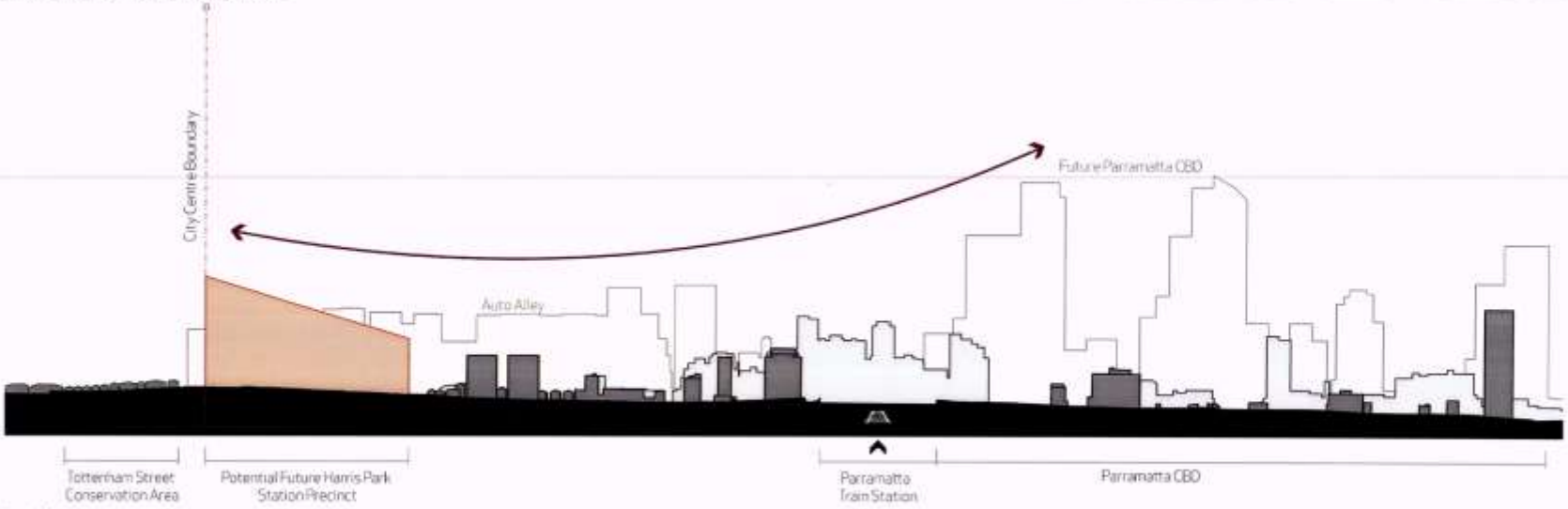
Key Opportunities

03 Built Form that Responds to Context

There is an opportunity for the future built form within the Harris Park Station Precinct to be complementary and a positive addition to the Parramatta City Centre skyline.

Section 01 (North/South) –

The Station Precinct is located at one of the highest natural elevations found within the Parramatta City Centre. All development will appear visually prominent in the skyline and there is a unique opportunity for a landmark 'bookend' tower that marks the southern extents of the Parramatta City Centre and the Auto Alley + Harris Park Station Precinct.



Section A-A

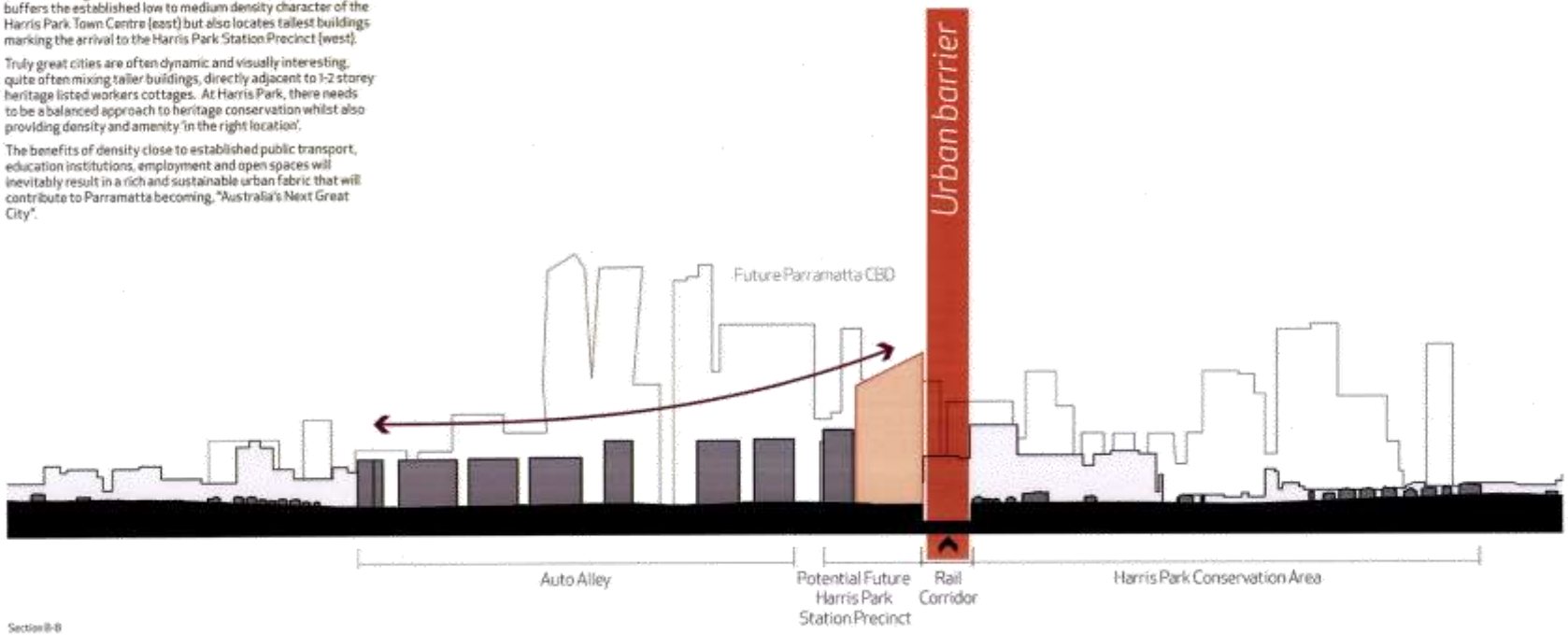
Key Opportunities

Section 02 (East/West) -

A dynamic built form transition between high and low densities is possible at Harris Park Station due to the existing heavy rail corridor acting as an 'urban barrier' that clearly separates and buffers the established low to medium density character of the Harris Park Town Centre (east) but also locates tallest buildings marking the arrival to the Harris Park Station Precinct (west).

Truly great cities are often dynamic and visually interesting, quite often mixing taller buildings, directly adjacent to 1-2 storey heritage listed workers cottages. At Harris Park, there needs to be a balanced approach to heritage conservation whilst also providing density and amenity 'in the right location'.

The benefits of density close to established public transport, education institutions, employment and open spaces will inevitably result in a rich and sustainable urban fabric that will contribute to Parramatta becoming, "Australia's Next Great City".



Section B-B

ONE STATION PARRAMATTA

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Key Opportunities

04 Provide a Planning Framework that facilitates urban renewal of Harris Park Station Precinct

As part of this Urban Design Report we have undertaken a detailed analysis of the potential future of the precinct, with the objective of developing a proposal for 1-7 Station Street that responds not only to site and feasibility but most importantly to the potential growth and development of the precinct as a whole.

For this purpose we have focused on Harris Park Station Precinct (West), given that is the area with greater potential for development. Specifically we have looked at the potential development of lots located between Station Street West, Marion Street, Raymond Street and High Street. We have also included due to its size distinction the council owned car park site at the end of Marion Street. We will refer to this as the study area.

Current Ownership Pattern

The following diagram shows the current ownership pattern on the study area. Its observed that most heritage items are located along Marion Street and High Street, recent development or undergoing development is mainly located along High Street, with station street showing the greatest potential for re-development.

Existing Conditions Plan

Key Opportunities

Proposed Amalgamation Plan

Subject Site

A	Lot Area:	1,840sqm	
	Typical Floor Plate	615sqm	
	FSR:	6:1 (21s)	- 10:1 (37s)
B	Lot Area:	2,205sqm	
	Typical Floor Plate	635sqm	
	FSR:	6:1 (26s)	10:1 (44s)
C	Lot Area:	2,388sqm	
	Typical Floor Plate	968sqm	
	FSR:	6:1 (20s)	10:1 (34s)
D	Lot Area:	2,952sqm	
	Typical Floor Plate	1,142sqm	
	FSR:	6:1 (26s)	10:1 (35s)
E	Lot Area:	2,057sqm	
	Typical Floor Plate	852sqm	
	FSR:	6:1 (25s)	10:1 (41s)
F	Lot Area:	5,628sqm	
	Typical Floor Plate (x2)	1,080sqm	
	FSR:	6:1 (23s)	10:1 (38s)
G	Lot Area:	3,682sqm	
	Typical Floor Plate	1,156sqm	
	FSR:	6:1 (23s)	10:1 (39s)
H	Lot Area:	2,577sqm	
	Typical Floor Plate	888sqm	
	FSR:	6:1 (22s)	10:1 (37s)
I	Lot Area:	2,188sqm	
	Typical Floor Plate	673sqm	
	FSR:	6:1 (24s)	10:1 (41s)
J	Lot Area:	1,845sqm	
	Typical Floor Plate	513sqm	
	FSR:	6:1 (24s)	10:1 (45s)

Proposed Amalgamation Pattern

The proposed amalgamation pattern has considered the following:

- Providing a consistent street wall to Station Street West, Marion Street and High Street by establishing 2 storey podiums;
- Aligning development with existing heritage items to reinforce their presence in the precinct, along Raymond Street, Marion Street and High Street;
- Provide for a minimum 24m separation between taller forms;
- Setback development from Raymond Lane;
- Renewal of Station Street west into a high quality public open space;
- Apply a 6:1 FSR to amalgamated sites less than 1,800sqm and with a street frontage 40m or greater, resulting in development of around 20-25 storeys providing the densities required to establish a successful precinct;
- Additional floor space can be purchased subject to a value capture mechanism that delivers public benefit through a VPA, ranging from 6:1 to 10:1 (maximum) for site larger than 1,800m²;
- Establish floor plates of a minimum 600sqm and a maximum 1,080sqm;
- All lots achieve a minimum site area of 1,800m².

The proposed planning framework establishes a blueprint that encourages site amalgamation and building envelopes that align with Councils policies and complies with the Apartment Design Guidelines (ADG), in order to clearly demonstrate best practice urban planning.

Key Opportunities

04 Provide a Planning Framework that facilitates urban renewal of Harris Park Station Precinct

In May 2015, the NSW Department of Planning issued the Herring Road, Macquarie Park Finalisation Report. The report provides an overview of the Herring Road Priority Precinct and the proposed planning amendments to Ryde LEP in order to increase height and density controls for the precinct, particularly around the station.

A comparative analysis between Macquarie Park Priority Precinct and One Station Street Precinct has been conducted due to the overarching similarities between these two Urban Transformation Precincts.

Key Strategies and Principles

The following bullets point highlight the similarities Macquarie Parks shares with One Station Street, in terms of the urban strategy and planning framework.

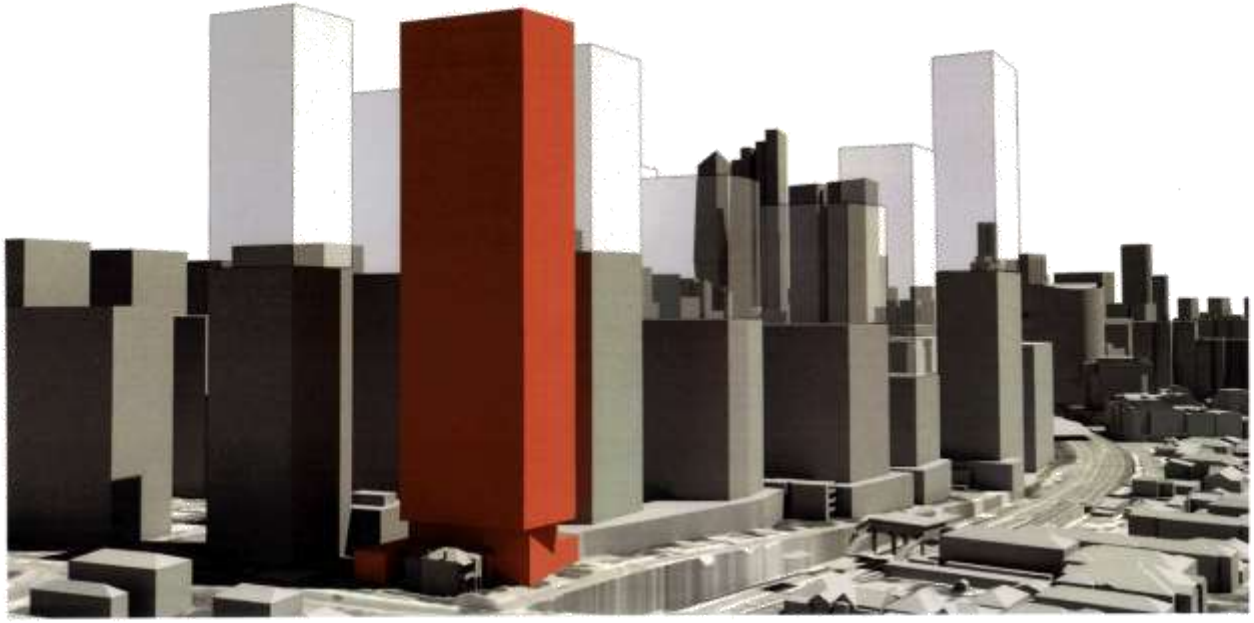
- Opportunity for new homes and urban renewal within a 800m radius of the railway station.
- Locate taller buildings close to the railway station, with the next other tall buildings near major intersections, therefore creating 'landmark' or 'arrival' buildings into the precinct.
- Locate areas of higher density within close proximity to the train station and major transport corridors.
- Deliver significant uplift to the precinct through the inclusion of built, social, environmental and economic infrastructure.

	Macquarie Park UAP	One Station Street
Building Height	120m or 37 storeys, which are located within close proximity to the station	2 storeys (FSR 0.1) 37 storeys (FSR 10.1)
Floor Space Ratio	FSRs between 4.5:1 and 8:1 apply to sites closest to the railway station and at gateway locations where additional height is permitted.	FSRs between 0.1 and 10:1 for sites within walking distance to the Harris Park train station, where additional height may be permitted based on design excellence.
Minimum Lot Sizes	1,800m² to create large sites that will accommodate full tower building footprints and achieve the appropriate ADG setbacks and separation distances.	1,800m²
Open Space	A network of small local parks dispersed throughout the precinct and connected to other open space areas by the creek corridors to service the needs of the existing and future residents.	The provisions for a green park and open space has been detailed into the design proposal along Station Street West. Note there is an opportunity for additional open space to be identified.
Community Facilities	Additional services & community facilities (such as Libraries, Community Rooms) to meet the demand generated by the new population in the precinct.	The design proposal has allowed the opportunity to incorporate multi-purpose community facilities to cater to all demographics within the precinct or the Superlot.

Proposed Visualisation of Herring Road Priority Precinct, Macquarie Park

Proposed Visualisation of One Station Street Precinct, Harris Park

Key Opportunities



Key
- Future Subject Site Development (FSR 10:1)
- Future Precinct Development (FSR 6:1)
- Future Precinct Development (FSR 10:1)

Massing studies - Aerial views

Key Opportunities

05 Provide improved Public Open Space + Community Facilities

The One Station proposal has the potential to fund a significant public domain upgrade of Station Street West. It is envisioned that the upgrade of Station Street West will enhance the amenity and activation of the Station Precinct, making it an attractive location to live, work and visit.

The key features of the landscape vision include:

- Creating an arterial pedestrian, vehicular and cyclist connection to Harris Park Station via a linear park;
- Activating the space through raised lawn areas, outdoor dining experiences and opportunities for public art installations;
- Providing a safe and secure park for the community through CPTED practices. I.e. street lighting, feature lighting, security surveillance;
- Provide a safe pedestrian priority crossing and a key nodal primary plaza connecting to the station entry;
- Reducing impacts of the urban heat island effect by installing large canopy trees to provide shelter and escape. Large trees are the beginning of a "Green Spine" connecting Harris Park to the CBD;
- Smaller canopy trees provide a human-scale;
- Introducing WSUD initiatives through rain water gardens that will act as sponges along the linear park;
- Rooftop gardens to provide private outdoor space for residents whilst encouraging biodiversity;
- Opportunity to "green" the railway interface with planting;
- Opportunity to "Rebrand" the public space "Harris Park".

Key Opportunities

Harris Park and Urban Canopy Illustration

Key Opportunities

06 Enhance and Support Heritage

This opportunity considers the following precedents studies of tower development applications that interact with heritage items and understand the ways the design proposal supports and enhance the relationship between the future development and existing heritage items.

Precedent One

118- 148 Lonsdale Street, Melbourne

A development proposal was submitted by COX Architecture for a new 144m skyscraper in Melbourne adjacent a historic church manse, built in 1859. Currently owned by The Uniting Church in Australia Property Trust, the subject site is currently consisting of ten heritage buildings built in between 1858 and 1938, including:

- The Church (1858);
- The Manse (1859);
- The School House (1859);
- Caretakers Cottage (1914); and
- Princess Mary Club (1926).

The proposal seeks to develop a 55,000sqm high-end commercial office building with an active ground plane that will transform the site into an 'event and meeting place'. In order to accommodate this 39 level office tower, the Stables, on-site factory and the Princess Mary Club will need to be demolished, while the remaining heritage items to be retained and reused.

As part of the design concept, the Manse will be integrated into the design proposal, while the podium and tower will be built around the other re-adapted heritage items. The design for the 5 storey podium will feature sculptural steel columns with bronze aluminium screening that will envelope the Manse building, in order to satisfy Heritage Victoria, an additional height clearance will be provide above the Manse and podium. The redevelopment of the heritage items with the new facilities and public domain offering, seeks to emphasise the notion of an integrated development proposal with heritage items and contemporary architecture.

Key Opportunities

Precedent Two

485 George Street, Sydney

The building is located on the south-west corner of George and Bathurst Streets completing the southern edge of Sydney Square along Bathurst Street. The former Bank building is an important part of the George Street streetscape and Sydney Square. It is located on a prominent corner location, is of modest scale, with delicately-carved external stonework, and as a remnant of an earlier Sydney streetscape.

The existing former Bank building, currently a KFC outlet, covers the whole of the small corner site, which is 259 square metres. It is adjacent to a building site that was a large hole and vacant for a number of years. Recently, the site has been developed as part of a podium for an approved high-rise residential development, and this will reinstate the former Bank building as part of an established streetscape.

- "Lumière is a residential and commercial building along Bathurst Street. This 56-storey tower was built in 2007. There's a glimpse of St Andrew's Cathedral in the foreground.
- Lumière is the main of two towers that form the Regent Place Development on the site of the former Regent Theatre adjacent to Sydney Town Hall.
- Lumière comprises 447 residential apartments in a 41 storey tower building with a mix of studio, one bedroom, two bedroom, three bedroom, and exclusive penthouse apartments.
- Extensive private residents' recreation facilities are located at the top of the 4 level sandstone and glass podium and include a 50m pool, spa and sauna, gymnasium, theatrettes, and a multi-function facility.

Key Opportunities

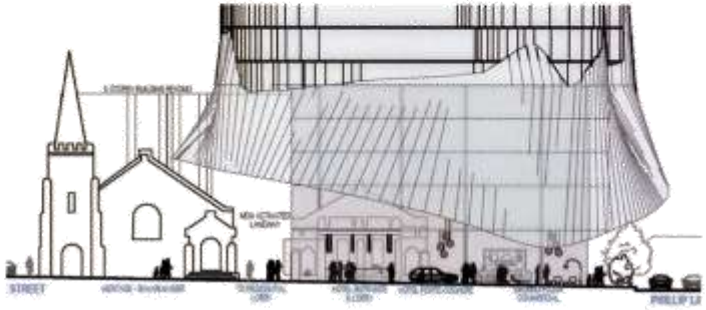
Precedent Three

2 - 10 Phillips Street, Parramatta

Planning Proposal for a development site with a heritage item (St Andrews Church and Hall) located within the subject site boundary. The proposal seeks to amend the maximum FSR (currently 6:1) to 17.1 and building height (80m or 25 storeys) to 192m or 58 storeys, in order to facilitate a potential mixed use development comprising of approximately 27,800sqm of residential, 7,800sqm hotel and 3,000sqm of retail/suites/ dining.

The heritage items on the site includes three buildings; a church (former St Andrew's Church), hall and annex to the hall, which were constructed in 1926. As part of Council's DCP provision, any future planning proposal for 2-10 Phillip Street must have minimal impact or disruption to the former St Andrew's Church and should facilitate the adaptive re-use of the former Church Hall.

The planning proposal for 2-10 Phillips Street seeks to re-use both of the heritage items, with the partial demolition of a recent addition to the rear of the Church to provide vehicular access from Marsden Street and the partial demolition of the hall, in order to accommodate the tower core. The design concepts offer a public domain benefits between Marsden Street and Phillips Street, integrating the Church into the development and creating a revitalised eat street and entertainment precinct.



Key Opportunities

Summary

Recognise the Significance of Harris Park Station

- Transform Harris Park into Parramatta's secondary city centre station;

01

Establish a Harris Park Station Precinct

- Encourage new mixed use development to create a new station precinct;
- Provide more employment and community opportunities within the precinct.

02

Built Form that responds to Context

- Transition in building height to relate with Parramatta CBD
- Locate taller towers within close proximity to the train station;
- Create denser areas around the train station and major transport corridors.

03

Establish a Planning Framework that facilitates urban renewal of Harris Park Station Precinct

- Work with council to develop a planning framework that supports suitable development opportunities in the area;
- Facilitate for more housing and employment opportunity within close proximity to the train station

04

Provide improved Public Open Space + Community Facilities

- Create a Linear Park that connects to the train station;
- Integrate car sharing opportunities within the development for the local community;
- Encourage pedestrian activation along station through the improvement of the public domain;
- Incorporate social and community facilities to service the needs and requirements for the local residents

05

Enhance and support heritage

- Understand the lessons learnt from previous developments in order to maintain a relationship between the heritage items and new development;
- Celebrate the heritage culture of Harris Park.

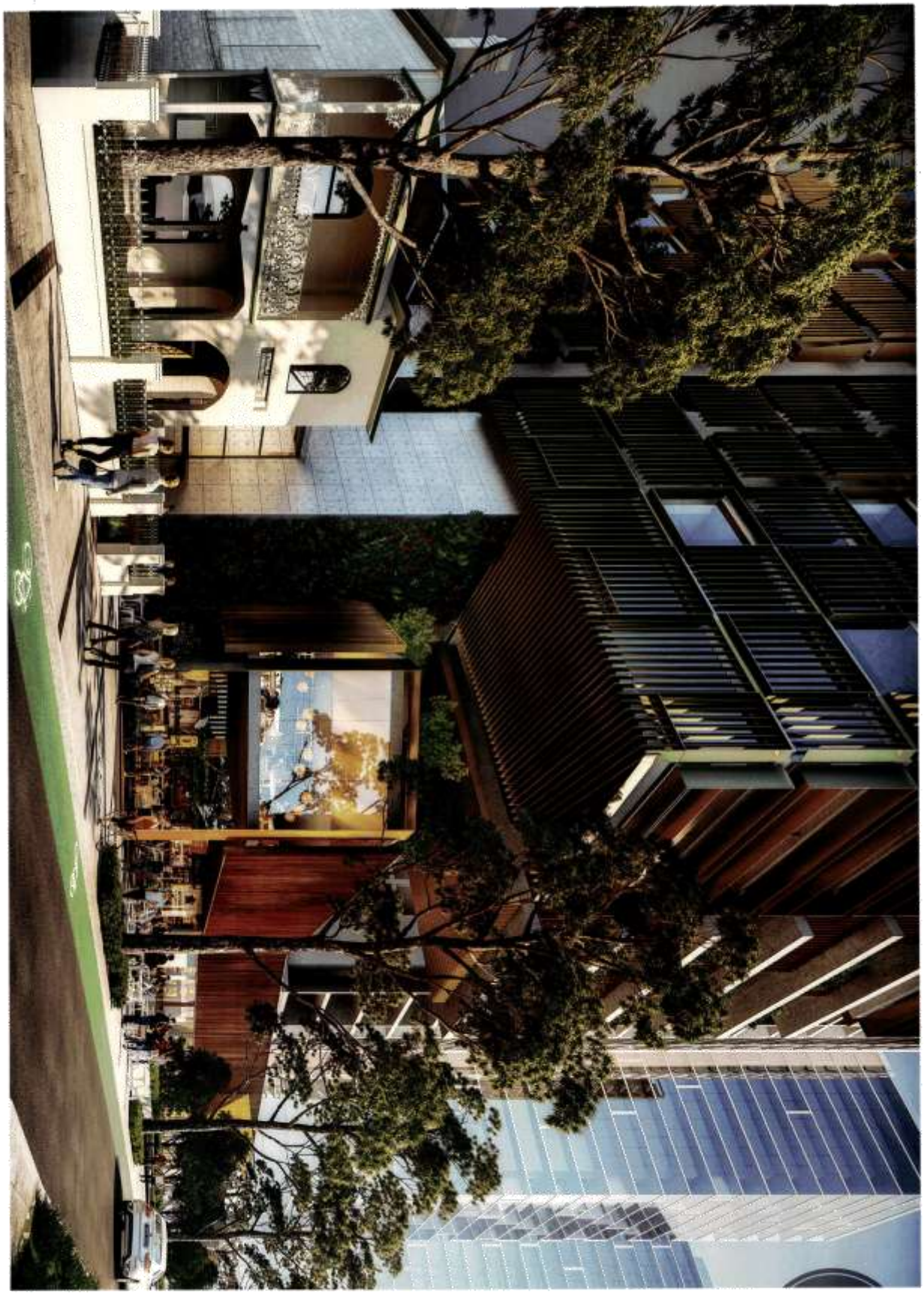
06

The subject site and the surrounding context presents a series of opportunities to assist in transforming Harris Park station precinct into a functional mixed use development. This section explores the key opportunities relating to Harris Park , with particular focus on;

- Transport Infrastructure;
- Active Ground Plane;
- Built Form;
- Planning Framework; and
- Heritage Culture.

There are a few considerations to the subject site that will need to be addressed/ acknowledged in terms of constraints.

- **Heritage Items and surrounding Conservation Areas:** ensure the future development does not detract from the character of the heritage items, and the design mitigates any solar or visual impacts to the heritage items;
- **Future Development:** appropriate setbacks to ensure future building separation between the proposed tower on the subject site and the neighbouring future development opportunities.



4.0 DESIGN CONCEPTS

Design Concepts

Massing Study

Chapters 2 and 3 of this report outlined the key considerations for the development of the subject site; these have led the exploration of a number of massing options. Following is a summary of the massing study undertaken and the key aspects explored.

Design Objectives

- Retain and enhance the character of 1 Station Street;
- Address the unusual cadastre along Station Street West;
- Allow for a minimum 24m inter-building separation as established by the ADG;
- Support the establishment and consolidation of Harris Park Station Precinct;
- Provide an improved public domain;
- Provide a clear and simple built form that allows for a number of variations to be achieved through design excellence.
- Support the role of the precinct as a southern entrance to the Parramatta CBD

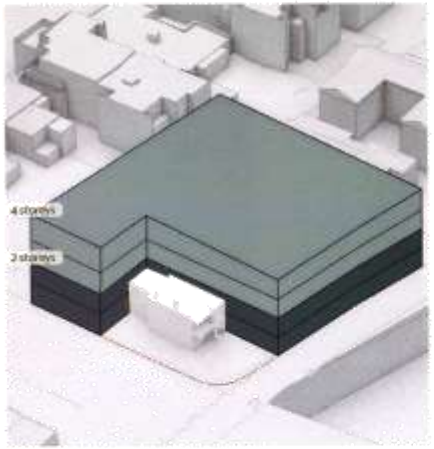
Key Considerations

- The future development of the precinct;
- The impacts on heritage item 1744 and the Tottenham Street conservation area;
- The visual and amenity impacts for pedestrians;
- The viability of the development;
- Heritage and neighbouring sites ;
- Improve the social fabric of the local community.

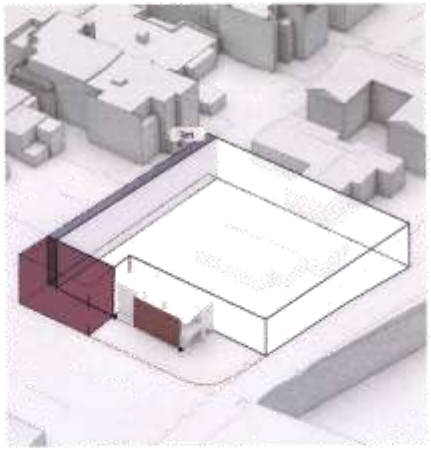
Podium

In terms of height, the DCP suggests a 4 storey /14m street frontage height along Station Street West, but an analysis of the development of the precinct suggests a 2 storey street frontage. This provides a more achievable 1:1 commercial floor space allocation, given its proximity to Auto Alley and its second-station hierarchy.

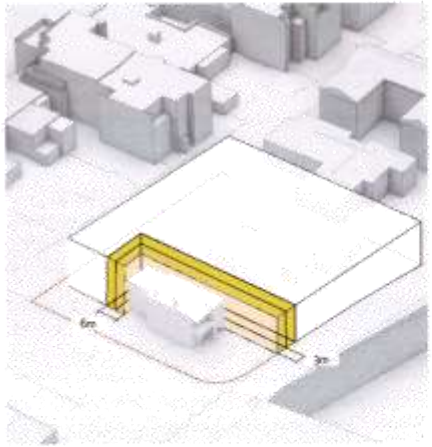
- 3m to 6m separation between the heritage item and the podium along Station Street West and along Raymond Street;
- 0m to 3m podium-setback along Raymond Lane, that would mitigate the impacts of any development built to the boundary (Refer to 49-51 High Street DA);
- Setback along Raymond Street to align with heritage item
- Directly projecting/extending the cadastre line of the lots immediately north on to the subject site and establishing a clear view to heritage item 1744 (1 Station Street) from the north. This created a podium significantly setback from the boundary line (approximately 10m) and accentuated the cantilevering of the tower (necessary to achieve a workable footprint).
- Straightening the cadastre line of the lots immediately to the north, bringing the podium to the boundary at an angle. This reduces the visual impact of the tower cantilevering and provided a clearer building envelope, and therefore reduces the overall height of the tower.



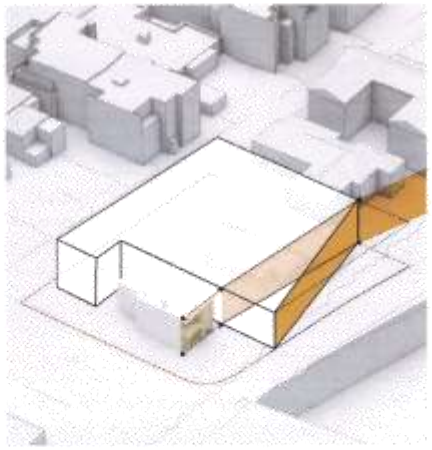
Podium Height



Podium Setback and Alignment



Heritage Curtilage


Consistent Street Wall along Station Street West

Design Concepts

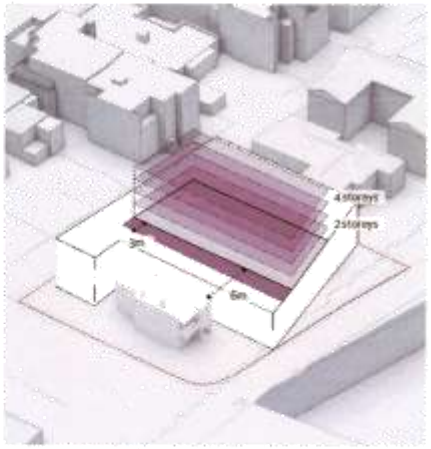
Articulation

Another important concern was the visual impact on pedestrian views, and heritage item 1744. Particularly the first 6-8 stories of the development are critical to the amenity of the street and the impact on the heritage item. A number of options where explored that looked at the different setbacks and the extent of carving required to achieve the best outcome.

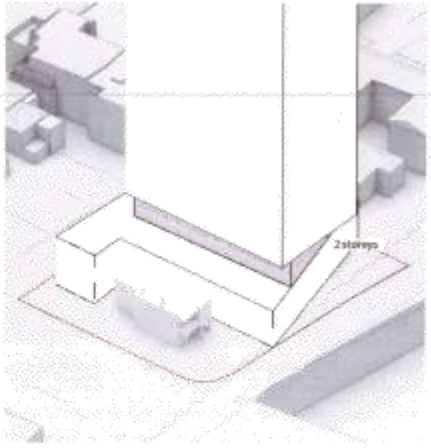
This included looking at articulation zones of 2,4 and 6 storeys above the podium (some significantly setback from the boundary and/or heritage item) and some cantilevering over the podium and heritage item.

The massing study considered the following options

- Articulation zones of 2,4 and 6 stories in height above the 2 storey podium
- 3m-6m setbacks to the north of the heritage



Articulation Setback & Height



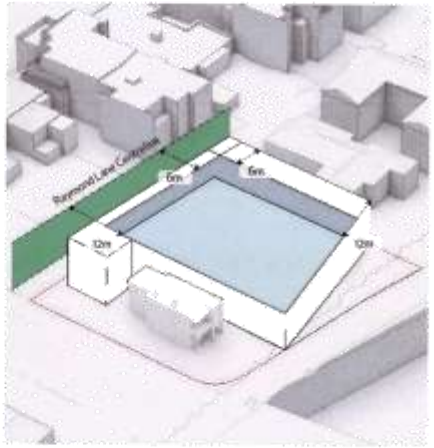
2 Storey Articulation Zone

Tower

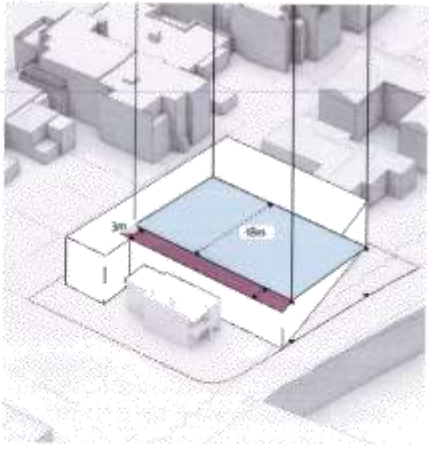
One of the key considerations of the massing study has been to achieve a viable tower footprint, with a minimum width of 18m and a minimum floor plate of 450sqm.

The location of the tower also has to allow for a minimum of 24m inter-building separation, from the potential future buildings to the north and west of the site. Consequently a number of options looked at the extent to which cantilevering is required and its visual impacts from a pedestrian and heritage point of view.

- 6m to 12m upper level setback of the tower to the centre of the Raymond Lane; that would again mitigate the impacts of any development built to the boundary (Refer to 49-51 High Street Development Application).
- 6m to 12m upper level setback of the tower to the northern boundary as per the ADG requirements.
- Extent of cantilevering over the podium to the boundary along Station Street West.



Tower Setbacks



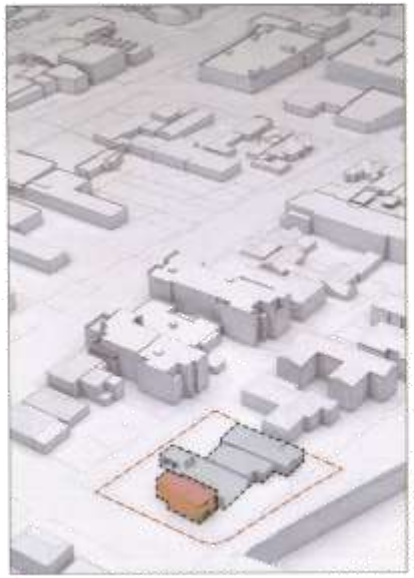
Viable Tower Footprint

Design Concepts

Design Parameters

The following design parameters were defined by previously mentioned planning strategy, consultation with the Heritage Architects, and good urban design principles.

The purpose of these diagrams, is to help define the allowable building envelope for the subject site.



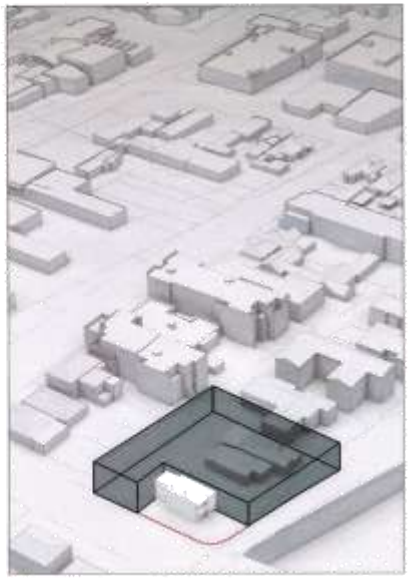
Key
- Subject Site
- To be demolished
- To be Retained

Heritage Items

The site is constrained by two buildings listed as a heritage items, and therefore restricted by the Parramatta Council's heritage controls.

While heritage item 1744 (1 Station Street) has been deemed as having significances to the local context, the other heritage item 1745 is not considered significant and is proposed to be demolished.

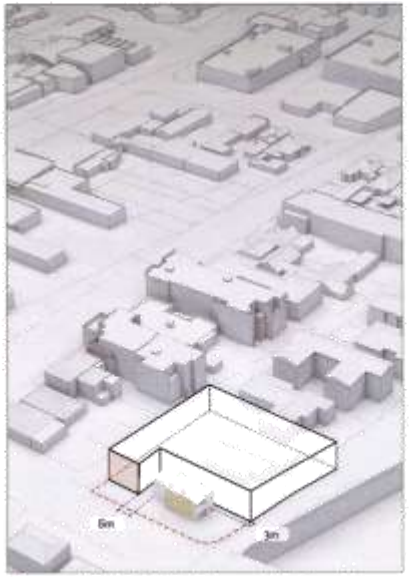
The future development can establish itself as a secondary anchor to the heritage item at the corner of the subject site. The heritage item 1744 will be retained and enhanced, maintaining the character of the surrounding context.



Key
- Subject Site
- Podium Height Plane

Podium

Using the height of the heritage house to define the podium height level before having a setback from the boundary.



Key
- Subject Site
- Heritage Alignment

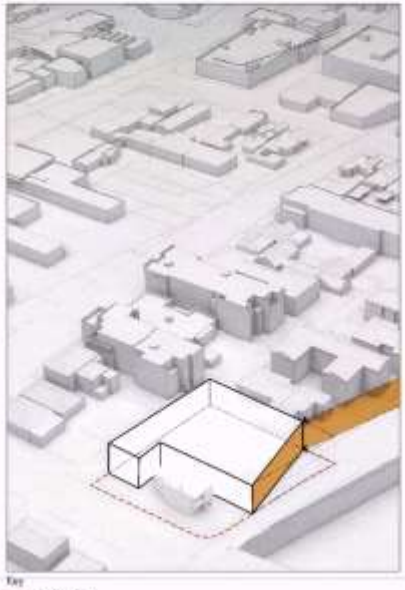
Heritage Curtilage

In order to balance the site without distracting from the heritage item, a **6 metre** rear setback and a **3 metre** side setback at ground level has been provided around the heritage item.

The southern edge of the podium is to align with the heritage building edge along Raymond Street.

Design Concepts

Design Parameters



Key
- Subject Site
- Station Street Alignment

Consistent Street Wall

The existing buildings to the north of the subject site should define the street alignment at podium level, in order to ensure consistency in the streetscape and character of Station Street.

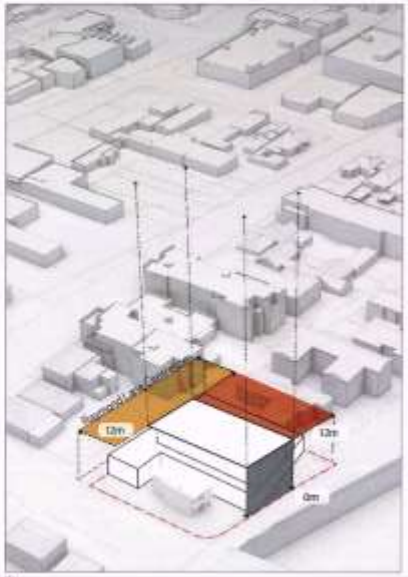
The preferred option adopted a 2-storey street wall to support the development of the precinct and as a direct response to its strategic context. Furthermore, heritage assessment and advice indicated the view of the heritage item from the north was not a significant view (Please refer to Heritage report); consequently the podium was aligned to achieve a better built form and tower footprint, compromising the view of heritage item I144 from the north.

Key
- Subject Site
- 6m Heritage Articulation Zone above Podium Level
- 6m Ground Level Setback to Podium
- 3m Ground Level Setback to Podium

Articulation Zone

With the site and the heritage item, the building envelope must take into consideration an appropriate architectural response, as not to diminish or distract from the heritage buildings.

In response to the proportions of the heritage item the preferred option suggests a **2-storey** height articulation zone above the podium; and a **6 metre** setback from the northern edge of the heritage item, or a **3 metre** setback from the podium edge, as to minimise the visual impacts to the heritage item.



Key
- Subject Site
- Rear Setback
- Side Setback
- Front Setback

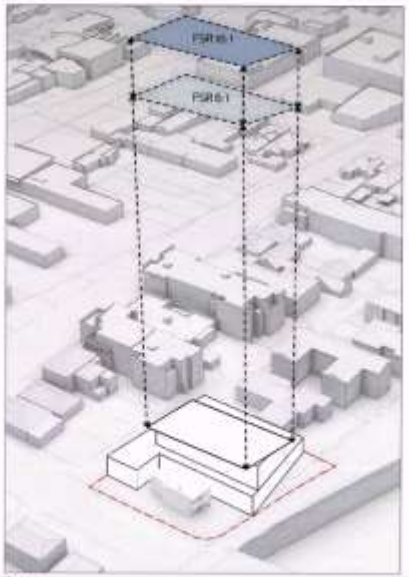
A Viable Tower Footprint

The following setbacks were used in order to determine the tower footprint;

- **12 metre** rear setback from the centreline of Raymond Lane;
- **12 metre** side setback from the northern edge of the site boundary;
- **0 metre** front setback from Station Street boundary

In order to maximise the residential floor plate within the tower form, the frontage along Station Street extrudes towards the site boundary.

The preferred option suggests a very slender and efficient tower footprint that minimizes any cantilevering impact along Station Street West and supports development of the precinct as a whole, particularly the immediately adjacent sites.



Key
- Subject Site
- LEP Height Plane based on FSR 6:1
- LEP Height Plane based on FSR 10:1

Building Height

The Parramatta LEP has designated the site with a maximum height level of 12 metres. However, nominated in the planning strategy for Parramatta, the site also has the opportunity to utilise the FSR 6:1.

The site has the potential to receive an additional floor space bonus of 15% under the provisions for Design Excellence, therefore increasing the maximum height level.

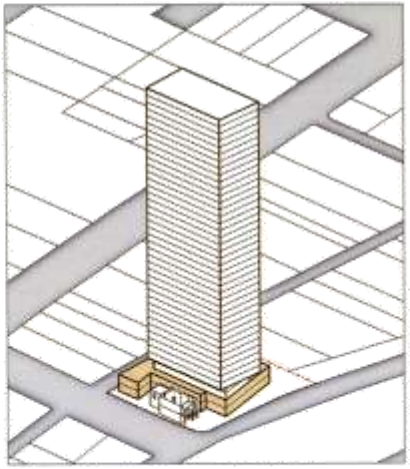
Design Concepts

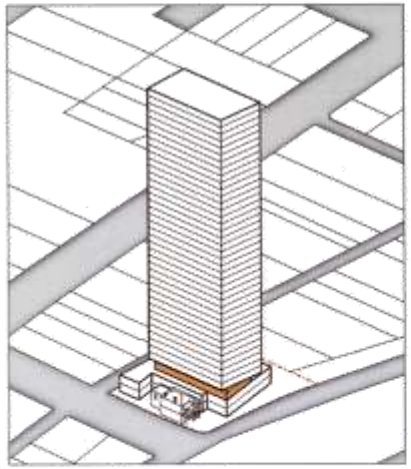
Preferred Option

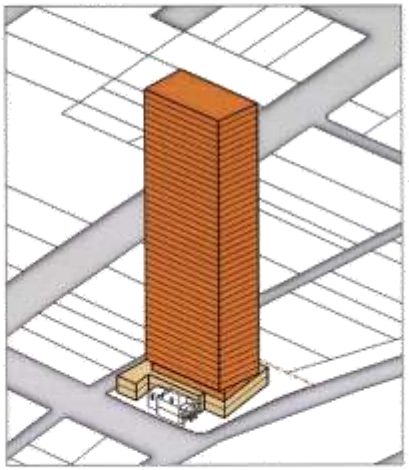
Development Summary

The preferred option is a balanced response to the current strategic and physical context of the site, the future potential development and consolidation of Harris Park Station Precinct and the economic feasibility of the development.

Below is a summary of the key aspects of the proposal.







Commercial Podium

- Approximate Floor plate: 1,140sqm
- 2-storey podium
- 0m setback to the northern boundary
- 3m setback to the Raymond Lane
- 3m-6m setback to the heritage item (1744) along Station Street West
- 6m setback to the heritage Item (1744) along Raymond Street

Residential Tower (low)

- Approximate Floor plate: 470sqm
- 12m setback to northern boundary
- 12m setback to centre of Raymond Lane
- 0-8.6m setback to Station Street West
- 6m setback to heritage Item (1744)

Residential Tower (Typical)

- Approximate Floor plate: 615sqm or 635sqm
- 12m setback to northern boundary
- 12m setback to centre of Raymond Lane
- 0m setback to Station Street West
- 3m setback to heritage Item (1744)

Subject Site
Commercial Podium
Lower Residential
Typical Residential Tower

ONE STATION PARRAMATTA

Design Concepts

Area Schedule

The following table outlines the total calculations for the preferred design concept, based on the assumption listed below.

Assumptions

Heritage Building

The area shown for the heritage building on 1 Station Street West is indicative and estimated based on survey plan provided

Number of Dwellings

The mix of units is as per the Parramatta Development Control Plan 2011

- 1 bed - 10%
- 2 bed - 75%
- 1 bed - 15%

Parking

The parking requirements have been estimated with the RMS guide to traffic generating development (as specified in the ADG)

- 0.4 spaces per 1 bedroom unit
- 0.7 spaces per 2 bedroom unit
- 1.2 spaces per 3 bedroom unit
- Plus 1 space per 7 units (visitor parking)

Gross Floor Area (GFA)

- Building efficiencies have been calculated at 75% for residential and 85% for commercial
- Residential Floor to Floor height 3.1m
- Commercial Floor to Floor height 4.1m
- Basement Floor to Floor height 2.9m

Apartment Design Guideline Compliance table

	Apartment Design Guidelines	One Station Street	Compliance
Building Depth	12m-18m	18m	✓
Building Separation (Habitable to Habitable)	Up to 4 Levels (12m) Up to 8 Levels (18m) Over 9 Levels (24m)	24m 24m 24m	✓
Deep Soil Zone	7%-15%	Approximately 10%	✓
Vehicular Access	Provide to rear of site	Via rear lane	✓
Solar Access**	70% of apartments receive minimum 2hrs	95% of apartment receive minimum 2hrs	✓
Cross Ventilation**	60% of units receive cross-ventilation	80% of the units receive cross-ventilation	✓

**Note: These calculation are based on the FSR 10:1 option

Area Summary for 1 Station Street

	FSR 10 : 1	FSR 11.5 :1 Design Excellence (15%)
Heritage Building*	170 sqm	170 sqm
Ground Floor & L1 Commercial /Non Residential	1,940 sqm	1,940 sqm
Level 2 & 3 Residential Tower low	727 sqm	727 sqm
Level 4 + Residential Tower Typical	15,597 sqm	18,538 sqm
Estimated # of units*	184	216
Estimated # of car spaces required*	192	221
Estimated # of storeys	37	43
Estimated # of Basement levels	6	7
Total Residential GFA	16,424 sqm	19,263 sqm
Total Commercial / Non Res GFA	2,110 sqm	2,110 sqm
TOTAL GFA	**18,534 sqm**	**21,373 sqm**

*Please refer to assumptions

5.0 INDICATIVE ARCHITECTURAL SCHEME

Indicative Architectural Scheme

Schematic Plans & Section

Commercial Podium Ground Level Floor Plan
ONE STATION PARRAMATTA

Indicative Architectural Scheme

Schematic Plans & Section

Commercial Podium Level 1 Floor Plan
ONE STATION PARRAMATTA

Indicative Architectural Scheme

Schematic Plans & Section

Residential Upper Levels 2-3 Floor Plan
ONE STATION PARRAMATTA

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Indicative Architectural Scheme

Schematic Plans & Section

Residential Typical Floor Plan
ONE STATION PARRAMATTA

Indicative Architectural Scheme

Schematic Plans & Section

Basement Level 1 Floor Plan
ONE STATION PARRAMATTA

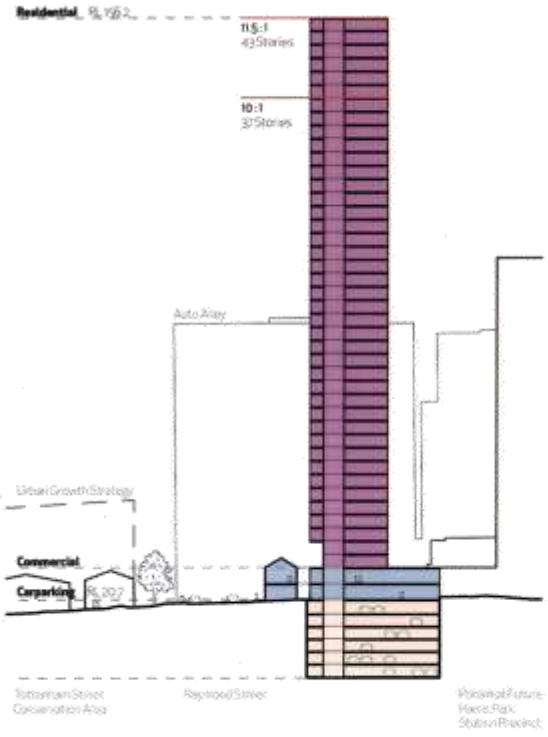
Indicative Architectural Scheme

Schematic Plans & Section

Basement Level 2 Floor Plan
ONE STATION PARRAMATTA

Indicative Architectural Scheme

Schematic Plans & Section



ONE STATION PARRAMATTA

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Indicative Architectural Scheme

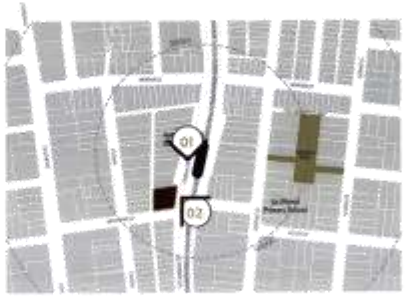
Visualisations

Indicative Architectural Scheme

Visual Analysis

01 Harris Park Station Exit

02 Cambridge Street Bridge



Indicative Architectural Scheme

Visual Analysis

03_Station Street East

04_Tottenham Street

Indicative Architectural Scheme

Visual Analysis

05_Marion & High Street

06_Corner of Raymond & High Street

Indicative Architectural Scheme

Shadow Analysis

The shadow diagrams shown over the following pages illustrate the impact of the design concept, for both FSR options, on the surrounding context. Despite the reach of the shadows, due to their narrowness the impact passes quickly, allowing all surrounding properties to receive in excess of three hours of sunlight between 9am and 3pm in mid-winter (21 June).

The results from the solar analysis indicates that both design options have limited shadow impact on the surrounding areas, due to the fast moving shadows created by the tall slender tower design.

Winter Solstice_8am

8am

The reach of the shadow extends across Church Street, with some impact to commercial properties along Auto Alley, and low density residential development beyond. These impacts are limited to this hour only and no further shadow impact from the proposed development affects these sites.

Winter Solstice_9am

9am

The existing low and medium density residential development along the southern side of Raymond Street are impacted. The impact is limited to a small number of properties that fall within the long shadow.

Key

FSR 6:1 +15% DE 21 storeys

FSR 10:1 +15% DE 37 storeys

Indicative Architectural Scheme

Solar Analysis

Winter Solstice_10am

Winter Solstice_11am

Winter Solstice_12pm

10am

Shadow impacts to the residential properties along Raymond Street shifts north to include the low-density properties at the corner of the Raymond Street and rear Raymond Lane between High Street and Tottenham Street. Those properties along Church Street are no longer impacted.

11am

The reach of the shadow impact is reduced to the rear of several properties fronting Tottenham Street.

12pm

At midday the shadow impact is limited to eight single detached houses fronting Tottenham Street.

Key

PSR 6:1 +15% DE 21 storeys

PSR 10:1 +15% DE 32 storeys

Indicative Architectural Scheme

Shadow Analysis

Winter Solistice_1pm

Winter Solistice_2pm

Winter Solistice_3pm

1pm

The shadows from the tower extend across the railway corridor, and have limited impact on the rear yards of the medium density development properties fronting Wigram Street.

2pm

The eastern shadow now extends towards medium density properties at the intersection of Wigram Street and Raymond Street. Those properties along Tottenham Street are no longer impacted.

3pm

The shadow impact shifts further to the east of the site, encompassing the residential properties fronting the southern end of Wigram Street. These impacts are limited and did not receive any previous further shadow impact from the proposed development earlier in the day.

Key

- PSR — 6:1 +15% DE, 21 storeys
- PSR — 10:1 +15% DE, 37 storeys

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RESEARCH

PLANNING PROPOSAL
HERITAGE IMPACTS ASSESSMENT

ONE STATION STREET PARRAMATTA

1-7 STATION STREET WEST
PARRAMATTA NSW 2124

FEBRUARY 2016

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This report has been prepared under the guidance of the Expert Witness Code of Conduct in the Uniform Civil Procedure Rules and the provisions relating to expert evidence

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Issued: February 2016

STATEMENT OF HERITAGE IMPACT
PLANNING PROPOSAL – ONE STATION
1-7 STATION STREET, PARRAMATTA

1.0 INTRODUCTION

This Heritage Evaluation and Impact Statement has been prepared in accordance with the standard guidelines of the NSW Heritage Office to accompany a Planning Proposal for the site known as One Station Street Parramatta. The site, 1 – 7 Station Street, contains two listed heritage items and is located in the vicinity of several other items and an adjoining Heritage Conservation Area in the Holroyd Local Government Area. The site is also in the visual context of the Harris Park Conservation Area located across the main western railway line. The review identified the existing heritage status and controls for the site and assesses the potential impact of proposed development resulting from an increased development potential sought in the Planning Proposal.

The assessment of potential heritage impact has been undertaken by Robert Staas, Associate Director / Heritage Consultant of NBRS+PARTNERS Architects. Details of the Planning proposal have been prepared by Allen Jack and Cottier and JBA.

1.1 Requirements for this Report

This report is a requirement to provide adequate information to Parramatta Council and the NSW Department of Planning + Environment relating to potential heritage issues associated with the Planning proposal to alter the existing planning controls on the site.

1.2 Methodology

Independent heritage assessments were made of the two heritage items which form part of the subject site and a Conservation Plan was prepared for No.1 Station Street which is proposed to be retained and incorporated into future development. A Heritage Assessment and Demolition Report was prepared for No. 7 station Street, which is not considered to have sufficient heritage value to warrant retention in preference to an appropriate redevelopment as proposed.

The heritage context of the site was also considered and documented to provide information for the assessment of the Planning Proposal.

1.3 Authorship

This report was prepared by Robert Staas, Associate Director / Heritage Consultant, using research and a history researched and written by Léonie Masson, Historian, all of NBRS+PARTNERS. Additional input in the process was made by Jennifer Hill, Heritage Consultant of Architectural Projects and Graham Brooks, Heritage Consultant of Graham Brooks & Associates (GBA).

1.4 Site Location

The site is located on the western side of Station Street at its junction with Raymond Street which forms the boundary of the Parramatta Local Government Area to the north and the Holroyd Local Government Area to the south. The site adjoins the Harris Park Railway Station on the Great Western Line.

The site location is shown at Figure 1 below.

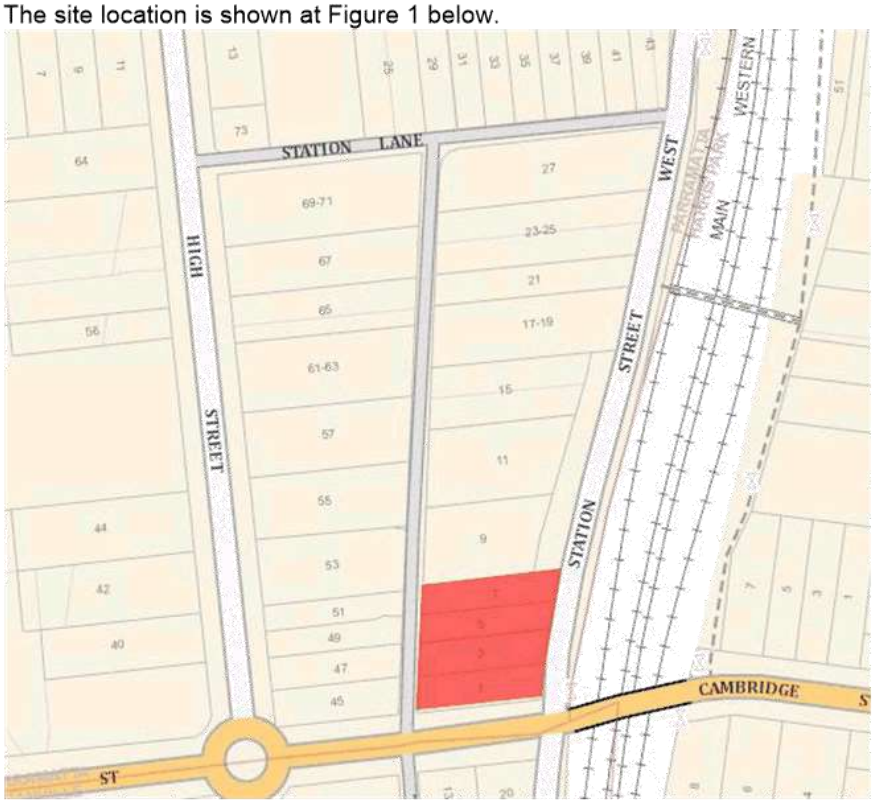


Figure 1 — Location plan of subject site. (Source: NSW Land & Property Information, SIX Maps)

2.0 PARRAMATTA COUNCIL HERITAGE LISTINGS

2.1 Parramatta Local environmental plan 2011,

The subject site includes two items of environmental heritage identified in the Parramatta Local Environmental Plan 2011, I745 & I744.

The site is also in the vicinity of several other local heritage items located in High Street to the west including Item, I710 which is a co-joined pair of two storey Victorian Houses at 49 – 51 High Street.

There are several heritage items and a conservation area located to the north east across the railway line that are identified as heritage items in the Parramatta Local Environmental Plan 2011. Refer Section 3

The site adjoins the boundary of Parramatta City Centre with the Holroyd Council area and a number of heritage items are located opposite the site in that Local Government Area. Ref Section 4

Figure 2 — extract from the heritage map accompanying Parramatta Local Environmental Plan 2011, showing the subject site outlined in red, in the vicinity of other heritage items (light brown) and conservation areas (hatched red)

The heritage items on the subject site are identified as I26 (No.1 Station Street) and I 27 (No.7 Station Street)
The adjacent heritage item is identified as I02 (No.49 – 51 High Street)

The information quoted below relating to identified heritage significance is taken from the State Heritage Inventory listings adopted by Council.

2.2 Heritage Significance of 1 & 7 Station Street

I 744- Two Storey Terrace Residence, 1 Station Street West, Harris Park

House at 1 Station Street West is of significance for the local area for historical, aesthetic and representativeness reasons. Built c.1890, it is readily identifiable as part of historic building stock and is strongly contributing to the streetscape.

Two storey late Victorian (1890) house of rendered brick has pyramid slate roof with projecting hip front forming squat tower over stilted arch entrance with corniced string line. A recessed niche is between two rendered corniced string

lines above arch and under windowsill. There is one rendered brick chimney with stepped corbel decoration. Verandah has concave corrugated iron roof that runs across front to projecting hip, supported by timber post to ground floor. Upper level verandah has cast iron balustrading and valence, lower level verandah has curved timber valence. Ground floor front wall has arch topped window and sidelights. French door on upper verandah floor has bolection mould panels below the lock rail and glazed panels above. Front door has transom light and sidelights above Victorian timber door with round head glazed upper panels, below lock rail and two timber panels with bolection moulding. Front fence is aluminium spearhead palisade fence and gate.

Figure 3 - 1 Station Street Parramatta, a two storey Victorian Italianate villa adapted and converted for commercial use.

The house is now used as commercial offices and is a relatively standard example of its type which is common throughout the region. The building is at the edge of the Local Government Area but adjoins a Heritage Conservation Area opposite in the Holroyd Local Government Area and form a transition to that area in views along Tottenham Street and in Raymond Street. It is visually prominent when viewed across the railway overpass bridge along Cambridge Street.

I 745 – Single Storey Residence, 7 Station Street West, Harris Park.

House at 7 Station Street West is of significance for the local area for historical and representativeness reasons. Built c.1915, it is readily identifiable as part of historic building stock and is still contributing to the streetscape.

Single storey Federation brick cottage (1915) has corrugated iron roof on painted brick walls. The main roof is broken by a small gable with turned timber finial and louvred ventilator. Projecting gable has finial and decorated with dentils below string course. There are two tall brick chimneys with stepped corbels and chinese lanterns. Verandah has corrugated iron skillion roof extending from main roof across front to projecting gable and is supported by paired timber posts set on painted tall brick piers with sandstone caps. Verandah has painted concrete floor and painted brick balustrade. Awning above window has Federation decorative timber ladder brackets and corrugated iron roof. Front fence is aluminium spearhead palisade fence and gate.

Figure 4 - 7Station Street Parramatta a highly modified, early 20th century cottage converted for commercial use.

2.3 Heritage significance of 49 – 51 High Street Parramatta

I 710 – Pair of co-joined residences 49 – 51 High Street Parramatta

The houses at 49-51 High Street are of significance for the local area for historical and aesthetic reasons, and as a representative example of residential architecture of the Victorian period in this area. Built c. 1885, the houses are readily identifiable as part of historic building stock and strongly contributes to the streetscape. The houses feature a rare double hipped roof form.

Two storey late Victorian attached houses are of rendered brick walls to front, painted sides and hip corrugated iron roof. The rear wings are under a separate hipped roof form, and this "double hipped roof" is a rare feature. There are two tall rendered brick chimneys with cornices each side of roof. Verandah has concave corrugated iron roof over verandah on upper level which goes across

front on both levels. Verandah floor on No. 51 is sandstone. Verandah supports are cast iron columns with frieze and brackets to both floors. There are decorative brackets on central privacy wall. Windows have label moulds and decorative stops over each door. Exterior doors have glazed transom and sidelights over Late Victorian panelled door with glazed panels above lock rail and two timber bolection moulded panels below. Front door has transom lights over French doors with round head glazed upper panels and timber bolection panels below lock rails. All doors have timber louvered shutters. Both houses have two tier cast iron spearhead palisade iron fence on rendered plinth between large rendered piers with stepped pyramid tops and matching two tier cast iron spearhead palisade gates.

Figure 5 - No49 - 51 High Street Parramatta, co-joined late Victorian residences.

Within the Parramatta Local Government Area a number of heritage items are identified in schedule 5 of the Parramatta Local Environmental Plan 2011. These are shown on the extract from the Heritage Map.

A number of heritage items are located in the vicinity of the site including the items located across the Great Western Rail Line from the subject site in Harris Park are identified as I264, I265, I266 and somewhat further afield is I303.

The first three items are identified as a group of three, single storey, late Victorian houses, 1, 3 & 5 Cambridge Street directly to the east of the subject site. The fourth item is a single storey Victorian house at 48 Wigram Street.

Further to the north east and substantially removed from the subject site is southern edge of The Harris Park West Conservation Area.

These heritage listings are shown on the extract from the heritage map at Figure 5

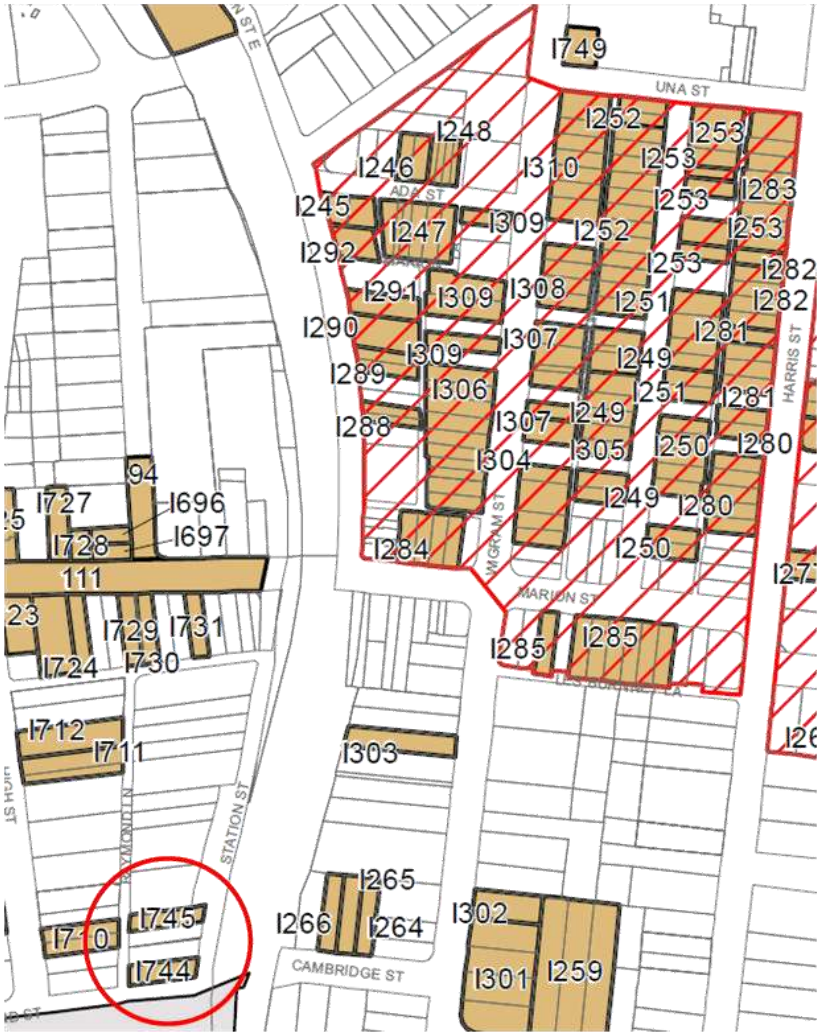


Figure 6 - Extract from Heritage Map in Parramatta Local Environmental Plan 2011 showing heritage items located across the Great Western Rail Line from the subject site and the southern extent of the Harris Park Conservation Area.

2.4 Heritage Significance of 1, 3 & 5 Cambridge Street Harris Park

Three heritage listed houses in Cambridge Street are considered to be in the vicinity of the subject site. Views of these houses include the subject site in the background. A direct visual connection can be made to No. 1 Station Street looking west across the railway bridge:

1, 3 & 5 Cambridge Street Harris Park

> *The houses at 1, 3 and 5 Cambridge Street are of significance for the local area for historical reasons and as a representative examples of late Victorian houses in the area. The houses make an important contribution to the streetscape, additionally enhanced by the adjacent houses in Cambridge Street, illustrating the development history of their locality.*

Figure 7 - View from Cambridge Street looking west to the subject site showing No. 1 Station Street and 49 - 51 High Street in the background.

The following descriptions are taken from the State Heritage Inventory where the houses are listed individually as heritage items .More recently the houses been extensively renovated and extended sympathetically.

Figure 8 - 1 Cambridge Street Harris Park

I 264 7 Cambridge Street

Single storey Victorian cottage of brickwork, now rendered, with hipped corrugated iron roof and tall brick chimney. Front verandah has straight sloping corrugated iron roof and terminates at projecting gable with plain bargeboard, originally also had a crosspiece. Gable window has corrugated iron awning. Two painted brick chimneys and corbels and painted squat terracotta pots survive. Verandah with skillion corrugated iron roof and hip corner across front to projecting gable. Verandah has concrete floor, sandstone steps, posts set on brick pier and painted brick balustrade. Windows have rendered sills. Front door is Interwar timber door with glazed panel above lock rail and three recessed timber panels below. Early timber post and rail fence with cyclone wire infill and wire mesh panel attached to pipe frame gate was replaced with modern timber railing.

Figure 9 - No.3 Cambridge Street Harris Park

I 265 3 Cambridge Street

Single storey Victorian cottage of brick with sandstone foundations and hipped corrugated iron roof and ogee verandah supported by cast iron columns. Once painted, the house was restored but other elements were replaced with less sympathetic, e.g. the timber shutters to French doors and original posts. Chimney is painted brick with corbels and squat terracotta pots. Privacy screen each end of verandah, of lattice on timber panelling, was also lost. Transom light above French doors, which flank front door, have bolection mould panels below lock rails and glazed panels above. Front door has painted transom light over four panelled timber door with round tops and bolection mould decoration.

Figure 10 - 5 Cambridge Street Harris Park

I 266 5 Cambridge Street

Single storey Victorian Italianate house of rendered brick with gabled roof with projecting gable front. Verandah has straight sloping tiled roof terminating against projecting gable with three sided bay window. Rendered walls have ashlar markings. Terracotta tiled roof has terracotta horns on gables. Roof is a segmented hip roof with cornice and stringline decoration around eaves of faceted bay. Stepped brick chimney on ridgeline. Verandah has ceramic tiled step and concrete floor, cast Iron columns, shortened column on east end set on rendered brick balustrade. Windows have Victorian label mould arches linked above windows in faceted bay, rendered moulded cornices beneath front windows, recessed rectangular niches below cornice in faceted bay. Front door has transom light above five panelled door with three glazed panels above lock rail and two timber bolection mould panels below.

3.0 HOLROYD COUNCIL HERITAGE LISTINGS

The subject site is located in the immediate vicinity of the boundary of Parramatta and Holroyd Councils. Holroyd Local Environmental Plan 2013 identifies a conservation area containing 9 Local heritage items in the form of Federation era houses, known as The Tottenham Road Conservation Area C1

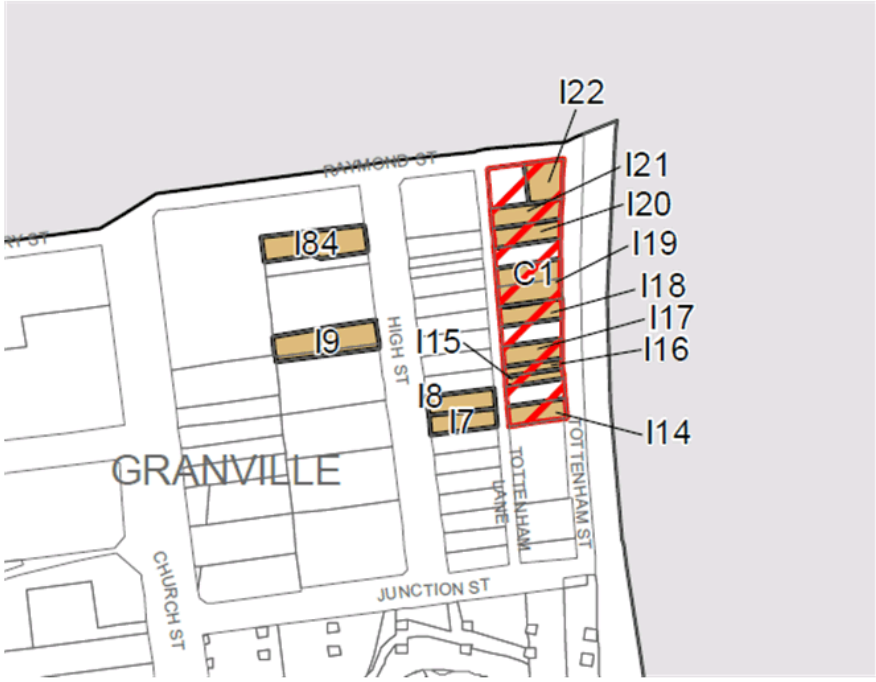


Figure 11 - extract from the heritage map accompanying Holroyd Local Environmental Plan showing the conservation area and listed heritage items located to the south of the subject site across Raymond Street

The following statement of Significance is that adopted by Council for this group of Federation era cottages:

Conservation Area 1 – Tottenham Street Conservation Area
Tottenham Street Group – federation Period Cottages
Constructed c 1900 – 1925

The buildings in Tottenham street are significant as part of a group of small scale residential buildings in Tottenham street, Granville. The group is largely intact externally and is significant for the variety of building styles and as a good representative example of early cottages dating from around the turn of the (20th) century. The buildings are significant for their form, scale and character which gives a good indication of the socio-economic make up of the community at the time of their construction. The group gives a good representative cross section of modest scale residences of the turn of the (20th) century period and their location close to Parramatta and the railway provides evidence of the influence of these factors on the early development of Holroyd.

The houses within the conservation area are individually listed as heritage items I 15 – I 22 in Schedule 5 of the Holroyd Local Environmental Plan 2013.

Figure 12 - View from Tottenham Road Conservation Area looking north towards the subject site with the proposed future tower location.

Figure 13 - View from subject site looking south west to Tottenham Road.

5.0 HISTORICAL BACGROUND TO THE SUBJECT SITE

5.1 Pre-European History

Prior to the arrival of European settlers in 1788 the general area around Parramatta was inhabited by the indigenous Burramattagal clan who shared the Darug language with associated clans from Broken Bay to the Shoalhaven and west to the Blue Mountains.[1]

5.2 European Era History

Within a few months of the arrival of the first fleet in Sydney Cove, a party, consisting of 10 convicts and a garrison of soldiers, was established in Parramatta.[2] This party grew to 100 convicts in 1789, and the following year, Governor Phillip laid down the lines for a regular township adjacent to the river, which he initially called Rose Hill, and later becoming Parramatta.[3]

Clearing and development of land for agriculture then followed and New South Wales' second town had begun. In an early plan of the new Roseville settlement (ca.1790) the subject area was shown as part of 'enclosures for cattle' and 'ground in cultivation'.

Between 1791 and 1800, about 20 significant land grants were issued to settlers in and around the town of Parramatta, and a system of leasing lands was established for home building purposes.[4] Early grantees or lessees in the vicinity often held leases in the town of Sydney and elsewhere as well as Parramatta. Simultaneously, a site was set aside for the market and town hall in the vicinity of Church Street near the Parramatta River. The first permanent dwellings in the new township were erected in the principal thoroughfares of George, Macquarie and Church Streets.

With the arrival of Governor Macquarie in 1810, further streets were laid out and blocks of land surveyed in George, Church, Phillip and Macquarie Streets. All convicts were removed into a barracks that was completed in 1822. Public buildings, a hallmark of the Macquarie period, proliferated. Parramatta developed as a secondary seat of government, a centre of agriculture and grazing, and was directly connected to Sydney by road and river. The town developed rapidly during this period as depicted in Figure 15.

In 1844, W Meadows Brownrigg undertook a survey of Parramatta to identify grants, purchasers and leaseholders and noting which portions were built upon (Figure 16).

[1] Kass, T., Liston, C. & McClymont, J., *Parramatta: A Past Revealed*, Parramatta City Council, 1996. pp. 4-6.
[2] Jervis, J, *The Cradle City of Australia – A History of Parramatta 1788-1961*, Council of the City of Parramatta.
[3] Kass, T., Liston, C. & McClymont, J., *Parramatta: A Past Revealed*, Parramatta City Council, 1996. pp. 10-15, 22
[4] Noel Bell, Ridley Smith & Partners (aka NBRS+Partners), *The Former Parramatta Fire Station Heritage Assessment*, unpublished report, October 1998. p. 6

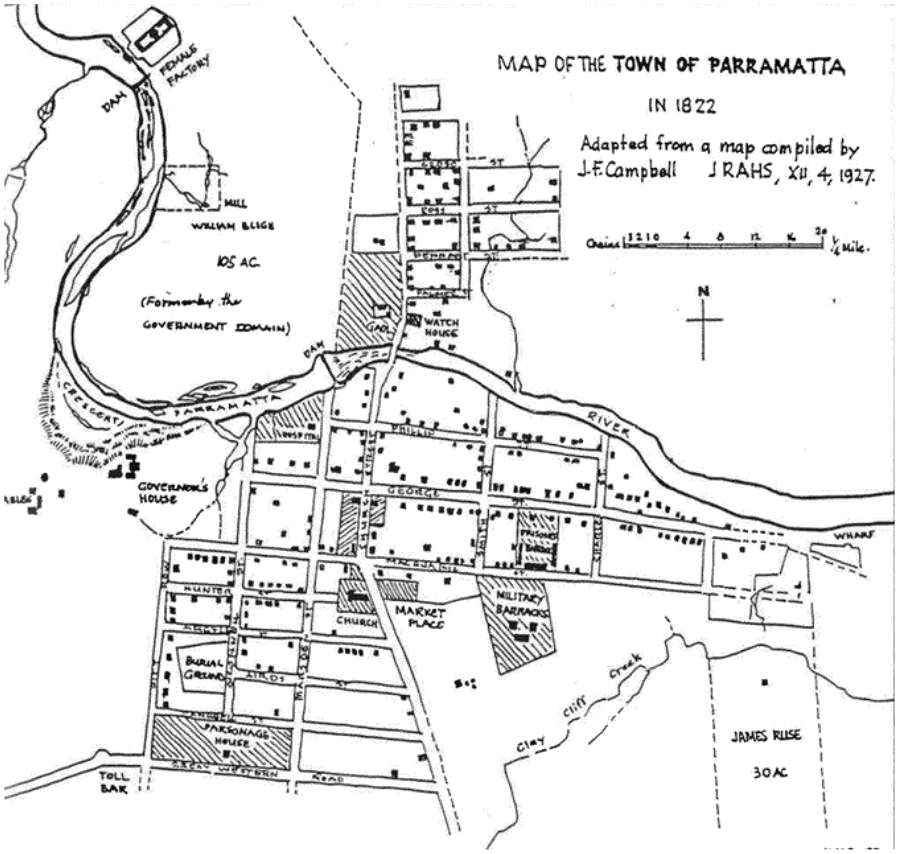


Figure 14 - Map of the Town of Parramatta in 1822. The approximate location of the subject area is circled in red. Macarthur's land grant is outside the boundaries of this plan. (Source: Reproduced from Kass, T, et al, Parramatta: a past revealed, 1996, p113)

Figure 15 – William Meadows Brownrigg, Map of the town of Parramatta and the adjacent properties, 1844. (Source: SLNSW, Z/M3 811.1301/1844/1) The map shows Hambledon Cottage and Experiment Farm on the eastern edge of the town but does not show Elizabeth Farm.

The railway from Sydney to Parramatta Junction (Granville) was opened on 26 September 1855. It was later extended into the population centre at Argyle Street in April 1860. The increased accessibility brought about by the railway contributed to the increase in population and development of the area between 1870 and 1880.

Surgeon John Harris was granted 100 acres (40 hectares) adjoining Ruse's farm. His land, with its heavily wooded hills, was the basis of the modern suburb

of Harris Park, which also includes a portion of the neighbouring estate owned by another Corps officer, John Macarthur. They were responsible for two of the suburb's surviving landmarks, Hambledon Cottage and Experiment Farm Cottage. Macarthur built Hambledon in the 1820s. Its early tenants included the Anglican Archdeacon Thomas Scott and the Macarthur's governess, Penelope Lucas. Although Harris spent much of his time on another estate at Shane's Park, he retained his Parramatta land and built Experiment Farm Cottage in 1835. This classic 'Indian' bungalow, with its wide verandas, is now a National Trust property.

When Harris died in 1838, his nephew, Thomas, inherited Experiment Farm and settled there in the 1840s, farming and breeding horses. After his death in 1870, the break-up of the Harris estate began, although the family retained Experiment Farm Cottage until the 1920s. An early residential subdivision was marketed as 'Harris Park' and the name became attached to the wider area. But what was accepted as 'Harris Park' in the nineteenth century did not exactly coincide with the twenty-first century suburb. From the 1870s to the 1900s, for example, Samuel Purchase occupied six acres (2.4 hectares) of the Harris estate and ran a successful plant nursery. The site of this Harris Park landmark, bounded by George, Hassall and Harris Streets, now lies just outside the current suburb boundary.

In the late 1870s, local builders bought blocks in Harris Park, but the anticipated influx of home buyers did not arrive until a railway platform was opened in the 1880s. This rail link to the merging industrial areas of Granville and Clyde led to a network of workers' cottages quickly developing around the station, but by 1900 the suburb also contained more substantial homes and middle-class residents. For decades, the area known as Harris Park was divided between the municipalities of Parramatta (proclaimed 1861) and Granville (proclaimed 1885). In 1949, the entire Granville municipality was included in an extended City of Parramatta

Despite its industrial connections, Harris Park remained largely residential. Renewed subdivision in the 1920s took up virtually all the suburb's available land. After World War II, state planners designated Parramatta as a major growth centre and large-scale immigration began. These policies affected the density and the composition of the Harris Park population. The construction of home units from the 1960s has meant that the suburb has a very high proportion of this type of housing. Similarly, an unusually high percentage of the Harris Park population was born overseas. Roughly one in four residents speak Arabic, Hindi or a Chinese language.[5]

5.3 History of the Subject Site

The subject site is located on Lots 31, 32, 33 & 34 of Section 1 of DP 976, (see Figure 21) which was originally part of "*110 acres in the township of Parramatta on the north of a creek known by the name of Duck Creek*" granted to surgeon, John Harris, on 20 February 1794. He subsequently purchased the farm of James Ruse on which in 1798 he built the still extant Experiment Farm Cottage. "Until 1800 he led a busy existence as surgeon and farmer. By the turn of the century he owned 315 acres (127 ha) of land of which 205 (83 ha) were purchased, and had acquired 431 head of stock, possessions which placed him

[5] Dictionary of Sydney staff writer, Harris Park, Dictionary of Sydney, 2008, http://dictionaryofsydney.org/entry/harris_park, viewed 30 July 2015

among the foremost officer-farmers."[6] At his death on 27 April 1838, he left property in the region of £150,000.[7]

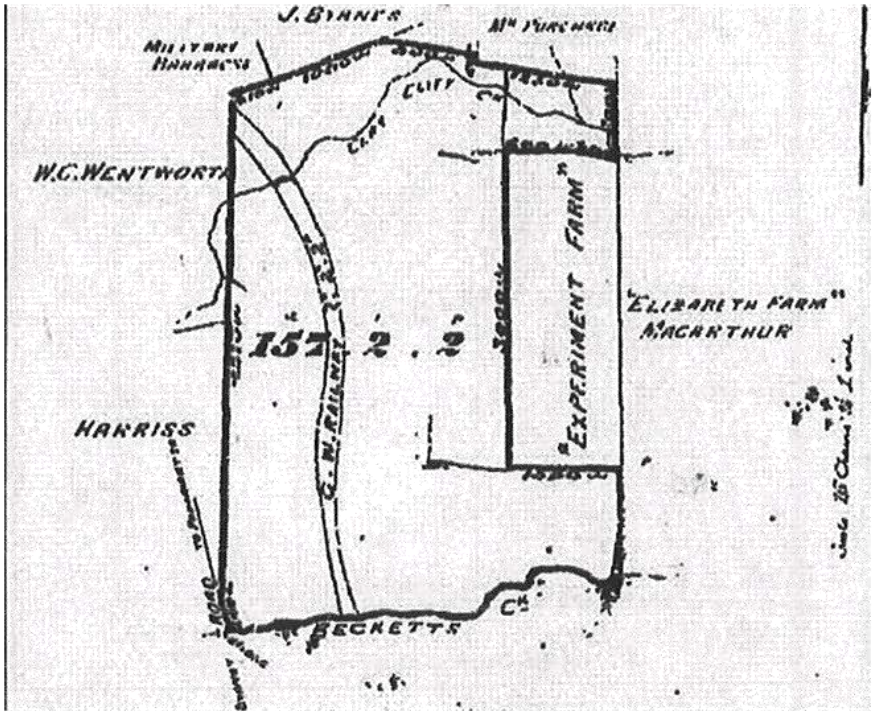


Figure 16 — Block plan of the Harris Estate in 1872 (Source: NSW Land & Property Information, Certificate of Title Vol CXXX111 Fol 127)

Sir George Wigram Allen, a prominent lawyer, politician and land speculator came into ownership of the land and commenced subdivision of the Harris Estate in 1876 (figure18). This is part of the land depicted in the block plan shown at figure 17. This land was re-subdivided with land to the east of the railway line as DP 241; the subject site is located within Section 10 thereof.

[6] B. H. Fletcher, 'Harris, John (1754–1838)', Australian Dictionary of Biography, National Centre of Biography, Australian National University, http://adb.anu.edu.au/biography/harris-john-2164/text2773, published first in hardcopy 1966, accessed online 30 July 2015.
[7] Ibid.

Figure 17 — DP 241, Harris Park, May 1876. (Source: NSW Land & Property Information)

In the "Plan of Streets in Harris Park, Town of Parramatta" undertaken in September 1882 (Figure 19), the subject site is located within that portion of undeveloped land owned by Sir George Wigram Allen, bounded by Marion Street, High Street, Short Street (later Raymond Road) and Station Street West. What is apparent from comparing the May 1876 and September 1882 plans is that the portions of Allen's land did not sell immediately, including Section 10.

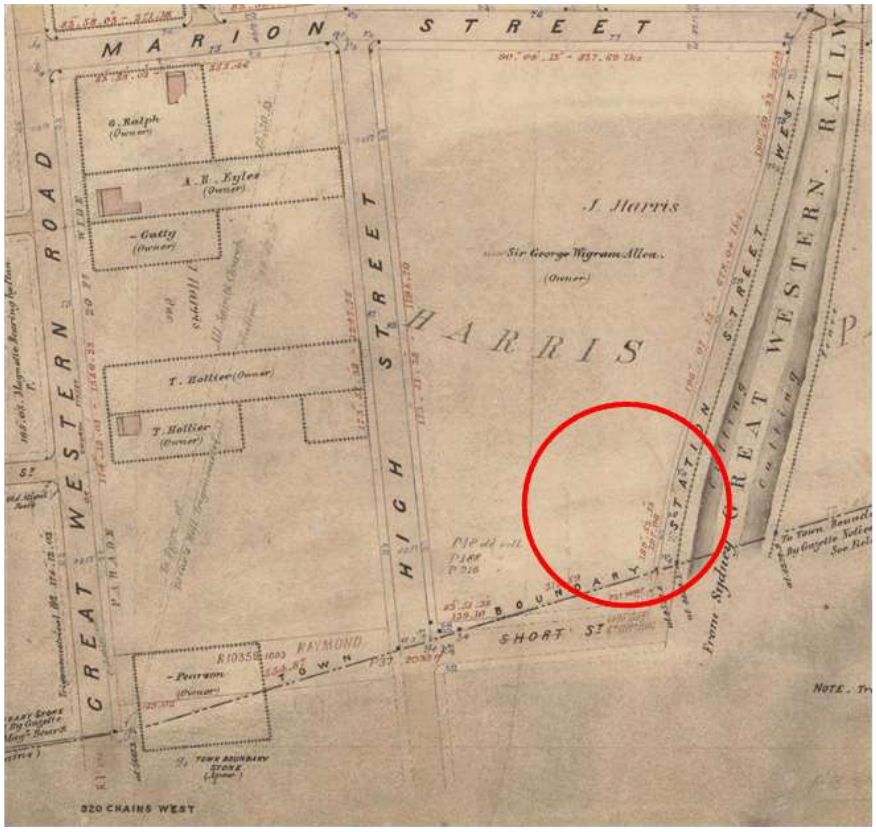


Figure 18 — Extract from Plan of streets in Harris Park Town of Parramatta Parish of St John County of Cumberland / date of survey 1-21 September 1882. (Source: NSW Land & Property Information, Crown Plan 12-833 and P12-2033R)

George Wigram Allen advertised the auction sale on 4 November 1882 of "92 splendid sites" at Harris Park Parramatta. Sections 10 and 12 of DP 241 were sold to Henry Solomon of the City of Sydney, landowner.[8] That land is shown on the subdivision plan at figure 20. Solomon was a partner with George and Henry Myers as the firm of Myers and Solomon (general importers) and had their store at 542 George Street, Sydney. A report on the auction sale was published in the *Sydney Morning Herald* the Monday after: "*Messrs Mills, Pile and Gilchrist…sold…the whole of the subdivision at Harris's Park, Parramatta, consisting of 92 allotments, at prices ranging from 26s to £3 1s per foot [realising] £6500.*"[9]

[8] Certificate of Title Vol 616 Fol 243, NSW Land & Property Information.
[9] "Monetary and Commercial", *Sydney Morning Herald*, 6 November 1882, p6.

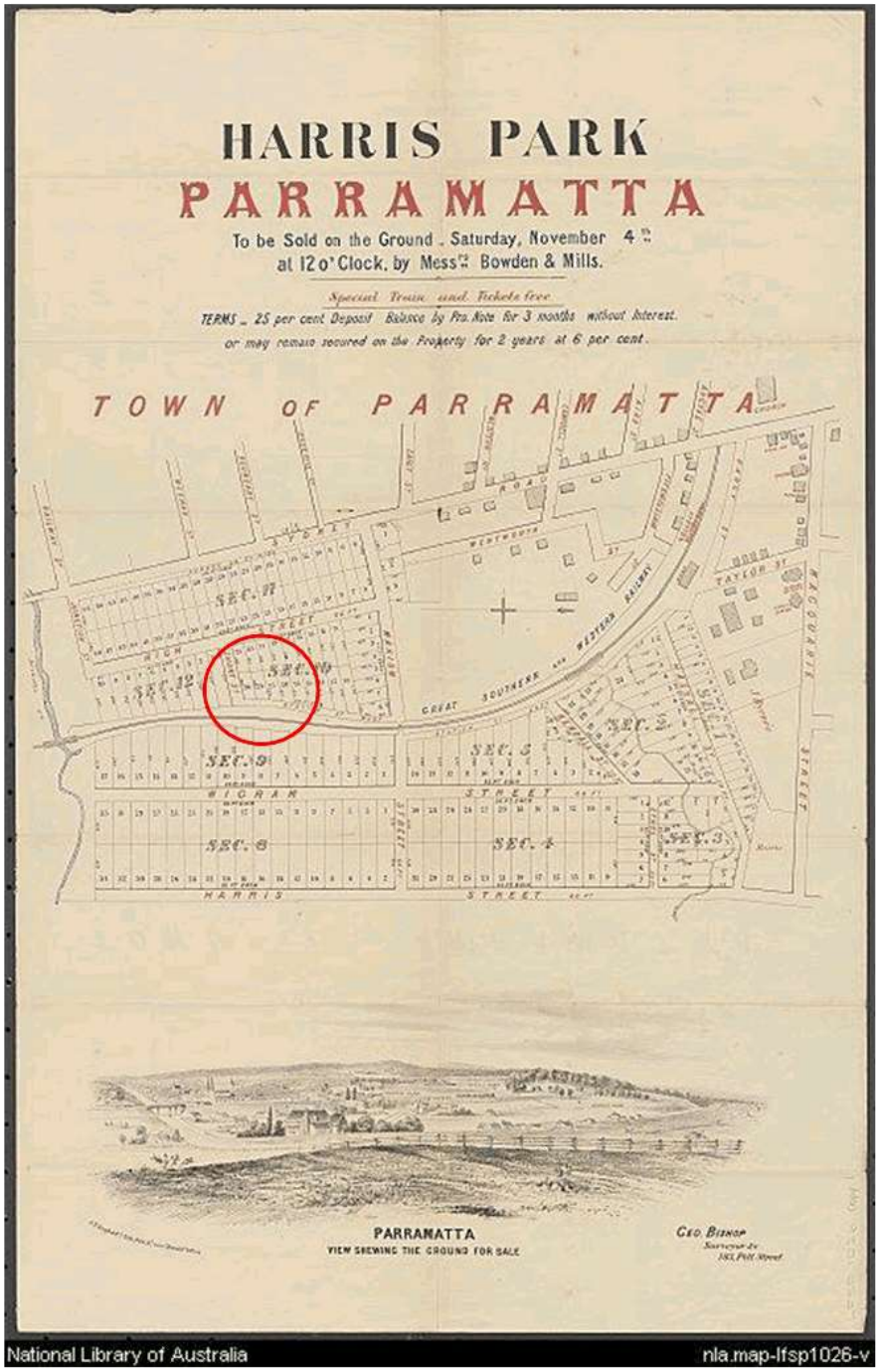


Figure 19 — Harris Park Parramatta to be sold on the ground Saturday November 4th [1882]. (Source: NLA, MAP Folder 68, LFSP 1026)

Auction Sales.

TO-MORROW AFTERNOON.

HARRIS PARK,
PARRAMATTA,
ON THE GROUND, at 3 p.m.

92 SPLENDID BUILDING SITES.

THE ONLY HIGH LAND BETWEEN GRANVILLE
and PARRAMATTA.
CHARMING VIEWS. GRAND ELEVATION.
HALF A MILE RAILWAY FRONTAGE.

ATTEND the SALE, and SECURE A LOT.

This LAND WILL DOUBLE ITS VALUE WITHIN
A VERY SHORT TIME.
TORRENS' TITLE. Lithos at the Rooms.

TORRENS' TITLE. Lithos at the Rooms.

FREE TICKETS for Special Train leaving REDFERN at 2.15 p.m., can be obtained at the Rooms.
TERMS—10 PER CENT DEPOSIT, balance in 18 monthly payments.
MILLS, PILE, and GILCHRIST,
Auctioneers.

Figure 20 — Auction sale advertisement for Harris Park Parramatta subdivision. (Source: Sydney Morning Herald, 3 November 1882, p10)

Solomon re-subdivided Sections 10 and 12 of DP 241 as DP 296, which plan of subdivision is shown at Figure 22. The first sales in this subdivision are registered on the certificate of title on 27 December 1882.

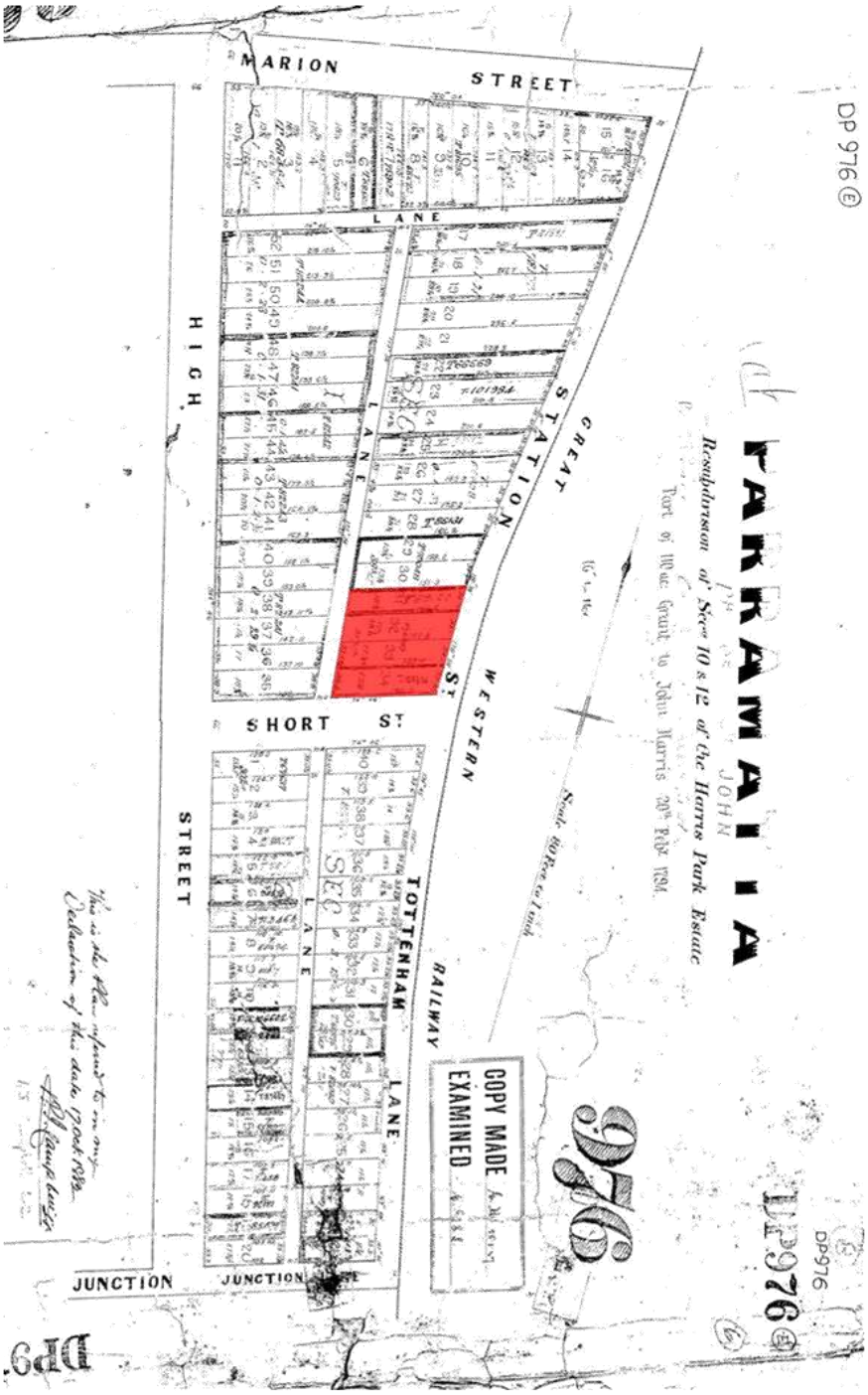


Figure 21 — DP 976, Parramatta – Re-subdivision of Sec[ts] 10 & 12 of the Harris Park Estate, 1882. Subject site (Lots 31, 32, 33, 34) shaded red thereon. (Source: NSW Land & Property Information)

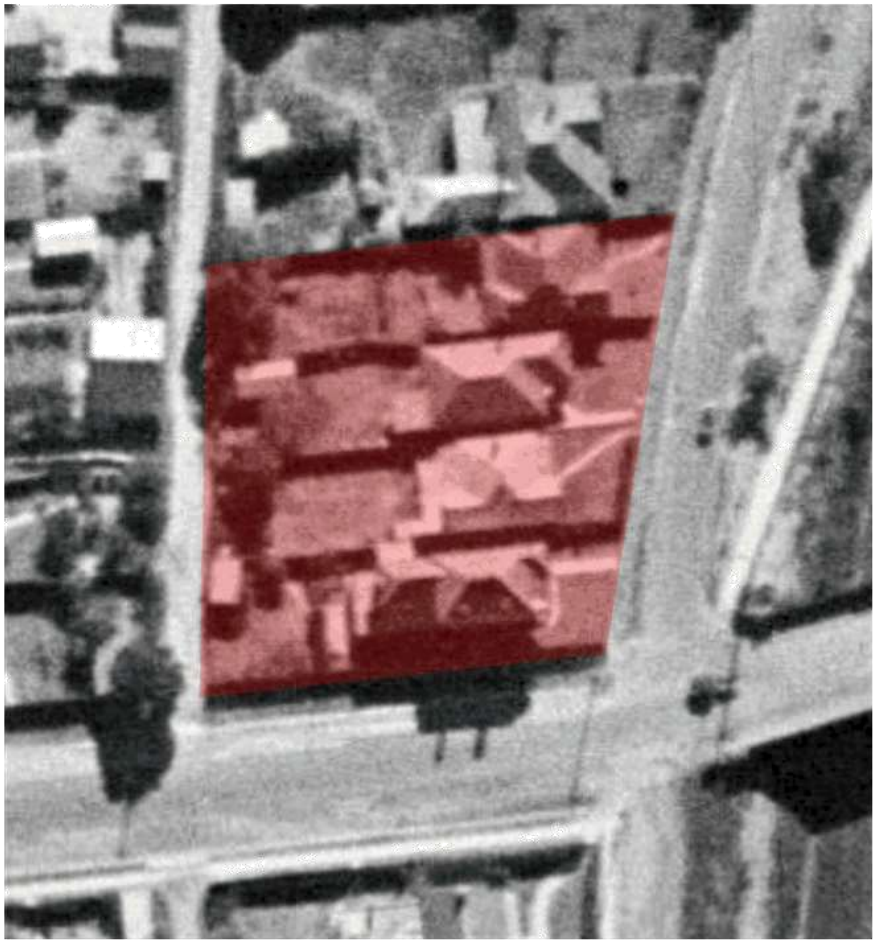


Figure 22 — Extract from 1943 aerial of Sydney showing 1-7 Station Street. (Source: NSW Land & Property Information, SIX Maps)

5.3.1 1 Station Street

Lot 34 of Section 1 of DP 976 was sold in March 1886 to Arthur Ross Nott of Sydney, resident secretary of the Federal Building Society, for the sum of £107/19/10.[10] Nott is accordingly listed as the owner of "unenclosed land" in the 1883 Parramatta Rate Book with a value of £4. It was described as land in the succeeding rate books to 1886.

A brick house was erected on the allotment by 1887 when, according to the rate books, AR Nott and John Cole are named the owner and occupier respectively of a brick house in Station Street. By this date the property was valued at £65. "John Cole, schoolteacher" is listed for the first time in Station Street in the 1888 Sands Directory. Joseph W Martin, a constable, succeeded Cole as the occupier of the residence between 1890 and 1892.

[10] Memorandum of Transfer 105836, NSW Land & Property Information.

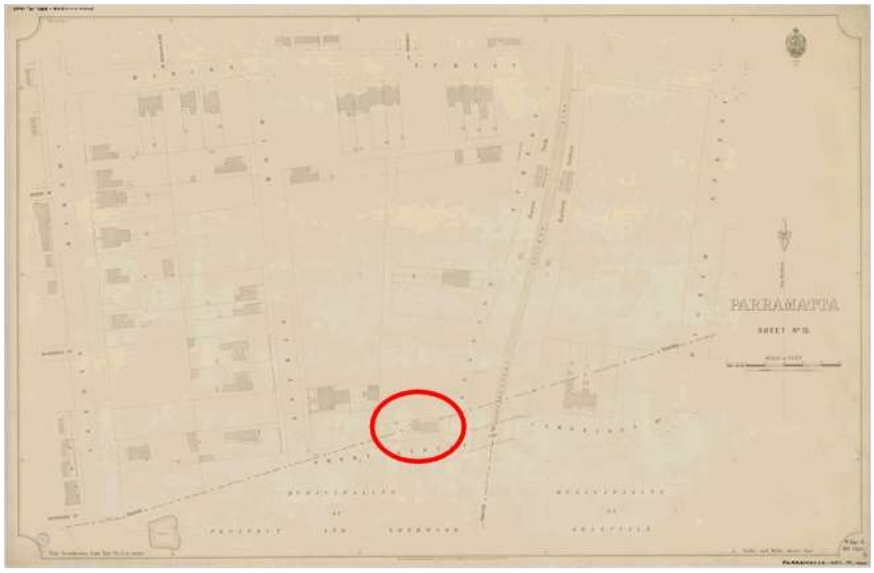


Figure 23 — Detail Survey Parramatta Sheet 15, 1895. 1 Station Street outlined in red thereon. (Source: State Library of New South Wales)

Neil (or Niel) Campbell lived in the subject property from 1896 until his death in November 1912. An obituary in the *Cumberland Argus and Fruitgrowers Advocate* on 9 November 1912 (p6) noted the death of Campbell, "an old and respected resident of Parramatta". Two years later Nott sold the property in October 1914 to one of Neil's sons, James Allen Campbell of Harris Park, line repairer.[11] He lived with other members of the family, namely Mary and Arthur Lake and their children, Rebecca Hariskey (sometimes spelt Harresky) Campbell and Rebecca Campbell.

James (Jim) Campbell owned and occupied 1 Station Street until his death in January 1946. Probate of his will was granted to Adelta Rebecca Lake. The property passed by transmission in September the same year to Adelta Rebecca Lake and Rebecca Hariskey (sometimes spelt Harresky) Campbell (niece and aunt respectively) as tenants in common.[12] The latter passed away in December 1946 whereupon the property passed by transmission to Adelta Rebecca Lake. She lived in the residence until at least 1980 and died at Castle Hill in February 1986. It is presumed she lived in 1 Station Street until 1983 when the property was sold to Chalced Pty Ltd.[13]

In March 1984, Chalced Pty Ltd lodged a successful building application to Parramatta Council for "stairway" estimated to cost $3000; the builder was Projcon Pty Ltd.[14] The property changed hands in November the same year to Eric Morris and again in 1987 to Stephen Hendry Edward and Jennifer Jayne Edwards as joint tenants. 1 Station Street has been most recently occupied by Stephen Edwards Constructions Pty Ltd.

[11] Certificate of Title Vol 786 Fol 121, NSW Land & Property Information.
[12] Certificates of Title Vol 5603 Fols 246 & 247, NSW Land & Property Information.
[13] Certificate of Title Vol 5851 Fol 184, NSW Land & Property Information.
[14] 84/81, Building Register 1984, Parramatta City Council Archives.

A Conservation Management Plan for No. 1 Station Street has been prepared by Architectural Projects and forms part of the material submitted for this Planning Proposal.

5.3.2 3 Station Street

3 Station Street is located on Lot 33 of Section 1 of DP976. Lot 32 and 33 were sold in June 1884 to James Bligh Johnston junior of Windsor.[15] JB Johnston is accordingly named the owner of "unenclosed land" valued at £9 in the 1883 rate book. Commencing in the 1898 rate book, the mortgagee, Harrison Jones & Devlin, is named the owner of Lots 32 and 33 of Section 1, still described as "unenclosed land".

Harrison Jones and Devlin Limited (mortgagees) exercised power of sale of the land in 1908 to Walter John Airey of Parramatta, auctioneer. He simultaneously sold the allotments to Florence Charlotte Watsford of Parramatta.[16] She in turn sold same in July 1911 to William Casey of Parramatta, railway official and his wife Johanna as joint tenants.

A cottage was erected on this land by 1917 when Horace N Lynch is named in the Sands Directory in Station Street between the houses of James Campbell (No. 1) and Michael Farrell (No. 7). Earlier listings in the street make it difficult to confirm an earlier construction date. Irrespective of the exact date the house was built, Johanna and William Casey never occupied the property, instead leasing 3 Station Street to a succession of tenants including Thomas J Riordan, A Jennings, Horace Spencer and Archibald Osborne.[17] In the 1924 valuation roll, the property is described as "D.F. B. ON B. CTGE. FOUR RMS. K. IRON RF."

In July 1937 Johanna and William Casey conveyed Lot 32, the undeveloped portion of their property, to Arthur Joseph Casey of Guildford.[18] Two years later the latter conveyed a small part of Lot 32 to Johanna and William Casey; thereafter 3 Station Street was described as Lot 33 and Part Lot 32 – (B).

The Caseys sold 3 Station Street in 1958 to William Clive Spencer, butcher and Reginald George Spencer, nurse. They leased the property as an investment. In 1968 they sold the site to Warren George Honeman, the then resident. He conveyed the property in 1977 to RDU Pty Limited. Coinciding with the change of ownership, a successful building application was lodged in December 1977 by the new owner for a garage estimated to cost $4800.[19]

In 1985 the property changed hands to the Caravan and Camping Industry Association of New South Wales.[20]

The property has no heritage significance.

[15] Certificate of Title Vol 700 Fol 152, NSW Land & Property Information.
[16] Ibid.
[17] Sands Directory to 1932/33 when the directory ceased publication.
[18] Certificate of Title Vol 700 Fol 152, NSW Land & Property Information.
[19] 77/393, Building Register 1977, City of Parramatta Archives.
[20] Certificate of Title Vol 10845 Fol 95, NSW Land & Property Information.

5.3.3 5 Station Street

5 Station Street is located on Lot 32 of Section 1 of DP976. Lot 32 and 33 were sold in June 1884 to James Bligh Johnston junior of Windsor.[21] JB Johnston is accordingly named the owner of "unenclosed land" valued at £9 in the 1883 rate book. Commencing in the 1898 rate book, the mortgagee, Harrison Jones & Devlin, is named the owner of Lots 32 and 33 of Section 1, still described as "unenclosed land".

Harrison Jones and Devlin Limited (mortgagees) exercised power of sale of the land in 1908 to Walter John Airey of Parramatta, auctioneer. He simultaneously sold the allotments to Florence Charlotte Watsford of Parramatta.[22] She in turn sold same in July 1911 to William Casey of Parramatta, railway official and his wife Johanna as joint tenants.

In July 1937, Johanna and William Casey conveyed Lot 32, the undeveloped portion of their property, to Arthur Joseph Casey of Guildford.[23] He simultaneously lodged a successful building application to Parramatta Council to erect "brick cottage" in Station Street estimated to cost £900.[24] Arthur Joseph Casey, railway clerk, is accordingly listed as the owner and occupier of the cottage at 5 Station Street in the 1939 valuation roll. Also in 1939, Casey conveyed a small part of Lot 32 to Johanna and William Casey; thereafter 5 Station Street was described as part Lot 32 – (A).

Arthur Casey conveyed the property in September 1945 to himself and his wife, Esme May Casey as joint tenants.[25] In 1954, AJ Casey carried out additions to the building, estimated to cost £300, constructed by AM Slater.[26] The Caseys lived in 5 Station Street until Arthur's death in 1980. The property passed by transmission to Esme May Casey.[27] Esme died in 2004 at Carlingford, "late of Harris Park", suggesting that she resided at 5 Station Street just before her death.

The property has no heritage significance.

5.3.4 7 Station Street

In March 1883, Solomon sold Lot 31 of Section 1 to Samuel Phillips of Pitt Town, farmer[28] for the sum of £74/7/1.[29] Phillips is accordingly named the owner of "unenclosed land" in the 1883 Parramatta Rate Book with an annual value of £5.

The allotment remained undeveloped until 1909 when Samuel Phillips sold the land to Michael Farrell of Parramatta, grocers assistant in May.[30] Farrell mortgaged the land in September 1909, presumably to raise the capital required to build upon the lot. The Council gave permission in October to the

[21] Certificate of Title Vol 700 Fol 152, NSW Land & Property Information.
[22] Ibid.
[23] Certificate of Title Vol 4863 Fol 242, NSW Land & Property Information.
[24] 37/120, Building Register, City of Parramatta Archives.
[25] Certificate of Title Vol 5098 Fol 129, NSW Land & Property Information.
[26] 54/99, Building Register, City of Parramatta Archives.
[27] Ibid.
[28] Certificate of Title Vol 656 Fol 50, NSW Land & Property Information.
[29] Memorandum of Transfer 69129, NSW Land & Property Information.
[30] Ibid.

building application submitted by S Lucas "*to erect a cottage in Station Street for Mr H Farrell* [sic]."[31]

According to the *Sands Directory* Michael Farrell was the occupant of the unnumbered residence in Station Street from 1911 until 1919. Thereafter the house was leased to a succession of tenants including Walker R Paul, Alfred W Bayly and CG Gregory. Farrell conveyed 7 Station Street in January 1929 to Edna Mary Farrell of Parramatta, spinster. Later in the same year she married Donaldson C Walker. The Walkers lived here for a few short years before moving to the Northern Beaches of Sydney by 1933. Thereafter the Valuation Lists name Mrs (Edna) May Walker as the owner of the subject site until her death in 1969 at Fairlight. It is not known who occupied the property in the intervening period.

The subject site was conveyed in October 1969 to her widower, Donaldson Cannon Walker of North Balgowlah, retired insurance inspector, and their son Geoffrey Michael Walker of Killarney Heights, dentist. Following the death of Donaldson Walker in 1978, the subject site passed to Geoffrey Michael Walker in February 1983. He owned same until August 1988 when it was sold to Premier Fire Protection Pty Limited.[32] That company lodged a successful building application to Parramatta Council in mid-December for "adds office" estimated to cost $50,000; the application as approved on 31 March 1989.[33]

The works undertaken with approval of Council almost doubled the size of the original building and resulted in substantial removal of original finishes and details.

The commercial property was purchased by the Greek Orthodox Archdiocese of Sydney in August 2005 and in 2006, they established the Greek Welfare Centre there as a regional office in Western Sydney, to service the needs of people of Greek background and the wider community offering a range of programs and services, a use that it continues at the present time.

A detailed Heritage Assessment of No. 7 Station Street has been prepared by NBRS+PARTNERS and was reviewed by Graham Brooks & Associates and Architectural Projects. That report forms part of the material submitted with the Planning Proposal for One Station Street.

6.0 THE PLANNING PROPOSAL

The Planning Proposal in this application seeks a site amalgamation to allow for the conservation of No. 1 Station Street in accordance with a separate Conservation Management Plan, the demolition of No.s 3, 5 and 7 Station Street and the increase of development potential to allow for a high density, mixed use development adjacent to Harris Park Station.

An Urban design Study prepared by Allen Jack & Cottier suggests that this corridor is a natural expansion of the Parramatta CBD providing increased development adjoining the major transport corridor afforded by the Great Western Highway and the railway line.

[31] "Parramatta Council", *Cumberland Argus and Fruitgrowers Advocate*, 20 October 1909, p3.
[32] Certificate of Title Vol 11175 Fol 52, NSW Land & Property Information.
[33] 88/431, Register of Building Applications 1988, Parramatta City Council Archives.

An indicative building envelope has been developed which takes into consideration the existing heritage item at No. 1 Station Street and the relationship of the site to other heritage items and existing medium density development in the vicinity. It is however noted that the detailed design of any building will be subject to an architectural design competition to inform the lodgement of a Development application.

Appropriate setbacks are proposed to maintain a suitable setting for the heritage item which occupies a prominent corner location. A two storey podium form is proposed to define the streetwall to Station Street and Raymond Street, a recessed transitional zone of two levels above the podium and to a tower component that cantilevers out at the upper levels.

The planning proposal is considered appropriate for the following reasons:
The site occupies a strategic location

- *within 100m walk to Harris Park Railway Station*
- *within 10 minutes walk to Parramatta City Centre including the Parramatta rail interchange and Westfield shopping centre.*
- *Adjacent to the 'Auto Alley' Urban Renewal precinct.*
- *Separated from the Harris Park town centre and conservation area by the rail corridor.*
- *In proximity to a comprehensive network of public open space.*

The opportunities identified for the renewal of the area by providing increased development potential include the following:

- *Strengthen Harris Park Station as the main transport hub for the Auto Alley precinct and Parramatta's second inner city station.*
- *Transform Station Street into a tree lined pedestrian priority street with high quality public domain and a range of active and passive gathering spaces.*
- *Encourage lot amalgamations that facilitates the development of high density, mixed use development close to major transport links.*
- *Through the Design Excellence process, One Station Street has the potential to be a landmark 'bookend' tower that marks the southern edge of the Parramatta City Centre.*
- *Facilitate high density living within 100m of Harris Park Station and 10 minutes walk to Parramatta City Centre, Sydney's second CBD.*
- *The heavy rail corridor forms an urban barrier that clearly separates Station Street West + Auto Alley (High Density) from the Harris Park Town Centre within the Harris Park West Conservation Area.*

In preparing the planning Proposal the designers have had the following Key Principles:

- *Ensure an appropriate heritage interface to One Station Street heritage item.*
- *Assess visual and potential overshadowing impacts on surrounding heritage items and conservation areas.*
- *Assess impact on recent medium density developments and approved DA's in the surrounding area.*
- *Review demolition of No. 7 Station Street.*
- *Consider the visual impact from within the Harris Park Conservation Area.*
- *Consider visual impacts on heritage and conservation areas in the adjoining Holroyd Local Government Area.*

6.1 Potential Building Envelope

A building envelope has been determined by the Urban Design Consultants in consultation with the Town Planning Consultant and the Heritage Consultants which addresses appropriate setbacks from adjoining sites, separation from any adjoining developments and provision of appropriate curtilage and visual setting for the retained heritage item at No. 1 Station Street and the Conservation Area opposite in Tottenham Road.

A setback on the Station Street frontage is proposed to provide a substantial streetscape setting at ground level and extending over the height of the two storey podium which reflects the scale of the existing item at No. 1 Station Street.

The podium is separated from the blank northern wall of the heritage item by a distance of three metres and any connection between the two structures would be set well back from the street frontage and limited to a single storey link.

At the rear of the heritage item any two storey podium development would be separated by a distance of six metres from the service wing of the heritage item with the potential for a light weight glazed awning over the courtyard space created at this part of the site of single storey scale.

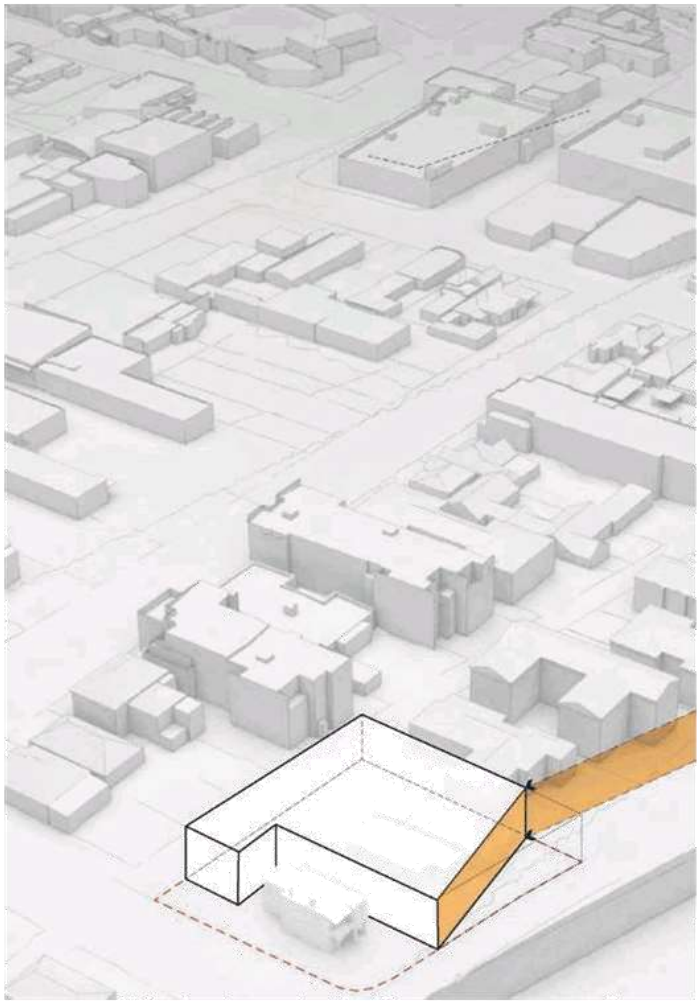
A transitional zone of two storeys is proposed above the podium to create a substantial visual setback from the item when viewed from the surrounding locations where it has visual prominence.

The tower form is aligned with the street frontage and the rear lane alignment and cantilevers out over the transitional levels.

The proposed building envelope provides an appropriate relationship of the new development to the heritage item, the conservation area in Tottenham Road and in relation to surrounding heritage items and views and vistas from the surrounding area including the Harris Park Conservation Area to the north east.

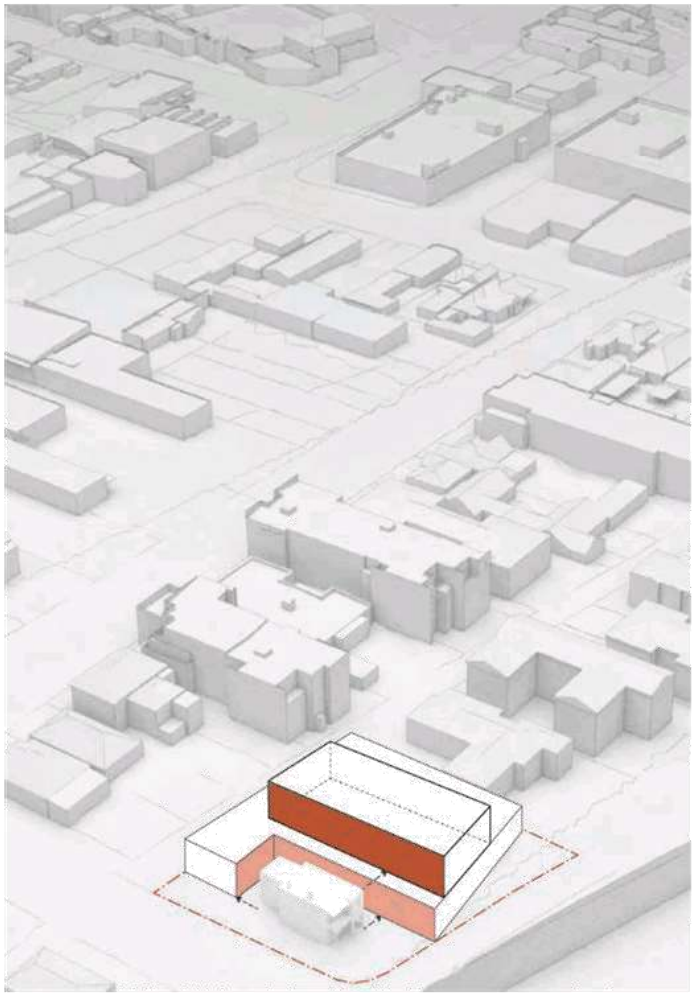
The potential building envelope is shown on the drawings prepared by AJC and represent parameters that will be refined by a design excellence competition to arrive at an appropriate building design for the site.

An indicative design is shown to indicate how the envelope parameters can be used to protect the setting of the heritage item.



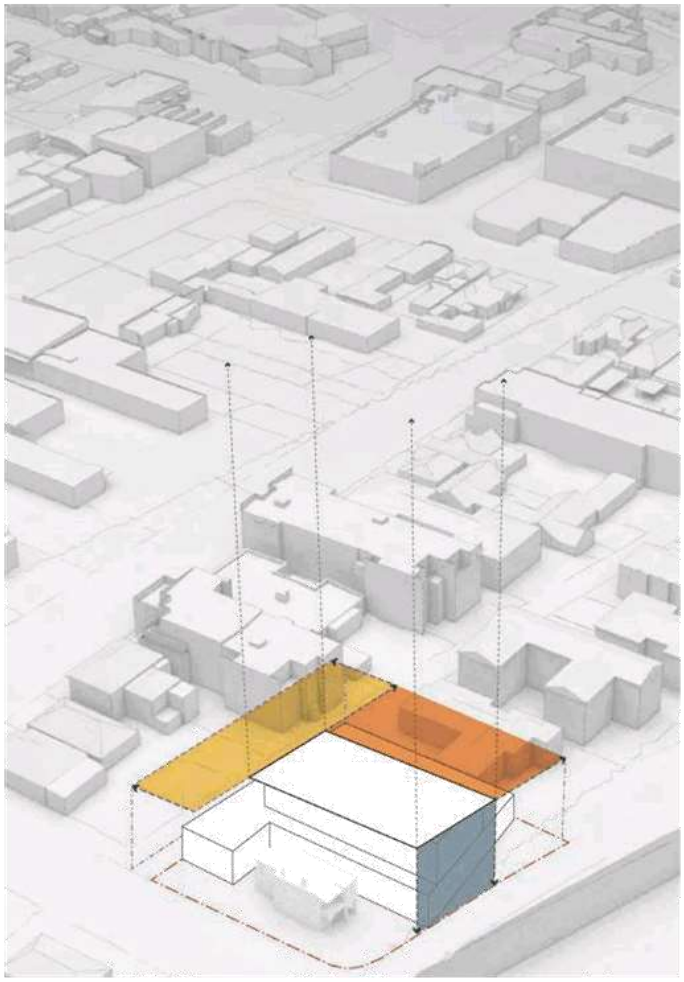
Consistent Street Wall

The existing buildings to the north of the subject site should define the street alignment at podium level, in order to ensure consistency in the streetscape and character of Station Street The preferred option adopted a 2-storey street wall to support the development of the precinct and as a direct response to its strategic context. Furthermore, heritage assessment and advice indicated the view of the heritage item from the north was not a significant view, consequently the podium was aligned to achieve a better built form and tower footprint



Articulation Zone

With the site and the heritage item, the building envelope must take into consideration an appropriate architectural response, so as not to diminish or detract from the heritage buildings.
In response to the proportions of the heritage item the preferred option suggests a **2-storey** height articulation zone above the podium; and a **6 metre** setback from the northern edge of the heritage item, or a **3 metre** setback from the podium edge, as to minimise the visual impacts to the heritage item.



A Viable Tower Footprint

The following setbacks were used in order to determine the tower footprint;
12 metre rear setback from the centreline of Raymond Lane;
12 metre side setback from the northern edge of the site boundary;
0 metre front setback from Station Street boundary
In order to maximise the residential floor plate within the tower form, the frontage along Station Street extrudes towards the site boundary.

The preferred option suggests a very slender and efficient tower footprint that minimizes any cantilevering impact along Station Street West and supports development of the precinct as a whole; particularly the immediately adjacent sites.
The height of the tower is not critical to the setting of the item.

Figure 24 - Artists impression of potential development outcome showing the physical and visual relationship to No. 1 Station Street.

7.0 HERITAGE IMPACTS

7.1 Archaeology

There is no identification of significant archaeology associated with the subject sites which were first developed in the last decade of the 19th and first decades of the 20th centuries. Excavation proposed for future redevelopment is unlikely to have any adverse impact in regard to archaeology on the subject sites.

7.2 Old Government House and Government Domain

Old Government House and Government domain for part of a world Heritage Listing for Colonial development and are protected by legislation that defines adverse impacts on views to and from the area as well as the setting of the heritage domain. The subject site while located on elevated land above the Parramatta CBD is outside the areas of visual sensitivity identified for Old Government House and Government Domain World Heritage Precinct and development as proposed would not be considered to detract from the World Heritage values associated for those sites.

7.3 Views & Vistas to and from Heritage Items and Conservation Areas

The proposed amalgamated site for future development occupies a prominent location at a high point above Parramatta with the landforms to the east and south falling away. Development of this site will therefore have some visual prominence when viewed from surrounding locations.

Harris Park west Conservation Area

The views from the West Harris Park Conservation area are substantially removed by distance and perimeter medium density housing development to be of any significant heritage concern. While the proposed development would be visible from locations within the conservation area, its presence as a background element would not detract from the identified heritage values of the

area nor would it visually dominate any of the existing streetscapes within that conservation area.

Figure 25 - View to the subject site from the edge of the Harris Park West Conservation Area across the Great Western Railway Line looking south .Views to higher density development already exists from this edge of the conservation area to the west and north.

Tottenham Road Conservation Area

Despite the proximity of this area to the subject site its orientation to the east and the falling topography suggest that the proposed development will be adequately separated by the retention of No. 1 Station Street and the podium scale and form of the suggested tower. In my estimation the development will not visually dominate this area of low scale housing or affect the identified heritage significance of the individual properties or the area as a whole. View studies of the proposed building envelope from this area have been evaluated as part of this process. View studies of pedestrian level views of any final design outcome should also be tested.

49 – 51 High Street Parramatta

This isolated heritage item is located to the west of the subject site but is in close proximity to it. Current redevelopments adjoining the site and to the rear of it have partially separated it from the influence of the subject site. Immediate views of the building in High Street are unlikely to be unreasonably affected by the proposed tower. View studies in this regard should be tested.

Figure 26 - Streetscape view of 49 - 51 High Street looking towards the subject site. Any new development will be seen to rise above this building in these views.

3,5 &7 Cambridge Street Harris Park

These houses are orientated to the south and while on the same level as the top of the subject site at No. 1 Station Street are sufficiently removed from the development site to be affected in a minor manner by the presence of a tower structure in the background. In the streetscape of Cambridge Street and its extension as Raymond Street the houses will continue to be read in conjunction with No. 1 Station Street as their principal context. View connections between these houses at the rear of 49 – 51 High Street will be removed by any proposed development irrespective of height.

No. 1 Station Street

Views to and from No. 1 Station Street will be preserved as part of the proposed Planning Proposal with the building envelope designed to maintain a two storey context immediately adjoining the item and a recess provided to maintain its visual presentation to the street. The proposed new built form envelope does not detract from the existing 'tower' element on the front façade of the item or its corner presentation to Raymond Street. Future development options will be tested as part of a design competition to ensure compatibility in this regard.

Views to the rear of the item which have lower significance will be partially obscured by proposed additions but will not affect its contribution to the area or its relationship with the Tottenham Road Conservation Area opposite. An appropriate gap between the rear of the item and the new building envelope has been provided. Any development connecting the heritage item to the new development should be light weight and of only single storey scale.

Figure 27 - Zoomed view of visual context looking west along Cambridge Street to No. 1 Station Street and the rear of 49 – 51 High Street any development of No. 3 & 5 Station Street would obscure the visual connection to the rear of the houses in High Street.

7.4 Curtilage and Setting of No. 1 Station Street

A detailed Conservation Management Plan has been prepared for this property by Architectural Projects and this should form part of any brief for future building designs.

The existing curtilage of No. 1 Station Street is its lot boundary while the visual setting extends to the east along Cambridge Street, to the south down Tottenham Street and along the south edge along Raymond Street. There are no significant views or setting associated with the rear lane to the west of the property and no strong connection between this isolated Victorian house and any other similar development.

No. 1 station Street has been a commercial property for some decades and notwithstanding its established character as a two storey Italianate villa it has little stylistic or physical connection with any other development in the immediate vicinity.

The Planning Proposal facilitates a design that respects the scale and corner location of the heritage item and maintains an appropriate setting for it in this transitional location. The three metre separation between the item and the proposed podium and the alignment of the podium with the tower element of the heritage item, when combined with the transition zone above and visual separation of the tower component provides an acceptable setting for the heritage item. The integration of the heritage item within the development also ensures that recommendations of the Conservation Management Plan will be implemented to conserve and enhance the heritage values of this property. This will also be managed and preserved through an architectural design competition to achieve design excellence for this site.

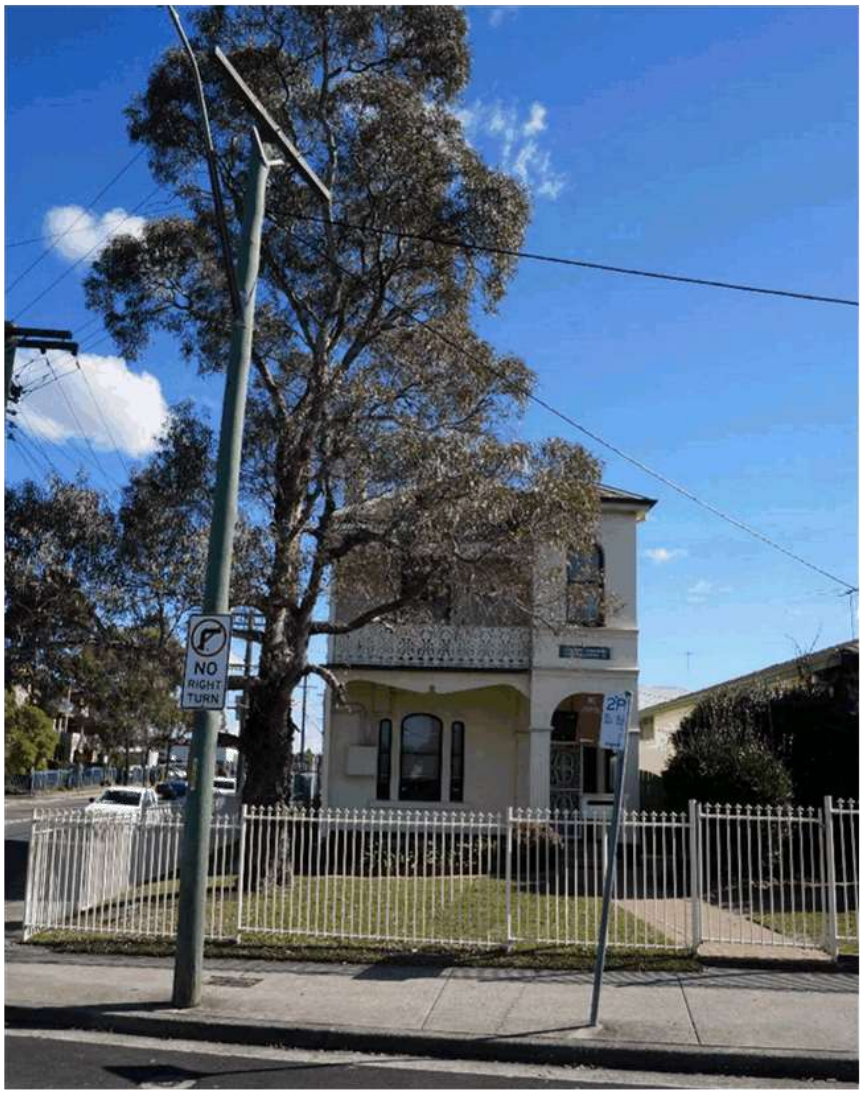


Figure 28 - No. 1 Station Street principal street presentation. The proposed 3 metre separation of a two storey podium along the northern boundary and the setback created to the street provides visual relief for the setting of the heritage item in this location.

Figure 29 - Corner presentation of No.1 Station Street showing blank wall facade to Raymond Street. This presentation will remain unaltered and represents the pedestrian level view of the heritage item.

7.5 Demolition of No. 7 Station Street

In relation to No. 7 Station Street a detailed heritage assessment has been made of this building which was identified as a Local Heritage Item in the Parramatta Heritage Study without any consideration of the substantial changes that had been made to it or the limited value that it represented as an intact example of early 20th century residential design.

That assessment which was peer reviewed by two independent heritage consultants indicated that the place did not meet the threshold for individual heritage listing for any of the standard heritage criteria and that the original listing had been ill informed and was not valid. A copy of the assessment and the Peer Reviews forms part of the planning Proposal for the site.

Demolition of No. 7 Station Street will have no impact on any heritage values for the Parramatta Local Government area and will not have any significant impact on any identified streetscape character in this location.

Redevelopment of the site as proposed will have a more beneficial effect on the wider community than retention of the highly modified building which has been assessed as having very low historic, aesthetic and streetscape values.

Demolition of a listed heritage item is not prohibited by the controls of the Parramatta Local Environmental Plan or the Parramatta Development Control Plan. Appropriate assessments in this regard support the demolition.

Figure 30 - No. 7 Station Street seen across the railway bridge with contemporary development located to the rear in High Street.

The whole of the roof form behind the first chimneys is a modern modification as is the detailing of the front verandah and all of the internal finishes. The building is not considered to have heritage values that warrant its listing as a Local heritage item.

8.0 VIEW STUDY

AJC have prepared a series of streetscape views based upon the raw building envelope that has been determined to be the most appropriate to allow future development while protecting local heritage values.

The viewpoints are those considered to be critical to the surrounding areas and indicate that the built form maintains views to One Station Street.

Figure 31 - Cambridge Street view to the subject site. Showing the adopted building massing to achieve appropriate separation from the heritage item at One Station Street.

Figure 32 - View to the site from the Harris Park Conservation Area showing the substantial visual separation.

Figure 33 - View up Tottenham Road showing the cutaway around the heritage item.by the adopted building envelope.

Figure 34 - View along Raymond Road from High Street looking towards the heritage item at one Station Street.

Figure 35. View from the intersection of Marion and High Street to the south east

9.0 CONCLUSIONS & RECOMMENDATIONS

The Planning Proposal - as described above does not adversely or unacceptably impact upon the identified heritage significance of the nearby local heritage items, The Proposal can be realised in a way which accords with the management recommendations and conservation policies provided for nearby heritage places.

Appropriate consideration has been given to the immediate setting of No. 1 Station Street; views from the listed houses in Tottenham Street to the south; views to the heritage items in High Street and Cambridge Street; views from within the Harris Park Conservation Area to the east and any impact on the heritage listed elements in Marion Street to the north.

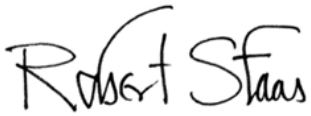
The resulting development would have positive social and planning outcomes for this part of the Parramatta City Centre and by implementing design excellence provisions can improve the urban fabric of the area in a positive manner.

The height, density and general form indicated in the Urban Design Study accompanying this planning proposal and any site specific development control plan or voluntary planning agreement that follows those characteristics are likely to have a minor and acceptable heritage impact.

When a specific development arising from the provisions of the Planning Proposal is proposed an assessment as set out by the NSW Heritage Office (now Heritage Division of the Office of Environment and Heritage) publication 'Statements of Heritage Impact', 2002 should be addressed.

The Conservation Management Plan for No. 1 Station Street by Architectural Projects should be endorsed by Council and its policies and recommendations implemented as part of any future development approval that includes this site.

A photographic archival record of the existing structure at No. 7 Station Street and the general context of the surrounding heritage items should be prepared and lodged with Council's Local studies collections prior to any future work being undertaken on the subject site.



Robert Staas
Director / Heritage Consultant
NBRS+PARTNERS

PEER REVIEW

1-7 Station Street West
Parramatta

Weir
Phillips
Heritage

Level 19
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Sydney NSW 2011
(02) 8076 5317

March 2016

1.0 INTRODUCTION

1.1 Preamble

Weir Phillips Heritage has been asked to provide a Peer Review of the document entitled *Planning Proposal Heritage Impacts Assessment: One Station Street, Parramatta (1-7 Station Street West, Parramatta)* prepared by NBRS + Partners and dated January 2016.

The Planning Proposal Heritage Impact Assessment (*PPHIA*) assesses the potential impacts of a proposal developed by AJ+C and JBA Planning for the owners of the site. The site comprises Nos. 1, 3, 5 and 7 Station Street West, Parramatta. The proposal is for the demolition of Nos. 3, 5 and 7 Station Street West, retaining No. 1 Station Street West, and the construction of a tower block on a two storey podium on the site. The *PPHIA* identifies Nos. 1 and 7 Station Street West as heritage items and locates a number of other heritage items/conservation areas within the immediate vicinity of the site or within its wider setting.

1.2 Authorship

This report was prepared by James Phillips, B.Sc.(Arch), B.Arch, M.Herit.Cons.(Hons), of Weir Phillips Heritage.

1.3 Limitations

The author had access to the site and the documents listed under Section 1.6 below. No additional historical research or analysis was provided for. No physical intervention was carried out. No Aboriginal or historical archaeology was provided for.

1.4 Methodology

This report was prepared with reference to guidelines for assessment published by the NSW Heritage Office/Division, including *Assessing Heritage Significance* (2001) and *Statements of Heritage Impact* (2002 update).

A site visit was carried out in February 2016. Unless otherwise stated, the author took the photographs in this report on that occasion.

1.5 Site Location

The site is located on the north western corner of Station Street West and Raymond Street, Parramatta (Figure 1). The site is identified as Lot 34 Section 1 D.P. 976 (No. 1 Station Street West); Lot 33 Section 1 D.P. 976 (No. 3 Station Street West); Lot A D.P. 340959 (No. 5 Station Street West); and Lot 31 Section 1 D.P. 976 (No. 7 Station Street West).

Figure 1: Site Location.
NSW Lands Department; annotations by WP Heritage.

1.6 References

1.6.1 Documents Provided

- AJ+C Architects, *One Station Parramatta: Draft Urban Design Report.*
- Architectural Projects, 1608-1, *7 Station Street, Parramatta. Conservation Management Plan*, November 2015.
- NBRS+ Partners, *Planning Proposal Heritage Impacts Assessment: One Station Street, Parramatta*, January 2016.

1.6.2 Council Controls

- *Parramatta Local Environmental Plan 2011.*

2.0 PEER REVIEW

2.1 Planning Instruments and Heritage Listings

The site is located within the City of Parramatta. The *PPHIA* cites the primary planning control for the site as being the *Parramatta City Centre Local Environmental Plan 2007* (*LEP 2007*).

It is noted that, as of 18 December 2015, the *LEP 2007* has been consolidated with the *Parramatta Local Environmental Plan 2011* (Amendment 10). Consequently, the principal planning controls for the site is now the *Parramatta Local Environmental Plan 2011* (*LEP 2011*). The correct statutory heritage listings for the site are as follow:

- Two Storey Residence, No. 1 Station Street West, Parramatta. Local significance. I744. Listing boundary: Lot 34 Section 1 D.P. 976.
- Single Storey Residence, No. 7 Station Street West, Parramatta. Local significance. I745. Listing boundary: Lot 31 Section 1 D.P. 976.

The *PPHIA* identifies the following heritage items as being within the vicinity of the site under the *LEP 2007*. The items identified by the *PPHIA* are all listed by the *LEP 2011* as follows:

Under Schedule 5 Part 1:

- Attached Houses, Nos. 49 and 51 High Street, Parramatta. Local significance. I710.
- Single Storey Residence, No. 1 Cambridge Street, Harris Park. Local significance. I264.
- Single Storey Residence, No. 3 Cambridge Street, Harris Park. Local significance. I265.
- Single Storey Residence, No. 5 Cambridge Street, Harris Park. Local significance. I266.
- Single Storey Residence, No. 48 Wigram Street, Harris Park. Local significance. I303.

Under Schedule 5 Part 2:

- Harris Park West Conservation Area. Local significance.

It is further noted, that given the massing and scale of the proposed tower, Council will consider other items, not identified by the *PPHIA*, as being potentially impacted upon. These items include, but are no limited to other items in High Street to the north of the site and items in Marion Street, also to the north.

Raymond Street forms the boundary with the Holroyd Local Government Area. The *PPHIA* identifies a number of items, within the Tottenham Road Conservation Area, located within the vicinity of the site as listed by Schedule 5 Part 1 and 2 of the *Holroyd LEP 2013*. This plan remains in force. The heritage items are thus correctly identified.

2.2 Heritage Assessment of the Existing Buildings on the Site

The *PPHIA* adopts best practice approach to the assessment of the significance of the existing buildings on the site by providing a history of the site that clearly identifies the gradual subdivision of the original grant to achieve the lot boundaries, the construction date of the extant dwellings and the owners and occupiers over time. The brief history of the surrounding area as a whole is provided to place the site history in context.

With regard to the non-heritage listed buildings on the site (Nos. 3 and 5 Station Street West), Parramatta Council (unlike other Sydney councils) do not appear to provide any guidelines for the type, if any, of assessment that is required for the demolition of non-heritage listed buildings that are not located within a Conservation Area. The *PPHIA* provides sufficient history of Nos. 3 and 5 Station Street West to determine when the dwellings were constructed and to establish that they do not have significant associations with important people or events. There is, however, no description of the sites and no analysis, however brief, to support the conclusion that the properties have no heritage significance. It would be useful to have a brief

description of each property and a short explanation as to why they do not have heritage significance.

With regard to No. 1 Station Street West, it is noted that a Conservation Management Plan has been prepared for this site by Architectural Projects. The history and assessment contained within these documents follow NSW Heritage Division guidelines.

With regard to No. 7 Station Street West, it is noted that a separate heritage assessment of this site has been prepared by NBR+S and two peer reviews carried out. The NBR+S report follows the NSW Heritage Division guidelines for the assessment of heritage items. The author concurs with the conclusions reached by all three reports that the site does not meet the threshold for listing as a local heritage item.

2.3 Heritage Impacts

It is proposed to construct an, up to, 43 storey mixed-use commercial residential building on the site. This involves the demolition of the heritage item at No. 7 Station Street West and the unlisted dwellings at Nos 3 and 5. No. 1 Station Street West is to be retained and conserved.

No.1 Station Street West is a freestanding two storey terrace-style dwelling; No. 7 Station Street West is a single storey dwelling. Normally such dwellings, if heritage listed, are afforded protection under 5.10 (5) of the *LEP 2011*, which states:

The consent authority may, before granting consent to any development:
(a) on land on which a heritage item is located, or
(b) on land that is within a heritage conservation area, or
(c) on land that is within the vicinity of land referred to in paragraph (a) or (b),require a heritage management document to be prepared that assesses the extent to which the carrying out of the proposed development would affect the heritage significance of the heritage item or heritage conservation area concerned.

Under Part 5.10 of the *LEP 2011*, assessment is required to be carried out to determine the extent to which the carrying out of the proposed development would affect the heritage significance of the heritage items.

As stated above, the author concurs with the three assessments prepared by others that No. 7 Station Street West does not meet the threshold for listing as a heritage item on the *LEP 2011*. Its demolition will thus have an acceptable impact on the heritage significance of Parramatta.

It is proposed to retain No. 1 Station Street West. The impact of the proposed tower on this item must therefore be considered.

The desired future character of the area is for tower buildings of similar height and bulk to achieve planning densities required to meet the future population of Sydney. In planning for such densities, two storey free-standing dwellings, such as No. 1 Station Street West, are not anticipated as part of the dense urban development proposed in the vicinity of Harris Park Railway Station.

Every effort has been made to maintain presence of No. 1 Station Street West in the streetscape in relation to the existing lower scale development to the south of Raymond Street and in light of the proximity of such a tall building as that proposed. In relation to the planning requirements for the area and the requirement that heritage items are retained and conserved, an acceptable compromise has been

reached. This involves the setback of the proposed tower from the Heritage Item and partially cantilevering over it above a certain height.

The potential impacts, including overshadowing, on the Tottenham Road Conservation Area (Holroyd Council) on the southern side of Raymond Street have been considered. As shown by the shadow diagrams that accompany the concept plans, the overshadowing of this area occurs only briefly, around midday. It is further noted that the orientation of this area to the east and the falling topography, together with the retention of No. 1 Station Street and the two storey podium form of the tower, will help mitigate impacts on the Conservation Area.

With regard to the heritage item at No. 49-51 High Street, it is agreed that current redevelopments adjoining the site and to the rear of it have partially separated it from the influence of the subject site. View of the item from High Street will not be blocked. The tower will, however, been visible within the background of this item.

Nos. 3, 5 and 7 Cambridge Street are located on the opposite side of the railway line, which provides a distinct visual barrier. The tower will read as part of their background setting. It will be sufficiently removed for the impact to be acceptable.

2.4 Compromised Development

The proposal to retain No. 1 Station Street West is, however, a compromise. A strong case can be made for accepting the demolition of this item to allow a better architectural and amenity outcome for the proposed development.

The justification would be as follows:

1. The existence of the heritage item at No. 1 Station Street West places an undue constraint on the proposed tower in terms of the cost of construction and the potential to offer its future residents the best possible amenity.
2. The proposed development, and the development encouraged by Council controls on sites in its immediate vicinity, will not allow the item to be readily understood in its historic context.

   This item requires a low density setting to preserve a meaningful example of its historic context. Not only is the subject site zoned for high-density development, but the surrounding area is similarly zoned. There is little possibility of maintaining a truly appropriate setting for this item in these circumstances.

   There is an inherent conflict in zoning a site with a small-scale heritage item upon it for high-density development of the type encouraged by Council controls. There is no way in which Council's desired future density for the area can be obtained if the standard heritage provisions of the *LEP 2011* and *DCP*, which are themselves informed by best heritage practice, are to be complied with. An example of these provisions is the use of an appropriate massing and scale within the vicinity of a heritage item.
3. The heritage item on the site is one of at least six examples of this type and style of building within the Parramatta Council area. One of these examples, No. 62 Prospect Street, is listed on the State Heritage Register. Analysis could be undertaken to determine if these other items are located in areas that retain a lower density zoning that maintains their setting. If so, an argument could be put forward that the development type represented by No. 1 Station Street West is better represented by other local examples where an appropriate setting is supported by Council controls.
4. Best practice suggests that every effort should be made to incorporate the heritage item into a development to enhance the quality of that development

and to provide for the conservation of the item. In this case the incorporation of the item into the development does not enhance the overall amenity of the development, as the item is not capable of providing a realistic beneficial amenity to the development (i.e., a grand space, a communal facility or the like).

5. It can be argued that the benefits of providing the proposed development with better layout opportunities, particularly at ground level will greatly outweigh the loss of the local heritage item.
6. Clearer provisions in planning controls for such occurrences should be made in the future to allow for the removal of heritage items where they are clearly not fitting into broader planning requirements and offer no significant or unique contribution to the cultural heritage of the State or the Local Government Area.

3.0 SUMMARY

This peer review has considered a report prepared by NBRS + Partners which assesses the heritage impacts of a planning proposal for No. 1-7 Station Street West, Parramatta. The proposal is for the demolition of Nos. 3, 5 and 7 Station Street, the retention of No. 1 Station Street and the construction of a new tower block.

Although No. 7 Station Street is listed as a local heritage item, the author concurs with the conclusions of the NBRS + Partners report, and the conclusions of two independent heritage assessments, that No. 7 Station Street does not meet the threshold for listing as a local heritage item under NSW Heritage Council criterion. It's demolition in order that the proposal might meet other Council planning objectives for this part of Parramatta will thus have a minimal and acceptable impact on the heritage of Parramatta.

It is recommended that the possibility of demolishing No. 1 Station Street West, to allow for a better planning outcome on the site, be actively considered. Should permission for demolition be obtained, a full archival recording to NSW Heritage Council standards and an interpretation strategy demonstrating the history of the site and this part of Parramatta should be prepared.

Heritage Peer Review

1-7 Station Street West, Parramatta

24th February

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Heritage Peer Review: 1-7 Station Street West, Parramatta: Proposed conservation, demolition and new Mixed Use Building

Background

I have been engaged by the owners, Greenrock Property, to peer review the proposed design for the conservation of a heritage item and demolition of three dwellings, one being a heritage item, on the subject sites and the erection of a new residential flat building.

I am a qualified heritage consultant with extensive experience in built environment heritage at the local, state and community level. I am currently Chair of the Heritage Council of NSW. I attach my CV to this review.

I have visited the site and am familiar with this area of Parramatta.

Assessment

Heritage interest in a site most often comes from both the interest in the history of the place, the aesthetics of the place and the impact on the locality. The history can include the associational and social connections to the place and the aesthetics can include the research potential for the site.

The *history* of the site has been researched by NBRS and Partners and by Architectural Projects. The building at No.7 Station Street West has been assessed and is assessed as not meeting the threshold for individual listing whilst the building at No.1 station Street West has been assessed as having heritage significance. I concur with these assessments.

It is often easy to expect that established places should not change, and more so that they should not be demolished, however all buildings change over time, and the amount of change in an area often depends on the condition and significance of the place.

In assessing impact I always consider that there are three basic questions:

- How significant is the place?
- What is its context?, and
- What are the opportunities?

No.1 Station Street West, Parramatta

I support the CMP prepared by Architectural projects for this property. It is accepted that it is a local heritage item that complements the adjoining heritage conservation area in the Holroyd Local Government Area. The building is to be retained.

Nos. 3&5 Station Street West, Parramatta

I accept the conclusions from a detailed investigation made by NBRS that these dwellings are not of local significance and have been heavily modified.

No. 7 Station Street West, Parramatta.

As stated in the NBRS report is a modified early twentieth century residence of a standard form that retains some characteristics of this transitional style of development which is relatively common in the Local Government area. The building has no historic evolutionary or associational values and

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represents typical residential development of the period in which it was built.
The changes to the building to convert it to commercial use have permanently altered its original appearance and form and have obscured original character and detail. It its current form it does not provide accurate evidence of the historic building stock of this area.

The setting of the building amongst later development does not provide support for the setting or contribution of this site to any significant streetscape in the vicinity of the site.

The site does not reach a reasonable threshold for individual heritage listing.

Demolition of the item will not result in any significant loss of cultural heritage to Harris Park, Parramatta City Centre or the wider Parramatta Local Government Area.

Demolition of the item will not have any significant adverse impact on the heritage items and conservation area in the Holroyd Local Government Area adjacent to the boundary of Parramatta across Raymond Street

The detailed heritage assessment has revealed that the site does not meet the threshold for individual listing nor inclusion in a conservation area.

2. What is the context?

The historically most significant development phase of the area occurred in the late Victorian to early twentieth century times consisting of a wide variety of villa dwellings and small scaled individual dwellings.

The site contains the Victorian Villa at No. 1 Station Street West, the Federation Bungalow at No.7 and two non-listed buildings between them, being highly altered bungalows that represent the post WW2 immigration changes to buildings, including aluminium windows, rendered surfaces and altered roof lines.

The site is located opposite Harris Park Station and is in a mixed area of altered bungalows and residential flat buildings. The site is north of the Tottenham Street Conservation Area in the Holroyd Council Area, separated from Parramatta LGA by Raymond Street. The listed item at 1 Station Street West retains a link to the conservation area to its south across Raymond Street.

The context is therefore mixed with No 1 Station Street West having a strong relationship to the conservation area to its south while No. 7 is an altered isolated dwelling in the context with residential flat buildings to its north.

3. What are the opportunities?

All areas, particularly outside conservation areas, change over time and so the question is by how much and in which style?
The significance and the context have been assessed and in this regard one can consider the opportunities and constraints.

The constraints here relate to the contribution that the buildings make to the area and the nature of the adjoining dwellings.

Retention or Demolition?
I have visited the site and inspected the buildings.
I am convinced by my inspection and the Heritage Assessment that the buildings are such that No.1 should be retained for its contribution the adjacent conservation area and No.7 may be demolished due

to its diminished context and altered form and detail.
I am not in favour of reconstruction/replication as new buildings should be configured to suit contemporary living. In this case the proposed residential flat building may be designed as contemporary new development in the low quality streetscape.

New or Old Style?
There is often debate in heritage circles as to whether the additions to a place/area should be in a similar or different style to the original building.
There are various principles that one can apply to the design philosophy for infill, places adjacent to heritage items or alterations and additions to existing places.
The Burra Charter requires that new work should be clearly new. I am of the school of conservation philosophy that when adding to an existing area that the addition may be very contemporary and represent the current architectural aesthetic of the present day. It should be referential to the period however I am not drawn to the pastiche of historicist approach because it usually leads to poor proportions in terms of the original buildings, confusion in understanding the place and the inhibiting of the opportunity for new architecture, in the professional sense. It should also display excellence.

The result of the analysis is that the dwelling at No. 7 Station Street West need not be conserved. A simple contemporary building on the site is appropriate.

A building envelope has been determined by the Urban Design Consultants in consultation with the Town Planning Consultant and the Heritage Consultants which addresses appropriate setbacks from adjoining sites, separation from any adjoining developments and provision of appropriate curtilage and visual setting for the retained heritage item at No. 1 Station Street and the Conservation Area opposite in Tottenham Road.

There are no views to or from heritage items in the vicinity that are detrimentally affected by the proposal.

The issues for the demolition on the subject site are the eventual relationship between No.1 Station Street West and the design of new development at 3-7 Station Street. A well resolved podium will provide a satisfactory neighbour to No.1 Station Street West. There should be a height and scale relationship in the podium between the two buildings at the southern end of the proposed building. Materials and colour are important here as well.

Summary
It appears the issue for the application is that it proposes demolition of a listed heritage item.
There is complete concurrence by five of Sydney's leading heritage practitioners that No.7 Station Street West does not meet the threshold for heritage listing and may be demolished. The legislation allows demolition subject to the level of scrutiny that has been applied.

The subject area is of a mixed style and will change with current controls. The proposal maintains the listed item at No.1, on the subject site, which will complement the transition from the conservation area row in the Holroyd Council conservation area, and provide for redevelopment in accordance with the permissible controls to the north.

These types of applications have a 'recognition of excellence' emphasis and of having the ability to review past listings that did not have the benefit of the subject research.

It is the confidence to accept that No.7 does not satisfy the criteria for listing and to take the opportunity that is provided to redevelop the site.

The subject proposal will maintain the important site characteristics whilst providing a well-designed residential flat/mixed use building on this site which is well located for public transport. The review of the potential amenity impacts, including overshadowing, for a higher building in this location, as assessed by AJC Architects, gives confidence that the proposal will not have a detrimental impact on heritage items and conservation areas in the vicinity.

Yours sincerely,

Stephen Davies
Director Heritage
24/02/2016

urbis

Qualifications and Affiliations

Chair, Heritage Council NSW (2016 – current)

1996 Accredited Environmental Mediation

1978 Dip. Cons. Studies, York University, UK
Institute of Advanced Architectural Studies

1976 Dip. T&CP University of Sydney

1970 BA, Dip. Ed. Newcastle

Member, ICOMOS

Affiliate Member, RAIA. (2004)

Member, SEPP 65 Randwick/ Waverley Design Review Panel (2004-2006)

Member, NSW Government Sydney Harbour Reference Group (1998-2000)

Councillor, Woollahra Municipal Council (1995-1999)

Member, Heritage Council NSW (1990-1998)

Board Member, State Records Authority of NSW (1 Jan. 2006 – 1 Jan 2012)

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Stephen Davies

DIRECTOR - HERITAGE

Stephen Davies established Urbis Heritage in 2007 in response to a growing need for a quality heritage consultancy with 'in house' Town Planning, Urban Design and Social Planning and Research skills.
By offering heritage conservation services within the infrastructure of a larger firm rather than being aligned to any architectural practice, Urbis Heritage can provide truly independent advice for clients.
Urbis Heritage is a firm with varying backgrounds and expertise and collectively the company is experienced in providing a range of heritage services to a varied clientele.

Expertise

Stephen Davies, currently Chair of the NSW Heritage Council, is experienced in all aspects of heritage management. A member of ICOMOS and an accredited environmental mediator, he has been an expert member of a number of government and local government committees and boards with responsibility for heritage items. His work extends across small and major projects and as a former elected member of Woollahra Council, he has a unique understanding of the political and administrative decision-making process and is a skilled negotiator.

Experience

In Dec 2007 Stephen was appointed by the Minister for Planning, to a Ministerial Review Panel under the Heritage Act of NSW 1977 to provide expert advice on heritage issues relating to Currawong, as well as an Independent Panel of Experts under the Environmental Planning and Assessment Act 1979.
Also in December 2007 Stephen was appointed by the Minister for Planning to be part of a Heritage Review Panel, established under the Heritage Act, 1997(as amended) to review and make recommendations to the Minister on those places recommended by the Heritage Council of NSW to the Minister to be placed on the State Heritage Register.
Stephen was a Minister appointed Board Member, representing the private sector, on the State Records Authority in NSW. The Authority fell within the Jurisdiction of the NSW Department of Commerce.
Stephen has been selected on a number of occasions as a court appointed expert to assist the Land and Environment Court.
Stephen is often used as a facilitator and presenter in urban design and heritage matters where various representatives present their views. In the case of a proposed 'Aging in Place' residential project in Bondi in 2008 Stephen facilitated an expert panel process for the

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Benevolent Society of NSW. This project balances heritage, residential and amenity issues with a brief for an innovative social housing scheme.

Urbis (2007– Current) Director

As Director of Urbis (Heritage), Stephen manages his professional team in the preparation of:

- Conservation Management Plans;
- Heritage Impact Statements;
- Conservation supervision;
- Local Government Heritage studies and reviews;
- Demolition reports;
- Archival recordings;
- Interpretation strategies at both individual building and regional centres levels;
- Evidence to the Land and Environment Court.

City Plan Heritage (2000–2007) – Director

In 2002 Stephen was appointed to assist the Commission of Inquiry in the heritage aspects of a proposal for the conservation and adaptive reuse of the Quarantine Station at North Head, Manly. The Commissioner, William Simpson presented the report to Dr. Andrew Refshauge, Deputy Premier, Minister of Planning, Minister of Aboriginal Affairs and Minister for Housing in 2004. Stephen was responsible for the same conservation activities as outlined above for Urbis, on a State level.

National Trust of Australia NSW & Victoria (1988–2000) – Deputy Director and Head, Conservation

In both New South Wales and Victoria, Stephen had a significant role in presenting to local government and planning committees and making representation to local and state government politicians. Major submissions included:

- Cemeteries Review in Victoria;
- HBC on the ANZ Gothic Bank development in Collins Street;
- Central Sydney Planning Committee on the GPO Site;
- NSW Minister for Planning, the Hon Craig Knowles, on the Heritage System Review; and
- Commissioner W Simpson on the Greater Central Sydney Planning Enquiry and the Parliamentary committee of enquiry into the Conservatorium.

Melbourne City Council, City Planning (1986–1988) – Team Leader Council's Strategy Planning Local Plans Branch:

Stephen was responsible for local planning (outside the CBD) and for forward conservation planning for the City as a whole. Prepared Draft Residential Development Guidelines for the City of Melbourne 1987.

Department of Environment & Planning (NSW) Sydney Region West (1978–1986)

Statutory Duties Blue Mountains and Blacktown, information branch, technical assistant to Director of Department, Heritage and Conservation Branch, Sydney Central Branch.

URBIS

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URBIS.COM.AU
Urbis Pty Ltd
ABN 50 105 256 228

01 December 2016

Mr Robert Cologna
Service Manager – Land Use Planning
Parramatta City Council
PO Box 32,
Parramatta NSW 2124

Dear Mr Cologna,

HERITAGE STUDY AND 1-7 STATION STREET WEST, PARRAMATTA

I refer to our recent meeting regarding correspondence dated 24th February 2016 for Green Rock Property.

In that correspondence I provided a Peer Review of the assessments made for the heritage items in their ownership, being Nos.1 and No.7 Station Street. The conclusion of my Peer Review was that I supported the retention of the heritage listing of No.1 Station Street and I supported the removal of the item at No.7 Station Street from the heritage schedule of the Parramatta LEP on grounds that "demolition of the item will not result in any significant loss of cultural heritage to Harris Park, Parramatta City Centre or the wider Parramatta Local Government Area and it does not reach the threshold for local significance."

My advice was initially supposed to be related only to the significance of the subject properties as I was not perceived to have had a conflict of interest in the listing process. I accept that I have a conflict of interest in the suitability of the scale and type of development on the site as Urbis is assisting the Council on the heritage aspects of the Parramatta Planning Study.

In this respect, I widened my scope in the last paragraph of my Peer review for Greenrock Property to support in principle the proposal. I accept that this conflicts with my brief to provide professional advice to Parramatta Council on heritage matters that pertain to the City.

I withdraw formally any endorsement for the proposed scheme at 1-7 Station Street, West Parramatta, and its associated Floor Space ratio and apologise to Council for any embarrassment that this has caused.

Yours sincerely,

Stephen Davies
Director

29 November 2016

NBRS+PARTNERS
ARCHITECTURE
HERITAGE
LANDSCAPE
INTERIORS
URBAN DESIGN
ENVIRONMENTAL
COMPLIANCE
RESEARCH

HERITAGE ASSESSMENT

7 STATION STREET WEST
PARRAMATTA NSW 2150

AUGUST 2015

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ABN: 16 002 247 565

Nominated Architects
Graham Thorburn: Reg No.5706; Geoffrey Deane: Reg No.3766;
Garry Hoddinett: Reg No 5286; Andrew Duffin: Reg No 5602

This report has been prepared under the guidance of the Expert Witness Code of Conduct in the Uniform Civil Procedure Rules and the provisions relating to expert evidence. The opinions in the report represent the professional opinions of the author based on an assessment of the available information cited in the report.

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Version 0.1 Final August 2015

EXECUTIVE SUMMARY

This report has been prepared to accompany a Planning Proposal for the proposed demolition of an existing heritage listed building on the site to allow for multi- unit residential redevelopment.

Procedures used in the analysis of information and organization of this report follow the established guidelines of The Conservation Plan by J.S.Kerr (6th Edition 2004), published by the National Trust of Australia (NSW).

Evaluation of any potential heritage significance of the site has been undertaken in accordance with the relevant guidelines of the NSW Heritage Office Manual publications.

No 7 Station Street West, Parramatta is identified as a Local heritage item (I27) in Schedule 5, Environmental Heritage, of the Parramatta City Centre LEP

Major Recommendations
This assessment finds that there is no significant heritage justification for the individual heritage listing of the former residence in this context given its relative isolation, previous degree of modification and low level representative value.

This assessment finds that there is no significant streetscape value in this location that the existing building could contribute to and that its demolition will not have any major impact in that regard.

This report recommends that subject to an appropriate development being proposed for the amalgamated site including No. 1, 3 5 & 7 Station Street West, that approval for demolition of the item to allow for development that achieves an acceptable outcome should be favourably considered by Council.

ROBERT STAAS
Director / Heritage Consultant
NBRS+PARTNERS

August 2015

1.0 INTRODUCTION

1.1 Introduction

This Heritage Assessment was prepared for Greenrock Property, by NBRS+PARTNERS to accompany a Planning Proposal to Parramatta Council to support the demolition of a listed heritage item as part of a co-ordinated development option for residential redevelopment of a site at 1 – 7 Station Street West, Parramatta.

1.2 Definition of the Study Area

The site is located on the western side of Station Street, north of its intersection with Raymond Street adjacent to Harris Park Railway Station, and is shown in Figure 1.

The property forms part of a consolidated site proposed for redevelopment that contains two listed heritage items. (No.1 and No.7 Station Street West)

Figure 1 — Location plan of the subject site.
(Source: NSW Land & Property Information)

1.3 Study Objectives

This Heritage Assessment is intended to evaluate the existing Statement of Significance for the property in the light of its current modified condition and to identify any significant heritage values associated with the site in accordance with the standard assessment criteria in order to determine the potential, if any, for future redevelopment of the site involving the demolition of the item.

1.4 Methodology

This report generally follows the format set out in the document entitled *Assessing Heritage Significance (2001)* published by the NSW Heritage Office. The terms *fabric, place, preservation, reconstruction, restoration, adaptation* and *conservation* used throughout this report have the meaning given them in *Australia ICOMOS Charter for the Conservation of Places of Cultural Significance (Burra Charter)1999.*

1.5 Limitations

The report is a result of analysis of available research material combined with a physical assessment of the existing building fabric and a streetscape analysis.

1.6 Identification of Author

This report was researched and prepared by Robert Staas, Associate Director / Senior Heritage Consultant, using a history researched and written by Léonie Masson, Historian, of NBRS+PARTNERS.

1.7 Sources

The main documentary sources consulted in the research for this report are listed below:

- National Library of Australia, Trove databases
- State Library of NSW
- NSW Land & Property Information
- Sydney Water Historical Archive
- Parramatta Heritage Centre, Council Archives and Local Studies Collection
- Parramatta Council Records

2.0 COUNCIL STATEMENT OF HERITAGE SIGNIFICANCE

The subject site is identified as a Local Heritage Item in Schedule 5 of the Parramatta City Centre LEP as I27.

Identification of the site was made as part of the City of Parramatta Heritage Study undertaken in 1993 by Meredith Walker and remained unaltered in the 2004 Heritage Review undertaken by the National Trust (Parramatta Branch) without the benefit of the Heritage office Guidelines.

I27 – Single Storey Residence, 7 Station Street West, Parramatta.

House at 7 Station Street West is of significance for the local area for historical and representativeness reasons. Built c.1915, it is readily identifiable as part of historic building stock and is still contributing to the streetscape.

Single storey Federation brick cottage (1915) has corrugated iron roof on painted brick walls. The main roof is broken by a small gable with turned timber finial and louvred ventilator.

Projecting gable has finial and decorated with dentils below string course. There are two tall brick chimneys with stepped corbels and chinese lanterns.

Verandah has corrugated iron skillion roof extending from main roof across front to projecting gable and is supported by paired timber posts set on painted tall brick piers with sandstone caps. Verandah has painted concrete floor and painted brick balustrade. Awning above window has Federation decorative timber ladder brackets and corrugated iron roof. Front fence is aluminium spearhead palisade fence and gate.

Figure 2 - No.7 Station Street West Parramatta, currently occupied by Western Sydney Greek Welfare Centre

3.0 DOCUMENTARY EVIDENCE

3.1 Pre European History

Prior to the arrival of European settlers in 1788 the general area around Parramatta was inhabited by the indigenous Burramattagal clan who shared the Darug language with associated clans from Broken Bay to the Shoalhaven and west to the Blue Mountains.[1]

3.2 Early European Development

Within a few months of the arrival of the first fleet in Sydney Cove, a party, consisting of 10 convicts and a garrison of soldiers, was established in Parramatta.[2] This party grew to 100 convicts in 1789, and the following year, Governor Phillip laid down the lines for a regular township adjacent to the river, which he initially called Rose Hill, and later becoming Parramatta.[3]

Clearing and development of land for agriculture then followed and New South Wales' second town had begun. In an early plan of the new Roseville settlement (ca.1790) the subject area was shown as part of 'enclosures for cattle' and 'ground in cultivation'.

Between 1791 and 1800, about 20 significant land grants were issued to settlers in and around the town of Parramatta, and a system of leasing lands was

[1] Kass, T., Liston, C. & McClymont, J., *Parramatta: A Past Revealed*, Parramatta City Council, 1996. pp. 4-6.
[2] Jervis, J, *The Cradle City of Australia – A History of Parramatta 1788-1961*, Council of the City of Parramatta.
[3] Kass, T., Liston, C. & McClymont, J., *Parramatta: A Past Revealed*, Parramatta City Council, 1996. pp. 10-15, 22

established for home building purposes.[4] Early grantees or lessees in the vicinity often held leases in the town of Sydney and elsewhere as well as Parramatta. Simultaneously, a site was set aside for the market and town hall in the vicinity of Church Street near the Parramatta River. The first permanent dwellings in the new township were erected in the principal thoroughfares of George, Macquarie and Church Streets.

With the arrival of Governor Macquarie in 1810, further streets were laid out and blocks of land surveyed in George, Church, Phillip and Macquarie Streets. All convicts were removed into a barracks that was completed in 1822. Public buildings, a hallmark of the Macquarie period, proliferated. Parramatta developed as a secondary seat of government, a centre of agriculture and grazing, and was directly connected to Sydney by road and river. The town developed rapidly during this period as depicted in Figure 3.

In 1844, W Meadows Brownrigg undertook a survey of Parramatta to identify grants, purchasers and leaseholders and noting which portions were built upon (Figure 4).

[4] Noel Bell, Ridley Smith & Partners (aka NBRS+Partners), *The Former Parramatta Fire Station Heritage Assessment*, unpublished report, October 1998. p. 6

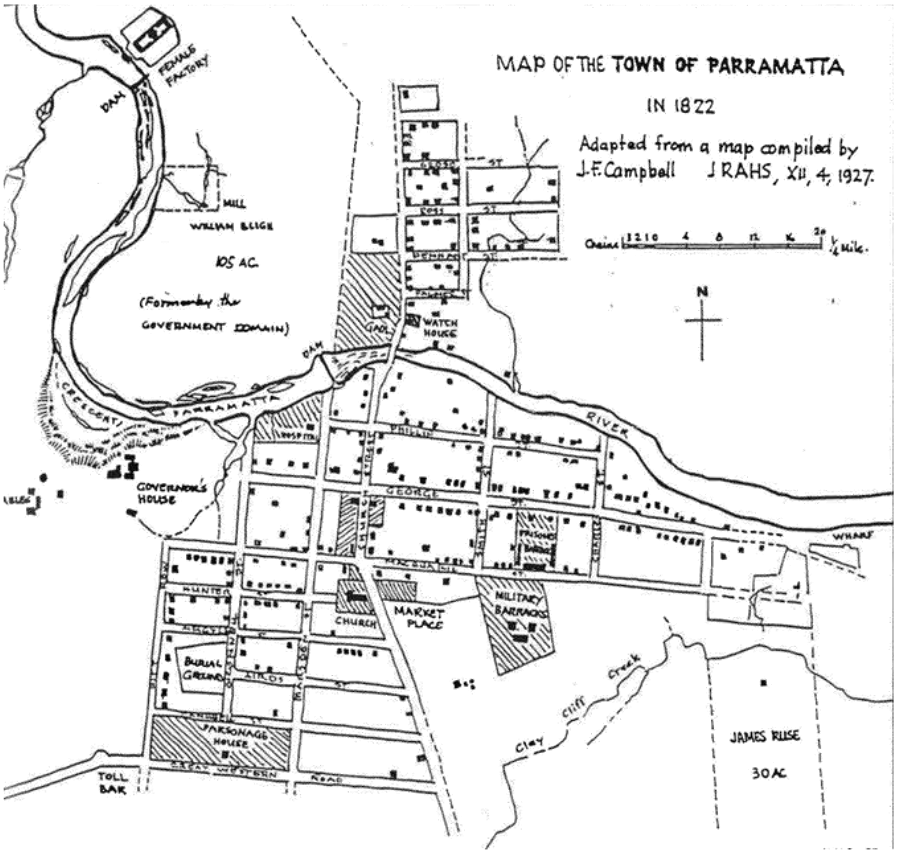


Figure 3 - Map of the Town of Parramatta in 1822. The approximate location of the subject area is circled in red. Macarthur's land grant is outside the boundaries of this plan. (Source: Reproduced from Kass, T, et al, Parramatta: a past revealed, 1996, p113)

Figure 4 – William Meadows Brownrigg, Map of the town of Parramatta and the adjacent properties, 1844. (Source: SLNSW, Z/M3 811.1301/1844/1) The map shows Hambledon Cottage and Experiment Farm on the eastern edge of the town but does not show Elizabeth Farm.

The railway from Sydney to Parramatta Junction (Granville) was opened on 26 September 1855. It was later extended into the population centre at Argyle Street in April 1860. The increased accessibility brought about by the railway

contributed to the increase in population and development of the area between 1870 and 1880.

Surgeon John Harris was granted 100 acres (40 hectares) adjoining Ruse's farm. His land, with its heavily wooded hills, was the basis of the modern suburb of Harris Park, which also includes a portion of the neighbouring estate owned by another Corps officer, John Macarthur. They were responsible for two of the suburb's surviving landmarks, Hambledon Cottage and Experiment Farm Cottage. Macarthur built Hambledon in the 1820s. Its early tenants included the Anglican Archdeacon Thomas Scott and the Macarthur's governess, Penelope Lucas. Although Harris spent much of his time on another estate at Shane's Park, he retained his Parramatta land and built Experiment Farm Cottage in 1835. This classic 'Indian' bungalow, with its wide verandas, is now a National Trust property.

When Harris died in 1838, his nephew, Thomas, inherited Experiment Farm and settled there in the 1840s, farming and breeding horses. After his death in 1870, the break-up of the Harris estate began, although the family retained Experiment Farm Cottage until the 1920s. An early residential subdivision was marketed as 'Harris Park' and the name became attached to the wider area. But what was accepted as 'Harris Park' in the nineteenth century did not exactly coincide with the twenty-first century suburb. From the 1870s to the 1900s, for example, Samuel Purchase occupied six acres (2.4 hectares) of the Harris estate and ran a successful plant nursery. The site of this Harris Park landmark, bounded by George, Hassall and Harris Streets, now lies just outside the current suburb boundary.

In the late 1870s, local builders bought blocks in Harris Park, but the anticipated influx of home buyers did not arrive until a railway platform was opened in the 1880s. This rail link to the merging industrial areas of Granville and Clyde led to a network of workers' cottages quickly developing around the station, but by 1900 the suburb also contained more substantial homes and middle-class residents. For decades, the area known as Harris Park was divided between the municipalities of Parramatta (proclaimed 1861) and Granville (proclaimed 1885). In 1949, the entire Granville municipality was included in an extended City of Parramatta

Despite its industrial connections, Harris Park remained largely residential. Renewed subdivision in the 1920s took up virtually all the suburb's available land. After World War II, state planners designated Parramatta as a major growth centre and large-scale immigration began. These policies affected the density and the composition of the Harris Park population. The construction of home units from the 1960s has meant that the suburb has a very high proportion of this type of housing. Similarly, an unusually high percentage of the Harris Park population was born overseas. Roughly one in four residents speak Arabic, Hindi or a Chinese language.[5]

[5] Dictionary of Sydney staff writer, Harris Park, Dictionary of Sydney, 2008, http://dictionaryofsydney.org/entry/harris_park, viewed 30 July 2015

3.3 History of the Subject Site

The subject site is located on Lot 34 of Section 1 of DP 976, which is originally part of "*110 acres in the township of Parramatta on the north of a creek known by the name of Duck Creek*" granted to surgeon, John Harris, on 20 February 1794. He subsequently purchased the farm of James Ruse on which in 1798 he built the still extant Experiment Farm Cottage. "Until 1800 he led a busy existence as surgeon and farmer. By the turn of the century he owned 315 acres (127 ha) of land of which 205 (83 ha) were purchased, and had acquired 431 head of stock, possessions which placed him among the foremost officer-farmers."[6] At his death on 27 April 1838, he left property in the region of £150,000.[7]

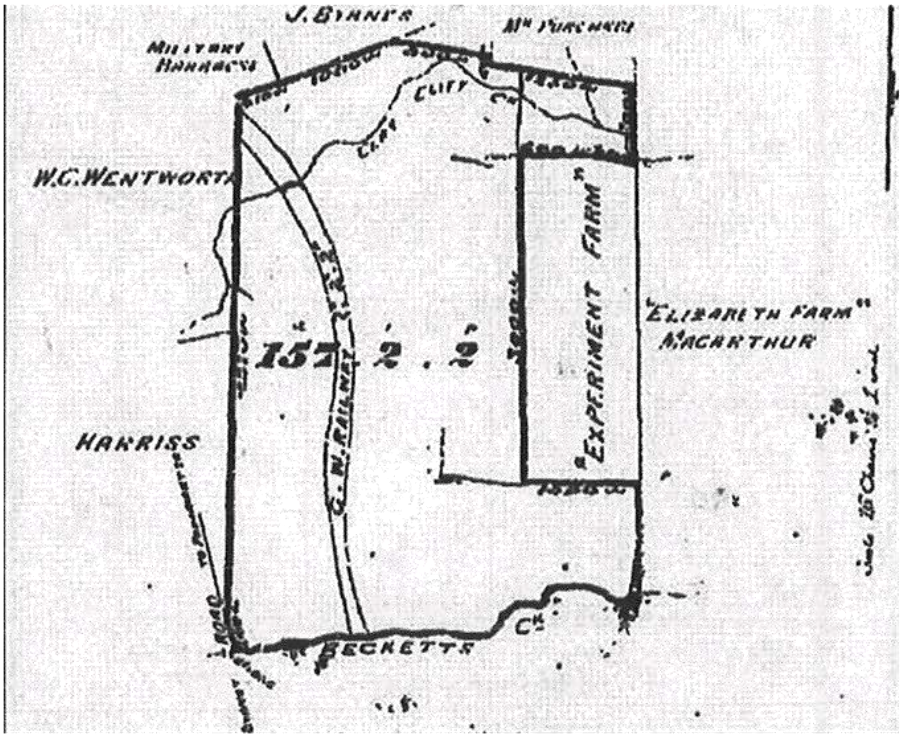


Figure 5 — Block plan of the Harris Estate in 1872 (Source: NSW Land & Property Information, Certificate of Title Vol CXXX111 Fol 127)

John Wigram Allen commenced subdivision of the Harris Estate in 1876 (Figure 6). This is part of the land depicted in the block plan shown at Figure 5. This land was re-subdivided with land to the east of the railway line as DP 241 (Figure 6); the subject site is located within Section 10 thereof.

[6] B. H. Fletcher, 'Harris, John (1754–1838)', Australian Dictionary of Biography, National Centre of Biography, Australian National University, http://adb.anu.edu.au/biography/harris-john-2164/text2773, published first in hardcopy 1966, accessed online 30 July 2015.
[7] Ibid.

Figure 6 — DP 241, Harris Park, May 1876. (Source: NSW Land & Property Information)

In the "Plan of Streets in Harris Park, Town of Parramatta" undertaken in September 1882 (Figure 7), the subject site is located within that portion of undeveloped land owned by Sir George Wigram Allen, bounded by Marion Street, High Street, Short Street and Station Street West. What is apparent from comparing the May 1876 and September 1882 plans is that the portions of Allen's land did not sell immediately, including Section 10.

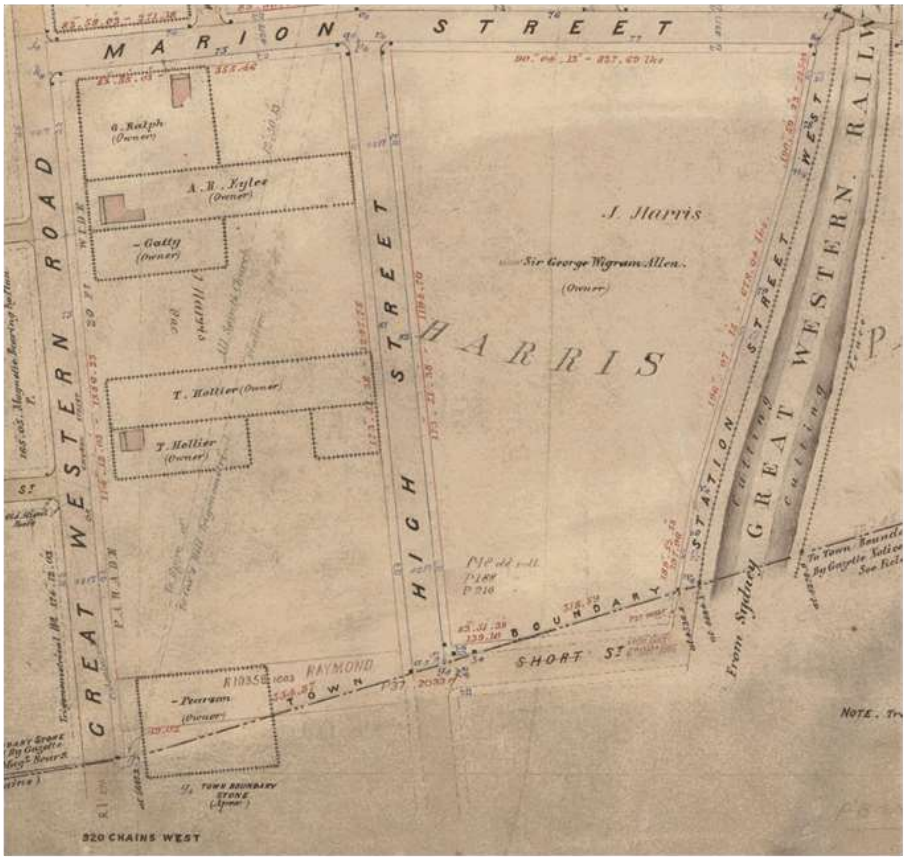


Figure 7 — Extract from Plan of streets in Harris Park Town of Parramatta Parish of St John County of Cumberland / date of survey 1-21 September 1882. (Source: NSW Land & Property Information, Crown Plan 12-833 and P12-2033R)

George Wigram Allen advertised the auction sale on 4 November 1882 of "92 splendid sites" at Harris Park Parramatta (Figure 9). Sections 10 and 12 of DP 241 were sold to Henry Solomon of the City of Sydney, landowner.[8] That land is shown on the subdivision plan at Figure 8. Solomon was a partner with George and Henry Myers as the firm of Myers and Solomon (general importers) and had their store at 542 George Street, Sydney. A report on the auction sale was published in the *Sydney Morning Herald* the Monday after: "*Messrs Mills, Pile and Gilchrist…sold…the whole of the subdivision at Harris's Park, Parramatta, consisting of 92 allotments, at prices ranging from 26s to £3 1s per foot [realising] £6500.*"[9]

[8] Certificate of Title Vol 616 Fol 243, NSW Land & Property Information.
[9] "Monetary and Commercial", *Sydney Morning Herald*, 6 November 1882, p6.

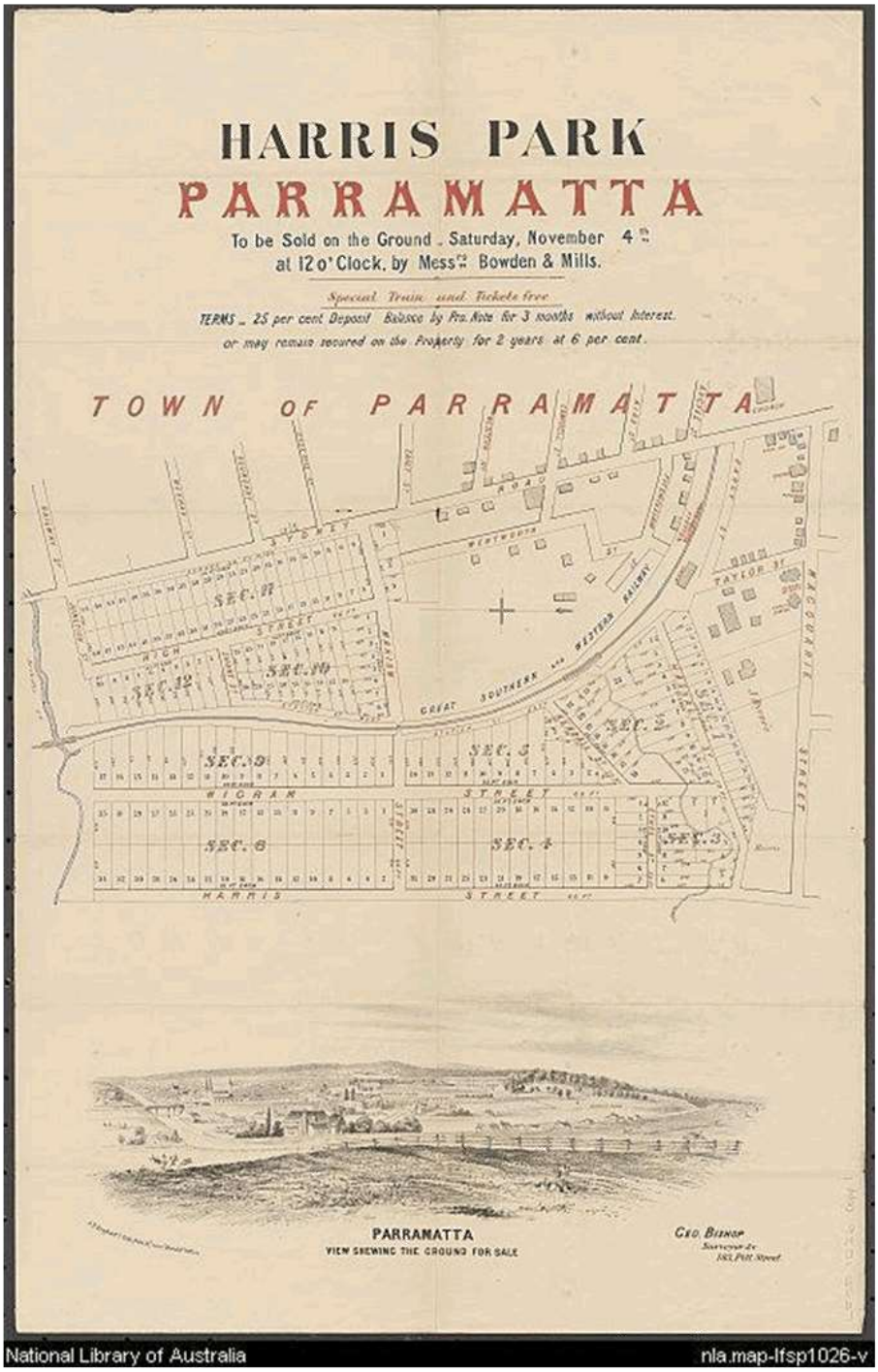


Figure 8 — Harris Park Parramatta to be sold on the ground Saturday November 4th [1882]. (Source: NLA, MAP Folder 68, LFSP 1026)

Auction Sales.

TO-MORROW AFTERNOON.

HARRIS PARK,
PARRAMATTA,
ON THE GROUND, at 3 p.m.

92 SPLENDID BUILDING SITES.

THE ONLY HIGH LAND BETWEEN GRANVILLE and PARRAMATTA.
CHARMING VIEWS. GRAND ELEVATION.
HALF A MILE RAILWAY FRONTAGE.

ATTEND the SALE, and SECURE A LOT.

This LAND WILL DOUBLE ITS VALUE WITHIN A VERY SHORT TIME.
TORRENS' TITLE. Lithos at the Rooms.

TORRENS' TITLE. Lithos at the Rooms.

FREE TICKETS for Special Train leaving REDFERN at 2.15 p.m., can be obtained at the Rooms.
TERMS—10 PER CENT DEPOSIT, balance in 18 monthly payments.
MILLS, PILE, and GILCHRIST,
Auctioneers.

Figure 9 — Auction sale advertisement for Harris Park Parramatta subdivision. (Source: Sydney Morning Herald, 3 November 1882, p10.

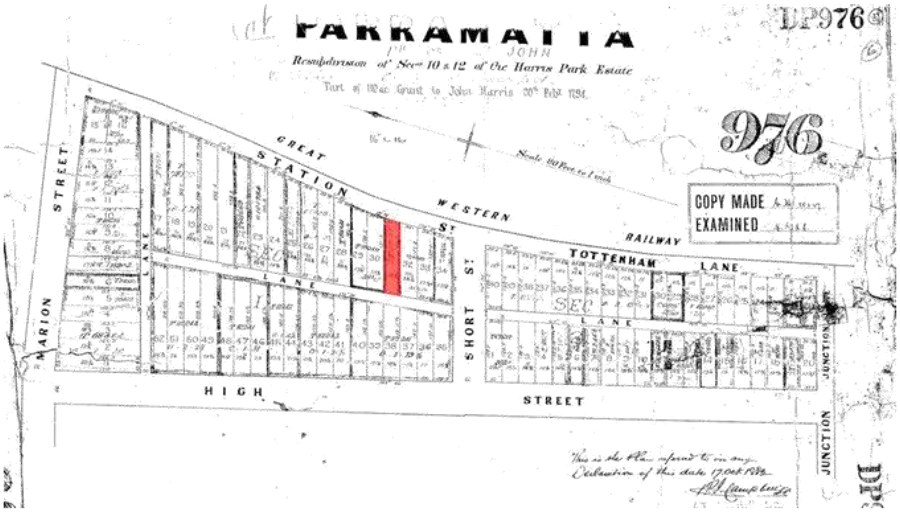


Figure 10 — Extract from DP 976, Parramatta – Re-subdivision of Sec^{ts} 10 & 12 of the Harris Park Estate, 1882. Subject site shaded red thereon. (Source: NSW Land & Property Information)

Solomon re-subdivided Sections 10 and 12 of DP 241 as DP 296, which plan of subdivision is shown at Figure 10. The first sales in this subdivision are registered on the certificate of title on 27 December 1882. The following March, Solomon sold Lot 31 of Section 1 (subject site) to Samuel Phillips of Pitt Town, farmer[10] for the sum of £74/7/1.[11] That allotment is shaded red on the subdivision plan. Phillips is accordingly named the owner of "unenclosed land" in the 1883 Parramatta Rate Book with an annual value of £5.

The allotment remained undeveloped until 1909 when Samuel Phillips sold the land to Michael Farrell of Parramatta, grocer's assistant in May.[12] Farrell mortgaged the land in September 1909, presumably to raise the capital required to build upon the lot. The Council gave permission in October to the building application submitted by S Lucas "*to erect a cottage in Station Street for Mr H Farrell* [sic]."[13]

According to the *Sands Directory* Michael Farrell was the occupant of the unnumbered residence in Station Street from 1911 until 1919. Thereafter the house was leased to a succession of tenants including Walker R Paul, Alfred W Bayly and CG Gregory. Farrell conveyed 7 Station Street in January 1929 to Edna Mary Farrell of Parramatta, spinster. Later in the same year she married Donaldson C Walker. The Walkers lived here for a few short years before moving to the Northern Beaches of Sydney by 1933. Thereafter the Valuation Lists name Mrs (Edna) May Walker as the owner of the subject site until her death in 1969 at Fairlight. It is not known who occupied the property in the intervening period.

Figure 11 comprises an aerial view of 7 Station Street in 1943.

The subject site was conveyed in October 1969 to her widower, Donaldson Cannon Walker of North Balgowlah, retired insurance inspector, and their son Geoffrey Michael Walker of Killarney Heights, dentist. Following the death of Donaldson Walker in 1978, the subject site passed to Geoffrey Michael Walker in February 1983. He owned same until August 1988 when it was sold to Premier Fire Protection Pty Limited.[14] That company lodged a successful building application to Parramatta Council in mid-December for "adds office" estimated to cost $50,000; the application was approved on 31 March 1989.[15]

[10] Certificate of Title Vol 656 Fol 50, NSW Land & Property Information.
[11] Memorandum of Transfer 69129, NSW Land & Property Information.
[12] Ibid.
[13] "Parramatta Council", *Cumberland Argus and Fruitgrowers Advocate*, 20 October 1909, p3.
[14] Certificate of Title Vol 11175 Fol 52, NSW Land & Property Information.
[15] 88/431, Register of Building Applications 1988, Parramatta City Council Archives.

Figure 11 — Extract from 1943 aerial survey of Sydney showing subject site shaded yellow. (Source: NSW Land & Property Information, SIX Maps)

The commercial property was purchased by the Greek Orthodox Archdiocese of Sydney in August 2005 and in 2006, they established the Greek Welfare Centre there as a regional office in Western Sydney, to service the needs of people of Greek background and the wider community offering a range of programs and services.

4.0 PHYSICAL EVIDENCE

4.1 Generally

The existing building is a highly modified, early 20th century, single storey house with a corrugated metal clad hipped roof form and projecting gabled bay to the street frontage and a large hipped and skillion extension to the rear.

The front section of the site retains a modified garden setting with a modern pool style, aluminium fence.

The rear section of the site is paved and is occupied by car parking.

The building follows a traditional design formulae with a projecting room with a gabled roof and a verandah set under an extension of the main hipped roof form which is supported on later paired timber supports set over modified brick piers. This form was originally expressed at the rear of the house as well prior to its modification.

Reconstructed ventilation gabletts are located at the apex of the roof, front and back and three, tall face brick chimneys are located on either side of the building.

The current detailing is of Inter War and Federation era character with turned timber finials and a bracketed awning over paired windows on the projecting bay.

The building, once tuck pointed face brickwork is now painted.

The building has been modified and extended to provide office style accommodation including offices, kitchen, toilets and a large meeting room.

An open skillion roof to the rear covers an outdoor area that is separated from the concrete paved car parking bays accessed from the laneway.

4.1.1 Building Modifications

Modifications to the original building can be seen in the building fabric and were the result of the adaptation of the original cottage to commercial uses in the 1980s.

The physical extent of these changes is best understood by comparison of the 1943 aerial view at Figure 13 and the current aerial photograph of the site at Figure 12.

The original building had a mirror image of the front form at the rear with the roof rising to a single cross ridge aligning with the existing northern chimney. This has been obliterated by the later additions to the rear which have extended the size of the building by approximately 50%.

Changes made to the detailing of the front façade have falsified the character of the building and are no longer legitimate representative of its original form and detail.

The rear yard was divided by a fence into two areas of open lawn and is now fully concreted with a large unsympathetic awning roof covering an open area outside the additions.

Figure 12 - Existing aerial view of the subject site showing the modified roof form and paved area to the rear of the site.

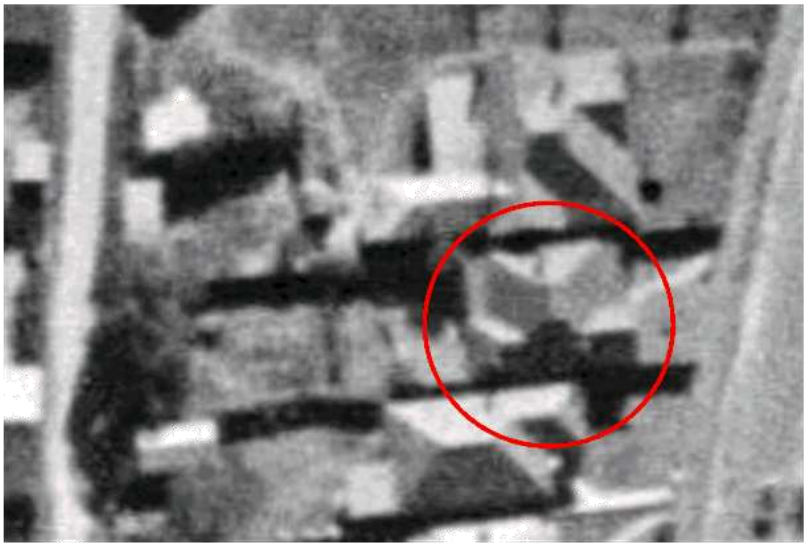


Figure 13 - 1943 aerial photograph of the subject site showing the original cottage at No. 7 Station Street West Parramatta.

The extent of changes made to the building are demonstrated by the following photographs.

Figure 14 - The projecting gable showing a traditional early 20th century treatment of the gable, rough cast and projecting string course supported with dentil brickwork and a bracketed window awning which may be a later addition as suggested by the bolted connection to the wall. The barge boards and finial are modern replacements of the original detailing and the tuck-pointed, face brickwork has been painted.

Figure 15 - later Brick verandah enclosure and piers. The front of the building was modified at some point in its history to remove the original Federation detailing and replace it with this Inter War style details. The brickwork does not match the rest of the front façade which is carefully tuck pointed and the character is at odds with the original character of the former house.

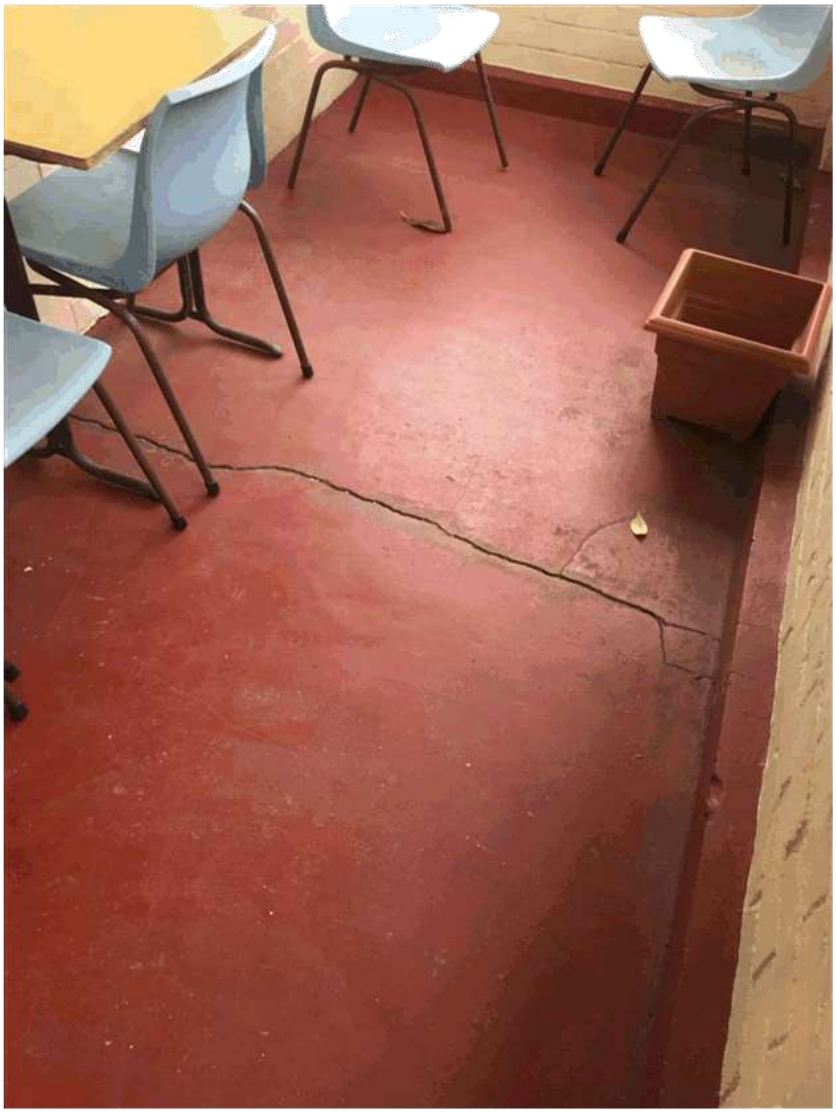


Figure 16 - Front verandah painted concrete detail. Showing cracking due to subsidence of sub floor fill. The later verandah enclosure is seen on the right.

Figure 17 - Modern replacement verandah supports with routed detailing. There is no evidence of the original details, however the layout and surviving details on the side of the verandah suggest bracketed posts which were typical of the period when the former house was built.

Figure 18 - Front bedroom window with typical tripartite configuration with modern security bars. The window joinery in the two front rooms is original while other joinery has been replaced.

Figure 19 - View to northern end of front verandah showing the surviving traditional profiled bracket support and lattice infill. Evidence of a similar bracket at the entry suggests that the original verandah detailing was of timber posts with bracket supports. The original soffit lining has been replaced with fibre board lining and original trims evidenced in the wall surface have been removed.

Figure 20 - Front window awning showing detailing that may be of a later era to the original cottage design. Note evidence of original tuck pointing of face brick wall prior to painting and modern bolted connection of timber frame to wall.

Figure 21 - Modification of original side window opening and replacement of original joinery as part of the works to convert the building to office use.

Figure 22 - Rear extension to original house to provide space for adaptation to commercial use.

Figure 23 - Rear presentation showing extended hipped roof and skillion awning over outdoor area and fully concrete paved yard area.

Figure 12 - Internal detailing showing modern replacement ceilings, cornice and ceiling rose detailing which has been carried out throughout the building.

Figure 13 - Original Kitchen with modified chimney, replacement ceilings and replacement window joinery.

Figure 14 - Modern hardwood floors replacing original flooring throughout the original portion of the former house.

Figure 15 - Modern archway detailing looking through to later extension at the rear of the original cottage.

Figure 16 - Meeting Room extension to original house.

Figure 17 - View back towards front door showing location of original rear wall of the house prior to the extensions made when it was adapted for Commercial uses. The lead light window and arched opening are modern modifications.

4.2 Identification of Modifications

The following list is of changes which are clearly discernible in the existing building fabric and which provide clear evidence of a lack of physical integrity as a representative example of an early 20th century residence:

- Reconstructed front verandah detailing and trims.
- Possible addition of bracketed awning to projecting bay.
- Modern finials, barges and ventilator details.
- Extension of original plan form to the rear.
- Modification of the original roof form as a result of later additions.
- Modification of side window sized and joinery.
- Replacement of original flooring.
- Replacement of all internal doors.
- Replacement of all ceilings, cornices and ceiling roses.
- Painting of face brickwork.
- Concreting of rear yard.
- Modification of front yard and front fencing.
- Removal of original kitchen fireplace.
- Loss of original residential context through redevelopment of surrounding sites.

4.3 Setting and Physical Context

Whereas in its original setting, the cottage was set hard against an adjoining house of the same period and character, it is now located against two and three storey flat developments to the north and a very changed streetscape context. This would seem at odds with the Heritage listing which suggests that the building forms part of a significant streetscape character in this location.

The site is located opposite the deep cutting for the railway and backs onto a laneway that is characterised by modern developments fronting High Street.

Figure 18 - The wider setting of the site with three storey flats to the north and modern residential development to the west. Station Street is bordered by the railway cutting to the east and the Parramatta City is bounded by Raymond Street to the south.

Figure 19 two storey flat development to the north of the heritage item in Station Street West.

4.4 Streetscape Values

Notwithstanding the heritage inventory identified streetscape as being an element of the significance of this site, there is no cohesive or significant streetscape character in the immediate context and the highly modified form and detail of the building does not contribute in any legitimate way to the streetscape.

4.5 Heritage Items in the Vicinity

The subject site is located in the vicinity of two heritage items identified in Schedule 5 of the Parramatta City Centre LEP and is also in the vicinity of a number of items included in a conservation area identified in the adjoining Holroyd Local Government Area as identified in Part 2 of Schedule 5 of the Holroyd LEP 2013

Figure 20 Extract from Heritage Map for Parramatta City Centre showing the subject site and the two heritage items in the vicinity.

The Heritage Items in the vicinity of the subject site located within the Parramatta Local Government Area are identified in Schedule 5 as 102 & 126:

102 49 – 51 High Street

Statement of Significance

The houses at 49-51 High Street are of significance for the local area for historical and aesthetic reasons, and as a representative example of residential architecture of the Victorian period in this area. Built c. 1885, the houses are readily identifiable as part of historic building stock and strongly contributes to the streetscape. The houses feature a rare double hipped roof form.

Description

Two storey late Victorian attached houses are of rendered brick walls to front, painted sides and hip corrugated iron roof. The rear wings are under a separate hipped roof

form, and this "double hipped roof" is a rare feature. There are two tall rendered brick chimneys with cornices each side of roof. Verandah has concave corrugated iron roof over verandah on upper level which goes across front on both levels. Verandah floor on No. 51 is sandstone. Verandah supports are cast iron columns with frieze and brackets to both floors. There are decorative brackets on central privacy wall. Windows have label moulds and decorative stops over each door. Exterior doors have glazed transom and sidelights over Late Victorian panelled door with glazed panels above lock rail and two timber bolection moulded panels below. Front door has transom lights over French doors with round head glazed upper panels and timber bolection panels below lock rails. All doors have timber louvered shutters. Both houses have two tier cast iron spearhead palisade iron fence on rendered plinth between large rendered piers with stepped pyramid tops and matching two tier cast iron spearhead palisade gates.

Figure 21 - 49 - 51 High Street

These houses have their rear facades facing the subject site and are now almost completely separated from it by recent development approved on the laneway between the two sites.

126 No. 1 Station Street West

Statement of Significance

House at 1 Station Street West is of significance for the local area for historical, aesthetic and representativeness reasons. Built c.1890, it is readily identifiable as part of historic building stock and is strongly contributing to the streetscape.

Description

Two storey late Victorian house of rendered brick has pyramid slate roof with projecting hip front forming squat tower over stilted arch entrance with corniced string line. A recessed niche is between two rendered corniced string lines above arch and under windowsill. There is one rendered brick chimney with stepped corbel decoration.

Verandah has concave corrugated iron roof that runs across front to projecting hip, supported by timber post to ground floor. Upper level verandah has cast iron balustrading and valence, lower level verandah has curved timber valence. Ground floor front wall has arch topped window and sidelights. French door on upper verandah floor has bolection mould panels below the lock rail and glazed panels above. Front door has transom light and sidelights above Victorian timber door with round head glazed upper panels, below lock rail and two timber panels with bolection moulding. Front fence is aluminium spearhead palisade fence and gate.

Figure 22 - 1 Station Street West

No. 1 Station Street is not directly related to the subject site being separated from it by two modern houses.

It more closely relates to the heritage items across Raymond Street which are located within the Holroyd Local Government Area and which are listed in a Conservation Area by that Council. Any future development of the subject site will maintain this relationship through the retention of the heritage item at No. 1 Station Street west.

Figure 23 - Side of late Victorian Hose in Tottenham Street across Raymond Street.

Figure 24 - View from Tottenham Street towards the subject site.

Figure 25 - View from No.1 Station Street West to Tottenham Street across Raymond Street

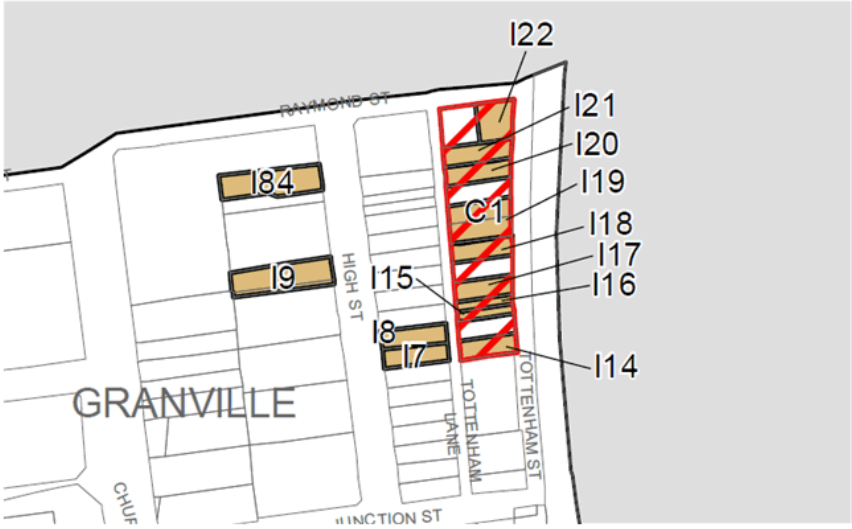


Figure 26 - Extract from Holroyd LEP Heritage Map showing Conservation Area C1 located west of the boundary of Parramatta across Raymond Road in the vicinity of the subject site

HOLROYD COUNCIL C1 Tottenham Street Conservation Area
Statement of Significance

The buildings in Tottenham Street are significant as part of a group of small scale residential buildings in Tottenham Street, Granville. The group is largely intact externally and is significant for the variety of building styles and as a good representative example of early cottages dating from around the turn of the century.

The buildings are significant for their form, scale and character which gives a good indication of the socio-economic make up of the community at the time of construction. The group gives a good representative cross section of modest scale residences of the turn of the century period and their location close to Parramatta and the railway provides evidence of the influence of these factors on the early development of Holroyd.

The items in the Holroyd Local Government Area have their principal orientation towards the east across Tottenham Street with the substantial Late Victorian villa at the corner of Raymond Street presenting its side elevation to the item opposite at 1 Station Street West.

There is a substantial separation between the heritage item at 7 Station Street and this group of small houses which fall away to the south from the high point on Raymond Street. There is no significant visual connection between the Tottenham Street Conservation Area and the subject site. The closest association, physical and visual is with the two storey house at 1 Station Street West.

5.0 ANALYSIS OF CULTURAL HERITAGE SIGNIFICANCE

5.1 Basis of Cultural Heritage Assessment

This assessment of heritage is based on the methodology and guidelines set down by the NSW Heritage Office and considers the standard values or criteria which arise from the history, construction and use of the building and its site as well as any levels of esteem by recognised groups for the site.

Evaluation Criteria

Heritage significance, cultural significance and *cultural value* are all terms used to describe an item's value or importance to our own society. This value may be contained in the fabric of an item, its setting and its relationship to other items, the response that the item stimulates to those who value it now and in the historical record that allow us to understand it in its own context. An assessment of what is significant is not static. Significance may increase as more is learnt about the past and as items become rare, endangered or are found to document or illustrate aspects that achieve a new recognition of importance.

Determining cultural value is the basis of all planning for places of historic value. Determination of significance permits informed decisions or future planning that ensures that the expressions of significance are retained, enhanced or at least minimally impacted upon. A clear understanding of the nature and degree of significance will determine the parameters for flexibility of future planning and development.

The historical analysis provides the context for assessing significance, which is made by applying standard evaluation criteria to the development and associations of an item. The NSW Heritage Manual has produced standard evaluation criteria that are compatible with the criteria used by the Australian Heritage Commission in assessing items for the Register of the National Estate, and with those included in The Burra Charter.

5.2 Assessment of Cultural Significance

5.2.1 Criterion (a) Historical Evolution

An item is important in the course, or pattern, of the local area's cultural or natural history.

Guidelines for INCLUSION	Guidelines for EXCLUSION
• Shows evidence of a significant human activity. • Is associated with a significant activity or historical phase. • Maintains or shows continuity of a historical process or activity.	• Has incidental or unsubstantiated connections with historically important activities or processes. • Provides evidence of activities or processes that are of dubious historical importance. • Has been so altered that it can no longer provide evidence of a particular association.

The critical issue in applying historical evolutionary values to a site is the establishment that the place is important in the course of an area's cultural history.

Types of items which meet criterion (a) include:

- *Items which demonstrate strong associations to past customs, cultural practices, philosophies or systems of government, regardless of the intactness of the item or any structure on the place*;

The existing house is typical of many in the local government area which are not heritage listed and does not represent or demonstrate any strong association with past customs or practices that are not common to many similar properties in the area.

- *Items associated with significant historical events, regardless of the intactness of the item or any structure on the place;*

The place is not associated with any significant person or historical event that provides evidence of the evolution of the area

- *Significant cultural landscapes and other items demonstrating overlays of the continual pattern of human use and occupation; and /or*

The site is not part of any identified or identifiable cultural landscape in this location.

- *Items where the physical fabric (above or below ground) demonstrates any of the points described above;*

The modified fabric of the original building does not demonstrate any significant cultural evolution associated with the cultural history of the area.

The Parramatta Council Heritage Inventory suggests that this place is significant historically under Criteria A. The reason given in the Statement of Significance is that it was built in c.1915(sic) and is readily identifiable as part of historic building stock.

In my opinion the property does not reach a threshold for heritage listing under this criterion. It is not associated with a significant activity or phase beyond the most basic associations that are common to all development in the area no matter which era it belongs to. The site has unsubstantiated and incidental connections with historically important activities and processes and has been substantially modified from its original presentation.

5.2.2 Criterion (b) Historical Associations

An item has strong or special association with the life or works of a person, or group of persons, of importance in the cultural or natural history of the local area.

The Parramatta Council's Heritage Inventory does not claim any significance under this value. The place has no documented or established association with the life and work of anyone of importance to the cultural history of the area.

Guidelines for INCLUSION	Guidelines for EXCLUSION
• Shows evidence of a significant human occupation. • Is associated with a significant event, person, or group of persons.	• Has incidental or unsubstantiated connections with historically important people or events. • Provides evidence of people or events that are of dubious historical importance. • Has been so altered that it can no longer provide evidence of a particular association.

Types of items that meet this criterion include:

- *Items which demonstrate strong associations to a particular event, historical theme, people or philosophies, regardless of the item or any of its structures*;

There is no strong association to any historical person or event.

- *Items where the physical fabric (above or below ground) demonstrates any of the points described above.*

The modified character of the building does not demonstrate this heritage value.

5.2.3 Criterion (c) Aesthetic Values

An item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in the local area.

Parramatta Council's Heritage Inventory does not claim any significance under this criterion, but suggests that the building contributes to the streetscape of Station Street West.

Guidelines for INCLUSION	Guidelines for EXCLUSION
• Shows or is associated with, creative or technical innovation or achievement. • Is the inspiration for a creative or technical innovation or achievement. • Is aesthetically distinctive. • Has landmark qualities. • Exemplifies a particular taste, style or technology.	• Is not a major work by an important designer or artist. • Has lost its design or technical integrity. • Its positive visual or sensory appeal or landmark or scenic qualities have been more than temporarily degraded. • Has only a loose association with a creative or technical achievement.

Types of items which meet this criterion include:

- *Items which demonstrate creative or technical excellence, innovation or achievement;*

The building is a highly modified, standard early 20th century residential design and does not demonstrate creative or technical excellence, innovation oir achievement that would suggest any level of significance for this value.

- *Items which have been the inspiration for creative or technical achievement;*

The building is clearly not the inspiration for and other creative or technical achievement.

- *Items which demonstrate distinctive aesthetic attributes in form or composition; and/or*

The building is not distinctive aesthetically in any of its design character and has been modified by later changes which reduce its integrity as an intact example of a standard design form.

- *Items which demonstrate a highly original and influential style, such as an important early (seminal) work of a major architect.*

The building is not original or influential in any aesthetic manner and is not the work of a well known designer or craftsman.

- *Items which demonstrate the culmination of a particular architectural style (known as climactic).*

The building is not a climactic example of this standard building type and does not demonstrate in any significant manner a particular architectural style.

The site is not significant under this criterion being a poor example of the type which has undergone substantial modification and has lost its design integrity. The site does not reach a threshold for listing under this value.

5.2.4 Criterion (d) Social Value

An item has strong or special association with a particular community or cultural group in the area for social, cultural or spiritual reasons.

The Parramatta City Council's heritage inventory does not claim social significance in relation to this site. There is no evidence of any particular evidence that the site represents any association with a particular group that would warrant heritage listing. The association with the Greek Archdiocese does not constitute any significant heritage value in this regard.

The establishment of Social significance requires a detailed study to be undertaken before any heritage value can be established.

Guidelines for INCLUSION	Guidelines for EXCLUSION
• Is important for its associations with an identifiable group. • Is important to a community's sense of place.	• Is only important to the community for amenity reasons. • Is retained only in preference to a proposed alternative.

Types of items which meet this criteria include:

- *Items which are esteemed by the community for their cultural values;*

There is no evidence that the place is esteemed by the community as a whole for any cultural values. The listing of the place was not the result of a community based heritage study.

- *Items which if damaged or destroyed would cause the community a sense of loss; and/or*

There is no indication one way or the other that demolition of the place would result in any significant community loss. Any proposal for demolition would include public advertising allowing for any submissions to be made in this regard to establish community esteem.

- *Items which contribute to a community's sense of identity.*

There is no identified evidence that the place contributes to community identity in this location. It is an isolated item which has low contributory value to a mixed streetscape and is not supported by the presence of other similar items.

5.2.5 Criterion (e) Technical / Research Value

An item has potential to yield information that will contribute to an understanding of the area's cultural or natural history.

The Parramatta Council Heritage Inventory does not claim significance for any technical or research value. There is no indication that the site was previously occupied or used for any purpose that would have resulted in significant archaeological value. The existing building is standard constructions and materials and demonstrates no technological innovation or interest.

Guidelines for INCLUSION	Guidelines for EXCLUSION
• Has the potential to yield new or further substantial scientific and/or archaeological information. • Is an important benchmark or reference site or type. • Provides evidence of past human cultures that is unavailable.	• Has little archaeological potential. • Only contains information that is readily available from other resources or archaeological sites. • The knowledge gained would be irrelevant to research on science, human history or culture.

The site has no significance under this criterion that would support individual heritage listing or prevent demolition for a suitable development option.

5.2.6 Criterion (f) Rarity

An item possesses uncommon, rare or endangered aspects of the area's cultural or natural history

The Parramatta Council Heritage Inventory for the site does not claim that the place is rare or that it represents anything but a typical early 20th century cottage in a typical subdivision.

Guidelines for INCLUSION	Guidelines for EXCLUSION
• Provides evidence of a defunct custom, way of life or process, • Demonstrates a process, custom or other human activity that is in danger of being lost. • Shows unusually accurate evidence of a significant human activity. • Is the only example of its type. • Demonstrates designs or techniques of exceptional interest. • Shows rare evidence of a significant human activity important to a community.	• Is not rare. • Is numerous but under threat.

The site is not significant under this criterion as it is not rare.

5.2.7 Criterion (g) Representativeness

An item is important in demonstrating the principal characteristics of a class of the area's

- - cultural or natural places; or
- - cultural or natural environments.

The operative requirement for this value is that any representative value be important in demonstrating the principal characteristics of a type.

The subject site in its modified form is not important as a representative example of early 20th century residential design in the area and does not provide significant evidence of the cultural environment of the area.

Guidelines for INCLUSION	Guidelines for EXCLUSION
• Is a fine example of its type. • Has the principal characteristics of an important class or group • Has attributes typical of a particular way of life, philosophy, custom,	• Is a poor example of its type. • Does not include or has lost the range of characteristics of a type.

significant process, design, technique or activity. • Is a significant variation to a class of items. • Is part of a group which collectively illustrates a representative type. • Is representative because of its setting, condition or type. • Is outstanding because of its integrity or the esteem in which it is held.	• Does not represent well the characteristics that make up a significant variation of a type.

The place is not a 'fine' example of its type and as a result of modification has lower integrity than what would normally be expected for an individual heritage item. It is not a significant variation of this class of items and is not part of an identifiable group. Its location and setting do not support its inclusion as a representative example and the place is not held in high esteem by any identifiable community group because of its outstanding integrity. The place does not reach a threshold for inclusion as a local heritage item based on the above inclusion and exclusion criteria.

5.3 Statement of Cultural Heritage Significance

No. 7 Station Street West, Parramatta, is a modified early twentieth century residence of a standard form that retains some characteristics of this transitional style of development which is relatively common in the Local Government area. The building has no historic evolutionary or associational values and represents typical residential development of the period in which it was built.

The changes to the building to convert it to commercial use have permanently altered its original appearance and form and have obscured original character and detail. It its current form it does not provide accurate evidence of the historic building stock of this area.

The setting of the building amongst later development does not provide support for the setting or contribution of this site to any significant streetscape in the vicinity of the site.

The site does not each a reasonable threshold for individual heritage listing.

Demolition of the item will not result in any significant loss of cultural heritage to Harris Park, Parramatta City Centre or the wider Parramatta Local Government Area.

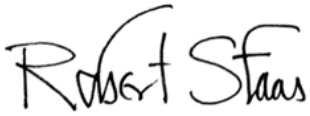
Demolition of the item will not have any significant adverse impact on the heritage items and conservation area in the Holroyd Local Government Area adjacent to the boundary of Parramatta across Raymond Street.

6.0 CONCLUSION

This heritage assessment suggests that the individual heritage listing of the property identified as 7 Station Street West in Schedule 5 of the Parramatta Council Local Environmental Plan was not appropriate at the time of the original heritage study and cannot have included a rigorous assessment or analysis of the building fabric given its high degree of modification which is discernible on inspection without the benefit of any additional documentation.

The very limited heritage value and substantially modified condition of the place suggests that its loss would not result in any significant diminution of the environmental heritage of Parramatta. Demolition for a conforming development would in my opinion be acceptable in these circumstances.

NBRS+PARTNERS



ROBERT STAAS
Associate Director / Heritage Consultant
August 2015

Appendix – State Heritage Inventory Listing

7.0 SINGLE STOREY RESIDENCE

Item details

Name of item: Single Storey Residence

Other name/s: Single-storey Residence

Type of item: Built

Group/Collection: Residential buildings (private)

Category: House

Primary address: 7 Station Street West, Harris Park, NSW 2150

Local govt. area: Parramatta

Property description

Lot/Volume Code	Lot/Volume Number	Section Number	Plan/Folio Code	Plan/Folio Number
LOT	31	1	DP	976
LOT	31	1	DP	976

All addresses

Street Address	Suburb/town	LGA	Parish	County	Type
7 Station Street West	Harris Park	Parramatta			Primary Address

Statement of significance:

House at 7 Station Street West is of significance for the local area for historical and representativeness reasons. Built c.1915, it is readily identifiable as part of historic building stock and is still contributing to the streetscape.

Date significance updated: 01 Mar 02

Note: There are incomplete details for a number of items listed in NSW. The Heritage Branch intends to develop or upgrade statements of significance and other information for these items as resources become available.

Description

Construction years:	1915-
Physical description:	Single storey Federation brick cottage has corrugated iron roof on painted brick walls. The main roof is broken by a small gable with turned timber finial and louvred ventilator. Projecting gable has finial and decorated with dentils below string course. There are two tall brick chimneys with stepped corbels and chinese lanterns. Verandah has corrugated iron skillion roof extending from main roof across front to projecting gable and is supported by paired timber posts set on painted tall brick piers with sandstone caps. Verandah has painted concrete floor and painted brick balustrade. Awning above window has Federation decorative timber ladder brackets and corrugated iron roof. Front fence is aluminium spearhead palisade fence and gate.
Physical condition and/or Archaeological potential:	National Trust (Parramatta Branch): Good.
Modifications and dates:	National Trust (Parramatta Branch) supplied Year Started.
Further information:	Subd plans (ML) - Harris Park

History

Historical notes:	Land auctioned November 1882. Built c. 1910. National Trust (Parramatta Branch): PCC RB 1915: N0. 824 Improv. Cap. Val. 875 pounds. F.J. Thomas? | PCC RB 1914: N0. 824 Sec. 1 lot pts. 28,29,29. Francis John Thomas, Incorp..> S. Accountant, Parra.

Assessment of significance

SHR Criteria a) [Historical significance]	This item historically significant.
SHR Criteria g) [Representativeness]	This item is representative.
Assessment criteria:	Items are assessed against the State Heritage Register (SHR) Criteria to determine the level of significance. Refer to the Listings below for the level of statutory protection.

Listings

Heritage Listing	Listing Title	Listing Number	Gazette Date	Gazette Number	Gazette Page
Regional Environmental Plan	REP No 28	536	20 Aug 99	95	6161
Heritage study					

Study details

Title	Year	Number	Author	Inspected by	Guidelines used
City of Parramatta Heritage Study	1993	536	Meredith Walker		Yes
Parramatta Heritage Review	2004		National Trust (Parramatta Branch)		No

References, internet links & images

None

Note: internet links may be to web pages, documents or images.

(Click on thumbnail for full size image and image details)

Data source

The information for this entry comes from the following source:

Name: Local Government

Database number: 2240536

Architectural Projects

1608 – 7 Station Street West, Parramatta

Peer Review

August 2015

Document

Project: 7 Station Street West, Parramatta

Project No: 1608

Document Control			
Version	Date	Document	DRAFT
1		Status	Peer Review
		Author	Jennifer Hill Director Registered Architect 4811
		Verification	Elizabeth Gibson Associate, Senior Consultant

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1. INTRODUCTION

1.1. BACKGROUND

The Heritage Assessment by NBRS dated August 2015, which assesses the property at 7 Station Street West, is currently the subject of a Peer Review. Architectural Projects Pty Limited were commissioned on behalf of Greenrock Property to prepare this document.

1.2. SITE LOCATION AND DESCRIPTION

The site is a located to the west of 7 Station Street West. The present land title is identified as Lot 34 in DP 976 being a subdivision of Sections 10 and 12 of the Harris Park Estate 1882. The site is currently listed as a heritage item.

1.3. AUTHORSHIP

The report has been prepared by a team consisting of the following key members:
Jennifer Hill – Architectural Projects Pty Ltd – Heritage Architect
Elizabeth Gibson – Architectural Projects Pty Ltd – Heritage Architect

1.4. LIMITATIONS

A time frame of 1 week was established for the preparation of the Report. Access was given to the site and Council records held by the applicant and Council. No physical intervention was undertaken to prepare this report. No historical archaeological work other than the site surveys provided herein was commissioned for the report.

1.5. METHODOLOGY

The Peer Review confirms whether the Heritage Assessment has been prepared in accordance with the methodology outlined in J. S. Kerr, *The Conservation Management Plan* by Dr James Semple Kerr (5th Edition 2000) and whether the report complies with the principles of the Australian ICOMOS Charter for the Conservation of Places of Cultural Significance (the Burra Charter) and its guidelines. The methodology used in the Heritage Assessment is that recommended by the NSW Heritage Office.

1.6. DOCUMENTS REVIEWED

- NRBS Heritage Assessment, 7 Station Street West, Parramatta, August 2015
- Parramatta Council LEP Heritage Inventory
- Register of the NSW Chapter of the Royal Australian Institute of Architects
- Register of 20th Century Buildings of Significance
- NSW Heritage Branch inventory sheet:

1.7. SITE INSPECTION

A site visit occurred on 27 July 2015 and 7 August 2015

1.8. PARRAMATTA COUNCIL

The local authority for the area is Parramatta Council
The property is not listed on the State Heritage Register
The property is listed as a heritage item in the Parramatta LEP.

1.9. PEER REVIEW

Heritage Assessment

The Heritage Assessment provides a detailed history of the site, an assessment of the integrity and a revised assessment of significance from which it concludes that the building does not react the threshold for listing.

Researched historical information

The submitted Heritage Assessment has included adequate historical information. It provides a summary of the development on the site. In particular the history notes:

A report on the auction sale was published in the Sydney Morning Herald the Monday after: "Messrs Mills, Pile and Gilchrist…sold…the whole of the subdivision at Harris's Park, Parramatta, consisting of 92 allotments, at prices ranging from 26s to £3 1s per foot [realising] £6500."[1]

Figure 10 — Extract from DP 976, Parramatta – Re-subdivision of Sects 10 & 12 of the Harris Park Estate, 1882. Subject site shaded red thereon. (Source: NSW Land & Property Information)[2]

The following March, Solomon sold Lot 31 of Section 1 (subject site) to Samuel Phillips of Pitt Town, farmer, in 1883.[3]

The allotment remained undeveloped until 1909 when Samuel Phillips sold the land to Michael Farrell of Parramatta.[4]

The report specifically identified the pattern of development, which in part explains the inconstitancy of the development form along Station Street West which detracts from its streetscape character. The report notes:

Whereas in its original setting, the cottage was set hard against an adjoining house of the same period and character, it is now located against two and three storey flat developments to the north and a very changed streetscape context. This would seem at odds with the Heritage listing which suggests that the building forms part of a significant streetscape character in this location.[5]

Assessment of Integrity

The low integrity of the house is partly explained in the history, which states:

Modifications to the original building can be seen in the building fabric and were the result of the adaptation of the original cottage to commercial uses in the 1980s. The extent of these changes is best understood by comparison of the 1943 aerial view and the current aerial photograph of the site.
The original building had a mirror image of the front form at the rear with the roof rising to a single cross ridge aligning with the existing northern chimney, which has since been changed. [6]

The building was sold to Premier Fire Protection Pty Limited. That company lodged a successful building application to Parramatta Council in mid-December for "adds office" estimated to cost $50,000; the application was approved on 31 March 1989.[7]

The report lists a series of changes to the building which could be summarized as follow.

1 Page 10, NBRS + Partners

2 Page 12, NBRS + Partners

3 Page 13, NBRS + Partners

4 Page 13, NBRS + Partners

5 Page 23, NBRS + Partners

6 Page 22, NBRS + Partners

7 Page 13, NBRS + Partners

A modern pool style, aluminium fence. [8]
The building, once face brickwork is now painted.[9]
The barge boards and finial are modern replacements to the projecting gable.[10]
Replacement verandah with routed detailing.
Rear presentation showing extended hipped roof and skillion awning and different brickwork.
Fully concrete paved yard area.[11]

The analysis is detailed and I agree with its summary of the changes to the house.

Comparative Analysis

The Heritage Assessment has provided an assessment of the significance of the building within the context of the Harris Park Estate, which has become the Harris Park Conservation Area and other heritage items in the Parramatta LEP.

The report acknowledges that the building is an altered example of Federation Style and notes :
The existing house is typical of many in the local government area which are not heritage listed and does not represent or demonstrate any strong association with past customs or practices that are not common to many similar properties in the area.[12]

A preliminary review of the Parramatta Council Inventory indicates sixty – eight properties (Appendix A) listed within the Harris Park area. Of these twenty two properties (Appendix B) are listed within the relevant 1900 – 1920 time frame. The inventory sheets (Appendix C) have some historical information in the form of subdivision history and sand directory but do not identify if the occupants are significant Parramatta identities. This information, with the exception of 6 Crown Street, does not inform the Statement of Significance, which generally notes

is of significance for the local area for historical reasons and as a representative example of Federation period houses in the local area . The building makes an important contribution to the streetscape and the character of the conservation area.

or words to that effect. Equally unusual building typology are not noted.

Overall the inventory sheets provide generalized substantiation for their listing, which is primarily based on aesthetic contribution. As the building has a low level of intactness its aesthetic is much lower than the other examples.

Some of the inventory sheets do not have photos. Of the selected eighteen buildings the other buildings have a greater level of integrity. Some indicate the type of verandah associated with this style of building. 48 Station Street also indicates a later verandah modification. The presence of weather board cottages is not noted as rarer type within the Parramatta Area on the inventory sheets.

Statement of Significance

The Parramatta Council Heritage Inventory Statement of Significance notes:

8 Page 14, NBRS + Partners

9 Page 15, NBRS + Partners

10 Page 17, NBRS + Partners

11 Page 18, NBRS + Partners

12 Page 23, NBRS + Partners

House at 7 Station Street West is of significance for the local area for historical and representativeness reasons and is still contributing to the streetscape. This statement suggest that this place is significant under Criteria A and Criteria C and F. The NBRS report addresses these criteria as follows:

5.2.2 Criterion (a) Historic Values
The modified fabric of the original building does not demonstrate any significant cultural evolution associated with the cultural history of the area.

In my opinion the property does not reach a threshold for heritage listing under this criterion. It is not associated with a significant activity or phase beyond the most basic associations that are common to all development in the area no matter which era it belongs to. The site has unsubstantiated and incidental connections with historically important activities and processes and has been substantially modified from its original presentation.[13]

5.2.3 Criterion (c) Aesthetic Values
The building is a highly modified, standard early 20th century residential design and does not demonstrate creative or technical excellence, innovation or achievement that would suggest any level of significance for this value.

The site is not significant under this criterion being a poor example of the type which has undergone substantial modification and has lost its design integrity. The site does not reach a threshold for listing under this value.[14]

5.2.7 Criterion (g) Representativeness
The operative requirement for this value is that any representative value be important in demonstrating the principal characteristics of a type. [15]

The place is not a 'fine' example of its type and as a result of modification has lower integrity than what would normally be expected for an individual heritage item. It is not a significant variation of this class of items and is not part of an identifiable group. Its location and setting do not support its inclusion as a representative example and the place is not held in high esteem by any identifiable community group because of its outstanding integrity. The place does not reach a threshold for inclusion as a local heritage item based on the above inclusion and exclusion criteria.[16]

The report also addresses the other criteria identified for listing as a heritage item.

5.2.2 Criterion (b) Historical Associations
There is no strong association to any historical person or event.[17]

5.2.4 Criterion (d) Social Value
There is no indication one way or the other that demolition of the place would result in any significant community loss. Any proposal for demolition would include public advertising allowing for any submissions to be made in this regard to establish community esteem.[18]

13 Page 25, NBRS, Heritage Assessment, 7 Station Street West, Parramatta

14 Page 27, NBRS + Partners

15 Page 29, NBRS + Partners

16 Page 30, NBRS + Partners

17 Page 26, NBRS + Partners

18 Page 28, NBRS + Partners

5.2.5 Criterion (e) Technical / Research Value
The site has no significance under this criterion that would support individual heritage listing or prevent demolition for a suitable development option.[19]

5.2.6 Criterion (f) Rarity
The site is not significant under this criterion as it is not rare. [20]

The Summary Statement of significance provided in the NBRS report notes:
No. 7 Station Street West, Parramatta, is a modified early twentieth century residence of a standard form that retains some characteristics of this transitional style of development which is relatively common in the Local Government area.
The building has no historic evolutionary or associational values and represents typical residential development of the period in which it was built.
The changes to the building to convert it to commercial use have permanently altered its original appearance and form and have obscured original character and detail. It its current form it does not provide accurate evidence of the historic building stock of this area.
The setting of the building amongst later development does not provide support for the setting or contribution of this site to any significant streetscape in the vicinity of the site.
The site does not each a reasonable threshold for individual heritage listing.
Demolition of the item will not result in any significant loss of cultural heritage to Harris Park or the wider Parramatta Local Government Area.

1.10. CONCLUSION

The Statement of Assessment details the extent of change to the building externally and internally. The changes are extensive to the exterior and interior such that an understanding of the original house is obscured. The Heritage Assessment provides a clear discussion of the proposed changes and their impact on the integrity and significance of what was initially a representative example.

The report follows the established methodology for the assessment of Significance and I concur with its findings that the existing site has low significance and does not reach the threshold for listing as a heritage item. The report notes:

The heritage assessment suggests that the individual heritage listing of the property in Schedule 5 of the Parramatta Council Local Environmental Plan was not appropriate given its very limited heritage value and substantially modified condition. Demolition for a conforming development would be acceptable in these circumstances. [21]

I would agree that demolition is an acceptable outcome.

19 Page 29, NBRS + Partners

20 Page 29, NBRS + Partners

21 Page 30, NBRS + Partners

7 Station Street West Parramatta Heritage Peer Review
13 August 2015

GRAHAM BROOKS AND ASSOCIATES
ARCHITECTS PLANNERS AND HERITAGE CONSULTANTS

Greenrock Property Pty Ltd

Dear Sirs

Peer Review of Heritage Assessment Report
7 Station Street West, Parramatta

As requested, we have carried out a Peer Review of the report *Heritage Assessment, 7 Station Street West, Parramatta,* August 2015, prepared by NBRS + Partners Heritage Consultants. In preparing this Peer Review, Graham Brooks has inspected the subject site and its streetscape and reviewed the *Heritage Assessment* in detail.

We understand that you will submit this Peer Review to Parramatta Council, with other relevant documentation, at the appropriate time.

Background

The *Heritage Assessment* has been prepared in the context of a future application for the demolition of the subject historic house as part of a redevelopment proposal for the subject and adjoining sites.

Review of Report Methodology

The *Heritage Assessment* report adopted a best conservation management practice approach to its task, researching and reviewing the historical development of the site, the original construction date of the subject house and by comparing the physical evidence, identified subsequent alterations to establish its nature, associations, condition and integrity. The report therefore has established a thorough understanding of the heritage significance of the place.

The Heritage Assessment then set itself two tasks:

- To review the information contained in the Council Heritage Inventory Form that informed the original heritage listing of the site.
- To undertake a new review of the significance of the subject site through the filter of the standard Heritage Council Criteria for Heritage Assessment, in order to test if the site and the house meet the thresholds for local heritage listing contained in that methodology.

It is this approach and its conclusions that will form the basis for this Peer Review.

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NSW Architects Registration 3836

Integrity of the Historic House

The *Heritage Assessment* reviewed the range of alterations and additions that have been made to the original house. It summarised these on P32.

- *Reconstructed front verandah detailing and trims*
- *Possible addition of bracketed awning to projecting bay*
- *Modern finials, barges and ventilator details*
- *Extension of the original plan form to the rear*
- *Modification of the original roof form as a result of later additions*
- *Modification of side window size and joinery*
- *Replacement of original flooring*
- *Replacement of all internal doors*
- *Replacement of all ceilings, cornices and ceiling roses*
- *Painting of face brickwork*
- *Concreting of the rear yard*
- *Modification of front yard and front fencing*
- *Removal of original kitchen fireplace*
- *Loss of original residential context through redevelopment of surrounding sites*

From a review of the analysis of the historical development of the building and a detailed site inspection, I concur with this summary and agree that the original integrity of the subject house has been severely compromised. In particular, the altered roof form with its different ridgeline, combined with the altered front verandah detailing, have changed the presentation of the house to the street. Many of these changes cannot be reversed due to their impact on, or loss of, original fabric. Other changes are unlikely to be reversed in the current socio-economic context of the area.

I also accept that the streetscape context of the house has changed radically over time, particularly with the erection of a series of mid 20th century residential flat buildings to the immediate north. These buildings are set well back from the street frontage in anticipation of a planned road widening that did not eventuate.

Heritage Inventory Statement of Significance

Information contained on the Heritage Inventory sheet for the subject property provides some background to the heritage listing process that resulted in the subject property being listed as a Local Heritage Item in Parramatta City Centre LEP 2007, where it is identified as Item 127.

- Identification of the site (as item 536) for its heritage values was first undertaken by Meredith Walker as part of the 1993 City of Parramatta Heritage Study. She utilised the standard heritage study guidelines then in practice.

- The property was first given statutory protection when it was included as a heritage item in Regional Environmental Plan 28 (Item No 536) in 1999.

- The Statement of Significance was last updated on 1st March 2002.

- The second round of analysis was undertaken by the National Trust (Parramatta Branch) in 2004, when a date for the construction of the residence (1915) was added to the inventory. The National Trust study did not follow any recognised guidelines.

Note that the standard Heritage Council Guidelines known as *Assessing Heritage Significance*, was first published in 2001.

The official Statement of Heritage Significance contained in the Heritage Inventory states:

House at 7 Station Street West is of significance for the local area for historical and representativeness reasons. Built c.1915, it is readily identifiable as part of historic building stock and is still contributing to the streetscape.

The Heritage Inventory sheet records the following assessment against the standard Heritage Assessment Criteria:

- *Historic (Criterion A) This item is historically significant*
- *Representative (Criterion G) This item is representative*

There is no further discussion or analysis in the Heritage Inventory to support these conclusions. The Statement of Significance appears to be suitable for an Heritage Inventory, on the assumption that it will subsequently be reviewed at the appropriate time, when a future development opportunity is being considered.

Note, the additional text quoted under the Statement of Significance on pp 3 of the *Heritage Assessment* report was in fact contained in the Physical Description section of the Heritage Inventory sheet for the property.

Upgraded Heritage Assessment against Criteria

Having reviewed this aspect of the analysis in the *Heritage Assessment*, I concur with the conclusion that the subject property does not meet any of the thresholds established by the Heritage Council for entry in a Local Environmental Plan Heritage Schedule.

Those criteria speak of "special", "important" and "significant". The current house has none of these threshold characteristics. In terms of the Heritage Inventory sheet analysis:

- There is nothing to establish that has made any important contribution to the historical course of pattern of the area's cultural history.

- Its degree of representativeness has been severely compromised by subsequent alterations.

Upgraded Assessment of Heritage Significance

The upgraded Assessment of Heritage Significance contained in the *Heritage Assessment* report is as follows:

No 7 Station Street West, Parramatta, is a modified early 20th century residence of a standard form that retains some characteristics of this transitional style of development which is relatively common in the Local Government area. The building has no historic evolutionary or associational values and represents typical residential development of the period in which it was built.

The changes to the building to convert it to commercial use have permanently altered its original appearance and form and have obscured original character and detail. In its current form it does not provide accurate evidence of the historic building stock in this area.

The setting of the building amongst later development does not provide support for the setting or contribution of this site to any significant streetscape in the vicinity of the site.

The site does not reach a reasonable threshold for individual heritage listing.

Demolition of the item will not result in any significant loss of cultural heritage to Harris Park, Parramatta City Centre or the wider Parramatta Local Government Area.

I concur with this upgraded Statement of Heritage Significance.

Conclusion Reached in the *Heritage Assessment* report

The conclusion reached by the Heritage Assessment report was as follows:

This heritage assessment suggests that the individual heritage listing of the property in Schedule 5 of the Parramatta City Centre LEP was not appropriate at the time of the original heritage study and cannot have included a rigorous assessment or analysis of the building fabric given its high degree of modification which is discernible on inspection without the benefit of documentation.

The very limited heritage value and substantially modified condition of the place suggests that its loss would not result in any substantial diminution of the environmental heritage of Parramatta. Demolition for a conforming development would in my opinion be acceptable in these circumstances.

Comment:

I concur with this conclusion. The *Heritage Assessment* has succeeded in its primary aims:

It has reviewed the information contained in the Council Heritage Inventory form and found that the depth of original research and analysis (1999) was inadequate as it did not recognise the influence of the many alterations that had taken place on the building in accordance with a 1989 development consent. It is apparent that, for whatever reason, the consultants did not identify the particular circumstances of this property and consider excluding it from their recommended list of potential heritage items for the eventual REP.

It is apparent that once on the REP heritage schedule that no subsequent heritage review has substantially reconsidered the integrity of the property and its continuing suitability for retention on the heritage schedules of successive planning instruments. In my experience it is highly unusual for broad coverage heritage reviews and surveys to delete properties that had been included in earlier listing schedules.

The 2002/2004 addition of comments against criteria A and G, do not in my opinion, reflect a substantial reconsideration.

The detailed analysis of the subject site against the Heritage Council Assessing Heritage criteria contained in the *Heritage Assessment* report rightly concludes that the subject property does not meet the thresholds for LEP listing that were introduced in 2001.

Recommendation

In light of the renewed analysis and conclusions of the Heritage Assessment report, I support its recommendation that, although the site has been heritage listed for some time, demolition of the house at 7 Station Street West, Parramatta is acceptable in the context of a future consent for the redevelopment of the subject site and potentially adjoining sites.

Yours faithfully
GRAHAM BROOKS AND ASSOCIATES

Graham Brooks
Director
grahambrooks@gbaheritage.com

Architectural Projects

1608 – 1, 7 Station Street, Parramatta
Conservation Management Plan
November 2015

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1. INTRODUCTION

1.1. BACKGROUND

The sites of 1 - 7 Station Street West located on the corner of Station Street West, and Raymond Lane, Parramatta. The site is currently the subject of a Planning Proposal. Architectural Projects were commissioned by Greenrock Property Pty Ltd to prepare this document in September 2015.

1.2. SITE LOCATION AND DESCRIPTION

The Assessment relates to a study area defined by the Parramatta Harris Park Estate with specific focus on 1 and 7 Station Street West, lots 34 and 31, Sec 1, DP976. The site is located on the west side of Station Street West.

1.3. AUTHORSHIP

The report has been prepared by a team consisting of the following key members:
Jennifer Hill – Architectural Projects Pty Ltd – Heritage Architect
Elizabeth Gibson – Architectural Projects Pty Ltd – Heritage Architect

1.4. LIMITATIONS

A time frame of 4 weeks was established for the preparation of the Report. Access was given to the site and Council records held by the applicant and Council. No physical intervention was undertaken to prepare this report. No historical archaeological work other than the site surveys provided herein was commissioned for the report.

1.5. METHODOLOGY

The Assessment has been prepared in accordance with the methodology outlined in, *The Conservation Management Plan* by Dr James Semple Kerr (6th Edition 2004). The report complies with the principles of the Australian ICOMOS Charter for the Conservation of Places of Cultural Significance (the Burra Charter) and its Guidelines. The methodology used in the evaluation of the place is that recommended by the Heritage Branch of the Office of Environment and Heritage.

It seeks to identify from documentary and physical evidence any historic aesthetic social and technological values of each component building and to determine their level of representatives or rarity by comparison with other identified examples. The analysis also looks at the overall character of the adjoining area to determine if the buildings and the site development pattern contribute to a characteristic grouping or cohesive streetscape that is unique or of sufficient importance to require protection.

1.6. TERMINOLOGY AND DEFINITIONS

The terms fabric, place, preservation, reconstruction, restoration, adaptation and conservation used throughout this report have the meaning given them in Australia ICOMOS Charter for the Conservation of Places of Cultural Significance (Burra Charter).

The terminology used to described building styles follows the nomenclature set out in Apperly, R., Irving, R. and Reynolds, P. *A Pictorial Guide to Identifying Australian Architecture*, 1989.

In order to achieve a consistency in approach and understanding of the meaning of conservation by all those involved a standardised terminology for conservation processes and related actions should be adopted. The terminology in the *Burra Charter* is a suitable basis for this. Article 1 of the *Burra Charter* gives the following definitions:

Place means site, area, building or other work, group of buildings or other works together with associated contents and surround.

Cultural significance means aesthetic, historic, scientific or social value for past, present or future generations.

Fabric means all the physical material of the place.

Conservation means all the processes of looking after a place so as to retain its cultural significance. It includes maintenance and may, according to circumstance include preservation, restoration, reconstruction and adaptation and will be commonly a combination of more than one of these.

Maintenance means the continuous protective care of the fabric, contents and setting of a place, and it is to be distinguished from repair. Repair involves restoration and reconstruction and it should be treated accordingly.

Preservation means maintaining the fabric of a place in its existing state and retarding deterioration.

Restoration means returning the existing fabric of a place to a known earlier state by removing accretions or by reassembling existing components without the introduction of new material.

Reconstruction means returning a place as nearly as possible to a known earlier state and is distinguished by the introduction of materials (new or old) into the fabric. This is not to be confused with either recreation or conjectural reconstruction, which are outside the scope of the Burra Charter.

Adaptation means modifying a place to suit propped compatible uses.

Compatible use means a use, which involves no change to the culturally significant fabric, changes that are substantially reversible, or changes which require a minimal impact.

1.7. ACKNOWLEDGMENTS

City of Parramatta Council
Parramatta Local Studies Library
National Trust of Australia (NSW)
Australian Heritage Council
Australian Institute of Architects

This report has relied upon a draft Heritage Assessment of No. 7 Station Street West, Parramatta, prepared for Greenrock Property in August 2015 by NBRS & Partners, and a peer review of this assessment by Architectural Projects, August 2015.

1.8. EXTENT OF SEARCHES

Information searches have occurred with the following organisations:
The Mitchell Library: General subdivision information.
The NSW Land Titles Office: Specific subdivision/title information.
Sands Directory
Local Studies Library

Sydney Water Archives
Council Archives
Commonwealth archives
Australian Heritage Council
National Trust of Australia (NSW)
Heritage Council of NSW
NSW State Heritage Inventory
RAIA Twentieth Century Heritage Inventory
Art Deco Society of NSW Heritage Inventory
Parramatta Historical Society
Parramatta Heritage Centre

1.9. COPYRIGHT

This report is copyright of Architectural Projects Pty Ltd and was prepared specifically for the owners of the site. It shall not be used for any other purpose and shall not be transmitted in any form without the written permission of the authors.

2. HISTORICAL DOCUMENTARY ANALYSIS

2.1. HISTORICAL CONTEXT OF THE AREA

The NBRS & Partners report provides the following history of the area:

Pre European History
Prior to the arrival of European settlers in 1788 the general area around Parramatta was inhabited by the indigenous Burramattagal clan who shared the Darug language with associated clans from Broken Bay to the Shoalhaven and west to the Blue Mountains.

Early European Development
Within a few months of the arrival of the first fleet in Sydney Cove, a party, consisting of 10 convicts and a garrison of soldiers, was established in Parramatta. This party grew to 100 convicts in 1789, and the following year, Governor Phillip laid down the lines for a regular township adjacent to the river, which he initially called Rose Hill, and later becoming Parramatta.

Clearing and development of land for agriculture then followed and New South Wales' second town had begun. In an early plan of the new Roseville settlement (ca.1790) the subject area was shown as part of 'enclosures for cattle' and 'ground in cultivation'.

Between 1791 and 1800, about 20 significant land grants were issued to settlers in and around the town of Parramatta, and a system of leasing lands was established for home building purposes. Early grantees or lessees in the vicinity often held leases in the town of Sydney and elsewhere as well as Parramatta. Simultaneously, a site was set aside for the market and town hall in the vicinity of Church Street near the Parramatta River. The first permanent dwellings in the new township were erected in the principal thoroughfares of George, Macquarie and Church Streets.

With the arrival of Governor Macquarie in 1810, further streets were laid out and blocks of land surveyed in George, Church, Phillip and Macquarie Streets. All convicts were removed into a barracks that was completed in 1822. Public buildings, a hallmark of the Macquarie period, proliferated. Parramatta developed as a secondary seat of government, a centre of agriculture and grazing, and was directly connected to Sydney by road and river. The town developed rapidly during this period as depicted in Figure 2.1.

In 1844, W Meadows Brownrigg undertook a survey of Parramatta to identify grants, purchasers and leaseholders and noting which portions were built upon (Figure 2.2).

The railway from Sydney to Parramatta Junction (Granville) was opened on 26 September 1855. It was later extended into the population centre at Argyle Street in April 1860. The increased accessibility brought about by the railway contributed to the increase in population and development of the area between 1870 and 1880.
Harris Park
In 1794, Surgeon John Harris was granted 110 acres at Parramatta (40 hectares) adjoining Ruse's farm. His land, with its heavily wooded hills, was the basis of the modern suburb of Harris Park, which also includes a portion of the neighbouring estate owned by another Corps officer, John Macarthur. They were responsible for two of the suburb's surviving landmarks, Hambledon Cottage and Experiment Farm Cottage. Macarthur built Hambledon in the 1820s. Its early tenants included the Anglican Archdeacon Thomas Scott and the Macarthur's governess, Penelope Lucas. Although Harris spent much of his time on another estate at Shane's Park, he retained his Parramatta land and built Experiment Farm Cottage in 1835. This classic 'Indian' bungalow, with its wide verandas, is now a National Trust property.

When Harris died in 1838, his nephew, Thomas, inherited Experiment Farm and settled there in the 1840s, farming and breeding horses. After his death in 1870, the break-up of the Harris estate began, although the family retained Experiment Farm Cottage until the 1920s. An early residential subdivision was marketed as 'Harris Park' and the name became attached to the wider area. But what was accepted as 'Harris Park' in the nineteenth century did not exactly

coincide with the twenty-first century suburb. From the 1870s to the 1900s, for example, Samuel Purchase occupied six acres (2.4 hectares) of the Harris estate and ran a successful plant nursery. The site of this Harris Park landmark, bounded by George, Hassall and Harris Streets, now lies just outside the current suburb boundary.

In the late 1870s, local builders bought blocks in Harris Park, but the anticipated influx of home buyers did not arrive until a railway platform was opened in the 1880s. This rail link to the merging industrial areas of Granville and Clyde led to a network of workers' cottages quickly developing around the station, but by 1900 the suburb also contained more substantial homes and middle-class residents. For decades, the area known as Harris Park was divided between the municipalities of Parramatta (proclaimed 1861) and Granville (proclaimed 1885). In 1949, the entire Granville municipality was included in an extended City of Parramatta.

Despite its industrial connections, Harris Park remained largely residential. Renewed subdivision in the 1920s took up virtually all the suburb's available land. After World War II, state planners designated Parramatta as a major growth centre and large-scale immigration began. These policies affected the density and the composition of the Harris Park population. The construction of home units from the 1960s has meant that the suburb has a very high proportion of this type of housing. Similarly, an unusually high percentage of the Harris Park population was born overseas. Roughly one in four residents speak Arabic, Hindi or a Chinese language.[1]

2.2. SITE AND BUILDING TIMELINE

YEAR	DATE	TEXT
1794	20 February	Surgeon John Harris was granted 110 acres Harris' Farm
1820		Macarthur built Hambledon Cottage
1835		John Harris built Experiment Farm Cottage.
1838	27 April	Death of John Harris and estate valued at £150,000
1838		Thomas Harris inherited Experiment Farm and settled there
1855	26 September	The railway from Sydney to Parramatta Junction (Granville) was opened
1860	April	Railway extended to Argyle Street
1861		Municipality of Parramatta proclaimed
1870		Death of Thomas Harris
1870		Break-up of the Harris Estate commenced
1870/1880		Increase in population and development of Harris Estate
1870/1900		Samuel Purchase occupied six acres (2.4 hectares) of the Harris Estate and ran a successful plant nursery.
1876		John Wigram Allen commenced subdivision of the Harris Estate Harris Estate was re-subdivided with land to the east of the railway line as DP 241
1880s		A network of workers' cottages developed around the station
1882		Plan of Streets in Harris Park, Town of Parramatta indicates the site as undeveloped
1882		Early residential subdivision was marketed as 'Harris Park'
1882	4 November	Auction sale, Messrs Mills, Pile and Gilchrist, of "92 splendid sites" the whole of the subdivision at Harris's Park, Parramatta, at prices ranging from 26s to £3 1s per foot [realising] £6500
1882		Section 10 and 12 of DP 241 were sold to Henry Solomon of the City of Sydney, Partner Myers and Solomon (general importers)
1882		Solomon re-subdivided Sections 10 and 12 of DP 241 as DP 296

[1] NBRS + P, Draft Heritage Assessment No 7 Station Street West, Harris Park 2015

1883	March	Solomon sold Lot 31 of Section 1 to Samuel Phillips of Pitt Town, farmer for the sum of £74/7/1
1884		Sands Directory first listing of Station Street as Station Street East properties
1887		Station Street West properties are first listed in Sands Directory
1889		James Smith is listed at "Yeltaville"
1896		Neil Campbell is first listed in Sands Directory at Station St West (No. 1)
1900s		Harris Park contained more substantial homes and middle-class residents
1903		Five listings in Sands Directory
1905		Six listings in Sands Directory
1909	May	Samuel Phillips sold Lot 31 (No.7) to Michael Farrell of Parramatta, grocer's assistant
	September	Farrell mortgaged Lot 31 (No.7)
	October	Council gave permission to the building application submitted by S Lucas "to erect a cottage in Station Street for Mr H Farrell
1911/1919		Michael Farrell was the occupant of 7 Station Street (Sands Directory)
1911		Eight listings in the Sands Directory
1912		Neil Campbell dies at his residence in Station St (No.1)
1915		Eleven listings in the Sands Directory
1916/1930's		James Campbell listed at No. 1 Station St West
1920s		Harris family retained Experiment Farm Cottage
1920s		Renewed subdivision of Harris Park
1929	January	7 Station Street sold to Edna Mary Farrell of Parramatta, spinster (later Mrs. D Walker)
1933		House 7 Station Street rented
1949		Granville municipality was included in an extended City of Parramatta
1950		Parramatta designated as a major growth centre and large-scale immigration began
1960s		Construction of home units in the area
1960		Increase in immigrant population
1969		Death of Mrs (Edna) May Walker
1988	August	Geoffrey Michael Walker sold to Premier Fire Protection Pty Limited
1989	31 March	Building application to Parramatta Council approved for additions office
2005	August	Site purchased by the Greek Orthodox Archdiocese of Sydney
2006		Established the Greek Welfare Centre

2.3. HISTORY OF THE SITE AND BUILDING

The subject sites are located on Section 1 of DP 976, which was originally part of "110 acres in the township of Parramatta on the north of a creek known by the name of Duck Creek" granted to surgeon, John Harris, on 20 February 1794. Harris subsequently purchased the farm of James Ruse on which he built the still extant Experiment Farm Cottage in 1798. "Until 1800 he led a busy existence as surgeon and farmer. By the turn of the century he owned 315 acres (127 ha) of land of which 205 (83 ha) were purchased, and had acquired 431 head of stock, possessions which placed him among the foremost officer-farmers."6 At his death on 27 April 1838, he left property in the region of £150,000.[2]

John Wigram Allen purchased 91 acres, 2 roods + 16 perches plus 24 acres, 3 roods + 8 perches and commenced subdivision of the Harris Estate in 1876 (Figure 2.5). This is part of the land depicted in the block plan shown at Figure

[2] NBRS&P, Draft Heritage Assessment 7 Station Street West, Harris Park, 2015

2.3. This land was re-subdivided with land to the east of the railway line as DP 241 (Figure 2.5); the subject site is located within Section 10 thereof. The first sales in DP 241 commenced in January 1877.

In the "Plan of Streets in Harris Park, Town of Parramatta" undertaken in September 1882 (Figure 2.8), the subject sites are located within that portion of undeveloped land owned by Sir George Wigram Allen, bounded by Marion Street, High Street, Short Street and Station Street West. What is apparent from comparing the May 1876 and September 1882 plans is that the portions of Allen's land did not sell immediately, including Section 10.[3]

George Wigram Allen advertised the auction sale on 4 November 1882 of "92 splendid sites" at Harris Park Parramatta (Figure 2.10). Sections 10 and 12 of DP 241 were sold to Henry Solomon of the City of Sydney, landowner (Figure 2:7).[4] That land is shown on the subdivision plan at Figure 2.9. Solomon was a partner with George and Henry Myers as the firm of Myers and Solomon (general importers) and had their store at 542 George Street, Sydney. A report on the auction sale was published in the Sydney Morning Herald the Monday after: *"Messrs Mills, Pile and Gilchrist…sold…the whole of the subdivision at Harris's Park, Parramatta, consisting of 92 allotments, at prices ranging from 26s to £3 1s per foot [realising] £6500."*[5]

Solomon re-subdivided Sections 10 and 12 of DP 241 as DP 976, which plan of subdivision is shown at Figure 2.11. The first sales in this subdivision are registered on the certificate of title on 27 December 1882.[6]

In March 1883, Solomon sold Lot 31 of Section 1 (No.7 Station St West) to Samuel Phillips of Pitt Town, farmer for the sum of £74/7/1.11. That allotment is shaded red on the subdivision plan. Phillips is accordingly named the owner of "unenclosed land" in the 1883 Parramatta Rate Book with an annual value of £5.[7]
In April 1886, Arthur Ross Nott purchased lot 34 of Section 1, DP976 from Solomon. Nott, a resident of Sydney, was the secretary of The Federal Building Society. Nott mortgaged the property in August 1886, and remained absent landowner until 1914 (Figure 2.11)

The Sands directories do not list Station Street until 1884, and at this time only Station Street East properties are included. In 1887, Station Street West properties are listed. Five listings occur unnumbered, including: Thomas Anstias, Joseph Button, Jeffrey Harved, Matthew Howlett and Samuel Howlett. In 1889 James Smith is listed at "Yeltaville". Followed by listings for Mrs Elizabeth Hownett (sic), Samuel Hownett, and John Cole School Teacher. The following year Cole is replaced by Mrs Connell, and listing remain consistent until Mrs Connell is replaced by Joseph Martin, constable in 1894, then Neil Campbell in 1896, Mrs Wilson in 1901. By 1903, two additional listings occur bring the number to 5 with James Smith still at Yelta, Alfred Howlett, then William Handcock, Lachlan McKay, and William Hughes. From 1905, there are 6 listings and by 1911 eight including Michael Farrell. Another three are added in 1915.

The Sands Directory listings are not numbered until early 1920's when No 1 can be identified as occupied by James Campbell. James Campbell was listed as occupant from 1916-1930's, and prior to that the property is noted as occupied by Neil Campbell. Neil Campbell is first listed in Station St West in the 1896 Sands Directory, when it was one of only four

[3] NBRS&P, Draft Heritage Assessment 7 Station Street West, Harris Park, 2015

[4] Certificate of Title Vol 616 Fol 243 NSW L&PI

[5] Monetary and Commercial, SMH 6 November 1882, p6. NBRS&P

[6] NBRS&P

[7] NBRS&P

listings. This would suggest a likely construction date of No. 1 as c.1895. The property was also occupied by William Hughes from 1903-6. Hughes was Campbell's brother in law.

Neil Campbell died in 1912, and James was one of his sons. The following obituary was reproduced in the Cumberland Argus and Fruit growers Advocate of 9 November 1912, p6.
"The Late Mr. Neil Campbell.
Mr. Neil Campbell, an old and respected resident of Parramatta; died at his residence, Station Street, Harris Park, on Monday, at the ripe old- age' of 8O years.: Mr. Campbell was a native of Tyree, in the Highlands of Scotland, the Duke of Argyle's Estate. He came out to this colony with his father and mother and brothers and sisters when he was about six years of age. His father was a turner, and worked for Mr. T. Urquhart, who had a carriage building establishment on the site now occupied by the post-office. Mr. John Taylor was an apprentice of Mr. Urquhart as also was Mr. W. O. Ward. Young Neil went to Mr. Ewbank Lough's school, which was in a cottage near the river bank, on the east side of Marsden street. The front portion of the site was afterwards used for the building of a Primitive Methodist Church. As a boy he was employed in the butchering, business by Mr. Blackett at what wan known as the "Boilling Down," at the rear of the Old Racecourse. Cattle and sheep were then so cheap that they were slaughtered and boiled down for their tallow. Later on he had a coach with which he piled to and from the steamers wharf. Afterwards he entered the Telegraph Construction Department, when he was engaged in constructing telegraph lines. His work took him through the colony in all directions. For over twenty years he was thus engaged, and on leaving that work he retired. His wife predeceased him by some ten years. His son Daniel also predeceased him. He leaves three sons and two daughters, Neil, Duncan and James, Mrs. Lake, and Miss Rebecca Campbell. Neil is a successful horse trainer in Melbourne, training for a wealthy horse owner there. James is in the Telegraph Construction Department, and Duncan is in the back country. One of Parramatta's oldest Identities. Mr. Duncan Campbell, of Marsden street, is a brother of the deceased, and the late Mrs. William Hughes was his sister. Mr. Campbell was of a quiet and reserved nature, and lived a very unostentatious life." (Figure 2.12)

The Truth, of 10 November 1912 also reported Campbells death as follows:
"NEIL CAMPBELL.
Mr. Campbell, who was a native of the Isle of Tiree, Scotland, and who died at Parramatta, on November 11th, aged eighty years, had resided in the old town for three-quarters of a century...."

The allotment now known as No. 7 Station Street West remained undeveloped until May 1909 when Samuel Phillips sold the land to Michael Farrell of Parramatta, grocer's assistant. (Memorandum of Transfer 69129, NSW L&PI) Farrell mortgaged the land in September 1909, presumably to raise the capital required to build upon the lot. The Council gave permission in October to the building application submitted by S Lucas "to erect a cottage in Station Street for Mr H Farrell [sic]."[8]
In 1914 Arthur Nott transferred lot 34 (No 1 Station Street West) to James Allan Campbell line repairer of Harris Park Occupation of the house by the Campbell family continued with the property being transmitted to spinsters Rebecca Harresky Campbell + Adelta Rebecca Lake in 1946. Lake is listed on the electoral rolls at 1 Station Street West from 1930-1980. The property was sold in 1983.

An aerial photograph of 1 and 7 Station Street taken in 1943 shows the two houses in their original low scale residential setting. The houses are adjoined by hipped and gables roof freestanding residences in garden settings. The two residential properties to the north of No.7 (No's 9 and 11) are substantial, with large gardens.

[8] Cumberland Argus and Fruitgrowers Advocate, 20 October 1909, p3 NBRS&P

According to the Sands Directory Michael Farrell was the occupant of the No7 Station Street from 1911 until 1919. Thereafter the house was leased to a succession of tenants including Walker R Paul, Alfred W Bayly and CG Gregory. Farrell conveyed 7 Station Street in January 1929 to Edna Mary Farrell of Parramatta, spinster. Later in the same year she married Donaldson C Walker. The Walkers lived here for a few short years before moving to the Northern Beaches of Sydney by 1933. Thereafter the Valuation Lists name Mrs (Edna) May Walker as the owner of the subject site until her death in 1969 at Fairlight. It is not known who occupied the property in the intervening period. In October 1969, No. 7 Station Street was conveyed to her widower, Donaldson Cannon Walker of North Balgowlah, retired insurance inspector, and their son Geoffrey Michael Walker of Killarney Heights, dentist. Following the death of Donaldson Walker in 1978, the subject site passed to Geoffrey Michael Walker in February 1983. He owned same until August 1988 when it was sold to Premier Fire Protection Pty Limited.(Land Titles) That company lodged a successful building application to Parramatta Council in mid-December for "adds office" estimated to cost $50,000; the application was approved on 31 March 1989.[9]

In 1987, Stephen and Jennifer Edwards purchased No 1 Station Street West from Robert Morris. They retained ownership through various companies until 2015, with Stephen Edwards Construction leasing the property.

In 1993, a Building Application for a shade port structure over part of carpark at the rear of No.1 Station St West was approved by Council.

The commercial property was purchased by the Greek Orthodox Archdiocese of Sydney in August 2005 and in 2006, they established the Greek Welfare Centre there as a regional office in Western Sydney, to service the needs of people of Greek background and the wider community offering a range of programs and services.[10]

In 2006, a Development Application to construct a carport at the rear of No. 7 Station St west and continue the commercial use of the building as a community information centre was approved by Council.

2.4. RELEVANT HISTORICAL THEMES

4 Building settlements, towns and cities - Accommodation - Activities associated with the provision of accommodation, and particular types of accommodation - House

[9] Register of Building Applications PCC, NBRS&P

[10] NBRS&P

3. PHYSICAL ANALYSIS

3.1. DESCRIPTION OF THE AREA

Despite its industrial connections, Harris Park remained largely residential. Renewed subdivision in the 1920s took up virtually all the suburb's available land. After World War II, state planners designated Parramatta as a major growth centre and large-scale immigration began. These policies affected the density and the composition of the Harris Park population. The construction of home units from the 1960s has meant that the suburb has a very high proportion of this type of housing.[11]

3.2. DESCRIPTION OF THE SITE & SETTING

The sites are located opposite the deep cutting for the railway and back onto a laneway that is characterised by modern developments fronting High Street.

In their original setting, the houses were set hard against adjoining houses of the same period and character, now located against two and three storey flat developments the streetscape context is substantially altered.

3.3. DESCRIPTION OF THE BUILDING

1 Station Street West

The NSW Heritage Inventory provides the following description:

"two storey late Victorian house of rendered brick has pyramid slate roof with projecting hip front forming squat tower over stilted arch entrance with corniced string line. A recessed niche is between two rendered corniced string lines above arch and under windowsill. There is one rendered brick chimney with stepped corbel decoration. Verandah has concave corrugated iron roof that runs across front to projecting hip, supported by timber post to ground floor. Upper level verandah has cast iron balustrading and valence, lower level verandah has curved timber valence. Ground floor front wall has arch topped window and sidelights. French door on upper verandah floor has bolection mould panels below the lock rail and glazed panels above. Front door has transom light and sidelights above Victorian timber door with round head glazed upper panels, below lock rail and two timber panels with bolection moulding. Front fence is aluminium spearhead palisade fence and gate."

The existing Victorian style house is remarkably intact with the exception of the rear verandah infill, which is in poor condition. The main façade (east elevation) is characterised by an off centre tower element centering on the entry door with the entry hall behind. The primary building form, which accommodates two rooms on both levels steps with a lower service wing, which contains a bathroom. The rear verandah at ground level returns around this wing.

The planning is characteristic of a grand Victorian residence. A hall way leads to the rear service area. It features corbel brackets an arch and timber stair. A Verandah is located to the front of the façade on both levels. The two main rooms in the primary building form are linked with one fronting the verandah and retaining its original tri partite window. The other room facing the rear features a simple double hung window. Both rooms retain their symmetry although the cornices have been replaced and the fire place modified. To the rear the service wing and former kitchen retain its oven recess and the room features a decorative cornice but has been subdivided below. An additional wing currently used as the kitchen is more utilitarian.

7 Station Street West

The NSW Heritage Inventory provides the following description:

[11] Harris Park, Dictionary of Sydney, 2008

"single storey Federation brick cottage has corrugated iron roof on painted brick walls. The main roof is broken by a small gable with turned timber finial and louvred ventilator. Projecting gable has finial and decorated with dentils below string course. There are two tall brick chimneys with stepped corbels and Chinese lanterns. Verandah has corrugated iron skillion roof extending from main roof across front to projecting gable and is supported by paired timber posts set on painted tall brick piers with sandstone caps. Verandah has painted concrete floor and painted brick balustrade. Awning above window has Federation decorative timber ladder brackets and corrugated iron roof. Front fence is aluminium spearhead palisade fence and gate."

The existing building at 7 Station Street West is a highly modified, early twentieth century, single storey house with a corrugated metal clad hipped roof form and projecting gabled bay to the street frontage and a large hipped and skillion extension to the rear. The front section of the site retains a garden setting with a modern poll style, aluminium fence. The rear section of the site is paved and is occupied by car parking.
The building follows a traditional design formulae with a projecting room with a gabled roof and a verandah set under an extension of the main hipped roof form which is supported on paired timber supports set over brick piers. This form was originally expressed at the rear of the house as well prior to its modification.
Reconstructed ventilation gabletts are located at the apex of the roof, front and back and three, tall face brick chimneys are located on either side of the building.
The current detailing is of Federation era character with turned timber finials and a bracketed awning over paired windows on the projecting bay.
The building, once face brickwork is now painted.[12]

3.4. INTERIOR

The spatial qualities of the primary rooms at No. 1 are defined by their high volumes and decorative detail including moulded skirtings, cornices and architraves. The timber stair is intact, and features details typical of the period. Decorative plaster ceilings are of a later date.
The interior spaces of No. 7 are utilitarian and have been altered.

3.5. OTHER ASPECTS OF SITE

3.5.1. Evidence of Archaeological Potential

Given the history of site disturbance/development from the late nineteenth / early twentieth century period, the site is unlikely to reveal archaeological remains.

3.5.2. Evidence of Aboriginal Heritage Potential

Given the history of site disturbance and development from the late nineteenth and early twentieth century period, the site is unlikely to reveal aboriginal remains.

3.5.3. Evidence of Natural Heritage Potential

Given the history of site disturbance from the late nineteenth century period the site is unlikely to have heritage significance for its natural features.

3.5.4. Moveable context

No significant moveable items exist.

[12] NBRS & Partners

3.6. PHASES OF DEVELOPMENT

The site of 1-5 Station Street have been in one ownership since 1990 and has been extended to provide a composite building. 7 Station Street West has been extended and modified.

Modifications to the original building can be seen in the building fabric and were the result of the adaptation of the original cottage to commercial uses in the 1980s. The extent of these changes is best understood by comparison of the 1943 aerial view at Figure 2.13 and the current aerial photograph of the site at Figure 2.14
The original building had a mirror image of the front form at the rear with the roof rising to a single cross ridge aligning with the existing northern chimney. The rear yard was divided by a fence into two areas.[13]

3.7. HISTORY OF GENERAL CHARACTERISTICS & A COMPARATIVE ANALYSIS OF THE STYLE

Late Victorian Italianate Style
No 1 Station Street West is a simple example of a Late Victorian Terrace with some Italianate features.

Richard Apperly, Robert Irving, and Peter Reynolds "A Pictorial Guide to Identifying Australian Architecture; Styles and Terms from 1788 to the Present", identify the Late Victorian Italianate style as follows:
"In the seventeenth century, two French artists, Nicolas Poussin and Claude Lorrain, fell under the spell of the Italian landscape and in their paintings translated it into a vision of Arcadia. For more than a century thereafter, many cultured Europeans allowed themselves to admire a real landscape only if it was literally 'picturesque' enough to resemble a painting by Claude.

Through the efforts of such men as Uvedale Price, Richard Payne Knight and Humphrey Repton, the Picturesque movement in architecture and landscape design gained strength in Britain without ever completely forgetting its Franco-Italic beginnings. From this movement, a significant strand of nineteenth-century domestic architecture endeavoured to establish a vaguely Italian ambience, drawing on images of rambling farmhouses in the Campagna and idyllic villas in the Tuscan countryside. The facile John Nash began the movement in Britain in 1803 with the stuccoed, picturesquely asymmetrical Cronkhill in Shropshire. Karl Friedrich von Schinkel provided an important Continental example of the Italianate style some decades later with his Court Gardener's House at Potsdam (1829—31). Pattern books were an important vehicle for the spread of the style, two influential publications being Charles Parker's Villa Rustica (1832) and Calvert Vaux's Villas and Cottages, published in America in 1857. No less a personage than Prince Albert, working with Thomas Cubitt, gave the Italianate style a boost when he designed Osborne on the Isle of Wight (1845), a retreat for Queen Victoria and the royal family. Osborne, with its tall, balustraded tower, was to be the model for many large residences throughout the Empire, including Government House in Melbourne.

The Italianate style was never an 'academic' idiom. As a style of domestic architecture in Australia, Victorian Italianate made minimal reference to Italy. Mouldings and minor details usually had a classical feeling, but two of the style's prominent characteristics—the faceted bay and the stilted segmental arch—were not specifically Italian at all. A Victorian Italianate building of any consequence has a tower capped with a low- pitch pyramid roof—or, more pretentiously, with a balustrade—and it is likely to have an asymmetrical principal elevation. Indeed, it can be claimed with much justification that the Great Australian Asymmetrical Front (where the main bedroom pokes out a metre or two towards the Street beyond the rest of the house) began with the Victorian Italianate and has continued with little interruption down to the present day."

[13] NBRS & Partners

Federation Bungalow Style
No 7 Station Street West is a modest altered example of a Federation Bungalow.

Richard Apperly, Robert Irving, and Peter Reynolds "A Pictorial Guide to Identifying Australian Architecture; Styles and Terms from 1788 to the Present", identify the Federation Bungalow style as follows:
"The principles of the Arts and Crafts movement which grew up in Britain around William Morris in the second half of the nineteenth century were strongly promoted in America by Gustav Stickley in The Craftsman, the influential magazine he founded in 1901 and published until 1916. The journal featured designs for houses, gardens and furniture, all of which were notable for the homespun charm and lack of pretension. The style of a 'Craftsman Home', Stickley claimed, sprang 'from the needs of the plain people' and was based upon 'the simplest and most direct principles of construction'. Stickley's ideas formed the basis for the bungalow movement which swept America in the early twentieth century.
The word bungalow is derived from bangla, meaning 'a Bengali house'. In the early days of the British Raj in India, a bungalow was understood to be a single-storey house with commodious verandas, but by the end of the nineteenth century the word was comfortable bungalow. Regurgitations of articles in American magazines extolling the virtues of the bungalow continued to appear in local publications for the best part of a decade.

The Federation Bungalow style can be regarded as a transition between the Federation Queen Anne and the Inter-War California Bungalow styles: it cast off the picturesque complexities of the former and did not display its structural carpentry as much as the latter. Chronologically, the style appears late in the Federation period and flows on into the Inter-War period. The accompanying illustrations show that, while Federation bungalows in this country often vary quite widely from one another in appearance, the definitive examples of the style share the qualities of homely simplicity and robust honesty."

3.8. COMPARATIVE ANALYSIS

The NBRS & Partners Heritage Assessment has provided an assessment of the significance of the building at 7 Station Street West, within the context of the Harris Park Estate, which has become the Harris Park Conservation Area and other heritage items in the Parramatta LEP.

The report acknowledges that the building at 7 Station Street West is an altered example of Federation Style and notes : *The existing house is typical of many in the local government area which are not heritage listed and does not represent or demonstrate any strong association with past customs or practices that are not common to many similar properties in the area.*[14]

A preliminary review of the Parramatta Council Inventory indicates sixty – eight properties (Appendix A) listed within the Harris Park area. Of these twenty two properties (Appendix B) are listed within the relevant 1900 – 1920 time frame. The inventory sheets (Appendix C) have some historical information in the form of subdivision history and Sands Directory searches but do not identify if the occupants are significant Parramatta identities. This information, with the exception of 6 Crown Street, does not inform the Statement of Significance, which generally notes:

is of significance for the local area for historical reasons and as a representative example of Federation period houses in the local area . The building makes an important contribution to the streetscape and the character of the conservation area.

14 Page 23, NBRS + Partners

or words to that effect. Equally unusual building typology are not noted.

Overall the inventory sheets provide generalized substantiation for their listing, which is primarily based on aesthetic contribution. As the building has a low level of intactness its aesthetic is much lower than the other examples.

Some of the inventory sheets do not have photos. Of the selected eighteen buildings the other buildings have a greater level of integrity. Some indicate the type of verandah associated with this style of building. 48 Station Street also indicates a later verandah modification. The presence of weather board cottages is not noted as rarer type within the Parramatta Area on the inventory sheets.

The building at 1 Station Street West is a good example of Late Victorian Italianate style that is substantially intact and is prominently located on a corner site.

A preliminary review of the Parramatta Council Inventory indicates 34 properties listed within the relevant 1860-1900 time frame. Of these listings are two storey, including Comfort Lodge 62 Prospect Street, attached houses at 42-44 Station Street East and 32-34 Station Street East, Terrace 36-40 Station Street East, and the subject property at 1 Station Street West.

The inventory sheet for Comfort Lodge, a two storey late Victorian Italianate Villa, notes only six other buildings of similar period and architectural style exist in the Parramatta region.

Comfort Lodge is more substantial than 1 Station Street West, and is included in the State Heritage Register.
The building style and typology is relatively rare.

4. ASSESSMENT OF CULTURAL SIGNIFICANCE

4.1. GENERAL

A statement of cultural significance is a declaration of the value and importance given to a place or item, by the community. It acknowledges the concept of a place or item having an intrinsic value that is separate from its economic value.

There are a number of recognised and pre-tested guidelines for assessing the cultural significance of a place or item established by organisations including among others, the ICOMOS (International Committee on Monuments and Sites, Australia), The National Trust of Australia, The Australian Heritage Council (Australian Government) and in New South Wales by the NSW Heritage Council (The Heritage Branch of the Office of Environment and Heritage).

The Heritage Council's criteria 'NSW Heritage Assessment Criteria' are based on the Australian Heritage Commission criteria and encompass the five values in the Australia ICOMOS Burra Charter; Historical Significance, Historical Association Significance, Aesthetic Significance, Scientific Significance, Social Significance and 'two' grading level Rarity and Representativeness. These criteria were gazetted following amendments to the Heritage Act, which came into force in April 1999 and further amended in 2004.

This report uses the NSW Heritage Assessment Criteria to assess the significance of the study area.

4.2. CRITERION A – HISTORICAL EVOLUTION

An item is important in the course, or pattern, of NSW's cultural or natural history (or the cultural or natural history of the local area.

1 Station Street West

Built c.1895, 1 Station Street West has historical significance for its ability to evidence the subdivision and late nineteenth century development (significant human activity) of the Harris Park Estate.

7 Station Street West

7 Station Street West has low historical significance for its ability to evidence early twentieth century development in the Harris Park Area.

The existing house is typical of many in the local government area which are not heritage listed and does not represent or demonstrate any strong association with past customs or practices that are not common to many similar properties in the area. The place is not associated with any significant person or historical event that provides evidence of the evolution of the area. The modified fabric of the original building does not demonstrate any significant cultural evolution associated with the cultural history of the area.

The Parramatta Council Heritage Inventory suggests that this place is significant historically under Criteria A. The reason given in the Statement of Significance is that it was built in c.1915 (sic) and is readily identifiable as part of historic building stock. The property does not reach a threshold for heritage listing under this criterion. It is not associated with a significant activity or phase beyond the most basic associations that are common to all development in the area no matter which era it belongs to. The site has unsubstantiated and incidental connections with historically important activities and processes and has been substantially modified from its original presentation.

4.3. CRITERION B – HISTORICAL ASSOCIATIONS

An item has strong or special association with the life or works of a person, or group of persons, of importance in NSW's cultural or natural history (or the cultural or natural history of the local area).

1 Station Street West
The house at No. 1 Station Street West has a historic association with early long term Parramatta resident and local identity Neil Campbell.

7 Station Street West
The research to date has not indicated any significance under this criterion.

4.4. CRITERION C – AESTHETIC VALUES

An item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW (or the local area).

1 Station Street West
1 Station Street has aesthetic significance as a fine example of a two storey Victorian terrace, which has landmark qualities due to its corner site for its contribution to the streetscape.

7 Station Street West
7 Station Street is not considered significant for its positive visual or sensory appeal or landmark and scenic qualities have been more than temporarily degraded.
7 Station Street is a highly modified, standard early twentieth century residential design and does not demonstrate creative or technical excellence, innovation or achievement that would suggest any level of significance for this value.

4.5. CRITERION D – SOCIAL VALUE

An item has strong or special association with a particular community or cultural group in NSW (or the local area) for social, cultural or spiritual reasons.

1-7 Station Street West
The research to date has not indicated any significance under this criterion.

4.6. CRITERION E – TECHNICAL/RESEARCH VALUE

An item has potential to yield information that will contribute to an understanding of NSW's cultural or natural history (or the cultural or natural history of the local area).

1-7 Station Street West
The research to date has not indicated any significance under this criterion.

4.7. CRITERION F - RARITY

An item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history (or the cultural or natural history of the local area.

No.7 Station Street West is not significant under this criterion as they are not rare.
The house at No.1 Station Street West is relatively rare as a two storey Late Victorian Italianate residence on Harris Park Estate.

4.8. CRITERION G - REPRESENTATIVENESS

An item is important in demonstrating the principal characteristics of a class of NSW's

- **cultural or natural places; or**
- **cultural or natural environments**

(or a class of the local areas' cultural or natural places; or cultural or natural environments).

1 Station Street West
The building has representative significance as a fine example of late nineteenth century residence.

7 Station Street West
The research to date has not indicated any significance under this criterion.
The operative requirement for this value is that any representative value be important in demonstrating the principal characteristics of a type.
The building is not significant under this criterion being a poor example of the type, which has undergone substantial modification and has lost its design integrity.
7 Station Street does not reach a threshold for listing under this value.

4.9. INTACTNESS
1 Station Street West
The main front form remains highly intact externally.

7 Station Street West
7 Station Street has been extensively altered in a number of significant phases. The remaining building retains its original external character which was originally typical rather than exceptional. Internally the plan layout has been extensively altered and all finishes have been painted or replaced.

4.10. LEVELS OF SIGNIFICANCE
Background
The terms 'local', and 'state' relate to the geographical and social context of an item's significance. For example, an item of local significance will be of historical, aesthetic, social or technical/research significance in a local geographical context; an item of state social heritage significance will be important to an identifiable, contemporary, statewide community.

Historic and aesthetic significance
Representative level of significance within the Sydney area, does/does not

4.10.1. Local Heritage
Due to historic and aesthetic significance, 1 Station Street does reach the threshold for local significance.
Due to representative significance and extent of alteration, 7 Station Street does not reach the threshold for local significance.

4.10.2. State Heritage
Due to their representative level of significance within the Sydney area and extent of alteration, 1 and 7 Station Street West do not reach the threshold for state significance.

4.11. GRADING OF SIGNIFICANCE

	GRADING	JUSTIFICATION	STATUS
A	EXCEPTIONAL	Rare or outstanding element directly contributing to an item's local and State significance.	Fulfils criteria for local or State listing

	GRADING	JUSTIFICATION	STATUS
B	HIGH	High degree of original fabric. Demonstrates a key element of the item's significance. Alterations do not detract from significance.	Fulfils criteria for local or State listing.
C	MODERATE	Elements of typical representative quality. Altered or modified elements. Elements with little heritage value, but which contribute to the overall significance of the item.	Fulfils criteria for local or State listing.
D	LITTLE	Alterations detract from significance. Difficult to interpret.	Does not fulfil criteria for local or State listing.
E	INTRUSIVE	Damaging to the item's heritage significance.	Does not fulfil criteria for local or State listing.

Schedule of significant fabric

The schedule of existing fabric notes the relevant area and its level of significance.

ELEMENT	GRADING
The Site 1 – 7 Station Street West	D
1 Station Street West	
The Exterior	
North Façade	C
South Façade	C
East Façade	B
West Façade	C
The Interior	C
7 Station Street West	
The Exterior	
North Façade	D
South Façade	D
East Façade	D
West Façade	D
The Interior	D

4.12. DEFINING HERITAGE CURTILAGE

4.12.1. Background

There are different types of Heritage Curtilage that relate to the history and significance of the site.

Lot Boundary Heritage Curtilage

The most common type of heritage curtilage comprises the boundary of the property containing the heritage item, or items. The property may also contain associated buildings, gardens and other significant features, including walls, fences, driveways or tennis courts, all which may contribute to the heritage significance of the property.

Reduced Heritage Curtilage

This type of heritage curtilage is less than the lot boundary of the property. It arises where the significance of the item may not relate to the total lot, but to a lesser area, and is often only defined when development occurs.

Expanded Heritage Curtilage

There may be circumstances where the heritage curtilage may need to be greater than the property boundary. Depending on the topography, an expanded curtilage may be required to protect the landscape setting or visual catchment of a heritage item.

Composite Heritage Curtilage

This type of curtilage applies to heritage conservation areas and defines the boundaries of land required to identify and maintain the heritage significance of an historic district, village or suburban precinct.

4.12.2 Heritage Curtilage

The sites of 1 and 7 Station Street West are associated with the key period of significance of the Harris Park Estate, and reflect the 1882 subdivision.

Given the significance of 1 Station Street West, a lot boundary heritage curtilage is appropriate.

Given the low significance of 7 Station Street West, it is not justified to recommend a heritage curtilage.

4.13. SUMMARY STATEMENT OF SIGNIFICANCE

1 Station Street West

The house at 1 Station Street West is of significance for the local area for historical, aesthetic rarity and representativeness reasons. Built c.1895 for early Parramatta identity Neil Campbell, the building is substantially intact and is readily identifiable as part of historic building stock and strongly contributed to the streetscape. It is a fine example of a late Victorian terrace with Italianate influences, and is a rare example of a two storey Italianate Villa in the area.

7 Station Street West

The house at 7 Station Street West has low significance for the local area for its ability to evidence subdivision and as a representative example. Built c.1915, the building was originally typical rather than exceptional. The fabric and setting of the building has been substantially altered and the building no longer represents the style well.

The place is not a 'fine' example of its type and as a result of modification has lower integrity than what would normally be expected for an individual heritage item. It is not a significant variation of this class of items and is not part of an identifiable group. Its location and setting do not support its inclusion as a representative example and the place is not held in high esteem by any identifiable community group. The place does not reach a threshold for inclusion as a local heritage item based on the above inclusion and exclusion criteria.

5. CONSTRAINTS & OPPORTUNITIES

5.1. GENERAL

A general policy for the preservation of a building is based on a recognition of its significance and the relevant constraints, these constraints may extend to development on sites in the vicinity.

1 Station Street West

The chief constraint for 1 Station Street West is the statement of significance.

7 Station Street West

The significance of the 7 Station Street West does not require any constraints.

5.2. CONSTRAINTS & OPPORTUNITIES ARISING FROM THE CULTURAL SIGNIFICANCE OF THE PLACE

1 Station Street West

The significance of the building warrants its listing as a local heritage item.

7 Station Street West

Retention is not required on Heritage Grounds.

See Section 7 for specific Policies arising from Statement of Significance.

General Constraints Arising out of Cultural Significance of 1 Station Street West.

The building should be retained and conserved. No new work or activity should be carried out which will detract from or obscure physical evidence of the major phases of development of the key period of significance from the Late Nineteenth Century period. Significant architectural and decorative features that date from the key period of significance should be conserved. New works or activities at the place should not diminish the evocative character as a Late Nineteenth Century residence.

5.3. CONSTRAINTS & OPPORTUNITIES ARISING FROM THE CULTURAL SIGNIFICANCE OF ITEMS IN THE VICINITY

The proposed changes anticipated by the Planning Proposal will permanently change the setting of the buildings at No. 1 – 7 Station Street West.

5.4. CONSTRAINTS & OPPORTUNITIES ARISING FROM THE CONDITION OF THE PLACE

The buildings are presently in need of significant maintenance work and upgrade to comply with egress requirement for specific commercial uses. All essential works at 1 Station Street West should be undertaken as soon as possible prior to the commencement of conservation and refurbishment works. An asbestos survey should be carried out by an experienced and qualified organisation.

5.5. CONSTRAINTS & OPPORTUNITIES ARISING FROM PROPERTY OWNERSHIP

The owner wishes to retain 1 Station Street West on the corner and demolish 7 Station Street West and provide development consistent with the Architecture Planning Proposal.

5.6. CONSTRAINTS & OPPORTUNITIES WHICH IMPACT UPON DEVELOPMENT OPTIONS

1 Station Street West

The location of the building does not provides a significant limitation to development permissible in the zoning.

7 Station Street West

The location of the building provides a significant limitation to development permissible in the zoning. The demolition of 7 Station Street West will ensure an appropriate setting for 1 Station Street West.

5.7. CONSTRAINTS & OPPORTUNITIES ARISING FROM HERITAGE PLANNING REQUIREMENTS

5.7.1. Australian Heritage Council

The site is not included on the National Heritage List, the Commonwealth Heritage List nor on the list of items nominated for evaluation. The site is not covered by statutory protection provided pursuant to the EPBC Act

5.7.2. Heritage Council of NSW / NSW Heritage Act

The site is not covered by statutory protection provided pursuant to the NSW Heritage Act 1977. No constraints apply.

5.7.3. National Trust (NSW)

The site is not classified by the National Trust (NSW). Listings in this register impose no legal restrictions. No constraints apply.

5.7.4. AIA Register of Significant Buildings

The buildings are not listed as a heritage item by the AIA. Listings in this register impose no legal restrictions. No constraints apply.

5.7.5. Australian Institute of Engineers

The buildings are not listed as a heritage item by the RAIE. Listings in this register impose no legal restrictions. No constraints apply.

5.7.6. Art Deco Register of NSW

The buildings are not listed as a heritage item by the Art Deco Society of NSW. Listings in this register impose no legal restrictions. No constraints apply.

5.7.7. Section 170 Register

The buildings are not listed as a heritage item on any 170 Register of any Government Body. Listings in this register impose no legal restrictions. No constraints apply.

5.7.8. Parramatta Council

1 Station Street West and 7 Station Street West are identified as a Heritage Items in the Parramatta LEP. The site 1-7 Station Street West is not located within a Conservation Area identified in the LEP. The site lies within the vicinity of other buildings listed as heritage items under the Parramatta LEP and Holroyd LEP. The Parramatta Council inventory sheet provides some substantiation for the listing, however detailed fabric analysis and historic research provided in this report has resulted in a re-assessment of significance.

5.8. OTHER STATUTORY REQUIREMENTS

Any changes in the use of the buildings may result in a need to upgrade certain facilities to meet such obligations as may be imposed by Parramatta Council. The report by Architecture Planning Proposal proposes a dramatic change to the existing setting for these two buildings.

6. STATEMENT OF CONSERVATION POLICY

A Statement of Conservation Policy is a document that provides guidelines to assess many different proposals. Policies for the preservation of a Conservation Area or Heritage Item are based on a recognition of its significance and the relevant constraints. Conservation can be regarded as the management of change and can be applicable whether or not the building has reached the threshold for listing as a heritage item or as a contributing component of a streetscape or Conservation Area.

The significance of 7 Station Street West does not warrant protection. Therefore the policies only relate to the protection of 1 Station Street West.

The future conservation and development of the place should be carried out in accordance with the principles of the Australia ICOMOS Charter for the Conservation of Places of Cultural Significance (Burra Charter) as revised in 1999.

The Statement of Cultural Significance and Schedule of Significant Fabric set out in Section 4, together with any more detailed assessments of individual items in the policy section should be accepted as one of the bases for future planning and work on the place.

The policies recommended in this document should be endorsed by all parties as a guide to future conservation and development of the place.

All work in the building shall be undertaken on the basis of known evidence.

All work affecting significant fabric should be designed and constructed under the constant supervision of a qualified conservation practitioner approved by the Heritage Council of New South Wales. Assessment of cultural significance, and consequent decisions on conservation, should be modified if necessary in the light of further information obtained during conservation work.

This document should be reviewed regularly as the need arises or when new information comes to light.

The purpose of the following policy is to provide a framework for the management of 1 Station Street West as a heritage item.

The conservation policy focuses on retaining the building as a viable commercial facility, commensurate with current standards, while protecting its cultural significance as a late Nineteenth Century residence.

The Statement of Conservation Policy identifies which elements of the building should be conserved and nominates intrusive elements in need of modification. The Policy identifies action in terms of essential and desirable works. The Policy also identifies new work opportunities. However, work should not occur at the expense of existing significant spaces.

6.1. REVIEW OF THE CONSERVATION MANAGEMENT POLICIES

6.1.1. Policy - Conservation Management

The Conservation Management Policy should be adopted to guide all work to the building and continually reviewed.

6.2. CONSERVATION OF BUILDING FABRIC

6.2.1. Policy - Fabric Conservation

- No significant item identified in this plan should be despoiled and/or removed from the building prior to understanding the significance of the item and its contribution to the significance of the place.

- The grading of significance of the various elements of the building is a valuable planning tool, and it assists in developing a consistent approach to the treatment of different elements. The various grades of significance generate different requirements for retention and conservation of individual spaces and their various elements.

- Surviving building fabric nominated in this document as being of **high significance** shall be retained and conserved and shall only be considered for removal or alteration where there is no appropriate alternative. Any work which affects the building fabric or spatial arrangement graded in this category should be confined to preservation, restoration or reconstruction, as defined by the Burra Charter.

- Where fabric of **high significance** is removed or altered a thorough recording of the original form and detail should be made. Removed items should be catalogued and stored safely for possible future reinstatement.

- Fabric of **moderate significance** should generally be retained. Adaptation or alteration may be acceptable if assessed and appropriate within framework that protects the significance of the whole place. Surviving building fabric nominated in this conservation plan as being of **little significance** can be either retained or removed if required as either option does not intrude on the significance of the building.

The building should exemplify and reflect the principal period of its development from the key period of significance. Significant fabric should be preserved. The existing building, in particular, the original significant façades and building elements, should be retained.

This includes the following building elements at 1 Station Street West:

East (front façade) B to a high level of integrity
North and South (side Facades) C retain reasonably intact, particularly Raymond Street facing elevation
West rear façade C (altered, scope exists for modification)

6.2.2. Policy – Significant Fabric

No fabric identified as having exceptional significance (A).

Fabric identified in Section 4.11 having exceptional significance (A) must be retained and conserved.

Fabric identified in Section 4.11 as having high significance (B) should be retained, conserved and/or preserved where possible.

Fabric identified in Section 4.11 as having moderate significance (C) – retention and preservation is desirable but not essential.

Fabric identified in Section 4.11 as having little significance (D) may be retained or removed as required subject to practical considerations.

Fabric identified in Section 4.11 as intrusive elements (E) should be removed or modified to a less intrusive form, wherever the opportunity arises.

6.2.3. Policy - Reconstruction

Reinstatement of missing fabric, or reconstruction should only take place within the context of retention of cultural significance of a particular element and of the building generally.

6.2.4. Policy - Finishes

It is desirable that finishes never intended for painting should continue to be appropriately maintained. Investigation should be undertaken to establish whether the removal of later paint finishes is possible. Surfaces intended for painting should continue to be painted in appropriate colours.

6.2.5. Policy – Define Colours

Original significant Colour schemes based on appropriate research and which evoke the original character should be reinstated.

6.3. INTERVENTION

Background

Article 3 of The Burra Charter indicates that conservation is based on a respect for the existing fabric of a place and should therefore involve the least possible physical intervention in order not to distort the evidence provided by the fabric.

Adaptations of existing fabric for practical reasons such as installation of new services and equipment, and the need to meet fire safety and other statutory requirements may be required in terms of securing a viable use for the building components as a whole, and satisfying the changing needs of the general public.

Guidelines

- Intervention into any building fabric should respect the integrity of the extant material, be carefully controlled, and be limited to that required by the proposed works.
- Limited intervention for exploratory or research purposes should generally be restricted to approved programs of re-use, or upgrading of service areas and facilities.
- Intervention should not be detrimental to the original fabric.
- Existing service areas may be upgraded. Any upgrading is subject to the proper approval process.
- New internal floor coverings are permissible, but should have minimal impact on the floor structure.

6.3.1. Policy - Restrict Intervention

It is desirable that intervention into building fabric for non-conservation purposes should generally be restricted to approved programs of re-use or upgrading of service areas and facilities.

6.3.2. Policy - Minimise Impact of Intervention

It is desirable that where intervention in significant fabric is unavoidable, the loss of cultural significance should be minimised. Such intervention should occur in areas of lower rather than higher significance.

6.4. SETTING B

6.4.1. Policy – Setting B

The architectural impact of 1 Station Street West derives from its form, facades, corner location and landmark quality. Key views of the building available from 1 Station Street West and from Raymond Street should be preserved. It is preferable that no further additions should occur to the building.

A minimum 3 metre gap, to the north is required. No constraints relate to the station street alignment.
Given the planning controls for the site it is preferable that the allowable FSR be distributed to the north of the site and not to the west.

There are no heritage restrictions related to the height of the towers.

6.4.2. Policy – Detracting External Additions

Any new work should reduce the impact of detracting external additions the lean to verandah. New development should be controlled so as not to detract from the significance of the place. Therefore any additions to the building should be located to the rear.

6.4.3. Policy – Landscape

The garden within the original site of 1 Station Street West, should exemplify and reflect the principal period of its development from the key period of significance late Nineteenth Century. The overall form of the garden should be retained and conserved. Significant plantings and garden elements should be preserved. Additional planting should occur to reinforce the original Late Victorian character.

6.5. EXTERIOR

6.5.1. Policy – Exterior Appearance

The overall building form should be preserved. The existing form, external surfaces, materials and finishes of the façade should be preserved. It is desirable that door and window openings should not be enlarged or closed in. No new work should compromise the original significant facades. All remaining intact fabric on significant facades, as identified in Section 4.11, should be retained and conserved.

6.5.2. Policy - Façade Modification

It is desirable that where it is necessary to modify the façade, changes to the facade should reinforce the composition of the original facade.

In the event that the building is kept it is desirable that where it is necessary to modify the façade, changes to the facade should reinforce the composition of the original facade.

7.8.3. Policy – Façade Additions

Additions of little significance that detract from an appreciation of the original building detail as identified in Section 4.11 can be removed. Scope exists to modify these alterations.

6.5.3. Policy – Façade Changes

The interpretation of the building would benefit by a better understanding of the original construction phase the late Nineteenth Century Non original additions could be modified to provide a better interpretation of the key period of significance.

6.6. INTERIOR

6.6.1. Policy – Interior Elements

Generally the retention of the original decorative features are desirable, including stair, timber joinery and decorative set plaster work.

6.6.2. Policy – Interior Spaces

The spatial qualities of the interiors within the primary form of the building contribute to its significance and interpretation and therefore should be conserved, as part of the on-going use, on-going management and any future development strategy.

6.6.3. Policy – Impact on Façade

Internal work should not compromise the significant facades of the buildings.

6.7. TENANCY FITOUT GUIDELINES

6.7.1. Policy – Tenancy Fitout

All tenants of the building should be made aware of the cultural significance of the item.

Tenancies should only be selected on the basis that the proposed or future uses are compatible with the significance, and the sensitive fabric and spaces, and can be installed and removed without impact.

6.7.2. Policy – Incremental Changes

Proposed changes of use to any part of the building should only be considered in the context of a coordinated plan for the whole building.

6.8. ORDINANCE COMPLIANCE

6.8.1. Policy - Ordinance Compliance BCA

Uses which require an unacceptable degree of intervention for upgrading to ordinance compliance should be avoided or located in areas of low significance. Where unacceptable levels of intervention are required, exemptions should be sought. Conservation, upgrading and reuse programs of the various components of the building should focus on responding to the spirit and intent of the ordinances if strict compliance would adversely affect the cultural significance.

6.9. INTEGRATION OF SERVICES

6.9.1. Policy – Removal of Inappropriate Services

The provision of new services should consider the removal of inappropriate services.

6.9.2. Policy - Installation of Services

The extension or alteration of existing services in the building is acceptable in the context of re-use, but should not have a detrimental impact on the significance of the building components as a whole.

6.9.3. Policy – Ventilation

Appropriate ventilation and climate control that enabled retention of long-term tenants.

6.9.4. Policy – Upgrading of Services

Any proposed upgrading of services should be carefully planned. Brackets or fixings for services that are more visible and do not damage significant fabric are preferred.

6.10. INTERPRETATION

6.10.1. Policy – Retain and Interpret Building Evolution

Evidence of the progressive evolution of the building should be respected and retained and interpreted.

6.10.2. Policy – Appropriate Interpretation

The heritage significance of the building should be interpreted on site by appropriate methods making reference to existing / extant evidence that can be utilised in interpretation as the starting point (rather than rely on introducing new material).

6.10.3. Policy – Interpretation of Original Use

As the buildings historical significance derives from its early function as a grand residence. Conservation should primarily be aimed at retaining and recovering this aspect of the significance.

6.10.4. Policy

A plaque, consistent with others in the area, could be fixed to the external facade adjacent to the original entrance of the building noting the building's construction date and original use.

6.11. FUTURE USE

6.11.1. Policy - Future Use

The future use of the building should be compatible with its conservation and ideally remain as a residence. Alternate uses would include: professional rooms, offices.

The policies set out in this document should be applied irrespective of the uses that occupy the building.

New uses should be selected which are most compatible with the retention and recovery of the character and significance of the building. The approach should be sufficiently flexible to ensure that the building and setting retain the identified cultural significance of the place.

6.11.2. Policy - Incremental Changes of Use

Proposed changes of use to any part of the building should only be considered in the context of a coordinated plan for the whole building.

Suitable uses would include commercial uses.

6.12. ARCHAEOLOGY MONITORING

6.12.1. Archaeology Permit

In accordance with the Heritage Act 1977, any excavation where relics may be disturbed requires an excavation permit.

6.12.2. Policy - Archaeology

All work involving excavation of a site that has archaeological potential should be carried out under archaeological supervision by a qualified archaeologist.

6.12.3. Policy – Archaeology

Based on the significance of the site, any ground disturbance on the property should be subject to archaeological monitoring.

6.13. MAINTENANCE AND REPAIR

6.13.1. Policy – Maintenance Plan

A building maintenance plan and repair program should be prepared and implemented based on a comprehensive knowledge of the building's use and its materials, with regular inspection and prompt preventative maintenance and repair.

6.13.2. Policy – Graded Levels of Intervention

The appropriate level of significance of any part or element of the building shall be determined from this plan prior to determining the acceptable level of intervention or appropriate action required under maintenance.

6.14. APPROPRIATE SKILLS AND EXPERIENCE

6.14.1. Policy – Skills and Experience

Relevant and experienced professional conservation advice should be provided for all conservation, maintenance, adaptation and repair works proposals and programs on the building.

7. IMPLEMENTATION OF POLICY

7.1. MANAGEMENT PROCESSES

In the future management of 1 Station Street West, the decision making process should centre on the protection of heritage values. The building is listed as a Heritage Item. The Parramatta Council is the consent authority for all building work. As such any Development Application should be accompanied by an Assessment of Heritage Impact, which assesses the proposed scheme in terms of the Conservation Policies outlined in this report.

The following management processes should be implemented / maintained when considering the ongoing use of the building:

- This Conservation Plan should be included in any future sale documents in order that the enquirer or prospective purchaser is fully appraised of heritage requirements.
- Skilled and appropriate staff or consultants should be employed to develop an understanding of the nature of the building or place, re-assess its significance and develop compatible approaches taking into consideration user requirements and heritage issues.
- Insurance cover for the building should be reviewed to acknowledge the areas of significance.
- Regular BCA reporting on emergency services as required.
- A building Maintenance Program should be implemented.

7.2. REVIEW OF THE CONSERVATION MANAGEMENT POLICY

This Conservation Management Plan proposes a framework for the management of heritage issues into the long term. Conservation Policies need to progressively respond to changing situations if they are to remain relevant.

Conservation Policies should be reviewed every five years or subsequent to major programmes of upgrading or changes in ownership and should reflect latest relevant legislation and conservation practices. Reviews should be carried out by experienced Conservation Practitioners.

7.3. CONSERVATION WORKS

A Schedule of Essential and Desirable Conservation Works should be prepared to ensure the adequate conservation of the building.

7.4. MAINTENANCE WORKS

A planned Maintenance Program should be prepared and implemented based on the cyclical inspection, monitoring and recording of the condition of the fabric. The main elements requiring attention are:

- Roofing
- Gutters
- Rainwater disposal system
- Brickwork and render finishes
- Windows and doors
- Verandah detail

A schedule of ongoing maintenance works should be prepared. This should identify cyclic maintenance works to fabric and services that should be implemented by the owner / manager as part of the process of ongoing management of the building, beginning from the time that conservation works are substantially completed. A record of when this work is performed, and any faults found, or repairs made should be recorded and kept along side this maintenance schedule.

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10. APPENDIX – 1608 HISTORIC TITLE – 1 STATION STREET WEST

Date	Title
20.2.1794	Crown grant to John Harris, 110 acres 'Harris Farm'
26.11.1870	**Application No 2455** John Harris of Parramatta, gentleman 150 acres
	Transfer 19700 John Harris to George Wigram Allen
10.9.1876	**Certificate of Title Vol 266 Fol 250** George Wigram Allen. 24 acres 3 roods 8 perches DP 241 Sales commenced January 1877
22.8.1878	**Certificate of Title Vol 370 Fol 184** George Wigram Allen The Residue DP241 (Including the whole of section 10 + 12)
5.12.1882	Transfer 64021 George Wigram Allen to Henry Soloman
16.12.1882	**Certificate of Title Vol 616 Fol 243** Henry Solomon City of Sydney Landowner 7a 1r 27 ¼p being whole of sec 10 DP241 4a or 13p "Lots t9, Pt Lot 10 of Sec 12 DP241 dp 976 – Sales Commenced December 1882
7.4.1886	Transfer 105836 Henry Solomon to Arthur Ross Nott
28.4.1886	**Certificate of Title Vol 786 Fol 121** Arthur Ross Nott City of Sydney, Resident Secretary of the Federal Building Society Lot 34, Sec 1, DP976
1.7.1886	Mortgage to Federal Building Society discharged 19.8.86
20.8.1886	Mortgage to Samuel McFarlane, London discharged 28.9.1914
1.10.1914	Transfer Arthur Ross Nott to James Allan Campbell, Line repairer of Harris Park

	Application by Transmission Adelta Rebecca Lake and Rebecca Harrisky Campbell
9.9.1946	**Certificate of Title Vol 5603 Fol 246** Adelta Rebecca Lake of Harris Park Spinster, Lot 34 Sec 1, DP976 (half share)
9.9.1946	**Certificate of Title Vol 5603 Fol 247** Rebecca Harresky or Harris Park, Spinster Lot 34 Sec 1 DP976 (half share)
21.7.1948	**Certificate of Title Vol 5841 Fol 184** Lot 34 Sec 1 DP 976 Consolidated by Adelta Rebecca Lake
31.10.1983	Transfer to Cholseal Place
29.11.1984	Transfer to Rober Eric Morris
27.08.1987	Transfer to Stephen Hendry Edwards + Jennifer Jane Edwards
4.11.2013	**Computer Folio Ref 34/1/976** Transfer to Avoca 143 PL
10.9.2015	Transfer to Greenrock Property Lease to Stephen Edwards Construction

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Figure 1.1 Site location SIX Maps

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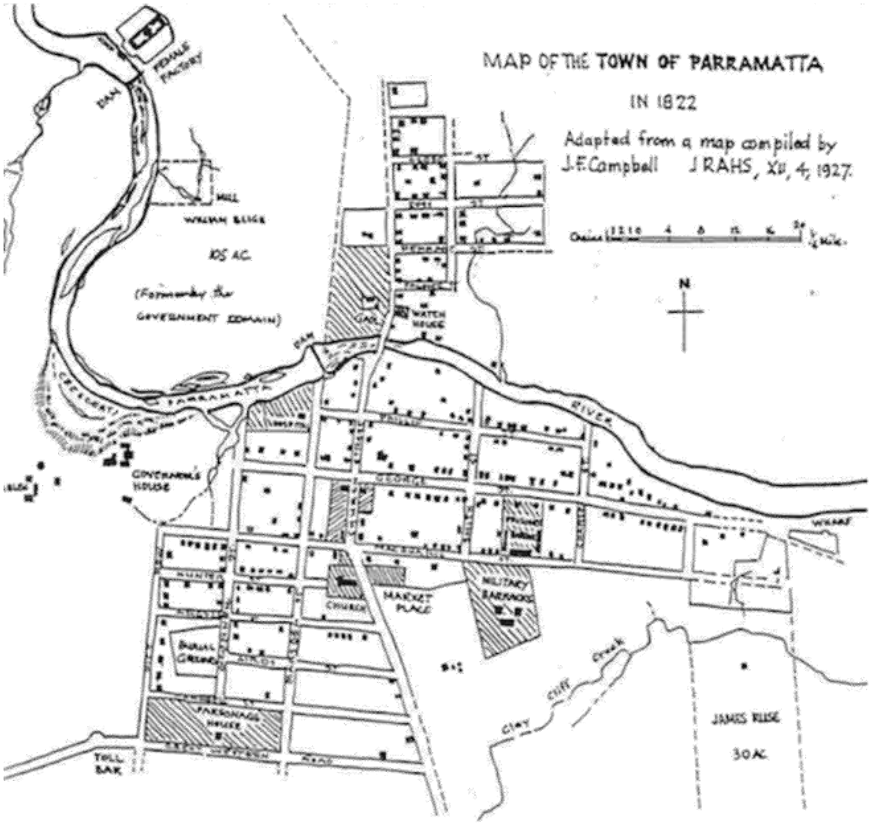

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Figure 2.2 William Meadows Brownrigg, Map of the Town of Parramatta and adjacent properties, 1844 SLNSW

Figure 2.3 Block Plan of Harris Estate in 1876 LPI-Certificate of Title 13127

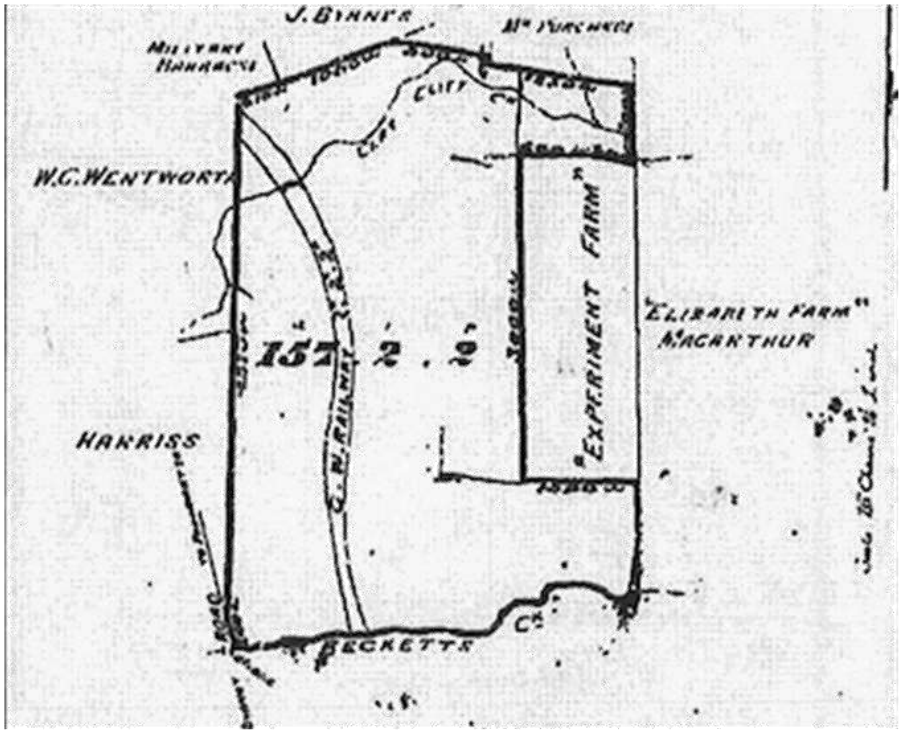

Figure 2.4 George Wigram Allen's land, 1876 LPI-Certificate of Title 266250

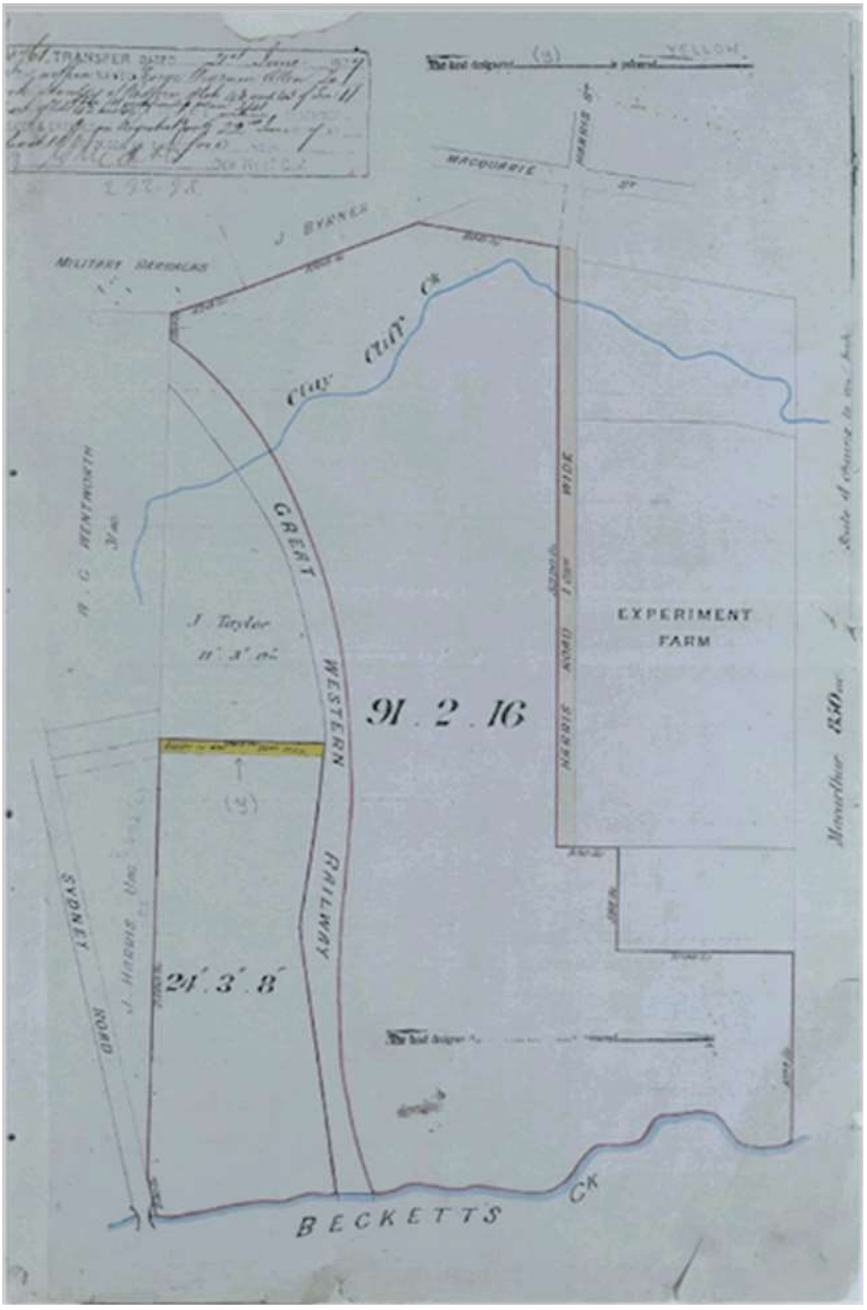

Figure 2.5 DP 241, Subdivision of Harris Park, May 1876 NSW LPI

Figure 2.6 Sales of DP 241, 1878 LPI-Certificate of Title 370184

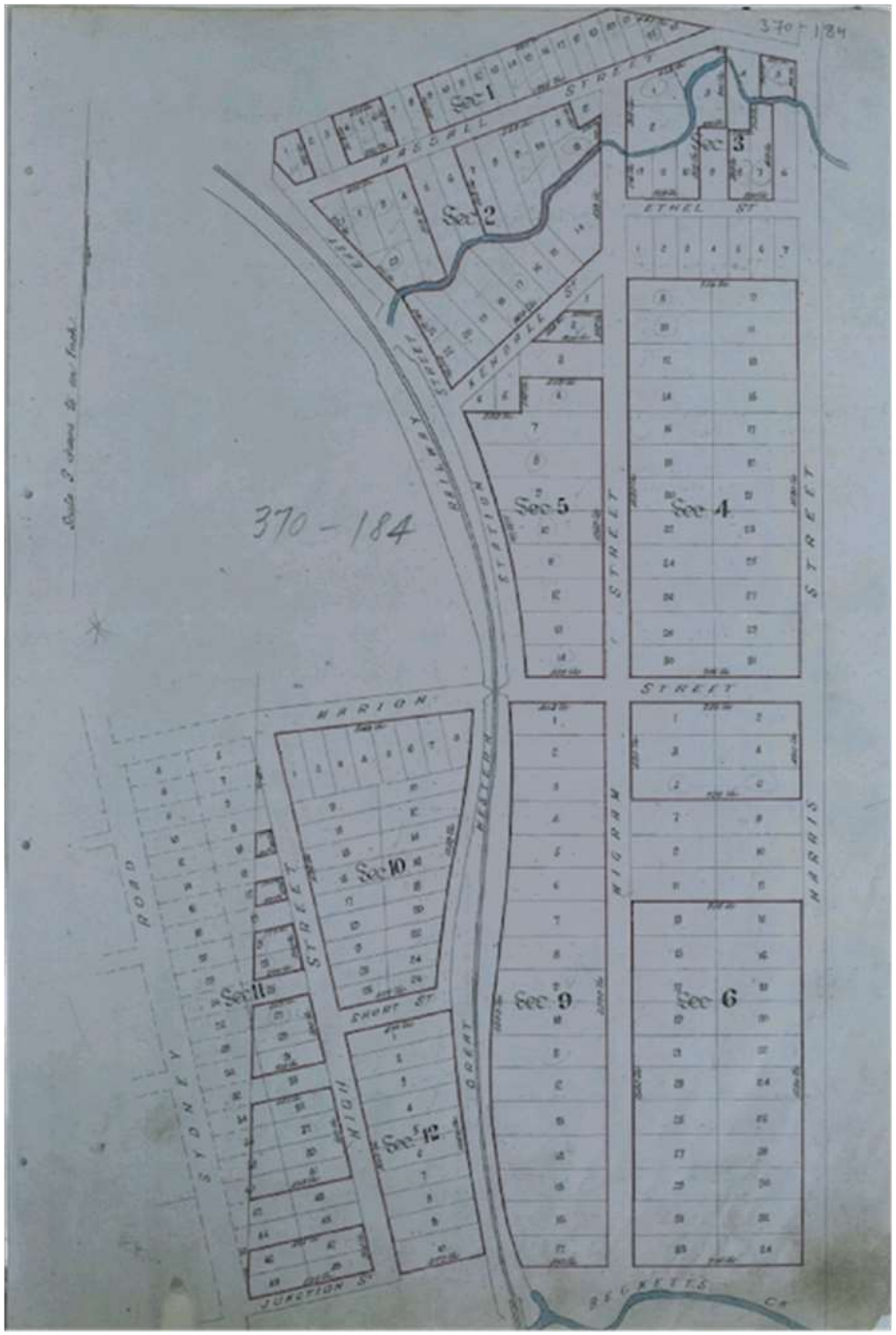

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Figure 2.7 Land purchased by Henry Solomon, 1882 LPI-Certificate of Title 616243

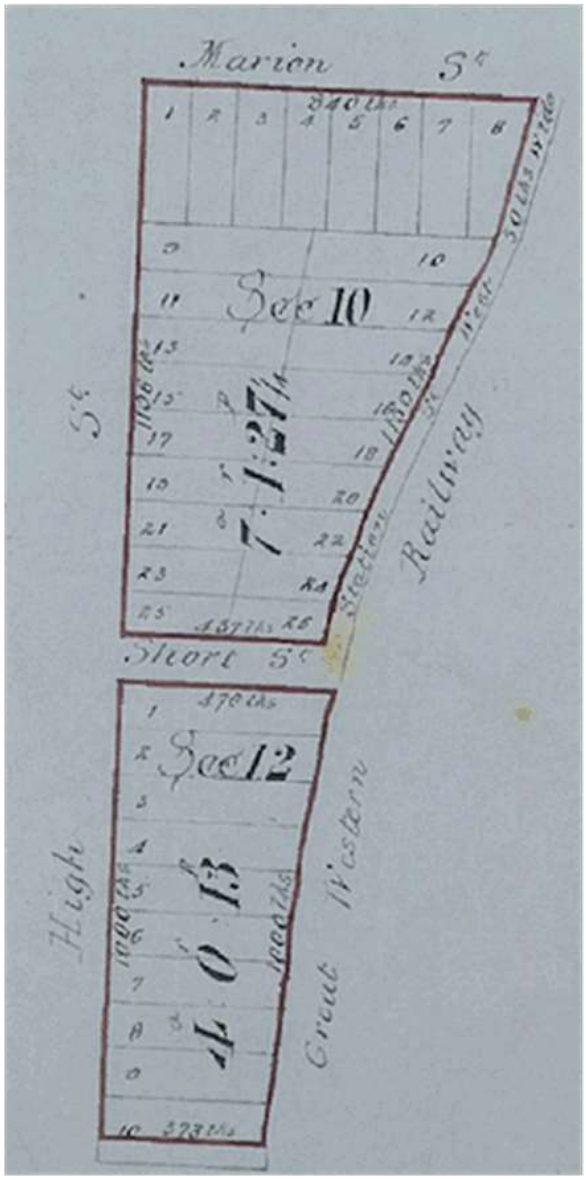

Figure 2.8 Plan of streets in Harris Park Town, 1882 LPI, Crown Plan

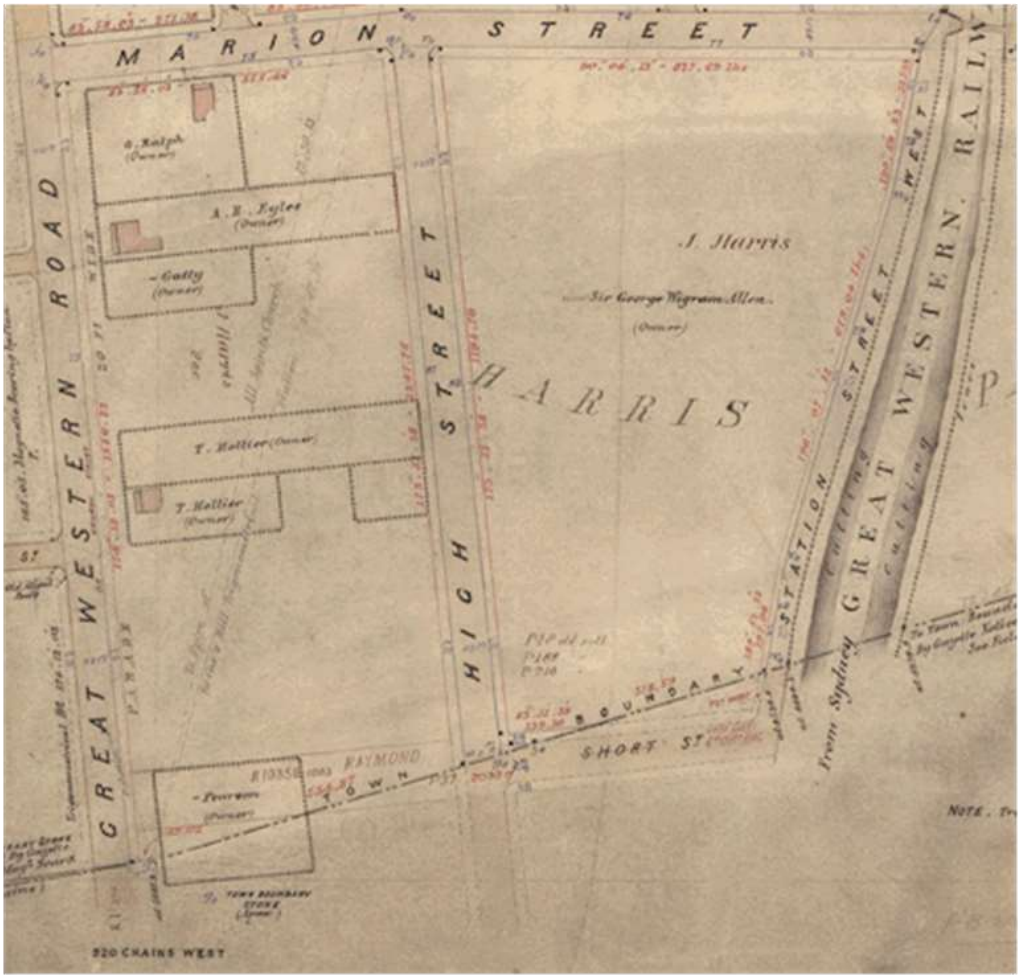

Figure 2.9 Harris Park Parramatta, 1882 NLA MAP folder 68, LFSP 1026

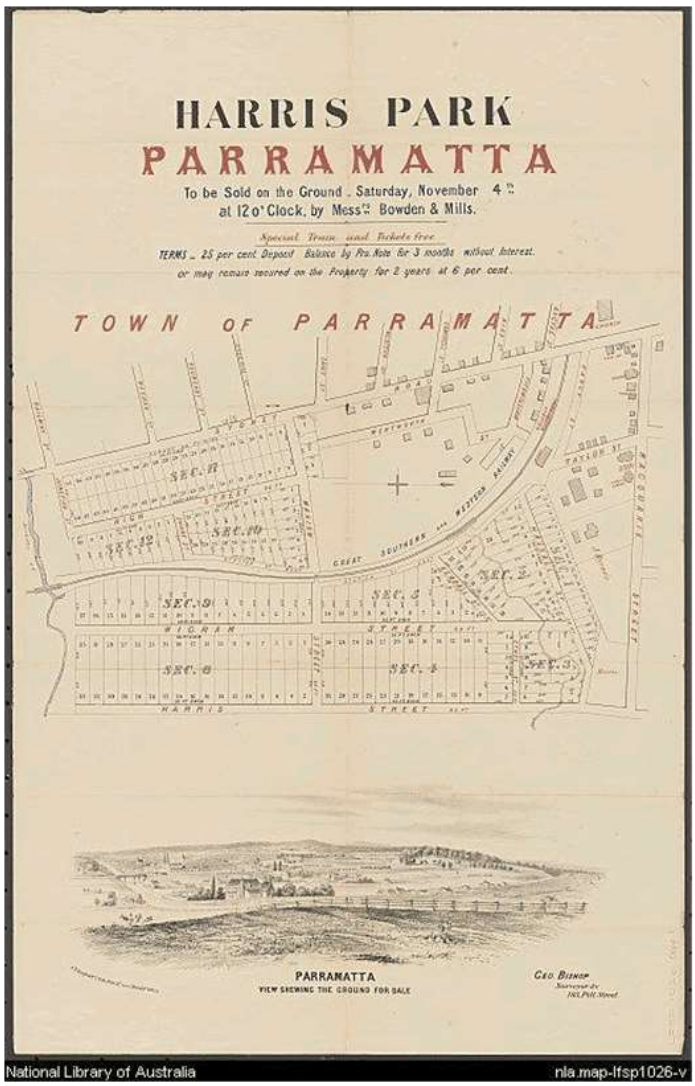

Figure 2.10 Auction Sale Advertisement, 1882 SMH, 3.11.1882 p10

Auction Sales.

TO-MORROW AFTERNOON.

HARRIS PARK,
PARRAMATTA,
ON THE GROUND, at 3 p.m.

92 SPLENDID BUILDING SITES.

THE ONLY HIGH LAND BETWEEN GRANVILLE and PARRAMATTA.
CHARMING VIEWS. GRAND ELEVATION.
HALF A MILE RAILWAY FRONTAGE.

ATTEND the SALE, and SECURE A LOT.

This LAND WILL DOUBLE ITS VALUE WITHIN A VERY SHORT TIME.
TORRENS' TITLE. Lithos at the Rooms.

TORRENS' TITLE. Lithos at the Rooms.

FREE TICKETS for Special Train leaving REDFERN at 2.15 p.m., can be obtained at the Rooms.
TERMS—10 PER CENT DEPOSIT, balance in 18 monthly payments.
MILLS, PILE, and GILCHRIST,
Auctioneers.

Figure 2.11 DP976 Re subdividing of sections 10 and 12, 1882 NSW LPI

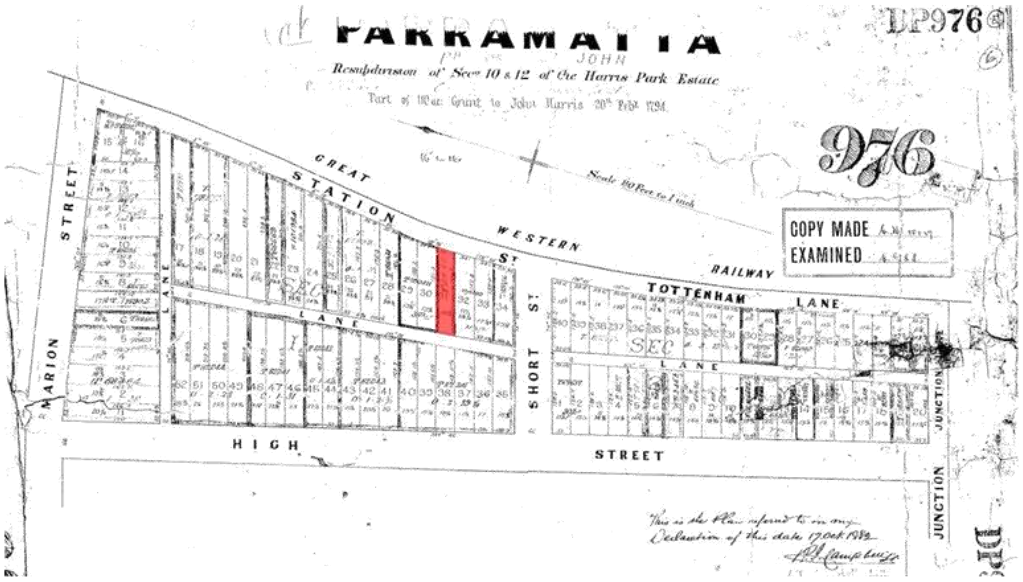

Figure 2.12 Obituary: 'The late Mr Nell Campbell', 1912 The Cumberland Argus and Fruit Growers Advocate 9.11.1912, p6

The Late Mr. Nell Campbell.

Mr. Nell Campbell, an old and respected resident of Parramatta, died at his residence, Station-street, Harris Park, on Monday, at the ripe old age of 80 years. Mr. Campbell was a native of Tiree, in the Highlands of Scotland, the Duke of Argyle's Estate. He came out to this colony with his father and mother and brothers and sisters when he was about six years of age. His father was a turner, and worked for Mr. J. Urquhart, who had a carriage building establishment on the site now occupied by the post-office. Mr. John Taylor was an apprentice of Mr. Urquhart, as also was Mr. W. O. Ward. Young Nell went to Mr. Ewbank Lough's school, which was in a cottage near the river bank, on the east side of Marsden-street. The front portion of the site was afterwards used for the building of a Primitive Methodist Church. As a boy he was employed in the butchering business by Mr. Blackett, at what was known as the "Boiling Down," at the rear of the Old Racecourse. Cattle and sheep were then so cheap that they were slaughtered and boiled down for their tallow. Later on he had a coach with which he plied to and from the steamers wharf. Afterwards he entered the Telegraph Construction Department, when he was engaged in constructing telegraph lines. His work took him through the colony in all directions. For over twenty years he was thus engaged, and on leaving that work he retired. His wife predeceased him by some ten years. His son Daniel also predeceased him. He leaves three sons and two daughters, Neil, Duncan and James, Mrs. Lake, and Miss Rebecca Campbell. Neil is a successful horse trainer in Melbourne, training for a wealthy horse-owner [illegible]. James is in the Telegraph Construction Department, and Duncan is [illegible]. One of Parramatta's [illegible] Mr. Duncan Campbell, of Marsden-street, is a brother of the [illegible] Mrs. William [illegible]. Mr. Campbell was of a [illegible] and reserved nature, and lived a very [illegible] life.

Figure 2.13 Aerial Photograph, 1943 SIX Maps

Figure 2.14 Current Aerial photography, 2015 SIX Maps

Figure 3.1.1 East Elevation Architectural Projects 2015

Figure 3.1.2 South Elevation Architectural Projects 2015

Figure 3.1.3 West Elevation Architectural Projects 2015

Figure 3.1.4 North Elevation Architectural Projects 2015

Figure 3.2.1 Room 1 Reception looking West Architectural Projects 2015

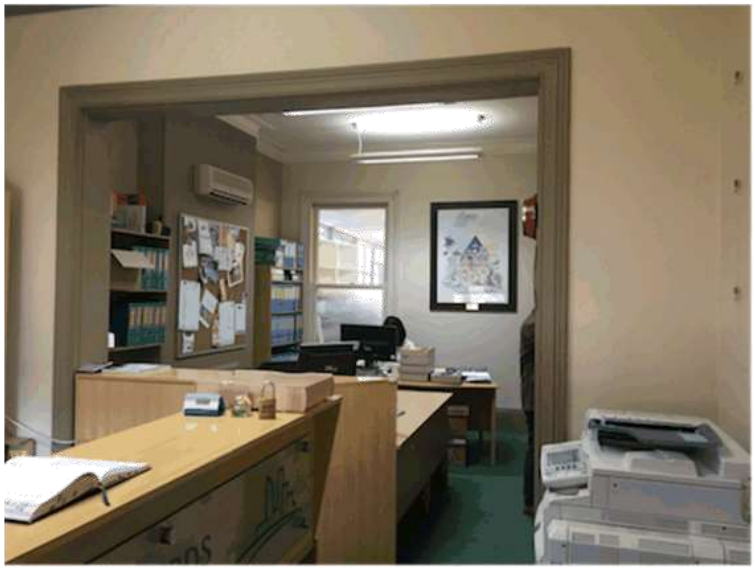

Figure 3.2.2 Room 2 Corridor looking East Architectural Projects 2015

Figure 3.2.3 Room 4 Verandah looking East Architectural Projects 2015

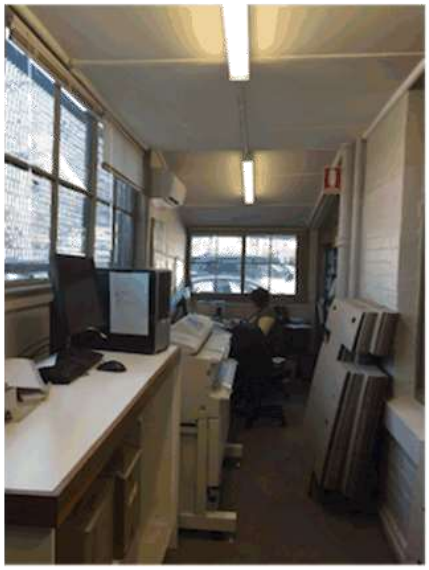

Figure 3.2.4 Room 3 Architectural Projects 2015

Figure 3.2.5 Stair looking West Architectural Projects 2015

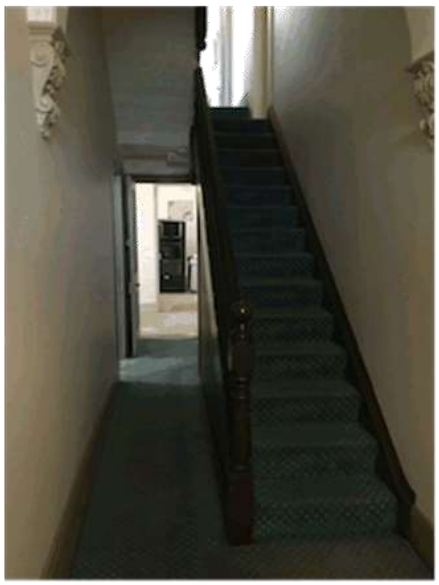

Figure 3.2.6 Room 5 Kitchen looking Architectural Projects 2015

Figure 3.2.7 Room 1.1 Stair looking East Architectural Projects 2015

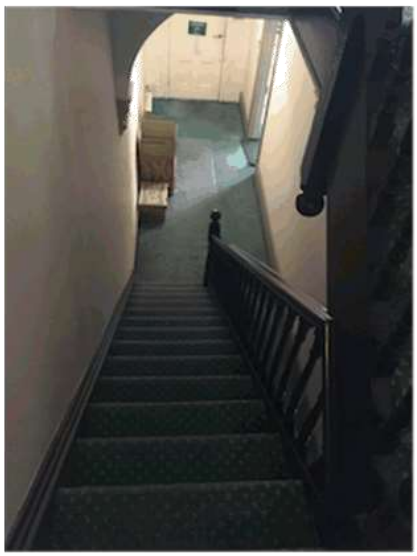

Figure 3.2.8 Room 1.2 Office looking East Architectural Projects 2015

Figure 3.2.9 Room 1.3 Alcove looking East Architectural Projects 2015

Figure 3.2.10 Room 1.4 Verandah looking East Architectural Projects 2015

Figure 3.2.11 Room 1.5 Boardroom looking West Architectural Projects 2015

Figure 3.2.12 Room 1.6 Bathroom looking South Architectural Projects 2015

Figure 3.2.13 Room 1.7 Office looking West Architectural Projects 2015

MN/SG
15519
March 2016

Mr Gregory Dyer
Chief Executive Officer
Parramatta City Council
P.O. Box 32
PARRAMATTA NSW 2124

Dear Mr Dyer,

LETTER OF OFFER FOR VOLUNTARY PLANNING AGREEMENT:
1-7 STATION STREET, PARRAMATTA

We write to you on behalf of Greenrock Property Pty Ltd to provide this letter of offer to enter into a Voluntary Planning Agreement (VPA) with Parramatta City Council in respect to provision of public benefits associated with a Planning Proposal affecting land at 1-7 Station Street, Parramatta. The Planning Proposal seeks to amend the controls applying to the site under the *Parramatta Local Environmental Plan 2011,* to increase the building height and FSR controls and remove the heritage listing of the item at 7 Station Street. The LEP amendment will facilitate the redevelopment of the site for a high quality mixed use residential development.

Greenrock Property Pty Ltd have been examining options that will realise an outstanding development for the site in terms of design excellence, amenity and delivery of additional housing adjacent to the Harris Park train Station.

In order to achieve the desired outcome, it has been determined that the best solution can be reached by consolidating the four existing sites and retaining the heritage item at 1 Station Street for adaptive reuse to facilitate a high quality development on the site. This involves an increase in the height and floor space ratio applicable to the site that requires an amendment to Parramatta LEP 2011.

It is Greenrock Property Pty Ltd vision not simply to build a residential development but to contribute to the amenity and well-being of the Parramatta community. This Letter of offer proposes how those benefits can be delivered through a VPA linked to the Planning Proposal.

Greenrock Property Pty Ltd has consulted with Council and its independent consultants in determining the items to be included in the contribution to ensure that a maximum benefit to the community is received. Accordingly a range of items have been identified allowing Council and the proponent to determine the most desired items. The value of the items has not been determined by a quantity surveyor at this stage however this can be undertaken in conjunction with Council once the Planning Proposal is progressed and Council has determined the desired items. Council may therefore determine the range of items listed below to be included in a VPA.

Public Benefits to be offered by Greenrock Property Pty Ltd include:

1. **Construction works for the creation of a linear park along Station Street to be known as Harris Park, as designed by Context and provided with the Planning Proposal documents. The linear park represents a substantial public benefit and contribution values in excess of $1,000,000;**
2. **Embellishment of the Linear park along Station Street with landscaping, street furniture, CCTV cameras, LED lighting and wayfinding signage;**

JBA Urban Planning Consultants Pty Ltd ABN 84 060 735 104 / North Sydney t +61 2 9956 6962 w jbaurban.com.au

3. **The registration of an easement or encumbrance across the portion of the site fronting Station Street to form part of the Linear Park and be accessible to the public;**
4. **The provision and management of publically accessible car sharing spaces above that of Council's DCP requirement. A letter of offer from GoGet is provided attached to this letter.**
5. **Maintenance and ongoing restoration works to the heritage item at 1 Station Street in accordance with the Conservation Management Plan for the item;**

Greenrock Property Pty Ltd would also consider a monetary contribution to the upgrade and embellishment of toilets and amenities at Rosella Park;

We note that Council are currently preparing a Development Guideline to help inform contributions for Community Infrastructure. While the contributions outlined above are considered to represent a significant public benefit, Greenrock Property Pty Ltd is willing to engage with Council on the terms of the VPA should any future policy be developed around contributions.

Greenrock Property Pty Ltd are committed to making this project a signature development that will add to the architectural character of Parramatta and provide much needed housing adjacent to the Harris Park Train Station.

We would be pleased to discuss with you and the Council the proposed items being offered as part of the VPA. If you have any queries in relation to the above, please contact me on 9956 6962.

Yours faithfully

Stephen Gouge
Principal Planner

1/12/2015

Attention:
Matthew Norman
JBA Planning
North Sydney
2059

Car Sharing for proposed development at Harris Park Station

CarShare Australia would like to confirm our support for a car sharing bay in the new development at **Harris Park station**. CarShare Australia is keen to install and manage at least one car sharing vehicle in this location, for the benefit of owners/tenants and the surrounding community. GoGet has **27 members within 250 metres** on this development with **no** carshare cars within 250 metres currently.

CarShare Australia Pty Ltd, operator of GoGet, is a unique business partnership formed to take advantage of business, policy, academic and research skills to launch Australia's first and largest car sharing service. Founded 10 years ago by directors Nic Lowe and Bruce Jeffreys, the company has developed a range of strategic partnerships, including formal working relationships with a number of Local Government authorities.

A car sharing program offers local residents and businesses access to a fleet of cars parked close to where they live and work for occasional use. The vehicles are parked in a dedicated location, called a pod, and are returned to that spot at the end of each trip. Car sharing services operate to fill a mobility 'gap' that exists between private car ownership, which is inefficient, expensive and unsustainable and public transport, walking and cycling, which can generally suit most local transport needs. A car sharing service in the development would increase transport efficiencies in the area, and encourage public transport usage by residents. Car sharing is a sustainable form of transport that will contribute to the green credentials of the building.

A car sharing program provides a reliable, convenient and affordable alternative to private car ownership. It has the following advantages:

1. Allows people to live car-free;
2. Promotes alternative transport options such as public transport, cycling or walking;
3. Decreases car usage which improves local air quality and promotes local businesses;
4. Removes private cars from local streets.

Should you require further information please don't hesitate to contact me directly.

Yours sincerely,

Christopher Vanneste PhD
Head of Locations
GoGet CarShare
Chris@goget.com.au

Ph: **1300 769 389** Fax: **02 8211 5119** Email: **admin@goget.com.au** Web: **goget.com.au**

Level 4, 59 Goulburn Street, NSW 2000 ABN: 39 102 892 679

ETHOS
URBAN

18 April 2018

17297

Carolyn McNally
Secretary
Depertment of Planning and Environment
320 Pitt Street, Sydney

Attention: Ann-Marie Carruthers, Director Sydney Region West

Dear Ms McNally,

Request for Rezoning Review
1-7 Station Street, Parramatta

This letter has been prepared by Ethos Urban on behalf of Greenrock Property Group Pty Ltd (Greenrock) in relation to 1-7 Station Street, Parramatta (the Site). The site is the subject of a Planning Proposal seeking to amend the building height, floor space ratio (FSR) and heritage controls that apply to it under the *Parramatta Local Environmental Plan 2011* (Parramatta LEP). The purpose of this letter is to request that the Department of Planning and Environment (DP&E) initiate a rezoning review for the Planning Proposal.

An initial meeting was held with Council on Thursday 30 August 2015 to discuss the merits of the site. At this meeting the applicant was welcomed to submit a Planning Proposal to facilitate the redevelopment of the site.

The Planning Proposal was submitted to Council on 11 March 2016 and seeks to make the following amendments to the Parramatta LEP 2011:

- Increase the FSR control from 2:1 to 10:1 (11.5:1 then achievable with 15% design excellence bonus);
- Increase the building height limit from 18m to 142m; and
- Remove the local heritage listing of the item at 7 Station Street (I744).

The rezoning Review is being sought by the applicant as Council has not determined the Planning Proposal within 90 days.

This letter should be read in conjunction with the following supporting attachments:

- Signed Pre-Gateway Review Application Form;
- A cheque for $20,000, being the relevant application fee;
- A hard and soft copy of the Planning Proposal including additional information as provided in response to Council's requests for further information; and
- All correspondence received from Council.

Smart People, People Smart | T. +61 2 9956 6962 | E. sydney@ethosurban.com W. ethosurban.com | 173 Sussex St Sydney NSW 2000 | ABN. 13 615 087 931

1.0 Rezoning review

This request for Rezoning Review has been prepared in accordance with the Guidelines set out in the DP&E's *Guide to Preparing Local Environmental Plans* (the Guide)

1.1 Step 1 – Proponent Seeks Review

Step 1 of the Guide provides that a proponent may seek a Rezoning Review if:

> *b) the council has failed to indicate its support 90 days after the proponent submitted a request, accompanied by the required information or has failed to submit a planning proposal for a Gateway determination within a reasonable time after the council has indicated its support.*

This rezoning review is being sought as Council has failed to indicate its support for the Planning Proposal within 90 days of the lodgement of the request. Council accepted a fee for the Planning Proposal on 11 March 2016 demonstrating that they formally accepted the Planning Proposal. As outlined in **Table 1** below, 766 days have passed since the Planning Proposal was lodged and Council has not indicated that insufficient information was provided with the proposal.

The applicant has maintained an open dialogue with Council throughout the assessment process and has proactively engaged with Council to resolve issues that have arisen throughout their assessment. Notwithstanding this, a rezoning review is being sought as an agreement with Council on key components of the proposed LEP amendment have not been reached.

The key milestones and correspondence between the applicant and Council throughout the assessment are provided in **Table 1** below.

Table 1 - Timeline of Planning Proposal Assessment

Action	Date	No. of Days (cumulative)
Lodge Planning Proposal	11 March 2016	
Assessment		132
Applicant Writes to Council	21 July 2016	132
Council Writes to applicant requesting items to be clarified	18 August 2016	160
Council Writes to applicant amending letter with correct site address	6 September 2016	179
Applicant responds to Council	19 September 2016	192
Council writes to applicant	25 November 2016	259
Applicant responds to Council	11 January 2017	306
Council writes to applicant	17 August 2017	524
Applicant responds to Council	12 October 2017	580
Applicant lodges rezoning review	18 April 2018	768 (as of 18 April 2018)

1.2 Step 2 - Strategic Merit

Step 2 of the DP&E's *A Guide to Preparing Planning Proposals* requires the Planning Proposal to have strategic merit, as outlined below.

a) Does the proposal have strategic merit? Is it:

Question 1. Consistent with the relevant regional plan outside of the Greater Sydney Region, the relevant district plan within the Greater Sydney Region, or corridor/precinct plans applying to the site, including any draft regional, district or corridor/precinct plans released for public comment

Greater Sydney Region Plan: A Metropolis of Three Cities

In March 2018 the Greater Sydney Commission (GSC) finalised the *Greater Sydney Region Plan: A Metropolis of Three Cities* (Region Plan). The Region Plan elevates the role of Parramatta to Sydney's Central City and identifies that Sydney's population is expected to grow by an additional 1.7 million people to 2036. The Planning Proposal will achieve the aims of the Region Plan, which identifies that population growth estimates have risen by 9% since the release of *A Plan for Growing Sydney*. In this regard, the Planning Proposal seeks to provide additional residential density in Parramatta, Sydney's Central City.

The Planning Proposal is consistent with the Region Plan as it facilitates the growth of Parramatta as Sydney's Central City through increasing the supply of housing located in close proximity to public transport, jobs, education and services. Specifically, the proposal achieves the following directions in the Greater Sydney Region Plan:

- Objective 10: Greater Housing Supply - The proposal will directly facilitate the growth of the Parramatta CBD by facilitating a residential development adjacent to a CBD train station. The proposal seeks to implement a density of 10:1 on the site, commensurate with the density in other major centres and renewal areas in Sydney. The proposal will facilitate greater housing supply and the growth of the Parramatta CBD as it will:
  - Enable a residential tower on the site that is able to achieve an appropriate level of residential amenity and as such will contribute to the significant population growth targets for Central District in a sustainable and high-quality way.
  - Enable additional residential floor space on a site that is located adjacent to the second train station in the Parramatta CBD (Harris Park). As such the proposal will facilitate additional dwellings in a location well serviced by high capacity transport.
  - Facilitate a mixed use residential development that is in close proximity to significant employment precincts, community and civic facilities, educational and health facilities.
  - Revitalise an underutilised city centre block by enabling a built form outcome that will strengthen the CBD skyline with density located at transport nodes, is consistent with the sites CBD location and will be capable of achieving a high level of residential amenity and increased employment capacity.
  - Improve traffic congestion by locating higher density development in close proximity to public transport infrastructure.

As illustrated in **Figure 3** below the proposal seeks to provide additional residential density adjacent to public transport. The level of density is commensurate with the remainder of the CBD however is located directly adjacent to a train station, unlike most parts of the CBD.

The Region Plan provides that the most suitable areas for significant urban renewal are those areas best connected to employment and within walking distance of regional high frequency public transport. The Planning Proposal directly achieves this direction through increasing the permitted density on a site located 100m from Harris Park station and 170m to the Auto Alley employment precinct (26,000 jobs).

- Objective 14: *A Metropolis of Three Cities* – integrated land use and transport creates walkable and 30-minute cities- The proposal will facilitate growth through appropriately located residential density adjacent to a train station and within walking distance of significant employment, services and education facilities within the Central City. The proposal will result in the amalgamation of small fragmented inner-city allotments to facilitate a taller tower form, consistent with Council's intention to locate additional density on larger sites (through minimum site area FSR sliding scales and opportunity site requirements).

  The proposal will also better utilise the investment in Harris Park station (refer to **Section 2.1** below) by locating additional residential density within close walking proximity of the station. The proposal will facilitate the use of public transport, assisting in the creation of a 30-minute city.

- Objective 19: Greater Parramatta is stronger and better connected – One of the pillars of the Region Plan is to reinforce Parramatta's role as a metropolitan centre of comparable scale to the Sydney CBD. Significant growth in infrastructure, commercial, educational and medical investment has and will continue to drive the growth of Parramatta.

  In order to accommodate this growth, Parramatta must grow its housing supply accordingly, consistent with objectives to create a 30 minute city and provide for additional housing growth. The proposal will facilitate Parramatta's growth as one of Sydney's dual CBDs by providing for housing of a scale and quality commensurate with its role as one of Greater Sydney's major metropolitan centres.

Central City District Plan

The Planning Proposal is also consistent with the Central City District Plan (District Plan), which was finalised in March 2018. The Planning Proposal will contribute to Parramatta's 5-year (2016-2021) housing target of 21,650 dwellings identified in the District Plan and will facilitate the minimum 20 year housing target of 207,500 dwellings for the Central District.

It is noted that the forecast growth of 207,500 dwellings for the Central District is the highest of any of the Greater Sydney districts, providing 28% of the required 1,725,000 dwellings for Sydney to 2036. Residential growth targets for Metropolitan Sydney have increased a further 9% from those forecast in *A Plan for Growing Sydney*, which increased targets from the Draft Metropolitan Strategy by 22% when it was released in late 2014. The Planning Proposal will support the growth of Parramatta, Sydney's central city and provide critical housing in an appropriate location, adjacent to high capacity public transport.

Specifically, the Planning Proposal is consistent with Planning Priority C5 - *Providing housing supply, choice and affordability with access to jobs and services*. The District Plan states that the following criteria should be used for urban renewal:

1. *Alignment with investment in regional and district infrastructure which acknowledges the catalytic impacts of infrastructure such as Sydney Metro Northwest, NorthConnex, WestConnex and Parramatta Light Rail*

The proposal seeks to locate additional density immediately adjacent to Harris Park Station, the Central City's second piece of high capacity transport infrastructure. As outlined in **Section 2.1**, investment in upgrading the station and platform facilities Harris park station is currently underway. As such the proposal will directly align with investment in transport infrastructure as it seeks to locate additional dwellings directly adjacent to a train station that is undergoing upgrade works.

2. *other possible future investments such as Sydney Metro West and opportunities created by enhancements to existing infrastructure such as upgrades to schools, open space including sporting facilities and transport*

The proposal's location next to Harris Park train station will provide access to Sydney Metro West and other future city-serving corridors, as identified in Transport for NSW's *Future Transport 2056.*

3. *Accessibility to jobs, noting over half of Greater Sydney's jobs are generated in metropolitan and strategic centres.*

The proposal seeks to locate additional residential density within 170m of the Auto Alley Precinct that will provide approximately 26,000 jobs. Furthermore, the proposal seeks to provide additional housing in a location adjacent to transport infrastructure within Sydney's central city, providing access to the planned baseline target of 137,000 jobs in Greater Parramatta in 2036.

4. *Accessibility to regional transport, noting that high frequency transport services can create efficient connections to local transport services and expand the catchment area of people who can access regional transport.*

The proposal seeks to locate additional dwellings directly adjacent to an existing train station serviced by two lines providing regional connections.

5. catchment areas within walking distance (10 minutes) of centres with rail, light rail or regional bus transport.

The proposal seeks to locate additional dwellings in Sydney's Central City and has walking access to regional transport links including Harris Park Station, the Parramatta Transport Interchange, Parramatta Light Rail and future West Metro.

Question 2. Is it consistent with a relevant local council strategy that has been endorsed by the Department?

The Planning Proposal is consistent with Part (a)(1) of *A Guide to Preparing Planning Proposals* strategic merit test and as such is not required to be consistent with part 2 or 3. Notwithstanding

this the Planning Proposal is consistent with Council's endorsed Parramatta CBD Planning Framework as seeks to:

- Facilitate growth of Parramatta;
- Does not overshadow any parks or areas of protected public domain;
- Create a tall, slender tower that facilitates an increase in residential density located in close walking proximity to transport infrastructure; and
- Provides for density on a large site in excess of 1,800m^2.

We note that the proposal (10:1) is not consistent with the FSR control proposed under the CBD Planning Proposal (6:1); however it remains consistent with the objectives and intended outcomes of the Planning Proposal, as it will:

- Strengthen Parramatta's position as the dual/Central CBD for metropolitan Sydney;
- Increase the capacity for new dwellings in order to create a dynamic and diverse city;
- Provide for a high quality new linear park and public domain improvements;
- Facilitate the provision of community infrastructure to service the growing city;
- Enhance the quality and amount of commercial floor space on the site;
- Facilitate the creation of a sustainable residential building envelope; and
- Not result in any adverse risks to life and property from flooding.

While the Parramatta CBD Planning Proposal has not yet been endorsed by DP&E, they are Council's endorsed strategies to grow the CBD and are commensurate with the aims around growing Parramatta in the relevant strategic planning documents.

Question 3. Responding to a change in circumstances, such as the investment in new infrastructure or changing demographic trends that have not been recognised by existing planning controls.

The existing LEP controls for the site were included in the *Parramatta City Centre Local Environmental Plan 2007* and transferred into the Parramatta LEP 2011 in December 2015. The controls for the site are therefore almost ten years old and do not reflect the changing circumstances that have elevated Parramatta into Sydney's Central City and a major CBD. Parramatta's elevated role in Metropolitan Sydney has resulted in significant transport investment in close proximity to the site including the Western Sydney Light Rail and the West Metro Rail.

Additionally, as outlined in **Section 2.1** below, the proposal seeks to increase residential density on a site that is located adjacent to a train station undergoing platform upgrades. The upgrades to Harris Park station will facilitate greater improved passenger amenities and usability of the station, commensurate with its expected increase in patronage resulting from the growth of the Parramatta CBD. In this regard the proposal will utilise the investment in transport infrastructure.

2.0 Transit Oriented Development

Site is located approximately 100m to the south of the Harris Park train station and as such is ideally located to support additional density. Harris Park station is the second train station in the Parramatta CBD and will play an important role in distributing platform capacity from the Parramatta Station.

The Parramatta Strategic Transport Study was prepared by AECOM on behalf of Council to support the CBD Planning Proposal. The Strategic Transport Study identifies that the T1 Western line is currently experiencing overcrowding and Parramatta Station is experiencing issues resulting from platform crowding. The Study states:

> *Issues are also already experienced at Parramatta Station, where crowding and minor delays can be experienced at vertical transport connections to the platforms as trains unload in the morning peak periods. It is forecast that the future Parramatta CBD will:*
>
> - *Require significant additional services to support growth: strategic demand forecasts indicate a need for the equivalent of at least 15 additional AM peak hour services by 2056*
> - *Require significant additional station and interchange capacity: with demand through Parramatta Station forecast to double by 2036 - surpassing current turnover through Town Hall during peak periods – and would increase further with the proposed delivery of Sydney Metro West.*

The proposal seeks to increase density in the southern portion of the CBD, an area that is serviced by Harris Park Station. Current growth and planned growth in Parramatta is centralised around the use of Parramatta Station and as such is exacerbating platform capacity issues identified above. As outlined in the sections below, Harris Park Station is currently undergoing significant investment to cater for increased patronage and is substantially underutilised with respect to patronage numbers compared to Parramatta station and other major centres in Sydney. The proposal seeks to locate additional residential density within 100m of Harris Park Station, Parramatta's second CBD train station, and as such better utilise this infrastructure and will assist in sharing platform capacity with Parramatta Station.

2.1 Harris Park station upgrades

The NSW Government is improving accessibility at Harris Park Station. The works form part of the government Transport Access Program, designed to encourage greater public transport use and better integrate station interchanges with the role and function of town centres. The improvements will also support a stronger customer experience outcome to deliver seamless travel, and encourage patronage and will include:

- Three new lifts.
- A family accessible toilet.
- New canopies for weather protection and undercover bicycle racks.
- Improved interchange area.

- Upgrades to lighting and CCTV surveillance.

Figure 1 – Harris Park Station montage

Source: Transport for NSW

2.2 Utilisation of Harris Park Station

The Parramatta CBD is envisaged to be Sydney's central city. The CBD Planning Proposal locates the majority of the city's density proximate to the Parramatta Station however does not locate substantial density at the Harris Park station. We consider that this will result in a constraint for the long term growth of Sydney's central city as the proposed density does not adequately utilise the existing high capacity transport infrastructure, resulting in a reliance on transport in the central portion of the CBD that may result in over capacity platforms, as identified in the Strategic Transport Assessment above.

The Sydney CBD is serviced by four train lines across seven train stations (Central, Town Hall, Circular Quay, Martin Place, St James and Museum stations) with the Sydney Metro line providing another line and two new high capacity stations. Harris Park Station is serviced by two lines (on a single station).

Table 2 below identifies to total of movement (in/out), and rank of the top 7 stations in Metropolitan Sydney. The table clearly shows that the infrastructure at Harris Park Station is underutilised and has the capacity to service a greater number of patrons than existing, particularly in line with planned Station upgrades

Table 2 - Rank of Sydney train station usage over 24 hour period (Transport Statistics 2014)

Location	In	Out	Rank	No. of lines
Central	97,110	97,110	1	5
Town Hall	89,620	89,620	2	4
Wynyard	60,200	60,200	3	3
Parramatta	34,960	34,960	4	2
North Sydney	28,610	28,610	5	1
Redfern	25,680	25,680	6	5
Chatswood	22,200	22,200	7	1
Harris Park	**1,710**	**1,710**	**130**	**2**

Figure 2 below illustrates a comparison of Sydney train station patronage.

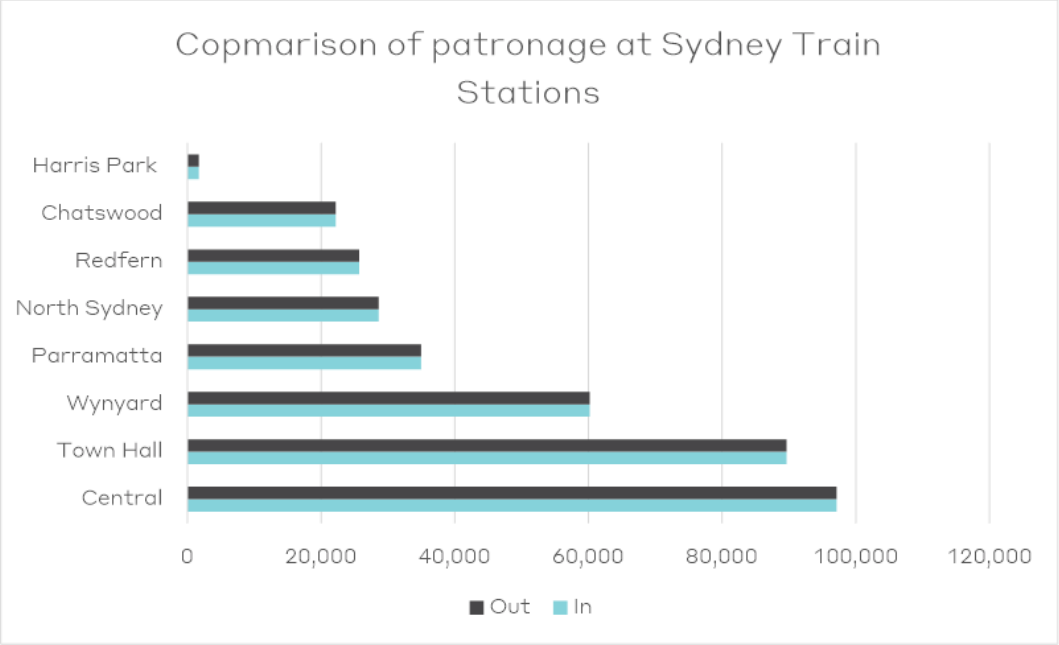

Figure 2 - Sydney train stations patronage comparison

For Parramatta to be realised as Sydney's Central City it will need to provide high capacity transport in multiple accessible locations, similar to the Eastern City. We consider that a density of 6:1 (proposed in the Parramatta CBD Planning Proposal) immediately adjacent to the second station in the Central city is not the highest and best use of the land and will constrain growth in the CBD in the future.

Figure 3 below illustrates the location of Parramatta's two existing train stations and the proximity of density to each station proposed in the CBD Planning Proposal. As illustrated in **Figure 3**, the majority of density in the CBD relies on Parramatta Station for access to high capacity transport. Even with the addition of the Parramatta Light rail and West Metro, the density proposed in the southern portion of the CBD significantly underutilises the existing infrastructure at Harris Park station.

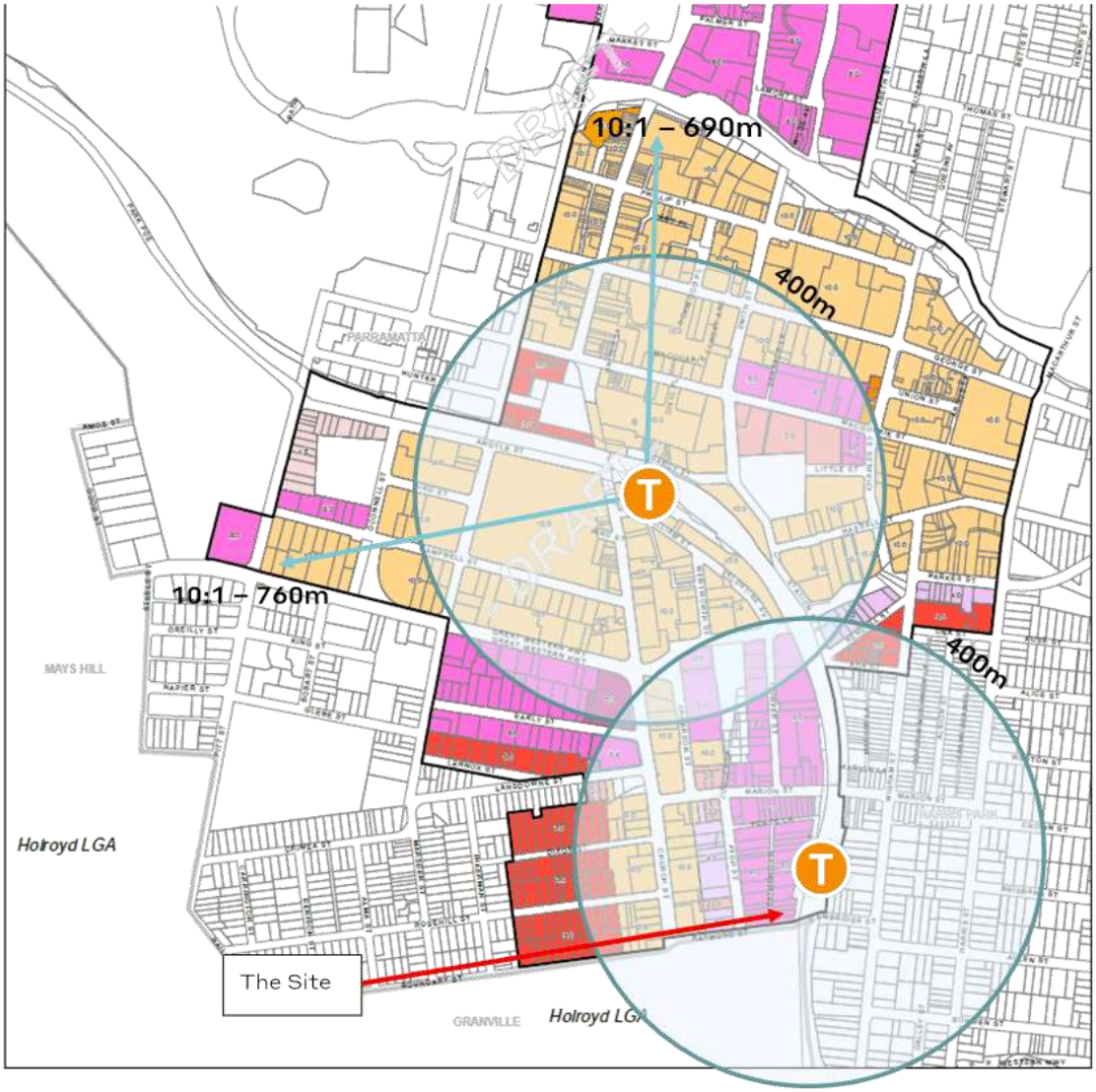

Figure 3 - Proximity of proposed density to rail infrastructure

3.0 Heritage

3.1 Heritage Listing of No. 7 Station Street

On 17 August 2017 (524 days after the proposal was lodged), Council wrote to the applicant to advise that an independent Heritage assessment of the locally listed heritage item at No. 7 Station Street had been undertaken by City Plan (refer to August 17th 2017 Council letter). The independent review agreed with the assessment in the Planning Proposal that the item did not warrant heritage listing. As such Council has supported the proposed removal of the heritage listing for the item at 7 Station Street.

3.2 Heritage Interface

In July 2017 Council endorsed the Parramatta CBD Heritage Interface Study (Heritage Interface Study) to be forwarded to DP&E for consideration as part of the CBD Planning Proposal. The Heritage Interface Study was commissioned by Council to respond to the issues raised by the Heritage Council and the DP&E with respect to the height and FSR controls proposed in the CBD Planning Proposal and the resulting interface implications to the Heritage Conservation Areas surrounding the CBD.

The endorsed Heritage Interface Study recommended that the built form controls in a number areas throughout the CBD reduced in scale to better respond to the heritage fabric of the CBD and surrounds. The Heritage Interface study also recommends that a new Heritage Conservation Area is created for the Marion Street precinct (located to the north of the site). **Figure 4** below illustrates the land subject to recommendations in the Heritage Interface Study. The restrictions relate to reduced height controls and the new Marion Street HCA.

Areas identified with additional heritage constraints

Study area

Figure 4- Location of heritage constraints in the southern portion of the CBD

Source: Hector Abrahams

The Heritage Interface Study included an assessment of the subject site and street block with respect to the Tottenham Street HCA located to the south of the site, across Raymond Street. The study did not include any recommendation to reduce the scale of the buildings on the subject site or in the study precinct (shaded in red in **Figure 4** above) and as such supported the proposed removal of the building height limits as proposed in the CBD Planning Proposal. The Heritage Interface study did include a number of recommendations surrounding historic setback patterns, areas of deep soil and modulating building facades etc. The applicant supports these recommendations and considers that these matters are to be addressed during the design competition phase and are not relevant to the Planning Proposal stage.

4.0 Replacing Dwellings in the Parramatta CBD

As a result of the building height controls recommended in the Heritage Interface Study, a reduction of approximately 870 dwellings and 113 jobs from the numbers sought under the Parramatta CBD Planning Proposal will be realised (Council business paper dated 10 July 2017 paragraph 40-41, item 11.15). While it is acknowledged that the biggest reduction in density will occur in the Sorrell Street precinct, the Marion Street precinct (to the north of the site) will also result in a loss of density as a result of the height restrictions and the creation of a potential new HCA.

We note that the site specific Planning Proposal seeks to achieve a density greater than that proposed under the CBD Planning Proposal (10:1 compared to 6:1) and as such provides an opportunity to accommodate the loss of density resulting from the Heritage Interface Study. The additional floor space resulting from a density of 10:1 across the Station Street block (study area identified in **Figure 4** above) compared to 6:1, would result in approximately 400-450 additional dwellings, all within 100m of the train station.

We consider that the site is ideally located to accommodate the additional density as it:

- Is located within 100m of Parramatta's second train station;
- Is located 170m to the east of the future Auto Alley precinct employment accommodating up to 26,000 jobs;
- Is not considered to have heritage interface issues that would restrict the built form; and
- Is of an appropriate land amalgamation size to accommodate a high density development, commensurate with Parramatta Council's opportunity site requirements of 1,800m^2 and 40m street frontage.
- Its location in a Strategic Centre and in proximity to transport infrastructure is consistent with density supported by the DP&E in other regions including Ryde, Wentworth Point and Macquarie Park.

5.0 Urban Design Rationale

The Urban Design Analysis submitted with the Planning Proposal identified a number of key urban design principles, consistent with the Parramatta Council's opportunity site requirements of 1,800m^2 and 40m wide frontage, that make it appropriate for a high density development:

- The site comprises the amalgamation of four properties to achieve a site area in excess of 1,800m^2;
- The site has three street frontages;
- A 40m site frontage/width at the building line;
- Ability to achieve appropriate transition to heritage;
- Proximity to high capacity public transport; and
- The ability to provide a public benefit.

We note that the Parramatta CBD Planning Proposal was endorsed by the Council after the site specific Planning proposal was lodged however it identifies the same principles for Opportunity Sites, being mixed use sites that are eligible for additional density provided they satisfy the following criteria:

- *the development site is at least 40 metres wide at the front building line, has an area of at least 1,800 square metres; and*
- *the development demonstrates an appropriate transition to any heritage items; and*
- *the development includes community infrastructure to the satisfaction of the consent authority, whether or not provided on the development site or an alternative site nominated by the consent authority.*

As illustrated in **Figure 5** below, the CBD Planning Proposal seeks to locate opportunity sites, that are eligible for FSR controls up to 15:1, up to 800m from the nearest station. The figure also illustrates that there are no opportunity sites located within 400m of the Harris Park station.

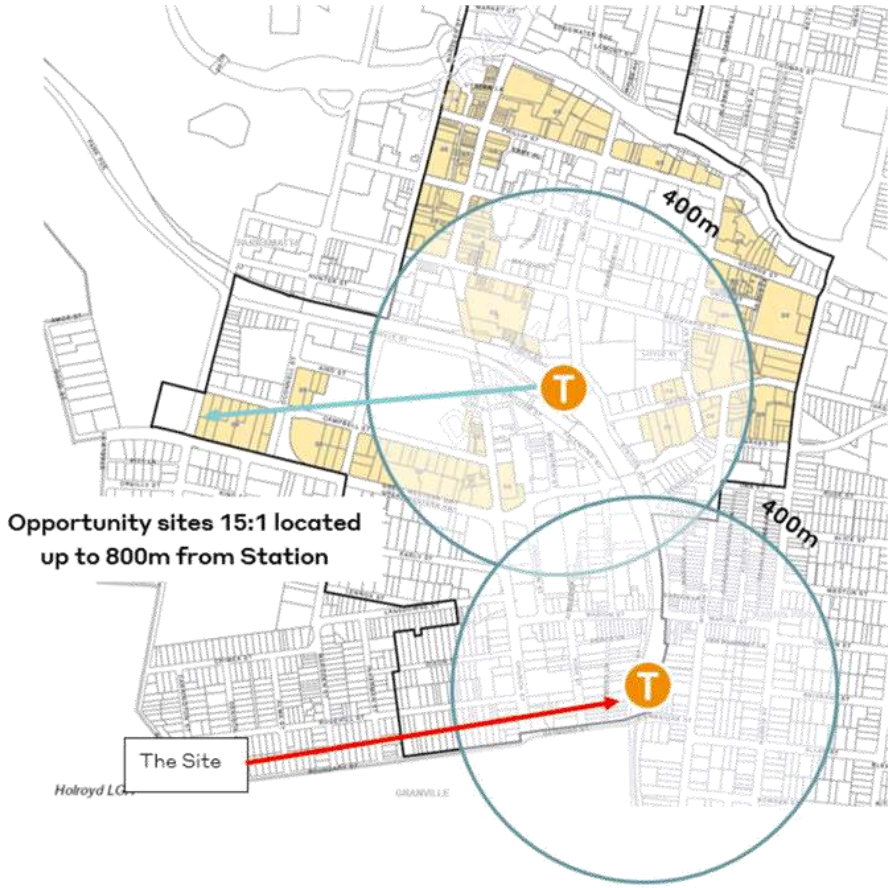

Figure 5- Location of opportunity sites within the CBD

In this regard we consider that the proposal has site specific merit and aligns with Council's endorsed criteria for sites that are appropriate for higher density. The Urban Design Analysis submitted with the Planning Proposal identified a potential building arrangement for the street block whereby adjoining sites are amalgamated to achieve the above criteria. This arrangement is illustrated in **Figure 6** below.

Opportunity site No. 2

**Note that the land fronting High Street would no longer be included in this amalgamation pattern.*

Figure 6- Potential amalgamation plan submitted with Planning Proposal

Following the endorsement of the CBD Planning Proposal, the applicant wrote to Council on July 2016, noting that Council had recently endorsed the CBD Planning Proposal that included opportunity sites. The letter identified that the subject meets the 1,800m^2 lot size and 40m street frontage requirements and will facilitate an appropriate transition to the heritage item at 1 Station Street West, as required under Draft Clause 7.16 Opportunity Sites.

The letter outlined that the urban design assessment submitted with the Planning Proposal identified the same opportunity site criteria for development in the Station Street precinct (Refer to **Figure 6** above). Accordingly, it was suggested to Council that the precinct may be considered as 'opportunity site 2' and permit additional FSR from the mapped incentive FSR of 6:1 up to 10:1, provided the opportunity site criteria are met.

5.1 Height and Density located at Station

We note that Council has raised concern over the proposed location of density outside of the CBD core. However, we disagree with this assessment as the CBD Planning Proposal identifies a number of areas on the southern and western edge of the CBD that are proposed to have the same density as the proposal. As illustrated in **Figure 7** below, the Auto Alley Precinct is located on the southern edge of the CBD and comprises a large area of land with high density zoning, being the same as that proposed for the site.

The densities proposed in the CBD include the B3 zoned Commercial Core with commercial office developments having no maximum FSR control over an area of approximately 20Ha, the Auto Alley Precinct and opportunity sites allowing mixed use developments with FSR controls up to 15:1. In this regard the proposed development, being a single site with a maximum FSR control of 10:1 plus design excellence bonus, will not undermine the hierarchy of densities in the Parramatta CBD. We consider that the merit of a density of 10:1 on the subject site is clear.

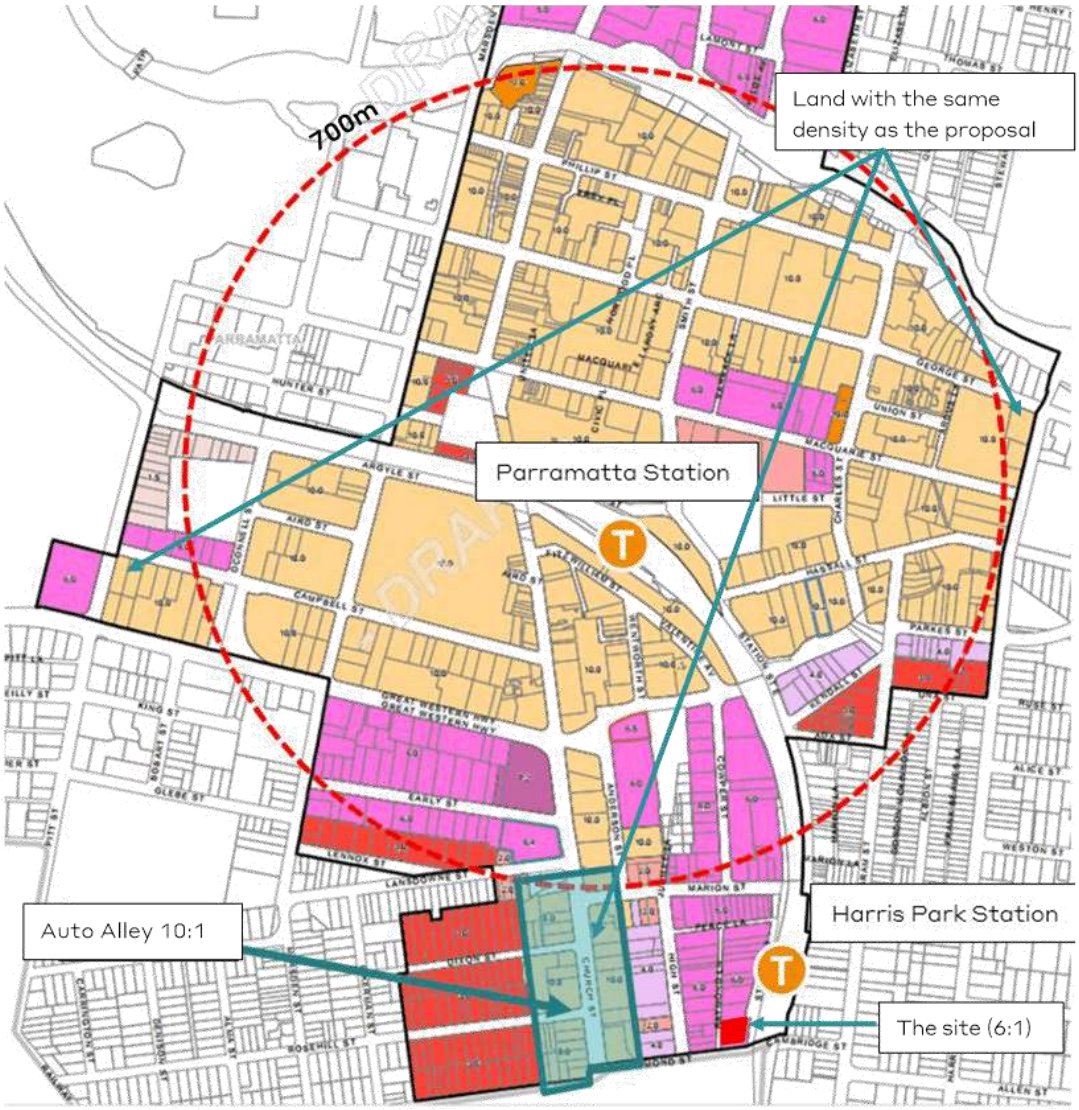

Figure 7- Location of density within Parramatta CBD

Source: CBD Planning Proposal Incentive FSR map

We consider that the proposed location of increased density adjacent to Parramatta's second railway station is a sustainable and appropriate location. The proposed density on the site is commensurate with many fringe areas of the CBD, many of which do not have proximate access to public transport, as illustrated in **Figure 7** above. We consider the provision of increased density adjacent to existing high capacity transport infrastructure achieves the objectives of the various strategic planning documents including A Plan for Growing Sydney, Greater Sydney Regional Plan and the Draft Central District Plan for the Sydney's Central City and will ensure that well located land isn't locked up with low intensity development.

6.0 Voluntary Planning Agreement

The Planning Proposal is accompanied by an agreement to enter into a Voluntary Planning Agreement (VPA) that will deliver s significant public benefit and community infrastructure. The public Benefits offered by Greenrock in the VPA offer include:

1. Construction works for the creation of a linear park along Station Street to be known as Harris Park, as designed by Context and provided with the Planning Proposal documents. The linear park represents a substantial public benefit and contribution values in excess of $1,000,000;
2. Embellishment of the Linear park along Station Street with landscaping, street furniture, CCTV cameras, LED lighting and wayfinding signage;
3. The registration of an easement or encumbrance across the portion of the site fronting Station Street to form part of the Linear Park and be accessible to the public;
4. The provision and management of publicly accessible car sharing spaces above that of Council's DCP requirement. A letter of offer from GoGet is provided attached to this letter.
5. Maintenance and ongoing restoration works to the heritage item at 1 Station Street in accordance with the Conservation Management Plan for the item; and
6. Greenrock would also consider a monetary contribution to the upgrade and embellishment of toilets and amenities at Rosella Park.

Greenrock note that Council have endorsed the preparation of a Draft CBD Infrastructure Strategy that provides for a Phase 1 Value sharing rate of $150/sqm, to be applied to the amount of additional floor space gained through the CBD Planning Proposal or site specific Planning Proposals. Greenrock express their support for this policy position that will result in a contribution of approximately $2,208,000 to be allocated to the items identified above or other Council nominated projects in the CBD.

7.0 Avoidance of Precedent

We understand that Council have raised concern over creating an undesirable precedent should the site achieve, or should Council support the proposed FSR of 10:1. We consider that there are sufficient and significant factors that would prevent the occurrence of an undesirable precedent in this instance, including:

- The site and the Station Street study area is located adjacent to a train station and as such is in a unique location.
- The catchment served by the Harris Park station is located partially outside of the CBD boundary and as such has little opportunity to service new development as a result of the growth of the CBD. In this regard, the site and the Station Street study area are located directly adjacent to the station and are located within the CBD boundary.

- Following the exhibition of the CBD Planning Proposal it is considered unlikely that any rezoning of the land surrounding the site will occur within 5 years as the Department of Planning's *Guide to Preparing LEP's* states that there will be a presumption against a Rezoning Review that seeks to amend LEP controls that are less than 5 years old, unless the proposal can clearly meet the Strategic Merit Test;
- There are very few development sites in the CBD located within 100m of a train station that meet the same site criteria (1,800m^2 area and 40m frontage);
- Other street blocks in the area are affected by heritage controls or building height and FSR restrictions. As identified in the Hector Abrahams Study there are no heritage constraints on the site; and
- The site is an amalgamated land holding and achieves a large, 1,800m^2 site area and 40m wide frontage.

8.0 Political Donations

A political donations form is included in the application form attached to this letter.

9.0 Conclusion

The proposal clearly demonstrates strategic merit by assisting in growth of Sydney's central city by locating additional density adjacent to a CBD train station. The proposal also demonstrates site specific merit through a large site area and frontage, ability to transition to heritage and ability to achieve a high level of residential amenity. The site is unique and has significant merit as it:

- Is one of only a very few number of development sites in the CBD located within 100m of a train station that meet the same site criteria (1,800m^2 area and 40m frontage);
- Is located within 100m of an existing train station;
- Will provide an efficient and slender residential building envelope that demonstrates a high level of residential amenity;
- Achieves Council's criteria for additional density, being 1,800m^2 area, 40m frontage and appropriate transition to heritage;
- Is located in an area that does not contain heritage restrictions with respect to building heights or FSR;
- And promotes sustainable development that is consistent with strategic planning policy.

We consider that the information contained within this letter is sufficient to progress the rezoning review. Should you wish to discuss this further please do not hesitate to contact me at aszczepanski@ethosurban.com or 9956 6962.

Yours sincerely,

André Szczepanski
Principal
9956 6962
aszczepanski@ethosurban.com

CITY PLAN SERVICES

Assessment of Significance &
Heritage Impact Statement + Analysis of Impact of De-listing

7 Station Street West, Parramatta

Prepared for Parramatta City Council

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June 2017 | 17-077

Report Revision History

Revision	Date Issued	Prepared by	Reviewed by	Verified by
01	6/06/17	**Brittany Freelander** *Heritage Consultant* **Kerime Danis** *Director - Heritage*	**Kerime Danis** *Director - Heritage*	**Kerime Danis** *Director - Heritage*
02	13/06/17	**Kerime Danis** *Director - Heritage*	**Kerime Danis** *Director - Heritage*	

CERTIFICATION
This report has been authorised by City Plan Heritage P/L, with input from a number of other expert consultants, on behalf of the Client. The accuracy of the information contained herein is to the best of our knowledge not false or misleading. The comments have been based upon information and facts that were correct at the time of writing this report.

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1. Introduction

1.1 Background

City Plan Heritage (CPH) has been engaged by the City of Parramatta to undertake independent assessment of the heritage significance of the heritage item located at 7 Station Street West, Parramatta. The existing Federation cottage is identified as a heritage item of local significance under Schedule 5 of the Parramatta Local Environment Plan (LEP) 2011 (item no. I745). This independent assessment has been requested due to a proposed de-listing and demolition of the subject heritage item as part of a Planning Proposal that also relates to numbers 1, 3 and 5 Station Street West, Parramatta. Number 1 Station Street is also an item of local heritage significance (I744) that the proposal intends to retain. The Planning Proposal also involves additional amendment to Parramatta LEP 2011 to increase the height of buildings control from 12 metres to 142 metres and to increase the floor space ratio (FSR) from 2:1 to 11:5:1.

The brief for the independent assessment of the heritage significance of 7 Station Street West also included the following assessments also be undertaken:

- a statement of heritage impact relating to the proposed de-listing and demolition of the item; and
- an analysis of the potential precedent that may be created from de-listing of this item. This is required to advise Council of the potential precedent set for its heritage schedule within Parramatta LEP 2011 should a decision be made to de-list the item.

Therefore, the following report is presented in three main parts:

- Part A: Assessment of Heritage Significance;
- Part B: Heritage Impact Assessment;
- Part C: Analysis of Impact of Potential De-listing.

Existing Heritage Context

The subject site, in addition to its being a heritage item, is located within proximity to two heritage listed residences at 1 Station Street (item no. I744) and two attached houses at 49 and 51 High Street (item no. I710), as identified in the Parramatta LEP 2011. It is also located close to the Tottenham Street Heritage Conservation Area (C1) located within the Holroyd LGA identified under Part 2 of the Holroyd LEP 2013. There are also a number of heritage items within the Conservation Area; however, they have no or very limited visual relationship with 7 Station Street West.

Previous Studies Pertinent to the Site

As part of the Planning Proposal documentation submitted to Council for review, a heritage assessment of the property and four separate peer reviews of the assessment were undertaken. These reports, prepared by NBRS + Partners, Graham Brooks & Associates, Architectural Projects, Urbis, and Weir Phillips Heritage support the de-listing of the Federation cottage and its subsequent demolition. A Conservation Management Plan was also prepared by Architectural Projects in 2015.

2. Part A: Heritage Assessment

2.1 Methodology

This Heritage Assessment has been prepared in accordance with the NSW Heritage Manual "Assessing Heritage Significance" guidelines. The philosophy and process adopted has been guided by the Australia ICOMOS *Burra Charter* 2013.

The methodology used for this heritage assessment included a site inspection prior to review of any documentation and previous heritage studies/ peer reviews undertaken in relation to the subject Planning Proposal in order to form an independent view on the integrity and heritage values of the heritage item in question. The NBRS + Partners' 2015 Heritage Assessment and the Architectural Projects' Conservation Management Plan have been utilised for the historical development of the site and its immediate local area with cross referencing of the resources, which confirmed the historical background information and documentary evidence contained in these studies with limited gaps. These gaps would not make any difference to the principle author's view and therefore further historical research have not been carried out. A series of documentation associated with the subject Planning Proposal have been reviewed during the production of this report with the following documentation being related to the heritage studies and peer reviews:

- Heritage Assessment, 7 Station Street West Parramatta, NBRS + Partners, August 2015;
- Heritage Impacts Assessment, One Station Street Parramatta, NBRS + Partners, February 2016;
- Heritage Peer Review, 1-7 Station Street West Parramatta, Urbis, 24th February;
- Peer Review, 1-7 Station Street West Parramatta, Weir Phillips Heritage, March 2016;
- Peer Review of Heritage Assessment Report, 7 Station Street West, Parramatta, Graham Brooks and Associates, August 2015; and
- 7 Station Street West, Parramatta, Peer Review, Architectural Projects, August 2015.
- Conservation Management Plan, 1, 7 Station Street, Parramatta, Urbis, November 2015 (The CMP does not provide conservation policies for 7 Station Street West as it notes "The significance of 7 Station Street West does not warrant protection. Therefore the policies only relate to the protection of 1 Station Street West");
-

In addition, comments and concerns received from Council's Heritage Advisor have been reviewed and considered.

2.2 Limitations

A detailed historical and archaeological assessment, including an assessment of Aboriginal cultural heritage values, is not considered necessary at this time and does not form part of the scope of this report.

2.3 Author Identification

The following report has been prepared by Kerime Danis (Director - Heritage) with research and comparative analysis assistance from Brittany Freelander (Heritage Consultant).

Site inspection was undertaken on 15 May 2017 by Kerime Danis in association with Neal McCarry, Team Leader at the City of Parramatta.

3. Site Context and Description

3.1 Site Context

The subject site is located in the western suburb of Parramatta, approximately 23km west of the Sydney Central Business District (CBD). It is a mixed residential and commercial suburb located within the local government area of Parramatta City Council. The subject Federation cottage is located west of the Parramatta CBD.

7 Station Street West is located on the western side of the Street, towards the intersection with Raymond Street. It is located on an irregular shaped block that is bounded to the north by Peace Lane, to the west by Raymond Lane, to the east by Station Street and to the south by Raymond Street. The Main Western Railway line is located directly opposite the site and northeast of the site is the Harris Park Railway Station. While the immediate surrounds of the site are populated by residential housing dating from various periods of development, located west of the site is Church Street, which has a number of businesses, predominately consisting of car dealerships.

As detailed in Section 1.1, the cottage is identified as a heritage item under Schedule 5 of the Parramatta Local Environment Plan (LEP) 2011 (item no. I745). The site is also located within proximity to two heritage listed residences at 1 Station Street (item no. I744) and two attached houses at 49 and 51 High Street (group item no. I710).

The following images provide an overview of the site's context.

Figure 1: Aerial view showing the location of the subject site, outlined in red. (Source: SIX Maps accessed 5 June 2017 via https://maps.six.nsw.gov.au/)

Figure 2: Street map showing the location of the subject site, outlined in red. (Source: SIX Maps accessed 5 June 2017 via https://maps.six.nsw.gov.au/)

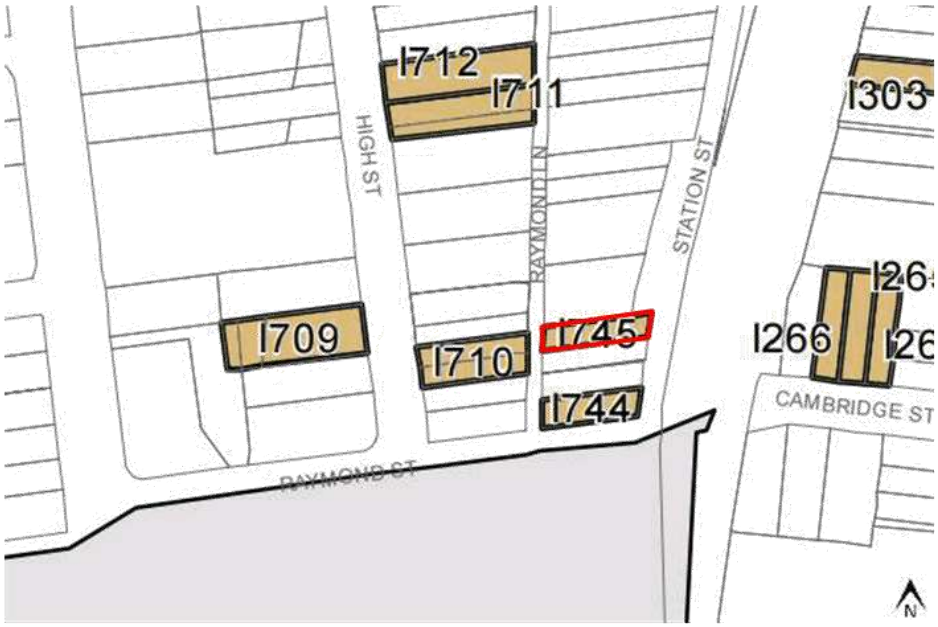

Figure 3: Excerpt from the Parramatta LEP heritage map showing the location of the subject site, outlined in red, and the nearby heritage items. (Source: Parramatta LEP Heritage Map 010)

Figure 4: View of the heritage listed residence at 1 Station Street (item no. I744) (left image) and view looking west from the rear of 7 Station Street towards the residences located to the rear within Raymond Lane (item no. I710) (right image).

Figure 5: View looking southeast towards the neighbouring residences at 1-5 Station Street (left image). Note the visibility of the heritage listed 1 Station Street in the background. The image on the right is looking north towards the neighbouring residential flat building located at 9 Station Street (right image).

3.2 Site Description

The subject site is located at7the southern end of Station Street West, and is a single storey cottage originally constructed in the Federation period and modified numerous times, with most significant changes occurring in the 1980s. The site is rectangular in shape and the residence is located towards the eastern end of the block, set back behind a contemporary metal palisade fence with fleur-de-lys finials and a small landscaped garden. The fence extends south along the eastern boundary of the neighbouring properties located at 1-5 Station Street.

The cottage is asymmetrical in form and has a projecting gabled bay to the southern end. The hipped roof is clad in corrugated metal and to the rear is a hipped and skillion extension, also clad in corrugated metal. There are three brick chimneys with terracotta pots, one located towards the northern end of the roof and two to the south. Within the apex of the roof is a small gablet with a metal roof vent and small modern timber finial.

The projecting gable to the eastern façade includes two long rectangular double hung windows with timber frames and covered by metal security bars. The windows are surmounted by an eyelid hood in the same corrugated metal as the roof with decorative timber brackets, possibly a later addition. Above the window hood within the gable end is a dentilated string course and rough-cast cladding. At the apex of the gable end is a timber finial, similar to the finial seen in the main roof.

The front façade of the cottage was originally of facebrick with tuck pointing, however, it has since been painted in a cream colour.

Internally, the cottage has been modified and converted into commercial premises with rooms including offices, a kitchen, toilets and a meeting room. There is also an outdoor area with a flat metal awning and parking to the rear.

As previously noted and was evident at the site inspection, the cottage has undergone a number of modifications to facilitate conversion of the property into commercial premises, which occurred in the 1980s. These included the following:

- According to the 2015 Heritage Assessment and as evident in the 1943 aerial seen in Section 3.3, there is a new rear addition that has significantly increased the size of the cottage and has resulted in the removal of a portion of the building to the rear;
- The rear backyard has been concreted and is no longer an open lawn area;
- Changes to the front façade detailing including replacement of the gable end barge boards and finials, painting of the brickwork, the awning above the gable end windows is possible a replacement, original Federation detailing to the veranda and balustrade removed and replaced with modern detailing, front veranda floor now painted concrete, veranda post supports are also a later addition;
- Window joinery to all rooms have been replaced except the front two windows;
- Internal detailing to the ceilings, cornice, picture rails, skirting and corbels are replacements and not original detailing;
- The original flooring has been replaced with modern hardwood and carpeting;
- Painting of the front façade;
- Original kitchen fireplace has been removed;
- Addition of a new palisade fence to the front and new landscaping to the garden.

The following images provide an overview of the site's current configuration and physical condition.

Figure 6: External views of the primary eastern façade showing the projecting gabled bay (left) and front garden with modern palisade fence (right). Note the uniformity in the corrugated metal roof, which extends over the veranda and has also been used in the eyelid hood over the windows of the projecting bay.

Figure 7: Views looking southwest towards the northern façade of the cottage showing the northern chimney (left) and original timber bracket in the veranda with contemporary lattice detailing (right). The palisade fence is also visible, wrapping partially around the northern boundary before joining with a higher metal sheeting fence. The veranda is partially obscured from view by landscaping.

Figure 8: Detailed views of the gabled bay (left) and front entrance (right). Note the modifications made to the eyelid hood over the windows of the projecting gabled bay, modified barge boards and finials in both gable ends, modified balustrade detailing, painted concrete floor, handrail and painted facebrick.

Figure 9: Detailed view looking north within the veranda (left) and south east towards the brick balustrade (right). While some original detailing can be seen in the brickwork (now painted) and timber bracket, this area has been highly modified.

Figure 10: Views within the rear section of the site looking east towards the extension, external awning and paved parking area (left) and west towards the properties in Raymond Lane (right). This area was once open lawn and has been encroached upon by the modern addition to the rear of the cottage. Note the contemporary flat awning.

Figure 11: Internal views of the cottage, which is now used as a Greek Welfare Centre. The views showing the extent of modifications made with all detailing seen dating from the 1980s renovations.

Figure 12: Internal views showing a modified side window (left), modified fireplace (centre) and a general view of an office space with a contemporary ceiling rose (right).

Figure 13: Detailed view of later cornice and possible original wall vent (left) and a general view of an office meeting room with modern detailing visible in the arched entrance, picture rails, cornice, window frames and skirting (right).

Figure 14: Detailed views of a modern cornice with a visible crack (left) and a ceiling rose with modern light fittings (right).

Figure 15: Internal views of the kitchen area which has been modified and the original fireplace removed (left) and an internal view of an office meeting room looking towards a modern internal stained glass window (right).

Figure 16: Internal views of a storage area (left), toilet (centre) and hallway area (right). All these areas are located at the rear and feature modern detailing, fittings and fixtures (right).

Figure 17: View looking east towards the main entrance (left) and detailed views of a fireplace (centre) and original window (right).

4. History

4.1 Aboriginal Association with the Site

Prior to European settlement, Parramatta was occupied by the Darug people, with the local clan being the Burramattagal people. The proximity of Parramatta to the river would have made it an important location for hunting, fishing and camping. The tributaries of the Parramatta River would have provided resources such as ducks, fish, crayfish, shellfish in the freshwater sections of the river, while shellfish, molluscs and eels would have been present in saltwater portions of the creek.[1]

4.2 European Development of Parramatta

The following is an extract from the Dictionary of Sydney entry for Parramatta,[2] which is itself based on the history of the area published by Kass et al. in 1996:[3]

> *After the penal colony was founded at Sydney Cove in January 1788, Governor Arthur Phillip organised exploring expeditions up the Parramatta River. When more fertile land near the head of the river was found, he decided to set up a second settlement. On 2 November 1788, a site was selected for a redoubt at the Crescent, in what is now Parramatta Park, and on 4 November 1788, convicts were sent to the site. Land was cleared and planted with crops. Apart from government agriculture, private farming also began. In November 1789, James Ruse was occupying land at Experiment Farm, which he was cultivating. Later, it was granted to him.*
>
> ***From Rose Hill to Parramatta***
>
> *The settlement was originally known as Rose Hill in honour of George Rose, Secretary to the British Treasury, who was reputed to have helped Phillip secure appointment as governor of the penal colony. On 2 June 1791, Phillip renamed it Parramatta, using the locality name used by the Burramattagal. Various meanings have been ascribed to the name Parramatta, but Elizabeth Macarthur wrote at the time that it meant 'head of the river'. It was the first place to be given a name by Europeans that was based on an Aboriginal name.*[4]
>
> *A town was laid out in 1790 with a long transverse street, later known as George Street, leading from the wharf to Government House. It was lined on both sides with convict huts. Other buildings erected included a granary, stores, and military barracks. A hospital was operating in 1789: in 1792 a new brick hospital was built on a site by the river. A gaol was commenced in 1797 in what is now Prince Alfred Park. The first service at St John's Church was held on 17 April 1803. Its distinctive towers were added in the 1810s. Originally all communication to and from Parramatta was by river, but a rough track to Sydney was opened. Parramatta Road was laid out about 1797 under the direction of Surveyor-General, Augustus Alt.*[5]
>
> *Government House was set up as the governor's Parramatta residence and a large area around it was set aside as the Governor's Domain. It became Parramatta Park after it had been greatly reduced in size. Until the 1850s many governors preferred to rule from Parramatta rather than Sydney.*

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[1] Casey and Lowe, 2006. *109- 113 George Street, Parramatta Archaeological Investigation*, pp.50- 51.
[2] T Kass, 2008. "Parramatta", Dictionary of Sydney, available at http://dictionaryofsydney.org/entry/parramatta.
[3] T Kass, C Liston and John McClymont, 1996. *Parramatta: A Past Revealed*. Parramatta: Parramatta City Council.
[4] Kass et al. 1996, p.26.
[5] J Jervis, 1927. "The Road to Parramatta - Some Notes on its History", *Journal of the Royal Australian Historical Society* 13, pp. 68-69.

Manufacturing in Parramatta included weaving, brewing, and brick kilns. The streets were regularised in 1811 and 1814. Inns emerged as commerce expanded in the town, changing a convict-based economy into a market-based economy.

The Female Orphan School, a pet project of Governor Macquarie's wife Elizabeth, was completed on 30 June 1818. It now forms part of the University of Western Sydney. The Female Factory was occupied in February 1821, housing convict women awaiting assignment or returned to the government by their employers.

In May 1823, a Governor's Proclamation permitted those who held land in towns, including Parramatta, to obtain a lease for 21 years. Those who were willing to pay 21 years 'quit rent' or had spent over £1,000 on building were entitled to a grant. Previously, some grants been made in the town but most land was held under lease or at sufferance. The proclamation gave townspeople secure tenure of their land, which they could develop for commercial or residential purposes. When the leases expired in the 1840s, there was a long period of tidying up of property ownership in Parramatta, which enabled some canny speculators to obtain a good deal of land in the area. The process of finalising grants continued into the 1850s.

The town prospers

Parramatta grew as the major regional centre for western Cumberland with its courthouse, Government House, markets and stores. It provided professional services in law and medicine. Many specialist suppliers operated from Parramatta while notable hotels such as the Red Cow and the Woolpack added to its attractions. The establishment of the King's School fixed Parramatta's role as a major educational centre. The school moved into new premises on the north side of the river in 1835.

The end of the convict regime in the 1840s and the withdrawal of the imperial garrison and the loss of its financial expenditure meant a reduction of functions for Parramatta, so its economy suffered. However, Parramatta was left with a legacy of major convict era buildings. These were later converted into public institutions such as the Lunatic Asylum (former Female Factory), Benevolent Asylum (George Street convict barracks) Lancer Barracks (former military barracks), and Parramatta Gaol.

The arrival of the railway in 1860 changed the focus away from George Street and the road from the wharf to Church Street and the railway station. Major stores and businesses began to re-align themselves along Church Street rather than George Street.

A local government authority was proclaimed for Parramatta on 27 November 1861. An election on 20 December 1861 was followed by the first meeting of council on 2 January 1862 in the courthouse. Parramatta's Town Hall was completed in September 1883.

Industrial businesses set up in Parramatta included blacksmiths, which later turned into engineering firms such as that of the Ritchie family; millers such as Henry Harvey and the Byrnes Brothers; tanneries, brick kilns and tweed mills (also run by Byrnes Brothers). Parramatta's continuing role as a retail centre with many stores was reflected in the number of newspapers issued at Parramatta, though, unfortunately, few issues survive from before the 1870s. Major banks established in Parramatta included the Commercial Banking Co of Sydney (1861) and Bank of New South Wales (1874).

A suburbanisation boom from the 1870s onwards created satellite towns in areas such as Harris Park and Granville. Initially, since there were only a few general

stores in those centres, most residents still patronised Parramatta for major purchases or professional services. At the same time, more intense development pressures within Parramatta forced some manufacturers to shift to outer areas on 'green field' sites. Byrnes Brothers weaving mills moved to Granville and Ritchie's engineering works went to Auburn.

As a town with an 'old world' feel by the 1870s, Parramatta emerged as a holiday or honeymoon destination, a function it retained into the 1910s. Centred on a pleasant landscape of farms and orchards with the river and hills nearby, its less hectic lifestyle brought Sydneysiders there for holidays. Parramatta was also the centre for many established sports including clubs for cricket, football and tennis, as well as wheeled sports such as bicycling, motor-cycling and eventually car racing.

Parramatta has a special place in the history of flying. On 3 November 1911, William Ewart Hart flew his plane from Penrith to Parramatta for breakfast with his father, taking his 16-year-old brother, Jack, as a passenger. It took 19 minutes to complete the journey. It is reported that Jack vowed he would never go up with Billy again after the flight. It is recognised as the first long distance flight in Australia.

Commercial development

Major stores commenced by local entrepreneurs included Erby's, Rawlinson's and the most famous of all, Murray Brothers. WR Murray and EN Murray combined their businesses in 1884 and expanded. In 1889, they built new multistorey premises which dominated Church Street, and which may be the first multistorey commercial store built in western Sydney. They are still extant at 263 Church Street.

By the 1930s, Sydney-based chain stores such as McIlrath's, Moran & Cato and Nock & Kirby were entering Parramatta and pushing out local firms. Grace Brothers opened its new Parramatta store on 5 April 1933. A band of local unemployed men welcomed and entertained customers as they entered the premises. Murray Brothers expanded into new purpose-built premises on a new site at the corner of Macquarie and Church Streets. Local ice cream producer Lynam's opened a milk bar in Macquarie Street in the 1930s. For 18 months, it was conducted by John Goffage, later better known as Australian character actor 'Chips' Rafferty. Industrial development spread east along Parramatta River and to the south in the 1920s into what was then the Municipality of Granville.

Growth and change

Municipal amalgamation forced by the state government in 1948 permitted Parramatta to absorb the municipalities of Granville, Dundas, Ermington and Rydalmere, despite the observation of Granville's Town Clerk that 'You can't make one rich man by tying three poor men together'.[6] *A major part of Blacktown Shire covering Northmead and Winston Hills was added to the City of Parramatta in 1972.*

Institutions such as the George Street Benevolent Asylum and Homes for the Aged were closed, and their sites redeveloped, reducing Parramatta's dependence on government institutions. Yet, the continuation of others such as the former Female Factory, which became the Lunatic Asylum (now Cumberland Hospital), the former Female Orphan School (later Rydalmere Lunatic Asylum) and now the University

[6] Kass et al. 1996, p.368.

of Western Sydney's Rydalmere campus, maintained the role of large institutions in Parramatta and ensured the survival of its historical fabric.

Vigorous commercial redevelopment commenced in the 1950s, as commercial offices entered the Parramatta central business district, diversifying its former retail focus. The process was hastened by zoning and the need for regional headquarters for firms serving western Sydney, which had boomed after World War II. Retailing changes were highlighted by the remodelling of Grace Brothers store in 1956 with rooftop parking. The opening of David Jones Church Street store by the Parramatta River on 22 November 1961 helped to steer retailing northwards away from the railway station.

Subsequently, Westfield redeveloped the Grace Brothers site on Church Street next to the railway station. When it opened in 1975, it sought to reverse the trend of shoppers bypassing Parramatta for regional shopping centres such as Roselands. The strategy was successful and Westfield has expanded further since then. Wholesale redevelopment of entire blocks adjacent to the railway station is currently altering the core of Parramatta.

4.3 History of the Subject Site

The following history of 7 Station Street West has been extracted from the Heritage Assessment prepared by NBRS + Partners, which was confirmed by CPH that it is based largely on primary sources. The history from the August 2015 report is considered detailed and has been extracted in full below.

The subject site is located on Lot 34 of Section 1 of DP 976, which is originally part of "110 acres in the township of Parramatta on the north of a creek known by the name of Duck Creek" granted to surgeon, John Harris, on 20 February 1794. He subsequently purchased the farm of James Ruse on which in 1798 he built the still extant Experiment Farm Cottage. "Until 1800 he led a busy existence as surgeon and farmer. By the turn of the century he owned 315 acres (127 ha) of land of which 205 (83 ha) were purchased, and had acquired 431 head of stock, possessions which placed him among the foremost officer-farmers."[7] At his death on 27 April 1838, he left property in the region of £150,000.[8]

John Wigram Allen commenced subdivision of the Harris Estate in 1876 (Figure 18). This is part of the land depicted in the block plan shown at Figure 18. This land was re-subdivided with land to the east of the railway line as DP 241 (Figure 19); the subject site is located within Section 10 thereof.

[7] B. H. Fletcher, 'Harris, John (1754–1838)', Australian Dictionary of Biography, National Centre of Biography, Australian National University, http://adb.anu.edu.au/biography/harris-john-2164/text2773, published first in hardcopy 1966, accessed online 30 July 2015.
[8] Ibid

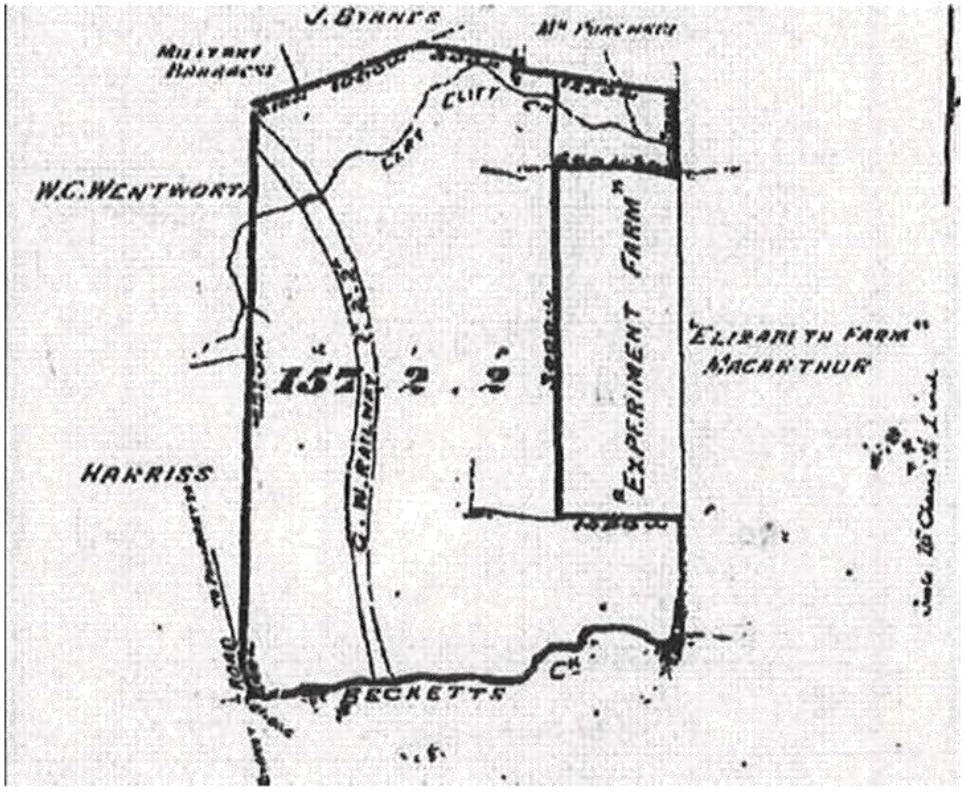

Figure 18: Block plan of the Harris Estate in 1872 (Source: NSW Land & Property Information, Certificate of Title Vol CXXX111 Fol 127)

In the "Plan of Streets in Harris Park, Town of Parramatta" undertaken in September 1882 (Figure 20), the subject site is located within that portion of undeveloped land owned by Sir George Wigram Allen, bounded by Marion Street, High Street, Short Street and Station Street West. What is apparent from comparing the May 1876 and September 1882 plans is that the portions of Allen's land did not sell immediately, including Section 10.

George Wigram Allen advertised the auction sale on 4 November 1882 of "92 splendid sites" at Harris Park Parramatta (Figure 21). Sections 10 and 12 of DP 241 were sold to Henry Solomon of the City of Sydney, landowner.9 That land is shown on the subdivision plan at Figure 22. Solomon was a partner with George and Henry Myers as the firm of Myers and Solomon (general importers) and had their store at 542 George Street, Sydney. A report on the auction sale was published in the Sydney Morning Herald the Monday after: "Messrs Mills, Pile and Gilchrist…sold…the whole of the subdivision at Harris's Park, Parramatta, consisting of 92 allotments, at prices ranging from 26s to £3 1s per foot [realising] £6500."[10]

[9] Certificate of Title Vol 616 Fol 243, NSW Land & Property Information.
[10] Monetary and Commercial", Sydney Morning Herald, 6 November 1882, p6.

Figure 19: DP 241, Harris Park, May 1876. (Source: NSW Land & Property Information)

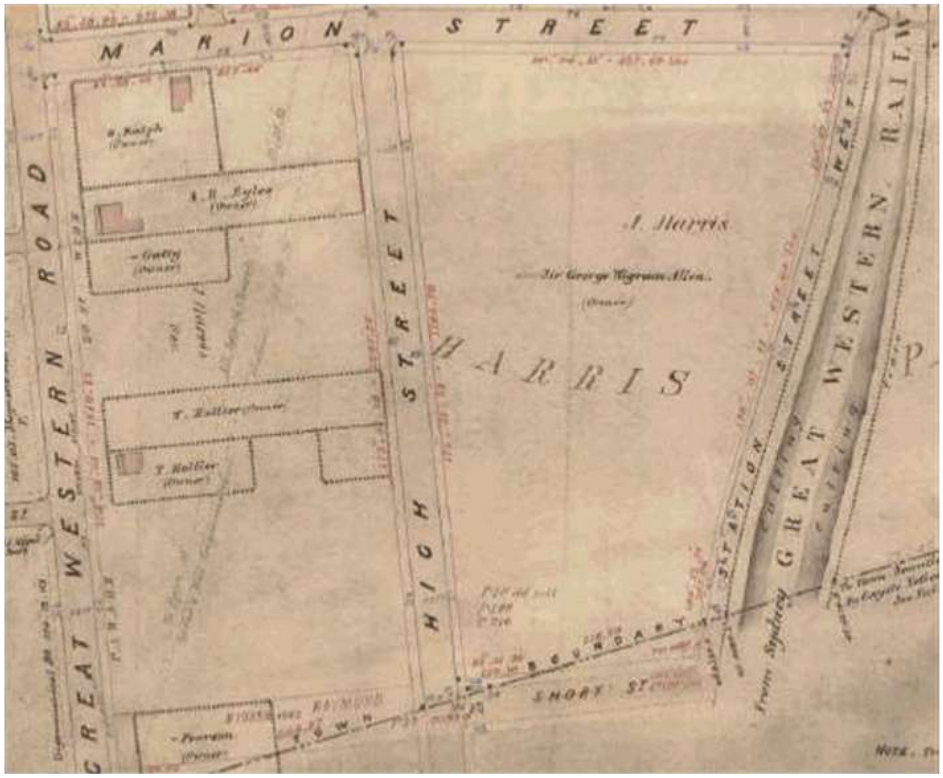

Figure 20: Extract from Plan of streets in Harris Park Town of Parramatta Parish of St John County of Cumberland / date of survey 1-21 September 1882. (Source: NSW Land & Property Information, Crown Plan 12-833 and P12-2033R)

Auction Sales.

TO-MORROW AFTERNOON.

HARRIS PARK,
PARRAMATTA,
ON THE GROUND, at 3 p.m.

91 SPLENDID BUILDING SITES.

THE ONLY HIGH LAND BETWEEN GRANVILLE and PARRAMATTA.
CHARMING VIEWS. GRAND ELEVATION.
HALF A MILE RAILWAY FRONTAGE.

ATTEND the SALE, and SECURE A LOT.

This LAND WILL DOUBLE ITS VALUE WITHIN A VERY SHORT TIME.
TORRENS' TITLE. Lithos at the Rooms.

TORRENS' TITLE. Lithos at the Rooms.

FREE TICKETS for Special Train leaving REDFERN at 2.15 p.m., can be obtained at the Rooms.
TERMS—10 PER CENT DEPOSIT, balance in 18 monthly payments.
MILLS, PILE, and GILCHRIST,
Auctioneers.

Figure 21: Auction sale advertisement for Harris Park Parramatta subdivision. (Source: Sydney Morning Herald, 3 November 1882, p10.

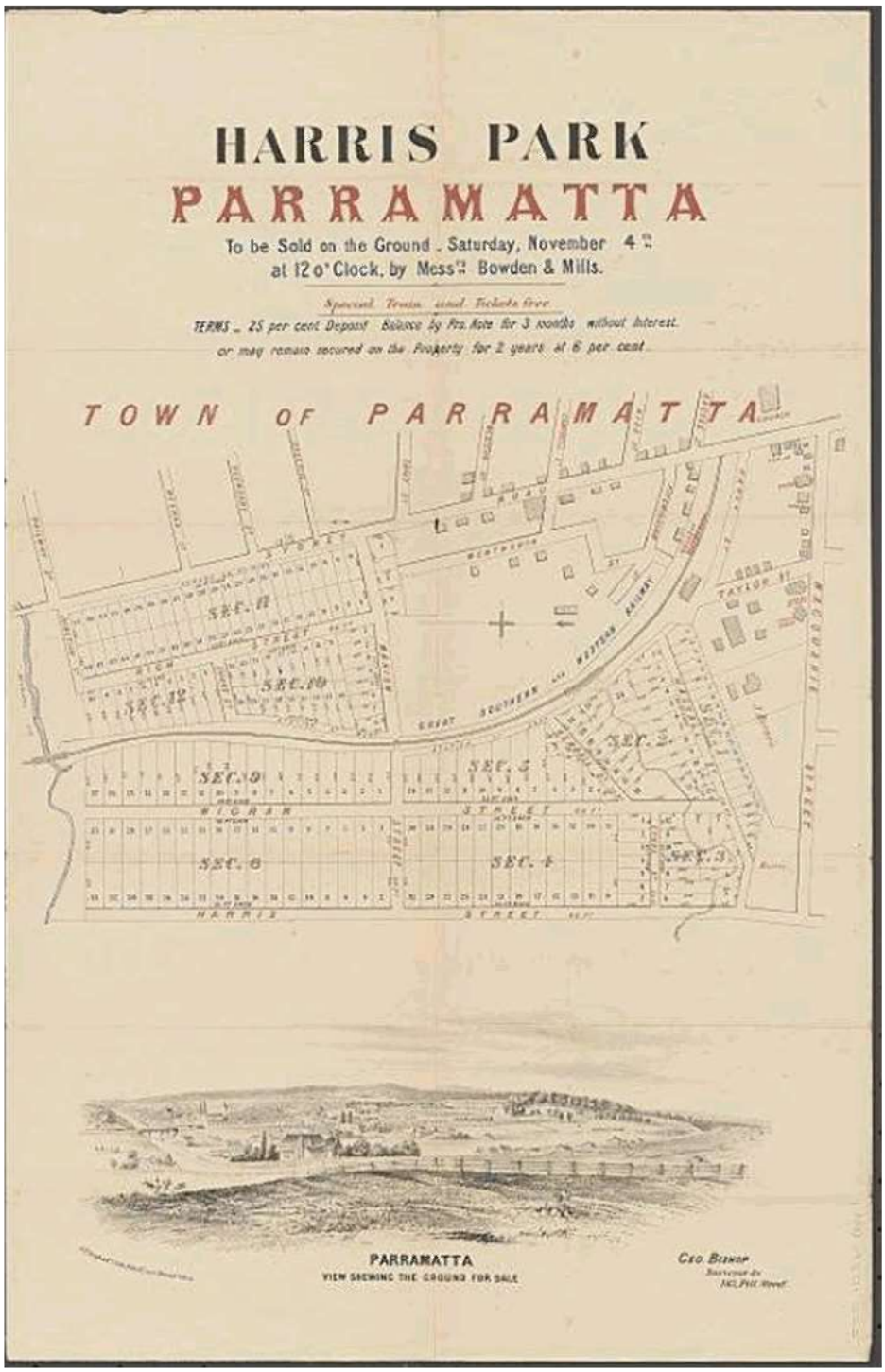

Figure 22: Harris Park Parramatta to be sold on the ground Saturday November 4th [1882]. (Source: NLA, MAP Folder 68, LFSP 1026)

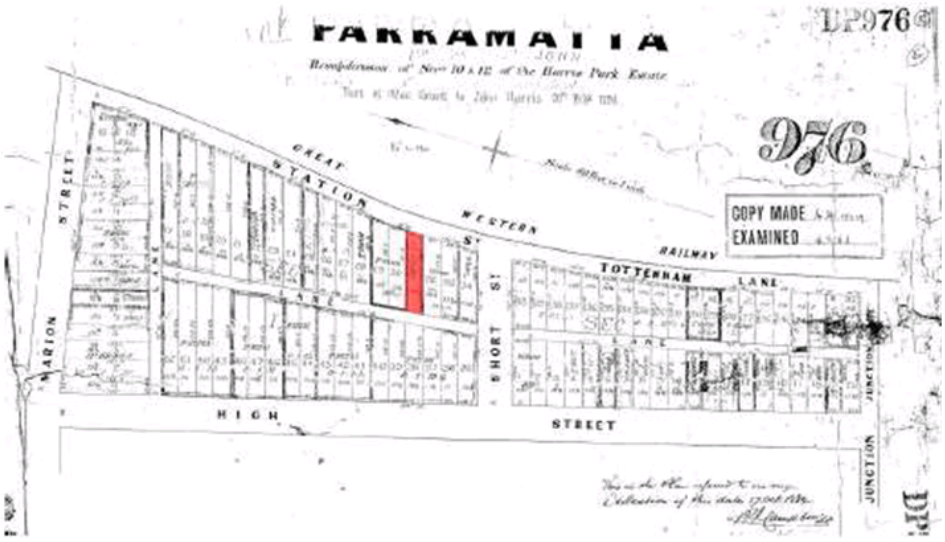

Figure 23: Extract from DP 976, Parramatta – Re-subdivision of Sects 10 & 12 of the Harris Park Estate, 1882. Subject site shaded red thereon. (Source: NSW Land & Property Information)

Solomon re-subdivided Sections 10 and 12 of DP 241 as DP 296, which plan of subdivision is shown at Figure 23. The first sales in this subdivision are registered on the certificate of title on 27 December 1882. The following March, Solomon sold Lot 31 of Section 1 (subject site) to Samuel Phillips of Pitt Town, farmer[11] *for the sum of £74/7/1.*[12] *That allotment is shaded red on the subdivision plan. Phillips is accordingly named the owner of "unenclosed land" in the 1883 Parramatta Rate Book with an annual value of £5.*

The allotment remained undeveloped until 1909 when Samuel Phillips sold the land to Michael Farrell of Parramatta, grocer's assistant in May.[13] *Farrell mortgaged the land in September 1909, presumably to raise the capital required to build upon the lot. The Council gave permission in October to the building application submitted by S Lucas "to erect a cottage in Station Street for Mr H Farrell [sic]."*[14]

According to the Sands Directory Michael Farrell was the occupant of the unnumbered residence in Station Street from 1911 until 1919. Thereafter the house was leased to a succession of tenants including Walker R Paul, Alfred W Bayly and CG Gregory. Farrell conveyed 7 Station Street in January 1929 to Edna Mary Farrell of Parramatta, spinster. Later in the same year she married Donaldson C Walker. The Walkers lived here for a few short years before moving to the Northern Beaches of Sydney by 1933. Thereafter the Valuation Lists name Mrs (Edna) May Walker as the owner of the subject site until her death in 1969 at Fairlight. It is not known who occupied the property in the intervening period.

Figure 24 comprises an aerial view of 7 Station Street in 1943.

The subject site was conveyed in October 1969 to her widower, Donaldson Cannon Walker of North Balgowlah, retired insurance inspector, and their son Geoffrey Michael Walker of Killarney Heights, dentist. Following the death of Donaldson

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[11] Certificate of Title Vol 656 Fol 50, NSW Land & Property Information.
[12] Memorandum of Transfer 69129, NSW Land & Property Information.
[13] Ibid
[14] "Parramatta Council", Cumberland Argus and Fruitgrowers Advocate, 20 October 1909, p3.

Walker in 1978, the subject site passed to Geoffrey Michael Walker in February 1983. He owned same until August 1988 when it was sold to Premier Fire Protection Pty Limited.[15] *That company lodged a successful building application to Parramatta Council in mid-December for "adds office" estimated to cost $50,000; the application was approved on 31 March 1989.*[16]

The commercial property was purchased by the Greek Orthodox Archdiocese of Sydney in August 2005 and in 2006, they established the Greek Welfare Centre there as a regional office in Western Sydney, to service the needs of people of Greek background and the wider community offering a range of programs and services.

Figure 24: Extract from 1943 aerial survey of Sydney showing subject site shaded yellow. (Source: NSW Land & Property Information, SIX Maps)

[15] Certificate of Title Vol 11175 Fol 52, NSW Land & Property Information.
[16] 88/431, Register of Building Applications 1988, Parramatta City Council Archives.

5. Comparative Analysis

The level of significance of an item is determined by its value relative to other comparable items, be they in a local or international context. The rarity and/or representativeness of the item are considered as part of the overall analysis of its significance. Comparisons will be made between suitable buildings for the purposes of establishing significance in relation to the rarity criterion G and representativeness criterion F of the NSW Heritage Manuals 'Assessing Heritage Significance' guidelines.

Survey of Schedule 5 'Heritage Items' of the Parramatta LEP including the inventory forms provided on the Office of Environment' State Heritage Inventory (SHI) database reveals existence of a limited number of Federation residences located within the Parramatta LGA that date from a similar period of development and reflect the general characteristics and features of the residence located at 7 Station Street West. The heritage items considered below are in no way represent the full list of the Federation period cottages or houses that are listed on the Parramatta LEP as the LEP listing names do not contain the construction or architectural type of all items and there are limited information on some of the SHI database inventory forms. These limitations have further discussed and considered in 'Part C' of this report. The following are the heritage items that could have been identified as Federation period houses in the Parramatta LEP and the associated SHI database, and are of similar comparable brick construction houses with 7 Station Street West.

5.1 63 Wigram Street, Harris Park

The Federation free-standing cottage located at 63 Wigram Street is part of a group heritage item that encompasses the residences located at 59-65 Wigram Street (item no. 614). The residences encompassed within the listing are a mixture of developments dating from the Victorian and Federation period. Only 63 Wigram Street is considered to share similarities with 7 Station Street.[17]

The residence is constructed of red stretcher bond facebrick and is surmounted by a hipped roof clad in cement tiles with exposed rafters. At the base of the residence are rendered foundations that are somewhat hidden from view due to the timber picket fence located along the eastern boundary of the site.[18]

Towards the front primary façade is a projecting gable with a timber shingled bargeboard. Other design features of note include the timber detailing to the windows and doors, curved timber brackets to the veranda supports, enclosed veranda with cement tiled roof, timber eyelid shutter to the projecting gable window and three decorative chimneys with brick corbels and lantern pots.[19]

While 7 Station Street shares some similarities with this example, 63 Wigram Street is highly ornate and has retained a significant amount of original detailing that is clearly visible from within the streetscape.

63 Wigram Street, Harris Park		Similar	Different
Significance Level	Local	✓	
Period	1925-	✓	
Style	Federation	✓	
Storeys	Single storey	✓	
Wall Finish	Facebrick		✓
Façade detailing	Eyelid window	✓	

[17] State Heritage Inventory form for "Group of Cottages," database no. 2240614, accessed 30 May 2017 via http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?id=2240614
[18] Ibid
[19] Ibid

	Asymmetrical form	✓	
	Timber detailing to facade		✓

Figure 25: Photograph showing the primary elevation of 63 Wigram Street. (Source: State Heritage Inventory form for "Group of Cottages," database no. 2240614, accessed 30 May 2017 via http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?id=2240614)

5.2 Alberdane, 22 Redbank Road, Northmead

As with the previous example, Alberdane is encompassed within a group heritage item that includes the residence located at 20 Redbank Road (item no.465). It is a single storey Federation cottage, well set back from the street and surrounded by landscaping primarily consisting of small plantings and lawn. The house itself is highly ornate and features red tuck-pointed stretcher bond brick walls, some blue brick trim detailing, a Marseille terracotta tiled roof that extends over the veranda and a projecting gable to one side. It is asymmetrical in form and features timber detailing to the front façade with elements including the timber detailing to the gable end bargeboard, decorative timber and brick balustrade to the veranda, timer posts and timber curved brackets. [20]

In addition to this ornamentation, the residence has a prominent gable end that extends over the entrance stairs that lead to the front door. The detailing in this gable end reflects the timber posts and brackets seen in the rest of the veranda.

This example is highly ornate and significantly more intact externally than the residence located at 7 Station Street.

[20] State Heritage Inventory form for "Cottage Group," database no. 2240465, accessed 30 May 2017 via http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=2240465

Alberdane, 22 Redbank Road, Northmead		Similar	Different
Significance Level	Local	✓	
Period	1920 -	✓	
Style	Federation	✓	
Storeys	Single storey	✓	
Wall Finish	Facebrick		✓
Façade detailing	Asymmetrical façade	✓	
	Projecting bay	✓	
	Timber detailing to façade elements		✓

Figure 26: Alberdane, located at 22 Redbank Road, Northmead. (Source: State Heritage Inventory form for "Cottage Group," database no. 2240465, accessed 30 May 2017 via http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=2240465)

5.3 45 Station Street, Guildford

The Federation single storey residence located at 45 Station Street, Guildford, is identified as a heritage item of local significance and is not part of a group heritage item, unlike the other examples explored above (item no. 534). According to the SHI form for the residence, it is considered a representative example of a Federation cottage in the Guildford area and reflects the characteristics often seen in Federation weatherboard cottages.[21]

[21] State Heritage Inventory form for "House," database no. 2240534, accessed 30 May 2017 via http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=2240534

The residence was constructed in c.1915 and is of an asymmetrical form with a projecting gable inset with two adjoining windows with transoms and covered by a timber eyelid awning. The pyramid roof is clad in corrugated metal and the residence has retained one brick chimney, which is partially visible behind the ridgeline of the roof.[22]

The veranda has a separate curved corrugated metal roof, timber posts and some timber detailing present in the brackets. There is also some detailing to the windows and under the sills.

Unlike the previous examples, 45 Station Street features less detailing, although has retained a number of original features and is considered externally intact.

45 Station Street, Guildford		Similar	Different
Significance Level	Local	✓	
Period	1915 -	✓	
Style	Federation	✓	
Storeys	Single storey	✓	
Wall Finish	Weatherboard		✓
Façade detailing	Asymmetrical façade	✓	
	Projecting bay	✓	
	Timber detailing to windows and veranda		✓
	Hipped corrugated metal roof	✓	

Figure 27: 45 Station Street, Guildford. (Source: State Heritage Inventory form for "House," database no. 2240534, accessed 30 May 2017 via http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=2240534)

[22] State Heritage Inventory form for "House," database no. 2240534, accessed 30 May 2017 via http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=2240534

5.4 St Mons, 41 Weston Street, Harris Park

The residence, known as St Mons and located at 41 Weston Street, Harris Park, is individually listed as a heritage item of local significance on the Parramatta LEP (item no. 605).[23]

The residence has been constructed of timber weatherboards and has a hipped gablet roof clad in red tiles and with exposed rafters. It is asymmetrical in form and has a projecting gable with a central window consisting of three long vertical panes with transoms and timber detailing. The veranda has decorative timber posts and is covered by a terracotta tiled skillion roof. The main roof of the residence is clad in red tiles and there are two tall brick chimneys present.

St Mons, 41 Weston Street, Harris Park		Similar	Different
Significance Level	Local	✓	
Period	1915 -	✓	
Style	Federation	✓	
Storeys	Single storey	✓	
Wall Finish	Weatherboard		✓
Façade detailing	Asymmetrical façade	✓	
	Projecting bay	✓	
	Eyelid timber awning to projecting gable window	✓	

Figure 28: St Mons, located at 41 Weston Street, Harris Park. (Source: State Heritage Inventory form for "St Mons," database no. 2240605, accessed 30 May 2017 via http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=2240605)

[23] State Heritage Inventory form for "St Mons," database no. 2240605, accessed 30 May 2017 via http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=2240605

5.5 114 & 116 Windsor Road, Northmead

Located at 114 and 116 Windsor Road are two timber weatherboard Federation cottages that are identified as a group heritage item on the Parramatta LEP (item no. 631). They date from the late Federation period (constructed c.1914-1915), are single storied only and are in the Arts and Crafts style.[24]

Both are similar in appearance, however, vary in some detailing for example the residence at 116 Windsor Road has retained a ladder gable screen, tall timber finial to the gable end and a brick chimney with corbels. These elements have been removed from no.114. As with the other examples, they have an asymmetrical façade and projecting gable end with a window covered by an eyelid hood. The hipped roofs are clad in corrugated iron.[25]

Again, these residences are highly intact and have retained a significant amount of external detailing that clearly identifies them as being in the Arts and Crafts style.

114 & 116 Windsor Road, Northmead		Similar	Different
Significance Level	Local	✓	
Period	1914 - 1915	✓	
Style	Federation	✓	
Storeys	Single storey	✓	
Wall Finish	Weatherboard		✓
Façade detailing	Asymmetrical façade	✓	
	Projecting bay	✓	
	Timber fretwork detailing	✓	

Figure 29: 114 and 116 Windsor Road, Northmead. (Source: On the House website accessed 30 may 2017 via http://www.onthehouse.com.au/4339816/114_windsor_rd_northmead_nsw_2152 and http://www.onthehouse.com.au/13178424/116_windsor_rd_northmead_nsw_2152)

[24] State Heritage Inventory form for "Timber Cottages," database no. 2240631, accessed 30 May 2017 via http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=2240631
[25] Ibid

5.6 66 & 70 Harris Street, Harris Park

66 and 70 Harris Street, Harris Park, are part of a group heritage item that encompasses the residences located at 64-78 Harris Street (SREP no.'s 270, 270A and 64). While they are not the only Federation cottages in the group heritage listing, they share similarities with one another and differ from the other two examples and therefore are covered separately.[26]

Both houses are constructed of facebrick with two rows of dark brick detailing, have a projecting gable, a gablet hip roof clad in terracotta tiles, timber posts to the veranda, detailing to the bargeboard and a prominent Queen Anne style arched window to the projecting bay.

Again, they are highly ornate examples that have retained a significant amount of external detailing, particularly within the projecting bay. They are highly visible from within the streetscape and have small front gardens behind a timber picket fence (no.70) and a low facebrick fence (no.66).

66 & 70 Harris Street, Harris Park		Similar	Different
Significance Level	Local	✓	
Period	c.1900		✓
Style	Federation	✓	
Storeys	Single storey	✓	
Wall Finish	Facebrick	✓	
Façade detailing	Asymmetrical façade	✓	
	Projecting bay	✓	
	Queen Anne arched window		✓
	Timber detailing to facade		✓

Figure 30: 70 and 66 Harris Street, Harris Park. (Source: State Heritage Inventory form for "Cottages Group," database no. 2240270, accessed 30 May 2017 via http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?id=2240270 and Google Street view July 2016, accessed 30 May 2017 via https://www.google.com.au/maps/@-33.8220016,151.0107954,3a,75y,262.71h,84.28t/data=!3m6!1e1!3m4!1sSksfchCTYHp6YM62zeKQlQ!2e0!7i13312!8i6656!6m1!1e1)

[26] State Heritage Inventory form for "Cottages Group," database no. 2240270, accessed 30 May 2017 via http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?id=2240270

5.7 68 & 75 Harris Street, Harris Park

The residences at 68 and 75 Harris Street are incorporated in the previous heritage listing, however, are different in appearance to the two previous examples. While the residences are asymmetrical in form with a projecting gable, they have more ornate timber detailing to the veranda, tuck pointed Flemish bond brick walls, a sun ray timber pattern to the gable end bargeboard and an eyelid awning over the bay windows.

While they share general similarities with 7 Station Street, they are highly ornate examples, located prominently within the streetscape and are highly intact externally.

68 & 75 Harris Street, Harris Park		Similar	Different
Significance Level	Local	✓	
Period	c.1900		✓
Style	Federation	✓	
Storeys	Single storey	✓	
Wall Finish	Facebrick		✓
Façade detailing	Asymmetrical façade	✓	
	Projecting bay	✓	
	Timber fretwork to facade		✓

Figure 31: 68 and 75 Harris Street, Harris Park. (Source: State Heritage Inventory form for "Cottages Group," database no. 2240270, accessed 30 May 2017 via http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?id=2240270)

5.8 Conclusion

Overall, there are examples of heritage listed Federation cottages located in the Parramatta LGA that share some similarities with 7 Station Street West. Most similarities include general characteristics and architectural features such as an asymmetrical form, presence of a veranda to the front facade, projecting gabled bay and an eyelid hood over windows.

The main differences between 7 Station Street West and the examples explored above is the amount of original detailing present. Most of the examples are ornate and show a higher degree of intactness. In addition, most have timber detailing to the veranda, which is missing from 7 Station Street West. 7 Station Street has also been significantly modified internally and does not have any original detailing and elements present as most dates from the 1980s renovation. Similarly, the external detailing could be reinstated but that would render most of the building's exterior being new fabric as it is now and would be based on conjecture as the

desktop research to date did not reveal any early or original photograph of the subject cottage.

As such, it is concluded that there are a number of existing heritage listed examples within the Parramatta LGA that are considered better and outstanding examples of a Federation cottage.

6. Assessment of Significance

6.1 Assessment of Criteria

The following assessment of significance has been prepared in accordance with the 'Assessing Heritage Significance' guidelines from the NSW Heritage Manual.

a) an item is important in the course, or pattern, of the local area's cultural or natural history

Constructed c1915 at the end of the Federation period, the residence located at 7 Station Street West, Parramatta is associated with the early development of Harris Park, in particular Station Street as part of the subdivision of John Harris's original estate from 1794. The site is also indicative of the early residential growth of Harris Park during the early 1900s.

Guidelines for Inclusion	✓/ X	Guidelines for Exclusion	✓/ X
▪ shows evidence of a significant human activity	X	▪ has incidental or unsubstantiated connections with historically important activities or processes	X
▪ is associated with a significant activity or historical phase	✓	▪ provides evidence of activities of processes that are of dubious historical importance	X
▪ maintains or shows the continuity of a historical process or activity	X	▪ has been so altered that it can no longer provide evidence of a particular association	X

b) an item has strong or special associations with the life or works of a person, or group of persons, of importance in the local area's cultural or natural history

While the site was originally part of a larger block of land issued to John Harris in 1794 and later subdivided and developed by John Wigram Allen, Myer and Solomon, Samuel Phillips and Michael Farnell, it does not have any strong or special associations with these early residents and land owners.

Guidelines for Inclusion	✓/ X	Guidelines for Exclusion	✓/ X
▪ shows evidence of a significant human activity	X	▪ has incidental or unsubstantiated connections with historically important activities or processes	✓
▪ is associated with a significant activity or historical phase	X	▪ provides evidence of activities of processes that are of dubious historical importance	✓
		▪ has been so altered that it can no longer provide evidence of a particular association	X

c) an item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in the local area

The subject former residence at 7 Station Street West is a typical and unadorned example of a Federation cottage with an asymmetrical massing, projecting bay flanked by a front veranda and eyelid hood over the window of the projecting bay. While there are some characteristic architectural features from the Federation style still present within the facade, most original detailing to the exterior of the residence has been removed or replaced with later detailing. As such, it makes a moderate contribution to the streetscape that differs significantly from the streetscape of Tottenham Street (Heritage Conservation Area in Holroyd LGA) on the western side of Raymond Street. Internally, as physically evident, the former residence has some internal detailing such as cornices, corbels and mouldings around entrances although this ornamentation dates from the 1980s renovations and is not original.

Guidelines for Inclusion	✓/ X	Guidelines for Exclusion	✓/ X
▪ shows or is associated with, creative or technical innovation or achievement	X	▪ is not a major work by an important designer or artist	✓
▪ is the inspiration for a creative or technical innovation or achievement	X	▪ has lost its design or technical integrity	✓
▪ is aesthetically distinctive	X	▪ its positive visual or sensory appeal or landmark and scenic qualities have been more than temporarily degraded	✓
▪ has landmark qualities	X	▪ has only a loose association with a creative or technical achievement	✓
▪ exemplifies a particular taste, style or technology	X		

d) an item has strong or special association with a particular community or cultural group in the local area for social, cultural or spiritual reasons

Historical research to date has not indicated the site has a strong or special association with a particular community or cultural group in the area for social, cultural or spiritual reasons.

Guidelines for Inclusion	✓/ X	Guidelines for Exclusion	✓/ X
▪ is important for its associations with an identifiable group	X	▪ is only important to the community for amenity reasons	✓
▪ is important to a community's sense of place	X	▪ is retained only in preference to a proposed alternative	X

e) an item has potential to yield information that will contribute to an understanding of the local area's cultural or natural history

Due to the age of the residence, which is the first development to have occurred on the site and is still standing to date, the site would have low archaeological potential to yield information that will contribute to an understanding of the local area's cultural or natural history. Substantial changes to its architectural detailing resulted in the loss of most of its fabric rendering it as a building with 1980s/1990s fabric, and as such it has limited ability to yield information on the construction and characteristics of Federation cottages that were built in the locality at the end of the Federation period.

Guidelines for Inclusion	✓/ X	Guidelines for Exclusion	✓/ X
▪ has the potential to yield new or further substantial scientific and/or archaeological information	X	▪ has little archaeological or research potential	✓
▪ is an important benchmark or reference site or type	X	▪ only contains information that is readily available from other resources or archaeological sites	✓
▪ provides evidence of past human cultures that is unavailable elsewhere	X	▪ the knowledge gained would be irrelevant to research on science, human history or culture	X

f) an item possesses uncommon, rare or endangered aspects of the local area's cultural or natural history

The subject former residence is a late Federation cottage that has been significantly modified internally and externally and therefore is not considered as an exemplar of the style. The alterations to the building has removed almost all its internal finishes and detailing and together with changes to its some joinery and detailing externally they have reduced its intactness and integrity There are better examples present within the Parramatta LGA as seen from the few examples contained in the Comparative Analysis above.

Guidelines for Inclusion	✓/ X	Guidelines for Exclusion	✓/ X
▪ provides evidence of a defunct custom, way of life or process	X	▪ is not rare	✓
▪ demonstrates a process, custom or other human activity that is in danger of being lost	X	▪ is numerous but under threat	✓
▪ shows unusually accurate evidence of a significant human activity	X		
▪ is the only example of its type	X		
▪ demonstrates designs or techniques of exceptional interest	X		
▪ shows rare evidence of a significant human activity important to a community	X		

g) an item is important in demonstrating the principal characteristics of a class of the local area's

- ***cultural or natural places; or***
- ***cultural or natural environments***

The subject site is indicative of the residential growth of Harris Park during the early 1900s and is a common example of a modified Federation cottage.

Guidelines for Inclusion	✓/ X	Guidelines for Exclusion	✓/ X
▪ is a fine example of its type	X	▪ is a poor example of its type	✓

▪ has the principal characteristics of an important class or group of items	X	▪ does not include or has lost the range of characteristics of a type	✓
▪ has attributes typical of a particular way of life, philosophy, custom, significant process, design, technique or activity	X	▪ does not represent well the characteristics that make up a significant variation of a type	X
▪ is a significant variation to a class of items	X		
▪ is part of a group which collectively illustrates a representative type	X		
▪ is outstanding because of its setting, condition or size	X		
▪ is outstanding because of its integrity or the esteem in which it is held	X		

6.2 Statement of Significance

The existing Statement of Significance for 7 Station Street as identified in the SHI form for the residence is as follows:[27]

> *House at 7 Station Street West is of significance for the local area for historical and representativeness reasons. Built c.1915, it is readily identifiable as part of historic building stock and is still contributing to the streetscape.*

In light of the Assessment of Significance undertaken in Section 6of Part A above, CPH has revised the Statement of Significance as below:

Constructed c1915 at the end of the Federation period, the residence located at 7 Station Street West, Parramatta is associated with the early development of Harris Park, in particular Station Street as part of the subdivision of John Harris's original estate from 1794. Although, the site is also indicative of the early residential growth of Harris Park during the early 1900s. the subject former residence is a typical and unadorned example of a Federation cottage that has lost most of its original detailing and provides loose associations with the architectural characteristics of its type. While there are some characteristic architectural features from the Federation style still present within the facade, most original detailing to the exterior of the residence has been removed or replaced with later detailing. As such, it makes a moderate contribution to the streetscape that differs significantly from the streetscape of Tottenham Street (Heritage Conservation Area in Holroyd LGA) on the western side of Raymond Street. Internally, as physically evident, the former residence has some internal detailing such as cornices, corbels and mouldings around entrances although this ornamentation dates from the 1980s renovations and is not original.

Substantial changes to its architectural detailing resulted in the loss of most of its fabric rendering it as a building with 1980s/1990s fabric, and as such it has limited ability to yield information on the construction and characteristics of Federation cottages that were built in the locality at the end of the Federation period. As such, it is not considered as an exemplar of the style.

[27] State Heritage Inventory form for "Single Storey Residence," database no. 2240536, accessed 1 June 2017 via http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=2240536

The existing cottage and its site fails to meet six of the seven Significance Assessment Criteria with only association with the local area's cultural history being its construction at the end of the Federation period. Although it is as an indicative of the residential growth of Harris Park during the early 1900s and is a common example of a modified Federation cottage, these values alone when comparing with the other heritage items of similar period do not warrant its retention on Schedule 5 of the Parramatta Local Environmental Plan 2011.

7. Recommendations and Conclusion

Based on the fabric analysis undertaken by CPH on 15 May 2017 and the comparative analysis undertaken in Section 5, it is clear that the heritage item at 7 Station Street has lost its integrity and has a limited ability to demonstrate the detailing and configuration that it had originally. It is considered to have loose connections/ associations with the other heritage items within the Parramatta LGA that are exemplars of the Federation period and their respective architectural styles. This building could be considered on the "border line" for heritage listing but following the analysis undertaken by CPH against the exclusion and inclusion criteria of the Significance Assessment Criteria, it is evident that the site and the cottage fail to meet six of the seven criteria with only loosely meeting the historical criterion (a). Given consideration that any building that was built in the same late Federation period would have some historical association with the development history or a historical phase of a local area, meeting criterion (a) alone would not warrant its listing on a local heritage register. Listing under only Criterion (a) as quoted above would require considerable importance to a local area's cultural and natural history due to a place's association with a significant activity or historical phase. Other than being built at the end of the Federation period the subject site has no known significant connection with the Federation phase development of Harris Park. The site does not show evidence of a significant human activity nor it maintains or shows the continuity of a historical process or activity in the local area.

The SHI form for the subject heritage item indicates its first identification as a heritage item as part of the 1993 *City of Parramatta Heritage Study* undertaken by Meredith Walker. The SHI form notes that the guidelines are used; however, the significance assessment criteria under the Heritage Manual was first published in 2001. Notwithstanding, the 1993 heritage study could have utilised the guidelines established for the State Heritage Inventory Manual, which was one of the reports that were prepared by several consultants for the then Heritage Branch, NSW Department of Planning. Meredith Walker was one of these consultants as indicated in the *Acknowledgement* section of the *Assessing Heritage Significance* publication of the NSW *Heritage Manual.*[28] The earliest of these studies date from 1989 and extends up to 1996 when the NSW *Heritage Manual* was first published. The second review of the Parramatta Heritage items was undertaken by National Trust (Parramatta Branch) in 2004 with note that no guidelines have been used. The 2004 review updated the Statement of Significance by only adding the construction date. It is unclear if the cottage was more intact than it was in 2004 and is now but this could be the case at the time of the 1993 heritage study. The building may have had good and more intact detailing/integrity at the time of its first identification and assessment as a heritage item but has lost most of its fabric rendering it as a building with 1980s/1990s fabric. This is evident from the inspection and analysis of its importance to the local area's late Federation period historical and architectural building stock. Therefore, in line with the findings of the above assessment, it is concluded that 7 Station Street West does not meet the threshold for heritage listing today. In addition, its recognition as a Heritage item under the LEP may reduce the integrity of Part 1 of Schedule 5 (Heritage Items) listing of the Parramatta LEP 2011. This could apply to other similar borderline heritage items in the heritage list.

CPH therefore concurs with the statements made in the Heritage Assessment and four Peer Reviews and recommends the cottage be removed from Part 1 of Schedule 5 of the Parramatta LEP 2011.

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28 http://www.environment.nsw.gov.au/resources/heritagebranch/heritage/listings/assessingheritagesignificance.pdf

Further supporting information in relation to the comparative survey of the existing heritage items of the Parramatta LEP can be found in *Part C: Analysis of Impact of Potential De-listing* of this report. The following section contains *Part B: Heritage Impact Assessment*, which provides an assessment of the likely heritage impacts of the proposed de-listing and demolition of the subject heritage item as part of the Planning Proposal submitted for the site.

8. Part B: Heritage Impact Assessment

The brief of the City of Parramatta requested a statement of heritage impact relating to the proposed de-listing and demolition of the item but did not directly require an assessment of the likely impacts of the submitted Planning Proposal. Therefore, the impact assessment below only relates to the assessment of the impacts that would be caused by the proposed de-listing and the demolition of the item.

8.1 Documentation

As noted in Part A of this report a series of documentation associated with the subject Planning Proposal have been provided by the City of Parramatta, which have been reviewed during the production of this report with the focus on the following documentation that relate to the heritage matters

- Heritage Assessment, 7 Station Street West Parramatta, NBRS + Partners, August 2015;
- Heritage Impacts Assessment, One Station Street Parramatta, NBRS + Partners, February 2016;
- Heritage Peer Review, 1-7 Station Street West Parramatta, Urbis, 24th February;
- Peer Review, 1-7 Station Street West Parramatta, Weir Phillips Heritage, March 2016;
- Peer Review of Heritage Assessment Report, 7 Station Street West, Parramatta, Graham Brooks and Associates, August 2015; and
- 7 Station Street West, Parramatta, Peer Review, Architectural Projects, August 2015.
- Conservation Management Plan, 1, 7 Station Street, Parramatta, Urbis, November 2015 (The CMP does not provide conservation policies for 7 Station Street West as it notes "The significance of 7 Station Street West does not warrant protection. Therefore the policies only relate to the protection of 1 Station Street West");

The remainder of the documentation, which include but not limited to the following, have also been reviewed to obtain better understanding of the proposed development, the overall urban context analysis and the necessity of the subject heritage item's de-listing and demolition:

- Urban Design Report - One Station Parramatta, AJ+C
- Amendments to Parramatta LEP 2011, 1-7 Station Street West, Parramatta, March 2016
- Visualisation for Younes Property

8.2 The Planning Proposal

The Planning Proposal for the site, which is named as One Station Street Parramatta under the proposed development, consists of properties at 1, 3, 5 and 7 Station Street West. The proposal is for the demolition of buildings at numbers 3 and 5 as well as the de-listing and demolition of the heritage item at number 7. 1 Station Street West is also a heritage item on Schedule 5 of the Parramatta LEP 2011 and is retained under the proposal. The Planning Proposal seeks amalgamation of these properties to allow for the retention and conservation of the heritage item at 1 Station Street West in order to develop the balance of the amalgamated sites as a high density and mixed used development. The Planning Proposal also involves additional amendment to Parramatta LEP 2011 to increase the height of buildings control from 12 metres to 142 metres and to increase the floor space ratio (FSR) from 2:1 to 11:5:1.

8.3 Existing Heritage Status and Significance

8.3.1 The development site

As detailed in Part A of this report the subject development site contains two heritage items 1 and 7 Station Street West, Parramatta both listed on Part 1 of Schedule 5 of the Parramatta LEP 2011 under item numbers I744 and I745 respectively.

Statement of Significance for 1 Station Street West:[29]

> *House at 1 Station Street West is of significance for the local area for historical, aesthetic and representativeness reasons. Built c.1890, it is readily identifiable as part of historic building stock and is strongly contributing to the streetscape.*

Statement of Significance for 7 Station Street West:[30]

> *House at 7 Station Street West is of significance for the local area for historical and representativeness reasons. Built c.1915, it is readily identifiable as part of historic building stock and is still contributing to the streetscape.*

8.3.2 The items in the vicinity

The development site is also located within the vicinity of a group heritage item "Two attached houses" at 49 and 51 High Street (item no. I710), as identified in the Parramatta LEP 2011; and a Heritage Conservation Area located within the boundaries of Holroyd LGA extending from the western side of Raymond Street. The Tottenham Street Heritage Conservation Area (HCA), which consists of 13 properties fronting Tottenham Street, includes 10 individually listed heritage items (I14 - I22) under Holroyd LEP 2013. The development period for the HCA extends from c1900 to 1925, a period in which the subject site at 7 Station Street was also constructed. The Statement of Significance for the Tottenham Street HCA is provided in the Holroyd Development Control Plan (DCP) 2013 states the following:[31]

> *The buildings in Tottenham Street are significant as part of a group of small scale residential buildings in Tottenham Street, Granville. The group is largely intact externally and is significant for the variety of building styles and as a good representative example of early cottages dating from around the turn of the century. The buildings are significant for their form, scale and character which gives a good indication of the socio-economic makeup of the community at the time of construction. The group gives a good representative cross-section of modest scale residences at the turn of the century, and their location close to Parramatta and the railway provides evidence of the influence of these factors on the early development of Holroyd.*

8.4 Assessment of the proposed de-listing and demolition of item

8.4.1 Updated Statement of Significance for 7 Station Street West

In line with the findings of the Heritage Assessment of Part A of this report the Statement of Significance for the heritage item at 7 Station Street West has been updated as follows:

> *Constructed c1915 at the end of the Federation period, the residence located at 7 Station Street West, Parramatta is associated with the early development of Harris Park, in particular Station Street as part of the subdivision of John Harris's original estate from 1794. Although, the site is also indicative of the early residential growth of Harris Park during the early 1900s. the subject former residence is a typical and*

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[29] http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=2240535
[30] http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=2240536
[31] Provided after C11 on p. 399 in Part H - Heritage Conservation of the DCP 2013.

unadorned example of a Federation cottage that has lost most of its original detailing and provides loose associations with the architectural characteristics of its type. While there are some characteristic architectural features from the Federation style still present within the facade, most original detailing to the exterior of the residence has been removed or replaced with later detailing. As such, it makes a moderate contribution to the streetscape that differs significantly from the streetscape of Tottenham Street (Heritage Conservation Area in Holroyd LGA) on the western side of Raymond Street. Internally, as physically evident, the former residence has some internal detailing such as cornices, corbels and mouldings around entrances although this ornamentation dates from the 1980s renovations and is not original.

Substantial changes to its architectural detailing resulted in the loss of most of its fabric rendering it as a building with 1980s/1990s fabric, and as such it has limited ability to yield information on the construction and characteristics of Federation cottages that were built in the locality at the end of the Federation period. As such, it is not considered as an exemplar of the style.

The existing cottage and its site fails to meet six of the seven Significance Assessment Criteria with only association with the local area's cultural history being its construction at the end of the Federation period. Although it is an indicative of the residential growth of Harris Park during the early 1900s and is a common example of a modified Federation cottage, these values alone when comparing with the other heritage items of similar period do not warrant its retention on Schedule 5 of the Parramatta Local Environmental Plan 2011.

Based on the updated Statement of Significance and conclusion of Part A (Heritage Assessment) contained in Section 7 above the subject heritage item no longer qualifies for being a heritage item. Its retention on Schedule 5 of the Parramatta LEP will have a potential for reduction in the integrity of the heritage schedule of the LEP, which contains a large number of exceptionally significant heritage items important to Parramatta's cultural and natural heritage at all levels (local, State, National and World heritage).

8.4.2 Discussion of heritage significance assessment

The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance, 2013 (*Burra Charter*) defines the *Cultural Significance* as (Article 1.2):-

Cultural significance means aesthetic, historic, scientific, social or spiritual value for past, present or future generations.

Cultural significance is embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects.

Places may have a range of values for different individuals or groups.

The *Burra Charter* further explains the term of cultural significance as being of synonymous with cultural heritage significance and cultural heritage value. It notes that the cultural significance may change over time and with use, and that understanding of cultural significance may also change as a result of new information.

The NSW heritage management system consists of three steps in managing individual heritage items:

- *investigate significance*
- *assess significance*
- *manage significance*

The NSW Heritage Manual explains these steps, which apply to all kinds of heritage items, from individual houses and movable items to archaeological and industrial sites, conservation areas, landscapes and natural areas as well as to items of any level of significance, from local heritage significance to world heritage significance. In practical terms, the vast majority of items managed in NSW are of local significance with a smaller number are being of State significance. A Heritage Assessment will use the first and second steps to ascertain the significance of a place in order to provide appropriate management guidelines.

As evident from the Assessment of Significance of 7 Station Street West undertaken in Section 6 and further reiterated in Section 8.4.1 of this report, the item has loose associations with a historical development phase of the local area that occurred in the late Federation period. NSW Heritage Manual explains the role of history (page 5 of Assessing Heritage Significance) as one of the key aspects of the assessment process based on the relationship between an item and its historical context. Historical themes, which provide a context within which the heritage assessment criteria are applied, provide critical evidence of understanding of an item's heritage values. The historical theme that would apply to the late Federation cottage at 7 Station Street West would be *Accommodation* under the State Historical Theme *4 Building settlements, towns and cities* associated with building of houses and cottages around the railway line and Harris Park Station. The current urban context of the site however, do not date from the key period of development of the area, which occurred in the Victorian and early Federation periods. The two-storey terrace at 1 Station Street West relate to that phase and maintains its integrity. It meets the threshold for individual heritage listing for more than one criteria of the significance assessment and its significantly changed urban context does not reduce its ability in representing these historical, aesthetic and representative values. On the other hand, the subject cottage at 7 Station Street West due to its considerably changed and replaced fabric will require a more intact historical context from the same period in order to increase its value in understanding of local area's cultural history as its loose association with the historical theme of accommodation especially the late Federation period housing development alone does not make it an important item in the local area's cultural history.

The 'Step 4' of the assessing heritage significance of the NSW Heritage Manual (page 6 of Assessing Heritage Significance) after using the NSW heritage assessment criteria requires to check whether if one can make a sound analysis of the item's heritage significance. This includes checking the integrity or condition of an item, which may diminish its significance. The question of to be answered is "has the item has been altered so much that it fails to meet the relevant assessment criterion?" Referring to the changed urban context of 7 Station Street West and loss of considerable amount of its original fabric and integrity as well as consideration against the inclusion and exclusion guidelines confirms that it fails to meet the threshold for individual heritage listing. 7 Station Street West is essentially described under the kind of attributes listed in the exclusion guidelines of six of the seven criteria as such it is not significant in terms of those criterion. It does not demonstrate associations to past customs, cultural practices nor it is associated with significant historical events that would make it important regardless of its intactness.

8.5 Conclusions and Recommendations

8.5.1 De-listing

The above discussion and further assessment against the *Burra Charter* guidelines and the NSW *Heritage Manual* "Assessing Heritage Significance" process and procedure, in addition to the significance assessment undertaken in Section 7 above, confirms that the late Federation cottage at 7 Station Street West no longer fulfils the criteria for heritage listing and has lost its ability in demonstrating the local area's cultural history.

Although not an ideal result and not easy to make a decision of de-listing of a heritage item from a heritage register based on the findings of the significance assessment de-listing of 7 Station Street West would not diminish the cultural values associated with the local history of its immediate context or wider cultural heritage of Parramatta. The cultural significance of the item has changed overtime due to the reasons contained in the significance assessments

undertaken and cross checking through inclusion and exclusion guidelines and other relevant heritage best practice guidelines.

As noted earlier, Schedule 5 of the Parramatta LEP 2011 has numerous intact and culturally significant heritage items that meet the significance assessment criteria representing Parramatta's unique cultural history regardless of their changing context. Therefore, it is concluded that loss of 7 Station Street West from the heritage schedule of the LEP will not erode Schedule 5's integrity rather it will increase its credibility by having items that clearly meet the threshold for heritage listing.

8.5.2 Demolition

As the brief for the preparation of this report did not specifically ask for consideration of the submitted Planning Proposal, assessment of the proposed demolition of the heritage item whether it is necessary or not have not been investigated in detail. However, the principal author of this report has considerable knowledge of Parramatta's heritage values at all levels as well as the process associated with the current high-rise developments within the City Centre and its extended curtilage.

It is evident that any redevelopment of such scale within the subject amalgamated sites of 1-7 Station Street West would require demolition of non-significant buildings and structures in order to be feasible and achieve the required design excellence. Retention and incorporation of the heritage item is a must as it is clearly an intact and significant heritage item for the local area's cultural history, and therefore its loss would be detrimental to the integrity of the Parramatta LEP's heritage schedule unlike the loss of the item at 7 Station Street West. Retention of the cottage at 7 Street West as part of the subject Planning Proposal would be for amenity purposes rather than for its heritage values.

It is concluded that should the decision be made to de-list the subject heritage item its demolition would not be detrimental to the established cultural heritage of its immediate locality or Parramatta LGA.

8.5.3 Recommendations

The following recommendations have been made for consideration as Conditions of Consent should any future consent given to the demolition of 7 Station Street West in association with the subject Planning Proposal:

- Salvage methodology for the surviving limited original and early fabric should be prepared and submitted for the approval of Council's Heritage Advisor prior to the commencement of demolition.
- Prior to the commencement of any works, including the dismantling of fabric or demolition, a Photographic Archival Recording shall be undertaken and submitted to Council's Heritage Advisor for approval. The Photographic Archival Recording shall be prepared in accordance with the guidelines Archival Recording of Heritage Items Using Film or Digital Capture" published by the Heritage Division of the Office of Environment and Heritage.
- A Heritage Interpretation Strategy should be prepared and incorporated into the public art and domain of the new development in order to communicate the local area's historical development and its importance in the cultural history of wider Parramatta.
- In the unlikely event that historical archaeological remains or deposits are exposed during the works, all work should cease while an evaluation of their potent extent and significance is undertaken and the NSW Heritage Division in the Office of Environment and Heritage be notified under the requirements of the NSW Heritage Act, 1977.

9. Part C: Analysis of Impact of Potential De-listing

An analysis of the potential precedent that may be created from de-listing of the heritage item at 7 Station Street West, Parramatta is required to advise Council of the potential precedent set for its heritage schedule within Parramatta LEP 2011 should a decision be made to de-list the item. The following analysis, as noted in the Council's brief, is a desktop analysis only of the Parramatta LEP, which also informed the Comparative Analysis provided in Section 5 of Part A above. Therefore, this Part should be read in conjunction with Section 5 as findings of the analysis have also included there to avoid repetition.

9.1 Desktop survey of Parramatta LEP 2011

Part 1 (Heritage Items) of Schedule 5 (Environmental Heritage) of the Parramatta LEP 2011 contains 740 heritage items listed either as individual or group heritage items. Some of these items have also been listed on the State Heritage Register but the current analysis focused only on the local level heritage items as the subject heritage item is listed for its local heritage significance assessed under the 1993 and 2004 Parramatta heritage studies.

210 items of 740 heritage items of the LEP are located in Parramatta while 64 are located in Harris Park when considering the immediate locality associated with the subject heritage item at 7 Station Street West. Of 740 heritage items 46 are listed under the name of 'Cottage' or 'Cottages' of which 2 are located in Harris Park and 11 in Parramatta. There are 14 group heritage items listed as Group of Cottages, all are in Harris Park.

Schedule 5 of the Parramatta LEP 2011 also contains 12 Heritage Conservation Areas in Part 2 and 12 Archaeological Sites in Part 3. However, these are not part of the analysis in this section.

The LEP does not clearly identify the period of development for the houses listed on the LEP, therefore the State Heritage Inventory (SHI) database has been relied upon to identify Federation cottages within the Parramatta LGA, for the comparative analysis. Limitations in the search of the SHI database does not allow for exhaustive survey of the database in order to adequately identify the number of items from a particular period or architectural style. Search for the keyword 'Federation' returned '0' result therefore a search for key period between 1900 and 1915 has been undertaken, which returned 187 items of varying types, periods and styles giving non-conclusive information for the purposes of comparative analysis. Subsequently, a more exhaustive search of almost each of these inventory forms has been undertaken to ascertain the number of comparable Federation cottages. This search found 10 Federation cottage examples within the Parramatta LGA some are listed in groups, all of which have been included in detail in the comparative analysis in Section 5 above.

As noted in Section 5, the heritage items considered for comparative analysis are in no way represent the full list of the Federation period cottages or houses that are listed on the Parramatta LEP due to the limitations on adequately searching the LEP or the SHI database. Listing names do not contain the construction or architectural type of all items and there is limited information on some of the SHI database inventory forms. These limitations reduce the ability of searching for comparative analysis of any heritage item in this regard.

9.2 Discussion of potential precedent that may be created from de-listing

The brief for this report called for an analysis of the potential precedent that may be created from de-listing of the subject heritage item at 7 Station Street West. This is required to advise Council of the potential precedent set for its heritage schedule within Parramatta LEP 2011 should a decision be made to de-list the item.

Considering the independent comprehensive significance assessment and evaluation of the heritage values and integrity of the subject heritage item as part of this three-part report, and its conclusion that the item has lost its integrity and no longer fulfils the significance assessment criteria, any item listed in the Parramatta LEP heritage schedule would be

required similar level of assessment and justification of its de-listing. The limited number of comparative items included in Section 5 clearly show their intactness and contribution to their respective context and to the cultural heritage of Parramatta LGA. The subject heritage item as detailed throughout this report fails to meet the threshold for heritage listing and therefore its de-listing justifiable.

Any item that is proposed for such de-listing will need to be assessed on its own merit against the Significance Assessment Criteria and the guidelines of heritage best practice contained in the *Burra Charter* and the NSW *Heritage Manual* 'Assessing Heritage Significance'. Once the Statement of Significance for a particular item is defined management of the identified heritage significance would be required accordingly to maintain and protect those cultural heritage values.

Survey of the Parramatta LEP heritage schedule and the associated SHI database indicated that there is a need for a more detailed assessment and information to be included in the name of the heritage items and in their inventory forms. Such as name of an item could be more specific than a general 'house', 'cottage' or 'residence' to reflect its particular period and style, and the SHI forms could be based on a detailed significance assessment criteria. Lack of information on the heritage inventory forms of the heritage items, in particular those at local heritage level, makes them vulnerable and results in questioning of their respective heritage values and the process/method of their assessment.

It is known that the City of Parramatta values its LGA's cultural heritage assets and undertakes heritage studies whenever required especially where a new development zonings occur. The last overall heritage review of the LEP heritage schedule as seen in the inventory form of 7 Station Street West appears to have been undertaken in 2004, which may mean that a review of the existing heritage items and inclusion of a more comprehensive information in their SHI forms is timely. Such review may provide an opportunity to improve integrity of the Parramatta LEP heritage schedule and provide the Council with a reliable information and management guidelines when assessing any proposals for development associated with a heritage item.

In conclusion, the author does not consider that de-listing of the subject heritage item at 7 Station Street West would create a precedent for other heritage items listed in the Parramatta LEP for the reasons explained above.

CITY PLAN HERITAGE

JUNE 2017

LEADING

ITEM NUMBER	13.4
SUBJECT	34-42 East Street, Granville - DCP
REFERENCE	RZ/8/2017 - D06120474
REPORT OF	Project Officer Land Use
LANDOWNER	St Vincent de Paul Society NSW
APPLICANT	DPG Project 6 Pty Ltd

PURPOSE:

To report to Council a draft site specific Development Control Plan (DCP) to enable it to be publicly exhibited concurrently with the associated Planning Proposal at 34-42 East Street, Granville.

RECOMMENDATION

(a) **That** the draft site specific DCP prepared for 34-42 East Street, Granville (as provided at **Attachment 1**) be endorsed for public exhibition.

(b) **That** the draft site specific DCP be placed on public exhibition concurrently with the Planning Proposal for 34-42 East Street, Granville for a minimum period of 28 days, and the outcome of the public exhibition be reported back to Council.

(c) **Further, that** Council authorise the CEO to correct any minor policy inconsistencies and any anomalies of an administrative nature relating to the draft site specific DCP prior to exhibition.

THE SITE

1. The subject site is located at 34-42 East Street, Granville and comprises Lot 1 DP 996285, Lot 1 DP 195784 and Lot 1 DP 1009146. The total site area is 1,577m2 and is within a 100m walk to Granville Railway Station. Under the Parramatta Local Environmental Plan 2011 the land is zoned B4 Mixed Use with a Floor Space Ratio (FSR) of 3.5:1 (but up to 6:1 subject to a sliding scale dependent on site area) and a maximum Building Height of up to 52m (subject to a sliding scale dependent on site area).

Figure 1: Site Location Map

BACKGROUND

2. Under the current controls, the site by itself could achieve a 3.5:1 FSR but only a 21m building height. The site was the subject of a development approval in conjunction with the adjoining site for a mixed use development (DA/738/2014) that met the site requirements for the maximum FSR (6:1) and building height (52m). However, the development could not achieve the maximum FSR within the maximum building height limit. Subsequently, a planning proposal was lodged with Council on 27 April 2017 seeking to amend the planning controls applicable to the site.

3. On 13 November 2017, Council resolved to forward a Planning Proposal to the Department of Planning and Environment (DPE) for Gateway Determination to amend the Parramatta Local Environmental Plan 2011 as follows:

    - To increase the maximum building height from 52m to 82m
    - To increase the maximum floor space ratio from 3.5:1 to 6:1
    - To include a site specific provision to exclude ‘wintergardens’ (enclosed balconies) on the building façade facing the railway line from the Gross Floor Area calculation as part of determining the building’s floor space ratio
    - Requiring an appropriate design competition

4. At the same meeting, Council also resolved that a site specific DCP be prepared and reported to Council prior to formal exhibition of the Planning Proposal to enable both the Planning Proposal and site specific DCP to be exhibited concurrently.

5. A Gateway Determination was issued by the Department of Planning and Environment on 14 April 2018. Conditions of the Gateway Determination requires Council to clearly articulate and demonstrate that the floor space ratio over the site will not exceed 6:1 and to provide a site specific clause to nominate a maximum gross floor area that can be used for wintergardens (enclosed balconies) that would be excluded from total gross floor area calculations prior to public exhibition.

DRAFT SITE-SPECIFIC DEVELOPMENT CONTROL PLAN

6. A draft site specific DCP has been prepared by the applicant and lodged with Council on 17 April 2018. The draft DCP has been reviewed by Council officers and is included in **Attachment 1**. The draft DCP seeks to guide the detailed development of the land in accordance with the Planning Proposal to deliver appropriate building and urban design outcomes. The Parramatta Road Corridor Urban Transformation Strategy (PRCUTS) and its accompanying Urban Design Guidelines, together with the Planning Proposal and accompanying reference design, have informed the preparation of the draft DCP. Guidance on the following building and design elements are contained in the draft DCP:

    - Desired future character
    - Built form and massing
    - Design controls (podium, ground level and public domain, communal open space, substations, wintergarden balconies)
    - Traffic and transport
    - Flooding

7. The final endorsed site specific DCP will become a key consideration for the preparation of any future development application for the site, in addition to general controls provided in the Parramatta Local Environmental Plan (LEP) 2011, the broader controls in the Parramatta DCP 2011, as well as any other relevant legislation and guidelines.

<u>Urban Design & Residential Amenity</u>

8. The draft DCP refers to building heights identified in the endorsed Planning Proposal and specific setback controls to inform future development (refer to **Figure 2**). These controls ensure appropriate relationship to the adjoining development and the wider Granville precinct.

9. The proposed heights and setbacks are considered to be in accordance with the recommended built form guidelines of the PRCUTS. A tall, slender tower form is the intended outcome to reduce overshadowing impacts and to allow for solar access and visual privacy

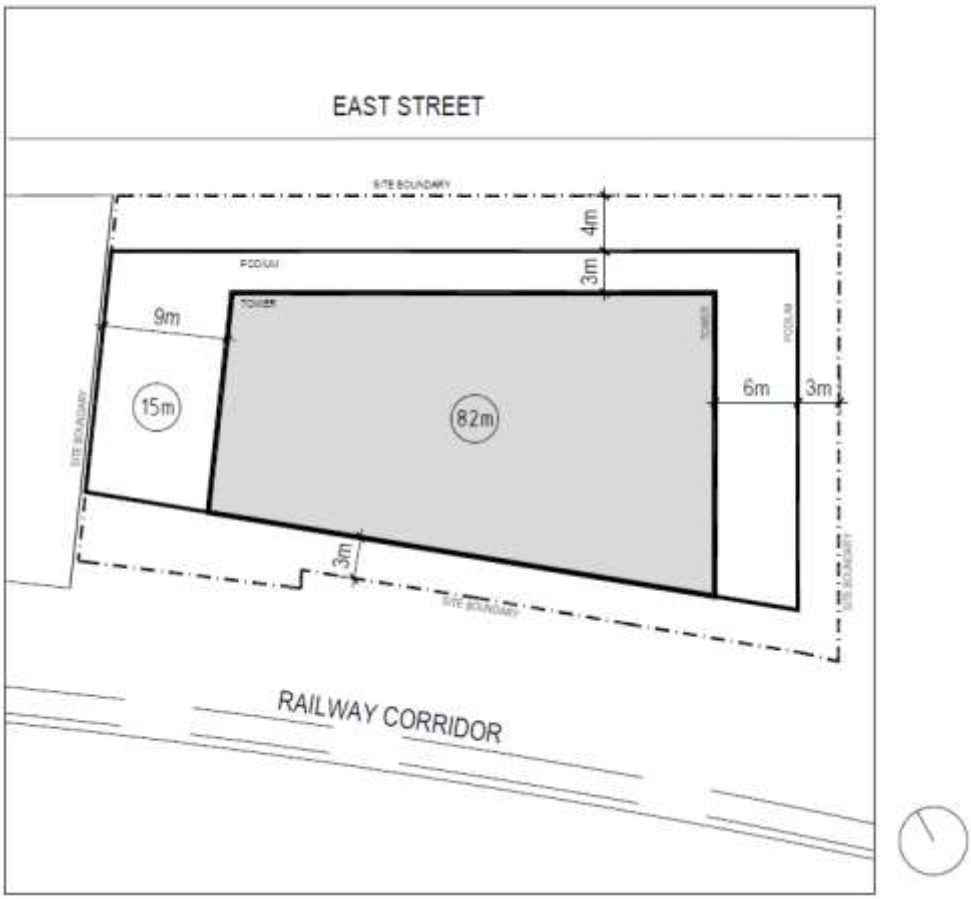


Figure 2: Building Heights and Setbacks

10. Wintergardens (enclosed balconies) are proposed but will be limited in their use and location to the southern side of the site adjoining the railway line to address acoustic amenity. One of the conditions of the Gateway requires a site-specific clause to nominate a maximum Gross Floor Area (GFA) that can be used for wintergardens to be excluded from the GFA calculations. In order to enable some flexibility for the design in the design competition process, Council officers have considered a 400m2 cap over the site as appropriate for wintergardens to be excluded from GFA calculations. Any wintergarden area that exceeds the 400m2 cap will be included in GFA calculations.

11. As part of the assessment of the draft DCP, consideration was given to the Apartment Design Guidelines (ADG) in relation to wintergardens. In particular, wintergarden balconies are to be limited to the minimum balcony areas as noted in the ADG depending on the dwelling type (8m2 for 1 bedroom apartments, 10m2 for 2 bedroom apartments or 12m2 for 3 bedroom apartments). This was to ensure the built form complies with these requirements as an assessment against the ADG will form part of any future development application assessment.

<u>Design Excellence Competition</u>

12. The PRCUTS requires a Design Excellence process to be run for “sites with an inherent scale impact (greater than 1,500m2 or proposals that exceed 4 storeys in height)”. The area subject to the Planning Proposal is greater than 1,500m2 and is therefore required to demonstrate design excellence.

13. Council at its meeting on 13 November 2017 resolved that the site require an appropriate design competition. A design competition will ensure a high quality built form outcome is delivered on the site. This is important due to the amenity issues resulting from the site's close proximity to the railway line and the need to mitigate these issues through a design competition process.

14. The Design Competition brief will require compliance with the draft site specific DCP and the Apartment Design Guidelines (ADG). During the preparation of the brief, Council Officers will also have the opportunity to propose any other additional design considerations required to be addressed in order to achieve design excellence.

NEXT STEPS

15. If supported by Council, the draft site specific DCP will be publicly exhibited concurrently with the Planning Proposal.

RECOMMENDATION

16. It is recommended that Council endorse the draft site specific DCP for 34-42 East Street, Granville as provided at **Attachment 1** to proceed to public exhibition together with the associated Planning Proposal.

Darren Caballero
Project Officer Land Use Planning

Sue Weatherley
Director Strategic Outcomes and Development

Jim Stefan
Acting Director City Services

ATTACHMENTS:

1⇩ Draft DCP - 34-42 East Street Granville 7 Pages

DRAFT SITE SPECIFIC DEVELOPMENT CONTROL PLAN 2011

34-42 EAST STREET, GRANVILLE NSW

The subject site comprises 3 individual land parcels as follows:

Lot 1 DP 1009146
Lot 1 DP 195784
Lot 1 DP 996285

Land to which this applies

This site specific Development Control Plan applies to land at 34-42 East Street, Granville legally known as Lot 1 DP 1009146, Lot 1 DP 195784 and Lot 1 DP 996285 within Granville as illustrated in Figure 2 below. Following the finalisation of the Planning Proposal to amend the Parramatta Local Environmental Plan 2011, the yield anticipated for the site comprises a floor space ratio of 6:1.

This DCP sets relevant development controls for the form of the building, taking into account the anticipated yield in floor space.

Figure 1: Site Location Map

Figure 2: Land covered by this Part

Relationship to other planning documents

This part of the DCP is to be read in conjunction with other parts of the Parramatta DCP and the Parramatta Local Environment Plan (LEP) 2011.

If there is any inconsistency between this part of the DCP and other parts of the Parramatta DCP 2011, this part of the DCP will prevail.

This DCP establishes objectives and controls to be interpreted during preparation and assessment of development applications and supports the objectives of the LEP.

Desired Future Character

Future development at 34-42 East Street shall be designed to respond to the high density mixed use character developing in the precinct in its transition from light industrial uses as envisioned by the *Parramatta Road Corridor Urban Transformation Strategy*.

Adjacent development is characterised by a podium and tower building typology with 4 storey street walls and residential towers above. The proposed mix of land uses includes retail/commercial uses at the ground floor with residential apartments above.

Future development should establish active edges at ground level to enhance activity, movement and safety in the streetscape while providing opportunities for boutique retail, café and commercial floor space.

A tall slender, tower form is encouraged with a podium of above ground parking to buffer the adjacent rail corridor.

The following design principles are to be incorporated into the future design of the building:

- Respond to the north facing frontage with an appropriate built form that maximises solar access
- Create a ground floor with presentation to the street of design excellence which contributes to the design quality of the public domain
- Development is to comply with the objectives and controls set out below and any other relevant objectives and controls of this DCP.

Site Objectives

Objectives

O.1 To provide a mix of uses that support the role of the Granville Town Centre

O.2 To encourage high quality built form outcomes and achieve Design Excellence

O.3 To create an attractive and safe activated urban environment within East St and the adjacent Pocket park / Future pedestrian link over railway

O.4 To deliver housing growth directly adjacent Granville Rail Station.

Built Form and Massing

Objectives

O.1 To ensure that the built form appropriately responds to the desired future context at street level and the wider precinct

O.2 To ensure the future development adds visual interest and diversity to the local skyline

O.3 To ensure urban design outcomes demonstrated in the Planning Proposal are achieved

O.4 Tower form should appear as tall and slender

O.5 Podium form should exhibit fine grain character and appropriate scale

Controls

C.1 Maximum building heights shall be in accordance with **Figure 1**

C.2 Building Setbacks shall be in accordance with **Figure 1**

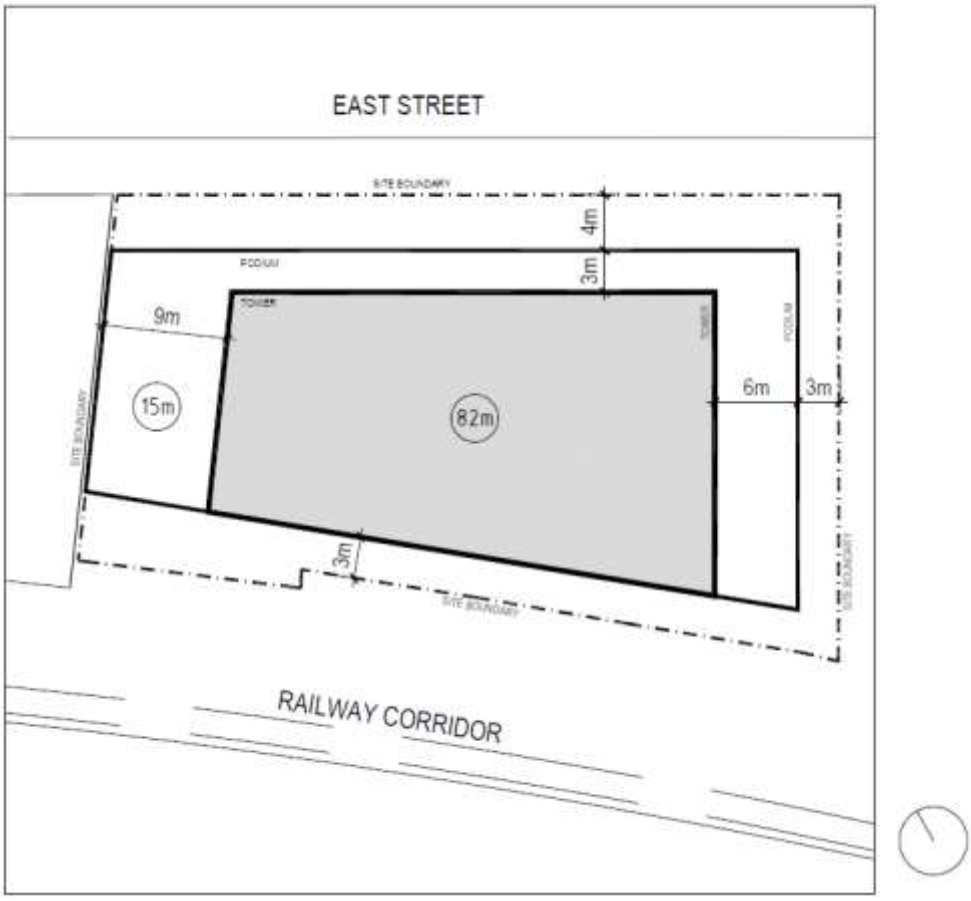


Figure 3: Building height and setback controls

Podium, Ground Level and Public Domain

Objectives

O.1 The podium façade should be designed as the architectural component of the building that defines and imparts grain and character to the street and the Pocket Park. It should be thought of as a separate architectural element distinct from the tower above.

O.2 The street wall should be designed to provide a well-modulated pedestrian experience at street level. An appropriate scale should be used in its articulation, and the ground floor façade and public domain should be rich in quality and detail.

O.3 The street facades of the podium fronting carparking should be considered in detail. Green walls, thin skins or screens are not appropriate – depth, scale and materiality should be aimed for, incorporating passive surveillance and natural ventilation.

O.4 Maximise active street frontage to East St and the adjacent Pocket Park

O.5 Ensure flush access between retail tenancies and outdoor spaces to encourage outdoor dining opportunities

O.6 Take account of and complement the public domain of the adjacent development to the West

Controls

C.1 Retail shopfronts should provide step-free transition between indoor and outdoor space

C.2 Provide adequate space on the East St and Pocket Park frontage for outdoor dining

C.3 Awnings facing East St are not to restrict tree growth

C.4 Separate the commercial and residential lobbies.

C.5 Provide minimum articulation depth of 600mm to carpark facades

C.6 Ensure there are no direct sightlines from pedestrians to vehicles within carpark, and consider lighting and night views from streets into carpark areas.

Communal Open Space

Objectives

O.1 Ensure appropriate provision of communal open space

Controls

C.1 Provide communal open space on the podium accessible off the lift core on the western edge.

C.2 Accommodate an undercover communal facility within the tower footprint adjacent to the open to sky communal open space.

Traffic

Objectives

O.1 Encourage use of active and public transport

O.2 Reduce dependency on private vehicle use

O.3 Encourage above ground parking as a buffer to rail corridor visual and acoustic impacts, and mitigation of flood risk

O.4 Minimise loading area impact on retail / commercial uses

O.5 Minimise vehicular circulation within site

Controls

C.1 Car Parking is to be provided at the following rates in accordance with the *Parramatta Road Corridor Urban Transformation Strategy:*

Residential

Use	Maximum spaces per dwelling
Studio	0.3 space/unit
1 bedroom	0.5 space/unit
2 bedroom	0.9 space / unit
3 or more bedroom	1.2 space/unit
Visitors	0.1 space/unit
Motorcycles	1 space per 25 car spaces
Bicycles	0.5 space per dwelling in secure enclosure

Commercial / Retail

Use	Maximum generation
Commercial	1 space / 100m² GFA
Retail	1 space / 70m² GFA
Bicycles	1 space per 200m² GFA accessible to visitors

C.2 Provide at least 1 car share space

C.3 Buildings should be designed with car parking at podium levels (See 'Podium, Ground Level and Public Domain')

C.4 Vehicular access to the site shall be via a single two way driveway with crest height in accordance with flood planning requirements.

C.5 Loading space shall be provided on East St subject to consultation with council.

Substations

Objectives

O.1 New substations should be designed within building footprints, minimising impacts on public domain

O.2 Existing padmount substation (See Figure 2) located in the north eastern corner of the site should be relocated within a new substation enclosure to maximise the open space and activation of the 'Pocket park' subject to design consultation with Endeavour Energy

Controls

C.1 Substations are to be provided within buildings, not within the streets, open spaces or setbacks, and are to be designed to ensure protection of residents from Electro Magnetic Radiation (EMR) emissions.

C.2 Development Application shall include consultation with Endeavour Energy to relocate existing padmount substation

Figure 2 – Existing padmount substation at 34 East St

Flooding

Objectives

O.1 Building design should minimise or eliminate risk to human life resulting from 'high hazard floodwaters' and 'localised / overland flooding'

O.2 Building design shall comply with relevant flood planning requirements

O.3 Building design should consider 'shelter in place' strategies for flood events

Controls

C.1 Development Application for the site shall be accompanied by a detailed flood impact study

C.2 A 'flood planning / shelter in place' strategy shall be provided with any Development Application

C.3 Habitable uses and vehicular parking shall be provided at a height above relevant flood planning levels

Wintergarden Balconies

Objectives

O.1 Wintergarden balconies should be designed in such a way that the space is perceived as an external balcony that has operable glazing to enable it to be modified to control intrusive noise. To this end, all the elements of the space should be designed appropriately, which includes a drained impervious floor finish and precludes air conditioning units being located within the space.

Controls

C.1 Wintergarden areas able to be excluded from GFA shall be those fronting the railway corridor and limited to the minimum balcony areas as noted in the ADG for dwelling types: 8m2 for 1 bedroom apartments, 10m2 for 2 bedroom units, and 12m2 for 3 bedroom units. The maximum wintergarden areas to be excluded from GFA is capped at 400m2. Any wintergarden area exceeding 400m2 will be included in the GFA calculations.

LEADING

ITEM NUMBER	13.5
SUBJECT	Parramatta CBD Planning Proposal Update
REFERENCE	F2013/02004 - D06097657
REPORT OF	Service Manager Land Use Planning

NOTE: This report was deferred from the 12 March 2018, 9 April 2018 and 23 April 2018 Council Meetings.

PURPOSE:

The purpose of this report is to provide Council with an update on the Parramatta CBD Planning Proposal.

RECOMMENDATION

(a) **That** Council note the work undertaken to date to prepare a new planning framework for the Parramatta CBD in line with the NSW Government's metropolitan planning to grow Parramatta as Sydney's second CBD and "Central City".

(b) **That** Council authorises the Lord Mayor to correspond and meet with the NSW Minister for Planning, Anthony Roberts seeking an intervention to expedite the release of a favourable Gateway Determination for the draft Parramatta CBD Planning Proposal so as to facilitate public exhibition.

(c) **Further, that** the Department of Planning and Environment be advised of this resolution to assist with its processing of the Gateway Determination of the draft Parramatta CBD Planning Proposal.

BACKGROUND

1. In July 2013, Council resolved to prepare a study about creating a world class Central Business District (CBD) for Parramatta. Since then, Council has been engaged in a strategic planning project to advance a new planning framework for the Parramatta CBD. The culmination of these efforts is the draft Parramatta CBD Planning Proposal (CBD PP).
2. In April 2016, (the former) Parramatta City Council endorsed the draft CBD PP, which was forwarded to the Department of Planning and Environment (DPE) for DPE's assessment and issuing of a Gateway Determination.
3. Since it originally forwarded the draft CBD PP to DPE, Council has undertaken further work with regards to the CBD PP. Most significantly, this work has included:
    a. Council prepared and exhibited a Discussion Paper relating to Infrastructure Planning and Funding in the Parramatta CBD. This Discussion Paper was accompanied by the draft Parramatta CBD Local Infrastructure Needs Analysis as well as an Independent Peer Review of Council's work in relation to the value sharing mechanism included in the CBD PP. This package of materials was exhibited in March 2017. Council resolved in April 2017 to continue to support the

inclusion of the value sharing mechanism in the CBD PP, and also resolved to prepare the draft Parramatta CBD Infrastructure Strategy (including a draft Development Guideline with value sharing rates) for exhibition alongside the CBD PP. The outcomes of this work were forwarded to DPE in April 2017.

b. The Strategic Transport Study (STS) for the Parramatta CBD was completed. In April 2017, Council endorsed the STS, including maximum car parking rates for inclusion in the draft CBD PP. The outcomes of this work were forwarded to DPE in April 2017.

c. Council undertook a further Heritage Study to assess at a precinct scale the impact of the proposed controls in the CBD PP on Heritage Items and Heritage Conservation Areas within and adjacent to the Heritage Interface Areas at the edges of the CBD PP area. Council endorsed this study, as well as Council officers' response to it in July 2017. The outcomes of this work were endorsed by Council and forwarded to DPE in July 2017.

d. Council had previously resolved (in April 2016) to prepare an Exceptional Circumstances application in support of advancing the flood controls in the draft CBD PP. Council officers completed this application and relevant supporting studies, and the outcomes of this work was forwarded to DPE in November 2017.

4. Since lodgment of the additional work described above, Council officers have responded to DPE officers' requests in relation to DPE's assessment of the CBD PP. The most significant of these requests have related to the proposed value sharing mechanism, about which DPE officers requested further information (particularly, comparing Council's value sharing mechanism to Section 94A funding). Council officers have provided information as requested, and at the time of writing this report there were no outstanding requests from DPE in relation to their assessment of the CBD PP other than the matter of the proposed value sharing mechanism.

CURRENT STATUS

5. Council is currently awaiting a Gateway Determination from DPE so as to facilitate public exhibition. The timeframe for issuing the Gateway Determination is at the discretion of DPE and the Minister for Planning.

RELATED WORK

6. Alongside the CBD PP, Council officers are also undertaking preparation of the draft Parramatta CBD Development Control Plan (DCP) and draft Parramatta CBD Infrastructure Strategy (and supporting elements).

7. It is anticipated that public exhibition of the CBD PP would occur simultaneous with the draft CBD DCP and Infrastructure Strategy as a holistic policy package.

8. Because major components of the draft DCP and Infrastructure Strategy depend on outcomes of the Gateway Determination and final form of the CBD PP, the draft DCP and draft Infrastructure Strategy have not yet been reported to Council and are still "works-in-progress".

EXPECTED NEXT STEPS & CONSULTATION

9. If Council receives a Gateway Determination **which supports** continued inclusion of the value sharing mechanism, it is expected that the next steps would be to:
    a. finalise the draft CBD PP, in line with any Gateway conditions;
    b. finalise the draft DCP and Infrastructure Strategy in line with the finalised draft PP;
    c. prepare a report to Council detailing the contents of the Gateway Determination and seek an endorsement to place the above documents on public exhibition; and
    d. publicly exhibit a holistic policy package containing the draft Parramatta CBD PP, DCP and Infrastructure Strategy.
10. If Council receives a Gateway Determination **which does not support** continued inclusion of the value sharing mechanism (or requires other major changes which differ to Council's endorsed position), it is expected that the next step would be a report to Council detailing the contents of the Gateway Determination and outlining options for Council's direction on further next steps.

FINANCIAL IMPLICATION FOR COUNCIL

11. If Council receives a Gateway Determination which does not support continued inclusion of the value sharing mechanism, there are significant financial implications for Council – particularly if the Gateway Determination does not make provision for an alternate and commensurate funding source for local infrastructure.
12. The local infrastructure needs of the Parramatta CBD have been estimated at $1 billion over build-out of the CBD PP's capacity. Council's endorsed value sharing mechanism has the estimated potential to contribute $237m - $368m towards this infrastructure need.

RECOMMENDATION

13. As it has been nearly two years since Council endorsed and forwarded the draft CBD PP to DPE for Gateway Determination, it is considered prudent that Council write to the NSW Minister for Planning seeking an intervention to expedite the release of a favourable Gateway Determination for the draft CBD PP so as to facilitate public exhibition.

Roy Laria
Service Manager Land Use Planning

Sue Weatherley
Director Strategic Outcomes and Development

Jim Stefan
Acting Director City Services

ATTACHMENTS:

REFERENCE MATERIAL

LEADING

ITEM NUMBER	13.6
SUBJECT	Review of the development controls for the South Parramatta Heritage Conservation Area and adjoining areas
REFERENCE	F2014/00181 - D06121085
REPORT OF	Project Officer- Land Use Planning

PURPOSE:

To report to Council the outcomes of the public exhibition of the Planning Proposal for the South Parramatta Heritage Conservation Area (HCA) and land north of Boundary Street, Parramatta and amendments to Parramatta Development Control Plan (DCP) 2011 regarding the South Parramatta HCA. This report also seeks Council's endorsement of these documents for finalisation.

RECOMMENDATION

a) **That** Council receive and note the submissions made during the public exhibition of the Planning Proposal for the South Parramatta Heritage Conservation Area (HCA) and land north of Boundary Street, Parramatta and amendments to Parramatta Development Control Plan 2011 regarding the South Parramatta HCA as summarised in **Attachment 1.**

b) **That** Council adopt and finalise the Planning Proposal provided in **Attachment 2** for proposed amendments to the Parramatta Local Environmental Plan (LEP) 2011, subject to determining an appropriate Maximum Building Height of 7.5m and Maximum Floor Space Ratio of 0.4:1 for the South Parramatta HCA.

c) **That** Council adopt the proposed amendments to Parramatta DCP 2011 at **Attachment 3,** subject to the following minor amendments:

(i) Replace Design Control C.12 with the following:

"Detached additions may be permitted at the rear of properties, behind existing buildings, and a minimum distance of 20m from the front street alignment. *Adequate deep soil areas and tree planting are to be provided between the existing and new buildings"*.

(ii) R eplace the last sentence of Design Control C.14 with the following:

"The preference is for new buildings to be detached and set further back towards the rear of the property. Adequate deep soil areas and tree planting are to be provided between the existing and new buildings".

and place a notice in the relevant local newspaper advising of Council's decision as required by the Environmental Planning and Assessment Regulation 2000.

a) **Further, that** Council grant delegated authority to the CEO to make any minor amendments and corrections of a non-policy and administrative

nature that may arise during the LEP and DCP plan amendment finalisation processes.

BACKGROUND

1. Between approximately September 2014 and April 2016 a major review of the South Parramatta HCA and adjoining areas was undertaken in order to resolve the inconsistency in the planning controls contained in the Parramatta Local Environmental Plan 2011 (PLEP 2011) and those in the Parramatta Development Control Plan 2011 (PDCP 2011). PLEP 2011 includes a R3 Medium Density Residential zoning, a maximum Height of Buildings (HOB) of 11m and a maximum Floor Space Ratio (FSR) of 0.8:1 allowing townhouses and multi-dwelling housing. Conversely, PDCP 2011 aims to maintain the single storey scale and the historic pattern of development.

2. The major review led to a range of options and proposals for the South Parramatta HCA in summary providing for the following:

    - A reduction in the extent of the Heritage Conservation Area. See **Figure 8, Attachment 2.**
    - Increased height and floor space ratio controls for properties fronting the north side of Boundary Street as follows:
        - Height from 11m to 14m
        - FSR from 0.8:1 to 1.2:1.
    - The retention of existing zoning, height and floor space ratio controls for land bordering the reduced heritage conservation area. See **Figures 5, 6, and 7, Attachment 2**.
    - The addition of buildings and 8 and 10 Alma Street to the heritage list.
    - Five different development scenarios for the reduced Heritage Conservation Area including:
        - **Scenario 1 (for single storey development)** which proposes a **R2** Low Density Residential zoning with a HOB of **4.5m** (except to the rear of properties north of Crimea Street which have a proposed HOB of 6m) and a FSR of **0.33:1**;
        - **Scenario 2 (for single storey development plus attic)** which proposes a **R2** Low Density Residential zoning with a HOB of **6m** and a FSR of **0.5:1**; and
        - **Scenario 3 (for double storey development for the rear part of sites)** which proposes a **R2** Low Density Residential zoning with a HOB of **7.5m** and a FSR of **0.33:1**.
        - **Scenario 4 (for two-storey townhouse development at rear of sites),** which would retain the **R3** Medium Density Zoning with a HOB of **8m** (double storey, with no attics, for rear of sites) and a FSR of **0.4:1**.
        - **Scenario 5 (for attached or detached dual occupancy development),** which proposes a **R2** Low Density Residential zoning with a HOB of **7.5 m** (double storey for rear of sites) and a FSR of **0.4:1**.

3. Council considered all the proposals detailed above and resolved on 26 April 2016 to undertake pre-statutory consultation with landowners in the South

Parramatta HCA and adjoining areas. This consultation occurred from 4 October to 7 November 2016 to obtain feedback on the proposals.

4. After further review and consideration of the feedback received during pre-statutory consultation the following proposals were recommended by Council officers to IHAP:

   - **A combination of Scenarios 3 and 5 for two storey development which allows for dual occupancy development, at the rear of properties.** Under these scenarios Council will seek to (for land within the reduced HCA);
     - amend the zoning from R3 Medium Density Residential to R2 Low Density Residential
     - reduce the permitted height from 11m to 7.5m and the FSR from 0.8:1 to 0.4:1.
     - The scenarios will preclude development such as townhouses and multi-dwelling housing that would be out of character in the HCA and ensure an appropriate scale for new development. The heritage values of the HCA will be protected but some opportunities will be allowed for two storey development at the rear of properties.
   - **A reduction in the extent of the HCA** as it reflects a heritage assessment and removes land of a different character and lesser conservation values than the rest of the HCA.
   - **The retention of the current height and FSR for land bordering the HCA** as it will provide an appropriate buffer between low density development in the HCA and a high density development envisaged for the Parramatta CBD.
   - **An increase in the maximum FSR from 0.8:1 to 1.2:1 and height from 11m to 14m for land on the north side of Boundary Street** as it will provide an appropriate transition to land to the south of Boundary Street and west of Railway Street under the Holroyd Local Environmental Plan 2013.
   - **Properties at 8 and 10 Alma Street should not be added to the heritage list** as listing is opposed by the land owners of these properties and the properties are not considered to be of exceptional historical importance or aesthetic significance. In addition, the dwellings will still be retained under provisions of the HCA.

5. The IHAP, having heard a submission from a landowner in the HCA that expressed concern at the proposal to reduce FSR in the modified HCA from 0.8:1 to 0.4:1 recommended a proposed FSR of 0.4:1 to 0.5:1 and proposed permitted maximum height of 7.5m to 9m.

6. In a report to Council in 10 April 2017 it was stated that in order to mitigate the potential negative aspects of development in the recommended combination of **scenarios 3 and 5** for two storey development proposed amendments to Parramatta DCP 2011 would be prepared during the period when awaiting Gateway determination for the Planning Proposal and would then be submitted to Council for endorsement so that they can be exhibited with the Planning Proposal. Council resolved that:

(a) ***That*** *Council considers the report that was submitted to the Independent Hearing and Assessment Panel (IHAP) on 21 March 2017 (Attachment A) and its recommendation (Attachment B) which supports the progression of the Planning Proposal for the South Parramatta HCA and adjoining areas.*

(b) ***That*** *Council endorses the Planning Proposal (which is included as Attachment 1 of Attachment A) to amend the Parramatta LEP 2011 subject to it being modified where necessary to be consistent with the IHAP recommendation which is for the Planning Proposal to propose the following amendments to the controls:*

(i) *To reduce the extent of the Heritage Conservation Area (HCA) (see Figure 2 in Attachment A).*

(ii) *That for land within the reduced HCA the Planning Proposal will seek to:*

- *amend the zoning from R3 Medium Density Residential to R2 Low Density Residential*
- *reduce the permitted FSR from 0.8:1 to an FSR in the range of between 0.4:1 and 0.5:1.*
- *reduce the permitted height from 11m to a height in the range of between 7.5m and 9m.*
- *limit Torrens title subdivision.*

(iii) *That for land on the north side of Boundary Street (shown shaded orange in Figure 9 of Attachment A) the Planning Proposal will seek to:*

- *increase the FSR from 0.8:1 to 1.2:1*
- *increase permitted building height from 11m to 14m*

and forward for Gateway determination by the Department of Planning and Environment in accordance with section 56 of the Environmental Planning and Assessment Act 1979.

(c) ***That*** *upon receipt of the Gateway determination the Planning Proposal be placed on public exhibition for a period of 28 days subject to compliance with any conditions of the Gateway determination.*

(d) ***That*** *Council advises NSW Department of Planning and Environment that the Interim General Manager will be exercising the plan making delegations for the Planning Proposal as authorised by Council on 26 November 2012.*

(e) ***Further, that*** *Council authorises the Interim General Manager to correct any minor anomalies of a non-policy and administrative nature that may arise during the plan amendment process.*

7. On 19 July 2017, a Gateway determination was received from the Department of Planning and Environment allowing the Planning Proposal to proceed subject to a number of conditions.

8. On 4 September 2017, Council considered a report that dealt with proposed amendments to Parramatta DCP 2011 to address the effects of development allowed under the Planning Proposal and to reflect the reduction in the extent of the HCA. Council resolved:

That Council endorse proposed amendments to Parramatta DCP 2011 as included at Attachment 1 and that they be placed on public exhibition, concurrently with the Planning Proposal for the South Parramatta Heritage Conservation Area and adjoining areas.

PUBLIC EXHIBITION

9. The Planning Proposal and proposed amendments to Parramatta DCP 2011, together with supporting documents, were publicly exhibited from 13 September 2017 to 13 October 2017 which is in compliance with the 28 day public exhibition requirement stipulated in the Gateway determination. Public notice of the exhibition was published in the Parramatta Advertiser on 13 September 2017. Exhibition material was placed on Council's website, at the Parramatta Central Library and Council's Administration Building.

10. The exhibition material included:
    - The Planning Proposal and relevant appendices (including properties associated with the Planning Proposal, the heritage review of March 2014, the report to the Independent Hearing and Assessment Panel of 21 March 2017 and report to Council of 10 April 2017)
    - Gateway Determination
    - Report to Council of 4 September 2017
    - Urban design data showing impact of different FSR and height controls for the HCA
    - Draft amendments to Parramatta DCP 2011 for South Parramatta HCA.

11. In the exhibition material clarification was provided that the Planning Proposal was being publicly exhibited with a range of permitted FSRs and heights for the reduced HCA that was supported by urban design data that showed the impact of the different controls. It was further clarified that following public exhibition, submissions would be reviewed and reported to Council along with recommendations on the most appropriate specific FSR and permitted height to be included in the Planning Proposal to be sent to the Department of Planning and Environment for finalisation.

12. Approximately 1380 notification letters of the exhibition were sent to landowners and residents for an area generally bound by, Glebe, Inverness Boundary and Railway and Pitt Streets and including properties adjoining these streets.

13. The following public authorities were also consulted as instructed by the Gateway Determination:

    - Cumberland Council
    - Office of the Environment and Heritage – Heritage Division
    - Transport for NSW – Roads and Maritime Services

14. A public hearing was not considered necessary nor requested for this proposal.

ASSESSMENT OF SUBMISSIONS RECEIVED

15. In total, eleven (11) submissions were received during the public exhibition period of which eight (8) were from members of the general public and three (3) submissions were from government agencies. A summary of the submissions and Council officer's responses are provided in **Attachment 1.**

16. The key issues raised within the eight (8) submissions made by community members are outlined below:

Issue	**Response**
Ollie Webb reserve The removal of Ollie Webb Reserve from the HCA as it will result in a loss of heritage values and recreational space. (Community Member 1)	The zoning of the reserve as RE1 Public Recreation under Parramatta LEP 2011 will ensure its continued use for recreational purposes. The Park is not considered to have heritage significance and its inclusion in the HCA is not warranted
Heritage properties at 6 Boundary and 29 Lansdowne Streets The heritage listed items at 6 Boundary and 29 Lansdowne Streets should be removed from Schedule 5 of Parramatta LEP 2011. (Community Members 2 and 8)	The relief sought is beyond the scope of this Planning Proposal. The request to remove 6 Boundary Street from Schedule 5 is supported by a detailed heritage assessment and will be further investigated as part of a future housekeeping amendment to the LEP. The request to remove from 29 Lansdowne Street is not supported by a detailed heritage assessment and removal does not appear to be warranted. It is not proposed to investigate the request in a future housekeeping amendment. If necessary, the community member can commission an independent heritage assessment and or pursue a private planning proposal change.
Overshadowing impacts The proposed increase in height for properties on the north side of Boundary Street from 11m to 14m will cause over shadowing of property on the opposite side of the street at 45 Boundary Street. (Community Member 3)	The increase in height, from overshadowing analysis, will cause a marginal increase in overshadowing of the property in mid-winter. However, any impacts should be able to be satisfactorily ameliorated through the assessment of Development Applications for any future developments.
Response to FSR changes There should be no reduction in FSR from 0.8:1 for the HCA and that an FSR of 0.5:1 is supported rather than 0.4:1. (Community Members 4 and 5)	An FSR of 0.8:1 would result in a scale and intensity of development that would be out of character with the HCA. An FSR of 0 4:1 would result in a scale of development sympathetic to the character of the HCA, and allows the opportunity for dual occupancy development in the HCA.
Side-by-side duplexes Seeks the allowance of duplexes side-by-side with side garaging (Community Member 4)	Such allowance would be contrary to the objectives and provisions of the HCA to preserve the single storey character of the front part of lots. Dual occupancy development to a two storey height limit is planned to be located at the rear of properties which may be able to include integrated covered parking.

Response to height changes The proposed 7.5m maximum height limit is opposed and 9m is considered appropriate. (Community Member 5)	The maximum height of 7.5m is considered appropriate for the character of the HCA where typical development is single storey. A height of 9m is considered excessive and would result in buildings being dominant from the street.
Provision for family/executive living Inadequate provision is made for house additions to accommodate family/executive living. (Community Member 5)	The controls in the DCP for the HCA provide opportunity for rear additions to existing dwellings to accommodate family living.
Front additions No opportunity is provided for additions forward of the original footprint. (Community Member 5)	The design controls for the HCA stipulate that additions to the front or side of an existing house should be avoided.
Car parking issues Inadequate provision is made for on-site parking that will result in congested street parking. (Community Member 5)	The design controls for the HCA incorporate provision for on-site parking. The proposed change in zoning and reduction in height and FSR will result in reduced traffic generation and reduced pressure on street parking compared to what is permitted under current controls.
Rear Lane between Alma and Denison Streets The DCP does not address opportunities presented by the rear lane between Alma and Denison Streets. (Community Member 5)	This lane, which is owned by Council, is classified as a drainage reserve and public recreation garden space is not available for private development and access purposes.
Challenges of living in a heritage property Living in an older timber house means sacrifices and struggles with respect to sustainability and limits to refurbishment. (Community Member 5)	It is acknowledged that ownership of the heritage property can be challenging but there are resources to assist in the form of advice and grants from Council's Local Heritage Fund.
Down-zoning and consultation Local landowners want a high density of development not a downzoning. Council's proposed Planning Proposal for the area has been pursued without appropriate consultation. (Community Members 6 and 7)	A change in zoning from R3 Medium Density Residential to R2 Low Density Residential is considered appropriate as it will ensure that there is consistency with the provisions of Parramatta DCP 2011 which aims to maintain the single storey character of the HCA. Council has undertaken appropriate and extensive consultation with the local community on the planning for the HCA and adjoining areas including pre-statutory consultation in October 2016. This consultation included a survey of residents and drop in sessions and the consultation required as part of the planning proposal.

17. The key issues raised within the three (3) submissions made by government agencies are outlined below:

Issue	**Response**
Support for Planning Proposal changes The proposed down-zoning, including the proposed reduction in building height and FSR	Support for downzoning, reduction in building height and FSR controls is noted.

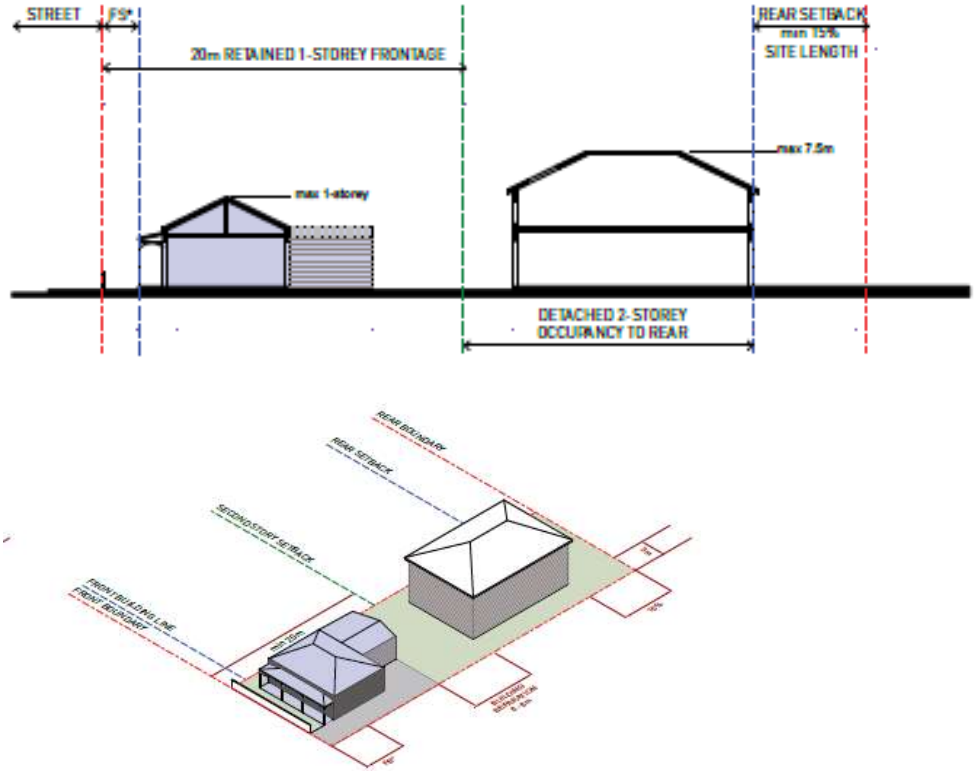
controls is supported as this will encourage a reduced scale of development sympathetic to the significance of the HCA. (Heritage Council of NSW)	
Separation distance provisions Suggests that DCP 2011 include suitable controls to ensure adequate separation distance between existing dwellings and new two-storey development at the rear, to preserve the historic streetscapes of the HCA. (Heritage Council of NSW)	Whilst amendments to the DCP provide for appropriate separation between existing dwellings and new two-storey development at the rear it is proposed to strengthen the provisions to minimise the impact of two-storey development by making amendments as outlined in paragraph 20 of this report.
Impact on heritage property Consideration should be given to the impact of proposed additional height and FSR on the heritage listed property at 6 Boundary Street. (Heritage Council of NSW)	It is not considered that the proposed planning changes should have significant effect on this heritage item, which from a heritage assessment does not have high heritage values. Any impact will also be considered in detail during assessment of Development Applications that may be lodged in the future.
Historic archaeology Land the subject of the planning proposal is of moderate archaeological research potential and an archaeological assessment will be required with any future Development Applications. (Heritage Council of NSW)	Will be considered in detail as part of the Development Application process.
Traffic impact Traffic impact assessment of the development uplift may be considered in the assessment of any future development applications for sites located on the northern side of Boundary Street. (Roads and Maritime Services)	Traffic impact assessment will be considered in detail as part of the Development Application process.
Electricity supply Provides information for the supply of electricity to sites that may be developed in the future. (Endeavour Energy)	Will be considered in detail as part of the Development Application process.

18. After considering the submissions received (refer to **Attachment 1**) it is recommended that the most appropriate specific FSR and permitted height to be included in the finalised Planning Proposal is a FSR of 0.4:1 and permitted height of 7.5m for the following reasons:

    - The FSR of 0.4:1 was determined after extensive urban design testing and provides flexibility for new developments whilst conserving the setting of heritage items in the study area and the character of the HCA.
    - The maximum height of 7.5m has also been determined after extensive urban design testing and is appropriate for the character of the HCA, where the typical house is single storey. This height allows the second storey to be built partly within the roof space while keeping new development sufficiently low so as to reduce its visual impact.

- An FSR of 0.4:1 and a permitted height of 7.5m is considered to be in line with good practice heritage conservation to ensure that new development in heritage conservation areas is compatible in scale with existing development.
- The reduced permitted FSR and height is in line with the support from the NSW Heritage Council.
- An FSR of 0.5:1 and a height of 9m could result in bulkier buildings being developed to the rear of properties with reduced opportunity for building separation distances and setbacks and that could be more dominant when viewed from the street. The impact of development to these controls is illustrated in **Figure 1** over which shows an urban design comparison of development to an FSR of 0.5:1 and permitted height of 9m compared to development to an FSR of 0.4:1 and permitted height of 7.5m.

Detached Two-Storey Dual Occupancy: FSR 0.4:1, height of 7.5m



Detached Two-Storey Dual Occupancy: FSR 0.5:1, height of 9m

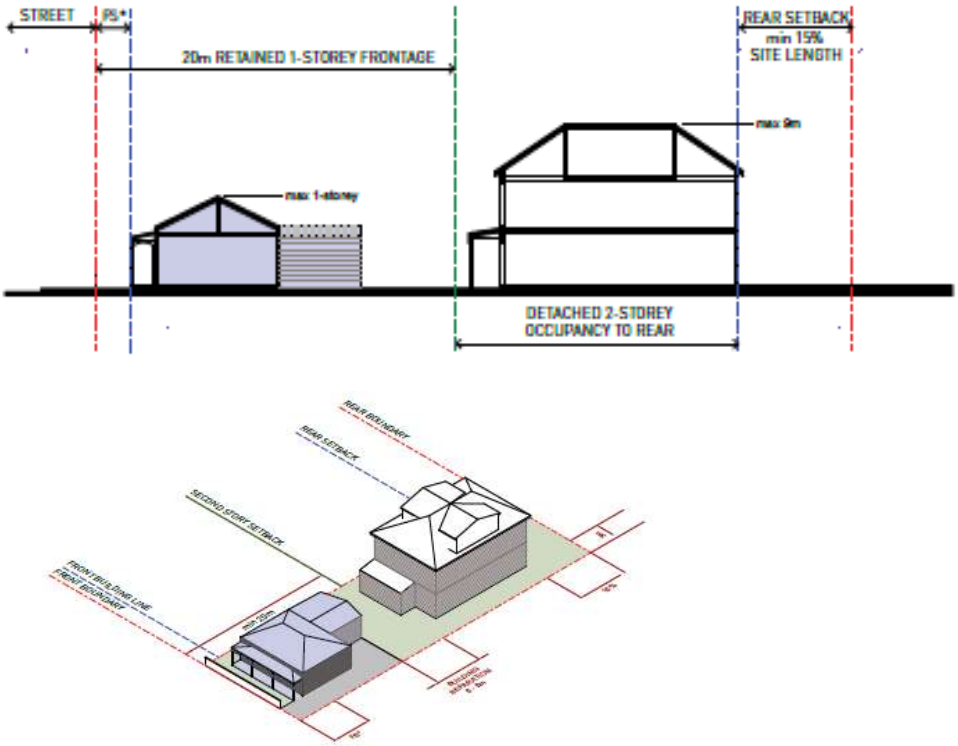


Figure 1: Urban design comparison of different FSR and height controls

19. In addition, in response to the submission received from the NSW Heritage Council it is recommended that the following minor changes be made to the DCP amendments as publicly exhibited:

    a) Replace Design Control C.12 which states, *Detached additions may be permitted at the rear of properties.*

       With

       Detached additions may be permitted at the rear of properties, behind existing buildings, and a minimum distance of 20m from the front street alignment. *Adequate deep soil areas and tree planting are to be provided between the existing and new buildings*.

    b) Replace the last sentence of Design Control C.14 which states, "*Where possible new buildings should be set further back with tree planting between the existing and new buildings".*

       With

       "The preference is for new buildings to be detached and set further back towards the rear of the property. Adequate deep soil areas and tree planting are to be provided between the existing and new buildings".

20. No other changes are recommended to be made to the exhibited Planning Proposal and the exhibited amendments to Parramatta DCP 2011.

COUNCILLOR WORKSHOP

21. At a Councillor workshop held on 16 April 2018 on the outcomes of the public exhibition of the Planning Proposal and DCP amendments, Councillors sought confirmation that there is a sufficient proportion of properties in the reduced South Parramatta HCA that would allow new two-storey development at the rear of properties.

22. Urban design testing has been undertaken to review the development potential for secondary dwellings in the reduced South Parramatta HCA. The testing was based on an ideal developable minimal site proportioned at least 12m in width, 40m in depth and at least 480m² in site area. It was noted that the minimum allotment size under the Parramatta DCP 2011 to accommodate a secondary dwelling 60m² in floor area is 450m².

23. Within the reduced South Parramatta HCA there is a total of 159 residential allotments; 3 lots are strata managed and unlikely to accommodate additional development. The following table and mapping (Figure 2) illustrates the number of sites which have unencumbered potential to accommodate development, i.e. lots in excess of 450m² with a minimum width of 12m.

Table: Number of Sites Which Have Potential to Accommodate Additional Development

	LOTS WITH A MIN WIDTH OF 12M	LOTS WITH A WIDTH LESS THAN 12M	STRATA	
480m^2 +	**108**	3	3	
450m^2 - 480m^2	**5**	-	-	
400m^2 – 450m^2	2	9	-	
Less than 400m^2	8	21	-	
Total	123	33	3	159

Note: Black font shows potentially developable lots and red font shows lots that are not considered to have development potential

Figure 2: Testing of development potential of secondary dwellings in the reduced HCA

24. The testing shows that 113 lots or 71% of the lots in the reduced HCA have a reasonable expectation of accommodating two-storey development at the rear of properties.

NEXT STEPS

25. Should Council resolve as recommended to endorse the Planning Proposal provided in Attachment 2, Council officers will deal directly with the Parliamentary Counsel on the legal drafting and mapping of the amendment, as Council has been authorised to exercise the delegation in the making of this Planning Proposal. When finalised, the LEP amendment will be signed by the Chief Executive Officer and formally notified and come into effect when published on the NSW legislation website.

26. Should Council adopt the amendments to Parramatta DCP 2011 they will be notified in a local newspaper with the DCP amendments to come into effect when the LEP amendment comes into effect.

CONCLUSION

27. Having considered the submissions received and matters relevant to this proposal it is recommended that Council should endorse and finalise the Planning Proposal at **Attachment 2,** with an FSR of 0.4:1 and permitted height of 7.5m and amendments to Parramatta DCP 2011 at **Attachment 3**, subject to minor amendments outlined in this report.

Paul Kennedy
Project Officer – Land Use Planning

Robert Cologna
Service Manager Land Use Planning

Sue Weatherley
Director Strategic Outcomes and Development

Jim Stefan
Acting Director City Services

ATTACHMENTS:

1⇩	Summary of Submissions and Responses	11 Pages
2⇩	Planning proposal	30 Pages
3⇩	Draft amendments to Parramatta DCP 2011	14 Pages

REFERENCE MATERIAL

Attachment 1: Summary of Submissions and Responses

Submitters	Summary of submissions	Staff response
Community Member 1		
	Opposes the removal of Ollie Webb Reserve from the HCA. The reserve is a Parramatta icon for both the history of the area and recognition and dedication of Mr Horace Webb. In addition, the HCA should be retained to ensure it remains as a park that provides a perfect green space for families and activities.	The Reserve is zoned RE1 Public Recreation in Parramatta LEP 2011 ensuring its continued use for recreational purposes. The Park is not considered to be of heritage significance and its inclusion in the HCA is not warranted. The Park is outside the historic core of the HCA represented by the rectangular blocks between Crimea Street to the north, Rosehill Street to the south, Carrington Street to the west and Inkerman Street to the east. Furthermore, the Park is not referenced in the Statement of Significance or Significant Characteristics of the HCA in the DCP.
Community Member 2		
	Seeks as part of the planning proposal for the area, that the heritage listed item at 6 Boundary Street be removed from Schedule 5 of the LEP. The submission is supported by a detailed heritage assessment. The assessment states that the dwelling on the site has undergone substantial change over time as and is in a poor state of repair. The dwelling is not considered to demonstrate strong significance in any of the NSW Heritage Council criteria. The conclusion of the assessment states that the removal of 6 Boundary Street from the LEP as a heritage item will have an acceptable impact because it is a building of few architectural pretentions or merit, that has been altered over time to a point where restoration would involve a considerable degree of conjecture as evidenced	The property is listed as Chadwick Guest House 6 Boundary Street (former Amwell) and of local significance in Parramatta LEP. The heritage inventory for the property includes the following in the Statement of Significance: - - *Early house in subdivision. Larger house than those in locality possibly associated with a notable person*. The relief sought is considered to be outside the scope of this planning proposal and cannot be pursued through this process. The validity of the assessment can be tested in a future housekeeping amendment to the LEP. If necessary Council can decide to remove this item from the Schedule.

	by this assessment.	
Community Members 3		
	Objects to the increase in allowable height on the north side of Boundary Street from 11m to 14m as it will reduce natural light and create overshadowing of property at 45 Boundary Street, which is of heritage value.	45 Boundary Street is heritage listed as a Victorian Cottage and of local significance in Holroyd Local Environmental Plan 2013. In response to the submission, an overshadowing analysis has been undertaken to show the impact of increased height on the subject property. The analysis shows that development to a height of the current height control of 11m will cause some overshadowing of the front part of the subject property in mid- winter. A building to a height of 14m would increase marginally the extent of overshadowing on the property. It is considered that mitigation measures to minimise the extent of overshadowing can be dealt with at the time a development application is lodged having regard to existing DCP and LEP provisions. Section 3.3.5 of the DCP provides that dwellings within the development site and adjoining properties are to receive a minimum of 3 hours sunlight in habitable rooms and in at least 50% of the private open space between 9 a.m. and 3 p.m. on 21 June. Where existing development currently receives less sunlight than this requirement, this should not be unreasonably reduced. Clause 5.10 of Parramatta LEP 2011 also requires consideration to be given to the effect of proposed development on the heritage significance of an item. This could include overshadowing effects and measures to ameliorate impacts.

Community Members 4		
	Supports an FSR of 0.5:1 rather than 0. 4:1.	An FSR of 0.5: 1 is not supported as it would result in a scale of development not in sympathy with the character of the HCA. At this FSR it may be difficult to achieve compliance with separation distance guidelines and requirements. If this FSR is combined with a height of 9m resulting buildings could be bulky and dominant when viewed from the street. The FSR of 0. 4:1 is the result of extensive urban design testing and will result in building forms and scale that are in character with the HCA.
	Seeks the allowance of duplexes to be side by side with side garages to save land space and allow easier access especially with young children	The objectives and provisions of the HCA seek to preserve the single storey character of the front part of allotments. It is also important that there is only one driveway. These measures would retain the predominant historic scale of the conservation area, as well as the pattern of a single driveway for each allotment. Two driveways are not acceptable due to the loss of front garden area as the driveways would take up a large portion of the front garden, thereby adversely affecting the setting of the heritage items and the character of the HCA streetscape. Dual occupancy development with a two storey height has been planned to be located at the rear of properties so as not to be detrimental to the character of the HCA. Integrated covered parking may be able to be incorporated into the design of a dual occupancy development however it is very important that a deep soil area able to accommodate a tree is not compromised by car parking. In some situations, the incorporation of covered car parking may mean that the allowable floor space is not able to be maximised.

Community Member 5		
	Objects to the focus on providing for dual occupancy development and not on encouraging sensitive rebuilds or extensions to a main house which would meet the objective of providing much needed family/executive homes in Parramatta	The design controls for the South Parramatta HCA in the DCP retain provisions to allow additions to houses to increase accommodation – providing they are modest. Linked pavilions or skillions at the back of a house are supported as the form of additions. In addition, proposed amendments to the DCP to allow detached two-storey additions at the rear of properties offer property owners additional flexibility to meet their accommodation needs. These provisions together with the controls of Parramatta LEP 2011 should allow the establishment of family/executive homes that would meet the needs of family/executive living. There are many examples of heritage properties in Parramatta that had been extended to meet the needs of 21st-century accommodation whilst retaining their heritage features.
	Strongly objects to decreasing the FSR within the HCA. Space within/out of buildings is a flexibity that must be conceded to the owner or occupier particularly when there are ample other controls to be complied with to maintain the heritage look and feel within this precinct.	The proposed reduction in FSR from 0.8:1 to 0.4:1 was the result of extensive planning and urban design testing. An FSR of 0.8:1 is designed to allow townhouses and multi-unit dwellings under an R3 Medium Density Zone. Furthermore, this FSR would result in a scale and intensity of development that would be out of character with the HCA. An FSR of 0. 4:1 is still designed to allow opportunities for development in the HCA in the form of dual occupancies.
	Strongly objects to the 7.5m maximum height and considers 9m appropriate. A second storey extension at the rear of the house which is on piers (off the ground by 2 feet or so) has both floors with 10 feet or 11ft ceilings and attic/pitched roof to match the frontage, need not contend with meeting 7.5m height restrictions.	The maximum height of 7.5m, envisaged for two storey detached additions and dual occupancy development at the rear of the property, was determined after extensive testing and has been proposed as this is appropriate for the character of the HCA, where the typical house is single storey. This height allows the second storey to be built partly within the roof space. This enables a second storey while keeping new development

		sufficiently low so as to reduce its visual impact. It is considered that a height of 9m is excessive and would result in buildings at the rear of properties being dominant viewed from the street. A second storey extension at the rear of an existing heritage dwelling would generally not be appropriate and would be out of sympathy with the character of single storey heritage buildings. However, as indicated above the proposed amendments to the DCP allow for detached two-storey additions to be developed at the rear of a property.
	There is no mention whether constructing a new facade or additions, forward of the original footprint is acceptable if it brings a house in line with all other bungalows on the street	The design controls for the HCA stipulate that additions to the front or side of an existing house should be avoided. Front additions would not be acceptable and would likely be out of character with the HCA
	The provision for separate accommodation at the rear will lead insufficient space for on-site parking which will result in cars being parked on the street and overcrowding on lots.	The design controls for the HCA are designed to make provision for the required on-site parking. In addition, the proposed down-zoning and reduction in height and FSR will result in reduced traffic generation and reduced pressure on street parking.
	The DCP does not address opportunities presented to some properties along Alma and Denison Streets by virtue of their being a rear lane– to date not agreed to be annexed by residential lots or formalised as a lane to serve rear entries to properties to help accommodate cars on sites in rear garages of each property (described above). It may be acceptable to have zero offset along the boundaries along a lane and some options for discussions are worthwhile and well overdue.	The grassed 'rear lane' concerned is owned by Council and is identified as the Crimea Street Reserve on Council's GIS database. The land has a classification of drainage reserve and public recreation garden space and is currently zoned R3 Medium Density Residential in Parramatta LEP 2011. Because of the status of this land strip it is not available for purchase by adjoining owners to facilitate development proposals or to allow access.
	Outlines the issues, sacrifices and struggles of living in an older timber house with respect to sustainability and limits to refurbishment.	The difficulties of the submitter are appreciated and it is acknowledged that ownership of a heritage property can have its challenges.

		Nevertheless, there are resources available to assist heritage owners such as the submitter. Council's Heritage Advisor may be able to offer practical advice regarding maintenance. It is noted that NSW Heritage Council expert committees gives free technical advice on sustainably upgrading heritage buildings for contemporary needs. Conserving a heritage property is also an important means of sustainability reducing consumption of ecological resources and ecological footprint. Council also operates a local heritage fund to provide financial assistance for appropriate conservation work to heritage properties. Finally, whilst Council's DCP states that applications for demolition will be considered very cautiously within conservation areas this may be the only viable alternative if it can be shown that a property has lost its heritage significance and economic maintenance is no longer possible.
Community Member 6		
	Local landowners want a higher density of development not a de-zoning that will reduce property values. Council has rushed this process without appropriate consultation on what the local community wants in this locality. Properties located at 9 and 10 Denison Street, Parramatta 33 and 33A Crimea Street are to be excluded from Council's planning proposal and subject to the submitter's own separate planning proposal. Council will be receiving a petition confirming that the majority of the land owners object to Council's proposed planning proposal for the area without appropriate consultation.	A downzoning from RE3 Medium Density Residential to R2 Low Density Residential is considered appropriate as it will ensure consistency with the provisions of Parramatta DCP 2011 for the HCA which aims to maintain the single storey character of the HCA. Townhouses and multi-story development allowed in the RE3 Medium Density Residential Zone would be out of character with the HCA. Council has undertaken appropriate and extensive consultation with the local community on the planning for the HCA and adjoining area. In particular pre-statutory consultation was undertaken in October 2016. Landowners were notified and invited to provide feedback on a number of development scenarios. Two drop in

		sessions were held to enable people to obtain further explanation and clarification of the proposals. Responses were received from 58 residents with a high proportion seeking to allow some form of development and in particular two-storey development at the rear to meet housing and family needs. After further review and consideration of feedback Council staff recommended support for scenarios which allows for detached additions and dual occupancy development at the rear of properties. It is noted that 9 and 10 Denison Street are identified in the DCP as bungalows of the 1920s and 1930s which must be retained. 33A Crimea Street is identified as a Federation houses of the 1900s – circa 1920 which must be retained. No.33 Crimea Street is identified as an intact house of the late 1940s and 1950s whose conservation is to be encouraged.
Community Member 7		
	The owners of a property in Carrington Street opposes the change in zoning from R3 Medium Density Residential to R2 Low Density Residential as it will decrease the value of land and it is believed that this area is best developed due to its close proximity to the City's public facilities.	A change in zoning of land from RE3 Medium Density Residential to R2 Low Density Residential is considered appropriate as it will ensure consistency with the provisions of Parramatta DCP 2011 for the HCA which aims to maintain the single storey character of the HCA. Townhouses and multi-story development allowed in the RE3 Medium Density Residential Zone would be out of character with the HCA. Because of the heritage values of the HCA development opportunities within this area should be limited. Nevertheless, under the planning proposal and proposed DCP amendments it will be possible to establish two-storey additions and dual occupancy development at the rear of

		properties. In addition, there are extensive opportunities for housing development in the Parramatta CBD and adjoining areas that will meet the demand for dwelling units.
Community Member 8		
	Seeks that the heritage listed item at 29 Lansdowne Street be removed from Schedule 5 of the LEP. It is stated that the item is in poor condition and too old to repair with rotten interior walls. Item should be removed from the Schedule to allow the site to be re-developed in line other development occurring in the vicinity.	The property is listed as cottage and of local significance in Parramatta LEP. The heritage inventory for the property includes the following in the statement of significance: *The house is of significance for the local area for historical reasons, and as a representative example of residential architecture of the Victorian period in this area. Built c. 1895, the house is readily identifiable as part of historical building stock and contributes to the streetscape.* The relief sought is considered to be outside the scope of this planning proposal and cannot be pursued through this process. It is noted that the submission is not supported by a detailed heritage assessment for the removal of the item from Schedule 5. The item is considered to be of heritage significance, and despite being in fair condition, delisting is not considered warranted. It is not proposed to add this request to a future housekeeping amendment to the LEP. If necessary, the submitter can commission an independent heritage assessment and or pursue a private planning proposal change.
Heritage Council of NSW		
`	The proposed downzoning, including the proposed reduction in building height and FSR controls, is supported as this will encourage a	Support for downzoning, reduction in building height and FSR controls and DCP amendments is noted.

	reduced scale of development sympathetic to the significance of the HCA. The proposed strengthening of the DCP controls to align with the amended zoning, height and FSR are also supported as this will this assist in achieving good heritage planning outcomes for future development within the HCA.	
	The proposal provides opportunities for new two-storey development to be accommodated at the rear of existing single storey and two storey dwellings. Whilst this may be acceptable in principle, the indicative potential massing scenarios and streetscape views indicate that the predominant single storey character of the HCA could be diminished over time. It is suggested that DCP 2011 includes suitable controls to ensure adequate separation distance between existing dwellings and new two-storey development at the rear, to preserve the historic streetscapes of the HCA. Adequate separation distance should also provide for deep soil landscaping and tree planting, as this will assist in softening the appearance of new two-storey development, thereby mitigating impacts to historic streetscapes.	Proposed height and FSR limits are designed to minimise the impact of two-storey development at the rear of properties. It is considered as shown in the urban design comparison that two-storey development built to comply with an FSR of 0.4:1 and a height of 7.5 m should not be dominant from the street. This will help to preserve the historic single storey streetscapes of the HCA. However, conversely development built to an FSR of 0.5:1 and a height of 9m would result in a bulky building to the rear of properties that would be dominant from the street. In addition, the proposed changes to the DCP for the HCA are designed to minimise the impact of two-storey development at the rear of properties. They provide at C.14 that new buildings associated with dual occupancy development are to be located at the rear of properties behind existing buildings and a minimum distance of 20m from the front street alignment. Where possible new buildings should be set further back with tree planting between the existing and new buildings. Nevertheless, it is considered that the proposed DCP amendments could be strengthened to minimise the impact of two-storey development. Design Control C.12 should be replaced with the following: *Detached additions may be permitted at the rear*

		of properties, behind existing buildings, and a minimum distance of 20m from the front street alignment. Adequate deep soil areas and tree planting are to be provided between the existing and new buildings. The last sentence of Design Control C.14 should be replaced with the following: *The preference is for new buildings to be detached and set further back towards the rear of the property. Adequate deep soil areas and tree planting are to be provided between the existing and new buildings.*
	Properties to the northern side of Boundary Street includes the property at 6 Boundary Street which is identified as a local item in Schedule 5 of Parramatta LEP 2011. Suggests that consideration be given to the impact of the proposed additional height and FSR on the setting of the single storey local item at 6 Boundary Street. There may be design implications for new development on adjoining properties which could impede the ability of new development from achieving the proposed increases and permissible height and floor space.	It is noted that the property at 6 Boundary Street is also the subject of a submission by Community Member 2 seeking the removal of this property from Schedule 5 of Parramatta LEP 2011. It is not considered that the proposed minor increases in permitted FSR and height should have any significant effect on this heritage item, which from a detailed heritage assessment is not considered to have high heritage values. Furthermore, any impact can be considered during assessment of Development Applications that may be lodged in the future. This information will be provided to the Development and Traffic Services Unit for consideration.
	In relation to historic archaeology, the subject land is located within Archaeological Management Unit 3081 which is identified to be of local significance with moderate archaeological research potential. As there is potential for relics to be present at the site, and archaeological assessment will be required with any future Development Application. The removal of archaeological resources from the site may not be supported, and this may have implications for proposed future excavation, basement car	The statement of significance for the AMU states: *This area was marginal to the early township. It was the site of the first racecourse in Parramatta (1825-1847). The land was subdivided in 1856 and developed as a residential area throughout the late nineteenth and twentieth centuries. The physical archaeological evidence*

	parking and the achievement of the proposed maximum FSR as part of future development proposals.	*within this area may include structural features, intact subfloor deposits, open deposits and scatters, ecological samples and individual artefacts which have potential to yield information relating to major historic themes Agriculture, Cultural Sites, Housing, Land Tenure, Leisure, Sport and Townships.* These are matters for consideration of future Development Applications. This information has been referred to the Development and Traffic Services Unit for its consideration.
Roads and Maritime Services		
	Raises no objection to the planning proposal. However, traffic impact assessment of the development uplift may be considered in the assessment of any future development applications on the sites located on the northern side of Boundary Street, Parramatta. In support of the planning proposal, Roads and Maritime request Council to give consideration to a funding mechanism towards regional road and transport infrastructure.	Noted. The need for a traffic impact assessment of future development applications for sites on the northern side of Boundary Street is a matter for consideration during assessment of Development Applications that may be lodged in the future. This information will be provided to the Development and Traffic Services Unit for consideration.
Endeavour Energy		
	Has no objection to the planning proposal and provides information for electricity supply to sites within the area that are proposed to be developed.	These are matters for consideration during assessment of Development Applications that may be lodged in the future. This information will be provided to the Development and Traffic Services Unit for consideration.

PLANNING PROPOSAL

REVIEW OF PLANNING CONTROLS IN SOUTH PARRAMATTA HERITAGE CONSERVATION AREA & ADJOINING AREAS

PARRAMATTA WE'RE BUILDING AUSTRALIA'S NEXT GREAT CITY

Planning Proposal drafts

Proponent versions:

Council versions:

No.	Author	Version
1.	City of Parramatta Council	13 March 2017
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3.	City of Parramatta Council	10 July 2017
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INTRODUCTION

This planning proposal explains the intended effect of, and justification for, the proposed amendment to *Parramatta Local Environmental Plan 2011*. It has been prepared in accordance with Section 55 of the *Environmental Planning and Assessment Act 1979* and the Department of Planning and Environment (DP&E) guides, 'A Guide to Preparing Local Environment Plans' (April 2013) and 'A Guide to Preparing Planning Proposals' (October 2012) and 'Guidance for merged councils on planning functions' (May 2016).

Background and context

This planning proposal relates to the South Parramatta Heritage Conservation Area (HCA) and an area to the north of Boundary Street, Parramatta (refer Figure 1). The subject areas are located to the south of Parramatta CBD near the Parramatta and Cumberland Council Local Government Area boundaries and are within the boundaries of the Parramatta Local Environmental Plan 2011 application area.

Figure 1: Locational Context Map showing subject areas **Source:** City of Parramatta GIS data

The planning proposal seeks to resolve a number of inconsistencies between the existing development standards and planning controls for the HCA as set out in the Parramatta Local Environmental Plan (PLEP) 2011 and the Parramatta Development Control Plan (PDCP) 2011.

The planning proposal also seeks to increase the intensity development for land fronting the north side of Boundary Street to ensure an appropriate transition to land under the control of the Holroyd LEP 2013.

PART 1 – OBJECTIVES OR INTENDED OUTCOMES

The objectives of this planning proposal are:

- To reduce the extent of the HCA and remove areas in Lansdowne and Glebe Streets that are out of character with and do not contribute to the heritage significance of the HCA but retain the historic core of the HCA;

- To remove the existing anomalies in the PLEP 2011 development standards that apply to the HCA and which have the potential to adversely impact on the character and heritage significance of the HCA by allowing for a reduced scale and intensity of development within the modified HCA;

- To increase the permissible density of development of land on the north side of Boundary Street to ensure an appropriate transition to land under the control of Holroyd LEP 2013.

PART 2 – EXPLANATION OF PROVISIONS

This planning proposal seeks to amend *Parramatta LEP 2011* (*PLEP 2011*) in relation to the zoning, height, heritage provisions and floor space ratio controls.

An identification of the properties, including legal descriptions and street numbers associated with the two subject areas of the planning proposal are included at **Appendix 1** as outlined below:

1. HCA – refer to Table 1 (within **Appendix** 1)
2. North of Boundary Street – refer to Table 3 (within **Appendix 1**)

In order to achieve the desired objectives the following amendments to the *PLEP 2011* would need to be made:

1. Amend the South Parramatta Heritage Conservation Area in the **Heritage Map** (Sheet HER 5 & 10), by reducing the extent of the HCA and removing the properties identified in Table 2 of Appendix 1 from the HCA. Refer to Figure 8 in Part 4 of this planning proposal.

2. Amend the zone in the **Land Zoning Map** (Sheet LZN 5 & 10), as it relates to the proposed reduced South Parramatta Heritage Conservation Area, from R3 Medium

Density Residential to R2 Low Density Residential. Refer to Figure 5 in Part 4 of this planning proposal.

3. Amend the maximum building height in the **Height of Buildings Map** (Sheet HOB 5 & 10), as it relates to
   - the reduced **South Parramatta Heritage Conservation Area**, from 11 metres to a height in the range of between 7.5m (1.5 storeys) and 9m (1-2 storeys). Refer to Figure 6 Part 4 of this planning proposal.
   - land on the **north side of Boundary Street**, Parramatta, from 11 metres to 14 metres which equates to 4 storeys. Refer to Figure 6 in Part 4 of this planning proposal.
4. Amend the maximum FSR in the **Floor Space Ratio Map** (Sheet FSR 5 & 10), as it relates to:
   - the reduced **South Parramatta Heritage Conservation Area**, from 0.8:1 to an FSR in the range of between 0.4:1 and 0.5:1. Refer to Figure 7 in Part 4 of this planning proposal.
   - land on the **north side of Boundary Street**, Parramatta, from 0.8:1 to 1.2:1. Refer to Figure 7 in Part 4 of this planning proposal.
5. Introduce a new site specific clause prohibiting Torrens Title subdivision of development within the reduced South Parramatta Heritage Conservation Area.

Note: It is clarified that:

- The planning proposal as submitted for Gateway determination provides for a range of permitted FSRs (0.4:1 to 0.5:1) and heights (7.5m to 9m) for the reduced HCA.
- The planning proposal will be publicly exhibited with a range of permitted FSRs and heights for the reduced HCA that will be supported by urban design data that shows the impact of the different controls.
- Following public exhibition, submissions will be reviewed and reported to Council along with recommendations on the most appropriate specific FSR and permitted height to be included in the planning proposal to be sent to the Department of Planning and Environment for finalisation.

PART 3 – JUSTIFICATION

This part describes the reasons for the proposed outcomes and development standards in the planning proposal.

3.1 Section A - Need for the planning proposal

3.1.1 Is the Planning Proposal a result of any study or report?

Recognising the inconsistencies in the planning controls for the South Parramatta HCA set out in the PLEP 2011 and the PDCP controls, as well as the uncertainty and ambiguity that this is currently causing for landowners, potential developers and the general community, Council initiated a review of the controls for the South Parramatta HCA and adjoining areas.

Initially, a heritage survey (included at **Appendix 2**) was undertaken by Council's heritage advisor that assessed the condition of the existing HCA and made a number of recommendations with regard to the extent of the HCA. The existing strip along Lansdowne Street was identified for potential removal because it does not provide the same experience as other streets in the conservation area, mainly because is surrounded by blocks of flats developed on all sides. It was also recommended that consideration should be given to removing the HCA from properties adjoining Glebe Street (at the corner with Marsden Street) including the park.

Council staff then prepared and tested a number of broad development options for the area covered by the revised HCA boundary to determine building envelopes that retain the integrity of the HCA character while still allowing development opportunities.

Following consideration by Council and pre-statutory consultation with landowners, the preferred scenarios to retain the HCA and amend the PLEP 2011 development standards accordingly was developed and form the basis of this planning proposal. An outcome of this process was a decision to retain the current controls for height of building and floor space ratio for land bordering and just outside the new boundary of the HCA. However, for land fronting the north side of Boundary Street it is proposed to increase the floor space ratio and building height, that is also reflected in this planning proposal.

3.1.2 Is the Planning Proposal the best means of achieving the objectives or intended outcomes, or is there a better way?

As noted above, the inconsistencies between the development standards in the PLEP 2011 and the planning objectives and controls of the PDCP are causing confusion as to what type and scale of development is appropriate in the HCA.

At present, the HCA is zoned predominantly for **R3** Medium Density Residential with a HOB of 11m and a FSR of 0.8:1. Having regard to the type of development permissible under the **R3** zoning (townhouses, multi-dwelling developments, etc.) and the scale of development possible with a FSR of 0.8:1 and a building height of 11m, it is clear that the current development standards are not compatible the single storey nature and modest subdivision pattern of the HCA, key elements which contribute to the heritage significance of the area.

To resolve this conflict and to give appropriate weight to the responses received from residents during pre-statutory consultation it is proposed to accept scenarios that allow for two storey development at the rear of properties in the HCA. Under these scenarios the zoning would be reduced from R3 Medium Density Residential to R2 Low Density Residential and permitted height reduced from 11m to a height in the range of between 7.5m and 9m and FSR from 0.8: I to and FSR in the range of between 0.4:1 to 0.5:1. Amendments are also proposed to Parramatta DCP 2011 to reflect and manage the provision of two-storey development at the rear of properties. These changes will ensure that PLEP development standards align with the PDCP controls.

Therefore, Council considers that the current planning proposal is the best means of achieving the objectives/intended outcomes for the HCA. The proposed amendment to the PLEP development standards will ensure the protection of the HCA and that future development in the HCA respects the character and the heritage significance of the area.

In addition, the planning proposal is considered the best method of achieving increased intensification of land on the northern side of Boundary Street. The planning proposal will protect street amenity whilst allowing development consistent with that allowed on the opposite side of the street under the control of Holroyd LEP 2013.

3.2 Section B – Relationship to strategic planning framework

This section assesses the relevance of the Planning Proposal to the directions outlined in key strategic planning policy documents. Questions in this section consider state and local government plans including the NSW Government's Plan for Growing Sydney and subregional strategy, State Environmental Planning Policies, local strategic and community plans and applicable Ministerial Directions.

3.2.1 Is the planning proposal consistent with the objectives and actions contained within the applicable regional or sub-regional strategy?

A Plan for Growing Sydney

On 14 December 2014, the NSW Government released '*A Plan for Growing Sydney*' which outlines actions to achieve the Government's vision for Sydney which is a 'strong global city and a great place to live'.

In achieving this vision, A Plan for Growing Sydney has identified goals that Sydney will be:

- A competitive **economy** with world-class services and transport
- A city of **housing choice** with homes that meet our needs and lifestyles
- A **great place to live with** communities that are strong, healthy and well connected; and
- A sustainable and resilient city that protects the **natural environment** and has a balanced approach to the use of the land and resources

The proposed amendments to the PLEP 2011 will amend development standards that have the potential to adversely impact on the historical and heritage significance of the South Parramatta HCA with regard to future development. In this regard, this proposal is compliant under A Plan for Growing Sydney as it aims to promote and maintain European heritage.

While this planning proposal proposes to rezone approximately 8.7ha of land from **R3** (Medium Density residential) to **R2** (Low Density residential), this will have no impact on A Plan for Growing Sydney's delivery to achieve growth. In this regard, the following factors should be considered:

- The extent of the area proposed to be rezoned from **R3** to **R2** is limited in area in the context of the wider Metropolitan Area;

- At present, development of the scale and density permissible under the current development standards in the PLEP would have a significant and unreasonable impact on the heritage and historical character of the HCA; and.
- The planned uplift in FSR and HOB on land fronting the north side of Boundary Street in the vicinity of the HCA will help to offset the reduction in FSR and HOB within the HCA in terms of overall development yield from this part of the city.

Draft West Central District Plan

The Draft West Central District Plan (DWCDP) released in November 2016 outlines the Greater Sydney Commission's 20-year vision for the West Central District which comprises Blacktown, Cumberland, The Hills and City of Parramatta local government areas (LGAs).

The relevant actions and priorities within the DWCDP which are applicable to the Planning Proposal are:

Liveability Priority 1: Deliver West Central's 5-year housing targets.

Council's submission on the draft West Central District Plan included an analysis of the City of Parramatta's (CoP) performance against the 5 and 20 year dwelling targets. This analysis demonstrated that CoP is performing well above and beyond the targets. As such, the downzoning of the subject land from R3 to R2 will not impede Council's ability to meet the targets. In addition, the effect of the planning proposal to increase dwelling yield for land on the north side of Boundary Street will help to offset the proposed reduction of dwellings within the HCA.

Action L13: Conserve and enhance environmental heritage including Aboriginal, European and natural.

This planning proposal is consistent with this action as the proposed amendments will assist in the protection of the historical and heritage significance of the South Parramatta HCA. The rezoning of the land from R3 Medium Density Residential to R2 Low Density residential will reduce conflicts between the conservation of the heritage values of the area and pressure for redevelopment.

Liveability Priority 7: Conserve heritage and unique local characteristics.
The subject land has been identified within the South Parramatta Heritage Conservation Area. The Planning Proposal will help to preserve the unique character of the area and the streetscape, and to reduce the likelihood that contributory items will be demolished.

3.2.2 Is the planning proposal consistent with the local council's Community Strategic Plan or other local strategic plan?

3.2.3

The following strategic planning documents are relevant to the planning proposal.

Parramatta 2038 Community Strategic Plan

The *Parramatta 2038 Community Strategic Plan* recognises Parramatta as a city that carries a rich history where heritage assets help to shape the culture of the city and its identity. Through the conservation of heritage, Parramatta will work towards building upon

its cultural life. The plan identifies a number of strategies to promote culture, one of which is identified as 'Distinct Places', the objective of which is to *'formulate great experiences and recognise, celebrate, and promote our dynamic history and heritage and unique places'.*

This planning proposal is consistent with Council's local strategy as it aims to maintain the heritage significance of the HCA ensuring that future development aligns with the cultural and heritage values of the area.

3.2.4 Is the planning proposal consistent with the applicable State Environmental Planning Policies?

3.2.5

The following State Environmental Planning Policies (SEPPs) are of relevance to the site (refer to Table 1 below).

Table 1 – Comparison of planning proposals with relevant SEPPs

State Environmental Planning Policies (SEPPs)	Consistent: Yes - ✓ No - × or N/A	Comment
SEPP No 1 Development Standards	N/A	This SEPP is not applicable to the subject land under Clause 1.9 of the Parramatta LEP 2011.
SEPP 4 – Development Without Consent and Miscellaneous Exempt and Complying Development	N/A	This SEPP is not applicable to the subject land under Clause 1.9 of the Parramatta LEP 2011.
SEPP 6 – Number of Storeys in a Building	N/A	Standard instrument definitions apply.
SEPP No 55 Remediation of Land	✓	Not relevant to proposed amendment. May be relevant to future DAs.
SEPP 60 – Exempt and Complying Development	N/A	This SEPP is not applicable to the subject land under Clause 1.9 of the Parramatta LEP 2011.
SEPP 64 – Advertising and Signage	N/A	Not relevant to proposed amendment. May be relevant to future DAs.
SEPP No 65 Design Quality of Residential Flat Development	✓	Not relevant to the proposed amendment as it relates to the HCA. The design of future development of land north of Boundary Street will be addressed in future DAs.
SEPP No.70 Affordable Housing (Revised Schemes)	N/A	Not relevant to proposed amendment.
SEPP (Affordable Rental Housing) 2009	N/A	Not relevant to proposed amendment.
SEPP (BASIX) 2004	N/A	Not relevant to the proposed amendment. May be relevant to future DAs.
SEPP (Exempt and Complying Development Codes) 2008	✓	May apply to future development of the site.
SEPP (Infrastructure) 2007	✓	May apply to future development of the site.
Sydney Regional Environmental Plan No 18–Public Transport Corridors	N/A	This SEPP is not applicable to the subject land under Clause 1.9 of the Parramatta LEP 2011.

Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005	N/A	Not relevant to the proposed amendment. May be relevant to future DAs.
SEPP (Urban Renewal) 2010	✓	The lands which are the subject of this planning proposal are partially located within the Granville potential precinct as identified by the Urban Renewal SEPP (lands east of Marsden Street), It should be noted, however, that the land is situated outside of the Urban Renewal Study Area for the Auto Alley Precinct. Any future development proposals in the area affected by this SEPP will be subject to assessment at the DA stage (where applicable). The criteria set out in Clause 10(3) of the SEPP requires an assessment of the potential of proposed development to restrict or prevent the following: a) Development of the potential precinct for high density housing or commercial or mixed development. b) The future amalgamation of sites for the purpose of any such development within the potential precinct c) Access to or development of infrastructure, other facilities, and public domain areas associated with existing and future public transport in the potential precinct. The provisions of the current planning proposal will not compromise compliance of future development with this SEPP.

3.2.6 Is the planning proposal consistent with applicable Ministerial Directions (s.117 directions)

In accordance with Clause 117(2) of the *EP&A Act 1979* the Minister issues directions for the relevant planning authorities to follow when preparing planning proposals for new LEPs. The directions are listed under the following categories:

- Employment and resources
- Environment and heritage
- Housing, infrastructure and urban development
- Hazard and risk
- Regional planning
- Local plan making

The following directions are considered relevant to the subject Planning Proposal.

Table 2 – Comparison of planning proposals with relevant Section 117 Directions

Section	Comment	Compliance
2. Environment and Heritage		

Direction 2.3 - Heritage Conservation	This planning proposal seeks to promote the conservation of the South Parramatta HCA. The proposed amendments to down zone the area to R2 Low Density Residential and to reduce height and FSR will ensure a reduced scale of development in line with DCP objectives and controls. This will help to maintain the area's heritage and historical significance and ensure that future development does not compromise the area. Whilst it is proposed to contract the HCA, it is considered that this will have a positive impact on the integrity of the HCA which is to be retained. The built up areas to be removed from the existing HCA have been extensively altered since the original subdivision and now add little to the character of the HCA or to its heritage value. By removing the areas which no longer contribute to the HCA (and which set an undesirable precedent for other such development in the HCA), it is considered that the integrity of the retained HCA will be strengthened.	Yes
3. Housing, Infrastructure and Urban Development		
Direction 3.1 - Residential Zones	The planning proposal proposes to rezone the modified HCA from **R3** Medium Density Residential to **R2** Low Density Residential and to reduce FSR and HOB for the purpose of heritage conservation. It has been calculated that these changes to the planning controls could result in a reduction of 280 dwellings in the reduced HCA. The proposed increase in FSR and HOB for land fronting the north side of Boundary Street outside the HCA will offset the decrease in development yield within the HCA. It has been calculated that the change in planning controls could result in an increase of 45 additional dwellings for this area. Overall, the planning proposal could theoretically result in a net loss of approximately 235 dwelling units in this local area. However, this net loss is considered insignificant given the extensive opportunities for housing development in the Parramatta CBD and adjoining areas. This proposal will not impact on the efficient use of existing infrastructure and services located on or in proximity to the conservation area. Due to the proximity of the area to Harris Park and Parramatta Interchanges, future development will benefit from access to these infrastructure services. Whilst the planning controls in the amended HCA will not encourage a variety and choice of housing types, the planning controls in the adjoining area will promote this.	Yes

Direction 3.4 - Integrating Land Use and Transport	Increased HOB and FSR for land north of Boundary Street will facilitate the delivery of additional residential accommodation in proximity to existing transport interchanges (i.e. Parramatta and Harris Park station).	Yes
4. Hazard and Risk		
Direction 4.1 - Acid Sulfate Soils	Soils in the HCA are classified as Class 5 under the Acid Sulphate Soils designation in the PLEP 2011. All future development will be assessed against this SEPP at a DA stage.	Yes
Direction 4.3 - Flood Prone Land	Council's current flood information indicates that most of the sites to south of Lansdowne Street, the rear of the sites to the north of Dixon Street and some lots to the north of Inkerman Street are affected by flooding, in particular the 20-year flood level and the high hazard flood path (Refer to **Figure 9** over). Where development is permissible, appropriate design principles are set out in the existing PDCP to address flooding issues.	Yes
6. Local Plan Making		
Direction 6.1 - Approval and Referral Requirements	The Planning Proposal does not introduce any provisions that require any additional concurrence, consultation or referral.	Yes
Direction 6.3 - Site Specific Provisions	The Planning Proposal does not introduce any site specific provisions.	Yes

3.3 Section C – Environmental, social and economic impact

This section considers the potential environmental, social and economic impacts which may result from the Planning Proposal.

1.3.1 Is there any likelihood that critical habitat or threatened species, populations or ecological communities, or their habitats, will be adversely affected as a result of the proposal?

The South Parramatta HCA does not include any critical habitat, threatened species, populations or ecological communities. Therefore, this planning proposal will not pose any threat to the above.

1.3.2 Are there any other likely environmental effects as a result of the planning proposal and how are they proposed to be managed?

This planning proposal may result in some environmental effects within the area of the reduced South Parramatta HCA. By rezoning land from R3 Medium Density Residential to R2 Low Density Residential it will no longer be possible to establish townhouses and multiunit housing in the area that conflicts with the character of the HCA. However, under the planning proposal it will be possible to establish two storey additions and dual occupancy development at the rear of properties. Proposed amendments to Parramatta DCP 2011 will manage the effects of

this development by retaining the single storey scale of houses at the front of properties and ensuring that new development is sympathetic to the objectives of the HCA.

The planning proposal by allowing for intensification of multiunit and apartment dwelling development for land on the north side of Boundary Street could affect the street's character. Nevertheless, it is not considered that development permitted up to a height of 14m (four storeys) will cause any significant overshadowing or loss of amenity for the street. Any impacts should be able to be appropriately managed by controls in PLEP 2011 and PDCP 2011. Development permitted will also be compatible with that allowed on the opposite side of the road under the Holroyd LEP 2013. This land is zoned R4 High Density Residential, has a floor space ratio of 1.2:1 and a permitted height of 15 m.

Whilst development is not currently permitted in high hazard flood zones, the Draft Floodplain Risk Management Policy will permit development in these areas where it is demonstrated that the new development reduces the risk of flooding compared to what is existing and that properties are not exposed to increased flood risk. Appropriate development principles are set out in the DCP to minimise environmental effects and flood related impacts and associated issues will be addressed at a DA stage.

1.3.3 How has the planning proposal adequately addressed any social and economic effects?

The redevelopment of sites within the HCA for higher density development, though currently permissible under the existing zoning and FSR and HOB standards, is at odds with the HCA designation and the objectives of the PDCP to maintain the character of the area.

Therefore, whilst it could be argued that the proposed amendments to the zoning, FSR and HOB will have some negative impact on the development potential and hence the future development yield of a site and the economic implications of same, this will be offset by amendments that allow for some redevelopment at the rear of properties in the HCA.

The amendments also recognise the positive economic and social impacts of retaining the HCA designation and maintaining the character of the area. A growing number of property market watchers have indicated that that a moderate heritage overlay control (such as a heritage conservation area designation) can have a positive impact on property values and that there is evidence to suggest that such a designation actually enhances the value of a property[1]. It is reasonable to conclude that architecturally uniform streetscapes can work to boost the value of individual houses and that a property within an intact period streetscape will be more attractive to a prospective buyer than the same house two streets away which may be sitting between a RFB and a modern townhouse. Whilst the proposed amendments seek to retain the existing buildings which contribute to the streetscape, and to maintain the existing scale and pattern of development at the front of properties, provision is made for two storey development at the rear of properties that will meet the economic and social needs of existing

[1] *http://news.domain.com.au/domain/home-investor-centre/heritage-homes-sell-at-a-premium-20110215-1aujt.html*

owner occupiers. In addition, the proposal to increase height and FSR for land on the north side of Boundary Street will help to meet housing demand in the area.

1.4 Section D – State and Commonwealth Interests

1.4.1 Is there adequate public infrastructure for the planning proposal?

Any future development applications for redevelopment of this area (where applicable), will be subject to assessment under Clause 104 of the SEPP Infrastructure 2007. It is therefore considered that a traffic and transport assessment is not required to be undertaken.

1.4.2 What are the views of State and Commonwealth public authorities consulted in accordance with the gateway determination?

This planning proposal will be seeking views of State and Commonwealth authorities as part of its public exhibition. It is proposed to consult with NSW Office of Environment and Heritage and Cumberland Council.

PART 4 – MAPPING

This section contains the mapping for this planning proposal in accordance with the DP&E's guidelines on LEPs and Planning Proposals.

4.1 Existing controls

This section contains map extracts from *PLEP 2011* which illustrate the current controls applying to the South Parramatta Heritage Conservation Area and adjoining areas.

Planning Proposal –South Parramatta Heritage Conservation Area and adjoining areas

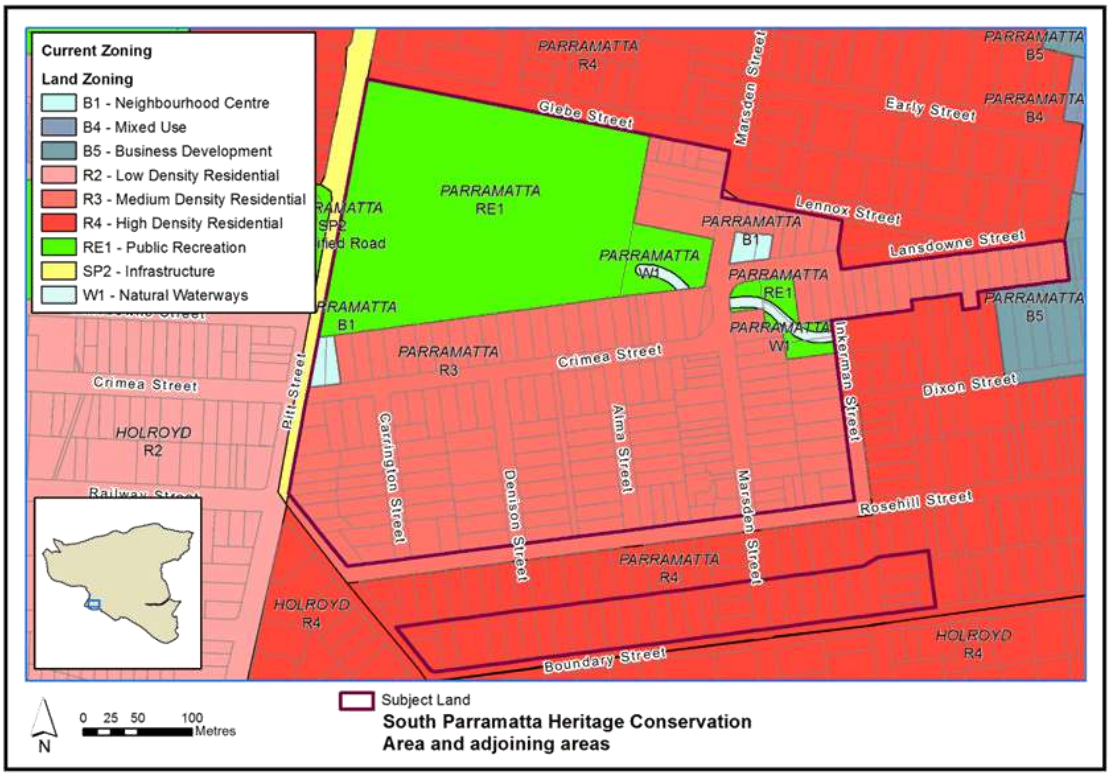


Figure 1– Existing zoning extracted from the *PLEP 2011* Land Zoning Maps

Figure 1 above illustrates the existing R3 Medium Density Zone over the South Parramatta Heritage Conservation Area and the R4 High Density Zone over land to the north of Boundary Street.

Planning Proposal –South Parramatta Heritage Conservation Area and adjoining areas

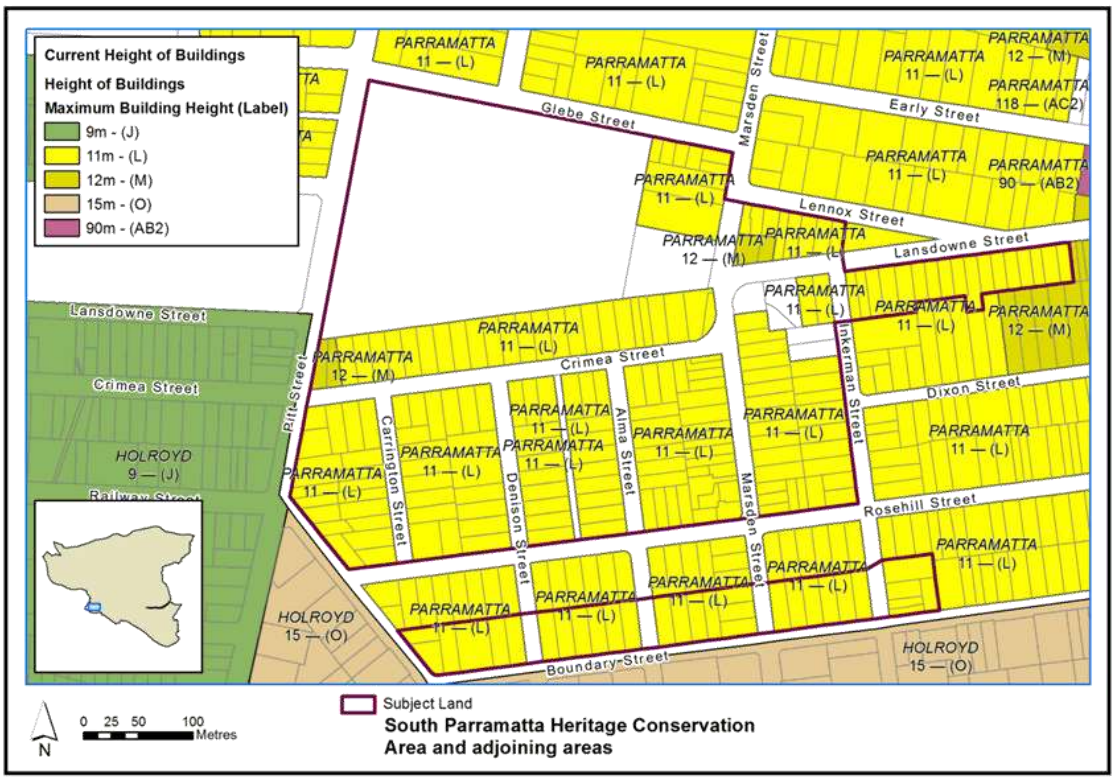


Figure 2 – Existing building heights extracted from the *PLEP 2011* Height of Buildings Maps

Figure 2 above illustrates the existing 11 metre height applying to the South Parramatta Heritage Conservation Area and land to the north of Boundary Street.

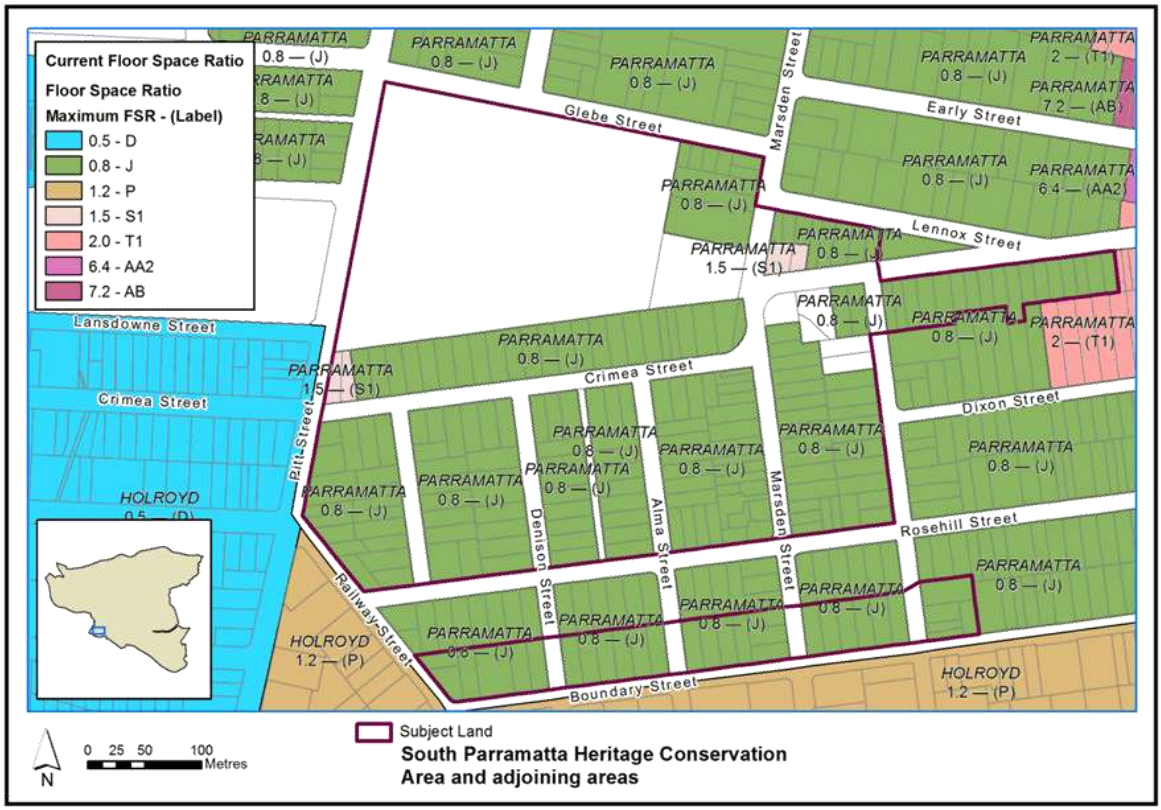


Figure 3 – Existing floor space ratio extracted from the *PLEP 2011* Floor Space Ratio Map

Figure 3 above illustrates the existing 0.8:1 FSR which applies to the South Parramatta Heritage Conservation Area and land to the north of Boundary Street.

Planning Proposal –South Parramatta Heritage Conservation Area and adjoining areas

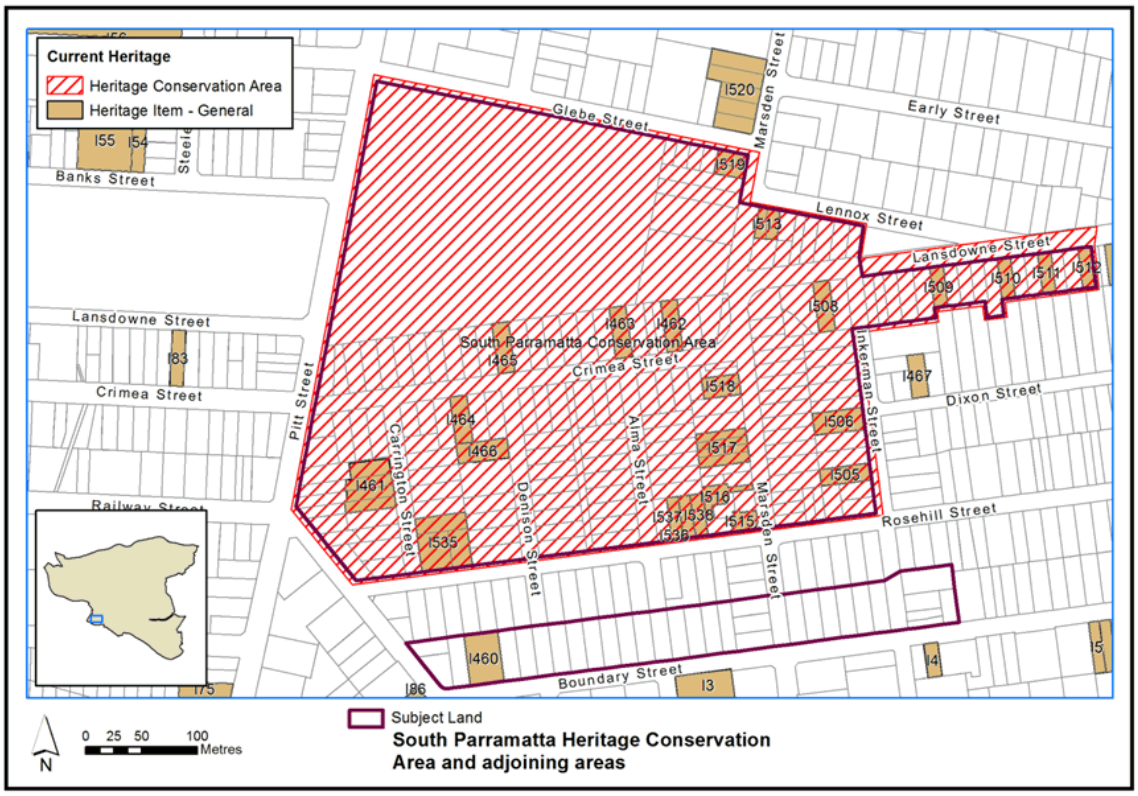


Figure 4 – Existing heritage items extracted from the *PLEP 2011* Heritage Maps

Figure 4 above illustrates the South Parramatta Heritage Conservation Area and heritage sites which are located within and adjacent to this Area.

4.2 Proposed controls

The figures in this section (Figures 5 to 8) illustrate the proposed zoning, building height, floor space ratio and heritage changes sought by this planning proposal. The proposed maps amendments are set out below.

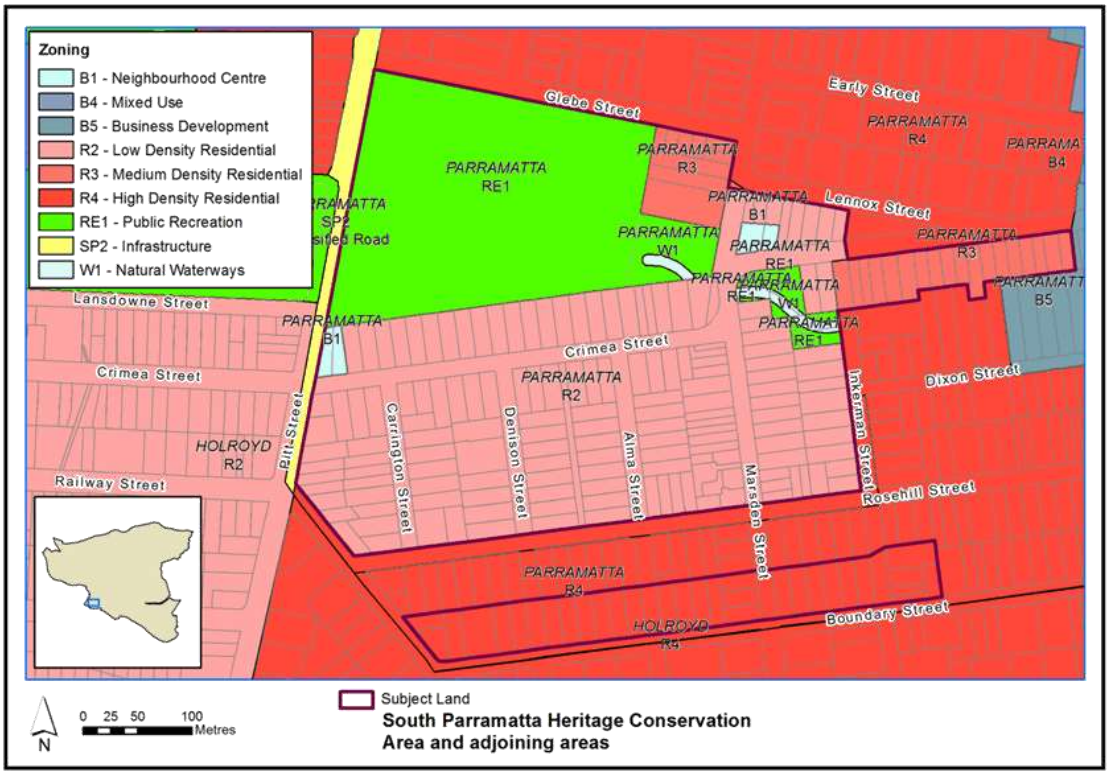


Figure 5 – Proposed amendment to the PLEP 2011 Land Zoning Map which shows the rezoning of the reduced area of the HCA to R2 Low Density Residential.

Planning Proposal –South Parramatta Heritage Conservation Area and adjoining areas

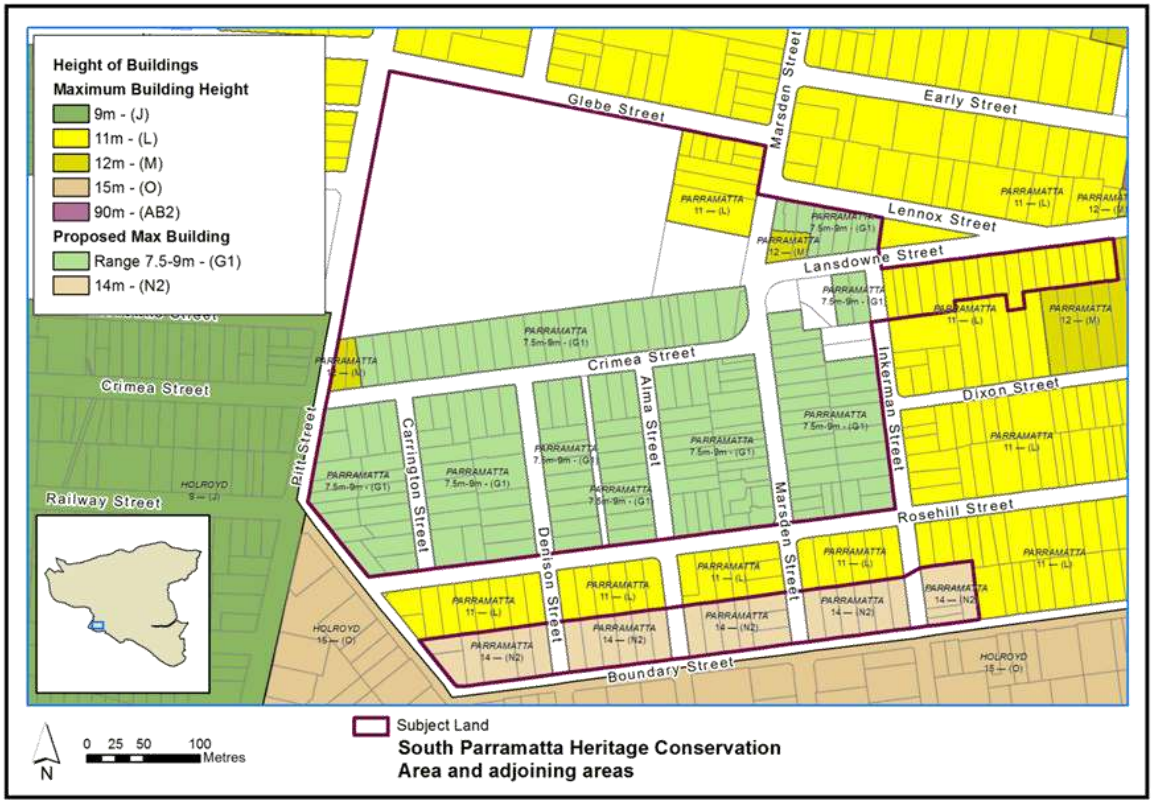


Figure 6 – Proposed amendment to the PLEP 2011 Height of Building Map which shows for the reduced HCA a reduction in permitted height to a height in the range of between 7.5m and 9m and for the area north of Boundary Street an increase in permitted height to 14m.

Planning Proposal –South Parramatta Heritage Conservation Area and adjoining areas

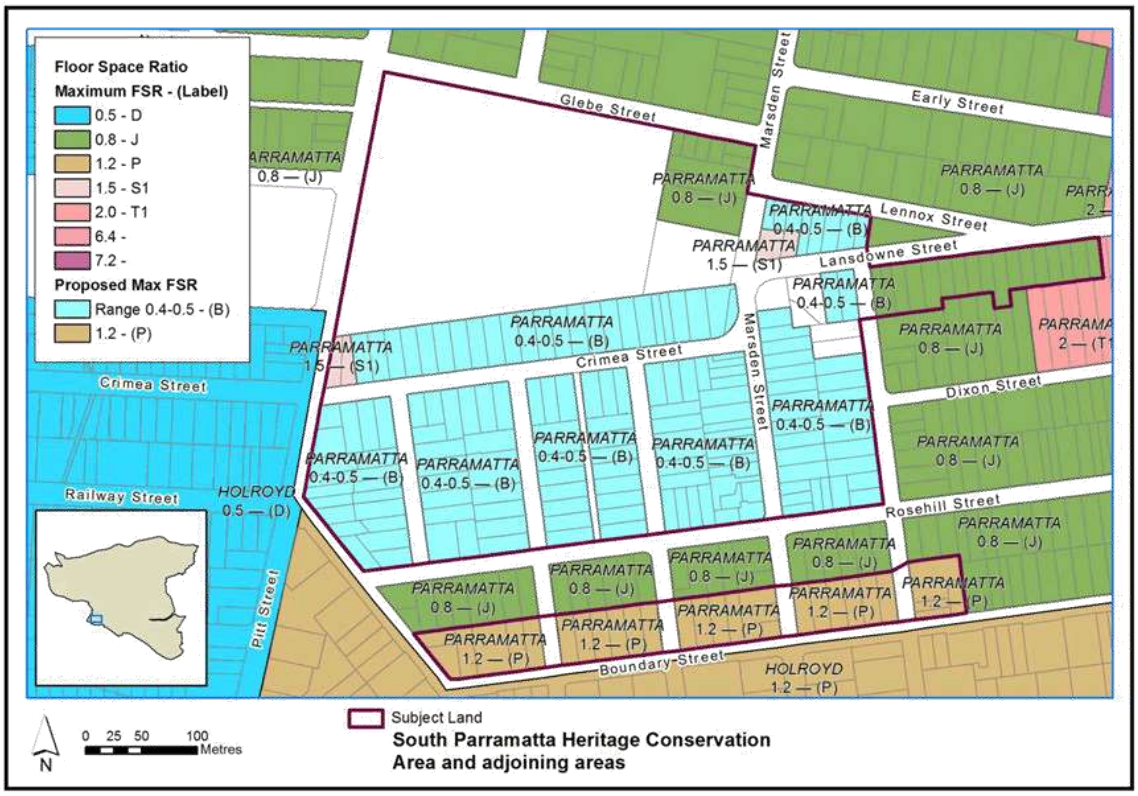


Figure 7 – Proposed amendment to the PLEP 2011 Floor Space Ratio Map which shows for the reduced HCA a reduction in permitted FSR to an FSR in the range of between 0.4:1 to 0.5:1 and for the area north of Boundary Street an increase in permitted FSR to 1.2:1.

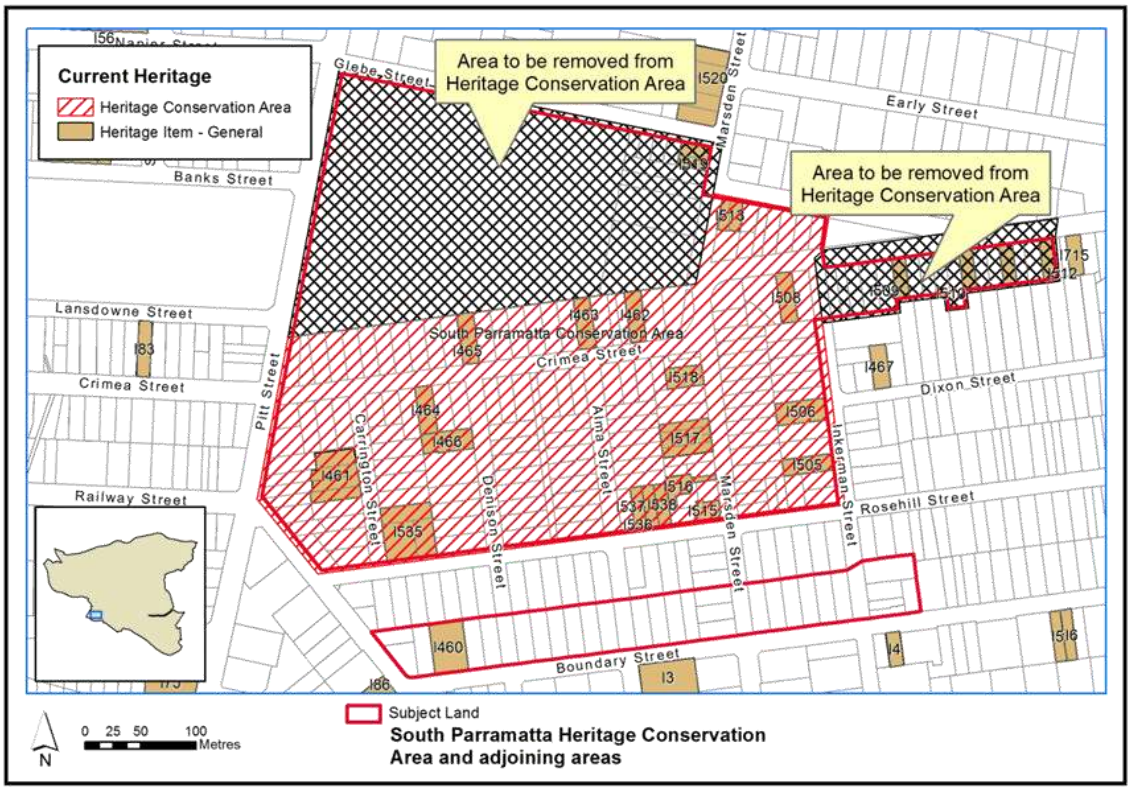


Figure 8 – Proposed amendment to the LEP 2011 Heritage Map which shows the areas to be removed from the HCA.

PART 5 – COMMUNITY CONSULTATION

The planning proposal (as revised to comply with the Gateway determination) is to be publicly available for community consultation for a period of 28 days.

Public exhibition is likely to include:

- newspaper advertisement;
- display on the Council's web-site; and
- written notification to landowners within the HCA and land north of Boundary Street and land adjoining these areas.

The gateway determination will specify the level of public consultation that must be undertaken in relation to the planning proposal including those with government agencies.

Pursuant to Section 57(8) of the *EP&A Act 1979* the Responsible Planning Authority must consider any submissions made concerning the proposed instrument and the report of any public hearing.

PART 6 – PROJECT TIMELINE

The detail around the project timeline is expected to be prepared following the referral to the Minister for review of the Gateway Determination.

The following steps and timeframes are anticipated:

Steps	Timeframe
Referral to Minister for Gateway determination	July 2017
Date of Gateway determination	October 2017
Commencement and completion dates for public exhibition period and government agency notification	November/December 2017
Consideration of submissions	January 2018
Consideration of proposal post exhibition and reporting to Council	February 2018
Submission to the Department to finalise the LEP	March 2018
Notification of instrument	April 2018

Prepared by City of Parramatta

PARRAMATTA WE'RE BUILDING AUSTRALIA'S NEXT GREAT CITY

Appendix 1 – Properties Associated with Planning Proposal

Appendix 2 – South Parramatta Conservation Area Review, March 2014

Appendix 3 – Report to the Independent Hearing and Assessment Panel, 21 March 2017

Appendix 4 – Report to Council 10 April 2017

Note: Proposed amendments shown as marked on this document. New additions are shown in red text and deletions are shown by a red line through text.

Note: 4.4.4.2 South Parramatta

This area includes two rural grants to Meehan and to Norris. Development to the south of Parramatta township occurred later than that to the north, and the 1855 Street Alignment Plan shows very few buildings in this area. In 1855 the railway from Sydney to Parramatta Junction (now Granville) terminated near Meehan's grant. Anticipating a demand for housing close to the terminus, Meehan's land was subdivided into 22 allotments of 50 feet x 150 feet and auctioned in 1856. When the railway was extended to Parramatta in 1860, the subdivision lost its attraction. Nevertheless, modest but slow development did occur, most aimed at the rental market. Brickmaking was also occurring at that time along A'Becketts Creek. Ten houses remain from this early period. All stand on or close to the front fence.

The 1880s saw rapid suburban expansion throughout Sydney. In South Parramatta, Norris's grant was subdivided and more houses built. Rental housing remained important. Some allotments were amalgamated and re-subdivided for smaller lot housing. The Detail Survey of 1895 shows 104 buildings scattered through the Conservation Area at that time. Eleven were later demolished for the park and eight went in recent years for the flats in Lennox Street. Forty-seven of those 104 houses remain today - a very high retention rate.

Houses continued to be built in the early years of last century, 28 of which remain intact. They stand further from the front fence than the earlier cottages. In the 1920s, Sydney experienced another rash of suburban development, at which time all houses on the western side of Alma Street and most of those on the eastern side of Denison Street were built. Other houses were built on vacant allotments scattered throughout the area. Front gardens were deeper than previously, gardening being at that time an important part of suburban living. Crimea Street was the important cross street, linking Church Street with Pitt Street, and small groups of shops were built on corner positions to serve this passing trade and local needs. Some vacant allotments remained, however, until the 1960s. Since then some earlier houses have been demolished for new development, or altered comprehensively in attempts to update them.

Figure 4.4.4.2.1
South Parramatta Precinct Map

Replacement Figure 4.4.4.2.1

Statement of Significance

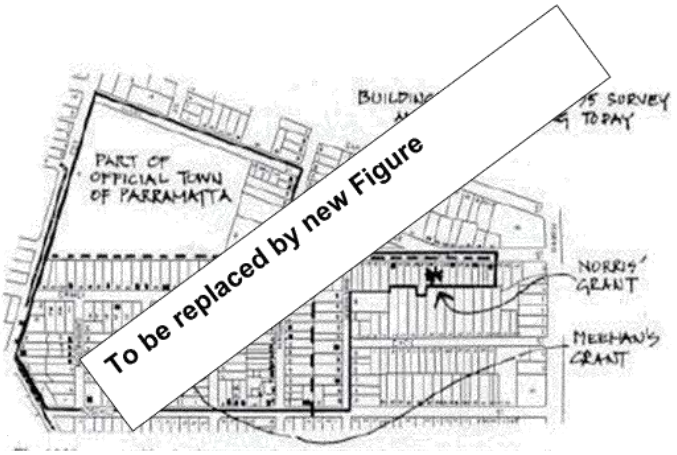
This area is the earliest remaining example in Parramatta of a speculative private subdivision related to the railway. The pattern of subdivision remains along with a very intact collection

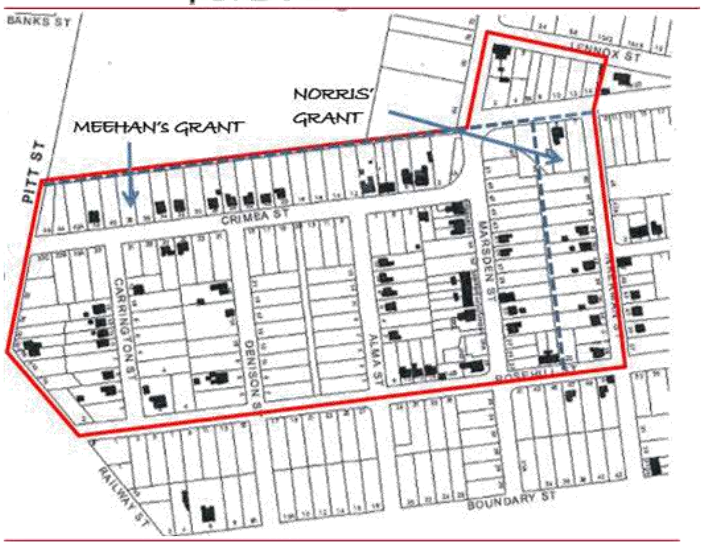
of early pre- 1900 cottages. The consistently single storey scale of most of its housing and associated shops, and the range of building styles, from the 1850s to the 1960s, clearly demonstrate the way in which this suburb gradually developed and allows its history to be understood.

Significant Characteristics

- gently sloping landforms on either side of A'Becketts Creek and views across houses and the park to city buildings beyond
- that most of the original regular 50 by 150 foot allotments remain
- contains single storey freestanding dwellings or pairs of semis separated from the street and neighbours by planted garden space
- there is a consistency in the scale of mostly single storey houses
- few street trees so buildings enclose street space
- enclosed character reinforced by:
  - width of allotment - 50 feet or less
  - early buildings built on or close to front fence
  - groups of early cottages on narrow lots built close together and close to the street
  - small groups of one or two storey shops at or near the corner
- houses stand parallel to the street
- predominance of modest houses dating from 1850s - 1960s which collectively show how the area has grown, and which provide the historic significance and character of the area
- limited range of building materials - brick, timber, fibro, tiles and iron
- age of the houses often apparent by the depth of the front garden from 1 - 8 m
- space between building line and front fence is without garages or carports
- pattern of narrow driveway openings beside most houses leading to backyard garages
- front gardens visible from the street over low fences, generally of lightweight such as timber or wire mesh on timber frame
- familiar suburban timber paling fence to side and back boundaries

PART 4 | 4.4





Replacement Figure 4.4.4.2.2

Figure 4.4.4.2.2
Significant Characteristics

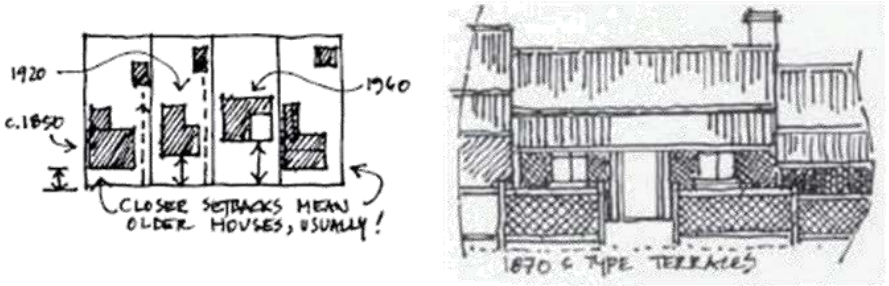


Figure 4.4.4.2.3
Typology and Siting

Objectives

O.1 To maintain the ~~area's~~ single storey character of the area's streetscape.

O.2 To ensure new developments and additions ~~to increase accommodation~~ complement and are sympathetic to the existing character of the conservation area~~are modest~~.

~~O.2~~

Design Controls

Subdivision

C.1 Consider re-subdivision along the length of the allotment where it would not affect the setting of an existing building listed at the end of this Clause, or the character of the street

C.2 Avoid re-subdivision across line of subdivision or by amalgamation of back garden space.

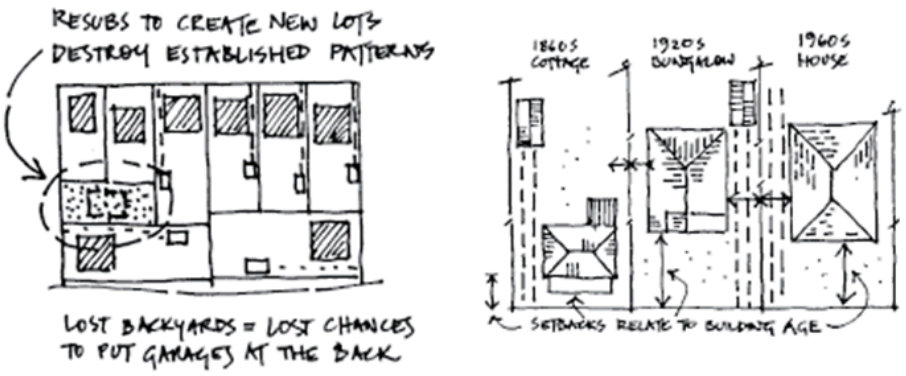


Figure 4.4.4.2.4
Subdivision

C.3 Torrens Title subdivision for dual occupancy development is not permitted.

C.4 Strata Title subdivision for dual occupancy development is permitted at the rear of properties where the proposed new development complements and is compatible with the existing character of the conservation area and retains an adequate curtilage for significant contributory buildings or heritage items.

Siting and Garden Area

C.5 Maintain the historical pattern of development of detached dwellings with **front and side gardens.** ~~space around, with the oldest dwellings close to the front boundary and later dwellings and other buildings with larger setbacks~~

C.6 Keep ~~views~~ **spaces** around and between buildings.

C.7 ~~Maintain amenity and privacy of back gardens.~~

C.8 Keep at least ~~50~~**50**% of the site for garden area.

C.9 Keep driveways to garages/carports in back yards.

C.10 Ensure similar side boundary setbacks to those existing.

C.11 Avoid additions to the front or side of an existing house. Linked pavilions or skillions at back of a house are supported as a form of additions.

C.12

~~a~~ **Detached additions may be permitted at the rear of properties.**

~~C.11~~**C.13** **Attached or detached dual occupancy development can be considered for the rear of properties for lots that have a minimum area of 600 m²**~~Dual occupancy development is not considered to be appropriate, except where it can be accommodated in a modest attached addition to the rear of existing house~~.

~~C.12~~**C.14** New buildings **associated with dual occupancy development**

should be located at the rear of properties, behind existing buildings, and a minimum distance of 20m from the front street alignment ~~not be established closer than 8m to the front street alignment~~. Where possible new buildings should be set further back with tree planting between the existing and new buildings.

C.15 New buildings should not be constructed with zero side setbacks except on lots narrower than 10m.

~~C.13~~C.16 Rear setbacks for detached additions, secondary dwellings or dual occupancy development are to be a minimum of 15% of site length

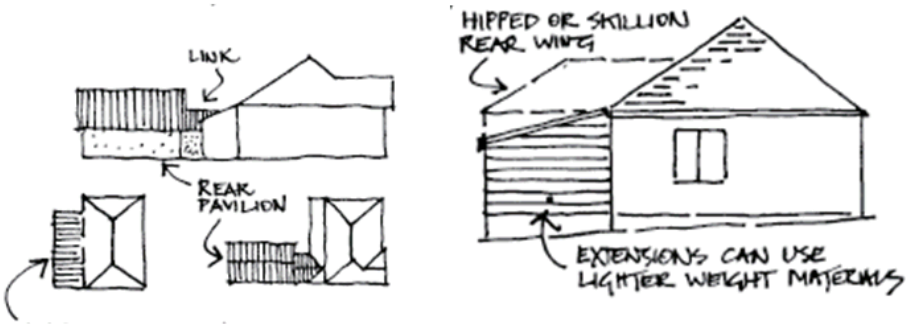
Alterations and Additions

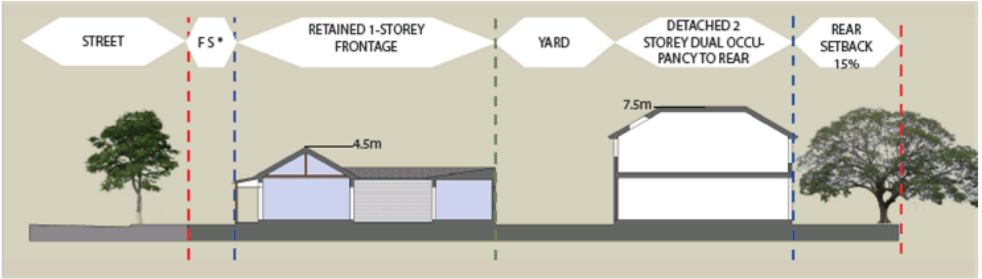
C.17 Avoid painting or re-skinning original brick walls.

C.18 All additions to existing single story buildings shall be limited to a single storey and additions to existing two storey buildings shall be limited to two storeys.

C.19 Detached additions may be permitted to a height of either 7.5m or 9m. Where height is limited to 7.5m the second storey shall be contained within the roof of the building. Where height is limited to 9m, the wall height (measured to underside of the eaves) of two storey additions must be limited to 6m on frontages visible from the street or consistent with eaves of existing two storey buildings on site to minimise the bulk of the addition.

~~C.14~~C.20 Additions to a height of 7.5m/9m should be no more than two levels (inclusive of an attic or a mezzanine) at any given point.





New figure for permitted dual occupancy development

Figure 4.4.4.2.5
~~Alterations and~~ Additions and New Development

New Development

~~C.3~~C.21 The maximum height of dual occupancy development or a secondary dwelling shall be 7.5m or 9m. Where height is limited to 7.5m the second storey shall be contained within the roof of the building. Where height is limited to 9m, the eaves of the building must be limited to 6m on frontages visible from the street or consistent with eaves of existing two storey buildings on site to minimise the bulk of the building. ~~Single storey scale with maximum wall height to relate to any nearby existing significant building listed above.~~

C.22 New buildings associated with dual occupancy development and secondary dwellings are to be designed and sited so that the existing building on the site remains the visually dominant element, and so that the new buildings have limited or no visibility. This is particularly important if the existing building is a heritage item or contributory building.

C.23 The materials, detailing and colours of new buildings are to be sympathetic to the existing house on the property if it is a heritage item or contributory building and to the character of the conservation area.

C.24 New buildings are not to be designed as a copy of historic buildings in the area, but rather are to have a design that complements the character of the heritage conservation area.

~~C.15~~C.25 Roofs should be hipped or gabled pitched and should not exceed 35 degrees in pitch. Rooms in roof can be considered where ventilated only by flat, in-plane skylights.

~~C.16~~C.26 Setback of 8m or more for any new house

~~C.17~~C.27 Side driveway access to garage in backyard.

PART 4 | 4.4

~~C.18~~C.28 Materials for new buildings of face or common bricks, timber or fibro, with terracotta tile or corrugated steel roofs.

~~C.19~~C.29 Avoid boundary-to-boundary development which prevents garages and carports being located in the rear yard. In exceptional cases, where the lot is less than 10m wide, a front garage may be integrated with a new house, providing that it is setback from the front wall of the house by a minimum of 1m and its design and construction avoids negative impact on the streetscape.

~~C.20~~C.30 Avoid hearted, speckled, multi-coloured or textured bricks in light colours.

C.31 Avoid imitation slate or obtrusively coloured roofing materials.

~~C.4~~C.32 Any development application for a dual occupancy development is to be accompanied by measures that provide for the conservation and upgrade of the existing house on the property and contributes to the positive qualities of the streetscape. Measures may include the reconstruction or restoration of original elements and or the removal of unsympathetic alterations and additions, including inappropriate building elements.

Garages, carports and other ancillary development

~~C.21~~C.33 Keep side driveways free of structures. In exceptional cases, where the lot is less than 10m wide, a front garage may be integrated with a new house, providing that it is setback from the front wall of the house by a minimum of 1m and its design and construction avoid negative impact on the streetscape.

~~C.22~~C.34 ~~Secured~~ Paved standing space ~~only~~ to the side of a house ~~may allow better use of limited site area for garden~~ may be allowed where it is not possible to create a garage or carport.

~~C.23~~C.35 ~~Continue the~~ For garages and carports use ~~of~~ lighter weight cladding materials such as timber, ~~imitation timber cladding~~ timber weatherboards or corrugated iron.

C.36 Only one driveway should be permitted for each allotment and its width is to be minimised. Driveways should not include provision of passing bays ~~Driveways should not continue over footpath space~~.

~~C.5~~C.37 New and replacement driveways should be created of gravel and brick paving unless there are engineering reasons preventing the use of these materials.

~~C.24~~C.38 Garages and carports should not be integrated with the house or be located at side driveways ~~(including carports),~~ except where the allotment is less than 10m wide.

4.4

Fences

~~C.25~~C.39 Fences at the following properties must be retained:

- Crimea Street: Nos 17, 19, 21, 33
- Denison Street: Nos 10, 11, 16*

* Heritage Item

~~C.26~~C.40 For front boundaries, continue with fences of varied unobtrusive lightweight materials such as timber or wire mesh on timber frame with hedges if desired. Hedges could be planted along the fence if desired.

~~C.27~~C.41 ~~Where existing~~Existing, timber framed fences sheeted with corrugated iron should be maintained, and where necessary, replaced with a fence of the same height and materials.

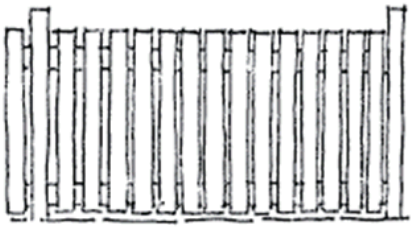
~~C.6~~C.42 ~~Avoid creating high~~ High front privacy walls of brick, timber or brush are not acceptable.

C.43 New brick front fences are not ~~desirable~~ acceptable, except where there is evidence of an earlier brick fence lost or changed since its construction.

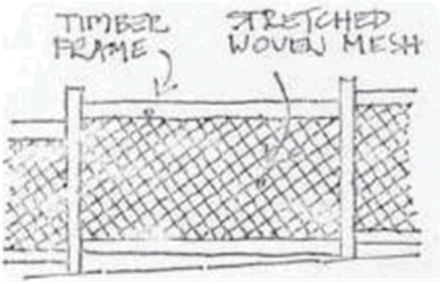
C.44 Colorbond steel fences are not to be used for side and rear boundaries. Pool, mesh, woven wire and metal slat fences and gates are not to be used within the front setback.

C.45 Rear fences for lots on Crimea Street backing onto Ollie Webb Reserve are to match front fence requirements.

~~C.7~~



After 1920, picket fences were more plain in design and avoided fancy tops



Cyclone mesh fences are later but appropriate low-cost front fences for older homes

Figure 4.4.4.2.6
Fences

Public Lands

~~C.28~~C.46 Conserve and enhance those elements of the public domain which contribute to an understanding of the history of the area.

~~C.29~~C.47 Improve the residential amenity of the area by screening structures which intrude upon that amenity.

~~C.30~~C.48 Improve public enjoyment of public open spaces and views.

~~C.31~~C.49 Maintain and restore (where they remain beneath the bitumen) the sandstone kerbs and gutters in Lansdowne and Inkerman Streets.

~~C.32~~C.50 Prepare, plant and maintain a landscape plan for the drainage easement

and park between Inkerman and Glebe Streets. This plan will need to respond to the modest historic suburban character of the area.

~~C.33 Plant a dense strip of evergreen trees along the grass verge on the north side of Lennox Street and the north side of Lansdowne Street to screen the intrusive scale and materials of the new flats from the low scale suburban character of the Conservation Area.~~

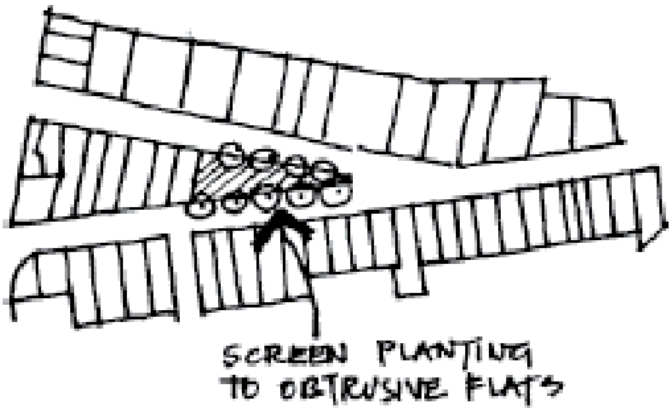


Figure 4.4.2.7 to be removed

PART 4 | 4.4

~~Figure 4.4.4.2.7~~
~~Significant Characteristics~~

Existing Significant Buildings

The following houses which are shown on the 1895 Detail Survey must be retained, together with their original features:

Houses built between 1850s and 1880s

- **Inkerman Street: No 40* (c1870)**
- ~~**Lansdowne Street: No 19* (c1870)**~~
- **Lennox Street: Nos 1 and 3* (1850s-1860s)**
- **Marsden Street: Nos 44* 46* 48* 50* (1880s) 56* 58* (1860)**

Houses Built From 1880s - 1895

- **Alma Street: Nos 6, 8, 10**
- **Carrington Street: Nos 4*, 9, 11, 13, 15**
- **Crimea Street: Nos 6, 25*, 26, 34, 42**
- **Denison Street: No 16**
- **Inkerman Street: No 34***
- **Lansdowne Street: Nos 5, ~~35*, 41*, 43*, 49*, 51*~~**
- **Marsden Street: Nos 38, 39, 40B, 41, 42, 60, 62, ~~74*, 76*~~**
- **Pitt Street: No 58**
- **Rosehill Street: Nos 10, 12, 14, 16, 18**

* Heritage Item

Any building not listed above but located on the site of a building shown on the 1895 Detail Survey should not be demolished until Council has examined the building for any evidence of the structure extant in 1895.

The following buildings constructed since 1895 must be retained:

Federation houses of the 1900s - c1920

- Carrington Street: No 3

- Crimea Street: Nos 5, 9, 12, 13, 18, 30, 33A, 40
- Denison Street: No 6
- Inkerman Street: Nos 38, 44
- Lansdowne Street: Nos 7, ~~23, 25, 27, 39~~
- Marsden Street: Nos 23, 25, 27, 31, 35, 37, 43, 45, 47, 49, 51
- Rosehill Street: No 20

Bungalows of the 1920s & 1930s

- Alma Street: Nos 1, 3, 5, 7, 9, 11, 13, 15
- Carrington Street: No 5
- Crimea Street: Nos 8, 8A, 11, 15, 16, 17, 19, 23, 31, 38, 46
- Denison Street: Nos 4, 9, 10, 11, 13, 15, 17, 19
- Inkerman Street: No 32
- Lansdowne Street: Nos 2, 4, 6A, 8, 9,10, 12, ~~13, 15, 17, 31, 37~~
- Marsden Street: Nos 23, 33, 49, 51, ~~72~~

Where possible, the following intact early post-war buildings should be retained:

Intact Houses of late 1940s & 1950s

These houses complete the developmental history of this area. Their scale, siting, setbacks and materials complement the character of the area. Their conservation is to be encouraged:

- Alma Street: No 4
- Carrington Street: Nos 1, 6, 7, 8,12
- Crimea Street: Nos 2, 3, 4, 7, 14, 21, 22, 24, 27, 33, 33B, 36
- Denison Street: Nos 8, 21
- Inkerman Street: No 36
- ~~Lansdowne Street: No 21~~
- Pitt Street: Nos 52, 54, 56
- Railway Street: Nos 101, 103, 105
- Rosehill Street: No 2

LEADING

ITEM NUMBER	13.7
SUBJECT	Precinct Support Scheme Funding Agreement for Embellishment and Upgrades to Sturt and Acacia Parks, Telopea
REFERENCE	F2015/02009 - D06030751
REPORT OF	Project Officer

PURPOSE:

For Council to consider a draft funding agreement with the Department of Planning and Environment (DPE) regarding embellishment and upgrades to Sturt and Acacia Parks in the Telopea Planned Precinct.

RECOMMENDATION

(a) **That** Council authorise the Acting Chief Executive Officer to execute the proposed funding agreement (**Attachment 1**) on behalf of Council.

(b) **Further, that** Council authorise the Acting Chief Executive Officer to negotiate the final project milestones (including timing and staging of funding) prior to execution of the agreement, and to make minor edits and corrections to the funding agreement of a non-policy and administrative nature.

INTRODUCTION – PRECINCT SUPPORT SCHEME FUNDING

1. A key pathway for rezoning precincts in Greater Sydney is the designation of certain areas as “Planned Precincts” by the Department of Planning and Environment (DPE). Planned Precincts have also formerly been called “Priority Precincts” or “Urban Activation Precincts”.

2. There are several such past and current precincts within the City of Parramatta, including Epping, Wentworth Point, Carter Street, Westmead, Wentworthville, and Telopea.

3. The NSW Government has established the Precinct Support Scheme (PSS) to assist councils to upgrade local infrastructure and provide high-quality urban environments in and around Planned Precincts. The scheme is administered by DPE, which disburses funding to Councils to deliver infrastructure associated with Planned Precincts. Generally, DPE makes available $5 million for one or more projects within each Planned Precinct.

4. This report puts forward for Council’s consideration a draft funding agreement relating to embellishment and upgrades to Sturt and Acacia Parks within the Telopea Planned Precinct.

BACKGROUND – TELOPEA PLANNED PRECINCT TIMELINE

5. **July 2015 - March 2017:** Council and NSW Land and Housing Corporation (LAHC) undertook a master planning process for a 64-hectare area in Telopea. This process involved two separate public consultation phases (March-April 2016 and August-September 2016) and concluded with publication of the Telopea Master Plan in March 2017. The Master Plan identified infrastructure

upgrades associated with growth in the precinct, which included upgrades to Sturt and Acacia Parks.

6. **March 2017:** Council (the Administrator) resolved to endorse 'in principle' the Telopea Master Plan prepared by LAHC in collaboration with Council, acknowledging that further refinement and analysis was required with respect to the:
   - Future detailed Local Environmental Plan (LEP) and Development Control Plan (DCP) provisions and controls
   - Nature and scale of intersection upgrades
   - Costing and funding mechanisms of identified infrastructure to support the anticipated population increases.

7. **1 June 2017:** DPE formally designated Telopea a Priority Precinct (now called Planned Precinct). The Planned Precinct boundary covers a larger area than the boundary of the Council/LAHC Telopea Master Plan area, as it includes a larger area spread across both sides of the existing rail line.

8. **13 October 2017:** The Minister for Planning released the Telopea Precinct Proposal Stage 1 for consultation. DPE decided to progress the Planned Precinct in two stages, with Stage 1 involving rezoning of land within Council/LAHC Master Plan area. Consistent with the Council/LAHC Master Plan, DPE's Stage 1 Precinct Proposal identified upgrades to Sturt and Acacia Parks. The Stage 1 Precinct Proposal also referenced that the NSW Government had allocated up to $5 million of additional funds through a PSS grant for local infrastructure upgrades in Telopea.

9. **November 2017 – April 2018:** Council and DPE officers resolved the contents of a draft PSS funding agreement in relation to upgrades to public open space in Telopea. The draft agreement relating to these upgrades is now put forward for Council's consideration.

SUMMARY OF DRAFT FUNDING AGREEMENT AND PROPOSED WORKS

10. The draft funding agreement is attached to this report at **Attachment 1**. The upgrade project is to take place between June 2018 – March 2021, with key milestones proposed as follows.

Milestone	***Description***	***Date completed***	***Funding required to achieve milestone***
Project commencement	Project Commencement *Next actions: Strategic concept designs and indicative cost plans*	June 2018	$0
Milestone 1	Completion of strategic concept designs, confirmation of scope and indicative cost plan *Next actions: Concept designs, community consultation and planning*	February 2019	$225,000

	approval		
Milestone 2	Completion of concept designs, community consultation and planning approvals *Next actions: Detailed design and construction tender*	August 2019	$525,000
Milestone 3	Construction commencement *Next action: Delivery*	December 2019	$10,000
Milestone 4	Construction completion *Next action: Commissioning*	December 2020	$4,230,000
Project completion	Public opening	March 2021	$10,000

11. The disbursement of the total funding amount under the agreement ($5 million incl. GST) is to be made as soon as practicable after project commencement in June 2018.

12. Council officers are reviewing the proposed project milestones (including timing and staging of funding) in order to align with Council's operational programming. Therefore, it is recommended that Council authorises the Acting Chief Executive Officer to negotiate the final project milestones (including timing and staging of funding) prior to execution of the agreement.

13. The embellishment and upgrade works to the parks would encompass the following elements, pending the outcomes of concept design and consultation:

- Minor earthworks
- Improved drainage
- Works around creek at Sturt Park (i.e. flood mitigation, bush regeneration, bioswales, etc.)
- Landscaping and turf
- New and upgraded park furniture elements such as seating, bike racks, bins, BBQs, bubblers, shade structures, etc.
- Playground and fitness equipment
- New, relocated toilet facilities
- Improved play courts
- Improved cricket pitch at Sturt Park
- Skate park upgrade at Sturt Park
- Improving park entrances and pathways
- Works to improve legibility and safety throughout the park

CONSULTATION

14. As is Council's standard practice with open space upgrades, the community will be consulted as part of this upgrade project. For a project with the potential scope of works identified here, Council would typically conduct an onsite community workshop (potentially in partnership with another Council community event) in each of the two parks to inform the development of a concept design. This concept design would then be placed on public exhibition for comment by those who attended the workshop/event and the wider public.

15. As noted above, the draft funding agreement proposes that consultation will occur between February 2019 and August 2019.

FINANCIAL IMPLICATIONS FOR COUNCIL

16. If executed, DPE will provide PSS funds to Council under the attached agreement to progress meeting open space needs in Telopea. As described previously in this report, the funding agreement with DPE is structured on completion of agreed milestones however, disbursement of funds is proposed in a lump sum upon project commencement.

17. Council is currently working with LAHC and DPE to review the current contributions framework as part of the Telopea Planned Precinct process, in order to ensure that the infrastructure needs of the precinct – including for open space - are met.

18. The receipt of the PSS funds relatively early in the precinct planning process will help maximise the infrastructure that is delivered alongside rezoning and redevelopment (rather than later, after significant growth has already occurred).

19. At a recent ward Councillor briefing session, the issue of alternative infrastructure in Telopea towards which the PSS funds could be directed was raised. If, while considering the draft agreement, Council decides that alternative infrastructure items in Telopea should be explored for PSS funding, then Council could resolve to:
    a. not authorise the CEO to execute the proposed funding agreement on behalf of Council (as per the recommendation);
    b. nominate alternative infrastructure projects within Telopea which could be the subject of an amended application for PSS funding;
    c. direct Council officers to continue negotiations with DPE on these nominated items; and
    d. request a further report be brought to Council relating to the outcomes of these further negotiations.

INTERNAL LEGAL REVIEW

20. Council's legal team has advised that the draft agreement is acceptable from a legal perspective.

RECOMMENDATION

21. Open space upgrades in Telopea are considered an appropriate item for the PSS funding program, as upgrades to the parks have been consistently identified throughout the precinct planning process, and public open space upgrades are able to be delivered relatively early in the redevelopment process (as Council already owns the land). It is therefore recommended that Council authorise the CEO to execute the proposed funding agreement on Council's behalf.

22. Council officers are reviewing the proposed project milestones (including timing and staging of funding) in order to align with Council's operational programming. Therefore, it is recommended that Council authorises the Acting Chief Executive Officer to negotiate the final project milestones (including timing and staging of funding) prior to execution of the agreement, as well as to make minor edits and corrections of a non-policy and administrative nature.

Sarah Baker
Project Officer Land Use Planning

Robert Cologna
A/Service Manager Land Use Planning

Sue Weatherley
Director Strategic Outcomes and Development

Jim Stefan
Acting Director City Services

ATTACHMENTS:

1⇩	Draft Precinct Support Scheme Funding Agreement - Telopea Planned Precinct - Acacia Park and Sturt Park Embellishment Project	28 Pages

REFERENCE MATERIAL

PRECINCT SUPPORT SCHEME FUNDING AGREEMENT

TELOPEA PLANNED PRECINCT

ACACIA PARK AND STURT PARK EMBELLISHMENT PROJECT

BETWEEN:

Name	Crown in right of the State of New South Wales represented by the Department of Planning and Environment (the **Department**)
A.B.N	ABN 38 755 709 681
Address	320 Pitt Street, Sydney, New South Wales, 2000

AND

Name	City of Parramatta Council a body politic of the State constituted under the *Local Government Act 1993* (**Council**)
A.B.N	ABN 49 907 174 773
Address	126 Church Street, Parramatta, New South Wales, 2150

(the **parties**)

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BACKGROUND

- The Department has identified the Telopea Precinct as a planned precinct.
- The NSW Government has established the Precinct Support Scheme (**PSS**) to assist local councils to upgrade local infrastructure and provide high quality urban environments in and around urban activation precincts.
- The Council has identified Works to the Telopea Precinct that can be funded through the PSS.
- The Department has agreed to provide the Total Funding Amount from the PSS to facilitate the carrying out of the Works by the Council.
- The objective of this Agreement is to document the agreed outcomes for the Project including Milestones and timing for payment of the Total Funding Amount and completion of the Project.
- The parties also agree that in the event that part of the Total Funding Amount is not required or used by the Council, that portion of the Total Funding Amount will be refunded by the Council to the Department.
- The Department agrees to provide, and the Council agrees to accept, the Total Funding Amount in accordance with the terms of this Agreement.

OPERATIVE PROVISIONS

1. Definitions and Interpretation

1.1 **Dictionary:** In this Agreement, unless the contrary intention requires:

(a) **"Agreement"** means this Agreement including the Attachments.

(b) "**Agreement Details**" means Attachment 1 to this Agreement.

(c) "**Acquittal Certificate"** means Attachment 5 of this Agreement.

(d) **"Business Day"** means the day which is not a Saturday, Sunday or public holiday in Sydney, NSW.

(e) "**Telopea Precinct**" means the area shown in the Project Location Plan.

(f) **"Commencement Date"** means the date that this Agreement is executed by both parties.

(g) **"Confidential Information"** means any information and all other knowledge at any time disclosed (whether in writing or orally) to a party, or acquired by a party which:

(i) is by its nature confidential;

(ii) is designated, or marked, or stipulated as confidential; or

(iii) the party knows or ought to know is confidential;

But does not include information which:

(iv) is or becomes public knowledge other than by breach of this Agreement;

(v) is in a party's lawful possession without restriction in relation to disclosure before the date or receipt of the information from another party or a third party;

(vi) has been developed or acquired by a party independently of this Agreement;

(vii) is ascertainable through independent enquiries;

(viii) may be or is required to be disclosed pursuant to Premier's Memorandum No. 2007-01 Public Disclosure of Information arising from NSW Government Tenders and Contracts dated 8 January 2007, as amended or updated from time to time; or

(ix) is required to be disclosed pursuant to law, regulation, legal process or by a regulatory authority.

(h) **"Conflict of Interest"** means an actual or perceived conflict between a person's public duty and their private or personal interest.

(i) **"GST Law"** means *A New Tax System (Goods & Services Tax) Act 1999*, related legislation and any delegated legislation made pursuant to such legislation.

(j) "**Material Clause**" means clause 3.2 (Timing of Payment), clause 3.3 (Use of Total Funding Amount), clause 4 (Milestones) and clause 13 (Compliance with Laws) of this Agreement.

(k) **"Milestone"** means each event described as a Milestone in Item 4 of the Agreement Details.

(l) **"Project"** means the project description as described in Item 3 of the Agreement Details.

(m) **"Project Commencement Date"** means the date specified in Item 3 of the Agreement Details as the project commencement date or another date agreed between the parties.

(n) **"Project Completion Date"** means the date specified in Item 3 of the Agreement Details as the project completion date.

(o) "**Project Location Plan"** means Attachment 2 of this Agreement.

(p) **"Project Report"** means Attachment 4 of this Agreement.

(q) **"Representative"** means the Department representative or Council representative identified in Item 1 of the Agreement Details, as the context requires.

(r) **"Tax Invoice Requirements"** means Attachment 3 of this Agreement.

(s) **"Term"** means the duration of this Agreement, beginning on the Commencement Date and ending on the earlier of:

(i) the Project Completion Date; or

(ii) the date this Agreement is terminated in accordance with the Agreement.

(t) **"Total Funding Amount"** means the total funding amount specified in Item 2 of the Agreement Details.

(u) **"Unexpended Funding"** means the Total Funding Amount paid to the Council, or any part of the Total Funding Amount, that is unspent at the Project Completion Date and includes any part of the Total Funding Amount that is committed but unspent.

(v) **"Works"** means the design, planning and construction of embellishments at Acacia and Sturt Parks in Telopea as specified in Item 3 of the Agreement Details.

(w) **"Variation Schedule"** means Attachment 6 to this Agreement.

1.2 **Interpretation:** Except where the context otherwise requires:

(a) a singular number includes a reference to a plural number and vice versa;

(b) a gender includes a reference to the other genders and each of them;

(c) any person or company will mean and include the legal personal representative, successor in title, and permitted assigns of such person or company as the circumstances may require;

(d) words and expressions importing natural persons include partnerships, bodies corporate, associations and governmental and local authorities and agents;

(e) any organisations, associations, societies, groups or bodies will, in the event of them ceasing to exist or being reconstituted, renamed or replaced or if the powers or functions of any of them are transferred to any other entity, body or group, refer respectively to any such entity, body or group, established or constituted in lieu thereof or succeeding to similar powers or functions;

(f) statues, regulations, ordinances or by-laws will be deemed for all purposes to be extended to include a reference to all statues, regulations, ordinances or by-laws amending, consolidating or replacing same from time to time;

(g) a month will be construed as a reference to a calendar month;

(h) "includes" and "including" mean by way of example but without limitation;

(i) monetary references are references to Australian currency;

(j) where any time limit is pursuant to this Agreement falls on a Saturday, Sunday or public holiday in the State of New South Wales then that time limit will be deemed to have expired on the next Business Day;

(k) where the parties are comprised of more than one person, each of the parties obligations will bind those persons jointly and severally and will be enforceable against them jointly and severally;

(l) the headings used in this Agreement are for convenience only and will not affect the interpretation of this Agreement;

(m) no rule of construction operates to the detriment of a party only because that party was responsible for the preparation of this Agreement or any part of it; and

(n) where there occurs a reference to the doing of anything by the Department including giving any notice, consent, direction or waiver, this may be done by any officer we duly authorise.

2. Term

2.1 This Agreement commences on the Commencement Date and will continue for the Term.

2.2 This Agreement may be extended at the discretion of the Department for a period and on such amended terms as agreed between the parties in writing.

2.3 **Commencement of Project**: The Council must commence the Project no later than the Project Commencement Date or a later time approved by the Department.

3. Provision of Total Funding Amount

3.1 **Total Funding Amount:**

(a) The Department will provide up to a maximum of the Total Funding Amount to the Council for the Project in a single payment to fund all project Milestones:

(b) The Council agrees to receive the Total Funding Amount in accordance with, and subject to the terms of, this Agreement.

3.2 **Timing of payment**: The Department will provide, or enable the provision of, the Total Funding Amount to the Council in accordance with the following:

(a) Payment to the Council on or as soon as practicable after the Project Commencement Date, unless otherwise agreed by the parties.

(b) Prior to the Department making any payments in accordance with this clause, the Council must provide to the Department:

(i) a valid tax invoice (including itemisation of the GST component) in accordance with the Tax Invoice Requirements for the Total Funding Amount requested.

3.3 **Use of Total Funding Amount**: The Council will use the Total Funding Amount for the Project.

3.4 **Conditions precedent to provision of the Total Funding Amounts:** The payment of the Total Funding Amount, or any part of it, is conditional on the NSW Parliament making all the necessary appropriations.

3.5 **Repayment of Unexpended Funding:** The Council will repay any Unexpended Funding to the Department upon request by the Department.

3.6 **Right to recall Total Funding Amount:** Without limiting the Department's rights under this Agreement, if:

(a) Council breaches a Material Clause and the Council fails to remedy that breach within a reasonable time following receipt of a written request from the Department; or

(b) the Department terminates this Agreement under clause 18,

the Department may, by notice in writing, require the refund of the Total Funding Amount (or any part of it).

3.7 If the Department exercises the right to require the refund of all or part of the Total Funding Amount in accordance with clause 3.6, the Council must refund:

(a) the full amount of the Total Funding Amount; or

(b) the part of the Total Funding Amount that is the subject of the notice,

within the period (which must be reasonable in the circumstances) specified in the written notice.

3.8 Despite clause 3.7, and unless the Department terminates this Agreement, the Council is not required to refund all or part of the Total Funding Amount if:

(a) the Council fully performs each and every Milestone to the Department's reasonable satisfaction; or

(b) the Department is otherwise satisfied that the Milestones will be met by the Council in accordance with this Agreement,

within the period specified in the written notice given under clause 3.7.

3.9 If this Agreement is terminated by the Department, the Department agrees to discuss with the Council how the Total Funding Amount or any remaining part of the Total Funding Amounts might be reallocated to other projects similar to the Project.

3.10 If any dispute arises regarding the refund of the Total Funding Amount, the parties shall resolve the dispute in accordance with clause 20 (Dispute Resolution).

4. Milestones

4.1 The Council must complete, to the satisfaction of the Department:

(a) each Milestone; and

(b) each obligation or requirement imposed by each Milestone,

on or before the date specified for the completion of that Milestone or as otherwise agreed in writing between the parties.

5. Project Plans

5.1 The Council must provide a Project Plan for each project endorsed on the project list.

5.2 The Project Plan to be provided to the Department within 20 business days of the project list being endorsed.

5.3 The Project Plan for the purposes of clause 5 must be in a format jointly agreed between the Department and the Council.

6. Project Reporting

6.1 The Council must provide a Project Report at least every 3 months to the Department. The Project Reports must be provided, regardless of progress in carrying out the Project.

6.2 Each Project Report for the purposes of this clause 6 must be in the format of the schedule of the Project Report and must address the matters specified in that schedule, including the extent to which (and the times at which) Milestones or tasks described in Item 4 of the Agreement Details have been completed, and whether the relevant outputs or outcomes in the table have been realised. Any major changes to the Project and any major issues arising out of the Project are to be outlined.

6.3 Each Project Report must be endorsed by an appropriate representative of the Council before being provided to the Department.

6.4 The Council must provide the Department with any additional Project Report it requests.

7. Project Review and Evaluation

7.1 The Department may assess the Project's progress or delivery at any stage and may engage independent contractors to do this. The Council must promptly make all relevant records available for scrutiny for this purpose. It is noted that documents associated with Commercial 'In confidence' and other procurement processes do not have to be disclosed.

8. Project Finalisation

8.1 A final Project Report and Acquittal Certificate indicating the status of the Total Funding Amount received for the Project is required to be provided to the Department on completion of the Project.

8.2 All Project Reports and the Acquittal Certificate should be signed by a delegated officer of the Council.

9. Project Responsibility

9.1 The Council acknowledges and agrees that it is solely responsible for delivery and completion of the Project within the terms and conditions of this Funding Agreement. The Council must ensure that it and any organisation or person engaged to carry out work adhere to all regulatory requirements associated with carrying out the Project.

10. Acknowledgement of Support

10.1 Council must acknowledge the NSW Government's support for the Project in accordance with the NSW Government's Funding Acknowledgement Guidelines for

recipients of NSW Government infrastructure Grants, including acknowledgement of NSW Government support on signage and in any other public communications.

10.2 Council must, unless the Department agrees otherwise, use the NSW Government's Waratah logo in conjunction with all acknowledgements of NSW Government support in accordance with the Funding Acknowledgement Guidelines.

11. Publicity

11.1 Council must provide the Department with at least 15 Business Days' notice of any proposed announcements, launches or public events relating to the Project, and provide an opportunity for a representative of the NSW Government to attend and speak at any launch or public event for the Project.

11.2 The Department may issue public communications on the provision of the Total Funding Amount to Council and progress on completing the Project, including milestones. Where practicable to do so, the Department will give Council advanced notice of such communications and their content.

12. GST

12.1 The parties acknowledge and agree that the provision of the Total Funding Amount by the Department to the Council is not consideration for a supply for GST purposes. The Department is not liable to pay to the Council an amount equal to GST payable on the supply (**GST Amount**) in addition to the Total Funding Amount.

12.2 Despite clause 12.1, if the provision of the Total Funding Amount is determined to be a taxable supply liable for GST, the Council acknowledges and agrees that the Total Funding Amount is inclusive of GST and will not be increased by the amount of the Council's GST liability. The Council will pay any GST Amount on the supply and will not seek reimbursement from the Department or request it to attend to payments of the GST Amount.

12.3 The Council acknowledges that it will be liable for GST on the supply of goods and services acquired with the Total Funding Amount. The Council will pay that GST Amount and will not seek reimbursement from the Department or request it to attend the payment of that GST Amount.

12.4 Subject to this clause, the Council warrants that it is registered for GST purposes as at the date of this Agreement and will continue to be so for the Term.

12.5 Subject to this clause, any invoice rendered by the Council in connection with a supply under this Agreement must conform to the requirements for a tax invoice under the GST Law as set out in the Tax Invoice Requirements.

13. Compliance with law

13.1 The Council agrees:

(a) to comply with all applicable standards, laws, regulations policies and statements for the Project;

(b) not do anything that would cause the Department to breach its obligations under any legislation.

13.2 The Council must hold all rights, permissions, approvals and consents required to conduct the Project and otherwise fulfil its obligations under this Agreement.

14. Accountability

14.1 The parties have statutory obligations to ensure the accountability of expenditure of funds including the Total Funding Amount and, accordingly, the parties are required to be accountable for the Total Funding Amount provided and received under this Agreement.

15. Indemnity and release

15.1 The Council shall at all times indemnify, hold harmless and defend the Department and its officers, employees and agents (**those indemnified**) from and against any liability or loss (including reasonable legal costs and expenses), which is suffered or incurred by any of those indemnified to the extent such loss or damage is caused or contributed to by the unlawful, wrongful, wilful or negligent act of the Council, or the officers, employees, agents, contractors or volunteers of the Council with respect to the Project and the use by the Council of the Total Funding Amount.

15.2 The liability of the Council to indemnify those indemnified under this Agreement shall be reduced proportionally to the extent that any unlawful, wrongful, wilful or negligent act or omission of those indemnified caused or contributed to the liability or loss.

15.3 The indemnity contained in this clause is a continuing obligation of Council separate and independent of any other responsibility of the Council and will continue beyond the Term.

15.4 The Council agrees to release and discharge those indemnified from any action, proceedings, claim or demand which, but for this provision, might be brought against or made upon those indemnified.

16. Confidentiality

16.1 **Obligation to keep confidential:** Each party must keep the Confidential Information of each other party in confidence and not disclose the Confidential Information to any person without the other party's prior written consent.

16.2 **Limited Disclosure:** A party may disclose the Confidential Information of another party to their personnel and legal and professional advisors provided they ensure that the recipient:

(a) keeps the Confidential Information confidential; and

(b) does not use the Confidential Information except for the purposes of this Agreement.

17. Variation

17.1 Written agreement between the parties must be obtained for any variation to:

(a) this Agreement; and

(b) any of the matters outlined in the attachments to this Agreement.

17.2 A variation under clause 17.1(b) must be made in accordance with the Variation Schedule or in accordance with in any other document required by the Department in its reasonable discretion.

18. Ending this Agreement

18.1 **Termination after 20 days notice:** A party may (by giving the other parties 20 days written notice) terminate this Agreement if any one or more of the following occurs:

(a) one party breaches a Material Clause of this Agreement in a manner that, in the other party's reasonable opinion, is not capable of remedy; or

(b) one party breaches a Material Clause of this Agreement that in another party's reasonable opinion is capable of remedy and the party has failed to comply with a notice from the other party to remedy the breach within the reasonable period for remedy specified in that notice.

19. Obligations when this Agreement ends

19.1 **Rights and remedies not prejudiced:** Any termination of this Agreement by a party is without prejudice to any accrued rights or remedies of that party.

19.2 **Clauses that survive termination:** Clauses 14 (Accountability), 15 (Indemnity and release), 16 (Confidentiality), and this clause 19 (Obligations when this Agreement ends) and any other provision of this Agreement which by its nature should survive termination will survive termination, expiry or repudiation of this Agreement.

20. Dispute Resolution

20.1 The parties must attempt to settle any dispute in relation to this Agreement in accordance with the following provisions, before resorting to court proceedings or other dispute resolution process.

(a) a party claiming that a dispute has arisen, must give written notice of the dispute to the other party. On receipt of this notice the parties must within 14 days of receipt seek to resolve the dispute.

(b) if the dispute is not resolved within this 14 day period or within such further period as the parties agree in writing then the dispute is to be referred to the Australian Commercial Dispute Centre (**ACDC**) for mediation.

(c) the mediation shall be conducted in accordance with the ACDC Mediation Guidelines which set out the procedures to be adopted, the process of selection of the mediator and the costs involved.

(d) if the dispute is not settled within 28 days (or such other period as agreed to in writing between the parties) after appointment of the mediator, or if no mediator is appointed within 28 days of the referral of the dispute to mediation, the parties may pursue any other procedure available at law for the resolution of the dispute.

(e) nothing in this clause (Dispute Resolution) will prevent either party from seeking urgent interlocutory relief.

21. Notices

21.1 **Change of contact details:** The parties must inform each other within 7 days of any changes to its contact details set out in Item 1 of the Agreement Details.

21.2 **Notice Requirements:** A notice under this Agreement must be:

(a) in writing, directed to the Representative of the other party as set out in Item 1 of the Agreement Details; and

(b) forwarded to the address, facsimile number or the email address of that Representative as set out in Item 1 of the Agreement Details.

21.3 **When a notice is served:** A notice under this Agreement will be deemed to be served:

(a) in the case of delivery in person – when delivered to the recipient's address for service and a signature received as evidence of delivery;

(b) in the case of delivery by post – within three (3) Business Days of posting;

(c) in the case of delivery by facsimile – at the time of dispatch if the sender receives a transmission report which confirms that the facsimile was sent in its entirety to the facsimile number of the recipient; or

(d) in the case of delivery by email – on receipt of confirmation by the sender that the recipient has received the email.

21.4 **Delivery late in the day:** Notwithstanding the provisions of this clause 19 (Notices), if delivery or receipt of a communication is on a day which is not a Business Day in the place to which the communication is sent or is later than 5pm (local time in that place) it will be deemed to have been duly given or made at 9am (local time in that place) on the next Business Day in that place.

22. General

22.1 **Entire agreement:** This Agreement constitutes the entire agreement and understanding between the parties as to the subject matter of this Agreement. Any prior arrangements, representations or undertakings as to the subject matter of this Agreement are superseded.

22.2 **Non-waiver:** No failure or delay by a party in exercising any right, power or remedy under this Agreement and no course of dealing or grant by a party to the other party of any time or other consideration, will operate as a waiver of the breach or a default by a party. Any waiver by a party of a breach of this Agreement will not be construed as a waiver of any further breach of the same or any other provision.

22.3 **Conflict of interest:** The Council warrants that at the date of this Agreement, no Conflict of Interest exists or is likely to arise in relation to execution of this Agreement or its subject matter. The Council undertakes to notify the Department, in writing, immediately upon becoming aware of the existence, or possibility, of a Conflict of Interest and agrees to comply with any reasonable directions of the Department to appropriately manage the Conflict of Interest, within the time frame stipulated by the Department in writing.

22.4 **Severability:** If any part of this Agreement is prohibited, void, illegal or unenforceable, then that part is severed from this Agreement but without affecting the continued operation of the remainder of the Agreement.

22.5 **Relationship:**

(a) Nothing in this Agreement is intended to create a partnership, joint venture or agency relationship between the parties; and

(b) A party will not hold itself out to be an employee, partner, agent or representative of the other party.

22.6 **Applicable law:** This Agreement is governed by, and must be construed in accordance with, the laws in force in the state of New South Wales.

22.7 **Governing jurisdiction:** The parties submit to the exclusive jurisdiction of the courts exercising jurisdiction in the state of New South Wales and the courts of appeal therefrom.

EXECUTED AS A DEED on …… **2018**.

Signed, sealed and delivered for and on behalf of the Crown in right of the State of New South Wales, but not so as to incur any personal liability	)	
by…… (name and position of authorised officer)	)	…… (signature of authorised officer)
in the presence of…… (name of witness)	)	…… (signature of witness)

Signed, sealed and delivered for and on behalf of the Council of A.B.N: ……	)	
by…… (name and position of authorised officer)	)	…… (signature of authorised officer)
in the presence of…… (name of witness)	)	…… (signature of witness)

ATTACHMENT 1 – AGREEMENT DETAILS

Item 1: Contact Details

The Department	
Address:	320 Pitt Street, Sydney NSW 2000
Facsimile:	9228-6455
Email:	Stuart.melville@planning.nsw.gov.au
Representative:	Stuart Melville

Council	
Address:	126 Church Street, Parramatta, New South Wales, 2150
Facsimile:	02 9806 5144
Email:	rcologna@cityofparramatta.nsw.gov.au
Representative:	Robert Cologna

Item 2: Funding Amount

Total Funding Amount:	$5,000,000.00 (inclusive of GST)

Item 3: Project 3

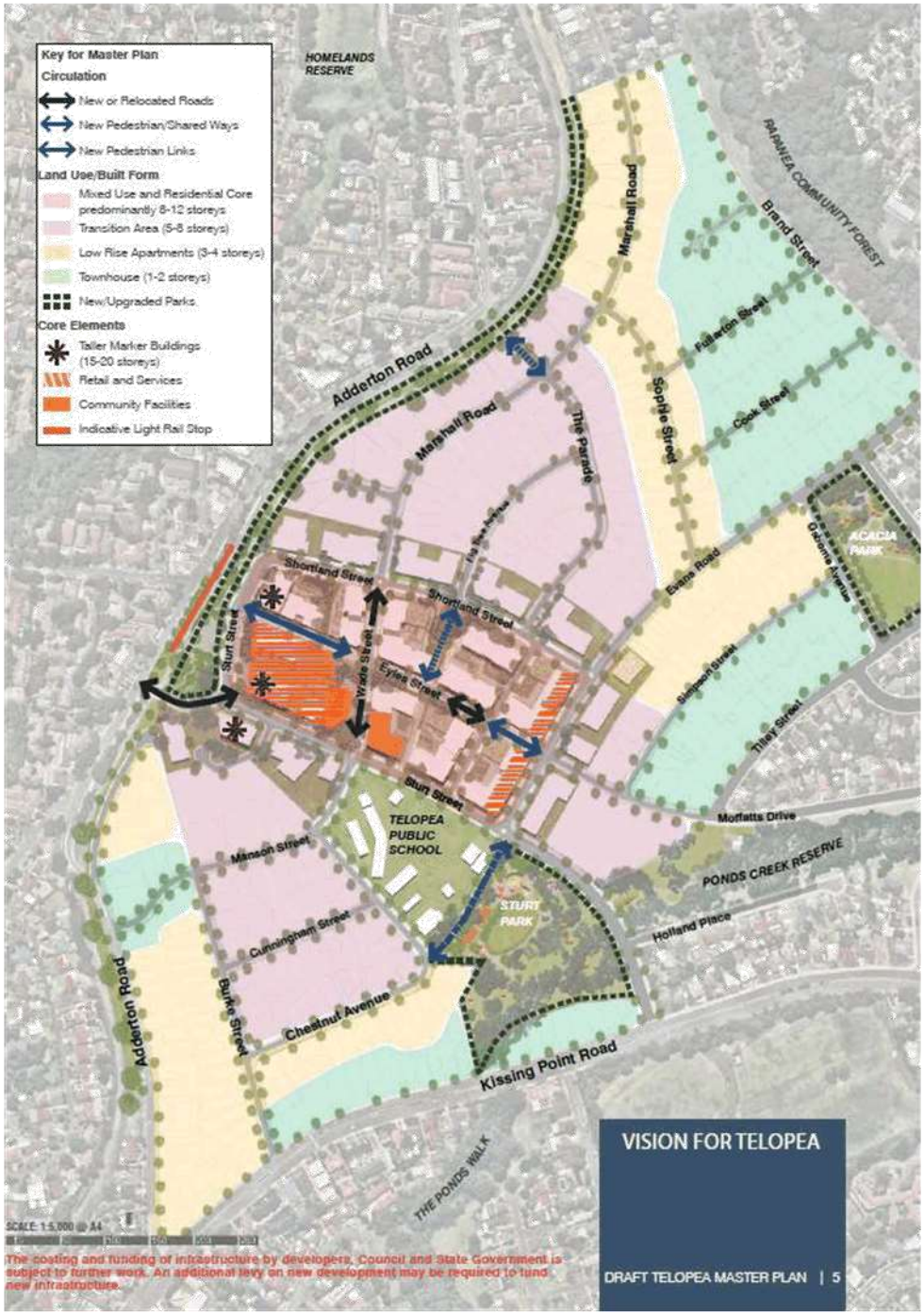
Project Commencement Date:	The date this Agreement is executed by both parties
Project Completion date:	March 2021
Project Description:	• Minor earthworks • Improved drainage • Works around creek at Sturt Park (i.e. flood mitigation, bush regeneration, bioswales, etc.) • Landscaping and turf • New and upgraded park furniture elements such as seating, bike racks, bins, BBQs, bubblers, shade structures, etc. • Playground and fitness equipment

	• New, relocated toilet facilities • Improved play courts • Improved cricket pitch at Sturt Park • Skate park upgrade at Sturt Park • Improving park entrances and pathways • Works to improve legibility and safety throughout the park

Item 4: Project Milestone

Milestone	Date of completion	Funding required to achieve milestone
Project commencement – June 2018 *Next actions: Strategic concept designs and indicative cost plans*	N/A	$0
Milestone 1 Completion of strategic concept designs, confirmation of scope and indicative cost plan *Next actions: Concept designs, community consultation and planning approval*	February 2019	$225,000
Milestone 2 Completion of concept designs, community consultation and planning approvals *Next actions: Detailed design and construction tender*	August 2019	$525,000
Milestone 3 Construction commencement *Next action: Delivery*	December 2019	$10,000
Milestone 4 Construction completion *Next action: Commissioning*	December 2020	$4,230,000
Project complete Public opening	March 2021	$10,000
TOTAL	**32 months**	**$5,000,000**

ATTACHMENT 2 – PROJECT LOCATION PLAN


Key for Master Plan
Circulation
New or Relocated Roads
New Pedestrian/Shared Ways
New Pedestrian Links
Land Use/Built Form
Mixed Use and Residential Core predominantly 8-12 storeys
Transition Area (5-8 storeys)
Low Rise Apartments (3-4 storeys)
Townhouse (1-2 storeys)
New/Upgraded Parks
Core Elements
Taller Marker Buildings (15-20 storeys)
Retail and Services
Community Facilities
Indicative Light Rail Stop
HOMELANDS RESERVE
RAPANEA COMMUNITY FOREST
Marshall Road
Brand Street
Fullerton Street
Adderton Road
Marshall Road
The Parade
Sophie Street
Cook Street
ACACIA PARK
Shortland Street
Shortland Street
Evans Road
Sturt Street
Wade Street
Eyles Street
Simpson Street
Tilley Street
Sturt Street
TELOPEA PUBLIC SCHOOL
Moffatts Drive
Manson Street
PONDS CREEK RESERVE
STURT PARK
Holland Place
Cunningham Street
Adderton Road
Burke Street
Chestnut Avenue
Kissing Point Road
THE PONDS WALK
SCALE: 1:5,000 @ A4
The costing and funding of infrastructure by developers, Council and State Government is subject to further work. An additional levy on new development may be required to fund new infrastructure.
VISION FOR TELOPEA
DRAFT TELOPEA MASTER PLAN | 5

ATTACHMENT 3 – TAX INVOICES

All Tax Invoices must:

i. be addressed to the Department's head office; and
ii. prominently be identified as "Tax Invoice".

and contain:

iii. Council's name;
iv. Council's ABN;
v. the name of Project;
vi. the instalment payment reference (i.e. 1st instalment);
vii. the amount requested;
viii. the GST component (listed separately to the amount requested); and
ix. the total amount requested.

ATTACHMENT 4 – PROJECT REPORT

NSW GOVERNMENT | Planning & Environment

PRECINCT SUPPORT SCHEME PROJECT REPORT

PROJECT DETAILS

Council name	
Project name	
Council project manager / representative	
Report date	

PROJECT STATUS UPDATE

Summary – previous report	*Insert current status from previous report*
Summary – current status	*Insert current status summary*
Actions since last report	*Actions which have commenced or complete*
Upcoming actions	*Next actions*

MILESTONES

Milestone Number	Milestone Description	Target Date	Forecast Date
1	*Milestone 1 description*	*Insert date*	*Insert date*
2	*Milestone 2 description*	*Insert date*	*Insert date*
3	*Milestone 3 description*	*Insert date*	*Insert date*
4	*Milestone 4 description*	*Insert date*	*Insert date*
5	*Milestone 5 description*	*Insert date*	*Insert date*
6	*Milestone 6 description*	*Insert date*	*Insert date*

Planning & Environment

PRECINCT SUPPORT SCHEME PROJECT REPORT

COMMUNICATIONS / PUBLIC STATEMENTS

Date	Audience	Method	Purpose
Past and future	*Local community* *Targeted stakeholder*	*Website / letter / Media release*	*Project status update / community consultation*

RISKS AND ISSUES

Risk	Opportunity or Threat	Risk Cause	Likelihood	Impact	Treatment

BUDGET

Total grant funding	Project expenditure to date	Forecast expenditure to complete current milestone
$0,000,000	$0,000,000	$0,000,000

ADDITIONAL COMMENTARY

Insert additional commentary as required

AUTHORISATION

Name	
Signature	
Position	

ATTACHMENT 5 – ACQUITTAL CERTIFICATE

PRECINCT SUPPORT SCHEME ACQUITTAL CERTIFICATE

Project Name	
Project Address/Location	
Date Project Completed	

I, the undersigned, confirm that:

1. An amount equal to the total grant funds paid by the Department of Planning and Environment ($..... including GST) has been expended on this Project in accordance with the terms and conditions of the Funding Agreement dates……. with the Department.

AND

2. A complete set of accounting and financial records relevant to the Project have been maintained.

Name	
Signature	
Position	
Date	
Council	

ATTACHMENT 6 – PROJECT VARIATIONS

PRECINCT SUPPORT SCHEME
PROJECT VARIATION

PROJECT VARIATION (Revision X) Date: _____

Between

Department of Planning and Environment ("the Department")

And

_____

("the Council")

ABN Number:

1. Revised Project Plan

[Provide a brief summary of the current status of the project and why a Project Variation is required]

[Provide details of the remaining milestones and the original and revised due dates for each item.]

Revised Project Workplan

Milestone Number	Description of Milestones	Original Milestone Due Date	Revised Milestone Due Date	Responsibility	Output (to align with revised Stage Funding Amounts table)

Planning & Environment

PRECINCT SUPPORT SCHEME PROJECT VARIATION

2. Revised Stage Funding Amounts Table

Stage Number	Payment Milestone	Revised Stage Funding Amounts Due	Milestone	Payment amount ex GST	Payment amount inc GST

3. Project Reporting Schedule

Original Project Commencement Date:	
Original Project Completion Date:	
Revised Project Completion Date:	

Has a previous Project Variation been requested:	

Revised/Additional Project Report Number	Revised Due Date

Prepared by Council:

Signature: _____

Name: _____

Position: _____

Date: _____

Agreed to by Department

Signature: _____

Name: _____

Position: _____

Date: _____

LEADING

ITEM NUMBER	13.8
SUBJECT	Epping Town Centre Traffic Study and other Epping Planning Review Matters
REFERENCE	F2017/00210 - D06023116
REPORT OF	Snr Project Officer
PREVIOUS ITEMS	11.3 - Epping Planning Review - Completion of Stage 1 and Commencement of Stage 2 - Council - 14 Aug 2017 6:00pm 12.5 - Update on Epping Planning Review and Related Matters - Council - 12 Feb 2018 6.30pm 13.4 - Outcomes of Public Exhibition - Draft Amendments to Hornsby Development Control Plan 2013 - Tree and Vegetation Preservation - Council - 26 Feb 2018 6.30pm

PURPOSE:

This report details the progress of the Epping Town Centre Traffic Study and updates Council on the implications for the findings of the Epping Planning Review, as well as several related planning matters relevant to the Epping Town Centre.

RECOMMENDATION

(a) **That** Council note this update on the Epping Planning Review and related matters.

(b) **That** Council exhibits the Epping Town Centre Traffic Study and supporting documentation to enable comment from major stakeholders in accordance with the consultation plan described in the body of this report.

(c) **That** despite recommendation (b) above, that Council adopts the position that it does not support any:

i. Planning proposal or preliminary planning proposal that applies to sites situated within the Epping Planning Review Study Area which seek to deliver extra housing in addition to what can be achieved under the current planning controls, unless the planning proposal is seeking to address a planning issue identified in Council's Epping Planning Review process related to heritage interface controls, commercial floor space or resolving open space issues at Forest Park.

ii. Development applications seeking an increase in residential density via clause 4.6 of the *PLEP 2011*

and that Council write to the Department of Planning and Environment (DP&E) advising them of this position.

(d) **That** in relation to the Austino Planning Proposal that Council write to the DP&E to:-

i. Object to the Planning Proposal in its current form and density proceeding; and

ii. Request that Council be re-instated as the RPA so that Council can pursue a Planning Proposal that would retain the current controls that

apply to the site with the exception of the former Bowling Club portion of the site which would be rezoned from RE1 Public Recreation to R4 High Density Residential with a maximum Height of Building control of 17.5m and FSR of 1.5:1.

(e) That should Council be re-instated as the RPA (on the basis that it will pursue a Planning Proposal as per (d)(ii) above) Council officers be authorized to commence discussions with the Austino PP applicant about the form of the Planning Proposal and whether there are any opportunities for some contribution to additional open space as part of the Planning Proposal. The outcome of these discussions should be reported to Council.

(f) **That** Council write to the Minster for Planning and the Greater Sydney Commission and request the State Significant Development currently being progressed for 240-244 Beecroft Road be placed on hold until:

i. the supplementary work on a new road link has been completed; and

ii. that the relevant approval authority agrees to the provision of commercial floor space equivalent to a 1:1 FSR.

(g) **That** a further report is brought to Council on the options for the Rawson Street carpark site as a site for future civic space and community facilities and analysis on whether any EOI process should be commenced to seek partners to redevelop the site and realise the FSR available on the site.

(h) **That** a further report is brought to Council on the outcome of the consultation on the Epping Town Centre Traffic Study and the results of the supplementary traffic analysis discussed in this report on:-

i. Reopening of the former M2 bus tunnel link; and

ii. A new east west road link through 240-244 Beecroft Road

(i) **That** a Planning Proposal including all necessary background studies and analysis be prepared to progress the recommended LEP amendments detailed in this report relating to:-

i. Rosebank Avenue HCA, Precinct;

ii. 1, 3, 3A, 5, 7, and 7A Norfolk Road and 25 Pembroke Street;

iii. Essex Street HCA Precinct;

iv. Rose Street Precinct; and

v. Rockleigh Park Precinct;

and that the Planning Proposal and associated material be reported to Council for endorsement before it is forwarded to the Department of Planning and Environment seeking any Gateway Determination for the planning proposal.

(j) **Further, that** a Planning Proposal including all necessary background studies and analysis be prepared to progress the recommended LEP amendments detailed in this report relating to new controls to require the provision of commercial floor space in the centre and that the Planning Proposal and associated material be reported to Council for endorsement before it is forwarded to the Department of Planning and Environment seeking any Gateway Determination for the planning proposal.

BACKGROUND

1. This report is a progression of a Council report deferred from the 12 February 2018 Council meeting (Item 12.5) provided at **Attachment 1**. This report also relates to a Council assessment of the Austino planning proposal.

2. As noted above, Item 12.5 from the 12 February 2018 Council meeting which sought to provide an update on the status of the Epping Planning Review and associated matters was deferred. It resolved as follows:

   That *consideration of this matter be deferred for the following reasons:*

   1. *Consultation with Ward Councillors.*
   2. *That Council write to the Department of Planning seeking clarification around the decision of 1 December 2017 to appoint the Sydney Central Planning Panel as the relevant Planning Authority, meaning that Council no longer has relevant planning Authority Status for this proposal. Council is seeking this clarification particularly around the fact that the Department of Planning and Environment will be referring the outcome of the Traffic Study to make their determination which is the reason for our Council delaying a recommendation to the Council.*
   3. *Upon receipt of the valuation for the former Epping Bowling Club site, the formal valuation be the subject of a Briefing to Ward Councillors and any other interested Councillors prior to the Austino Planning Proposal or any update on the Epping Planning Review being reported back to Council.*

3. In response to the resolution of 12 February 2018:

   a. A Workshop was held with Councillors on 16 February 2018 so that the applicants of two preliminary planning proposals – Oakstand consortium and Lyon Group – could present their respective preliminary planning proposals. These preliminary planning proposals are detailed later in this report.

   b. A Councillor briefing session was held with Ward Councillors on Wednesday, 28th March 2018 which provided an update on the Epping Planning review including the draft findings on the Epping Town Centre Traffic Study and valuation report on 725 Blaxland Road.

   c. A meeting was held with the Member for Epping, Damien Tudehope on Thursday, 29th March 2018 which also provided an update on the Epping Planning review and included a discussion on the draft findings on the Epping Town Centre Traffic Study and valuation report on 725 Blaxland Road.

4. Consistent with resolution 2 above, on 1 March 2018, Council Officers wrote to the Department of Planning and Environment (DP&E) seeking clarification on the removal of the relevant planning authority role from City of Parramatta council. The DP&E's response is attached to this report at **Attachment 2**.

OVERVIEW OF EPPING PLANNING REVIEW AND STRUCTURE OF THIS REPORT

5. The Epping Planning Review (EPR) was initiated as a review of planning controls for the Epping Town Centre and immediate surrounds (refer to the

area delineated orange in the figure below) to address the issues of land use conflicts. These conflicts were raised by the Epping Community following from the DP&E's Priority Precinct process which increased the density controls in March 2014. The EPR Study Area is shown in Figure 1.

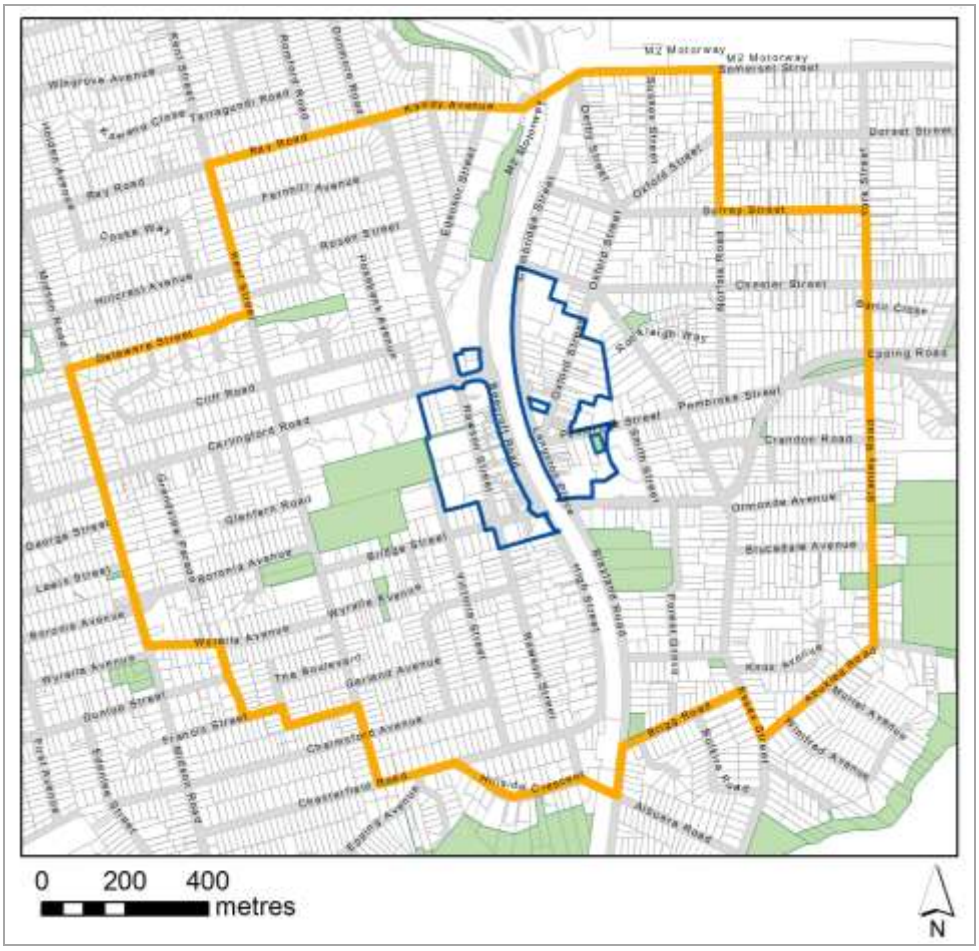


Figure 1 - Epping Planning Review study area showing the town centre and immediate surrounds

6. The EPR has also followed the Council boundary changes occurring in May 2016 under which the Epping Town Centre came to be entirely contained within the City of Parramatta (having previously been split between Parramatta City and Hornsby Shire Councils).

7. One objective of the EPR has been to create a unified planning framework for the Epping Town Centre and its immediate surrounds, including one set of LEP and DCP controls, a unified development contributions framework and one public domain plan. Council has already developed a single development contributions framework for the Epping Town Centre and Council's formal LGA-wide Harmonization Process will have a role in bringing some further consistency to the planning controls.

8. The EPR has two stages. The first stage has involved undertaking technical studies and community consultation to inform planning control amendments to resolve land use conflicts or issues. The last remaining element of this stage is the completion of traffic analysis and the major element of this is the Epping Town Centre Traffic Study.

9. The **Epping Town Centre Traffic Study** (ETCTS) is the key component of this report, as its findings have major implications for the Epping Town Centre in the

short to mid-term. The implications of the ETCTS are also discussed with regards to:

a. Updates on the status of **LEP and DCP amendments** affecting land within the Town Centre with a small section of the report discussing the release of the final **Central City District Plan** in March 2018 and relationship with the EPR.

b. the State Significant Development proposal affecting NSW Government owned land at **240-244 Beecroft Road, Epping**.

c. The **Austino Planning Proposal** and **Preliminary planning proposals** affecting land within the Town Centre.

10. This report makes recommendations on:

a. the **interface areas** at Rosebank Avenue, Rockleigh Park, Pembroke Street/Norfolk Rd, Essex Street and the Rose Street Precinct;

b. **commercial floorspace** within the centre; and

c. potential **social infrastructure** provision on the Rawson Street Car Parking site.

RELATED PLANNING POLICY MATTERS

11. A series of recent policy amendments (LEP, DCP and development contributions plans) are complete which apply to land within the EPR study area and relate to:

a. Housekeeping Amendment to Hornsby LEP 2013 recently coming into effect.

b. Fast Tracked Amendments to Parramatta DCP 2011 involving footpath widening recently coming into effect.

c. Amendment to Hornsby DCP 2013 - Tree Preservation and associated matters raised by Council in its resolution from the 26 February 2018 Council meeting pertaining to tree removal in Forest Park and the potential impact of Austino planning proposal on trees in the north of Forest Park are detailed in **Attachment 3** to this report.

d. Section 94 and 94A Developer Contributions Plans applying to the EPR area recently coming into effect.

12. These matters are further detailed in **Attachment 3**.

Greater Sydney Region Plan and Central City District Plan

13. In March 2018, the Greater Sydney Commission (GSC) released the final *Central City District Plan* (CCDP) and its metro-wide level plan *Greater Sydney Region Plan - A Metropolis of Three Cities.*

14. In both plans, Epping is identified as a ‘Strategic Centre’ for 2036. However, in the earlier iterations of the District Plan and Metro Plan, Epping was identified as a “Town Centre” or “Local Centre”. Thus the role of the Epping Town Centre has been elevated to a higher-order centre without any corresponding dialogue or justification. Also, the ‘Strategic Centre’ category is still not clearly defined in the Final Plans. The change has also occurred ahead of completion of the Epping Town Centre Traffic Study.

15. The CCDP establishes dwelling targets for the five year period from 2016 to 2021 for the Parramatta LGA and jobs targets for lower and higher scenarios

for 2036 for Epping, specifically. In the context of the Epping Planning Review and recent development forecast, these are discussed below:

a. With regards to **dwelling targets** for that period, the CCDP sees 21,650 additional dwellings for the 2016-2021 period for the Parramatta LGA. Analysis contained in this report on recent dwelling growth within the Epping Town Centre demonstrates that recent growth patterns mean this centre can meet a substantial proportion of this target.

b. With regards to the **jobs targets**, the Epping Town Centre is identified as a Strategic Centre for 2036 with a jobs target of 1,900 additional jobs (2036 baseline) to 2,400 additional job (2036 higher target). These are on top of the 5,100 jobs that the CCDP sees as the baseline for 2016. Further discussion about the provision of commercial floorspace is provided further in this report.

16. Furthermore, a series of actions (both direct or indirect) across a number of the CCDP's Planning Priorities apply to the Epping Town Centre and largely involve collaboration with the DP&E and GSC.

EPPING PLANNING REVIEW - STAGE 1

17. The major elements of Stage 1 of the EPR were spelled out in the 12 February 2018 report (Item 12.5) which noted that Stage 1 of the Epping Planning Review was largely completed with the exception of a Final Traffic Study. This was precluded by a report of Council at its meeting on 14 August 2017 which reported the Discussion Paper and its supporting technical studies.

18. An **Interim Traffic Modelling Report** (dated June 2017) was prepared by EMM for the purposes of the Epping Planning Review Discussion Paper which was exhibited in June/July 2017. The Interim Report formed preliminary analysis in order to consult the Epping community on traffic and access in and around the Town Centre.

19. At the 14 August 2017 Council meeting, Council endorsed a suite of principles to guide Stage 2 of the Epping Planning Review. The issues discussed in this report directly affect many of the principles.

Epping Planning Review Steering Group

20. To ensure delivery of the Epping Planning Review, in February 2017, Council established the Epping Planning Review State Agency Steering Group which has representation from the Greater Sydney Commission, the Department of Planning and Environment, Transport for NSW and Roads and Maritime Services.

21. The Steering Group is also consistent with the Central City District Plan where:

> *Parramatta City Council is leading the review of planning controls and the Commission is collaborating with Council and other State agencies to address social infrastructure, traffic, heritage and commercial land issues* (p.21).

22. Given the recommendations within this report, the role of the Steering Group in providing further direction on the Epping Planning Review process is paramount.

BACKGROUND TO EPPING TOWN CENTRE TRAFFIC STUDY

23. The principal traffic study underpinning the existing planning controls which is now outdated is the **Halcrow Study** of 2011 commissioned by Hornsby

Council, the then Parramatta City Council and the DP&E prior to the Priority Precinct process formally commencing. The Epping Town Centre Traffic Study (ETCTS) replaces this analysis.

24. The Halcrow Study tested the short term and long term land use scenarios:
    a. The short term (2016) land use scenario was based on a forecast of additional 900 dwellings and additional 3,000sqm of retail uses; and
    b. The long term (2026) land use forecast a further 2,100 dwellings and another 3,000sqm of retail uses.
25. In total, this tested the impact of 3,000 additional dwellings and 6,000sqm of additional retail within the Town Centre by 2026. As is discussed further in this report, the Halcrow assumptions on residential land use have substantially underestimated the development trends.

EMM's Interim Traffic Study (2017)

26. The preliminary analysis carried out by EMM in 2017 as part of the Interim Traffic Modelling report for the purposes of the EPR Discussion Paper allowed discussion of the issues as part of the Discussion Paper process. Specifically, the preliminary study identified the following key issues:
    a. The east west Carlingford Road/Epping Road and north south Beecroft Road/Blaxland Road are sub-regional routes that converge at the Town Centre mixing with local traffic.
    b. Approximately 89% of trips that cross the bridge are through traffic trips where the origin and destination of the trip is outside the Epping Town Centre.
    c. The through trips are a significant barrier to improving the traffic flow around the Epping Town Centre. (Note: Centres are usually structured in a way that separates local traffic from through-traffic, but the Epping Town Centre is not).
    d. The widening of the rail bridge will not be a "game changer" given the time it will take motorists to cross the bridge. In other words, the expansion of the bridge will be an improvement, but will not be a *significant* improvement in providing relief to congestion.
    e. Traffic routes and intersections are currently operating at over-saturated traffic levels for both the morning and afternoon peak hour, and the increased intersection traffic delays are already displacing some of the previous regional through traffic movements away from the Epping Town centre to other parallel traffic routes such as the M2 Motorway for east-west traffic and Midson Road for north-south traffic.

Local road upgrades

27. The Roads and Maritime Services' (RMS) program of main road improvements within the town centre have been factored into the ETCTS. They are:
    a. Widening of Epping Road from two lanes to three lanes involving:
        i. Removal of the right turn movement from Langston Place into Epping Road,
        ii. Removal of the right turn movement from Epping Road into Smith Street and Forest Gove;

iii. New dedicated right turn lanes from Essex Street into Epping Road; and

iv. New traffic light controlled pedestrian crossing for Epping Road and Essex Street.

b. Upgrading the Beecroft Road and Carlingford Road intersection in Epping involving:

i. New traffic light controlled pedestrian crossing for Carlingford and Beecroft Roads;

ii. Additional right-turn lane from Beecroft Road into Carlingford Road; and

iii. New pedestrian path to link with the exiting path to Epping Station.

28. A critical factor is that the traffic modelling undertaken since 2011 all factor in a widening of the rail bridge carriageway on Epping Road to accommodate an additional westbound lane. In a letter from the DP&E to Council dated 7 November 2017, it notes that "Transport for NSW is investigating several options for widening this overpass and the Council would be informed of the results when the investigation concludes" but the letter did not provide a timeframe. Since the receipt of the letter, Council Officers have not been provided with an update.

Dwelling forecasts since 2011 and actual dwelling growth

29. In order to understand the significance of the findings from the ETCTS (covered in the next section), it is important to understand recent (actual) and anticipated dwelling growth in the context of the growth predicted by the DP&E as part of the former Epping Priority Precinct process completed in March 2014. This must be understood so that infrastructure providers (Council and the State government) can ensure the delivery of appropriate infrastructure at the right time.

Dwelling forecasts

30. During the progression of the DP&E's Priority Precinct process, dwelling growth forecasts were reviewed from **3,000 additional dwellings** for 2026 in the Halcrow Study to **3,750 additional dwellings** for the year 2036 as per the Department of Planning and Environment's (DP&E's) *Finalisation Report* (November 2013). However, shortly after the City of Parramatta commenced the EPR process, in early 2017, the DP&E revised its forecast figure of 3,750 additional dwellings to **5,500 additional dwellings** by 2036 and set a maximum dwelling yield of **10,000 additional dwellings** at a 100% take up rate.

Actual dwelling growth

31. The Epping Planning Review Discussion Paper (June 2017) noted that Council Officers had reviewed recent development applications and approvals to track actual growth against the dwelling forecasts undertaken by the DP&E and/or during the Priority Precinct process. This reviewed all of the pre-lodgments, DAs under assessment and determined (both under construction and not yet under construction) that have occurred since March 2014 when the new Priority Precinct controls came into effect and found that **4,735 additional dwellings** could be delivered in the short to mid term (assumed to be as early as 2023), if all DAs are constructed and fully occupied in that time. This equates to an

additional **10,890 people** within the centre assuming a household size of 2.3 persons per household (Source: Council's Social Outcomes Unit).

32. Then again, for the purpose of this Council report, on 19 April 2018, Council Officers tracked this figure to **5,553 additional dwellings** by 2023. This is made up of 3,940 approved dwellings and 1,613 dwellings under assessment. Again, applying an occupancy rate of 2.3 persons per household, this means an additional **12,771 people** in the town centre by 2023. With no signs of the Town Centre's residential market slowing down, Council Officers conclude that within 4 years of the new planning framework being in place, the DP&E's revised 5,550 additional dwelling target for 2036 is well on its way to being met well before 2036.

What does this growth mean?

33. The tracked growth is well above what was forecast and planned for by the DP&E during the Priority Precinct process. In effect, the 2036 revised forecast of last year by the DP&E (of 5,500 dwellings) will already effectively be met within 4 years of the new planning controls if the development detailed in existing approvals and applications are realised.

34. The rate of this growth has significant implications for the amenity and function of the centre including infrastructure provision in the short and mid-terms. For example:

    a. The widening of the rail bridge carriageway on Epping Road to accommodate an additional westbound lane is yet to be delivered by the State Government.

    b. Education infrastructure such as schools managed by the Department of Education (public schools) as well as private schools will be under more pressure.

    c. The significant loss of commercial floorspace spelled out in the SGS *Commercial Floorspace Study* and the *Epping Planning Review Discussion Paper* exhibited in mid 2017 means the future amenity and function of Epping as a centre is at stake.

    d. The provision of local infrastructure (libraries, community facilities, open space and recreational facilities) is under pressure to be enhanced and improved.

Conclusions

35. Comparing the Town Centre's growth with the CCDP's dwelling targets for the Parramatta local government area (LGA) for the 2016-2021 period which is (21,650 dwellings), the 5,553 additional dwellings represents a substantial proportion of the dwelling target although some of that growth has occurred post March 2014.

36. In addition to the tracked dwelling growth since March 2014, there is substantial interest from developers and land owners within and around the town centre seeking an increase in residential yield above what the current controls allow via a planning proposal process.

37. Council must ensure that the amenity of the centre as well as the long term social, environmental and economic aspirations of the Epping community are not undermined. Both the Greater Sydney Commission and the DP&E have a critical role in this.

EPPING TOWN CENTRE TRAFFIC STUDY

38. Council Officers commissioned EMM Planning and Environmental Consultancy in March 2017 to revise the traffic analysis work done as part of the DP&E's Precinct Planning process.

39. The Epping Town Centre Traffic Study (ETCTS) effectively replaces the 2011 Halcrow Study which formed the basis for the current planning controls within the Town Centre. It also replaces other applicant-prepared traffic analysis from 2015. A copy of the ETCTS is provided at **Attachments 4 and 5** (Attachment 4 comprises the Traffic Report and Attachment 5 comprises the Appendices).

The EMM Epping Town Centre model

40. The traffic model was developed by Transport Modelling for EMM. The base model report was completed in December 2017 and forwarded to the RMS for authorisation which was received in February 2018. In its response, RMS stated that the consultant's 2017 base model is suitable for traffic assignment analysis (traffic distribution) for the assessment of any future proposals within the study area.

41. The ETCTS models the co-ordinated operation of a chain of linked intersections. It does this for four existing and future traffic network model and land use scenarios which are:

    a. Existing actual peak hour intersection traffic volumes which were surveyed in March 2017;

    b. Modelled base case 2017 intersection traffic volumes from the EMME model;

    c. Modelled +5,000 dwellings growth scenario intersection traffic volumes from 2026; and

    d. Modelled +10,000 dwellings growth scenario intersection traffic volumes from 2026.

42. To develop a base year for the network traffic model, in March 2017 the following peak hour surveys, travel time surveys and traffic queue length observations were undertaken:

    a. Peak hourly intersection turning movements at 17 intersections;

    b. Morning/afternoon peak hour travel time surveys across the full study area;

    c. Morning/afternoon peak hour maximum traffic queues for traffic signal operations on Beecroft Road, Carlingford, Epping and Blaxland Roads.

43. The model then tests two future residential growth scenarios in the study area as follows:

    a. A 2026 land use scenario tests 5,000 additional dwellings

    b. A 2036 land use scenario tests 10,000 additional dwellings.

    These scenarios are additional dwellings realized after the new DP&E planning controls came into effect in March 2014.

44. The ETCTS also includes preliminary analysis of two local road network options:

    a. The reopening of the former M2 bus tunnel link to Epping Station as a one way westbound link with left turn egress only at Beecroft Road and

b. A new east west road link connecting between Ray Road and Beecroft Road, through the NSW Government site at 240-244 Beecroft Road on the western side of Beecroft Road.

45. These two road network options are only explored in a preliminary sense for the 2026 and 2036 future traffic network models. This seeks to determine the potential future extent of the likely road network traffic delay benefits for locally based traffic accessing the major road network at Epping. Refer to Sections 7.3 and 7.4 of the ETCTS provided at **Attachment 4**.

ETCTS Findings

46. The broad findings from the ETCTS are summarized below.

Findings from Survey Counts

47. For the **March 2017** surveyed morning and afternoon peak hour traffic conditions the findings are as follows:

    a. Up to four of the six key intersections on the four major traffic routes (via Beecroft Road, Blaxland Road, Carlingford Road and Epping Road) are operating at over saturated (level of service F) traffic conditions respectively with an average 5 minute waiting time.

    b. During the morning peak period the combined eastbound and southbound traffic queues on Carlingford Road and Beecroft Road can reach a combined total length of approximate 1.5 km.

    c. The most widespread traffic queuing effects on all areas of the road network are considered to occur at approximately 8:40 am and 5:40pm, consistent with the Sydney regional major road traffic conditions.

    d. The increasing road traffic congestion occurring in the Town Centre area, is adversely affecting both the regional through traffic movements and local traffic accessibility to the major road network.

Future years of 2026 and 2036

48. The findings of the +5,000 and +10,000 dwellings growth scenario intersection traffic volumes for the 2026 and 2036 are as follows:

    a. Future peak hour traffic conditions continue to worsen even when the full programs of the identified RMS and Council road improvements have been implemented.

    b. In the road networks, five to six of the assessed intersections will have traffic conditions operating at oversaturated (level of service F) during both the morning and afternoon traffic peak periods. As an example, in 2026, the Carlingford Road/Beecroft Road intersection has an average delay which equates to 70.5 minutes (morning peak) and 23.5 minutes (afternoon peak). In 2036, this increases to 77 minutes (morning peak) and improves to 10.5 mins in the afternoon peak.

    c. In 2036, over 3,300 vehicles cannot enter the network.

49. The average intersection delays are predicted to improve by 2036 from the 2026 base scenario as a result of Council proposed road improvements which are anticipated to be implemented during this period. However, the most crucial intersection – Beecroft Road – actually experiences a higher average delay in 2036 than for the 2026 case (p.41).

50. The ETCTS also finds that *the afternoon performance of the network for the base 2036 is such that it is unlikely that there will be any spare capacity for additional vehicles* (p.41).

Additional westbound lane on Epping Bridge

51. The additional westbound lane on Epping Bridge would primarily benefit the afternoon peak hour westbound regional traffic movements travelling through the Town Centre. However, if the bridge were to operate with future tidal flow traffic conditions such as four lanes eastbound during the morning peak periods with two lanes westbound and three lanes in each direction during the afternoon peak periods, this future improvement could provide significant travel flow benefits during both these peak periods.

Additional road network options

52. The findings from preliminary testing of two additional road network options, are as follows:

    a. **Reopening of the former M2 bus tunnel link:** the envisaged number of vehicles that would use the tunnel would result in equivalent peak hourly traffic reductions for certain southbound right turning traffic and westbound traffic movements. These "*would probably have significant network traffic benefits in terms of reducing the future peak hourly intersection traffic delays at these intersections"* (ETCTS, p.45).

    b. **A new east west road link through 240-244 Beecroft Road:** the envisaged number of vehicles that would use the through link would result in equivalent peak hourly traffic reductions for the other traffic movements using the Carlingford Road intersections with Beecroft Road or Ray Road and Rawson Street which "*could have significant network traffic benefits in terms of reducing the future peak hourly intersection traffic delays at these intersections"* (ETCTS, p.45).

53. However, further SIDRA intersection analysis is required of the above two road network options, this analysis is currently underway.

Implications

54. The findings from the ETCTS has major land use and infrastructure implications for town centre and surrounds. Therefore, Council Officers see that the role of the ETCTS is to:

    a. Inform planning policy affecting the Study Area particularly in relation to:

        i. Certain proposals seeking an increase in residential yield; and

        ii. State Significant Development applications.

    b. Provide a basis for Council to take to the DP&E, GSC and the Minister for Planning seeking support for:

        i. a position on residential development that indicates that any growth in residential development should only be permitted to resolve planning issues in Epping rather than just to permit additional residential development above what can be achieved under the current controls; and

        ii. a coordinated approach to infrastructure delivery consistent with actions within the CCDP.

c. Inform changes to the principles adopted by Council on 14 August 2017 that relate to:

i. Heritage interface;

ii. Commercial floorpsace; and

iii. Open space and community infrastructure.

Consultation

55. The ETCTS and any associated traffic analysis as part of the overall ETCTS brief should be placed on exhibition so that the major stakeholders (such as RMS, Transport for NSW (TfNSW), DP&E, GSC, landowners and the wider community) have an opportunity to comment on the documentation. Consultation will occur via:

a. Formal invitation to State agencies represented on the EPR Steering Group which are RMS, TfNSW, DP&E and GSC.

b. Formal invitation to major land owners formally seeking density residential density uplift such as Austino, Oakstand and Lyon Group.

c. Notification e-newsletter to the 440 residents and businesses registered on the EPR project mailout database. This will include local residents and business as well as planning consultants acting for Epping landowners.

d. A public notice in the *Northern District Times.*

56. The ETCTS and associated supporting material will be made available on the EPR project website.

IMPACT OF ETCTS ON STATE SIGNIFICANT DEVELOPMENT AT 240-244 BEECROFT ROAD

57. The State government owned site at 240-244 Beecroft Road (refer to Figure 2) once used for the Sydney Metro Northwest project is subject of a State Significant Development (SSD) application.

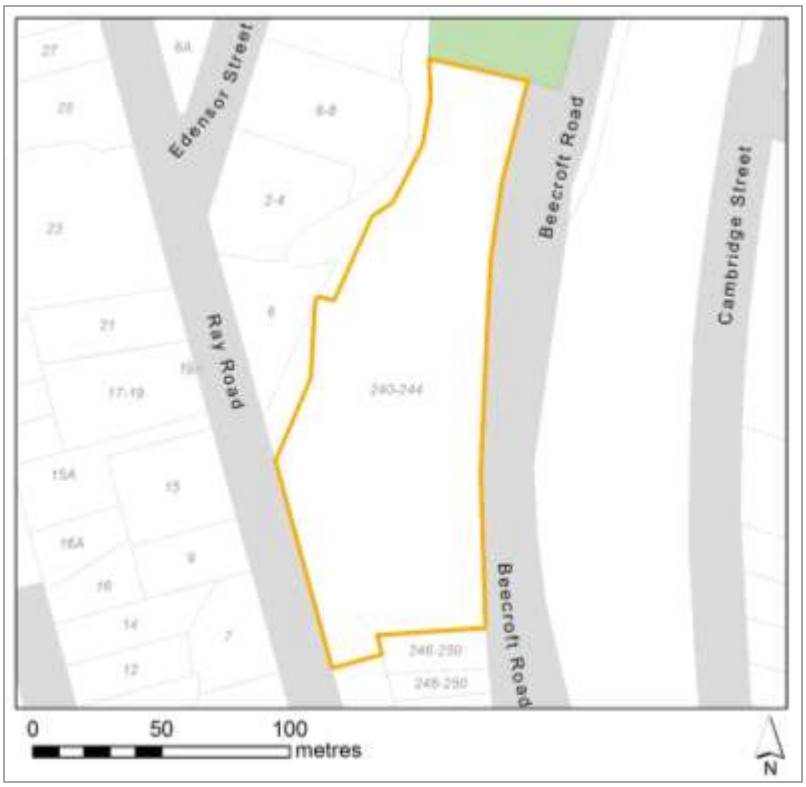


Figure 2 - State government owned land at 240-244 Beecroft Road, Epping

58. The background to his SSD application up to January 2018 is contained within the deferred Council report of 12 February 2018 (**Attachment 1**). However, the role of the site in the future development of the Town Centre is key in two ways: from both land use and traffic/access perspectives.

Land Use issue

59. The SSD application applies to 10,120sqm of the 13,342sqm total site area and proposes 39,000sqm of GFA (450 residential units) and 15 storeys which equates to a 3.8:1 FSR. Of that, the SSC proposes 2,000sqm of commercial FSR which equates to 0.2:1 *to be located at ground level on Road (could be general store, childcare, gymnasiun, café, small offices).*

60. The Commercial Floorspace Study by SGS prepared for the purposes of the EPR Discussion Paper saw that there has been a loss of commercial floorspace estimated at about 63%. Further internal analysis undertaken by Council Officers in early February 2018 has identified that that approximately **8,200sqm retail** and **35,200sqm office** floorspace needs to be "replaced" within the Town Centre. Given its scale, this site plays an important role.

61. From a planning perspective, the SSD process presents Council with an opportunity to negotiate an outcome because:

    a. The site's current zoning (R4 High Density Residential) does not require any commercial floorspace however, a ***neighbourhood shop*** use (max. 100sqm) is permissible within the zone.

    b. The site's previous zone (B4 Mixed Use) would still have allowed the commercial office building on that site to be demolished and replaced with a building that had retail and commercial at lower levels and residential on higher levels. Returning the site to its previous zoning would not require the owner to replace the previous commercial floor space that historically existed on that site.

    c. The timeframe around the SSD process is much faster, than a rezoning process; in the latter, Council can seek a higher amount of commercial floorspace on the site, but this would take some time. The SSD can approve commercial floorspace even it if is not permitted in the zone so there is a mechanism for addressing the floorspace in a timely manner if agreement can be reached.

62. Therefore, a 1:1 FSR (10,120sqm) for commercial uses is a balanced negotiating position that maximises the chances that commercial can be achieved on the site and contribute to Epping's role as a Strategic Centre as identified in the CCDP.

Local Traffic/Access issue

63. Also, as already noted in this report, a road link through the SSD site is being tested to determine whether it can alleviate some of the traffic pressure at the intersections of Carlingford Road with Ray Road and Beecroft Road. Preliminary testing shows it can take of some pressure of peak hour traffic. However, more detailed analysis is progressing with a supplementary report due shortly which will form supplementary analysis to the ETCTS.

Recommendations

64. Council Officers therefore recommend:

a. That Council not support the application until:

   i. A 1:1 FSR of commercial land uses can be delivered on the site; and

   ii. A supplementary report on an east west through link is completed.

b. That Council write to the Minister seeking that he not support the proposal until the two criteria listed in a. immediately above are achieved.

IMPACT OF ETCTS ON AUSTINO PLANNING PROPOSAL

Introduction

65. Council Officers were intending to undertake a detailed assessment of the Austino PP. However, on account of:

    a. The Town Centre having effectively reached the DP&E's revised 2036 dwelling target; and

    b. the findings from the ETCTS;

    Council Officers consider that a detailed assessment of this proposal is no longer required. Instead the assessment method emphasises the significance of the findings of the ETCTS and recognises the critical importance of the RMS and JRPP's comments on traffic matters at the earlier stages of the planning proposal (discussed in the "Traffic" sub-section, below). In short, the traffic impacts associated with the faster than anticipated dwelling growth is the guiding principle informing the outcome of this proposal.

Background

66. The Austino Property Group are the applicant for a Planning Proposal affecting land at 2-18 Epping Road, 2-4 Forest Grove and 725 Blaxland Road (the latter site being the former bowling club site – refer to Figure 3).

Figure 3 - Land affected by the Austino Planning Proposal denoted in solid red line (from applicant's Urban Design Report)

67. The planning proposal – resubmitted to the DP&E in January 2018 seeks to:

    a. Reconfigure the existing R4 and RE1 zones resulting in no net loss of open space;

b. Increase the building heights over the reconfigured R4 zone from 26.5 metres to a maximum of 65.5 metres along with 5 other building heights; and

c. Increase the density on the site from an equivalent 2.1:1 to a combination of 7.5:1, 4.6:1, and 1.75:1.

68. The above proposed changes seek to deliver a predominantly residential development comprising two towers on Blaxland Road with smaller towers on Epping Road accommodating estimated 794* units. (Note this calculation relies on Council's standard practice of applying an efficiency unit rate of 85sqm per unit whereby the applicant relies on a rate of 100sqm). Under the current controls (ie R4 zoning, maximum height of 26.5 metres) on the sites fronting Epping Road), the Austino landholdings would realise a total of approximately 308 units according to Council Officer analysis.

69. A VPA dated 4 December 2015 accompanies the planning proposal which proposes a public urban plaza through the proposed development providing a pedestrian connection between Epping Road and Forest Park, with an area equivalent to the area of land currently zoned RE1 Public Recreation (6,665sqm), so there will be no net loss in open space. However, much of the area proposed to be zoned public open space contains underground car parking below it which is generally not acceptable to Council.

70. This PP has a complex history. Details of the process and the proposal are provided at **Attachment 6.**

Petition

71. Between February and March 2017, Council Officers received a petition which containing nearly 600 signatures. The petition requested a number of actions including that Council purchase the site at 725 Blaxland Road. Other actions related to concerns on the impacts of the planning proposal on Forest Park in terms of traffic and urban design.

72. The petitions were tabled at the Council meeting held on 13 February 2017 where Council resolved:

> *That the petition be received and referred to the appropriate Council officer for report.*

73. In response to the resolution, the appropriate time for the consideration of the petition was always intended to be undertaken as part of the assessment of the Austino planning proposal. This section in this report forms that assessment.

Traffic Analysis

74. The applicant's Traffic Impact Study prepared by GTA in 2015 tested the traffic impacts of the proposal based on the Halcrow Study's 3,000 additional dwellings for 2026. However, as identified in the Halcrow Study, the 3,000 dwellings for 2026 falls well short of the likely growth of 2025 (5,553 dwellings) based on current and expected development activity.

75. In March 2016 having reviewed the applicant's traffic analysis the RMS wrote to Hornsby Shire Council when it was the RPA noting the following:

> *Should Council support a recommendation for gateway determination, the exhibited proposal must also ensure that the Transport Impact Assessment traffic includes detailed Network modelling results (ie. phasing, queue lengths/delays for all movements, intersection details) for [six] key intersections for all modelled scenarios.*

76. At that time, RMS also noted that *the total Residential Parking requirements being restricted to no greater than the minimum parking rates applicable for a total of 327 apartments* on the entire site (ie. Limited to approximately half the amount being sought under this proposal)*. (Note: it is not clear what assumptions the RMS has relied to determine this number of units. Council's assessment suggests the figure is closer to 308 units).

77. In February 2018, the brief for the Epping Traffic Study was extended so that an impact assessment of the Austino planning proposal on traffic and access around the site could be undertaken. This was decided given the findings from the modelled base case 2017 intersection traffic volumes from EMME software based counts.

78. The Traffic Impact Assessment (TIA) prepared by EMM (provided at **Attachment 6**) concludes that the proposal would generate an additional 768 daily vehicle movements on Forest Grove. It also sees that because the impacts of the 2026 and 2036 additional dwellings on the network are so severe, that the actual intersection performance deterioration due to the Austino development either with or without the planning proposal is relatively small.

79. The ETCTS and recent TIA by EMM updates the Austino TIA because the TIA findings were based on a slightly lower future baseline year 2026 additional dwelling forecast than the forecast which has been used in the ETCTS. That said, the general findings within the EMM TIA are still valid. All the same, with regards to the Austino planning proposal impacts, the ETCTS concludes the:

> *…significant intersection performance deterioration from the 2017 base to the 2026 future base traffic situation renders any further traffic generating development in this location unacceptable without further capacity improvements to the locality major road and local road network capacity, in particular at the Epping Road/Blaxland Road intersection, and to a lesser extent at the Epping Road/Essex Street intersection. (p.42)*

80. When the (then) Sydney East Joint Regional Planning Panel (JRPP) assessed the planning proposal as part of its initial review, it stated, as one of the seven (7) actions, that:

> *The proposal on this site should be part of the current Council traffic review of the whole of Epping Town Centre and the outcomes that review shall inform the final decision on Floor Space Ratio for the site.*

81. Because of this, a detailed assessment of the planning proposal is considered unnecessary as the fundamental determinant for deciding whether the Epping Planning Review Study Area can take any more residential development is the ETCTS.

82. It is also worth noting that in March 2014, the zoning and density controls for the parcels fronting Epping Road and Forest Grove were amended enabling higher residential yields as part of the DP&E's Priority Precinct process. With the controls having only been in place for 18 months, the applicant seeks further uplift through this planning proposal process. As noted elsewhere in this report, this planning proposal for additional residential development represents housing development simply to increase housing.

Purchase of 725 Blaxland Road (former bowling club) site

83. Part of the site (the former Bowling Club site) is zoned RE1 Public Recreation. The City of Parramatta became responsible for the Planning Controls that apply

to the subject site when the amalgamation occurred in May 2016. Therefore, the City of Parramatta became the acquisition authority for this public recreation land.

84. However, Hornsby Council did not have a funding strategy to acquire the site at 725 Blaxland Road. When the bowling club site became available for sale (ie the transaction that resulted in the current land owner acquiring it). The then Hornsby Council, had the opportunity to purchase it but made a decision not to yet still retained both the RE1 Public Open Space zoning on the Land Zoning Map, and the "Local Open Space Reservation" on the Land Reservation Acquisition Map, over the site.

85. Currently, there is no City of Parramatta Council funding strategy for its acquisition. The revised Section 7.11 and 7.12 (formerly 94/94A) Contributions Plans for Epping which came into effect in November 2017 does include collection for some open space provision. However, the advice in the Epping Planning Review was that Council would be better served by acquiring open space in different parts of Epping where growth is occurring rather than spending a substantial proportion of any funding available (via Section 94 or from other sources) on this portion of land which adjoins an existing substantial piece of open space. This recognises that spending funds to acquire this site would reduce Council's capacity to invest in other open space to meet the needs of growth in other parts of Epping as well as other community needs.

86. An initial internal valuation of the site was undertaken in mid 2017. The ERP Discussion Paper concluded that for the reasons described above the purchase of the site did not represent value for money and this position informed the subsequent adopted principle which was that Council not purchase the site and instead:

> *That Council should seek to progress the planning proposal with Council as the RPA subject to the Traffic Study being completed before FSRs for the site can be finalised. That Council also negotiate with the developer for the provision of public open space in a way that ensures there is a suitable area of open space which is appropriately sized and located.*

87. Council Officers have subsequently commissioned an independent valuation for peer review purposes. The valuations remain Commercial in Confidence and confirms that the purchase of the site by Council is not a viable financial option.

88. With regards to the adopted principle above, Council Officers suggest that the opportunity to negotiate with the landowner to have them provide an equivalent amount of open space has changed because of the result of the ETCTS and is in part depended upon the decision made by the current RPA for the Austino Planning Proposal.

89. As already detailed above in this report the DP&E has chosen to remove the Council as the Relevant Planning Authority (RPA) for the Austino Planning Proposal and so it will need to make the next key decision. If despite the ETCTS the RPA now in place for the Austino PP (ie the Central Sydney Planning Panel) decide to proceed with the Planning Proposal then the Council should seek to enter into further discussions with the applicant and the RPA to seek to achieve some dedication of an equivalent amount of open space at no cost to Council as part of the Planning Proposal. If the DP&E allows the further growth despite the problems with the road network they should also be seeking to broker appropriate open space outcomes to help deal with the growth proposed.

90. However, if the RPA decides not to proceed with the Planning Proposal then Council and the applicant will still need to resolve what will happen to the former bowling club site as it will remain zoned RE1 Public Recreation. Whilst this zoning is retained Council remains the acquisition authority.

91. Council options for the former bowling club site in this case will be:-

    a. To commit to the acquisition by retaining the RE1 zoning. As detailed above this option is not recommended by Council Officers as is not considered to be an efficient use of Council funds.

    b. Alternatively, rezone the site so Council is no longer the acquisition authority. In this case the appropriate zoning would be R4 High Density Residential with a maximum height of 17.5m (which permits 5-6 storeys) (Note the *Hornsby LEP* does not include FSR controls for sites zoned R4 High Density Residential but Council's Urban Designers indicate that this would allow approximately 162 units to be built on this site under the controls that would apply under the Hornsby DCP with an FSR equivalent to 1.5:1).

92. It is acknowledged that allowing the site to be rezoned to allow more residential development will be inconsistent with the ETCTS conclusions but Council has two conflicting issues that need to be managed. Council will need to balance two potential negative impacts:-

    a. the traffic impact

       versus

    b. the sub-optimal financial and open space outcomes if it commits to remaining as the acquisition authority for the former bowling club site.

93. Council Officer consider that rezoning the former bowling club site to R4 High Density Residential with a height of 17.5m and FSR of 1.5:1 is the preferred approach because:-

    a. The density that would be permitted is much less than that proposed in the applicants PP so the traffic impact would be mitigated by comparison.

    b. Council will not be forced to expend resources acquiring the former bowling club site in a location Council Officers consider is not optimal use of available funds.

    c. The building height is consistent with the height applied by the DP&E to transition areas when it put in place the existing planning controls in Epping. It will see a stepping down of permitted height as you move away from Epping Road and down to Forrest Park.

94. It is acknowledged that the density permitted on the former bowling club site is the most significant factor driving its valuation and as the density decreases so will the cost of acquiring the site. If Council and the DP&E accept that a R4 High Density Residential Zoning with a height of 17.5m and FSR of 1.5:1 are the appropriate alternate controls to the current RE1 zoning then it maybe possible to have further discussions with the owner about the implications of this for the redevelopment of the site and the delivery of open space outcomes.

Recommendation

95. That Council object to the Planning Proposal in its current form and density proceeding and request that Council be re-instated as the RPA so that Council

can pursue a Planning Proposal that would retain the current controls that apply to the site with the exception of the Bowling Club portion of the site which would be rezoned from RE1 Public Recreation to R4 High Density Residential with a maximum Height of Building control of 17.5m and FSR of 1.5:1.

IMPACT OF ETCTS ON PRELIMINARY PLANNING PROPOSALS

96. As has been noted during Stage 1 of the Epping Planning Review process, two preliminary planning proposals were lodged with Council in late 2014 which affect land within the town centre (western side). Refer to Figure 4. Both proposals have been on hold on account of the ETCTS being completed as per adopted principles of 14 August 2017. When combined, the preliminary planning proposals seek more than **2,000 dwellings**. This equates to an additional 1,000 dwellings above what can currently be achieved across both sites.

97. Each proposal seeks a partnership with Council to develop their sites in conjunction with the Council car park. Figure 4 below shows both the Oakstand and Lyon Group land holdings as well as Council's land holdings. The details of each proposal are provided in **Attachment 7**.

Figure 4 – Applicant owned land for preliminary planning proposals as well as Council's Rawson Car Park sites

Recommendations

98. Given the current growth rate from tracked DAs and the findings from the ETCTS, Council Officers conclude that in the short to mid term, there is no justification for further residential development simply to increase housing. That said, there is an opportunity for an expression of interest (EOI) process with landowners within the Town Centre to transfer some of the floorspace on Council's car park sites to another land owner/s site/s. The EOI process would, at the minimum, stipulate public benefits around a community hub facility, underground car parking, an east-west connection between community hub and the Epping Rail Station, and the like.

99. The outcome of this approach would mean that there is there no net increase in residential floorspace above what can currently be achieved. Effectively Council would be "trading" off the FSR from the carpark site to other sites to generate

funding to provide community facilities on the site of the current car park. It should be noted that any redevelopment would also include retention of carparking on site as it is recognised that this is critical to the operation of western part of the Epping Town Centre.

100. This process would be the subject of a further Council report before any further action is taken explaining the process and potential outcomes. The alternative is to retain the current carpark site and seek to redevelop it independent of other landowners sites. In this case Council would find it difficult to realise the full FSR that currently applies on the site and at the same time provide a significant piece of civic space within current height limits. The viability of achieving the FSR of 4:1 and community facilities and a civic space on the site as a stand alone redevelopment would also be covered in the report should Council request a further report be provided.

IMPACT OF ETCTS ON AREAS WITH INTERFACE ISSUES

101. With regards to the heritage interface areas at Rosebank Avenue HCA, part of the Essex Street HCA, land parcels and Pembroke Road and Norfolk Street and the Rose Street Precinct, the principles adopted at the 14 August 2017 Council meeting recommend further planning analysis that tests higher residential densities such as ***manor homes*** or 3 storey ***residential flat buildings*** which would replace existing detached dwelling development.

102. The interface issues are a result of land use conflicts occurring as a result of the DP&E's Priority Precinct process and require resolution where possible. It is acknowledged that the ETCTS identifies significant traffic impacts on the EPR study area and increasing densities at interface areas will have an increase on the traffic impacts. However, the interfaces put in place where 5-6 storey building look onto the backyards of sites zoned for single dwelling development and covered by a Heritage Conservation Area designation are unacceptable and need to be addressed in some format. This issue was discussed in detail in the Epping Planning Review documents.

103. A copy of the EPR Discussion Paper and the report considered by the Council on 14 August 2017 have been attached (refer to **Attachments 8 and 9**). The details on each HCA and background on the recommendations for these areas is available in this background material. The report below details just the recommendations made previously and options discussed with Councillors at Ward Councillor Briefings to allow Council to determine whether it should proceed with the previous recommendations.

104. Council officers are of the opinion that if growth is to be permitted which will impact on the road network that it should be to resolve these types of planning problems rather than to just increase density on a site for the sake of additional housing numbers. It is for these reasons that Council Officers recommend that changes to the planning controls proceed despite the findings of the ETCTS.

105. Furthermore, in March this year, the DP&E released its *Low Rise Medium Density Housing Code* which comes into effect in July 2018. This establishes planning controls on some forms of medium density housing and provide further guidance on the recommended outcomes in this section.

Rosebank Avenue HCA

106. With regards to Rosebank Avenue HCA, in the 14 August 2018 Council report, Council Officers recommended:

    a. Removing the HCA notation but keeping heritage items.

b. For the area south of the heritage items: allow 3 storey ***residential flat buildings (RFBs).***

c. For the area north of the heritage items: no change.

d. That the changes occur ahead of completion of ETCTS.

107. Council subsequently resolved that it pursue 2 storey ***manor homes*** along full length of Rosebank Ave but test benefits of 3 storey ***RFBs***.

Recommendation

108. Council Officers recommend proceeding with the original recommendations to remove the HCA notation, enable 3 storey ***RFBs*** south of the heritage items with no change north of the heritage items. Refer to Figure 5.

Figures 5 – Council Officer recommendation for Rosebank Avenue HCA

1, 3, 3A, 5, 7, and 7A Norfolk Road and 25 Pembroke Street

109. With regards to properties at 1, 3, 3A, 5, 7, and 7A Norfolk Road and 25 Pembroke Street, in the 14 August 2018 Council report, Council Officers recommended:

a. Remove HCA notation but keep heritage items.

b. R3 zone of area edged black but limit No.s 7 & 7A Norfolk Rd to ***manor homes*** (current zoning is shown in Figure 6).

c. Enable 3 storey ***RFB*** on No.s 1, 3, 3A and 5 Norfolk Rd and 25 Pembroke St.

d. Changes occur ahead of completion of ETCTS.

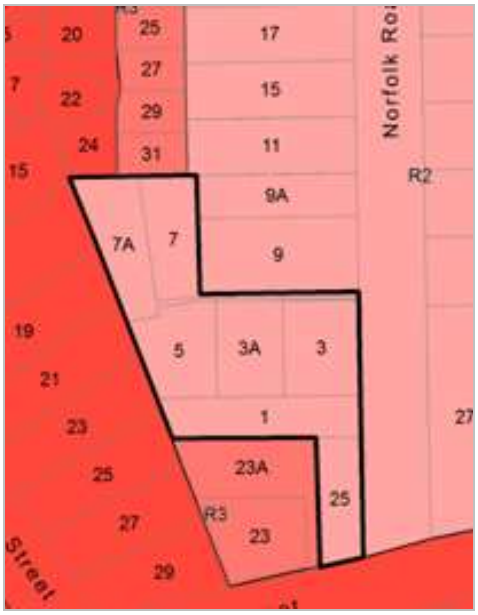


Figure 6 – Current zoning of 1, 3, 3A, 5, 7, and 7A Norfolk Road and 23, 23A and 25 Pembroke Street

110. Council subsequently resolved that it pursue 2 storey ***manor homes*** but test benefits of 3 storey ***residential flat buildings***.

111. At the Ward Councillor Briefings discussed above the option of making no change to the controls in this area was discussed. Should Councillors wish to proceed with this option then Council should resolve to take no further action to change the planning controls for this precinct.

Recommendation

112. To ensure consistency with new Complying Code and subsequent analysis as part of the LEP Harmonisation process, Council Officers propose a new recommendation - **Part 'no change', part RFB:**

    a. No changes to battle-axe blocks at No.s 7 & 7A (ie. maintain controls for ***detached dwellings***) because this conflicts with the DP&E's Complying Code on battle-axe blocks.

    b. Rezone No.s 1, 3, 3A & 5 to R3 zone to enable 3 storey ***RFB*** subject to amalgamation controls being put in place to create 1 super lot.

    c. No.25 Pembroke cannot develop of itself and should retain its existing zoning.

    Refer to the Figure 7.

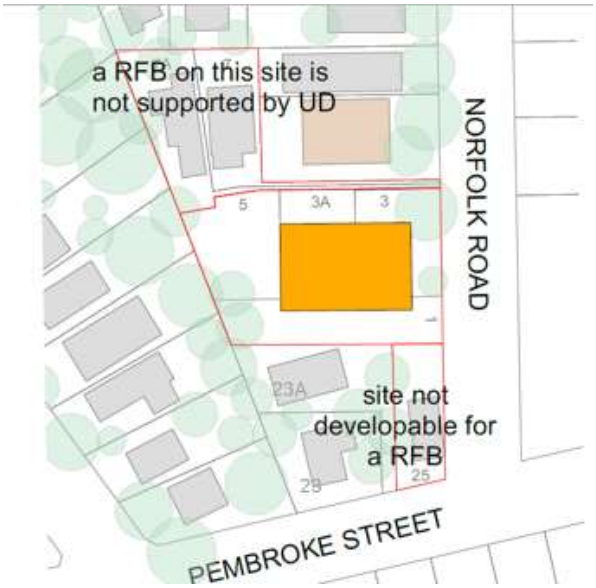


Figure 7 – Council Officer recommendation for 1, 3, 3A, 5, 7, and 7A Norfolk Road and 23, 23A and 25 Pembroke Street

Essex Street HCA

113. With regards to the Essex Street HCA, in the 14 August 2018 Council report, Council Officers recommended:

    a. Remove HCA notation but keep heritage items.

    b. Allow ***manor homes*** on western side between Epping Road and Maida Road only with no change on eastern side.

    c. That the changes occur ahead of completion of ETCTS.

114. The above recommendations were supported by the Council in August 2017.

Recommendation

115. Council Officers recommend maintaining the above recommendations and develop DCP controls that protect larger setbacks to ensure the protection of the tree canopy at rear setbacks.

Rose Street Precinct

116. With regards to the Rose Street Precinct, in the 14 August 2018 Council report, Council Officers recommended:

    a. Allow ***residential flat buildings*** development (R3 zone) with urban design analysis to step down height to Brigg Rd to 2 storeys.

    b. That the changes occur ahead of completion of ETCTS.

117. Council subsequently resolved that it pursue 2 storey ***manor homes*** but test benefits of 3 storey ***residential flat buildings***.

118. At the Ward Councillor Briefing Councillors the issue of the topography of this area and the drainage implications of allowing more density were raised. Council Officers consider that this issue could be investigated as part of the redevelopment options but if Councillors are of the opinion that this should be investigated upfront the recommendation should be amended accordingly.

Recommendation

119. Council Officers recommend allowing ***residential flat buildings*** with associated urban design analysis and DCP controls that enable the stepping down of the building height to 2 storeys at the Brigg Road/Rose Street

frontages and that the four (4) sites fronting Blaxland Road also be included in the precinct. Refer to Figure 8.

Figure 8 – Council Officer recommendation for Rose Street Precinct but include the 4 properties fronting Blaxland Road

Rockleigh Park

120. With regards to the Rockleigh Park, in the 14 August 2018 Council report, Council Officers recommended:

    a. The area zoned R4 (edged with yellow line) be down-zoned to R3 to be consistent with R3 zone boundary to north and east.

    b. That further urban design analysis to determine best height and FSR controls.

121. The above recommendations were supported by the Council.

Recommendation

122. Council Officers recommend reinstate original recommendations. But ensure that ***residential flat buildings*** are prohibited from this area (R3 zone in *HLEP* permits 4 storey RFBs). Refer to Figure 9.

Figure 9 – Council Officer recommendation for Rockleigh Park

IMPACTS OF ETCTS ON COMMERCIAL FLOORSPACE

123. Recent pre-lodgments and development applications within the centre continue to erode the volume of commercial floorspace within the centre as developers

are ‘opting out’ of applying the existing DCP provisions that require delivery of 2, 3 and 4 storey podiums of commercial floorspace in mixed use proposals. This is because of the weak ‘statutory weight’ that DCP controls have over an environmental planning instrument such as a LEP.

124. As discussed in the section entitled “Impact of ETCTS on State Significant Development at 240-244 Beecroft Road”, Council Officers have identified that approximately **8,200sqm of retail floorspace** and **35,200sqm of office floorspace** needs to be “replaced”. To deliver this, Council’s Urban Designers determine that three storey commercial podiums (comprising one floor of retail and two floors of office premises) on remaining sites can deliver the required floorspace.

125. With regards to traffic, the associated traffic impacts from commercial land uses (retail and office premises) may well be greater than those associated with residential development. This is because commercial uses tend to generate a greater number of trips per square metre of floor area. This is another area where Council Officers consider that it may be necessary to allow additional development to resolve a planning issue not related solely to housing delivery. In this case allowing additional density that may detrimentally impact on traffic outcomes should be considered.

126. Given this conflict around the need for more commercial floorspace within the centre to protect its economic viability and amenity, with its associated traffic impacts, a delicate balancing exercise is required that meets the of commercial floorspace needs of the centre whilst acknowledging the potential traffic impacts.

127. In light of the above, Council Officers have identified the following potential options:

    a. **Option 1 – No change:** This option involves no change to the current controls. Because the market favours residential development and the pace of that development recently, this option is highly likely to encourage DAs that deliver only ground floor commercial that will undermine centre’s amenity and economic viability. This has no traffic impact compared to current controls.

    b. **Option 2 – Require minimum level of commercial FSR provision to be provided without amending the maximum FSR or Building Heights:** This option involves increasing the commercial FSR requirements but this occurs at the cost of residential FSR. It means that the heights or densities of buildings will not change, but there will be a higher proportion of commercial floorpsace within any development and less residential than would currently be permitted. In other words, it equates to a net decrease in residential FSR but will improve centre’s amenity and economic viability. This will potentially result in a detrimental impact on the local traffic network.

    c. **Option 3 – Require minimum level of commercial FSR provision to be provided but amend the maximum FSR or Building Heights to seek to retain where possible an FSR for residential equivalent to existing levels** This will mean increases in overall density and building heights but it makes delivery of more commercial (retail/office) uses more viable which will improve the centre’s amenity and economic viability. The detrimental impact on the local traffic network will be greatest with this option.

Recommendation

128. Of the above options, Council Officers recommend **Option 3 - Increase Commercial FSR and density/building heights** because of the strong residential market and the way the planning system operates, if Option 2 was pursued, Council would receive a flood of DAs seeking mixed use development with only the ground floor allocated to commercial uses. These would all have to be considered and potentially approved under the current planning rules and the opportunity to provide the commercial floorspace Epping needs will be lost forever. Without sufficient commercial/retail floorspace the future function and amenity of the Town Centre is significantly impacted.

129. Whilst Option 3 is the Council Officer preference at this point in time this scenario needs to be run through the traffic modelling and if the outcome is unacceptable it may be necessary to fall back to Option 2. A further analysis and report to Council will allow Council to determine which option it will ultimately pursue via a Planning Proposal.

CONCLUSION

130. The reported rate of growth compared to the growth envisaged by the DP&E in 2013 demonstrates the Epping Town Centre has been doing a lot of the “heavy lifting” for dwelling growth and that the impact on infrastructure means that further housing growth for the sake of increasing house supply in Epping is not necessary.

131. This report provides a basis for Council to take to the DP&E, the Minister for Planning and the GSC seeking support for a strategic approach to future planning in Epping where any growth seeks to solve existing planning problems rather than just increasing density for the sole purpose of providing additional housing supply.

NEXT STEPS

132. The next steps are:

    a. Progressing supplementary traffic analysis on new through link through 240-244 Beecroft Rd; and re-opening of former M2 bus tunnel link.

    b. Exhibiting the ETCTS documentation for major stakeholder comment.

    c. Council Officers to arrange EPR Steering Group meeting with State agencies about proposed policy change and revisiting infrastructure delivery.

    d. Council Officers prepare further Council reports that seek to:

        i. Provide advice on provision of community facilities on the Councils Rawson Street Car park land and whether an EOI process should be pursued to enter into partnerships with other landowners.

        ii. Report on the outcome of the consultation on the Epping Town Centre Traffic Study and the results of the supplementary traffic analysis discussed in this report on:-

            1. Reopening of the former M2 bus tunnel link; and

            2. A new east west road link through 240-244 Beecroft Road.

e. Planning Proposal processes inclusive of background and technical study preparation commence on:

i. The heritage interface areas; and

ii. The provision of commercial floor space in the centre.

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ATTACHMENTS:

1⇩	ATTACHMENT 1 - Council Report of 12 February 2018	16 Pages
2⇩	ATTACHMENT 2 – April 2018 and November 2017 responses from DPE on RPA matter	3 Pages
3⇩	ATTACHMENT 3 – Related planning policy matters	3 Pages
4⇩	ATTACHMENT 4 - ETCTS Report	51 Pages
5⇩	ATTACHMENT 5 - ETCTS Appendices	192 Pages
6⇩	ATTACHMENT 6 - Austino PP Traffic Impact Assessment undertaken for Council	39 Pages
7⇩	ATTACHMENT 7 - For 28 May 2018 Council Report on EPR - Detail of Planning Proposals	6 Pages
8⇩	ATTACHMENT 8 - EPR Discussion Paper	111 Pages
9⇩	ATTACHMENT 9 - Council Report of 14 August 2017	59 Pages

REFERENCE MATERIAL

LEADING

ITEM NUMBER 11.5

SUBJECT Update on Epping Planning Review and Related Matters

REFERENCE F2017/00210 - D05739808

REPORT OF Project Officer

PURPOSE:

The purpose of this report is to update Council on the Epping Planning Review, as well as several related planning matters relevant to the Epping Town Centre.

RECOMMENDATION

(a) **That** Council note this update on the Epping Planning Review and related matters.

(b) **That,** with regards to the Planning Proposal at 2-18 Epping Road, 2-4 Forest Grove and 725 Blaxland Road, Epping, Council endorse the following principles to be applied when assessing and preparing a future formal submission to the Central City Planning Panel on this matter:

i. No more than 50% of Forest Park should be overshadowed in midwinter between the hours of 10am-2pm.
ii. In the case that there are open space dedications to Council, these should be at grade, contain deep soil zones and should be unencumbered with basement car parking.
iii. The proposal shall step down across the site from Epping Road to Forest Park, both in levels and in scale to demonstrate a respect for the interface between the site and Forest Park.
iv. Building heights should better respond to the surrounding residential zoned land context and respect proximity to Forest Park.
v. Linked residential towers with large floor plates shall be avoided to minimize cumulative bulk and scale impacts.
vi. The design efficiencies of residential Gross Floor Area (GFA) should be based on a Gross Building Area (GBA) x 75%.
vii. A design excellence competition process should be put in place in addition to the site specific DCP.
viii. Any roads/pedestrian links provided through the site should:
   - Provide public address and surveillance;
   - If they relate or link to Forest Park, they should resolve levels and scale along the park interface;
   - Be embellished with paving, bollards, furniture and street lighting; and
   - Be dedicated to Council and delivered via VPA with the relevant public domain guidelines to inform the quality of the finishes.
ix. VPA contribution/effort could also be directed to upgrading existing degraded facilities in the park (amenities, playground equipment, furniture, paving etc).
x. No net loss of public open space.
xi. The proposal should provide a suitable area of public open space which is appropriately sized and located.

xii. The proposal should not be finalized until the Epping Traffic Study is completed.

(c) **That** Council objects to progression of the proposed State Significant Development at 240-244 Beecroft Road until:

i. There is a significant increase in the quantum of commercial floor space provided on this site; and
ii. The Epping Traffic Study is complete.

(d) **Further, that,** following completion of the Epping Traffic Study, a further report to commence Stage 2 of the Epping Planning Review be prepared for Council's consideration.

OVERVIEW OF EPPING PLANNING REVIEW AND STRUCTURE OF THIS REPORT

1. The Epping Planning Review involves undertaking a review of planning for the Epping Town Centre and immediate surrounds. The review follows on from new planning controls introduced in March 2014 through the Department of Planning and Environment's (DPE) Urban Activation Precinct (UAP) Process, as well as Council boundary changes occurring in May 2016 under which Epping Town Centre came to be contained within the City of Parramatta (having previously been split between Parramatta City and Hornsby Shire Councils).

2. The intended outcome of the Epping Planning Review is to create a unified planning framework for the Epping Town Centre and its immediate surrounds, including one set of LEP and DCP controls, a unified development contributions framework and one public domain plan.

3. The Epping Planning Review has two stages. Stage 1 has involved undertaking technical studies and community consultation to inform Stage 2, which will involve preparing the aforementioned unified planning framework.

4. Following two briefings with the Epping Ward Councillors in October 2017 in relation to the Epping Planning Review, it is considered timely to present to Council an update on the Epping Planning Review project, as well as several interrelated planning matters happening concurrently in Epping Town Centre. This includes:

    a. Current development activity in Epping Town Centre;
    b. Regional/District planning matters;
    c. LEP matters;
    d. DCP matters; and
    e. Developer Contributions framework matters.

EPPING PLANNING REVIEW - STAGE 1

5. Stage 1 of the Epping Planning Review involved:

    a. A public launch in mid-December 2016;
    b. Preparation of four technical studies on Heritage, Social Infrastructure, Commercial Floorspace and Traffic (Interim) by consultants;

c. Urban design and planning analysis undertaken by Council;

d. Community consultation in December 2016 and Council Officer attendance at various community events such as Australia Day and Lunar New Year in early 2017 to inform the community of the review being undertaken;

e. Community consultation in March and April 2017 which informed the technical studies and Discussion Paper;

f. Preparation and public exhibition (21 June 2017 – 19 July 2017) of the Epping Planning Review Discussion Paper, informed by the steps described above; and

g. Additional community consultation (workshop series) during public exhibition of the Discussion Paper.

6. Stage 1 of the Epping Planning Review was largely completed (with the exception of a Final Traffic Study, as discussed further in this report) by way of a report to Council at its meeting of 14 August 2017 (Item 11.3). At this meeting, Council endorsed a suite of principles to guide Stage 2 of the Epping Planning Review; the endorsed principles are included at **Attachment 1** and are discussed in more detail in the next section of this report.

7. Council's full resolution from 14 August 2017 in relation to the Epping Planning Review is included at **Attachment 2** of this report. An update on the action items from this resolution is provided below.

a. Consistent with part (c)1 of the resolution, the Epping Ward Councillors were briefed on the Epping Planning Review via two briefing sessions held on 17 and 23 October 2017. At these briefing sessions, there was discussion relating to the traffic implications of some of the endorsed principles and additional information being provided regarding this. In response to discussion at these briefing sessions, and to provide further information in relation to traffic and other matters, this update report is provided for Council's consideration.

b. Part (c)2 of the resolution requires that a report to Council be prepared to commence Stage 2 of the Epping Planning Review once the Councillors have been briefed. This future report is discussed in further detail in the "Next Steps" section of this report.

c. Consistent with Part (e) of the resolution, Council wrote to the community thanking them for their feedback and advising them on the outcome of Stage 1 and next steps.

d. Consistent with Part (f) of the resolution, Council wrote to the Minister for Planning, Greater Sydney Commission, Department of Planning and Environment, Transport for NSW and Roads and Maritime Services to provide an update on the project and next steps.

EPPING PLANNING REVIEW - ENDORSED PRINCIPLES TO GUIDE STAGE 2

8. As discussed above, an extensive suite of principles to guide Stage 2 of the Epping Planning Review were endorsed by Council at its meeting of 14 August 2017. The endorsed principles are included in full at **Attachment 1** of this report, and are summarised in the following subsections. Status updates on actions currently being undertaken are also provided.

Heritage Interface Issues

9. The principles endorse for two (2) of the heritage areas in question (being Rosebank Avenue and certain properties at Norfolk Road/Pembroke Street) and for the Rose Street precinct (located adjacent to the Essex Street Heritage Conservation Area) that facilitating development of 2 storey manor homes be pursued in response to existing heritage interface issues, but that 3 storey residential flat buildings with appropriate DCP controls also be tested through further work. The principles also endorse removal of the Heritage Conservation Area (HCA) notation at Rosebank Avenue and at No.s 1, 3 and 3A Norfolk Road and 25 Pembroke Street.

10. For the Essex Street area, the endorsed principles envision that the HCA notation be removed, that planning controls on the western side of Essex Street be amended to permit redevelopment to 2 storey manor homes, and that planning controls on the eastern side of Essex Street remain unchanged.

11. For Rockleigh Park, the endorsed principles envision that the component of Rockleigh Park zoned R4 be rezoned to the R3 zone, and that further urban design work be undertaken to determine other appropriate controls.

12. For all of the abovementioned areas (excluding Rockleigh Park) the principles state that the recommendations contained in the principles could proceed prior to completion of the Traffic Study, as they seek to urgently deal with existing unintended heritage interface issues.

    <u>Status update:</u> This work has progressed and taken into account the following:

    a. **The need to brief Ward Councillors who have requested further information be provided these options; and**
    b. **It is acknowledged that the principles relating to these heritage precincts endorsed proceeding with these changes ahead of the Traffic Study. However, Council has statutory obligations when preparing any new planning controls to consider the traffic/transport impacts of any proposed changes, therefore, Council is not able to formally advance a Planning Proposal to change these planning controls without consideration of a traffic assessment. Once the Traffic Study is complete, Council may wish to prioritise advancing these amendments based on the further design work that Council officers have undertaken. Council does have the discretion to prioritise these changes ahead of others based on potential traffic impacts, but it must provide an assessment of the traffic implications.**

    The progress on this work has been limited by the need to advance competing priorities for resourcing arising to assist new Councillors upon their election to Council.

13. The principles also endorse recommendations of the Hornsby Heritage Review Stage 6 relating to altering various heritage listings as well as preparation of a Planning Proposal to reflect these recommendations.

Commercial Floor Space

14. The principles endorse further work being undertaken to ensure that minimum 3 storey commercial podiums are delivered on all land zoned B2 (except at 240-244 Beecroft Road, as discussed further in this report), and acknowledge that this work may include investigation through the Traffic Study of additional residential floorspace and height to facilitate delivery of this commercial floorspace. The principles also endorse use of the technical study on commercial floorspace (which informed the Discussion Paper) to be used as an interim assessment measure for future Development Applications until more formal controls are in place.

    Status Update: Council's Land Use Planning officers have been attending DA pre-lodgment meetings with Council's DA assessment officers and applicants in order to advise them of the need to provide appropriate levels of commercial floor space within the town centre in accordance with the Commercial Floorspace Needs Study.

15. The endorsed principles envision rezoning of the site at 240-244 Beecroft back to the B2 Local Centre zone (as was in place prior to DPE changing the zoning to the R4 High Density Residential Zone) to ensure an appropriate commercial floorspace contribution is made. This site is discussed in further detail later in this report. The principles also call for Council Officers to meet with Transport for NSW to discuss opportunities for the Epping rail station site to provide commercial floorspace.

16. The endorsed principles call for investigation of Council-owned sites in relation to both their potential capacity for commercial floorspace and their potential social/community role.

    Status Update: The delivery of commercial floorspace and community facilities on Council-owned sites is still being investigated and Council officers will continue to work to better understand the community needs and commercial opportunities of these sites, as well as work with the proponents of any future Public-Private Partnerships to determine whether the Planning Proposal process can deliver an appropriate development outcome. Regardless, any future development scenarios for Council-owned sites (whether this is Council-led or through a partnership) will need to ensure that the traffic impact is tested as part of the Traffic Study.

Social Infrastructure

17. The endorsed principles call for Council to investigate multiple detailed options to ensure that open space needs in the area are met, and that various other Council planning activities relating to open space consider the community's feedback provided during the Epping Planning Review.

18. With regards to the Austino Planning Proposal, which includes the former bowling club site, the principles endorse progressing the Planning Proposal with Council as the Relevant Planning Authority (RPA), subject to the Traffic Study being completed prior to finalising densities. The principles also state that Council will negotiate with the developer to ensure that a suitable area of open

space is provided. An update on this Planning Proposal is provided elsewhere in this report.

19. The principles state that there will be no net loss of community facility floorspace overall. Providing community infrastructure and civic focal points on both sides of the town centre is endorsed, with a community hub on one side, with adjunct uses on the other. Further feasibility testing should be undertaken to develop options for funding and delivering community facilities.

    Status Update: Council's Social Outcomes unit will do this in conjunction with other relevant business units as part of the annual Operational Plan/Delivery Plan review process; this process would determine prioritisation and budget for future community facilities in Epping.

20. The endorsed principles call for preparation of a master plan for Dence Park in 2018/2019, and that this include a base assumption of an aquatic facility with 50m pool, consideration of multiple options for the Epping Aquatic Leisure Centre, as well as increasing the overall recreation uses of the site and adjoining sensitive bushland.

    Status Update: Council's Place Services Unit has commenced the master plan process, beginning with preparing a brief for consultants.

Public Domain

21. The principles endorse preparation of appropriate DCP controls and a public domain plan that delivers through-block links and wider footpaths.

    Status Update: Please refer to a later section of this report relating to a fast-tracked DCP amendment to provide wider footpaths.

Traffic

22. Several of the endorsed principles relating to traffic provided direction in relation to progressing current development proposals, as follows:

    a. The principles endorse completion of the Traffic Study prior to finalization of proposals seeking development uplift, so that traffic impacts can be properly understood. Furthermore, the principles state that unless innovative solutions or initiatives are found to significantly curb or restrict car ownership/traffic movements, that proposals from parties seeking uplift will not be able to progress. These solutions should be assessed once the Traffic Study is complete.

    b. The principles endorse completion of the Traffic Study prior to finalization of current preliminary Planning Proposals and any future Planning Proposals, and also state that landowners seeking to pursue additional development uplift need to proceed through a formal Planning Proposal process (rather than as part of the Epping Planning Review Process)

    c. With regards to the Austino Planning Proposal, the principles state that Council will seek to retain its RPA status for this proposal on the basis that the proposal cannot be finalized until the traffic study is complete. (Please refer to a later section of the report where the current status of this proposal is discussed in more detail.)

d. The endorsed principles call for a Councillor briefing in relation to the Rawson Street Car Park, in order to progress preliminary Planning Proposals involving this site (refer to later section of this report).

23. The other endorsed principles regarding traffic relate to parking and congestion issues. These principles endorsed the following:

    a. a review of the car parking rates across the relevant Hornsby and Parramatta DCPs in order to determine appropriate lower parking rates, which are to be tested via the Traffic Study.

    b. a further report to Council in relation to amending the Hornsby DCP (which relies on minimum parking rates) to be consistent with the Parramatta DCP (which relies on maximum rates).

       <u>Status update:</u> This DCP amendment process has not commenced due to the potential for the Traffic Study to recommend changes to the parking rates in order to better encourage public transport usage. Changes to Council's parking DCP are subject to completion of the Traffic Study.

    c. to not proceed with a policy of providing an enhanced commuter car parking facility in the town centre.

    d. to further investigate the potential for a resident parking scheme.

    e. introduction of a car share scheme, and the potential for similar schemes to be provided form part of Stage 2 of the Planning Review.

       <u>Status Update:</u> Council installed six (6) car share spaces in the Epping Town Centre between 15-25 November 2017. Further car share policy and implementation options can be considered following completion of the Traffic Study.

    f. that Council trial a "stop/go" traffic controller at the pedestrian crossing of Rawson Street.

       <u>Status Update:</u> Planning for the trial has progressed, and the trial will proceed once school resumes in Term 1 (as it was considered that undertaking the trial during holidays when traffic patterns and pedestrian volumes are different would not provide reliable information upon which to evaluate the trial).

24. As noted above, several of the endorsed principles relate to finalisation of the Traffic Study, as discussed in more detail in the next section of this report.

EPPING PLANNING REVIEW - FINALISATION OF TRAFFIC STUDY

25. The remaining element of Stage 1 of the Epping Planning Review to be completed is the Traffic Study. It is acknowledged that the timelines for the completion of the Traffic Study have been amended to reflect delays in finalising the base traffic network model, which Roads and Maritime Services (RMS) needs to authorize before testing of the land use scenarios identified in the Epping Planning Review are carried out (i.e. Heritage Interface areas, additional commercial FSR, etc.) The major milestones and expected timeframes in relation to finalising the Traffic Study are now as follows:

    a. February 2018: RMS validation of final component of base model.

    b. February 2018: Scenario testing completed.

c. March 2018: Draft Final Traffic Study to Council and RMS for review.

d. April 2018: Final Traffic Study completed.

e. May 2018: Council report on Final Traffic Study with recommendations.

26. As confirmed in the Ward-based Councillor briefing sessions, the Traffic Study must be completed before Council Officers progress any Planning Proposal – whether Applicant-led, site-specific Planning Proposals or a Council-led Planning Proposal to amend controls in the Epping Town Centre (i.e. Stage 2 of the Epping Planning Review). It is acknowledged that the principles relating to heritage precincts endorsed proceeding with some changes ahead of the Traffic Study. However, as noted above, Council has statutory obligations when preparing any new planning controls to consider the traffic/transport impacts of any proposed changes, therefore Council is not able to formally advance a Planning Proposal to change these planning controls without consideration of a traffic assessment. Once the Traffic Study is complete, Council may wish to prioritise advancing these amendments based on the further design work that Council officers have undertaken. Council does have the discretion to prioritise these changes ahead of others based on potential traffic impacts, but it must provide an assessment of the traffic implications.

CURRENT DEVELOPMENT ACTIVITY IN EPPING

27. Simultaneous to the Epping Planning Review project, there has been significant development activity via Planning Proposals (PPs), Development Applications (DAs) and construction of approved DAs underway in Epping Town Centre and surrounds since late 2014. The following subsections provide updates on this activity.

Austino Planning Proposal

28. A Planning Proposal for land at 2-18 Epping Road, 2-4 Forest Grove and 725 Blaxland Road (former bowling club site) was initially lodged with Hornsby Shire Council in 2015, but came to be located within City of Parramatta Council following the May 2016 Council boundary changes. Figure 1 shows the land affected by this PP.

Figure 1: Land affected by the Austino Planning Proposal denoted in solid red line

(from applicant's Urban Design Report)

29. This PP has a complex history, which is summarised as follows:

    a. **December 2015:** The original PP was lodged with Hornsby Shire Council (HSC).

    b. **January 2016:** Parramatta City Council (PCC) was formally invited to prepare a submission which HSC would have regard to in making a decision to support or refuse the application.

    c. **March 2016:** PCC endorsed a submission to HSC (refer **Attachment 3**) which established seven planning principles that this PP should address; these principles are discussed in further detail below.

    d. **April 2016:** HSC refused the PP. The applicant subsequently sought a pre-Gateway review process through DPE.

    e. **May 2016:** Council boundary changes occurred, and the site came to be located in City of Parramatta. DPE also formally notified Council that the applicant had sought a pre-Gateway review.

    f. **November 2016:** DPE wrote to Council to advise that the PP could proceed to Gateway determination "subject to further consideration as indicated in the advice provided by the [Joint Regional Planning] Panel" as part of its pre-Gateway review. This advice included that the proposal "be part of the current Council traffic review of the whole of Epping Town Centre and that the outcomes of that review shall inform the final decision of the Floor Space Ratio for the site".

    g. **December 2016**: In response to letter from DPE, Council wrote to DPE requesting to be the Relevant Planning Authority (RPA) for this PP. This request was on the basis that the Gateway would be issued after the exhibition of the Epping Planning Review Stage 1 materials (Stage 1 had just commenced at that time).

    h. **March 2017**: DPE appointed Council as the RPA on the basis described above.

    i. **June-July 2017**: The Epping Planning Review Discussion Paper and associated technical studies (including interim traffic study) were exhibited for a four-week period.

    j. **August 2017:** Principles to guide Stage 2 of the Epping Planning Review were endorsed by the Administrator.

    k. **September 2017:** Following a request from the applicant, DPE wrote to Council requesting Council to provide its reasoning as to why an alternate RPA should not be appointed, or to advise that it would submit the proposal for Gateway based on the information available at that time.

    l. **October 2017:** Council responded to the above letter, stating its reasoning for remaining the RPA, as summarised below:

        i. RMS's support for the density sought in this PP was only on account of amendments being made to the PP regarding the number of car parking spaces on the site and additional traffic modelling being carried out;

ii. The progression of the PP is dependent on the outcomes of the Epping Traffic Study (consistent with the JRPP's recommendation).

iii. The Epping community expects that traffic matters will be well understood before any decision is made on proposals seeking uplift within and immediately around the town centre.

iv. The issue of precedent that would be created should the RPA role be removed from this planning proposal.

30. On **1 December 2017**, Council received a letter from DPE advising that it had appointed the Sydney Central City Planning Panel as RPA, meaning that Council no longer has RPA status for this proposal. This is not consistent with the endorsed principles discussed in this report, which sought to retain Council's RPA status.

31. DPE has advised Council that it anticipates that any Gateway determination for this proposal would require completion of the Traffic Study and any necessary amendments to the Planning Proposal prior to exhibition.

32. DPE has also advised Council that there will be formal consultation with Council on this Planning Proposal as it proceeds. Therefore, this report seeks Council's endorsement of principles to guide assessment and preparation of a future formal submission on this matter. Council officers have prepared principles for Council's consideration as follows; these principles align with PCC's original submission to HSC on this Planning Proposal (refer **Attachment 3**), as well as relevant principles established through Stage 1 of the Epping Planning Review:

a. No more than 50% of Forest Park should be overshadowed in midwinter between the hours of 10am-2pm.

b. In the case that there are open space dedications to Council, these should be at grade, contain deep soil zones and should be unencumbered with basement car parking.

c. The proposal shall step down across the site from Epping Road to Forest Park, both in levels and in scale to demonstrate a respect for the interface between the site and Forest Park.

d. Building heights should better respond to the surrounding residential zoned land context and respect proximity to Forest Park.

e. Linked residential towers with large floor plates shall be avoided to minimize cumulative bulk and scale impacts.

f. The design efficiencies of residential Gross Floor Area (GFA) should be based on a Gross Building Area (GBA) x 75%.

g. A design excellence competition process should be put in place in addition to the site specific DCP.

h. Any roads/pedestrian links provided through the site should:

i. Provide public address and surveillance;

ii. If they relate or link to Forest Park, they should resolve levels and scale along the park interface;

iii. Be embellished with paving, bollards, furniture and street lighting; and

iv. Be dedicated to Council and delivered via VPA with the relevant public domain guidelines to inform the quality of the finishes.

i. VPA contribution/effort could also be directed to upgrading existing degraded facilities in the park (amenities, playground equipment, furniture, paving etc).

j. No net loss of public open space.

k. The proposal should provide a suitable area of public open space which is appropriately sized and located.

l. The proposal should not be finalized until the Epping Traffic Study is completed.

33. Council is mindful that applying the above principles is likely to bring a reduction of built form, yield, height and density when compared to the proposal considered by Hornsby Shire Council.

34. Council officers are also progressing a formal valuation of the former Epping Bowling Club site, which forms part of this Planning Proposal.

State Significant Development at 240-244 Beecroft Road

35. There is a large site at 240-244 Beecroft Road which, until recently, was used as a tunneling and works site for the Sydney Metro Northwest project. The endorsed principles call for an appropriate amount of commercial floorspace to be provided as part of redevelopment of this site (whilst retaining current residential floorspace capacity).

Figure 4: UrbanGrowth site at 240-244 Beecroft Road

36. On 27 September 2017, a State Significant Development (SSD) application for a predominantly residential development at this site was lodged with DPE. The application contains an indicative development yield of 450 units.

37. On 9 October 2017, Council endorsed a Lord Mayoral minute outlining Council's objection to the progression of the SSD application until:

    a. *"There is a significant increase in the quantum of commercial floors space provided on this site; and*

    b. *The traffic study currently underway for the Epping Town Centre is complete."*

    Council also resolved to write to the Local MP, Minister for Planning and DPE requesting support for Council's position on this matter.

38. On 24 October 2017, Secretary's Environmental Assessment Requirements (SEARs) were issued for this project. Council was given the opportunity to comment on the SEARs, and raised three in-principle issues with the project, summarised as follows:

    a. The Traffic Study is not yet complete, and will likely include a proposal that will make use of part of this site to improve traffic conditions and the public domain. The proposed development of the site could make this impossible to achieve. Furthermore, the potential for confusion arising from the concurrent public release of the Traffic Study and the SSD would be a poor outcome.

    b. Future controls from Stage 1 of the Epping Planning Review would require that this site provide significantly more commercial floor space than is currently proposed in the SSD application.

    c. Council welcomed further discussion with DPE regarding the validity of the SSD pathway for this project.

    Council also provided feedback on the SEARs, requesting that several of these were strengthened to achieve improved outcomes in matters such as social and environmental sustainability, public domain and design excellence. On 8 December 2017, revised SEARs were issued with minor changes.

39. On 1 December 2017, Landcom (the body responsible for the site disposal process) wrote to the Lord Mayor after having conducted a stakeholder engagement with Council, Mr Damien Tudehope MP, the Epping Chamber of Commerce and Epping residents to advise that Landcom will defer the release of the Expressions of Interest (EOI) for the site from early December 2017 to early 2018. The letter advised that this will allow Landcom and Transport for NSW to investigate the possibility of increasing the proposed commercial floorspace on this site from 700sqm to 2,000sqm.

40. As stated previously, the Epping Planning Review Stage 1 principles call for an appropriate amount of commercial floorspace to be provided as part of redevelopment of this site. It is Council officers' view that 2,000sqm is not an appropriate amount, and that additional commercial floor space should be provided. This is based on the following:

    a. the site was previously zoned B2 and had commercial uses on site;

b. the Epping Planning Review Stage 1 principles endorse a minimum 3-storey podium for other land zoned B2 in the Epping Town Centre; and

c. the site area is approximately 13,342sqm, meaning that the proposed 2,000sqm constitutes only about 0.15:1 FSR for commercial uses.

41. It is recommended that Council reiterate its resolution of 9 October 2017 on this matter, specifically, that Council objects to the progression of this SSD application until:

    a. There is a significant increase in the quantum of commercial floor space provided on this site; and

    b. The Epping Traffic Study is complete.

Other planning and development activities in Epping Town Centre

42. Development Applications (DAs) in Epping Town Centre continue to be processed.

43. There are also two preliminary Planning Proposals involving Council-owned sites (inclusive of Council car park) at 51A and 51B Rawson Street. Consistent with the endorsed principles, Council has advised these applicants that current preliminary proposals will not be finalised prior to completion of the Traffic Study.

REGIONAL/DISTRICT PLANNING MATTERS

44. The Greater Sydney Commission (GSC) released new draft Region and District Plans in late 2017 for public consultation. In the draft *Central City District Plan*, Epping is identified as a 'Strategic Centre' for 2036, with a jobs target of 1,900 to 2,400 additional jobs for 2036.

45. Epping was not identified as a higher-order centre in either of the two previous draft subregional/district plans (the draft *West Central Subregion Draft Subregional Strategy 2007* and the draft *West Central District Plan 2016*). These plans identified Epping as a "Town Centre" and "Local Centre", respectively. Thus the role of Epping appears to have been recently elevated from a lower-order to a higher-order centre. However, the 'Strategic Centre' category is not clearly defined in the 2017 draft plans, and no explanation or justification has been provided for this change. The change has also occurred ahead of completion of the Epping Traffic Study, which will guide the centre's capacity for further growth.

46. Council's submission to the GSC on the draft Region and District Plans supported the relevant Action identified in the draft District Plan, which was to "*continue the review of planning controls for Epping in collaboration with State agencies*". Council's submission also offered feedback on the vision expressed for Epping, as summarised in the following points:

    a. Council considers that Epping is less advanced in terms of its development as a strategic centre, and requests stronger guidance from GSC relating to the role of strategic centres (and Epping in particular);

    b. Council notes that the vision for the centre expressed in the draft *District Plan* requires a genuine commitment from State government in

all its respective areas of responsibility (including evidence-based policy making, policy implementation, infrastructure investment and governance) to ensure that any expanded role of the centre is a successful one;

c. Council strongly believes that with the support of improved transport, social and recreational infrastructure and public domain investments, the role of Epping as an important business precinct could be heightened; and

d. Any review of the planning controls for Epping must closely involve the community likely to be affected by the outcomes of the review.

47. Council's submission made the following recommendations relating to Epping:

- *That the final plans provide stronger guidance on the role of strategic centres, and Epping in particular.*
- *That the GSC, DPE and UrbanGrowth NSW work with Council to ensure that any review of planning controls for Epping closely involves the community.*

48. Council officers also note that the draft District Plans work to a timeframe of 2036, and the Region Plan presents a vision to 2056. These longer-term timeframes suggest that strategic centres could develop incrementally over the medium- to longer-term. This contrasts with the intense level of development that Epping has experienced in the past few years, and which is forecast for the next few years (as discussed previously in this report).

LEP MATTERS (HORNSBY LEP 2013 – HOUSEKEEPING AMENDMENT)

49. A Housekeeping Amendment to Hornsby LEP 2013 (which was commenced by Hornsby Shire Council prior to council boundary changes in May 2016) was notified on 29 September 2017. This Amendment included some minor changes applying to land in and around Epping Town Centre, as follows:

a. Minor boundary adjustments to the zoning map to align with land parcel boundaries;

b. A change of attribution for the 72m height limit from "AA" to "AA2" (the 72m height remains as is); and

c. Amendment of some minimum lot size requirements at land zoned R3 and R4 (generally around Hazelwood Pl, Essex St, Derby St and Maida Rd) to correspond with previous changes to related planning controls.

This Housekeeping Amendment was administrative in nature, and does not impact the Epping Planning Review.

DCP MATTERS (FAST TRACKED AMENDMENTS TO PARRAMATTA DCP 2011 – PUBLIC DOMAIN)

50. The Epping Planning Review Discussion Paper undertook preliminary analysis identifying the need for amendments for ground floor setbacks in parts of the Town Centre. As part of the suite of principles endorsed on 14 August 2017, Council endorsed the following relevant principle:

That as part of Stage 2 of the Epping Planning Review, that Council prepare appropriate DCP controls and a public domain plan that deliver through-block links and wider footpaths.

51. Since the new planning controls were introduced in March 2014, most DAs in Epping's B4 Mixed Use zone have affected sites on the eastern side of the Town Centre (formerly Hornsby Shire Council area). However, during late 2017, several major land owners on the western side of the Town Centre commenced development proposals (or discussion about potential proposals). Whilst wider footpaths on the eastern side of the Town Centre have largely been delivered through the planning framework and DA processes, widening the footpath on the western side of the Town Centre is now of critical importance in light of significant developer interest and expected increases in pedestrian volumes.

52. The current DCP controls contained within Parramatta DCP 2011 are not considered adequate to deliver the desired outcome of wider footpaths. Council considered a report on this matter on 18 December 2017 which proposed to increase the full building setback from 0m to 1.5m along Beecroft Road (as well as parts of High and Bridge streets). In relation to this matter, Council resolved:

    *(a) **That** the Council resolves the proposed changes to amend the Parramatta DCP 2011 by preparing a public exhibition as outlined in this report.*

    *(c) **That** the CEO be given delegation to authorise the DCP exhibition material prior to proceeding to public exhibition in early 2018.*

    *(d) **Further, that** a report be considered by Council on outcomes of the public exhibition of the DCP amendment.*

53. Exhibition of these amendments commenced on 24 January 2018, and the exhibition outcomes will be reported back to Council in March/April 2018.

DCP MATTERS (AMENDMENTS TO HORNSBY DCP 2013 RELATING TO TREE PRESERVATION)

54. On 10 July 2017, Council resolved to prepare draft amendments to Hornsby DCP 2013 for public exhibition that have the effect of applying the tree preservation controls in Section 5.4 of Parramatta DCP 2011 to land now contained within City of Parramatta which was previously within Hornsby LGA. The draft amendments also update the controls so they are consistent with the new Biodiversity Conservation Act 2016 and State Environmental Planning Policy (vegetation in non-rural areas) 2017. These draft amendments were exhibited from 18 October – 17 November 2017. Council officers are currently preparing a briefing session for Councilors and subsequent report to Council regarding the outcomes of this exhibition; this report is planned for February/March 2018, once a Councillor briefing session has taken place.

DEVELOPER CONTRIBUTIONS MATTERS (NEW CONTRIBUTIONS PLANS RELATING TO EPPING TOWN CENTRE)

55. At its meeting of 13 November 2017 (Item 11.6), Council adopted new Section 94/94A Plans for the area transferred from Hornsby to City of Parramatta as part of council boundary changes in May 2016. These plans were

predominantly required to support infrastructure demand resulting from the growth occurring in Epping Town Centre and will ensure that funds collected within the area now located in City of Parramatta are spent in that area. These plans came into effect on 6 December 2017.

EXPECTED NEXT STEPS

56. Expected timeframes for the individual matters discussed in this report have been provided where possible. It is expected that the outcomes of Council's consideration of a future report to begin Stage 2 of the Epping Planning Review (consistent with part (c)2 of the resolution outlined earlier in this report) will provide more clarity as to the direction for Stage 2 of the Epping Planning Review, as well as other related matters. The timing of this future report depends on the finalisation of the Traffic Study which, as noted previously, is currently expected in May 2018.

CONCLUSION AND RECOMMENDATION

57. As evidenced in this report, there continues to be a significant number of interrelated planning and development matters underway at Epping Town Centre, affecting the formal completion of Stage 1 and commencement of Stage 2 of the Epping Planning Review.

58. It is recommended that Council note the updates on various matters provided in this report and that, following completion of the Traffic Study, a further report to commence Stage 2 of the Epping Planning Review process is prepared for Council's consideration.

Sarah Baker
Project Officer Land Use Planning

Jacky Wilkes
A/Team Leader Land Use Planning

Robert Cologna
A/Service Manager Land Use Planning

Sue Weatherley
Director Strategic Outcomes and Development

Jim Stefan
A/Director City Services

ATTACHMENTS:

1	Endorsed Principles - Stage 1 Epping Planning Review	8 Pages
2	Council resolution - Epping Planning Review - Completion of Stage 1 and Commencement of Stage 2 - 14 August 2017	3 Pages
3	Submission to Hornsby Shire Council - Planning Proposal - Epping and Blaxland Roads, Epping - March 2016	23 Pages

REFERENCE MATERIAL

NSW GOVERNMENT | Planning & Environment

IRF18/1026

Ms Sue Coleman
Interim Chief Executive Officer
City of Parramatta Council
PO Box 32
PARRAMATTA NSW 2124

Attention: Mr Robert Cologna

Dear Ms ~~Coleman~~ Sue

Austino planning proposal (2-18 Epping Road, 2-4 Forest Grove and 725 Blaxland Road, Epping)

I write in response to your letter of 1 March 2018 requesting further clarification of why the Sydney Central City Planning Panel was appointed as the planning proposal authority (PPA) for the above proposal.

As detailed in correspondence from the Department of Planning and Environment in November 2017, careful consideration was given to the proponent's request to grant an alternate PPA. Given the delays and ongoing extensions surrounding the delivery of the Epping traffic report, the change in the local government area, the information submitted by Austino and the outcomes of the meetings between the proponent, Council and the Department, the decision was made to appoint the Panel as the PPA for the planning proposal.

Such a decision is not taken lightly by the Department. However, in this instance, the request was considered to have merit.

A copy of previous correspondence outlining the reasons why an alternate PPA was appointed is enclosed for your reference.

Should you have any further questions in relation to this matter, please contact Ms Ann-Maree Carruthers, Director, Sydney Region West, at the Department on 9274 6270.

Yours sincerely

RECEIVED IN RECORDS
03 MAY 2018
Initials

SCANNED
03 MAY 2018
PCC

Marcus Ray
Deputy Secretary
Planning Services
27/04/2018

Encl: Letters to Council dated 8 September 2017 and 29 November 2017

320 Pitt Street Sydney NSW 2000 | GPO Box 39 Sydney NSW 2001 | planning.nsw.gov.au

NSW GOVERNMENT | Planning & Environment

Mr Greg Dyer
Interim General Manager
City of Parramatta Council
PO Box 32
PARRAMATTA NSW 2124

17/10406-1

Dear Mr ~~Dyer~~ Greg

Austino Property Group (proponent) has requested that an alternate Relevant Planning Authority (RPA) be appointed to progress a proposal which seeks to amend the zones and development controls applying to land at 2–18 Epping Road, 2–4 Forest Grove and 725 Blaxland Road, Epping.

The proponent is concerned that a planning proposal has not been submitted for a Gateway determination despite the Sydney West Joint Regional Planning Panel determining in September 2016 that the proposal should progress. I am also aware that despite the proponent indicating that it is willing to negotiate parking and access requirements for the site, Council resolved on 10 August 2017 to not progress the proposal until a wider traffic study has been completed.

I have carefully reviewed this matter. Given the history of the application, ongoing delays, the information submitted by Austino and the outcomes of the meetings between the proponent, Council and the Department, the request does appear to have merit.

Before I make a decision on the matter, I request that Council provide its reasoning why an alternate RPA should not be appointed or alternatively advise that it will submit the proposal for a Gateway determination based on the information available to date. I request that Council provide a response to this request by 13 October 2017.

I have also requested Catherine Van Laeren, Director of the Sydney Region West office to schedule a meeting to discuss these issues. Mrs Van Laeren can be contacted directly on 9860 1520.

Yours sincerely

Marcus Ray
Deputy Secretary
Planning Services
08/09/2017

320 Pitt Street Sydney NSW 2000 | GPO Box 39 Sydney NSW 2001 | planning.nsw.gov.au

NSW GOVERNMENT | Planning & Environment

Office of the Secretary

17/14234

Mr Greg Dyer
Interim General Manager
City of Parramatta Council
PO Box 32
PARRAMATTA NSW 2124

Dear Mr Dyer

Thank you for your letter of 4 October 2017 regarding Austino's request for an alternate Relevant Planning Authority (RPA) to be appointed for the planning proposal at 2–18 Epping Road, 2–4 Forest Grove and 725 Blaxland Road, Epping (PGR_2016_HORNS_002_00).

I have carefully considered Council's response and I understand Council has met with Department of Planning and Environment staff to discuss the matter. I have now determined that the Sydney Central City Panel will carry out the role of RPA for this proposal.

The Department will coordinate consultation with Council and the proponent to receive an updated planning proposal to be lodged for a Gateway determination as soon as possible. Given the extensive work and community engagement undertaken to date by Council, and the traffic study for the Epping Planning Review nearing completion, it is anticipated that any Gateway determination will require that the proposal not be placed on community consultation until the traffic study is completed and any necessary amendments to the proposal are made.

I note that Council has advised the traffic study is anticipated to be completed in February 2018. The Department is available to work with Council to ensure this timeframe is met.

I have requested Mrs Catherine Van Laeren, Director of Sydney Region West, to assist if you have any further queries. Mrs Van Laeren can be contacted directly on 9860 1520.

Yours sincerely

Secretary
Department of Planning and Environment

29.11.17

320 Pitt Street Sydney NSW 2000 | GPO Box 39 Sydney NSW 2001 | planning.nsw.gov.au

RELATED PLANNING POLICY MATTERS

Attachment 3 to Council Report on Epping Town Centre Traffic Study – 28 May 2018

A series of policy amendments (both LEPs, DCPs and development contributions plans) have been underway or are complete that have an impact on the Epping Town Centre. These matters are summarized in Attachment #).

Hornsby LEP 2013 – Housekeeping Amendment

1. A Housekeeping Amendment to Hornsby LEP 2013 (commenced by Hornsby Shire Council prior to council boundary changes in May 2016) was notified on 29 September 2017. This Amendment included some minor changes applying to land in and around Epping Town Centre, as follows:
    a. Minor boundary adjustments to the zoning map to align with land parcel boundaries;
    b. A change of attribution for the 72m height limit from "AA" to "AA2" (the 72m height control remains as is); and
    c. Amendment of some minimum lot size requirements at land zoned R3 and R4 (generally around Hazelwood Pl, Essex St, Derby St and Maida Rd) to correspond with previous changes to related planning controls.
2. This Housekeeping Amendment was administrative in nature, and does not impact the Epping Planning Review.

Developer Contributions Plans Relating to Epping Town Centre

3. At its meeting of 13 November 2017 (Item 11.6), Council adopted new Section 94/94A Plans for the area transferred from Hornsby to City of Parramatta as part of council boundary changes in May 2016. These plans were predominantly required to support infrastructure demand resulting from the growth occurring in Epping Town Centre and will ensure that funds collected within the area now located in City of Parramatta are spent in that area. These plans came into effect on 6 December 2017.

Fast Tracked Amendments to Parramatta DCP 2011 – Public Domain

4. The Epping Planning Review Discussion Paper undertook preliminary analysis identifying the need for amendments for ground floor setbacks in parts of the Town Centre. As part of the suite of principles endorsed on 14 August 2017, Council endorsed the following relevant principle:

    That as part of Stage 2 of the Epping Planning Review, that Council prepare appropriate DCP controls and a public domain plan that deliver through-block links and wider footpaths.

5. Draft DCP controls were prepared and exhibited between January and February 2018. On 12 March 2018 (Item 13.4) after reporting on the exhibition process, the DCP was adopted by Council. It came into effect on 4 April 2018.

Amendment to Hornsby DCP 2013 - Tree Preservation

6. On 26 February 2018, Council resolved to adopt amendments to Hornsby DCP 2013 that apply the tree preservation controls in Section 5.4 of Parramatta DCP 2011 to land now contained within City of Parramatta which was previously within Hornsby LGA. The draft amendments also update the controls to ensure consistency with the new *Biodiversity Conservation Act 2016* and *State Environmental Planning Policy (Vegetation in non-rural areas) 2017*. Public notices were subsequently placed in local papers in mid March 2018 which brought the DCP amendments into effect.

7. The Council resolution in relation to this item (Item 13.4) request a report be brought back to Council regarding: (1) tree removal in Forest Park; and (2) the impact of the Austino planning proposal on the trees at the northern side of Forest Park. The relevant resolution parts are as follows:

   (h) ***That*** *a report be brought back to Council regarding which trees in Epping Forest Park have been removed by Council staff and any proposed plantings.*

   (i) ***Further, that*** *a report be brought back to Council regarding the potential impact of proposed development to the north of Epping Forest Park on existing trees.*

8. Council Officer's response is provided in the sub-section below.

<u>Tree removal by Council Staff in Forest Park</u>

9. Forest Park is listed as local heritage item under Schedule 5 of the *Hornsby Local Environmental Plan 2013*. This listing identifies significant tree plantings within the park that contribute to its heritage character, including:

   a. 2 x Hoop Pines and 2 x Bunya Pines (c1910/20s);
   b. 1 x Cypress Pine (c1920s);
   c. Canary Island Pines (c1930s);
   d. Crepe Myrtle / Tibouchina / Bottlebrush / New Zealand Christmas Bush eastern border planting (1930s/40s);
   e. Camphor Laurels (c1950s);
   f. Brush Box along northern boundary (c1950s); and
   g. Group of gums including Spotted Gums (c1960s).

10. Council's Parks Services team has commenced restoration of the heritage landscape elements of the garden along the northern boundary of the reserve. This garden contains a number of plant specimens from the original heritage landscaping that have become overgrown in recent years. Large amounts of weeds have recently been removed to uncover these original plantings. The largest and most recent weed removals included three Cocos Palms (*Syagrus romanzoffianum)*.

11. Removal of these trees commenced in early March, with two of the three trees being removed before works were halted due to concerns from members of the local community. These three trees do not contribute to the heritage significance of the park and their removal will allow for additional plantings consistent with the original landscape character of Forest Park.

12. Following the transfer of Forest Park to the City of Parramatta Council in 2016 on account of Council amalgamations, Council has installed a number of plants consistent with the existing heritage plantings, including:

- 15 x Camellia (Propagated from site);
- 3 x Gordonia;
- 10 x Ozmanthus;
- 5 x Rhododendron (Propagated from site);
- 30 x Ctenanthe ' Grey star';
- 20 x Hydrangea;
- 8 x Magnolia 'Little gem'; and
- 15 x Grevillea.

13. Additional plantings are also scheduled to be undertaken during the current Autumn months. However, this is on hold pending removal of the remaining Cocos Palm to avoid damage to new plants. The additional plantings include:

    - 40 x Philodendrons 'Xanadu';
    - 20 x Camellia (Propagated from site);
    - 6 x Magnolia Little gem';
    - 40 x Gordonia 'Florida';
    - 6 x Tibouchina; and
    - 20 x Azalea (Propagated from site).

14. The above information addresses Council's resolution that "a report be brought back to Council regarding which trees in Epping Forest Park have been removed by Council staff and any proposed plantings."

<u>Potential impact of proposed (Austino) development to the north of Epping Forest Park</u>

15. The discussion on this planning proposal within the Council report (which this attachment relates to) recommends an alternative option/s for this site. The outcome of this should be explored before an assessment of the proposal is undertaken of the potential impact of proposal on existing trees to the north of Epping Forest Park.

**

Epping Town Centre Traffic Study

Land Use Options Testing

Prepared for Parramatta City Council | 10 May 2018

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Land Use Options Testing

Epping Town Centre Traffic Study

Final

Report J17056RP4 | Prepared for Parramatta City Council | 10 May 2018

Prepared by	**Tim Brooker**	Approved by	**Allan Young**
Position	Associate - Transport Planner	Position	Director
Signature		Signature	
Date	10 May 2018	Date	10 May 2018

This report has been prepared in accordance with the brief provided by the client and has relied upon the information collected at the time and under the conditions specified in the report. All findings, conclusions or recommendations contained in the report are based on the aforementioned circumstances. The report is for the use of the client and no responsibility will be taken for its use by other parties. The client may, at its discretion, use the report to inform regulators and the public.

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Document Control

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1 Introduction

1.1 Background to land use changes at Epping

A number of economic and transport accessibility factors are currently attracting new urban development (primarily higher density residential development) to be located in the Epping Town Centre and surrounding areas.

Foremost in this regard is the North West Metro project, which the NSW Government has acknowledged by implementing significant local area land use zoning changes at Epping in October 2014, and the concurrent redistribution of the local government area boundaries during 2015 and 2016 which has now brought the entire Epping Town Centre area under the land use planning control of Parramatta City Council (except for some major sites where the NSW Government's-Planning Assessment Panels are involved in the planning assessment).

The continuing strong population growth and transport network changes throughout Sydney and the adjoining outer-urban regions of North Western Sydney, will also have a contributory effect in future years on road traffic conditions throughout the Epping Study area, not just the development occurring adjacent to the "Epping Town Centre" road network which is the primary focus of this report.

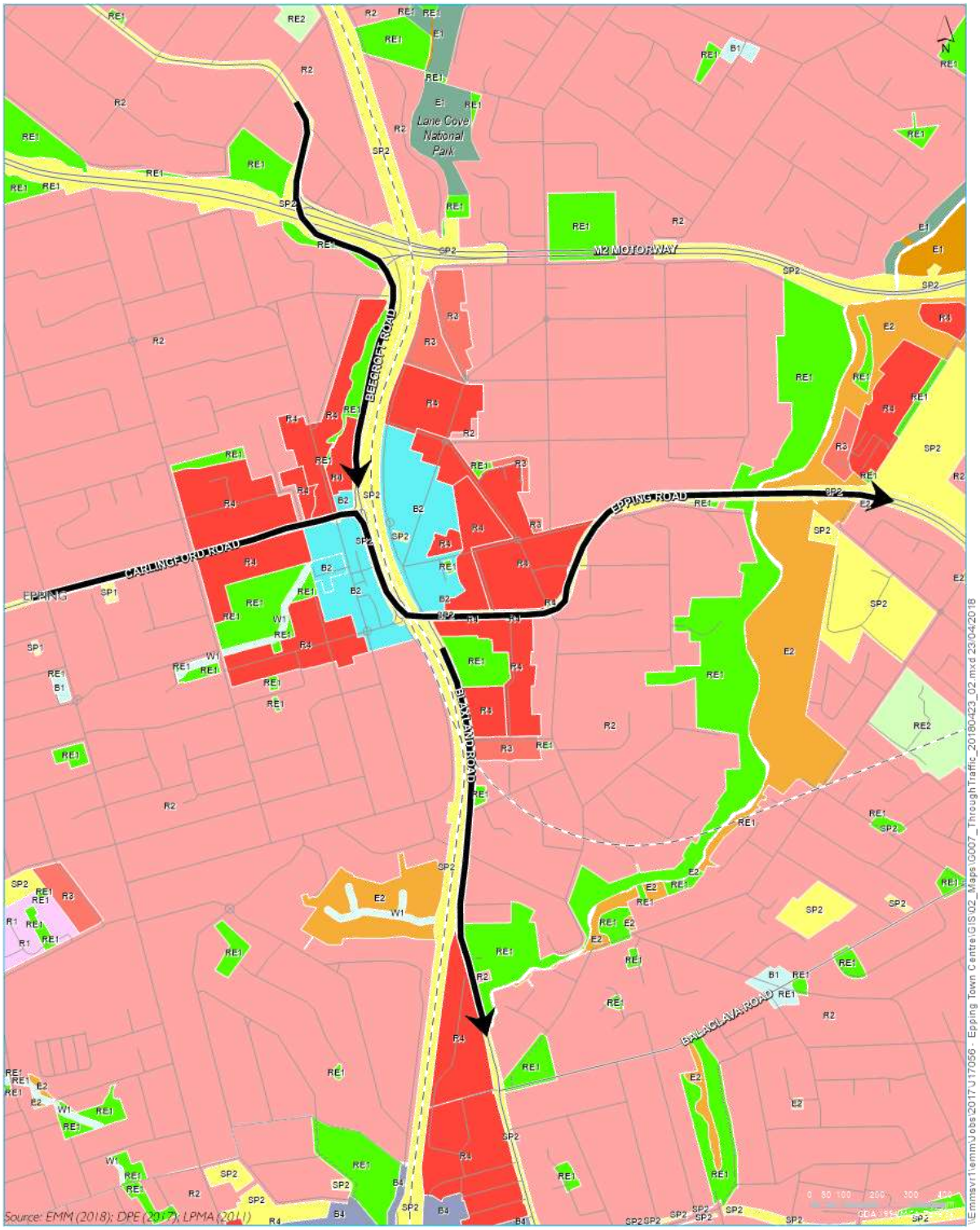
Historically the Town Centre has had a significant employment focus in addition to its retailing and residential development. In recent years, since the new Priority Precinct planning controls were first drafted (from 2011 onwards), the development focus has shifted towards significantly increased residential densities and many proposed residential developments are now potentially displacing the historic employment and retail/commercial uses on key sites within and adjoining the town centre. It is the view of Council that this is not a preferred outcome for the Epping Town Centre where the existing level of retail and commercial development is desired to be at least maintained, to adequately serve the local retail industry and service needs of a growing residential population within and in the vicinity of the Town Centre.

The core commercial and retailing areas of the Town Centre are all within easy walking distance (mostly within 200 m and all generally within 400 m) of the Railway Station at Epping. The primary focus of the existing commercial and retail activity, including the major supermarket (Coles) is currently on the western side of the railway where the three primary retail frontages of Beecroft Road (western side), Rawson Street (eastern side) and Rawson Street (western side) accommodate these businesses. Also, the large Council-owned open air car park, which is located on the western site of Rawson Street, serves as a primary focus for the local vehicular traffic and parking movements which are generated by the Town Centre retail and commercial activity.

1.2 Transport networks

This study has been undertaken as one of a number of related land use planning studies which are critically examining the environmental and other impacts of the potential future urban development at Epping. The Epping study area is strategically located between the Parramatta CBD and Sydney CBD and is well served by regional transport links. These links are described below.

The study area major road network south of the M2 Motorway, which consists of the four major roads, Epping Road, Beecroft Road, Blaxland Road and Carlingford Road, which pass through the Epping Town Centre (refer to Figure 1.1).



KEY

- Through trips
- Rail line
- Main road
- Local road
- NPWS reserve

Zone

- B1 Neighbourhood Centre
- B2 Local Centre
- B4 Mixed Use
- E1 National Parks and Nature Reserves
- E2 Environmental Conservation
- R1 General Residential
- R2 Low Density Residential
- R3 Medium Density Residential
- R4 High Density Residential
- RE1 Public Recreation
- RE2 Private Recreation
- SP1 Special Activities
- SP2 Infrastructure
- W1 Natural Waterways

Major road network at Epping south of the M2 Motorway

Epping Town Centre traffic study

Figure 1.1

EMM

The M2 Section of the Sydney Orbital Motorway, bypasses the Town Centre in an east-west direction, approximately 800 m north of the core Beecroft Road commercial area. Although the Sydney Motorway Network (including the M2 Motorway) is now heavily congested in the peak travel direction, for extensive periods throughout the normal weekday morning and afternoon traffic peak periods, there are no current plans by RMS for any widening of the M2 Motorway.

The future North-Connex Motorway diversion for the Pennant Hills Road traffic north of Carlingford may potentially provide some future traffic relief to the peak hour traffic congestion on the M2 Motorway. However due to the generally diverging alignments of the two Motorway routes, which is shown on the Sydney Motorway and Tollways map in Figure 1.2, there will be only a limited range of combinations of traffic origins and destinations for which North-Connex can provide a convenient alternative route to the M2, and the new Motorway route is likely to provide only limited future traffic relief to the existing M2 Motorway traffic congestion.

Map Source: Ben Aveling and Ian Bell

Figure 1.2 Future Sydney orbital motorway and tolled road network

The Sydney heavy rail and future metro rail networks pass through Epping, which is a major junction station on the Sydney Trains network and major stopping point for Inter City train services on the Sydney to Newcastle and Central Coast line. This provides a high and improving level of rail network accessibility and connectivity for the future residential population and workforce at Epping as is shown by the existing and proposed future train service frequency maps in Figures 1.3, 1.4 and 1.5.

However, although the rail network connectivity is good for the major travel destinations to the north east, north west and south east of Epping, there remains a crucial missing link in the rail network connectivity towards the Parramatta direction in the south west, where the NSW Government's decision in 2005 not to proceed with the previously approved Epping to Parramatta Heavy Rail link, continues to have a significant adverse effect on the public transport connectivity and journey times for public transport travel to and from Epping in the Parramatta direction.

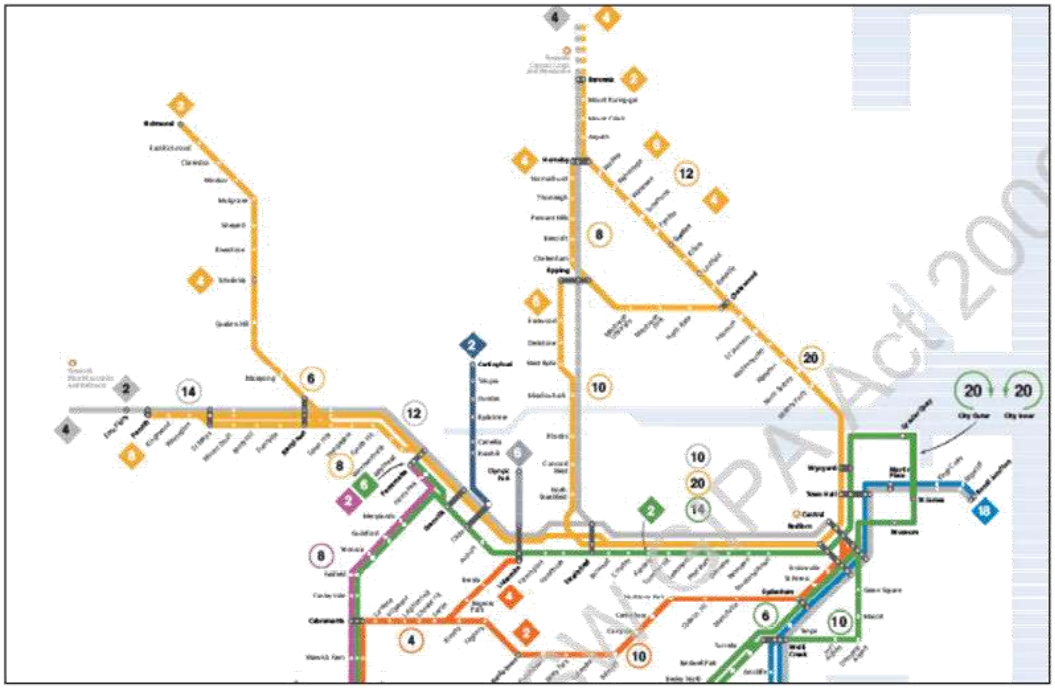


Figure 1.3 Existing Sydney Trains 1 am peak hour train service frequency in 2015

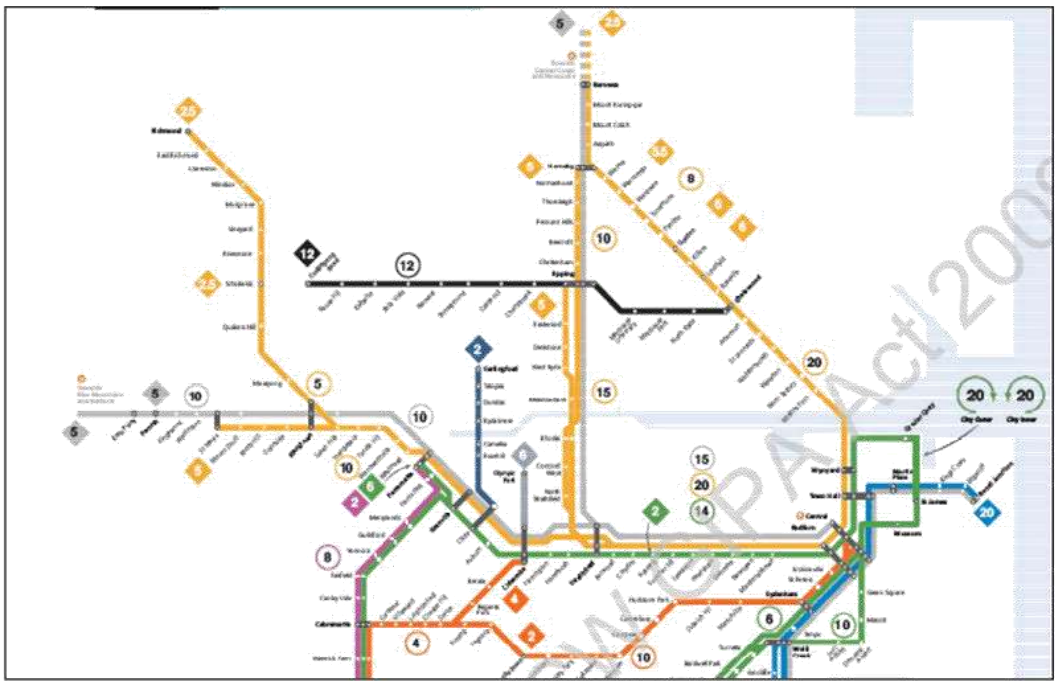


Figure 1.4 Future Sydney Trains 1 hour am peak train service frequency after 2019

The STA (Sydney Buses) local and interregional bus routes network at Epping, which are shown in Figure 1.5, currently service a wide range and frequency of destinations for bus passengers at Epping including longer distance sub-regional connections to Parramatta (routes M54, 546 and 549) and North Sydney or the Sydney CBD (routes 288, 290 and 291).

However even with peak hourly ten minute service frequencies for the buses travelling by these routes, the bus network capacity for peak hourly passenger movements is still only a few hundred passenger per hour, for each route, compared to the likely capacity of between 10,000 to 20,000 passengers per hour which could be achieved by direct metro or heavy rail services travelling to these destinations.

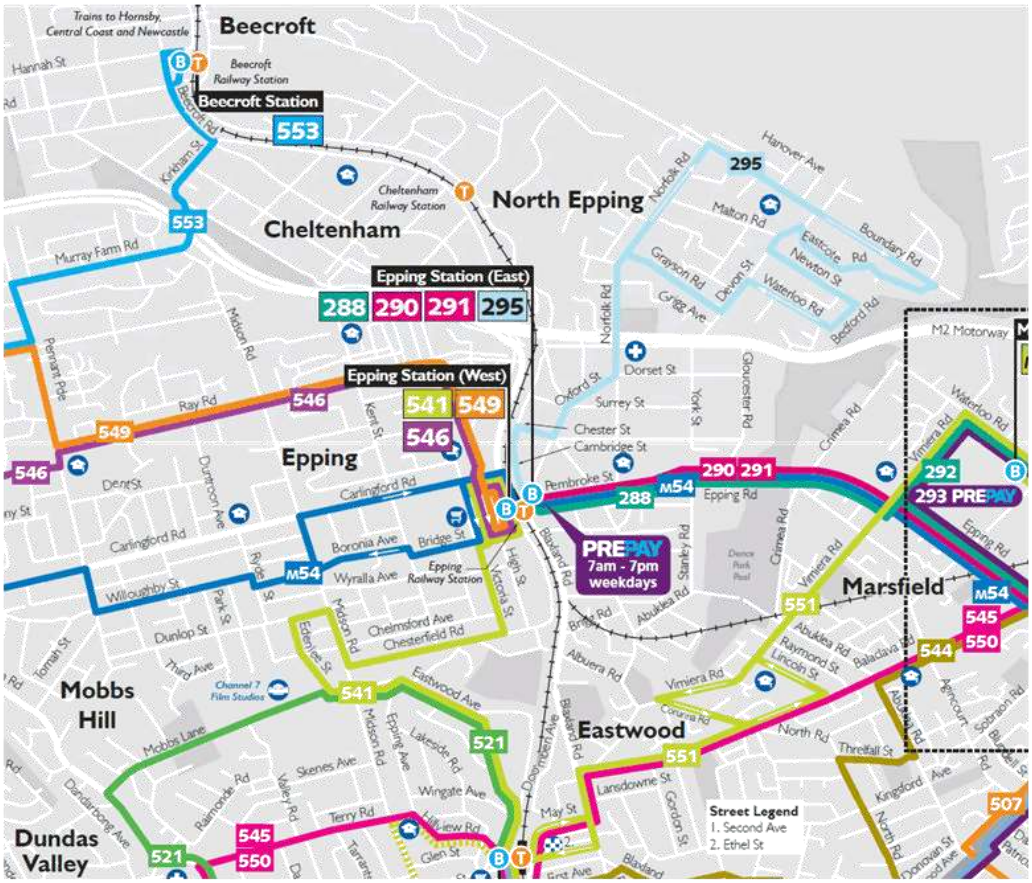


Figure 1.5 Bus routes connecting to the Epping Town Centre and Railway Station

1.3 Project objectives

In a transport modelling context, the two primary aims and objectives of the study are:

- to identify the through (regional) traffic volume growth and its effect on the traffic network; and
- the quantification of the local area road network impacts from local and through traffic growth.

A range of future land use and road network improvement scenarios are including the core locality residential traffic growth scenarios stemming from the recent zoning changes implemented as an outcome of the Epping Town Centre Urban Activation Precinct (UAP) Study 2014.

This analysis is effectively required to further update the work of the Epping Town Centre Transport Studies by Halcrow and GTA (Halcrow Pacific Pty Ltd, 2011 and GTA Consultants-reviewed by AECOM, 2015) which informed the work of the UAP. The Halcrow Study recommendations for road infrastructure improvements to accommodate the short term future development growth scenario for the Epping Town Centre go some way to accommodate the future traffic needs of longer-term development. However, both these earlier studies were based upon future traffic growth estimates for approximately 3,000 additional dwelling units.

The more recent land capability analysis which has been undertaken for this study by Parramatta City Council and EMM has identified the actual future development potential under the new zoning controls is more likely to be approximately 10,000 additional dwellings. Also this growth estimate does not include any additional dwellings proposed as part of planning proposal applications for key sites in the town centre, where several land owners/developers are already requesting further zoning changes which could potentially develop a future total of 2,800 dwellings of which approximately 1,500 dwellings would be in addition to the number of dwellings permitted under current zonings as identified by the land capability assessments which have been undertaken by Parramatta City Council and EMM for this study.

Also, the future land use options which have developed by Parramatta City Council and EMM for assessment in this study are essentially neutral in terms of employment and commercial floorspace development within the Epping Town Centre, which assume no change effectively from the current base year situation. However, it is anticipated that in due course additional town centre development scenarios will be assessed using the Epping Town centre traffic models which have been developed for this study, which also include higher levels of commercial development (and employment) in Epping.

The key objectives of the traffic study process, which have evolved and been refined during the course of the study in numerous discussions with the Council staff, RMS and other key study stakeholders are as follows:

- To develop a series of existing and future year (2017, 2026 and 2036) mesoscopic travel demand and traffic flow/queuing models for the full study area road network (including all the existing and proposed major roads and local roads) for the full future 6.30-9.00 am and 3.30-6.00 pm peak traffic flow periods.

- To further develop the actual 8.00-9.00 am and 5.00-6.00 pm one hour peak period linked intersection traffic flow and delay (queuing) models for the core traffic model area which is effectively the chain of key intersections along the major traffic route, via Carlingford, Beecroft, Epping and Blaxland Roads. This additional modelling uses the SIDRA 7 Linked intersection model

- To accurately calibrate the 2017 peak hourly mesoscopic and traffic flow/queuing models to correctly represent the measured vehicle travel times and traffic queue lengths throughout the Epping Study area, This work has been undertaken in liaison with representatives of RMS. In particular, the calibration and validation of the initial base year 2017 am and pm peak hour study Dynameq traffic models, have been accurately calibrated with regards to:

  - Peak hourly intersection turning movements at the key traffic signal intersections;

  - Morning and afternoon peak hour travel times across the full study area from west to east and south to north via the identified major road travel paths, and

- Morning and afternoon peak hour maximum traffic queues for each cycle of the traffic signal operations on the Beecroft, Carlingford, Epping and Blaxland Road approaches to the two main traffic signal controlled intersections at the Epping Town centre.

- To test the future network congestion and traffic flow implications of a range of future urban development scenarios for the study area, which are broadly consistent with the effects of the priority precinct zoning changes for the study area since 2014, which are effectively

  - The future development of approximately 5,000 net additional dwellings from new residential development within the Epping study area, with all the additional dwellings completed and occupied by the year 2026

  - The future development of approximately 10,000 net additional dwellings from new residential development within the Epping study area, with all the additional dwellings completed and occupied by the year 2036

1.4 Scope of work

To develop the initial study base year 2017, study area network traffic models, the following peak hour traffic volume surveys, travel time surveys and traffic queue length observations were undertaken.

- Peak hourly intersection turning movements at 17 nominated key intersections on Wednesday ;

- Morning and afternoon peak hour travel time surveys across the full study area major road travel paths, and

- Morning and afternoon peak hour maximum traffic queues for each cycle of the traffic signal operations on the Beecroft, Carlingford, Epping and Blaxland Road approaches to the centre

1.5 Study area

1.5.1 Major roads

Particulars concerning all the major roads in the study area are detailed below:

- Beecroft Road – a declared State road under the jurisdiction of the RMS. It is generally a four-lane, two-way road running in a north-south direction between Pennant Hills and Epping. It is signposted with a speed limit of 60 km/hr through Epping. Both sides of Beecroft Road south of the M2 Motorway are clearways during peak hours. It should be noted that RMS has recently completed some widening of Beecroft Road, through and to the north of the Carlingford Road intersection to accommodate one additional southbound right turning lane at the intersection.

- Carlingford Road – a declared State road under the jurisdiction of the RMS. It is also generally a four-lane, two-way road running in an east-west direction between Beecroft Road at Epping and Pennant Hills Road at Carlingford. It is signposted with a speed limit of 60 km/hr through the Epping urban area. In the 90 m section of west of Beecroft Road, to the additional town centre intersection with Ray Road and Rawson Street, the traffic queuing is frequently congested and detailed attention is required to be given to the synchronised phasing of the two adjacent sets of traffic signals to optimise the traffic movement through both intersections. Also the right turn movement is not permitted from Carlingford Road to Ray Road in the westbound direction.

- Epping Road – a declared State road under the jurisdiction of the RMS. It is also generally a four-lane, two-way road in the Epping study area, although it is wider (generally six lanes) further to the east in the direction of Macquarie Park and Lane Cove. It is signposted with a speed limit of 60 km/hr within the Epping urban area. Both sides of Epping Road are clearways during peak hours and are 'no stopping' at other times. It should be noted that RMS is currently widening Epping Road between Essex Street and Blaxland Road to accommodate an additional westbound lane, and for adding a raised median strip, which will prevent right turning traffic movements in the future at the Epping Road/Smith Street and Epping Road/Forest Grove Road intersections.

- Blaxland Road – a declared State road under the jurisdiction of the RMS. It is generally a four-lane, two-way road running in a north-south direction between Epping and Ryde. It is signposted with a speed limit of 60 km/hr. In the 70 m section of Blaxland Road approaching the intersection with Epping Road, a 'no stopping' restriction applies on both sides of the road, and elsewhere on the western side. On most sections, however, kerbside parking is permitted on the eastern side outside of peak hours. At the four way intersection of Blaxland Road with Epping Road and Langston Place to the north, the future RMS intersection improvements will remove the southbound right turn facility from Langston Place into Epping Road-Beecroft Road heading west, which will free up some additional capacity for other traffic movements at the intersection, but will require the existing locally based traffic which is making this movement via Langston Place, to use other traffic detour routes in the future, most probably via the Epping Road/Essex Street intersection.

1.5.2 Intersections

This traffic study has surveyed the existing peak hourly and turning traffic movements at a total of seventeen intersections throughout the study area, which are shown by the summaries of the am and pm peak period one hourly intersection approach traffic volumes in Appendix A.

In addition the RMS has expressed an interest in specifically reviewing the peak hourly intersection approach and turning traffic movements which are predicted by the study at the six key traffic signal controlled intersections along the major traffic route, which are:

- West of the railway line at:
  - Carlingford Road/Midson Road
  - Carlingford Road/Ray Road/Rawson Street
  - Carlingford Road/Beecroft Road, and
- East of the railway line
  - Epping Road/Blaxland Road/Langston Place
  - Epping Road/Essex Street
  - Epping Road/Pembroke Street

Also shown in Appendix A are the "core network" one hour am and pm peak westbound and eastbound traffic flow volumes along the major traffic route between these intersections, including the calculated mid block traffic flow gains and losses, which represent either:

- Additional traffic joining or leaving the major road from intervening local road intersections or property access driveways, or
- Greater or fewer number of stored vehicles in the traffic queues along the major road, between the beginning and the end of the relevant peak hour period, or
- Possible minor errors in the surveyed intersection turning traffic movements at any intersection

In this study report, the morning and afternoon peak period traffic queuing behaviour along the four major traffic routes approaching Epping has been assessed in detail using the Dynameq traffic queuing model outputs from the year 2017 am and pm peak period base traffic models. A detailed series of traffic queuing outputs for the full study area road network for the overall 2-3 hour am and pm peak traffic periods is presented in Appendix B.

During the morning peak period the combined eastbound and southbound traffic queues on Carlingford Road and Beecroft Road can reach a combined total length of approximately 1.5 km, which is illustrated by Figure 1.6.

The detailed actual Epping town centre peak hour traffic queuing and congestion, is further illustrated by the series of traffic flow and queuing plots in Figures 1.7 to 1.14. Each yellow dot on the maps and figures in Appendix B and Figures 1.7 to 1.15 represents one queued vehicle.

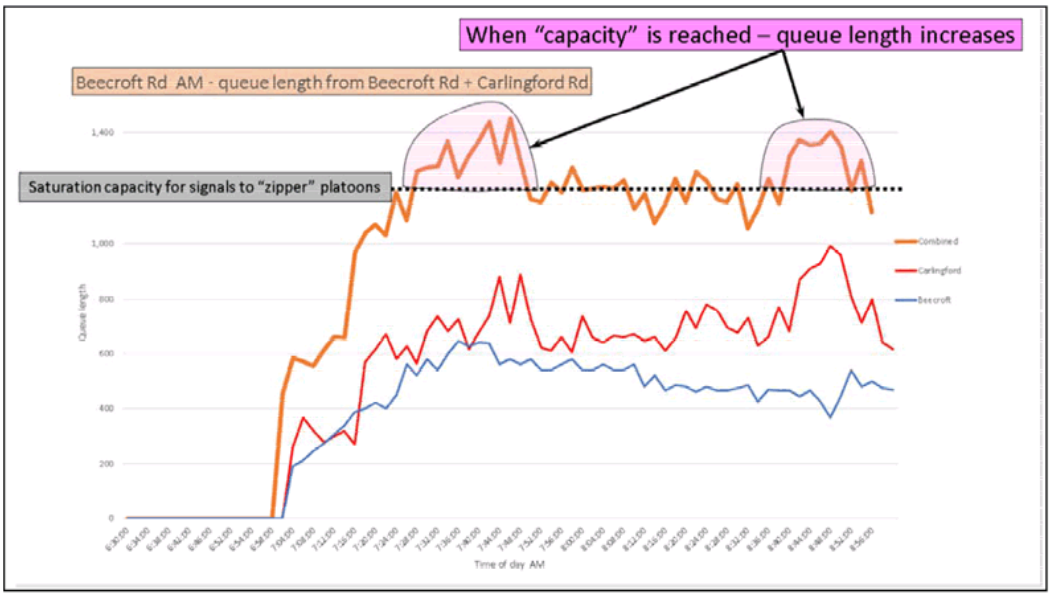


Figure 1.6 Combined morning peak hour Carlingford Road and Beecroft Road traffic queues

The peak traffic queue lengths can generally occur at different times of the peak hour in the morning and afternoons on different approach routes and at different intersections, which is also illustrated by the different peak traffic queue times for Carlingford Road and Beecroft Road in Figure 1.6.

There is also a separate focus of significant traffic queuing and congestion in the western part of the study area, centred around the Carlingford Road/Midson Road intersection, which can only be fully understood by referring to the separate series of traffic flow and queuing plots in Appendix B. These plots show the

greatest development of traffic queues occurring in this locality between 8.45-8.55 am in the morning and 5.45—5.55pm in the afternoon, which is later than the peak traffic queues near the Epping Town Centre.

For Epping traffic model study area overall, the most widespread traffic queuing effects on all areas of the road network are considered to occur at approximately 8.40 am in the mornings and 5.40 pm in the afternoons, which is consistent with the normal Sydney region major road traffic conditions where the peak traffic volumes are normally between 8.00-9.00 am in the mornings and 5.00—6.00 pm in the afternoons

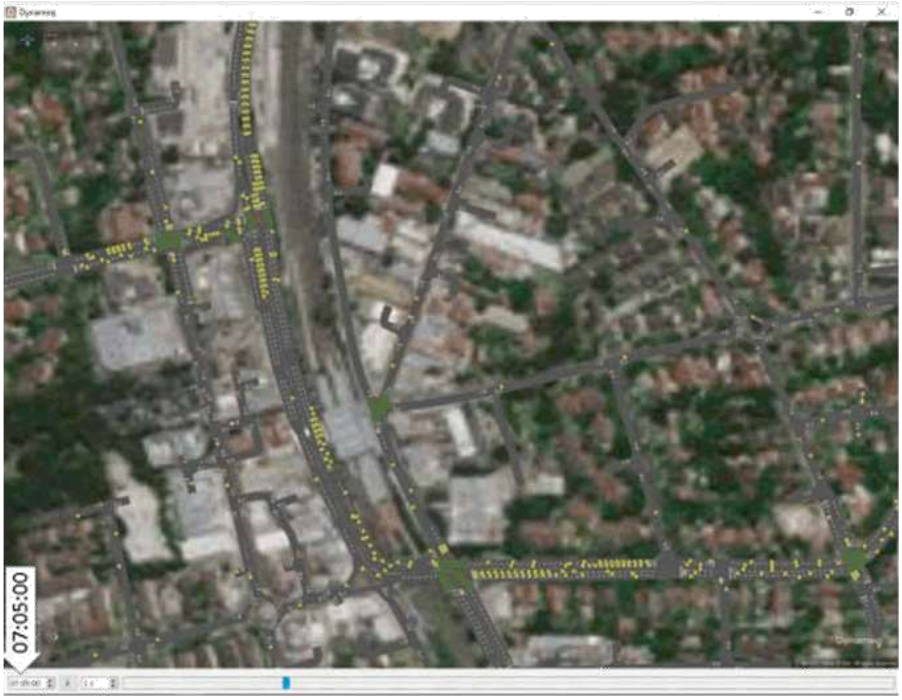


Figure 1.7 Early morning peak hour eastbound traffic queuing at 7.05 am

Figure 1.8 **Early morning peak hour eastbound traffic queuing at 7.25 am**

Figure 1.9 **Middle morning peak hour eastbound traffic queuing at 8.05 am**

Figure 1.10 Middle morning peak hour eastbound traffic queuing at 8.15 am

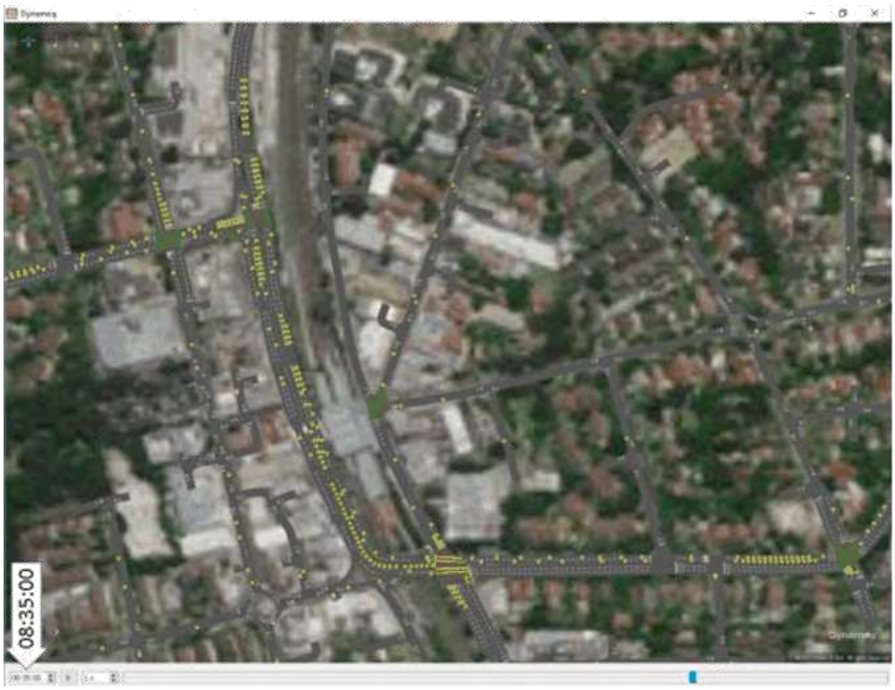


Figure 1.11 Later morning peak hour eastbound traffic queuing at 8.35 am

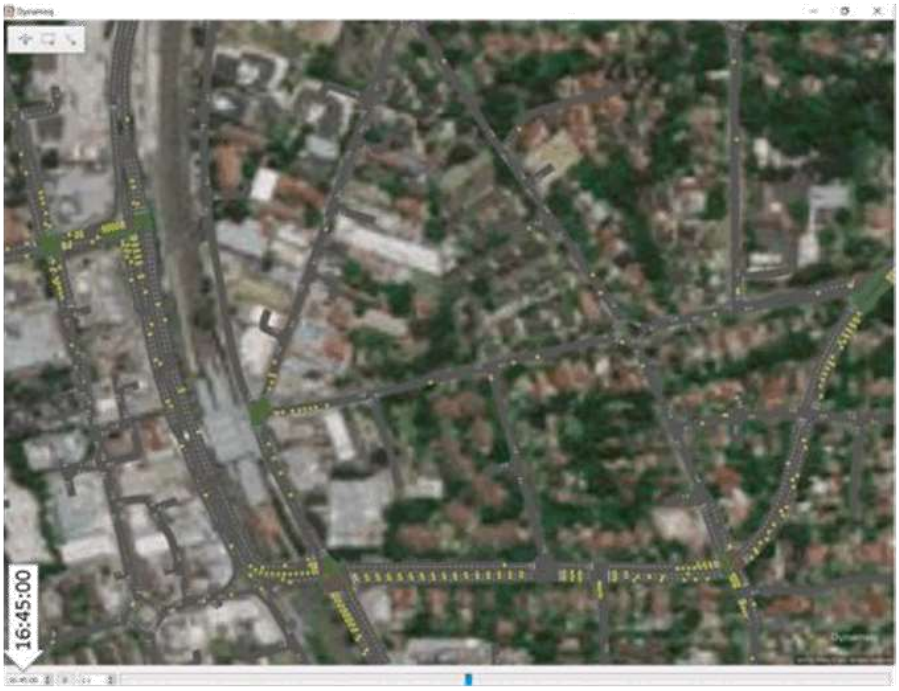


Figure 1.12 **Early afternoon peak hour westbound traffic queuing at 4.45 pm**

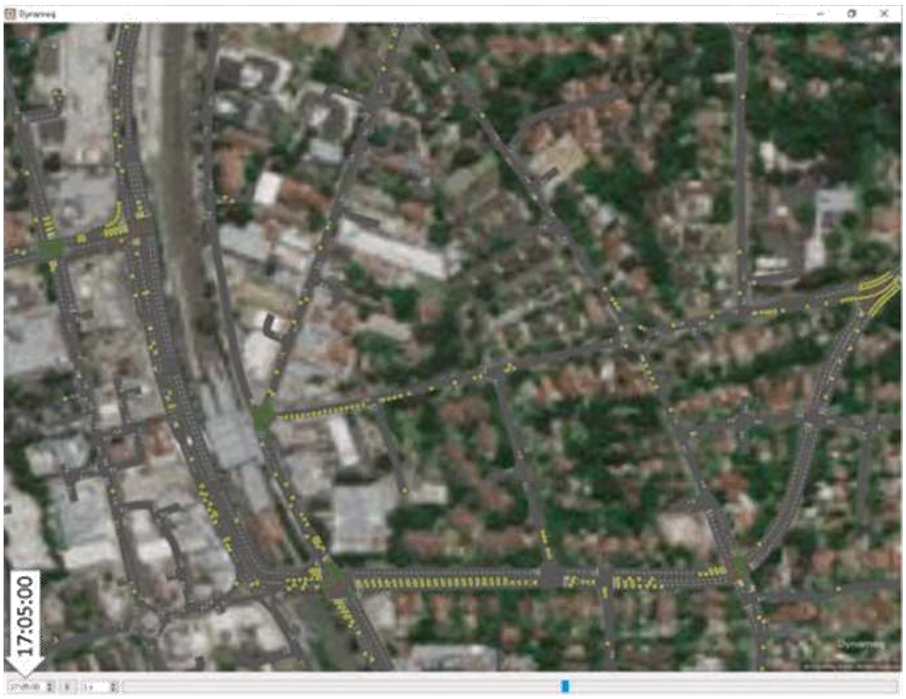


Figure 1.13 **Middle afternoon peak hour westbound traffic queuing at 5.05 pm**

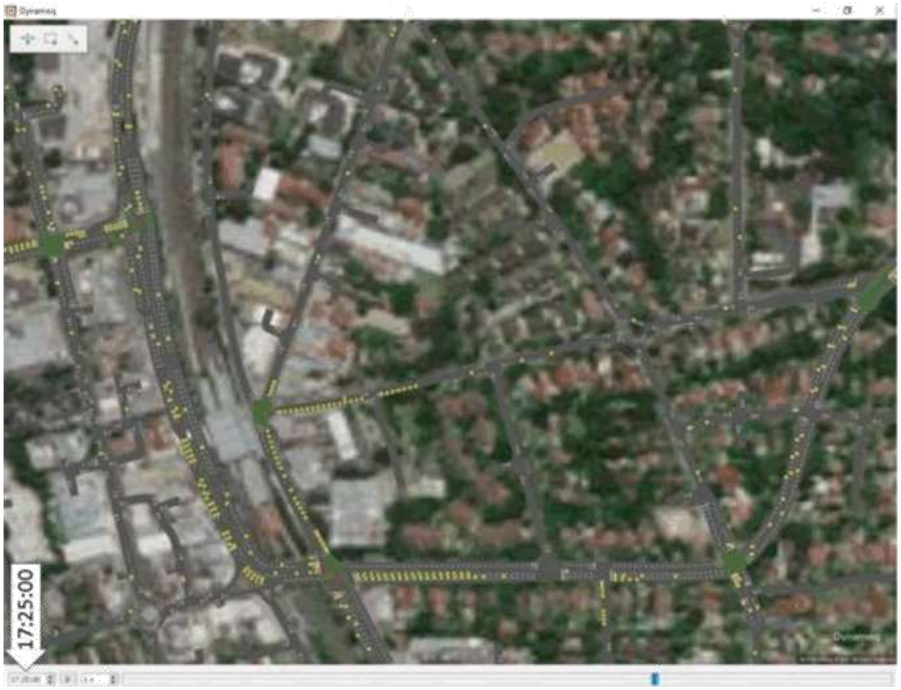


Figure 1.14 Middle afternoon peak hour westbound traffic queuing at 5.25 pm

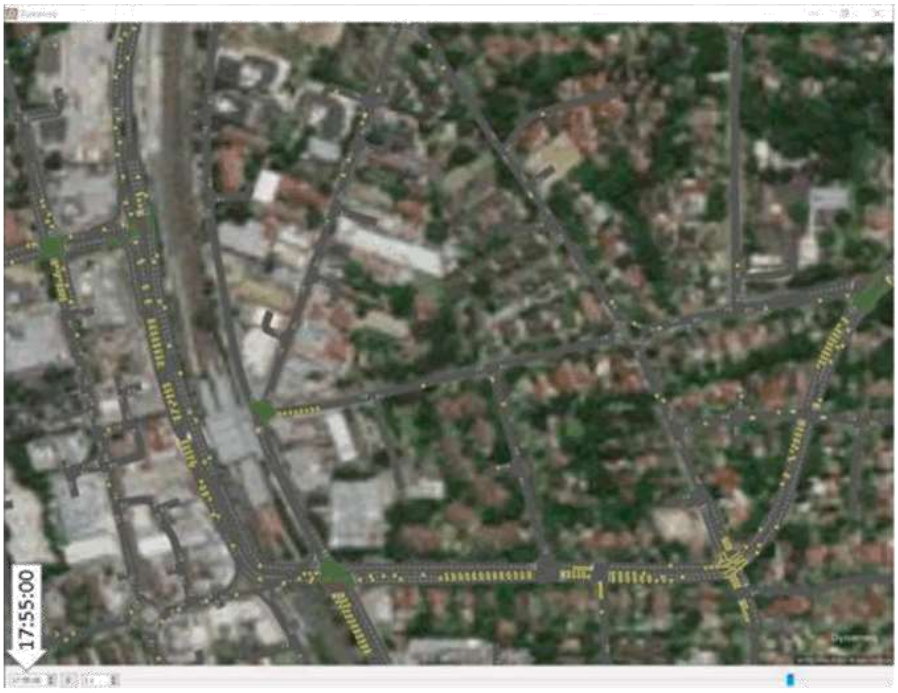


Figure 1.15 Later afternoon peak hour westbound traffic queuing at 5.55 pm

In addition to the Dynameq traffic model queuing analysis, which has been undertaken for the existing base year 2017 am and pm peak traffic models, the existing and future intersection performance and traffic delays at the six key traffic signal controlled intersections of the traffic model "core network" area has been assessed in detail using the SIDRA 7 Linked Intersection model, for the existing 2017 and future year 2026 and 2036 am and pm traffic network models.

For this detailed intersection traffic delay analysis, the unrestrained network travel demand which is determined by the EMME model for the one hour am and pm peak periods, for regional traffic growth, combined with the additional development traffic at Epping, is fed directly into the SIDRA 7 linked intersection model where the SIDRA model responds by applying upstream capacity constraints at each assessed intersection, whereby the peak hourly traffic which is travelling through the intersection is limited according to the actual capacity constraints at the relevant upstream intersections.

1.5.3 Land use patterns

The existing patterns of land use development in the study area, including the current land use zonings, and the sites of recently approved residential developments within and surrounding the Epping Town centre is shown by the map in Figure 1.16, where the identified future development sites are also shown with a red or blue shading.

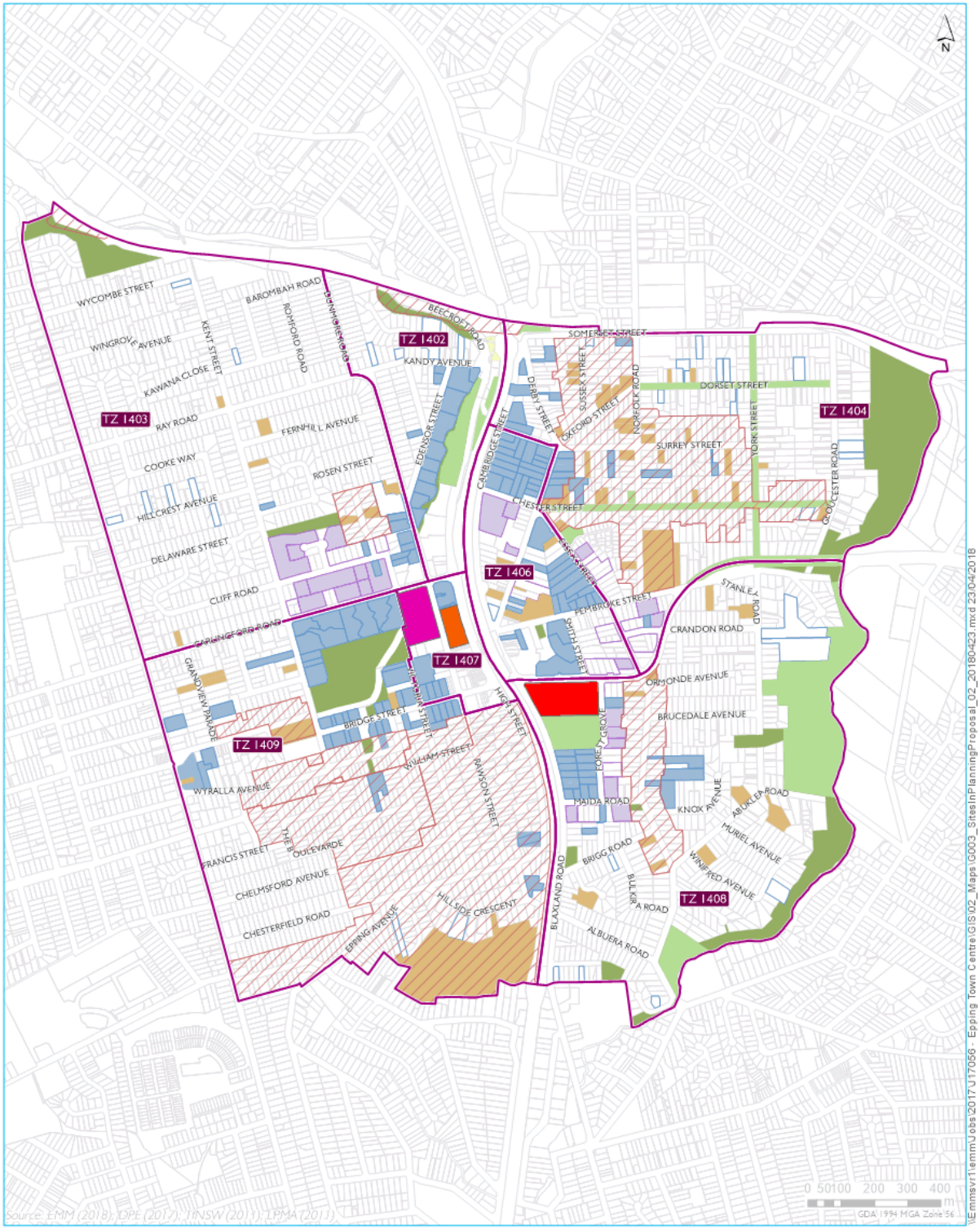
More details of the map which is shown in Figure 1.16 and listings of all the identified development sites and their approved or potential future dwelling numbers in the interim (year 2026) and ultimate (year 2036) future Epping Town Centre land use scenarios are provided in the additional maps and summary tables in Appendix C and Appendix D.

The existing approved developments (as at 19 June 2017) which was defined to be assessed as one of the two core future land use options for the Epping Study area, will effectively result in approximately 5,000 additional dwellings in the study area by 2026 and a further increase to approximately 10,000 additional dwellings in the study area by 2036.

Three further "Planning Proposal" sites, which are either wholly within or adjacent to the Epping town centre commercial areas, and are the subject of known planning proposals to modify the existing zonings and height limits.

These three sites are also shown on the map in Figure 1.17. The requested zoning changes for these three sites, if approved, would permit the construction of a total of approximately 2,800 new dwellings, in comparison to approximately 1,300 new dwellings which would be permitted for these sites currently. This would further increase the potential future Epping study area residential development yield by approximately 1,500 dwellings above the calculated maximum of approximately 10,000 new dwellings, which is forecast to be achieved under the current planning controls.

Figure 1.16 Study area land use analysis and identified development sites



KEY

- BTS Travel zone
- Sites in planning proposal
- Beecroft/Rawson Street site
- Epping Road site
- Rawson Street site
- SILEP heritage
- Conservation Area - General
- Item - General
- Item - Archaeological
- Item - Landscape
- Strata Plan (LPMA 2014)
- Strata title property (Epping Town Centre Urban Activation Precinct Structure Plan 2011)
- DA approved
- DA approved - under construction
- Parks / open space
- Cadastre

Land use analysis and sites with planning proposals

Epping Town Centre traffic study

Figure 1.17

EMM

1.6 Report outline

The structure of this report follows the report guideline table of contents for "Option Testing Report" which has been published by RMS as part of Technical Direction – Traffic Management TTD 2017/001 published on 17 May 2017.

The key details of the study traffic model development have previously been presented in two traffic model calibration reports which were prepared by EMM/Paul van den Bos in July 2017 and December 2017. The additional study traffic model results for the increased study area networks travel demand in 2026 and 2036 and the further detailed SIDRA intersection modelling to calculate future intersection traffic delays, is described in detail in this report under the following chapter headings.

- Chapter 2 Land use and network option testing
- Chapter 3 Traffic modelling assumption
- Chapter 4 Future growth in travel demand
- Chapter 5 Base year network operations
- Chapter 6 Future Base year network operations
- Chapter 7 Future land use and network operation results
- Chapter 8 Operational assessment comparison
- Chapter 9 Conclusion

2 Option testing conditions

2.1 Regional context

Sydney's future population growth and urban development projections, and now published separately for the three "connected cities" of central, eastern and western Sydney.

Epping is included in the Parramatta LGA which is part of the central city area and which has anticipated future population growth of 550,000 persons over the 20 year future period (from 2016 to 2036). This represents average population growth of 27,500 persons per year over this period.

The anticipated future annual growth demand for new dwellings is a total of 207,500 dwellings, which corresponds to an average growth of 10,375 dwellings per year over the 20 year period.

The forecast range of future housing types for the projected new dwellings is as follows:

- 60% detached dwellings = 6,225 additional dwellings per year;
- 15% medium density = 1,556 additional dwellings per year; and
- 20% apartments = 2,075 additional dwellings per year

Within the Epping town centre study area, the 10,000 additional dwellings which are likely to be constructed over the next 20 years will be either medium density housing or apartments. These additional dwellings will contribute towards meeting the overall "central city" future housing 20 year growth target of 72,625 additional medium density or apartment dwellings which is required (35% of the 207,500 total dwellings required) over the future period from 2016 to 2036.

There has been only moderate recent population growth in the suburb of Epping between the 2011 and 2016 census and the suburb was recently recorded in the 2011 census as having a total of 7,322 existing households, with approximately 31.4% of the working population usually travelling to work by public transport (28.6% by train and 2.8% by bus).This data is summarised in Table 2.1.

The likely future development of an additional 10,000 dwellings at Epping will represent a 137% increase in the number of existing households at Epping, which will have far reaching implications for the range of transport infrastructure and all other community facilities and services which are required to support this level of population growth, in the areas within and around the Epping Town Centre.

Table 2.1 Key demographic indicators for Epping at the 2011 Census

	Epping	Parramatta LGA
Number of households	7,322	70,438
Key methods of travel to work	Train – 28.6%	Train – 18.7%
	Bus – 2.8%	Bus – 5.0%
	Car – as driver – 47.7%	Car – as driver – 54.1%
	Car as Passenger – 3.8%	Car as Passenger – 4.2%
	Bicycle – 0.4%	Bicycle – 0.3%
	Walked only – 2.4%	Walked only – 3.6%

The future supporting transport infrastructure which is proposed to be provided by the NSW government at Epping includes both road and public transport network improvements, including the North West metro line to Rouse Hill and the as yet unspecified future radial public transport connection between Parramatta and Epping, shown on the map extract from the central city district plan, in Figure 2.1.

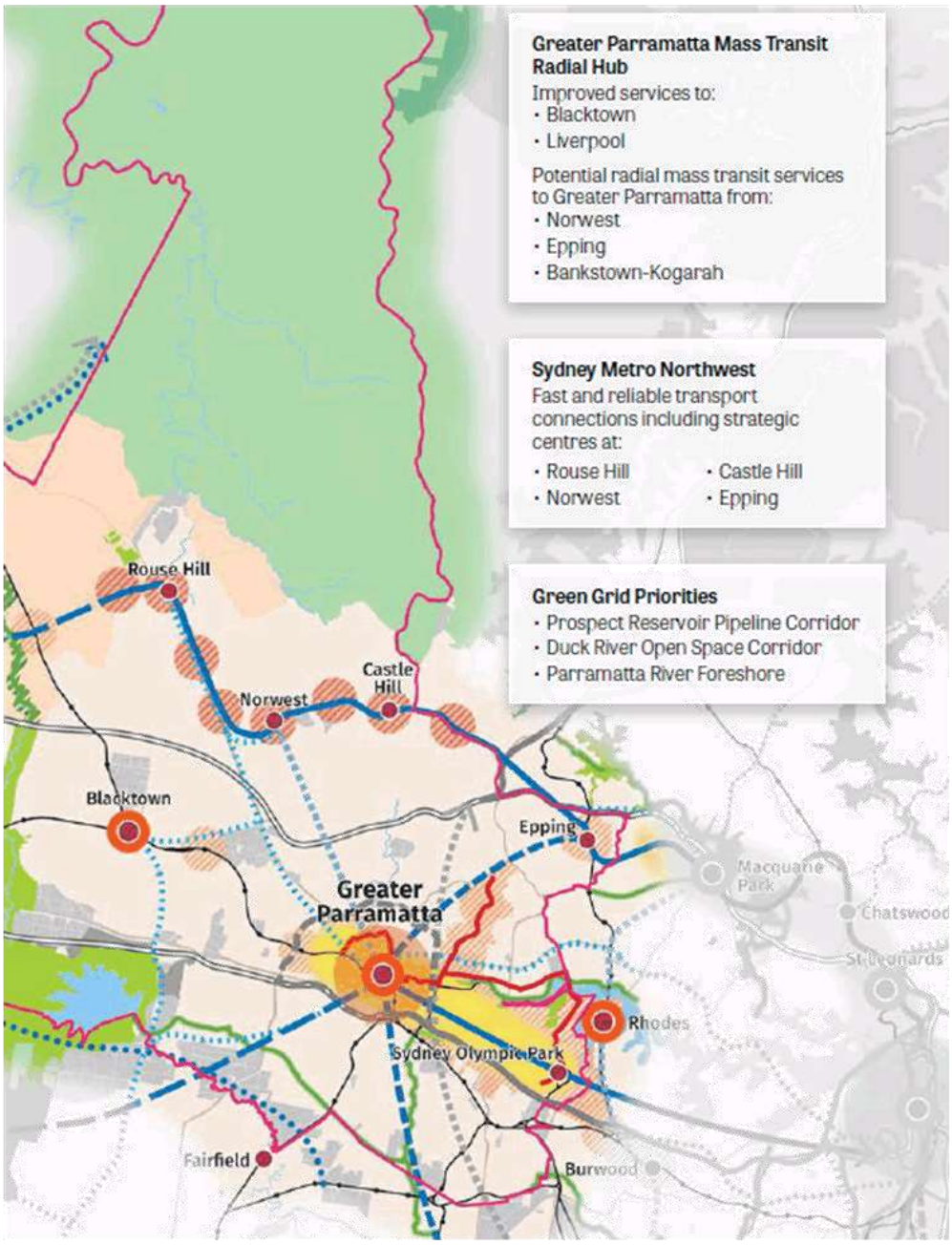


Figure 2.1 Future public transport connections for Central City including Parramatta-Epping

2.2 Land use options

Existing land use in the study area comprises of a mix of commercial and residential uses. Existing retail and office activity is concentrated within a 400 m radius of the Epping Train Station. Some residential uses exist in the area, in mixed use buildings with retail on the ground floor. Building heights in this area are generally eight to nine storeys. The Epping Business Park and Cambridge Office park, which are small scale commercial business parks are located on the western and eastern side of the rail line respectively.

There are a number of public and social infrastructure facilities in the area including parks, churches and other community facilities.

Land immediately adjoining the town centre core consists predominately of medium density residential uses including three to four storey apartment buildings. The remaining portion of the Epping town centre study area consists of mostly low density detached buildings with consistent character and built form, in well established areas.

Further details of the identified locations of development sites for 5,000 additional dwellings in the study area by 2026 and a further 5,000 additional dwellings between 2026 and 2036 are shown in Appendix C and Appendix D. The proposed locations of the new dwellings are cross referenced to a fine grain system of new traffic network nodes, which are shown on the study area map in Figure 2.2, which are also cross referenced to the broader TFNSW system of 'TZ' travel zones for network traffic models in Figure 2.3.

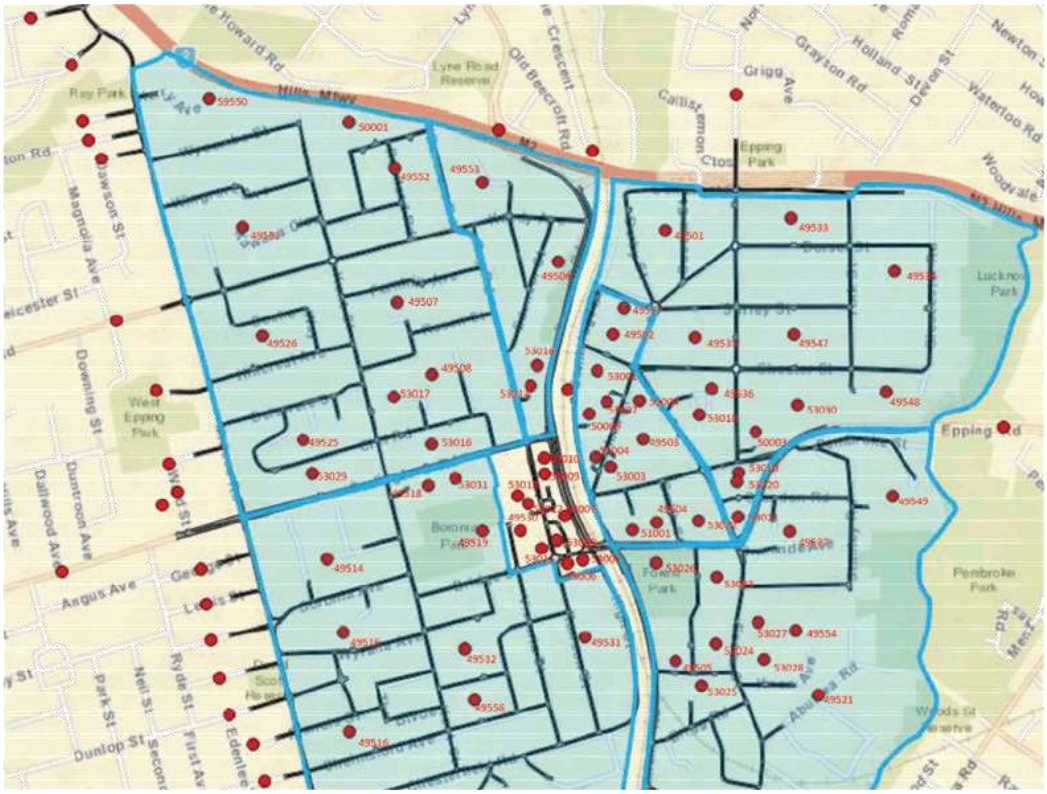
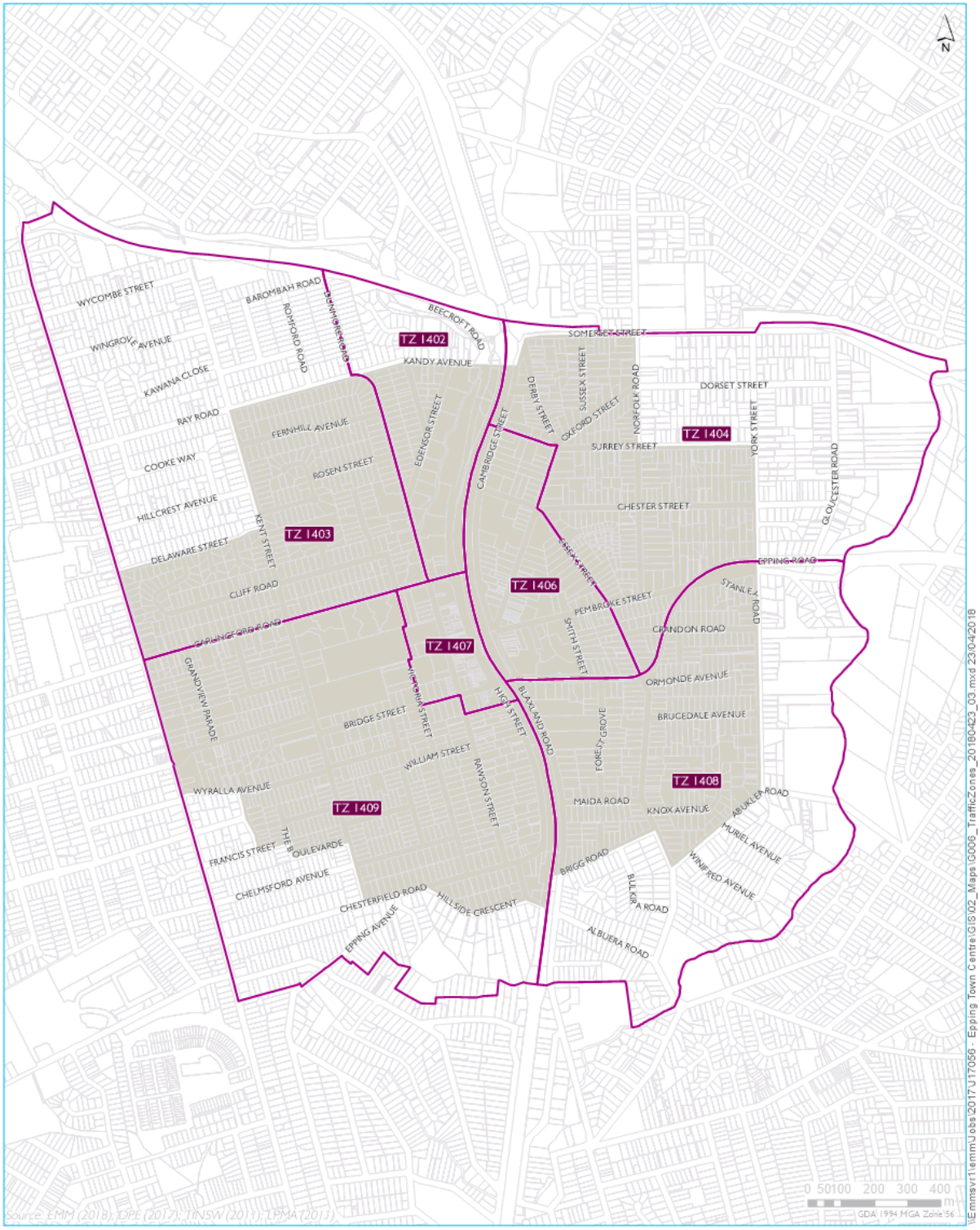


Figure 2.2 **Fine grained network of nodes for new residential development at Epping**



KEY

- BTS Travel zone
- Cadastre
- Epping precinct boundary

TfNSW land use traffic zones for the study area

Epping Town Centre traffic study

Figure 2.3

EMM

The future land use options which have developed by Parramatta City Council and EMM for assessment in this study are essentially neutral in terms of their future employment and commercial floorspace development scenarios within the Epping Town Centre and assume no change effectively from the current base year situation. However, it is anticipated that in due course additional town centre development scenarios will be assessed using the Epping Town centre traffic models which have been developed for this study, which will also include higher levels of commercial development (and employment) in the Epping Town Centre.

One of the additional future planning proposal sites which is shown on Figure 1.17, the Austino site, is located at 2-18 Epping Road, 2-4 Forest Grove Road and 725 Blaxland Road. An additional site specific assessment has also been undertaken for this site to determine the general future road network and intersection delay impacts from allowing additional residential development at this site, above that which is permitted under the current zonings. The preliminary results from this analysis are discussed and presented in Chapter 7 and Appendix M of this report.

2.3 Road network options

The future assumed base levels of road network improvements for the study area are as follows:

- the RMS committed program of main road improvements along the Epping Road to Carlingford Road and Beecroft Road route, through the Epping Town centre, which are linked with the "interim future baseline" year 2026 study area residential development scenario for +5,000 dwellings in the year 2026 network traffic model, and

- a further series of local road network improvements which have been identified by Parramatta City Council, which are assumed to be implemented in addition to the RMS committed program of main road improvements for the "longer term future baseline" year 2036 study area network traffic model with +10,000 dwellings.

A series of maps and other details describing the RMS committed and Council identified future road network improvements are provided in Appendix E and Appendix F of this report.

The Council identified future road network improvements include a total of twelve items of future roadworks, including the previous RMS proposal for one additional traffic lane westbound on the Epping Road bridge which crosses the railway line, which is no longer included in the current RMS committed program of roadworks for the Epping Town Centre (Appendix E) although the previous traffic studies which were undertaken by Halcrow and GTA in 2011 and 2015 both identified this bridge widening was required to accommodate future traffic growth estimates for approximately 3,000 additional dwellings within the Epping Town Centre locality.

In addition a further preliminary analysis of two further road network options has been undetaken:

- the reopening of the former M2 bus tunnel link to Epping Station as a one way westbound link with left turn egress only at Beecroft Road and

- a new East west road link connecting between Ray Road and Beecroft Road, through the NSW Government land which is on the western side of Beecroft Road

where the year 2026 and 2036 future traffic network models have determined the potential future traffic usage and road network traffic delay improvements elsewhere for locally based traffic accessing the major road network at Epping, when these additional road network connections are provided.

The preliminary network traffic analysis results for these additional road network options are presented and discussed in Chapter 7 and Appendix N and Appendix O of this report. The full future traffic analysis details including the SIDRA intersection modelling results for these two options will be reported in a further supplementary report to this report.

3 Assumptions

3.1 Strategic network development

The full details of the Epping Town centre traffic model and study area baseline road network assumptions have been provided in the two previous traffic model calibration reports which were prepared by EMM/Paul van den Bos for review by RMS in July 2017 and December 2017.

The assumed core road network travel speeds for each link in the road network are shown on the map in Figure 3.1, which confirms the maximum (uncongested) travel flow speeds for traffic travelling through and within the study area are effectively:

- 60 km/hr for the major road (Epping, Beecroft, Carlingford and Blaxland Roads);
- 50 km/hr for all local roads except for the roads where school zone speed limits apply; and
- 40 km/hr for the local roads, where school zone speed limits apply.

Figure 3.1 Map of base network travel speeds for each network link

The base year 2017 network traffic modelling assumptions for the combined EMME and Dynameq am and pm peak period and peak hourly traffic models were developed through extensive consultation with the traffic engineering and strategic planning officers at Parramatta City Council and the network traffic

modelling and development consultation specialists at RMS. RMS have generally endorsed the base year 2017 network model methodology and assumptions, although the final level of calibration of the detailed core area Dynameq traffic model results do not meet the full RMS microsimulation calibration standard for the core areas of network models, but they do meet the RMS calibration standard for the overall network area. This level of calibration accuracy is considered by the Parramatta City Council planning officers to be adequate for the purposes of the Epping Town Centre study which is primarily a strategic level transport planning study which examines the future road network and traffic capacity implications for the study area from developing either 5,000, 10,000 or possibly an even greater number of additional dwellings over a 10 to 20 year future time horizon.

In this study, the 2017 morning and afternoon peak period vehicle following and queuing behaviour has been extensively investigated for the four major traffic routes approaching Epping using the Dynameq traffic queuing model as a "post processing" for the core unrestrained network travel demand which is calculated using the EMME model. This analysis has been continued using the Dynameq model for the core network travel demand analysis in the EMME model where the real time intersection traffic capacity constraints in the Dynameq model effectively limit the peak hourly volumes of traffic which are able to enter the network, so the core output from the Dynameq traffic model for the 2026 and 2036 future year scenarios is effectively the peak hourly volumes of traffic which are kept waiting and are effectively unable to enter the network.

For intersection analysis outputs for the base year 2017 am and pm peak one hour traffic models, the existing intersection performance and traffic delays at the six key traffic signal controlled intersections of the traffic network model "core area" has been assessed in detail using the SIDRA 7 Linked Intersection model, and this analysis has also been extended to the future year 2026 and 2036 am and pm peak one hour traffic network models. The future year SIDRA 7 Linked intersection model layout for the assessed linked intersections (including the future year road network options assessed) is shown in Figure 3.2 and Figure 3.3 for the future road networks in 2026 and 2036.

The unrestrained network travel demand which is determined by the EMME model for the one hour am and pm peak periods provides the inputs to the SIDRA 7 Linked intersection model to assess the regional traffic growth in 2026 and 2036 in combination with the additional development traffic at Epping.

The EMME model traffic volume outputs for all the linked intersections along the major traffic route, is fed directly into the SIDRA 7 linked intersection model, and the SIDRA model responds by applying upstream capacity constraints at each assessed intersection, whereby the peak hourly traffic which is travelling through both intersections is limited according to the actual capacity constraints at the relevant upstream intersections.

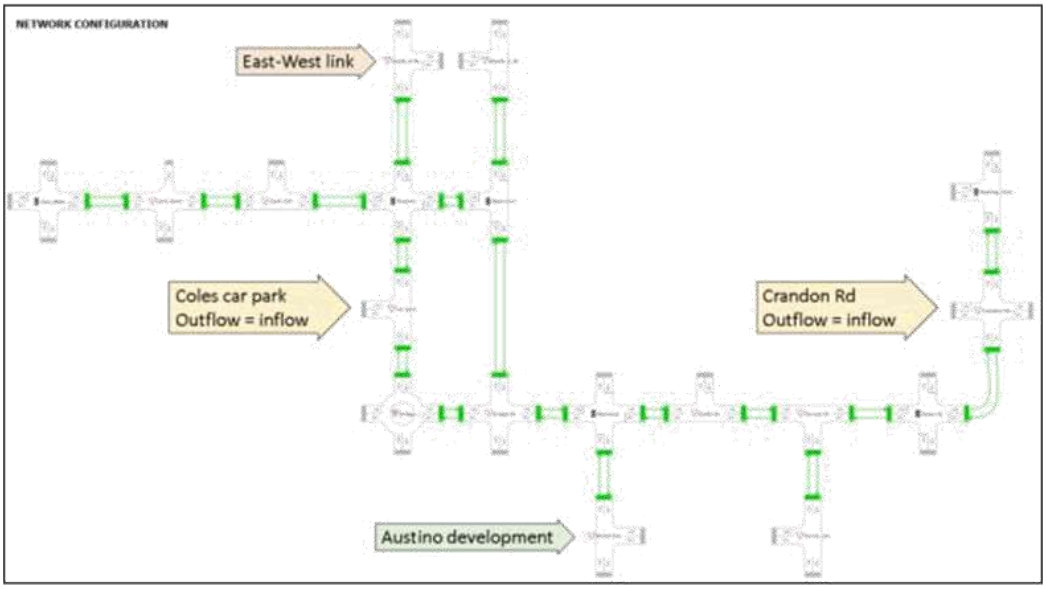


Figure 3.2 **Future SIDRA linked intersections assessed in 2026 network model**

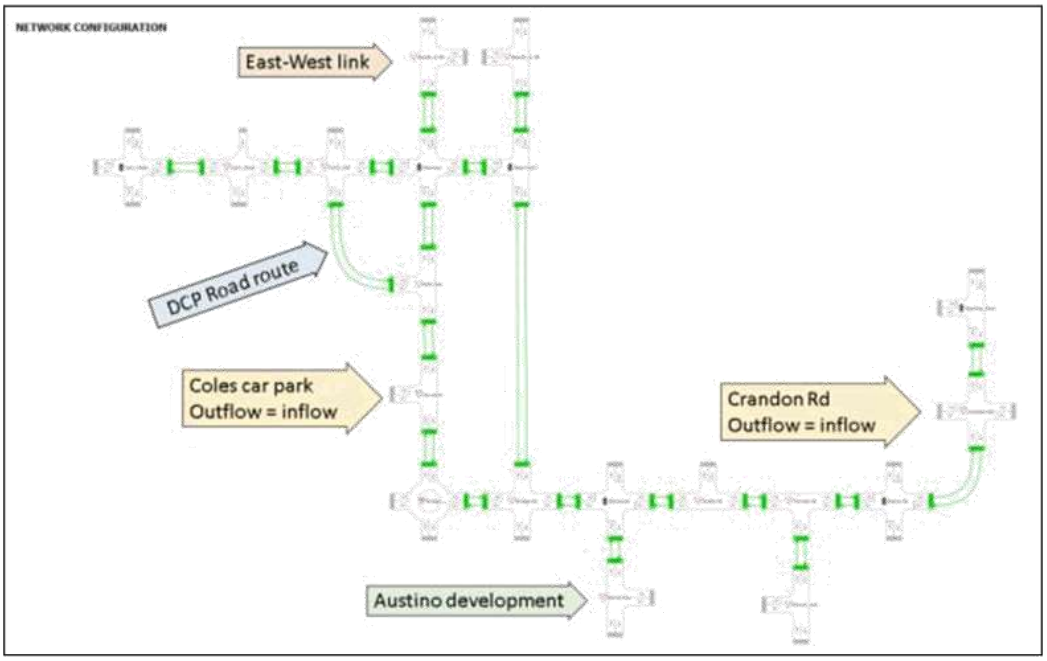


Figure 3.3 **Future SIDRA linked intersections assessed in 2036 network model**

4 Future year demand

4.1 Dwellings growth

The future dwelling growth scenarios which have been used to develop the future road network traffic demand scenarios for this study have been determined by future land capability analysis by EMM and Parramatta City Council strategic planners and are as follows:

- the future development of approximately 5,000 net additional dwellings from new residential development within the Epping study area, with all the currently approved additional dwellings completed and occupied by the year 2026
- the future development of approximately 10,000 net additional dwellings from new residential development within the Epping study area, with all the additional dwellings completed and occupied by the year 2036

As at 19 April 2018, a total of over 5,500 new dwellings have either been fully approved by Parramatta City Council or the former Hornsby Council (3,940 dwellings) or are in various stages of assessment (1,613 dwellings), since the Epping Town centre land use zoning changes in 2014. The two development scenarios of 5,000 and 10,000 additional dwellings in this study represent effectively the limits of the likely range of realistic minimum and future maximum residential development scenarios for the study area, in the absence of any further zoning changes through planning proposals, which would further increases the maximum residential development yield beyond 10,000 additional dwellings.

4.2 Traffic generation and distribution

For the additional development traffic, the methodology which has been used to calculate traffic generation is based on the distance between a development and the train station. Four concentric zones (see Figure 4.1) were defined based on the distance to the train station, with each zone assigned traffic generation rates corresponding to distances of either (0 - 200, 200 – 400, 400 - 800 or over 800 m to the train station).

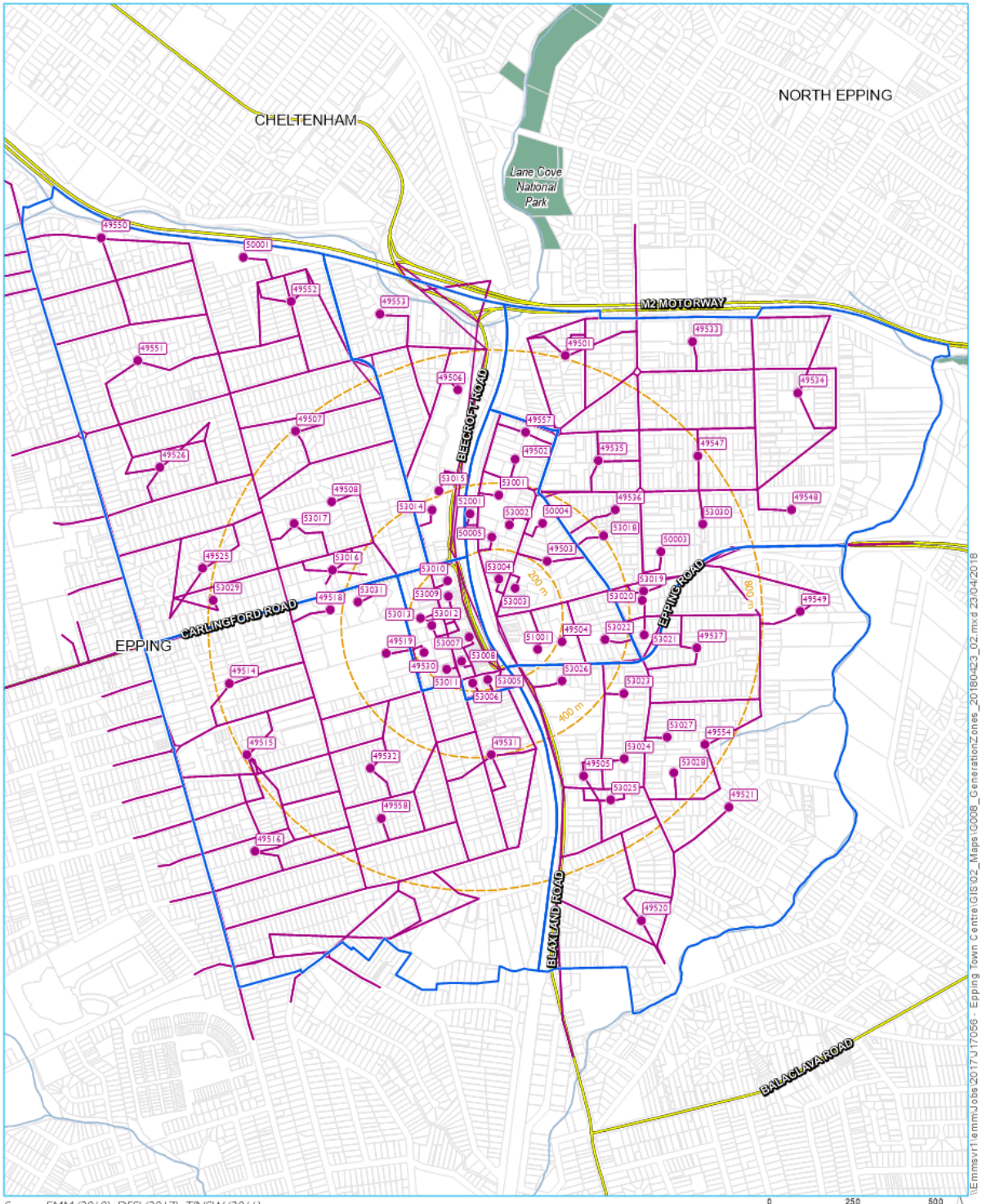
The future residential traffic generation rates for zone 1 residential development, within 200 m from the railway station, correspond to the lowest, most recent RMS (year 2013) traffic generation rates for higher density residential development, which are as summarised below:

- Morning peak traffic generation: 0.19 vehicles per hour per dwelling; and
- Afternoon peak traffic generation: 0.15 vehicles per hour per dwelling.

The future residential traffic generation rates for zone 2 residential development, between 200 to 400 m from the railway station, correspond to the earlier, RTA/RMS (year 2002) general traffic generation rates for higher density residential development in metropolitan centres, which are:

- Morning and afternoon peak traffic generation: 0.23 vehicles per hour per dwelling;

The future residential traffic generation rates for zone 3 residential development, between 400 to 800 m from the railway station also correspond to the earlier, RTA/RMS (year 2002) traffic generation rates for higher density residential development in metropolitan “sub-regional” centres, which are:



Source: EMM (2018); DFSI (2017); TfNSW (2011)

0 250 500 m
GDA 1994 MGA Zone 56

KEY

- Travel zone
- Access buffers
- Node / zone
- Emme links
- Main road
- Watercourse / drainage line
- Cadastral boundary
- NPWS reserve

Traffic generation zones

Epping Town Centre traffic study

Figure 4.1

EMM

- Morning and afternoon peak traffic generation: 0.29 vehicles per hour per dwelling;

The future residential traffic generation rates for zone 4 residential development, over 800 m from the railway station, correspond to the earlier RTA/RMS (year 2002) traffic generation rates for medium density residential development, for which the mid point of the likely range is:

- Morning and afternoon peak traffic generation: 0.48 vehicles per hour per dwelling;

4.3 Increased travel demand

The unrestrained growth in the future road network travel demand has been determined using the EMME model for the additional traffic volumes generated by additional residential development, combined with the regional traffic growth (excluding any component which related to the previously assumed Epping Town Centre growth) which was already incorporated in the year 2026 and 2036 versions of the EMME base model.

The overall study area road network plots for the current (year 2017) and the future year 2026 and 2036 baseline (with assumed growth of 5,000 and 10,000 dwellings respectively) are provided in Appendix G, Appendix H and Appendix I of this report. The hourly traffic volumes on each link of the road network are adjusted by + or - up to 50 vehicles, to round to the nearest 100 hourly vehicles, which is an appropriate level of summarisation for network level traffic volume plots of this nature.

A summary of the consequent predicted future growth in the morning and afternoon peak hour traffic volumes on the respective north-south and east-west major road traffic routes through Epping is presented in Table 4.1 and Table 4.2.

Table 4.1 Comparison of future growth in the morning peak hourly traffic volumes 8-9 am

Road	Direction	2017 am peak	2026 am peak	Growth % (from 2017)	2036 am peak	Growth % (from 2017)
Beecroft Rd	Southbound	1,800	2,900	61%	3,000	67%
N/Carlingford Rd	Northbound	900	1,400	56%	1,700	89%
	Combined	**2,700**	**4,300**	**60%**	**4,700**	**74%**
Blaxland Rd	Southbound	900	1,900	111%	2,200	144%
	Northbound	600	1,100	83%	1,100	83%
	Combined	**1,500**	**3,000**	**100%**	**3,300**	**120%**
Carlingford Rd	Eastbound	1,400	1,800	29%	2,100	50%
W/Kent Rd	Westbound	900	1,300	44%	1,500	67%
	Combined	**2,300**	**3,100**	**35%**	**3,600**	**57%**
Epping Rd	Eastbound	2,200	2,300	5%	2,400	9%
E/Blaxland Rd	Westbound	800	1,300	63%	1,600	100%
	Combined	**3,000**	**3,600**	**20%**	**4,000**	**33%**
Epping Rd	Eastbound	2,900	4,000	38%	4,400	52%
at Terrys Creek	Westbound	900	1,000	11%	1,200	33%
	Combined	**3,800**	**5,000**	**32%**	**5,600**	**47%**

The future traffic growth rates from the study EMME network traffic model, which include both through traffic growth and locally based development traffic growth are generally greater on the north-south

traffic routes (via Beecroft Road and Blaxland Road) compared to the east west traffic routes (via Carlingford Road and Epping Road).

Table 4.2 Comparison of future growth in the afternoon peak hour traffic volumes 5-6 pm

Road	Direction	2017 pm peak	2026 pm peak	Growth % (from 2017)	2036 pm peak	Growth % (from 2017)
Beecroft Rd	Southbound	900	1,000	11%	1,900	111%
N/Carlingford Rd	Northbound	1,100	2,100	91%	2,200	100%
	Combined	**2,000**	**3,100**	**55%**	**4,100**	**105%**
Blaxland Rd	Southbound	300	1,400	366%	1,600	433%
S/Epping Rd	Northbound	500	1,600	220%	1,700	240%
	Combined	**800**	**3,000**	**275%**	**3,300**	**313%**
Carlingford Rd	Eastbound	700	1,500	114%	1,700	142%
W/Kent Rd	Westbound	1,100	1,700	55%	1,900	73%
	Combined	**1,800**	**3,200**	**78%**	**3,600**	**100%**
Epping Rd	Eastbound	1,000	1,000	0%	1,300	30%
E/Blaxland Rd	Westbound	1,500	2,700	80%	3,200	113%
	Combined	**2,500**	**3,700**	**48%**	**4,500**	**80%**
Epping Rd	Eastbound	1,100	1,400	27%	1,700	55%
at Terrys Creek	Westbound	1,300	2,600	100%	3,100	138%
	Combined	**2,400**	**4,000**	**67%**	**4,800**	**100%**

The overall averages of the range of future traffic volume growth rates from the range of locations considered are much higher for the north-south travel routes, which is probably because there are no direct motorway alternative routes for this travel demand, and the network base traffic volumes are lower (in particular for Blaxland Road) so the future proportional traffic increases are much greater. The predicted proportional traffic increases for the affected major road routes at Epping are:

- For the North-South travel routes
  - +55 to 60% for Beecroft Road in 2026, 74-105% in 2036
  - +100 to 275% for Blaxland Road in 2026, 120-313% in 2036
- For the East-West travel routes
  - +35 to 78% for Carlingford Road in 2026, 57-100% in 2036
  - + 20 to 67% for Epping Road in 2026, 33-100% in 2036

These traffic volume increases illustrate the extent of the additional traffic capacity which is required for the major road network at key intersections in the study area, if the road network is to adequately accommodate (in either 2026 or 2036) the extent of the likely peak hour traffic growth from the combination of the regional through traffic growth and traffic generated by new residential developments in the Epping study area, which includes both the town centre and surrounding residential precincts.

4.4 Vehicles waiting to enter the network

During the morning peak periods for the 2017, 2026 (+5,000 dwellings) and 2036 (+10,000 dwellings) full study area EMME network volumes, the Dynameq model has been used to examine the overall effect of the network capacity constraints at the key intersections, where for the predicted future traffic growth, when the on-road traffic queuing capacity becomes fully occupied, vehicle are kept waiting and unable to enter the traffic model network.

A series of additional Dynameq traffic model output charts and graphs from these model years is also included with the overall EMME one hour peak network travel demand plots in Appendix G, Appendix H and Appendix I of this report.

These additional vehicles waiting, which are unable to enter the Dynameq traffic model network show that the local significance of this factor at Epping does not generally affect the key network model output results for the key intersections in 2017, but does become progressively more significant in 2026 and becomes highly significant in 2036.

A summary of the Dynameq network model "vehicles waiting" plots in Appendix G, Appendix H and Appendix I of this report, is shown in Table 4.3, which illustrates the development of this limiting network capacity factor (which shows effectively the amount of traffic that is able to actually enter the study area Dynameq road network model in either 2017 or the future year 2026 and 2036 networks.

Table 4.3 Summary of key Dynameq traffic model outputs for future year networks

Network Model Year and analysis period	Peak quarter hourly demand for traffic entering the network	Peak quarter hourly vehicles waiting to enter the network	Effect of vehicles waiting on the study area intersection traffic flow results
2017 am peak	2,836 vehicles	7 vehicles	Not significant
2026 am peak	3,320 vehicles	109 vehicles	Marginally significant
2036 am peak	3,442 vehicles	3,273 vehicles	Highly significant

The geographic distribution is also shown in Appendix I for the progressive development of the additional vehicles queued awaiting access to the road network (as defined by the study area road network boundary shown in Figure 2.2) at 7.30, 8.00, 8.15, 8.30 and 8.45 am during the future weekday morning peak hour 2036 analysis. This show the progressive development over the full morning peak period and the range of locations at which additional traffic is not actually able to enter the Dynameq model network. At the peak waiting time, which is 8.45 am, the main locations of the additional waiting vehicles are at:

- Beecroft Road, north, 1014 vehicles
- Carlingford Road, west, 719 vehicles
- Cliff Road. 165 vehicles
- Essex Street, north, 144 vehicles
- Midson Road, north, 132 vehicles, and
- Essex Street, south, 116 vehicles

5 Base network model operational results

5.1 Intersection performance

The performances of the intersections with traffic signals in the immediate vicinity of the site were analysed using a SIDRA-linked intersection model. To the west of the railway line, these included:

- Carlingford Road/Midson Road;
- Carlingford Road/Rawson Street; and
- Carlingford Road/Beecroft Road.

To the east of the railway line, the assessed intersections included:

- Epping Road/Blaxland Road;
- Epping Road/Essex Street; and
- Epping Road/Pembroke Street.

The RMS SIDRA intersection level of service (LoS) vs. delay standards for traffic signal controlled intersections which are specified in the RTA-RMS Guide to Traffic Generating Developments (RTA 2002) are summarised below. In addition to LoS, the existing operation of the intersection is also described in terms of the following factors:

- Degree of Saturation (DoS) which is the ratio of the traffic volume to the capacity of the intersection;
- the Average Vehicle Delay (AVD) in seconds per vehicle for all traffic movements at the intersection; and
- the length of the maximum traffic queue (95th percentile traffic queue) for any traffic movement at the intersection.

Table 5.1 RMS SIDRA intersection level of service and delay standards

Description	LoS (RMS definition)	Average Vehicle Delay (s)
Very Good	A	<14.5
Good	B	14.5 to ≤28.5
Satisfactory	C	28.5 to ≤42.5
Near Capacity	D	42.5 to ≤56.5
At Capacity	E	56.5 to ≤70.5
Over Capacity	F	≥70.5(1)

In discussions with the Council staff, it has been decided (for the purposes of this study only) that the absolute maximum acceptable intersection delays for under level of service F for the future traffic conditions at any Epping Town Centre intersection should be defined as two complete cycles of the peak hour traffic signals (300 seconds). This is effectively an average 5 minute waiting time at traffic signals.

With this in mind, the peak hour intersection analysis for the 2017 base traffic scenario (for both the modelled case and the actual surveyed case) is presented in Table 5.2 and Table 5.3 with the unacceptable intersection delays which exceed the maximum study intersection delay of 300 seconds, highlighted in yellow:

Table 5.2 Base year 2017 AM intersection performance (surveyed/modelled)

Intersection	Vehicle demand (Veh per Hr) (Survey/Model)	Vehicle throughput (Veh per Hr) (Survey/Model)	Level of Service (Survey/Model)	Average Delay (Seconds) (Survey/Model)	Degree of Saturation (Survey/Model)	Queue length (metres) (Survey/Model)
Carlingford Road / Midson Road	3,251 / 2,787	3,229 / 2,713	F / D	87.3 / 46.0	1.003 / 0.874	301 / 114
Carlingford Road / Rawson Street	2,639 / 2,693	2,617 / 2,623	F / F	304.4 / 210.6	5.771 / 2.401	405 / 223
Carlingford Road / Beecroft Road	4,505 / 4,531	4,334 / 4,402	F / F	153.8 / 255.1	1.244 / 1.540	816 / 816
Epping Road / Blaxland Road	4,545 / 4,601	4,155 / 4,309	C / E	31.1 / 59.3	0.882 / 1.014	132 / 312
Epping Road / Essex Street	3,243 / 3,195	2,972 / 2,959	B / F	26.0 / 277.5	0.888 / 1.380	196 / 196
Epping Road / Pembroke Street	3,343 / 3,341	3,077 / 2,968	F / F	99.5 / 85.3	2.057 / 1.788	492 / 450

Table 5.3 Base year 2017 PM intersection performance (surveyed/modelled)

Intersection	Vehicle demand (Veh per Hr) (Survey/Model)	Vehicle throughput (Veh per Hr) (Survey/Model)	Level of Service (Survey/Model)	Average Delay (Seconds) (Survey/Model)	Degree of Saturation (Survey/Model)	Queue length (metres) (Survey/Model)
Carlingford Road / Midson Road	2,906 / 3,115	2,798 / 3,110	D / E	51.1 / 63.2	0.905 / 0.891	191 / 258
Carlingford Road / Rawson Street	2,496 / 2,365	2,396 / 2,360	F / C	193.8 / 34.1	3.373 / 0.913	378 / 114
Carlingford Road / Beecroft Road	3,991 / 3823	3,830 / 3823	F / D	86.5 / 43.3	1.111 / 1.035	571 / 332
Epping Road / Blaxland Road	4,025 / 4,172	3,823 / 4,171	E / C	66.4 / 42.1	0.997 / 0.891	326 / 326
Epping Road / Essex Street	2,628 / 2,932	2,614 / 2,928	F / B	93.2 / 26.2	1.073 / 0.909	369 / 209
Epping Road / Pembroke Street	2,338 / 2,819	2,322 / 2,816	A / A	13.2 / 8.8	0.631 / 0.537	120 / 103

In Table 5.2, the intersection analysis for the base year 2017 morning peak hour shows some (though generally not significant) variance between the surveyed and the modelled network flows. Most of the intersections considered are over capacity (level of service F).

However, to consider intersections with average delays of up to 300 seconds as acceptable (in the context of this study) only the Rawson Street intersection (as surveyed) exceeds the 300 second average delay threshold. The overall major road network at Epping in 2017 is nevertheless largely at or over capacity for the morning peak hour, which indicates there is very little spare capacity for additional vehicles on the current road network.

In Table 5.3, the intersection analysis for the base year 2017 afternoon peak hour shows some variance between the surveyed and the modelled network flows. Generally, modelled flows are less congested than surveyed flows. Many of the intersections considered (as surveyed) are over capacity (level of service F). In particular, the Rawson Street intersection has an average delay of 193.8 seconds (as surveyed).

However, as the Council study steering group has indicated that it is prepared to consider intersections with average delays of up to 300 seconds as acceptable, when taking this into account, all intersections for the afternoon peak hour have currently acceptable operations.

Overall the major road network at Epping in 2017 also has very little spare capacity for additional vehicles during the afternoon peak hour.

6 Future base year network operational results

6.1 Future base year 2026 network model results

The peak hour intersection analysis for the 2026 future baseline traffic scenario, with the additional traffic growth from 5,000 new dwellings at Epping is presented below In Table 6.1 and Table 6.2:

Table 6.1 Future base year 2026 AM intersection performance

Intersection	Vehicle demand (Veh/Hr)	Vehicle throughput (Veh/Hr)	Level of Service	Average Delay (Seconds)	Degree of Saturation	Queue length (metres)
Carlingford Road / Midson Road	5,305	4,461	F	488.1	1.577	2,119
Carlingford Road / Rawson Street	5,271	3,366	F	1,197.8	13.456	245
Carlingford Road / Beecroft Road	8,342	6,622	F	4,218.7	14.709	816
Epping Road / Blaxland Road	8,116	5,024	F	273.6	1.508	382
Epping Road / Essex Street	5,056	3,104	F	285.5	1.376	897
Epping Road / Pembroke Street	5,289	3,014	F	328.5	2.164	933

Table 6.2 Future base year 2026 PM intersection performance

Intersection	Vehicle demand (Veh/Hr)	Vehicle throughput (Veh/Hr)	Level of Service	Average Delay (Seconds)	Degree of Saturation	Queue length (metres)
Carlingford Road / Midson Road	4,838	3,973	F	234.7	1.232	818
Carlingford Road / Rawson Street	4,369	2,985	F	508.7	3.614	245
Carlingford Road / Beecroft Road	7,301	5,006	F	1,413.2	4.906	816
Epping Road / Blaxland Road	7,437	5,727	F	609.1	2.063	326
Epping Road / Essex Street	4,296	3,132	F	181.7	1.213	505.6
Epping Road / Pembroke Street	4,300	4,055	F	368.7	1.543	2249.8

The intersection analysis of the future base year 2026 scenario for the morning peak hour shows a low level of network performance at all considered intersections. All intersections are over capacity (level of service F). However, the Council has indicated that it is prepared to consider intersections with average delays of up to 300 seconds as acceptable.

Even so, the Midson Road, Rawson Street, Beecroft Road and Pembroke Street intersections all have average delays over this threshold. Most notably, the Beecroft Road intersection has an average delay of 4,219 seconds (or 70.5 minutes).

It should also be noted that the vehicle demand for the intersections considered is consistently higher than actual vehicle throughput – which suggests that there are a number of vehicles that cannot even pass through the network. Overall, the morning performance of the network for the base 2026 scenario is such that it is unlikely that there will be any spare capacity for additional vehicles.

The intersection analysis of the future base year 2026 scenario for the afternoon peak hour shows a similarly low level of network performance at all considered intersections. All intersections are over capacity (level of service F). The Rawson Street, Beecroft Road, Blaxland Road and Pembroke Street intersections all have average delays over 300 seconds.

Again, the Beecroft Road intersection has the highest average delay at 1,413 seconds (or 23.5 minutes) which is highly significant, though not as extreme as for the morning peak. Again, vehicle demand for the intersections considered is consistently higher than actual vehicle throughput. Overall, the afternoon performance of the network for the base 2026 scenario is such that it is unlikely that there will be any spare capacity for additional vehicles.

6.2 Future year 2036 network model results

The Future peak hour intersection analysis for the 2036 future development traffic scenario, for a total of 10,000 new dwellings at Epping is presented below In Table 6.3 and Table 6.4:

Table 6.3 Future base year 2036 AM intersection performance

Intersection	Vehicle demand (Veh/Hr)	Vehicle throughput (Veh/Hr)	Level of Service	Average Delay (Seconds)	Degree of Saturation	Queue length (metres)
Carlingford Road / Midson Road	5,941	4,963	F	1,046.9	2.530	3,064
Carlingford Road / Rawson Street	5,825	2,849	F	174.4	1.191	163
Carlingford Road / Beecroft Road	9,340	6,671	F	4,643.5	15.202	816
Epping Road / Blaxland Road	9,178	5,153	F	291.6	1.527	515
Epping Road / Essex Street	5,747	3,398	F	459.7	1.524	1,228
Epping Road / Pembroke Street	5,898	3,202	F	206.1	1.640	843

The intersection analysis of the future base year 2036 scenario for the morning peak hour shows a low level of network performance at all considered intersections. All intersections are over capacity (level of service F). As mentioned in Section 6.1, the Council has indicated that it is prepared to consider intersections with average delays of up to 300 seconds as acceptable. Even so, the Beecroft Road and Essex Street intersections both have average delays over this threshold.

Most notably, the Beecroft Road intersection has an average delay of 4,644 seconds (or 77 minutes). It should also be noted that the vehicle demand for the intersections considered is consistently higher than actual vehicle throughput – which suggests that there are a number of vehicles that cannot even pass through the network.

Overall, the morning performance of the network for the base 2036 scenario is such that it is unlikely that there will be any spare capacity for additional vehicles. While, broadly, average delays are predicted to improve by 2036 from the 2026 base scenario as a result of the additional Council proposed road improvements which are anticipated to be implemented during this period, the most crucial intersection – Beecroft Road – actually experiences a higher average delay in 2036 than for the 2026 case.

Table 6.4 Future base year 2036 PM intersection performance

Intersection	Vehicle demand (Veh/Hr)	Vehicle throughput (Veh/Hr)	Level of Service	Average Delay (Seconds)	Degree of Saturation	Queue length (metres)
Carlingford Road / Midson Road	5,545	4,398	F	330.0	1.370	1,140
Carlingford Road / Rawson Street	4,834	2,500	C	37.7	0.730	163
Carlingford Road / Beecroft Road	8,322	5,185	F	627.3	2.706	816
Epping Road / Blaxland Road	8,645	5,923	F	602.3	2.061	365
Epping Road / Essex Street	5,176	3,505	F	261.5	1.355	767
Epping Road / Pembroke Street	5,076	4,711	F	525.6	1.799	2,994

The intersection analysis of the future base year 2036 scenario for the afternoon peak hour shows a similarly low level of network performance at all considered intersections. All intersections except Rawson Street are over capacity (level of service F). The Midson Road, Beecroft Road, Blaxland Road and Pembroke Street intersections all have average delays over 300 seconds. Again, the Beecroft Road intersection has the highest average delay at 627 seconds (or 10.5 minutes) which is a significant, though not as extreme delay, as for the morning peak.

Again, vehicle demand for all the intersections considered is consistently higher than the actual vehicle throughput. Overall, the afternoon performance of the network for the base 2036 scenario is such that it is unlikely that there will be any spare capacity for additional vehicles.

7 Future land use and network options examined

7.1 Introduction

This report has primarily only investigated the two future baseline development scenarios for the Epping town centre of +5,000 additional dwellings by the year 2026, and +10,000 additional dwellings by the year 2036.

Further road network investigations by EMM and Paul van Den Bos are ongoing for the additional potential residential development at the Austino site, which is described further in Section 7.2 below and the future road network benefits of two additional local road link connections options for the Epping town centre, which are described further in Sections 7.3 and 7.4 below.

7.2 Land use development scenario option 1: The Austino site

The proposed Austino residential development at 2-18 Epping Road, 2-4 Forest Grove and 725 Blaxland Road may have some impacts on the local road network. A preliminary future traffic network analysis for the site has been undertaken by EMM and was reported previously in a draft Austino Planning Proposal TIA review report which was prepared by EMM in February 2018. The February 2018 Austino site traffic analysis was based on a slightly lower future baseline year 2026 additional dwelling forecast for the Epping Town centre than the forecast which has been used for this report. However the general findings of the EMM TIA review analysis are still generally valid and are summarised here in this report.

The detailed year 2026 SIDRA intersection analysis results for the proposed Austino planning proposal development are included as Appendix M to this report and indicate that the most significant intersection performance deteriorations as a result of the additional potential dwellings for the Austino development would occur at the Epping Road/Essex Street and Epping Road/Blaxland Road intersections. This analysis which is now in the process of being updated by EMM for the latest study area dwellings forecast is presented below in Table 7.1:

Table 7.1 Summary of intersection performance changes due to the Austino proposal

Approach	2017 average delay (seconds) (am/pm)	2017 level of service (am/pm)	2026 base average delay (seconds) (am/pm)	2026 base level of service (am/pm)	2026 (with Austino) average delay (seconds) (am/pm)	2026 (with Austino) level of service (am/pm)
Epping Road/Essex Street intersection						
South approach left turn	66.6 / 91.6	E / F	64.3 / 74.6	E / F	60.3 / 74.6	E / F
South approach through	61.1 / 77.8	E / F	247.0 / 295.2	F / F	294.1 / 282.8	F / F
South approach right turn	66.8 / 82.1	E / F	71.9 / 155.4	F / F	68.2 / 206.6	E / F
East approach left turn	13.7 / 241.6	A / F	44.6 / 247.2	D / F	56.8 / 284.4	E / F
East approach through	8.2 / 236.3	A / F	41.6 / 247.7	C / F	54.9 / 284.9	D / F
East approach right turn	13.7 / 242.0	A / F	Movement removed	Movement removed	Movement removed	Movement removed
North approach left turn	49.0 / 62.7	D / E	37.1 / 289.5	C / F	38.0 / 296.6	C / F
North approach through	53.5 / 57.1	D / E	31.9 / 284.1	C / F	32.5 / 291.1	C / F
North approach right turn	66.0 / 254.3	E / F	292.9 / 297.3	F / F	300.1 / 320.6	F / F

Table 7.1 Summary of intersection performance changes due to the Austino proposal

Approach	2017 average delay (seconds) (am/pm)	2017 level of service (am/pm)	2026 base average delay (seconds) (am/pm)	2026 base level of service (am/pm)	2026 (with Austino) average delay (seconds) (am/pm)	2026 (with Austino) level of service (am/pm)
West approach left turn	23.0 / 22.1	B / B	30.9 / 11.2	C / A	35.2 / 11.2	C / A
West approach through	17.6 / 20.5	B / B	165.3 / 6.5	F / A	190.8 / 6.5	F / A
West approach right turn	23.3 / 33.5	B / C	Movement removed	Movement removed	Movement removed	Movement removed
Epping Road/Blaxland Road intersection						
South approach left turn	17.3 / 74.6	B / F	72.6 / 1060.2	F / F	77.1 / 1118.7	F / F
South approach through	53.8 / 73.6	D / F	695.3 / 1191.6	F / F	701.4 / 1233.9	F / F
East approach left turn	48.8 / 72.8	D / F	38.1 / 35.4	C / C	38.1 / 35.4	C / C
East approach through	43.3 / 67.0	D / E	773.5 / 1325.2	F / F	813.2 / 1313.2	F / F
North approach left turn	58.4 / 98.0	E / F	64.9 / 68.6	E / E	64.4 / 67.5	E / E
North approach through	52.9 / 92.5	D / F	746.8 / 1182.4	F / F	772.0 / 1106.4	F / F
North approach right turn	58.6 / 98.1	E / F	Movement removed	Movement removed	Movement removed	Movement removed
West approach left turn	5.6 / 4.9	A / A	5.6 / 6.2	A / A	5.5 / 6.2	A / A
West approach through	27.3 / 8.6	B / A	13.6 / 11.3	A / A	12.9 / 11.6	A / A
West approach right turn	44.8 / 39.8	D / C	798.4 / 1269.6	F / F	791.8 / 1277.1	F / F

As was concluded by the EMM Austino site planning proposal TIA review report of February 2018, and is further illustrated by the results in Table 7.1, the actual additional intersection performance deterioration due to the Austino development with the planning proposal zoning changes, is relatively small.

However, the significant intersection performance deterioration from the 2017 base to the 2026 future base traffic situation renders any further traffic generating development in this location unacceptable without further capacity improvements to the locality major road and local road network capacity, in particular at the Epping Road/Blaxland Road intersection, and to a lesser extent at the Epping Road/Essex Street intersection.

7.3 Network development scenario option 2: Reopening the bus tunnel link

Further locality major road and local network investigations by EMM and Paul van Den Bos are ongoing for the potential additional local road link connection for the Epping town centre, which could be provided by reopening the former bus tunnel connection which crosses under the railway line to the north of Epping Station, for one way westbound use, primarily by local traffic, with a left turn only movement permitted for the traffic egress at Beecroft Road.

The future road network 2026 and 2036 am and pm peak hour vehicle "difference plots" are shown in Appendix N for the future road networks in 2026 and 2036, either with or without this additional road network connection. The future predicted morning and afternoon traffic volumes which would be using the future bus tunnel (westbound traffic only) would be.

- 151 vehicles per hour during the 2026 am peak hour;

- 121 vehicles per hour during the 2026 pm peak hour
- 234 vehicles per hour during the 2036 am peak hour
- 192 vehicles per hour during the 2036 pm peak hour

These peak hourly traffic volumes of primarily locally based traffic using the former bus tunnel connection, would result in equivalent peak hourly traffic reductions for the southbound right turning traffic at the Epping Road/Essex Street intersection and the westbound through traffic movement at the Epping Road/Blaxland Road/Langston Place intersection, which would probably have significant network traffic benefits in terms of reducing the future peak hourly intersection traffic delays at these intersections.

The full future year 2026 and 2036 SIDRA intersection analysis has not yet been undertaken for these traffic changes so it is not possible to confirm the exact extent of the future traffic benefits from the additional local traffic connection at Epping via the former bus tunnel. However this analysis is due to be completed soon to confirm this benefit.

7.4 Network development scenario option 3: New Ray Road to Beecroft Road link

This future road network connection is different in principle to the potential former bus tunnel local traffic connection at Epping, which was examined in Section 7.3, in that it is already included in the assumed future 2036 Council recommended road improvements for the Epping Town Centre, which are listed in detail in Appendix F.

The future road network 2026 and 2036 am and pm peak hour vehicle "difference plots" for the road network with and without this east-west link are shown in Appendix O. The future predicted morning and afternoon traffic volumes which would be using the future east-west link road connection are:

- 246 vehicles per hour during the 2026 am peak hour;
- 229 vehicles per hour during the 2026 pm peak hour
- 143 vehicles per hour during the 2036 am peak hour
- 139 vehicles per hour during the 2036 pm peak hour

These peak hourly traffic volumes of primarily locally based traffic using the proposed east-west link would result in equivalent peak hourly traffic reductions for the other traffic movements using either the Carlingford Road/Beecroft Road or Carlingford Road/Ray Road/Rawson Street intersections, which could have significant network traffic benefits in terms of reducing the future peak hourly intersection traffic delays at these intersections.

The full future year 2026 and 2036 SIDRA intersection analysis has not yet been undertaken for these traffic changes so it is not possible to confirm the exact extent of the future traffic benefits from the additional east west local traffic connection between Ray Road and Rawson Street at Epping. This further analysis is due to be completed soon and will be presented in an additional supplementary report by EMM for more formally assessing the future benefit of these road proposals.

8 Operational assessment comparison

8.1 Future land use options

This report has primarily only investigated the two future baseline development scenarios for the Epping town centre of +5,000 additional dwellings by the year 2026, and +10,000 additional dwellings by the year 2036.

The future intersection delay results from these traffic scenarios show significant and generally unacceptable traffic delays at the key intersections on the major traffic routes through the Epping town centre for east-west and north-south through traffic movements and also for the additional locally generated traffic which will be trying to gain access to the major road network at Epping in these future years.

Further road network investigations of additional road link options for the Epping town centre as identified in Chapter 7, have identified some further potential for additional local road network improvements to improve the future accessibility to the major road network for local traffic. However, until these further investigations are completed, further land rezoning on the key sites within and adjoining the Epping town centre should not be approved until adequate future road network capacity can be identified to accommodate the additional generated traffic demand from these sites.

8.2 Future road network operations

The two primary capacity controlling intersections in the Epping town centre are and will generally remain, the Carlingford Road/Beecroft Road and Epping Road/Blaxland Road intersections. The future operations for these two intersections are summarised below, based on the study SIDRA analysis results which are presented in Chapter 6:

Table 8.1 Summary of two key intersections and their future operations

Intersection	Vehicle demand (Veh/Hr) (am/pm)	Vehicle throughput (Veh/Hr) (am/pm)	Level of Service (am/pm)	Average Delay (Seconds) (am/pm)	Degree of Saturation (am/pm)	Queue length (metres) (am/pm)
Base year 2026						
Carlingford Road / Beecroft Road	8,342 / 7,301	6,622 / 5,006	F / F	4,218.7 / 1,413.2	14.709 / 4.906	816 / 816
Epping Road / Blaxland Road	8,116 / 7,437	5,024 / 5,727	F / F	273.6 / 609.1	1.508 / 2.063	382 / 326
Base year 2036						
Carlingford Road / Beecroft Road	9,340 / 8,322	6,671 / 5,185	F / F	4,643.5 / 627.3	15.202 / 2.706	816 / 816
Epping Road / Blaxland Road	9,178 / 8,645	5,153 / 5,923	F / F	291.6 / 602.3	1.527 / 2.061	515 / 365

As is shown above in Table 8.1, there are some improvements in the average delays in the intersections considered from 2026 to 2036, in particular during the afternoon peak hour at the Carlingford Road/Beecroft Road intersection. These improvements may be attributed to the proposed construction of the east-west link between Ray Road and Beecroft Road and the additional DCP Link Road connection to Carlingford Road on the south side opposite Cliff Road.

However, there is still a large amount of network performance deterioration overall, especially during the morning peak hour. This is primarily due to the fact that the proposed network upgrades will only alleviate local traffic issues, while inter-regional traffic will continue to put pressure on these intersections.

The reopening of the bus tunnel (for westbound traffic only) is not included in the above analysis results and this may lead to some small but significant improvements in future network traffic delays, although primarily only at the Epping Road/Blaxland Road and Epping Road/Essex Street intersections.

9 Conclusion

9.1 Future road network implications for future baseline development

This analysis of the existing (year 2017) traffic situation and two proposed future year residential development scenarios (in 2026 and 2036) for the Epping Town Centre has identified significant levels of predicted future traffic growth that will have significant implications for the future levels of traffic congestion and delays on the major road network, even after considering the currently identified program of road improvements (by both RMS and Parramatta City Council) that have been identified by previous studies to provide additional road traffic capacity to meet the needs of forecast residential development in the Epping area.

The future year 2026 and 2036 land use options which have been assessed by this study are essentially neutral in terms of their employment and commercial floorspace development projections for the Epping Town Centre and assume no change from the current base year situation. However, it is anticipated that in due course additional town centre development scenarios will be further analysed using the Epping Town centre Dynameq and SIDRA traffic models which have been developed for this study, to also assess the future generated traffic impacts of higher levels of commercial development (and employment) in Epping.

The analysis of the key major road intersection delays (assuming the implementation of all the identified RMS and Council road improvements) has been undertaken SIDRA 7 intersection model which models the co-ordinated operation of a chain of linked intersections, for four existing and future traffic network model and land use scenarios, which are:

- The existing actual peak hour intersection traffic volumes which were surveyed in March 2017;
- The modelled base case 2017 intersection traffic volumes from the EMME model;
- The modelled +5,000 dwellings growth scenario intersection traffic volumes from 2026, and
- The modelled +10,000 dwellings growth scenario intersection traffic volumes from 2036,

The key findings of the preliminary Dynameq and detailed SIDRA traffic model investigations which have been undertaken for this study are:

- Three or four of the six key intersections on the four major traffic routes (via Beecroft Road, Blaxland Road, Carlingford Road and Epping Road) are all operating at over saturated (level of service F) traffic conditions with the March 2017 surveyed morning and afternoon peak hour traffic volumes. The increasing major road traffic congestion which is now occurring in the Epping Town Centre area, is adversely affecting both the regional through traffic movements and the delays for local traffic access to the major road network at Epping.
- In the future years of 2026 and 2036, when the increased through and local residential traffic growth is modelled, the future peak hour traffic conditions on the major road network will continue to worsen even when the full programs of the identified RMS and Council road improvements have been implemented. In the assessed future road networks, either five or six of the assessed six intersections will have future traffic conditions operating at oversaturated (level of service F) during both the morning and afternoon traffic peak periods.

- The provision of one additional lane westbound on the western side of Epping Bridge will primarily benefit the afternoon peak hour westbound regional traffic movements which are travelling through the Epping Town Centre. However, if the bridge were to operate with future tidal flow traffic conditions such as four lanes eastbound during the morning peak periods with two lanes westbound and three lanes in each direction during the afternoon peak periods, this future improvement could provide significant travel flow benefits during both these peak periods.

9.2 Future Epping area land use development implications

The potential traffic network implications of predicted residential growth in the Epping Town Centre have been reviewed by this report for two different levels of proposed development (either +5,000 or +10,000 additional dwellings) which effectively represent the likely minimum and future maximum residential development scenarios which are likely to occur within the Epping study area:

- This future traffic analysis updates the work of the previous Epping Town Centre Transport Studies by Halcrow and GTA (Halcrow Pacific Pty Ltd, 2011 and GTA Consultants, reviewed by AECOM, 2015) which previously identified short term road infrastructure treatments to accommodate Town Centre growth scenarios of up to 3,750 additional dwelling units.

- More recent land capability analysis undertaken by City of Parramatta Council informing this traffic study has identified the actual future development potential under the new zoning controls is likely to be in the order of 10,000 additional dwellings. As a result the identified future roadworks programs which have been determined by both the Halcrow and GTA studies for up to 3,750 additional dwellings, are now inadequate and have been reviewed by both Parramatta City Council and RMS.

- However the network traffic analysis which has been undertaken for this report has identified that even with all the RMS committed and Council proposed road improvements the future 2036 road network would be inadequate to accommodate the full future predicted traffic demand from approximately 10,000 additional dwellings in the Epping Town Centre and adjoining areas.

References

Epping Town Centre Transport Study Outcomes Report Halcrow Pacific Pty Ltd 2011

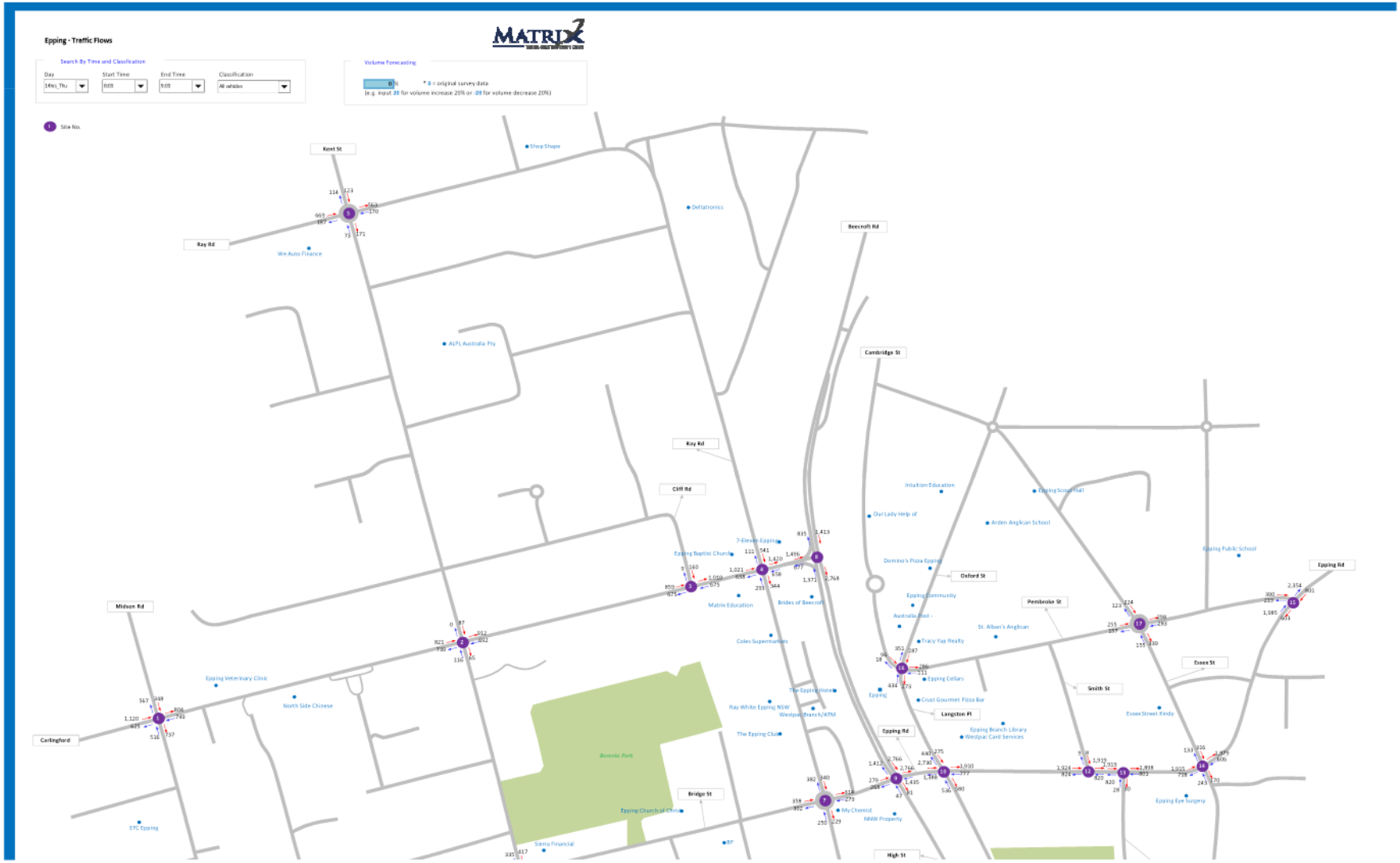
Greater Sydney Commission, Draft Central City District Plan, March 2018

JBA Planning 2011, *Epping Town Centre Study*. Report prepared by JBA Urban Planning Consultants Pty Ltd

Proposed Epping Town Centre Redevelopment, Rawson Street Epping, Traffic Study by GTA, reviewed by AECOM, November 2015

Appendix A

Traffic Survey Volumes


Epping - Traffic Flows
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Start Time
End Time
Classification
Volume Forecasting
Site No.
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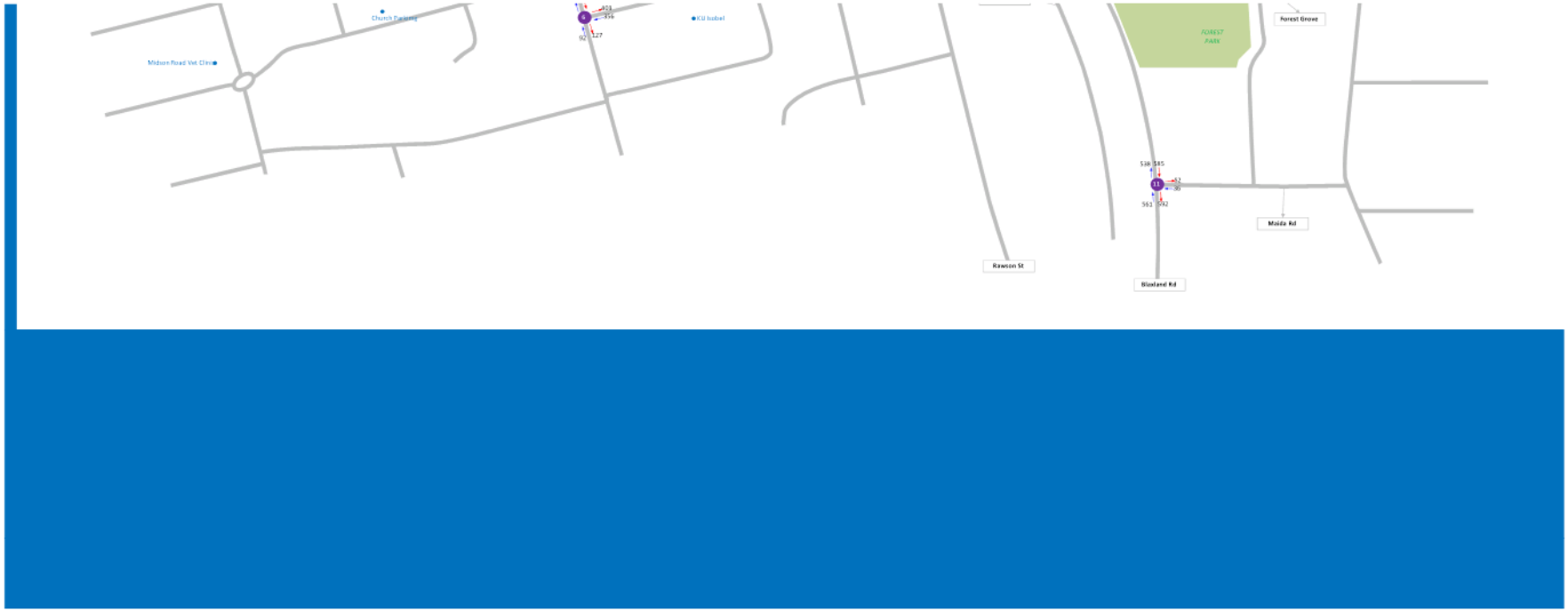
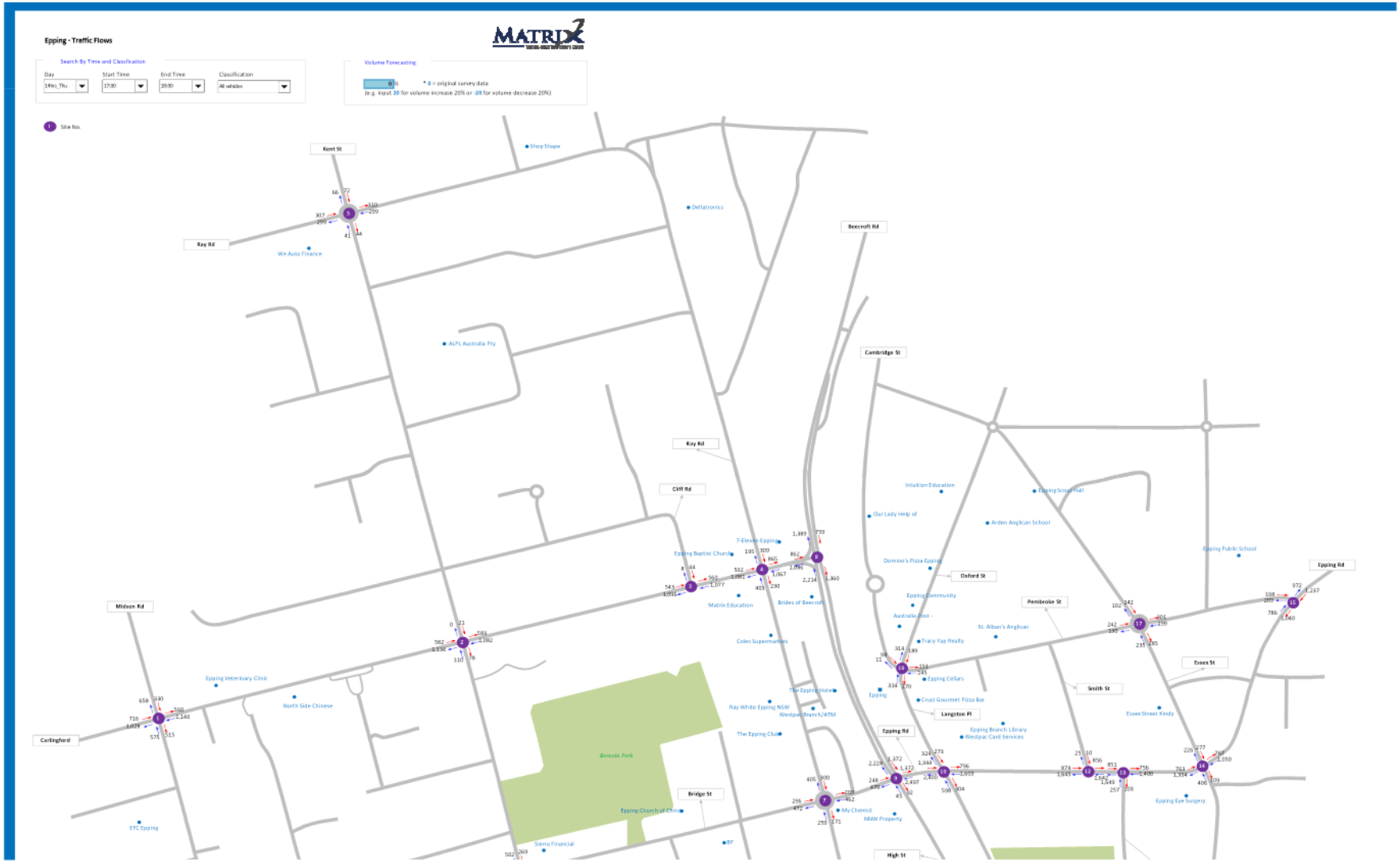
Ray Rd
Beecroft Rd
Cambridge St
Cliff Rd
Oxford St
Pembroke St
Epping Rd
Midson Rd
Essex St
Smith St
Langston Pl
Carlingford
Bridge St
High St
Bonnie Park


Church Parking
Midson Road Vet Clinic
KU Isabel
Forest Grove
FOREST PARK
Maida Rd
Rawson St
Blaxland Rd


Epping - Traffic Flows
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Beecroft Rd
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Langston Pl
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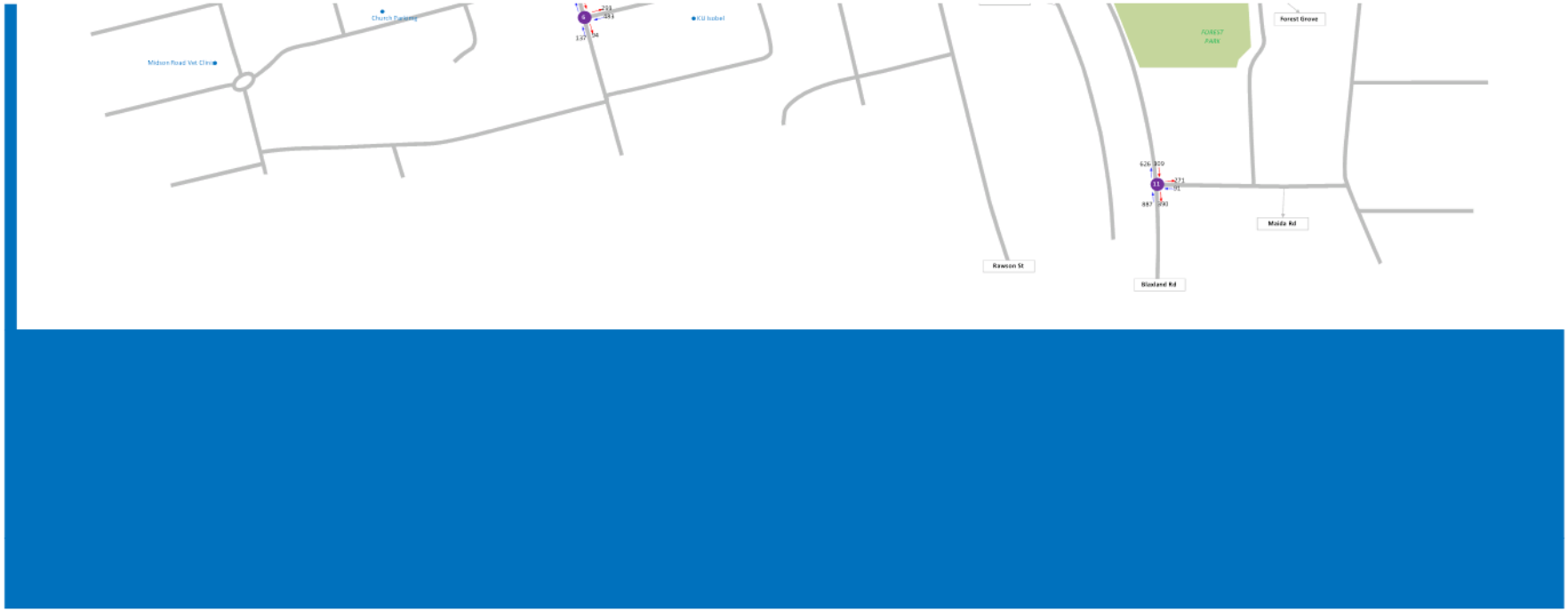
Midson Road Vet Clinic
KU Isobel
FOREST PARK
Forest Grove
Maida Rd
Rawson St
Bloxland Rd

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Out: 1,046
50
In: 1,496
Out: 1,446
43
In: 1,915
Out: 1,872
-36
In: 859
Out: 895
17
In: 821
Out: 804
26
In: 1,919
Out: 1,893
26
In: 1,924
Out: 1,898
49
In: 1,936
Out: 1,985
12
In: 2,730
Out: 2,718
Difference
Inflow: 780
Outflow: 784
9
160
11
286
27
1,299
79
125
1,469
666
21
117
26
14
332
14
7
2
28
7
428
22
1
14
99
Carlingford
Coles Supermarkets
Epping
Boronia Park
Arden Anglican School
Public School
FOREST PARK
Google

AM – East to West 08:00 – 09:00
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In: 560
Out: 708
111
In: 675
Out: 786
94
In: 692
Out: 786
-5
In: 749
Out: 744
-6
In: 801
Out: 795
-6
In: 820
Out: 814
37
In: 777
Out: 814
31
In: 1,371
Out: 1,402
Difference
Inflow: 784
Outflow: 784
11
114
808
563
125
5
89
42
332
278
220
81
428
22
2
2
175
27
8
39
22
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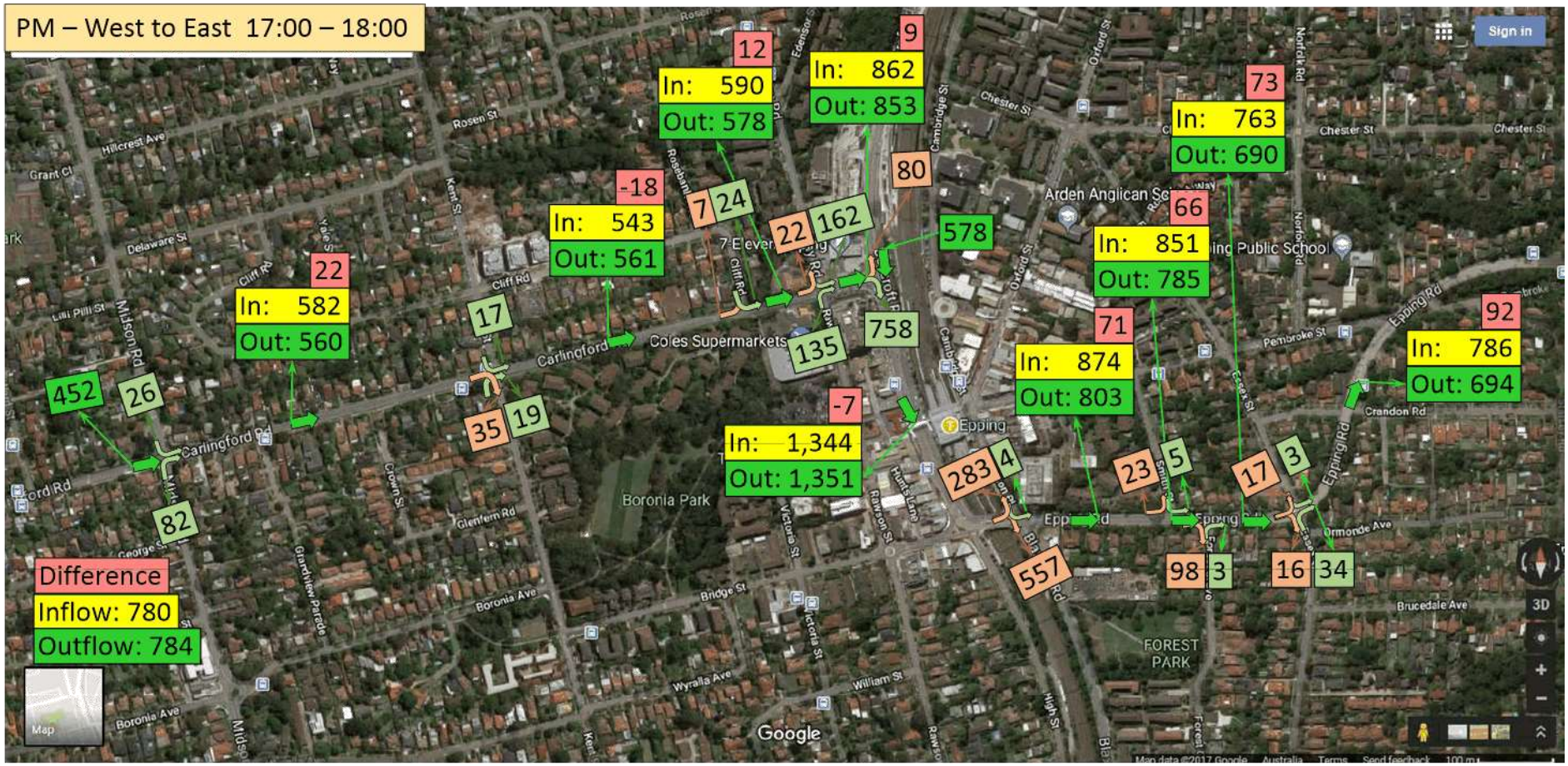
Coles Supermarkets
Arden Anglican School
Public School
Epping
FOREST PARK
Google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Out: 578
9
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In: 763
Out: 690
-18
In: 543
Out: 561
66
In: 851
Out: 785
22
In: 582
Out: 560
71
In: 874
Out: 803
92
In: 786
Out: 694
-7
In: 1,344
Out: 1,351
Difference
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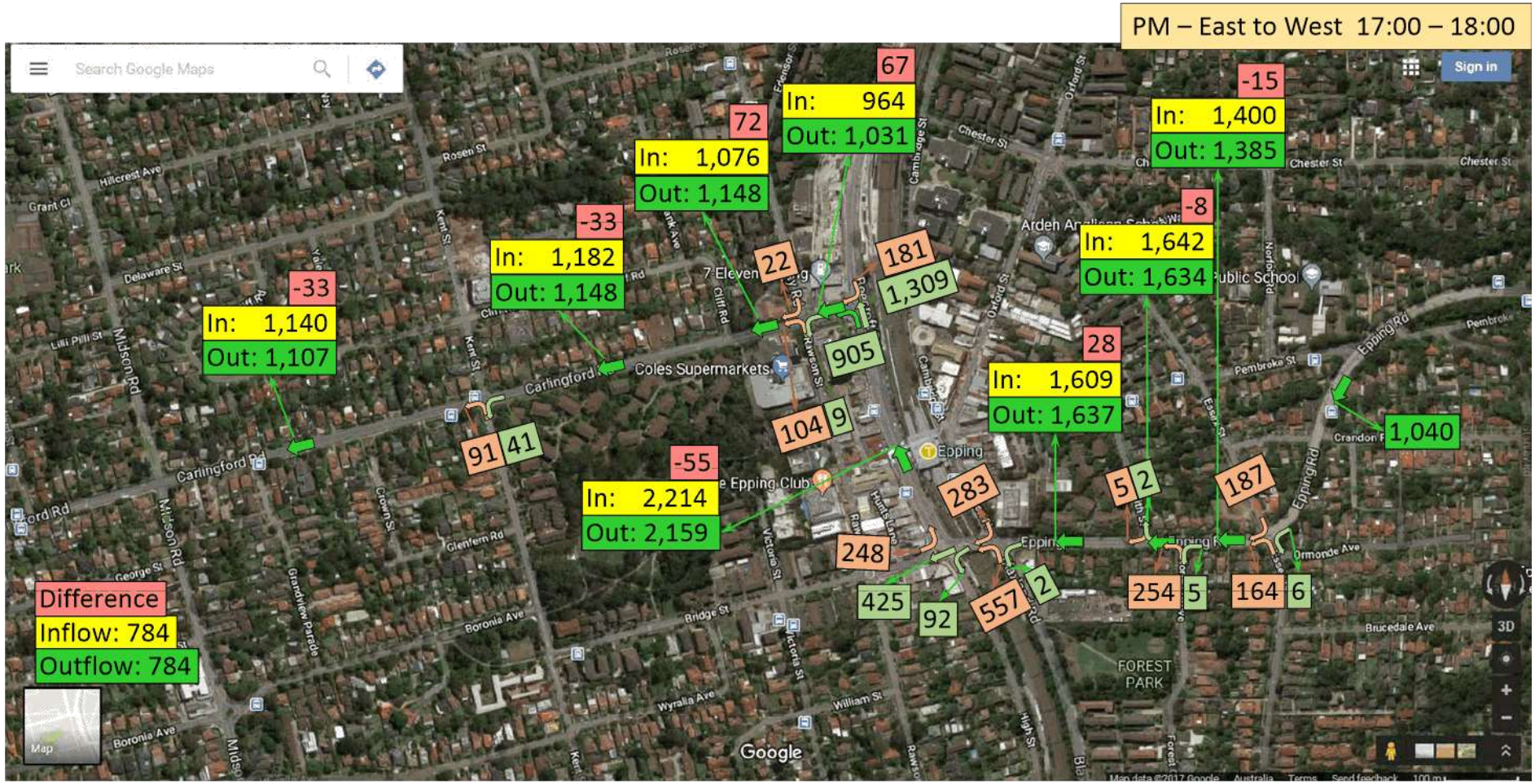
Outflow: 784
452
26
82
17
35
19
7
24
22
162
578
80
758
135
283
4
557
23
5
98
3
17
3
16
34
Carlingford
Coles Supermarkets
Boronia Park
Epping
Arden Anglican Sc
Public School
FOREST PARK
Google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Out: 1,031
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In: 1,076
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-33
In: 1,140
Out: 1,107
-15
In: 1,400
Out: 1,385
-8
In: 1,642
Out: 1,634
28
In: 1,609
Out: 1,637
-55
In: 2,214
Out: 2,159
Difference
Inflow: 784
Outflow: 784
22
181
1,309
905
104
9
91
41
283
248
425
92
557
2
5
2
187
254
5
164
6
1,040
Coles Supermarkets
Carlingford
Epping
Epping Club
Arden Anglican School
Public School
FOREST PARK
Google

Appendix B

Traffic Queuing Outputs

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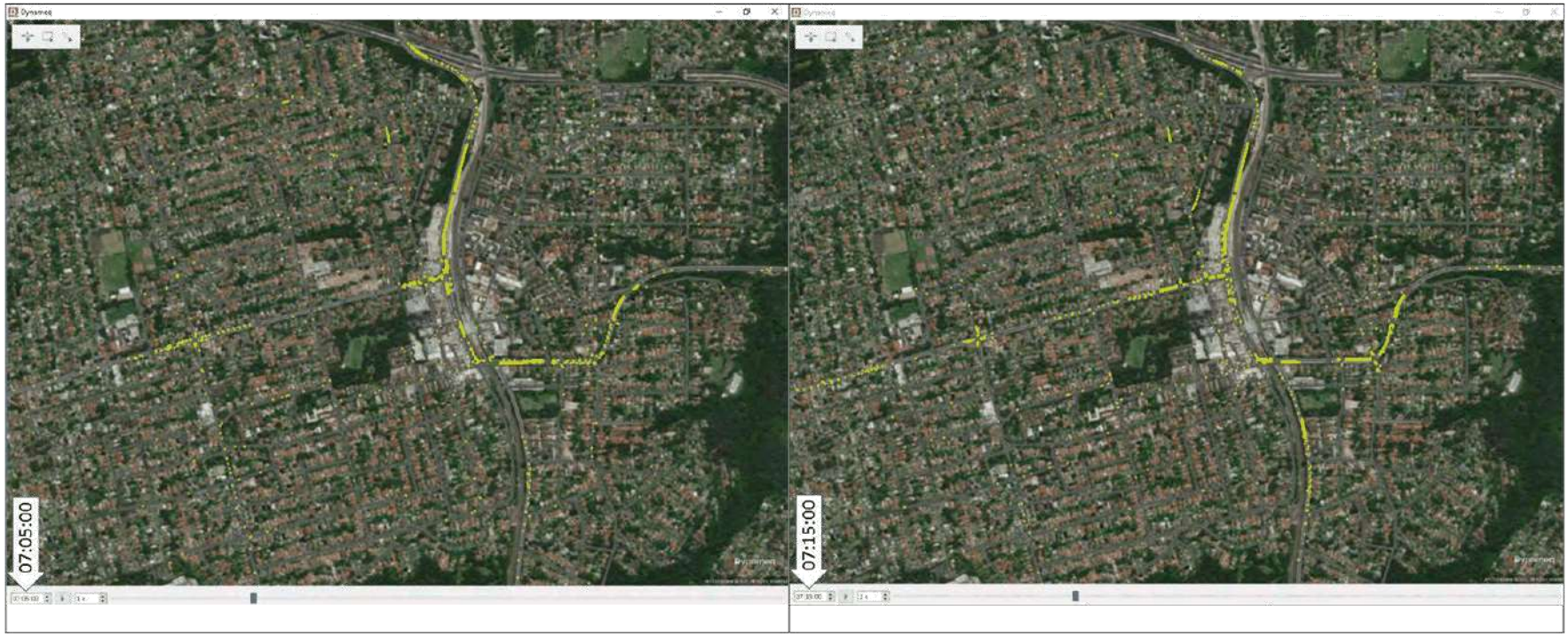
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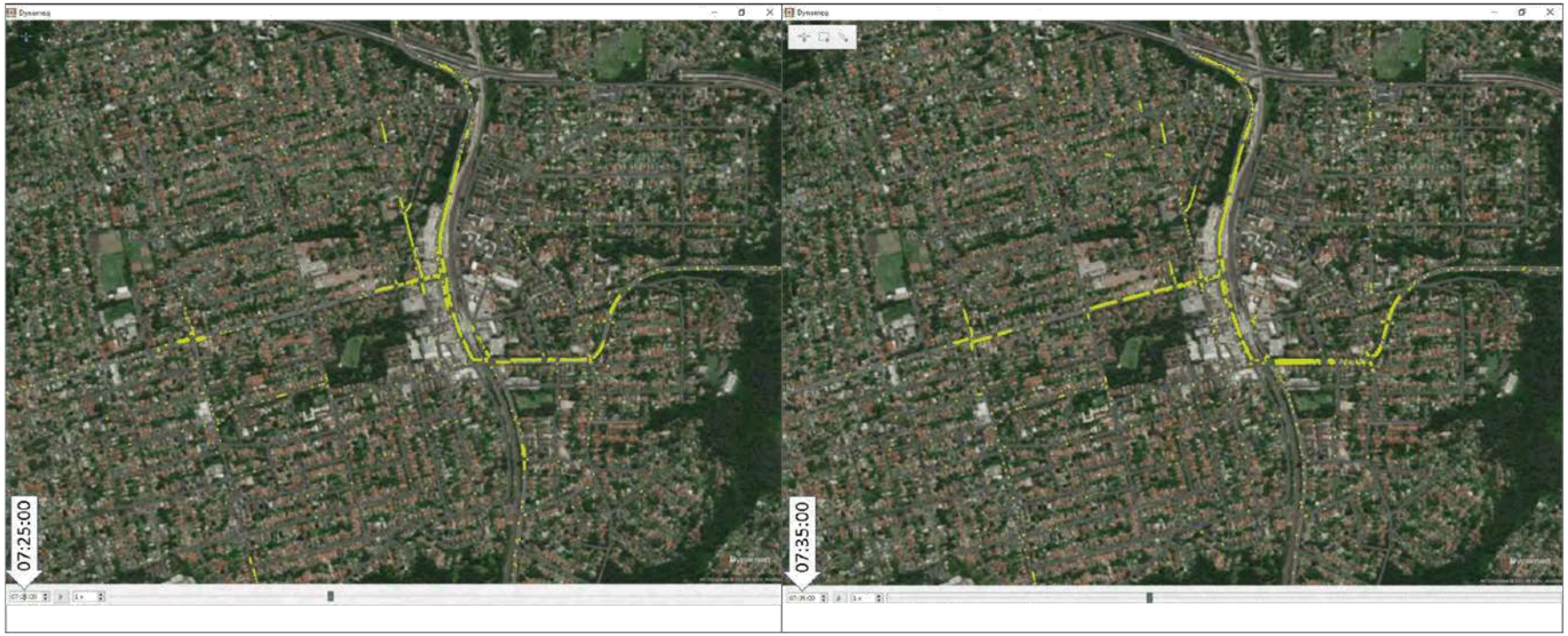
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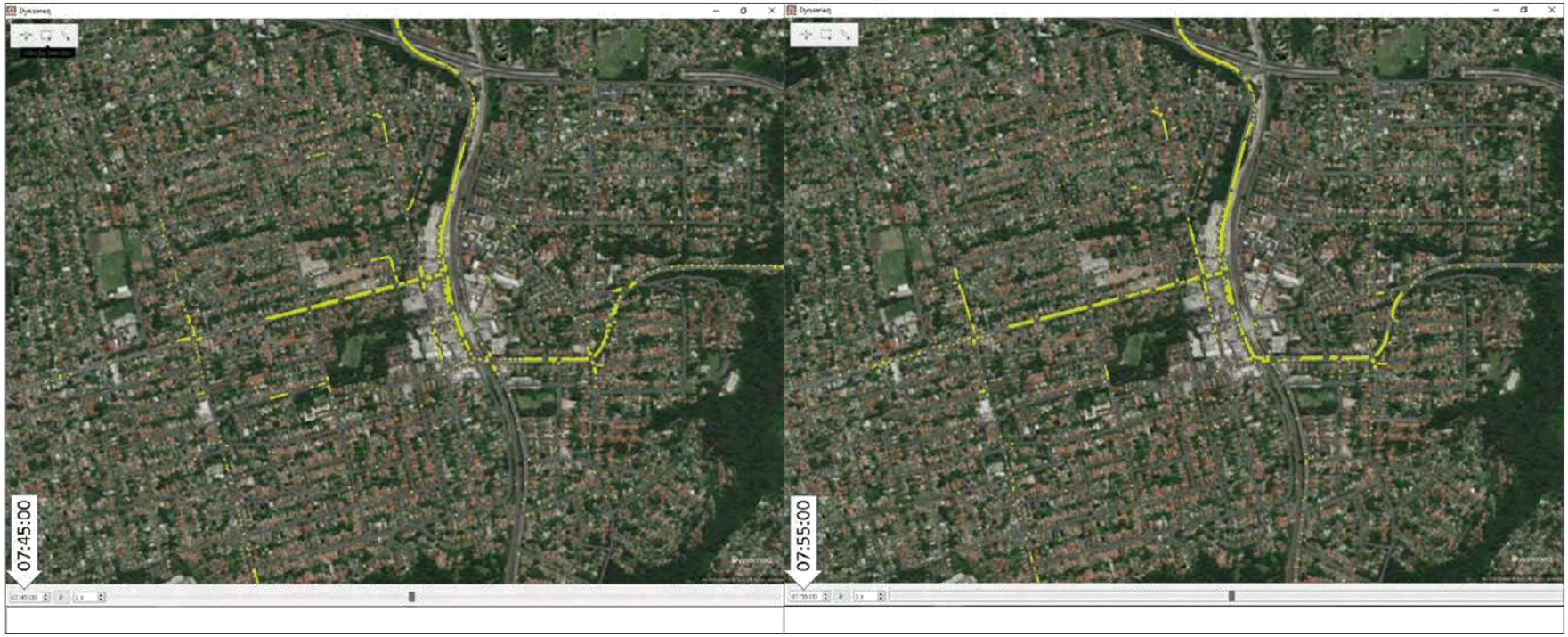
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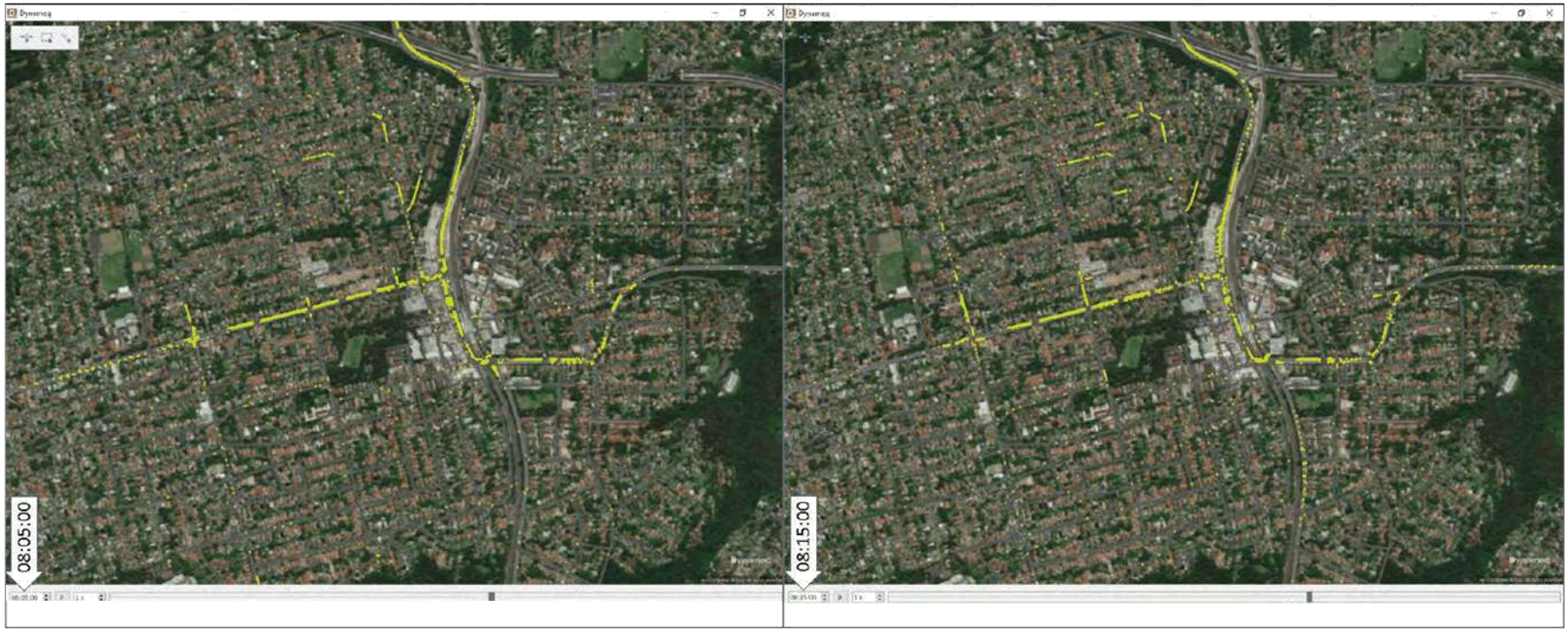
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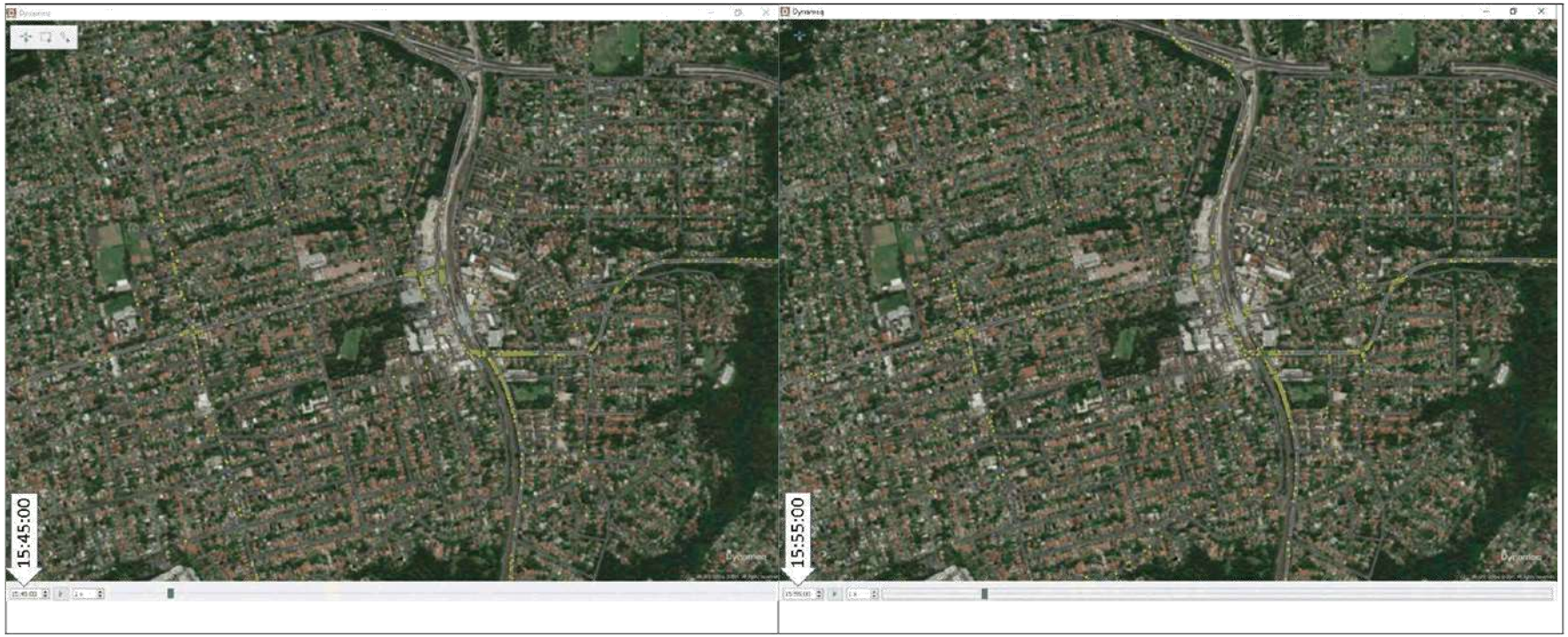
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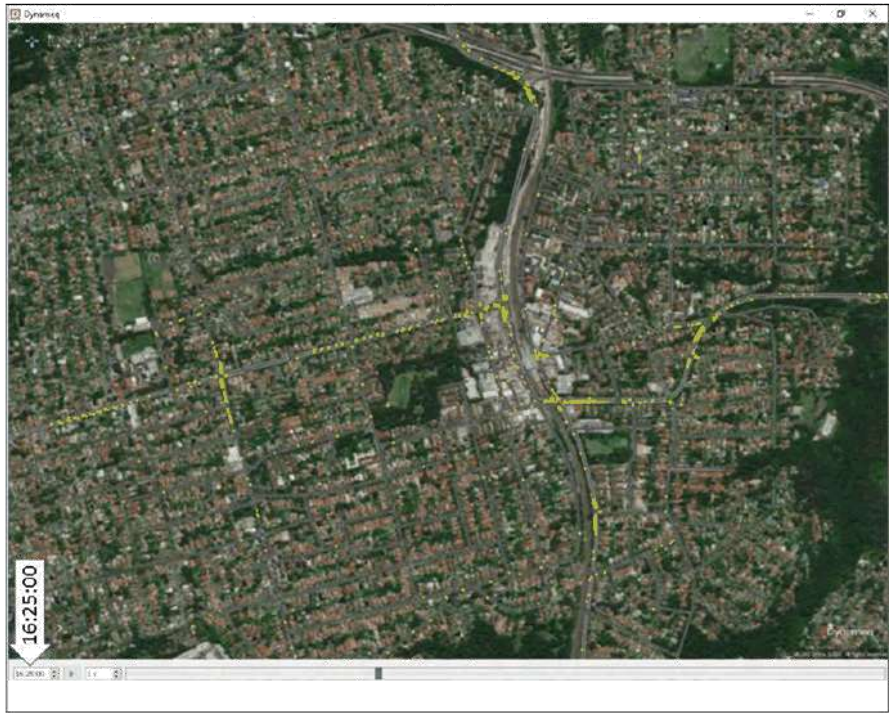
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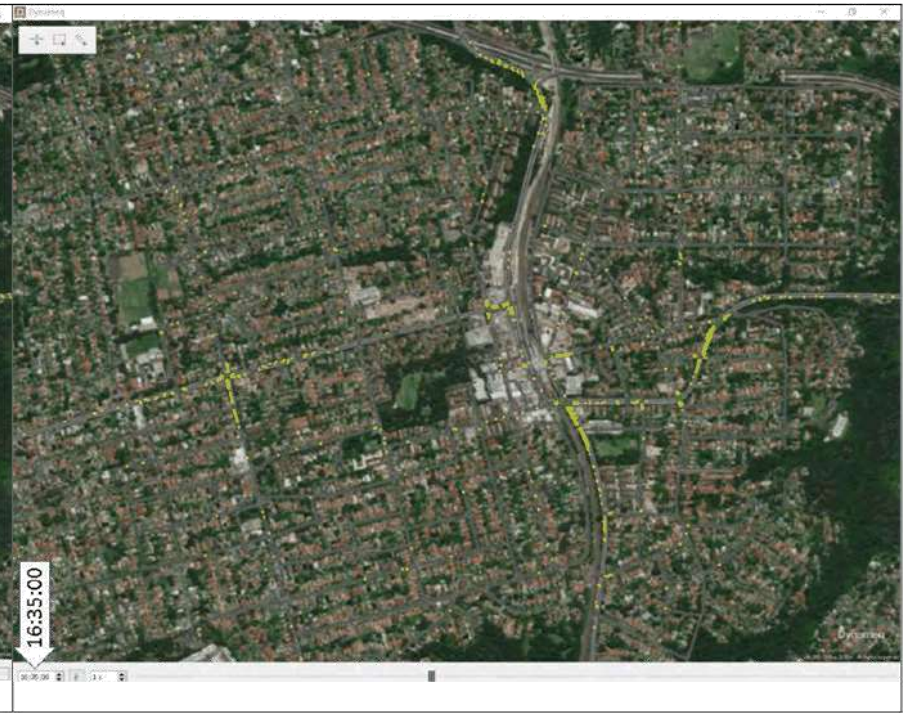
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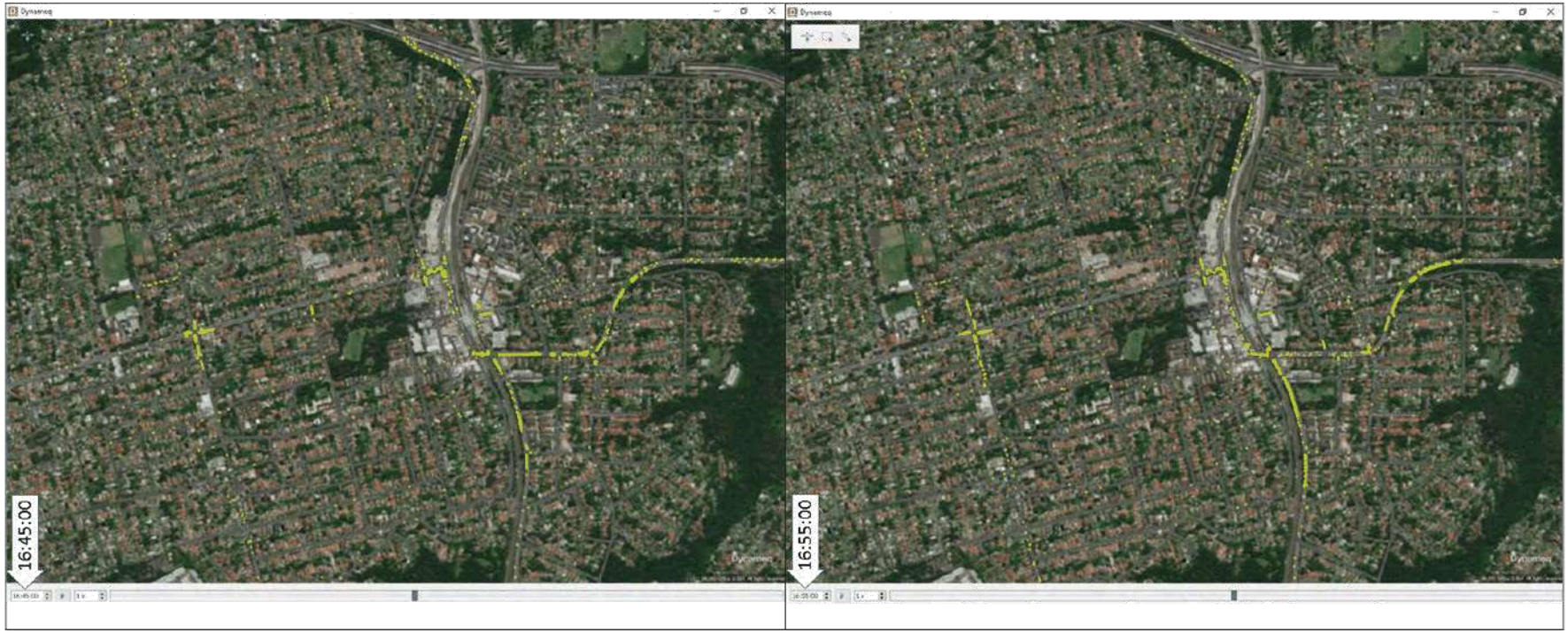
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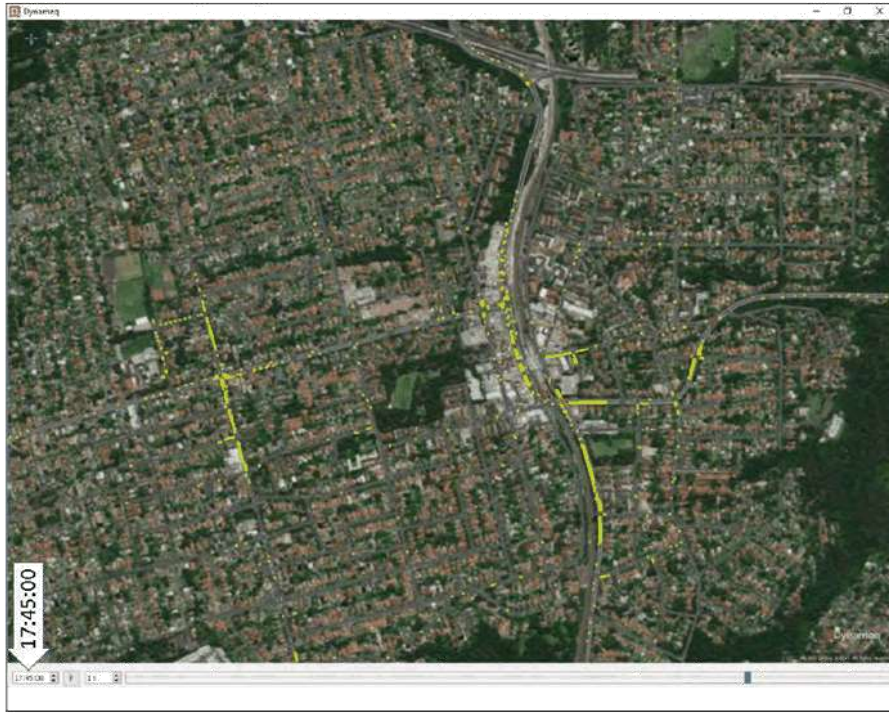
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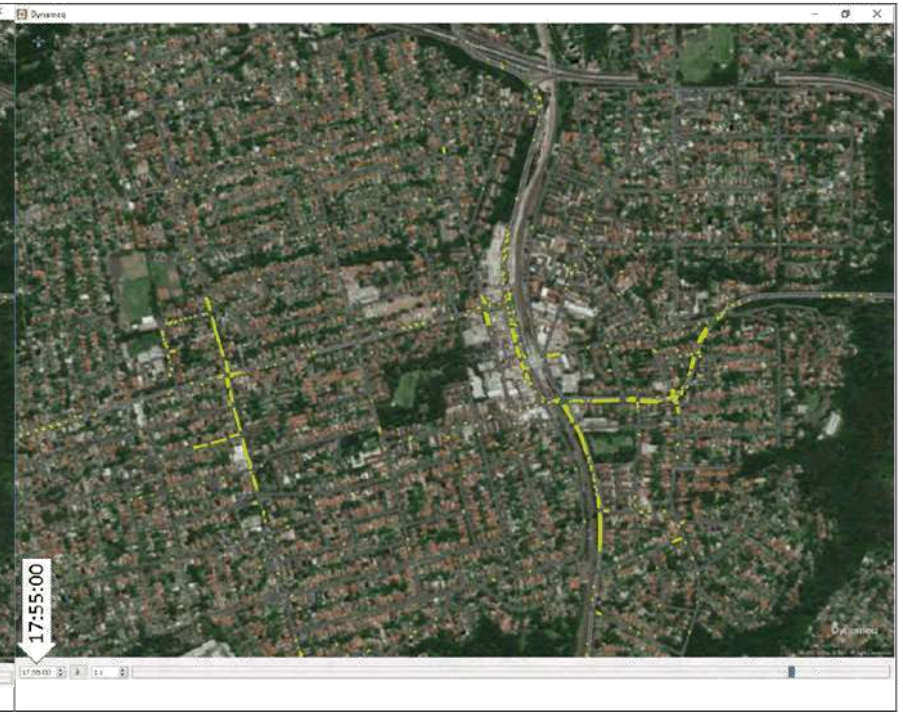
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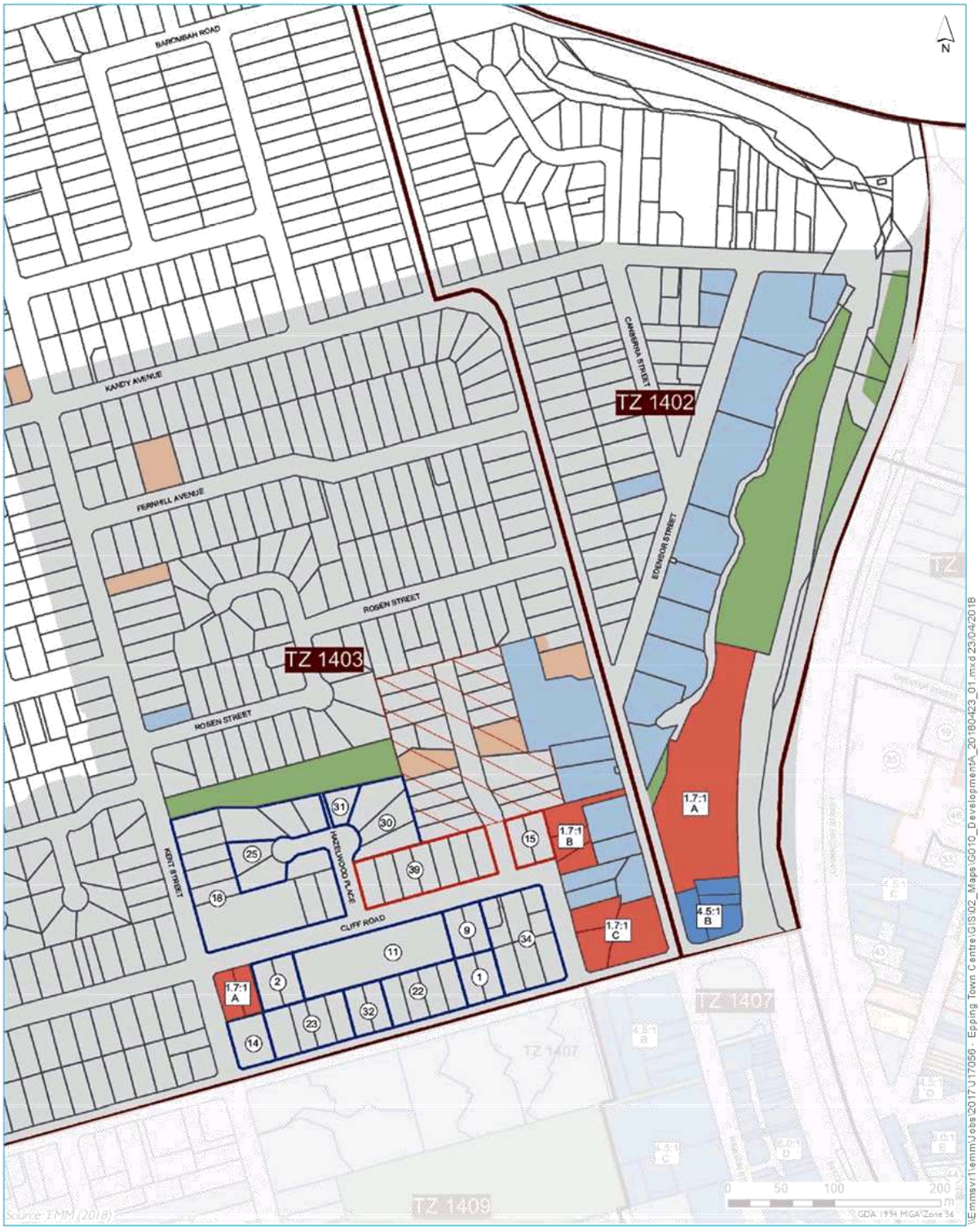
Appendix C

5,000 dwellings growth location



KEY

- Travel zone boundary
- Under construction
- DA approved
- Under assessment
- Not determined
- Preliminary lodgement
- Heritage conservation area
- B2 zone - potential development
- R4 zone - potential development
- R3 zone - potential development
- Epping Town Centre
- Heritage
- Preliminary lodgement

Epping - Current and potential development - North-west

Epping Town Centre traffic study

Figure C.1

EMM

KEY

- Travel zone boundary
- Under construction
- DA approved
- Under assessment
- Not determined
- Preliminary lodgement
- Heritage conservation area
- B2 zone - potential development
- R4 zone - potential development
- R3 zone - potential development
- Epping Town Centre
- Heritage
- Preliminary lodgement

Epping - Current and potential development - North-east

Epping Town Centre traffic study

Figure C.2

EMM

KEY

- Travel zone boundary
- Under construction
- DA approved
- Under assessment
- Not determined
- Preliminary lodgement
- Heritage conservation area
- B2 zone - potential development
- R4 zone - potential development
- R3 zone - potential development
- Epping Town Centre
- Heritage
- Preliminary lodgement

Epping - Current and potential development - South-west

Epping Town Centre traffic study

Figure C.3

EMM

KEY

- Travel zone boundary
- Under construction
- DA approved
- Under assessment
- Not determined
- Preliminary lodgement
- Heritage conservation area
- B2 zone - potential development
- R4 zone - potential development
- R3 zone - potential development
- Epping Town Centre
- Heritage
- Preliminary lodgement

Epping - Current and potential development - South-east

Epping Town Centre traffic study

Figure C.4

EMM

DA Approved/DA Approved and Under Construction

Travel Zone	Figure Reference	Node	Radius Sector	Units	
	1403	1	53016	3	88
		2			39
		9			36
		11			141
		14			33
		22			78
		23			77
		32			40
		34			130
		49			39
		15	49508	3	35
		30			99
		31			0 (refused)
		39			133
		18	53017	3	256
		25			38
					1262 Total Units
	1404	7	53018	3	32
		10			76
		8	53021	3	87
		13			52
		17			30
		36			63
		38			40
		41			66
		24	49501	4	12
					458 Total Units
	1406	19	53001	2	119
		35			501
		48			222
		33	53002	2	54
		46			295
		43	50005	2	83
		40	53003	1	254
		42	51001	1	464
		44			104
		5	53022	2	30
		6			90
		37			64
		45	49503	2	200
		47			179
					2659 Total Units
	1407	50	53007	1	147
					147 Total Units
	1408	3	53023	3	37
		16			36
		27			57
		28			37
		29			70
		20	53024	3	55
		26			55
		4	53025	3	60
		12			36
		21			27
					470 Total Units
					4996 Grand Total

Appendix D

10,000 dwellings growth location

			Location of Identified Future Potential Developments			
Travel Zone	Node		Figure Reference	Radius Sector	Units	
	1402	49505				
		49553				
		53014		B	2	159
		53015		A	3	265
						424 Total Units
	1403	49507				
		49508		B	3	52
		49525				
		49526				
		49550				
		49551				
		49552				
		50001				
		53016		A	3	33
		53017		C	3	94
		53029				
						179 Total Units
	1404	49501		A	4	34
		49533				
		49534				
		49535		B	3	109
		49536		C	3	56
		49547		D	3	38
		49548				
		50003		F	3	33
		53018		G	3	81
		53019		E	3	14
		53020		H	3	72
		53021		I	3	31
		53030				
						468 Total Units
	1406	49502				
		49503				
		49504				
		49557				
		50004				
		50005		C	2	581
		51001		E	1	204
		53001		A	2	113
		53002				
		53003		D	1	56
		53004				
		53022		B	2	251
						1205 Total Units
	1407	49530		C	1	756
		53005		A	1	215
		53006				
		53007		D	1	1007
		53008				
		53009				
		53010				
		53011				
		53012				
		53013		B	1	450
						2428 Total Units
	1408	49505				
		49520				
		49521				
		49537				
		49549				
		49554				
		53023				
		53024		D	3	45
		53025		A	3	10
		53026		B	2	234
		53027		C	3	44
		53028				
						333 Total Units
	1409	49514				
		49515		C	3	13
		49516				
		49518		B	3	15
		49519		A	2	7
		49531				
		49532		D	3	10
		49558				
		53031		E	2	11
						56 Total Units
						5093 Grand Total

Appendix E

RMS Road Improvements

J17056RP4

Epping Intersection Improvements
Frequently asked questions

Overall project

What are the Epping Town Centre improvements?

Epping Town Centre is one of eight precincts covered under the NSW Government's Urban Activation Precincts Program.

The Roads and Maritime Services is delivering the Epping Town Centre project, which includes:

- Project 1: upgrading the Beecroft Road and Carlingford Road intersection
- Project 2: widening the southern side of Epping Road by about 3.7 metres between Essex Street and Blaxland Road, to provide an additional westbound lane.

Project 1 is due to be completed in early 2018 and includes:

- widening Beecroft Road on the eastern side of the intersection
- providing an additional right turn lane from Beecroft Road southbound into Carlingford Road
- providing a third southbound lane on Beecroft Road north of Carlingford Road
- upgrading the left turn slip lane from Carlingford Road onto Beecroft Road
- providing a new traffic light pedestrian crossing on the western side of the intersection
- building a 90 metre long retaining wall on the eastern side of Beecroft Road next to the rail corridor
- vegetation removal
- upgrading traffic islands and traffic control signals
- adjusting property and utility services.

Project 2 started in mid-2017 and is due to be completed in mid-2018. The work includes:

- widening the southern side of Epping Road by about 3.7 metres between Essex Street and Blaxland Road to provide an additional westbound lane. The additional westbound lane would function as a dedicated left turn lane into Blaxland Road
- upgrading the Epping Road and Essex Street intersection including:
    - widening the north-eastern side of the intersection to provide an additional right turn lane onto Epping Road westbound. This would provide two marked right turn lanes and an unmarked shared left turn/through lane
    - providing new traffic light pedestrian crossings and pram ramps on all four approaches to the intersection
- building a raised central median about 340 metres long on Epping Road between Essex Street and Blaxland Road
- building a raised median about 20 metres long on Essex Street north of Epping Road intersection

- removal of right turns into and out of Forest Grove and Smith Streets
- removal of the right turn from Langston Place onto Epping Road westbound
- removal of the right turn from Epping Road into Essex Street in both directions
- providing a left turn lane from Essex Street onto Epping Road westbound.

What are the key benefits of the project?

The Epping Town Centre project aims to:

- improve traffic flow and road safety
- improve pedestrian access
- help reduce traffic delays and congestion.

What work has been done on Project 2 so far, and what work is to be completed?

We have surveyed the site, carried out demolition work, started our utility relocation work and set up the site compound. Work to be done includes:

- widening Epping Road westbound between Essex Street and Blaxland Road
- improving the intersection at Epping Road and Essex Street
- installing or improving dedicated turning lanes
- asphalting
- road marking.

Questions about the work schedule/construction (hours, noise, schedule)

What will your work schedule involve?

Our typical day working hours will be between **7am** and **6pm** from **Monday** to **Friday**, and **8am** to **1pm** on **Saturdays.** Our typical night time working hours will be between **9pm** and **6am.**

These work hours would be ongoing for four months.

From time to time we may need to work additional hours, including Sundays. The community will be notified if we work outside of these hours.

What is the work schedule?

The expected work schedule is outlined below:

Activity	Timing	Time of the day most construction will happen	Noise Level
Water main relocations	February and March 2018	Mainly days, some night shifts needed	Less Noisy
Electrical relocations	February to April 2018	Mainly days, some night shifts needed	Less Noisy
Telstra relocations	February to April 2018	Mainly days, some night shifts needed	Less Noisy
Optus and NBN relocations	February to April 2018	Mainly days, some night shifts needed	Less Noisy
Jemena relocations	February to April 2018	Mainly days, some night shifts needed	Less Noisy

Building the new road pavement and traffic signals	March to June 2018	Day and night Shifts	Noisier activities
Improvements open to traffic	July 2018		
Building the new median kerb and road furnishing including landscaping and footpaths	July and Aug 18	Mainly Night shift	Less Noisy

What is construction noise?

Most construction noise is typically caused by open-air construction activities and vehicles. Noise impacts depend on the source of the noise, the proximity to the receiver and the existing levels of background noise at the property.

Additionally, construction noise changes with different construction activities and as work progresses.

During the project we will be using equipment including, but not limited to:

- day work: excavators, vacuum trucks, bobcats, jackhammers, tipping trucks, concrete trucks, delivery vehicles, rollers
- night work before midnight: excavators, jackhammers, vacuum trucks, bobcats, concrete saws, rollers, concrete removers, lighting towers
- night work after midnight: asphalt pavers, vacuum trucks, bob cats, excavators, road profiling machines, tipping trucks, rollers, trailers and trucks, bobcats, lighting towers.

It's important to note that people may have varying reactions and sensitivities to noise.

What do you mean when you say X decibels above background?

Decibel is the unit we use to measure noise. When measuring construction noise, we start by monitoring the existing noise to understand what the normal noise levels are for an area. This is referred to as 'background noise levels'. We do this for daytime, evening and night time periods as each of those times typically have different background noise levels.

We then consider the decibel levels of individual and groups of machinery being used in order to determine what the noise increase will be due to the project work. Given that the machines being used for a construction project are generally noisier than cars, traffic or other noise sources, the construction noise typically exceeds the background noise levels.

How much the construction noise exceeds the background noise level determines the level of construction noise you hear and the annoyance you may experience. A noise increase of around 10 decibels at your house will usually be noticeable, a 20 decibel increase will be clearly audible and a greater than 20 or 30 decibel increase will be moderately to highly intrusive..

The noise impact from our work and your eligibility for relocation will be determined by the level of noise above the background noise (decibels above background) your residence is predicted to experience. See below for more information about relocations.

For an understanding of construction noise please ask the project team for a copy of the 'Construction Noise' infographic.

What will I be seeing and hearing?

The things you will see and hear will depend on where you live. Typically, you will see workers:

- digging up the road and footpath to move services

- removing waste from the site
- building the road.

What do you consider 'noisy' and 'less noisy' work?

Noisy work is work considered to have high noise levels and potentially annoying aspects, including high or low frequencies (such as a saw-cutter or circular saw), tonal noises or repetitive noises (such as jack-hammering).
Less noisy work is generally considered to have lower noise levels, a consistent noise source (such as a generator or lighting tower), or equipment that produces similar noise to that of the surrounding noise environment (such as cars or trucks). You may still be able to hear this work, however we try to carry out less noisy work after 12am to minimise sleep disturbance.

How do you predict construction noise levels?

Construction noise is considered during project planning and development. We carry out noise monitoring to help us understand the existing background noise levels. We then assess these levels against the noise generated by the types of equipment we are planning to use to understand the potential impacts.

Will I hear construction work every night you are working?

Construction work will not be carried out across the entire length of the project during every night shift. Work will generally be confined to a limited area of the project each night and will often move along the project site from night to night. This will mean that the level of noise you hear may not be the same each night, depending on where the work and your house are located.

Most of the night work will be around the major intersections of Essex Street and Blaxland Road, so there will be more night shifts around those areas than along the rest of the project.

Why does the work need to be completed using such an intensive schedule?

The road upgrade will improve traffic flow and tackle congestion around Epping Town Centre.

Completing work at night will minimise traffic disruption and enable us to complete the project before the Epping to Chatswood rail line is upgraded to Sydney Metro standards in late 2018. While the rail line is being upgraded, buses will replace trains for around seven months as part of the Temporary Transport Plan.

What mitigation measures are in place to reduce noise at my house?

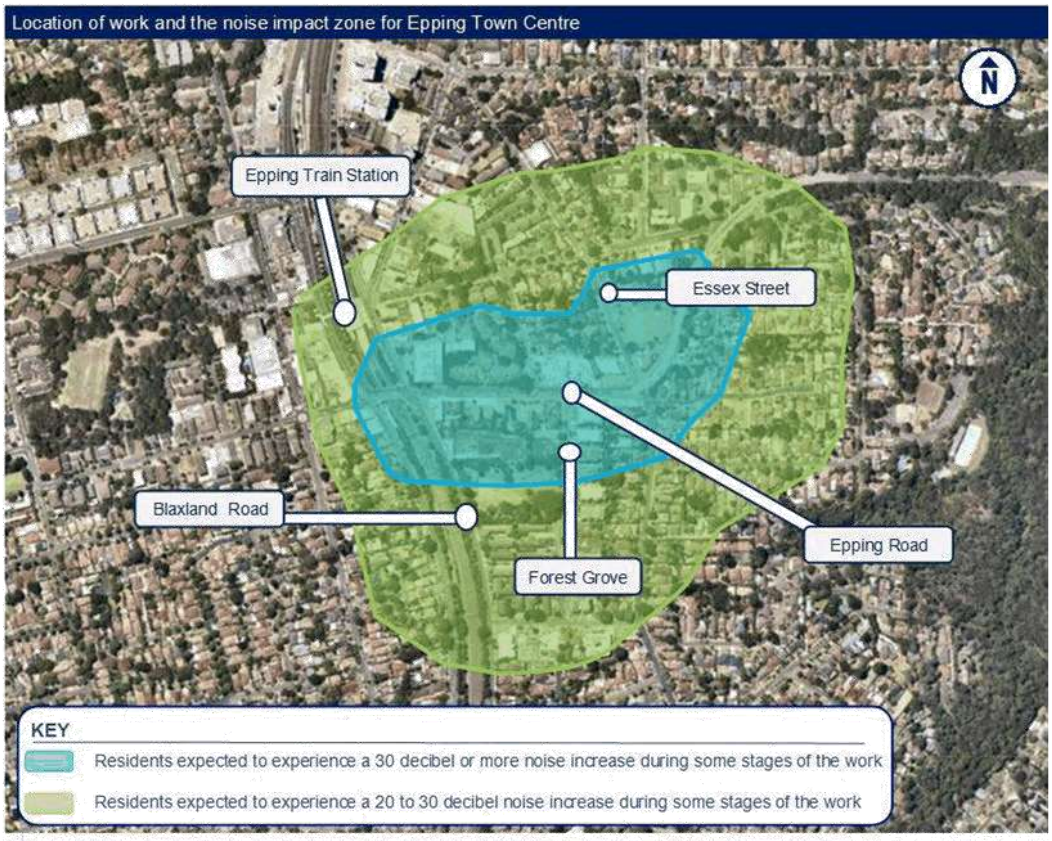
Roads and Maritime is exploring a number of options to mitigate noise on this project. These include:

- installing temporary noise barriers on the construction fencing
- using lighting towers that are powered by solar power, rather than generators
- using smaller or less noisy machinery whenever possible.

Relocation

Am I eligible for relocation?

Our noise monitoring has determined that relocation is may be warranted for homes within the area indicated in the map below:



- offer of permanent relocation will be for people predicted to experience a greater than 30 decibel noise may be available
- week by week offers of relocation (based on modelling of forecast activities) for people predicted to experience an increase between 20 and 30 decibels may be available.

If we are speaking to you, it is likely that you are eligible for relocation. Please contact DM Roads' Communication and Stakeholder Engagement team on 1800 332 660 for more information.

How do you determine who is offered relocation?

Offers of relocation are made based on expected noise impacts to residents, which is determined using noise modelling software. Noise impacts can differ from property to property, depending on the closeness to the source, the type of work, if you can see the work, or if there is a barrier or structure between you and the work. The noise modelling software factors all of this in to the predicted noise impacts.

I am eligible for relocation, but it is unrealistic for me to move. What can you do for me?

If you would prefer not to move but are impacted by noise from the work, please contact the DM Roads Communication and Stakeholder Engagement team on 1800 332 660. We will arrange to visit your property and investigate whether any temporary onsite noise reduction options can be put in place.

Will I still be eligible for relocation later if I don't accept it now?

Yes, the offer for relocation will remain open while this phase of work is ongoing. Please contact the DM Roads Communication and Stakeholder Engagement team on 1800 332 660 to let us know if you would like to be relocated. We will do our best to find suitable accommodation for you as quickly as possible, however please be aware that we are unlikely to be able to relocate you immediately.

Can my pets be relocated with me?

If you have a pet, please let the DM Roads Communication and Stakeholder Engagement team know when they approach you to discuss relocation. We will do our best to arrange for relocation to a pet friendly property.

Where would I be relocated to?

A number of relocation venues are available to you in serviced apartments around Sydney. Please speak to the project team about the best option for you.

I live in a house; will you relocate me to another house?

Relocation is being offered in serviced apartments. We can offer access to one, two and three bedroom apartments in various locations across Sydney.

Will the relocation you offer include a kitchen and laundry?

Yes, the proposed relocation would include a kitchen or kitchenette and laundry.

We just moved in. Why weren't we told about this before we moved?

Work on Project 2 started in mid-2017 and has been delayed due to challenges related to utility relocation designs. Additionally, as part of the Sydney Metro Northwest rail link project, the Epping to Chatswood rail line will need to be closed for updating. The railway line will be closed for about seven months from mid-2018 with trains to be replaced with bus services. Our road upgrade work will help facilitate traffic management during this transition.

The intensive night works schedule is required to ensure that Epping Town Centre improvement works are completed on time so that traffic impacts associated with the additional bus services are minimised.

What do I do if I feel like my business will lose trade because of this work schedule?

Roads and Maritime must carefully balance the need to provide a road network that facilitates smooth traffic movements for road users while accommodating the needs of the local community.

If you believe the work has caused you financial hardship, you can make a claim by sending your contact details, details of the claim, proof of ownership, occupation and details of your claim to:

Liability Claims Team
Transport Shared Services
PO Box 6464
Silverwater, NSW 1811

Review of Environmental Factors display

How do I make a submission?

We have placed an update to the Review of Environmental Factors on display at the following locations:

Epping Library, Chambers Court (off Pembroke Street), Epping

Christian Chinese Community Service Centre, 41 Essex Street, Epping

The update is available for viewing between 8.30am and 5.00pm from Monday to Friday, and can also be viewed at:

rms.nsw.gov.au/eppingstage2.

If you would like to make a submission, it must reach us by **5pm** on **Tuesday 3 April 2018.**

Your submission should include:

- your name and address
- a statement on whether you support or object to the project
- the reasons why you support or object to the project.

Your submission should be marked DM Roads, Epping Town Centre Project 2:

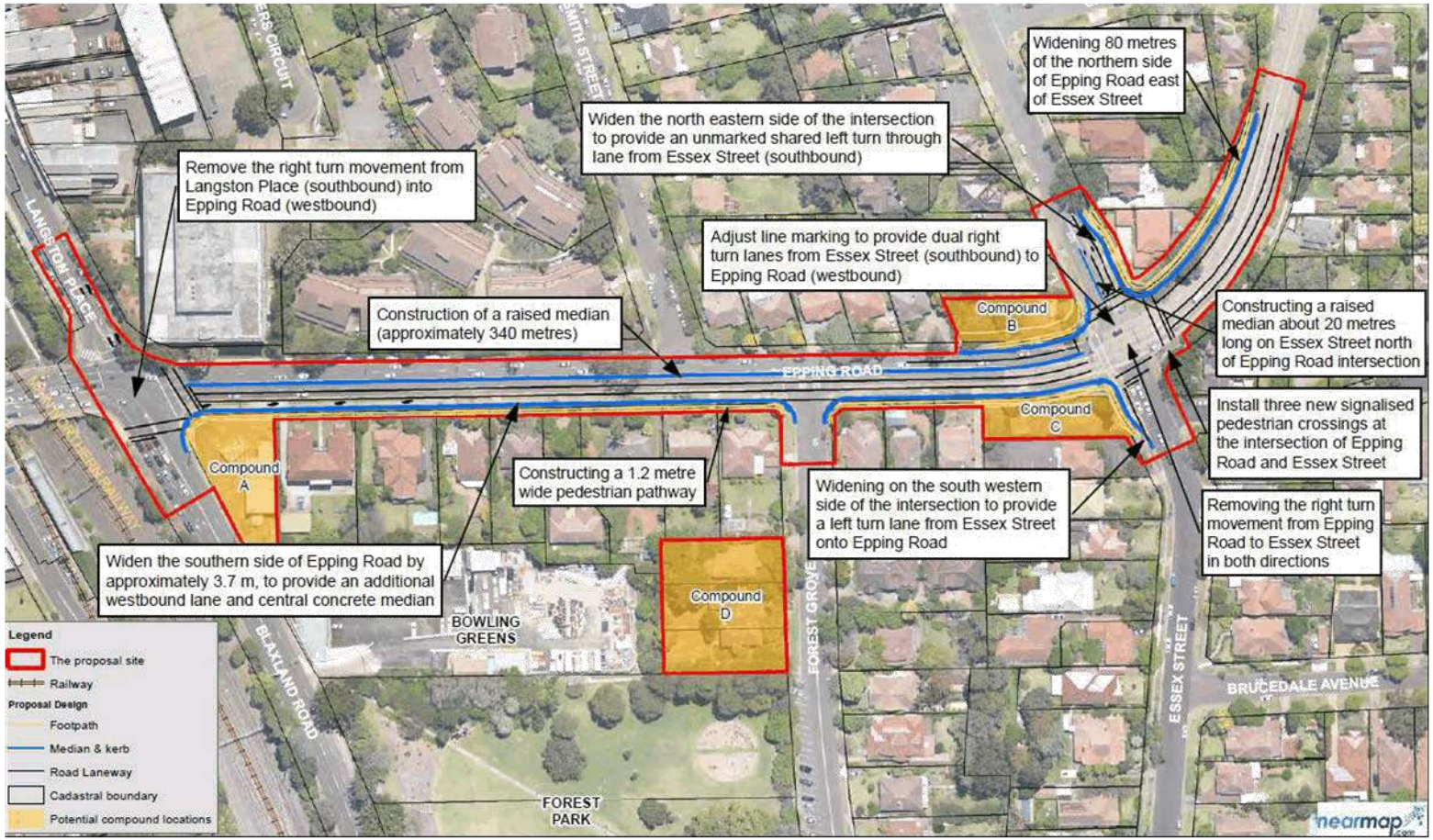
- posted to PO Box 6465, North Ryde NSW 2113
- emailed to nsw_projects@dmroads.com.au

Your submission can be as simple as a one page letter or it can be longer.

Some tips:

- remember, this consultation is solely about the work schedule, we will not consider submissions about the proposal.
- clearly identify the issue and location you want us to know about
- include relevant contact details; name, address, email, fax, telephone
- identify points you want to make
- use headings, sub-headings or main points
- state your position or view at the beginning and explain how it relates to our assessment
- provide background if it would help to explain your concern or issue
- state whether you agree, disagree or you are just stating important things that should be considered
- use one point per paragraph or dot points for each new idea or point
- use headings that highlight your point of view
- summarise the main points
- avoid long sentences.

If you need more information about writing a submission, please phone our community information line on 1800 332 660 or email nsw_projects@dmroads.com.au.


Widening 80 metres of the northern side of Epping Road east of Essex Street
Widen the north eastern side of the intersection to provide an unmarked shared left turn through lane from Essex Street (southbound)
Remove the right turn movement from Langston Place (southbound) into Epping Road (westbound)
Adjust line marking to provide dual right turn lanes from Essex Street (southbound) to Epping Road (westbound)
Construction of a raised median (approximately 340 metres)
Constructing a raised median about 20 metres long on Essex Street north of Epping Road intersection
Install three new signalised pedestrian crossings at the intersection of Epping Road and Essex Street
Constructing a 1.2 metre wide pedestrian pathway
Widening on the south western side of the intersection to provide a left turn lane from Essex Street onto Epping Road
Removing the right turn movement from Epping Road to Essex Street in both directions
Widen the southern side of Epping Road by approximately 3.7 m, to provide an additional westbound lane and central concrete median
Compound A
Compound B
Compound C
Compound D
EPPING ROAD
LANGSTON PLACE
BOWLING GREENS
FOREST GROVE
ESSEX STREET
BRUCEDALE AVENUE
BLAXLAND ROAD
FOREST PARK
Legend
The proposal site
Railway
Proposal Design
Footpath
Median & kerb
Road Laneway
Cadastral boundary
Potential compound locations
nearmap

Appendix F

Council Road Improvements

J17056RP4

Supporting text for Local Road Improvements Maps (at D05725714 & D05725987)

- **Rosebank Avenue**: (1) Extend Rosebank Avenue north to connect with Rosen Street. (2) Widen Rosebank Avenue bridge.
- **Kent Street/Cliff Rd intersection** – install a round-a-bout.
- **Local road through site at 240-244 Rosebank Avenue** – create a new local road through this site connecting Ray Road to Beecroft Road. Left in and left out only where it connects with Beecroft Road. (**Note:** this is consistent with the 'Public Domain' section of the EPR Discussion Paper).
- **Ray Road/Rawson Street intersection –** install barrier on Carlingford Road to restrict movements to left-in/left-out of both Ray Road and Rawson Street.
- **DCP Road** – new road from Rawson Street connecting at Carlingford Road opposite Cliff Road.
- **Cliff Road/DCP road intersection** – (1) Left in/Left out from Cliff Road/DCP road. (2) Straight ahead movement from Cliff Road/DCP road. (3) Right out from Cliff Road/DCP road. (4) Right in to Cliff Road/DCP road (outside of peak, only). (5) Pedestrian bridge on western side of Cliff Road/DCP road intersection.
- **Carlingford Road/Beecroft Road intersection** – Widening of Beecroft Road to 3 lanes. If not, then tidal flow: 3 lanes northbound at peak pm.
- **Widen rail bridge, westbound lane** – westbound lane addition.
- **Epping Road** – Set a Level of Service for motorists exiting from the east side of Epping, north of Epping Road so that motorists do not wait for more than 2 cycles of the traffic signals to get onto, or south of, Epping Road. RMS would need to manage the traffic signals to ensure that this level of service is met.

On account of the first Ward Councillor briefing session held on 17 October, the following sub-option shall also be tested (read in conjunction with D05725987):

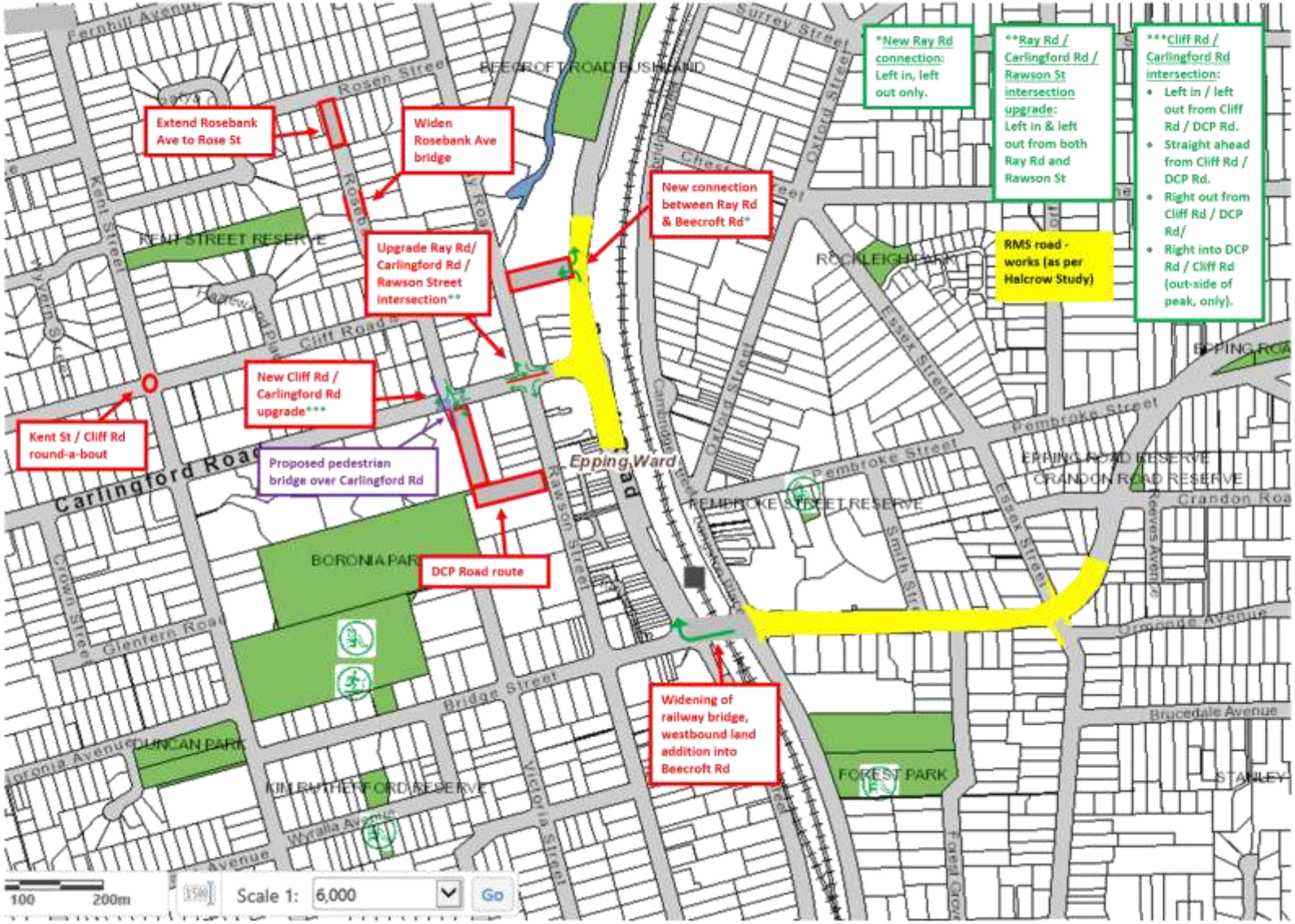
- **One way south-bound down Rawson Street** between Carlingford Road and Bridge Street.
- Replace DCP Road Route with New road that connects through Council car park site with Victoria Street cul-de-sac.
- **Signalisation of Kent/Carlingford Road intersection**.

*

D05624869 (F2017/00210)

LOCAL ROAD IMPROVEMENTS – EPPING TOWN CENTRE TRAFFIC STUDY (Map 1 of 2)

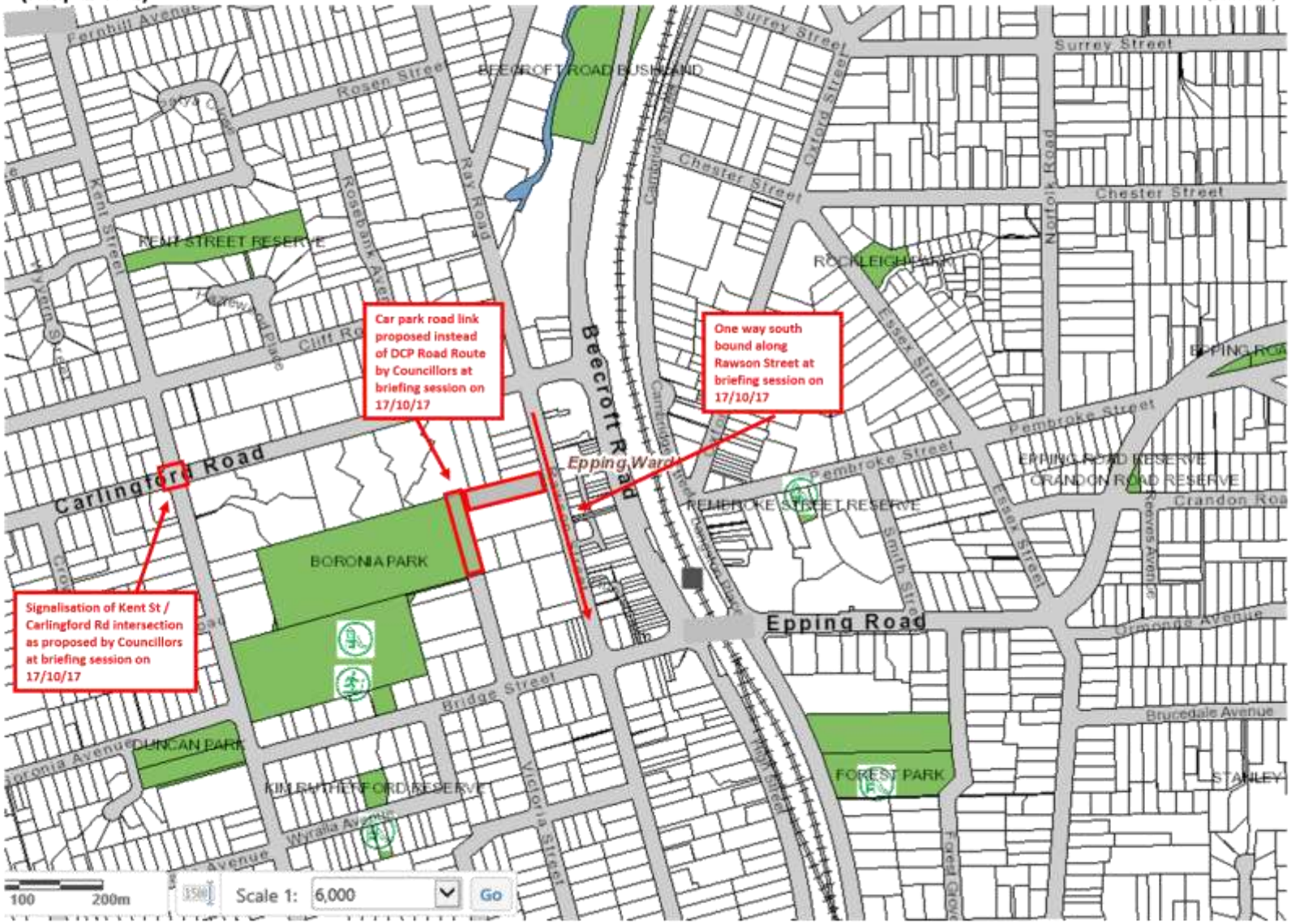
(D05725714)



Note: this must be read in conjunction with supporting text at D05624869, and Summary Table at D05582338 and Maps 2 of 2 at D05725987.

LOCAL ROAD IMPROVEMENTS – EPPING TOWN CENTRE TRAFFIC STUDY - Road upgrades as proposed by Councillors) (Map 2 of 2)

{D05725987}

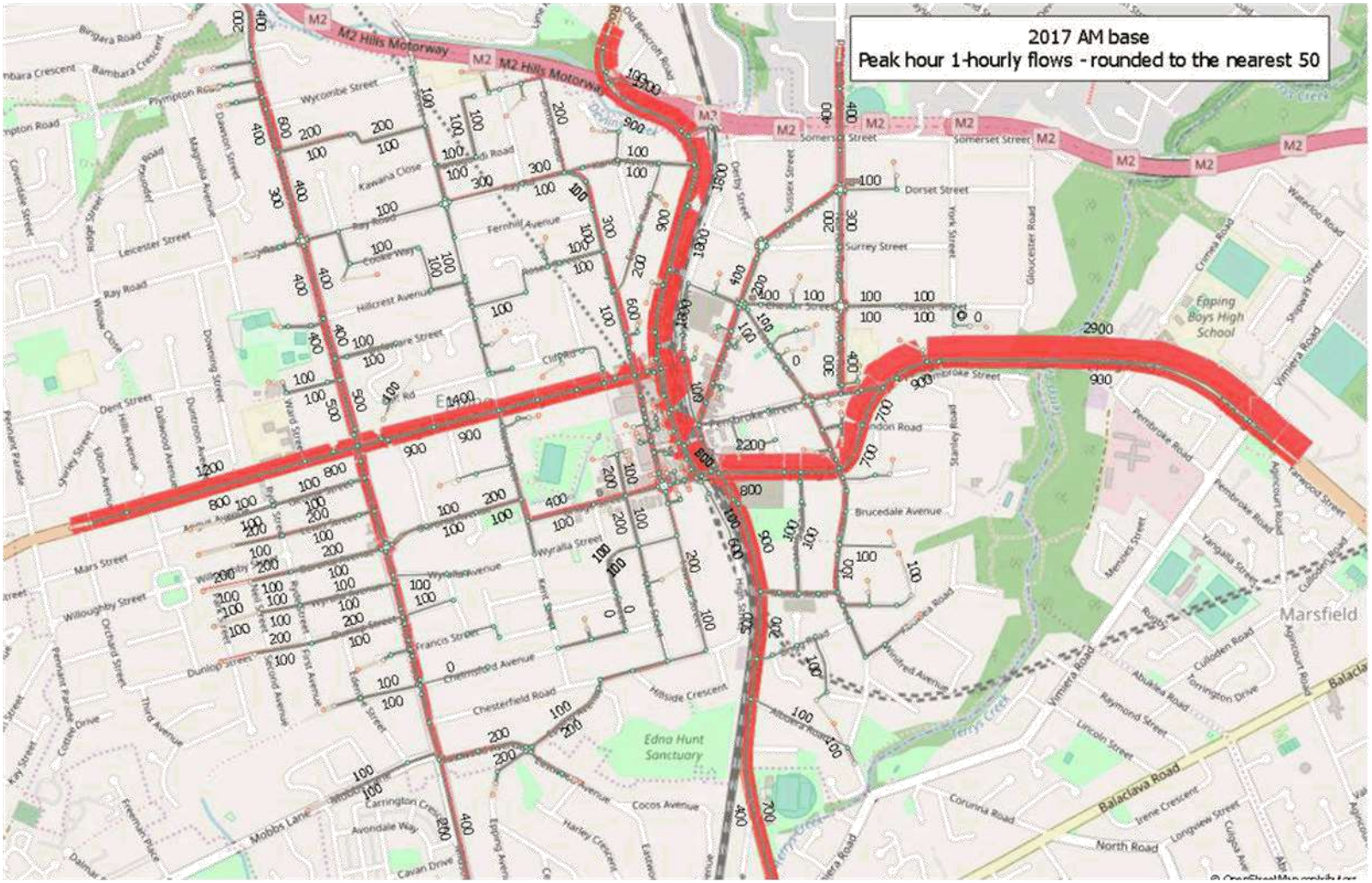


Note: this must be read in conjunction with supporting text at D05624869, and Summary Table at D05582338 and Maps 1 of 2 at D05725714.

Appendix G

2017 Network Volumes

J17056RP4


2017 AM base
Peak hour 1-hourly flows - rounded to the nearest 50
M2 Hills Motorway
Epping Boys High School
Edna Hunt Sanctuary
Marsfield
Balaclava Road
Epping

2017 PM base
Peak hour 1-hourly flows - rounded to the nearest 50
M2 Hills Motorway
Marsfield
Edna Hunt Sanctuary
Epping Boys High School
Balaclava Road
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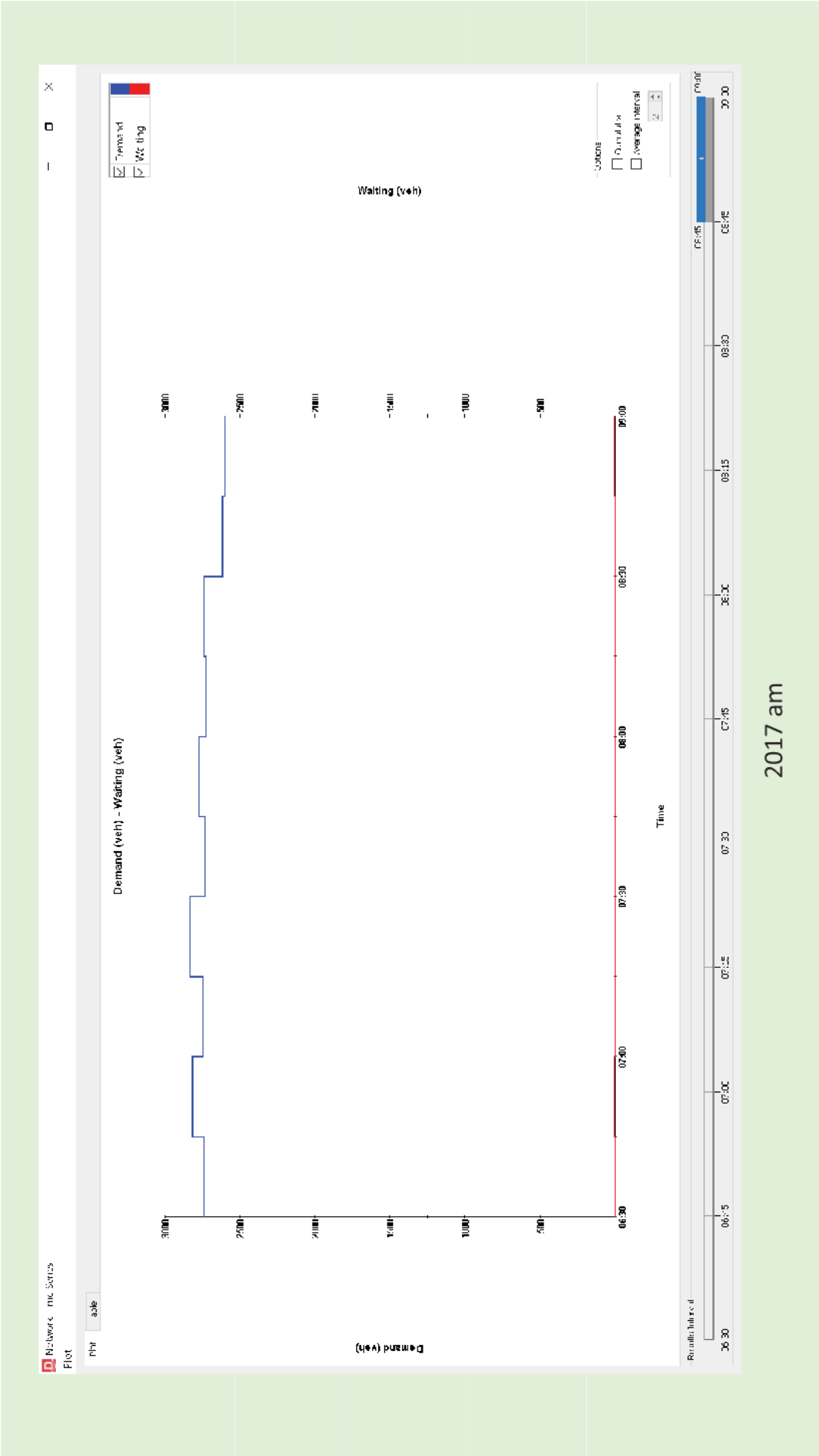

Demand (veh) - Waiting (veh)
Waiting (veh)
Demand (veh)
Time
2017 am

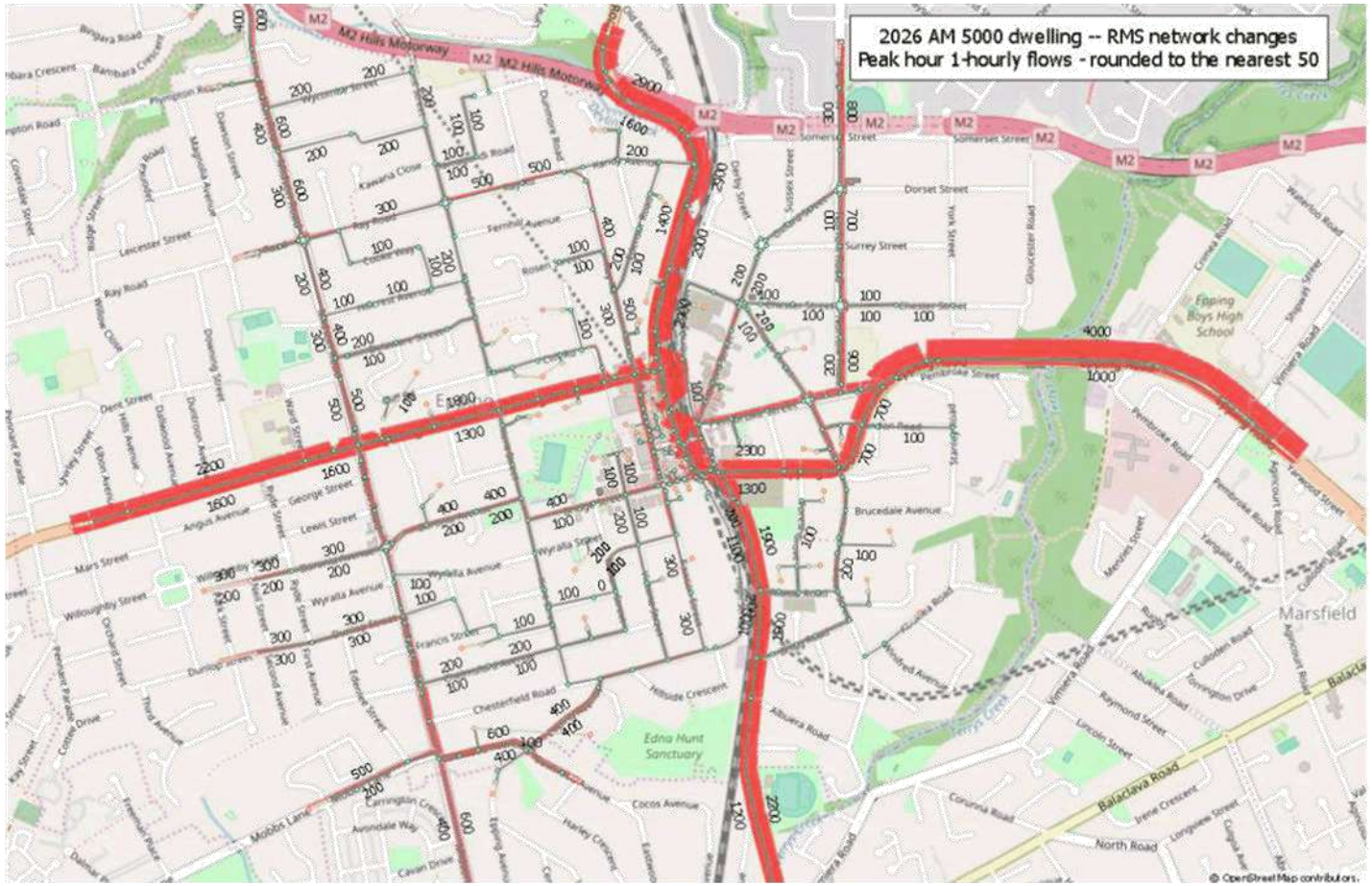
*	project:	Epping_dynameq_small									
*	scenario:	net_2017_base									
*	DTA:	am_2017									
*	vehicle	classes:	Default								
*	CREATED	Tue	24	Apr	4:03:31	2018					
*	result	6:30:00	6:45:00	7:00:00	7:15:00	7:30:00	7:45:00	8:00:00	8:15:00	8:30:00	8:45:00
Demand		2739	2817	2748	2836	2734	2776	2723	2738	2614	2601
In	Count	2737	2812	2754	2835	2736	2775	2723	2739	2612	2598
Out	Count	1972	2685	2668	2816	2647	2706	2839	2798	2693	2646
Waiting		2	7	1	2	0	1	1	0	2	5
Travelling		765	892	978	997	1086	1155	1039	980	899	851
Density		4	7	8	8	9	9	9	8	7	7
VHT		137	214	239	246	270	282	279	266	233	213
VHT-Total		137	214	239	247	270	282	279	266	234	213
VHT-Virtual		0	0	0	0	0	0	0	1	1	0
VHD		43	101	124	126	155	166	157	147	119	101
VHD-Total		43	101	124	127	156	167	157	147	120	101
VKT		5,161	6,225	6,373	6,644	6,341	6,387	6,694	6,519	6,229	6,105
Speed		37.8	29.1	26.7	27.0	23.5	22.6	24.0	24.5	26.7	28.7

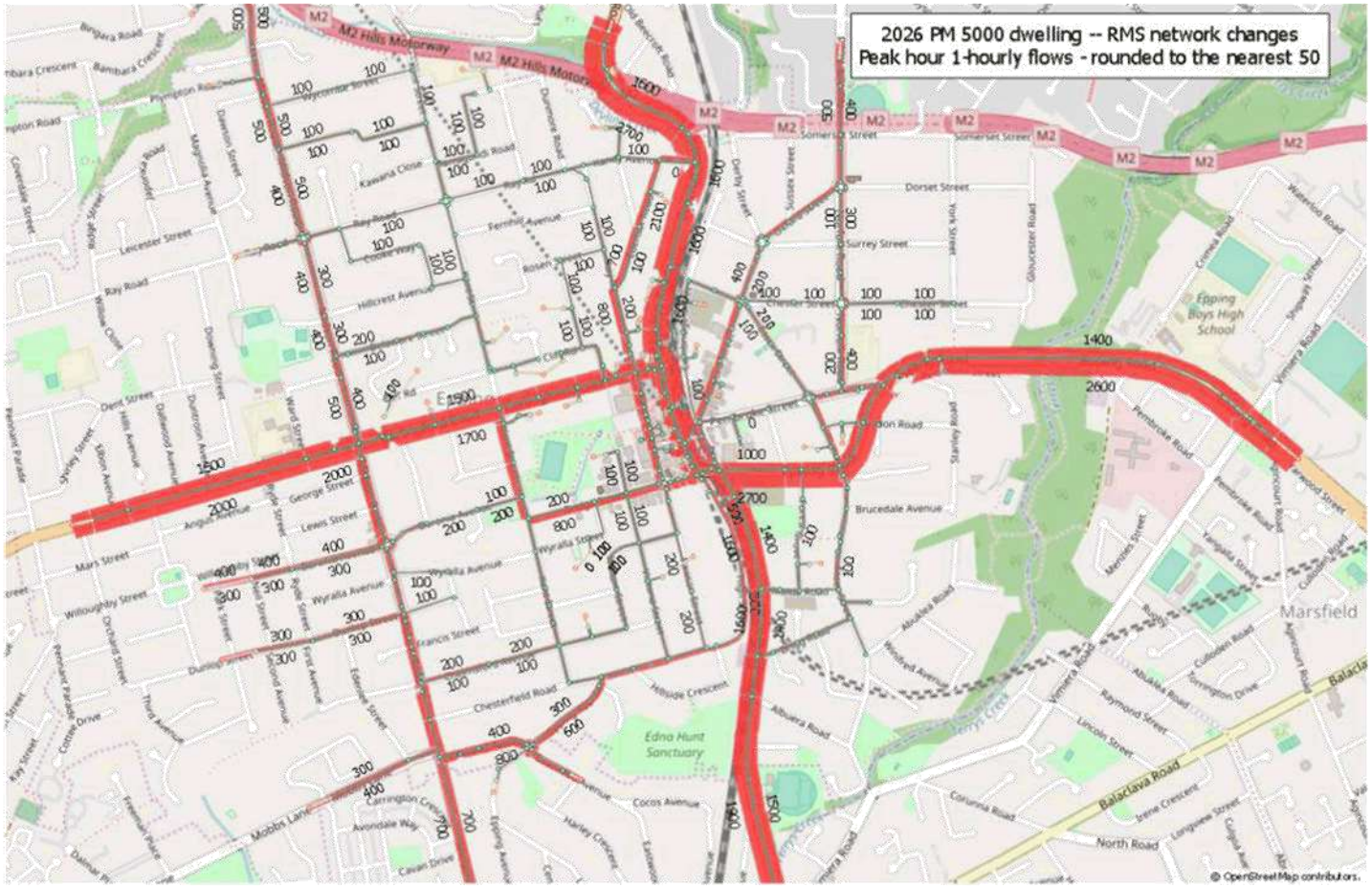
2017 am

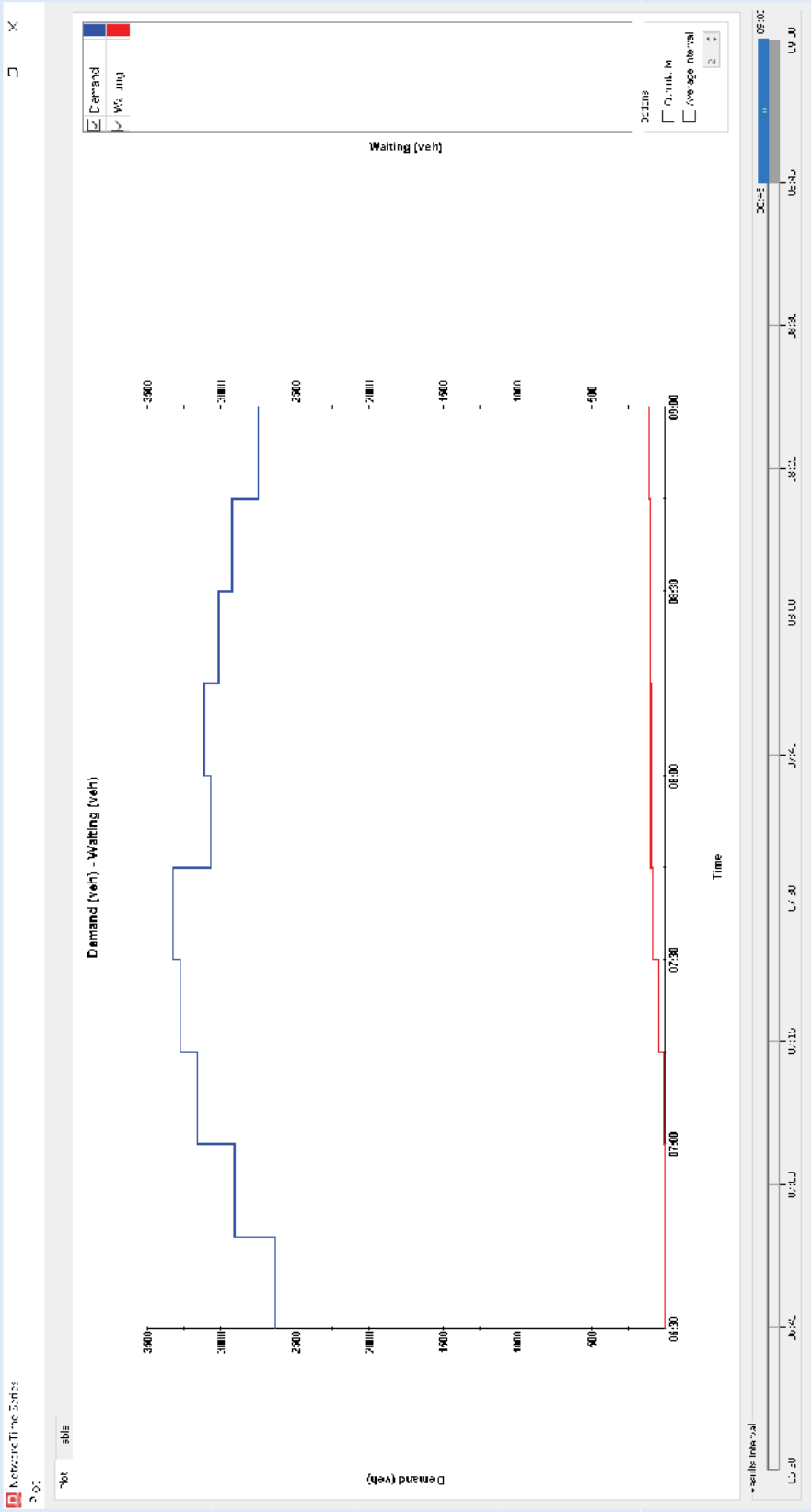
Appendix H

2026 Network Volumes

J17056RP4


2026 AM 5000 dwelling -- RMS network changes
Peak hour 1-hourly flows - rounded to the nearest 50
M2 Hills Motorway
Epping Boys High School
Edna Hunt Sanctuary
Marsfield
Balaclava Road
North Road
© OpenStreetMap contributors.


2026 PM 5000 dwelling -- RMS network changes
Peak hour 1-hourly flows - rounded to the nearest 50
M2 Hills Motorway
Epping Boys High School
Edna Hunt Sanctuary
Marsfield
Balaclava Road
North Road
© OpenStreetMap contributors.


Demand (veh) - Waiting (veh)
Demand (veh)
Waiting (veh)
Time
3500
3000
2500
2000
1500
1000
500
0
08:30
07:40
07:50
08:00
08:10
08:20
08:30
08:40
08:50
09:00
Demand
Waiting
Options
Average interval

2026 am

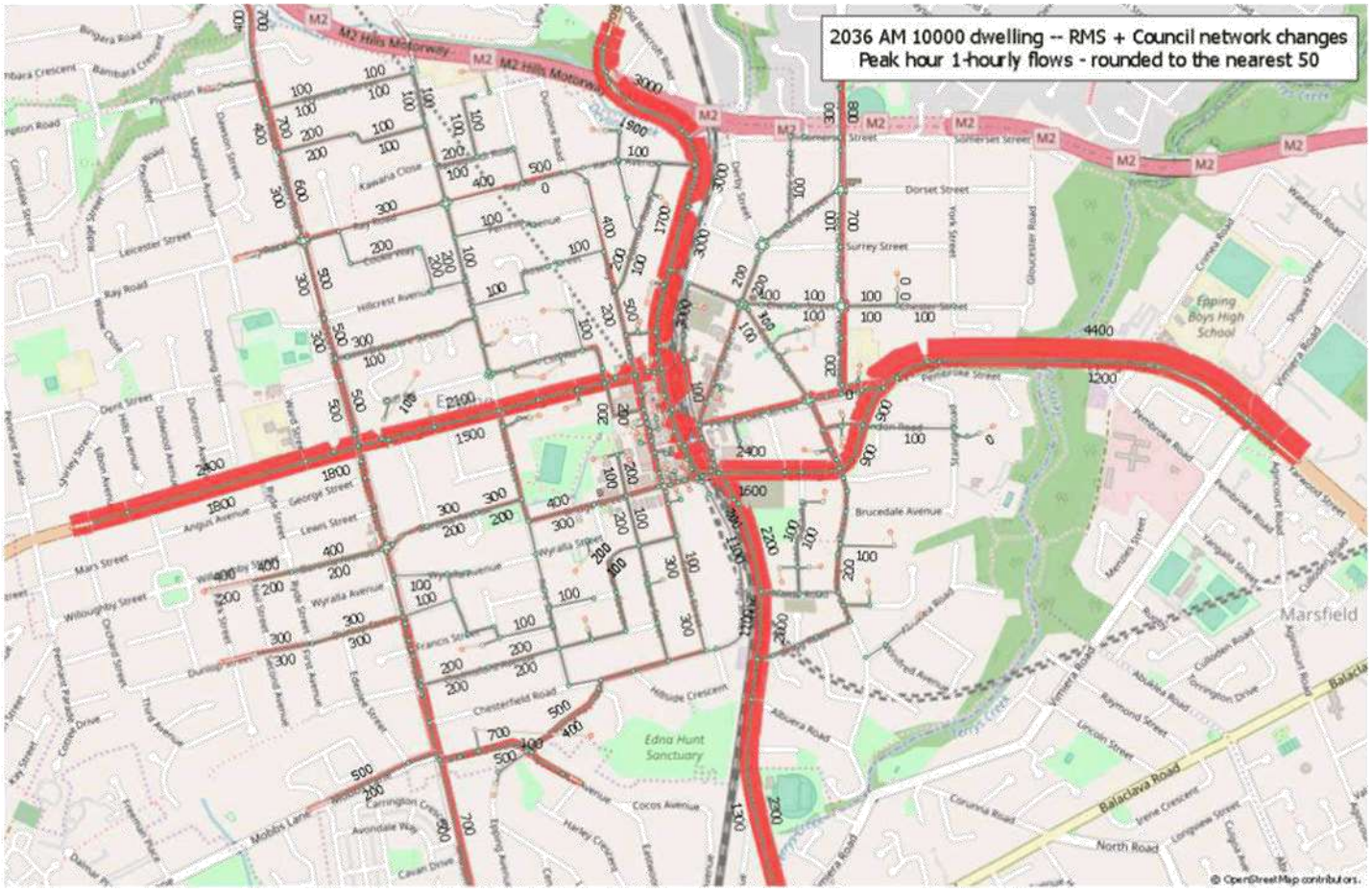
*	project:	Epping_dynameq_small									
*	scenario:	net_2026_RMS									
*	DTA:	am_2026_4000									
*	vehicle	classes:	Default								
*	CREATED	Tue	24	Apr	4:07:51	2018					
*	result	6:30:00	6:45:00	7:00:00	7:15:00	7:30:00	7:45:00	8:00:00	8:15:00	8:30:00	8:45:00
Demand		2,634	2,907	3,162	3,274	3,320	3,069	3,113	3,015	2,924	2,751
In	Count	2,634	2,906	3,155	3,239	3,280	3,053	3,112	3,010	2,927	2,744
Out	Count	2,128	2,690	3,209	3,104	3,371	3,164	3,111	2,981	2,933	2,744
Waiting		0	1	8	43	83	99	100	105	102	109
Travelling		506	722	668	803	712	601	602	631	625	625
Density		3.4	4.8	5.8	5.9	6.0	5.0	5.0	5.0	5.0	4.9
VHT		109	152	183	186	190	159	159	157	159	154
VHT-Total		109	152	183	192	206	182	183	183	185	178
VHT-Virtual		0	0	1	6	16	23	24	26	26	25
VHD		12	34	48	50	44	28	29	31	35	39
VHD-Total		12	34	48	56	60	51	54	56	61	63
VKT		5,428	6,606	7,527	7,600	8,143	7,254	7,151	6,962	6,889	6,333
Speed		49.9	43.5	41.2	40.8	42.8	45.7	44.9	44.4	43.3	41.3

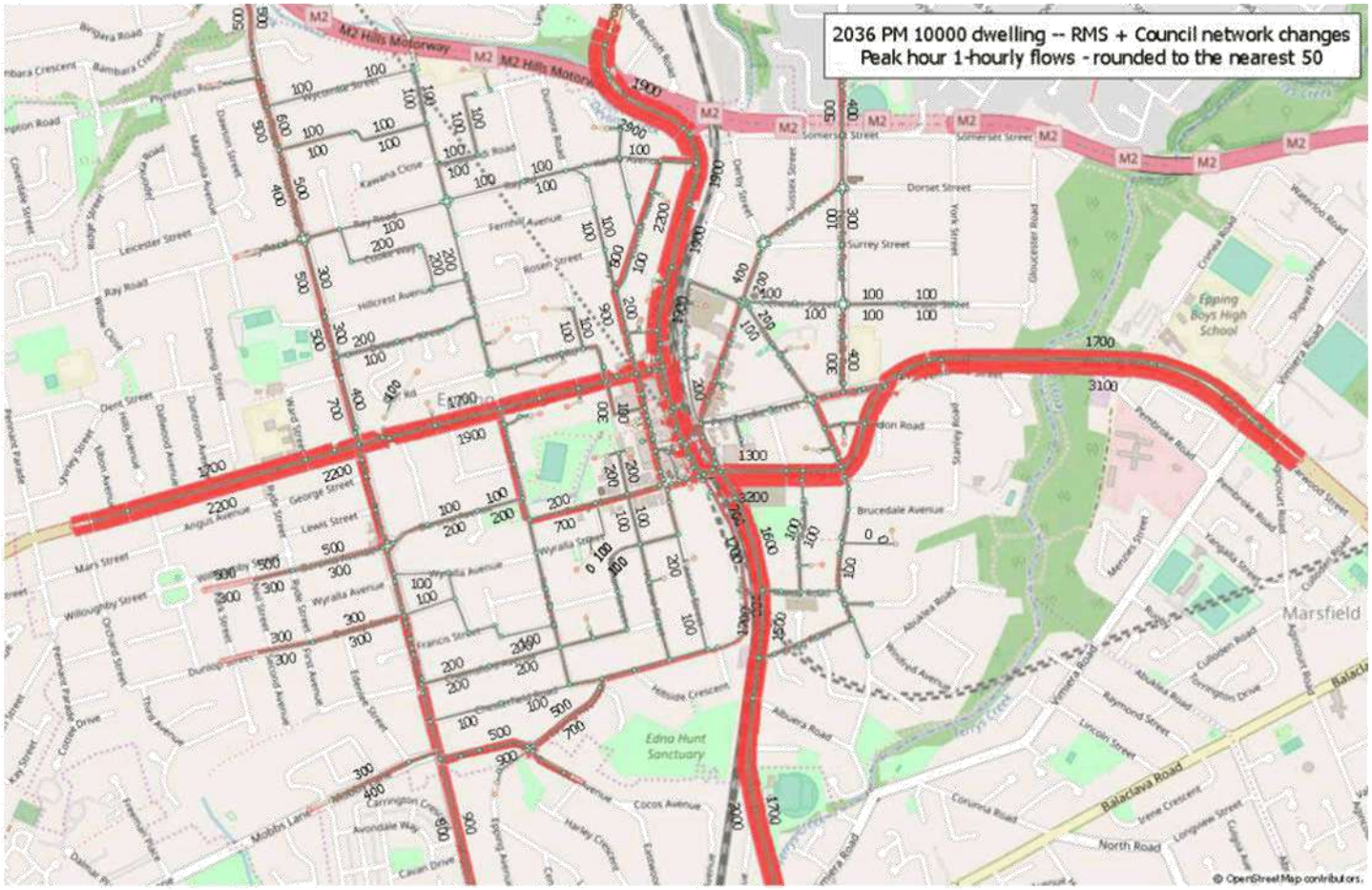
2026 am

Appendix I

2036 Network Volumes

J17056RP4


2036 AM 10000 dwelling -- RMS + Council network changes
Peak hour 1-hourly flows - rounded to the nearest 50
M2 Hills Motorway
Marsfield
Edna Hunt Sanctuary
Epping Boys High School
© OpenStreetMap contributors.


2036 PM 10000 dwelling -- RMS + Council network changes
Peak hour 1-hourly flows - rounded to the nearest 50
M2 Hills Motorway
Epping Boys High School
Edna Hunt Sanctuary
Marsfield
Balaclava Road
North Road
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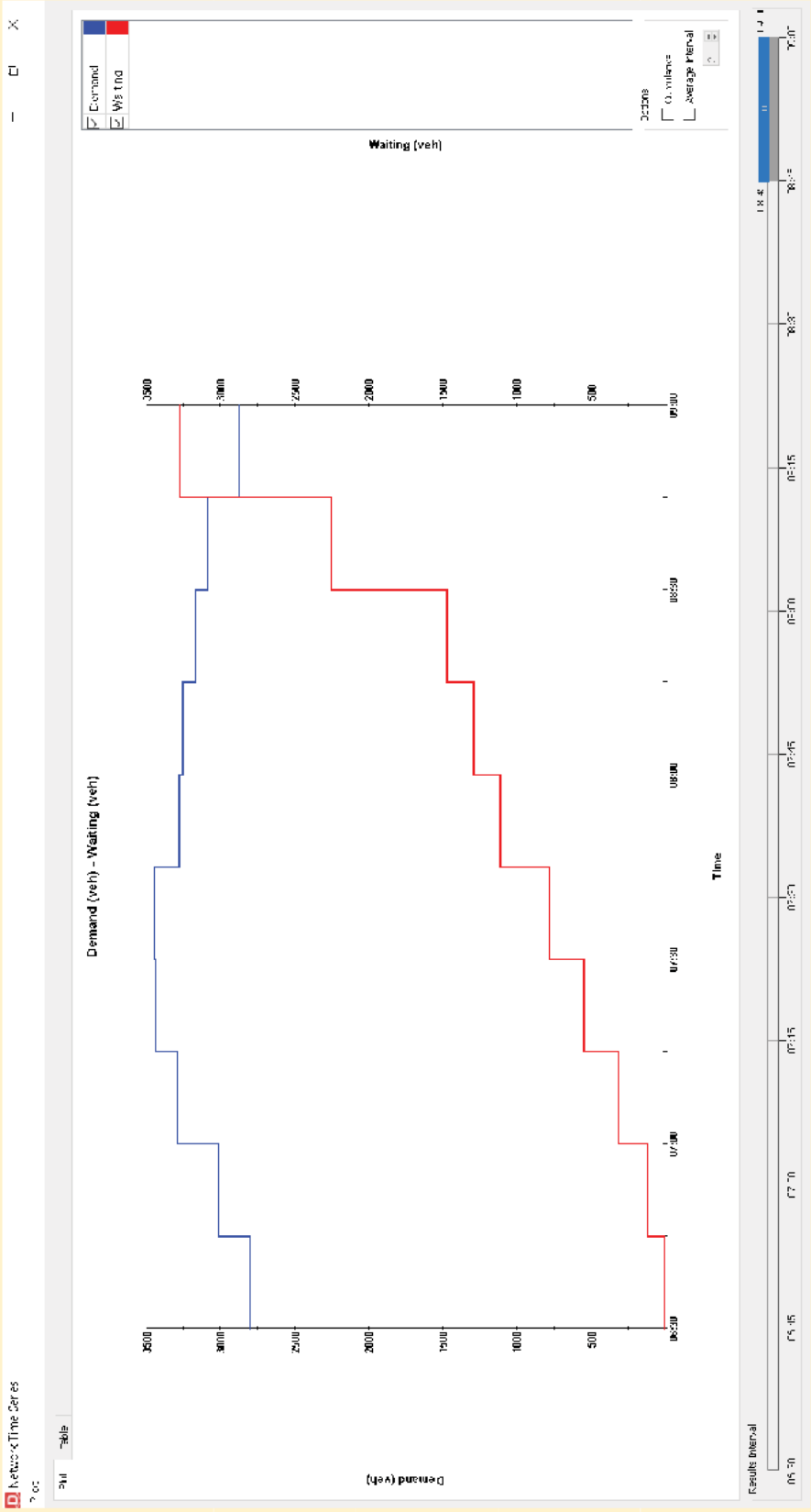
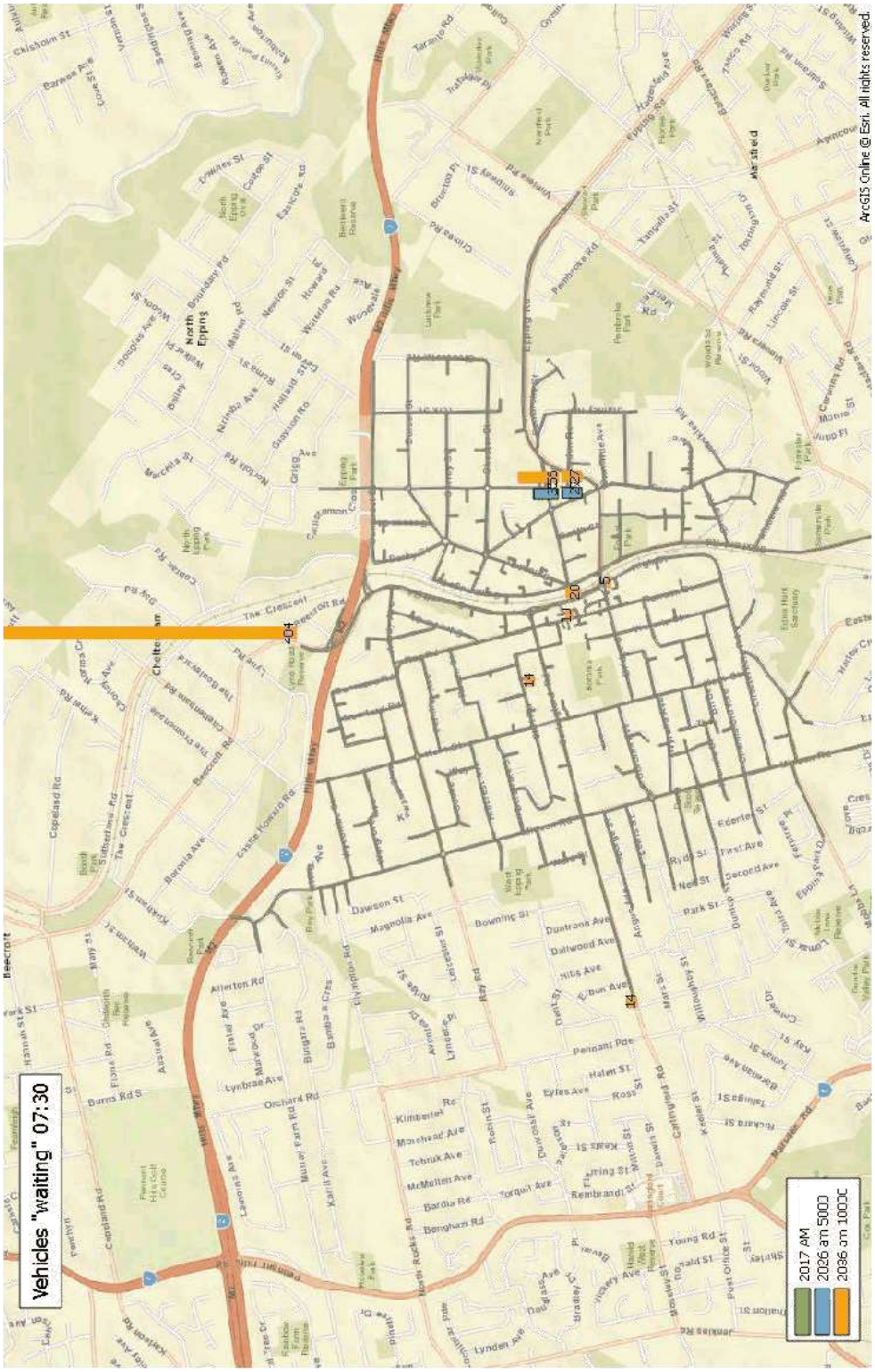

Network Time Series
Table
Demand (veh) - Waiting (veh)
Demand (veh)
Waiting (veh)
Time
Demand
Waiting
Average Interval
Results Interval

2036 am

*	project:	Epping_dynameq_small									
*	scenario:	net_2036_RMS_Council									
*	DTA:	am_2036_10000									
*	vehicle	classes:	Default								
*	CREATED	Tue	24	Apr	4:15:26	2018					
*	result	6:30:00	6:45:00	7:00:00	7:15:00	7:30:00	7:45:00	8:00:00	8:15:00	8:30:00	8:45:00
Demand		2,796	3,008	3,292	3,439	3,442	3,279	3,252	3,171	3,091	2,873
In	Count	2,795	2,889	3,094	3,206	3,209	2,953	3,071	2,989	2,314	1,850
Out	Count	1,908	2,510	2,801	2,824	2,764	2,657	2,828	2,554	1,429	1,373
Waiting		1	120	318	551	784	1,110	1,291	1,473	2,250	3,273
Travelling		887	1,266	1,559	1,941	2,386	2,682	2,925	3,360	4,245	4,722
Density		4.8	8.6	11.5	13.4	15.4	19.6	20.9	21.1	18.4	27.0
VHT		152	273	364	427	489	624	665	671	584	858
VHT-Total		152	281	419	534	647	873	964	1,019	1,029	1,552
VHT-Virtual		0	9	55	107	158	249	299	348	445	694
VHD		62	165	244	302	370	503	542	556	521	801
VHD-Total		62	173	299	409	528	752	840	904	966	1,495
VKT		4,996	5,973	6,589	6,854	6,586	6,734	6,793	6,350	3,374	3,090
Speed		32.9	21.9	18.1	16.1	13.5	10.8	10.2	9.5	5.8	3.6

2036 am


Vehicles "waiting" 07:30
2017 AM
2026 am 5000
2036 am 10000
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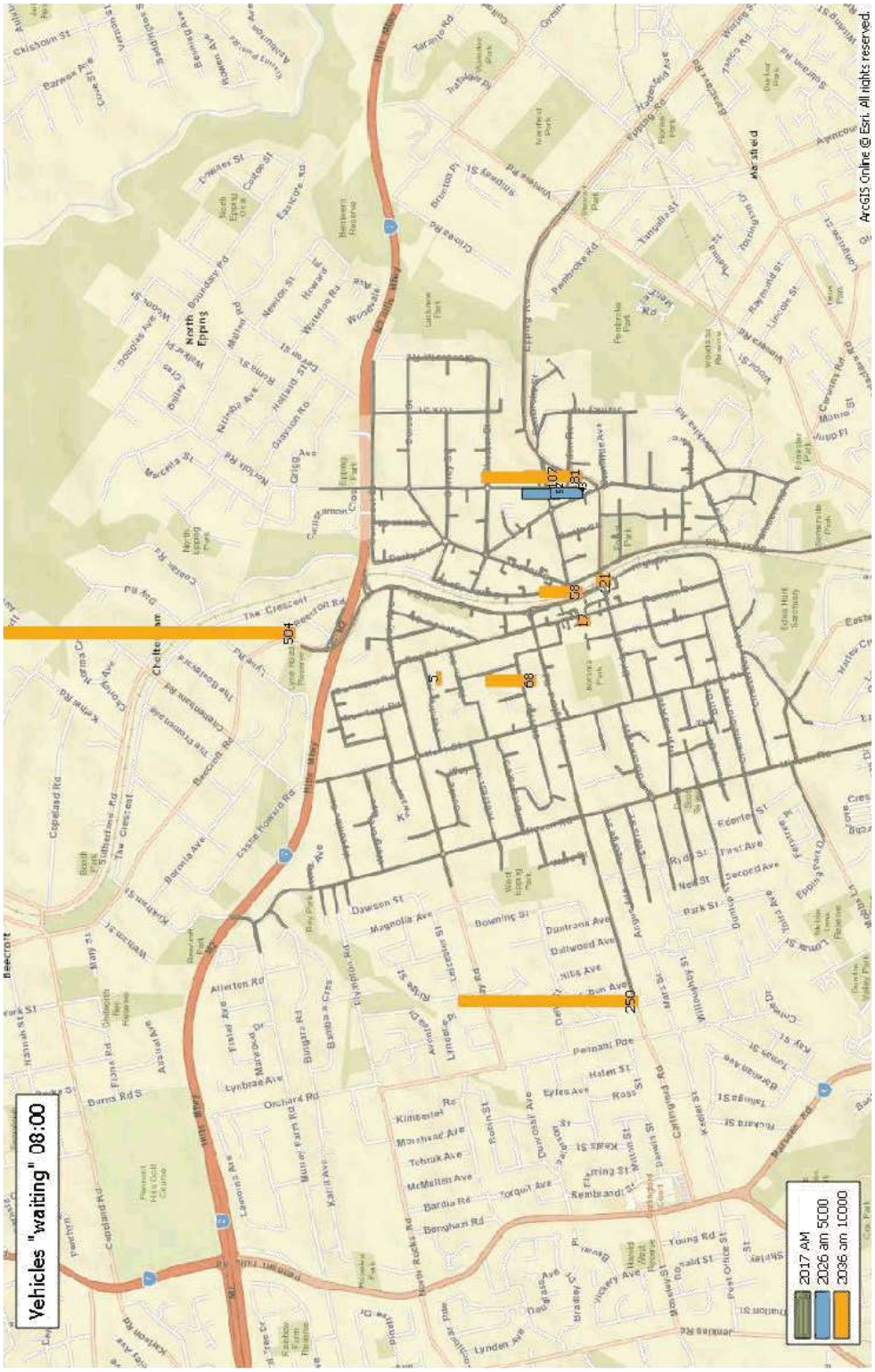
Vehicles "waiting" 08:00
2017 AM
2026 am 5000
2036 am 10000
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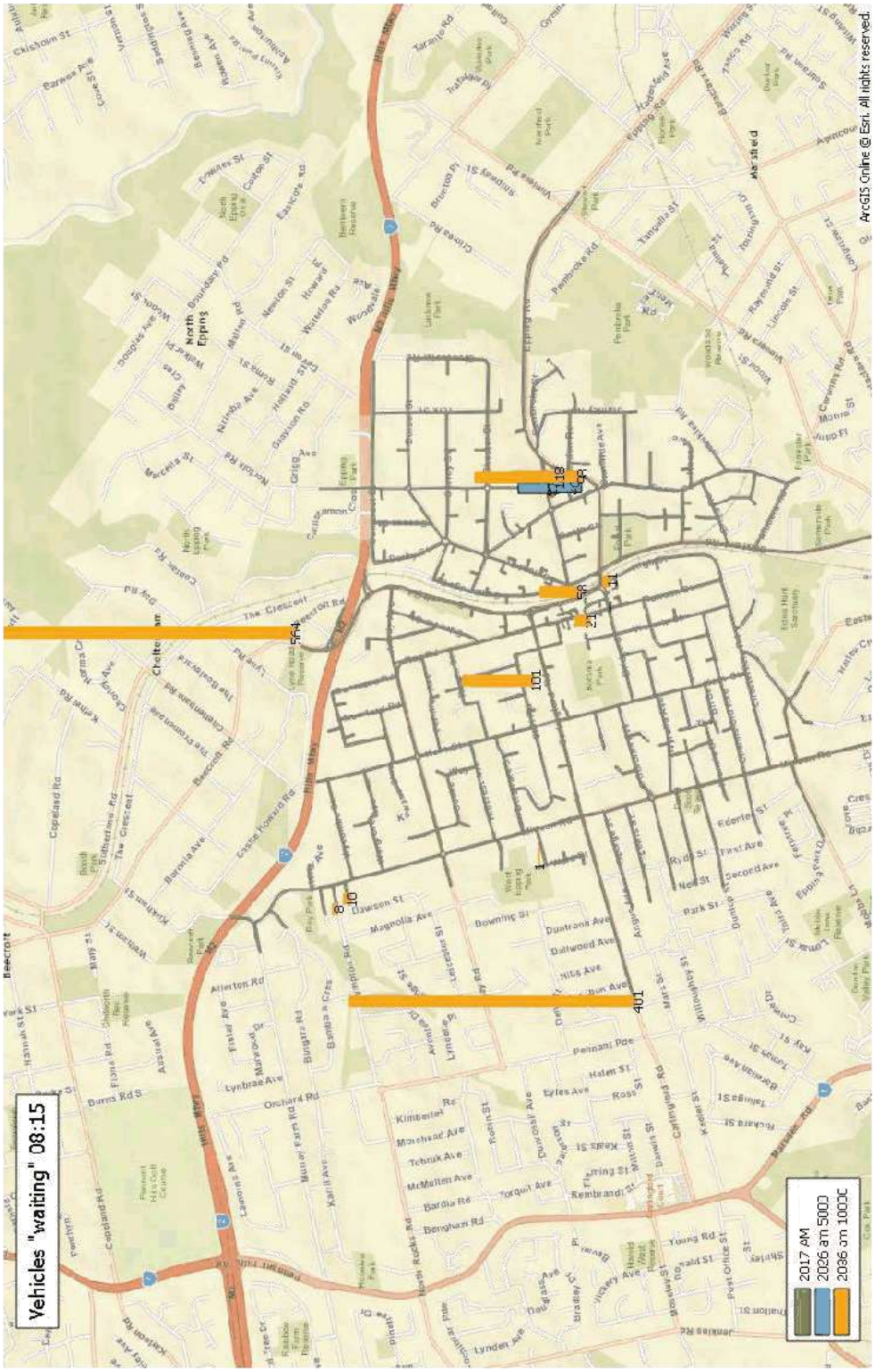
Vehicles "waiting" 08:15
2017 AM
2026 am 5000
2036 am 10000
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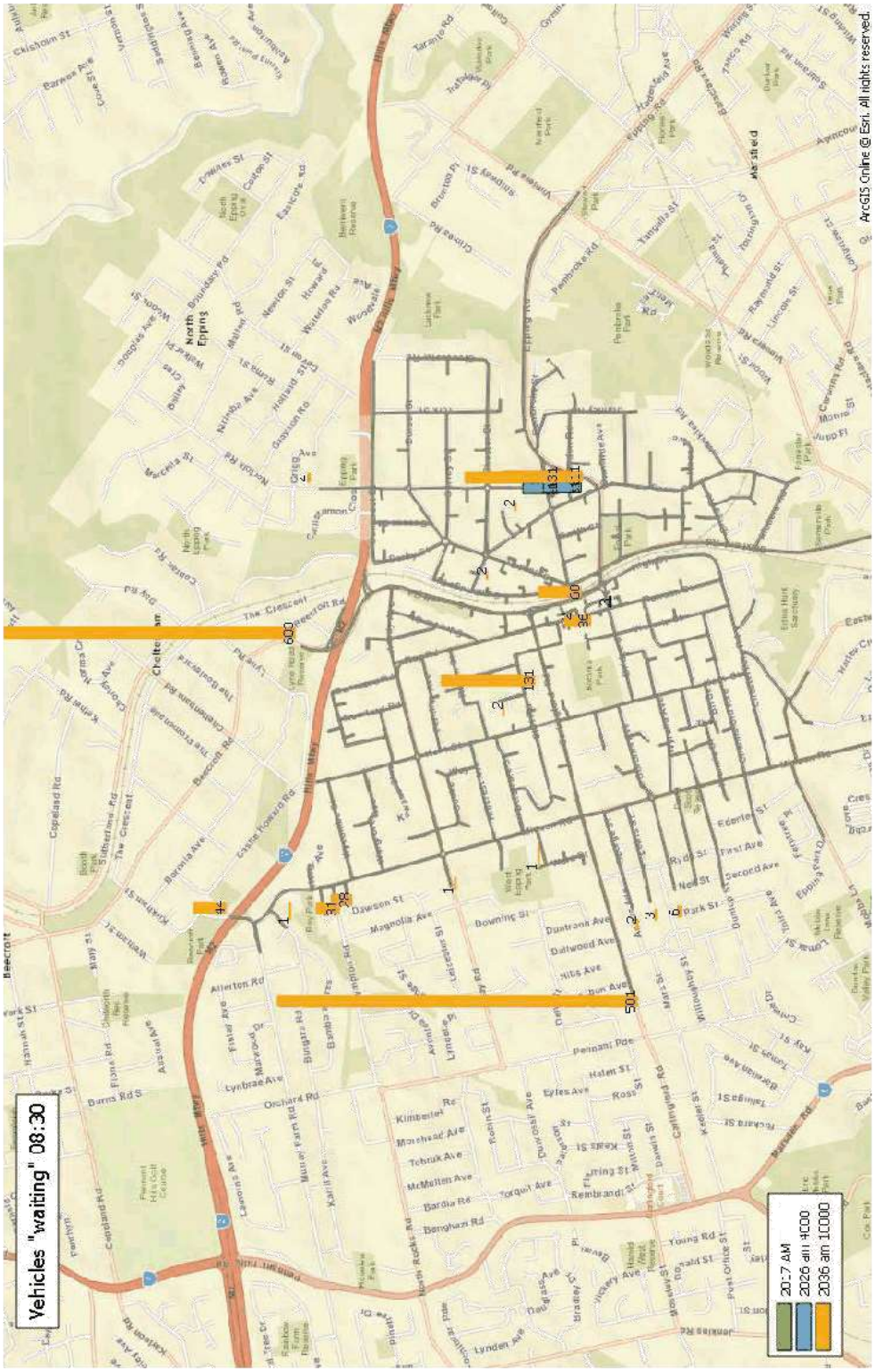
Vehicles "waiting" 08:30
2007 AM
2026 am 4000
2036 am 10000
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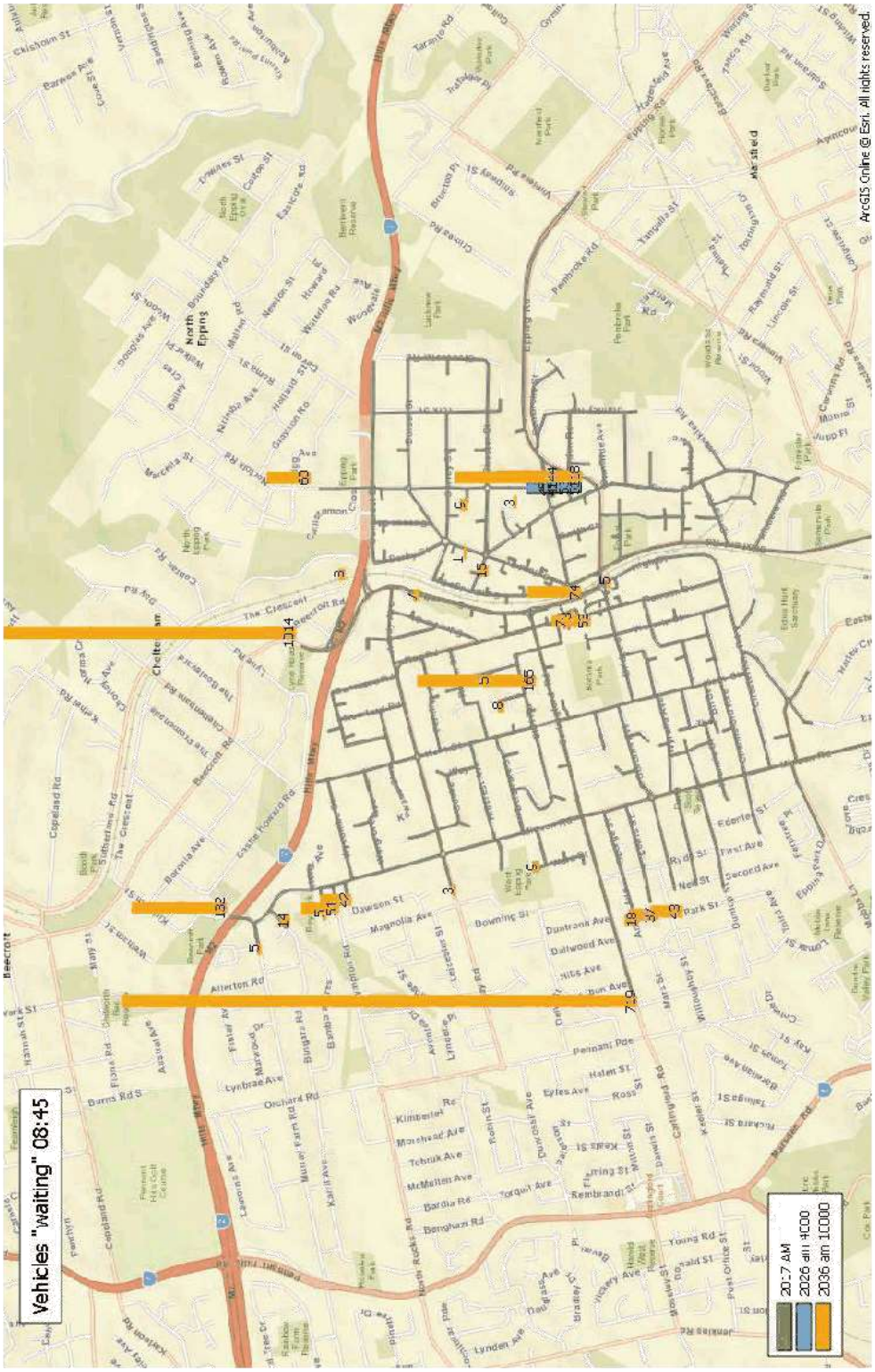
Vehicles "waiting" 08:45
2017 AM
2026 am 4000
2036 am 10000
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Appendix J

2017 SIDRA Results

J17056RP4

MOVEMENT SUMMARY

Site: Bridge St [Bridge St]

Network: 2017_netwo [2017_am_base_survey]

Beecroft Rd - Hight St Bridge St
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: High St													
1	L2	49	0.0	49	0.0	0.042	0.9	LOS A	0.2	1.4	0.33	0.17	49.1
Approach		49	0.0	49	0.0	0.042	0.9	NA	0.2	1.4	0.33	0.17	49.1
East: Bridge													
4	L2	85	0.0	85	0.0	0.605	0.0	LOS A	0.0	0.0	0.00	0.00	55.0
5	T1	232	0.0	232	0.0	0.605	0.0	LOS A	0.0	0.0	0.00	0.00	50.3
6	R2	1194	0.0	1194	0.0	0.605	0.1	LOS A	0.0	0.0	0.00	0.00	51.9
Approach		1511	0.0	1511	0.0	0.605	0.1	NA	0.0	0.0	0.00	0.00	52.2
North: Beecroft Rd													
7	L2	2912	0.0	2531	0.0	0.521	0.1	LOS A	30.2	211.5	0.00	0.00	59.8
Approach		2912	0.0	2531 [N1]	0.0	0.521	0.1	NA	30.2	211.5	0.00	0.00	59.8
West: Bridge St													
10	L2	293	0.0	290	0.0	0.896	29.5	LOS C	7.5	52.5	0.73	1.43	8.9
Approach		293	0.0	290 [N1]	0.0	0.896	29.5	LOS C	7.5	52.5	0.73	1.43	8.9
All Vehicles		4764	0.0	4381 [N1]	0.0	0.896	2.0	NA	30.2	211.5	0.05	0.10	51.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option is selected.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 156.5 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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Organisation: TRANSPORT MODELLING | Processed: Monday, 23 April 2018 11:15:43 AM
Project: C:\Epping_SIDRA\Epping_2017_am_survey.sip7

MOVEMENT SUMMARY

Site: Beec-Carl [Beecroft-Carlingford]

Network: 2017_netwo [2017_am_base_survey]

Beecroft Rd - Carlingford Rd
Signals - Fixed Time Coordinated Cycle Time = 180 seconds (Network Cycle Time - Program)
Common Control Group: carl [Carlingford Rd]

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Beecroft Rd													
1	L2	593	0.0	592	0.0	0.207	7.0	LOS A	4.3	30.4	0.09	0.56	45.9
2	T1	851	0.0	849	0.0	1.244	306.1	LOS F	76.8	537.4	1.00	1.78	3.9
Approach		1443	0.0	1441 N1	0.0	1.244	183.3	LOS F	76.8	537.4	0.63	1.28	6.3
North: Beecroft Rd													
8	T1	1367	0.0	1367	0.0	1.180	247.1	LOS F	116.6	816.0	1.00	1.66	6.5
9	R2	120	0.0	120	0.0	1.224	305.9	LOS F	21.5	150.2	1.00	1.37	5.3
Approach		1487	0.0	1487	0.0	1.224	251.9	LOS F	116.6	816.0	1.00	1.64	6.4
West: Carlingford Rd													
10	L2	28	0.0	25	0.0	0.019	9.4	LOS A	0.4	2.8	0.21	0.58	22.4
12	R2	1546	0.0	1381	0.0	0.629	20.0	LOS B	16.3	114.2	0.44	0.71	12.9
Approach		1575	0.0	1406 N1	0.0	0.629	19.8	LOS B	16.3	114.2	0.44	0.71	13.0
All Vehicles		4505	0.0	4334 N1	0.0	1.244	153.8	LOS F	116.6	816.0	0.69	1.22	6.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 156.5 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

SIDRA INTERSECTION 7.0 | Copyright © 2000-2017 Akcelik and Associates Pty Ltd | sidrasolutions.com
Organisation: TRANSPORT MODELLING | Processed: Monday, 23 April 2018 11:15:43 AM
Project: C:\Epping_SIDRA\Epping_2017_am_survey.sip7

MOVEMENT SUMMARY

Site: BridgeRaws [BridgeSt_RawsonSt]

Network: 2017_netwo [2017_am_base_survey]

BridgeSt_RawsonSt
Roundabout

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Rawson St													
1	L2	15	0.0	15	0.0	0.276	5.8	LOS A	1.5	10.7	0.55	0.66	49.1
2	T1	104	0.0	104	0.0	0.276	6.1	LOS A	1.5	10.7	0.55	0.66	46.9
3	R2	139	0.0	139	0.0	0.276	10.7	LOS A	1.5	10.7	0.55	0.66	46.9
Approach		258	0.0	258	0.0	0.276	8.5	LOS A	1.5	10.7	0.55	0.66	47.1
East: Bridge St													
4	L2	64	0.0	64	0.0	0.279	5.5	LOS A	1.7	12.2	0.52	0.59	48.9
5	T1	146	0.0	146	0.0	0.279	5.8	LOS A	1.7	12.2	0.52	0.59	44.5
6	R2	75	0.0	75	0.0	0.279	10.4	LOS A	1.7	12.2	0.52	0.59	30.5
Approach		285	0.0	285	0.0	0.279	6.9	LOS A	1.7	12.2	0.52	0.59	44.1
North: Rawson St													
7	L2	45	0.0	42	0.0	0.280	5.6	LOS A	1.5	10.2	0.41	0.62	44.0
8	T1	143	0.0	134	0.0	0.280	5.8	LOS A	1.5	10.2	0.41	0.62	52.7
9	R2	135	0.0	126	0.0	0.280	10.5	LOS A	1.5	10.2	0.41	0.62	49.4
Approach		323	0.0	302 N1	0.0	0.280	7.7	LOS A	1.5	10.2	0.41	0.62	50.7
West: Bridge St													
10	L2	197	0.0	197	0.0	0.401	5.8	LOS A	2.2	15.6	0.57	0.63	39.3
11	T1	138	0.0	138	0.0	0.401	6.0	LOS A	2.2	15.6	0.57	0.63	39.3
12	R2	28	0.0	28	0.0	0.401	10.7	LOS A	2.2	15.6	0.57	0.63	52.4
Approach		363	0.0	363	0.0	0.401	6.3	LOS A	2.2	15.6	0.57	0.63	41.6
All Vehicles		1229	0.0	1208 N1	0.0	0.401	7.3	LOS A	2.2	15.6	0.51	0.63	46.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 156.5 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: CarIf_Clif [CarlingfordRd_CliffRd]

Network: 2017_netwo [2017_am_base_survey]

CarlingfordRd_CliffRd
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: Carlingford Rd													
5	T1	711	0.0	687	0.0	0.176	0.0	LOS A	0.0	0.0	0.00	0.00	60.0
Approach		711	0.0	687[N1]	0.0	0.176	0.0	NA	0.0	0.0	0.00	0.00	60.0
North: RoadName													
7	L2	168	0.0	168	0.0	0.402	8.8	LOS A	0.9	6.4	0.49	0.80	46.8
9	R2	1	0.0	1	0.0	0.010	37.7	LOS C	0.0	0.2	0.90	0.96	27.0
Approach		169	0.0	169	0.0	0.402	8.9	LOS A	0.9	6.4	0.49	0.81	46.6
West: Carlingford Rd													
10	L2	9	0.0	9	0.0	0.232	5.6	LOS A	18.8	131.5	0.00	0.01	57.9
11	T1	895	0.0	895	0.0	0.232	0.0	LOS A	26.4	185.0	0.00	0.01	59.8
Approach		904	0.0	904	0.0	0.232	0.1	NA	26.4	185.0	0.00	0.01	59.7
All Vehicles		1784	0.0	1761[N1]	0.0	0.402	0.9	NA	26.4	185.0	0.05	0.08	56.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 156.5 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Carli_Kent [CarlingfordRd_KentSt]

Network: 2017_netwo [2017_am_base_survey]

CarlingfordRd_KentSt
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Kent St													
1	L2	73	0.0	73	0.0	0.074	6.9	LOS A	0.3	1.9	0.37	0.63	45.4
3	R2	27	0.0	27	0.0	0.380	69.3	LOS E	1.2	8.5	0.95	1.02	14.4
Approach		100	0.0	100	0.0	0.380	24.0	LOS B	1.2	8.5	0.53	0.73	28.6
East: Carlingford Rd													
4	L2	44	0.0	43	0.0	0.183	5.6	LOS A	0.0	0.0	0.00	0.07	56.8
5	T1	684	0.0	667	0.0	0.183	0.0	LOS A	0.0	0.0	0.00	0.03	59.1
Approach		728	0.0	710 N1	0.0	0.183	0.3	NA	0.0	0.0	0.00	0.04	58.8
North: Kent St													
7	L2	83	0.0	83	0.0	0.095	7.7	LOS A	0.4	2.7	0.46	0.67	48.0
Approach		83	0.0	83	0.0	0.095	7.7	LOS A	0.4	2.7	0.46	0.67	48.0
West: Carlingford Rd													
11	T1	849	0.0	849	0.0	0.229	0.2	LOS A	49.3	345.4	0.04	0.01	59.2
12	R2	15	0.0	15	0.0	0.229	10.7	LOS A	49.3	345.4	0.08	0.02	57.1
Approach		864	0.0	864	0.0	0.229	0.4	NA	49.3	345.4	0.04	0.01	59.1
All Vehicles		1776	0.0	1757 N1	0.0	0.380	2.1	NA	49.3	345.4	0.07	0.09	55.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 156.5 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Carl_Mids [CarlingfordRd_MidsonRd]

Network: 2017_netwo [2017_am_base_survey]

CarlingfordRd_MidsonRd
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Midson Rd													
1	L2	58	0.0	58	0.0	0.965	104.4	LOS F	25.0	175.1	1.00	1.14	19.5
2	T1	362	0.0	362	0.0	0.965	99.0	LOS F	25.0	175.1	1.00	1.13	19.7
3	R2	123	0.0	123	0.0	0.965	104.7	LOS F	24.7	173.2	1.00	1.13	9.5
Approach		543	0.0	543	0.0	0.965	100.8	LOS F	25.0	175.1	1.00	1.13	17.7
East: RoadName													
4	L2	58	0.0	56	0.0	0.969	104.2	LOS F	30.1	210.5	1.00	1.16	18.6
5	T1	566	0.0	551	0.0	0.969	98.8	LOS F	30.1	210.5	1.00	1.15	22.0
6	R2	164	0.0	160	0.0	0.496	66.4	LOS E	10.7	74.7	0.95	0.81	27.4
Approach		788	0.0	767 N1	0.0	0.969	92.4	LOS F	30.1	210.5	0.99	1.08	22.7
North: RoadName													
7	L2	22	0.0	22	0.0	0.778	67.0	LOS E	23.6	165.1	1.00	0.90	20.1
8	T1	311	0.0	311	0.0	0.778	61.5	LOS E	23.6	165.1	1.00	0.90	26.6
9	R2	407	0.0	407	0.0	0.997	116.0	LOS F	40.8	285.8	1.00	1.08	20.5
Approach		740	0.0	740	0.0	0.997	91.6	LOS F	40.8	285.8	1.00	1.00	22.4
West: RoadName													
10	L2	71	0.0	71	0.0	0.772	57.3	LOS E	29.9	209.5	0.98	0.87	31.7
11	T1	701	0.0	701	0.0	0.772	50.8	LOS D	29.9	209.5	0.94	0.84	22.6
12	R2	407	0.0	407	0.0	1.003	120.2	LOS F	43.0	300.7	1.00	1.08	17.2
Approach		1179	0.0	1179	0.0	1.003	75.1	LOS F	43.0	300.7	0.96	0.93	20.4
All Vehicles		3251	0.0	3229 N1	0.0	1.003	87.3	LOS F	43.0	300.7	0.98	1.01	21.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 156.5 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	53	61.8	LOS F	0.2	0.2	0.91	0.91
P2	East Full Crossing	53	58.2	LOS E	0.2	0.2	0.88	0.88
P3	North Full Crossing	53	45.7	LOS E	0.2	0.2	0.78	0.78
P4	West Full Crossing	53	68.3	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		211	58.5	LOS E			0.88	0.88

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.

MOVEMENT SUMMARY

Site: Rawson [Carlingford Rd - Ray St - Rawson St]

Network: 2017_netwo [2017_am_base_survey]

Carlingford Rd - Ray St - Rawson St
Signals - Fixed Time Coordinated Cycle Time = 180 seconds (Network Cycle Time - Program)
Common Control Group: carl [Carlingford Rd]

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Rawson St													
1	L2	77	0.0	77	0.0	0.524	52.8	LOS D	11.4	79.5	0.79	0.71	17.7
2	T1	100	0.0	100	0.0	0.524	47.2	LOS D	11.4	79.5	0.79	0.71	17.7
3	R2	132	0.0	132	0.0	5.771	4328.6	LOS F	57.9	405.3	1.00	1.79	0.3
Approach		308	0.0	308	0.0	5.771	1875.1	LOS F	57.9	405.3	0.88	1.17	0.6
East: Carlingford Rd													
4	L2	103	0.0	100	0.0	0.287	21.3	LOS B	11.1	77.9	0.42	0.47	13.4
5	T1	584	0.0	566	0.0	0.287	19.2	LOS B	16.3	114.2	0.54	0.52	12.4
Approach		687	0.0	666[N1]	0.0	0.287	19.5	LOS B	16.3	114.2	0.53	0.51	12.6
North: Ray St													
7	L2	301	0.0	301	0.0	1.249	325.4	LOS F	23.3	163.2	1.00	1.40	1.2
8	T1	258	0.0	258	0.0	1.083	188.4	LOS F	23.3	163.2	1.00	1.37	2.1
9	R2	11	0.0	11	0.0	1.083	193.9	LOS F	23.3	163.2	1.00	1.37	2.1
Approach		569	0.0	569	0.0	1.249	260.9	LOS F	23.3	163.2	1.00	1.39	1.5
West: Carlingford Rd													
10	L2	12	0.0	12	0.0	0.897	58.9	LOS E	23.3	163.2	0.94	0.98	6.9
11	T1	1062	0.0	1062	0.0	0.897	52.9	LOS D	23.3	163.2	0.94	0.98	7.0
Approach		1074	0.0	1074	0.0	0.897	53.0	LOS D	23.3	163.2	0.94	0.98	7.0
All Vehicles		2639	0.0	2617[N1]	0.0	5.771	304.4	LOS F	57.9	405.3	0.84	0.97	1.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 156.5 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Blaxland [Epping_Blaxland]

Network: 2017_netwo [2017_am_base_survey]

New Site
Signals - Fixed Time Isolated Cycle Time = 90 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Arrival Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Blaxland Rd													
1	L2	451	0.0	451	0.0	0.369	17.8	LOS B	5.0	34.7	0.75	0.77	18.8
2	T1	114	0.0	114	0.0	0.860	53.8	LOS D	5.8	40.4	1.00	0.97	15.2
Approach		564	0.0	564	0.0	0.860	25.1	LOS B	5.8	40.4	0.80	0.81	17.3
East: Epping Rd													
4	L2	12	0.0	12	0.0	0.821	44.9	LOS D	18.8	131.5	1.00	0.97	15.0
5	T1	806	0.0	806	0.0	0.821	39.4	LOS C	18.8	131.7	1.00	0.97	15.0
Approach		818	0.0	818	0.0	0.821	39.5	LOS C	18.8	131.7	1.00	0.97	15.0
North: Landston Place													
7	L2	15	0.0	15	0.0	0.867	58.4	LOS E	7.4	51.6	1.00	0.99	9.8
8	T1	71	0.0	71	0.0	0.867	52.9	LOS D	7.4	51.6	1.00	0.99	9.8
9	R2	204	0.0	204	0.0	0.867	58.6	LOS E	7.4	51.6	1.00	0.99	9.5
Approach		289	0.0	289	0.0	0.867	57.2	LOS E	7.4	51.6	1.00	0.99	9.6
West: Bridge St													
10	L2	349	0.0	302	0.0	0.245	5.6	LOS A	2.1	14.4	0.25	0.62	41.5
11	T1	1996	0.0	1725	0.0	0.882	24.7	LOS B	14.0	97.9	0.80	0.86	9.8
12	R2	528	0.0	457	0.0	0.881	48.2	LOS D	14.0	97.9	1.00	1.07	5.3
Approach		2874	0.0	2483 N1	0.0	0.882	26.7	LOS B	14.0	97.9	0.77	0.87	10.9
All Vehicles		4545	0.0	4155 N1	0.0	0.882	31.1	LOS C	18.8	131.7	0.84	0.89	12.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 156.5 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Essex St [Essex St]

Network: 2017_netwo [2017_am_base_survey]

Epping Essex St
Signals - Fixed Time Isolated Cycle Time = 100 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Essex St													
1	L2	41	0.0	41	0.0	0.843	62.5	LOS E	7.1	49.5	1.00	0.95	6.4
2	T1	111	0.0	111	0.0	0.843	57.0	LOS E	7.1	49.5	1.00	0.95	12.0
3	R2	104	0.0	104	0.0	0.843	62.7	LOS E	6.9	48.4	1.00	0.95	6.1
Approach		256	0.0	256	0.0	0.843	60.2	LOS E	7.1	49.5	1.00	0.95	8.8
East: Epping Rd													
4	L2	23	0.0	23	0.0	0.325	13.6	LOS A	5.5	38.4	0.62	0.55	41.5
5	T1	615	0.0	615	0.0	0.325	8.1	LOS A	5.5	38.4	0.62	0.54	41.8
6	R2	1	0.0	1	0.0	0.325	13.6	LOS A	5.4	37.9	0.62	0.53	43.9
Approach		639	0.0	639	0.0	0.325	8.3	LOS A	5.5	38.4	0.62	0.54	41.7
North: Essex St													
7	L2	7	0.0	7	0.0	0.195	44.5	LOS D	2.7	19.1	0.90	0.69	14.8
8	T1	141	0.0	141	0.0	0.840	45.9	LOS D	14.3	99.9	0.96	0.86	16.9
9	R2	184	0.0	184	0.0	0.840	56.2	LOS D	14.3	99.9	1.00	0.97	11.5
Approach		333	0.0	333	0.0	0.840	51.6	LOS D	14.3	99.9	0.98	0.91	13.9
West: Epping Rd													
10	L2	29	0.0	26	0.0	0.888	27.9	LOS B	28.0	195.8	0.97	0.97	23.9
11	T1	1972	0.0	1707	0.0	0.888	22.5	LOS B	28.0	195.8	0.97	0.97	15.9
12	R2	15	0.0	13	0.0	0.888	28.2	LOS B	28.0	195.8	0.97	0.97	21.5
Approach		2016	0.0	1745 N1	0.0	0.888	22.6	LOS B	28.0	195.8	0.97	0.97	16.1
All Vehicles		3243	0.0	2972 N1	0.0	0.888	26.0	LOS B	28.0	195.8	0.90	0.87	18.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 156.5 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Forrest Gr [Forrest Grove]

Network: 2017_netwo [2017_am_base_survey]

Epping Rd Forrest Grove
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Forrest Grove													
1	L2	28	0.0	28	0.0	0.031	7.4	LOS A	0.1	0.9	0.42	0.61	29.1
3	R2	1	0.0	1	0.0	0.271	518.5	LOS F	0.3	2.3	0.99	1.00	0.8
Approach		29	0.0	29	0.0	0.271	25.6	LOS B	0.3	2.3	0.44	0.63	12.8
East: Epping Rd													
4	L2	8	0.0	8	0.0	0.216	5.5	LOS A	0.0	0.0	0.00	0.01	59.1
5	T1	835	0.0	835	0.0	0.216	0.0	LOS A	0.0	0.0	0.00	0.01	59.5
Approach		843	0.0	843	0.0	0.216	0.1	NA	0.0	0.0	0.00	0.01	59.5
West: Epping Rd													
11	T1	1997	0.0	1727	0.0	0.458	0.2	LOS A	2.6	18.2	0.04	0.01	54.6
12	R2	23	0.0	20	0.0	0.458	11.8	LOS A	2.6	18.2	0.07	0.01	49.9
Approach		2020	0.0	1747 N1	0.0	0.458	0.4	NA	2.6	18.2	0.04	0.01	54.5
All Vehicles		2893	0.0	2619 N1	0.0	0.458	0.6	NA	2.6	18.2	0.03	0.01	54.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 156.5 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Eppimg_Pem [EppingRd_PembrokeSt]

Network: 2017_netwo [2017_am_base_survey]

EppingRd_PembrokeSt
Signals - Fixed Time Coordinated Cycle Time = 180 seconds (Network Cycle Time - Program)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Epping Rd													
1	L2	22	0.0	19	0.0	0.565	10.8	LOS A	25.1	175.4	0.35	0.34	49.5
2	T1	2067	0.0	1804	0.0	0.565	5.2	LOS A	25.1	175.6	0.35	0.34	54.1
Approach		2089	0.0	1824 N1	0.0	0.565	5.3	LOS A	25.1	175.6	0.35	0.34	54.1
North: Epping Rd													
8	T1	635	0.0	635	0.0	0.197	3.3	LOS A	5.5	38.7	0.22	0.19	54.2
9	R2	208	0.0	208	0.0	2.057	1089.8	LOS F	70.3	491.8	1.00	2.08	2.4
Approach		843	0.0	843	0.0	2.057	271.9	LOS F	70.3	491.8	0.41	0.66	6.6
West: Pembroke St													
10	L2	411	0.0	411	0.0	1.047	164.0	LOS F	25.8	180.3	1.00	1.10	12.7
Approach		411	0.0	411	0.0	1.047	164.0	LOS F	25.8	180.3	1.00	1.10	12.7
All Vehicles		3343	0.0	3077 N1	0.0	2.057	99.5	LOS F	70.3	491.8	0.46	0.53	18.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 156.5 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	53	83.3	LOS F	0.3	0.3	0.96	0.96
P3	North Full Crossing	53	84.3	LOS F	0.3	0.3	0.97	0.97
P4	West Full Crossing	53	4.5	LOS A	0.1	0.1	0.22	0.22
All Pedestrians		158	57.4	LOS E			0.72	0.72

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: Smith St [Smith St]

Network: 2017_netwo [2017_am_base_survey]

Epping Rd - Smith St

Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: Epping Rd													
5	T1	861	0.0	861	0.0	0.226	0.4	LOS A	0.3	2.3	0.02	0.00	53.6
6	R2	2	0.0	2	0.0	0.226	30.8	LOS C	0.3	2.3	0.04	0.00	51.2
Approach		863	0.0	863	0.0	0.226	0.5	NA	0.3	2.3	0.02	0.00	53.6
North: Smith St													
7	L2	2	0.0	2	0.0	0.005	11.1	LOS A	0.0	0.1	0.62	0.68	31.9
9	R2	6	0.0	6	0.0	0.494	391.0	LOS F	1.3	9.0	0.99	1.02	1.9
Approach		8	0.0	8	0.0	0.494	296.0	LOS F	1.3	9.0	0.90	0.93	2.5
West: Epping Rd													
10	L2	7	0.0	6	0.0	0.452	5.6	LOS A	45.7	320.2	0.00	0.00	56.0
11	T1	2018	0.0	1758	0.0	0.452	0.0	LOS A	45.7	320.2	0.00	0.00	59.8
Approach		2025	0.0	1764 N1	0.0	0.452	0.0	NA	45.7	320.2	0.00	0.00	59.7
All Vehicles		2897	0.0	2636 N1	0.0	0.494	1.1	NA	45.7	320.2	0.01	0.00	53.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 156.5 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Bridge St [Bridge St]

Network: 2017_netwo [2017_pm_base_survey]

Beecroft Rd - Hight St Bridge St
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: High St													
1	L2	47	0.0	47	0.0	0.048	1.9	LOS A	0.2	1.5	0.45	0.29	48.4
Approach		47	0.0	47	0.0	0.048	1.9	NA	0.2	1.5	0.45	0.29	48.4
East: Bridge													
4	L2	97	0.0	90	0.0	0.650	0.0	LOS A	2.6	18.1	0.00	0.00	54.3
5	T1	447	0.0	414	0.0	0.650	0.0	LOS A	2.6	18.1	0.00	0.00	47.7
6	R2	2084	0.0	1929	0.0	0.650	0.1	LOS A	14.0	97.9	0.00	0.00	52.6
Approach		2628	0.0	2433 N1	0.0	0.650	0.1	NA	14.0	97.9	0.00	0.00	52.1
North: Beecroft Rd													
7	L2	1444	0.0	1411	0.0	0.290	0.0	LOS A	13.8	96.4	0.00	0.00	59.9
Approach		1444	0.0	1411 N1	0.0	0.290	0.0	NA	13.8	96.4	0.00	0.00	59.9
West: Bridge St													
10	L2	261	0.0	258	0.0	0.776	15.6	LOS B	4.2	29.2	0.68	1.02	13.4
Approach		261	0.0	258 N1	0.0	0.776	15.6	LOS B	4.2	29.2	0.68	1.02	13.4
All Vehicles		4381	0.0	4149 N1	0.0	0.776	1.0	NA	14.0	97.9	0.05	0.07	51.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option is selected.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 197.2 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Beec-Carl [Beecroft-Carlingford]

Network: 2017_netwo [2017_pm_base_survey]

Beecroft Rd - Carlingford Rd
Signals - Fixed Time Coordinated Cycle Time = 180 seconds (Network Cycle Time - Program)
Common Control Group: carl [Carlingford Rd]

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Beecroft Rd													
1	L2	953	0.0	889	0.0	0.387	8.0	LOS A	19.1	133.4	0.10	0.57	44.4
2	T1	1378	0.0	1285	0.0	1.111	191.7	LOS F	81.6	571.2	1.00	1.49	6.1
Approach		2331	0.0	2174 N1	0.0	1.111	116.6	LOS F	81.6	571.2	0.63	1.11	9.4
North: Beecroft Rd													
8	T1	608	0.0	608	0.0	0.267	19.3	LOS B	12.8	89.6	0.53	0.46	37.0
9	R2	191	0.0	191	0.0	1.097	207.5	LOS F	28.2	197.7	1.00	1.23	7.6
Approach		799	0.0	799	0.0	1.097	64.2	LOS E	28.2	197.7	0.64	0.64	19.3
West: Carlingford Rd													
10	L2	84	0.0	84	0.0	0.083	17.8	LOS B	2.2	15.3	0.34	0.63	14.4
12	R2	777	0.0	773	0.0	0.639	32.5	LOS C	16.3	114.2	0.62	0.75	8.7
Approach		861	0.0	857 N1	0.0	0.639	31.1	LOS C	16.3	114.2	0.59	0.74	9.0
All Vehicles		3991	0.0	3830 N1	0.0	1.111	86.5	LOS F	81.6	571.2	0.63	0.93	11.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 197.2 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Smith St [Smith St]

Network: 2017_netwo [2017_pm_base_survey]

Epping Rd - Smith St

Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: Epping Rd													
5	T1	1726	0.0	1556	0.0	0.401	0.0	LOS A	11.7	81.6	0.00	0.00	59.2
6	R2	2	0.0	2	0.0	0.401	13.4	LOS A	11.7	81.6	0.01	0.00	53.8
Approach		1728	0.0	1558[N1]	0.0	0.401	0.1	NA	11.7	81.6	0.00	0.00	59.2
North: Smith St													
7	L2	5	0.0	5	0.0	0.006	7.4	LOS A	0.0	0.1	0.43	0.59	37.9
9	R2	5	0.0	5	0.0	1.041	824.0	LOS F	1.7	11.6	1.00	1.10	0.9
Approach		11	0.0	11	0.0	1.041	415.7	LOS F	1.7	11.6	0.71	0.84	1.7
West: Epping Rd													
10	L2	24	0.0	24	0.0	0.231	5.5	LOS A	0.0	0.0	0.00	0.03	55.5
11	T1	896	0.0	878	0.0	0.231	0.0	LOS A	0.0	0.0	0.00	0.02	59.3
Approach		920	0.0	901[N1]	0.0	0.231	0.2	NA	0.0	0.0	0.00	0.02	59.1
All Vehicles		2659	0.0	2470[N1]	0.0	1.041	1.9	NA	11.7	81.6	0.01	0.01	47.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 197.2 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: BridgeRaws [BridgeSt_RawsonSt]

Network: 2017_netwo [2017_pm_base_survey]

BridgeSt_RawsonSt
Roundabout

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Arrival Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Rawson St													
1	L2	40	0.0	40	0.0	0.299	7.2	LOS A	2.0	13.8	0.69	0.75	48.4
2	T1	111	0.0	111	0.0	0.299	7.4	LOS A	2.0	13.8	0.69	0.75	46.1
3	R2	116	0.0	116	0.0	0.299	12.0	LOS A	2.0	13.8	0.69	0.75	46.1
Approach		266	0.0	266	0.0	0.299	9.4	LOS A	2.0	13.8	0.69	0.75	46.5
East: Bridge St													
4	L2	52	0.0	48	0.0	0.390	5.5	LOS A	2.9	20.3	0.54	0.59	48.7
5	T1	308	0.0	288	0.0	0.390	5.7	LOS A	2.9	20.3	0.54	0.59	44.2
6	R2	125	0.0	117	0.0	0.390	10.3	LOS A	2.9	20.3	0.54	0.59	30.4
Approach		485	0.0	453 N1	0.0	0.390	6.9	LOS A	2.9	20.3	0.54	0.59	42.9
North: Rawson St													
7	L2	63	0.0	61	0.0	0.253	5.2	LOS A	1.3	9.1	0.39	0.61	44.2
8	T1	97	0.0	94	0.0	0.253	5.4	LOS A	1.3	9.1	0.39	0.61	52.8
9	R2	137	0.0	132	0.0	0.253	10.1	LOS A	1.3	9.1	0.39	0.61	49.6
Approach		297	0.0	287 N1	0.0	0.253	7.5	LOS A	1.3	9.1	0.39	0.61	50.2
West: Bridge St													
10	L2	172	0.0	172	0.0	0.290	5.8	LOS A	1.8	12.8	0.57	0.63	39.3
11	T1	103	0.0	103	0.0	0.290	6.1	LOS A	1.8	12.8	0.57	0.63	39.3
12	R2	25	0.0	25	0.0	0.290	10.7	LOS A	1.8	12.8	0.57	0.63	52.4
Approach		300	0.0	300	0.0	0.290	6.3	LOS A	1.8	12.8	0.57	0.63	41.7
All Vehicles		1348	0.0	1306 N1	0.0	0.390	7.4	LOS A	2.9	20.3	0.54	0.64	45.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 197.2 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Carlf_Clif [CarlingfordRd_CliffRd]

Network: 2017_netwo [2017_pm_base_survey]

CarlingfordRd_CliffRd
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: Carlingford Rd													
5	T1	1133	0.0	1042	0.0	0.267	0.0	LOS A	0.0	0.0	0.00	0.00	59.9
Approach		1133	0.0	1042 [N1]	0.0	0.267	0.0	NA	0.0	0.0	0.00	0.00	59.9
North: RoadName													
7	L2	25	0.0	25	0.0	0.050	6.7	LOS A	0.1	0.6	0.34	0.60	49.0
9	R2	21	0.0	21	0.0	0.160	33.6	LOS C	0.5	3.5	0.90	0.96	28.8
Approach		46	0.0	46	0.0	0.160	18.9	LOS B	0.5	3.5	0.59	0.76	37.1
West: Carlingford Rd													
10	L2	7	0.0	7	0.0	0.147	5.5	LOS A	6.9	48.5	0.00	0.02	57.9
11	T1	564	0.0	564	0.0	0.147	0.0	LOS A	7.5	52.2	0.00	0.01	59.8
Approach		572	0.0	572	0.0	0.147	0.1	NA	7.5	52.2	0.00	0.01	59.7
All Vehicles		1751	0.0	1660 [N1]	0.0	0.267	0.6	NA	7.5	52.2	0.02	0.02	57.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 197.2 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Carli_Kent [CarlingfordRd_KentSt]

Network: 2017_netwo [2017_pm_base_survey]

CarlingfordRd_KentSt
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Arrival Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Kent St													
1	L2	96	0.0	96	0.0	0.120	8.1	LOS A	0.4	3.0	0.48	0.72	43.9
3	R2	19	0.0	19	0.0	0.294	70.5	LOS F	0.9	6.3	0.95	1.00	14.2
Approach		115	0.0	115	0.0	0.294	18.4	LOS B	0.9	6.3	0.56	0.77	32.6
East: Carlingford Rd													
4	L2	43	0.0	39	0.0	0.267	5.6	LOS A	0.0	0.0	0.00	0.05	57.1
5	T1	1096	0.0	1001	0.0	0.267	0.0	LOS A	0.0	0.0	0.00	0.02	59.4
Approach		1139	0.0	1040 N1	0.0	0.267	0.2	NA	0.0	0.0	0.00	0.02	59.2
North: Kent St													
7	L2	2	0.0	2	0.0	0.002	7.0	LOS A	0.0	0.1	0.39	0.54	48.7
Approach		2	0.0	2	0.0	0.002	7.0	LOS A	0.0	0.1	0.39	0.54	48.7
West: Carlingford Rd													
11	T1	576	0.0	576	0.0	0.192	1.4	LOS A	31.6	220.9	0.15	0.04	56.0
12	R2	37	0.0	37	0.0	0.192	14.7	LOS B	31.6	220.9	0.42	0.12	52.1
Approach		613	0.0	613	0.0	0.192	2.2	NA	31.6	220.9	0.17	0.05	55.5
All Vehicles		1868	0.0	1770 N1	0.0	0.294	2.1	NA	31.6	220.9	0.09	0.08	55.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 197.2 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Carl_Mids [CarlingfordRd_MidsonRd]

Network: 2017_netwo [2017_pm_base_survey]

CarlingfordRd_MidsonRd
Signals - Fixed Time Isolated Cycle Time = 100 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Midson Rd													
1	L2	89	0.0	89	0.0	0.875	58.7	LOS E	16.7	116.9	1.00	1.02	27.9
2	T1	429	0.0	429	0.0	0.875	53.1	LOS D	16.7	116.9	1.00	1.02	28.4
3	R2	86	0.0	86	0.0	0.875	58.7	LOS E	16.7	116.9	1.00	1.02	15.6
Approach		605	0.0	605	0.0	0.875	54.7	LOS D	16.7	116.9	1.00	1.02	27.0
East: RoadName													
4	L2	55	0.0	50	0.0	0.905	57.8	LOS E	27.3	190.9	1.00	1.09	27.3
5	T1	935	0.0	850	0.0	0.905	52.2	LOS D	27.3	190.9	1.00	1.09	31.3
6	R2	211	0.0	191	0.0	0.382	37.8	LOS C	7.7	53.7	0.86	0.79	35.5
Approach		1200	0.0	1092 N1	0.0	0.905	49.9	LOS D	27.3	190.9	0.97	1.03	31.8
North: RoadName													
7	L2	27	0.0	27	0.0	0.601	49.6	LOS D	8.2	57.4	0.98	0.80	24.6
8	T1	262	0.0	262	0.0	0.601	44.1	LOS D	8.2	57.4	0.98	0.80	31.2
9	R2	58	0.0	58	0.0	0.601	49.7	LOS D	8.1	57.0	0.98	0.80	33.8
Approach		347	0.0	347	0.0	0.601	45.5	LOS D	8.2	57.4	0.98	0.80	31.3
West: RoadName													
10	L2	53	0.0	53	0.0	0.851	57.6	LOS E	14.1	99.0	1.00	0.99	31.6
11	T1	476	0.0	476	0.0	0.851	52.0	LOS D	14.3	99.9	1.00	0.99	22.3
12	R2	225	0.0	225	0.0	0.758	52.6	LOS D	11.3	79.1	1.00	0.88	28.4
Approach		754	0.0	754	0.0	0.851	52.6	LOS D	14.3	99.9	1.00	0.96	25.2
All Vehicles		2906	0.0	2798 N1	0.0	0.905	51.1	LOS D	27.3	190.9	0.99	0.98	29.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 197.2 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	53	36.2	LOS D	0.1	0.1	0.85	0.85
P2	East Full Crossing	53	44.3	LOS E	0.1	0.1	0.94	0.94
P3	North Full Crossing	53	44.3	LOS E	0.1	0.1	0.94	0.94
P4	West Full Crossing	53	44.3	LOS E	0.1	0.1	0.94	0.94
All Pedestrians		211	42.3	LOS E			0.92	0.92

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.

MOVEMENT SUMMARY

Site: Rawson [Carlingford Rd - Ray St - Rawson St]

Network: 2017_netwo [2017_pm_base_survey]

Carlingford Rd - Ray St - Rawson St
Signals - Fixed Time Coordinated Cycle Time = 180 seconds (Network Cycle Time - Program)
Common Control Group: carl [Carlingford Rd]

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Rawson St													
1	L2	109	0.0	107	0.0	0.590	25.0	LOS B	11.7	81.7	0.53	0.56	29.4
2	T1	173	0.0	168	0.0	0.590	19.5	LOS B	11.7	81.7	0.53	0.56	29.4
3	R2	142	0.0	139	0.0	3.373	2190.4	LOS F	54.0	378.1	1.00	1.96	0.5
Approach		424	0.0	414 N1	0.0	3.373	748.1	LOS F	54.0	378.1	0.69	1.03	1.6
East: Carlingford Rd													
4	L2	108	0.0	100	0.0	0.754	59.5	LOS E	16.3	114.2	0.92	0.83	5.1
5	T1	1005	0.0	925	0.0	0.754	54.8	LOS D	16.3	114.2	0.95	0.85	5.2
Approach		1114	0.0	1024 N1	0.0	0.754	55.2	LOS D	16.3	114.2	0.94	0.85	5.2
North: Ray St													
7	L2	171	0.0	170	0.0	0.456	26.3	LOS B	9.0	63.3	0.56	0.70	12.9
8	T1	132	0.0	132	0.0	1.236	241.0	LOS F	23.3	163.2	0.90	1.25	1.6
9	R2	35	0.0	35	0.0	1.236	311.0	LOS F	23.3	163.2	1.00	1.41	1.3
Approach		337	0.0	337	0.0	1.236	139.5	LOS F	23.3	163.2	0.74	0.99	2.7
West: Carlingford Rd													
10	L2	23	0.0	23	0.0	0.895	87.2	LOS F	23.3	163.2	1.00	1.05	4.7
11	T1	598	0.0	598	0.0	0.895	82.0	LOS F	23.3	163.2	1.00	1.06	4.7
Approach		621	0.0	621	0.0	0.895	82.2	LOS F	23.3	163.2	1.00	1.06	4.7
All Vehicles		2496	0.0	2396 N1	0.0	3.373	193.8	LOS F	54.0	378.1	0.89	0.95	2.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 197.2 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Blaxland [Epping_Blaxland]

Network: 2017_netwo [2017_pm_base_survey]

New Site
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Blaxland Rd													
1	L2	586	0.0	586	0.0	0.903	82.2	LOS F	20.0	140.0	1.00	1.11	5.4
2	T1	43	0.0	43	0.0	0.635	83.2	LOS F	3.4	23.7	1.00	0.78	10.8
Approach		629	0.0	629	0.0	0.903	82.2	LOS F	20.0	140.0	1.00	1.08	5.8
East: Epping Rd													
4	L2	2	0.0	2	0.0	0.989	83.9	LOS F	46.6	326.4	1.00	1.16	8.6
5	T1	1692	0.0	1521	0.0	0.989	85.6	LOS F	46.6	326.4	1.00	1.20	8.0
Approach		1694	0.0	1523 N1	0.0	0.989	85.6	LOS F	46.6	326.4	1.00	1.20	8.0
North: Landston Place													
7	L2	4	0.0	4	0.0	0.962	105.5	LOS F	17.4	121.5	1.00	1.08	5.7
8	T1	35	0.0	35	0.0	0.962	100.0	LOS F	17.4	121.5	1.00	1.08	5.7
9	R2	248	0.0	248	0.0	0.962	109.7	LOS F	17.4	121.5	1.00	1.08	5.4
Approach		287	0.0	287	0.0	0.962	108.5	LOS F	17.4	121.5	1.00	1.08	5.5
West: Bridge St													
10	L2	298	0.0	291	0.0	0.215	4.9	LOS A	1.6	11.1	0.13	0.58	42.9
11	T1	834	0.0	815	0.0	0.358	7.3	LOS A	12.2	85.1	0.38	0.33	23.8
12	R2	283	0.0	277	0.0	0.997	119.6	LOS F	14.0	97.9	1.00	1.21	2.3
Approach		1415	0.0	1384 N1	0.0	0.997	29.3	LOS C	14.0	97.9	0.45	0.56	11.3
All Vehicles		4025	0.0	3823 N1	0.0	0.997	66.4	LOS E	46.6	326.4	0.80	0.94	7.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 197.2 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Essex St [Essex St]

Network: 2017_netwo [2017_pm_base_survey]

Epping Essex St
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Essex St													
1	L2	173	0.0	173	0.0	1.073	175.9	LOS F	21.6	151.1	1.00	1.23	2.2
2	T1	219	0.0	219	0.0	1.064	156.3	LOS F	30.0	209.9	1.00	1.34	5.0
3	R2	36	0.0	36	0.0	1.064	161.9	LOS F	30.0	209.9	1.00	1.34	2.5
Approach		427	0.0	427	0.0	1.073	164.7	LOS F	30.0	209.9	1.00	1.29	3.7
East: Epping Rd													
4	L2	6	0.0	6	0.0	1.034	116.9	LOS F	44.9	314.6	1.00	1.29	9.3
5	T1	1098	0.0	1098	0.0	1.034	108.5	LOS F	52.7	369.2	1.00	1.29	7.6
6	R2	1	0.0	1	0.0	1.034	111.7	LOS F	52.7	369.2	1.00	1.30	10.3
Approach		1105	0.0	1105	0.0	1.034	108.5	LOS F	52.7	369.2	1.00	1.29	7.6
North: Essex St													
7	L2	3	0.0	3	0.0	0.246	63.2	LOS E	5.3	36.8	0.91	0.71	11.0
8	T1	92	0.0	92	0.0	1.062	70.8	LOS F	25.1	175.6	0.92	0.78	12.5
9	R2	197	0.0	197	0.0	1.062	165.1	LOS F	25.1	175.6	1.00	1.22	4.3
Approach		292	0.0	292	0.0	1.062	134.4	LOS F	25.1	175.6	0.97	1.07	5.9
West: Epping Rd													
10	L2	18	0.0	18	0.0	0.513	19.5	LOS B	12.4	86.7	0.73	0.65	30.2
11	T1	768	0.0	754	0.0	0.513	17.6	LOS B	12.4	86.7	0.78	0.68	18.9
12	R2	18	0.0	18	0.0	0.513	29.3	LOS C	10.1	70.7	0.87	0.74	20.8
Approach		804	0.0	790 N1	0.0	0.513	17.9	LOS B	12.4	86.7	0.78	0.68	19.3
All Vehicles		2628	0.0	2614 N1	0.0	1.073	93.2	LOS F	52.7	369.2	0.93	1.08	7.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 197.2 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Eppimg_Pem [EppingRd_PembrokeSt]

Network: 2017_netwo [2017_pm_base_survey]

EppingRd_PembrokeSt
Signals - Fixed Time Coordinated Cycle Time = 180 seconds (Network Cycle Time - Program)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Epping Rd													
1	L2	13	0.0	12	0.0	0.251	9.0	LOS A	7.5	52.3	0.23	0.22	51.6
2	T1	815	0.0	799	0.0	0.251	3.5	LOS A	7.5	52.3	0.23	0.22	55.9
Approach		827	0.0	811 N1	0.0	0.251	3.6	LOS A	7.5	52.3	0.23	0.22	55.8
North: Epping Rd													
8	T1	1095	0.0	1095	0.0	0.631	5.9	LOS A	17.2	120.2	0.39	0.37	50.3
9	R2	207	0.0	207	0.0	0.434	12.4	LOS A	6.0	41.8	0.35	0.69	45.7
Approach		1302	0.0	1302	0.0	0.631	6.9	LOS A	17.2	120.2	0.39	0.42	49.3
West: Pembroke St													
10	L2	208	0.0	208	0.0	0.532	89.1	LOS F	8.8	61.8	0.99	0.79	20.0
Approach		208	0.0	208	0.0	0.532	89.1	LOS F	8.8	61.8	0.99	0.79	20.0
All Vehicles		2338	0.0	2322 N1	0.0	0.631	13.2	LOS A	17.2	120.2	0.39	0.38	44.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 197.2 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	53	83.3	LOS F	0.3	0.3	0.96	0.96
P3	North Full Crossing	53	84.3	LOS F	0.3	0.3	0.97	0.97
P4	West Full Crossing	53	4.5	LOS A	0.1	0.1	0.22	0.22
All Pedestrians		158	57.4	LOS E			0.72	0.72

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: Forrest Gr [Forrest Grove]

Network: 2017_netwo [2017_pm_base_survey]

Epping Rd Forrest Grove
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Forrest Grove													
1	L2	267	0.0	267	0.0	0.731	17.4	LOS B	3.7	26.2	0.64	1.12	17.1
3	R2	3	0.0	3	0.0	0.059	69.7	LOS E	0.2	1.2	0.95	0.98	5.3
Approach		271	0.0	271	0.0	0.731	18.0	LOS B	3.7	26.2	0.64	1.12	16.7
East: Epping Rd													
4	L2	5	0.0	5	0.0	0.331	5.5	LOS A	28.0	195.8	0.00	0.00	59.6
5	T1	1468	0.0	1287	0.0	0.331	0.0	LOS A	28.0	195.8	0.00	0.00	59.8
Approach		1474	0.0	1292 N1	0.0	0.331	0.0	NA	28.0	195.8	0.00	0.00	59.8
West: Epping Rd													
11	T1	793	0.0	777	0.0	0.314	1.8	LOS A	86.4	604.8	0.16	0.08	37.6
12	R2	103	0.0	101	0.0	0.314	14.2	LOS A	86.4	604.8	0.73	0.36	15.9
Approach		896	0.0	879 N1	0.0	0.314	3.2	NA	86.4	604.8	0.22	0.11	32.4
All Vehicles		2640	0.0	2441 N1	0.0	0.731	3.2	NA	86.4	604.8	0.15	0.16	40.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 197.2 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Bridge St [Bridge St]

Network: 2017_netwo [2017_am_base_modelled]

Beecroft Rd - Hight St Bridge St
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: High St													
1	L2	32	0.0	32	0.0	0.027	1.0	LOS A	0.1	0.9	0.33	0.16	49.1
Approach		32	0.0	32	0.0	0.027	1.0	NA	0.1	0.9	0.33	0.16	49.1
East: Bridge													
4	L2	173	0.0	172	0.0	0.397	0.0	LOS A	2.4	17.1	0.00	0.00	53.7
5	T1	244	0.0	244	0.0	0.397	0.0	LOS A	2.4	17.1	0.00	0.00	44.3
6	R2	1072	0.0	1069	0.0	0.397	0.0	LOS A	4.2	29.7	0.00	0.00	52.2
Approach		1488	0.0	1484 N1	0.0	0.397	0.0	NA	4.2	29.7	0.00	0.00	51.8
North: Beecroft Rd													
7	L2	2908	0.0	2601	0.0	0.535	0.1	LOS A	40.8	285.9	0.00	0.00	59.8
Approach		2908	0.0	2601 N1	0.0	0.535	0.1	NA	40.8	285.9	0.00	0.00	59.8
West: Bridge St													
10	L2	266	0.0	246	0.0	0.488	2.8	LOS A	1.7	11.6	0.44	0.37	25.5
Approach		266	0.0	246 N1	0.0	0.488	2.8	LOS A	1.7	11.6	0.44	0.37	25.5
All Vehicles		4695	0.0	4362 N1	0.0	0.535	0.2	NA	40.8	285.9	0.03	0.02	56.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option is selected.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 340.8 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Beec-Carl [Beecroft-Carlingford]

Network: 2017_netwo [2017_am_base_modelled]

Beecroft Rd - Carlingford Rd
Signals - Fixed Time Coordinated Cycle Time = 180 seconds (Network Cycle Time - Program)
Common Control Group: carl [Carlingford Rd]

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Beecroft Rd													
1	L2	482	0.0	474	0.0	0.191	7.5	LOS A	3.5	24.7	0.09	0.56	45.2
2	T1	856	0.0	841	0.0	1.540	558.9	LOS F	81.6	571.2	1.00	2.19	2.2
Approach		1338	0.0	1315 N1	0.0	1.540	360.2	LOS F	81.6	571.2	0.67	1.60	3.4
North: Beecroft Rd													
8	T1	1467	0.0	1467	0.0	1.292	340.6	LOS F	116.6	816.0	1.00	1.93	4.8
9	R2	226	0.0	226	0.0	1.513	547.7	LOS F	54.2	379.7	1.00	1.68	3.1
Approach		1694	0.0	1694	0.0	1.513	368.3	LOS F	116.6	816.0	1.00	1.90	4.5
West: Carlingford Rd													
10	L2	58	0.0	54	0.0	0.038	8.2	LOS A	0.7	5.2	0.19	0.59	24.3
12	R2	1441	0.0	1340	0.0	0.639	18.9	LOS B	16.3	114.2	0.39	0.69	13.5
Approach		1499	0.0	1394 N1	0.0	0.639	18.5	LOS B	16.3	114.2	0.39	0.69	13.7
All Vehicles		4531	0.0	4402 N1	0.0	1.540	255.1	LOS F	116.6	816.0	0.71	1.43	4.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 340.8 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: BridgeRaws [BridgeSt_RawsonSt]

Network: 2017_netwo [2017_am_base_modelled]

BridgeSt_RawsonSt
Roundabout

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Rawson St													
1	L2	12	0.0	12	0.0	0.160	5.2	LOS A	0.9	6.3	0.44	0.57	50.3
2	T1	113	0.0	113	0.0	0.160	5.4	LOS A	0.9	6.3	0.44	0.57	48.4
3	R2	56	0.0	56	0.0	0.160	10.1	LOS A	0.9	6.3	0.44	0.57	48.4
Approach		180	0.0	180	0.0	0.160	6.9	LOS A	0.9	6.3	0.44	0.57	48.6
East: Bridge St													
4	L2	27	0.0	27	0.0	0.183	4.6	LOS A	1.1	7.9	0.33	0.56	48.7
5	T1	76	0.0	76	0.0	0.183	4.8	LOS A	1.1	7.9	0.33	0.56	44.2
6	R2	128	0.0	128	0.0	0.183	9.5	LOS A	1.1	7.9	0.33	0.56	30.7
Approach		232	0.0	231 N1	0.0	0.183	7.4	LOS A	1.1	7.9	0.33	0.56	40.1
North: Rawson St													
7	L2	55	0.0	34	0.0	0.124	4.5	LOS A	0.6	3.9	0.24	0.54	45.6
8	T1	93	0.0	58	0.0	0.124	4.8	LOS A	0.6	3.9	0.24	0.54	53.6
9	R2	97	0.0	61	0.0	0.124	9.4	LOS A	0.6	3.9	0.24	0.54	50.7
Approach		244	0.0	153 N1	0.0	0.124	6.5	LOS A	0.6	3.9	0.24	0.54	51.4
West: Bridge St													
10	L2	123	0.0	123	0.0	0.190	5.4	LOS A	1.1	7.4	0.48	0.59	40.0
11	T1	58	0.0	58	0.0	0.190	5.6	LOS A	1.1	7.4	0.48	0.59	40.0
12	R2	26	0.0	26	0.0	0.190	10.3	LOS A	1.1	7.4	0.48	0.59	52.7
Approach		207	0.0	207	0.0	0.190	6.1	LOS A	1.1	7.4	0.48	0.59	43.4
All Vehicles		863	0.0	771 N1	0.0	0.190	6.7	LOS A	1.1	7.9	0.38	0.57	46.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 340.8 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Carlf_Clif [CarlingfordRd_CliffRd]

Network: 2017_netwo [2017_am_base_modelled]

CarlingfordRd_CliffRd
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: Carlingford Rd													
5	T1	844	0.0	776	0.0	0.199	0.0	LOS A	0.0	0.0	0.00	0.00	60.0
Approach		844	0.0	776[N1]	0.0	0.199	0.0	NA	0.0	0.0	0.00	0.00	60.0
North: RoadName													
7	L2	116	0.0	116	0.0	0.287	8.3	LOS A	0.6	3.9	0.49	0.77	47.3
9	R2	47	0.0	47	0.0	0.598	79.7	LOS F	2.1	14.8	0.97	1.07	16.8
Approach		163	0.0	163	0.0	0.598	29.0	LOS C	2.1	14.8	0.63	0.86	31.0
West: Carlingford Rd													
10	L2	23	0.0	23	0.0	0.255	5.6	LOS A	17.3	121.4	0.00	0.03	57.8
11	T1	972	0.0	972	0.0	0.255	0.0	LOS A	31.2	218.4	0.00	0.01	59.6
Approach		995	0.0	995	0.0	0.255	0.1	NA	31.2	218.4	0.00	0.01	59.5
All Vehicles		2002	0.0	1934[N1]	0.0	0.598	2.5	NA	31.2	218.4	0.05	0.08	52.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 340.8 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Carli_Kent [CarlingfordRd_KentSt]

Network: 2017_netwo [2017_am_base_modelled]

CarlingfordRd_KentSt
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Arrival Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Kent St													
1	L2	72	0.0	72	0.0	0.076	7.1	LOS A	0.3	1.9	0.40	0.64	45.2
3	R2	27	0.0	27	0.0	0.570	122.6	LOS F	1.8	12.9	0.98	1.05	9.1
Approach		99	0.0	99	0.0	0.570	39.1	LOS C	1.8	12.9	0.56	0.76	21.6
East: Carlingford Rd													
4	L2	60	0.0	54	0.0	0.207	5.6	LOS A	0.0	0.0	0.00	0.08	56.7
5	T1	832	0.0	751	0.0	0.207	0.0	LOS A	0.0	0.0	0.00	0.04	59.0
Approach		892	0.0	805 N1	0.0	0.207	0.4	NA	0.0	0.0	0.00	0.04	58.7
North: Kent St													
7	L2	31	0.0	31	0.0	0.041	8.6	LOS A	0.2	1.1	0.52	0.69	46.9
Approach		31	0.0	31	0.0	0.041	8.6	LOS A	0.2	1.1	0.52	0.69	46.9
West: Carlingford Rd													
11	T1	937	0.0	937	0.0	0.306	1.1	LOS A	55.1	385.6	0.15	0.05	56.5
12	R2	77	0.0	77	0.0	0.306	12.2	LOS A	55.1	385.6	0.41	0.14	53.0
Approach		1014	0.0	1014	0.0	0.306	1.9	NA	55.1	385.6	0.17	0.06	56.0
All Vehicles		2035	0.0	1948 N1	0.0	0.570	3.3	NA	55.1	385.6	0.12	0.10	53.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 340.8 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Carl_Mids [CarlingfordRd_MidsonRd]

Network: 2017_netwo [2017_am_base_modelled]

CarlingfordRd_MidsonRd
Signals - Fixed Time Isolated Cycle Time = 90 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Midson Rd													
1	L2	53	0.0	53	0.0	0.874	54.3	LOS D	15.1	105.7	1.00	1.03	29.3
2	T1	299	0.0	299	0.0	0.874	48.8	LOS D	15.1	105.7	1.00	1.03	29.6
3	R2	240	0.0	240	0.0	0.874	54.5	LOS D	14.7	102.7	1.00	1.01	15.8
Approach		592	0.0	592	0.0	0.874	51.6	LOS D	15.1	105.7	1.00	1.02	25.0
East: RoadName													
4	L2	39	0.0	36	0.0	0.835	48.8	LOS D	16.2	113.6	1.00	0.98	30.0
5	T1	708	0.0	650	0.0	0.835	43.2	LOS D	16.3	114.1	1.00	0.98	34.1
6	R2	156	0.0	143	0.0	0.365	38.9	LOS C	5.5	38.3	0.90	0.78	35.1
Approach		903	0.0	829 N1	0.0	0.835	42.7	LOS D	16.3	114.1	0.98	0.95	34.1
North: RoadName													
7	L2	158	0.0	158	0.0	0.655	46.0	LOS D	8.3	57.9	0.99	0.84	24.4
8	T1	208	0.0	208	0.0	0.655	40.4	LOS C	8.6	59.9	0.99	0.83	32.5
9	R2	22	0.0	22	0.0	0.655	45.9	LOS D	8.6	59.9	0.99	0.83	35.4
Approach		388	0.0	388	0.0	0.655	43.0	LOS D	8.6	59.9	0.99	0.83	29.8
West: RoadName													
10	L2	17	0.0	17	0.0	0.857	51.9	LOS D	15.4	108.0	1.00	1.01	33.5
11	T1	614	0.0	614	0.0	0.857	46.3	LOS D	15.5	108.2	1.00	1.01	24.0
12	R2	274	0.0	274	0.0	0.780	47.2	LOS D	12.5	87.4	1.00	0.90	30.0
Approach		904	0.0	904	0.0	0.857	46.7	LOS D	15.5	108.2	1.00	0.98	26.3
All Vehicles		2787	0.0	2713 N1	0.0	0.874	46.0	LOS D	16.3	114.1	0.99	0.96	29.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 340.8 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	53	38.4	LOS D	0.1	0.1	0.92	0.92
P2	East Full Crossing	53	39.3	LOS D	0.1	0.1	0.94	0.94
P3	North Full Crossing	53	39.3	LOS D	0.1	0.1	0.94	0.94
P4	West Full Crossing	53	39.3	LOS D	0.1	0.1	0.94	0.94
All Pedestrians		211	39.1	LOS D			0.93	0.93

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.

MOVEMENT SUMMARY

Site: Rawson [Carlingford Rd - Ray St - Rawson St]

Network: 2017_netwo [2017_am_base_modelled]

Carlingford Rd - Ray St - Rawson St
Signals - Fixed Time Coordinated Cycle Time = 180 seconds (Network Cycle Time - Program)
Common Control Group: carl [Carlingford Rd]

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Rawson St													
1	L2	125	0.0	125	0.0	0.480	50.7	LOS D	11.6	81.3	0.78	0.74	17.9
2	T1	112	0.0	111	0.0	2.401	639.0	LOS F	31.9	223.1	0.88	1.20	1.8
3	R2	42	0.0	42	0.0	2.401	1319.4	LOS F	31.9	223.1	1.00	1.72	0.9
Approach		279	0.0	279	0.0	2.401	477.5	LOS F	31.9	223.1	0.85	1.07	2.4
East: Carlingford Rd													
4	L2	3	0.0	3	0.0	0.281	23.3	LOS B	13.0	91.2	0.51	0.45	13.1
5	T1	705	0.0	636	0.0	0.281	21.7	LOS B	16.3	114.2	0.60	0.53	11.6
Approach		708	0.0	639[N1]	0.0	0.281	21.7	LOS B	16.3	114.2	0.60	0.53	11.6
North: Ray St													
7	L2	380	0.0	380	0.0	1.408	459.6	LOS F	23.3	163.2	1.00	1.57	0.9
8	T1	223	0.0	223	0.0	1.721	721.4	LOS F	23.3	163.2	1.00	2.01	0.5
9	R2	14	0.0	14	0.0	1.721	726.9	LOS F	23.3	163.2	1.00	2.01	0.5
Approach		617	0.0	617	0.0	1.721	560.2	LOS F	23.3	163.2	1.00	1.74	0.7
West: Carlingford Rd													
10	L2	11	0.0	11	0.0	0.900	62.1	LOS E	23.3	163.2	0.95	1.00	6.6
11	T1	1078	0.0	1078	0.0	0.900	55.0	LOS D	23.3	163.2	0.95	0.99	6.8
Approach		1088	0.0	1088	0.0	0.900	55.0	LOS D	23.3	163.2	0.95	0.99	6.8
All Vehicles		2693	0.0	2623[N1]	0.0	2.401	210.6	LOS F	31.9	223.1	0.87	1.06	2.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 340.8 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Blaxland [Epping_Blaxland]

Network: 2017_netwo [2017_am_base_modelled]

New Site
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Blaxland Rd													
1	L2	471	0.0	471	0.0	0.401	32.0	LOS C	8.8	61.5	0.78	0.82	12.2
2	T1	91	0.0	91	0.0	0.998	118.0	LOS F	8.7	61.2	1.00	1.08	8.0
Approach		561	0.0	561	0.0	0.998	45.9	LOS D	8.8	61.5	0.82	0.87	10.5
East: Epping Rd													
4	L2	1	0.0	1	0.0	1.008	124.7	LOS F	44.5	311.7	1.00	1.31	6.0
5	T1	802	0.0	798	0.0	1.008	119.5	LOS F	44.5	311.7	1.00	1.31	5.9
Approach		803	0.0	799 N1	0.0	1.008	119.5	LOS F	44.5	311.7	1.00	1.31	5.9
North: Landston Place													
7	L2	23	0.0	23	0.0	0.983	118.1	LOS F	17.8	124.9	1.00	1.16	5.2
8	T1	88	0.0	88	0.0	0.983	112.5	LOS F	17.8	124.9	1.00	1.16	5.2
9	R2	217	0.0	217	0.0	0.983	120.7	LOS F	17.8	124.9	1.00	1.13	5.0
Approach		328	0.0	328	0.0	0.983	118.3	LOS F	17.8	124.9	1.00	1.14	5.1
West: Bridge St													
10	L2	328	0.0	296	0.0	0.225	5.3	LOS A	2.3	16.4	0.17	0.59	42.1
11	T1	1980	0.0	1784	0.0	0.838	16.4	LOS B	14.0	97.9	0.70	0.66	13.6
12	R2	600	0.0	541	0.0	1.014	119.8	LOS F	14.0	97.9	1.00	1.26	2.3
Approach		2908	0.0	2621 N1	0.0	1.014	36.5	LOS C	14.0	97.9	0.70	0.78	8.3
All Vehicles		4601	0.0	4309 N1	0.0	1.014	59.3	LOS E	44.5	311.7	0.80	0.92	7.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 340.8 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Essex St [Essex St]

Network: 2017_netwo [2017_am_base_modelled]

Epping Essex St
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Essex St													
1	L2	51	0.0	51	0.0	0.528	75.5	LOS F	7.6	53.4	0.99	0.79	5.3
2	T1	57	0.0	57	0.0	0.528	70.0	LOS E	7.6	53.4	0.99	0.79	10.3
3	R2	128	0.0	128	0.0	1.295	350.2	LOS F	23.1	161.7	1.00	1.52	1.1
Approach		236	0.0	236	0.0	1.295	223.8	LOS F	23.1	161.7	1.00	1.19	2.2
East: Epping Rd													
4	L2	20	0.0	20	0.0	0.324	11.3	LOS A	7.4	51.8	0.45	0.41	39.1
5	T1	731	0.0	731	0.0	0.324	7.9	LOS A	7.6	53.5	0.52	0.46	33.6
6	R2	5	0.0	5	0.0	0.324	16.0	LOS B	7.6	53.5	0.59	0.52	36.0
Approach		756	0.0	756	0.0	0.324	8.1	LOS A	7.6	53.5	0.52	0.46	33.8
North: Essex St													
7	L2	7	0.0	7	0.0	0.297	80.9	LOS F	2.3	15.8	0.99	0.72	6.4
8	T1	109	0.0	109	0.0	1.282	273.5	LOS F	28.0	196.1	1.00	1.38	3.0
9	R2	77	0.0	77	0.0	1.282	333.0	LOS F	28.0	196.1	1.00	1.56	1.5
Approach		194	0.0	194	0.0	1.282	289.8	LOS F	28.0	196.1	1.00	1.43	2.4
West: Epping Rd													
10	L2	24	0.0	21	0.0	1.380	403.2	LOS F	28.0	195.8	1.00	2.21	2.3
11	T1	1972	0.0	1740	0.0	1.380	398.0	LOS F	28.0	195.8	1.00	2.21	1.2
12	R2	14	0.0	12	0.0	1.380	403.9	LOS F	28.0	195.8	1.00	2.21	2.0
Approach		2009	0.0	1774 N1	0.0	1.380	398.1	LOS F	28.0	195.8	1.00	2.21	1.2
All Vehicles		3195	0.0	2959 N1	0.0	1.380	277.5	LOS F	28.0	196.1	0.88	1.63	1.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 340.8 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Forrest Gr [Forrest Grove]

Network: 2017_netwo [2017_am_base_modelled]

Epping Rd Forrest Grove
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Forrest Grove													
1	L2	20	0.0	20	0.0	0.021	7.0	LOS A	0.1	0.6	0.38	0.59	29.6
3	R2	37	0.0	37	0.0	12.071	10234.3	LOS F	35.1	246.0	1.00	1.37	0.0
Approach		57	0.0	57	0.0	12.071	6635.8	LOS F	35.1	246.0	0.78	1.09	0.1
East: Epping Rd													
4	L2	77	0.0	76	0.0	0.220	5.5	LOS A	0.0	0.0	0.00	0.11	53.3
5	T1	781	0.0	778	0.0	0.220	0.0	LOS A	0.0	0.0	0.00	0.05	56.8
Approach		858	0.0	854 N1	0.0	0.220	0.5	NA	0.0	0.0	0.00	0.05	56.5
West: Epping Rd													
11	T1	1973	0.0	1784	0.0	0.473	0.3	LOS A	11.7	81.6	0.04	0.01	54.2
12	R2	22	0.0	20	0.0	0.473	12.6	LOS A	11.7	81.6	0.08	0.01	49.3
Approach		1995	0.0	1804 N1	0.0	0.473	0.4	NA	11.7	81.6	0.04	0.01	54.2
All Vehicles		2909	0.0	2715 N1	0.0	12.071	139.4	NA	35.1	246.0	0.04	0.04	2.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 340.8 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Eppimg_Pem [EppingRd_PembrokeSt]

Network: 2017_netwo [2017_am_base_modelled]

EppingRd_PembrokeSt
Signals - Fixed Time Coordinated Cycle Time = 180 seconds (Network Cycle Time - Program)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Epping Rd													
1	L2	64	0.0	53	0.0	0.538	10.6	LOS A	22.8	159.9	0.34	0.34	46.1
2	T1	2043	0.0	1681	0.0	0.538	5.0	LOS A	22.9	160.3	0.34	0.33	53.0
Approach		2107	0.0	1734 N1	0.0	0.538	5.2	LOS A	22.9	160.3	0.34	0.33	52.8
North: Epping Rd													
8	T1	615	0.0	615	0.0	0.190	3.3	LOS A	5.3	37.2	0.22	0.19	54.2
9	R2	208	0.0	208	0.0	1.788	839.3	LOS F	64.3	450.0	1.00	1.94	3.0
Approach		823	0.0	823	0.0	1.788	215.0	LOS F	64.3	450.0	0.42	0.64	8.2
West: Pembroke St													
10	L2	411	0.0	411	0.0	1.047	164.0	LOS F	25.8	180.3	1.00	1.10	12.7
Approach		411	0.0	411	0.0	1.047	164.0	LOS F	25.8	180.3	1.00	1.10	12.7
All Vehicles		3341	0.0	2968 N1	0.0	1.788	85.3	LOS F	64.3	450.0	0.45	0.52	18.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 340.8 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	53	83.3	LOS F	0.3	0.3	0.96	0.96
P3	North Full Crossing	53	84.3	LOS F	0.3	0.3	0.97	0.97
P4	West Full Crossing	53	4.5	LOS A	0.1	0.1	0.22	0.22
All Pedestrians		158	57.4	LOS E			0.72	0.72

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: Smith St [Smith St]

Network: 2017_netwo [2017_am_base_modelled]

Epping Rd - Smith St

Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: Epping Rd													
5	T1	801	0.0	797	0.0	0.299	0.3	LOS A	0.2	1.4	0.01	0.00	55.5
6	R2	1	0.0	1	0.0	0.299	34.0	LOS C	0.2	1.4	0.02	0.00	52.2
Approach		802	0.0	798[N1]	0.0	0.299	0.3	NA	0.2	1.4	0.01	0.00	55.5
North: Smith St													
7	L2	2	0.0	2	0.0	0.008	11.1	LOS A	0.0	0.1	0.63	0.71	31.9
9	R2	6	0.0	6	0.0	0.737	537.5	LOS F	1.4	9.8	0.99	1.04	1.4
Approach		8	0.0	8	0.0	0.737	405.9	LOS F	1.4	9.8	0.90	0.95	1.8
West: Epping Rd													
10	L2	21	0.0	19	0.0	0.457	5.6	LOS A	32.9	230.3	0.00	0.01	55.8
11	T1	1982	0.0	1764	0.0	0.457	0.0	LOS A	36.0	251.7	0.00	0.01	59.6
Approach		2003	0.0	1782[N1]	0.0	0.457	0.1	NA	36.0	251.7	0.00	0.01	59.5
All Vehicles		2814	0.0	2589[N1]	0.0	0.737	1.5	NA	36.0	251.7	0.01	0.01	52.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 340.8 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Beec-Carl [Beecroft-Carlingford]

Network: 2017_netwo [2017_pm_base_modelled]

Beecroft Rd - Carlingford Rd
Signals - Fixed Time Coordinated Cycle Time = 90 seconds (Network Cycle Time - Program)
Common Control Group: carl [Carlingford Rd]

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Beecroft Rd													
1	L2	963	0.0	963	0.0	0.425	7.2	LOS A	11.1	77.6	0.12	0.57	45.7
2	T1	1203	0.0	1203	0.0	1.028	98.0	LOS F	47.4	331.5	1.00	1.52	11.0
Approach		2166	0.0	2166	0.0	1.028	57.6	LOS E	47.4	331.5	0.61	1.10	16.7
North: Beecroft Rd													
8	T1	628	0.0	628	0.0	0.290	11.3	LOS A	7.2	50.6	0.57	0.49	44.1
9	R2	149	0.0	149	0.0	1.035	118.6	LOS F	12.1	84.5	1.00	1.33	12.3
Approach		778	0.0	778	0.0	1.035	31.9	LOS C	12.1	84.5	0.65	0.65	29.5
West: Carlingford Rd													
10	L2	102	0.0	102	0.0	0.106	12.5	LOS A	1.5	10.7	0.41	0.65	18.5
12	R2	777	0.0	777	0.0	0.713	18.8	LOS B	11.3	79.4	0.62	0.75	13.6
Approach		879	0.0	879	0.0	0.713	18.1	LOS B	11.3	79.4	0.59	0.73	14.0
All Vehicles		3823	0.0	3823	0.0	1.035	43.3	LOS D	47.4	331.5	0.61	0.92	19.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 5.0 %
Number of Iterations: 30 (maximum specified: 30)

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MOVEMENT SUMMARY

Site: BridgeRaws [BridgeSt_RawsonSt]

Network: 2017_netwo [2017_pm_base_modelled]

BridgeSt_RawsonSt
Roundabout

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Rawson St													
1	L2	26	0.0	26	0.0	0.209	6.0	LOS A	1.2	8.6	0.56	0.67	49.2
2	T1	85	0.0	85	0.0	0.209	6.3	LOS A	1.2	8.6	0.56	0.67	47.1
3	R2	99	0.0	99	0.0	0.209	10.9	LOS A	1.2	8.6	0.56	0.67	47.1
Approach		211	0.0	211	0.0	0.209	8.4	LOS A	1.2	8.6	0.56	0.67	47.4
East: Bridge St													
4	L2	9	0.0	9	0.0	0.271	4.8	LOS A	1.7	12.0	0.38	0.54	49.3
5	T1	223	0.0	223	0.0	0.271	5.0	LOS A	1.7	12.0	0.38	0.54	45.1
6	R2	107	0.0	107	0.0	0.271	9.6	LOS A	1.7	12.0	0.38	0.54	31.7
Approach		340	0.0	340	0.0	0.271	6.4	LOS A	1.7	12.0	0.38	0.54	42.6
North: Rawson St													
7	L2	39	0.0	39	0.0	0.150	4.7	LOS A	0.8	5.3	0.32	0.55	45.1
8	T1	74	0.0	74	0.0	0.150	4.9	LOS A	0.8	5.3	0.32	0.55	53.4
9	R2	67	0.0	67	0.0	0.150	9.6	LOS A	0.8	5.3	0.32	0.55	50.3
Approach		180	0.0	180	0.0	0.150	6.6	LOS A	0.8	5.3	0.32	0.55	51.2
West: Bridge St													
10	L2	86	0.0	86	0.0	0.144	5.3	LOS A	0.8	5.6	0.47	0.58	40.0
11	T1	48	0.0	48	0.0	0.144	5.5	LOS A	0.8	5.6	0.47	0.58	40.0
12	R2	22	0.0	22	0.0	0.144	10.2	LOS A	0.8	5.6	0.47	0.58	52.7
Approach		157	0.0	157	0.0	0.144	6.1	LOS A	0.8	5.6	0.47	0.58	43.6
All Vehicles		887	0.0	887	0.0	0.271	6.9	LOS A	1.7	12.0	0.43	0.58	46.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 5.0 %
Number of Iterations: 30 (maximum specified: 30)

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MOVEMENT SUMMARY

Site: Carlf_Clif [CarlingfordRd_CliffRd]

Network: 2017_netwo [2017_pm_base_modelled]

CarlingfordRd_CliffRd
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: Carlingford Rd													
5	T1	1173	0.0	1168	0.0	0.299	0.0	LOS A	0.0	0.0	0.00	0.00	59.9
Approach		1173	0.0	1168[N1]	0.0	0.299	0.0	NA	0.0	0.0	0.00	0.00	59.9
North: RoadName													
7	L2	2	0.0	2	0.0	0.002	6.6	LOS A	0.0	0.1	0.34	0.54	49.0
9	R2	21	0.0	21	0.0	0.237	50.9	LOS D	0.7	5.2	0.94	0.99	22.7
Approach		23	0.0	23	0.0	0.237	46.9	LOS D	0.7	5.2	0.88	0.95	23.9
West: Carlingford Rd													
10	L2	72	0.0	72	0.0	0.187	5.6	LOS A	0.0	0.0	0.00	0.12	56.9
11	T1	653	0.0	653	0.0	0.187	0.0	LOS A	0.0	0.0	0.00	0.05	58.6
Approach		724	0.0	724	0.0	0.187	0.6	NA	0.0	0.0	0.00	0.06	58.3
All Vehicles		1920	0.0	1915[N1]	0.0	0.299	0.8	NA	0.7	5.2	0.01	0.03	56.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 5.0 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Carli_Kent [CarlingfordRd_KentSt]

Network: 2017_netwo [2017_pm_base_modelled]

CarlingfordRd_KentSt
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Arrival Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Kent St													
1	L2	61	0.0	61	0.0	0.081	8.4	LOS A	0.3	2.0	0.50	0.73	43.4
3	R2	1	0.0	1	0.0	0.029	98.0	LOS F	0.1	0.6	0.96	0.98	11.0
Approach		62	0.0	62	0.0	0.081	9.9	LOS A	0.3	2.0	0.51	0.73	41.4
East: Carlingford Rd													
4	L2	64	0.0	64	0.0	0.305	5.6	LOS A	0.0	0.0	0.00	0.06	56.9
5	T1	1128	0.0	1124	0.0	0.305	0.0	LOS A	0.0	0.0	0.00	0.03	59.2
Approach		1193	0.0	1188 [N1]	0.0	0.305	0.3	NA	0.0	0.0	0.00	0.03	58.9
North: Kent St													
7	L2	2	0.0	2	0.0	0.002	7.6	LOS A	0.0	0.1	0.45	0.56	48.2
Approach		2	0.0	2	0.0	0.002	7.6	LOS A	0.0	0.1	0.45	0.56	48.2
West: Carlingford Rd													
11	T1	720	0.0	720	0.0	0.246	2.0	LOS A	1.6	11.0	0.16	0.04	54.8
12	R2	40	0.0	40	0.0	0.246	18.4	LOS B	1.6	11.0	0.49	0.12	50.2
Approach		760	0.0	760	0.0	0.246	2.9	NA	1.6	11.0	0.18	0.04	54.4
All Vehicles		2017	0.0	2012 [N1]	0.0	0.305	1.6	NA	1.6	11.0	0.08	0.06	56.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 5.0 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Carl_Mids [CarlingfordRd_MidsonRd]

Network: 2017_netwo [2017_pm_base_modelled]

CarlingfordRd_MidsonRd
Signals - Fixed Time Isolated Cycle Time = 130 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Midson Rd													
1	L2	140	0.0	140	0.0	0.890	70.3	LOS E	26.8	187.6	1.00	1.02	25.1
2	T1	415	0.0	415	0.0	0.890	64.8	LOS E	26.8	187.6	1.00	1.01	25.3
3	R2	202	0.0	202	0.0	0.890	70.4	LOS E	26.6	186.2	1.00	1.00	13.2
Approach		757	0.0	757	0.0	0.890	67.3	LOS E	26.8	187.6	1.00	1.01	22.7
East: RoadName													
4	L2	40	0.0	40	0.0	0.891	63.1	LOS E	36.9	258.0	1.00	1.02	25.9
5	T1	934	0.0	930	0.0	0.891	57.3	LOS E	36.9	258.0	0.98	1.01	30.0
6	R2	216	0.0	215	0.0	0.376	43.3	LOS D	10.6	74.4	0.83	0.80	33.6
Approach		1189	0.0	1185 N1	0.0	0.891	54.9	LOS D	36.9	258.0	0.95	0.97	30.4
North: RoadName													
7	L2	91	0.0	91	0.0	0.883	76.7	LOS F	15.6	109.4	1.00	1.00	17.8
8	T1	282	0.0	282	0.0	0.883	71.2	LOS F	15.7	109.9	1.00	1.00	24.1
9	R2	69	0.0	69	0.0	0.883	76.7	LOS F	15.7	109.9	1.00	1.00	27.1
Approach		442	0.0	442	0.0	0.883	73.2	LOS F	15.7	109.9	1.00	1.00	23.5
West: RoadName													
10	L2	16	0.0	16	0.0	0.853	71.4	LOS F	17.4	121.9	1.00	0.97	28.4
11	T1	488	0.0	488	0.0	0.853	65.8	LOS E	17.4	121.9	1.00	0.97	19.2
12	R2	222	0.0	222	0.0	0.777	66.7	LOS E	14.4	100.7	1.00	0.88	25.0
Approach		726	0.0	726	0.0	0.853	66.2	LOS E	17.4	121.9	1.00	0.94	21.4
All Vehicles		3115	0.0	3110 N1	0.0	0.891	63.2	LOS E	36.9	258.0	0.98	0.98	25.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 5.0 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	53	40.1	LOS E	0.2	0.2	0.79	0.79
P2	East Full Crossing	53	59.3	LOS E	0.2	0.2	0.96	0.96
P3	North Full Crossing	53	57.4	LOS E	0.2	0.2	0.94	0.94
P4	West Full Crossing	53	51.9	LOS E	0.2	0.2	0.89	0.89
All Pedestrians		211	52.2	LOS E			0.89	0.89

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.

MOVEMENT SUMMARY

Site: Rawson [Carlingford Rd - Ray St - Rawson St]

Network: 2017_netwo [2017_pm_base_modelled]

Carlingford Rd - Ray St - Rawson St
Signals - Fixed Time Coordinated Cycle Time = 90 seconds (Network Cycle Time - Program)
Common Control Group: carl [Carlingford Rd]

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Rawson St													
1	L2	65	0.0	65	0.0	0.070	15.3	LOS B	1.3	9.1	0.49	0.68	34.5
2	T1	149	0.0	149	0.0	0.272	12.3	LOS A	5.1	35.8	0.58	0.57	35.9
3	R2	64	0.0	64	0.0	0.272	17.9	LOS B	5.1	35.8	0.58	0.57	35.9
Approach		279	0.0	279	0.0	0.272	14.3	LOS A	5.1	35.8	0.56	0.59	35.5
East: Carlingford Rd													
4	L2	22	0.0	22	0.0	0.913	52.5	LOS D	16.3	114.2	1.00	1.12	5.9
5	T1	1089	0.0	1085	0.0	0.913	47.8	LOS D	16.3	114.2	1.00	1.12	5.9
Approach		1112	0.0	1107 N1	0.0	0.913	47.9	LOS D	16.3	114.2	1.00	1.12	5.9
North: Ray St													
7	L2	193	0.0	193	0.0	0.223	16.4	LOS B	4.3	29.9	0.54	0.72	17.8
8	T1	109	0.0	109	0.0	0.130	10.7	LOS A	2.7	18.8	0.52	0.46	22.7
9	R2	17	0.0	17	0.0	0.130	16.2	LOS B	2.7	18.8	0.52	0.46	22.7
Approach		319	0.0	319	0.0	0.223	14.4	LOS A	4.3	29.9	0.53	0.62	19.5
West: Carlingford Rd													
10	L2	33	0.0	33	0.0	0.585	34.1	LOS C	11.3	79.1	0.90	0.77	11.6
11	T1	623	0.0	623	0.0	0.585	28.5	LOS B	13.3	92.8	0.90	0.77	11.7
Approach		656	0.0	656	0.0	0.585	28.7	LOS C	13.3	92.8	0.90	0.77	11.7
All Vehicles		2365	0.0	2360 N1	0.0	0.913	34.1	LOS C	16.3	114.2	0.86	0.89	11.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 5.0 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Blaxland [Epping_Blaxland]

Network: 2017_netwo [2017_pm_base_modelled]

New Site
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Arrival Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Blaxland Rd													
1	L2	553	0.0	553	0.0	0.824	69.7	LOS E	16.4	114.5	1.00	1.04	6.3
2	T1	60	0.0	60	0.0	0.882	90.8	LOS F	5.0	35.0	1.00	0.92	10.0
Approach		613	0.0	613	0.0	0.882	71.8	LOS F	16.4	114.5	1.00	1.03	6.8
East: Epping Rd													
4	L2	1	0.0	1	0.0	0.891	45.5	LOS D	46.6	326.4	0.97	0.94	14.9
5	T1	1806	0.0	1806	0.0	0.891	39.9	LOS C	46.6	326.4	0.97	0.94	14.9
Approach		1807	0.0	1807	0.0	0.891	39.9	LOS C	46.6	326.4	0.97	0.94	14.9
North: Landston Place													
7	L2	39	0.0	39	0.0	0.867	86.8	LOS F	13.9	97.1	1.00	0.96	6.7
8	T1	37	0.0	37	0.0	0.867	81.2	LOS F	13.9	97.1	1.00	0.96	6.7
9	R2	269	0.0	269	0.0	0.867	86.9	LOS F	13.9	97.1	1.00	0.94	6.7
Approach		345	0.0	345	0.0	0.867	86.3	LOS F	13.9	97.1	1.00	0.95	6.7
West: Bridge St													
10	L2	244	0.0	244	0.0	0.182	5.1	LOS A	1.6	11.0	0.14	0.58	42.6
11	T1	905	0.0	905	0.0	0.394	7.5	LOS A	13.9	97.3	0.39	0.35	23.3
12	R2	257	0.0	257	0.0	0.889	83.4	LOS F	14.0	97.9	1.00	1.02	3.2
Approach		1406	0.0	1406	0.0	0.889	21.0	LOS B	14.0	97.9	0.46	0.51	14.1
All Vehicles		4172	0.0	4171 [N1]	0.0	0.891	42.1	LOS C	46.6	326.4	0.81	0.81	11.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 5.0 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Bridge St [Bridge St]

Network: 2017_netwo [2017_pm_base_modelled]

Beecroft Rd - Hight St Bridge St
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: High St													
1	L2	31	0.0	31	0.0	0.028	1.4	LOS A	0.1	0.9	0.40	0.22	48.7
Approach		31	0.0	31	0.0	0.028	1.4	NA	0.1	0.9	0.40	0.22	48.7
East: Bridge													
4	L2	251	0.0	251	0.0	0.704	0.1	LOS A	0.0	0.0	0.00	0.00	54.1
5	T1	334	0.0	334	0.0	0.704	0.1	LOS A	0.0	0.0	0.00	0.00	46.8
6	R2	2045	0.0	2045	0.0	0.704	0.1	LOS A	0.0	0.0	0.00	0.00	52.4
Approach		2629	0.0	2629	0.0	0.704	0.1	NA	0.0	0.0	0.00	0.00	52.3
North: Beecroft Rd													
7	L2	1405	0.0	1405	0.0	0.289	0.0	LOS A	7.0	49.1	0.00	0.00	59.9
Approach		1405	0.0	1405	0.0	0.289	0.0	NA	7.0	49.1	0.00	0.00	59.9
West: Bridge St													
10	L2	120	0.0	120	0.0	0.184	4.8	LOS A	0.8	5.7	0.62	0.58	22.4
Approach		120	0.0	120	0.0	0.184	4.8	LOS A	0.8	5.7	0.62	0.58	22.4
All Vehicles		4185	0.0	4185	0.0	0.704	0.2	NA	7.0	49.1	0.02	0.02	54.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option is selected.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 5.0 %
Number of Iterations: 30 (maximum specified: 30)

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MOVEMENT SUMMARY

Site: Essex St [Essex St]

Network: 2017_netwo [2017_pm_base_modelled]

Epping Essex St
Signals - Fixed Time Isolated Cycle Time = 130 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Essex St													
1	L2	43	0.0	43	0.0	0.559	66.2	LOS E	6.7	47.1	0.99	0.79	6.0
2	T1	65	0.0	65	0.0	0.559	60.6	LOS E	6.7	47.1	0.99	0.79	11.4
3	R2	195	0.0	195	0.0	0.909	81.9	LOS F	14.3	100.1	1.00	0.98	4.7
Approach		303	0.0	303	0.0	0.909	75.1	LOS F	14.3	100.1	1.00	0.91	6.2
East: Epping Rd													
4	L2	11	0.0	11	0.0	0.879	26.1	LOS B	29.8	208.6	0.90	0.89	31.1
5	T1	1548	0.0	1548	0.0	0.879	21.0	LOS B	29.8	208.6	0.90	0.89	28.4
6	R2	4	0.0	4	0.0	0.879	27.0	LOS B	29.3	205.1	0.90	0.90	32.2
Approach		1563	0.0	1563	0.0	0.879	21.1	LOS B	29.8	208.6	0.90	0.89	28.5
North: Essex St													
7	L2	8	0.0	8	0.0	0.206	68.3	LOS E	1.9	13.2	0.97	0.71	10.1
8	T1	67	0.0	67	0.0	0.890	73.1	LOS F	7.9	55.0	0.99	0.90	12.0
9	R2	62	0.0	62	0.0	0.890	83.7	LOS F	7.9	55.0	1.00	0.99	8.2
Approach		138	0.0	138	0.0	0.890	77.5	LOS F	7.9	55.0	0.99	0.92	10.2
West: Epping Rd													
10	L2	65	0.0	65	0.0	0.503	12.9	LOS A	11.7	81.8	0.59	0.55	37.5
11	T1	827	0.0	824	0.0	0.503	10.6	LOS A	11.7	81.8	0.66	0.60	25.3
12	R2	35	0.0	35	0.0	0.503	22.5	LOS B	8.7	60.8	0.81	0.70	24.7
Approach		927	0.0	924 N1	0.0	0.503	11.2	LOS A	11.7	81.8	0.66	0.60	26.4
All Vehicles		2932	0.0	2928 N1	0.0	0.909	26.2	LOS B	29.8	208.6	0.84	0.81	21.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 5.0 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Forrest Gr [Forrest Grove]

Network: 2017_netwo [2017_pm_base_modelled]

Epping Rd Forrest Grove
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Forrest Grove													
1	L2	168	0.0	168	0.0	0.576	15.9	LOS B	1.8	12.9	0.66	0.99	18.3
3	R2	23	0.0	23	0.0	1.195	562.6	LOS F	6.1	42.6	1.00	1.28	0.7
Approach		192	0.0	192	0.0	1.195	82.0	LOS F	6.1	42.6	0.70	1.03	4.5
East: Epping Rd													
4	L2	19	0.0	19	0.0	0.424	5.5	LOS A	3.6	25.4	0.00	0.01	58.9
5	T1	1635	0.0	1635	0.0	0.424	0.0	LOS A	4.3	30.4	0.00	0.01	59.4
Approach		1654	0.0	1654	0.0	0.424	0.1	NA	4.3	30.4	0.00	0.01	59.4
West: Epping Rd													
11	T1	904	0.0	904	0.0	0.343	3.4	LOS A	41.0	287.2	0.18	0.05	29.5
12	R2	57	0.0	57	0.0	0.343	23.3	LOS B	41.0	287.2	0.71	0.18	12.1
Approach		961	0.0	961	0.0	0.343	4.6	NA	41.0	287.2	0.22	0.06	27.2
All Vehicles		2806	0.0	2806	0.0	1.195	7.2	NA	41.0	287.2	0.12	0.09	27.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 5.0 %
Number of Iterations: 30 (maximum specified: 30)

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MOVEMENT SUMMARY

Site: Eppimg_Pem [EppingRd_PembrokeSt]

Network: 2017_netwo [2017_pm_base_modelled]

EppingRd_PembrokeSt
Signals - Fixed Time Coordinated Cycle Time = 90 seconds (Network Cycle Time - Program)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Epping Rd													
1	L2	161	0.0	161	0.0	0.373	11.0	LOS A	8.7	60.7	0.42	0.49	47.4
2	T1	869	0.0	867	0.0	0.373	5.4	LOS A	8.8	61.6	0.42	0.42	53.3
Approach		1031	0.0	1027 N1	0.0	0.373	6.3	LOS A	8.8	61.6	0.42	0.43	52.6
North: Epping Rd													
8	T1	1471	0.0	1471	0.0	0.530	6.4	LOS A	14.8	103.4	0.50	0.46	49.7
9	R2	175	0.0	175	0.0	0.537	16.9	LOS B	4.6	32.5	0.62	0.76	42.5
Approach		1645	0.0	1645	0.0	0.537	7.5	LOS A	14.8	103.4	0.51	0.49	48.5
West: Pembroke St													
10	L2	143	0.0	143	0.0	0.248	42.5	LOS D	2.8	19.9	0.92	0.75	30.4
Approach		143	0.0	143	0.0	0.248	42.5	LOS D	2.8	19.9	0.92	0.75	30.4
All Vehicles		2819	0.0	2816 N1	0.0	0.537	8.8	LOS A	14.8	103.4	0.50	0.48	48.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 5.0 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	53	39.3	LOS D	0.1	0.1	0.94	0.94
P3	North Full Crossing	53	39.3	LOS D	0.1	0.1	0.94	0.94
P4	West Full Crossing	53	6.8	LOS A	0.1	0.1	0.39	0.39
All Pedestrians		158	28.5	LOS C			0.75	0.75

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: Smith St [Smith St]

Network: 2017_netwo [2017_pm_base_modelled]

Epping Rd - Smith St

Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: Epping Rd													
5	T1	1804	0.0	1804	0.0	0.464	0.0	LOS A	11.7	81.6	0.00	0.00	59.5
6	R2	1	0.0	1	0.0	0.464	15.3	LOS B	11.7	81.6	0.01	0.00	53.9
Approach		1805	0.0	1805	0.0	0.464	0.0	NA	11.7	81.6	0.00	0.00	59.5
North: Smith St													
7	L2	19	0.0	19	0.0	0.023	7.7	LOS A	0.1	0.6	0.45	0.64	37.3
9	R2	2	0.0	2	0.0	1.132	1732.1	LOS F	1.5	10.7	1.00	1.05	0.4
Approach		21	0.0	21	0.0	1.132	180.1	LOS F	1.5	10.7	0.51	0.68	3.8
West: Epping Rd													
10	L2	2	0.0	2	0.0	0.242	5.5	LOS A	0.0	0.0	0.00	0.00	56.0
11	T1	942	0.0	942	0.0	0.242	0.0	LOS A	0.0	0.0	0.00	0.00	59.9
Approach		944	0.0	944	0.0	0.242	0.0	NA	0.0	0.0	0.00	0.00	59.9
All Vehicles		2771	0.0	2771	0.0	1.132	1.4	NA	11.7	81.6	0.01	0.01	49.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 5.0 %
Number of Iterations: 30 (maximum specified: 30)

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Appendix K

2026 SIDRA Results

J17056RP4

MOVEMENT SUMMARY

Site: Beec-Carl [Beecroft-Carlingford]

Network: 2017_netwo [2026_am_rms]

Beecroft Rd - Carlingford Rd
Signals - Fixed Time Coordinated Cycle Time = 180 seconds (Network Cycle Time - Program)
Common Control Group: carl [Carlingford Rd]

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Beecroft Rd													
1	L2	702	0.0	544	0.0	0.171	6.1	LOS A	2.6	18.1	0.06	0.55	47.3
2	T1	1343	0.0	1041	0.0	8.897	7142.1	LOS F	81.6	571.2	1.00	2.48	0.2
Approach		2045	0.0	1585 N1	0.0	8.897	4692.4	LOS F	81.6	571.2	0.68	1.81	0.3
North: Beecroft Rd													
8	T1	2157	0.0	2157	0.0	5.686	4267.0	LOS F	116.6	816.0	1.00	3.38	0.4
9	R2	911	0.0	911	0.0	14.709	12387.9	LOS F	116.6	816.0	1.00	2.62	0.1
Approach		3067	0.0	3067	0.0	14.709	6677.6	LOS F	116.6	816.0	1.00	3.16	0.3
West: Carlingford Rd													
10	L2	265	0.0	162	0.0	0.097	4.8	LOS A	0.6	3.9	0.06	0.55	30.7
12	R2	2964	0.0	1808	0.0	0.837	8.9	LOS A	14.0	97.9	0.31	0.67	21.3
Approach		3229	0.0	1970 N1	0.0	0.837	8.6	LOS A	14.0	97.9	0.29	0.66	21.8
All Vehicles		8342	0.0	6622 N1	0.0	14.709	4218.7	LOS F	116.6	816.0	0.71	2.09	0.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 442.5 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Bridge St [Bridge St]

Network: 2017_netwo [2026_am_rms]

Beecroft Rd - Hight St Bridge St
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: High St													
1	L2	14	0.0	14	0.0	0.011	0.8	LOS A	0.1	0.4	0.30	0.12	49.3
Approach		14	0.0	14	0.0	0.011	0.8	NA	0.1	0.4	0.30	0.12	49.3
East: Bridge													
4	L2	223	0.0	167	0.0	0.440	0.0	LOS A	21.3	149.1	0.00	0.00	54.2
5	T1	272	0.0	203	0.0	0.440	0.0	LOS A	21.3	149.1	0.00	0.00	46.7
6	R2	1702	0.0	1274	0.0	0.440	0.0	LOS A	21.3	149.1	0.00	0.00	52.4
Approach		2197	0.0	1644 N1	0.0	0.440	0.0	NA	21.3	149.1	0.00	0.00	52.4
North: Beecroft Rd													
7	L2	5121	0.0	2235	0.0	0.460	0.1	LOS A	81.6	571.2	0.00	0.00	59.8
Approach		5121	0.0	2235 N1	0.0	0.460	0.1	NA	81.6	571.2	0.00	0.00	59.8
West: Bridge St													
10	L2	322	0.0	280	0.0	0.625	6.3	LOS A	2.9	20.3	0.54	0.61	20.5
Approach		322	0.0	280 N1	0.0	0.625	6.3	LOS A	2.9	20.3	0.54	0.61	20.5
All Vehicles		7654	0.0	4172 N1	0.0	0.625	0.5	NA	81.6	571.2	0.04	0.04	55.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option is selected.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 442.5 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: BridgeRaws [BridgeSt_RawsonSt]

Network: 2017_netwo [2026_am_rms]

BridgeSt_RawsonSt
Roundabout

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Rawson St													
1	L2	2	0.0	2	0.0	0.611	5.2	LOS A	2.7	19.0	0.48	0.62	49.5
2	T1	253	0.0	253	0.0	0.611	5.4	LOS A	2.7	19.0	0.48	0.62	47.5
3	R2	234	0.0	234	0.0	0.611	10.1	LOS A	2.7	19.0	0.48	0.62	47.5
Approach		488	0.0	488	0.0	0.611	7.6	LOS A	2.7	19.0	0.48	0.62	47.5
East: Bridge St													
4	L2	19	0.0	15	0.0	0.211	4.2	LOS A	0.8	5.8	0.22	0.52	49.7
5	T1	131	0.0	100	0.0	0.211	4.4	LOS A	0.8	5.8	0.22	0.52	45.8
6	R2	116	0.0	89	0.0	0.211	9.0	LOS A	0.8	5.8	0.22	0.52	32.5
Approach		265	0.0	203 N1	0.0	0.211	6.4	LOS A	0.8	5.8	0.22	0.52	42.5
North: Rawson St													
7	L2	96	0.0	41	0.0	0.087	5.4	LOS A	0.5	3.2	0.48	0.59	39.2
8	T1	66	0.0	28	0.0	0.087	5.7	LOS A	0.5	3.2	0.48	0.59	52.2
9	R2	55	0.0	23	0.0	0.087	10.3	LOS A	0.5	3.2	0.48	0.59	47.8
Approach		217	0.0	92 N1	0.0	0.087	6.7	LOS A	0.5	3.2	0.48	0.59	47.4
West: Bridge St													
10	L2	174	0.0	174	0.0	0.522	8.7	LOS A	2.3	16.4	0.72	0.83	35.7
11	T1	84	0.0	84	0.0	0.522	8.9	LOS A	2.3	16.4	0.72	0.83	35.7
12	R2	16	0.0	16	0.0	0.522	13.5	LOS A	2.3	16.4	0.72	0.83	50.3
Approach		274	0.0	274	0.0	0.522	9.0	LOS A	2.3	16.4	0.72	0.83	37.6
All Vehicles		1244	0.0	1057 N1	0.0	0.611	7.7	LOS A	2.7	19.0	0.49	0.66	44.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 442.5 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: CarIf_Clif [CarlingfordRd_CliffRd]

Network: 2017_netwo [2026_am_rms]

CarlingfordRd_CliffRd
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: Carlingford Rd													
5	T1	1292	0.0	492	0.0	0.126	0.0	LOS A	0.0	0.0	0.00	0.00	60.0
Approach		1292	0.0	492 N1	0.0	0.126	0.0	NA	0.0	0.0	0.00	0.00	60.0
North: RoadName													
7	L2	91	0.0	91	0.0	0.510	19.1	LOS B	1.0	7.1	0.79	0.99	37.1
9	R2	155	0.0	155	0.0	25.789	22456.3	LOS F	152.2	1065.6	1.00	1.38	0.1
Approach		245	0.0	245	0.0	25.789	14174.8	LOS F	152.2	1065.6	0.92	1.24	0.1
West: Carlingford Rd													
10	L2	64	0.0	45	0.0	0.521	5.6	LOS A	79.3	554.9	0.00	0.03	57.7
11	T1	2842	0.0	1984	0.0	0.521	0.1	LOS A	79.3	554.9	0.00	0.01	59.5
Approach		2906	0.0	2029 N1	0.0	0.521	0.2	NA	79.3	554.9	0.00	0.01	59.4
All Vehicles		4443	0.0	2766 N1	0.0	25.789	1257.2	NA	152.2	1065.6	0.08	0.12	0.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 442.5 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Carli_Kent [CarlingfordRd_KentSt]

Network: 2017_netwo [2026_am_rms]

CarlingfordRd_KentSt
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Arrival Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Kent St													
1	L2	121	0.0	121	0.0	0.111	6.5	LOS A	0.4	2.9	0.31	0.59	45.8
3	R2	57	0.0	57	0.0	18.947	16359.5	LOS F	55.4	388.1	1.00	1.37	0.1
Approach		178	0.0	178	0.0	18.947	5231.7	LOS F	55.4	388.1	0.53	0.84	0.2
East: Carlingford Rd													
4	L2	147	0.0	53	0.0	0.139	5.5	LOS A	0.0	0.0	0.00	0.12	56.3
5	T1	1337	0.0	485	0.0	0.139	0.0	LOS A	0.0	0.0	0.00	0.05	58.6
Approach		1484	0.0	538 N1	0.0	0.139	0.6	NA	0.0	0.0	0.00	0.06	58.2
North: Kent St													
7	L2	197	0.0	197	0.0	1.250	264.9	LOS F	28.8	201.3	1.00	4.20	6.2
Approach		197	0.0	197	0.0	1.250	264.9	LOS F	28.8	201.3	1.00	4.20	6.2
West: Carlingford Rd													
11	T1	2642	0.0	1836	0.0	0.572	1.0	LOS A	52.2	365.3	0.16	0.06	56.6
12	R2	236	0.0	164	0.0	0.572	11.4	LOS A	52.2	365.3	0.40	0.15	53.6
Approach		2878	0.0	1999 N1	0.0	0.572	1.9	NA	52.2	365.3	0.18	0.07	56.1
All Vehicles		4737	0.0	2912 N1	0.0	18.947	338.9	NA	55.4	388.1	0.22	0.39	4.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 442.5 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Carl_Mids [CarlingfordRd_MidsonRd]

Network: 2017_netwo [2026_am_rms]

CarlingfordRd_MidsonRd
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Midson Rd													
1	L2	221	0.0	221	0.0	1.007	122.0	LOS F	37.5	262.7	1.00	1.17	17.2
2	T1	147	0.0	147	0.0	1.007	116.5	LOS F	37.5	262.7	1.00	1.17	17.4
3	R2	445	0.0	445	0.0	1.563	575.5	LOS F	102.5	717.6	1.00	1.88	1.9
Approach		814	0.0	814	0.0	1.563	369.2	LOS F	102.5	717.6	1.00	1.56	4.7
East: RoadName													
4	L2	58	0.0	24	0.0	1.406	437.3	LOS F	58.0	406.0	1.00	1.95	5.4
5	T1	1327	0.0	559	0.0	1.406	431.7	LOS F	58.2	407.2	1.00	1.95	6.7
6	R2	74	0.0	31	0.0	0.157	72.0	LOS F	2.1	14.7	0.94	0.73	26.2
Approach		1459	0.0	614 N1	0.0	1.406	413.8	LOS F	58.2	407.2	1.00	1.89	7.0
North: RoadName													
7	L2	222	0.0	222	0.0	1.458	482.5	LOS F	69.2	484.3	1.00	1.98	3.5
8	T1	321	0.0	321	0.0	1.458	476.8	LOS F	70.2	491.5	1.00	2.05	5.3
9	R2	122	0.0	122	0.0	1.458	482.4	LOS F	70.2	491.5	1.00	2.09	6.5
Approach		665	0.0	665	0.0	1.458	479.7	LOS F	70.2	491.5	1.00	2.03	5.0
West: RoadName													
10	L2	53	0.0	53	0.0	1.577	582.2	LOS F	302.7	2119.0	1.00	2.74	5.6
11	T1	2194	0.0	2194	0.0	1.577	578.4	LOS F	302.7	2119.0	1.00	2.75	3.0
12	R2	121	0.0	121	0.0	0.155	34.0	LOS C	5.4	37.7	0.66	0.74	34.7
Approach		2367	0.0	2367	0.0	1.577	550.7	LOS F	302.7	2119.0	0.98	2.65	3.3
All Vehicles		5305	0.0	4461 N1	0.0	1.577	488.1	LOS F	302.7	2119.0	0.99	2.25	4.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 442.5 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	53	69.3	LOS F	0.2	0.2	0.96	0.96
P2	East Full Crossing	53	69.3	LOS F	0.2	0.2	0.96	0.96
P3	North Full Crossing	53	32.7	LOS D	0.1	0.1	0.66	0.66
P4	West Full Crossing	53	61.8	LOS F	0.2	0.2	0.91	0.91
All Pedestrians		211	58.3	LOS E			0.87	0.87

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.

MOVEMENT SUMMARY

Site: Rawson [Carlingford Rd - Ray St - Rawson St]

Network: 2017_netwo [2026_am_rms]

Carlingford Rd - Ray St - Rawson St
Signals - Fixed Time Coordinated Cycle Time = 180 seconds (Network Cycle Time - Program)
Common Control Group: carl [Carlingford Rd]

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Rawson St													
1	L2	48	0.0	46	0.0	2.033	997.3	LOS F	35.0	244.8	1.00	2.14	0.6
2	T1	207	0.0	197	0.0	2.033	991.7	LOS F	35.0	244.8	1.00	2.14	0.6
3	R2	286	0.0	272	0.0	13.456	11247.2	LOS F	35.0	244.8	1.00	1.89	0.1
Approach		542	0.0	515 N1	0.0	13.456	6408.7	LOS F	35.0	244.8	1.00	2.01	0.1
East: Carlingford Rd													
4	L2	420	0.0	157	0.0	0.188	6.7	LOS A	3.8	26.8	0.16	0.40	29.8
5	T1	1192	0.0	445	0.0	0.188	3.3	LOS A	6.7	46.8	0.24	0.29	31.8
Approach		1612	0.0	602 N1	0.0	0.188	4.2	LOS A	6.7	46.8	0.22	0.32	31.3
North: Ray St													
7	L2	57	0.0	57	0.0	0.722	97.1	LOS F	7.3	50.9	1.00	0.86	4.1
8	T1	77	0.0	77	0.0	1.958	675.9	LOS F	23.3	163.2	1.00	1.44	0.6
9	R2	51	0.0	50	0.0	1.958	926.2	LOS F	23.3	163.2	1.00	1.68	0.4
Approach		184	0.0	184	0.0	1.958	566.0	LOS F	23.3	163.2	1.00	1.33	0.7
West: Carlingford Rd													
10	L2	46	0.0	33	0.0	1.261	307.1	LOS F	23.3	163.2	1.00	1.90	1.3
11	T1	2886	0.0	2032	0.0	1.261	301.7	LOS F	23.3	163.2	1.00	1.91	1.3
Approach		2933	0.0	2064 N1	0.0	1.261	301.8	LOS F	23.3	163.2	1.00	1.91	1.3
All Vehicles		5271	0.0	3366 N1	0.0	13.456	1197.8	LOS F	35.0	244.8	0.86	1.61	0.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 442.5 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Blaxland [Epping_Blaxland]

Network: 2017_netwo [2026_am_rms]

New Site
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Blaxland Rd													
1	L2	891	0.0	891	0.0	0.787	44.6	LOS D	20.6	144.2	0.96	0.96	9.3
2	T1	271	0.0	271	0.0	1.492	506.8	LOS F	28.0	195.8	1.00	2.02	2.0
Approach		1161	0.0	1161	0.0	1.492	152.3	LOS F	28.0	195.8	0.97	1.20	3.7
East: Epping Rd													
4	L2	2	0.0	2	0.0	0.002	34.2	LOS C	0.1	0.5	0.62	0.61	16.5
5	T1	1327	0.0	1146	0.0	1.493	512.9	LOS F	46.6	326.4	1.00	2.51	1.5
Approach		1329	0.0	1147 N1	0.0	1.493	512.2	LOS F	46.6	326.4	1.00	2.51	1.5
North: Landston Place													
7	L2	1	0.0	1	0.0	1.495	514.0	LOS F	54.3	380.1	1.00	1.98	1.2
8	T1	503	0.0	503	0.0	1.495	508.4	LOS F	54.5	381.7	1.00	1.98	1.2
Approach		504	0.0	504	0.0	1.495	508.4	LOS F	54.5	381.7	1.00	1.98	1.2
West: Bridge St													
10	L2	348	0.0	150	0.0	0.122	6.5	LOS A	1.8	12.7	0.22	0.60	39.8
11	T1	3298	0.0	1424	0.0	0.634	12.9	LOS A	14.0	97.9	0.57	0.52	16.2
12	R2	1475	0.0	637	0.0	1.508	524.9	LOS F	14.0	97.9	1.00	2.47	0.5
Approach		5121	0.0	2211 N1	0.0	1.508	159.9	LOS F	14.0	97.9	0.67	1.09	1.9
All Vehicles		8116	0.0	5024 N1	0.0	1.508	273.6	LOS F	54.5	381.7	0.85	1.53	1.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 442.5 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Essex St [Essex St]

Network: 2017_netwo [2026_am_rms]

Epping Essex St
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Essex St													
1	L2	21	0.0	21	0.0	0.113	72.6	LOS F	1.4	10.0	0.94	0.71	5.2
2	T1	44	0.0	44	0.0	0.227	68.1	LOS E	3.0	21.2	0.96	0.72	10.8
3	R2	252	0.0	252	0.0	1.370	406.8	LOS F	48.3	338.0	1.00	1.59	1.0
Approach		317	0.0	317	0.0	1.370	337.3	LOS F	48.3	338.0	0.99	1.41	1.3
East: Epping Rd													
4	L2	31	0.0	29	0.0	0.875	56.6	LOS E	26.1	183.0	1.00	0.98	14.0
5	T1	817	0.0	788	0.0	0.875	51.0	LOS D	26.2	183.5	1.00	0.98	10.2
Approach		847	0.0	817 N1	0.0	0.875	51.2	LOS D	26.2	183.5	1.00	0.98	10.4
North: Essex St													
7	L2	24	0.0	24	0.0	0.026	25.3	LOS B	0.9	6.1	0.53	0.67	20.3
8	T1	53	0.0	53	0.0	0.054	20.1	LOS B	1.9	13.4	0.54	0.42	29.3
9	R2	623	0.0	623	0.0	1.376	415.5	LOS F	128.2	897.4	1.00	1.68	1.8
Approach		700	0.0	700	0.0	1.376	372.3	LOS F	128.2	897.4	0.95	1.55	2.0
West: Epping Rd													
10	L2	108	0.0	43	0.0	1.359	380.8	LOS F	28.0	195.8	1.00	2.05	2.3
11	T1	3083	0.0	1227	0.0	1.359	375.3	LOS F	28.0	195.8	1.00	2.05	1.2
Approach		3192	0.0	1270 N1	0.0	1.359	375.5	LOS F	28.0	195.8	1.00	2.05	1.2
All Vehicles		5056	0.0	3104 N1	0.0	1.376	285.5	LOS F	128.2	897.4	0.99	1.59	2.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 442.5 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Forrest Gr [Forrest Grove]

Network: 2017_netwo [2026_am_rms]

Epping Rd Forrest Grove
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Forrest Grove													
1	L2	39	0.0	39	0.0	0.048	8.3	LOS A	0.2	1.4	0.50	0.65	27.4
Approach		39	0.0	39	0.0	0.048	8.3	LOS A	0.2	1.4	0.50	0.65	27.4
East: Epping Rd													
4	L2	174	0.0	149	0.0	0.080	5.5	LOS A	0.0	0.0	0.00	0.58	35.7
5	T1	1276	0.0	1098	0.0	0.282	0.0	LOS A	28.0	195.8	0.00	0.00	59.9
Approach		1449	0.0	1247 N1	0.0	0.282	0.7	NA	28.0	195.8	0.00	0.07	55.3
West: Epping Rd													
11	T1	3192	0.0	1334	0.0	0.342	0.0	LOS A	11.7	81.6	0.00	0.00	59.9
Approach		3192	0.0	1334 N1	0.0	0.342	0.0	NA	11.7	81.6	0.00	0.00	59.9
All Vehicles		4680	0.0	2620 N1	0.0	0.342	0.4	NA	28.0	195.8	0.01	0.04	55.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 442.5 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Eppimg_Pem [EppingRd_PembrokeSt] **Network: 2017_netwo [2026_am_rms]**

EppingRd_PembrokeSt
Signals - Fixed Time Coordinated Cycle Time = 180 seconds (Network Cycle Time - Program)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Epping Rd													
1	L2	8	0.0	3	0.0	0.349	9.4	LOS A	11.5	80.8	0.26	0.24	48.2
2	T1	3392	0.0	1122	0.0	0.349	3.9	LOS A	11.5	80.8	0.26	0.24	54.5
Approach		3400	0.0	1125 N1	0.0	0.349	3.9	LOS A	11.5	80.8	0.26	0.24	54.5
North: Epping Rd													
8	T1	742	0.0	742	0.0	0.230	3.4	LOS A	6.7	46.8	0.23	0.20	54.0
9	R2	299	0.0	299	0.0	1.006	137.4	LOS F	44.6	312.2	1.00	1.16	14.7
Approach		1041	0.0	1041	0.0	1.006	41.9	LOS C	44.6	312.2	0.45	0.48	27.1
West: Pembroke St													
10	L2	848	0.0	848	0.0	2.164	1110.7	LOS F	133.3	933.1	1.00	2.00	2.3
Approach		848	0.0	848	0.0	2.164	1110.7	LOS F	133.3	933.1	1.00	2.00	2.3
All Vehicles		5289	0.0	3014 N1	0.0	2.164	328.5	LOS F	133.3	933.1	0.54	0.82	6.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 442.5 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	53	83.3	LOS F	0.3	0.3	0.96	0.96
P3	North Full Crossing	53	84.3	LOS F	0.3	0.3	0.97	0.97
P4	West Full Crossing	53	4.5	LOS A	0.1	0.1	0.22	0.22
All Pedestrians		158	57.4	LOS E			0.72	0.72

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: Smith St [Smith St]

Network: 2017_netwo [2026_am_rms]

Epping Rd - Smith St

Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: Epping Rd													
5	T1	1327	0.0	1162	0.0	0.199	0.0	LOS A	11.7	81.6	0.00	0.00	60.0
Approach		1327	0.0	1162[N1]	0.0	0.199	0.0	NA	11.7	81.6	0.00	0.00	60.0
North: Smith St													
7	L2	13	0.0	13	0.0	0.037	9.0	LOS A	0.1	0.5	0.53	0.71	35.1
Approach		13	0.0	13	0.0	0.037	9.0	LOS A	0.1	0.5	0.53	0.71	35.1
West: Epping Rd													
10	L2	120	0.0	51	0.0	0.358	5.6	LOS A	46.6	326.4	0.00	0.04	55.2
11	T1	3179	0.0	1342	0.0	0.358	0.0	LOS A	46.6	326.4	0.00	0.02	59.0
Approach		3299	0.0	1392[N1]	0.0	0.358	0.2	NA	46.6	326.4	0.00	0.02	58.7
All Vehicles		4639	0.0	2567[N1]	0.0	0.358	0.2	NA	46.6	326.4	0.00	0.02	58.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 442.5 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Bridge St [Bridge St]

Network: 2017_netwo [2026_pm_rms]

Beecroft Rd - Hight St Bridge St
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: High St													
1	L2	48	0.0	48	0.0	0.041	1.0	LOS A	0.2	1.4	0.34	0.17	49.0
Approach		48	0.0	48	0.0	0.041	1.0	NA	0.2	1.4	0.34	0.17	49.0
East: Bridge													
4	L2	313	0.0	152	0.0	0.539	0.0	LOS A	21.3	149.1	0.00	0.00	54.4
5	T1	501	0.0	243	0.0	0.539	0.0	LOS A	21.3	149.1	0.00	0.00	48.0
6	R2	3339	0.0	1620	0.0	0.539	0.0	LOS A	21.3	149.1	0.00	0.00	52.6
Approach		4153	0.0	2015 N1	0.0	0.539	0.0	NA	21.3	149.1	0.00	0.00	52.6
North: Beecroft Rd													
7	L2	2568	0.0	1899	0.0	0.391	0.0	LOS A	81.6	571.2	0.00	0.00	59.9
Approach		2568	0.0	1899 N1	0.0	0.391	0.0	NA	81.6	571.2	0.00	0.00	59.9
West: Bridge St													
10	L2	365	0.0	337	0.0	0.891	23.9	LOS B	8.5	59.6	0.67	1.34	10.3
Approach		365	0.0	337 N1	0.0	0.891	23.9	LOS B	8.5	59.6	0.67	1.34	10.3
All Vehicles		7135	0.0	4299 N1	0.0	0.891	1.9	NA	81.6	571.2	0.06	0.11	50.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option is selected.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 134.8 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Beec-Carl [Beecroft-Carlingford]

Network: 2017_netwo [2026_pm_rms]

Beecroft Rd - Carlingford Rd
Signals - Fixed Time Coordinated Cycle Time = 180 seconds (Network Cycle Time - Program)
Common Control Group: carl [Carlingford Rd]

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Beecroft Rd													
1	L2	1377	0.0	727	0.0	0.310	6.9	LOS A	9.8	68.8	0.08	0.56	46.0
2	T1	2327	0.0	1229	0.0	4.849	3507.6	LOS F	81.6	571.2	1.00	2.90	0.4
Approach		3704	0.0	1956 N1	0.0	4.849	2206.4	LOS F	81.6	571.2	0.66	2.03	0.6
North: Beecroft Rd													
8	T1	1136	0.0	1136	0.0	1.658	662.3	LOS F	116.6	816.0	1.00	2.46	2.6
9	R2	557	0.0	557	0.0	4.906	3581.8	LOS F	116.6	816.0	1.00	2.64	0.5
Approach		1693	0.0	1693	0.0	4.906	1622.8	LOS F	116.6	816.0	1.00	2.52	1.1
West: Carlingford Rd													
10	L2	472	0.0	336	0.0	0.214	4.9	LOS A	1.0	7.0	0.05	0.55	30.5
12	R2	1433	0.0	1021	0.0	0.560	9.1	LOS A	8.0	55.7	0.19	0.61	21.0
Approach		1904	0.0	1357 N1	0.0	0.560	8.0	LOS A	8.0	55.7	0.15	0.60	22.8
All Vehicles		7301	0.0	5006 N1	0.0	4.906	1413.2	LOS F	116.6	816.0	0.64	1.81	0.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 134.8 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: BridgeRaws [BridgeSt_RawsonSt]

Network: 2017_netwo [2026_pm_rms]

BridgeSt_RawsonSt
Roundabout

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Rawson St													
1	L2	3	0.0	3	0.0	0.727	8.5	LOS A	4.6	32.0	0.62	0.79	47.5
2	T1	280	0.0	280	0.0	0.727	8.7	LOS A	4.6	32.0	0.62	0.79	45.0
3	R2	231	0.0	231	0.0	0.727	13.4	LOS A	4.6	32.0	0.62	0.79	45.0
Approach		514	0.0	514	0.0	0.727	10.8	LOS A	4.6	32.0	0.62	0.79	45.0
East: Bridge St													
4	L2	21	0.0	11	0.0	0.277	4.4	LOS A	1.3	9.1	0.31	0.51	49.8
5	T1	360	0.0	191	0.0	0.277	4.6	LOS A	1.3	9.1	0.31	0.51	46.0
6	R2	154	0.0	82	0.0	0.277	9.2	LOS A	1.3	9.1	0.31	0.51	32.6
Approach		535	0.0	284 N1	0.0	0.277	5.9	LOS A	1.3	9.1	0.31	0.51	43.8
North: Rawson St													
7	L2	75	0.0	44	0.0	0.136	5.4	LOS A	0.8	5.3	0.49	0.60	38.8
8	T1	94	0.0	56	0.0	0.136	5.6	LOS A	0.8	5.3	0.49	0.60	51.9
9	R2	75	0.0	44	0.0	0.136	10.3	LOS A	0.8	5.3	0.49	0.60	47.3
Approach		243	0.0	145 N1	0.0	0.136	7.0	LOS A	0.8	5.3	0.49	0.60	48.2
West: Bridge St													
10	L2	100	0.0	100	0.0	0.341	7.3	LOS A	1.4	9.7	0.71	0.75	37.8
11	T1	75	0.0	75	0.0	0.341	7.5	LOS A	1.4	9.7	0.71	0.75	37.8
12	R2	6	0.0	6	0.0	0.341	12.2	LOS A	1.4	9.7	0.71	0.75	51.5
Approach		181	0.0	181	0.0	0.341	7.6	LOS A	1.4	9.7	0.71	0.75	38.8
All Vehicles		1473	0.0	1123 N1	0.0	0.727	8.6	LOS A	4.6	32.0	0.54	0.69	44.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 134.8 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Carlf_Clif [CarlingfordRd_CliffRd]

Network: 2017_netwo [2026_pm_rms]

CarlingfordRd_CliffRd
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: Carlingford Rd													
5	T1	1860	0.0	963	0.0	0.247	0.0	LOS A	0.0	0.0	0.00	0.00	59.9
Approach		1860	0.0	963[N1]	0.0	0.247	0.0	NA	0.0	0.0	0.00	0.00	59.9
North: RoadName													
7	L2	49	0.0	49	0.0	0.135	8.5	LOS A	0.2	1.6	0.50	0.76	47.1
9	R2	101	0.0	101	0.0	3.553	2390.5	LOS F	55.0	384.8	1.00	2.26	0.7
Approach		151	0.0	151	0.0	3.553	1607.6	LOS F	55.0	384.8	0.84	1.76	1.1
West: Carlingford Rd													
10	L2	127	0.0	104	0.0	0.336	5.6	LOS A	31.7	221.9	0.00	0.10	57.1
11	T1	1467	0.0	1200	0.0	0.336	0.0	LOS A	31.7	221.9	0.00	0.04	58.8
Approach		1595	0.0	1304[N1]	0.0	0.336	0.5	NA	31.7	221.9	0.00	0.05	58.5
All Vehicles		3605	0.0	2418[N1]	0.0	3.553	100.4	NA	55.0	384.8	0.05	0.14	8.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 134.8 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Carli_Kent [CarlingfordRd_KentSt]

Network: 2017_netwo [2026_pm_rms]

CarlingfordRd_KentSt
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Kent St													
1	L2	107	0.0	107	0.0	0.168	7.5	LOS A	0.4	3.1	0.44	0.70	44.6
3	R2	63	0.0	63	0.0	6.771	5382.9	LOS F	50.2	351.5	1.00	1.51	0.2
Approach		171	0.0	171	0.0	6.771	1998.4	LOS F	50.2	351.5	0.65	1.00	0.6
East: Carlingford Rd													
4	L2	165	0.0	84	0.0	0.330	5.6	LOS A	0.0	0.0	0.00	0.10	56.4
5	T1	1785	0.0	907	0.0	0.330	0.0	LOS A	0.0	0.0	0.00	0.05	58.7
Approach		1951	0.0	991 [N1]	0.0	0.330	0.5	NA	0.0	0.0	0.00	0.05	58.4
North: Kent St													
7	L2	42	0.0	42	0.0	0.090	12.3	LOS A	0.3	2.3	0.67	0.86	43.0
Approach		42	0.0	42	0.0	0.090	12.3	LOS A	0.3	2.3	0.67	0.86	43.0
West: Carlingford Rd													
11	T1	1538	0.0	1293	0.0	0.465	2.1	LOS A	53.4	373.7	0.20	0.07	54.4
12	R2	141	0.0	119	0.0	0.465	16.7	LOS B	52.9	370.3	0.66	0.22	48.9
Approach		1679	0.0	1412 [N1]	0.0	0.465	3.3	NA	53.4	373.7	0.24	0.08	53.6
All Vehicles		3842	0.0	2615 [N1]	0.0	6.771	132.5	NA	53.4	373.7	0.18	0.14	9.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 134.8 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Carl_Mids [CarlingfordRd_MidsonRd]

Network: 2017_netwo [2026_pm_rms]

CarlingfordRd_MidsonRd
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Midson Rd													
1	L2	255	0.0	255	0.0	1.219	277.6	LOS F	73.4	514.1	1.00	1.65	8.7
2	T1	374	0.0	374	0.0	1.219	272.1	LOS F	73.4	514.1	1.00	1.64	8.8
3	R2	295	0.0	295	0.0	1.219	277.7	LOS F	73.1	512.0	1.00	1.62	3.7
Approach		923	0.0	923	0.0	1.219	275.4	LOS F	73.4	514.1	1.00	1.64	7.2
East: RoadName													
4	L2	36	0.0	19	0.0	1.232	288.5	LOS F	80.4	562.7	1.00	1.90	8.0
5	T1	1735	0.0	942	0.0	1.232	283.2	LOS F	80.4	562.7	1.00	1.89	9.8
6	R2	121	0.0	66	0.0	0.171	58.0	LOS E	3.9	27.6	0.86	0.75	29.4
Approach		1892	0.0	1027 N1	0.0	1.232	268.9	LOS F	80.4	562.7	0.99	1.81	10.2
North: RoadName													
7	L2	92	0.0	92	0.0	0.953	101.8	LOS F	19.5	136.2	1.00	1.10	14.4
8	T1	228	0.0	228	0.0	0.953	96.3	LOS F	19.5	136.2	1.00	1.10	19.9
9	R2	116	0.0	116	0.0	0.953	101.9	LOS F	19.4	135.6	1.00	1.10	22.7
Approach		436	0.0	436	0.0	0.953	99.0	LOS F	19.5	136.2	1.00	1.10	19.7
West: RoadName													
10	L2	81	0.0	81	0.0	1.211	267.0	LOS F	116.9	818.0	1.00	1.85	10.9
11	T1	1231	0.0	1231	0.0	1.211	263.1	LOS F	116.9	818.0	1.00	1.87	6.1
12	R2	276	0.0	276	0.0	0.578	49.9	LOS D	16.1	113.0	0.86	0.81	29.2
Approach		1587	0.0	1587	0.0	1.211	226.2	LOS F	116.9	818.0	0.98	1.69	7.9
All Vehicles		4838	0.0	3973 N1	0.0	1.232	234.7	LOS F	116.9	818.0	0.99	1.64	9.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 134.8 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	53	57.3	LOS E	0.2	0.2	0.88	0.88
P2	East Full Crossing	53	69.3	LOS F	0.2	0.2	0.96	0.96
P3	North Full Crossing	53	44.2	LOS E	0.2	0.2	0.77	0.77
P4	West Full Crossing	53	60.9	LOS F	0.2	0.2	0.90	0.90
All Pedestrians		211	57.9	LOS E			0.88	0.88

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.

MOVEMENT SUMMARY

Site: Rawson [Carlingford Rd - Ray St - Rawson St]

Network: 2017_netwo [2026_pm_rms]

Carlingford Rd - Ray St - Rawson St
Signals - Fixed Time Coordinated Cycle Time = 180 seconds (Network Cycle Time - Program)
Common Control Group: carl [Carlingford Rd]

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Rawson St													
1	L2	129	0.0	117	0.0	1.018	164.5	LOS F	15.3	107.1	1.00	1.10	3.4
2	T1	262	0.0	238	0.0	3.614	2419.1	LOS F	35.0	244.8	1.00	2.96	0.2
3	R2	376	0.0	341	0.0	3.614	2424.6	LOS F	35.0	244.8	1.00	2.96	0.2
Approach		767	0.0	696 N1	0.0	3.614	2041.4	LOS F	35.0	244.8	1.00	2.64	0.3
East: Carlingford Rd													
4	L2	267	0.0	123	0.0	0.325	14.6	LOS B	14.0	97.9	0.40	0.46	17.1
5	T1	1666	0.0	765	0.0	0.325	12.9	LOS A	14.0	97.9	0.51	0.50	15.3
Approach		1934	0.0	888 N1	0.0	0.325	13.1	LOS A	14.0	97.9	0.49	0.49	15.5
North: Ray St													
7	L2	48	0.0	48	0.0	0.313	68.1	LOS E	6.4	44.8	0.88	0.75	5.8
8	T1	39	0.0	39	0.0	0.313	62.6	LOS E	6.4	44.8	0.88	0.75	5.8
9	R2	63	0.0	63	0.0	1.432	471.3	LOS F	13.9	97.4	1.00	1.30	0.8
Approach		151	0.0	150 N1	0.0	1.432	235.8	LOS F	13.9	97.4	0.93	0.98	1.6
West: Carlingford Rd													
10	L2	38	0.0	31	0.0	0.899	46.2	LOS D	23.3	163.2	0.88	0.91	8.7
11	T1	1480	0.0	1220	0.0	0.899	41.1	LOS C	23.3	163.2	0.88	0.91	8.7
Approach		1518	0.0	1251 N1	0.0	0.899	41.2	LOS C	23.3	163.2	0.88	0.91	8.7
All Vehicles		4369	0.0	2985 N1	0.0	3.614	508.7	LOS F	35.0	244.8	0.80	1.19	0.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 134.8 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Blaxland [Epping_Blaxland]

Network: 2017_netwo [2026_pm_rms]

New Site
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Blaxland Rd													
1	L2	1304	0.0	1304	0.0	1.092	144.0	LOS F	28.0	195.8	1.00	1.22	2.6
2	T1	388	0.0	388	0.0	2.016	966.4	LOS F	28.0	195.8	1.00	2.61	1.1
Approach		1693	0.0	1693	0.0	2.016	332.7	LOS F	28.0	195.8	1.00	1.54	1.7
East: Epping Rd													
4	L2	12	0.0	7	0.0	0.009	31.9	LOS C	0.3	2.0	0.60	0.64	17.3
5	T1	2849	0.0	1690	0.0	2.063	1022.3	LOS F	46.6	326.4	1.00	3.37	0.7
Approach		2861	0.0	1697 N1	0.0	2.063	1018.3	LOS F	46.6	326.4	1.00	3.36	0.7
North: Landston Place													
7	L2	2	0.0	2	0.0	2.018	970.7	LOS F	45.1	315.7	1.00	2.00	0.6
8	T1	313	0.0	313	0.0	2.018	965.1	LOS F	45.1	316.0	1.00	2.00	0.6
Approach		315	0.0	315	0.0	2.018	965.2	LOS F	45.1	316.0	1.00	2.00	0.6
West: Bridge St													
10	L2	404	0.0	318	0.0	0.260	7.0	LOS A	4.5	31.7	0.25	0.62	39.0
11	T1	1021	0.0	804	0.0	0.360	7.6	LOS A	12.4	87.0	0.38	0.34	23.1
12	R2	1143	0.0	900	0.0	2.025	982.9	LOS F	14.0	97.9	1.00	3.18	0.3
Approach		2568	0.0	2022 N1	0.0	2.025	441.6	LOS F	14.0	97.9	0.64	1.65	0.8
All Vehicles		7437	0.0	5727 N1	0.0	2.063	609.1	LOS F	46.6	326.4	0.87	2.14	0.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 134.8 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Essex St [Essex St] **Network: 2017_netwo [2026_pm_rms]**

Epping Essex St
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Essex St													
1	L2	13	0.0	13	0.0	0.093	77.0	LOS F	0.9	6.2	0.96	0.69	5.0
2	T1	61	0.0	61	0.0	0.427	74.2	LOS F	4.4	31.0	1.00	0.76	10.1
3	R2	165	0.0	165	0.0	1.213	275.8	LOS F	25.6	179.3	1.00	1.38	1.4
Approach		239	0.0	239	0.0	1.213	213.8	LOS F	25.6	179.3	1.00	1.18	2.3
East: Epping Rd													
4	L2	54	0.0	35	0.0	1.194	237.7	LOS F	36.1	253.0	1.00	1.73	3.6
5	T1	2500	0.0	1609	0.0	1.194	232.1	LOS F	36.1	253.0	1.00	1.74	2.4
Approach		2554	0.0	1643 N1	0.0	1.194	232.3	LOS F	36.1	253.0	1.00	1.74	2.4
North: Essex St													
7	L2	21	0.0	21	0.0	0.027	32.8	LOS C	0.9	6.2	0.62	0.68	17.0
8	T1	20	0.0	20	0.0	0.025	27.2	LOS B	0.8	5.9	0.62	0.45	24.8
9	R2	449	0.0	449	0.0	1.185	255.0	LOS F	72.2	505.6	1.00	1.41	2.8
Approach		491	0.0	491	0.0	1.185	236.2	LOS F	72.2	505.6	0.97	1.34	3.1
West: Epping Rd													
10	L2	51	0.0	38	0.0	0.552	32.3	LOS C	16.9	118.0	0.86	0.75	21.4
11	T1	962	0.0	722	0.0	0.552	26.8	LOS B	16.9	118.6	0.86	0.74	14.2
Approach		1013	0.0	759 N1	0.0	0.552	27.1	LOS B	16.9	118.6	0.86	0.74	14.6
All Vehicles		4296	0.0	3132 N1	0.0	1.213	181.7	LOS F	72.2	505.6	0.96	1.39	3.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 134.8 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Forrest Gr [Forrest Grove]

Network: 2017_netwo [2026_pm_rms]

Epping Rd Forrest Grove
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Forrest Grove													
1	L2	24	0.0	24	0.0	0.042	10.8	LOS A	0.2	1.2	0.61	0.74	23.5
Approach		24	0.0	24	0.0	0.042	10.8	LOS A	0.2	1.2	0.61	0.74	23.5
East: Epping Rd													
4	L2	137	0.0	80	0.0	0.043	5.5	LOS A	0.0	0.0	0.00	0.58	35.7
5	T1	2824	0.0	1660	0.0	0.426	0.0	LOS A	28.0	195.8	0.00	0.00	59.9
Approach		2961	0.0	1740 N1	0.0	0.426	0.3	NA	28.0	195.8	0.00	0.03	58.0
West: Epping Rd													
11	T1	1013	0.0	820	0.0	0.218	0.0	LOS A	0.0	0.0	0.00	0.00	60.0
Approach		1013	0.0	820 N1	0.0	0.218	0.0	NA	0.0	0.0	0.00	0.00	60.0
All Vehicles		3998	0.0	2584 N1	0.0	0.426	0.3	NA	28.0	195.8	0.01	0.02	57.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 134.8 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Eppimg_Pem [EppingRd_PembrokeSt] **Network: 2017_netwo [2026_pm_rms]**

EppingRd_PembrokeSt
Signals - Fixed Time Coordinated Cycle Time = 180 seconds (Network Cycle Time - Program)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Epping Rd													
1	L2	34	0.0	26	0.0	0.266	9.1	LOS A	8.0	56.0	0.24	0.24	48.3
2	T1	1067	0.0	830	0.0	0.266	3.6	LOS A	8.0	56.2	0.24	0.23	54.7
Approach		1101	0.0	857 N1	0.0	0.266	3.7	LOS A	8.0	56.2	0.24	0.23	54.6
North: Epping Rd													
8	T1	2491	0.0	2491	0.0	1.543	557.5	LOS F	321.4	2249.8	1.00	2.47	3.1
9	R2	264	0.0	264	0.0	0.588	14.0	LOS A	9.3	65.4	0.43	0.72	44.6
Approach		2755	0.0	2755	0.0	1.543	505.4	LOS F	321.4	2249.8	0.95	2.30	3.6
West: Pembroke St													
10	L2	444	0.0	444	0.0	1.133	225.0	LOS F	33.2	232.1	1.00	1.20	9.6
Approach		444	0.0	444	0.0	1.133	225.0	LOS F	33.2	232.1	1.00	1.20	9.6
All Vehicles		4300	0.0	4055 N1	0.0	1.543	368.7	LOS F	321.4	2249.8	0.80	1.74	5.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 134.8 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	53	83.3	LOS F	0.3	0.3	0.96	0.96
P3	North Full Crossing	53	84.3	LOS F	0.3	0.3	0.97	0.97
P4	West Full Crossing	53	4.5	LOS A	0.1	0.1	0.22	0.22
All Pedestrians		158	57.4	LOS E			0.72	0.72

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: Smith St [Smith St]

Network: 2017_netwo [2026_pm_rms]

Epping Rd - Smith St

Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: Epping Rd													
5	T1	2849	0.0	1685	0.0	0.288	0.0	LOS A	11.7	81.6	0.00	0.00	59.9
Approach		2849	0.0	1685[N1]	0.0	0.288	0.0	NA	11.7	81.6	0.00	0.00	59.9
North: Smith St													
7	L2	17	0.0	17	0.0	0.019	7.3	LOS A	0.1	0.5	0.42	0.61	38.0
Approach		17	0.0	17	0.0	0.019	7.3	LOS A	0.1	0.5	0.42	0.61	38.0
West: Epping Rd													
10	L2	7	0.0	6	0.0	0.212	5.5	LOS A	0.0	0.0	0.00	0.01	55.9
11	T1	1015	0.0	821	0.0	0.212	0.0	LOS A	0.0	0.0	0.00	0.00	59.8
Approach		1022	0.0	826[N1]	0.0	0.212	0.0	NA	0.0	0.0	0.00	0.00	59.7
All Vehicles		3888	0.0	2529[N1]	0.0	0.288	0.1	NA	11.7	81.6	0.00	0.01	59.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 134.8 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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Appendix L

2036 SIDRA Results

J17056RP4

MOVEMENT SUMMARY

Site: Carl_Mids [CarlingfordRd_MidsonRd]

Network: 2017_netwo [Epping_2036_am_RMS_Council]

CarlingfordRd_MidsonRd
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Midson Rd													
1	L2	248	0.0	248	0.0	1.106	186.7	LOS F	59.7	417.6	1.00	1.41	12.2
2	T1	214	0.0	214	0.0	1.106	181.2	LOS F	59.7	417.6	1.00	1.41	12.3
3	R2	485	0.0	485	0.0	2.095	1050.1	LOS F	144.2	1009.6	1.00	2.30	1.0
Approach		947	0.0	947	0.0	2.095	627.7	LOS F	144.2	1009.6	1.00	1.86	3.0
East: RoadName													
4	L2	72	0.0	30	0.0	1.590	596.2	LOS F	76.3	534.4	1.00	2.22	4.1
5	T1	1525	0.0	630	0.0	1.590	590.7	LOS F	76.6	536.2	1.00	2.22	5.1
6	R2	69	0.0	29	0.0	0.145	71.9	LOS F	1.9	13.5	0.94	0.72	26.3
Approach		1666	0.0	688 N1	0.0	1.590	569.3	LOS F	76.6	536.2	1.00	2.15	5.2
North: RoadName													
7	L2	253	0.0	253	0.0	1.972	935.1	LOS F	90.3	632.1	1.00	2.39	1.9
8	T1	400	0.0	400	0.0	1.972	927.4	LOS F	128.0	895.9	1.00	2.65	2.9
9	R2	122	0.0	122	0.0	1.972	932.5	LOS F	128.0	895.9	1.00	2.71	3.6
Approach		775	0.0	775	0.0	1.972	930.7	LOS F	128.0	895.9	1.00	2.58	2.7
West: RoadName													
10	L2	65	0.0	65	0.0	2.530	1444.8	LOS F	437.6	3063.5	1.00	3.84	2.4
11	T1	2353	0.0	2353	0.0	2.530	1440.6	LOS F	437.6	3063.5	1.00	3.83	1.2
12	R2	135	0.0	135	0.0	0.184	37.0	LOS C	6.3	44.3	0.69	0.75	33.5
Approach		2553	0.0	2553	0.0	2.530	1366.6	LOS F	437.6	3063.5	0.98	3.67	1.4
All Vehicles		5941	0.0	4963 N1	0.0	2.530	1046.9	LOS F	437.6	3063.5	0.99	2.94	2.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 146.2 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	53	69.3	LOS F	0.2	0.2	0.96	0.96
P2	East Full Crossing	53	69.3	LOS F	0.2	0.2	0.96	0.96
P3	North Full Crossing	53	35.4	LOS D	0.2	0.2	0.69	0.69
P4	West Full Crossing	53	58.2	LOS E	0.2	0.2	0.88	0.88
All Pedestrians		211	58.0	LOS E			0.87	0.87

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

MOVEMENT SUMMARY

Site: Beec-Carl [Beecroft-Carlingford]

Network: 2017_netwo [Epping_2036_am_RMS_Council]

Beecroft Rd - Carlingford Rd
Signals - Fixed Time Coordinated Cycle Time = 180 seconds (Network Cycle Time - Program)
Common Control Group: carl [Carlingford Rd]

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Beecroft Rd													
1	L2	832	0.0	595	0.0	0.187	6.2	LOS A	2.9	20.1	0.06	0.55	47.3
2	T1	1627	0.0	1165	0.0	9.956	8097.3	LOS F	81.6	571.2	1.00	2.50	0.2
Approach		2459	0.0	1760 N1	0.0	9.956	5361.0	LOS F	81.6	571.2	0.68	1.84	0.2
North: Beecroft Rd													
8	T1	2183	0.0	2183	0.0	5.752	4327.4	LOS F	116.6	816.0	1.00	3.39	0.4
9	R2	941	0.0	941	0.0	15.202	12832.7	LOS F	116.6	816.0	1.00	2.63	0.1
Approach		3124	0.0	3124	0.0	15.202	6889.3	LOS F	116.6	816.0	1.00	3.16	0.3
West: Carlingford Rd													
10	L2	335	0.0	159	0.0	0.095	4.7	LOS A	0.4	3.0	0.05	0.55	30.9
12	R2	3422	0.0	1627	0.0	0.756	9.3	LOS A	14.0	97.9	0.33	0.67	20.6
Approach		3757	0.0	1786 N1	0.0	0.756	8.9	LOS A	14.0	97.9	0.30	0.66	21.3
All Vehicles		9340	0.0	6671 N1	0.0	15.202	4643.5	LOS F	116.6	816.0	0.73	2.14	0.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 146.2 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: BridgeRaws [BridgeSt_RawsonSt]

Network: 2017_netwo [Epping_2036_am_RMS_Council]

BridgeSt_RawsonSt
Roundabout

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Rawson St													
1	L2	2	0.0	2	0.0	0.493	5.8	LOS A	3.4	23.6	0.58	0.68	48.7
2	T1	200	0.0	200	0.0	0.493	6.0	LOS A	3.4	23.6	0.58	0.68	46.5
3	R2	339	0.0	339	0.0	0.493	10.6	LOS A	3.4	23.6	0.58	0.68	46.5
Approach		541	0.0	541	0.0	0.493	8.9	LOS A	3.4	23.6	0.58	0.68	46.5
East: Bridge St													
4	L2	38	0.0	27	0.0	0.206	4.2	LOS A	1.2	8.3	0.23	0.52	49.7
5	T1	185	0.0	132	0.0	0.206	4.4	LOS A	1.2	8.3	0.23	0.52	45.8
6	R2	166	0.0	119	0.0	0.206	9.0	LOS A	1.2	8.3	0.23	0.52	32.5
Approach		389	0.0	278 N1	0.0	0.206	6.3	LOS A	1.2	8.3	0.23	0.52	42.8
North: Rawson St													
7	L2	95	0.0	27	0.0	0.080	6.1	LOS A	0.4	3.1	0.57	0.64	37.9
8	T1	87	0.0	25	0.0	0.080	6.4	LOS A	0.4	3.1	0.57	0.64	51.4
9	R2	82	0.0	23	0.0	0.080	11.0	LOS A	0.4	3.1	0.57	0.64	46.7
Approach		264	0.0	75 N1	0.0	0.080	7.7	LOS A	0.4	3.1	0.57	0.64	47.0
West: Bridge St													
10	L2	211	0.0	211	0.0	0.457	9.0	LOS A	3.2	22.6	0.81	0.86	35.3
11	T1	109	0.0	109	0.0	0.457	9.3	LOS A	3.2	22.6	0.81	0.86	35.3
12	R2	16	0.0	16	0.0	0.457	13.9	LOS A	3.2	22.6	0.81	0.86	50.0
Approach		336	0.0	336	0.0	0.457	9.3	LOS A	3.2	22.6	0.81	0.86	36.8
All Vehicles		1531	0.0	1230 N1	0.0	0.493	8.4	LOS A	3.4	23.6	0.56	0.69	44.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 146.2 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Bridge St [Bridge St]

Network: 2017_netwo [Epping_2036_am_RMS_Council]

Beecroft Rd - Hight St Bridge St
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: High St													
1	L2	48	0.0	48	0.0	0.042	1.1	LOS A	0.2	1.4	0.36	0.19	48.9
Approach		48	0.0	48	0.0	0.042	1.1	NA	0.2	1.4	0.36	0.19	48.9
East: Bridge													
4	L2	241	0.0	163	0.0	0.476	0.0	LOS A	21.3	149.1	0.00	0.00	54.0
5	T1	400	0.0	270	0.0	0.476	0.0	LOS A	21.3	149.1	0.00	0.00	46.0
6	R2	2002	0.0	1350	0.0	0.476	0.0	LOS A	21.3	149.1	0.00	0.00	52.3
Approach		2643	0.0	1782 N1	0.0	0.476	0.0	NA	21.3	149.1	0.00	0.00	52.1
North: Beecroft Rd													
7	L2	5605	0.0	2023	0.0	0.417	0.1	LOS A	81.6	571.2	0.00	0.00	59.9
Approach		5605	0.0	2023 N1	0.0	0.417	0.1	NA	81.6	571.2	0.00	0.00	59.9
West: Bridge St													
10	L2	457	0.0	400	0.0	0.900	21.2	LOS B	10.6	74.2	0.61	1.19	11.1
Approach		457	0.0	400 N1	0.0	0.900	21.2	LOS B	10.6	74.2	0.61	1.19	11.1
All Vehicles		8754	0.0	4254 N1	0.0	0.900	2.0	NA	81.6	571.2	0.06	0.11	49.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option is selected.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 146.2 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Carl_Mids [CarlingfordRd_MidsonRd]

Network: 2017_netwo [Epping_2036_am_RMS_Council]

CarlingfordRd_MidsonRd
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Midson Rd													
1	L2	248	0.0	248	0.0	1.106	186.7	LOS F	59.7	417.6	1.00	1.41	12.2
2	T1	214	0.0	214	0.0	1.106	181.2	LOS F	59.7	417.6	1.00	1.41	12.3
3	R2	485	0.0	485	0.0	2.095	1050.1	LOS F	144.2	1009.6	1.00	2.30	1.0
Approach		947	0.0	947	0.0	2.095	627.7	LOS F	144.2	1009.6	1.00	1.86	3.0
East: RoadName													
4	L2	72	0.0	30	0.0	1.590	596.2	LOS F	76.3	534.4	1.00	2.22	4.1
5	T1	1525	0.0	630	0.0	1.590	590.7	LOS F	76.6	536.2	1.00	2.22	5.1
6	R2	69	0.0	29	0.0	0.145	71.9	LOS F	1.9	13.5	0.94	0.72	26.3
Approach		1666	0.0	688 N1	0.0	1.590	569.3	LOS F	76.6	536.2	1.00	2.15	5.2
North: RoadName													
7	L2	253	0.0	253	0.0	1.972	935.1	LOS F	90.3	632.1	1.00	2.39	1.9
8	T1	400	0.0	400	0.0	1.972	927.4	LOS F	128.0	895.9	1.00	2.65	2.9
9	R2	122	0.0	122	0.0	1.972	932.5	LOS F	128.0	895.9	1.00	2.71	3.6
Approach		775	0.0	775	0.0	1.972	930.7	LOS F	128.0	895.9	1.00	2.58	2.7
West: RoadName													
10	L2	65	0.0	65	0.0	2.530	1444.8	LOS F	437.6	3063.5	1.00	3.84	2.4
11	T1	2353	0.0	2353	0.0	2.530	1440.6	LOS F	437.6	3063.5	1.00	3.83	1.2
12	R2	135	0.0	135	0.0	0.184	37.0	LOS C	6.3	44.3	0.69	0.75	33.5
Approach		2553	0.0	2553	0.0	2.530	1366.6	LOS F	437.6	3063.5	0.98	3.67	1.4
All Vehicles		5941	0.0	4963 N1	0.0	2.530	1046.9	LOS F	437.6	3063.5	0.99	2.94	2.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 146.2 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	53	69.3	LOS F	0.2	0.2	0.96	0.96
P2	East Full Crossing	53	69.3	LOS F	0.2	0.2	0.96	0.96
P3	North Full Crossing	53	35.4	LOS D	0.2	0.2	0.69	0.69
P4	West Full Crossing	53	58.2	LOS E	0.2	0.2	0.88	0.88
All Pedestrians		211	58.0	LOS E			0.87	0.87

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

MOVEMENT SUMMARY

Site: CarIf_Clif [CarlingfordRd_CliffRd]

Network: 2017_netwo [Epping_2036_am_RMS_Council]

CarlingfordRd_CliffRd
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: RoadName													
1	L2	1	0.0	1	0.0	12.944	10918.7	LOS F	74.6	521.9	1.00	1.38	0.1
2	T1	100	0.0	78	0.0	12.944	10956.8	LOS F	74.6	521.9	1.00	1.38	0.2
3	R2	569	0.0	442	0.0	147.415	131839.2	LOS F	74.6	521.9	1.00	1.41	0.0
Approach		671	0.0	521 N1	0.0	147.415	113621.3	LOS F	74.6	521.9	1.00	1.41	0.0
East: Carlingford Rd													
4	L2	1	0.0	0	0.0	0.145	5.5	LOS A	0.0	0.0	0.00	0.00	59.9
5	T1	1417	0.0	566	0.0	0.145	0.0	LOS A	0.0	0.0	0.00	0.00	59.9
Approach		1418	0.0	566 N1	0.0	0.145	0.0	NA	0.0	0.0	0.00	0.00	59.9
North: RoadName													
7	L2	95	0.0	95	0.0	35.840	31439.8	LOS F	210.2	1471.1	1.00	1.69	0.1
8	T1	114	0.0	114	0.0	35.840	31453.0	LOS F	210.2	1471.1	1.00	1.69	0.1
9	R2	256	0.0	256	0.0	35.840	31458.2	LOS F	210.2	1471.1	1.00	1.44	0.1
Approach		464	0.0	464	0.0	35.840	31453.2	LOS F	210.2	1471.1	1.00	1.55	0.1
West: Carlingford Rd													
10	L2	60	0.0	38	0.0	0.523	5.6	LOS A	79.3	554.9	0.00	0.02	57.7
11	T1	3163	0.0	2000	0.0	0.523	0.1	LOS A	79.3	554.9	0.00	0.01	59.5
Approach		3223	0.0	2038 N1	0.0	0.523	0.2	NA	79.3	554.9	0.00	0.01	59.5
All Vehicles		5776	0.0	3589 N1	0.0	147.415	20552.2	NA	210.2	1471.1	0.27	0.41	0.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 146.2 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Carli_Kent [CarlingfordRd_KentSt]

Network: 2017_netwo [Epping_2036_am_RMS_Council]

CarlingfordRd_KentSt
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Kent St													
1	L2	145	0.0	145	0.0	0.178	6.6	LOS A	0.5	3.7	0.34	0.62	45.6
3	R2	80	0.0	80	0.0	26.666	23266.8	LOS F	78.1	546.7	1.00	1.38	0.1
Approach		225	0.0	225	0.0	26.666	8267.3	LOS F	78.1	546.7	0.58	0.89	0.2
East: Carlingford Rd													
4	L2	191	0.0	68	0.0	0.199	5.6	LOS A	0.0	0.0	0.00	0.13	56.1
5	T1	1521	0.0	543	0.0	0.199	0.0	LOS A	0.0	0.0	0.00	0.06	58.5
Approach		1712	0.0	611 N1	0.0	0.199	0.6	NA	0.0	0.0	0.00	0.07	58.0
North: Kent St													
7	L2	263	0.0	263	0.0	1.611	575.3	LOS F	66.5	465.7	1.00	6.81	3.0
Approach		263	0.0	263	0.0	1.611	575.3	LOS F	66.5	465.7	1.00	6.81	3.0
West: Carlingford Rd													
11	T1	2882	0.0	1807	0.0	0.562	1.1	LOS A	59.0	413.2	0.16	0.06	56.4
12	R2	235	0.0	147	0.0	0.562	12.2	LOS A	59.0	413.2	0.42	0.14	53.3
Approach		3117	0.0	1954 N1	0.0	0.562	1.9	NA	59.0	413.2	0.18	0.06	56.0
All Vehicles		5317	0.0	3053 N1	0.0	26.666	660.9	NA	78.1	546.7	0.25	0.71	2.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 146.2 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Rawson [1Carlingford Rd - Ray St - Rawson St]

Network: 2017_netwo [Epping_2036_am_RMS_Council]

Carlingford Rd - Ray St - Rawson St
Signals - Fixed Time Coordinated Cycle Time = 180 seconds (Network Cycle Time - Program)
Common Control Group: carl [Carlingford Rd]

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Rawson St													
1	L2	92	0.0	73	0.0	0.217	87.1	LOS F	3.0	20.9	0.96	0.74	4.4
Approach		92	0.0	73[N1]	0.0	0.217	87.1	LOS F	3.0	20.9	0.96	0.74	4.4
East: Carlingford Rd													
4	L2	448	0.0	167	0.0	0.205	6.7	LOS A	4.3	30.2	0.17	0.39	29.8
5	T1	1324	0.0	492	0.0	0.205	3.4	LOS A	7.4	51.9	0.25	0.30	31.7
Approach		1773	0.0	659[N1]	0.0	0.205	4.2	LOS A	7.4	51.9	0.23	0.32	31.2
North: Ray St													
7	L2	134	0.0	134	0.0	0.720	98.3	LOS F	6.2	43.4	1.00	0.86	4.0
Approach		134	0.0	134	0.0	0.720	98.3	LOS F	6.2	43.4	1.00	0.86	4.0
West: Carlingford Rd													
10	L2	205	0.0	106	0.0	1.191	243.7	LOS F	23.3	163.2	1.00	1.70	1.7
11	T1	3622	0.0	1877	0.0	1.191	239.0	LOS F	23.3	163.2	1.00	1.72	1.7
Approach		3827	0.0	1984[N1]	0.0	1.191	239.2	LOS F	23.3	163.2	1.00	1.72	1.7
All Vehicles		5825	0.0	2849[N1]	0.0	1.191	174.4	LOS F	23.3	163.2	0.82	1.33	2.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 146.2 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Blaxland [Epping_Blaxland]

Network: 2017_netwo [Epping_2036_am_RMS_Council]

New Site
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Blaxland Rd													
1	L2	979	0.0	979	0.0	0.954	80.5	LOS F	28.0	195.8	1.00	1.11	5.5
2	T1	279	0.0	279	0.0	1.448	468.8	LOS F	28.0	195.8	1.00	1.99	2.1
Approach		1258	0.0	1258	0.0	1.448	166.6	LOS F	28.0	195.8	1.00	1.30	3.4
East: Epping Rd													
4	L2	3	0.0	2	0.0	0.003	33.6	LOS C	0.1	0.7	0.62	0.62	16.7
5	T1	1643	0.0	1181	0.0	1.513	530.7	LOS F	46.6	326.4	1.00	2.56	1.4
Approach		1646	0.0	1183 N1	0.0	1.513	529.7	LOS F	46.6	326.4	1.00	2.56	1.4
North: Landston Place													
7	L2	2	0.0	2	0.0	1.515	531.2	LOS F	73.0	511.1	1.00	2.15	1.2
8	T1	665	0.0	665	0.0	1.515	525.6	LOS F	73.5	514.5	1.00	2.15	1.2
Approach		667	0.0	667	0.0	1.515	525.7	LOS F	73.5	514.5	1.00	2.15	1.2
West: Bridge St													
10	L2	431	0.0	157	0.0	0.128	6.7	LOS A	2.0	13.8	0.23	0.60	39.5
11	T1	3687	0.0	1345	0.0	0.635	15.3	LOS B	14.0	97.9	0.61	0.56	14.3
12	R2	1488	0.0	543	0.0	1.527	541.7	LOS F	14.0	97.9	1.00	2.48	0.5
Approach		5606	0.0	2045 N1	0.0	1.527	154.4	LOS F	14.0	97.9	0.68	1.07	2.0
All Vehicles		9178	0.0	5153 N1	0.0	1.527	291.6	LOS F	73.5	514.5	0.87	1.61	1.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 146.2 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Essex St [Essex St]

Network: 2017_netwo [Epping_2036_am_RMS_Council]

Epping Essex St
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Essex St													
1	L2	25	0.0	25	0.0	0.136	72.9	LOS F	1.7	12.0	0.95	0.72	5.2
2	T1	51	0.0	51	0.0	0.259	68.4	LOS E	3.5	24.4	0.96	0.73	10.8
3	R2	262	0.0	262	0.0	1.428	457.0	LOS F	53.4	373.8	1.00	1.65	0.9
Approach		338	0.0	338	0.0	1.428	370.2	LOS F	53.4	373.8	0.99	1.44	1.2
East: Epping Rd													
4	L2	32	0.0	32	0.0	1.398	414.2	LOS F	36.1	253.0	1.00	2.01	2.1
5	T1	1021	0.0	1021	0.0	1.398	408.7	LOS F	36.1	253.0	1.00	2.01	1.4
Approach		1053	0.0	1053	0.0	1.398	408.8	LOS F	36.1	253.0	1.00	2.01	1.4
North: Essex St													
7	L2	42	0.0	42	0.0	0.041	22.0	LOS B	1.4	9.7	0.49	0.67	22.2
8	T1	66	0.0	66	0.0	0.062	16.6	LOS B	2.2	15.4	0.49	0.39	32.1
9	R2	752	0.0	752	0.0	1.521	543.3	LOS F	175.4	1227.6	1.00	1.84	1.4
Approach		860	0.0	860	0.0	1.521	477.2	LOS F	175.4	1227.6	0.94	1.67	1.6
West: Epping Rd													
10	L2	142	0.0	47	0.0	1.524	525.1	LOS F	28.0	195.8	1.00	2.21	1.7
11	T1	3355	0.0	1101	0.0	1.524	519.5	LOS F	28.0	195.8	1.00	2.21	0.9
Approach		3497	0.0	1147 N1	0.0	1.524	519.8	LOS F	28.0	195.8	1.00	2.21	0.9
All Vehicles		5747	0.0	3398 N1	0.0	1.524	459.7	LOS F	175.4	1227.6	0.98	1.94	1.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 146.2 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Forrest Gr [Forrest Grove]

Network: 2017_netwo [Epping_2036_am_RMS_Council]

Epping Rd Forrest Grove
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Forrest Grove													
1	L2	44	0.0	44	0.0	0.055	8.4	LOS A	0.2	1.6	0.51	0.66	27.2
Approach		44	0.0	44	0.0	0.055	8.4	LOS A	0.2	1.6	0.51	0.66	27.2
East: Epping Rd													
4	L2	199	0.0	138	0.0	0.075	5.5	LOS A	0.0	0.0	0.00	0.58	35.7
5	T1	1599	0.0	1113	0.0	0.285	0.0	LOS A	28.0	195.8	0.00	0.00	59.9
Approach		1798	0.0	1251 N1	0.0	0.285	0.6	NA	28.0	195.8	0.00	0.06	55.6
West: Epping Rd													
11	T1	3497	0.0	1212	0.0	0.311	0.0	LOS A	11.7	81.6	0.00	0.00	59.9
Approach		3497	0.0	1212 N1	0.0	0.311	0.0	NA	11.7	81.6	0.00	0.00	59.9
All Vehicles		5339	0.0	2508 N1	0.0	0.311	0.5	NA	28.0	195.8	0.01	0.04	55.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 146.2 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Eppimg_Pem [EppingRd_PembrokeSt]

Network: 2017_netwo [Epping_2036_am_RMS_Council]

EppingRd_PembrokeSt
Signals - Fixed Time Coordinated Cycle Time = 180 seconds (Network Cycle Time - Program)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Epping Rd													
1	L2	9	0.0	3	0.0	0.329	11.8	LOS A	12.6	88.5	0.32	0.29	44.6
2	T1	3684	0.0	995	0.0	0.329	6.2	LOS A	12.6	88.5	0.32	0.29	51.7
Approach		3694	0.0	998 N1	0.0	0.329	6.2	LOS A	12.6	88.5	0.32	0.29	51.7
North: Epping Rd													
8	T1	951	0.0	951	0.0	0.627	9.2	LOS A	17.8	124.8	0.47	0.44	46.2
9	R2	312	0.0	312	0.0	0.962	103.4	LOS F	36.9	258.3	0.90	1.06	18.1
Approach		1262	0.0	1262	0.0	0.962	32.4	LOS C	36.9	258.3	0.58	0.59	30.7
West: Pembroke St													
10	L2	942	0.0	942	0.0	1.640	650.4	LOS F	120.4	842.5	1.00	1.72	3.7
Approach		942	0.0	942	0.0	1.640	650.4	LOS F	120.4	842.5	1.00	1.72	3.7
All Vehicles		5898	0.0	3202 N1	0.0	1.640	206.1	LOS F	120.4	842.5	0.62	0.83	9.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 146.2 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	53	74.9	LOS F	0.2	0.2	0.91	0.91
P3	North Full Crossing	53	77.6	LOS F	0.3	0.3	0.93	0.93
P4	West Full Crossing	53	6.7	LOS A	0.1	0.1	0.27	0.27
All Pedestrians		158	53.1	LOS E			0.71	0.71

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: Smith St [Smith St]

Network: 2017_netwo [Epping_2036_am_RMS_Council]

Epping Rd - Smith St

Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: Epping Rd													
5	T1	1643	0.0	1180	0.0	0.202	0.0	LOS A	11.7	81.6	0.00	0.00	60.0
Approach		1643	0.0	1180 N1	0.0	0.202	0.0	NA	11.7	81.6	0.00	0.00	60.0
North: Smith St													
7	L2	13	0.0	13	0.0	0.035	8.5	LOS A	0.1	0.4	0.51	0.69	35.9
Approach		13	0.0	13	0.0	0.035	8.5	LOS A	0.1	0.4	0.51	0.69	35.9
West: Epping Rd													
10	L2	204	0.0	74	0.0	0.343	5.6	LOS A	46.6	326.4	0.00	0.07	54.7
11	T1	3484	0.0	1260	0.0	0.343	0.0	LOS A	46.6	326.4	0.00	0.03	58.6
Approach		3688	0.0	1334 N1	0.0	0.343	0.3	NA	46.6	326.4	0.00	0.03	58.2
All Vehicles		5344	0.0	2526 N1	0.0	0.343	0.2	NA	46.6	326.4	0.00	0.02	58.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 146.2 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Beec-Carl [Beecroft-Carlingford]

Network: 2017_netwo [Epping_2036_pm_RMS_Council]

Beecroft Rd - Carlingford Rd
Signals - Fixed Time Coordinated Cycle Time = 180 seconds (Network Cycle Time - Program)
Common Control Group: carl [Carlingford Rd]

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Beecroft Rd													
1	L2	1518	0.0	719	0.0	0.325	9.3	LOS A	11.7	82.2	0.12	0.57	42.7
2	T1	2559	0.0	1213	0.0	2.704	1587.6	LOS F	81.6	571.2	1.00	2.95	0.8
Approach		4077	0.0	1932 N1	0.0	2.704	1000.0	LOS F	81.6	571.2	0.67	2.06	1.3
North: Beecroft Rd													
8	T1	1285	0.0	1285	0.0	1.097	176.4	LOS F	116.6	816.0	1.00	1.43	8.8
9	R2	664	0.0	664	0.0	2.706	1614.2	LOS F	116.6	816.0	1.00	2.32	1.1
Approach		1949	0.0	1949	0.0	2.706	666.3	LOS F	116.6	816.0	1.00	1.73	2.6
West: Carlingford Rd													
10	L2	502	0.0	285	0.0	0.203	5.9	LOS A	2.1	14.6	0.11	0.57	27.4
12	R2	1794	0.0	1019	0.0	0.887	19.8	LOS B	14.0	97.9	0.38	0.71	11.9
Approach		2296	0.0	1304 N1	0.0	0.887	16.8	LOS B	14.0	97.9	0.32	0.68	13.6
All Vehicles		8322	0.0	5185 N1	0.0	2.706	627.3	LOS F	116.6	816.0	0.71	1.59	1.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 140.1 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Bridge St [Bridge St]

Network: 2017_netwo [Epping_2036_pm_RMS_Council]

Beecroft Rd - Hight St Bridge St
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: High St													
1	L2	63	0.0	63	0.0	0.056	1.3	LOS A	0.3	1.9	0.38	0.22	48.8
Approach		63	0.0	63	0.0	0.056	1.3	NA	0.3	1.9	0.38	0.22	48.8
East: Bridge													
4	L2	397	0.0	167	0.0	0.534	0.0	LOS A	21.3	149.1	0.00	0.00	54.1
5	T1	707	0.0	297	0.0	0.534	0.0	LOS A	21.3	149.1	0.00	0.00	46.5
6	R2	3646	0.0	1533	0.0	0.534	0.0	LOS A	21.3	149.1	0.00	0.00	52.4
Approach		4751	0.0	1997 N1	0.0	0.534	0.0	NA	21.3	149.1	0.00	0.00	52.1
North: Beecroft Rd													
7	L2	3079	0.0	2179	0.0	0.449	0.1	LOS A	81.6	571.2	0.00	0.00	59.8
Approach		3079	0.0	2179 N1	0.0	0.449	0.1	NA	81.6	571.2	0.00	0.00	59.8
West: Bridge St													
10	L2	431	0.0	405	0.0	0.986	46.2	LOS D	17.9	125.4	0.66	1.98	6.3
Approach		431	0.0	405 N1	0.0	0.986	46.2	LOS D	17.9	125.4	0.66	1.98	6.3
All Vehicles		8323	0.0	4644 N1	0.0	0.986	4.1	NA	81.6	571.2	0.06	0.18	45.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option is selected.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 140.1 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: BridgeRaws [BridgeSt_RawsonSt]

Network: 2017_netwo [Epping_2036_pm_RMS_Council]

BridgeSt_RawsonSt
Roundabout

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Rawson St													
1	L2	3	0.0	3	0.0	0.716	9.3	LOS A	6.0	41.7	0.71	0.85	46.7
2	T1	296	0.0	296	0.0	0.716	9.5	LOS A	6.0	41.7	0.71	0.85	44.1
3	R2	291	0.0	291	0.0	0.716	14.1	LOS A	6.0	41.7	0.71	0.85	44.1
Approach		589	0.0	589	0.0	0.716	11.8	LOS A	6.0	41.7	0.71	0.85	44.1
East: Bridge St													
4	L2	29	0.0	14	0.0	0.276	4.3	LOS A	1.6	11.3	0.28	0.50	49.9
5	T1	485	0.0	226	0.0	0.276	4.5	LOS A	1.6	11.3	0.28	0.50	46.1
6	R2	226	0.0	106	0.0	0.276	9.1	LOS A	1.6	11.3	0.28	0.50	32.8
Approach		741	0.0	346 N1	0.0	0.276	5.9	LOS A	1.6	11.3	0.28	0.50	43.8
North: Rawson St													
7	L2	42	0.0	16	0.0	0.098	5.7	LOS A	0.5	3.7	0.53	0.63	37.7
8	T1	101	0.0	39	0.0	0.098	5.9	LOS A	0.5	3.7	0.53	0.63	51.2
9	R2	98	0.0	38	0.0	0.098	10.6	LOS A	0.5	3.7	0.53	0.63	46.4
Approach		241	0.0	94 N1	0.0	0.098	7.8	LOS A	0.5	3.7	0.53	0.63	48.2
West: Bridge St													
10	L2	142	0.0	142	0.0	0.411	8.5	LOS A	2.2	15.7	0.81	0.84	36.1
11	T1	87	0.0	87	0.0	0.411	8.8	LOS A	2.2	15.7	0.81	0.84	36.1
12	R2	6	0.0	6	0.0	0.411	13.4	LOS A	2.2	15.7	0.81	0.84	50.6
Approach		236	0.0	236	0.0	0.411	8.8	LOS A	2.2	15.7	0.81	0.84	37.0
All Vehicles		1807	0.0	1265 N1	0.0	0.716	9.3	LOS A	6.0	41.7	0.60	0.74	43.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 140.1 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: CarIf_Clif [CarlingfordRd_CliffRd]

Network: 2017_netwo [Epping_2036_pm_RMS_Council]

CarlingfordRd_CliffRd
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: RoadName													
1	L2	1	0.0	1	0.0	8.209	6552.2	LOS F	74.6	521.9	1.00	1.99	0.1
2	T1	197	0.0	149	0.0	8.209	6574.6	LOS F	74.6	521.9	1.00	1.99	0.4
3	R2	573	0.0	433	0.0	89.297	79526.2	LOS F	74.6	521.9	1.00	1.61	0.0
Approach		771	0.0	583 N1	0.0	89.297	60790.0	LOS F	74.6	521.9	1.00	1.71	0.0
East: Carlingford Rd													
4	L2	1	0.0	0	0.0	0.236	5.5	LOS A	0.0	0.0	0.00	0.00	59.9
5	T1	2004	0.0	921	0.0	0.236	0.0	LOS A	0.0	0.0	0.00	0.00	59.9
Approach		2005	0.0	922 N1	0.0	0.236	0.0	NA	0.0	0.0	0.00	0.00	59.9
North: RoadName													
7	L2	56	0.0	56	0.0	15.550	13169.0	LOS F	140.9	986.3	1.00	2.08	0.1
8	T1	65	0.0	65	0.0	15.550	13179.1	LOS F	140.9	986.3	1.00	2.08	0.1
9	R2	192	0.0	192	0.0	15.550	13220.1	LOS F	140.9	986.3	1.00	1.69	0.1
Approach		313	0.0	313	0.0	15.550	13202.4	LOS F	140.9	986.3	1.00	1.84	0.1
West: Carlingford Rd													
10	L2	112	0.0	83	0.0	0.362	5.6	LOS A	34.2	239.1	0.00	0.07	57.3
11	T1	1789	0.0	1326	0.0	0.362	0.0	LOS A	35.0	245.1	0.00	0.03	59.1
Approach		1901	0.0	1409 N1	0.0	0.362	0.4	NA	35.0	245.1	0.00	0.04	58.8
All Vehicles		4989	0.0	3226 N1	0.0	89.297	12263.5	NA	140.9	986.3	0.28	0.50	0.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 140.1 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Carli_Kent [CarlingfordRd_KentSt]

Network: 2017_netwo [Epping_2036_pm_RMS_Council]

CarlingfordRd_KentSt
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Kent St													
1	L2	181	0.0	181	0.0	0.335	7.8	LOS A	0.8	5.9	0.45	0.74	44.3
3	R2	59	0.0	59	0.0	6.961	5568.6	LOS F	48.2	337.2	1.00	1.48	0.2
Approach		240	0.0	240	0.0	6.961	1373.6	LOS F	48.2	337.2	0.59	0.92	0.9
East: Carlingford Rd													
4	L2	191	0.0	83	0.0	0.372	5.6	LOS A	0.0	0.0	0.00	0.11	56.3
5	T1	1994	0.0	864	0.0	0.372	0.1	LOS A	0.0	0.0	0.00	0.05	58.7
Approach		2184	0.0	946 N1	0.0	0.372	0.5	NA	0.0	0.0	0.00	0.05	58.3
North: Kent St													
7	L2	51	0.0	51	0.0	0.115	13.0	LOS A	0.4	2.9	0.70	0.87	42.3
Approach		51	0.0	51	0.0	0.115	13.0	LOS A	0.4	2.9	0.70	0.87	42.3
West: Carlingford Rd													
11	T1	1792	0.0	1349	0.0	0.485	2.0	LOS A	60.7	425.2	0.20	0.07	54.5
12	R2	176	0.0	132	0.0	0.485	16.1	LOS B	60.7	425.2	0.66	0.23	49.1
Approach		1967	0.0	1481 N1	0.0	0.485	3.3	NA	60.7	425.2	0.24	0.08	53.7
All Vehicles		4442	0.0	2718 N1	0.0	6.961	123.5	NA	60.7	425.2	0.20	0.16	10.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 140.1 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Carl_Mids [CarlingfordRd_MidsonRd]

Network: 2017_netwo [Epping_2036_pm_RMS_Council]

CarlingfordRd_MidsonRd
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Midson Rd													
1	L2	221	0.0	221	0.0	1.370	405.7	LOS F	101.3	709.0	1.00	2.03	6.3
2	T1	421	0.0	421	0.0	1.370	400.2	LOS F	101.3	709.0	1.00	1.97	6.3
3	R2	396	0.0	396	0.0	1.370	405.9	LOS F	99.6	697.5	1.00	1.82	2.6
Approach		1038	0.0	1038	0.0	1.370	403.6	LOS F	101.3	709.0	1.00	1.93	4.9
East: RoadName													
4	L2	36	0.0	17	0.0	1.329	370.8	LOS F	92.4	646.6	1.00	2.11	6.4
5	T1	1984	0.0	948	0.0	1.329	365.5	LOS F	92.4	646.6	1.00	2.09	7.8
6	R2	177	0.0	84	0.0	0.235	60.6	LOS E	5.2	36.6	0.89	0.77	28.8
Approach		2197	0.0	1050 N1	0.0	1.329	341.1	LOS F	92.4	646.6	0.99	1.98	8.3
North: RoadName													
7	L2	137	0.0	137	0.0	1.075	166.9	LOS F	28.8	201.8	1.00	1.34	9.3
8	T1	262	0.0	262	0.0	1.075	161.3	LOS F	29.1	203.5	1.00	1.34	13.5
9	R2	93	0.0	93	0.0	1.075	166.8	LOS F	29.1	203.5	1.00	1.34	15.9
Approach		492	0.0	492	0.0	1.075	163.9	LOS F	29.1	203.5	1.00	1.34	12.9
West: RoadName													
10	L2	88	0.0	88	0.0	1.347	382.3	LOS F	162.8	1139.8	1.00	2.20	8.1
11	T1	1445	0.0	1445	0.0	1.347	378.1	LOS F	162.8	1139.8	1.00	2.23	4.4
12	R2	285	0.0	285	0.0	0.630	48.4	LOS D	16.4	115.1	0.85	0.81	29.7
Approach		1819	0.0	1819	0.0	1.347	326.6	LOS F	162.8	1139.8	0.98	2.01	5.7
All Vehicles		5545	0.0	4398 N1	0.0	1.370	330.0	LOS F	162.8	1139.8	0.99	1.91	6.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 140.1 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	53	59.1	LOS E	0.2	0.2	0.89	0.89
P2	East Full Crossing	53	69.3	LOS F	0.2	0.2	0.96	0.96
P3	North Full Crossing	53	42.7	LOS E	0.2	0.2	0.75	0.75
P4	West Full Crossing	53	60.9	LOS F	0.2	0.2	0.90	0.90
All Pedestrians		211	58.0	LOS E			0.88	0.88

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

MOVEMENT SUMMARY

Site: Rawson [1Carlingford Rd - Ray St - Rawson St]

Network: 2017_netwo [Epping_2036_pm_RMS_Council]

Carlingford Rd - Ray St - Rawson St
Signals - Fixed Time Coordinated Cycle Time = 180 seconds (Network Cycle Time - Program)
Common Control Group: carl [Carlingford Rd]

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Rawson St													
1	L2	151	0.0	120	0.0	0.081	35.7	LOS C	3.0	20.8	0.61	0.71	9.8
Approach		151	0.0	120[N1]	0.0	0.081	35.7	LOS C	3.0	20.8	0.61	0.71	9.8
East: Carlingford Rd													
4	L2	328	0.0	145	0.0	0.509	37.2	LOS C	14.0	97.9	0.71	0.68	7.1
5	T1	1854	0.0	818	0.0	0.509	36.2	LOS C	14.0	97.9	0.79	0.73	6.7
Approach		2182	0.0	963[N1]	0.0	0.509	36.4	LOS C	14.0	97.9	0.78	0.72	6.7
North: Ray St													
7	L2	84	0.0	84	0.0	0.053	35.2	LOS C	2.1	14.9	0.60	0.69	9.9
Approach		84	0.0	84	0.0	0.053	35.2	LOS C	2.1	14.9	0.60	0.69	9.9
West: Carlingford Rd													
10	L2	183	0.0	101	0.0	0.730	44.1	LOS D	23.3	163.2	0.86	0.80	9.0
11	T1	2234	0.0	1232	0.0	0.730	38.5	LOS C	23.3	163.2	0.86	0.79	9.1
Approach		2417	0.0	1333[N1]	0.0	0.730	38.9	LOS C	23.3	163.2	0.86	0.79	9.1
All Vehicles		4834	0.0	2500[N1]	0.0	0.730	37.7	LOS C	23.3	163.2	0.81	0.76	8.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 140.1 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Blaxland [Epping_Blaxland]

Network: 2017_netwo [Epping_2036_pm_RMS_Council]

New Site
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Blaxland Rd													
1	L2	1381	0.0	1381	0.0	1.156	197.5	LOS F	28.0	195.8	1.00	1.33	2.0
2	T1	423	0.0	423	0.0	2.023	973.0	LOS F	28.0	195.8	1.00	2.68	1.1
Approach		1804	0.0	1804	0.0	2.023	379.4	LOS F	28.0	195.8	1.00	1.64	1.5
East: Epping Rd													
4	L2	3	0.0	2	0.0	0.002	32.9	LOS C	0.1	0.4	0.61	0.61	16.9
5	T1	3371	0.0	1636	0.0	2.061	1020.9	LOS F	46.6	326.4	1.00	3.33	0.7
Approach		3374	0.0	1637 N1	0.0	2.061	1019.9	LOS F	46.6	326.4	1.00	3.33	0.7
North: Landston Place													
7	L2	2	0.0	2	0.0	1.863	834.3	LOS F	52.2	365.1	1.00	2.07	0.8
8	T1	385	0.0	385	0.0	1.863	828.8	LOS F	52.2	365.3	1.00	2.07	0.8
Approach		387	0.0	387	0.0	1.863	828.8	LOS F	52.2	365.3	1.00	2.07	0.8
West: Bridge St													
10	L2	481	0.0	327	0.0	0.272	7.5	LOS A	5.1	35.6	0.27	0.62	38.2
11	T1	1320	0.0	897	0.0	0.432	9.6	LOS A	14.0	97.9	0.44	0.39	19.9
12	R2	1279	0.0	869	0.0	2.059	1013.2	LOS F	14.0	97.9	1.00	3.22	0.3
Approach		3080	0.0	2094 N1	0.0	2.059	426.0	LOS F	14.0	97.9	0.65	1.60	0.8
All Vehicles		8645	0.0	5923 N1	0.0	2.061	602.3	LOS F	52.2	365.3	0.87	2.12	0.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 140.1 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Essex St [Essex St]

Network: 2017_netwo [Epping_2036_pm_RMS_Council]

Epping Essex St
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Essex St													
1	L2	18	0.0	18	0.0	0.131	77.4	LOS F	1.3	8.8	0.97	0.70	4.9
2	T1	78	0.0	78	0.0	0.545	75.0	LOS F	5.7	40.0	1.00	0.77	10.0
3	R2	177	0.0	177	0.0	1.298	346.6	LOS F	31.1	217.8	1.00	1.49	1.1
Approach		273	0.0	273	0.0	1.298	251.3	LOS F	31.1	217.8	1.00	1.23	2.0
East: Epping Rd													
4	L2	56	0.0	32	0.0	1.331	357.0	LOS F	36.1	253.0	1.00	2.07	2.5
5	T1	2921	0.0	1662	0.0	1.331	351.5	LOS F	36.1	253.0	1.00	2.08	1.6
Approach		2977	0.0	1694 [N1]	0.0	1.331	351.6	LOS F	36.1	253.0	1.00	2.08	1.6
North: Essex St													
7	L2	26	0.0	26	0.0	0.032	30.5	LOS C	1.1	7.4	0.59	0.68	17.9
8	T1	23	0.0	23	0.0	0.027	24.8	LOS B	0.9	6.5	0.59	0.44	26.2
9	R2	547	0.0	547	0.0	1.355	398.7	LOS F	109.6	767.4	1.00	1.65	1.8
Approach		597	0.0	597	0.0	1.355	367.9	LOS F	109.6	767.4	0.97	1.56	2.0
West: Epping Rd													
10	L2	87	0.0	62	0.0	0.741	40.1	LOS C	24.7	173.2	0.95	0.85	18.2
11	T1	1242	0.0	880	0.0	0.741	34.6	LOS C	24.9	174.3	0.95	0.84	11.6
Approach		1329	0.0	941 [N1]	0.0	0.741	34.9	LOS C	24.9	174.3	0.95	0.84	12.1
All Vehicles		5176	0.0	3505 [N1]	0.0	1.355	261.5	LOS F	109.6	767.4	0.98	1.59	2.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 140.1 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Forrest Gr [Forrest Grove]

Network: 2017_netwo [Epping_2036_pm_RMS_Council]

Epping Rd Forrest Grove
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Forrest Grove													
1	L2	32	0.0	32	0.0	0.053	10.5	LOS A	0.2	1.5	0.60	0.75	23.9
Approach		32	0.0	32	0.0	0.053	10.5	LOS A	0.2	1.5	0.60	0.75	23.9
East: Epping Rd													
4	L2	148	0.0	71	0.0	0.038	5.5	LOS A	0.0	0.0	0.00	0.58	35.7
5	T1	3339	0.0	1602	0.0	0.411	0.0	LOS A	28.0	195.8	0.00	0.00	59.9
Approach		3487	0.0	1673 N1	0.0	0.411	0.2	NA	28.0	195.8	0.00	0.02	58.1
West: Epping Rd													
11	T1	1331	0.0	911	0.0	0.382	0.0	LOS A	0.0	0.0	0.00	0.00	59.8
Approach		1331	0.0	911 N1	0.0	0.382	0.0	NA	0.0	0.0	0.00	0.00	59.8
All Vehicles		4849	0.0	2615 N1	0.0	0.411	0.3	NA	28.0	195.8	0.01	0.02	57.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 140.1 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Eppimg_Pem [EppingRd_PembrokeSt]

Network: 2017_netwo [Epping_2036_pm_RMS_Council]

EppingRd_PembrokeSt
Signals - Fixed Time Coordinated Cycle Time = 180 seconds (Network Cycle Time - Program)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Epping Rd													
1	L2	58	0.0	42	0.0	0.311	9.3	LOS A	9.8	68.8	0.25	0.27	47.7
2	T1	1308	0.0	959	0.0	0.311	3.7	LOS A	9.9	69.1	0.25	0.25	54.4
Approach		1366	0.0	1002 N1	0.0	0.311	4.0	LOS A	9.9	69.1	0.25	0.25	54.2
North: Epping Rd													
8	T1	2903	0.0	2903	0.0	1.799	792.4	LOS F	427.7	2994.1	1.00	2.83	2.2
9	R2	338	0.0	338	0.0	1.002	129.7	LOS F	49.3	344.8	1.00	1.15	15.4
Approach		3241	0.0	3241	0.0	1.799	723.3	LOS F	427.7	2994.1	1.00	2.66	2.5
West: Pembroke St													
10	L2	468	0.0	468	0.0	1.195	273.5	LOS F	38.9	272.1	1.00	1.28	8.1
Approach		468	0.0	468	0.0	1.195	273.5	LOS F	38.9	272.1	1.00	1.28	8.1
All Vehicles		5076	0.0	4711 N1	0.0	1.799	525.6	LOS F	427.7	2994.1	0.84	2.01	3.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 140.1 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	53	83.3	LOS F	0.3	0.3	0.96	0.96
P3	North Full Crossing	53	84.3	LOS F	0.3	0.3	0.97	0.97
P4	West Full Crossing	53	4.5	LOS A	0.1	0.1	0.22	0.22
All Pedestrians		158	57.4	LOS E			0.72	0.72

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: Smith St [Smith St]

Network: 2017_netwo [Epping_2036_pm_RMS_Council]

Epping Rd - Smith St

Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: Epping Rd													
5	T1	3371	0.0	1634	0.0	0.279	0.0	LOS A	11.7	81.6	0.00	0.00	59.9
Approach		3371	0.0	1634[N1]	0.0	0.279	0.0	NA	11.7	81.6	0.00	0.00	59.9
North: Smith St													
7	L2	19	0.0	19	0.0	0.022	7.6	LOS A	0.1	0.6	0.45	0.63	37.4
Approach		19	0.0	19	0.0	0.022	7.6	LOS A	0.1	0.6	0.45	0.63	37.4
West: Epping Rd													
10	L2	9	0.0	7	0.0	0.240	5.5	LOS A	0.0	0.0	0.00	0.01	55.9
11	T1	1314	0.0	930	0.0	0.240	0.0	LOS A	0.0	0.0	0.00	0.00	59.8
Approach		1323	0.0	936[N1]	0.0	0.240	0.1	NA	0.0	0.0	0.00	0.00	59.7
All Vehicles		4713	0.0	2589[N1]	0.0	0.279	0.1	NA	11.7	81.6	0.00	0.01	59.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 140.1 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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Appendix M

Austino Site Analysis

J17056RP4

MOVEMENT SUMMARY

Site: Blaxland [Epping_Blaxland]

Network: 2026 netwk [2026_4000_am_network]

New Site
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Blaxland Rd													
1	L2	891	0.0	891	0.0	0.926	76.2	LOS F	28.0	195.8	1.00	1.11	5.8
2	T1	157	0.0	157	0.0	1.709	695.3	LOS F	28.0	195.8	1.00	1.90	1.5
Approach		1047	0.0	1047	0.0	1.709	168.9	LOS F	28.0	195.8	1.00	1.23	3.2
East: Epping Rd													
4	L2	1	0.0	1	0.0	0.001	38.1	LOS C	0.0	0.3	0.66	0.60	15.2
5	T1	1327	0.0	1231	0.0	1.787	773.5	LOS F	46.6	326.4	1.00	2.89	1.0
Approach		1328	0.0	1232 N1	0.0	1.787	773.0	LOS F	46.6	326.4	1.00	2.88	1.0
North: Landston Place													
7	L2	15	0.0	15	0.0	0.060	64.9	LOS E	0.9	6.5	0.89	0.70	8.4
8	T1	455	0.0	455	0.0	1.767	746.8	LOS F	117.3	821.4	1.00	2.59	0.8
Approach		469	0.0	469	0.0	1.767	725.4	LOS F	117.3	821.4	1.00	2.53	0.9
West: Bridge St													
10	L2	760	0.0	331	0.0	0.275	5.6	LOS A	3.1	21.5	0.19	0.60	41.5
11	T1	2608	0.0	1136	0.0	0.647	13.6	LOS A	14.0	97.9	0.57	0.52	15.6
12	R2	1753	0.0	763	0.0	1.817	798.4	LOS F	14.0	97.9	1.00	2.95	0.3
Approach		5121	0.0	2229 N1	0.0	1.817	281.0	LOS F	14.0	97.9	0.66	1.36	1.3
All Vehicles		7966	0.0	4978 N1	0.0	1.817	421.1	LOS F	117.3	821.4	0.85	1.82	1.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 48.7 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Blaxland [Epping_Blaxland]

Network: 2026 nrtwr [2026_4000_pm]

New Site
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Blaxland Rd													
1	L2	1967	0.0	1967	0.0	2.122	1060.2	LOS F	28.0	195.8	1.00	2.25	0.4
2	T1	301	0.0	301	0.0	2.270	1191.6	LOS F	28.0	195.8	1.00	2.50	0.9
Approach		2268	0.0	2268	0.0	2.270	1077.6	LOS F	28.0	195.8	1.00	2.28	0.5
East: Epping Rd													
4	L2	1	0.0	1	0.0	0.001	35.4	LOS C	0.0	0.3	0.63	0.60	16.1
5	T1	2185	0.0	1778	0.0	2.399	1325.2	LOS F	46.6	326.4	1.00	3.56	0.6
Approach		2186	0.0	1779 N1	0.0	2.399	1324.6	LOS F	46.6	326.4	1.00	3.56	0.6
North: Landston Place													
7	L2	7	0.0	7	0.0	0.037	68.6	LOS E	0.5	3.3	0.91	0.67	8.0
8	T1	476	0.0	476	0.0	2.259	1182.4	LOS F	146.3	1023.9	1.00	2.86	0.5
Approach		483	0.0	483	0.0	2.259	1165.4	LOS F	146.3	1023.9	1.00	2.82	0.5
West: Bridge St													
10	L2	421	0.0	328	0.0	0.282	6.2	LOS A	3.9	27.0	0.22	0.61	40.3
11	T1	1004	0.0	783	0.0	0.439	11.3	LOS A	14.0	97.9	0.47	0.42	17.8
12	R2	1143	0.0	891	0.0	2.344	1269.6	LOS F	14.0	97.9	1.00	3.47	0.2
Approach		2568	0.0	2002 N1	0.0	2.344	570.5	LOS F	14.0	97.9	0.67	1.81	0.6
All Vehicles		7506	0.0	6532 N1	0.0	2.399	996.0	LOS F	146.3	1023.9	0.90	2.53	0.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 48.9 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Essex St [Essex St]

Network: 2026 netwk [2026_4000_am_network]

Epping Essex St
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Essex St													
1	L2	21	0.0	21	0.0	0.082	64.3	LOS E	1.3	9.3	0.89	0.71	5.8
2	T1	304	0.0	304	0.0	1.185	247.0	LOS F	45.5	318.8	1.00	1.63	3.3
3	R2	174	0.0	174	0.0	0.678	71.9	LOS F	12.3	86.3	1.00	0.83	10.8
Approach		499	0.0	499	0.0	1.185	178.4	LOS F	45.5	318.8	0.99	1.31	4.5
East: Epping Rd													
4	L2	22	0.0	22	0.0	0.819	44.6	LOS D	28.0	195.9	0.99	0.93	16.9
5	T1	743	0.0	743	0.0	0.819	41.6	LOS C	28.0	195.9	0.98	0.94	12.0
Approach		765	0.0	765	0.0	0.819	41.7	LOS C	28.0	195.9	0.98	0.94	12.2
North: Essex St													
7	L2	6	0.0	6	0.0	0.031	37.4	LOS C	1.0	7.1	0.67	0.55	23.4
8	T1	16	0.0	16	0.0	0.031	31.9	LOS C	1.0	7.1	0.67	0.55	21.8
9	R2	626	0.0	626	0.0	1.223	292.9	LOS F	53.4	374.1	1.00	1.46	2.5
Approach		648	0.0	648	0.0	1.223	284.0	LOS F	53.4	374.1	0.99	1.43	2.6
West: Epping Rd													
10	L2	40	0.0	18	0.0	0.567	30.9	LOS C	14.0	98.2	0.88	0.76	22.3
11	T1	2455	0.0	1080	0.0	1.193	165.3	LOS F	28.0	195.8	0.96	1.41	5.2
Approach		2495	0.0	1097 N1	0.0	1.193	163.2	LOS F	28.0	195.8	0.96	1.40	5.3
All Vehicles		4407	0.0	3010 N1	0.0	1.223	160.9	LOS F	53.4	374.1	0.98	1.28	4.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 48.7 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Essex St [Essex St]

Network: 2026 nrtwr [2026_4000_pm]

Epping Essex St
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Essex St													
1	L2	2	0.0	2	0.0	0.016	74.6	LOS F	0.1	1.0	0.94	0.62	5.1
2	T1	174	0.0	174	0.0	1.243	295.2	LOS F	28.3	198.1	1.00	1.54	2.8
3	R2	141	0.0	141	0.0	1.055	155.4	LOS F	15.8	110.5	1.00	1.16	5.5
Approach		317	0.0	317	0.0	1.243	231.5	LOS F	28.3	198.1	1.00	1.36	3.6
East: Epping Rd													
4	L2	358	0.0	358	0.0	1.250	274.2	LOS F	246.4	1724.9	1.00	1.82	3.2
5	T1	2013	0.0	2013	0.0	1.250	274.7	LOS F	246.4	1724.9	1.00	1.86	2.1
Approach		2371	0.0	2371	0.0	1.250	274.6	LOS F	246.4	1724.9	1.00	1.85	2.2
North: Essex St													
7	L2	20	0.0	20	0.0	1.231	289.5	LOS F	40.7	285.2	1.00	1.64	4.2
8	T1	239	0.0	239	0.0	1.231	284.1	LOS F	40.7	285.2	1.00	1.64	3.6
9	R2	242	0.0	242	0.0	1.231	297.3	LOS F	20.4	142.9	1.00	1.45	2.4
Approach		501	0.0	501	0.0	1.231	290.7	LOS F	40.7	285.2	1.00	1.55	3.0
West: Epping Rd													
10	L2	61	0.0	48	0.0	0.202	11.2	LOS A	3.9	27.4	0.42	0.42	39.4
11	T1	959	0.0	751	0.0	0.426	6.5	LOS A	10.0	70.3	0.49	0.45	43.3
Approach		1020	0.0	798 N1	0.0	0.426	6.8	LOS A	10.0	70.3	0.49	0.44	43.1
All Vehicles		4208	0.0	3987 N1	0.0	1.250	219.6	LOS F	246.4	1724.9	0.90	1.49	3.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 48.9 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Forrest Gr [Forrest Grove]

Network: 2026 netwk [2026_4000_am_network]

Epping Rd Forrest Grove
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Arrival Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Forrest Grove													
1	L2	129	0.0	129	0.0	0.096	7.4	LOS A	0.4	3.1	0.39	0.62	28.5
Approach		129	0.0	129	0.0	0.096	7.4	LOS A	0.4	3.1	0.39	0.62	28.5
East: Epping Rd													
4	L2	194	0.0	178	0.0	0.220	5.5	LOS A	0.0	0.0	0.00	0.25	46.4
5	T1	1197	0.0	1099	0.0	0.220	0.0	LOS A	28.0	195.8	0.00	0.06	56.3
Approach		1391	0.0	1277 N1	0.0	0.220	0.8	NA	28.0	195.8	0.00	0.08	54.7
West: Epping Rd													
11	T1	2494	0.0	1096	0.0	0.281	0.0	LOS A	11.7	81.6	0.00	0.00	59.9
Approach		2494	0.0	1096 N1	0.0	0.281	0.0	NA	11.7	81.6	0.00	0.00	59.9
All Vehicles		4014	0.0	2503 N1	0.0	0.281	0.8	NA	28.0	195.8	0.02	0.07	53.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 48.7 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Forrest Gr [Forrest Grove]

Network: 2026 nrtwr [2026_4000_pm]

Epping Rd Forrest Grove
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Forrest Grove													
1	L2	113	0.0	113	0.0	0.107	9.0	LOS A	0.5	3.4	0.51	0.69	26.0
Approach		113	0.0	113	0.0	0.107	9.0	LOS A	0.5	3.4	0.51	0.69	26.0
East: Epping Rd													
4	L2	183	0.0	147	0.0	0.311	5.5	LOS A	0.0	0.0	0.00	0.15	51.3
5	T1	2074	0.0	1665	0.0	0.311	0.0	LOS A	28.0	195.8	0.00	0.04	57.3
Approach		2257	0.0	1812 N1	0.0	0.311	0.5	NA	28.0	195.8	0.00	0.05	56.7
West: Epping Rd													
11	T1	1020	0.0	781	0.0	0.200	0.0	LOS A	0.0	0.0	0.00	0.00	60.0
Approach		1020	0.0	781 N1	0.0	0.200	0.0	NA	0.0	0.0	0.00	0.00	60.0
All Vehicles		3389	0.0	2706 N1	0.0	0.311	0.7	NA	28.0	195.8	0.02	0.06	54.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 48.9 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Smith St [Smith St]

Network: 2026 netwk [2026_4000_am_network]

Epping Rd - Smoith St

Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: RoadName													
5	T1	1338	0.0	1241	0.0	0.212	0.0	LOS A	11.7	81.6	0.00	0.00	60.0
Approach		1338	0.0	1241 N1	0.0	0.212	0.0	NA	11.7	81.6	0.00	0.00	60.0
North: RoadName													
7	L2	6	0.0	6	0.0	0.006	8.8	LOS A	0.0	0.2	0.51	0.63	35.4
Approach		6	0.0	6	0.0	0.006	8.8	LOS A	0.0	0.2	0.51	0.63	35.4
West: Epping Rd													
10	L2	121	0.0	53	0.0	0.294	5.6	LOS A	0.0	0.0	0.00	0.06	55.0
11	T1	2487	0.0	1090	0.0	0.294	0.0	LOS A	46.6	326.4	0.00	0.03	58.8
Approach		2608	0.0	1144 N1	0.0	0.294	0.3	NA	46.6	326.4	0.00	0.03	58.5
All Vehicles		3953	0.0	2390 N1	0.0	0.294	0.2	NA	46.6	326.4	0.00	0.01	58.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 48.7 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Smith St [Smith St]

Network: 2026 nrtwr [2026_4000_pm]

Epping Rd - Smoith St

Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: RoadName													
5	T1	2185	0.0	1777	0.0	0.304	0.0	LOS A	11.7	81.6	0.00	0.00	59.9
Approach		2185	0.0	1777 N1	0.0	0.304	0.0	NA	11.7	81.6	0.00	0.00	59.9
North: RoadName													
7	L2	6	0.0	6	0.0	0.004	7.9	LOS A	0.0	0.1	0.46	0.60	36.8
Approach		6	0.0	6	0.0	0.004	7.9	LOS A	0.0	0.1	0.46	0.60	36.8
West: Epping Rd													
10	L2	8	0.0	6	0.0	0.199	5.5	LOS A	0.0	0.0	0.00	0.01	55.9
11	T1	1003	0.0	771	0.0	0.199	0.0	LOS A	0.0	0.0	0.00	0.00	59.7
Approach		1012	0.0	777 N1	0.0	0.199	0.1	NA	0.0	0.0	0.00	0.00	59.7
All Vehicles		3203	0.0	2561 N1	0.0	0.304	0.0	NA	11.7	81.6	0.00	0.00	59.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 48.9 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Blaxland [Epping_Blaxland]

Network: 2026 netwk [2026_4600_am_network]

New Site
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Blaxland Rd													
1	L2	891	0.0	891	0.0	0.926	77.1	LOS F	28.0	195.8	1.00	1.11	5.7
2	T1	140	0.0	140	0.0	1.716	701.4	LOS F	28.0	195.8	1.00	1.85	1.4
Approach		1031	0.0	1031	0.0	1.716	161.9	LOS F	28.0	195.8	1.00	1.21	3.2
East: Epping Rd													
4	L2	1	0.0	1	0.0	0.001	38.1	LOS C	0.0	0.3	0.66	0.60	15.2
5	T1	1360	0.0	1262	0.0	1.831	813.2	LOS F	46.6	326.4	1.00	2.94	0.9
Approach		1361	0.0	1263 N1	0.0	1.831	812.6	LOS F	46.6	326.4	1.00	2.94	0.9
North: Landston Place													
7	L2	7	0.0	7	0.0	0.030	64.4	LOS E	0.5	3.2	0.88	0.67	8.4
8	T1	462	0.0	462	0.0	1.795	772.0	LOS F	120.9	846.4	1.00	2.62	0.8
Approach		469	0.0	469	0.0	1.795	760.9	LOS F	120.9	846.4	1.00	2.59	0.8
West: Bridge St													
10	L2	783	0.0	340	0.0	0.280	5.5	LOS A	3.0	20.8	0.18	0.60	41.7
11	T1	2556	0.0	1110	0.0	0.628	12.9	LOS A	14.0	97.9	0.55	0.50	16.2
12	R2	1792	0.0	778	0.0	1.809	791.8	LOS F	14.0	97.9	1.00	2.94	0.3
Approach		5131	0.0	2228 N1	0.0	1.809	283.8	LOS F	14.0	97.9	0.65	1.37	1.3
All Vehicles		7992	0.0	4990 N1	0.0	1.831	437.3	LOS F	120.9	846.4	0.84	1.85	1.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.3 %
Number of Iterations: 28 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Blaxland [Epping_Blaxland]

Network: 2026netwrk [2026_4600_pm_network]

New Site
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Blaxland Rd													
1	L2	1991	0.0	1991	0.0	2.187	1118.7	LOS F	28.0	195.8	1.00	2.29	0.4
2	T1	307	0.0	307	0.0	2.318	1233.9	LOS F	28.0	195.8	1.00	2.52	0.8
Approach		2298	0.0	2298	0.0	2.318	1134.1	LOS F	28.0	195.8	1.00	2.32	0.5
East: Epping Rd													
4	L2	1	0.0	1	0.0	0.001	35.4	LOS C	0.0	0.3	0.63	0.60	16.1
5	T1	2185	0.0	1768	0.0	2.386	1313.2	LOS F	46.6	326.4	1.00	3.55	0.6
Approach		2186	0.0	1769 N1	0.0	2.386	1312.6	LOS F	46.6	326.4	1.00	3.55	0.6
North: Landston Place													
7	L2	7	0.0	7	0.0	0.035	67.5	LOS E	0.5	3.3	0.90	0.67	8.1
8	T1	483	0.0	483	0.0	2.173	1106.4	LOS F	145.2	1016.1	1.00	2.84	0.6
Approach		491	0.0	491	0.0	2.173	1090.8	LOS F	145.2	1016.1	1.00	2.81	0.6
West: Bridge St													
10	L2	419	0.0	312	0.0	0.268	6.2	LOS A	3.6	25.4	0.22	0.61	40.4
11	T1	1006	0.0	750	0.0	0.422	11.6	LOS A	14.0	97.9	0.48	0.42	17.5
12	R2	1167	0.0	871	0.0	2.353	1277.1	LOS F	14.0	97.9	1.00	3.48	0.2
Approach		2593	0.0	1933 N1	0.0	2.353	580.5	LOS F	14.0	97.9	0.67	1.83	0.6
All Vehicles		7567	0.0	6491 N1	0.0	2.386	1014.6	LOS F	145.2	1016.1	0.90	2.54	0.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 12.4 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Essex St [Essex St]

Network: 2026 netwk [2026_4600_am_network]

Epping Essex St
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Essex St													
1	L2	21	0.0	21	0.0	0.070	60.3	LOS E	1.3	8.9	0.86	0.71	6.2
2	T1	377	0.0	377	0.0	1.243	294.1	LOS F	62.2	435.3	1.00	1.82	2.8
3	R2	201	0.0	201	0.0	0.668	68.2	LOS E	13.9	97.5	0.99	0.83	11.3
Approach		599	0.0	599	0.0	1.243	210.0	LOS F	62.2	435.3	0.99	1.45	3.9
East: Epping Rd													
4	L2	22	0.0	22	0.0	0.881	56.8	LOS E	33.0	230.9	1.00	1.02	14.0
5	T1	749	0.0	749	0.0	0.881	54.9	LOS D	33.0	230.9	1.00	1.03	9.6
Approach		772	0.0	772	0.0	0.881	54.9	LOS D	33.0	230.9	1.00	1.03	9.7
North: Essex St													
7	L2	4	0.0	4	0.0	0.029	38.0	LOS C	0.9	6.4	0.67	0.53	23.3
8	T1	16	0.0	16	0.0	0.029	32.5	LOS C	0.9	6.4	0.67	0.53	21.7
9	R2	623	0.0	623	0.0	1.232	300.1	LOS F	53.8	376.3	1.00	1.47	2.4
Approach		643	0.0	643	0.0	1.232	291.8	LOS F	53.8	376.3	0.99	1.44	2.5
West: Epping Rd													
10	L2	39	0.0	17	0.0	0.586	35.2	LOS C	14.6	102.2	0.90	0.79	20.3
11	T1	2394	0.0	1047	0.0	1.235	190.8	LOS F	28.0	195.8	0.97	1.48	4.6
Approach		2433	0.0	1064 N1	0.0	1.235	188.3	LOS F	28.0	195.8	0.97	1.47	4.7
All Vehicles		4446	0.0	3078 N1	0.0	1.243	180.7	LOS F	62.2	435.3	0.99	1.35	4.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.3 %
Number of Iterations: 28 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Essex St [Essex St]

Network: 2026netwrk [2026_4600_pm_network]

Epping Essex St
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Essex St													
1	L2	2	0.0	2	0.0	0.016	74.6	LOS F	0.1	1.0	0.94	0.62	5.1
2	T1	172	0.0	172	0.0	1.228	282.8	LOS F	27.3	191.2	1.00	1.51	2.9
3	R2	151	0.0	151	0.0	1.126	206.6	LOS F	19.8	138.9	1.00	1.26	4.2
Approach		324	0.0	324	0.0	1.228	246.1	LOS F	27.3	191.2	1.00	1.39	3.4
East: Epping Rd													
4	L2	374	0.0	374	0.0	1.261	284.4	LOS F	253.1	1771.7	1.00	1.85	3.1
5	T1	2018	0.0	2018	0.0	1.261	284.9	LOS F	253.1	1771.7	1.00	1.89	2.0
Approach		2392	0.0	2392	0.0	1.261	284.8	LOS F	253.1	1771.7	1.00	1.88	2.2
North: Essex St													
7	L2	20	0.0	20	0.0	1.240	296.6	LOS F	41.6	291.1	1.00	1.66	4.1
8	T1	237	0.0	237	0.0	1.240	291.1	LOS F	41.6	291.1	1.00	1.66	3.5
9	R2	249	0.0	249	0.0	1.259	320.6	LOS F	21.4	149.8	1.00	1.48	2.2
Approach		506	0.0	506	0.0	1.259	305.8	LOS F	41.6	291.1	1.00	1.57	2.9
West: Epping Rd													
10	L2	62	0.0	47	0.0	0.195	11.2	LOS A	3.7	26.2	0.42	0.42	39.5
11	T1	959	0.0	721	0.0	0.410	6.5	LOS A	9.5	66.6	0.48	0.44	43.4
Approach		1021	0.0	768 N1	0.0	0.410	6.7	LOS A	9.5	66.6	0.48	0.44	43.2
All Vehicles		4243	0.0	3990 N1	0.0	1.261	230.8	LOS F	253.1	1771.7	0.90	1.52	3.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 12.4 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Forrest Gr [Forrest Grove]

Network: 2026 netwk [2026_4600_am_network]

Epping Rd Forrest Grove
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Arrival Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Forrest Grove													
1	L2	167	0.0	167	0.0	0.123	7.5	LOS A	0.6	4.1	0.39	0.63	28.4
Approach		167	0.0	167	0.0	0.123	7.5	LOS A	0.6	4.1	0.39	0.63	28.4
East: Epping Rd													
4	L2	201	0.0	184	0.0	0.220	5.5	LOS A	0.0	0.0	0.00	0.26	46.1
5	T1	1193	0.0	1093	0.0	0.220	0.0	LOS A	28.0	195.8	0.00	0.06	56.3
Approach		1394	0.0	1278 N1	0.0	0.220	0.8	NA	28.0	195.8	0.00	0.09	54.5
West: Epping Rd													
11	T1	2433	0.0	1064	0.0	0.273	0.0	LOS A	11.7	81.6	0.00	0.00	59.9
Approach		2433	0.0	1064 N1	0.0	0.273	0.0	NA	11.7	81.6	0.00	0.00	59.9
All Vehicles		3994	0.0	2510 N1	0.0	0.273	0.9	NA	28.0	195.8	0.03	0.09	52.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.3 %
Number of Iterations: 28 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Forrest Gr [Forrest Grove]

Network: 2026netwrk [2026_4600_pm_network]

Epping Rd Forrest Grove
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Forrest Grove													
1	L2	147	0.0	147	0.0	0.135	8.8	LOS A	0.6	4.4	0.50	0.68	26.4
Approach		147	0.0	147	0.0	0.135	8.8	LOS A	0.6	4.4	0.50	0.68	26.4
East: Epping Rd													
4	L2	232	0.0	184	0.0	0.310	5.5	LOS A	0.0	0.0	0.00	0.18	49.4
5	T1	2038	0.0	1619	0.0	0.310	0.0	LOS A	28.0	195.8	0.00	0.05	56.8
Approach		2269	0.0	1803 N1	0.0	0.310	0.6	NA	28.0	195.8	0.00	0.06	56.0
West: Epping Rd													
11	T1	1021	0.0	778	0.0	0.200	0.0	LOS A	0.0	0.0	0.00	0.00	60.0
Approach		1021	0.0	778 N1	0.0	0.200	0.0	NA	0.0	0.0	0.00	0.00	60.0
All Vehicles		3438	0.0	2729 N1	0.0	0.310	0.9	NA	28.0	195.8	0.03	0.08	53.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 12.4 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Smith St [Smith St]

Network: 2026 netwk [2026_4600_am_network]

Epping Rd - Smith St

Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: Epping Rd													
5	T1	1360	0.0	1261	0.0	0.216	0.0	LOS A	11.7	81.6	0.00	0.00	60.0
Approach		1360	0.0	1261[N1]	0.0	0.216	0.0	NA	11.7	81.6	0.00	0.00	60.0
North: Smith St													
7	L2	8	0.0	8	0.0	0.008	8.6	LOS A	0.0	0.2	0.51	0.64	35.6
Approach		8	0.0	8	0.0	0.008	8.6	LOS A	0.0	0.2	0.51	0.64	35.6
West: Epping Rd													
10	L2	132	0.0	57	0.0	0.286	5.6	LOS A	0.0	0.0	0.00	0.06	54.9
11	T1	2424	0.0	1056	0.0	0.286	0.0	LOS A	46.6	326.4	0.00	0.03	58.7
Approach		2556	0.0	1114[N1]	0.0	0.286	0.3	NA	46.6	326.4	0.00	0.03	58.3
All Vehicles		3924	0.0	2383[N1]	0.0	0.286	0.2	NA	46.6	326.4	0.00	0.02	58.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.3 %
Number of Iterations: 28 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: Smith St [Smith St]

Network: 2026netwrk [2026_4600_pm_network]

Epping Rd - Smoith St

Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: RoadName													
5	T1	2185	0.0	1767	0.0	0.302	0.0	LOS A	11.7	81.6	0.00	0.00	59.9
Approach		2185	0.0	1767 [N1]	0.0	0.302	0.0	NA	11.7	81.6	0.00	0.00	59.9
North: RoadName													
7	L2	17	0.0	17	0.0	0.011	7.9	LOS A	0.0	0.3	0.45	0.62	36.9
Approach		17	0.0	17	0.0	0.011	7.9	LOS A	0.0	0.3	0.45	0.62	36.9
West: Epping Rd													
10	L2	8	0.0	6	0.0	0.195	5.5	LOS A	0.0	0.0	0.00	0.01	55.9
11	T1	1004	0.0	753	0.0	0.195	0.0	LOS A	0.0	0.0	0.00	0.00	59.8
Approach		1013	0.0	759 [N1]	0.0	0.195	0.1	NA	0.0	0.0	0.00	0.00	59.7
All Vehicles		3215	0.0	2543 [N1]	0.0	0.302	0.1	NA	11.7	81.6	0.00	0.01	59.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 12.4 %
Number of Iterations: 30 (maximum specified: 30)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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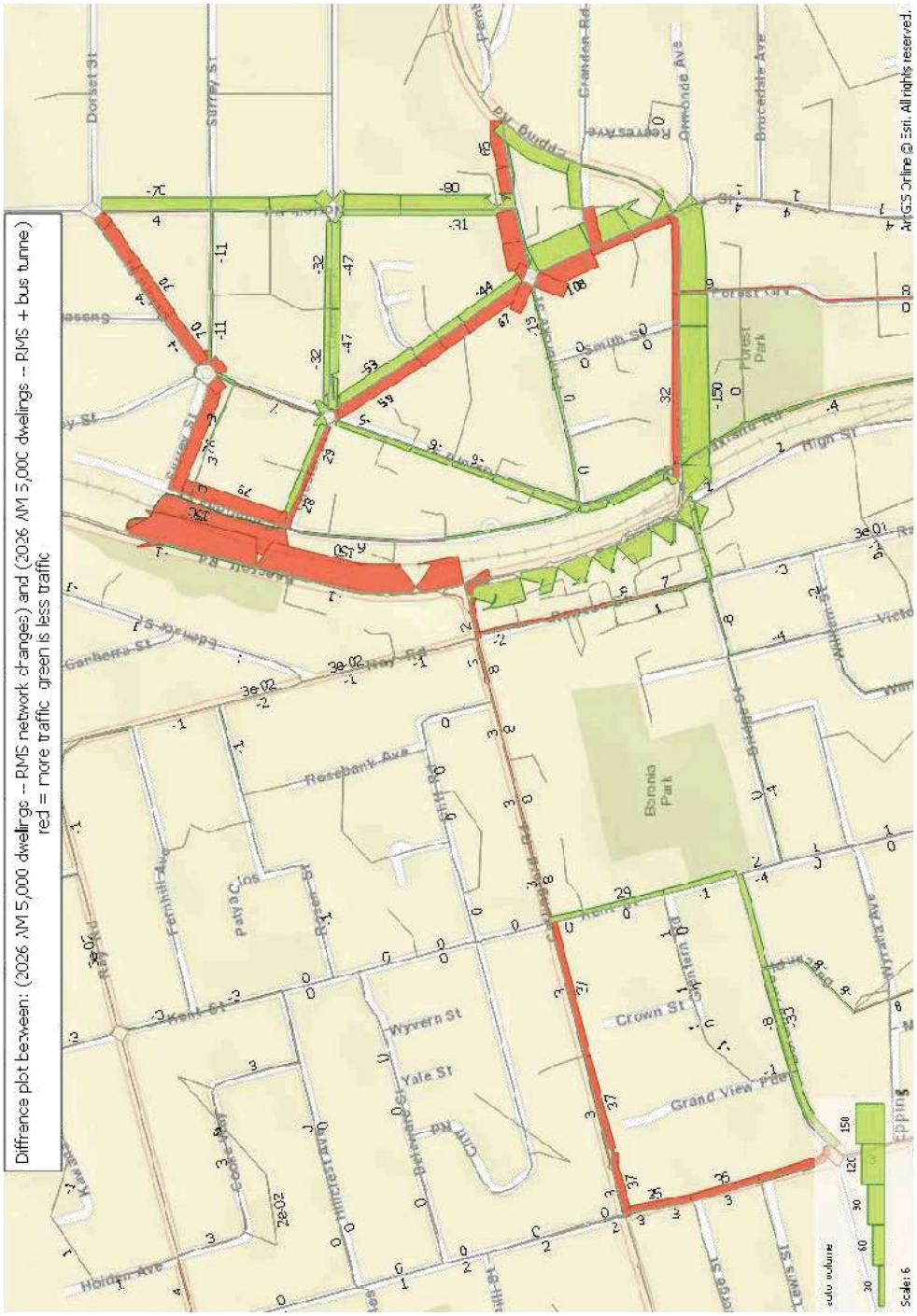
Appendix N

Bus Tunnel Analysis

J17056RP4


Diffrence plot between: (2026 AM 5,000 dwellings -- RMS network changes) and (2026 AM 5,000 dwellings -- RMS + bus tunnel)
red = more traffic green is less traffic
Dorset St
Surrey St
Crandon Rd
Reeves Ave
Ormonde Ave
Brucedale Ave
Forest Park
Smith St
High St
Rosebank Ave
Boronia Park
Crown St
Grand View Pde
Wyvern St
Yale St
Kent St
Holden Ave
Ray Rd
Fernhill Ave
Patya Clos
Rosen St
Hillcrest Ave
Lewis St
Wyralla Ave
Epping
Scale: 6
auto volume
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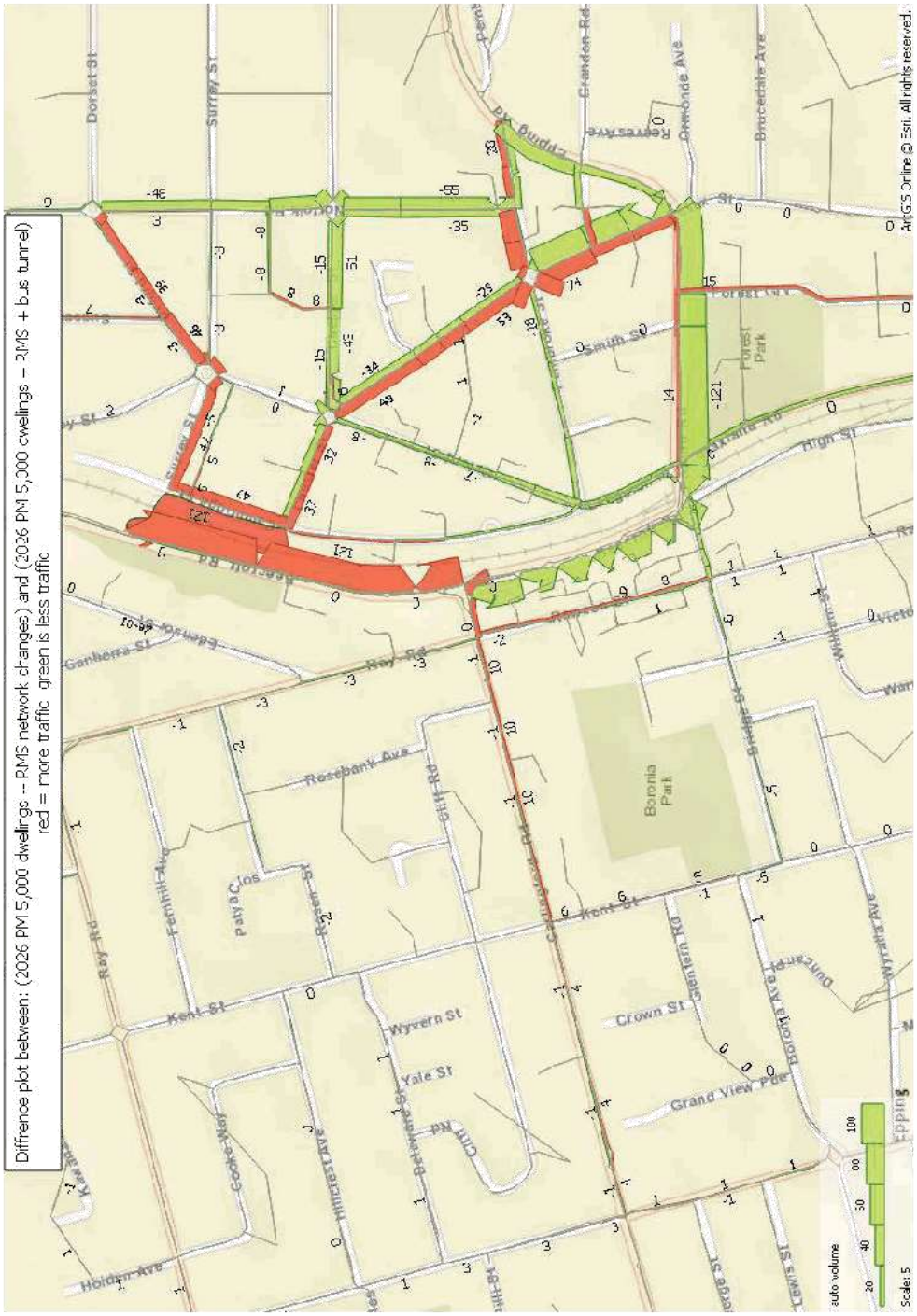
Diffrence plot between: (2026 PM 5,000 dwellings – RMS network changes) and (2026 PM 5,000 dwellings – RMS + bus tunnel)
red = more traffic green is less traffic
Boronia Park
Forest Park
Ray Rd
Kent St
Wyvern St
Yale St
Crown St
Grand View Pde
Rosebank Ave
Smith St
Dorset St
Surrey St
Crandon Rd
Ormonde Ave
Brucedale Ave
Holden Ave
Hillcrest Ave
Cooke Way
Glentern Rd
Boronia Ave
Wyralla Ave
Ganberra St
Fernhill Ave
Patya Cios
Rosen St
Cliff Rd
Bridge St
Lewis St
Epping
auto volume
Scale: 5
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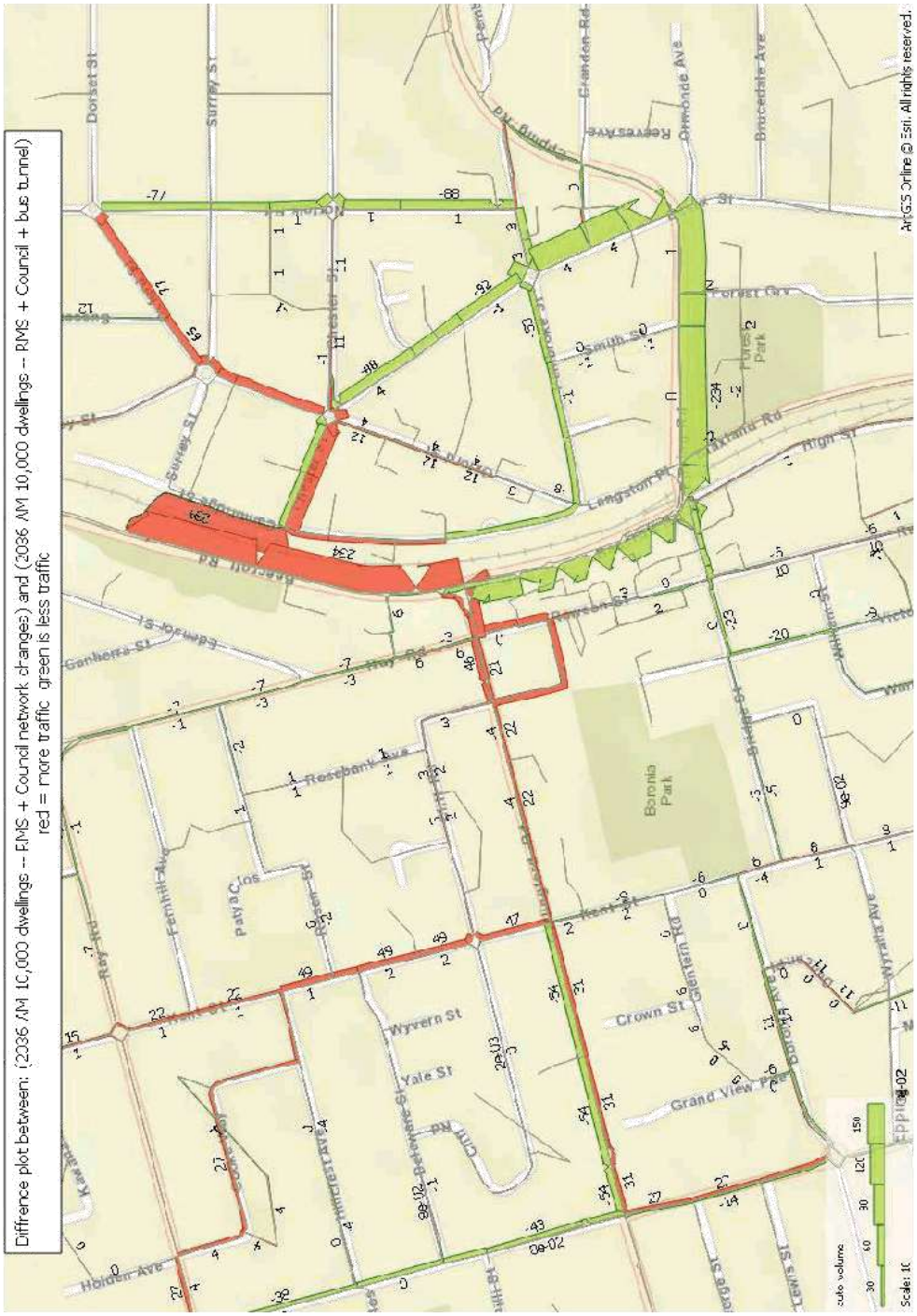
Diffrence plot between: (2036 AM 10,000 dwellings -- RMS + Council network changes) and (2036 AM 10,000 dwellings -- RMS + Council + bus tunnel)
red = more traffic green is less traffic
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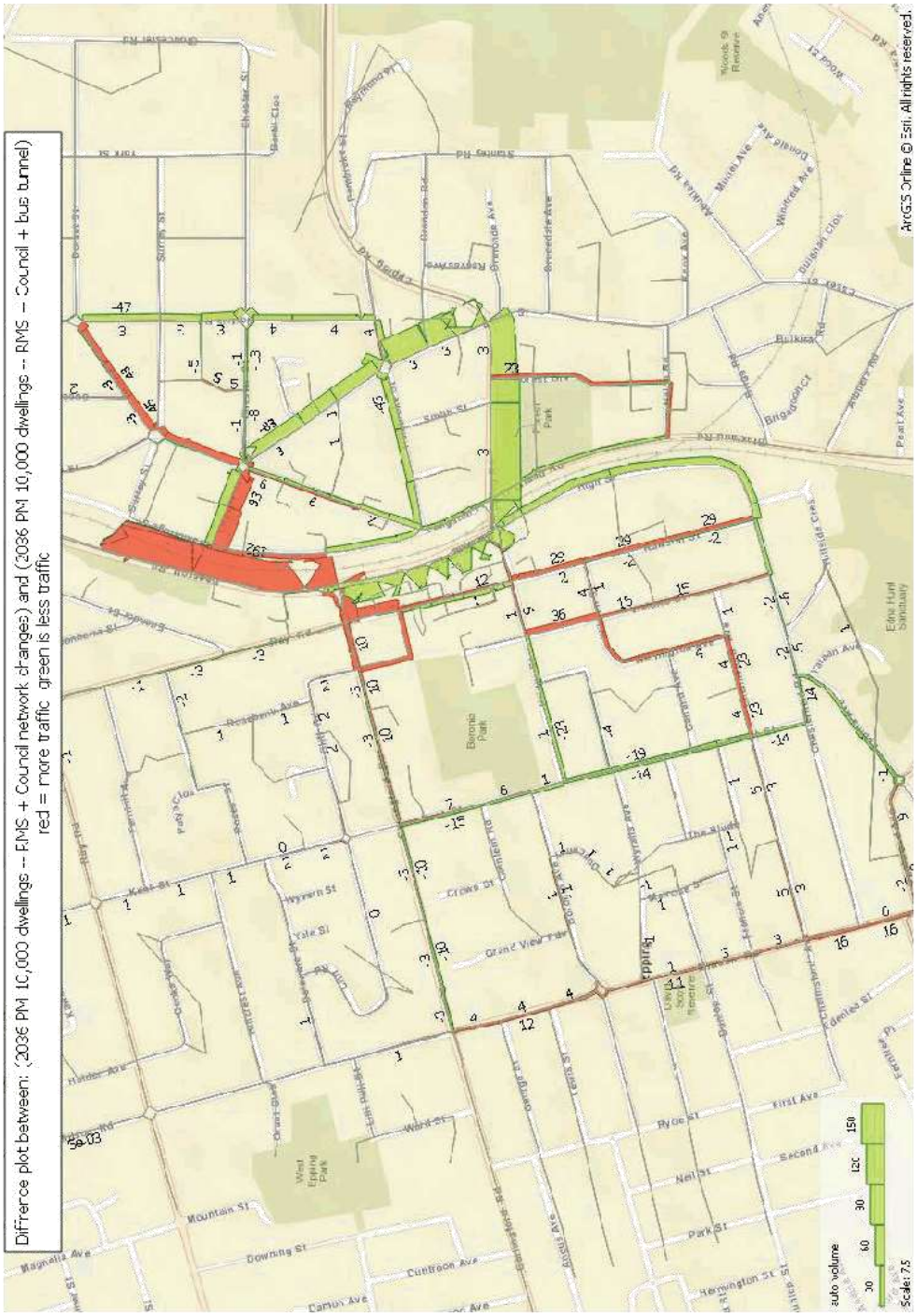
Boronia Park
Wyvern St
Yale St
Crown St
Grand View Pde
Langston Pl
Rowcott St
Hay Rd
Resebank Ave
Holden Ave
Glentern Rd
Wyrallah Ave
Ormonde Ave
Brucedale Ave
Reeves Ave
Dorset St
Surrey St
Ganberra St
Fernhill Ave
Patya Clos
Rosen St
Ray Rd
Kent St
Bridge St
Smith St
Forest Grv
Taxland Rd
High St
Scale: 1C


Difference plot between: (2036 PM 10,000 dwellings -- EMS + Council network changes) and (2036 PM 10,000 dwellings -- EMS -- Council + bus tunnel)
red = more traffic green is less traffic
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auto volume
30
60
90
120
150
Scale: 7.5

Appendix O

East West Link Analysis

J17056RP4

Diffrence plot between: (2026 AM 5,000 dwellings -- RMS network changes) and (2026 AM 5,000 dwellings -- RMS + E-W link)
red = more traffic green is less traffic
auto volume
30
60
90
120
150
Scale: 7.5
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Diffrence plot between: (2026 PM 5,000 dwellings -- RMS network changes) and (2026 PM 5,000 dwellings -- RMS + E-W link)
red = more traffic green is less traffic
auto volume
30
60
90
120
150
Scale: 7.5
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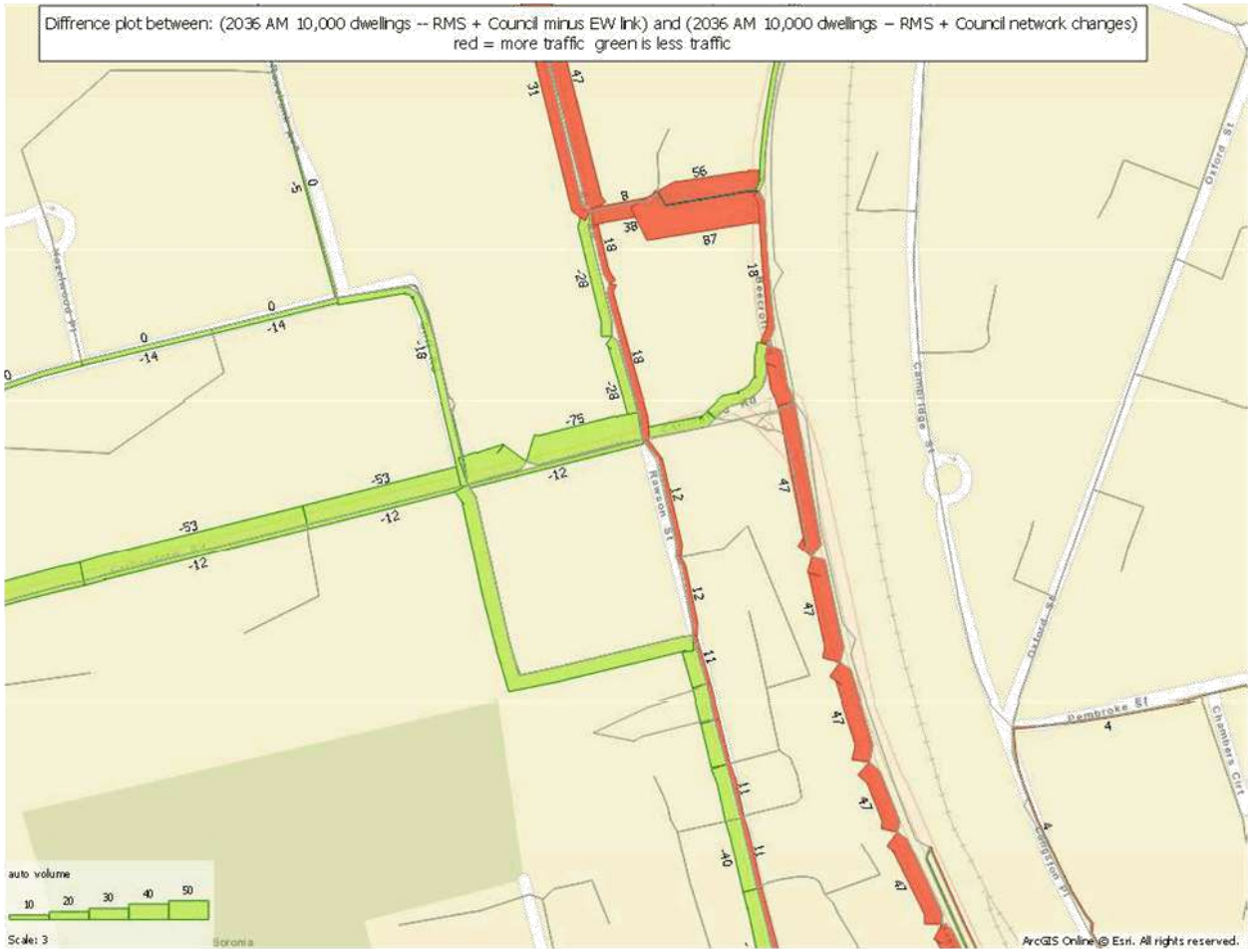
Diffrence plot between: (2036 AM 10,000 dwellings -- RMS + Council minus EW link) and (2036 AM 10,000 dwellings – RMS + Council network changes)
red = more traffic green is less traffic
auto volume
10 20 30 40 50
Scale: 3
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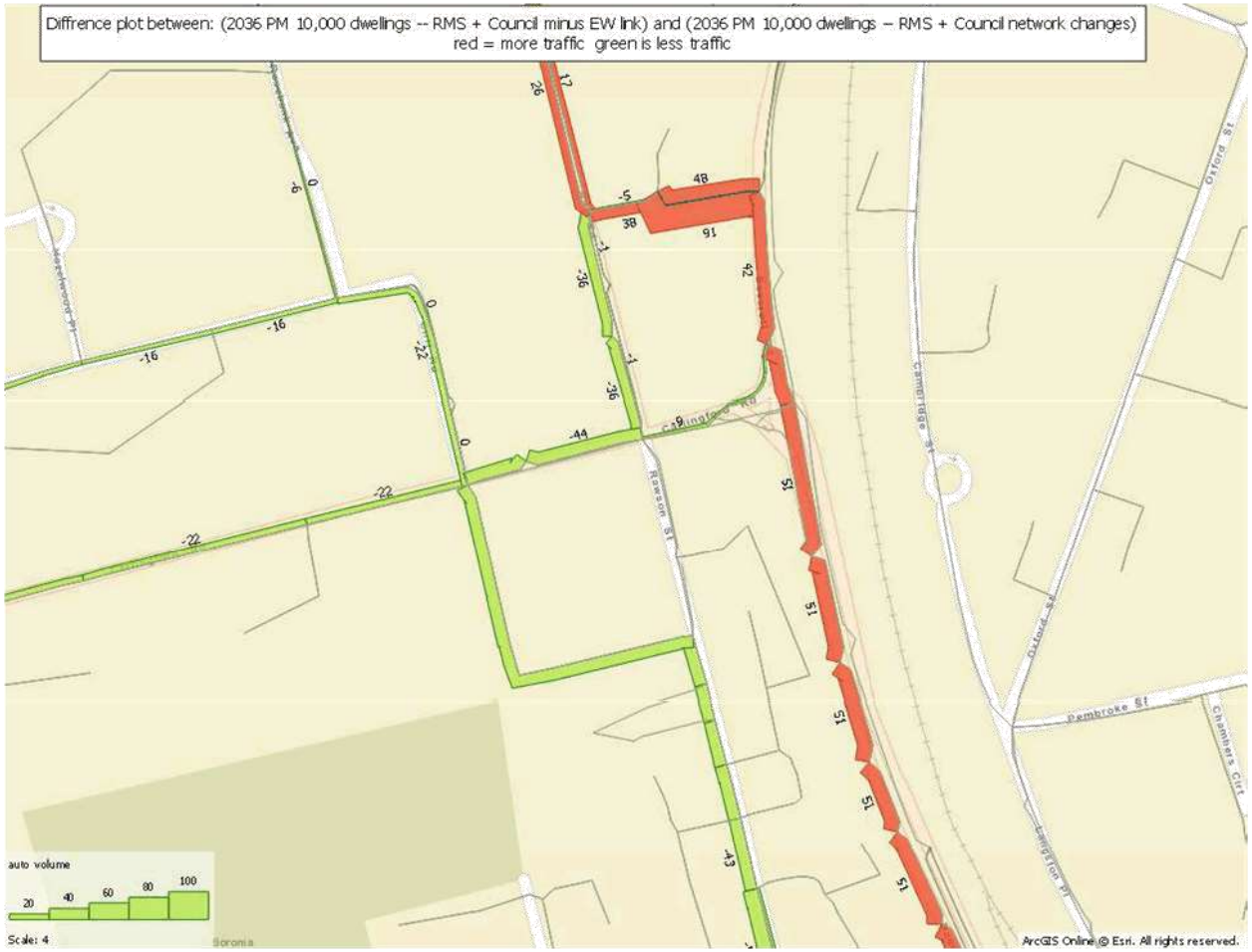
Diffrence plot between: (2036 PM 10,000 dwellings -- RMS + Council minus EW link) and (2036 PM 10,000 dwellings – RMS + Council network changes)
red = more traffic green is less traffic
auto volume
20
40
60
80
100
Scale: 4
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Forest Park Planning Proposal Review

Traffic Impact Assessment Report

Prepared for Parramatta City Council | 23 February 2018

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Forest Park Planning Proposal Review

Final

Report J17056 RPT3 | Prepared for City of Parramatta Council| 23 February 2018

Prepared by	**Dr Tim Brooker**	Approved by	**Allan Young**
Position	Associate – Transport Planner	Position	Planning Service Leader
Signature		Signature	
Date	23 February 2018	Date	23 February 2018

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Document Control

Version	Date	Prepared by	Reviewed by
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1 Introduction

1.1 Overview

This traffic impact assessment report (TIA) has been prepared by EMM Consulting Pty Limited (EMM) for City of Parramatta Council to review the transport and access impacts of potential residential development under the current zoning for approximately 234 dwellings at the Forest Park development plus a proposed zoning uplift for 350 additional dwellings. This would give a future total of 584 additional dwellings in a mixture of one bedroom, two bedroom and three bedroom units to be developed by 2026. In the period up to 2017, Council has currently approved 4,854 additional dwellings to be developed in the Epping town centre. The Forest Park development would raise this to a total of 5,438 dwellings by 2026.

While the site is located within the City of Parramatta local government area (LGA), due to a recent boundary change for local councils, Hornsby Shire Council planning instruments still apply. The development uplift will be greater than the development permitted for the site under the Hornsby Local Environment Plan 2013 (HLEP 2013). These dwellings will be above commercial floor-space (1,384 m^2) which is effectively a replacement activity for existing commercial uses at the site and the commercial component of the Forest Park development is therefore not considered in this report. The addresses which make up the site are: 2-18 Epping Road, 2-4 Forest Grove and 725 Blaxland Road, as shown below in Figure 1.1.

This TIA report considers the impacts of traffic generated by the maximum potential development (approximately 600 dwellings total), and also considers the future base traffic volumes which would be generated as a result of the existing recently approved backlog of new residential developments on sites within and surrounding the Epping town centre, which involves an additional 4,854 dwellings in the Epping town centre by 2026.

A TIA was included in a previous planning proposal for the Forest Park development. This was prepared for Austino Property Group by GTA consultants in December 2015 (GTA 2015). This TIA reviews the information and conclusions of the GTA report and updates these with regard to the most recent changes in the RMS approved road upgrades for the major road network, which are now under construction along Epping Road and the other major traffic routes through the Epping town centre.

Figure 1.1 Site locality

1.2 Details of the development traffic impacts considered

This TIA reviews the likely future effect of the traffic generated by the Forest Park development on weekdays during the main morning and afternoon commuter peak traffic hours on Epping Road, Blaxland Road, Forest Grove, Essex Street and Smith Street, in combination with other development traffic in the locality. The following three scenarios are considered in the analysis of traffic volumes:

- scenario 1 – the current base traffic volumes (using 2017 surveyed traffic flows);
- scenario 2 – the future base traffic volumes for 2026 (considering an additional 4,854 dwellings in the Epping Town Centre); and
- scenario 3 – the future total traffic volumes for 2026 (including the additional 4,854 dwellings plus an extra 584 dwellings at the site, totalling 5,438 dwellings).

This report also reviews the future pedestrian, cycleway and public transport access requirements for the potential 584 dwellings at the Forest Park development by considering:

- the site's pedestrian and cycleway access; and
- the use of the local bus routes and train line as the primary public transport routes serving the area.

2 Existing traffic conditions

2.1 Location

The site (see Figure 1.1 above), known as Forest Park, is located at the addresses: 2-18 Epping Road, 2-4 Forest Grove and 725 Blaxland Road, in the Epping town centre. The site is currently comprised of five properties fronting onto Epping Road, Blaxland Road and Forest Grove: a small block of flats, an automotive workshop, and three small residential dwellings. The remainder of the site has been cleared in preparation for development.

The site is approximately 20,040 m^2 and is currently zoned R4 High Density Residential and RE1 Public Recreation in the HLEP 2013. It is bounded by Epping Road to the north, Forest Grove to the east and Blaxland Road to the west and is located within an easy walking distance of Epping Railway Station (260 m).

2.2 Site access and local road network

The site is directly accessible from Epping Road, Blaxland Road and Forest Grove. Other key roads in the vicinity include Essex Street, Smith Street and Maida Road. Particulars concerning all these roads are detailed below:

- Epping Road – a state declared road under the jurisdiction of the RMS. It is generally a four-lane, two-way road running in an east-west direction between Epping and Lane Cove. It is signposted with a speed limit of 60 km/hr. Both sides of Epping Road are clearways during peak hours and are 'no stopping' at other times. It should be noted that RMS is currently widening Epping Road between Essex Street and Blaxland Road to accommodate an additional westbound lane, and adding a raised median strip.

- Blaxland Road – a state declared road under the jurisdiction of the RMS. It is generally a four-lane, two-way road running in a north-south direction between Epping and Ryde. It is signposted with a speed limit of 60 km/hr. In the 70 m section of Blaxland Road approaching the intersection with Epping Road, a 'no stopping' restriction applies on both sides of the road, and elsewhere on the western side. On most sections, however, kerbside parking is permitted on the eastern side outside of peak hours.

- Forest Grove – a local road under council jurisdiction. It is a two-lane, two-way road running in a north-south direction between Epping Road and Maida Road. It is signposted with a speed limit of 50 km/hr. Both sides of Forest Grove permit unrestricted parking.

- Essex Street – a local street under council jurisdiction. It is a two-lane, two-way street running in a north-south direction. It is signposted with a speed limit of 50 km/hr. Both sides of Essex Street permit unrestricted parking.

- Smith Street – a local street under council jurisdiction. It is a two-lane, two-way street running in a north-south direction between Pembroke Street and Epping Road. It is signposted with a speed limit of 50 km/hr. Both sides of Smith Street permit unrestricted parking.

- Maida Road – a local road under council jurisdiction. It is a two-lane, two-way street running in an east-west direction between Blaxland Road and Essex Street. It is signposted with a speed limit of 50 km/hr. Both sides of Maida Road permit unrestricted parking.

2.3 Traffic volumes

The existing peak hourly traffic volumes (scenario 1) for the local road network were determined by peak hourly intersection counts undertaken in March 2017.

These morning and afternoon peak hour traffic counts are shown below in Table 2.1:

Table 2.1 Traffic volumes on local roads

Road	Morning peak volume	Afternoon peak volume	Average daily volume[1]
Epping Road between Blaxland Road and Smith Street	2,730	2,431	30,966
Epping Road between Smith Street and Forest Grove	2,735	2,463	31,188
Epping Road between Forest Grove and Essex Street	2,700	2,156	29,136
Blaxland Road between Epping Road and Maida Road	1,120	919	12,234
Forest Grove	58	360	2,508
Essex Street between Epping Road and Maida Road	413	515	5,568
Smith Street	17	35	312
Maida Road	88	362	2,700

Notes: 1. Daily average volume is estimated as 12x the average peak traffic volume.

2.4 Existing Intersection Performance

The performances of the following intersections in the immediate vicinity of the site were analysed using a SIDRA-linked intersection model:

- Epping Road/Blaxland Road;
- Epping Road/Smith Street;
- Epping Road/Forest Grove; and
- Epping Road/Essex Street.

The RMS SIDRA intersection level of service (LoS) vs. delay standards for traffic signal controlled intersections which are specified in the RTA-RMS Guide to Traffic Generating Developments (RTA 2002) are summarised below. In addition to LoS, the existing operation of the intersection is also described in terms of the following factors:

- Degree of Saturation (DoS) which is the ratio of the traffic volume to the capacity of the intersection;
- the Average Vehicle Delay (AVD) in seconds per vehicle for all traffic movements at the intersection; and
- the length of the maximum traffic queue (95th percentile traffic queue) for any traffic movement at the intersection.

Description	LoS (RMS definition)	Average Vehicle Delay (s)
Very Good	A	<14.5
Good	B	14.5 to ≤28.5
Satisfactory	C	28.5 to ≤42.5
Near Capacity	D	42.5 to ≤56.5
At Capacity	E	56.5 to ≤70.5
Over Capacity	F	≥70.5

Table 2.2 Epping Road/Blaxland Road intersection - 2017 AM performance

Approach	Average delay (seconds)	Queue length (metres)	Level of service	Degree of saturation
South: Blaxland Road				
Left turn	17.3	33.7	B	0.358
Through	53.8	40.4	D	0.860
East: Epping Road				
Left turn	48.8	138.8	D	0.859
Through	43.3	139.0	D	0.859
North: Langston Place				
Left turn	58.4	51.6	E	0.867
Through	52.9	51.6	D	0.867
Right turn	58.6	51.6	E	0.867
West: Bridge Street				
Left turn	5.6	14.7	A	0.248
Through	27.3	97.9	B	0.895
Right turn	44.8	97.9	D	0.861

The existing Epping Road/Blaxland Road intersection morning operation shows a mixed performance. During the morning peak hour, the eastern and northern approaches have the worst levels of service, with the northern approach largely at capacity (LoS E). This shows that the intersection has a small amount of spare traffic capacity in the morning to accommodate additional peak hour traffic growth from the new residential and other developments in the Epping town centre locality assessed in this report.

Table 2.3 Epping Road/Blaxland Road intersection - 2017 PM performance

Approach	Average delay (seconds)	Queue length (metres)	Level of service	Degree of saturation
South: Blaxland Road				
Left turn	74.6	133.8	F	0.894
Through	73.6	22.1	F	0.402
East: Epping Road				
Left turn	72.8	326.4	F	0.962
Through	67.0	326.4	E	0.962
North: Langston Place				
Left turn	98.0	75.4	F	0.926
Through	92.5	75.4	F	0.926
Right turn	98.1	75.4	F	0.926
West: Bridge Street				
Left turn	4.9	11.9	A	0.243
Through	8.6	97.9	A	0.379
Right turn	39.8	97.9	C	0.832

The existing Epping Road/Blaxland Road intersection afternoon operation shows a low performance. During the afternoon peak hour, the southern, eastern and northern approaches are all generally over-capacity (LoS F). This shows that the intersection has practically no spare traffic capacity in the afternoon to accommodate additional peak hour traffic growth from the new residential and other developments in the Epping town centre locality assessed in this report.

Table 2.4 Epping Road/Smith Street intersection - 2017 AM performance

Approach	Average delay (seconds)	Queue length (metres)	Level of service	Degree of saturation
East: Epping Road				
Through	0.4	2.4	A	0.227
Right turn	31.6	2.4	C	0.227
North: Smith Street				
Left turn	11.2	0.1	A	0.005
Right turn	414.5	9.3	F	0.514
West: Epping Road				
Left turn	5.6	201.3	A	0.456
Through	0.0	201.3	A	0.456

The existing Epping Road/Smith Street intersection morning operation shows a generally satisfactory performance. During the morning peak hour, most approaches are acceptable (Los A-C). The major issue with this intersection is the right turn from Smith Street onto Epping Road. Due to the RMS' intention to

add a median strip on Epping Road, this turn will not be permitted in future. Apart from this issue, the intersection has significant spare traffic capacity in the morning to accommodate additional peak hour traffic growth from the new residential and other developments in the Epping town centre locality assessed in this report.

Table 2.5 Epping Road/Smith Street intersection - 2017 PM performance

Approach	Average delay (seconds)	Queue length (metres)	Level of service	Degree of saturation
East: Epping Road				
Through	0.0	81.6	A	0.471
Right turn	11.4	81.6	A	0.471
North: Smith Street				
Left turn	7.3	0.1	A	0.003
Right turn	1957.9	46.9	F	2.560
West: Epping Road				
Left turn	5.5	0.0	A	0.223
Through	0.0	0.0	A	0.223

Similarly to the morning peak, the afternoon peak for the existing Epping Road/Smith Street intersection has significant capacity and a very good LoS (A). Again, the only exception is the right turn from Smith Street which is well over capacity. However this turn will not be permitted in RMS' new plans for Epping Road, where a median strip will prevent right turns.

Table 2.6 Epping Road/Forest Grove intersection - 2017 AM performance

Approach	Average delay (seconds)	Queue length (metres)	Level of service	Degree of saturation
South: Forest Grove				
Left turn	7.4	0.9	A	0.031
Right turn	538.4	2.4	F	0.270
East: Epping Road				
Left turn	5.5	0.0	A	0.216
Through	0.0	0.0	A	0.216
West: Epping Road				
Through	0.8	13.1	A	0.886
Right turn	12.9	13.1	A	0.886

The existing Epping Road/Forest Grove intersection morning operation shows a mixed performance. During the morning peak hour, most approaches have a very good LoS (A). The major issue with this intersection is the right turn from Forest Grove onto Epping Road. Due to the RMS' intention to add a median strip on Epping Road, this turn will not be permitted in future. Apart from this issue, the intersection has significant spare traffic capacity in the morning to accommodate additional peak hour traffic growth from the new residential and other developments in the Epping town centre locality assessed in this report.

Table 2.7 Epping Road/Forest Grove intersection - 2017 PM performance

Approach	Average delay (seconds)	Queue length (metres)	Level of service	Degree of saturation
South: Forest Grove				
Left turn	23.5	34.4	B	0.801
Right turn	87.5	1.5	F	0.076
East: Epping Road				
Left turn	5.5	115.5	A	0.377
Through	0.0	164.0	A	0.377
West: Epping Road				
Through	2.3	18.0	A	0.286
Right turn	16.6	18.0	B	0.286

Similarly to the morning peak, the afternoon peak for the existing Epping Road/Forest Grove intersection has significant capacity and a good LoS (A-B). Again, the only exception is the right turn from Smith Street which is over capacity. However this turn will not be permitted in RMS' new plans for Epping Road, where a median strip will prevent right turns.

Table 2.8 Epping Road/Essex Street intersection - 2017 AM performance

Approach	Average delay (seconds)	Queue length (metres)	Level of service	Degree of saturation
South: Essex Street				
Left turn	66.6	60.9	E	0.841
Through	61.1	60.9	E	0.841
Right turn	66.8	59.3	E	0.841
East: Epping Road				
Left turn	13.7	39.7	A	0.314
Through	8.2	39.7	A	0.314
Right turn	13.7	39.1	A	0.314
North: Essex Street				
Left turn	49.0	21.5	D	0.206
Through	53.5	114.7	D	0.889
Right turn	66.0	114.7	E	0.889
West: Epping Road				
Left turn	23.0	193.1	B	0.859
Through	17.6	193.1	B	0.859
Right turn	23.3	190.5	B	0.859

The existing Epping Road/Essex Street intersection morning operation shows a mixed performance. During this peak hour, the southern and northern approaches have the worst levels of service, with the southern approach at or nearing capacity (LoS D-E). The Epping Road components of the intersection have good levels of service (A-B). This shows that the intersection has some spare traffic capacity to accommodate additional peak hour traffic growth from the new residential and other developments in the Epping town centre locality assessed in this report.

Table 2.9 Epping Road/Essex Street intersection - 2017 PM performance

Approach	Average delay (seconds)	Queue length (metres)	Level of service	Degree of saturation
South: Essex Street				
Left turn	91.6	110.3	F	0.891
Through	77.8	123.7	F	0.891
Right turn	82.1	123.7	F	0.891
East: Epping Road				
Left turn	241.6	544.3	F	1.194
Through	236.3	544.3	F	1.194
Right turn	242.0	534.8	F	1.194
North: Essex Street				
Left turn	62.7	41.9	E	0.270
Through	57.1	41.9	E	0.270
Right turn	254.3	210.9	F	1.178
West: Epping Road				
Left turn	22.1	102.7	B	0.560
Through	20.5	102.7	B	0.560
Right turn	33.5	79.2	C	0.560

The existing Epping Road/Essex Street intersection afternoon operation shows a low performance. During this peak hour, the southern, eastern and northern approaches are at or over capacity (LoS E-F). The western approach has an acceptable LoS (B-C). Overall, the intersection has no spare traffic capacity to accommodate additional peak hour traffic growth from the new residential and other developments in the Epping town centre locality assessed in this report.

2.5 Car parking

As mentioned is Section 2.2, kerbside parking is not permitted on Epping Road, however it is permitted on the eastern side of Blaxland Road outside of peak hours. Unrestricted kerbside parking is permitted on both sides of Essex Street, Forest Grove, Smith Street and Maida Road.

2.6 Pedestrian and cycling access

The vicinity of the site is well suited for pedestrian travel. There are concrete footpaths on both sides of Epping Road and the eastern side of Blaxland Road and Forest Grove. There are also concrete footpaths on the western side of Essex Street and on the northern side of Maida Road. Signalised pedestrian crossings at the Epping Road/Blaxland Road intersection allows for easy and safe crossing of the busier roads in the area.

There is a designated cycle route on Pembroke Street, approximately 200 m north of the site. This is connected to the local cycling network.

2.7 Public transport access and services

The site has good access to a range of public transport options. The T1 North Shore, Northern and Western Line of the Sydney railway network is accessible at Epping station, approximately 260 m from the Forest Park site. The railway provides access to a range of areas throughout the Sydney metropolitan

region including Hornsby, Chatswood, North Sydney and the CBD. Intercity services also stop at Epping, including services to the Central Coast and Newcastle.

A number of bus routes operate within a 300 m radius of the site, providing transport to the CBD, Macquarie Park and Parramatta. These services run along Pembroke Street, Beecroft Road and Epping Road. There is a bus stop located along the site's Epping Road frontage.

3 Proposed development

3.1 Currently permitted development

The HLEP 2013 zones the majority of the site as R4 high density residential. Within this zone, residential unit blocks, childcare centres and shop-top housing are permitted with consent. A maximum building height of 26.5 m is permitted where the site fronts on to Epping Road. A maximum building height of 17.5 m is permitted where the site fronts on to Forest Grove.

Under the HLEP 2013, high density residential development on the site may accommodate approximately 327 residential units along with approximately 200 m^2 of non-residential uses.

3.2 Proposed uplift

The planning proposal seeks to develop an uplift of the already existing proposal to incorporate an additional 327 units and 1,184 m^2 of non-residential floor-space. This would bring the total number of proposed units to 584, and a total of 1,384 m^2 of non-residential floor-space.

As yet, the exact mix of unit sizes and the use of the non-residential spaces are undetermined. However, for the purposes of this TIA, an indicative mix of unit sizes has been adopted, following the proportions of the mix quoted in GTA 2015:

- 1-bedroom units – 134;
- 2-bedroom units – 327;
- 3-bedroom units – 123;
- total – 584 units.

It is assumed that the non-residential space would be developed for commercial purposes. These commercial spaces would have a greater rate of traffic generation than the residential spaces but, as noted previously, commercial traffic is not considered in this report's analysis as it is assumed that the current volumes of commercial traffic generated by the site will be similar to those in the future.

4 Traffic impact assessment

4.1 Traffic generation and distribution

The methodology used to calculate traffic generation is based on a development's distance to the train station. Four concentric zones (see Figure 4.1 below) were defined based on the distance to the train station, with each zone assigned traffic generation rates. The Forest Park development is within zone 2 (200 – 400 m to the train station).

The future residential traffic volumes generated by the Forest Park development have been determined as summarised below:

- Morning traffic generation: 107 vehicle movements; and
- Afternoon traffic generation: 54 vehicle movements.

Figure 4.1 Traffic generation zones

4.2 Traffic volumes

The future peak hourly traffic volumes for scenario 2 (+4,854 additional dwellings in the Epping town centre) and scenario 3 (+5,438 additional dwellings in the Epping town centre) are shown below in Table 4.1:

Table 4.1 Future traffic volumes on local roads

Road	Morning peak volume (scen. 2/scen. 3)	Afternoon peak volume (scen. 2/scen. 3)	Average daily volume[1] (scen. 2/scen. 3)
Epping Road between Blaxland Road and Smith Street	3,949 / 3,920	3,197 / 3,198	42,876 / 42,708
Epping Road between Smith Street and Forest Grove	3,826 / 3,793	3,201 / 3,206	42,162 / 41,994
Epping Road between Forest Grove and Essex Street	3,885 / 3,827	3,271 / 3,291	42,936 / 42,708
Blaxland Road between Epping Road and Maida Road	3,257 / 3,286	3,888 / 3,949	42,870 / 43,410
Forest Grove	323 / 368	296 / 379	3,714 / 4,482
Essex Street between Epping Road and Maida Road	537 / 637	914 / 936	8,706 / 9,438
Smith Street	127 / 140	14 / 25	846 / 990

Notes: 1. Daily average volume is estimated as 12x the average peak traffic volume.

As shown above in Table 4.1, in terms of the volume of vehicles on the roads in the vicinity of the site, there is very little difference between scenario 2 and scenario 3. Interestingly, some of the scenario 3 volumes, as calculated by the model, are actually lower than the scenario 2 volumes. The main roads affected by the development will be Blaxland Road, Forest Grove, Essex Street and Smith Street. The increases in daily traffic on Forest Grove are the most significant – an extra 768 daily vehicle movements, approximately, as a result of the development. Overall however, there will be a minimal effect on the traffic volumes of the local network as a result of the Forest Park development.

4.3 Impacts at intersections

The future operating performance of the four intersections considered in this report has been assessed using the SIDRA linked intersection model with a 90 second cycle time for all intersections.

The primary modified feature of the future intersection design is the presence of a median strip along Epping Road adjacent to the site's frontage, and an additional west-bound lane.

The two future traffic generation scenarios (scenarios 2 and 3) for the locality which have been assessed are defined in Section 1.2. Scenario 2 assesses the future adjusted baseline traffic volumes for the locality incorporating the range of other developments totalling +4,854 new dwellings in the Epping town centre. Scenario 3 represents a cumulative analysis of the surrounding developments' traffic generation with the uplifted proposed Forest Park residential development, involving a total of +5,438 new dwellings in the Epping town centre. The future SIDRA intersection output results for the two future traffic generation scenarios considered are included for in Appendices B and C.

4.3.1 Epping Road/Blaxland Road intersection

The intersection analysis results for the Epping Road and Blaxland Road intersection for the two future traffic generation scenarios considered are presented in Table 4.2 and 4.3.

Table 4.2 Epping Road/Blaxland Road intersection - 2026 AM performance

Approach	Average delay (seconds) (scen. 2/scen. 3)	Queue length (metres) (scen. 2/scen. 3)	Level of service (scen. 2/scen. 3)	Degree of saturation (scen. 2/scen. 3)
South: Blaxland Road				
Left turn	76.6 / 77.1	195.8 / 195.8	F / F	0.926 / 0.926
Through	695.3 / 701.2	195.8 / 195.8	F / F	1.709 / 1.716
East: Epping Road				
Left turn	38.1 / 38.1	0.3 / 0.3	C / C	0.001 / 0.001
Through	773.5 / 813.2	326.4 / 326.4	F / F	1.787 / 1.831
North: Langston Place				
Left turn	64.9 / 64.4	6.5 / 3.2	E / E	0.060 / 0.030
Through	746.8 / 772.0	821.4 / 846.4	F / F	1.767 / 1.795
West: Bridge Street				
Left turn	5.6 / 5.5	21.5 / 20.8	A / A	0.275 / 0.280
Through	13.6 / 12.9	97.9 / 97.9	A / A	0.647 / 0.628
Right turn	798.4 / 791.8	97.9 / 97.9	F / F	1.817 / 1.809

The analysis of the future Epping Road/Blaxland Road intersection morning peak operation shows a low level of performance. During the morning peak hour, some lanes in all four approaches are above capacity (LoS F). There is no significant difference between scenario 2 and scenario 3. As such, the proposed development will have only a marginal impact on this intersection. Overall, the intersection has very little spare traffic capacity in the morning to accommodate additional peak hour traffic growth from the new residential and other developments in the Epping town centre locality assessed in this report.

Table 4.3 Epping Road/Blaxland Road intersection - 2026 PM performance

Approach	Average delay (seconds) (scen. 2/scen. 3)	Queue length (metres) (scen. 2/scen. 3)	Level of service (scen. 2/scen. 3)	Degree of saturation (scen. 2/scen. 3)
South: Blaxland Road				
Left turn	1060.2 / 1118.7	195.8 / 195.8	F / F	2.122 / 2.187
Through	1191.6 / 1233.9	195.8 / 195.8	F / F	2.270 / 2.318
East: Epping Road				
Left turn	35.4 / 35.4	0.3 / 0.3	C / C	0.001 / 0.001
Through	1325.2 / 1313.2	326.4 / 326.4	F / F	2.399 / 2.386
North: Langston Place				
Left turn	68.6 / 67.5	3.3 / 3.3	E / E	0.037 / 0.035
Through	1182.4 / 1106.4	1023.9 / 1016.1	F / F	2.259 / 2.173
West: Bridge Street				
Left turn	6.2 / 6.2	27.0 / 25.4	A / A	0.282 / 0.268

Table 4.3 Epping Road/Blaxland Road intersection - 2026 PM performance

Approach	Average delay (seconds) (scen. 2/scen. 3)	Queue length (metres) (scen. 2/scen. 3)	Level of service (scen. 2/scen. 3)	Degree of saturation (scen. 2/scen. 3)
Through	11.3 / 11.6	97.9 / 97.9	A / A	0.439 / 0.422
Right turn	1269.6 / 1277.1	97.9 / 97.9	F / F	2.344 / 2.353

The analysis of the future Epping Road/Blaxland Road intersection afternoon peak operation shows a low level of performance. During the afternoon peak hour, some lanes in all four approaches are above capacity (LoS F). There is no significant difference between scenario 2 and scenario 3. As such, the proposed development will have only a marginal impact on this intersection. Overall, the intersection has very little spare traffic capacity in the afternoon to accommodate additional peak hour traffic growth from the new residential and other developments in the Epping town centre locality assessed in this report.

4.3.2 Epping Road/Smith Street intersection

The intersection analysis results for the Epping Road and Smith Street intersection for the two future traffic generation scenarios considered are presented in Table 4.4 and 4.5.

Table 4.4 Epping Road/Smith Street intersection - 2026 AM performance

Approach	Average delay (seconds) (scen. 2/scen. 3)	Queue length (metres) (scen. 2/scen. 3)	Level of service (scen. 2/scen. 3)	Degree of saturation (scen. 2/scen. 3)
East: Epping Road				
Through	0.0 / 0.0	81.6 / 81.6	A / A	0.212 / 0.216
North: Smith Street				
Left turn	8.8 / 8.6	0.2 / 0.2	A / A	0.006 / 0.008
West: Epping Road				
Left turn	5.6 / 5.6	0.0 / 0.0	A / A	0.294 / 0.286
Through	0.0 / 0.0	326.4 / 326.4	A / A	0.294 / 0.286

The analysis of the future Epping Road/Smith Street intersection morning operation shows a very good level of performance. During the morning peak hour, all approaches are very good (LoS A). There are no differences between scenario 2 and scenario 3. As such the proposed development will have only a marginal effect on this intersection. Overall, the intersection has significant spare traffic capacity in the morning to accommodate additional peak hour traffic growth from the new residential and other developments in the Epping town centre locality assessed in this report.

Table 4.5 Epping Road/Smith Street intersection - 2026 PM performance

Approach	Average delay (seconds) (scen. 2/scen. 3)	Queue length (metres) (scen. 2/scen. 3)	Level of service (scen. 2/scen. 3)	Degree of saturation (scen. 2/scen. 3)
East: Epping Road				
Through	0.0 / 0.0	81.6 / 81.6	A / A	0.304 / 0.302
North: Smith Street				
Left turn	7.9 / 7.9	0.1 / 0.3	A / A	0.004 / 0.011
West: Epping Road				
Left turn	5.5 / 5.5	0.0 / 0.0	A / A	0.199 / 0.195
Through	0.0 / 0.0	0.0 / 0.0	A / A	0.199 / 0.195

The analysis of the future Epping Road/Smith Street intersection afternoon operation shows a very good level of performance. During the afternoon peak hour, all approaches are very good (LoS A). There are no significant differences between scenario 2 and scenario 3. As such the proposed development will have only a marginal effect on this intersection. Overall, the intersection has significant spare traffic capacity in the afternoon to accommodate additional peak hour traffic growth from the new residential and other developments in the Epping town centre locality assessed in this report.

4.3.3 Epping Road/Forest Grove intersection

The intersection analysis results for the Epping Road and Forest Grove intersection for the two future traffic generation scenarios considered are presented in Table 4.6 and 4.7.

Table 4.6 Epping Road/Forest Grove intersection - 2026 AM performance

Approach	Average delay (seconds) (scen. 2/scen. 3)	Queue length (metres) (scen. 2/scen. 3)	Level of service (scen. 2/scen. 3)	Degree of saturation (scen. 2/scen. 3)
South: Forest Grove				
Left turn	7.4 / 7.5	3.1 / 4.1	A / A	0.096 / 0.123
East: Epping Road				
Left turn	5.5 / 5.5	0.0 / 0.0	A / A	0.220 / 0.220
Through	0.0 / 0.0	195.8 / 195.8	A / A	0.220 / 0.220
West: Epping Road				
Through	0.0 / 0.0	81.6 / 81.6	A / A	0.281 / 0.273

The analysis of the future Epping Road/Forest Grove intersection morning operation shows a very good level of performance. During the morning peak hour, all approaches are very good (LoS A). There are no significant differences between scenario 2 and scenario 3. As such the proposed development will have only a marginal effect on this intersection. Overall, the intersection has significant spare traffic capacity in the morning to accommodate additional peak hour traffic growth from the new residential and other developments in the Epping town centre locality assessed in this report.

Table 4.7 Epping Road/Forest Grove intersection - 2026 PM performance

Approach	Average delay (seconds) (scen. 2/scen. 3)	Queue length (metres) (scen. 2/scen. 3)	Level of service (scen. 2/scen. 3)	Degree of saturation (scen. 2/scen. 3)
South: Forest Grove				
Left turn	9.0 / 8.8	3.4 / 4.4	A / A	0.107 / 0.135
East: Epping Road				
Left turn	5.5 / 5.5	0.0 / 0.0	A / A	0.311 / 0.310
Through	0.0 / 0.0	195.8 / 195.8	A / A	0.311 / 0.310
West: Epping Road				
Through	0.0 / 0.0	0.0 / 0.0	A / A	0.200 / 0.200

The analysis of the future Epping Road/Forest Grove intersection afternoon operation shows a very good level of performance. During the afternoon peak hour, all approaches are very good (LoS A). There are no significant differences between scenario 2 and scenario 3. As such the proposed development will have only a marginal effect on this intersection. Overall, the intersection has significant spare traffic capacity in the afternoon to accommodate additional peak hour traffic growth from the new residential and other developments in the Epping town centre locality assessed in this report.

4.3.4 Epping Road/Essex Street intersection

The intersection analysis results for the Epping Road and Essex Street intersection for the two future traffic generation scenarios considered are presented in Table 4.8 and 4.9.

Table 4.8 Epping Road/Essex Street intersection - 2026 AM performance

Approach	Average delay (seconds) (scen. 2/scen. 3)	Queue length (metres) (scen. 2/scen. 3)	Level of service (scen. 2/scen. 3)	Degree of saturation (scen. 2/scen. 3)
South: Essex Street				
Left turn	64.3 / 60.3	9.3 / 8.9	E / E	0.082 / 0.070
Through	247.0 / 294.1	318.8 / 435.3	F / F	1.185 / 1.243
Right turn	71.9 / 68.2	86.3 / 97.5	F / E	0.678 / 0.668
East: Epping Road				
Left turn	44.6 / 56.8	195.9 / 230.9	D / E	0.819 / 0.881
Through	41.6 / 54.9	195.9 / 230.9	C / D	0.819 / 0.881
North: Essex Street				
Left turn	37.4 / 38.0	7.1 / 6.4	C / C	0.031 / 0.029
Through	31.9 / 32.5	7.1 / 6.4	C / C	0.031 / 0.029
Right turn	292.9 / 300.1	374.1 / 376.3	F / F	1.223 / 1.232
West: Epping Road				
Left turn	30.9 / 35.2	98.2 / 102.2	C / C	0.567 / 0.586
Through	165.3 / 190.8	195.8 / 195.8	F / F	1.193 / 1.235

The analysis of the future Epping Road/Essex Street intersection morning operation shows a low level of performance. During this peak hour, the southern, northern and western approaches have the worst levels of service, each with lanes over capacity (LoS F). The main effect of the proposed development is on

the eastern approach of Epping Road, which reaches capacity (LoS E) for the left turn, and approaches capacity (LoS D) as a result of the extra 600 units. Overall, the intersection has limited spare traffic capacity to accommodate additional peak hour traffic growth from the new residential and other developments in the Epping town centre locality assessed in this report.

Table 4.9 Epping Road/Essex Street intersection - 2026 PM performance

Approach	Average delay (seconds) (scen. 2/scen. 3)	Queue length (metres) (scen. 2/scen. 3)	Level of service (scen. 2/scen. 3)	Degree of saturation (scen. 2/scen. 3)
South: Essex Street				
Left turn	74.6 / 74.6	1.0 / 1.0	F / F	0.016 / 0.016
Through	295.2 / 282.8	198.1 / 191.2	F / F	1.243 / 1.228
Right turn	155.4 / 206.6	110.5 / 138.9	F / F	1.055 / 1.126
East: Epping Road				
Left turn	274.2 / 284.4	1724.9 / 1771.7	F / F	1.250 / 1.261
Through	274.2 / 284.9	1724.9 / 1771.7	F / F	1.250 / 1.261
North: Essex Street				
Left turn	289.5 / 296.6	285.2 / 291.1	F / F	1.231 / 1.240
Through	284.1 / 291.1	285.2 / 291.1	F / F	1.231 / 1.240
Right turn	297.3 / 320.6	142.9 / 149.8	F / F	1.231 / 1.259
West: Epping Road				
Left turn	11.2 / 11.2	27.4 / 26.2	A / A	0.202 / 0.195
Through	6.5 / 6.5	70.3 / 66.6	A / A	0.426 / 0.410

The analysis of the future Epping Road/Essex Street intersection afternoon operation shows a low level of performance. During this peak hour, the southern, eastern and northern approaches are fully over capacity (LoS F). The proposed development has a small effect on the expected situation. Only the western approach has a very good LoS (A). Overall, the intersection has no spare traffic capacity to accommodate additional peak hour traffic growth from the new residential and other developments in the Epping town centre locality assessed in this report.

Overall, the worst affected approaches are the north and south approaches to Epping Road at the Blaxland Road and Essex Street intersections. This is clearly shown in the Table 4.10 below, comparing average delay times across the three scenarios:

Table 4.10 Summary of significant average delay deteriorations

Approach	Scenario 1 (AM/PM)	Scenario 2 (AM/PM)	Scenario 3 (AM/PM)
Epping Road/Blaxland Road intersection			
Northern approach left turn	49.0 / 62.7	37.4 / 289.5	38.0 / 296.6
Northern approach through	53.5 / 57.1	31.9 / 284.1	32.5 / 291.1
Northern approach right turn	66.0 / 254.3	292.9 / 297.3	300.1 / 320.6
Southern approach left turn	66.6 / 91.6	64.3 / 74.6	60.3 / 74.6
Southern approach through	61.1 / 77.8	247.0 / 295.2	294.1 / 282.8
Southern approach right turn	66.8 / 82.1	71.9 / 155.4	68.2 / 206.6
Epping Road/Essex Street intersection			
Northern approach left turn	58.4 / 98.0	64.9 / 68.6	64.4 / 67.5
Northern approach through	52.9 / 92.5	746.8 / 1182.4	772.0 / 1106.4
Southern approach left turn	17.3 / 74.6	76.6 / 1060.2	77.1 / 1118.7
Southern approach through	53.8 / 73.6	695.3 / 1191.6	701.2 / 1233.9

As such, while the effect of the development is generally small, as at other intersections, the year 2026 base conditions are such that no further development is advisable in the site locality without further improvements to the local traffic access to Epping Road.

4.4 Car parking

4.4.1 Council parking requirements

The HDCP 2013 gives parking rates for various types of development. A breakdown of the parking required based on the HDCP 2013 guidelines is provided below in Table 4.11:

Table 4.11 Analysis of council parking requirements

Use	Units/floor area	Minimum parking rate[1]	Minimum parking requirement
1-bedroom units	134	0.75 space per dwelling	100.5
2-bedroom units	327	1.0 space per dwelling	327
3-bedroom units	123	1.5 spaces per dwelling	184.5
Visitors		1.0 space per 7 dwellings	83.4
Residential subtotal			**695**
Commercial	1,384 m^2	1 space per 29 m^2	47.7
Total			**743**

Notes: 1. Minimum parking rates according to the Hornsby development control plan 2013.

The HDCP 2013 guidelines require a minimum of 695 residential car parking spaces and 48 commercial car parking spaces. Specific requirements for accessible care parking for high density residential developments include a minimum of one accessible car space for each proposed accessible unit and a minimum of 10 percent of all units to be provided with an accessible car space. This entails that at least 58 of the 695 residential car spaces be accessible car parking spaces. Furthermore HDCP 2013 requires that at least one car share (eg GoGet, Greenshare, Flexicar) space should be provided for residential developments containing 50 or more dwellings. Any further requirements, relating to loading or service vehicle bays for example, will be assessed in the detailed development application.

4.4.2 RMS parking requirements

The SEPP 65 amendment states that a development application cannot be refused on car parking grounds

> "if the car parking for the building be equal to, or greater than, the recommended minimum amount of car parking specified in Part 3J of the Apartment Design Guide".

Part 3J of the Apartment Design Guide states:

> "For development ... on sites that are within 800 metres of a railway station ... the minimum car parking requirement for residents and visitors is set out in the Guide to Traffic Generating Developments, or in the car parking requirement prescribed by the relevant council, whichever is less."

The site is located approximately 260 m from Epping railway station. The parking requirements relevant to the proposed development prescribed in the *Guide to Traffic Generating Developments* (2002) are analysed below in Table 4.12.

Table 4.12 Analysis of RMS parking requirements

Use	Units/floor area	Minimum parking rate[1]	Minimum parking requirement
1-bedroom units	134	0.6 space per dwelling	80.4
2-bedroom units	327	0.9 space per dwelling	294.3
3-bedroom units	123	1.4 spaces per dwelling	172.2
Visitors		0.2 space per dwelling	116.8
Commercial	1,384 m^2	1 space per 29 m^2	47.7
Total			**711**

Notes: 1. Minimum parking rates according to the Guide to Traffic Generating Developments (2002), except for commercial floor-space which continues to follow council requirements.

Based on the SEPP 65 amendment and Part 3J of the Apartment Design Guide, it is permissible for the development to supply a minimum of 711 parking spaces rather than 743 as per the council requirements.

The preliminary design of the proposed development accommodates the required 711 car parking spaces.

4.5 Pedestrian, cycling and motorcycling requirements

Pedestrian access for the site is very good, with concrete paved footpaths, safe crossings and easy access to Epping train station provided (as discussed in Sections 2.6 and 2.7).

The HDCP 2013 requires the following cycling and motorcycling provisions in high density residential developments:

- Bicycle parking is required at a rate of one space per five units for residents, one space per 10 units for visitors and one space per 600 m^2 of commercial floor area. This entails 117 spaces for residents, 58 spaces for visitors and two spaces for commercial uses – a total of 177 spaces.
- Motorcycle parking is required at a rate of 1 space per 50 car parking spaces provided. This entails a minimum of 14 spaces.

The preliminary design of the proposed development accommodates the required 177 bicycle spaces and 14 motorcycle spaces.

4.6 Public transport services

The existing bus and rail transport services discussed in Section 2.7 will provide adequate public transport accessibility for the proposed residential development. This is reflected in the more recent (but lower) 2013 traffic generation rates in the addendum to *Traffic Generating Developments (2002)* which are now recommended by RMS for use with higher density residential developments in more urbanised areas.

5 Summary and conclusions

This traffic impact assessment report has analysed the traffic impacts of the proposed residential development (including uplift) known as Forest Park. The analysis has considered the surrounding approved projects in the locality, to be fully developed by 2026.

The analysis was carried out with reference to three development scenarios:

- Scenario 1 – the 2017 base-load traffic in the vicinity of the site.
- Scenario 2 – the 2026 base-load traffic, generated by the additional 4,854 dwellings currently approved to be developed within the Epping town centre.
- Scenario 3 – as above, plus the traffic generated by the uplifted proposed Forest Park residential development (total of +5,438 dwellings).

With reference to these scenarios, this report includes:

- a detailed intersection traffic analysis of the four relevant intersections in the vicinity of the site;
- a cumulative analysis of the traffic volumes on the relevant roads;

This report also includes an assessment of the local public transport and pedestrian/cycleway access routes.

5.1 Site access and local network changes

The proposed vehicle access for the Forest Park residential development will be via Epping Road and Forest Grove. Significant other roads in the vicinity of the site include Blaxland Road, Essex Street, Smith Street and Maida Road. The RMS plans to carry out some road upgrades in the Epping town centre: most significantly for the site, the addition of a raised median strip on Epping Road. This will restrict right turns onto Epping Road from Forest Grove and Smith Street. Further, an additional west-bound lane on Epping Road along the site's frontage will be constructed.

5.2 Assessment of impacts on peak and daily traffic volumes

There will be significant increases in traffic volumes on the local network from the 2017 levels to the 2026 base-load levels. However, there will be a relatively small effect on 2026 volumes as a result of the Forest Park development. The most significant of these will be on Forest Grove, which will experience an additional 768 daily vehicle movements, approximately, as a result of the development. This was expected in that Forest Grove will be a primary access road to the development.

5.3 Assessment of traffic impacts on intersections

5.3.1 Existing intersection operations

The existing (2017) operations for the following intersections were assessed using SIDRA:

- Epping Road/Blaxland Road;

- Epping Road/Smith Street;
- Epping Road/Forest Grove; and
- Epping Road/Essex Street.

The existing operation of the Epping Road/Blaxland Road intersection is poor, with the northern approach at capacity (LoS E) during the morning peak hour. All approaches except for the western approach are over capacity (LoS F) during the afternoon peak hour.

The existing operations of the Epping Road/Smith Street and Epping Road/Forest Grove intersections are generally good. The level of service for all approaches is acceptable (LoS A-C) at both intersections for the morning and afternoon peak. The only exception is that the right turn from both Smith Street and Forest Grove is permanently over capacity (LoS F) due to the difficulty of turning right into Epping Road at an unsignalised intersection. However, RMS road upgrades will not permit these right turns in the near future.

The existing operation of the Epping Road/Essex Street is poor, with the northern and southern approaches at or near capacity (LoS D-E) during the morning peak hour. Furthermore, during the afternoon peak hour, all approaches except for the western approach are at or over capacity (LoS E-F).

5.3.2 Future intersection operations

The same four intersections were assessed again using SIDRA with consideration of scenario 2 (+4,854 new dwellings in the Epping town centre) and scenario 3 (+5,438 new dwellings plus Forest Park development) as cumulative traffic impacts on the local network. The road upgrades planned by RMS were incorporated into the predictive model used in this analysis.

The future operation of the Epping Road/Blaxland Road intersection is poor for both future scenarios, with the northern, southern and eastern approaches generally at or near capacity (LoS E-F) during the morning and afternoon peak hours. The differences between scenario 2 and scenario 3 are marginal and thus the effect of the Forest Park development on this intersection will not be significant.

The future operations of the Epping Road/Smith Street and Epping Road/Forest Grove intersections are very good for both future scenarios. The level of service for all approaches is acceptable (LoS A) at both intersections for the morning and afternoon peak. The differences between the two future scenarios are marginal and thus Forest Park's effect on these intersections will not be significant.

The future operation of the Epping Road/Essex Street is poor for both future scenarios. During the morning peak hour, all approaches exhibit a mixture of levels of service (LoS C-F), with these oscillating between scenarios 2 and 3. The net difference between the two scenarios is, however, minimal. During the evening peak hour, all approaches except the western approach are over capacity (LoS F) for both future scenarios with no practical difference between the scenarios. Overall, the effect of the Forest Park development on this intersection will not be significant.

While, in general, the development only has a minor effect on the traffic conditions at intersections, the increases in average vehicle delays (as shown in Table 4.10) from scenario 1 to scenario 2 are such that further development in the Epping town centre is unacceptable without further improvements to the local traffic access to Epping Road.

5.4 Assessment of car parking

Kerbside parking is currently permitted on various roads in the vicinity of the site including the eastern side of Blaxland Road (outside peak hours) and both sides of Essex Street, Forest Grove, Smith Street and Maida Road.

Based on a parking analysis (Section 4.4), a minimum of 711 car parking spaces will be required. These are accommodated in the preliminary design for the development.

5.5 Assessment of pedestrian and cycling access needs

The site is well placed for pedestrian and cycling access. Concrete footpaths are on at least one side of all the surrounding roads. A designated cycle route on Pembroke Street, 200 m north of the site is easily accessible.

A minimum of 177 bicycle and 14 motorcycle spaces are required by the HDCP 2013. These are accommodated in the preliminary design for the development.

5.6 Assessment of public transport access

Multiple public transport options are available. The T1 North Shore, Northern and Western Line of the Sydney railway network is accessible at Epping station, 260 m away on foot. Furthermore, several bus routes operate within a 300 m radius of the site – including a bus stop at the site's Epping Road frontage. Thus, public transport from the site to a range of areas throughout the Sydney metropolitan region is available. The existing public transport network will be sufficient for the needs of the Forest Park development.

References

GTA Consultants (2015), *Forest Park, Epping Planning Proposal Traffic Impact Assessment*, report prepared for Austino Property Group, December 2015.

Roads and Traffic Authority (2002), *Guide to Traffic Generating Developments.*

Appendix A

Scenario 1 Intersection SIDRA Analysis Results

Appendix B

Scenario 2 Intersection SIDRA Analysis Results

Appendix C

Scenario 3 Intersection SIDRA Analysis Results

SUMMARY OF PLANINNG PROPOSALS & PRELIMINARY PLANNING PROPOSALS –
Attachment 7 to Council report on the Epping Town Centre Traffic Study - 28 May 2018

AUSTINO PLANNING PROPOSAL

Introduction

1. A Planning Proposal for land at 2-18 Epping Road, 2-4 Forest Grove and 725 Blaxland Road (former bowling club site) was lodged with Hornsby Shire Council in 2015, but came to be located within City of Parramatta Council following the May 2016 Council boundary changes. Figure 1 below shows the land affected by this PP. The applicant is the Austino Property Group.

Figure 1 - Land affected by the Austino Planning Proposal denoted in solid red line (from applicant's Urban Design Report)

2. The proposal seeks a predominantly residential development comprising two towers on Blaxland Road with smaller towers on Epping Road accommodating estimated 794* units. (Note this calculation by Council Officers relies on Council's standard practice of applying an efficiency unit rate of 85sqm per unit whereby the applicant's 678 units figure relies on a rate of 100sqm).
3. This PP has a complex history, which is summarised as follows:
    a. **December 2015:** Original PP was lodged with Hornsby Shire Council (HSC).
    b. **January 2016:** the then Parramatta City Council (PCC) was formally invited to comment on the applicant's Planning Proposal and on 14 March 2016, resolved to adopt a submission on the matter which requested further analysis against 9 principles identified in Council's submission.
    c. **April 2016:** On 13 April 2016, Hornsby Shire Council resolved not to support the proposal (just prior to the Council amalgamation on 12 May 2016). In response to Hornsby Shire Council's resolution, the applicant

lodged a Pre-Gateway Review with the Department in late April 2016. This placed the handling of the Planning Proposal in the hands of the Department.

d. **March 2016:** the then PCC endorsed a submission to HSC (refer **Attachment 3**) which established seven planning principles that this PP should address; these principles are discussed in further detail below.

e. **April 2016:** HSC refused the PP. The applicant subsequently sought a pre-Gateway review process through DPE.

f. **May 2016:** Council boundary changes occurred, and the site came to be located within the new entity of the City of Parramatta. DPE also formally notified Council that the applicant had sought a pre-Gateway review.

g. **September 2016:** As part of the Pre-Gateway review process, the Joint Regional Planning Panel (JRPP) considered the proposal in September 2016 and recommended a range of issues be considered before the proposal is submitted for a Gateway Determination.

h. **November 2016:** DPE wrote to Council:

    i. To advise that the PP could proceed to Gateway determination "subject to further consideration as indicated in the advice provided by the [Joint Regional Planning] Panel" as part of its pre-Gateway review. This advice included that the proposal "be part of the current Council traffic review of the whole of Epping Town Centre and that the outcomes of that review shall inform the final decision of the Floor Space Ratio for the site".

    ii. Seeking whether Council would elect to be the Relevant Planning Authority (RPA). This would enable City of Parramatta Council to have more influence over the process. Council accepted the RPA role on the condition that the Gateway Determination is issued after the exhibition of the Discussion Paper and supporting technical studies, so that this information and community views can be taken into account.

i. **December 2016**: In response to November 2016 letter from DPE, Council wrote to DPE requesting to be the RPA. This request was on the basis that the Gateway would be issued after the exhibition of the Epping Planning Review Stage 1 materials (Stage 1 had just commenced at that time).

j. **March 2017**: DPE appointed Council as the RPA on the basis described above.

k. **June-July 2017**: The Epping Planning Review Discussion Paper and associated technical studies (including interim traffic study) were exhibited for a four-week period.

l. **August 2017:** Principles to guide Stage 2 of the Epping Planning Review were endorsed by the Administrator.

m. **September 2017:** Following a request from the applicant, DPE wrote to Council requesting Council to provide its reasoning as to why an

alternate RPA should not be appointed, or to advise that it would submit the proposal for Gateway based on the information available at that time.

n. **October 2017:** Council responded to the above letter, stating its reasoning for remaining as the RPA, as summarised here:

   i. RMS's support for the density sought in this PP was only on account of amendments being made to the PP regarding the number of car parking spaces on the site and additional traffic modelling being carried out;

   ii. The progression of the PP is dependent on the outcomes of the Epping Traffic Study (consistent with the JRPP's recommendation).

   iii. The Epping community expects that traffic matters will be well understood before any decision is made on proposals seeking uplift within and immediately around the town centre.

   iv. The issue of precedent that would be created should the RPA role be removed from this planning proposal.

o. On **1 December 2017**, Council received a letter from DPE advising that it had appointed the Sydney Central City Planning Panel as RPA, meaning that Council no longer has RPA status for this proposal. This is not consistent with the endorsed principles discussed in this report, which sought to retain Council's RPA status. The DPE has advised Council:

   v. that it anticipates that any Gateway determination for this proposal would require completion of the Traffic Study and any necessary amendments to the Planning Proposal prior to exhibition.

   vi. that there will be formal consultation with Council on this Planning Proposal as it proceeds.

p. **12 February 2018:** A Council report (Item 12.3) which sought to provide an update on the status of the Epping Planning Review and associated matters was deferred from the 12 February 2018 Council Meeting. One of the resolutions was:

   That Council write to the Department of Planning seeking clarification around the decision of 1 December 2017 to appoint the Sydney Central Planning Panel as the relevant Planning Authority, meaning that Council no longer has relevant planning Authority Status for this proposal. Council is seeking this clarification particularly around the fact that the Department of Planning and Environment will be referring the outcome of the Traffic Study to make their determination which is the reason for our Council delaying a recommendation to the Council.

q. **1 March 2018:** Consistent with the resolution on 12 February 2018, Council Officers wrote to the DPE on 1 March 2018. Council Officers have received verbal confirmation that a response from the DPE's Secretary is due shortly which will reiterate the position in its letter of 1 December 2018. At the time the Council report was being prepared, a

response from the DPE had not been provided. Therefore, a copy of that letter is attached to the Council Report.

r. **28 March 2018:** Consistent with a resolution from the 12 February 2018 Council meeting (Item 12.5) requesting Ward Councillors be briefed, a Councillor briefing session was held on Wednesday, 28 March 2018 with the Epping Ward Councillors.

s. **29 March 2018:** A meeting was held with the Local Member for Epping, Damien Tudehope MP with RMS and TfNSW and the Lord Mayor and Council Officers on 2 March 2018

t. **April 2018:** An independent valuation of the former Epping Bowling Club site (725 Blaxland Road, Epping) was completed.

u. **April 2018:** EMM complete two Traffic Analyses reports:

   i. Austino Traffic Impact Assessment (TIA) based on the 5,000 dwelling figures for the 2016 scenario.

   ii. The ETCTS which includes a section on the Austion PP (refer to Section 7.1) revises in a minor way, the figures in the their Austino TIA.

4. The assessment of the planning proposal as a result of the findings from the ETCTS and rate of dwelling growth within the Town Centre since March 2014 is provided within the Council report which this attachment relates to.

PRELIMINARY PLANNING PROPOSALS

5. As noted within the Epping Planning Review Discussion Paper and follow up Council Report on Stage 1 of the Epping Planning Review (of August 2018), two preliminary planning proposals have been lodged with Council affecting land within the town centre. As well, the seek a partnership with Council to develop their sites in conjunction with the Council car park. These preliminary planning proposals have been on hold on account of the ETCTS being completed as per the adopted principles of August last year.

Oakstand Consortium

6. A preliminary planning proposal received in of November 2014 by the Oakstand Group applies to land at 53 and 61 Rawson Street, Epping. Figure 2 shows the sites' consistent with that proposal.

Figure 2 - Oakstand site (53 & 61 Rawson Street, Epping)

7. The proposal seeks a partnership with Council to develop their site in conjunction with the Council car park. It seeks to amend planning controls to increase height and density achievable on these sites to enable:
    a. **674 units** over its site at 53 and 61 Rawson Street; and
    b. **520 units** over the Council car park site.
8. The total dwelling figure of this proposal equates to **1194 dwellings** It also proposes rezoning the entire site from B2 to B4 zoning, which would likely reduce the amount of commercial uses at the site. Whilst the proposal does currently propose 10,000sqm of retail and 4,923sqm of other non-residential uses, the risk that Council needs to consider is that introducing the proposed B4 zone could result in the site being redeveloped entirely for residential flat buildings with no commercial uses on the site, unless controls are put in place to mandate a minimum provision of commercial floor space.
9. The proposed public benefit elements included in this proposal include a range of traffic upgrades, creation of a new 3,430sqm town square, a new civic memorial, activation of Boronia Park, amenity improvements to Rawson Street, through-site links, and 200 underground Council car parking spaces.
10. More recently (ie. since the report to Council in August 2018 last year covering Stage 1 of the Epping Planning Review), the consortium now intends to expand their sites of interest to include the Epping Club, though no revised preliminary planning proposal has been submitted to Council as yet.

Lyon Group (59-77 Beecroft Road and Masonic Hall Site at 49 Rawson Street)

11. A preliminary proposal by the Winton and Lyon Groups applies to land at 59-77 Beecroft Road, Epping as well as the Masonic Hall located at 49 Rawson Street, adjacent to Council's car park site at 51A Rawson Street, Epping (refer to Figure 3).

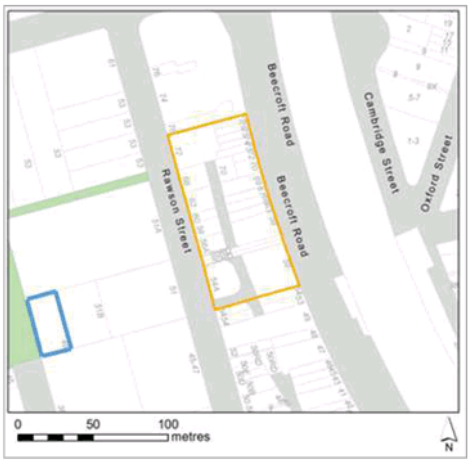

Figure 3 - Lyon group site – 59-77 Beecroft Road (orange outline) and Masonic Hall Site (blue outline), Epping

12. The preliminary proposal seeks a partnership with Council to develop their site in conjunction with the Council car park. It seeks to amend the planning controls to increase building height and density controls achievable at this site to enable:
    a. **700** units over its site at 59-77 Beecroft Road; and
    b. **200** units over the Council car park sites and the Masonic Hall site (49 Rawson Street).
13. The total dwelling figure of this proposal equates to **900 dwellings**. This proposal also includes retail and commercial uses, as well as proposed public benefits including 2,000sqm of community facilities and infrastructure, a civic plaza area of over 3,700sqm which will create a "green spine" from east to west through the site, and improved pedestrian connectivity between Boronia Park and the Epping transport interchange. These elements are proposed to be delivered via a voluntary planning agreement.

CONCULSION

14. Under the current controls, the planning (or preliminary planning) proposals applying to the three land holdings would deliver approximately 1,500 dwellings. If realized as currently proposed, the three planning proposals would deliver a total of 2,100 dwellings within the Town Centre which equates to an **additional 1,300 dwellings** above what can currently be achieved. This is on top of the **5,553 dwellings** which are being delivered via development applications and approvals.

***

Epping Planning Review

Discussion Paper

June 2017

How do I make a submission?

This Discussion Paper is being exhibited from Wednesday, 21 June 2017 to Wednesday, 19 July 2017. You can make a submission during this time.

Please quote reference no. **F2017/000210** in your submission.

SUBMISSIONS CAN BE POSTED TO:
Epping Planning Review
City of Parramatta Council
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WHAT HAPPENS TO MY SUBMISSION?
All submissions will be carefully considered by senior staff and reported to Council in August 2017, prior to commencing Stage 2. Letters of acknowledgment will be provided for written submissions.

WHAT IS ON EXHIBITION?
The Discussion Paper is being exhibited in conjunction with the following supporting information:

1. **Technical Studies:**
   a. Heritage Review (prepared by City Plan Services).
   b. Commercial Floorspace Study (prepared by SGS Economics & Planning).
   c. Social Infrastructure Study (prepared by Council's Social Outcomes team).
   d. Interim Traffic Modelling Report (prepared by EMM).
2. **Phase 1 Consultation Report** (prepared by Straight Talk).

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1.0 INTRODUCTION

1.1 Background

Due to the introduction of new planning controls in 2014 coupled with a strong housing market, the Epping Town Centre is experiencing unprecedented levels of redevelopment and change, particularly on its northern and eastern sides. This redevelopment impacts residents significantly, particularly with regards to view impacts, reduction in tree canopy, parking and traffic, and construction noise.

New development is changing the amount of commercial floor space available within the Epping Town Centre, creating uncertainty for existing businesses who want to remain in the centre. This is not an ideal outcome for current and future residents.

New development is also increasing the centre's residential population. At the current rate of development, approximately 10,000 new residents will move into the centre in the next five to seven years. This new population will rely on the commercial and community offerings of the Epping Town Centre, putting pressure on existing infrastructure. While the train station is a major asset and the North West Metro Line will be installed in the first half of 2019, access into, out of and through the centre for private vehicles continues to be an issue.

These changes are impacting on local residents, who see the character of their local area changing rapidly. Some of these impacts are temporary – like construction traffic and noise – while others will be more permanent. The positive elements of density, such as economic diversity and infrastructure investment, are not occurring at the same rate as the redevelopment.

On 12 May 2016, the council amalgamations process saw the Epping Town Centre fall entirely within the jurisdiction of the new City of Parramatta. This presents an opportunity to address these pressing issues and plan for the function of the centre over the next 20 years.

1.2 Strategic context

The most recent strategic planning document with implications for Epping is the Greater Sydney Commission's *Draft West Central District Plan* (Draft District Plan). The Draft District Plan was published in late 2016, and adopts a timeframe of 2016-2036 for planning for the West Central District. The Draft District Plan makes numerous references to the Epping Town Centre:

- *Examples of significant concurrent investment in growth and renewal opportunities include…the renewal and revitalisation of Epping Town Centre* (pg.31)
- *In the West Central District, Epping and Merrylands are examples of local centres that, with the right planning and investment, could read their potential as emerging commercial and retail nodes* (pg.48).
- The Draft District Plan recognises that the Epping Town Centre Priority Precinct is forecast to deliver up to 3,750 dwellings in the next 5 years after its rezoning in March 2014 (pg.93), although this figure has since been revised to 5,500 dwellings.

- City of Parramatta will *progress the delivery of Epping Town Centre urban renewal with the Greater Sydney Commission and Department of Planning and Environment* (pg.99).

The Draft District Plan identifies two distinct centre hierarchies: Local Centres and Strategic Centres (as detailed in the Department's *A Plan for Growing Sydney).* Epping is identified as a Local Centre as per the comments above; however, the Local Centre category is somewhat ambiguous with 30 to 40 local centres identified within the West Central District. Aside from the points above, there is very little about what the Epping Town Centre might become in 2036 in this document.

Please refer to Appendix 1 for a more detailed discussion of Epping's role within the metropolitan strategic planning framework.

1.3 Purpose of the Discussion Paper

This Discussion Paper is the major milestone for Stage 1 of the Epping Planning Review. The purpose of the Discussion Paper is to:

- explain the background and context around the need to undertake the Epping Planning Review;
- propose appropriate options, recommendations, and suggest principles for adoption, taking into consideration both technical study findings and community opinion; and
- invite comment on the Discussion Paper so the community can assist Council to develop new planning controls for the Epping Town Centre and immediate surrounds.

1.4 Study area

Figure 1 illustrates the extent of the study area for the Epping Planning Review. Despite the boundaries in Figure 1, Epping residents utilise community facilities situated outside the study area; these social infrastructure assets have been considered as part of the Epping Planning Review project.

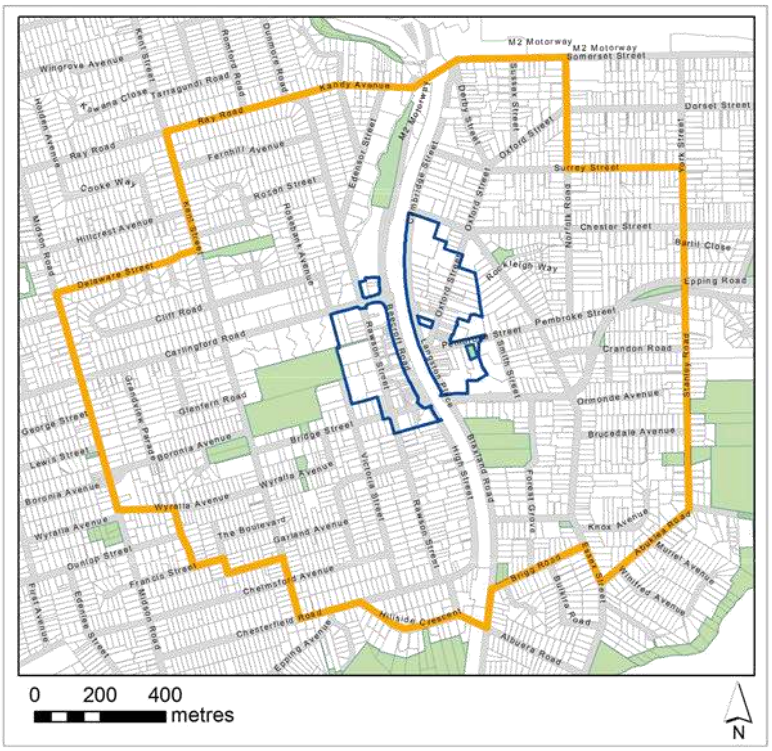

Figure 1 Epping Planning Review study area showing the town centre and immediate surrounds

1.5 Structure of the Discussion Paper

This Discussion Paper is structured as follows:

- **Chapter 2 Background**
  This chapter explains some background including the NSW Department of Planning's (the Department) Priority Precinct process and the new planning controls of March 2014.
- **Chapter 3 Why is the Epping Planning Review needed?**
  This chapter explains why the Epping Planning Review is being undertaken by the City of Parramatta.
- **Chapter 4 What is the Epping Planning Review?**
  This chapter details what the Epping Planning Review involves.
- **Chapter 5 Community Engagement**
  This chapter summarises the community consultation undertaken since the public forum (held on 14 December 2016) to the present, including the Phase 1 community workshops held in May 2017.
- **Chapter 6 Introduction to the Technical Studies**
  This chapter introduces the technical studies and supporting analyses which have informed this Discussion Paper.
- **Chapter 7 Heritage Review**

This chapter presents the findings from the heritage review (prepared by City Plan), summarises findings from the Phase 1 community workshops, and presents options and recommendations that seek to resolve the tensions between the technical findings and community opinion.

- **Chapter 8 Commercial Floorspace Study**
  This chapter presents the findings from the Commercial Floorspace Study (prepared by SGS Economics), summarises the findings from the Phase 1 community workshops, and presents options and recommendations to resolve issues around how commercial land uses will evolve in this centre over the next 20 years.
- **Chapter 9 Social Infrastructure Study**
  This chapter presents the findings from the Social Infrastructure Study (prepared by Council's Social Outcomes team), summarises the findings from the Phase 1 community workshops, and presents options and recommendations to resolve social infrastructure capacity issues over the next 20 years.
- **Chapter 10 Public Domain Analysis**
  This chapter acknowledges public domain issues that emerged from the technical studies and from the Phase 1 community workshops, and presents urban design recommendations for the public domain.
- **Chapter 11 Traffic and Land Use Options Study**
  This chapter presents interim findings from the traffic and land use technical study, acknowledges feedback on traffic and land use issues that emerged from the Phase 1 community workshops, and presents guiding principles for further consultation.
- **Chapter 12 How to Make a Submission and Next Steps**
  This chapter explains what the next steps are in the Epping Planning Review project including what happens after the exhibition of the Discussion Paper.

1.6 Supporting information

The following supporting information is being exhibited with this Discussion Paper:

- Heritage Review (prepared by City Plan Services).
- Commercial Floorspace Study (prepared by SGS Economics & Planning).
- Social Infrastructure Study (prepared by Council's Social Outcomes team).
- Interim Traffic Modelling Report (prepared by EMM).
- Phase 1 Community Consultation Report (prepared by Straight Talk).

2.0 BACKGROUND

2.1 Epping Priority Precinct

In 2011, the former Hornsby Shire and Parramatta City Councils jointly prepared the *Epping Town Centre Study* in order to explore the potential for more dwellings and jobs around the Epping train station. The study was funded by the NSW Department of Planning and Environment's (the Department) Planning Reform Fund.

The *Epping Town Centre Study* was exhibited in late 2011. As a means of implementing this study, Hornsby Shire Council nominated the precinct as a Priority Precinct. This was endorsed by the NSW Government in October 2012, and meant that the State Government took full carriage of the planning process from that point.

As part of the Priority Precinct process, studies addressing urban design, traffic and economic feasibility were undertaken. These studies informed new planning controls for the town centre which concentrated growth close to the railway station. These controls came into effect in March 2014.

2.2 March 2014 planning controls

The new planning controls which came into effect in March 2014 are detailed in Appendix 2. In summary:

- For the former Hornsby Shire Council (north and eastern) portion of the town centre and surrounds, the B2 Local Centre and R4 High Density Residential zones were expanded with their respective building height and density controls increased. Also, three new Heritage Conservation Areas were created (Rosebank Avenue, East Epping and Essex Street).
- For the former Parramatta City Council (western) portion of the town centre and surrounds, the B2 Local Centre zone became the uniform zone with accompanying height and floor space ratio controls increased. There were no changes to the surrounding R2 Low Density and R4 High Density zones, including no height and density changes, and no changes to nearby Heritage Conservation Areas.

The March 2014 planning controls enabled development of up to 10,000 dwellings if all sites were to be developed to their total capacity. Whilst this is the theoretical capacity, it is unlikely that all sites would be developed to their maximum capacity, so the theoretical capacity is unlikely to be reached.

Initial Department of Planning projections suggested that 3,750 dwellings would be achieved within 5 years (assuming a 37.5% take-up rate of the 10,000 dwellings). However, the Department has recently revised this figure, indicating that 5,550 dwellings will be achieved within 5 years (a 55% take-up rate of the 10,000 dwellings). This revised figure may still be an underestimate as recent analysis undertaken by Council suggests that the take-up rate for redevelopment sites in Epping has been unprecedented. If applications continue to be lodged at the rate they have been since the new controls came into force, it may be that more than 5,550 dwellings will be achieved in this timeframe.

3.0 WHY IS THE EPPING PLANNING REVIEW NEEDED?

A number of factors have led the City of Parramatta to undertake the Epping Planning Review. These factors are explained in this chapter.

3.1 Council amalgamations

Council amalgamations in May 2016 saw the Epping Town Centre and immediate surrounds fall wholly within a new jurisdiction - the City of Parramatta Council.

Prior to this, the Epping Town Centre had been split between the former Parramatta City Council (PCC) to the west and the former Hornsby Shire Council to the north and east. This historic dual structure resulted in a complex planning control framework currently in place for the centre, including:

- two local environmental plans (*Parramatta Local Environmental Plan 2011* and *Hornsby Local Environmental Plan 2013*);
- two development control plans (*Parramatta Development Control Plan 2011* and *Hornsby Development Control Plan 2013*);
- three development contributions plans with different contributions rates across each development type (a Section 94A plan applying to the former PCC area, and a Section 94 plan and Section 94A Plan applying to the former Hornsby Shire area); and
- one public domain plan for the former Hornsby Shire Council area, with no corresponding public domain plan for the former PCC side.

The amalgamation between the former PCC and Hornsby Shire councils did not change or unify any planning controls, so an exercise of bringing all of the controls into a single framework is required to deliver consistency. (As an example, one difference is that *Hornsby LEP 2013* does not contain floor space ratio controls in residential zones, while *Parramatta LEP 2011* includes floor space ratio controls in these zones.) The objective of this exercise will be one LEP, one DCP, one development contributions plan, and one public domain plan applying to the entire town centre and immediate surrounds. These planning policy documents will also be informed by traffic and transport management analysis and Council's Social Infrastructure Strategy, which are being prepared in conjunction with this Discussion Paper and will continue to evolve in parallel with the planning policies described above.

3.2 Developer interest

The level of interest from landowners within the Epping Town Centre and immediate surrounds is one factor driving the Epping Planning Review. This interest is evident in Development Applications, Planning Proposals (requests for rezoning and/or density changes) and preliminary discussions regarding undertaking a Planning Pproposal process.

Assuming that the Development Applications currently under construction, approved, under assessment or at a pre-lodgement stage are all constructed and fully occupied, they are expected to deliver **4,735 units (10,890 people** assuming a household size of 2.3 persons). This indicates a very rapid delivery of the Department's projected 5,500 dwellings over the next five years. If this rate of development activity continues, it is expected that more than 5,500 dwellings would be delivered in this centre. This unprecedented pace of redevelopment presents challenges for Council and the State

government in delivering the required infrastructure to accompany that population growth.

In addition to the Development Application activity, there is also a lodged Planning Proposal, two preliminary Planning Proposals, and two additional sites where landowners have expressed an interest in a Planning Proposal process.

Current Development Application and Planning Proposal activity in Epping is discussed in further detail at **Appendix 3**.

3.3 Poor built form transition – Epping Town Centre north and east

The new planning controls which came into effect in March 2014 rezoned some R2 Low Density Residential zoned land located to the north and east of the town centre to R4 High Density Residential. These changes resulted in:

- portions of the newly identified Rosebank Avenue and Essex Street HCAs (zoned R2) abutting land zoned R4 where the R4 sites were permitted a building height of 17.5 metres (5 storeys), and
- residential blocks of R2 zoned land located in the vicinity of Rose Street and Rockleigh Streets abutting land zoned R4 where the R4 sites were permitted a building height of 17.5 metres (5 storeys).

Redevelopment in these areas where there is an interface between R2 and R4 zones across a property boundary has resulted in new 5 storey residential flat buildings directly overlooking low-density residential properties located within Heritage Conservation Areas.

In order to better understand these interface issues, Council commissioned a Heritage Review and undertook its own analysis to assess these interface and other heritage matters raised by the Epping community since 2014. The findings are discussed in Chapter 7.

3.4 Loss of commercial floor space

In 2011, the Epping Town Centre had 4,512 jobs with 55,000sqm of office floor space and 13,000sqm of retail floor space. However, since 2014, new development within the B2 Local Centre zone has reduced the amount of office floor space. Developers are replacing existing large scale office towers and small scale (2 and 3 storey) office development with ***shop top housing***.

Shop top housing means development comprising apartments located above ground floor retail or business premises.

This trend is occurring despite the Hornsby DCP controls requiring non-residential uses on the first two to three floors of development in the B2 Local Centre zone. Parramatta's DCP controls are worded to allow a developer to provide "up to" 4 storeys of commercial development, but only for development on Beecroft Road. This wording leaves the choice of how many storeys between 1 and 4 in the hands of the developer and does not mandate a minimum floor area. This poor application of the planning controls needs to be better understood.

The Department's position on the reduction of commercial floor space is that, based on market analysis, demand for commercial floor space is expected to reduce as other

centres such as Macquarie Park and Norwest Business park become more attractive. However, the City of Parramatta does not accept this view.

In order to understand whether the loss of floor space is a positive trend, and to understand other commercial land use elements that may create a more successful town centre, Council commissioned SGS Economics to undertake a Commercial Floorspace Study. This is discussed in Chapter 8.

3.5 Social infrastructure

With unprecedented population growth occurring within the town centre and immediate surrounds, an understanding of the pressures on local infrastructure is urgently required. In 2016, Council commissioned consultants to undertake analyses of both open space and recreational facilities across the entire City of Parramatta. Council's Social Outcomes team has subsequently prepared the *Epping Social Infrastructure Study* which excises the Epping content from both analyses to create an infrastructure analysis for the Epping suburb. This analysis identifies Epping's existing social infrastructure, the potential infrastructure shortfalls arising from growth, and methods to address these shortfalls; it is discussed in Chapter 9.

3.5.1 Funding infrastructure

Following the Department's Priority Precinct process, Parramatta and Hornsby Shire Councils each received $2.5 million from the NSW Government's Precinct Support Scheme to fund improvements to Boronia Park, West Epping Park, and other public domain assets.

The Hornsby and Parramatta development contribution frameworks have not yet been aligned into a single City of Parramatta framework. Currently, developers within the former Parramatta City Council area pay 1% of the cost of development for purposes of funding local road upgrades, open space and community facilities. In the former Hornsby Shire Council area, the Hornsby Shire Council Section 94 Plan currently collects around $10,000 to $20,000 for each new apartment for a range of local road upgrades, open space and community facilities (including an upgrade to Epping Library and new Epping Community Centre) and for other infrastructure identified in the Hornsby plan.

The increase in population will place additional pressure on infrastructure within the town centre. As such, the current development contributions framework requires review. To this end, Council is preparing a new draft Development Contributions Plan to address these issues. Before this plan can be implemented there will need to be further consultation and negotiation with Hornsby Council prior to it coming into force.

3.6 Traffic and access

The planning controls of 2014 focus new development within walking distance of Epping Railway Station and commercial town centre core. Providing higher density development in a town centre with excellent public transport connections encourages more efficient use of public transport services while also encouraging new residents and workers to walk between shops and services.

However, Epping also experiences significant traffic congestion and this was a consistent theme raised by community during the public exhibition of the Urban Activation Precinct and subsequent community consultation carried out as part of the

broader Epping Planning Review. There are significant concerns from the community around the impacts of the additional residential densities permitted under the 2014 planning controls given the additional population envisaged and the subsequent impacts on an already congested and constrained road network. There is also increasing developer pressure to increase residential densities (through Planning Proposals) beyond that permitted under the existing planning framework.

The purpose of the Epping Traffic Study is to provide an evidence-based approach to the assessment of existing and future traffic conditions under different development scenarios for the Epping Town Centre and surrounds, including potential infrastructure improvements.

3.6.1 Road infrastructure

The Epping Town Centre is located approximately 25 km north west of the Sydney CBD and 10km north east of the Parramatta CBD. The Epping Town Centre is located south of the Beecroft Road exit off the M2 Motorway. The Road network consists of several major roads, which serve as part of the regional network, including Beecroft Road, Ray Road, Carlingford Road, Bridge Street and High Street on the western and on the eastern side, Epping Road, Oxford Street and Blaxland Road. A number of these major roads including Beecroft Road, Carlingford Road, Blaxland Road and Epping Roads are owned and managed by the State Government (Roads and Maritime Services or RMS). Figure 2 illustrates some of the major roads through the town centre.

Figure 2 Road network map

Traffic congestion in peak hours is a significant issue in the town centre. Vehicle queues typically extend for significant distances in peak periods along Carlingford Road, Beecroft Road and Epping Road as people try to access, or more typically pass through, the town centre. In particular, there is a high volume of through

traffic in the Epping Town Centre with 89% of all AM and PM peak traffic on the Rail Bridge having the origins and destinations of their trips outside the Epping Town Centre and surrounds (Halcrow 2011). This has flow on effects for local streets such as Rawson Street and Langston Place

Traffic and transport impacts were considered as part of the UAP process for Epping and was informed by a Transport Study prepared by Halcrow in 2011 for Hornsby Shire Council, former Parramatta City Council and NSW Department of Planning. The Study recommend a series of works to assist with managing traffic congestion in the Epping Town Centre.

The NSW Government Housing Acceleration Fund has since allocated funding for three intersection upgrades (Carlingford Road/Beecroft Road, Essex Street/Epping Road, and Epping Road/Blaxland Road) and widening of Epping Road to address the performance of intersections, travel times, congestion, pedestrian facilities and road safety. Construction of the Carlingford Road/Beecroft Road intersection started in late April 2016, with work expected to be completed by September 2017. The other traffic works will start on Monday 12 June 2017 and take 15 months to complete. The work will include the widening of Epping Road westbound between Essex Street and Blaxland Road and upgrading of the Epping Road and Essex Street intersection.

The proposed railway bridge widening is supported by the RMS, however further work still needs to be carried out to determine its feasibility due to current engineering constraints and funding implications.

3.6.2 Railway infrastructure

Epping train station is located on the T1 North Shore, Northern and Western Line with regular services to Central via Chatswood and Strathfield, Hornsby and Central Coast. Train services will improve with the introduction of the Sydney Metro Norwest project (scheduled for completion in 2019) and will further improve accessibility into Epping, particularly from the north west of Sydney (refer to Figure 3). Sydney Metro Northwest is an integrated transport initiative from Rouse Hill through to Chatswood. It will integrate directly with the existing Epping to Chatswood railway corridor to allow the new trains to operate a distance of 36km between Rouse Hill and Chatswood. In peak hours, it is expected that there will be a train at least every 4 minutes/15 trains per hour and they will run in both directions between Epping and Chatswood during the peak – almost four times the number of trains currently running in the peak times.

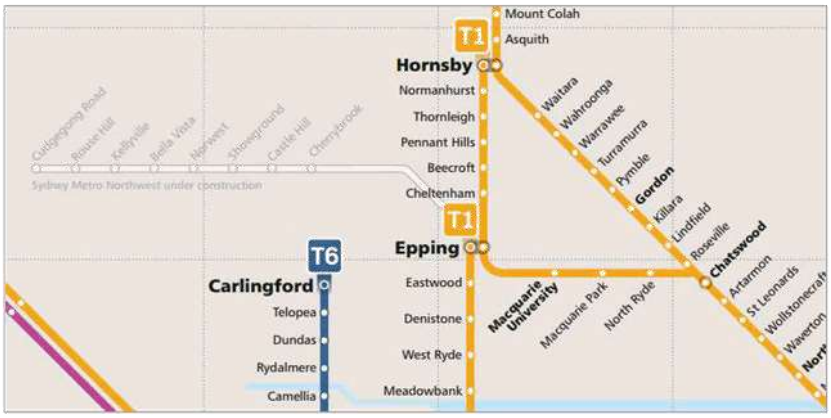

Figure 3 Chatswood to Epping and North West Metro lines (extract: Sydney Trains network map)

As part of converting the existing suburban line between Epping and Chatswood to accommodate the new Metro Service, upgrades will be needed to reconfigure existing stations (such as Epping) to include new cabling, power and signalling systems and platform screen doors to enable Metro integration.

From late 2018, buses will replace trains for around seven months between Epping and Chatswood whilst the line is converted to metro operations.

3.6.3 Buses

Epping is currently well served by buses with bus terminals located on both sides of the train station. Most of the buses that traverse Epping also feed passengers to and from the station with the exception of those services that now remain on the M2 Motorway since the widening work was carried out on the M2 Motorway.

Epping residents have access to a range of regular bus services travelling to both the Sydney CBD and Parramatta CBD. Bus routes also service other employment, education and shopping precincts such as Macquarie Park, Macquarie University and Chatswood as well as services to Carlingford and Eastwood local centres.

4.0 WHAT IS THE EPPING PLANNING REVIEW?

The Epping Planning Review project is identified in Council's *Operational Plan 2016/2017* under Action 2.4 "Review of Epping Town Centre Planning Controls". Council's current draft *Operational Plan 2017/2018* sees Council continuing to work with stakeholders on key precincts such as Epping. The *Draft West Central District Plan* also foresees that Council will progress the delivery of the Epping Town Centre urban renewal with the Greater Sydney Commission and the Department of Planning and Environment (pg.99).

The Epping Planning Review project involves two stages which are summarised in the sections below.

4.1 Stage 1 of the Epping Planning Review

Commencing in December 2016, the Epping Planning Review was launched via a public forum at the Epping Arts Centre (14 December 2016). Stage 1 involves the preparation of technical studies, community consultation, and the preparation of a Discussion Paper for public comment. Figure 4 below illustrates the structure and various components of Stage 1 of the Epping Planning Review.

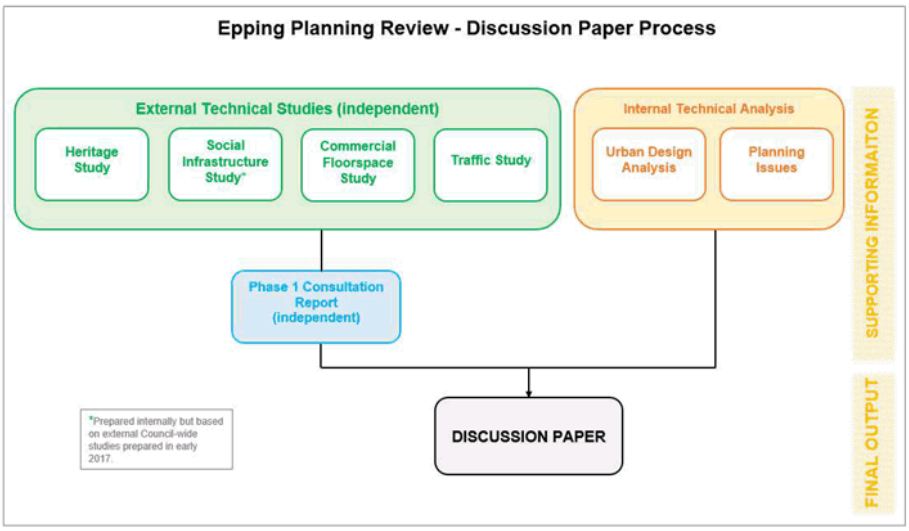

Figure 4 Process structure for Stage 1 of the Epping Planning Review

4.2 Stage 2 of the Epping Planning Review

Commencing in 2018, and relying on principles determined in Stage 1, Stage 2 will involve preparing a single set of planning controls for the town centre and immediate surrounds; this will include a new LEP, DCP, development contributions plan and public domain plan.

4.3 Stage agency buy-in

To ensure delivery of the Epping Planning Review, Council has established the Epping Planning Review State Agency Steering Group which has representation from the

Greater Sydney Commission, the Department of Planning and Environment, Transport for NSW and Roads and Maritime Services.

4.4 What the Epping Planning Review will not be addressing

The scope of the Epping Planning Review is limited to better managing the impacts of new development generated from planning controls that came into effect in March 2014 and allowing Council to assess other proposals for growth in the town centre. It is also intended to allow Council to progress decisions made by Hornsby Shire Council on specific heritage matters when it governed part of the Epping suburb.

The Epping Planning Review does **not** review the appropriateness of the 2014 planning controls (i.e. to reduce densities that were introduced in the planning controls of 2014 across the centre and surrounds).

5.0 COMMUNITY ENGAGEMENT

Council has undertaken targeted engagement on the Epping Planning Review since its inception in December 2016. The aim has been to provide high-quality and extensive community engagement, and to build capacity and understanding of planning concepts within the community. Consultation with a broad range of stakeholders has extended the project's reach to all cross sections of the community, including:

- Epping suburb residents,
- local businesses and their employees,
- local community organisations,
- State and local political representatives, and
- Epping visitors.

This chapter details the key engagement activities which have occurred to date.

5.1 Public forum (December 2016)

The Epping Planning Review commenced with a public forum held on 14 December 2016. Over 300 residents attended, along with State member for Epping, Damien Tudehope, West Central District Commissioner of the Greater Sydney Commission, Ed Blakely, and City of Parramatta Council's Administrator, Amanda Chadwick. During the forum, residents provided feedback on their concerns for Council's consideration. In early 2017, a summary of feedback from the forum was forwarded to those attendees who provided an email address. A summary of the resident feedback from the public forum is available at Appendix 4.

5.2 Project E-Newsletters

The attendees at the public forum were asked to provide their email address if they wanted be part of the mailing list to receive regular updates about the project and opportunities to participate. The e-newsletter list currently includes close to 400 recipients, and consists primarily of forum attendees.

5.3 Presence at Australia Day and Lunar New Year

Council held an information tent at the 2017 Australia Day event in Parramatta Park and Lunar New Year celebration in North Rocks on 28 January 2017. A total of 36 flyers were given out, including ten flyers in Chinese and one in Korean. Residents were also invited to sign up for email updates.

5.4 Imagine Epping

Council also ran a four-week online engagement campaign focusing on ideas for immediate improvements at Epping. From 3-29 March 2017, the "Imagine Epping" campaign asked residents, visitors and workers to submit their ideas for improving their experience of place and community in Epping. Participants could also vote and comment on ideas submitted on the website. 115 ideas were received via this platform, and included placing historical images of Epping around the town centre, improving traffic, and bringing back the suburb's leafy character in key locations. At the end of the campaign, an interdisciplinary panel of Council staff assessed the submissions. The winning submission was an idea to connect parks with walking routes, supported by landscaping, outdoor exercise equipment and a jogging and walking trail. This will be implemented in 2017/2018.

5.5 Project webpage

A dedicated project webpage was established in February 2017 and by early June 2017 had received 1,075 page views in its first three months of operation. The webpage allows the community to keep up-to-date with the Epping Planning Review, and includes information on the project context and timeline, description of the four technical studies, and downloadable information documents including flyers (English, Korean, Chinese) and presentations from Phase 1 community workshops.

5.6 Other correspondence from residents

Since last year's public forum, other correspondence has been received by Council via email, letter or phone call. Some of the matters raised in this correspondence are being addressed through Stage 1 of the Epping Planning Review. Appendix 5 provides a detailed summary of this correspondence, where it related to land use issues covered in this Discussion Paper. Issues raised by the community via this channel have been incorporated in this Discussion Paper where appropriate or responded to separately.

5.7 Community workshops (May 2017)

Prior to the release of the Discussion Paper, a number of community workshops were held in May 2017 to inform the technical studies prepared on heritage, social infrastructure and commercial floor space. The main purpose of the workshops was to discuss and gather information around community values in each of the respective technical areas. Each workshop included presentations from Council and the respective technical consultants, before workshop participants were asked to provide their input through facilitated table work.

The consultation workshops are summarised in Straight Talk's *Epping Town Centre: Phase 1 Community Consultation* which supports the Discussion Paper. Where participants provided preliminary submissions at the workshops, these were forwarded to the respective consultant for consideration in their respective reports.

5.7.1 Heritage Review Workshop

Two Heritage Review Workshops were held with regards to HCAs within the former Hornsby Shire Council area. One workshop was held for landowners within a HCA and the other was a general workshop held for any interested residents; these had 101 participants and 71 participants, respectively. The workshops explored potential land use scenarios and associated impacts in the HCAs. A detailed summary is contained in Straight Talk's *Epping Town Centre: Phase 1 Community Consultation*, and key issues arising are discussed in Chapter 7.

5.7.2 Social Infrastructure Workshop

The community workshop on the Social Infrastructure Study had 91 participants, which included residents and representatives from local interest groups. A detailed summary is contained in Straight Talk's *Epping Town Centre: Phase 1 Community Consultation*, and key issues arising are discussed in Chapter 9.

5.7.3 Commercial Floor Space Workshop

The community workshop on the Commercial Floorspace had 41 participants, which included local residents, business landowners and developers. A detailed summary is contained in Straight Talk's *Epping Town Centre: Phase 1 Community Consultation*, and key issues arising are discussed in Chapter 8.

5.8 Online survey

The workshops were supplemented by two online surveys to reach those who could not attend a workshop. The surveys related to Epping's heritage, social infrastructure, and commercial floor space respectively. The survey was also undertaken in person around Epping Town Centre and the train station during late May.

5.9 Exhibition consultation

Three Information Sessions will be undertaken during the exhibition of the Discussion Paper. The purpose of the workshops will be to further engage with the community on the options and recommendations raised in the Discussion Paper, and will focus on:

- Social infrastructure and commercial floor space
- Heritage
- Traffic

Details of the times and location for the workshops are available on Council's website (https://www.cityofparramatta.nsw.gov.au/about-parramatta/precinct-planning/epping-planning-review) and have been forwarded to Epping Stakeholders in letters notifying them of the release of this Discussion Paper.

5.10 CALD-based consultation

In line with Council's commitment to engagement, the Epping Planning Review sought to engage with Epping's Korean and Chinese communities, these being the largest cultural and linguistically diverse (CALD) communities in the suburb. The CALD-based activities included:

- Epping Planning Review flyer translated into Korean and Chinese; and
- The Imagine Epping campaign received one submission in Korean. Communications and promotions for Imagine Epping were undertaken in Korean and Chinese. The website could also be translated into Chinese, Korean, and Hindi.

During the Discussion Paper exhibition, one workshop each will be conducted in Korean and Chinese. The CALD workshops are being promoted via public notices in local Korean/Chinese newspapers, flyers (in Korean and Chinese) available at the Epping Library, Council's Customer Service Centre, the YMCA and the Epping Baptist Church. Information on these workshops will also be promoted via the Epping Project website, the Your City Your Say contact list and social media presence.

6.0 INTRODUCTION TO THE TECHNICAL STUDIES

As shown in Figure 4 (pg. 16), a series of technical studies were commissioned as part of Stage 1 of the Epping Planning Review. Three of these studies respectively address **heritage**, **commercial floor space** and **social infrastructure** issues. These three studies are being exhibited with this Discussion Paper as supporting information, and are discussed in further detail in Chapters 7, 8 and 9, respectively.

Public domain and planning analysis has also been undertaken by Council officers. This analysis aims to test a range of options responding to the technical study on heritage and community views heard before and during Phase 1 consultations, and to advance recommendations from the commercial floor space and social infrastructure technical studies. These analyses are discussed in the respective chapters of this Discussion Paper, as well as in Chapter 10. It is also noted that additional detailed urban design and planning analysis will need to be undertaken in Stage 2 of the Epping Planning Review to inform centre-wide development standards and progress some of the technical studies' findings.

A study on **traffic and transport** has also been commissioned, but has not yet been completed. However, interim findings from this study have been prepared and are also provided in support of this Discussion Paper. The key issues arising are discussed in Chapter 11 of this Discussion Paper.

The following chapters (7-11) summarise the technical findings from each study, present community feedback, and propose options and recommendations to address various technical issues identified during Stage 1 of the Epping Planning Review. In each chapter a series of questions are posed and feedback is sought on all of those questions to inform Phase 2 of the Epping Planning Review, where policy changes will be drafted prior to further community consultation. The response will also inform Council's position in response to applicant-initiated Planning Proposals that Council is asked to respond to.

7.0 HERITAGE STUDY

Council commissioned City Plan Services to undertake the *Epping Town Centre Heritage Review* (the Heritage Review), which is being exhibited in conjunction with this Discussion Paper, and which:

- Reviews the existing Heritage Conservation Areas (HCAs) incorporating East Epping, Essex Street and Rosebank Avenue located within Epping suburb (which became part of the City of Parramatta as a result of the Council boundary changes in May 2016).
- Investigates concerns raised by various landowners and residents about the value and significance of the HCAs and of properties located within the HCAs which interface with R4 and R3 zoned areas (higher density residential zones).
- Reviews current controls that apply to the areas that have an interface with these HCAs.
- Reviews various properties located within the Study area which are:
  - currently listed as Heritage Items, to advise on whether the listing should be retained,
  - currently located on the edges of the HCAs, to determine whether they should be removed from the HCA, or
  - currently not Heritage listed but were identified by Hornsby Shire Council as sites that could be considered for listing.

The scope of the Heritage Review responded in part to resolutions from Hornsby Shire Council from 8 October 2014 and January 2016 (which was when the eastern part of the Epping Town Centre was located within the former Hornsby Shire Council LGA Boundary) which proposed to undertake a review of various heritage matters.

7.1 Technical findings

The recommendations from the Heritage Review are as follows:

a) **Retain the current boundaries of the Essex Street and Rosebank Avenue HCAs.**
Despite the new R4 redevelopment (in the form of 5 storey residential apartments) flanking a portion of each of the two HCAs, the Heritage Review found that these two HCAs retain the same level of integrity and significance as identified in Hornsby Shire Council's 2013 *Heritage Study*. See Figures 5 and 6 below.

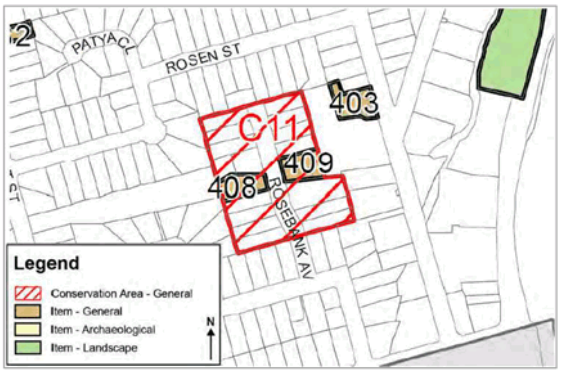

Figure 5 Rosebank Avenue HCA (extract from City Plan Services report, May 2017)

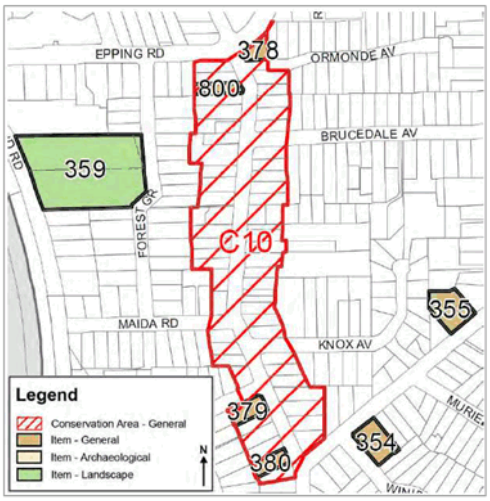

Figure 6 Essex Street HCA (extract from City Plan Services report, May 2017)

The Heritage Review also recommends that where sites in these two HCAs are located directly adjacent to an R4 zoned sites with higher density development, that those sites be permitted to undertake sympathetic 2 storey extensions to the rear of the site as long as they do not reduce the contribution of the dwelling to the HCA, or result in removal of mature trees or reduce the streetscape character.

A further recommendation is made that future planning controls should require archival photographic recordings to be taken of dwellings in the HCA if a substantial change is being made to the dwelling.

b) **Adjust the south-west boundary of the East Epping HCA to remove properties at 25 Pembroke Street and Nos. 1, 3 and 3A Norfolk Road**
The Heritage Review recommends the removal of these properties from the East Epping Heritage Conservation Area because Nos. 1, 3 and 3A Norfolk Road are not in keeping with the Federation and Inter War characteristics of the East Epping HCA, whilst 25 Pembroke Street (a contributory building) will soon be isolated from similar properties of Federation and Inter War periods as a result of rezoning of the southern side of Pembroke Street. Refer to Figure 7 below in point d). Sites discussed in this paragraph are outlined in blue in Figure 7.

c) **Retain individual heritage items requested for removal by property owners at No.3 and 42 Essex Street**
The Heritage Review reassessed the heritage value of these two properties and supports retaining the heritage listing currently in *Hornsby LEP 2013,* because the heritage significance of both properties is still intact.

d) **Rezone removed properties from East Epping Heritage Conservation Area (as per b) above), as well as Nos. 5, 7 and 7A Norfolk Road and identified properties within 'Rockleigh Park' to R3 Medium Density Residential with 12 metre height limit**
The Heritage Review recommends rezoning the removed properties from the East Epping HCA (as recommended in b above), as well as Nos. 5, 7 and 7A Norfolk Road and 'Rockleigh Park' from the R2 Low Density zone to the R3

Medium zone with a 12 metre (4 storey) height limit, so as to provide a smoother transition between the low and high density zones. These lots are shown in Figure 7.

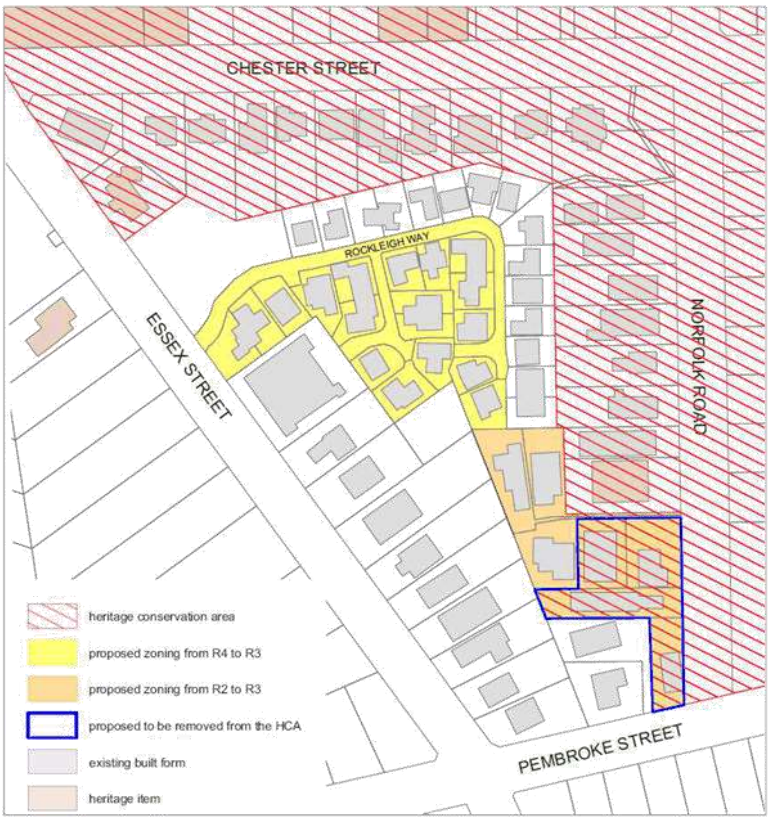

Figure 7 Sites recommended for HCA removal or rezoning at 'Rockleigh Park' and southern East Epping HCA

e) **Amend *Interface Guidelines of the Hornsby DCP (Section 9.4.1)* to improve the transition the R4 High Density development Hornsby DCP**
The Heritage Review recommends increasing the setbacks and areas for deep soil planting on R4 zoned land at the interface with a HCA to help retain landscape character.

f) **Maintain current height limits for the R4 and R3 zones**
The Heritage Review recommends that the 17.5 metre (5 storey) height limit in the R4 zone and 12 metre (4 storey) height limit in the R3 zone be maintained, as they create an appropriate transition in height.

g) **Rezone R2 land to the R3 zone in Rose Street and Briggs Road**
The Heritage Review recommends this rezoning in order to respond to 4 storey residential flat buildings being located immediately to the north and to better transition down to 2 storey development on the southern side of Brigg Road. This area is shown in Figure 8 below.

Figure 8 Rose Street and Briggs Road precinct (hashed blue)

h) **Hornsby Heritage Study issues**
In response to a previous Hornsby Shire Council resolution, the Heritage Review makes recommendations related to various sites identified as part of Stage 6 of the Hornsby Shire Council Heritage Study Review. Please refer to Section 13 of the Heritage Review that accompanies this Discussion Paper for detailed discussion of these recommendations.

Options and recommendations where appropriate related to each of these recommendations are discussed further in this chapter.

7.2 Community feedback

Community feedback was sought on the HCAs via two workshops held on 1st and 3rd of May 2017. Information and/or submissions were also provided at, or after, each workshop. During the workshops, participants were asked about what they valued about the neighbourhood, their experiences around development, and concerns around their neighbourhood. The participants were also specifically asked to nominate what Council should take into consideration when reviewing planning controls.

The participants valued Epping's aesthetics, particularly the green and leafy nature of the suburb which was seen to contribute to the feeling that the area is protected and has a good sense of community. The participants also reflected that the low-density buildings are perceived to add space and safety, adding to the family-friendly character of the suburb. Easy access to public transport is also highly valued.

Traffic and parking was perceived to be a major issue. Other concerns included privacy and overshadowing from increased building heights; and increase in traffic, noise and rubbish from over-development.

In regard to planning controls, there were differing views. Some participants believed that building and planning controls need to be stricter, while other participants believed that the development controls should be lifted entirely as the HCAs are already compromised. However, there was agreement that future planning and development should be consistent and appropriate for each section of the local area.

Some landowners within the HCA considered that the impact of a 5 storey apartment building located close to their rear yard was unsatisfactory and that this should be taken into consideration in determining whether their sites should remain in the HCA. They perceived that, even if they were to "sell up" and move to avoid amenity impacts, they would suffer financially as the amenity impact has devalued their property. Other landowners within the HCA's indicated that they valued the characteristics of their street that resulted in the HCA protection and that it should be retained for those reasons. There was no clear spatial pattern to differentiate those for and against retention of the HCA.

7.3 Guiding principles

After considering the technical report and the public consultation the principles and themes identified by Council staff to guide the development of options and recommendations presented in this Discussion Paper are:

- from a technical point of view, the adjoining development does not have sufficient impact on the HCAs to warrant the HCA designation being removed;
- controls should seek to retain the existing character of these areas which are valued by the community (the key characteristic being the relatively low building scale surrounded by spaces for significant landscaping and large trees);
- residents are concerned about the impact of higher density development in terms of traffic, noise, overlooking and overshadowing; and
- residents in interface areas between the R2 HCA sites and R4 apartment building sites suffer from amenity impacts and options to ameliorate these impacts should be considered.

There is no single option presented in this chapter that achieves all these principles; instead, options give differing weights to each of these principles.

7.4 Heritage issues – options, recommendations and questions

This section seeks to reconcile the recommendations a., e., and f. of the Heritage Review, community feedback and further urban design and planning investigations on the impact of alternate development on the character of the area. There are tensions between the technical findings and some community members who would like to see the HCA designations removed (particularly in the Essex and Rosebank precincts). Council officers acknowledge that the amenity of some rear yards within the HCAs has been compromised, so it was considered that other options should at least be canvassed as part of this Discussion Paper process. The amenity issues associated with the interface between the R4 zoned sites and adjoining HCA sites is a planning issue that should also be given some weight. It is also important to note that, whilst a critical component of Council's consideration, heritage matters are not the only consideration in play at Epping.

The heritage options below constitute analysis undertaken by Council officers in response to tensions between the recommendations in the *Heritage Review* and some

community feedback received. The options attempt to resolve poor transition in land use from 4 and 5 storey development to 2 storey development which was not appropriately addressed when the new planning controls came into effect in March 2014.

7.4.1 Rosebank Avenue and Essex Street HCA interfaces with R4 zoned land

A total of seven options are presented below for both the Rosebank Avenue and Essex Street heritage conservation area (HCA) interfaces with land zoned R4 High Density residential.

Option 1 – Maintain current HCAs

Option 1 protects and maintains the current Rosebank Avenue and Essex Street HCAs as shown previously in Figures 7 and 8, i.e. this will maintain the status quo. Figure 9 is an indicative diagram which illustrates the retention of the building form in each of the two HCAs (residential flat buildings on the left on adjoining R4 zoned land and single detached dwellings on the right on the R2 zoned and HCA land).

Figure 9 Option 1: Maintain current HCAs

Strengths:

- Consistent with findings from *Heritage Review.* The HCAs remain intact and are protected for current and future generations.
- No additional traffic or parking impacts arising from this area.
- Does not require Council to consult with the NSW Office of Environment and Heritage (OEH), as current HCA is maintained.
- A sensitively designed 2 storey extension to the rear could still be considered by the owner.

Weaknesses:

- Some land owners may feel aggrieved about the loss of amenity at the rear of their properties, and feel they are left with two options: to either stay and endure the decreased amenity, or suffer a financial loss when selling the property to move away.

Guiding principle: That the impact of RFBs at the interface areas of the HCA do not have significant impact on the significance and intactness of the HCA, and that the impact of the apartment building on the amenity of adjoining properties is within acceptable limits. The HCA should be retained.

Option 2 – Landscaping at interface with R2 and R4 zoned land

Option 2 involves a Council-funded/managed tree planting initiative (of appropriate tree species). The tree planting would occur in the rear yards of the land owners to assist in mitigating the visual impact and loss of visual amenity from the 5 storey residential flat building development. This initiative would be managed as part of Council's Heritage Grants Program, but would require a review of the Heritage Grants Guidelines and for Council to allocate additional funding to support this program.

This option is centred around managing the issue of visual impact alone. Figure 10 is an indicative illustration of how tree planting can assist in managing the visual impacts on privacy between the 5 storey residential flat building development (shown at left of the diagram) and largely single storey residential development (shown at right of the diagram). Photographs in Figures 66 and 69 in the *Heritage Review* also illustrate how mature tree planting can mitigate visual impacts.

Figure 10 Option 2: Council-funded/managed tree planting initiative

Strengths:

- Consistent with findings from *Heritage Review*; the HCAs remain intact and are protected for current and future generations.
- The neighbourhood will see an increase in green tree cover and canopy as the trees grow and mature over time which are elements of Epping the community value.
- No additional traffic or parking impacts arising from this area.
- Does not require Council to consult with the NSW Office of Environment and Heritage (OEH).
- A sensitively designed 2 storey extension to the rear could still be considered by the owner.

Weaknesses:

- Regardless of tree species recommended, the trees will take many years to grow to a sufficient height to mitigate the impacts. Therefore, current owners will have to endure ongoing amenity impacts for some time.
- Some land owners may feel aggrieved about the loss of amenity at the rear of their properties, and feel they are left with two options: to either stay and endure the decreased amenity, or suffer a financial loss when selling the property to move away.

Guiding principles: The impact of RFBs at the interface areas of the HCA do not have an adverse impact on the significance and intactness of the HCA and the HCA should therefore be retained. However, the visual and amenity impacts at the rear boundary is recognised with tree planting to be put in place to ameliorate the impact.

Option 3 – Dual Occupancy (addition at the rear)

Option 3 involves permitting a second attached dwelling to the rear of the dwelling resulting in an attached dual occupancy scheme which would not be visible from the street. Technically, this would be similar to a second storey alteration and addition recommended as appropriate by the independent Heritage Review. Figure 11 is an indicative illustration of Option 3 (refer to the orange colouring showing a ground floor extension and additional second floor at the rear).

Figure 11 Option 3: Dual Occupancy (addition at rear)

Strengths:

- Largely consistent with findings from *Heritage Review*; the HCAs remain largely intact and are protected for current and future generations.
- The current land owners who feel aggrieved about the loss of amenity at the rear of their properties are being offered an opportunity to re-develop their sites in a low impact fashion and realise an economic benefit.
- Results in a more efficient use of a large residential block.
- Provides an alternative type of housing stock (***dual occupancy***) with proximity to the Epping Town Centre and public transport.

Weaknesses:

- Requires Council to consult with the NSW Office of Environment and Heritage (OEH) owing to numerous amendments to the *HLEP 2013* regarding zone permissibility and heritage controls.

- Residents of the new dual occupancy development at the rear will still experience amenity issues with the adjoining 5 storey residential flat buildings.
- Likely to involve tress loss at the rear of the site and thus reduce the landscape buffer between the adjoining R4 zoned land and current R2.
- Some increase in traffic and on-street parking associated with additional dwellings.

Guiding principle: The impact of RFBs at the interface areas of the HCA do not have an adverse impact on the significance and intactness of the HCA and the HCA should therefore be retained. However, this option recognises that landowners can economically benefit from minor redevelopment opportunities.

Option 4 – Dual occupancy (side by side) redevelopment

This option involves demolishing the existing detached dwellings on a lot and replacing it with new ***dual occupancy (attached)*** in a side by side pair (i.e. both have street frontage). It would involve removal of the HCA. Figure 12 provides an indicative diagram of Option 4.

Figure 12 Option 4: Dual occupancy (attached) side by side redevelopment

Strengths:

- Represents a sound transition in density from the interface with 5 storey residential flat buildings, to 2 storey medium-density, then 1/2 storey low-density across the street.
- Efficient use of large residential blocks for two households with proximity to the Epping Town Centre.
- Provides an alternative type of housing stock (***dual occupancy***) with proximity to the Epping Town Centre and public transport.
- Introduces a more affordable housing option to that of a detached dwelling on a large lot.
- The current land owners who feel aggrieved about the loss of amenity at the rear of their properties are being offered an opportunity to re-develop their sites in a low impact fashion and realise an economic benefit.
- Trees are retained at the rear of the properties.

Weaknesses:

- Inconsistent with findings from *Heritage Review*; the HCA is not being protected for current and future generations.

- Alters the building form within the streetscape rather than having a predominant, uniform building type.
- Requires Council to consult with the NSW Office of Environment and Heritage (OEH) owing to numerous amendment to the *HLEP 2013* on permissibility and heritage.
- Some increase in traffic and on-street parking associated with additional dwellings.

Guiding principle: That the impact of RFBs at the interface areas of the HCA has such an adverse impact on the amenity of these properties in the HCA that the HCA designation should be removed and that alternate planning controls that still allow for 2 storey development should be introduced.

Option 5 – Town house re-development

This option involves demolishing the existing detached dwellings and replacing them with a town house development. This option requires the amalgamation of two residential sites for this option to occur. It would involve removal of the HCA. Figure 13 provides an indicative diagram of Option 5.

Figure 13 Option 5: Town House redevelopment

Strengths:

- Represents a sound transition in density from the interface with 5 storey residential flat buildings, to 2 storey medium-density, then 1/2 storey low-density across the street.
- More efficient use of large residential blocks for multiple households with proximity to the Epping Town Centre.
- Provides an alternative type of housing stock with proximity to the Epping Town Centre and public transport.
- Introduces a more affordable housing option to that of a detached dwelling on a large lot.
- The current land owners who feel aggrieved about the loss of amenity at the rear of their properties are being offered an opportunity to re-develop their sites in a low impact fashion and realise an economic benefit which is likely to be a higher benefit to that of Options 3 and 4.

Weaknesses:

- Inconsistent with findings from *Heritage Review*; the HCA is not being protected for current and future generations.

- Alters the building form within the streetscape rather than having a predominant, uniform single dwelling building form.
- Requires site amalgamation.
- Likely to add to the traffic and parking pressures on the street.
- Requires Council to consult with the NSW Office of Environment and Heritage (OEH) owing to numerous amendment to the *HLEP 2013* on permissibility and heritage.
- Significant tree removal likely with limited opportunity for deep soil planting.

Guiding principles: That the impact of RFBs at the interface areas of the HCA has such an adverse impact on the amenity of these properties in the HCA that the HCA designation should be removed and that alternate planning controls that still allow for 2 storey development should be introduced.

Option 6 – Manor home re-development

This option involves demolishing an existing detached dwelling and replacing it with a ***manor home***. This option does not require the amalgamation of lots. It would involve removal of the HCA.

Note: a ***manor home*** means a 2 storey building containing 4 dwellings, where:

a) each storey contains 2 dwellings, and

b) each dwelling is on its own lot (being a lot within a strata scheme or community title scheme), and

c) access to each dwelling is provided through a common or individual entry at ground level, but does not include a residential flat building or multi-dwelling housing.

(This definition is contained within *SEPP (Sydney Region Growth Centres) 2006*).

Figure 14 provides an indicative diagram of Option 6.

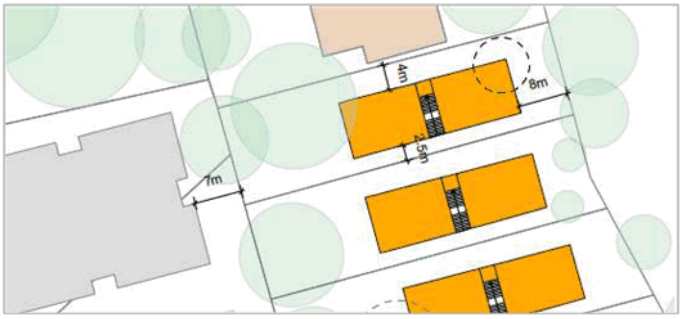

Figure 14 Option 6: Manor Home redevelopment

Strengths:

- Represents a sound transition in density from the interface with 5 storey residential flat buildings, to 2 storey medium-density, then 1/2 storey low-density across the street.
- More efficient use of large residential blocks for four households with proximity to the Epping Town Centre.

- Provides an alternative type of housing stock with proximity to the Epping Town Centre and public transport.
- Introduces a more affordable housing option to that of a detached dwelling on a large lot.
- Does not require site amalgamation.
- The current land owners who feel aggrieved about the loss of amenity at the rear of their properties are being offered an opportunity to re-develop their sites in a low impact fashion and realise an economic benefit which is likely to be a higher benefit to that of Options 3, 4 and 5.

Weaknesses:

- Inconsistent with findings from *Heritage Review;* the HCAs would not be protected for current and future generations.
- Significant change to streetscapes in Rosebank Avenue and Essex Streets in terms of building form and lot sizes.
- Will add to the traffic and parking impacts.
- Requires Council to consult with the NSW Office of Environment and Heritage (OEH) owing to numerous amendments to the *HLEP 2013* regarding permissibility and heritage.
- Significant tree removal likely for rear on-site parking and with limited opportunity for deep soil planting if basement parking not feasible.

Guiding principle: The impact of RFBs at the interface areas of the HCA has such an adverse impact on the amenity of these properties in the HCA that the HCA designation should be removed and that alternate planning controls that allow for 2 storey development should be introduced

Option 7 – 3 storey residential flat building re-development

This option involves demolishing the existing detached dwellings, site amalgamation and construction of 3 storey residential flat development. It would involve removal of the HCA.

It should be noted that in order to deal the issue of transition to adjoining low-density residential areas, the maximum height Council Officers are willing to identify as an option is a 3 storey apartment building. Permitting any 4-5 storey apartments on the western side of Essex Street is not considered appropriate as it would result in unbalanced streetscapes in Essex Street which can only be addressed by extending the higher density zones to the eastern side of Essex Street. This is not considered appropriate or consistent with community sentiment about the character of the area.

In the case of the Rosebank Avenue HCA, a 3 storey apartment building form is considered to be the maximum height that still allows for an appropriate transition, and also an appropriate height to deal with transition to the two heritage items located mid-block in this precinct.

Specifically, this option requires the amalgamation of two residential sites. Figure 15 provides an indicative diagram of Option 7.

Figure 15 Option 7: 3 storey residential flat redevelopment

Strengths:

- Represents a sound transition in density from the interface with 5 storey residential flat buildings, to 3 storey medium-density, then 1 and 2 storey low-density across the street.
- More efficient use of large residential blocks for two households with proximity to the Epping Town Centre.
- Provides an alternative type of housing stock with proximity to the Epping Town Centre and public transport.
- Introduces a more affordable housing option to that of a detached dwelling on a large lot.
- The current land owners who feel aggrieved about the loss of amenity at the rear of their properties are being offered an opportunity to re-develop their sites in a low impact fashion and realise an economic benefit which is likely to be a higher benefit to that of Options 3 to 6.

Weaknesses:

- Inconsistent with findings from *Epping Town Centre (East) Heritage Review;* the HCAs would not be protected for current and future generations.
- There would be significant change to streetscapes in Rosebank Avenue and Essex Streets in terms of building form and lot sizes.
- Likely to have the most noticeable traffic and parking impact on the street.
- Requires Council to consult with the NSW Office of Environment and Heritage (OEH) owing to numerous amendments to the *HLEP 2013*.
- Amalgamation of at least two lots will be required.
- Due to the necessity for basement car parking, this option would need to be tested for economic viability.

Guiding principles: The impact of apartment buildings at the interface areas of the HCA has an adverse impact on the significance and intactness of the HCA and the HCA should therefore be removed; and that transition between the R4 and R2 zones is better addressed; so that landowners can economically benefit from upper scale redevelopment.

Council Officer Recommendation

Council officers recommend that Council investigate 3 of the above options further. These are options are:

- Option 4 – Dual Occupancy (dwellings side by side) development

- Option 5 - Town House development
- Option 6 - Manor Home development.

These options recognize the unacceptable impact of adjoining development on the amenity of dwellings in the HCA, whilst allowing a transition to a built form that is 2 storeys in character and allows sufficient space for planting of significant trees.

Options 1 - Retain Existing Arrangements, 2 - Retain Existing Arrangements plus institute tree planting to screen and 3 - Dual Occupancy to the rear of existing dwellings all allow for the retention of the HCA. However, they do not sufficiently address the failures of previous planning processes (the outcome of which has been dwellings in a HCA have significantly reduced amenity with limited redevelopment options) to allow them to respond to the new adjoining apartment building development.

A sound planning process would have better balanced the desire for density with the impact on the amenity of the adjoining development. The independent Heritage Review recognises the impact of the adjoining apartment developments on the dwellings in the HCA by recommending increased setbacks and deep soil planting zones. However, neither of these options are feasible given that most of the adjoining sites where these measures might be implemented have already been developed or approved for development. Therefore, the setbacks and deep soil planting zones which might have been included as appropriate measures to protect the amenity of adjoining properties are no longer feasible.

Option 7 – 3 storey residential flat building redevelopment is not recommended as the other options provide for a more consistent 2 storey scale and more opportunity for significant tree planting. Both of these aspects are issues that residents indicated they valued in their local area during the consultation.

It is considered that Options 4, 5 and 6 should be further analysed (including financial feasibility) as preferred options for those sites that:

- fall within the Essex Road HCA and are located on the western side of Essex Street between Epping Road and Briggs Street.
- are located within the Rosebank HCA (where it is possible that different options might be applied to different parts of the HCA, i.e. higher density Manor Homes being more appropriate at the southern end and dual occupancy being more appropriate at the northern end).

Consultation Question:

Council is seeking your feedback on the preferred option. Council officers recommend that the options Council should consider further are options 4 - dual occupancy development, 5 - town house development and 6 - Manor Home Development, as these options recognize the impact of adjoining development on the amenity of dwellings in the HCA whilst allowing a transition to a built form that is 2 storey in character as well as sufficient space for planting of significant trees.

7a. What is your preferred option and why?

7.4.2 Zoning issues – interface with the East Epping HCA

Rockleigh Park comprises 36 small subdivided lots which are zoned R4 High Density Residential with a R3 zone edge to the north and east. It contains relatively new detached or attached cottages which front onto a small, narrow laneway system under community title. The average lot size is 280sqm. Figure 16 illustrates the Rockleigh Park area.

Figure 16 Rockleigh Park area (yellow outline)

The Heritage Review recommends down-zoning the Rockleigh Park parcels from the R4 High Density Residential zone which has a 17.5 metre (5 storey) building height to the R3 Medium Density zone which as a 12 metre (or 4 storey) building height. Council officers have undertaken a preliminary assessment of this recommendation (see following section).

Council officers also saw the need to undertake an assessment of parcels zoned R2 Low Density Residential at 1 to 7A Norfolk Road and 25 Pembroke Street. These parcels are situated south of "Rockleigh Park" and at the Southern end of the East Epping HCA (Refer Figures 17-19). The Heritage Review recommends these be rezoned to the R3 Medium Density Residential zone; Council Officers also present additional options for feedback in the following sections.

Council Officer Recommendations and Options

Rockleigh Park:
Down-zoning the site from the R4 High Density zone to the R3 Medium Density zone, enabling a reduction in the permissible density, is supported. However, to determine the appropriate density controls (height and floor space ratio), it is recommended that Stage 2 of the Epping Planning Review involves the preparation of a master plan to determine the most appropriate outcome. The area shown outlined in yellow in Figure 16 is the area to rezoned from R4 to R3.

Consultation Question:

7b. Do you agree with the above recommendation for Rockleigh Park?

Zoning Options: 1, 3, 3A, 5, 7 and 7A Norfolk Road and 25 Pembroke Road

Option 1 - Recommendation of the Heritage Review

As indicated in Section 7.1, the Heritage Review recommends that the HCA designation be removed from 1, 3, 3A Norfolk Road and 25 Pembroke Street, and that these sites, together with 5, 7 and 7A, be rezoned to Residential R3. This would allow them to be developed for apartment buildings to 4 storeys. It is noted that amalgamation of the lots would be necessary for these sites to be viable for this form of development. Figure 17 illustrates this option. Strengths and weaknesses of this option from Council Officers' point of view are:

Strengths

- Addresses the transition issues for Nos. 1, 5 and 7A Norfolk Road, as these properties have a rear boundary with sites fronting Essex Street which are zoned Residential R4 (and allows the construction of 5 storey apartment building).
- Addresses concerns of these landowners about the impact of the adjoining development on their amenity by allowing them to redevelop.

Weaknesses

- From an urban design viewpoint, Nos. 3A, 5, 7 and 7A have no road frontage. This makes designing apartment buildings that manage amenity impacts problematic in terms of setbacks and building separations, and will result in sub-optimal urban design outcomes.
- Will impact on traffic and parking issues in the street as a result of additional density.

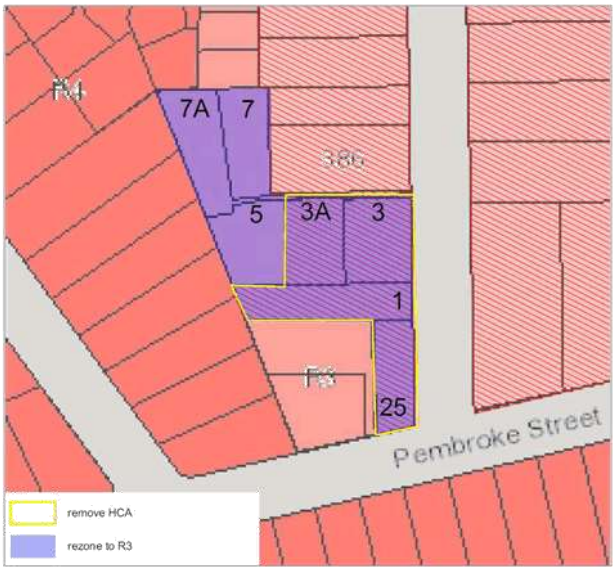

Figure 17 Option 1 – Recommendation of the heritage review

Option 2 - Rezone 1, 3, 3A, 5, 7 and 7A Norfolk Road and 25 Pembroke Street to Residential R3, but restrict development on 3, 3A, 5, 7, and 7A Norfolk Road to a 2 storey Manor Home.

As indicated above, rezoning all of these sites to Residential R3 would allow for a 4 storey development. One option for managing the design issues related to the isolated nature of Nos. 3A, 5, 7, and 7A Norfolk Road (as discussed in the weaknesses for Option 1 above) is to limit the redevelopment of these sites to a 2 storey Manor Home. In this case, there may be scope to introduce different design controls that would potentially produce better built form outcomes than those that would be result from a 4 storey apartment building under SEPP 65. This option would also involve removing the HCA designation from 1, 3, 3A Norfolk Road and 25 Pembroke Street. Figure 18 illustrates this option. Strengths and weaknesses of this options from Council Officers' point of view are:

Strengths

- Allows the owners of Nos. 3, 3A, 5, 7 and 7A Norfolk Road a redevelopment opportunity that they would not be able to achieve under the Residential R2 zoning (noting that it would require amalgamation of these into two development parcels)
- Allows for design options that better manage the transition between the building form on the Residential R4 on the adjoining site.

Weaknesses

- From an urban design perspective, Nos. 3A, 5, 7 and 7A have no road frontage. This makes designing apartment buildings that manage amenity impacts problematic in terms of setbacks and building separations, and will result in sub-optimal urban design outcomes.
- Will impact on traffic and parking issues in the street as a result of additional density, but not as greatly as Option 1 due to the lower density.

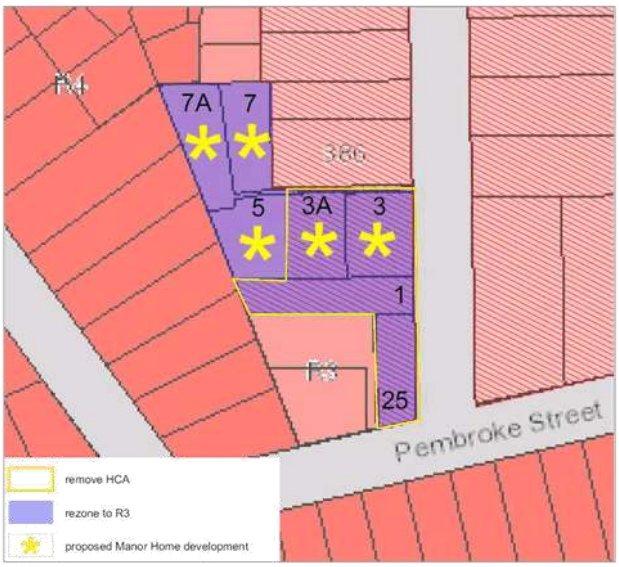

Figure 18 Option 2 involving 1-7A Norfolk Road and 25 Pembroke Street

Option 3 - Allow 1 Norfolk Road and 25 Pembroke Street to be rezoned to Residential R3 and retain Residential R2 zoning on 3, 3A, 5, 7 and 7A Norfolk Road

This option recognises that it may be possible to easily amalgamate 1 Norfolk Road and 25 Pembroke Street with 23 and 23A Pembroke Street (which are already zoned Residential R3) to create a suitably-dimensioned development site where a 4 storey development building can be accommodated with high-quality urban design outcomes. Due to concerns the design outcome from any amalgamation this option would see, Nos. 3, 3A, 5, 7 and 7A Norfolk Road would retain the Residential R2 zone which allows for no increased density. This option would also involve removing the HCA designation from 1, 3, 3A Norfolk Road and 25 Pembroke Street. Figure 19 illustrates this option. Strengths and weaknesses of this options from Council Officers' point of view are:

Strengths

- Addresses concerns about the urban design outcomes of redeveloping Nos. 3A, 5, 7 and 7A, given that they have no road frontage and are surrounded by other residential development sites.

Weaknesses

- Does not address the transition in built form issues of the owners of Nos. 5 and 7A who share a boundary with Residential R4 sites and may be concerned about the potential impact on the amenity of their property.
- Will impact on traffic and parking issues due to the additional density for 1 Norfolk Road and 25 Pembroke Street, but the impact would not be as significant as Options 1 and 2.

Figure 19 Option 3 involving 1-7A Norfolk Road and 25 Pembroke Street

Consultation Question:

7c. In the case of 1, 3, 3A, 5, 7, and 7A Norfolk Road and 25 Pembroke Street, what is your preferred option and why?

7.4.3 Rose Street precinct

The Rose Street precinct is zoned R2 Low Density Residential and includes properties that have frontage to Blaxland Road (comprising Nos. 705, 707, 709 and 711), Rose Street (comprising Nos. 1 to 5), and Brigg Road, northern side only (comprising Nos. 5-11 and 15-27). It excludes Essex Street properties. This land is zoned R2 Low Density Residential in *HLEP 2013*. Refer to the land shown hashed blue in Figure 20.

Figure 20 Rose Street precinct (land hashed blue)

In 2014, land immediately to the north of the precinct which has frontage to Maida Road was rezoned from the R2 zone to the R3 Medium Density Residential. The R3 zone in *HLEP 2013* permits residential flat buildings and has an accompanying 12m (4 storey) height limit. Recently approved Development Applications are seeing 4 storey residential flat building development realised on these sites.

The Heritage Review reviewed the appropriateness of the R2 Low Density zone over this precinct and has recommended up-zoning to the R3 Medium Density Residential zone. Council officers have reviewed this recommendation and concur with the conclusion, but also sees the need for further analysis to determine the appropriate density (height and FSR) controls.

Council Officer Recommendations

Council officers recommend rezoning this precinct from R2 Low Density to R3 Medium Density, thereby enabling a clear transition from the R4 zone on the northern side of Maida Road, to the R3 zone from the southern side of Maida Road to Brigg Road, and to the existing R2 zone on the southern side of Brigg Road. (Refer to Figure 21).

However, to determine the appropriate detailed controls, it is also recommended that Stage 2 of the Epping Planning Review involves the preparation of a master

plan to determine the subdivision pattern, the amalgamation pattern and the appropriate setbacks.

Figure 21 Rose Street precinct interface showing the proposed area to be up-zoned

Consultation Question:

7d. Do you agree with the recommendations for the Rose Street precinct? Please comment.

8.0 COMMERCIAL FLOORSPACE STUDY

Council commissioned SGS Economics and Planning to prepare a Commercial Floorspace Study in order to analyse the loss of commercial floor space occurring within the centre and determine the town centre's potential role and whether specific planning controls need to be in place to meet future demand. The Study is being exhibited as supporting information to this Discussion Paper.

Note: In this chapter "**commercial**" refers to **office**, **retail** and **other non-residential** floor space. When a specific subset of commercial floor space is referred to – i.e. office floorspace – the specific term is used.

8.1 Technical findings

The Commercial Floorspace Study (CFS) identifies that Epping has or will have a number of competitive advantages. First, Epping is expected to have a high rate of growth over the coming decades, which will result in more residents than other suburban centres such as Hornsby, Pymble, and Pennant Hills. Epping is also expected to be competitive with Macquarie Park, as it will have a larger population and a "comparable level of highly educated and professional people to draw on" (pg.57). Epping also ranks well in terms of transport accessibility, exposure for retail spaces and foot traffic.

The CFS also identified two of Epping's competitive weaknesses. The first is poor accessibility to major infrastructure such as hospitals, universities. The second is that Epping lacks the prestige of other nearby centres, such as Macquarie Park, Rhodes and Chatswood.

In light of the above strengths and weaknesses, the CFS details three possible scenarios for the Epping Town Centre:

1. Epping as a **population servicing centre (low scenario)** where office uses service the population of Epping.
2. Epping as a **local centre (medium scenario)** where office uses service the surrounding population (e.g. a 5 to 10 minute catchment).
3. Epping as a **district centre (high scenario)** where office uses service a wider population and attract strategic employment uses (e.g. a 20 to 30 minute catchment).

Note: The Greater Sydney Commission's Draft District Plans define a District Centre as having one or more of the following characteristics:

- the scale of retail activity, generally over 50,000 square metres of floor space
- the presence of health and education facilities that serve the district and the local community
- the level of transport services
- generally between 5,000 to 10,000 jobs.

In terms of the likely future scenario for the Epping Town Centre, the CFS concludes that the low scenario as not a realistic outcome as the Epping Town Centre has the potential to play a more significant role. The CFS therefore recommends that the preferred scenario is somewhere between the local centre (medium) and the district

centre (high) scenarios, and can be described as a **sub-district centre (a medium-high scenario)**.

The sub-district centre scenario would meet the forecast demand for **55,616sqm of office floor space** and **13,000sqm of retail floor space** in Epping Town Centre to 2036.

As shown in Table 1 below, the forecast demand is very close to the amount of office and retail floor space located in Epping Town Centre estimated through the 2011 Census data. However, as noted previously in this Discussion Paper, some office and retail floor space has been "lost" to residential uses through current redevelopment.

Type of commercial floor space	Provision 2011 (Census data estimates)	Demand 2036 (forecast in technical study)
Office	55,000sqm	55,616sqm
Retail	12,900sqm	13,000sqm

Table 1 2011 provision and 2036 demand for commercial floor space by type

8.1.1 Retail floor space

The CFS outlines demand for 13,000sqm of retail floor space in Epping Town Centre. It identifies that redevelopment should allow for a greater range of retail premises (i.e. variation in size of premises) to be provided for local shops, more supermarkets, cafes and restaurants, and everyday services such as banks, dry cleaners and hairdressers.

Retail uses should be located on the ground floor as part of any redevelopment, achieve a fine grain at the street level and promote an active street frontage. Figure 22 illustrates the location of these uses within the podium element of a mixed use development within the town centre.

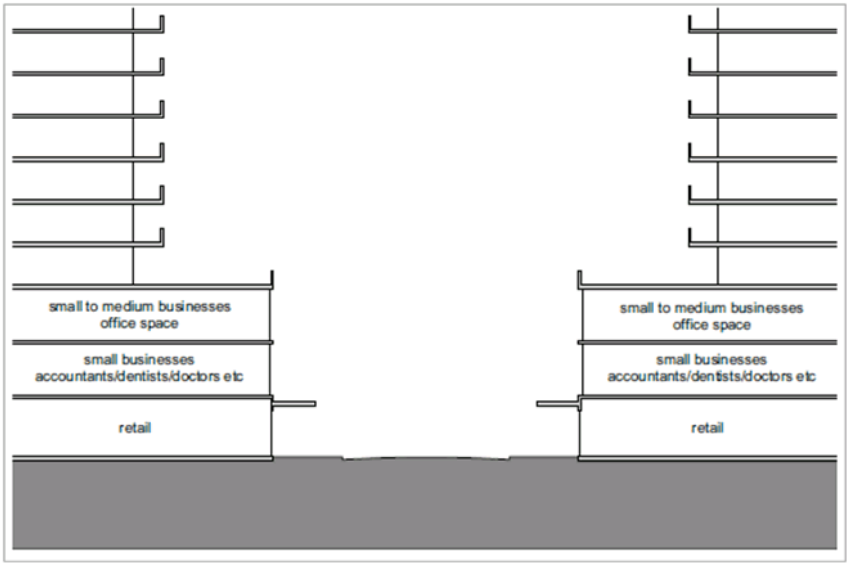

Figure 22 Location of retail and office uses within a 3 storey podium

8.1.2 Office floor space

The CFS outlines demand for 55,616sqm of office floor space in Epping Town centre, and recommends that this comprise the following types of office floor space:

- Small to medium enterprises across a range of industries located above the ground floor.
- Medical services for the local population (residents and workers) located on or above the ground floor.
- Other non-residential uses (such as Educational uses, child care centres and gyms) located on or above the ground floor.

8.1.3 Approaches to deliver the commercial floor space

The study looked at three approaches to addressing the demand for commercial floor space, as follows:

1. **Standalone commercial**: This approach requires office building development only, while prohibiting residential uses. The study generally recommends that this approach not be relied upon, but does identify some potential for large sites.
2. **True mixed-use development**: This approach requires commercial floor space for the first few floors of a mixed-use development. This can be achieved by having a minimum non-residential floor space ratio control.
3. **Development of government-owned sites**: This approach identifies that, where local or state government-owned land could incorporate commercial floor space to support the 30-minute city vision.

> **Note:** The Greater Sydney Commission's Draft District Plans envision a **30-minute city,** in which people can access a wide range of job, services and other opportunities within 30 minutes from their place of residence. The 30-minute city vision will improve the quality of life of Greater Sydney residents and improve accessibility and transport outcomes across the metropolitan area.

8.1.4 Other strategies for delivering commercial floor space

Because the market still favours residential development, the CFS recommends planning policies that would help deliver commercial floor space within the Epping Town Centre. These include:

- Introduce a **minimum non-residential floor space ratio control** on both sides of the town centre. (The report sees this as the most effective measure to maintain commercial floor space.)
- **Maintain residential development** on all B2 zoned land to maintain feasibility of non-residential development.
- Address the above two matters via **stronger planning controls** (LEP/DCP) that deliver podium-style commercial development with residential towers, along with a **prohibition of serviced apartments** in this zone
- **Explore car parking initiatives that reduce private car ownership**. This recognises the current impact that cars are having on the centre and the high level of public transport accessibility.
- With regards to **Government-owned sites**, Council should explore ways to include office, retail and other non-residential floor space which draws

residents to the centre. It proposes that the Ray Road/Beecroft Road sites previously zoned for business purposes (acquired by the State government for the purposes of the Sydney Metro project) be explored in this regard.

8.2 Community feedback

As noted previously, a community workshop focusing on commercial floor space was held on 22 May 2017. Feedback from this forum is summarised as follows:

- People are enthusiastic about the possible future of Epping. They want their town centre to reflect the vibrant, friendly, community which they are familiar with.
- There is a strong sense of community within Epping which is centred on having a retail and business hub which can offer a range of services and activities for the local community to access.
- There is a wide range of services available in the town centre which most participants enjoy using.
- There are some essential uses that do not exist or are not sufficiently provided within the town centre; this forces community members to visit other centres and suburbs. Workshop participants identified that the following broad range of uses which one might expect in a centre like Epping were not sufficiently provided:
    - Fresh food (butchers, greengrocers, etc.); there is only one supermarket
    - Larger format and big brand shops (discount department stores or hardware store)
    - A wide range of clothing retail
    - Medical services (e.g. x-ray services)
- There is little resistance to increasing the amount of space available for new businesses and offices spaces. Many participants wanted Epping to grow and wanted to see development of a new heart for the town centre.
- There is a noticeable lack of professional job opportunities in Epping at present. As such, there were many and varied suggestions around having flexible office or retail spaces, as well as room for business start-up spaces and for larger companies to make Epping their home (i.e. architectural, engineering or building companies).
- Parking and transport are seen as a barrier to those wanting to use Epping as a retail centre.

The community feedback is detailed in full in the Straight Talk Phase 1 Consultation Report which is being exhibited alongside this Discussion Paper.

8.3 Council analysis – commercial floor space issues

Council's analysis of commercial floor space issues, taking into account the findings from both the CFS and community consultation, is summarised in this section.

The Hornsby DCP controls which currently require a 2 to 3 storey podium for commercial uses have been applied weakly. As a result, only 50% of approvals to date are delivering a ground floor non-residential element. The Parramatta DCP controls require "up to" a 4 storey commercial podium for development along Beecroft Road but no retail or commercial on the other B2 Commercial zoned sites. The use of the words "up to" means the applicant can choose the height as long as it is no greater than 4 storeys. Furthermore, under current planning legislation, the role of the DCPs have been weakened relative to their historical role. DCPs now provide a guide, which can be varied as part of the Development Application process. In order to achieve a greater

provision of commercial floor space via the DA process, Council would have to strengthen its planning controls to mandate a minimum amount of commercial floor space in the LEP.

The lack of connectivity between the east and west portions of the centre was recorded indirectly in the feedback received at the consultation sessions. One of the options put forward was the desire to see a link between the two sides activated with shops. The suggestion was that a shopping centre linking both sides could be built over the train station. Whilst the achievement of a high-quality activated link is highly desirable, there is still a need to make sure that each side of the railway line is able to achieve a high level of amenity to minimise the distance people have to travel to meet their needs. In addition to a link, it is also desirable that both sides have a retail focus in the form of a supermarket, minimising the distance people have to travel to meet basic needs and providing an economic focal point on each side of the train station.

The ability of the centre to provide large floorplates was analysed. Given the lot sizes and the potential for site amalgamation, there is greater opportunity on the western side of the rail line for larger sites to be redeveloped to provide a variety of premises to support a mix of commercial uses. On the eastern side there are fewer options where amalgamation of multiple sites has already occurred. Council should investigate whether it is feasible to put in place planning controls that promote amalgamation of sites in strategic locations, so that a mix of commercial uses can be achieved on both sides of the rail line.

The rail line at Epping is a significant barrier to mobility; significant east, west, north and south routes of the arterial road network meet in Epping and cross over this barrier at the Epping Rail Overbridge. The preliminary traffic assessment (see Chapter 11) suggests that there is little that can be done to alleviate the arterial road traffic and that increasing private vehicle access into Epping represents a significant challenge for which there is not a feasible and cost-effective solution. The implications of this for commercial activity is that Epping should be a centre where the accessibility focus is on public transport and active transport options like walking and bicycles. This is also consistent with the recommendation in the SGS study which promotes initiatives to minimise private car ownership.

8.4 Guiding principles

The future planning controls for the Epping Town Centre should:

- seek to establish Epping as a Sub District Town Centre with a target of 13,000sqm of retail and 56,000sqm of office floor space by 2036.
- seek to ensure that each development site in Epping approved under any new controls makes a contribution to the retail and office targets in the centre and that consideration be given in preparing planning controls to:
    - ensure that residential is still retained at the maximum feasible level to maximise the feasibility of commercial floor space; and
    - provide an incentive for developers to amalgamate sites as this provides the best opportunity to provide a mix of retail and office floor space in their development.
- seek to ensure that the broadest possible range of retail and a range of small to medium office and service uses are can be accommodated in the Epping Town Centre
- seek to ensure that connectivity between the eastern and western parts of the Epping Town Centre is maximised to provide the broadest range of access for

all future users, whilst still seeking to ensure that key uses (i.e. a supermarket) are easily accessible to provide a high level of access to key services and facilities (minimising the distance anyone needs to travel within the centre to meet their daily needs).

- focus on Epping's relative accessibility advantage which is public transport and active transport, rather than relying on private vehicle transport where there are already constraints. These measures should seek to ensure Epping plays a role in providing residents in the region with a 30-minute city.

8.5 Questions for feedback

Council is seeking your feedback on the following questions and options.

8.5.1 Should Epping seek to evolve into a Sub District Centre with regards to commercial floor space?

Based on the Development Applications already approved, the Epping Town Centre will not achieve the recommended commercial floor space targets without some sort of planning intervention. Without intervention, Epping is likely to operate in the future as a dormitory suburb rather than a sub district centre. At the consultation session, there was general support for retail and office floor space being retained and provided in the Epping Town Centre. To test this premise amongst the broader community, feedback is sought on the following question.

Guiding principle: seek to establish Epping as a Sub District Town Centre with a target of 13,000sqm of retail and 56,000sqm of office floor space by 2036.

Consultation Question:

8a. Should Epping seek to evolve into a Sub District Town Centre with a target of 13,000sqm of retail floor space and 56,000sqm of office floor space?

8.5.2 Options for amending controls to deliver retail and office floor space targets

Council and the CFS identify that, if there is a desire to achieve the commercial floor space targets described above, then minimum non-residential floor space controls must be introduced. In order to have certainty on delivering this floor space, it is recommended that these controls be included in the LEP (as the existing DCP controls have not been an effective mechanism).

The technical study acknowledges that residential development on all B2 zoned land should be maintained in order to maintain the feasibility of non-residential development. This is also consistent with the Council and NSW Government objective of increasing activity around the Epping public transport hub.

Urban design analysis suggests that sites within the B2 zone (assuming a 60% take-up rate) would need to provide 3 storeys of commercial floor space in order to achieve the 2036 targets.

On the eastern side of the rail line, the current DCP controls requires 2 storeys on the majority of sites (with a small number of sites near the station required to provide 3 storeys). In this case, new controls would require an increase in the commercial floor space provided on site.

On the western side the land between Beecroft Road and Rawson Street, there is no clearly enforceable requirement to provide a commercial podium beyond retail at the ground floor. In this case, requiring 3 storeys of commercial across all these B2 zoned sites will give a net increase in the total amount of commercial floor space.

The way that Council implements any new controls will play an important role in the centre's viability and the delivery of commercial floor space.

Option 1 – Retain existing floor space controls and replace existing residential floor space with commercial floor space targets

When reformulating the planning controls, Council could retain existing FSR controls and introduce minimum requirements for non-residential floor space as well. This means that the development would reduce the amount of future residential floor space (the number of apartments that can be achieved) to accommodate the minimum non-residential floor space.

This would also potentially change the height controls, though it is not possible to say how these will change without site-specific testing. However, it is possible that the height controls would need to be maintained or increased because the floor to ceiling height for commercial storeys are higher than for residential storeys. In other words, mandating more commercial floor space at lower levels could result in slightly taller tower buildings, especially if a slender tower with a smaller shadow impact (which is a desirable building form) is to be achieved.

Strengths:

- Allows for delivery of commercial floor space targets and seeks to ensure Epping is able to achieve a Sub District Centre role and contribute to this part of Sydney becoming a 30-minute city.
- Delivers on the community's desire for a greater mix of goods services and jobs to be provided in the centre.
- Assist with managing traffic and parking issues by not resulting in a net increase in floor space in the town centre (especially if it is supported by other measures to limit private vehicle ownership for residents living close to the Epping Town Centre and to promote workers arriving at work via public transport).

Weaknesses:

- Reduces the number of residential units that can be achieved close to Epping Station, which was a key objective of the Epping UAP process; this may not be supported by the Department of Planning.
- Unlikely to be supported by landowners as it makes redevelopment less financially attractive (commercial floor space is much less valuable in the current market).
- Potentially encourages a "rush" of Development Applications under the current controls to avoid future planning controls that would limit residential units achievable.

Guiding principle:

- seek to establish Epping as a Sub District Town Centre with a target of 13,000sqm of retail and 56,000sqm of office floor space by 2036.

- seek to ensure that each development site in Epping approved under any new controls makes a contribution to the retail and office targets in the centre and that consideration be given in preparing planning controls to:
  - ensure that residential is still retained at the maximum feasible level to maximise the feasibility of commercial floor space; and
  - provide an incentive for developers to amalgamate sites as this provides the best opportunity to provide a mix of retail and office floor space in their development.

Consultation Question:

8b. Should Epping evolve as a Sub District Centre achieving the commercial floor space targets without any increase in Net Floor Space on Business B2 zoned sites?

Option 2 – Allow additional floor space on B2 Business zoned sites to allow for the commercial floor space targets to be achieved.

There are a number of sites where there would need to be more commercial floor space than envisaged under the existing DCP controls in order to meet the targets. In these instances, if the amount of floor space permitted was increased to accommodate the additional commercial floor space, then there would be no net loss in residential development permitted on these sites. The impact of this is that the height of the buildings would need to increase to accommodate the additional floor space.

Strengths:

- Allows for delivery of commercial floor space targets and seeks to ensure the Epping is able to achieve a Sub District Centre role and contribute to this part of Sydney becoming a 30-minute city.
- Delivers on community's desire for a greater mix of goods services and jobs to be provided in the centre.
- Has less impact on housing targets, and is more likely to be supported by the Department of Planning.
- More likely to be supported by landowners as the impact on financial returns associated with any redevelopment are significantly lower than Option 1.

Weaknesses:

- Will make managing traffic and parking issues more difficult by allowing a net increase in floor space in the town centre. This could potentially be offset if it is supported by other measures to limit private vehicle ownership for residents living close to the Epping Town Centre and to promote workers arriving at work via public transport. However, these measures would need to be even more strictly applied compared to Option 1.
- Allows for taller buildings with greater shadow and potential visual impacts compared to those permitted under existing controls.

Guiding principle:

- seek to establish Epping as a Sub District Town Centre with a target of 13,000sqm of retail and 56,000sqm of office floor space by 2036.
- seek to ensure that each development site in Epping approved under any new controls makes a contribution to the retail and office targets in the centre and that consideration be given in preparing planning controls to:

- ensure that residential is still retained at the maximum feasible level to maximise the feasibility of commercial floor space; and
- provide an incentive for developers to amalgamate sites as this provides the best opportunity to provide a mix of retail and office floor space in their development.

Consultation Question:

8c. Should Epping evolve as a Sub District Centre achieving the commercial floor space targets by allowing for an increase in density permitted so the commercial can be delivered with no loss of residential floor space capacity?

8.5.3 Role of Government-owned sites

The technical study has identified a role where Government-owned sites could be used as part of a deliberate strategy to support the Government's 30-minute city strategy by:

- Providing commercial floor space to offset the loss when other sites are developed; and
- Providing floor space to allow businesses that are displaced when their existing building is being redeveloped to relocate within the centres.

This section below discusses the Government-owned Sites that have been identified as opportunities to make a contribution to the 30-minute city strategy.

Site 1 – State Government Owned Site at 240 – 244 Beecroft Road, Epping

This site (see Figure 23) has previously accommodated a commercial office development. The site was acquired by the State Government and has been used as a works site for the North West Metro Project.

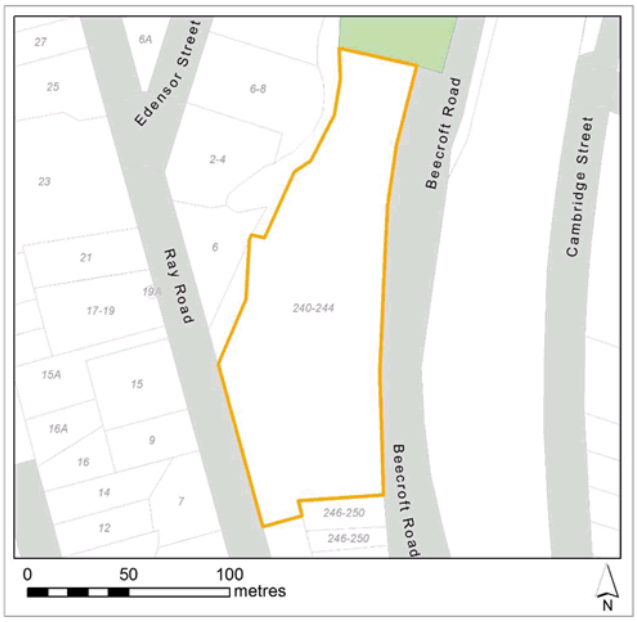

Figure 23 State government owned land at 240-244 Beecroft Road, Epping

As part of the 2014 Planning Controls coming into force, this site was rezoned to R4 High Density Residential with a maximum height of 48m. Once the construction of the Sydney Metro is completed and the site is no longer required for a works site, it is expected that it will be redeveloped in accordance with the existing zoning for largely residential purposes. The R4 zone allows for shop top housing and neighbourhood shops on the ground floor but would not permit any retail or commercial development above the ground floor.

As indicated above, the commercial floor space targets can be achieved in the existing B2 zone with a 60% take-up rate without any commercial floor space being developed on this site. If the zoning of this site changed to permit more commercial floor space, and this was taken up, it would be possible to reduce the retail commercial requirement on other sites. One advantage of encouraging commercial development on this site is that the size of the site would allow for larger floorplates than could be achieved on most sites in the B2 zone.

The technical study recommends that Council should explore ways that this site might be used for non-residential uses. Options for this site include:

- **Option 1a** - Retain the existing zoning.
- **Option 1b** - Rezone the site and allow a mix of retail and office on the site (similar to what is being considered in Section 8.5.2).
- **Option 1c** - Amend the planning controls to require commercial development and prohibit residential development.

The more commercial floor space that could be accommodated on this site, the less pressure there would be to maximise commercial floor space on B2 zoned sites closer to the station. However, unless the height of building also increases, Option 1b and 1c will result in a reduction in housing close to the Epping Station

which is inconsistent with the Epping UAP objectives put forward by the State Government.

Guiding principle:

- seek to establish Epping as a Sub District Town Centre with a target of 13,000sqm of retail and 56,000sqm of office floor space by 2036.
- seek to ensure that each development site in Epping approved under any new controls makes a contribution to the retail and office targets in the centre and that consideration be given in preparing planning controls to:
  - ensure that residential is still retained at the maximum feasible level to maximise the feasibility of commercial floor space; and
  - provide an incentive for developers to amalgamate sites as this provides the best opportunity to provide a mix of retail and office floor space in their development.

Consultation Question:

8d. What contribution should 240-244 Beecroft Road make to the provision of commercial floor space in Epping?

Site 2 – Epping Station Site

As part of the consultation a number of stakeholders put forward a proposal for a development over the top of the Epping Station. The perceived advantages of the proposal included:

- The opportunity to provide a high-quality activated link between the east and west side of the Town Centre; and
- The opportunity to provide commercial floor space to support the town centre

The critical conversation for this site is with the relevant Government transport agencies who may have a position on what can feasibly be constructed over the rail line/station.

Guiding principle:

- seek to establish Epping as a Sub District Town Centre with a target of 13,000sqm of retail and 56,000sqm of office floor space by 2036.
- seek to ensure that each development site in Epping approved under any new controls makes a contribution to the retail and office targets in the centre and that consideration be given in preparing planning controls to:
  - ensure that residential is still retained at the maximum feasible level to maximise the feasibility of commercial floor space; and
  - provide an incentive for developers to amalgamate sites as this provides the best opportunity to provide a mix of retail and office floor space in their development.
- seek to ensure that connectivity between the eastern and western parts of the Epping Town Centre is maximised to provide the broadest range of access for all future users, whilst still seeking to ensure that key uses (i.e. a supermarket) are easily accessible to provide a high level of access to key services and facilities (minimising the distance anyone needs to travel within the centre to meet their daily needs).

Consultation Question:

8e. What contribution should the Epping Station Site make improving connectivity and provision of commercial floor space?

Site 3 – Council Car Park site – Rawson Road Epping

The Council carpark site located in Rawson Street (see Figure 24) represents an opportunity to utilise Council-owned land to benefit the community (as identified in Appendix 3). Council has already been approached by adjoining developers seeking to enter into an agreement with Council to include this land in a redevelopment that would see car parking provided underground and the site developed above ground with a mix of community open space, commercial facilities and residential development (see Appendix 3 for further discussion).

Figure 24 Council car park sites at 51A and 51B Rawson Street, Epping

The role that this site can play as a potential location for a community hub incorporating a civic space and potential community hub facility incorporating a mix of community uses is discussed further in Chapter 9. Consequently, it is recommended that this site not be identified as a site where significant commercial or retail floor space should be contemplated. If redeveloped, this site will more likely play a role ensuring that there is sufficient social infrastructure provided in the town centre.

Site 4 – Current Epping Library site – Chamber Court Epping

The existing Epping Library Site (see Figure 25) was previously identified by Hornsby Shire Council as a potential redevelopment site. Hornsby Shire Council had previously undertaken an Expression of Interest (EOI) process that sought a partner to redevelop a site with a view to the site being redeveloped with residential uses and a new library facility located on the lower levels. A partnership approach was proposed with the objective of delivering a new library funded by the developer.

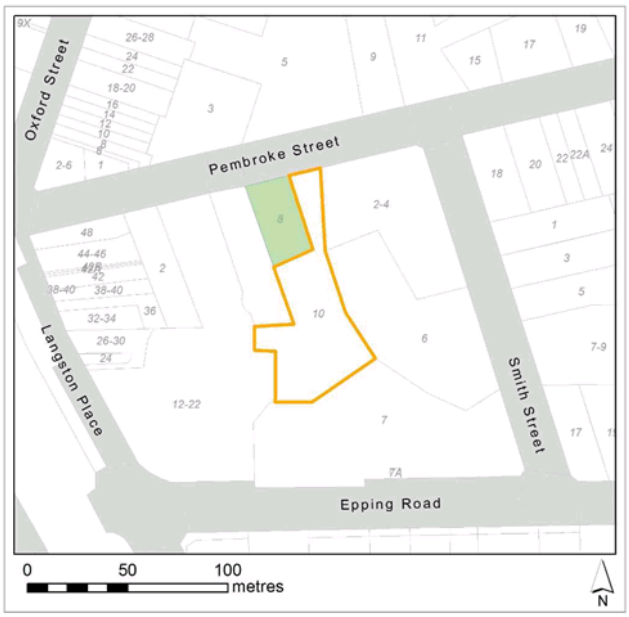

Figure 25 Epping Library site, Pembroke Street, Epping

The role this site could play in the provision of community open space and community facilities is discussed in more detail in Chapter 9. As part of that development, Council could consider what contribution the site should make to the provision of commercial floor space in the Town Centre.

Council could also require the site to provide for three levels of commercial floor space (equivalent to adjoining site), but use the lower levels for a community facility and/or office space that might accommodate Non-Government Organisations (NGOs) and other community service providers (instead of commercial floor space that would be leased in the open market).

Alternatively, Council could seek to make a greater contribution by providing more levels of office space than adjoining equivalent sites that could then be leased to both NGO/Community Service Providers and private tenants depending on demand and the funding model required.

Guiding principles:

- seek to establish Epping as a Sub District Town Centre with a target of 13,000sqm of retail and 56,000sqm of office floor space by 2036.
- seek to ensure that each development site in Epping approved under any new controls makes a contribution to the retail and office targets in the centre and that consideration be given in preparing planning controls to:
  - ensure that residential is still retained at the maximum feasible level to maximise the feasibility of commercial floor space; and
  - provide an incentive for developers to amalgamate sites as this provides the best opportunity to provide a mix of retail and office floor space in their development.

Consultation Questions:

8f. Should the Epping Library and Council car park sites play a role in providing for commercial floor space in the centre?

8g. Should the floor space allocated to community uses and commercial floor spaces be equivalent to or greater than the levels required on adjoining equivalent sites?

8.5.4 Delivering the right mix of retail uses in Epping Town Centre

Issue 1 – Delivering a Supermarket on the Eastern Side of Epping Town Centre

One issue that will impact on the liveability of Epping Town Centre will future residents' and workers' ability to access daily needs in a convenient manner. To this end, there would ideally there will be a supermarket provided on both sides of the rail line. Supermarkets tend to be an anchor use that then encourage other smaller and medium enterprises to locate nearby, providing a wider range of local uses for daily needs. A supermarket already operates on the west side of the centre but there is no supermarket on the eastern side.

Ultimately the planning system cannot mandate the operation of any business. The planning controls allocate floor space areas and set in place planning controls that seek to create an environment for the business community to operate these types of businesses. Council cannot guarantee a supermarket be provided, but it can put in place planning controls that promote or incentivise desirable outcomes and apply economic development initiatives to attract a supermarket tenant.

Supermarkets require large floorplates. On the eastern side of Epping Town Centre, the existing lot pattern with multiple small shops requires significant lot amalgamation to occur to get an appropriate site. Having considered the pattern of Development Applications already in place and the possible locations for a supermarket, there remains one key site identified by Council Officers as ideal for a supermarket to service the eastern side of the Town Centre. The landholding (see Figure 26) consists of 7 sites – 38-48 Langston Place and 2 Pembroke Street – which together have a site area of approximately 2,900sqm.

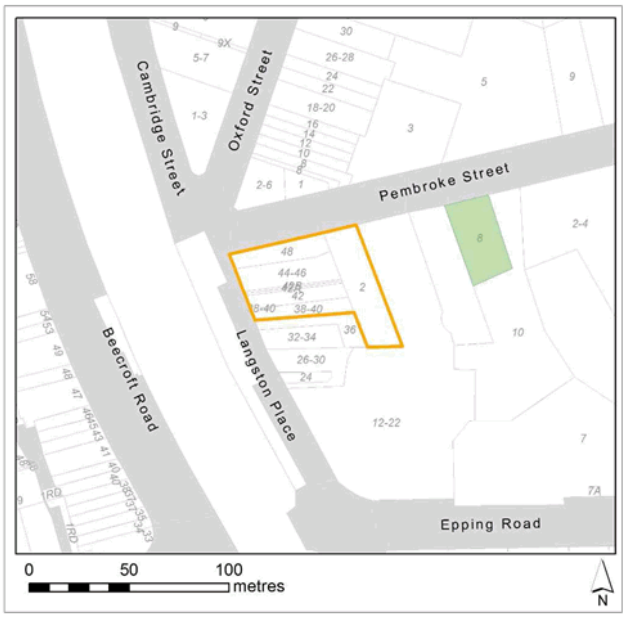

Figure 26 Potential supermarket site – Eastern side of Epping Town Centre

This site is located directly opposite the station and is considered the ideal site for a supermarket to service the eastern side of the Epping Town Centre, if supported by community and the market. However, the amalgamation of all of these sites to achieve a supermarket floorplate cannot be mandated by Council. Instead it may be possible to provide these landowners with an incentive to amalgamate these sites by providing them with additional floor space and height in any new planning controls to provide a financial incentive for amalgamation and the delivery of a supermarket.

Guiding principle:

- seek to ensure that the broadest possible range of retail and a range of small to medium office and service uses are can be accommodated in the Epping Town Centre.
- seek to ensure that connectivity between the eastern and western parts of the Epping Town Centre is maximised to provide the broadest range of access for all future users, whilst still seeking to ensure that key uses (i.e. a supermarket) are easily accessible to provide a high level of access to key services and facilities (minimising the distance anyone needs to travel within the centre to meet their daily needs).

Consultation Question:

8h. Should Council seek to actively encourage a supermarket site on the eastern side of the Epping Town Centre by providing floor space and height bonuses to incentivise the site amalgamation necessary to achieve a supermarket?

Issue 2 - Ensuring Delivery of Large Floorplate Retail Options on the Western Side of the Rail Line

As discussed in Appendix 3, Council has two Preliminary Planning Proposals seeking to increase FSR and height on sites on the western side of the Epping Town Centre. The two sites are shown in Figures 27 and 28 below.

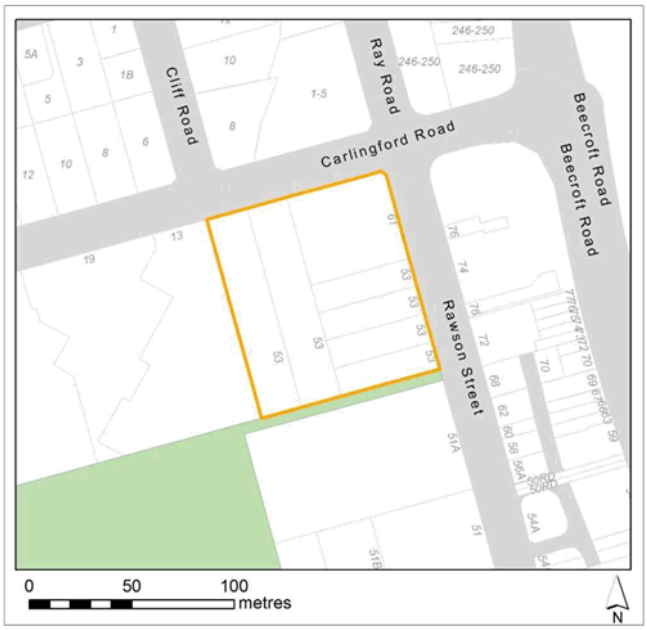

Figure 27 Potential large floorplate supermarket site – Western side of Epping Town Centre, 53 & 61 Rawson Street, Epping

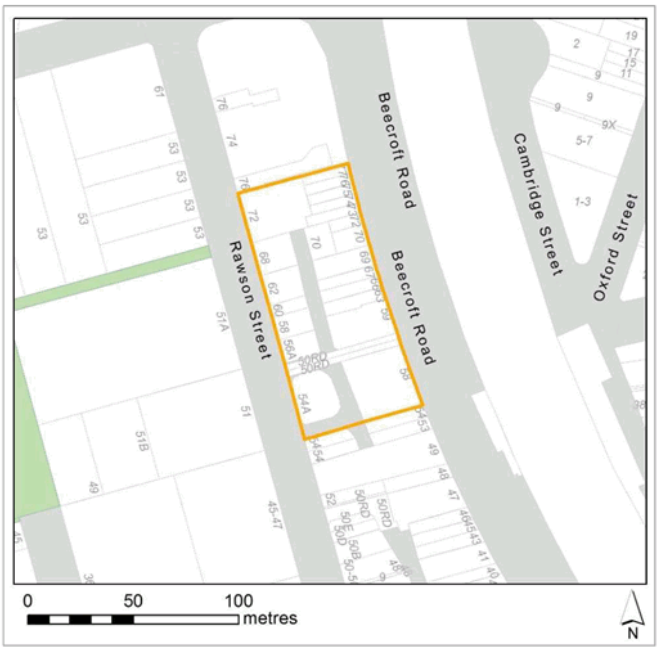

Figure 28 Potential large floorplate supermarket site – Western side of Epping Town Centre, 59 & 77 Beecroft Street, Epping

In both the proposals submitted there are large floorplate shops provided for in the lower levels.

In order to achieve a role for Epping as a sub district centre, it is critical that these sites provide commercial levels in a podium and that larger floorplate shops are retained within it. The DCP currently requires up to a 4 storey podium be provided for the Beecroft Road Site. However, the current planning controls do not contain any provisions that require the applicants to retain large floorplate outlets. There are also no controls that require a supermarket site be retained for the site on the western corner of Rawson Road and Carlingford Road

It is recommended that Council strengthen its DCP controls to specify that large floorplate retail should be provided. However, this sort of control has traditionally not been specified in a DCP and instead it has been left to the market to determine the mix of retail shop sites on a development in Parramatta LGA.

The circumstances for these sites are different to those discussed above in relation to providing a supermarket in the east. These sites have effectively already been amalgamated so there is no incentive required to promote amalgamation.

However, in both cases the applicants via their preliminary Planning Proposals are seeking additional density on these sites over and above what is permitted under the current controls. There are various other issues, particularly traffic management and urban design considerations that need to be considered before any decision about whether these sites will be able to be developed at higher densities.

However, a position Council could take is that any additional density on these sites (subject to Council being satisfied it is satisfactory from a traffic and urban design point of view) would be conditional upon large floorplate shops being provided.

Guiding principles:

- seek to ensure that the broadest possible range of retail and a range of small to medium office and service uses are can be accommodated in the Epping Town Centre.
- seek to ensure that connectivity between the eastern and western parts of the Epping Town Centre is maximised to provide the broadest range of access for all future users, whilst still seeking to ensure that key uses (i.e. a supermarket) are easily accessible to provide a high level of access to key services and facilities (minimising the distance anyone needs to travel within the centre to meet their daily needs).

Consultation Question:

8i. Should Council consider floor space incentives on this site to seek to ensure larger floorplate retail shops on these sites?

9 SOCIAL INFRASTRUCTURE STUDY

Following council boundary changes in 2016, Council commissioned Suter Planners and Elton Consulting to prepare studies of Council's social infrastructure across the City of Parramatta Local Government Area. The analysis relevant to the Epping suburb has been extracted and presented in the *Epping Social Infrastructure Study*. This is being exhibited as supporting information to this Discussion Paper.

Section 10.1 summarises the technical findings from the Epping Social Infrastructure Study while Section 10.2 summarises the community feedback from the Phase 1 workshops that took place in May 2017. Section 10.3 specifically addresses open space provision, which is a key issue for consideration. Section 10.4 then develops a set of guiding principles that inform the recommendations made in Section 10.5.

The role of this Discussion Paper is to identify principles that will guide future decision making. Any future decisions on provision of any social infrastructure will be guided by the outcome of this Discussion Paper process, but will also need to be informed by project feasibility and financial analysis prior to Council making any decisions on exactly how and where social infrastructure changes are pursued in the future.

9.1 Technical findings

The *Epping Social Infrastructure Study* (the Study) makes recommendations on each Council-owned social infrastructure facility; these are summarised in the following sections. Section 10.1.1 deals with Community Facilities, Section 10.1.2 deals with Open Space, and Section 10.1.3 deals with other Indoor and Outdoor Facilities.

The Study notes that the following types of social infrastructure were not audited as part of the study:

- school facilities used by the community;
- facilities owned and/or operated by other Councils that are outside City of Parramatta borders, but are likely to be used by Parramatta residents; and
- facilities not owned by Council, but used by the community for meetings and functions, such as churches and YMCA venues.

However, these types of social infrastructure were included when considering options for future provision of social infrastructure.

Important note on benchmarking of social infrastructure (continues on next page)

The Study relies on population benchmarking as a basis to compare and understand the provision of social infrastructure across various geographical areas in the Parramatta LGA. Benchmarking compares the amount of floor space available of various types of social infrastructure (e.g. library floor space and community meeting rooms) per 1,000 residents. This process can then be applied to identify current gaps in provision, as well predicting future needs to adequately service a local catchment as the population fluctuates.

While benchmarking is useful and widely used by government as an analysis tool, the Study is clear to point out that it is only one factor that should be considered as:

- It does not assess the useability or quality of the floor space being provided, so is therefore not a useful tool to assess the suitability of the space provided to meet the specific needs of the local community.
- It does not take into account the different ways that different communities live. For instance, the needs of residents living in high-density environments are different to those living in suburban settings, and provision of social infrastructure may need to change accordingly.
- It does not assess the practical elements that affect the way we plan for social infrastructure. For example, large parcels of land for additional sports fields are often not available in an urban or infill environment.
- Other approaches, such as using school grounds for org sport on weekends may create better outcomes for the community, rather than Council acquiring additional land to expand its sporting facilities assets. In other words, considering community needs within their own context is critical.

There are other factors that Council must consider when providing social infrastructure. Different areas of the City have different levels of provision when benchmarked. Council will need to prioritise available funding to make improvements to local social infrastructure. Whilst Section 94 developer contributions will assist in funding infrastructure, they will not cover the full cost of the infrastructure upgrades required; therefore, funding from other sources will need to be factored in when assessing the feasibility of delivering new social infrastructure.

9.1.1 Community facilities

The table below lists the Council-owned community facilities in Epping.

Facility	Address	GFA (sqm)	Zoning	Management
Epping Community Centre (School of Arts)	9 Oxford Street, Epping	1,157	B2 Local Centre	Unstaffed, Council management
Epping Library	1 Chambers Court, Epping	550	B2 Local Centre	Council management
Epping Leisure and Learning Centre	1 Chambers Court, Epping	389	B2 Local Centre	Council management
Epping Creative Centre	26 Stanley Road, Epping	460	RE1 Public recreation	Managed by NGO tenant – subsidised lease
West Epping Community Centre	15 Ward Street, Epping	622	RE1 Public recreation	Unstaffed, Council management
B. Parker Memorial Guide Hall	1-3 Briggs Road, Epping	190	RE1 Public recreation	Managed by NGO tenant (Girl Guides Association NSW) – exclusive lease

Table 2 Council-owned community facilities within the Epping suburb

The Study identified the following strengths and weaknesses with regard to community facilities in the Epping suburb:

Strengths:

- The community facilities generally benefit from good access to public transport, especially those close to the Town Centre, including Epping Community Centre and Epping Library.

- The community facilities generally benefit from good integration with other services and facilities.
- Benchmarking indicates that the current population of Epping (24,530 residents) is currently well-serviced with community space when compared with other parts of the Parramatta LGA. Epping has the highest community facility provision in the LGA (116sqm per 1,000 people in Epping, compared with 61sqm per 1,000 people across the LGA).
- On the assumption that the population of Epping increases to 37,271 residents in 2036, benchmarking indicates Epping will only have a very small shortfall in community facility floor space to service a larger population (81sqm per 1,000 residents) even if no new facilities are provided.

Weaknesses:

- In many cases, existing community facilities are not adequately staffed and have limited programming available, making much of the space unusable to the community and underutilised.
- The quality of the floor space across many of the community facilities is poor.
- The current dispersed "branch network" of community centres in and around the centre reinforces their underutilisation and poor useability. A best practice model that enables Council to efficiently resource, staff and program to meet the needs of local residents would be a large, flexible multipurpose community facility.
- Inadequate parking creates barriers to use, especially for facilities that do not benefit from public transport connectivity (e.g. West Epping Community Centre).
- Some community facilities lack visual prominence. Facilities such as the Epping Creative Centre and West Epping Community Centre lack good access. More prominence could provide increased value for the community.
- Epping Leisure and Learning Centre is in relatively poor condition, provides limited access, and is significantly underutilised.
- B. Parker Memorial Hall and Epping Creative Centre have limited access.
- Library floor space is unlikely to be inadequate to meet community needs by 2036 – see discussion in following paragraphs.

Epping Library

The Study identifies library space as Epping's most significant shortfall in the area of community facilities (refer to site at Figure 25). It does not meet the existing needs of the community in its current form. The current facility provides approximately 550sqm of library space, and requires an additional minimum of 1,000sqm to meet current needs using the benchmarking approach. Specifically, it was identified that there is a particular lack of space for the library to offer lifelong learning programs, and to provide adequate seating and study areas. It was also found that some events (such as Storytime) are often oversubscribed. Demand for library floor space and the services provided are forecast to continue to increase in line with population projections.

To service the needs of Epping residents to 2036, the Study identifies that 1,000sqm of additional floor space is required. However, some floor space efficiencies could be gained by co-locating the library with other community facilities using a multi-functional community hub model. Potential options on how Council might meet the needs of Epping residents, including through a community hub model, are further explored later in this chapter.

9.1.2 Open Space - sports fields and recreation parks

The study identified a total of 16 open space reserves and parks within the Epping suburb. They range from major sports fields, including the recently upgraded West Epping Park and Boronia Park, through to smaller passive outdoor recreation spaces such as Discovery Park and Kim Rutherford Reserve. This section summarises the findings of the Study with regards to sports fields and recreation parks, as well as the recreation facilities available within these settings (e.g. picnic areas, play spaces and exercise stations).

Strengths:

- The Epping suburb has adequate provision of outdoor recreation facilities for unstructured recreation (such as paths, play spaces, exercise equipment, and youth-oriented facilities) to meet the needs of the expected population at 2036.
- Epping Town Centre and suburbs benefit from a significant provision of natural areas, and a number of good-quality larger parks.
- Access to sports fields and parks by public transport is an overall strength, though this varies depending on proximity to the Town Centre.

Weaknesses:

- Many of the open space areas in Epping are not universally accessible, particularly at Dence Park and the Epping Aquatic and Leisure Centre, as access grades (the slope of the path) are not consistent with current building code requirements for universal accessibility.
- Open space provision is low for the current population (24,530 residents), with a particular lack of sports fields for organised activities. This shortage will only be exacerbated by growth in Epping. Specifically, additional open space will be required to provide for additional tennis and netball courts, as well as fields appropriately sized to allow for organised sport including rugby league, touch football and soccer.
- There are limited walkable connections between recreation facilities and spaces.
- While *generally* there are adequate recreation facilities to meet the needs of Epping residents to 2036, the Study identifies that by 2036 there will be some shortages in specific facilities like in playgrounds, youth skate and bike facilities, and dog parks. The study also identified that the diversity and quality of these facilities was generally lacking, particularly for older children and young adults.

Other observations:

Council officers also make the following observations regarding sports fields and recreation parks:

- By upgrading parks and open spaces, there is an opportunity to enhance the quality and function of the public spaces adjoining parks and sports fields. An example of this is the interface between future redevelopment in Epping Town Centre with Boronia Park, where redevelopment of surrounding sites offers the opportunity to improve the interface with the park.
- There is potential to increase the value and useability of smaller parks.

9.1.3 Aquatic and indoor recreational facilities

Aquatic and indoor recreational facilities are:

- The YMCA sports centre at West Epping Park (the only indoor recreation facility within the Epping suburb)
- Epping Aquatic and Recreation Centre provides a 50m outdoor pool with a smaller kids play pool at Dence Park.

The Study identified the following strengths and weaknesses with regard to aquatic and indoor recreational facilities in the Epping suburb:

Strengths:

- The YMCA Sports Centre has been recently upgraded and provides good quality facilities, including multi-use courts (with 4 badminton courts), separate gymnastics arena, multipurpose program rooms and a fitness centre. The Centre provides the flexible space model Council envisages for the area.
- The study indicates current flexible indoor court provision could be adequate to meet the needs of the expected population at 2036.

Weaknesses:

- The YMCA lacks car parking and connection with other West Epping sports facilities.
- Epping Aquatic and Recreation Centre is ageing and not close to the majority of expected population growth.
- There are limited walkable connections between recreation facilities and spaces.

9.1.4 Epping Town Centre Civic Focal Point

Epping Town Centre lacks a clear focal point for civic activity, with community facilities being dispersed across the centre and suburb. Epping Town Centre should have a focal point consistent with its strategic importance and size.

9.1.5 Social infrastructure needs analysis

The following is a summary of the needs identified in the analysis above:

- Library:
  - An additional minimum of 1,000sqm is required to meet current needs – i.e. a facility of approximately 1,500sqm.
  - To meet the needs of the future population at 2036, benchmarking indicates a library facility of about 2,000sqm. Efficiencies could be gained by co-locating the library with other community facilities in a multi-functional community hub (a best practice model).

- Community space:
  - There is only a small shortfall of community space across Epping anticipated for 2036. However, the configuration of the existing centres makes staffing and programming difficult. This limits the accessibility and usability of these facilities.
  - Current provision and programming of existing community facilities does not reflect best practice, and could be better provided through a larger flexible multi-purpose community space based on a community hub model.
  - The spread of community centre functions across a number of smaller locations is likely to confuse some residents.

- Epping Leisure and Learning Centre is in relatively poor condition and hence appears to be significantly underutilised.

- Open Space:
  - There is a need to address the provision of open space and its quality and usability to respond to increasing population pressure.

9.1.6 Recommendations of the Social Infrastructure Study

The Study makes the following recommendations across **community facilities and open space and recreation**:

- Improve Council's centralised bookings system
- Identify opportunities for greater utilisation by the community of all of Council's assets, including a review of Council's leases and licenses.
- Seek to include non – Council spaces for hire in Epping in Council's centralised booking system
- Seek to develop formal partnerships with organisation and groups in Epping and the wider catchment to increase community access to existing facilities

The Study makes the following recommendations in relation to **community facilities**:

- In the short term seek to convert the Epping Leisure and Learning Centre into an expanded multipurpose space for Epping Library to address some of the current shortfall in library space.
- In the longer term, review Epping Creative Centre design and uses as part of a master planning process for the entire Dence Park area to increase recreation and leisure uses on the site.
- With a medium to longer term view work now to identify opportunities to deliver a new community hub in Epping of 3,500 square metres.
- Seek to facilitate delivery of affordable rental housing in Epping.
- Seek to promote and work with developers and other stakeholders to realise increased provision of quality long day care.
- Seek opportunities to increase provision of low cost leasable office space for not for profit community service providers.

The Study makes the following recommendations in relation to **open space and recreation**:

- Work with councils bordering City of Parramatta LGA to understand the capacity of sports fields and recreation facilities close by to Epping to cater for Epping residents.
- In the medium to longer term, upgrade existing larger parks to establish them as major recreation destinations.
- Upgrade:
  - existing smaller parks within Epping to establish them as high quality recreation and open spaces.
  - existing sports fields within Epping to increase the community value of existing facilities.
  - existing sports facilities that are located nearby Epping to support the needs of Epping residents.
- Assess the condition and capacity of the Epping Aquatic and Leisure Centre to address local aquatic needs longer term and options for development of

alternate or enhanced aquatic offerings including water play and indoor facilities.
- Maximise appropriate use of Epping's natural assets by creating quality recreational settings linked to natural areas.
- Pursue land acquisition to increase open space recreation parks and plazas.

9.2 Community feedback

9.2.1 Social infrastructure workshop

The community workshop on social infrastructure in Epping was held on 15 May 2017 and focused on open space and 'bricks and mortar' facilities. A total of 91 participants attended the workshop.

Participants were asked to consider the strengths and weakness of the local parks and indoor and outdoor recreation facilities and how to increase their accessibility and usage, as well as to provide direction on the future of the Epping pool. Feedback on other social infrastructure, including infrastructure not in Council ownership (e.g. childcare, affordable rental housing, youth facilities, over 55's facilities) was also covered.

Other feedback received at the workshop included:

- Local facilities are well-known and residents are mostly satisfied with the range of services available to them.
- Operation and maintenance is important (e.g. contactable administration, good lighting and proper signage).
- There was a view that creating mixed-use spaces which cater to many different types of people could enhance usage (e.g. sports fields with picnic areas, local parks with adult facilities or multipurpose indoor recreation).
- Epping Pool is a beloved community asset. Developing different types of activities on-site such as improving gym facilities or incorporating a café may make it more appealing to use, bringing in more money for its maintenance.
- Participants believe that future infrastructure planning needs to 'enable liveable town centres' as an overarching principle.

9.2.2 Other community consultation and feedback

In addition to social infrastructure workshop that was part of the Epping Planning Review, Council undertook extensive community engagement across the whole City of Parramatta area throughout 2016. Through these processes, the Epping community told Council that:

- Epping has a great sense of community, and residents value the village feel of the suburb, which is "at a distance" to busier and denser suburbs. Residents feel a sense of belonging and connection to their neighbours.
- Residents value the "family feel" of the Epping area, which they see reflected in the preservation of family-oriented homes, as well as community-oriented facilities that cater to group activities and children.
- Residents value local parks and open space.
- Residents value public transport connections, but want to see improvements to traffic, transport and parking, with congestion recognised as a growing problem.

- Residents want to see the impacts of growth effectively managed, and are concerned by the perception of "overdevelopment" in the area.

9.3 Council assessment of key issue – open space

A key issue emerging from the previous sections is **the viability of applying strict benchmarks to open space provision**. Community feedback and the technical assessment both highlighted concerns about the need for additional open space to service the growing population.

Having considered the outcome of the technical assessment and the community feedback, Council officers have analysed this issue further to develop guiding principles. The key question is: how can Council respond and what would be the impact of that response?

There are practical issues that need to be considered before Council determines the appropriate strategy. Hypothetically, a strict application of the benchmark would require 56 additional hectares of open space within the Epping suburb, raising the following issues:

- **Character impacts:** The Epping suburb is 680Ha in area the town. It would not be possible to insert 56Ha of additional open space into this established urban area without significantly impacting on the suburb's predominantly low-density residential character.
- **Displacement of the community:** acquisition of 56ha of land which is close to the Epping Town Centre would require acquisition of a significant number of private homes.
- **Land Costs:** land values in this area are such that acquisition of 56Ha of land is not a feasible financial option for Council.
- **Flow-on density changes:** If 56Ha of land was rezoned to open space, densities on these sites would be very low (effectively zero). In order to maintain dwelling target numbers, densities on sites *not* zoned for open space would need to increase significantly to compensate. This would dramatically change the character of Epping.

In summary, to simply apply the benchmark in this established area would be inappropriate and impractical. This means that Council must consider what is the next best alternative. The key information to take away from the benchmarking exercise is that more open space is required and that the open space opportunities for residents need to be addressed via a series of strategies rather than simply meeting the numerical benchmark. Consideration also needs to be given to services and facilities that meet the community's needs, but which are not owned by Council or are located in adjoining Local Government Areas.

9.4 Guiding principles

After considering the technical report and the public consultation, the principles and key themes identified by Council staff which guide the development of options and recommendations included in this Discussion Paper are:

- Council should investigate a series of options to ensure that all its open space needs are met for the growing Epping population.

- A move toward a multi-function community hub model will deliver a best practice response for the residents of Epping in relation to community facilities by:
  - Allowing Council to co-ordinate staffing and programming resources efficiently to the benefit of the local community;
  - Encouraging diverse users;
  - Having a sufficient size and scale to have flexible and multipurpose spaces that respond and adapt as the needs of the community change; and
  - Being prominently located to encourage use and promote the role these facilities play in serving identified social and community needs (ideally on a main street with ground floor street frontages).
- Investment in upgrading of facilities needs to be prioritised in locations that are accessible both in terms of public transport, and are capable of achieving universal access requirements.
- There needs to be a balance between the needs of diverse communities, including young people and the elderly and frail.
- Facilities also need to balance family and non-family needs, as well providing options for people of diverse cultural backgrounds and preferences (active, passive open space; range of facilities – Barbeque, playground, fishing and other scout things and the like).
- By upgrading parks and open spaces, there is an opportunity to enhance the quality and function of the public spaces adjoining parks and sports fields.
- A civic space integrated with other community facilities and services should be provided in Epping Town Centre to provide a focal point for civic activity.

Given the range of role and function of social infrastructure in the local community, there are a number of options that are available to Council to provide the facilities, spaces and services to meet the needs of Epping residents now and to 2036. This is presented in the next section.

9.5 Questions for feedback

This section seeks to reconcile the recommendations of the Study with community feedback. In moving towards a best practice model of social infrastructure delivery, there will inevitably be tensions between the technical findings of the Study, the views of community members who have strong interests in particular community facilities, and the recommendations of Council officers which aim to deliver the best outcome for the community.

The issues presented in this section arise from a synthesis of the Study findings and the community feedback received during the consultation process. Feedback from the community is sought on policy areas to:

- help resolve potential inconsistency or conflict between the study and consultation findings;
- help resolve potential inconsistency or conflict between different parts of the Epping community; or
- assist Council to prioritise different options available to improve community facility and open space provision in the area.

Feedback in these areas will assist Council to develop strategies that balance the technical findings and community sentiment.

9.5.1 Issues regarding improving open space provision in Epping to 2036

Issue 1 - Assessing where new land should be acquired for open space

The strategic acquisition of land to increase the size of existing open space will be considered but the recommendation is that Council look at opportunities to expand the size of existing parks. In short, strategic purchases to create new parks would be a secondary consideration. This strategy is considered the most feasible approach to improving the role open space will have for all Epping residents. For instance, concentrating on a single new park will see a significant contribution to those within the catchment of the new park, but little impact elsewhere.

Also, expanding existing parks is considered to be a process where open space improvements can be realised in a shorter time period for reasons discussed in the next section. It is easier to acquire one or two sites to expand a park than it is to acquire multiple properties to create a new park.

Guiding principle: Council should investigate a series of options to ensure that all its open space needs are met for the growing Epping population.

Consultation Question:

9a. Do you support an approach of expanding existing parks in and around Epping ahead of the creation of a new park in the area around Epping Town Centre?

Issue 2 – Acquisition of former bowling club site

As discussed in further detail in Appendix 3, there is a Planning Proposal for a land holding between Epping Road and Forest Park (referred to as the Austino Planning Proposal). The site the subject of that Planning Proposal contains the former Epping Bowling Club site (725 Blaxland Road) which is currently zoned RE1 Public Recreation zone and owned by Austino. Figure 29 shows the former bowling club site and its location within Austino's overall land-holding.

Figure 29 Land affected by the Austino Planning Proposal (from applicant's Urban Design Report)

Council is the acquisition authority and could acquire the land subject to funding being available to finance the acquisition. The owner of the site is seeking to amend the planning controls for their land and as part of the proposal they are intending to dedicate an equivalent amount of open space to Council.

In carrying out the original assessment of the Planning Proposal, Hornsby Shire Council did not have a funding strategy to acquire 725 Blaxland Road and had concluded that the purchase of the site for the purpose of expanding Forest Park is unlikely to represent value for money when compared with alternative open space options within the locality (Hornsby Shire Council, 13 April 2016, Item 8). Given that the site was not formally purchased by the former Hornsby Shire Council, the site is currently not available to the community despite RE1 Public Recreation zoning. The applicant is therefore seeking to provide public open space as part of their redevelopment of the site, albeit in a different spatial structure than would have been achieved if Council had purchased the site subject to additional residential density being supported.

The trade-off that the community is being asked to consider in response to this Discussion Paper is whether it is willing to continue considering this trade-off as part of the Planning Proposal process or whether it should purchase the Open Space zoned land separately from the process, recognising that this would reduce Council's capacity to invest in other community needs.

It should be noted when providing this feedback that it will assist Council in assessing the Planning Proposal but:

- this trade-off is not the only consideration in the assessment of the Planning Proposal. The other impacts of the additional density must also be considered;
- even if Council was to purchase the bowling club site the applicant would still be able to pursue an application to increase density of the remainder of the site;
- feedback has been received from some local residents indicating the Planning Proposal should not be supported;
- the Sydney West Central Planning Panel have considered the matter and determined that it should at least be considered by Council. The Panel has the power to alter Council's future decisions on this Planning Proposal is they consider it appropriate.

The purpose of this section of the Discussion Paper is to test the community position on this trade-off so Council can decide whether it will seek funding to acquire the existing open space zone land or continue to consider the applicant's proposal. Council's decision will impact significantly on how the Planning Proposal progresses. In this regard advantages and disadvantages of accepting additional density in return for open space without Council having to formally purchase it include:

Advantages

- This option has the least financial impact for Council and the community. At this point in time, there is no designated funding for the acquisition of this site. The Section 94 Contributions Plan for Epping does not collect any funds for acquisition of this site. The more general revenue funding that Council

has to allocate to purchase this site, the less funding available for other infrastructure in Epping.

Disadvantages

- There will be impacts associated with the additional density the scale of which will depend on the scale of the additional density permitted proposal.

Guiding principle: Council should investigate a series of options to ensure that all its open space needs are met for the growing Epping population.

Consultation Question:

9b. Should Council purchase the Bowling Club site separate from the current Planning Proposal process or continue to consider the Planning Proposal option that it be provided to Council subject to additional density being permitted on the existing landowners site?

Issue 3 – Process for acquiring open space

Land in Epping is expensive and existing parks generally adjoin residential properties, which means any future expansion of existing parks or fields would require Council to acquire private residential properties. The potential acquisition of private residences would need to be undertaken very sensitively, considering the impact that this could have on the occupants/owners of the land. Despite this, Council will continue to investigate options for acquisition of land where it will improve existing open space. This may also involve the purchase of land outside of the immediate Epping area, but is accessible by residents from the Epping area.

Council will, as part of future phases of the planning process initiated by the preparation of this Discussion Paper, commence the feasibility analysis for identifying potential residential sites that could be acquired to expand existing parks. Consultation with land owners will precede any rezoning because in most instances they will comprise of private homes. It will be necessary to explain to the occupants/owners the impacts on their property value, their ability to sell their site and the ability to stay on the site.

Once the properties are zoned Council can legally acquire the properties via **compulsory acquisition** or via **negotiated agreement**. Traditionally Council has been reluctant to compulsorily acquire properties as this forces people out of their homes. Instead a process of negotiation at a time when the current owner is happy to consider moving is preferred. The disadvantage of this approach is that it can take many years for a piece of open space to be acquired, delaying the provision of additional open space. Using negotiated acquisition can take more time, but this process is more sensitive to impacts on the owners of those sites.

Feedback is required from the community on the importance of delivering open space acquisition in the short to medium term to determine which approach Council should take.

Guiding principle: Council should investigate a series of options to ensure that all its open space needs are met for the growing Epping population.

Consultation Question:

9c. Do you support Council pursing a process where acquisition of land for open space is done on the basis of negotiated acquisition rather than compulsory acquisition?

Issue 4 – Utilising existing land more effectively

There are a number of factors that determine the level of intensity of use a local park or sports field can accommodate to ensure it can be used by the community without degrading. Two key factors are the amount (or type) of landscaping on the site, and the level of maintenance required.

As an example, re-configuring landscaping in existing parks could enable more active uses (including both unstructured play and organised sporting activities) while also accommodating for the needs of residents who want to use parks to passively enjoy the outdoors.

Another option could be to provide a different surface treatment to playgrounds and sporting fields to accommodate a higher level of use, such as the use of synthetic sporting surfaces.

Guiding principle: Council should investigate a series of options to ensure that all its open space needs are met for the growing Epping population.

Consultation Question:

9d. Are you supportive of Council investing in improved landscaping and equipment in parks and sporting field, including investigating synthetic surfaces for sporting fields to cater for more intensive use?

Issue 5 – Establishing partnerships to make better use of existing facilities

Large institutional landowners, including government and non-government schools, provide opportunities for Council to facilitate partnerships with local community organisations (such as amateur sports clubs) to make better use of existing facilities for the local community. In the case of schools, many children within the Epping community use their school's open space areas during the week, but are unable to use the same fields on the weekend in organised sporting activities by non-school groups. The way in which schools are fenced off, and the way landscaping is used to prevent access is important to ensure the safety and supervision of students during school days, however there is an opportunity to consider the flexible use of schools' sporting fields.

Council considered a report on 13 June 2017 where it resolved to enter into a memorandum of understanding (MOU) with the Department of Education (DOE). The associated Investigation Program identifies seven action areas that together form the basis of Council's initial work with DOE:

- Increase community access to sports fields.
- Establish formal arrangements between DOE and Council to continue use of Carlingford High School sports fields.

- Increase community access to school halls and related facilities.
- Increase community access to library facilities.
- Proactive joint planning for the growth of Telopea and the shared use of school facilities and community assets.
- Proactive joint planning and preparation to support the opening of Wentworth Point Public School.
- Proactive joint planning of a primary school in the Carter Street Precinct.

Feedback is sought from the community on how this MOU should be pursued in the Epping area.

Guiding principle: Council should investigate a series of options to ensure that all its open space needs are met for the growing Epping population.

Consultation Question:

9e. Which schools should Council pursue in the Epping area to progress the MOU between Council and the Department of Education to improve the availability of sporting fields?

9.5.2 Location of potential future Civic Focal Point

In order to meet the needs of a larger population living in a higher density environment by 2036, the Study recommends the provision of a 3,500sqm multi-purpose facility based on the Community Facility Hub model (involving library and community facility floor space). This could include the co-location of an expanded library offering, as well community meeting rooms, study areas, community programming facilities and the like.

Investigating the delivery of such a facility is consistent with the guiding principles *"to effectively deliver community programming and services"*, *"investment in upgrading of facilities … prioritised in locations that are accessible both in terms of public transport and universal accessibility"* and *"to make our community facilities relevant and valued resources … they need to be clustered/co-located to encourage a diversity of users"*.

Ideally, the Community Facility Hub would be co-located with the Civic Space (i.e. plaza) that has been identified elsewhere in this Discussion Paper as required in the Epping Town Centre. This Community Facility Hub would be provided in integrated manner as a Civic Focal Point (comprising both the facilities hub and an urban plaza) for the centre. The options investigated below consider where a Civic Focal Point could be delivered.

Important Note:
Different terms are used in this section to describe and differentiate options for civic facilities as follows:

Community Facility Hub: A facility incorporating a library and community facility floor space.

Civic Space: A public urban plaza.

Civic Focal Point: A location combining both of the above elements.

Option 1 – Rawson Street Council car park site

The advantages and disadvantages of locating a Civic Focal Point on this site are discussed below together with some options for how this might be delivered on this site. The key reason for choosing this site is that it is already in Council's ownership.

Council currently owns the car park site along with an adjoining site at 51A and 51B Rawson Street (refer to Figure 24). The site currently plays a key role in providing car parking for this part of the Epping Town Centre. This option is put forward on the basis that the site will continue to play a role as a car park with parking transferred into a basement.

The strengths and weaknesses of this site as the location for a hub are detailed below.

Strengths:

- The site has a 55m primary street frontage to both Rawson Street and Boronia Park, which could allow Council to achieve one of the recommendations of the study which is to provide prominent visual exposure to a valued community asset (Boronia Park).
- The site is large enough to potentially provide for an integrated Civic Focal Point that meets both community facility requirements and a contiguous civic space with a good interface with Boronia Park thereby providing integration of 3 key civic assets.
- The site is more physically separated from sensitive land uses such as lower density residential development.
- There is an opportunity to enhance the quality and function of Boronia Park (including treatments of the edges), as well as the public domain along Rawson Street and a potential future town square.
- The proposed pedestrian network in the current DCP indicates an intent to create/improve upon pedestrian links between the station and residential zoned land to the west so the site would expect to have significant pedestrian traffic activating it and assisting with the visual exposure of the site.
- This site would be served by excellent public transport connectivity.
- Locating the Civic Focal Point here would strengthen the role of the town centre.

Weaknesses:

- The site is less accessible to residents/ workers located on the eastern side of the rail line.
- The development permitted under the planning controls for the site immediately to the north (containing the Coles supermarket) will mean that providing a Civic Space with a high level of solar access would be a challenge.

Option 2 – Epping Library site

The Epping Library site at 10 Pembroke Street also contains a Council carpark whilst Pembroke Reserve at 8 Pembroke Street adjoins the library site (refer to

Figure 23). Option 2 would see the park formalised into more of a civic space rather than its current role of a traditional park.

Chapter 10 of this Discussion Paper shows a future potential through link that is being considered for the street block that contains the current Epping library site. The comments on the strengths and weaknesses have had some regard to the impact of that proposal on the suitability of the site.

Strengths:

- The site is large enough to potentially provide for an integrated Civic Focal Point that meets the requirements for community facilities and for the conversion of the adjoining park into a more formalised Civic Space but the site is smaller than the Rawson Street Car park site.
- The site has good access for residents on the eastern side of the rail line.
- If the potential proposed new road network discussed in Chapter 10 can be delivered the road/pedestrian linkages are proposed to be improved which will improve pedestrian activity in this vicinity.

Weaknesses:

- The road network proposed for this street block will provide more road frontage but will split the site in two separating the civic space from the facilities building.
- The Library site is located mid street block and despite the creation of the new streets would have poorer visual prominence and exposure compared to the other option.
- In terms of its location, relative to existing and pedestrian pathways which are important for giving the hub prominence and activating any civic space the pedestrian desire lines that cross this site are weaker than the other option.
- Converting Pembroke Reserve into a more formalised Civic Space would result in loss of its existing local park functions diminishing the availability of local open space on the eastern side of the rail line.
- The site has poorer access for residents on the western side of the rail line.

Option 3 – Two Civic Focal Points with a range of services

This option would see the sites in Options 1 and 2 each turned into Civic Focal Points with a Community Facility Hub and Civic Space enabling Council to provide different community facilities on both sides of the rail line (for instance, a library facility on one side and a community centre on the other). It is worth noting that this option could have been realised if the Council amalgamation had not occurred in 2016. Given the severance issue with the town centre with the railway line, there is no reason why the Epping Town Centre cannot have more than one Civic Focal Point, with each activated with different community facilities.

Strengths:

- It retains a presence for community facilities on both sides of the rail line so residents have easy access to a civic space and some community facilities on their side of the rail station.
- It strengthens the role of each side of the town centre.

Weaknesses:

- This option is not consistent with the recommendations of the Consultant Study, which recommends consolidating community facilities into a single site (this consolidation provides the chance to share spaces and create efficiencies and ongoing operation costs, rather than having to staff and run programs over two separate sites).
- It does not create a single Civic Focal Point for the Epping Town Centre
- There is significant additional cost in creating two Civic Focal Points.
- There would be a loss of open space on the eastern side if Pembroke Reserve is converted into a more formalised civic space.

Council Officer Recommendation

Of the three options for the location of potential future Civic Focal Point/s, Council officers consider the Rawson Street Car Park site (presented as Option 1) to be the preferred option for a single Civic Focal Point, as the site is better able to accommodate a Community Facility Hub and Civic Space in way that can be integrated into the broader pedestrian network and town centre. This option does not result in the loss of any existing community facility given that the public car park can be located underground below the new Community Facilities Hub whereas the Epping Library Site and Pembroke park would result in the loss of local open space if Pembroke park was converted into a more formalised Civic Space.

Guiding principles:

- A move toward a multi-function community hub model will deliver a best practice response for the residents of Epping in relation to community facilities by:
  - Allowing Council to co-ordinate staffing and programming resources efficiently to the benefit of the local community;
  - Encouraging diverse users;
  - Having a sufficient size and scale to have flexible and multipurpose spaces that respond and adapt as the needs of the community change; and
  - Being prominently located to encourage use and promote the role these facilities play in serving identified social and community needs (ideally on a main street with ground floor street frontages).
- Investment in upgrading of facilities needs to be prioritised in locations that are accessible both in terms of public transport, and are capable of achieving universal access requirements.
- A civic space integrated with other community facilities and services should be provided in Epping Town Centre to provide a focal point for civic activity.

Consultation Questions:

9f. Where is your preferred location for a Civic Focal Point incorporating a Community Facilities Hub and some form of Civic Space?

9g. Why is this your preferred location?

9.5.3 Options for funding and delivering a potential future Civic Focal Point

Community feedback is required on the mechanisms that might be used to develop a Civic Focal Point regardless of the site. The Study suggests that one method to assist funding of a new central facility would be potentially to sell off some of the dispersed sites that currently accommodate these facilities to fund the new facility.

Another option is for Council to enter into partnerships with developers to realise the development potential of sites it currently owns to fund the provision of community facilities.

There is precedent in this regard. Prior to the Council boundary changes of May 2016, Hornsby Shire Council had commenced an expression of interest (EOI) process that sought partners interested in working with the Council to redevelop the library site for a mixed use development that would have seen residential units constructed above the library site to assist with the funding of the new facility. This process had not been completed when the boundary changes that unified the Epping Town Centre within the new City of Parramatta LGA occurred. The EOI has been placed on hold until this strategic planning review can be completed.

There are also similar mechanisms being proposed involving the Rawson Street car park site. As discussed in Appendix 3, two preliminary Planning Proposals have been lodged with Council which both put forward the proposition that the Rawson car park site might be included in a broader redevelopment with adjoining sites. Both of these development proposals incorporate some civic space and community facilities and are discussed in more detail in Appendix 3.

This Discussion Paper is not seeking feedback on the particular details of these preliminary proposals. The proposals if they proceed will require further negotiation and resolution with selected partners to confirm exactly what is being delivered with further public consultation required in some form before final decisions are made. The question that is being posed in this Discussion Paper is: should Council consider entering into partnerships with adjoining landowners to assist with funding community infrastructure in Epping Town Centre?

There are three options for Council, which are discussed below.

Option 1 – Selling land that becomes surplus to requirements if a single Civic Focal Point is built

As indicated above, all Council-owned sites located within the town centre have some development potential for which Council could realise value by selling the site for redevelopment. In Chapter 8 the role of Council's sites in providing for commercial floor space was discussed. Council could seek to sell any number of sites it currently owns to provide funding for delivery of the community infrastructure discussed in this section.

The purpose of selling sites would not be to reduce the level of services. Instead, the strategy would be to provide improved services in a more efficient way on a consolidated site.

Guiding principles:

- A move toward a multi-function community hub model will deliver a best practice response for the residents of Epping in relation to community facilities by:
  - Allowing Council to co-ordinate staffing and programming resources efficiently to the benefit of the local community;
  - Encouraging diverse users;
  - Having a sufficient size and scale to have flexible and multipurpose spaces that respond and adapt as the needs of the community change; and
  - Being prominently located to encourage use and promote the role these facilities play in serving identified social and community needs (ideally on a main street with ground floor street frontages).
- Investment in upgrading of facilities needs to be prioritised in locations that are accessible both in terms of public transport, and are capable of achieving universal access requirements.
- A civic space integrated with other community facilities and services should be provided in Epping Town Centre to provide a focal point for civic activity.

Consultation Question:

9h. Would you support existing community facilities sites being sold to assist with funding a new consolidated single community hub to provide a higher quality community facility somewhere else within the Epping Town Centre?

Option 2 – Maximise the development potential of sites to assist with funding a Civic Focal Point

One option for funding the provision of Community Infrastructure is for Council to realise the value of land holdings in a way that provides the community with a financial return that can be used to assist with funding the new Civic Focal Point. In relation to both the options being considered for a new Civic Focal Point there is a history of these sites being considered for redevelopment in ways that would allow for new facilities to be delivered as part of the process.

The Expression of Interest (EOI) process that Hornsby Shire Council undertook before the Local Government Boundary changes that saw Epping included in the City of Parramatta is an example. The intention of the EOI was to find a partner so that together Council and the development partner could develop the site with a building incorporating the library on lower levels and residential development on higher level. If it had gone ahead the residential development would have effectively funded the new library component.

Another option is discussed in Appendix 3 where two Preliminary Planning Proposals are detailed that both seek to include the Rawson Street Carpark in the redevelopments. Both of the Preliminary Planning Proposals envisage Council's Rawson Street Carpark site being included in redevelopment processes with the benefits to the community/Council being the car parking being retained in a basement plus the delivery of other community infrastructure.

The redevelopment of Council owned sites in partnership with other partners can deliver significant community benefits that will allow the delivery of community

infrastructure in a more financially sustainable manner. The Discussion Paper seeks feedback on whether the community is comfortable with this approach.

Guiding principles:

- A move toward a multi-function community hub model will deliver a best practice response for the residents of Epping in relation to community facilities by:
  - Allowing Council to co-ordinate staffing and programming resources efficiently to the benefit of the local community;
  - Encouraging diverse users;
  - Having a sufficient size and scale to have flexible and multipurpose spaces that respond and adapt as the needs of the community change; and
  - Being prominently located to encourage use and promote the role these facilities play in serving identified social and community needs (ideally on a main street with ground floor street frontages).
- Investment in upgrading of facilities needs to be prioritised in locations that are accessible both in terms of public transport, and are capable of achieving universal access requirements.
- A civic space integrated with other community facilities and services should be provided in Epping Town Centre to provide a focal point for civic activity.

Consultation Question:

9i. Should Council seek to develop Council-owned sites to maximise the funding available to deliver a new Civic Focal Point?

Option 3 – Allowing additional density to secure a new Civic Focal Point

The two preliminary Planning Proposals, discussed in Appendix 3, for sites adjoining the Rawson Street Carpark Site both propose an increase in the overall density permitted on their site and both proposals seek to underground the carpark, and provide community facilities and a civic space.

Again the community is being asked to consider a trade-off between timely provision of community facilities against additional density being permitted in the town centre. This is similar to the trade-off discussed earlier in the Chapter related to the acquisition of the Bowling Club site as open space.

In this case, feedback is sought from the community on whether the community benefit that might be generated in terms of funding for a Community Focal Point should be given any weight in the process of determining whether additional density should be permitted in or around the centre.

Guiding principles:

- A move toward a multi-function community hub model will deliver a best practice response for the residents of Epping in relation to community facilities by:
  - Allowing Council to co-ordinate staffing and programming resources efficiently to the benefit of the local community;
  - Encouraging diverse users;

  - Having a sufficient size and scale to have flexible and multipurpose spaces that respond and adapt as the needs of the community change; and
  - Being prominently located to encourage use and promote the role these facilities play in serving identified social and community needs (ideally on a main street with ground floor street frontages).
- Investment in upgrading of facilities needs to be prioritised in locations that are accessible both in terms of public transport, and are capable of achieving universal access requirements.
- A civic space integrated with other community facilities and services should be provided in Epping Town Centre to provide a focal point for civic activity.

Consultation Question:

9j. Are you willing to accept further increases in density in the town centre if it would assist with funding a new Civic Focal Point?

9.5.4 Dence Park - Epping Aquatic Centre

Through the community consultation process, it was clear to Council that Epping Aquatic and Leisure Centre is a beloved community asset to sections of the Epping Community. However, despite this impassioned position, usage levels of this facility have been in decline over the longer term.

The technical report acknowledges that the facility is aging and has accessibility issues which means it does not meet modern day standards for this type of facility. At the time the pool was the responsibility of Hornsby Shire Council, reports to council considered the option of closing down the centre.

As part of the development of a community facilities strategy, Council will need to determine what role the Epping Aquatic centre might play within the new City of Parramatta entity. For instance, should the centre be redeveloped or modernised as an aquatic centre, or put to an alternate community use.

The strengths and weaknesses of the site are detailed below.

Strengths

- Council owns the land.
- Council will open the pool for October 2017 summer.

Weaknesses

- The Aquatic Centre is aging and needs significant upgrading
- It lacks visual prominence.
- It is in a bushfire-prone site.
- Is not heated and is underutilised.
- The topography of the site makes modernising the site a relatively expensive exercise.

Council is seeking feedback from the community on what it considers is the appropriate future community and social use for this site.

Guiding principles:

- Council should investigate a series of options to ensure that all its open space needs are met for the growing Epping population.

- Investment in upgrading of facilities needs to be prioritised in locations that are accessible both in terms of public transport, and are capable of achieving universal access requirements.

Consultation Question:

9k. What should be the future use of the Dence Park Aquatic Site?

10.0 PUBLIC DOMAIN ANALYSIS

The intense growth within the Epping Town Centre presents Council with the opportunity to review aspects of the centre's public domain, identify opportunities for improvements and present these to the community for discussion. This will also assist Council in advising Development Application and Planning Proposal applicants until new planning controls can be formulated. Council officers have identified that the areas requiring immediate attention are pedestrian connections and footpath widths.

10.1 Community feedback

While there has not been a community workshop held specifically on urban design issues, numerous urban design themes have been consistently raised throughout the consultation process to date. Some recent feedback received at the workshop pertaining to the way the centre will redevelop over time included:

- **Pedestrian connections:** The view emerged in all workshops that pedestrian connections should be:
  - created or improved either between or through blocks;
  - improved between different land uses and attractors (i.e. the centre and open space areas);
  - created at mid-block where block lengths were long; and
  - improved to form linkages from one side of the centre to the other.
- **A vibrant centre:** Participants are enthusiastic about the possible future of Epping. They want their town centre to reflect the vibrant, friendly, community which they are familiar with (from the commercial floor space workshop).
- **Enable liveability:** The community believe that future infrastructure planning needs to "enable liveable town centres" as an overarching principle (from the Social Infrastructure Workshop held on 15 May 2017).

The recommendations in this chapter seek comment on proposed amendments to the design controls to improve the public domain in Epping Town Centre.

10.2 Guiding Principles

After considering the outstanding public domain design matters and the broad public consultation feedback, the guiding principles identified by Council staff are:

- to provide a well-connected town centre with footpaths, laneways and arcades that maximise the walkability of the town centre, and
- to make sure that the design of footpaths, laneways and arcades provides for high quality urban environments that feel safe and attractive for pedestrians.

10.3 Through-block connections, streets, laneways and arcades, and shareways

In urban precincts, the greater the density the greater the requirement for high quality streets and **fine-grain** street blocks. This is because streets and laneways provide access and address to buildings, as well as choices in how pedestrians and cars move through a precinct.

Fine grain means a network of small or detailed streetscapes which take into consideration street type hierarchies, physical links and movement between locations, and transport modes.

Streets and laneways also expand retail opportunities because they increase the range of rental possibilities.

Whilst streets, laneways and arcades are shown in current DCP and public domain controls, these are out of date and require review.

Below are objectives and design controls to inform new through-block links for the Epping Town Centre. Through-block links can be provided in the form of laneways, arcades or shareways. Shareways are spaces that are shared by vehicles and pedestrians, where vehicle speeds are low (around 10km per hour) and where pedestrians have right of way.

Proposed pedestrian links proposing laneways, arcades and shareways are illustrated in Figure 30. It is intended that these would be included in the future consolidated Development Control Plan for the town centre. The feedback sought from the community in this Discussion Paper is whether those proposed are appropriate and whether any additional connections should be considered.

Objectives

All Through-Block Connections

- Optimise choice and connectivity
- Create fine grain street blocks
- Provide addresses and frontages for buildings
- Provide an edge for public parks and spaces.

Pedestrian Laneways

- Provide ease of access and convenience between two locations.
- Pedestrian laneways are well designed.

Arcades

- Provide ease of access, convenience and protection from inclement weather between two nearby destinations.
- Pedestrian arcades are well designed.

Design controls

All Through-Block Connections

- Connections must increase the permeability of the overall street block in a logical way that reflects desire lines.
- Connections must have clear straight sight lines through the link.
- Connections must align with other streets, laneways and arcades where possible.
- Connections must provide links to public transport, streets and open spaces.
- Connections must create an edge for public open spaces.
- Connections must be generous, well-lit and fit for purpose.
- Connections must display signage at street entries indicating public accessibility and the street to which the through site link connects.

Laneways

- Pedestrian laneways must be a minimum width of 3m clear of all obstructions.
- Pedestrian laneways must be open to the air and to be publicly accessible at all times.
- Pedestrian laneways at ground level ideally would be dedicated to Council

Arcades

- Arcades must be a minimum width of 5m clear of all obstructions (including columns, stairs, escalators).
- Arcades must provide public access at all business trading times and be available to allow access 18 hours a day seven days a week even if some of the businesses are not operating
- Arcades must be at least 2 storeys high.
- Arcades where practical, have access to natural light for at least 50% of their length.
- Arcades must incorporate clear glazed entry doors comprising at least 50% of the entrance where the arcade is air conditioned.

Shareways

- Shareways be a minimum width of 6.5m clear of all obstructions.
- Shareways be open to the air and to be publicly accessible at all times.
- Shareways be built on the ground (without car parking underground).
- Shareways be dedicated to Council.
- Shareways meet RMS Standards

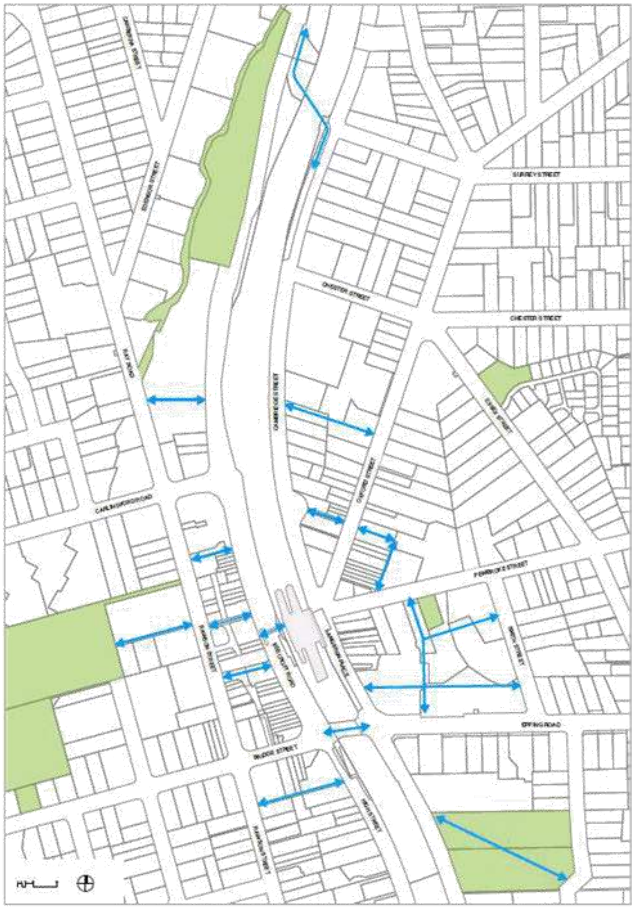

Figure 30 Existing and proposed through-block connections

Guiding principles:

After considering the outstanding public domain design matters and the broad public consultation feedback, the guiding principles identified by Council staff are:

- to provide a well-connected town centre with footpaths, laneways and arcades that maximise the walkability of the town centre, and
- to make sure that the design of footpaths, laneways and arcades provides for high quality urban environments that feel safe and attractive for pedestrians.

Consultation Question:

10a. Are there any other through site links outside of those that are already proposed in Figure 30 that should be considered by Council?

10.4 Wider footpaths

To provide more capacity for pedestrians, allow space for tree planting and street furniture that add to the amenity of the footpath changes could be made to the DCP controls that apply to sites in Epping. Figure 31 below illustrates the proposed setback for lower levels of the future buildings within the Epping Town Centre. This setback would apply to the lower levels of the building known as the podium.

Objectives:

- Increase the width of the existing footpath to provide generous footpaths and clear passage ways for pedestrians particularly to major destinations
- Enable light and sun to the street
- Reduce impacts from overshadowing
- Increase the width of the footpath so that it relates to the taller buildings
- Enable tree planting and awnings
- Enable outdoor dining and other street activities.

Design controls:

- Buildings be setback from street boundaries as indicated in Figure 29
- The footway interface, where the footway is being widened, must:
  - Provide a seamless level connection with the existing footpath
  - Be paved as per Council's Public Domain Guidelines
  - Be built on the ground (without car parking under)
  - Be dedicated to Council.

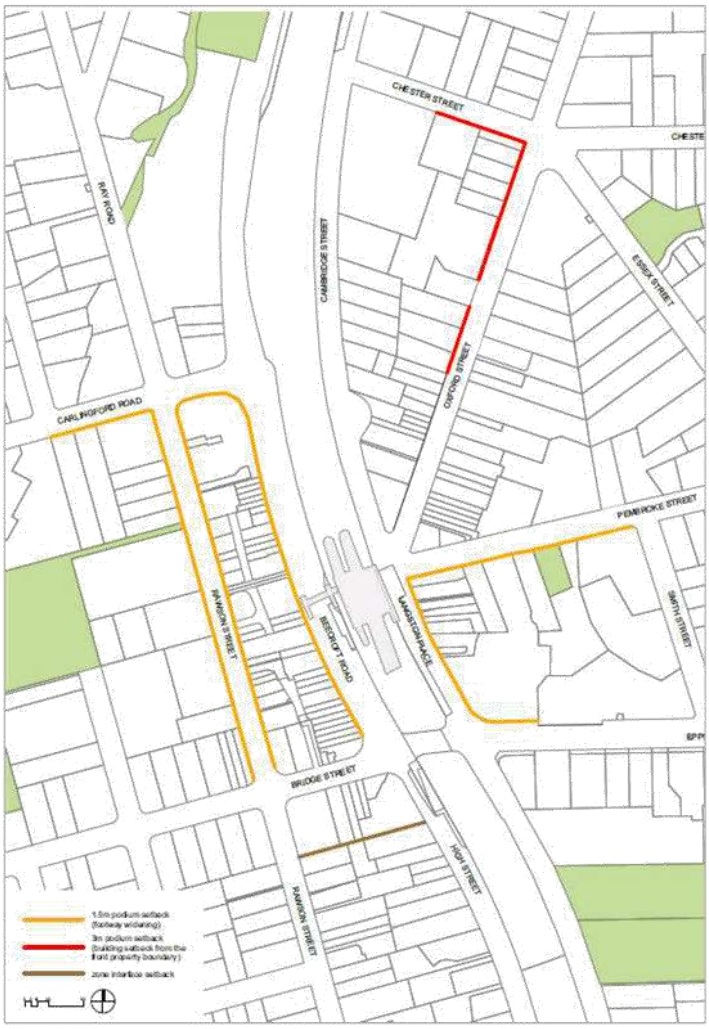

Figure 31 Proposed ground floor setbacks

Guiding principles:

After considering the outstanding public domain design matters and the broad public consultation feedback, the guiding principles identified by Council staff are:

- to provide a well-connected town centre with footpaths, laneways and arcades that maximise the walkability of the town centre, and
- to make sure that the design of footpaths, laneways and arcades provides for high quality urban environments that feel safe and attractive for pedestrians

Consultation Question:

10b. Do you think the new ground floor setbacks proposed in Figure 31 for Epping Town Centre are appropriate?

11.0 TRAFFIC AND LAND USE OPTIONS STUDY

11.1 Background

Council commissioned EMM Consulting to prepare a Traffic and Land Use Options Study (the Traffic Study) to provide an evidence-based approach to the assessment of existing and future traffic conditions with different development scenarios for the Epping Town Centre and surrounds, including potential infrastructure improvements.

A traffic study was carried out previously by Halcrow in 2011 on behalf of Hornsby Shire Council, the former Parramatta City Council and the Department of Planning as part of the proposed new planning controls implemented by the Department of Planning in 2014. This report recommended a series of works to address traffic issues. These works were detailed earlier in this report in Section 3.6.1.

It is noted that the Halcrow report was based on a long-term development scenario of 3,000 additional dwellings up to 2026. As noted previously, current Development Application activity indicates delivery of 4,735 residential units over the next few years. Work undertaken by Council suggests there is an ultimate capacity for 10,000 dwellings under the planning controls currently in place.

11.2 Development pressures

Appendix 3 describes three separate Planning Proposals or preliminary Planning Proposals which propose additional density in Epping Town Centre on top of the current controls. The preliminary Planning Proposals for the two sites with frontage to Rawson Street were accompanied by a Joint Traffic Study that has recommended additional traffic works (supplementary to works identified by Halcrow) that impact primarily on the western side of Epping. These works include:

- Provision of three eastbound lanes along Carlingford Road between Rawson Street/Ray Road and Beecroft Road;
- Provision of an additional (third) northbound through lane at the Carlingford Road/Beecroft Road intersection;
- Application of a double-cycle signal phasing at the Carlingford Road/Beecroft Road intersection;
- Provision of a new left-turn slip lane from Rawson Street into Carlingford Rd (part of the Oakstand site); and
- Victoria Street extension between Carlingford Road and Bridge Street.

A Planning Proposal for the site known as the Austino Site located on the eastern side of Epping (at the corner of Blaxland Road and Epping Road) is also described in Appendix 3. It should be noted that this proposal was previously considered by Hornsby Shire Council prior to the eastern part of Epping becoming part of the City of Parramatta. As part of the report considered by Hornsby Shire Council, the Roads and Maritime Service (RMS) raised concerns about the significant peak hour delays and queues in the locality, but ultimately raised no objection to the additional density on this site, subject to a number of amendments to the proposal (including the number of car parking spaces on site being capped to the number currently permitted on the site under the existing controls and additional traffic modelling being carried out prior to exhibition).

11.3 Draft technical findings

Council has engaged EMM Consulting to identify the traffic and transport network planning implications of different potential changes to the Epping Planning Controls.

There are scenarios detailed in previous sections of this Discussion paper which talk about the option to change planning controls, which would potentially increase the density of development in Epping by:

- Allowing bonus floor space as an incentive to have commercial floor space constructed
- Allowing bonus floor space to incentivise provision of large floor plate shops and retail
- Changing planning controls in existing HCA areas which may increase the density of development

A traffic model is being prepared and it will be used to assess the land use and road network improvement options that Council deems appropriate after considering this Discussion Paper.

In a transport modelling context, the objectives of the study are:

- To identify the through (regional) traffic volumes and their effect on the traffic network, and
- The quantification of the local area road network impacts from local and through traffic growth.

Once these are completed the land use scenarios Council may seek to pursue as a result of the exhibition of the Discussion Paper will be modelled using the following traffic models.

11.3.1 Traffic models

The **Sydney Traffic Model (STM)** belongs to the RMS and provides details of the morning and afternoon peak hour regional traffic movements travelling through the Epping area via RMS roads including Carlingford Road, Beecroft Road, Blaxland Road, and Epping Road.

The **Epping Town Centre Local Network Model (LNM)** on the other hand is currently being built for this project by the consultant team. The LNM (sometimes also referred to as the base model) provides a much finer grain level of analysis and includes details of local trips within the local traffic network (validated by traffic counts and surveys to validate journey times) as well as factoring regional routes identified in the STM so that Council has a detailed picture of the current traffic conditions in Epping. Once a base model is built and calibrated, this model can be manipulated to test various land use scenarios and the impact this will have on the traffic network. This model also has the capability to test and model the impacts of various traffic improvements/ infrastructure within Epping under a range of land use or development scenarios to determine the efficiency of potential infrastructure improvements. The development and calibration of the base model/LNM is often the most time consuming aspect of traffic modelling, however this approach is considered to be the most comprehensive approach for evaluating the impacts of various development scenarios within an existing network.

Due to the short timeframe between the engagement of EMM Consulting to carry out the Epping Traffic Study and the release of the EPR Discussion Paper, the base model is in the process of being finalised. Once the model is completed, the RMS will validate this base model before testing of the land use scenarios can occur.

In order to inform the Guiding Principles and Options detailed later in this report EMM Consulting have been asked to prepare an *Interim Traffic Modelling Report 2017* based on:

- the modelling carried out to date using the STM Model (note the Epping Traffic Model);
- local intersection based analysis (such as SIDRA analysis or similar tools); and
- their experience of the potential issues given the preliminary findings and data available to date.

11.3.2 Preliminary advice

The purpose of the preliminary analysis carried out as part of the Interim Traffic Modelling report is to provide an indicator of the issues and options available to allow discussion of these issues as part of the Discussion Paper process.

The preliminary advice received is that regardless of what land use density options or road work improvements are put in place there is little scope for significant improvements to the way the road network operates in the Epping Town Centre without new and additional policies to reduce car usage and shift more trips that currently come through the centre by car onto public transport modes.

The consideration of options for managing local traffic considered to date concludes that:

- Preliminary findings suggest the widening of the rail bridge will not be a "game changer" given the time it will take motorists to cross the bridge – the expansion of the bridge will be an improvement, but will not be a *significant* improvement in providing relief to congestion, and the benefit will only be felt in one direction (westbound). However, the addition of an additional lane could open up more options for the operation of the bridge to manage morning and evening peak traffic through changes to tidal flow conditions. This type of tidal flow arrangement would potentially enable a single lane of additional traffic capacity at the bridge to provide additional peak hour capacity for both the morning peak hour eastbound and the afternoon peak hour westbound traffic flows.
- Putting in place a ring road requiring traffic to 'go around the block' (Bridge Street, Kent Street, Carlingford Road prior to continuing north along Beecroft Rd), will potentially increase travel times and distances, and that through trippers may seek to take a shorter path - i.e. "rat run" via Rawson Road.
- The proposed Victoria Street link to Carlingford Road will provide an additional north-south link between Carlingford Road and Bridge Street for local trips. However, the modelling carried out to date is not sensitive enough to model the impact of this connection and its impacts on local traffic. This will need to be modelled through the LNM as part of the final Traffic Study.

Even improvements already underway or proposed in the Halcrow Report will not result in significant long term sustained improvements to the way traffic flows through or within the Epping Town Centre. The reason for this lies primarily in the fact that two major arterial road routes converge at the Epping Bridge. The east west Carlingford Road/Epping Road and north south Beecroft Road/Blaxland Road routes converge at the Epping bridge. This is the reason that 89% of trips that cross the bridge are through traffic trips where the origin and destination of the trip is outside the Epping Town Centre.

These traffic routes and intersections are currently operating at over-saturated traffic levels for both the morning and afternoon peak hour. It is considered that the increased intersection traffic delays are already displacing some of the previous regional through traffic movements away from the Epping Town centre to other parallel traffic routes such as the M2 Motorway for east-west traffic and Midson Road for north-south traffic. While there may be some improvements that could be made to improve capacity to Epping Bridge and the adjacent group of intersections, it is likely that this improved capacity will be taken up by the currently displaced through traffic.

The through trips are a significant barrier to improving the traffic flow around the Epping Town centre for the following reasons:

- Any improvement to the intersection will be primarily to the benefit of the through traffic rather than local traffic.
- If intersection management is changed to make access from local streets onto the arterial roads easier, it will cause significant delays and even further queuing on the arterial road network.
- There are no other feasible points where these routes can cross the Rail line in the vicinity of Epping to alleviate the pressure that through traffic places on the Epping Town Centre
- If a technical solution was found to improve the flow of traffic through Epping, then it is likely that more people would make a choice to avoid M2 tolls and go through Epping as the congestion at Epping is one of the factors that makes the choice to take the M2 more appealing (see above).

11.4 Community feedback

Unlike the Heritage Study, Social Infrastructure Needs Study and Commercial Floor Space Needs Study community consultation workshops carried out previously, there has been no pre-exhibition consultation workshop carried out specifically for Traffic. The timing of those community workshops meant that the results of the interim work relating to Traffic were still too preliminary to be of value to the community at that early stage. Accordingly, a traffic workshop has since been organised for the 12 July 2017 to discuss the findings of the work carried out to date and to allow the community to ask questions in order to inform their submission.

Notwithstanding the above, traffic congestion and access issues have been a consistent theme raised as part of the other pre exhibition workshops including written correspondence received throughout the preparation of this Discussion Paper (refer to Appendices 4 and 5 for further discussion). Common concerns are:

- The level of density proposed in Epping will only exacerbate already significant levels of congestion and that the densities proposed should never have been permitted;

- It is difficult to access service and facilities for those outside the walking catchment of Epping because of traffic congestion and lack of parking;
- The community feel that the failure to upgrade the Epping Bridge (which was a recommendation of the Halcrow report and a proposed work to support the UAP density) is unacceptable because the development is occurring but the infrastructure improvements are not being delivered;
- A number of stakeholders suggested that Council should either provide or lobby the State Government to provide commuter parking near the Epping Station. The argument put forward by proponents is that this would clear surrounding streets of commuter parking and improve access to local shops for local people.
- One of the issues raised during the consultation was a proposal for a crossing guard to regulate the pedestrian flow on the pedestrian crossing in Rawson Street to potentially improve traffic flow.

11.5 Epping's role in managing Sydney's transport issues

Given the high level of public transport access available in the Epping Town Centre it will have to make a significant contribution to help manage Sydney's Transport issues. The key recommendation to come out of the preliminary transport analysis to date is that traffic congestion can be managed but it is likely to continue to increase in Epping unless broader policies are put in place to encourage public transport usage instead of private vehicle trips.

Given the access to public transport in Epping its most important transport role is to make sure that as many people as possible are encouraged to take public transport rather than use their car. This is the principle that underpinned the additional density being proposed around Epping as part of the UAP and is one of the reasons why additional density remains a feasible option in this discussion paper despite the traffic congestion issues.

The RMS and Department of Transport are key partners in setting the policy frameworks that seek to manage the balance between increasing density around any train station whilst maintaining the amenity of the area for existing and future residents who live around that train station. This balance needs to recognise that if density is not focused on public transport nodes like Epping that general traffic congestion across Sydney becomes even more difficult to manage.

In order to continue to manage congestion existing and future public transport nodes must be used as efficiently as possible and so places like Epping have to evolve into places where the first choice made by residents is public transport or active transport options (walking or cycling) ahead of using the private motor vehicle.

Previous chapters of this discussion paper have noted the desire for Epping to become a more vibrant place where locals can access all the services and facilities they need. Proposals in the commercial floor space chapter to improve access to services and facilities measures in the Urban Design chapter to make Epping easier to walk around are all part of the evolution of Epping into a transit oriented centre. The consultant who provided advice on the future retail and office floor space needs of the centre felt the need to make a recommendation on parking recognising that transport related policy issues would impact on the success of Epping as a town centre.

Part of that evolution is looking at other transport policy options that take into consideration the findings of the traffic model being prepared to best manage local congestion but to more strongly driven by policies that:

- Discourage car ownership and usage
- Promote public transport and

The guiding principles discussed in the next chapter seek to put forward options that enable Epping to evolve in this way.

11.6 Interim guiding principles

The interim guiding principles for traffic considerations at Epping are:

- Advocate for road network improvements acknowledging that these measures are not the sustainable answer to reducing traffic congestion but are an important tool to mitigate traffic congestion.
- Do not support any additional uplift within the Epping Town Centre above and beyond current UAP densities until Council has the opportunity complete the Epping Traffic Model so any measures that help to best mitigate congestion can be best understood.
- Review car parking policies to ensure that they are calibrated to:
  - Minimise local car ownership
  - Decrease motor vehicle use (or alternatively promote active and public transport options) through and within Epping

11.7 Questions for feedback

11.7.1 Proposals for additional uplift

Given the above interim findings, Council recommend adoption of the principle that Council does not support any additional density (via Planning Proposals) within the Epping Town Centre above and beyond that which the current planning controls permit until the impact of such densities can be modelled through the completion of the Epping Traffic Study and until car parking and other policies are resolved to ensure the impact of the density is clearly and transparently understood.

Given that the Austino Planning Proposal discussed in detail in Appendix 3 has been subject of consideration by the Sydney West Central Planning Panel Council would also have to request that the State Government defer any progress on this Planning Proposal until the Epping Traffic Study is complete.

Guiding principles:
Do not support any additional uplift within the Epping Town Centre above and beyond current UAP densities until Council has the opportunity complete the Epping Traffic Model so any measures that help to best manage congestion can be best understood

Consultation Question:

11a. Should Council delay the processing of current and future Planning Proposals within the Epping Town Centre and surrounds until the Traffic Study is completed?

11.7.2 Car parking rates review

Car parking rates across on both sides of the Epping Town Centre are currently inconsistent. The Hornsby DCP contains minimum car parking rates while the Parramatta City DCP has maximum rates. These rates should be made consistent and a maximum rate should be applied so that development provides less car parking to discourage local car ownership and use.

As well as ensuring the parking rates are consistent it is also proposed that they be reviewed (and potentially further reduced) to further encourage residents to use public transport and other active transport modes.

Guiding principles:
Review car parking policies to ensure that they are calibrated to:

- Minimise local car ownership
- Decrease motor vehicle use (or alternatively promote active and public transport options) through and within Epping

Consultation Question:

11b. Should Council consider further reducing car parking rates as a means of reducing traffic within the Epping Town Centre and encourage public transport usage?

11.7.3 Commuter parking

A number of stakeholders suggested that Council should either provide or lobby the State Government to provide commuter parking near the Epping Station. The argument put forward by proponents is that this would clear surrounding streets of commuter parking and improve access to local shops for local people.

Commuter parking at train stations is a complex issue that depends very much on local context. It is acknowledged that allowing people to drive to stations to use public transport is decreasing the length of vehicle trips and increasing the length of public transport trips which is to be encouraged. However, the provision of commuter car parks can have other unintended impacts unless it is implemented sensitively and in appropriate locations. Council Officers and the consultants undertaking the traffic modelling exercise do not consider that Epping is an appropriate location for a commuter parking station for the following reasons:

- It will attract additional trips into the Epping Town Centre for the sole purpose of utilising the car park which will have a further detrimental impact on local traffic conditions and increase traffic congestion.
- It will encourage local employees to drive to the centre rather than arrive via public transport due to the increase access to day long parking options.
- Experience in other centres suggests that the availability of day long parking encourages more commuters to make the choice to drive to the station because of the increased likelihood they can find a park within reasonable walking distance to the station. So parking availability on local streets is not improved.
- An integrated transport system would see people take the bus from close to their home to the station to continue their public transport journey. This is most efficient and effective if regular bus services are feasible. The more commuter parking is provided the greater the negative impact on the

feasibility of running regular bus services especially given the number of buses that provide access to Epping.

Council Officers consider that commuter parking stations do play an important role in promoting public transport but do not consider that Epping is an appropriate location for a commuter parking station.

Guiding principles:

Review car parking policies to ensure that they are calibrated to:

- Minimise local car ownership
- Decrease motor vehicle use (or alternatively promote active and public transport options) through and within Epping

Consultation Question:

11c. Is there a suitable site for which Council should lobby the State Government to have a commuter parking station provided near Epping Station?

11.7.4 Policies to manage local parking and access to private motor vehicles

Option 1 – Resident or controlled parking schemes

A commonly expressed concern when any proposal is put forward to decrease parking rates on site is that residents will still own a car they will just park in local streets. Should Council consider introducing maximum rates or reducing car parking rates below the "maximum rates" identified in the PDCP2011 in order to influence mode shift, it is considered that additional measures could also be investigated to discourage residents purchasing into new high density development do not end up parking in local residential streets.

A rollout of restricted/time limited parking zones within residential streets adjacent higher density development could be investigated along with a resident parking scheme to enable existing residents within lower density residential zones up to a 3 storey apartment building to have the opportunity to apply for a permit to enable residents and their visitors to continue to have on-street parking albeit in limited and controlled manner. Such an initiative would also discourage commuters from parking within local streets close to Epping Station and depending on the nature of the restricted parking roll out, may encourage commuters to catch a bus to the Epping Station.

Notwithstanding the above, there are also a number of limitations and resourcing issues associated with any rollout of a resident car parking scheme. These issues include:

- Impacts on existing commuters and workers who currently park in local streets and walk into the centre who could be displaced.
- Setting a precedent that may then apply in future to other railway stations on the Northern and North Shore railway lines, further reducing commuter parking.
- Permit parking schemes can be difficult to manage in the transition areas on the edge of resident permit parking zones, as it transfers parking impacts to

areas immediately outside the permit parking precinct, including areas that would otherwise be unaffected by on-street parking issues.
- Affecting visitors to residents within the restricted areas.
- This scheme would require the consent of the RMS who monitor and can override any proposals that may impact on the availability of commuter parking.
- Any such scheme would be resource-intensive to implement and administer for both Council (who have to administer and enforce the system) and residents as they need to go through the process of obtaining and retaining permit. Accordingly, any such scheme would need to be appropriately resourced to ensure effective rollout and enforcement, particularly if it was seen as a precedent that saw it rolled out in other areas. Enforcement in particular can be problematic as the residential component means enforcement will be required at night.
- The perception of equity (or rather inequity) where Council would need to make a decision on who is and who is not entitled to a parking permit including the number of permits to be allocated. For example, residents on the fringes of the high density areas who have parking on-site, depending on the criteria, may not be deemed eligible for a permit and they may perceive this to be fair unfair as they are an original resident. The process for determining how the system operates can be very controversial.

Guiding principles:

Review car parking policies to ensure that they are calibrated to:
- Minimise local car ownership
- Decrease motor vehicle use (or alternatively promote active and public transport options) through and within Epping

Consultation Question:

11d. Would you support the introduction of a Resident Parking Scheme where owners of new units would not be permitted to park on local streets as a way to discourage car ownership and manage parking on local streets?

Option 2 – Car sharing schemes

Car sharing enables more sustainable travel habits by making more efficient use of a parking space either on street or within a private development. A single car share vehicle can replace up to 12 private vehicles that would otherwise compete for local parking (source: *www.cityofsydney.nsw.gov.au/live/residents/car-sharing*). Car share schemes provide flexibility to residents or businesses who either do not own a car, cannot justify car ownership given close proximity to public transport or lack a parking space. Resident and businesses can book a car online when they need one and pick it up from a car share space.

Car share users are charged by time and distance, at a rate set by each operator (e.g. GoGET, Hertz24/7). Costs associated with fuel, vehicle maintenance and insurance are usually included in the operator's hire fees. Car share spaces can be located on street with the agreement of Council or within development for larger scale developments.

At the 13 June Council Meeting, Council considered a report on the Minutes of the Parramatta Traffic Committee held on the 25 May 2017. Council resolved the following in relation to the recommendation to provide car share spaces on Council streets in Epping:

> *"2. That, in regards to six (6) car share spaces in Epping, Council notes that car share may be an important element of creating a less private car dependant town centre, and that car share arrangements be considered as part of the current traffic and land use study for Epping. No further action be taken on car share spaces in Epping until this study is complete."*

In accordance with the above resolution, car share arrangements will be considered as part of the Epping Traffic Study and will also consider feedback received from the community during this process on this issue.

Guiding principles:
Review car parking policies to ensure that they are calibrated to:

- Minimise local car ownership
- Decrease motor vehicle use (or alternatively promote active and public transport options) through and within Epping

Consultation Question:

11e. Do you support car sharing schemes as measures to decrease vehicle ownership and the potential impacts of decreasing parking rates for sites within walking distance of Epping Station?

11.7.5 Policies to manage local traffic congestion

An issue raised during a previous consultation event at Epping indicated that there is concern over the amount of traffic backing up on Rawson Street near the pedestrian crossing in front of Council's car park. During peak time the traffic backs up with a constant stream of people on the crossing, and associated safety issues are a concern.

In order to address the above, Council could implement a "Stop/Go" traffic controller on the crossing during peak times to control pedestrians (similar to a School zone crossing). A minimum shift is 4 hours and 2 people would be required. It is estimated that this would cost up to $100,000 per year inclusive of all on costs.

Guiding principles: Advocate for road network improvements acknowledging that these measure are not the sustainable answer to reducing traffic congestion but an important tool to best manage traffic congestion.

Consultation Question:

11f. Do you think Council should employ crossing attendants during peak conflict periods at the Rawson Street pedestrian crossing to manage the flow of pedestrians and vehicles to best manage congestion in Rawson Street?

12.0 HOW TO MAKE A SUBMISSION AND NEXT STEPS

12.1 Future Epping

The Discussion Paper and background reports that were prepared to inform this Discussion Paper all make suggestions about how Epping should evolve into a centre that provides the highest possible quality of life for existing and future residents of Epping.

The "Future Epping" envisaged in this Discussion Paper is an Epping that:

- operates as a sub-regional centre that provides for local jobs in businesses that meet all day to day needs of the Epping community with a high quality public domain incorporating safe and interesting streets and pedestrian connections;
- balances recognition of Epping's heritage and the impact of new development on the owners/occupants of developments within the Heritage conservation areas;
- provides for improved quality community facilities and open space and recreation opportunities for the local community than those currently available; and
- seeks to maximise the role Epping will play in managing Sydney's congestion problems by focusing on maximising public transport and active transport options whilst best managing local traffic congestion.

The Discussion Paper sets out how the evolution could occur but there are policy decisions to be made and potential trade-offs between further growth and provision of community facilities that will impact on how the evolution to a Future Epping will proceed. To help inform these decisions this Discussion Paper asks a series of questions around different policy themes and Council is seeking feedback on these Questions from the local community and other stakeholders.

12.2 How can I make a submission?

SUBMISSIONS CAN BE POSTED TO:
Epping Planning Review (F2017/000210)
City of Parramatta Council
PO Box 32
PARRAMATTA NSW 2150

SUBMISSIONS CAN BE EMAILED TO:
placeservices@cityofparramatta.nsw.gov.au

YOU CAN ALSO CALL US:
Lily Wang, Place Manager – 9806 5347
Jacky Wilkes, Senior Project Officer – 9806 5496

If you have accessibility concerns, please contact the National Relay Service on http://relayservice.gov.au/ and provide them with the City of Parramatta number you want to call.

In preparing your submission, please quote the number of any questions from this Discussion Paper to which you respond (e.g. 9a).

WHAT HAPPENS TO MY SUBMISSION?
All submissions will be carefully considered by senior staff and reported to Council in August 2017, prior to commencing Stage 2. Letters of acknowledgment will be provided for written submissions.

12.3 What are the next steps?

Following exhibition of the Discussion Paper, the expected next steps for the Epping Planning Review are as follows:

1. **14 August Council Meeting:** Council to consider the responses received as part of the Discussion Paper process to allow the Administrator to adopt some guiding principles and directions that will guide development of Stage 2 of the Epping Planning Review.

2. **Late 2017 - early 2018:** A Draft Planning Proposal accompanied by a Draft Development Control Plan and Developer Contributions Framework which will incorporate changes to the existing Planning Controls consistent with the guiding principles will be prepared for consideration by Council. If these are endorsed by Council, the following process will be pursued:

    a. The Draft Planning Proposal will be forwarded to the Department of Planning who need to endorse the potential new changes;
    b. Once endorsement from the Department of Planning is received the Draft Planning Proposal, Development Control Plan and Developer Contribution Framework will be placed on public exhibition to allow the Epping community to provide further comment on the detail of the proposed changes to the planning controls; and
    c. The results of this further consultation will be reported to Council and if the new controls are endorsed by Council the new planning controls would come into force once the Draft Planning Proposal changes are legally finalised and a notice indicating they have been finalised is published in the Government Gazette.

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Appendix 1 – Strategic context

This appendix discusses in more detail the role of the Epping Town Centre within the Sydney metropolitan context across the various metro-wide and sub-regional level plans over recent years.

Draft West Central District Plan (2016)

The Greater Sydney Commission's *Draft West Central District Plan* (Draft District Plan) is the draft subregional strategic planning document for the West Central District to 2036. The Draft District Plan makes numerous references to the Epping Town Centre:

- *Examples of significant concurrent investment in growth and renewal opportunities include…the renewal and revitalisation of Epping Town Centre* (pg.31)
- *In the West Central District, Epping and Merrylands are examples of local centres that, with the right planning and investment, could read their potential as emerging commercial and retail nodes* (pg.48).
- The Draft District Plan recognises that the Epping Town Centre Priority Precinct is forecast to deliver up to 3,750 dwellings in the next 5 years after its rezoning in March 2014 (pg.93), although this figure has since been revised to 5,500 dwellings. (As discussed elsewhere in this Discussion Paper 4,735 of these units are anticipated to be delivered in the next 5 to 7 years.)
- City of Parramatta will *progress the delivery of Epping Town Centre urban renewal with the Greater Sydney Commission and Department of Planning and Environment* (pg.99).

The Draft District Plan identifies two distinct centre hierarchies: Local Centres and Strategic Centres (as detailed in the Department's *A Plan for Growing Sydney)*. Epping is identified as a Local Centre as per the comments above; however, the Local Centre category is somewhat ambiguous with 30 to 40 local centres identified within the West Central District. Aside from the points above, there is very little about what the Epping Town Centre might become in 2036 in this document.

Towards our Greater Sydney 2056 (2016)

This short 16-page document prepared by the Greater Sydney Commission in November 2016 constitutes a draft amendment which updates the 2014 *A Plan for Growing Sydney* released by the Department in 2014 (and discussed below).

One of priorities expressed within this document is the concept of a 30-minute city, which aims to increase the range of jobs, services and other opportunities for people to access within 30 minutes from their place of residence. The 30-minute city concept and Epping's opportunity to fulfil this role is detailed in the Commercial Floorspace Study which supports this Discussion Paper and is discussed further in Chapter 8.

A Plan for Growing Sydney (2014)

The Department's *A Plan for Growing Sydney* is the principle vision for the Greater Sydney to the year 2031 with four principle goals to deliver new housing and employment across Sydney.

A Plan for Growing Sydney identifies the Epping Town Centre as one of ten Priority Precincts – a process which was initiated by Hornsby Shire Council and finalised in March 2014 when new planning controls came into effect. The Epping Town Centre is also identified as part of the North West Rail Link corridor (now referred to as Sydney Metro North West), which focuses on increased housing, economic activity, social infrastructure and accessibility to Sydney's Global Economic Corridor.

West Central Subregion Draft Subregional Strategy (2007)

Prepared in December 2007, the West Central Subregion Draft Subregional Strategy (WCDSS) establishes a clear centres hierarchy, and identifies Epping as one of eight Town Centres within the West Central Subregion. Town centres are defined in the WCDSS as having "one or two supermarkets, community facilities, medical centres, schools, etc. containing between 4,500 – 9,500 dwellings" (pg.61).

The WCDSS sees the eight Town Centres as important subregional anchors of retail, services and community facilities which service catchments of two or three surrounding suburbs (pg.60). This strategy presented a clear vision for the centre and its role within the West Central Subregion. However, since the release of the WCDSS in 2007, the Department has not released a centres hierarchy at the local centre level. Instead, it has focused on the higher order centres (Strategic Centres, GPOP, etc.).

Appendix 2 - Explanation of changes to planning controls that came into effect in March 2014

Changes to the planning controls that came into effect in March 2014 as part of the Department's Priority Precinct process are detailed below.

For the former **Hornsby Shire Council (eastern) portion** of the town centre and surrounds:

- Land zoned B2 Local Centre was slightly expanded and accompanied by substantial increases in building heights from 12 and 16 metres (3 to 4 storeys) to 48 and 72 metres (12 and 22 storeys) and floor space ratio (FSR) controls (from 0.5:1, 1:1 and 2:1 to 4.5:1 and 6:1).
- Land zoned R2 Low Density Residential was substantially rezoned to R4 High Density Residential, with a small portion rezoned to R3 Medium Density. The new R4 zone was accompanied by increases in the height controls from 8.5 and 12 metres (2 and 3 storeys) to 12, 17.5 and 26.5 metres 12 (3, 5 and 8 storeys).
- Three new Heritage Conservation Areas were created (Rosebank Avenue, East Epping and Essex Street).

For the former **Parramatta City Council (western) portion** of the town centre and surrounds:

- The Council-owned car park site was rezoned from SP2 Infrastructure to B2 Local Centre, and its accompanying height controls increased from no height control to 48 metres (12 storeys) and FSR controls increased from no FSR to 4.5:1.
- There were no other changes to the area of land zoned B2 Local Centre, however, in existing B2 Local Centre zones applying to the town centre, the height controls increased from 11, 18, 21, 25, 28 and 40 metres (2 to 11 storeys) to 18, 48 and 72 metres (5 to 22 storeys) and FSR controls increased from 0.8, 2:1, 3:1. 3.5:1 and 6:1 to 1.7:1, 4.5:1 and 6:1.
- There were no changes to the surrounding R2 Low Density zones, including no height and density changes.
- There were no changes to the area, height or density controls of R4 High Density Residential zones, with the exception of the R4 zone applying to a small frontage of land on Bridge Street. Its height controls increased from 11, 18 and 25 metres (2, 5 and 7 storeys) to 18 and 48 metres (5 and 12 storeys) and its density controls increased from 0.8:1 and 2:1 to 1.7:1 and 4.5:1 to 4.5:1 and 6:1.
- No changes occurred to nearby Heritage Conservation Areas.

*

Appendix 3 – Development Application and Planning Proposal activity in Epping

Development Applications

Since March 2014 when the new planning controls came into effect, a number of Development Applications (DAs) have been lodged, either with Hornsby Shire Council (prior to the amalgamations on 12 May 2016) or with the City of Parramatta Council (since 12 May 2016). As at 19 June 2017, Development Application activity is summarised as follows:

- **Pre-lodgements:** two pre-lodgement DAs are proposed to deliver **621 units**.
- **Under assessment:** four DAs currently under assessment propose to deliver **917 units**.
- **Approved but not under construction:** 11 approved DAs which are not yet under construction will deliver **879 units.**
- **Under Construction:** 28 developments that are under construction will deliver **2,318 units.**

Assuming these DAs are all constructed and fully occupied, they are expected to deliver **4,735 units** (**10,890 people** assuming a household size of 2.3 persons).

The current Development Application activity indicates a very rapid delivery of Department's projected 5,500 dwellings over the next five years. If this rate of development activity were to continue, it is expected that more than the 5,500 dwellings would be delivered in this centre.

Exponential growth and change: This forecasted dwelling/population growth indicates that growth is actually occurring more rapidly than in forecast scenarios undertaken by the Department and by id.Forecast (which Council typically relies on). This unprecedented pace of redevelopment presents challenges for Council and the State government in delivering the required infrastructure to accompany that population growth.

Planning Proposals

Austino Planning Proposal

Austino Property Group has lodged a Planning Proposal for land at 2-18 Epping Road, 2-4 Forest Road and 725 Blaxland Road, Epping (refer to Figure 32). This Planning Proposal seeks to increase height and density controls. Planning controls for this site were only recently amended in March 2014 as part of the Department's Priority Precinct process, at which time they changed from predominantly R2 Low Density Residential zoning and an 8.5 metre height control, to predominantly R4 High Density Residential zoning and a 26.5 metres height control. The RE1 Public Open Space zone over the former bowling club site was not altered.

Figure 32 Land affected by the Austino Planning Proposal (from applicant's Urban Design Report)

The Planning Proposal seeks to:

- reconfigure the R4 and RE1 zones across the site to enable an open space connection from the Epping Town Centre and the site;
- increase the building height over the reconfigured R4 zone from 26.5 metres to 72 metres (22 storeys), 65 metres (20 storeys), 58 metres (18 storeys) and 17.5 metres (5 storeys) with a small portion of the site to retain the 26.5 metres (8 storeys) building height;
- increase the density on the site to realise a predominantly residential development comprising two towers on Blaxland Road, accommodating estimated 654* units (please refer to box at end of this section for further discussion of this estimate); and
- deliver a public urban plaza through the proposed development providing a pedestrian connection between Epping Road and Forest Park, with an area equivalent to the area of land currently zoned RE1 Public Recreation (6,665sqm), so there will be no net loss in open space.

In January 2016, PCC was invited to comment on the applicant's Planning Proposal and on 14 March 2016, resolved to adopt a submission on the matter which requested further analysis against 9 principles identified in Council's submission. On 13 April 2016, Hornsby Shire Council resolved not to support the proposal (just prior to the Council amalgamation on 12 May 2016).

In response to Hornsby Shire Council's resolution, the applicant lodged a Pre-Gateway Review with the Department in late April 2016. This placed the handling of the Planning Proposal in the hands of the Department. As part of the Pre-Gateway review process, the Joint Regional Planning Panel (JRPP) considered the proposal in September 2016 and recommended a range of issues be considered before the proposal is submitted for a Gateway Determination.

With regards to the Epping Planning Review process, the relevant issues related to this Planning Proposal are:

- The proposal being subject to Council's traffic review for the Epping Town Centre to inform the final floor space ratio;
- Clarification of public benefits and heights of buildings, and addressing overshadowing of Forest Park; and
- No retail being permitted.

In November 2016, the Department wrote to City of Parramatta seeking whether Council would elect to be the Relevant Planning Authority (RPA). This would enable City of Parramatta Council to have more influence over the process. Council accepted the RPA role on the condition that the Gateway Determination is issued after the exhibition of the Discussion Paper and supporting technical studies, so that this information and community views can be taken into account.

What additional dwelling growth would the Austino proposal bring to the Epping Town Centre?

The current controls would result in the site delivering **630 dwellings**.

Council officers estimate that the applicant's request for uplift would result in an additional **129 dwellings** (total **759 dwellings**).

***The reason for the difference between Council officers' estimate of 759 dwellings and the applicant's estimate of 654 dwellings is that Council officers' analysis is based on 85sqm/unit size.**

Preliminary Planning Proposals

This section discusses two preliminary Planning Proposals which have been lodged with Council with regards to Council's car park sites at 51A and/or 51B Rawson Street (see Figure 33). Both of these preliminary Planning Proposals are on hold until two things occur: first, that feedback from the Discussion Paper has been reported to Council, and second, that the Traffic Study prepared by EMM has been finalised.

Figure 33 Council Car Park Sites – 51A and 51B Rawson Street, Epping

Both of the applicants' sites (discussed further below), as well as Council's car park site, received height and density increases as part of the new planning controls introduced in March 2014. The Council car park site was rezoned from SP2 zone to the B2 Local Centre zone when the new controls came into effect.

Important Note: While both preliminary schemes propose redevelopment of Council's car park site, Council has made no decision regarding redevelopment. Council's decision is that it will wait for the completion of Stage 1 of the Epping Planning Review before making any decision on the car park site. This has been communicated to both applicants.

Preliminary Proposal affecting 53 and 61 Rawson Street

A preliminary proposal by the Oakstand Group applies to land at 53 and 61 Rawson Street, Epping (refer to Figure 34).

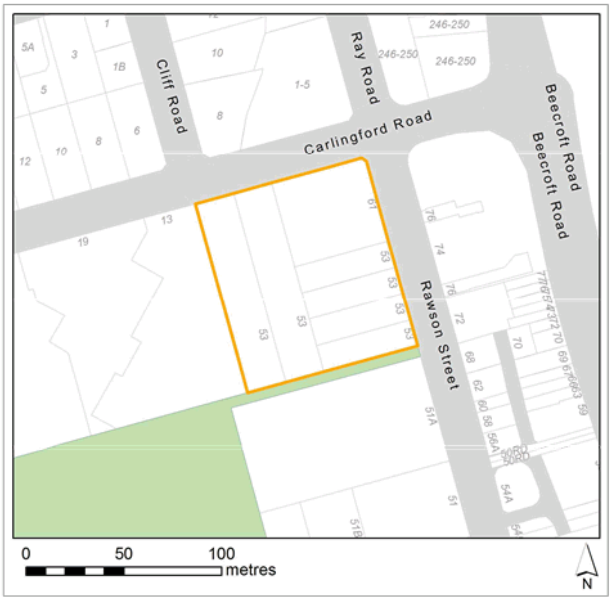

Figure 34 Oakstand site – 53 & 61 Rawson Street, Epping

The preliminary proposal seeks a partnership with Council to develop their site in conjunction with the Council car park. It seeks to amend planning controls to increase height and density achievable on these sites to enable:

- **674 units** over its site at 53 and 61 Rawson Street; and
- **520 units** over the Council car park site

It also proposes rezoning the entire site from B2 to B4 zoning, which would likely reduce the amount of commercial uses at the site. Whilst the proposal does currently propose 10,000sqm of retail and 4,923sqm of other non-residential uses, the risk that Council needs to consider is that introducing the proposed B4 zone could result in the site being redeveloped entirely for residential flat buildings with no commercial uses on the site, unless controls are put in place to mandate a minimum provision of commercial floor space.

The proposed public benefit elements included in this proposal include a range of traffic upgrades, creation of a new 3,430sqm town square, a new civic memorial, activation of Boronia Park, amenity improvements to Rawson Street, through-site links, and 200 underground Council car parking spaces.

What additional dwelling growth would the Oakstand proposal bring to the Epping Town Centre?

The current controls would result in the site delivering approximately **272 dwellings.** The applicant's proposal for uplift would result in an additional **922 dwellings** (total **1,194 dwellings**).

Preliminary Proposal affecting 59-77 Beecroft Road and Masonic Hall Site (49 Rawson Street)

A preliminary proposal by the Winton and Lyon Groups applies to land at 59-77 Beecroft Road, Epping (refer to Figure 35).

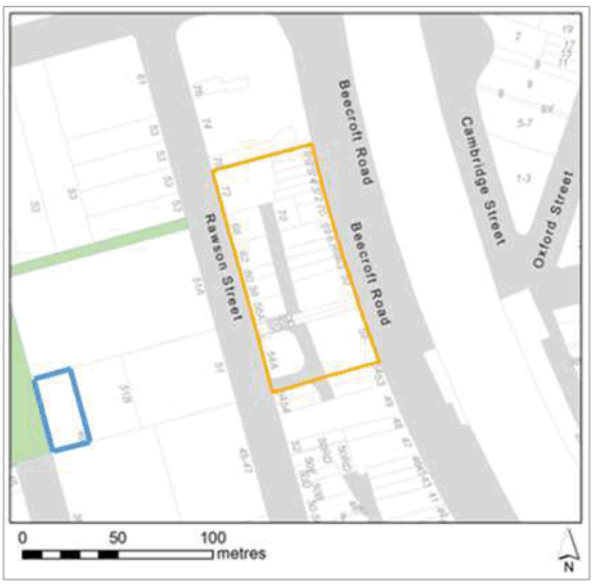

Figure 35 Winton/Lyon groups site – 59-77 Beecroft Road (orange outline) and Masonic Hall Site (blue outline), Epping

The preliminary proposal seeks a partnership with Council to develop their site in conjunction with the Council car park. It seeks to amend the planning controls to increase building height and density controls achievable at this site to enable:

- **700 units** over its site at 59-77 Beecroft Road; and
- **200 units** over the Council car park sites and the Masonic Hall site (49 Rawson Street).

This proposal also includes retail and commercial uses, as well as proposed public benefits including 2,000sqm of community facilities and infrastructure, a civic plaza area of over 3,700sqm which will create a "green spine" from east to west through the

site, and improved pedestrian connectivity between Boronia Park and the Epping transport interchange.

What additional dwelling growth would the Winton/Lyon groups proposal bring to the Epping Town Centre?

The current controls would result in the site delivering approximately **317 dwellings**.
The applicant's proposal for uplift would result in an additional **584 dwellings** (total **901 dwellings**).

Other land owner interest

The owners of two additional large sites in the vicinity of Ray and Beecroft Roads have also expressed interest in redevelopment to Council. Whilst details are not yet known, this suggests that landowners continue to perceive development opportunities in the centre.

Appendix 4 - Summary of feedback from public forum

[This Appendix is provided in a separate attachment]

Appendix 5 – Summary of feedback pertaining to land use issues received after the public forum

[This Appendix is provided in a separate attachment]

LEADING

ITEM NUMBER	11.3
SUBJECT	Epping Planning Review - Completion of Stage 1 and Commencement of Stage 2
REFERENCE	F2017/00210 - D05111630
REPORT OF	Snr Project Officer

PURPOSE:

The purpose of this report is twofold: to detail the feedback received from submissions on the Epping Planning Review Discussion Paper exhibited from 21 June and 19 July 2017; and to recommend principles to guide Stage 2 of the Epping Planning Review.

RECOMMENDATION

(a) **That** Council receive and note the submissions made on the Epping Planning Review Discussion Paper.

(b) **That** the recommended principles, as identified within this report and contained within **Attachment 6** be endorsed for the purposes of guiding Stage 2 of the Epping Planning Review.

(c) **That** Council Officers:

1 Brief the incoming Councillors on the Epping Planning Review process to date including the endorsed principles to confirm the future planning direction for Epping as part of progressing Stage 2 of the project, and

2 That following the above briefing, a further report be submitted to Council recommending the commencement of Stage 2 of the Epping Planning Review which will involve preparing new planning controls including:

2.1 A planning proposal to amend both the *PLEP 2011* and *HLEP 2013*

2.2 A development control plan amendment to amend PDCP 2011 and HDCP 2013

2.3 Amendments to relevant Contributions Plans and public domain plans where relevant.

(d) **That** the recommendations contained within **Attachment 5** detailing the outcomes of the Stage 6 Heritage Review be endorsed.

(e) **That** Council write to the community thanking them for their feedback and advising them on the outcome of Stage 1 Review and next steps

(f) **Further, that** Council write to the Minister for Planning, Greater Sydney Commission, Department of Planning and Environment, Transport for NSW and the Roads and Maritime Services to provide an update on the project and outline of next steps.

BACKGROUND

1. In March 2014, new planning controls for the Epping Town Centre and surrounds came into effect as a result of the Department of Planning and Environment's (DPE) Priority Precinct process. This process resulted in increased building heights and density controls within Epping Town Centre and surrounds which at the time was split between the former Parramatta City Council (western side of the train line) and former Hornsby Shire Council (eastern side of the train line). This process also saw the creation of three new Heritage Conservation Areas (on the former Hornsby Council side) – Rosebank Avenue, East Epping and Essex Street HCA.

2. On 12 May 2016, Council amalgamations saw the Epping Town Centre and immediate surrounds fall wholly within a new jurisdiction - the City of Parramatta Council. Prior to this, the Epping Town Centre had been split between the former Parramatta City Council (PCC) to the west and the former Hornsby Shire Council to the north and east. This historic dual structure has resulted in a complex planning control framework comprising of:

    a. two local environmental plans (*Parramatta Local Environmental Plan 2011* and *Hornsby Local Environmental Plan 2013*);

    b. two development control plans (*Parramatta Development Control Plan 2011* and *Hornsby Development Control Plan 2013*);

    c. three development contributions plans with different contributions rates across each development type (a Section 94A plan applying to the former PCC area, and a Section 94 plan and Section 94A Plan applying to the former Hornsby Shire area); and

    d. one public domain plan for the former Hornsby Shire Council area and public domain guidelines for the former PCC side.

3. The amalgamation has not changed or unified the planning controls, thus an exercise of bringing all of the controls into a single framework is required to deliver consistency. The objective of unifying the controls is to have one LEP, one DCP, one development contributions plan and one public domain plan applying to the entire town centre and immediate surrounds.

4. The Epping Planning Review project is identified in Council's *Operational Plan 2016/2017* under Action 2.4 "Review of Epping Town Centre Planning Controls". The Action involves undertaking a review of the planning for the Epping Town Centre, in conjunction with the Department of Planning and Environment (DP&E). Council's *Operational Plan 2017/2018* sees Council continuing to work with stakeholders on key precincts such as Epping. The *Draft West Central District Plan* also foresees that Council will progress the delivery of the Epping Town Centre urban renewal with the Greater Sydney Commission and the DP&E to ensure that the centre is considered as an integrated whole.

5. The study area for the Epping Planning Review is based on the DP&E's Urban Activation Precinct boundary and is illustrated in **Figure 1**. However, in the case of social infrastructure, the study boundary extends beyond the boundary in **Figure 1** so as to incorporate all the social infrastructure that Epping Town Centre residents rely on, which generally, is the Epping suburb.

Figure 1 - Epping Planning Review Study area

6. The Epping Planning Review project involves two stages, the scope of which has been to address the unintended consequences of the planning control amendments brought into effect in March 2014 as well as allowing Council to manage current (formal and preliminary) Planning Proposals seeking growth within the Town Centre. It is also intended to allow the City of Parramatta Council to progress resolutions made by the former Hornsby Shire Council on specific heritage matters. Stage 1 of the Epping Planning Review has involved:

    a. A public launch in mid December 2016.

    b. Preparation of technical studies on Heritage, Social Infrastructure, Commercial Floorspace and Traffic (Interim) by consultants as well urban design and planning analysis which was undertaken by Council.

    c. Pre-Phase 1 Community Consultation commencing in December 2016; this consultation is summarised in Chapter 5.0 Community Engagement of the Discussion Paper (**Attachment 1**) and involved Council Officer attendance at various community events such as the Australia Day and Lunar New Year to inform the community of the review being undertaken.

    d. Phase 1 Community Consultation involved consultations that informed the technical studies and Discussion Paper and was undertaken in conjunction with Straight Talk who were engaged to facilitate the consultation events. The feedback received from the Phase 1 consultations was contained in Straight Talk's Phase 1 Community Consultation report which formed part of the supporting information to the Discussion Paper in **Attachment 1**.

    e. The preparation of the Epping Planning Review Discussion Paper (informed by points b, c and d, above) for public exhibition.

f. Phase 2 Community Consultation carried out during the public exhibition of the Discussion Paper with a series of Community Workshop Sessions.

7. **Figure 2** below illustrates the major structural components of Stage 1 of the Epping Planning Review.

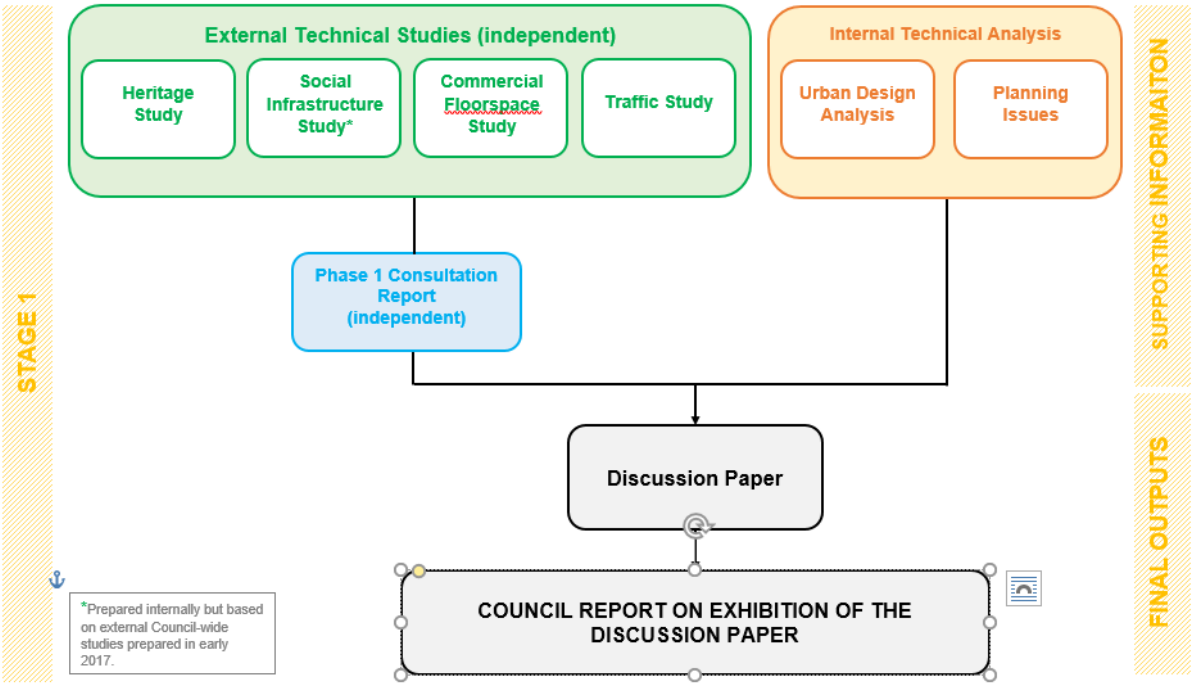

Figure 2 - Stage 1 of the Epping Planning Review

8. This Council report constitutes the last major milestone of Stage 1 of the Epping Planning Review and reports on the feedback received from the Phase 2 community consultations and Discussion Paper exhibition process.

9. Stage 2 of the Epping Planning Review will involve implementing changes to planning controls (zoning, heights, FSRs) and unifying the planning controls to create a single set of controls for the town centre. This means amending the *Parramatta LEP (PLEP) 2011* and the *Hornsby LEP (HLEP) 2013*, Parramatta DCP and Hornsby DCP, and relevant development contributions plans and public domain plans to create a single set of planning controls.

10. It is noted that the principles determined in Stage 1 also impact on other policy areas of Council (outside of the changes to planning controls covered in Stage 2) and that the findings and analysis carried out to date will be used to inform further work on these areas (ie. social infrastructure) as part of a separate process.

PUBLIC EXHIBITION OF DISCUSSION PAPER

11. The Epping Planning Review Discussion Paper **(Attachment 1)** and supporting studies were publicly exhibited from Wednesday, 21 June to Wednesday, 19 July 2016.

12. The Discussion Paper contained 32 questions, of which:

    a. 4 questions addressed heritage interface issues;

    b. 9 questions addressed commercial floorspace issues;

c. 11 questions addressed social infrastructure issues;

d. 2 questions addressed public domain issues; and

e. 6 questions addressed traffic and transport issues.

13. The context around the questions are detailed in the Discussion Paper.

14. Council has specifically sought responses to the questions to help guide the future direction of Stage 2 of the Epping Planning Review. As such this report focuses on the community feedback raised in relation to the questions.

15. It must also be noted that comments/feedback were also provided outside of the questions and this is also discussed in this report.

Phase 2 Community Engagement

16. Phase 2 community engagement involved a series of Community Workshop sessions which presented the findings of the technical studies and Discussion Paper. Feedback was also sought on the options and the questions.

17. Over 750 participant entries were recorded across all engagement activities, which incorporated:

    a. Three evening sessions held on:

        i. Social Infrastructure and commercial floor space (3 July 2017),

        ii. Heritage (5 July 2017), and

        iii. Traffic (12 July 2017).

    These were held at the St Albans Anglican Church Main Hall in the Epping Town Centre.

    b. Two evening sessions for Epping's two largest culturally and linguistically diverse (CALD) communities:

        i. A session for the Chinese community was held on 10 July 2017,

        ii. A session for the Korean community was held on 17 July 2017.

    These were held at the Epping Creative Centre.

18. All sessions were facilitated by Straight Talk, a consultancy commissioned to independently facilitate and record the feedback from each session.

19. These Phase 2 consultations are summarised in the *Epping Town Centre Review: Phase two – Exhibition period consultation* (provided at **Attachment 2**).

Site visits

20. Three site visits were undertaken by Council Officers and the Administrator at the request of residents who raised concerns about the impacts of current development in their areas. Site visits were undertaken at the following locations:

    a. Rosebank Avenue.

    b. Eastern side of Essex Street, within the Essex Street HCA.

    c. Norfolk Street in the vicinity of Pembroke Street.

21. The purpose of the site visits was to listen to the concerns raised by residents with regard to the findings of the Discussion Paper and assist them in informing their submission.

Developer Consultation

22. On 30 June 2017, Council Officers hosted an Information Session for the applicants of the Austino Planning Proposal (adjacent to Forest Park) and the two Preliminary planning proposals at Rawson Street and Beecroft Road.

23. The purpose of this consultation was to provide an update to the applicants on the status of the Epping Planning Review project, in order to enable them to prepare a submission.

PROJECT STEERING GROUP

24. To ensure State agency engagement on the recommendations of the Epping Planning Review process, at the commencement of the project, Council established the Epping Planning Review State Agency Steering Group.

25. The Steering Group comprises representation from the Greater Sydney Commission, the Department of Planning and Environment, Transport for NSW and Roads and Maritime Services and staff of City of Parramatta.

26. To date, the Steering Group has met on three occasions to discuss issues relating to the review as well as oversee the progress of the Discussion Paper.

COMMUNITY FEEDBACK - INTRODUCTION

Submissions

27. Council received over 300 individual pieces of correspondence in response to the exhibition. Within this correspondence, there were several submitters that made multi-part submissions, as well as a few submissions made on behalf of small groups of residents. These factors meant that the total number of submitters was over 260.

28. The submissions varied broadly in scope in terms of their response to the 32 questions posed in the Discussion Paper. The majority of submissions (about 90%) directly answered questions posed in the Discussion Paper. Of these, about one third of submitters focused on one question, about one third of submitters discussed 2-5 questions, and about one third addressed 6 or more questions. About 12% of submitters addressed 20 or more questions.

29. **Figure 3** below demonstrates the frequency of response to the 32 questions.

30. As demonstrated in **Figure 3** there was a high level of response to each of the questions posed (minimum 24 responses; maximum 131 responses). The average number of responses to each question was 50, for a total of over 1,600 individual answers across all of the questions. The four questions attracting the highest frequency of responses were 9b (relating to the purchase of the former Bowling Club site), 9k (relating to future use of the Dence Park Aquatic Centre), 9a (relating to expanding parks ahead of creating new parks), and 11a (relating to delaying processing of planning proposals until the Traffic Study is complete); each of these four questions received over 100 responses.

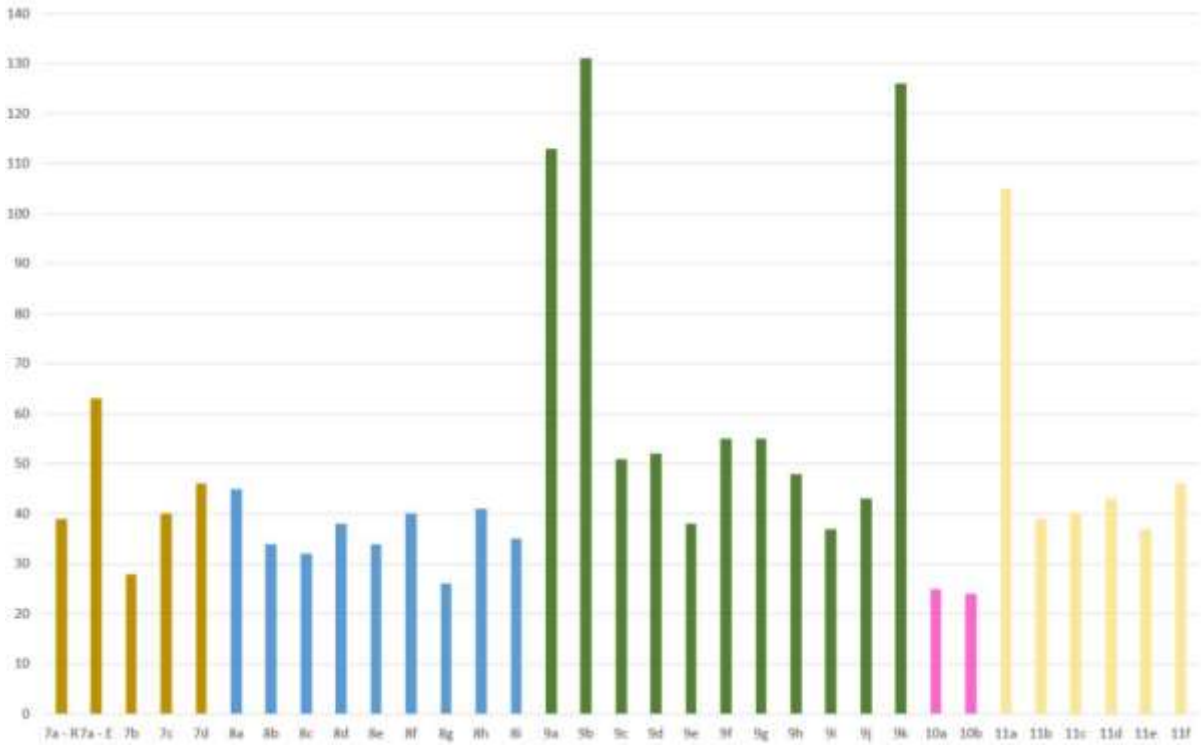

Figure 3 - Graph showing responses to the questions

31. **Attachment 3** provides a detailed summary of the submissions received in response to each question, and further sections of this report respond to this analysis on a question-by-question basis. Many respondents provided commentary outside of the questions posed, but which still broadly related to the five themes in the Discussion Paper (Heritage, Commercial Floor Space, Social Infrastructure, Public Domain and Traffic/Transport). This commentary is also summarised in **Attachment 3** on a thematic basis. Analysis of this feedback is also considered within this report.

32. Many respondents provided commentary outside of the questions and themes of the Discussion Paper. Council officers' analysis of this commentary is detailed in **Attachment 4** (General Comments). Analysis of this feedback is also considered within this report.

Community Workshop Sessions

33. The Community Workshop sessions (discussed above in 'Phase 2 Community Engagement') were a major element of the Phase 2 Community Engagement process and have been summarised in Straight Talk's *Epping Town Centre Review: Phase two – Exhibition period consultation* which forms **Attachment 2** to this report.

34. Generally, there are strong similarities with the feedback from the community submission process. However, any differences in views between submissions and feedback received directly from the community workshop sessions are explained in each of the chapter sections below.

HERITAGE CHAPTER

35. Chapter 7.0 of the Discussion Paper responds to the recommendations made within City Plan Services' *Epping Town Centre (East) Heritage Review* ("Heritage Review") as well as feedback received from residents during the Phase 1 consultations held in May this year.

36. The sub-sections below summarise the responses to the Discussion Paper's four questions (ie. 7a, 7b, 7c and 7d) which pertain to Rosebank Avenue and Essex Street Heritage Conservation Areas (HCAs), Rockleigh Way, certain properties at Norfolk Road and Pembroke Street and the Rose Street Precinct.

Rosebank Avenue HCA

37. Until March 2014, the Rosebank Avenue area and surrounds were zoned R2 Low Density Residential Zone. However, new planning controls which came into effect in March 2014 by way of the Department of Planning and Environment's (DP&E's) Urban Activation Precinct process introduced the Rosebank Avenue HCA and introduced the R4 High Density Residential Zone to its south eastern, southern and eastern borders. The R4 High Density Residential Zone currently permits 5 storey residential flat buildings.

38. The Rosebank HCA and surrounding land zonings in *HLEP 2013* are illustrated in **Figure 4**, below.

Figure 4 - Rosebank Avenue HCA (hashed) and current zoning

39. Two heritage items are situated midpoint within the HCA, at No.s 9 and 10 Rosebank Avenue (refer to **Figure 5** below). These two sites mark the midpoint on either side of the HCA.

40. The street runs in a north/south direction with most properties fronting the street in an east or west direction. These lots are relatively large. However, No.23 Rosebank Avenue is the only property that fronts the street in a north/south direction. This lot is also much smaller in size and is flanked by larger lots that have frontage to Rosen Street. It therefore, has limited redevelopment opportunity on its own.

41. The Heritage Review assessed the heritage value of the HCA and has recommended the retention of the Rosebank Avenue HCA. However, this study only looks at the heritage factors and does not address the land use conflicts occurring at the interface at the rear of some of the properties within the Rosebank Avenue HCA.

42. A strong residential market has seen many of the R4 zoned sites be redeveloped for 5 storey residential flat buildings. This has created a conflict in land use that sees 5 storey residential flat buildings overlooking single and two

storey low density residential development which is significantly impacting on the privacy and amenity of the Rosebank Avenue residents, particularly those at No.s 1-7, and 2-8 Rosebank Avenue.

43. Section 7.4.1 of the Discussion Paper presents 7 options to resolve interface issues at the Rosebank Avenue HCA (as well as the Essex Street HCA which is discussed in the section below). The options range from "Maintain the HCA" to presenting an option that would permit "3 storey residential flat building" redevelopment and involve the removal of the HCA notation in the *HLEP 2013*.

44. Council Officers recommend three options (Options 4, 5 and 6) for the Rosebank Avenue HCA all of which involve:

    a. Removal of the HCA affectation in *HLEP 2013*; and

    b. Planning controls that permit demolition of the existing housing and two storey redevelopment comprising: (1) Dual Occupancy (side by side); (2) Town Houses; or (3) Manor home, (with the exception of the two heritage items).

45. With the adjacent creek (zoned RE1 Public Open Space) and the two heritage items sitting midway in the precinct, the Discussion Paper noted that further analysis be undertaken to assess how *different options that might be applied to different parts of the HCA* due to the fact that the interface issues primarily affect the couthern properties in Rosebank Avenue.

46. The standard question 7a. asks: *What is your preferred option and why?*

Community Feedback

47. Feedback from the community on Rosebank Avenue received via the community information sessions and via submissions was divided.

48. Some residents within Rosebank Avenue want to see the same planning controls that enable 5 storey residential development applied to their sites so they can maximise their economic benefit in the same way their neighbours have to the south and south east (refer to **Figure 5** below showing the extent of the HCA and street numbers).

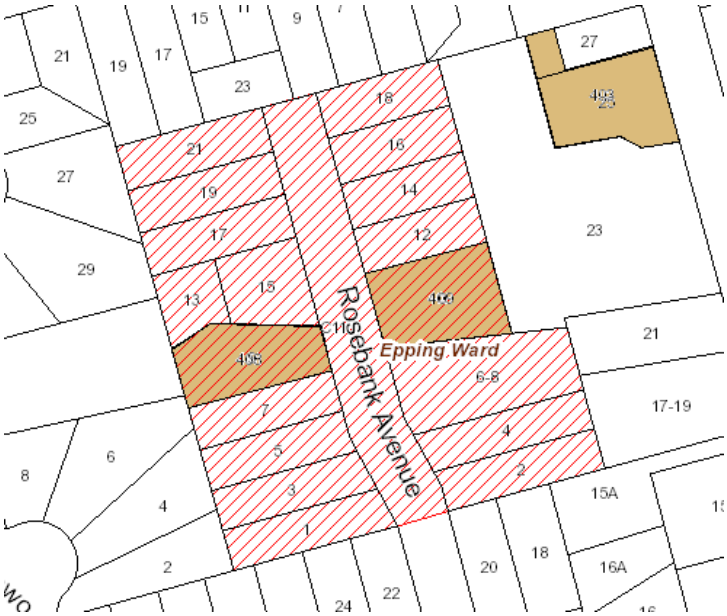

Figure 5 - Rosebank Avenue HCA and heritage items with street numbers

49. Views received via submissions and Community Workshop sessions from some residents who reside outside the HCA see the removal of the HCA and allowance for redevelopment as further degradation of local character. Many are unsympathetic to the residents experiencing the interface issues. Some view that the new R4 zone has been in place for over 3 and a half years and affected residents could have either sold up to a more tolerant resident who "knew what they were buying". Some hold the view that affected residents could have planted trees at the time the new controls came into effect to help mitigate the amenity and privacy impacts. There is also a perception from these respondents that the affected residents who see redevelopment as a resolution to the interface issues do not care about the impacts it will have on the residents who choose to stay or who are less affected by the new development.

50. With regards the heritage items at No.s 9 and 10 Rosebank Avenue, the predominant response from respondents was that the heritage items should be removed if the HCA notation is recommended for removal on the basis that the heritage items are just as affected as the properties at the sourthern portion of the precinct. They see that these properties also have visual proximity to the interface issues and this devalues the significance of the heritage items. There was also a contrary view – that the preference is for Options 1 ("Maintain the HCA") or Option 2 ("Landscaping at interface") across the precinct but notes that in the instance the HCA is recommended for removal, then the entire precinct should enable 5 storey residential flat buildings.

Conclusions and recommendations

51. The scope of the Stage 1 analysis and recommendations has been to address the unintended impacts resulting from the new planning controls introduced by the State Government in March 2014.

52. Having considered the feedback from the Phase 2 consultations, Council Officers **conclude**:

a. That Council Officers accept that there are severe interface issues occurring (or, in some cases, are yet to occur) to the southern half of the precinct; specifically, the properties at No.s 1, 3, 5 and 7 as well as 2, 4 and 6-8 are likely experience the same impacts as the remaining adjoining R4 zoned land is redeveloped over time.

b. That a heritage item (such as the two at No.s 9 and 10 Rosebank Avenue), as opposed to a property with just a HCA notation over it, has a much more significant role in terms of heritage conservation and protection. The importance of a heritage item relies less on the surrounding character and more so on its own individual historical attributes. As such, it is not uncommon for heritage items to sit amongst development that is of a different typology.

c. The RE1 zoned land to the west comprising the eastern edge of Kent Street Park – along with the two heritage items - also forms a 'break' and mid point within the Rosebank Avenue Precinct.

d. Council Officers see that the interface issues are less significant at the rear of No.s 12 to 18 Rosebank Avenue, despite the R4 zoning on the adjoining large site to the east at No.23 Ray Road. Constructed in early 2011, the development on this site incorporates 2.5 and 3 storey town house development which faces the properties at No.s 12 to 18 Rosebank Avenue. These townhouses shield the 4 storey residential flat building development that fronts Ray Road. Since 2011, tree

plantings now shield views to this development from Rosebank Avenue.

e. Similarly, Council Officers determine that there are no interface issues occurring (or anticipated to occur) at the rear of the sites at No.s 13 to 21 Rosebank Avenue. This also includes No.23 Rosebank Avenue. These sites do not adjoin any R4 zoned land. As noted above, the property at No.23 is isolated, smaller in size than the other Rosebank Avenue parcels and has little chance of being redeveloped and given it is surrounded by the R2 zoned properties which have frontage to Rosen Street. Therefore, the current R2 zone is not considered to be inappropriate against the R2 zoned land which has a two storey height limit.

f. That any change to the planning controls needs to be sensitive and sympathetic to the existing heritage items at No.s 9 and 10 Rosebank Avenue.

g. That the removal of the HCA notation will not have any impact on the heritage significance of the two heritage items situated at No.s 9 and 10 Rosebank Avenue (refer to **Figure 5**) as these properties are recognised for their significance as stand-alone sites.

h. That the basis for any changes to the planning controls is to place as little pressure as possible on local traffic.

53. Council Officers therefore, **recommend the following principles**:

a. In the case of properties situated at No.s 1, 3, 5 and 7 as well as 2, 4 and 6-8 Rosebank Avenue:

i. That Option 7 – 3 storey residential flat building redevelopment be permissible; and

ii. That further urban design work identify appropriate building height, density (FSR) controls, building setback and amalgamation controls so as to ensure an appropriate transition from 3 storeys to 2 storeys towards the heritage item sites to the north. This analysis will inform new DCP controls.

These recommended controls:

- enable owners to achieve economic benefit from a higher density solution.
- represent a sound transition in density from the 5 storey residential flat building to a single storey heritage item.

b. That the Rosebank Avenue HCA notation in *HLEP 2013* (labelled “C11”) be removed entirely.

c. That the existing heritage items at No.s 9 and 10 Rosebank Avenue remain listed in the LEP Heritage Schedule as heritage items.

d. In the case of the properties situated north of the heritage items comprising No.s 13 to 21 Rosebank Aveune (western side) and 12 to 18 Rosebank Avenue (eastern side) and of No.23 Rosebank Avenue, that there be no change to the LEP planning controls.

e. That in the case of the entire Rosebank Avenue area, that the relevant DCP controls be amended accordingly, including any amendments to

Section 9.3.14 'Rosebank Avenue (Epping) Heritage Conservation Area' section of the Hornsby DCP'.

f. That despite the increase in residential density proposed, that the above recommendations could proceed ahead of the completion of the Traffic study as they seek to urgently deal with the unintended impacts arising from the new planning controls implemented in 2014 relating to land use interface issues. Furthermore, the potential increase in dwelling numbers resulting from this recommendation is likely to be minimal when compared against the traffic impacts arising from proposals detailed later in this report.

Essex Street HCA

54. Until March 2014, land situated on the eastern side of Forest Grove - which directly adjoins land on the western side of Essex Street between Epping Road and Maida Road - was zoned R2 Low Density Residential. However, new planning controls which came into effect in March 2014 via the DP&E's Urban Activation Precinct process introduced the R4 zone. The R4 High Density Residential zone permits 5 storey residential flat buildings.

55. The Essex Street HCA and surrounding land zonings in *HLEP 2013* are illustrated in **Figure 6**, below.

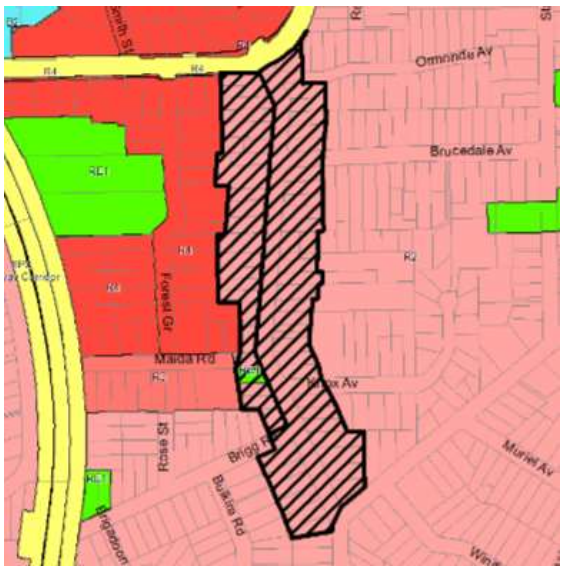

Figure 6 - Essex Street HCA (hashed) and current zoning

56. Four heritage items are situated within the Essex Street HCA - at No.s 42, 47, 76 and 84 Essex Street (refer to **Figure 7** below).

57. The Heritage Review assessed the heritage value of the HCA and has recommended retention of the Essex Street HCA. However, this study only looks at the heritage factors and does not address the land use conflicts occurring on the west side of the HCA between Epping Road and Maida Road.

58. A strong residential market has seen most of the R4 zoned sites (between Epping and Maida Roads) flanking the western side of Essex Street be redeveloped (or have existing approvals) for 5 storey residential flat buildings. This has created a conflict in land uses that sees 5 storey residential flat buildings overlooking single and two storey low density residential which is significantly impacting on the privacy and amenity of the Essex Street residents on the western side of Epping and Maida Road.

59. Section 7.4.1 of the Discussion Paper presents 7 options to resolve interface issues at the Rosebank Avenue HCA (as well as the Essex Street HCA which is discussed in the section below). The options range from "Maintain the HCA" to "3 storey residential flat building" redevelopment.

60. Council Officers recommend three options (Options 4, 5 and 6) for the Rosebank Avenue HCA all of which involve:

    a. Removal of the HCA notation in *HLEP 2013*; and

    b. Introduction of new planning controls that permit two storey redevelopment comprising: (1) Dual Occupancy (side by side); (2) Town Houses; or (3) Manor home (with the exception of heritage items).

61. The standard question, 7a., asks: *What is your preferred option and why?*

Community Feedback

62. Feedback from the community on the Essex Street HCA received via the community information sessions and via submissions is divided.

63. For residents residing on the western side of Essex Street, situated within the HCA, the responses were as follows:

    a. 75% of residents either supported the Council Officer recommendation or Option 7 ("3 Storey Residential Flat Building").

    b. 25% of residents supported Option 1 ("No Change").

64. The predominant view from residents on the eastern side of Essex Street within the HCA also support the removal of the HCA notation to enable redevelopment that enables a transition to the adjoining R4 zone. Views from the eastern side of Essex Street held the strong view that if there was any change to the building form on the western side of the street, that the same type of development should permissible on the eastern side of the street.

65. Views of residents that reside outside the HCA see the removal of the HCA and allowance for redevelopment as further degradation of local character. Furthermore these views have strong similarities with those of the residents situated outside the Rosebank Avenue HCA, in that:

    a. Some residents are not sympathetic to the residents experiencing the interface issues:

        i. Some view that affected residents could have addressed interface issues early by tree planting at the time the new controls came into effect to help mitigate the amenity and privacy impacts

        ii. Some view that affected residents could have either sold up and moved out by selling to a more tolerant resident who "knew what they were buying" and appreciates what special character is left.

        iii. Some have the perception that the affected residents who are fed up and want to sell to maximise their economic benefit do not care about the impacts it will have on the residents who choose to stay or who are less affected by the new development.

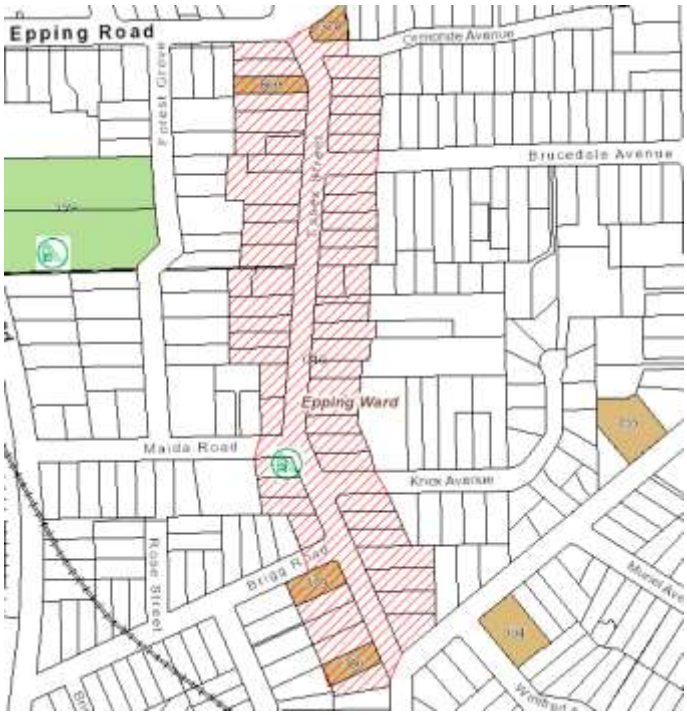

Figure 7 - Essex Street HCA and heritage items in HLEP 2013

Conclusions and recommendations

66. The scope of the Stage 1 analysis and recommendations has been to address the unintended impacts resulting from the new planning controls that came into effect by the State Government in March 2014.

67. Having considered the feedback from the Phase 2 consultations, Council Officers **conclude**:

    a. That there are significant interface issues that properties are experiencing on the western side of Essex Street HCA; specifically, those situated between Epping Road and No.86 Essex Street.

    b. That there are no interface issues being experienced on the eastern side of the Essex Street HCA despite the numerous views of the residents residing on the eastern side. The role of the Essex Street road reserve is critical in establishing a demarcation between land uses. The road reserve which is approximately 21 metres wide when measured between the front boundaries of the western and eastern side of the street acts as a clear demarcation for any change in land use and becomes the ideal “line in the sand”. If Council was to enable redevelopment uplift of the eastern side of Essex, this only pushes and extends the interface issue further east.

    c. Essex Street stretches from Oxford Street in the north to Abuklea Road in the south with the Essex Street HCA section occupying a little more than 25% of its full length. Therefore, any recommendations to change the eastern side of Essex Street within the HCA section is likely to result in the Essex Street residents situated outside of the HCA that own land zoned R2 Low Density Residential to also seek uplift because the rezoning of the eastern side will establish a precedent.

    d. Terry’s Creek forms a natural geographical boundary rather than a boundary for land use change. Relying on Terry’s Creek as a land use boundary would introduce a significant number of dwellings which

would not only have significant traffic implications but also result in significant additional land being up-zoned further away from the station.

e. Of the 3 recommended re-development options within the Discussion Paper (which were: Option 4 Dual Occupancy (side by side), Option 5 Town house re-development and Option 6 Manor home, that Council Officers recommend Option 6 Manor home because this option:

   i. Represents a sound transition in density from the 5 storey residential flat building to 2 a storey medium-density, to the 1 to 2 storey low density across the street. It means that no change to the existing height control is required.

   ii. Does not require site amalgamation so that owners will be able to independently develop their sites if they wish.

f. That if there is a recommendation that enables redevelopment of the western side of Essex Street between Epping and Maida Roads, that there is no heritage benefit in keeping the Essex Street HCA notation.

g. The removal of the HCA notation will not have any impact on the heritage significance of the four heritage items situated at No.s 42, 47, 76 and 84 Essex Street (refer to **Figure 7**) as these properties are recognised for their significance as stand-alone sites.

68. Council Officers therefore, **recommend the following principles**:

a. That the Essex Street HCA notation in *HLEP 2013* (labelled “C10”) be removed in full.

b. That the existing heritage items at No.s 42, 47, 76 and 84 Essex Street remain listed in the LEP Heritage Schedule as heritage items.

c. That the planning controls for the properties on the western side of the Essex Street HCA area be amended to permit re-development that involves demolition of the existing housing (with the exception of heritage items) to enable development of two storey manor home development, between Epping Road and Maida Road.

d. That the planning controls for the properties on the eastern side of the Essex Street HCA area remain unchanged and not be amended.

e. That further urban design be undertaken to determine the appropriate density, setbacks and other building envelope and controls to guide the development of new manor home development. This analysis will inform new development control plan (DCP) controls including any amendments to Section 9.3.13 ‘Essex Street (Epping) Heritage Conservation Area of the Hornsby DCP’.

f. That despite the increase in residential density proposed, that the above recommendations could proceed ahead of the completion of the Traffic study as they seek to urgently deal with the unintended impacts arising from the new planning controls implemented in 2014 relating to land use interface issues. Furthermore, the potential increase in dwelling numbers resulting from this recommendation is likely to be minimal when compared against the traffic impacts arising from proposals detailed later in this report.

Rockleigh Park

69. The Rockleigh Park precinct comprises 33 small subdivided lots that come off a small, narrow laneway system. The area is predominantly zoned R4 high Density Residential (shown edged yellow in **Figure 8** below) with an R3 Medium Density Residential zoned strip edging the north and eastern boundaries. The subject site currently contains medium density housing.

70. Until March 2014, the 36 parcels that make up Rockleigh Park were zoned R2 Low Density Residential Zone. However, new planning controls which came into effect in March 2014 via the DP&E's Urban Activation Precinct process introduced the R4 zone to the 18 parcels central within Rockleigh Park. The R4 High Density Residential zone permits 5 storey residential flat buildings. No sites have been redeveloped in accordance with the new zone on account of constraints around community title and the small street network.

71. The precinct's proximity to the R4 zoned land at Essex Street to the south and the East Epping HCA to the north (shown hashed red) are illustrated in **Figure 8**.

72. The Heritage Review commissioned by Council recommends down-zoning the parcels zoned R4 (which has a 17.5 metre or 5 storey building height) to R3 Medium Density Residential zone (which has a 12 metre or 4 storey building height) to better reflect existing development.

Figure 8 - Rockleigh Way (area edged in yellow and with a R3 zoned strip)

73. The Discussion Paper recommends supporting the R3 zone and that further urban design analysis to identify the appropriate amalgamation, height and density controls be carried out.

74. The proposed downzoning to the R3 zone better reflects the current use – small single and two storey cottages, some of which are attached, on a small, narrow laneway system.

75. The standard question at the end of this section (Question 7b) asks*: Do you agree with the recommendation for Rockleigh Park?*

Community Feedback

76. Community feedback from residents on this issue showed strong support for the down zoning of the site from the R4 zone to the R3 zone.

77. Respondents also said that the proposed R3 zone:

a. Would more appropriately deal with the transition between higher and lower density areas; and

b. Should be supported by a master planning process so that appropriate heights and density controls can be put in place.

Conclusions and recommendations

78. The scope of the Stage 1 analysis and recommendations has been to address the unintended impacts resulting from the new planning controls that came into effect by the State Government in March 2014.

79. Having considered the feedback from the Phase 2 consultations, Council Officers **conclude**:

    a. With 18 lots zoned R4 and 15 lots zoned R3 all of which rely on the same small road network for access which falls under a community title, it is highly unlikely that these sites will be purchased by a developer for redevelopment.

    b. The recommended downzoning better reflects the current use – small single and two storey cottages, some of which are attached, on a small, narrow laneway system.

    c. The proposed R3 Medium Density Residential zone is consistent with the Rockleigh Park properties that form its northern and eastern boundaries.

    d. That redevelopment of Rockleigh Park for 5 storey residential flat building development would reflect further and unnecessary encroachment of inappropriate high density development up against low density development.

    e. That the recommendation within the Discussion Paper to down-zone the R4 zone to the R3 zone still stands.

80. Council Officers therefore, **recommend the following principles**:

    a. That the component of Rockleigh Park currently zoned R4 be rezoned to the R3 zone so that the entire 33 parcels fall under a single (R3) zone consistent with the recommendations with the Heritage Review and Discussion Paper.

    b. That further urban design analysis be undertaken across all of Rockleigh Park to determine the best building height and density (FSR) controls including amalgamation patterns should the site be amalgamated in the future. This analysis will also inform DCP controls.

1, 3, 3A, 5, 7, and 7A Norfolk Road and 25 Pembroke Street

81. The parcels at 1, 3, 3A, 5, 7, and 7A Norfolk Road and 25 Pembroke Street are all currently zoned R2 Low Density Residential with the properties at No.s 1, 3 and 3A Norfolk Road and 25 Pembroke Street located within the most southern section of the East Epping HCA (refer to **Figures 9 and 10**, below)

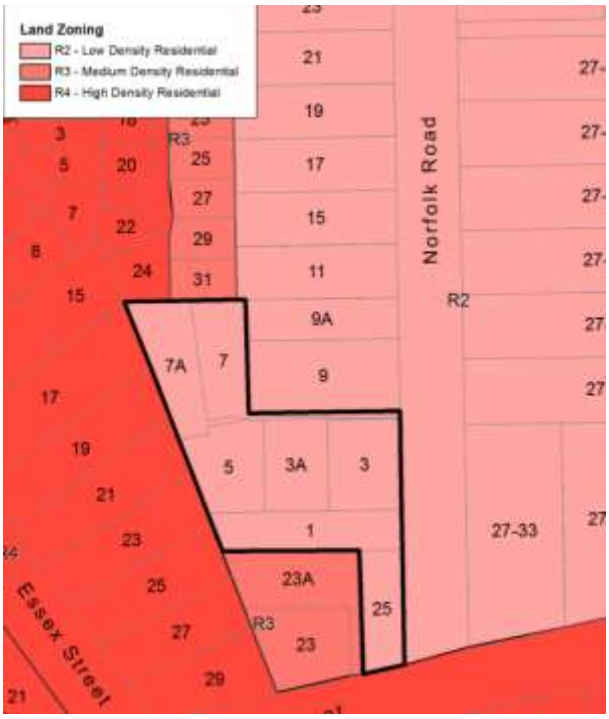

Figure 9 - Norfolk Road and Pembroke Street properties – land zonings as per HLEP 2013

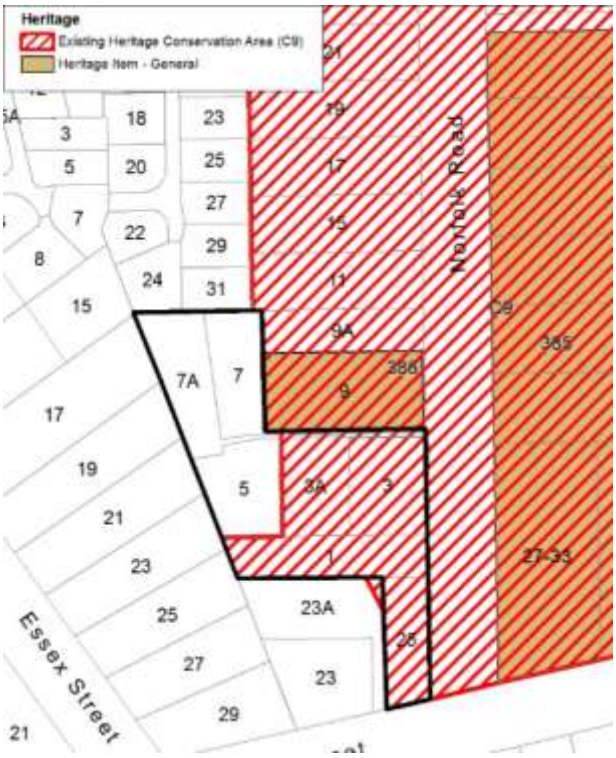

Figure 10 - Norfolk Road and Pembroke Street properties – HCA affectation and adjoining heritage item at 9 Norfolk Road HLEP 2013

82. Three parcels which do not have street frontage – No.s 5, 7 and 7A Norfolk Road are sandwiched between the HCA properties and a heritage item at No.9 Norfolk Road to the east and R4 zoned land which has a 5 storey height limit to the west. These sites are occupied by large houses which take up much of their respective sites.

83. Land to the south at 23 and 23A Pembroke Road has a R3 Medium Density Residential zoning and is also occupied by large dwelling houses that occupy much of their land parcel.

84. Until March 2014, the R4 zone to the west of this area did not exist. However, new planning controls which came into effect in March 2014 via the DP&E's Urban Activation Precinct process rezoned the R2 Low Density Residential land to the R4 High Density Residential zone which permits 5 storey residential flat buildings.

85. The Heritage Review commissioned by Council recommends:

    a. The removal of the East Epping HCA notation (labelled "C9" in *HLEP 2013*) over the properties at No.s 1, 3 and 3A Norfolk Road and 25 Pembroke Street; and

    b. Rezone No.s 1, 3 and 3A Norfolk Road and 25 Pembroke Street as well as No. 5, 7 and 7A to the R3 zone so all parcels share the same zoning and also, match the zoning to the south.

86. Since 2014, when the adjacent R4 zone came into effect, there has been no redevelopment of land in this vicinity however, it is noted that a strong residential market could drive redevelopment in the future.

87. To resolve any forthcoming interface issues at No.s 1, 3, 3A, 5, 7, and 7A Norfolk Road and 25 Pembroke Street, Section 7.4.2 of the Discussion Paper presented three options and sought feedback. The three options are as follows:

    a. Option 1 is as per the Heritage Review's recommendation (described above).

    b. Option 2 is to both:

        i. Remove the East Epping HCA notation (labelled "C9" in *HLEP 2013*) over the properties at No.s 1, 3 and 3A Norfolk Road and 25 Pembroke Street, and

        ii. Rezone all of the seven parcels to the R3 zone, but restrict development on No.s 3, 3A, 5, 7 and 7A Norfolk Road to a 2 storey manor home and encouraging No.s 1 Norfolk Road and 25 Pembroke Street to amalgamate with No.s 23 and 23A Pembroke Street to redevelopment into a town house scheme.

    c. Option 3 is to:

        i. Remove the East Epping HCA notation (labelled "C9" in *HLEP 2013*) over the properties at No.s 1, 3 and 3A Norfolk Road and 25 Pembroke Street, and

        ii. Retain the R2 zone on No.s 3, 3A, 5, 7 and 7A Norfolk Road, and

        iii. Allow No.1 Norfolk Road and 25 Pembroke Street to be rezoned to the R3 zone.

88. The standard question at the end of this section (Question 7c) asks: …*what is your preferred option and why?".*

Community Feedback

89. Feedback from the community via the community information sessions and submissions is divided.

90. Responses from the owners of No.s 1, 3, 3A, 5, 7, and 7A Norfolk Road and 25 Pembroke Street, included a coordinated group response which was included in some of the households' submissions. These indicated unanimous support

for Option 1 (remove HCA and rezone to R3). Key reasons for supporting this option were:

a. That there is a desire to resolve future interface issues with the anticipated R4 development yet to occur on the adjoining R4 land.

b. That the option could encourage amalgamated development sites large enough to support "high-quality integrated development" with adequate transition to adjacent low-rise areas and the Heritage Item at 9 Norfolk Road.

c. To encourage housing within walkable access to the school and town centre.

d. That Option 2 (manor home) was not preferred as it was seen as an undesirable and less integrated approach than larger site amalgamation along with the potential problems with strata-titled developments sharing one driveway (i.e. access, construction, utilities) was also raised although it should be noted that the manor home recommendation involves amalgamated sites.

e. That Option 3 was considered as an uncoordinated approach to zoning that could result in small, piecemeal development. An alternative for R4 zoning was also raised by some.

91. Feedback from two adjoining owners, including the owner of the adjoining heritage property at No. 9 Norfolk Road have preference for Option 3 as this is seen as a more appropriate building form response since the sites at No.s 3A, 5, 7 and 7A Norfolk Street have no street address.

92. Feedback from other residents were varied:

a. some seeing Option 2 as preferable,

b. others as Option 3 as preferable, with

c. others feeling that only limited redevelopment was acceptable (low density to be replaced with low density).

93. Other residents cited the local neighbourhood shop building which is attached to the dwelling at No. 25 Pembroke Street as a valued and historically important building in this area. However, despite the Heritage Study's identification of the site as a 'contributory item', it also recommends removal of the East Epping HCA notation over the site.

Conclusions and recommendations

94. The scope of the Stage 1 analysis and recommendations has been to address the unintended impacts resulting from the new planning controls that came into effect by the State Government in March 2014.

95. Having considered the feedback from the Phase 2 consultations, Council Officers **conclude**:

a. That any response needs to be sensitive to the heritage item at No.9 Norfolk Road.

b. The narrowness of the lots at No.25 Pembroke Street and No.1 Norfolk Street lend themselves to amalgamating with No.s 23 and 23A given their location.

c. That the R4 High Density Residential zone to the west and R3 Medium Density Residential zone to the south have the strong potential to result in interface issues which need to be managed.

96. Council Officers therefore, **recommend the following principles**:

a. That option 2 from the Discussion Paper be applied, which involves:

i. Removing the East Epping HCA notation (labelled "C9" in *HLEP 2013*) over the properties at No.s 1, 3 and 3A Norfolk Road and 25 Pembroke Street, and

ii. Rezoning all of the seven parcels to the R3 zone*, but:

1. Limit re-development on No.s 7 and 7A Norfolk Road to a 2 storey manor home.

2. Enable re-development on No.s 1, 3 and 3A, 5 Norfolk Road and 25 Pembroke Street to realise residential flat building (no more than 3 storeys in height) however, undertake urban design analysis to determine:

- appropriate height, density and amalgamation controls including the controls affecting No.s 23 and 23A Pembroke Street; and
- appropriate setback controls from the heritage item at No. 9 Norfolk Street; and
- that this analysis informs DCP controls including any amendments to section 9.3.12 'East Epping Heritage Conservation Area'.

Note: this may result in a different zone depending on the methodology utilized in the harmonization of the planning controls.

b. That despite the increase in residential density proposed, that the above recommendations could proceed ahead of the completion of the Traffic study as they seek to urgently deal with the unintended impacts arising from the new planning controls implemented in 2014 relating to land use interface issues. Furthermore, the potential increase in dwelling numbers resulting from this recommendation is likely to be minimal when compared against the traffic impacts arising from proposals detailed later in this report.

Rose Street precinct

97. The Rose Street Precinct is flanked by properties zoned R3 Medium Density Residential (which front Maida Road), Blaxland Road to the west, the Essex Street HCA properties to the east and Brigg Road to the south. It excludes the Essex Street properties and a pocket park in the north east corner with Maida Road and Essex Street. Refer to **Figure 11** below.

98. Until March 2014, land situated on the southern side Maida Road was zoned R2 Low Density Residential Zone. However, new planning controls which came into effect in March 2014 via the DP&E's Urban Activation Precinct process introduced the R3 zone to Maida Road. The R3 zone permits 4 storey residential flat buildings.

Figure 11 - Rose Street Precinct (area hashed blue)

99. The land that is zoned R3 is being redeveloped into 4 storey residential flat buildings. Also the topography slopes (downwards) to the south increasing the impact of the height of new development.

100. The Heritage Review assessed the appropriateness of the R2 zone with regards to the adjoining Essex Street HCA and concluded that the Rose Street precinct be upzoned to the R3 zone on a land use basis.

101. With regards to land outside the precinct (as per **Figure 11**, above) it should be noted that as per the recommendations for Essex Street, the HCA notation to the east of the precinct is recommended for removal.

102. As at mid July 2017, over two-thirds of the strip of R3 zoned land fronting Maida Road has either been developed as 4 storey residential flat buildings or is under construction for the same.

103. There is potentially an opportunity for Council to pursue an acquisition process to purchase sites for community/public open space in the vicinity of Rotary Park given the findings from the *Epping Social Infrastructure Study* which supported the Discussion Paper.

104. The Discussion Paper supports the recommendation within the Heritage Study - which is to zone the precinct R3 zone - but also recommends that further master planning work be undertaken to determine the appropriate height and density controls so as to ensure a clear transition to the R2 zoned land on the southern side of Brigg Road.

105. The Discussion Paper seeks feedback on the recommendation (Question 7d) which asks: *Do you agree with the recommendation for the Rose Street Precinct?*

Community Feedback

106. Council received a total of 45 submissions on this issue. Feedback from the community is divided. Responses from 19 respondents support the Discussion Paper's recommendation to up-zone the precinct. This is largely because those residing within the Rose Street precinct feel they have lost significant amenity with the introduction of the 4 storey residential flat building development occurring to the north. The views of residents outside the precinct (26 respondents) do not support the recommendation for up-zoning as they feel

that it will only extend pressure to upzone land further south. Some respondents have the view that the four storey interface is insignificant. (Refer to a summary of the submissions at **Attachment 3**).

107. The above views were also reflected at the Community Information Sessions (refer to Straight Talk's *Epping Town Centre Review - Phase Two - Exhibition period consultation* at **Attachment 2**).

Conclusions/Recommendations

108. The scope of the Stage 1 analysis and recommendations has been to address the unintended impacts resulting from the new planning controls that came into effect by the State Government in March 2014.

109. Having considered the feedback from the Phase 2 consultations, Council Officers **conclude**:

    a. That the interface issues that are occurring to the north of the precinct require a land use planning response to manage these interface issues.

    b. That the recommended R3 Medium Density zone in the Heritage Review and the Discussion Paper generally represents a sound transition to the R2 zone on the southern side of Briggs Road providing that master planning is undertaken for this precinct.

110. Council Officers therefore, **recommend the following principles**:

    a. That the land be rezoned to the R3 zone*; and

    b. That further urban design analysis/master planning process is needed to:

        i. Determine how development from the north needs to step down to a building height of 2 storeys at the Brigg Road frontage to transition to development across the road. Transition should also be considered towards the eastern end of the site to ensure future massing appropriately responds to the low density residential development fronting Essex Street.

        ii. Determine an appropriate amalgamation pattern, building height, density and setback controls as well as provision of communal and public open space

        iii. That this analysis inform DCP controls.

    Note: this may result in a different zone depending on the methodology utilized in the harmonization of the planning controls. But the intended built form outcome will remain the same.

    c. That despite the increase in residential density proposed, that the above recommendations could proceed ahead of the completion of the Traffic study as they seek to urgently deal with the unintended impacts arising from the new planning controls implemented in 2014 relating to land use interface issues. Furthermore, the potential increase in dwelling numbers resulting from this recommendation is likely to be minimal when compared against the traffic impacts arising from proposals detailed later in this report.

Hornsby Heritage Review Stage 6

111. Section 7.1 within the Heritage Chapter of the Discussion Paper responds to a previous Hornsby Shire Council resolution pertaining to certain heritage matters in Epping.

112. Identified as part of 'Stage 6' of the Hornsby Shire Council Heritage Study Review, the Heritage Study prepared by City Plan Services reviewed these matters and made a number of recommendations. These matters and recommendations are detailed in **Attachment 5** and are also detailed in the consolidated list of recommendations contained in **Attachment 6**.

COMMERCIAL FLOORSPACE CHAPTER

113. As noted in the Discussion Paper, in 2011 the Epping Town Centre had 4,512 jobs with 55,000sqm of office floor space and 13,000sqm of retail floor space. However, since 2014, new development within the B2 Local Centre zone has reduced the amount of office floor space. Developers are replacing existing large scale office towers and small scale (2 and 3 storey) office development with shop top housing.

114. This trend is occurring despite the Hornsby DCP controls requiring non-residential uses on the first two to three floors of development in the B2 Local Centre zone. Parramatta's DCP controls require applicant's to provide "up to" 4 storeys of commercial development, but only for development on Beecroft Road.

> **Note:** Commercial floorpsace is floorspace utilised for retail, office or business premises.

115. The Department's position on the reduction of commercial floor space is that, based on market analysis, demand for commercial floor space is expected to reduce as other centres such as Macquarie Park and Norwest Business Park become more attractive. City of Parramatta commenced a review and in response commissioned SGS Economics and Planning to understand whether the loss of floor space is a positive trend, and to understand other commercial land use elements that may create a more successful town centre.

116. Chapter 8.0 of the Discussion Paper responds to the recommendations made within SGS Economics and Planning *Epping Town Centre Commercial Floorspace Study* ("Floorspace Study") as well as feedback received from residents during the Phase 1 consultations held in May this year.

117. The sub-sections below summarise the responses to the Discussion Paper's nine questions which pertain to:

    a. Epping Town Centre's role as a Sub-District Centre;

    b. The role of Government owned sites; and

    c. The mix of retail uses.

Epping as a Sub District Town Centre in 2036

118. One of the concepts considered in the Floorspace Study is the State Government's **30-minute city** where people can access a wide range of job, services and other opportunities within 30 minutes from their place of residence.

119. Sections 8.5.1 and 8.5.2 within the Discussion Paper comprises three questions (8a to 8c) which seek feedback on the future role of the Epping Town Centre to the year 2036.

Community Feedback

120. With regards to question 8a: *Should Epping evolve as a Sub District Centre with a target of achieving the commercial floor space targets without any increase in Net Floor Space on Business B2 zoned sites?* The community's responses are highly supportive of the role of the centre having a significant component of commercial floorspace. The most common view is that there needs to be more variety in retail and more night time activity.

121. With regards to questions 8b and 8c, these ask if Epping should evolve as a Sub District Centre:

    a. Without any increase in net floorspace (8b) noting that additional commercial floorspace provision would be provided at the expense of residential development; or

    b. By allowing an increase in net floorspace (8c) to recognise the need for increased provision of commercial floorspace.

122. Responses were as follows:

    a. Despite residents generally recognising the need for additional commercial floorpsace, residents generally consider that this additional floorpsace should be contained within the current height and density controls.

    b. Developers believe that an incentive – such as mandating a minimum commercial floorspace - needs to ensure that there is no net loss of potential residential floorspace and is an essential mechanism to ensure the delivery of the amount of commercial floorspace to deliver a sub-district centre.

Conclusions and recommendations

123. The scope of the Stage 1 analysis and recommendations has been to address the unintended impacts resulting from the new planning controls that came into effect by the State Government in March 2014.

124. Having considered the feedback from the Phase 2 consultations, Council Officers **conclude** the following:

    a. That Epping Town Centre should aim to be a Sub-District Centre in 2036 (ie. 13,000sqm of retail floorspace and 55,000sqm of other commercial floorspace) as per the *Epping Commercial Floorspace Study* prepared by SGS Economics and Planning.

    b. The urban design analysis demonstrates that a 3 storey podium is required on remaining developable sites within the town centre to achieve the target identified in the Study.

    c. In order for the Epping Town Centre to become a vibrant commercial centre, additional floorspace which enables higher rates of office and retail floor space is needed.

    d. Such controls need to be mandated and therefore, should be in the LEP not the just the DCP.

e. That the traffic implications of increased commercial floorspace provision and associated increase in residential floorspace (should this be supported) be tested as part of the traffic study.

125. Council Officers **recommend the following principles**:

a. That further analysis be undertaken to determine the best LEP mechanism that mandates for a minimum amount of commercial floorspace within suitable locations that delivers a minimum 3 storey podium of commercial floorspace in the LEP and that this apply to all land zoned B2 without having the need to expand the B2 zone (except in the case of the site at 240-244 Beecroft Road – see below).

b. That any additional residential floorspace and height be investigated and analysed through the Traffic Study to partially recognise the proposed requirement to provide increased commercial floorspace.

c. That the SGS Economics and Planning's *Epping Commercial Floorspace Study* and Section 8.5.2 of the Epping Planning Review Discussion Paper which demonstrates that there is demand for additional retail and commercial floor space in Epping be used to inform the assessment of future development applications until more formal planning controls are in place.

Role of Government owned Sites

126. As noted in the Discussion Paper, the *Epping Commercial Floorspace Study* has identified a role where Government-owned sites could be used as part of a deliberate strategy to support the Government's 30-minute city strategy by:

a. Providing commercial floor space to offset the loss when other sites are developed; and

b. Providing floor space to allow businesses that are displaced when their existing building is being redeveloped to relocate within the centre.

127. The section below discusses the Government-owned sites that have been identified as opportunities to contribute to the 30-minute city strategy.

<u>State Government owned sites</u>

128. Part of Section 8.5.3 of the Discussion Paper proposes two State Government owned sites within the town centre at the following addresses to provide commercial floorspace:

a. 240-244 Beecroft Road, Epping (see **Figure 12** below); and

b. Epping Railway Station Site (see **Figure 13** below).

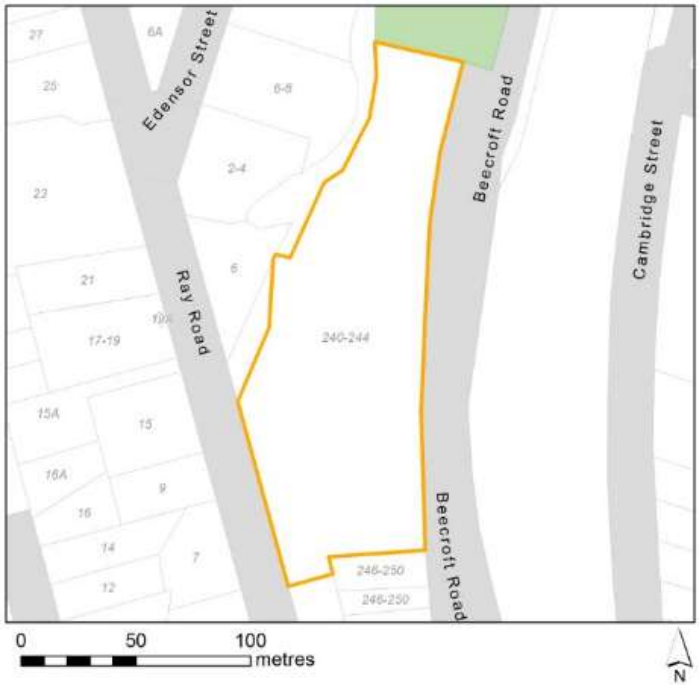

Figure 12 - UrbanGrowth NSW site – 240-244 Beecroft Road, Epping

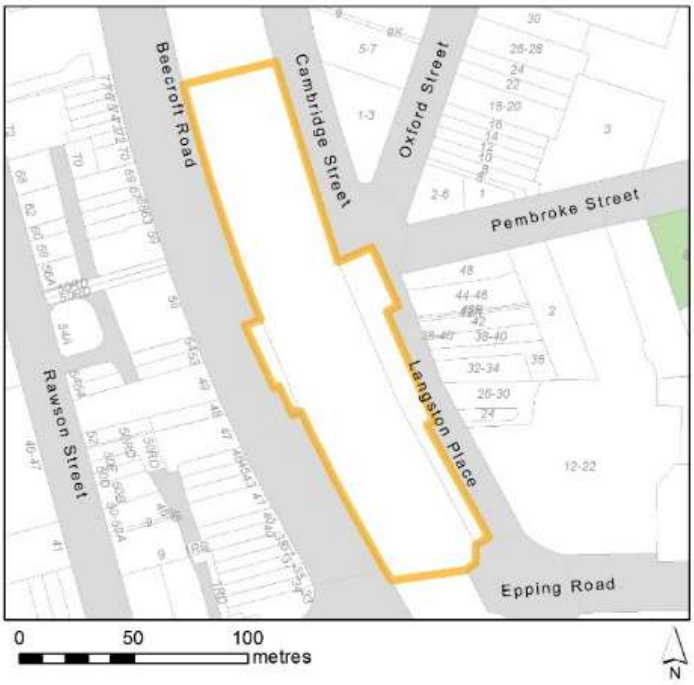

Figure 13 - Epping Railway Station site

129. The questions for each site (8e, 8f and 8g) asks the community *what contribution should each site make to the provision of commercial floor space in Epping*?

Community Feedback

130. A total of 40 responses were received on this question.

131. Community feedback received on the <u>UrbanGrowth site at 240-244 Beecroft Road, Epping</u> was:

    a. 19 submissions supported commercial and/or retail uses at the site, though some of these preferred commercial only, while more preferred a mix of non-residential uses.

b. Some respondents saw the site as having potential to provide commuter parking or a bus interchange.

c. Some respondents, including the land owner were of the view that the R4 High Density Residential zone was appropriate; reasons offered in support of this view included its proximity to the station and that there are other more suitable and feasible large commercial sites nearby. The landowner, a State Government agency, also questioned the need for large-scale floorplates in the town centre and at this site specifically.

132. Community feedback received on the Railway Station Site was as follows:

a. There was a high level of agreement that it could make a strong contribution to connectivity and civic space. The existing pedestrian connections through the station site were generally seen as inadequate, unattractive and inaccessible, and viewed redevelopment as a potential way to address some of these issues.

b. While there was a high level of support for use of this site for public open space and to improve public connectivity, there was less support for associated development due to concerns such as perceived overdevelopment and potential impacts on views and overshadowing.

c. While some submissions acknowledged that partnering with a developer might be necessary to realise development at this site, in general, only a low level of development was seen as acceptable – with many not accepting any level of development at all.

d. Many submissions acknowledged the technical complexity of such an undertaking, due to interface with the rail line.

Refer to a summary of the submissions at **Attachment 3.**

133. The above views were also reflected in the Community Workshop Sessions (refer to the *Epping Town Centre Review: Phase two – Exhibition period consultation* **Attachment 2**).

Conclusions and recommendations

134. The scope of the Stage 1 analysis and recommendations has been to address the unintended impacts resulting from the new planning controls that came into effect by the State Government in March 2014.

135. Having considered the feedback from the Phase 2 consultations, Council Officers **conclude**:

a. The State Government site situated at 240-244 Beecroft Road had previously been zoned B2 zone up to March 2014 when the State Government rezoned the land to residential. The amount of commercial floorspace that the site could deliver under the current controls would be tokenistic given its current R4 zone which only permits shop top housing and neighbourhood shops.

b. Large floorplate commercial is an important part of making a town centre commercially vibrant and diverse. The centre's poor offering of large floorplate commercial is identified as a disadvantage in the SGS Economics and Planning *Commercial Floorspace Study*.

c. There is limited opportunity for large floorplate commercial floorspace within the town centre.

d. The State Government sites:

i. Are large in scale (particularly the Beecroft Road site) and can make a unique offering by providing large floorplate commercial as found by the *Floorspace Study*.

ii. Can make a contribution to commercial floorspace as per the urban design analysis which recommends three storey podium of commercial development.

Each State Government site could be individually assessed for an appropriate level and type of commercial floorspace.

136. Council Officers therefore, **recommend the following principles**:

a. With regards to the site at 240-244 Beecroft Road, that:

i. That Council amends the planning controls (as discussed above) to rezone the site back to the B2 zone to ensure an appropriate contribution is made towards commercial floorspace whilst retaining current residential floorspace capacity. This may include concentrating these uses at the southern end of the site.

ii. That Council meet with UrbanGrowth NSW to discuss this proposed amendment.

b. With regards to the Epping Railway Station site, that Council Officers meet with Transport for NSW to discuss the opportunities for the site to deliver commercial development.

c. That the traffic impacts of both options need to be properly understood before finalising any changes to the planning controls.

<u>Local Government owned sites</u>

137. Part of Section 8.5.3 of the Discussion Paper considers two Council owned sites within the town centre at:

a. Council Car Park site at Rawson Street (see **Figure 14**); and

b. Epping Library Site (see **Figure 15**).

Figure 14 - Council Car Park landholding – 51A and 51B Rawson Street, Epping

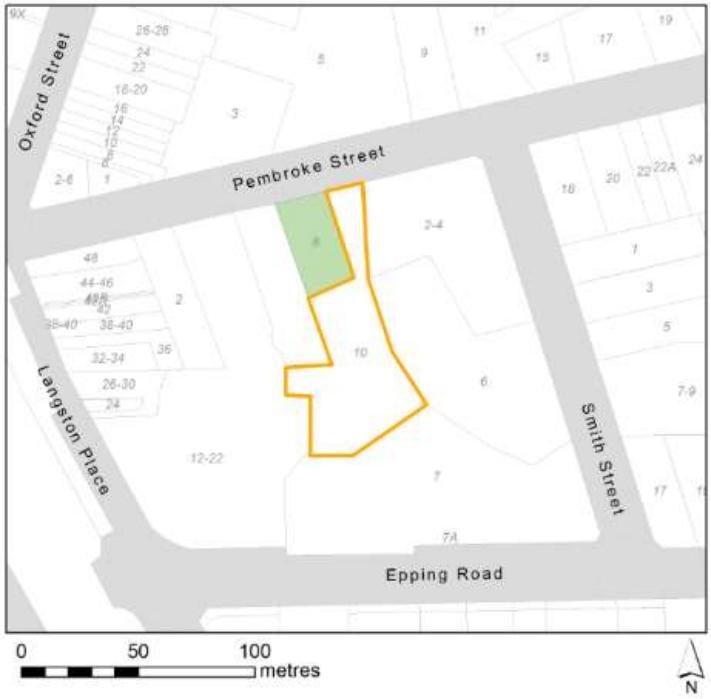

Figure 15 - Epping Library Site

138. Council has been approached by two developers to enter into an agreement to redevelop the Rawson Street car park.

139. The Epping Library site was previously identified by Hornsby Shire Council as a potential redevelopment site. Through an EOI process initiated by Hornsby Shire Council, it sought to redevelop the site with a view to being redeveloped with residential uses and a new library facility located on the lower storeys.

140. With regards to the Rawson Street car park site, the Discussion Paper recommended that the site not be identified as a site where significant commercial or retail floor space should be contemplated. If redeveloped, this site will more likely play a role ensuring that there is sufficient social infrastructure provided in the town centre.

141. The two questions – one for each site – asked:

    a. *8f. Should the Epping Library and Council car park sites play a role in providing for commercial floor space in the centre?*

    b. *8g. Should the floor space allocated to community uses and commercial floor spaces be equivalent to or greater than the levels required on adjoining equivalent sites?*

Community Feedback

142. A total of 38 responses were received on this question.

143. Community feedback received on the <u>Rawson Street Car Park site</u> was as follows:

    a. The predominant view was that respondents felt that the car park site should not be redeveloped to include commercial floor space. Instead an open space/plaza was preferred, in conjunction with linkages to nearby Boronia Park and underground parking.

    b. There were strong views that this site should be retained for public use only.

c. Some respondents (9) were positive about or at least willing to consider some commercial development here, some with provisos such that community facilities were maintained/increased, that height was limited, that access to Boronia Park was maintained, that such development might not be feasible given demand for commercial floor space, and that any such decision would require additional community consultation and careful consideration.

d. Refer to **Attachments 2 and 3** for a summary of the Community Workshop Session and submissions feedback.

144. Community feedback received on the Epping Library Site was as follows:

a. Views on the library site were more evenly-mixed. While 13 respondents were supportive or at least willing to consider such a proposal, 16 submissions were not supportive.

b. As with the car park, there was a frequent view that maintaining an exclusive public use on this site was important. Amongst those willing to consider a possible redevelopment, there were again provisos, such as prioritisation of community space over commercial, making space for NGOs, only with limited height potential, only with a master planning exercise, and only if community facilities were maintained or expanded.

Refer to a summary of the submissions at **Attachment 3.**

145. The above views were also reflected in the Community Workshop Sessions (refer to the *Epping Town Centre Review: Phase two – Exhibition period consultation* **Attachment 2**).

Conclusions and recommendations

146. These two Council assets are explored in more detail in the Social Infrastructure section of this Council report

147. Having considered the feedback from the Phase 2 consultations, Council Officers **conclude** in the Social Infrastructure section of this Council report:

a. Council Officers note and support the community's preference for Council to use its current assets at Rawson St and Chambers Court (Epping Library) for community uses.

b. Refer also to the Social Infrastructure section of this Council report where this asset is discussed in more detail including recommended principles.

148. Council Officers therefore, **recommend the principles**:

a. From the 'Local of Potential Civic Focal Point' section in the Social Infrastructure Chapter session of this report be applied here; and

b. That investigation take place on the potential for commercial uses on both sites and that occur in conjunction with the analysis on these sites' social/community role.

Delivering a supermarket on the eastern side of the Town Centre

149. As noted in Section 8.5.4 of the Discussion Paper, one of the issues that will impact on the future liveability of Epping Town Centre will be future residents' and workers' ability to access their daily food retail needs in a convenient manner.

150. The Discussion Paper explains that ideally there should be a supermarket provided on both sides of the rail line as supermarkets tend to be an anchor use that encourage other smaller and medium enterprises to locate nearby, providing a wider range of local uses for daily needs. A supermarket (Coles) already operates on the west side of the centre but there is no supermarket on the eastern side.

151. As the Discussion Paper explains, the planning system cannot mandate the location and operation of any business. The planning controls allocate floor space ratios and set in place planning controls that seek to create an environment for the business community to operate these types of businesses. Council cannot guarantee a supermarket would be provided, but it can put in place planning controls that promote or incentivise desirable outcomes and apply economic development initiatives to attract a supermarket tenant.

152. Supermarkets require large floorplates. On the eastern side of the Epping Town Centre, the existing lot pattern with multiple small shops requires significant lot amalgamation to occur to achieve an appropriate site. Having considered the pattern of Development Applications already in place and the possible locations for a supermarket, the Discussion Paper presents one site as ideal for a supermarket to service the eastern side of the Town Centre. The landholding (see **Figure 16**) consists of 7 sites – 38-48 Langston Place and 2 Pembroke Street – which together have a site area of approximately 2,900sqm.

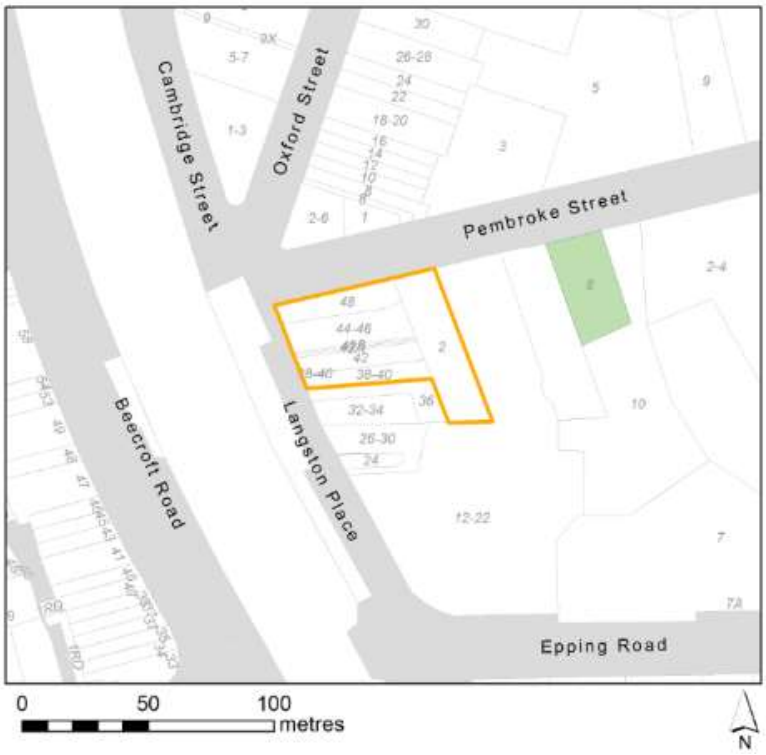

Figure 16 - Site identified within the Discussion Paper as a potential supermarket site on eastern side of Epping Town Centre

153. The question in the Discussion Paper, standard question 8h, asked *Should Council seek to actively encourage a supermarket site on the eastern side of the Epping Town Centre by providing floor space and height bonuses to incentivise the site amalgamation necessary to achieve a supermarket?*

Community Feedback

154. Specific feedback with regards to the eastern side was as follows:

a. Most respondents were positive about a supermarket on the eastern side of the rail line. There was a perception that additional residential development on the eastern side would necessitate this. As noted above, many submissions did not wish to accept height increases to incentivise this use.

b. Some alternative locations were suggested besides the one raised in the Discussion Paper, such as church and library sites on the eastern side, or at the end of Chester Street where traffic is less of an issue.

c. Few felt that supermarket options on the western side and/or nearby centres was sufficient, and that an additional supermarket was not needed on the eastern side.

155. Specific feedback with regards to the western side was as follows:

a. There were more mixed views about additional or new supermarkets, and this seemed to be affected by the fact that there is already a supermarket on the western side.

b. Most respondents did not support planning incentives to deliver a supermarket.

c. Some respondents saw supermarkets as a secondary consideration on the western side, instead considering smaller shops, services and other commercial floor space as more important.

d. Some respondents suggested that DCP controls be drafted to support delivery of a supermarket, rather than incentives.

Conclusions and recommendations

156. Having considered the feedback from the Phase 2 consultations, Council Officers **conclude and recommend the following principle**:

a. That the requirement for 3 storey commercial podium (as discussed, above) would provide additional floorpsace for commercial and retail uses that could assist in potentially delivering a supermarket on the eastern side.

Other Large Floorplate Retail Options

157. As noted in Section 8.5.4 of the Discussion Paper, Council has two Preliminary Planning Proposals seeking to increase FSR and height on sites on the western side of the Epping Town Centre. In both the proposals submitted there are large floorplate shops provided for in the lower levels. (Refer to **Figures 17 and 18**).

158. In order to achieve a role for Epping as a sub district centre, it is critical that these sites provide commercial levels in a podium and that larger floorplate shops are retained within it. The DCP currently requires up to a 4 storey podium be provided for the Beecroft Road Site (see **Figure 18**). However, the current planning controls do not contain any provisions that require the applicants to retain large floorplate outlets. There are also no controls that require a supermarket site be retained for the site on the western corner of Rawson Road and Carlingford Road

159. This type of landuse/planning control has traditionally not been specified in a DCP and instead it has been left to the market to determine the mix of retail shop sites in a development. However, it is recommended that Council

strengthen its DCP controls to specify that large floorplate retail should be provided.

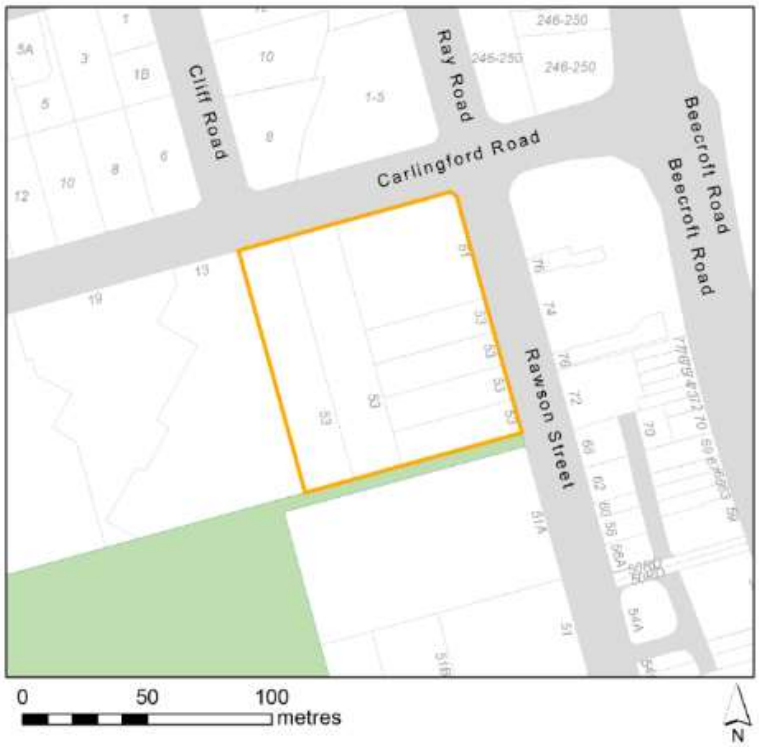

Figure 17 - Oakstand land holding

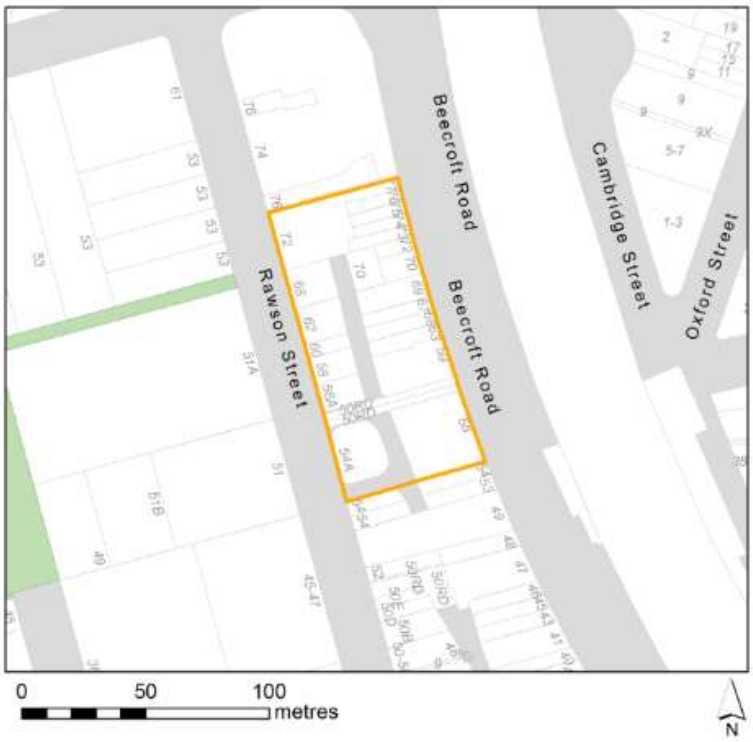

Figure 18 - Beecroft Road land holding

160. The circumstances for these sites are different to those discussed above in relation to providing a supermarket in the east. These sites have effectively already been amalgamated so there is no incentive required to promote amalgamation.

161. However, in both cases the applicants via their Preliminary Planning Proposals are seeking additional density on these sites over and above what is permitted

under the current controls. There are various other issues, particularly traffic management and urban design, that need to be considered before any decision about whether these sites will be able to be developed at higher densities.

162. However, a position Council could take is that any additional density on these sites (subject to Council being satisfied it is satisfactory from a traffic and urban design point of view) would be conditional upon large floorplate shops being provided.

163. The Discussion Paper question (8i) asked: *Should Council consider floor space incentives to seek to ensure larger floorplate retail shops on these sites?*

Community Feedback

164. There was a common, though not unanimous, view that more retail options are required across Epping. However, amongst the respondents who discussed incentives, most did not want Council to consider incentives to encourage amalgamation of large floorplates.

Conclusions and recommendations

165. These two sites are subject to another standard question (11a) in the report that asks if further consideration of the Planning Proposals (including the Austino planning Proposal) be deferred until the Traffic Study is complete so the traffic implications are fully understood (see on Traffic Chapter, below).

166. Council Officers therefore, **recommend the following principle**:

    a. That the consideration of large floorplate controls be deferred until the preliminary planning proposals can be progressed. See also recommendations in Traffic Chapter, below.

SOCIAL INFRASTRUCTURE CHAPTER

167. Chapter 9.0 Social Infrastructure comes from technical work initially prepared for Council by Suter Planners and Elton Consulting on Council's social infrastructure across the City of Parramatta local government area. The analysis relevant to the Epping suburb was extracted and presented in the *Epping Social Infrastructure Study* prepared by Council which supported the exhibition of the Discussion Paper.

168. The role of the Chapter 9.0 Social Infrastructure is to identify principles that will guide future decision making on the provision of social infrastructure. The outcomes are via feedback received on the questions.

169. The Discussion Paper recognises that the process will also need to be informed by project feasibility and financial analysis prior to Council making any decisions on exactly how and where social infrastructure changes are pursued in the future.

170. The Discussion Paper looks at the areas requiring attention in Epping:

    a. Improving access to open space
    b. Location of potential future Civic Focal Point
    c. Methods for funding and delivering a potential future Civic Focal Point
    d. Dence Park - Epping Aquatic and Leisure Centre.

    These are summarised below.

Improving open space provision in Epping to 2036

171. Section 9.5.1 of the Discussion Paper discusses three issues that seek to improve open space provision to meet the Epping community's needs by 2036. These are outlined and addressed below.

Assessing where new land should be acquired for open space

172. The Discussion Paper's recommended principle is that Council look at opportunities to expand the size of existing parks over and above creating new parks. The Discussion Paper's standard question (9a.) asks: *Do you support an approach of expanding existing parks in and around Epping ahead of the creation of a new park in the area around the Epping Town Centre?*

Community Feedback

173. Feedback from both the submissions and Phase 2 Community Workshops shows very strong community support for expanding open space opportunities in Epping, though it is noted that not all submissions appeared to view this question as a choice between expanding existing parks versus creating a new park. (A more detailed summary of feedback to this question is contained in **Attachments 2 and 3)**.

Conclusions and recommendations

174. Having considered the feedback from the Phase 2 consultations, Council Officers **conclude**:

    a. The community's strong support for expanding access to open space is noted.

    b. Community sentiment reflects the directions outlined for open space (parks) in Council's draft Social Infrastructure Strategy (SIS), which is to be publicly exhibited between August – September 2017, and is expected to be finalised by the end of 2017. In relation to parks, the draft Strategy suggests no net loss of current parks and outdoor recreation space provision in the City of Parramatta LGA, to increase the utilisation and hours of use of Council's exiting parks through improvements to quality and design, diversity of offer, enhanced pedestrian, cycle, public transport connections and or parking facilities, and further to seek to increase provision of open space for parks and outdoor recreation.

175. Council Officers therefore, **recommend the following principles**:

    a. That Council should investigate a series of detailed options to ensure that all its open space needs are met for the growing Epping population.

    b. That community feedback on expanding access to open space parks in Epping be considered as an information input to inform finalisation of Council's Social Infrastructure Strategy and the preparation of an Organised Sporting Asset Assessment Report (OSAAR) which is currently being drafted.

Acquisition of former bowling club site (725 Blaxland Road)

176. The Discussion Paper explains that a Planning Proposal by Austino Property Group applies (in part) to the former Epping Bowling Club site situated at 725 Blaxland Road (refer to **Figure 19** below). The site is currently zoned RE1

Public Recreation zone and identified for acquisition on the Land Reservation Map in *HLEP 2013*.

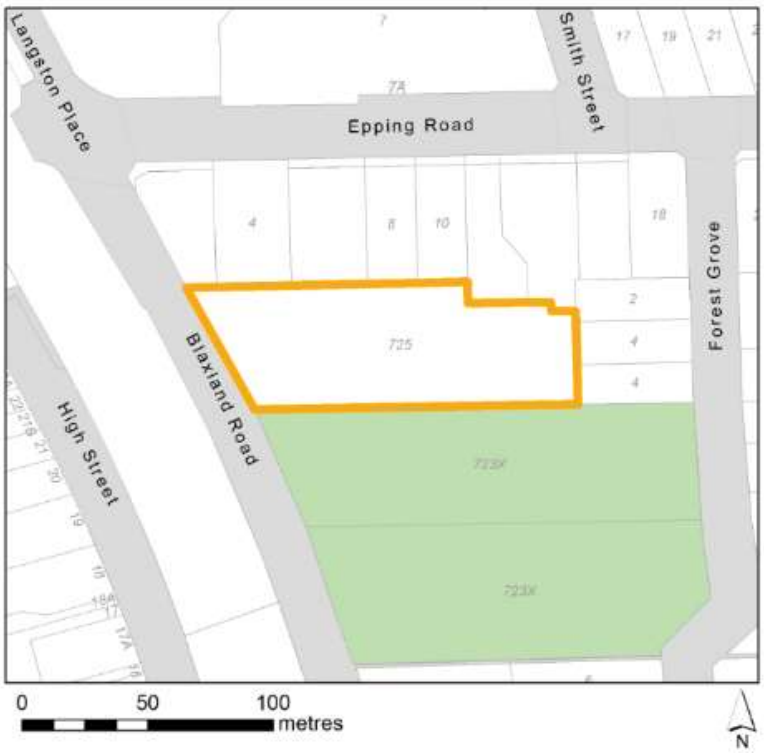

Figure 19 - Former bowling club site – 725 Blaxland Road, Epping

177. Despite this, the Hornsby Council concluded in April 2016 that the purchase of the site for the purpose of expanding Forest Park *is unlikely to represent value for money when compared with alternative open space options within the locality.*

178. The applicant's planning proposal is currently proceeding through the Department of Planning and Environment's Pre-Gateway Review process. In November 2016, Council nominated to be the relevant planning authority (RPA) in order to have influence over the outcome. It did so on the condition that the Gateway Determination is issued after the exhibition of the Discussion Paper and technical studies. However, because the Traffic Study is not yet complete, Council is reluctant to determine the planning proposal until the proponent's proposed density has been tested within the traffic model. Regardless, at any point, the Minister for Planning can withdraw Council's status as the RPA and take full control of the planning proposal process and progress it in a way that may not fully address Council's or the community's concerns.

179. The Discussion Paper's standard question (9b.) asks: *Should Council purchase the former Bowling Club site separate from the current Planning Proposal process or continue to consider the Planning Proposal option that it be provided to Council subject to additional density being permitted on the existing landowners site?*

Community Feedback

180. Feedback from both the submissions and Phase 2 Community Workshops shows very strong community support in favour of purchasing the Bowling Club and for Council to not progress the Planning Proposal. (A more detailed summary of feedback to this question is contained in **Attachments 2 and 3)**.

Conclusions and recommendations

181. Having considered the feedback from the Phase 2 consultations along with Council's analysis, Council Officers **conclude**:

    a. Council's Property officers have since undertaken an indicative assessment of the valuation of the site and determine that its value is cost prohibitive. The analysis further finds that Council would achieve better value for money by purchasing individual residential R2 zoned properties elsewhere near the town centre for a new park. Indicative costing of this alternate approach is provided within the *Draft Former Hornsby Council/Epping Town Centre Development Contributions Plans* which are scheduled to be exhibited from August to September 2017.

    b. That should the planning proposal progress, that Council negotiate with the developer for the provision of public open space appropriately located and sized on the site.

182. Council Officers **recommend the following principle**:

    a. That Council should seek to progress the planning proposal with Council as the RPA subject to the Traffic Study being completed before FSRs for the site can be finalised. That Council also negotiate with the developer for the provision of public open space in a way that ensures there is a suitable area of open space which is appropriately sized and located.

    Note: Refer also to the response to question 11a pertaining to *Consideration of Planning Proposals/Preliminary Planning Proposals*.

<u>Process for acquiring open space</u>

183. As noted within the Discussion Paper, Council will, as part of future phases of the planning process (initiated via the Discussion Paper) commence the feasibility analysis for identifying potential residential sites that could be acquired to expand existing parks. Consultation with land owners will precede any rezoning because in most instances they will be single detached homes. It will be necessary to explain to the occupants/owners the impacts on their property value, their ability to sell their site and the ability to stay on the site.

184. The Discussion Paper's question (9c.) asks: *Do you support Council pursuing a process where acquisition of land for open space is done on the basis of negotiated acquisition rather than compulsory acquisition?*

Community Feedback

185. With regards to the submissions received, there were mixed responses. Whilst respondents generally supported negotiated acquisition over compulsory acquisition, many other respondents expressed:

    a. support for compulsory acquisition in limited circumstances only;

    b. negotiated acquisition for private homes but compulsory at development sites;

    c. support for any option which would increase open space; and

    d. strict opposition to compulsory acquisition.

    A more detailed summary of feedback to this question is contained in **Attachment 3**.

186. With regards to the Phase 2 Community Workshop, the predominant response supported negotiated acquisition with a few respondents not supporting the idea. (A more detailed summary of feedback to this question is contained in Straight Talk's *Epping Town Centre Review: Phase two – Exhibition period consultation* report at **Attachment 2)**.

Conclusions and recommendations

187. Having considered the feedback from the Phase 2 consultations, Council Officers **conclude**:

    a. Council has prepared a Council wide draft *Social Infrastructure Strategy* (SIS) which is scheduled for exhibition from August to September 2017. The draft SIS: *identifies and assesses existing social infrastructure provision in City of Parramatta LGA. It identifies contemporary challenges we have for realising quality social infrastructure, and finally key opportunities and directions by asset type (including open space) and for City of Parramatta's 13 high growth areas (which includes Epping). This draft Strategy applies to our unique and diverse neighbourhoods as well as our CBD*.

    b. Council is also preparing an *Organised Sporting Asset Assessment Report* (OSAAR). The OSAAR will further assist Council to understand the specific challenges and opportunities that existing with each of our sports fields and determine the priority actions to take to increase provision and utilisation of our sports field open space. This will include sports fields in the suburb of Epping.

    c. The Discussion Paper process which constitutes Stage 1 of the Epping Planning Review aligns with the approaches being undertaken for the draft SIS and OSAAR, both of which are about increasing access to green open space.

188. Council Officers therefore, **recommend the following principle**:

    a. That the findings, analysis and feedback from Stage 1 of the Epping Planning Review process relating to the process for acquiring open space be considered as part of the preparation of the final SIS and OSAAR projects

<u>Utilising existing land more effectively</u>

189. The Discussion Paper explains that there are a number of factors that determine the level of intensity of use of a local park or sports field, to ensure it can be used by the community without being degraded. Two key factors are the amount (or type) of landscaping on the site, and the level of maintenance required. The Discussion Paper provides two examples:

    a. re-configuring landscaping in existing parks could enable more active uses (including both unstructured play and organised sporting activities) while also accommodating for the needs of residents who want to use parks to passively enjoy the outdoors.

    b. provide a different surface treatment to playgrounds and sporting fields to accommodate a higher level of use, such as the use of synthetic sporting surfaces.

190. The Discussion Paper's question (9d.) asks: *Are you supportive of Council investing in improved landscaping and equipment in parks and sporting fields,*

including investigating synthetic surfaces for sporting fields to cater for more intensive use?

Community Feedback

191. Feedback from both the submissions and Phase 2 Community Workshops revealed there was unanimous community support for improving landscaping, equipment and parks in Epping. There were mixed views on synthetic surfaces, with some accepting and some against their use. The community urged a site-by-site consideration of parks with additional consultation to make future decisions about improvements to parks and sports fields. (A more detailed summary of feedback to this question is contained in **Attachments 2 and 3**).

Conclusions and recommendations

192. Having considered the feedback from the Phase 2 consultations, Council Officers **conclude**:

    a. Council Officers recognise that the community of Epping support the upgrade and increased utilisation of parks and sports fields. Council Officers also acknowledge that there is mixed opinion for synthetic sports fields.

    b. The sports fields in the suburb of Epping must be analysed and planned within the context of the overall sports field network in the CoP LGA.

    c. Council has prepared a draft SIS which is scheduled for exhibition from August to September 2017. Work has also commenced on an LGA wide detailed organised sporting asset assessment (ie. the OSAAR).

    d. As part of the above documents Council will consider the use of synthetics and other options to increase utilisation and access to sports fields, as well as upgrades to parks within Epping.

193. Having considered the feedback from the Phase 2 consultations, Council Officers **recommend the following principle**:

    a. That the responses provided as part of the Phase 2 consultation process for the Epping Planning review relating to landscaping and synthetic surfaces for parks will inform the finalisation of the Social Infrastructure Strategy and Organised Sporting Asset Assessment Report. The intention is to finalise the SIS by the end of 2017.

<u>Establishing partnerships to make better use of existing facilities</u>

194. Large institutional landowners, including government and non-government schools, provide opportunities for Council to facilitate partnerships with local community organisations (such as amateur sports clubs) to make better use of existing facilities for the local community. In the case of schools, many children within the Epping community use their schools' open space areas during the week, but are unable to use the same fields on the weekend in organised sporting activities by non-school groups. The way in which schools are fenced off, and the way landscaping is used to prevent access is important to ensure the safety and supervision of students during school days, however there is an opportunity to consider further community use of schools' sporting fields.

195. Council considered a report on 13 June 2017 where it resolved to enter into a Memorandum of Understanding (MOU) with the NSW Department of Education (DOE). The associated Investigation Program identifies seven action areas that together form the basis of Council's initial work with DOE:

a. Increase community access to sports fields.

b. Establish formal arrangements between DOE and Council to continue use of Carlingford High School sports fields.

c. Increase community access to school halls and related facilities.

d. Increase community access to library facilities.

e. Proactive joint planning for the growth of Telopea and the shared use of school facilities and community assets.

f. Proactive joint planning and preparation to support the opening of Wentworth Point Public School.

g. Proactive joint planning of a primary school in the Carter Street Precinct.

196. The Discussion Paper sought feedback on how this MOU should be pursued in the Epping area through question 9e. *Which schools should Council pursue in the Epping area to progress the MOU between Council and the Department of Education to improve the availability of sporting fields?*

Community Feedback

197. The community's views from both submissions and the Phase 2 Community Workshops were as follows:

a. There is broad support for use of school facilities.

b. Some respondents query some of the detail about which schools and which facilities.

A more detailed summary of feedback to this question is contained in **Attachment 3**.

Conclusions and recommendations

198. Having considered the feedback from the Phase 2 consultations, Council Officers **conclude**:

a. That there is broad support for Council to work with schools to increase community use of school assets.

b. Council is commencing implementation and this includes investigating the suitability of individual schools and assets for community use.

c. Initial actions will focus on analysing the suitability of sports fields on specific school sites.

199. Council Officers therefore, **recommend the following principle:**

a. That the detailed community feedback provided as part of the Phase 2 community engagement process for the Epping Planning Review inform the implementation of the MOU with the DOE.

Location of potential future Civic Focal Point

200. Section 9.5.2 of the Discussion Paper defines a **Civic Focal Point** as comprising:

a. A library and community facility floor space; and

b. A public urban plaza.

201. The Discussion Paper (and *Epping Social Infrastructure Study* which supports the Discussion Paper) identifies:

a. That to meet the needs of a larger population living in a higher density environment by 2036, the Study recommends the provision of a 3,500sqm multi-purpose facility based on the Community Hub model (involving library and community facility floor space). This could include the co-location of an expanded library offering, as well as community meeting rooms, study areas, community programming facilities and the like.

b. That the 550sqm Epping library facility requires an additional minimum 1,000sqm to meet current population needs.

202. The Discussion Paper subsequently proposes three options for a civic focal point within the Epping Town Centre:

a. Rawson Street car park site (refer to **Figure 14**);

b. Epping Library site (refer to **Figure 15**); or

c. Two civic focal points each with a range of services.

203. The Discussion Paper then presents the Council Officer recommendation which is for Option 1 – Rawson Street Car Park site *as the site is better able to accommodate a Community Facility Hub and Civic Space in a way that can be integrated into the broader pedestrian network and town centre. ...[it] does not result in the loss of any existing community facility given that the public car park can be located underground below the new Community Facility Hub whereas the Epping Library Site and Pembroke Park would result in the loss of local open space if Pembroke Park was converted into a more formalised Civic Space.*

204. The city-wide Draft Social Infrastructure Strategy which is scheduled to be exhibited from August to September 2017, identifies the need to locate and plan for a civic focal point within the Epping Town Centre.

205. The Discussion Paper asked three questions relating to a Civic Focal Point:

a. Questions 9f. and 9g. asked: *Where is your preferred location for a Civic Focal Point incorporating a Community Facilities Hub and some form of Civic Space?* and *Why is this your preferred location?*

b. Question 9h. asked*: Would you support existing community facilities sites being sold to assist with funding a new consolidated single community hub to provide a higher quality community facility somewhere else within the Epping Town Centre?*

c. Question 9i. asked*: Should Council seek to develop Council-owned sites to maximise the funding available to deliver a new Civic Focal Point?*

The responses to the above questions pertaining to a Civic Focal Point are consolidated below.

Options for funding and delivering a potential future Civic Focal Point

206. Section 9.5.3 of the Discussion Paper proposes three options for funding and delivering a potential future Civic Focal Point:

a. Selling land that becomes surplus to requirements if a single Civic Focal Point is built;

b. Maximise the development potential of sites to assist with funding a Civic Focal Point; or

c. Allowing additional density to secure a new Civic Focal Point.

These are discussed below.

Selling land that becomes surplus to requirements if a single Civic Focal Point is built

207. As noted within the Discussion Paper, all Council-owned sites located within the town centre have some development potential for which Council could realise value by selling the site for redevelopment. Council could seek to sell any number of sites it currently owns to provide funding for delivery of the community infrastructure discussed in this section.

208. The purpose of selling sites would not be to reduce the level of services. Instead, the strategy would be to provide improved services in a more efficient way on a consolidated site.

Maximise the development potential of sites to assist with funding a Civic Focal Point

209. As noted within the Discussion Paper, one option for funding the provision of Community Infrastructure is for Council to realise the value of land holdings in a way that provides the community with a financial return that can be used to assist with funding the new Civic Focal Point (the EOI process that Hornsby Shire Council undertook before the Local Government boundary changes that saw Epping included in the City of Parramatta is an example which involved the Council finding a partner to develop a site). Another avenue can be through a planning proposal process involving Council owned land. Two Preliminary Planning Proposal examples were provided in the Discussion Paper.

210. The redevelopment of Council owned land in partnership with other partners can deliver significant community benefits that will allow the delivery of community infrastructure in a more financially sustainable manner. The Discussion Paper seeks feedback on whether the community is comfortable with this approach.

211. The Discussion Paper's question (9i.) asks*: Should Council seek to develop Council-owned sites to maximise the funding available to deliver a new Civic Focal Point?*

Allowing additional density to secure a new Civic Focal Point

212. The Discussion Paper notes two Preliminary Planning Proposals, for sites adjoining the Rawson Street Carpark Site. Both propose an increase in the overall density permitted on their site and both proposals seek to underground the carpark, and provide community facilities and a civic space.

213. The Discussion Paper's question 9j. which asks the community to consider a trade-off between timely provision of community facilities against additional density being permitted in the town centre, was: *Are you willing to accept further increases in density in the town centre if it would assist with funding a new Civic Focal Point?*

Community Feedback

214. Community feedback received from the submission process and Phase 2 Community Workshops on questions 9f, 9g and 9h pertaining to a Civic Focal Point indicated mixed views:

a. The most common response was a preference for two sites (and of these, most expressed support for the Rawson Street Car Park and Library sites). The key reasons for this included a preference for having

different sites for different uses and a perception of "fairness" across both sides of the rail line.

b. Of those who preferred a single site, the most common response was the Rawson Street Car Park site. The main advantages for this site were seen to be access, site size, parking and proximity to Boronia Park.

c. There was proportionately more support for Council seeking to develop Council-owned sites, than for selling existing community facilities or accepting further increases in density from the Phase 2 Community Workshops. This feedback was more supportive of such redevelopment models of Council-owned sites.

215. Refer to Straight Talk's *Epping Town Centre Review: Phase two – Exhibition period consultation* report at **Attachment 2**.a more detailed summary of feedback at **Attachment 3**.

Conclusions and recommendations

216. Having considered the feedback from the Phase 2 consultations and submissions, Council Officers **conclude**:

a. Council Officers note and support the community's preference for community facilities on both sides of the railway line.

b. Council Officers note and support the community's preference for Council to use its current assets at Rawson St and Chambers Court (Epping Library) for community uses.

c. Council officers note that there was no clear preference over the three options. However most support was given to the "developing council owned sites" option.

217. Council Officers therefore, **recommend the following principles**:

a. That Council utilise its assets at Rawson Street car park and Chambers Court to provide community infrastructure and civic focal points on both sides of the town centre.

b. That Council seek to develop a community hub (defined above) but on one of the sites and other adjunct uses for the other site.

c. That there be no net loss of community facility floor space overall in Epping.

d. That Council seek to increase the utilisation of all of Council's current assets in Epping for the broader community.

e. That further feasibility testing of Council owned land assets should be undertaken (including additional community consultation) to develop options - including a Community Hub (defined in the Discussion Paper as *a facility incorporating a library and community facility floor space*) and public urban plaza - and potential funding mechanisms for community facilities in Epping.

Dence Park – Epping Aquatic and Leisure Centre

218. Council's *Social Infrastructure Study* identifies that the Dence Park – Epping Aquatic and Leisure Centre is aging and has accessibility issues which means it does not meet current standards for this type of facility. Hornsby Shire

Council considered the option of closing the centre at the time the pool was its responsibility.

219. Section 9.5.4 of the Discussion Paper acknowledges that as part of the development of a community facilities strategy, Council will need to determine what role the Epping Aquatic and Leisure Centre might play. For instance, should the centre be redeveloped or modernised as an aquatic centre, or put to an alternate community use.

220. Through the Phase 1 community consultation process, it was clear the facility is a beloved community asset to sections of the Epping community. However, despite this impassioned position, usage levels of this facility have been in decline over the longer term, except in the last year where usage levels had actually increased since City of Parramatta took ownership.

221. The Discussion Paper noted the strengths and the weakness of the site. The strengths are that Council owns the land and that Council will open the pool for the October 2017 summer season. The weaknesses of the site are that:

    a. The Centre is aging, needs significant upgrading, and is at risk of significant infrastructure failure

    b. It lacks visual prominence,

    c. It is in a bushfire-prone site,

    d. Is underutilized, and

    e. The topography of the site makes modernising the site a relatively expensive exercise and impacts on its accessibility.

222. Adjoining bushland along Terrys Creek is a key wildlife corridor (confirmed in recent bushland fauna surveys).

223. The Discussion Paper's question (9k) asks: *What should be the future use of the Dence Park Aquatic Site?*

Community Feedback

224. The feedback from both the submissions and Phase 2 Community Workshops showed there was very strong community support to retain Dence Park for public and recreational uses. There was also strong community support to retain the swimming pool, and perhaps increase/improve it in some capacity with an expanded indoor fitness centre or similar uses. Furthermore, many respondents highlighted the environmental conservation value of the bushland and the need for its retention along with carefully selected passive recreational uses.

Conclusions and recommendations

225. Having considered the feedback from the Phase 2 consultations, Council Officers **conclude**:

    a. Council's Draft SIS which is being exhibited from August to September 2017 draws attention to the LGA-wide issues pertaining to the overall aquatic infrastructure/network.

    b. Adjoining bushland along Terrys Creek requires protection and there needs to be a restriction on the expansion of Dence Park aquatic facility.

226. Council Officers therefore, **recommend the following principles**:
    a. The feedback obtained from the Phase 2 consultation process be considered and integrated into the exhibition process for the Draft SIS.
    b. A master plan process be undertaken for the entire Dence Park site, giving consideration to the future options for aquatic and other water related activities for the Epping Aquatic and Leisure Centre, as well as increasing the overall recreation uses of the site and adjoining sensitive bushland.

PUBLIC DOMAIN CHAPTER

227. The intense growth within the Epping Town Centre has presented Council with the opportunity to review aspects of the centre's public domain, identify opportunities for improvements and present these to the community for discussion. The feedback and direction will also assist Council in advising Development Application and Planning Proposal applicants until new planning controls can be formulated. The areas requiring immediate attention are pedestrian connections and footpath widths.
228. Numerous urban design themes have been consistently raised throughout the consultation process on:
    a. Pedestrian connections - That pedestrian connections should be:
        i. created or improved either between or through blocks;
        ii. improved between different land uses and attractors (i.e. the centre and open space areas);
        iii. created at mid-block where block lengths were long; and
        iv. improved to form linkages from one side of the centre to the other.
    b. A vibrant centre – The community are enthusiastic about the possible future of Epping. They want their town centre to reflect the vibrant, friendly, community which they are familiar with.
    c. Enable liveability - The community see that future infrastructure planning needs to "enable liveable town centres" as an overarching principle.
229. The Discussion Paper subsequently presented two public domain issues:
    a. Through-block connections, streets, laneways and arcades and shareways; and
    b. Wider footpaths (which pertain to building setbacks).
230. The Discussion Paper asked two questions each were supported by a diagram:
    a. 10a. *Are there any other through site links outside of those that are already proposed in Figure 30 that should be considered by Council?* and
    b. 10b. *Do you think the new ground floor setbacks proposed in Figure 31 for Epping Town Centre are appropriate?*

Community Feedback

231. Community feedback (from 23 submissions) received on the through-block connections indicated the following:
    a. Some submissions broadly reflected that any and all links should be encouraged, in order to improve safe and pleasant access across the town centre.
    b. Many submissions also identified specific existing links that they wished to see reflected in the map.
    c. Some submissions proposed:
        - extensions to existing links, and/or
        - where a new link could be created.

232. Community feedback (from 21 submissions) received on wider footpaths said the following:
    a. The majority of submissions were supportive of the new ground floor setbacks proposed in the discussion paper.
    b. Some submissions noted that having setbacks which are consistent are important, and noted that the desired setbacks are not being achieved consistently through current controls (particular concern about current redevelopment at 35 Oxford Street).
    c. Some respondents felt that setbacks should be further increased (for example, on Oxford Street, Epping Road and Beecroft Road); justifications included that increased setbacks might provide space for larger trees, and that footpaths will continue to get busier in the town centre as Epping grows and that this could present safety and accessibility risks – particularly to those with limited mobility. Trees were seen in some submissions as being important to Epping's character, as well as having shading, cooling and aesthetics benefits.
    d. Some respondents also asked Council to consider cycling movement through Epping, as increasing bicycle trips could improve traffic issues.
    e. A couple of respondents were not supportive, as it was felt that the current setback situation is adequate.
    f. One developer was also not supportive of the proposed setbacks and instead proposed that setbacks be flexible in order to accommodate large retail/commercial floorplates at podium levels, should be determined at a master planning stage, and that having tightly controlled setbacks might not achieve the best outcome in all cases.

233. Refer to **Attachment 3** for a summary of the submission responses. Also, Public Domain matters were not covered by the Community Workshop Sessions.

Conclusions and recommendations

234. Having considered the feedback from the Phase 2 consultations, Council Officers **conclude**:
    a. There are a number of opportunities to improve the public domain in terms of delivering through-block links and wider footpaths.

b. The best mechanism for delivering public domain initiatives is via new DCP controls (where appropriate) and a revised public domain plan.

235. Council Officers therefore, **recommend the following principles**:

a. That as part of Stage 2 of the Epping Planning Review, that Council prepare appropriate DCP controls and a public domain plan that deliver through-block links and wider footpaths.

TRAFFIC CHAPTER

236. As noted on the Discussion Paper, Council has commissioned EMM Consulting to prepare a Traffic and Land Use Options Study (Traffic Study) to provide an evidence-based approach to the assessment of existing and future traffic conditions with different development scenarios for the Epping Town Centre and surrounds, including potential infrastructure improvements.

237. The Traffic Study builds on traffic study work which was carried out previously by Halcrow in 2011 on behalf of Hornsby Shire Council, the former Parramatta City Council and the Department of Planning and Environment as part of the proposed new planning controls implemented by the Department of Planning and Environment in 2014.

238. There are significant concerns from the community around the impacts of the additional residential densities permitted under the 2014 planning controls given the additional population envisaged and the subsequent impacts on an already congested and constrained road network. There is also increasing developer pressure to increase residential densities (through Planning Proposals) beyond that permitted under the existing planning framework.

239. EMM prepared *an Interim Traffic Modelling Report* which was exhibited as supporting information to the Discussion Paper. It included preliminary analysis to provide an indicator of the issues and options available to allow discussion of these issues as part of the exhibition process.

240. The preliminary advice concludes that regardless of what land use density options or road work improvements are put in place there is little scope for significant improvements to the way the road network operates in the Epping Town Centre without new and additional policies to reduce car usage and shift more trips that currently come through the centre by car onto public transport modes.

241. This chapter of the Discussion Paper presented six questions that play a role in developing the scenarios for the purposes of the traffic model exercise.

Consideration of Planning Proposals/Preliminary Planning Proposals

242. The Discussion Paper explains the level of developer interest in the Epping Town Centre with three planning proposal under assessment and other land owners also expressing a desire to seek uplift.

243. The standard question (11a) asks: *Should Council delay the processing of current and future Planning Proposals within the Epping Town Centre and surrounds until the Traffic Study is completed?*

Community Feedback

244. This matter received a total of 103 submissions - the most received for any standard question.

245. The predominant view (94 submissions) is overwhelmingly in favour of delaying the progression of any planning proposal including existing planning proposal, preliminary planning proposals and future planning proposals.

246. The majority of submissions to this question also raised concerns about existing traffic congestion in Epping (particularly around the Town Centre). Specific matters raised included:

    a. Residential growth has already outpaced the original traffic review carried out by Hornsby Council.

    b. There is a need to address traffic flows in and out of North Epping before further major developments are started.

    c. The volume of traffic has already increased markedly over the past decade and this is significantly detracting from the amenity of the Town Centre, with current levels of congestion only likely to worsen.

    d. A workable traffic solution for existing problems needs to be developed by Council and the RMS before any future Planning Proposals should be considered.

247. There was a broad view that further traffic analysis is required, and commentary on the Traffic Study was offered. Many submissions suggested that any additional impact from Planning Proposals (both current and future) needs to be carefully studied and understood, and that Council should not delay pending traffic studies.

248. A few submissions mentioned that the quality of the recommendations in the Traffic Study will depend on the quality of the assumptions made during the modelling performed. It was suggested that the Traffic Study should be peer reviewed and made available for public comment prior to finalisation. One submission recommended that the Traffic Study should assess usage and movement patterns in areas such as Cliff Road.

249. A total of 16 respondents specifically recommended that the Austino Planning Proposal be placed on hold until the Traffic Study is finalised, citing concerns about the level of density and the impact on local area traffic. In contrast, a developer submission from Austino strongly disagreed that current planning proposals be delayed until the traffic study is completed; this submission stated that this is currently the only major site in Epping that has been determined to have strategic merit by the NSW Department of Planning and Environment, the JRPP, and has been supported on traffic grounds by the RMS.

250. Some community responses sought to also delay development applications. However, under the *Environmental Planning and Assessment Act 1979* this is not legally possible. This position has been reinforced by Council's Administrator at the public launch of the Epping Planning Review in December 2016 as well as at subsequent community consultation sessions.

251. The above views were also expressed at the Community Workshop Sessions. Refer to **Attachments 2 and 3** for a summary of the Community Workshop Session and submissions feedback.

Conclusions and recommendations

252. The scope of the Stage 1 analysis and recommendations has been to address the unintended impacts resulting from the new planning controls that came into effect by the State Government in March 2014.

253. The Epping Town Centre currently experiences significant traffic delays during morning and afternoon peaks as a result of the significant amount through traffic as well as increased residential densities resulting from the new planning controls implemented in 2014. Until the traffic impacts of allowing increased development above and beyond current planning controls are properly understood (including the cumulative impact of current and potential planning proposals), any planning proposal should not be finalised.

254. Having considered the feedback from the Phase 2 consultations, Council Officers **conclude**:

    a. Council has deferred consideration of a Planning Proposal and two Preliminary Planning Proposal processes on account of the work being undertaken by the Epping Planning Review:

        i. The Austino Planning Proposal seeking to deliver an additional **272 dwellings**.

        ii. The Oakstand Preliminary Planning Proposal seeking to deliver an additional **922 dwellings***.

        iii. The Winten/Lyon Group Preliminary Planning Proposal seeking to deliver an additional **584 dwellings***.

        Note: with regards to the two preliminary planning proposals, it is accepted that the dwelling numbers as currently proposed cannot be delivered simultaneously as both proposal seek to develop Council's car park.

    b. In addition to the above, Council is aware of at least two other land holders potentially looking to pursue a planning proposal process. Therefore, there is an urgent need to understand the traffic issues prior to advancing proposals that seek development growth above the March 2014 planning controls.

    c. The Epping Town Centre has been doing a lot of the "heavy lifting" for the residential growth in this vicinity of Sydney. With the number of planning proposals and precinct planning projects across the LGA before Council, Council does not require any further uplift in Epping for the purpose of meeting its housing targets as expressed in the Greater Sydney Commission's *Draft West Central District Plan*. Also, as has been made clear, the scope of the Epping Planning Review has been to address the failings of the planning system that came into effect in March 2014. As such, additional requests for rezoning (received through the submission process) will not be considered as part of the Epping Planning Review.

    d. The pace of change is having a significant impact on the Epping residents. Council should therefore continue to manage any further formal requests for uplift (eg. planning proposal applications) outside of the Epping Planning Review process and be subject to the Epping Traffic Study which is still being completed.

    e. The scope of the traffic analysis has been undertaken to better understand the traffic impacts of any growth, not necessarily to enable any further growth within the Town Centre. Therefore, there is no urgency or need for Council to consider individual requests for uplift as part of the Epping Planning Review process. Instead, that applicant's seeking uplift should do this via a formal planning proposal process.

f. There is some urgency in bringing about the planning control changes to address the unintended impacts associated with the new planning controls that came into effect in March 2014 as soon as possible. The inclusion of other landowner sites within the Stage 2 process will only cause further delay to this process.

255. Council Officers therefore, **recommend the following principles:**

a. That Council continue to manage and progress the current planning proposal (Austino) given the potential risk of not being the Relevant Planning Authority (ie. the State Government becoming the Relevant Planning Authority). As mentioned previously, this is to ensure that Council's and the community's concerns and issues are addressed (eg. open space – refer to 'Acquisition of former bowling club site (725 Blaxland Road)' in Social Infrastructure section (ie. Response to question 9b). However, should the proposal proceed to Gateway Determination, that Council request that a condition be placed on the Gateway to ensure that the proposed FSRs for the site cannot be finalised until the Traffic Study is completed.

b. That following the Local Government elections in September 2017, the new Councillors be consulted and briefed on the progress of the Epping Planning Review and the community feedback received with regards to the future of the Rawson Street Car Park. This will enable Council officers to engage with the applicants of the 2 Preliminary Planning Proposals (Winten Lyon and Oakstand) to allow these proposals to be further considered.

c. That other landowners seeking to pursue development uplift will need to pursue this via a formal planning proposal process and not through the Epping Planning Review process.

d. That the Traffic Study must be completed to ensure that the traffic impacts of proposals seeking development uplift (with the exception of those changes proposed to deal with the unintended impacts of the previous UAP planning process) within Epping can be properly understood prior to any proposal being finalised. Furthermore, unless innovative solutions or initiatives that significantly curb or restrict car ownership/movements are incorporated as part of the development, that proposals seeking uplift will not be able to progress or be further considered given current traffic issues in Epping. Notwithstanding the above, any proposed parking/vehicle management solutions need to be assessed via the Traffic Study in order to determine its impact on the wider road network.

Car Parking Rates

256. Section 11.7.2 of the Discussion Paper explains the inconsistency between the parking rates between the Hornsby and Parramatta DCPs and the need to make them consistent. The Discussion Paper notes that parking rates should be reviewed and potentially further reduced to encourage residents to use public transport and other active transport modes.

257. The objectives around reducing car parking rates in DCPs is to minimise local car ownership and decrease private motor vehicle use.

258. The Discussion Paper's question (11b.) asks: *Should Council consider further reducing car parking rates as a means to reducing traffic within the Epping Town Centre and encourage public transport usage?*

Community Feedback

259. Community views (from a total of 38 respondents) were mixed with just over half of submissions not supporting this approach to reducing traffic.

260. Respondents that were not supportive (22) were of the view that reduced availability of car parking spaces will result in more on-street parking. Several believed that the current parking rates were reasonable and should not be changed. Some were sceptical on whether this would actually work in terms of reducing car ownership, and felt a more effective approach to reducing congestion would be to limit development instead.

261. Respondents that were supportive (11) generally took the view that the number of cars on the roads need to be reduced, with some supporting any measure to reduce the traffic load on Epping. Some submissions which were broadly supportive did note that reduced rates would be more appropriate for residential uses than for retail and service providers.

262. Many submissions were of the opinion that owning a car is necessary and that people cannot rely on public transport. These submissions mentioned that the new residents will need cars to move families around to libraries, school, after school activities, pick up from the station etc.

Conclusions and recommendations

263. The scope of the Stage 1 analysis and recommendations has been to address the unintended impacts resulting from the new planning controls that came into effect by the State Government in March 2014.

264. Having considered the feedback from the Phase 2 consultations, Council Officers **conclude**:

    a. That given the results of the interim traffic findings, reducing car parking rates is an important planning and traffic mechanism that can contribute towards the reduction of local car ownership and alternatively promote active and public transport options through and within Epping.

265. Council Officers therefore, **recommend the following principles**:

    a. The car parking rates across the Hornsby and Parramatta DCPs be reviewed to determine appropriate lower parking rates.

    b. That any proposed lower parking rate be tested as part of the traffic modelling in the Epping Traffic Study before changes are finalised.

    c. That further to points a. and b. above, an interim step towards reducing parking rates could be to amend Hornsby DCP parking controls (which have minimum parking rates) to be in line with Parramatta DCP parking controls (which have maximum parking rates).

Commuter Parking Station

266. Section 11.7.3 of the Discussion Paper explains that a number of stakeholders suggested that Council should either provide or lobby the State Government to provide commuter parking near the Epping Station. The argument put forward by proponents is that this would clear surrounding streets of commuter parking and improve access to local shops for local people.

267. Commuter parking at train stations is a complex issue that depends very much on local context. It is acknowledged that allowing people to drive to stations to use public transport is decreasing the length of cross-city vehicle trips and increasing the length of public transport trips which is to be encouraged. However, the provision of commuter car parks can have other unintended impacts unless it is implemented sensitively and in appropriate locations.

268. Again, the objectives around the car parking policy for the Epping Town Centre is to minimise local car ownership and decrease private motor vehicle use.

269. The Discussion Paper's question (11c.) asks: *Is there a suitable site for which Council should lobby the State Government to have a commuter parking station provided near Epping Station?*

Community Feedback

270. A total of 38 submissions were received with opinions split on this issue.

271. Across submissions supportive of commuter car parking, there was a view that the current situation where commuters park in local streets was not acceptable, as it affected locals, visitors, and businesses. Providing commuter car parking was seen as potentially increasing residents' usage of the rail line; current bus service was generally seen as poor, with commuter car parking as a better alternative. However, it was also noted that elderly residents who were unable to drive might still struggle to use transport.

272. The needs of neighbouring suburbs were also considered in some submissions, with the view expressed that North Epping residents need commuter parking as well; Transport for NSW's current investigations of a similar solution at Eastwood was also raised.

273. As noted above, several ideas about commuter car park sites were suggested:

    a. 240-244 Beecroft Road, mainly due to good station access,
    b. Above Epping Train Station,
    c. Above Rawson Street Car Park,
    d. Under current library site,
    e. Older apartment complex near Epping Station, through an acquisition process, and
    f. Inside newly constructed residential towers.

274. Many submissions took a broader view that any site considered should be within walking distance of the town centre and train station, while others were willing to consider sites outside the town centre in combination with shuttle buses to the station.

275. Amongst submissions not supporting commuter car parking, there was a common view that commuter parking would only increase traffic and local car use. Some felt that this would incentivise commuters from other suburbs coming into Epping to park, thereby impacting the road network and taking away parking from local residents. Others felt there was no suitable space in Epping for a commuter parking station, while others felt that a commuter parking station was a lower priority than valuable commercial, retail and residential space. Some felt that a low-cost shuttle bus would be a better alternative.

276. The above views were also expressed at the Community Workshop Sessions. Refer to **Attachments 2 and 3** for a summary of the Community Workshop Session and submissions feedback.

Conclusions and recommendations

277. Having considered the feedback from the Phase 2 consultations on a commuter car parking station in the Epping Town Centre, Council Officers maintain the views expressed in the Discussion Paper and therefore **conclude** the following:

    a. It will attract additional trips into the Epping Town Centre for the sole purpose of utilising the car park which will have a further detrimental impact on local traffic conditions and increase traffic congestion.

    b. It will encourage local employees to drive to the centre rather than arrive via public transport due to the increased access to day long parking options.

    c. Experience in other centres suggests that the availability of day long parking encourages more commuters to make the choice to drive to the station because of the increased likelihood they can find a park. If all spaces within the commuter car park are occupied, drivers will park on the street. So parking availability on local streets is not improved.

    d. An integrated transport system would see people take the bus from close to their home to the station to continue their public transport journey. This is most efficient and effective if regular bus services are feasible. The more commuter parking is provided the greater the negative impact on the feasibility of running regular bus services especially given the number of buses that provide access to Epping.

    e. Commuter parking stations do play an important role in promoting public transport but do not consider that Epping is an appropriate location for a commuter parking station.

278. Council Officers therefore, **recommend the following principles**:

    a. That Council Officers not pursue a policy of providing a commuter car parking facility within the Town Centre.

Policies to manage local parking and access to private motor vehicles

279. Section 11.7.4 of the Discussion Paper proposes two options to discourage residents that purchase into new high density development from parking in local residential streets:

    a. Resident or controlled parking schemes; and

    b. Car sharing scheme.

280. As Section 11.7.4 of the Discussion Paper noted, a commonly expressed concern when any proposal is put forward to decrease parking rates on site is that residents will still own a car and will park it on local streets. Should Council consider introducing maximum rates or reducing car parking rates below the “maximum rates” identified in the PDCP 2011 in order to influence mode shift, it is considered that additional measures could also be investigated to discourage residents purchasing into new high density development do not end up parking in local residential streets.

Resident or controlled car parking schemes

281. The Discussion Paper notes that a rollout of restricted/time limited parking zones within residential streets adjacent to higher density development could be investigated along with a resident parking scheme to enable existing residents within lower density residential zones up to a 3 storey apartment building to have the opportunity to apply for a permit to enable residents and their visitors to continue to have on-street parking albeit in a limited and controlled manner. Such initiatives also discourage commuters from parking within local streets close to Epping Station and depending on the nature of the restricted parking roll out, can encourage commuters to catch a bus to the Epping Station.

282. The fundamental objectives around introducing a resident or controlled parking scheme is to minimise local car ownership and decrease private motor vehicle use.

283. The Discussion Paper's question (11d.) asks: *Would you support the introduction of a Resident Parking Scheme where owners of new units would not be permitted to park on local streets as a way to discourage car ownership and manage parking on local streets?*

Community Feedback

284. Community views (from a total of 41 respondents) were mixed with more than half of submissions supporting this approach to reducing traffic.

285. Respondents that were supportive generally supported introducing restricted/time parking zones within residential streets adjacent to high density residential development. Others suggested delineating a radius around the station to which the scheme would apply. Others suggested that Council remove "full day" parking in favour of different timed parking options which radiated out from the centre. There was also a specific request for extension of 2-hour parking farther along Oxford Street.

286. Respondents that were not supportive had the following opinions:

    a. Many respondents felt that people would want to own cars, regardless of efforts made by Council to encourage behaviour change.

    b. Some were concerned about how the value of units might be affected with the introduction of a scheme. One was unsure about how this approach could help with reducing car ownership.

287. The above views were also expressed at the Community Workshop Sessions. Refer to **Attachments 2 and 3** for a summary of the Community Workshop Session and submissions feedback.

Conclusions and recommendations

288. The scope of the Stage 1 analysis and recommendations has been to address the unintended impacts resulting from the new planning controls that came into effect by the State Government in March 2014.

289. Having considered the feedback from the Phase 2 consultations, Council Officers **conclude**:

    a. There is strong community support for a residential or controlled parking scheme

290. Council Officers therefore, **recommend the following principle**:

a. That Council officers carry out further investigation around the potential implementation of a resident parking scheme in Epping in order to minimise local car ownership and decrease private motor vehicle use.

Car sharing scheme

291. As noted within the Discussion Paper, car sharing enables more sustainable travel habits by making more efficient use of a parking space either on street or within a private development. A single car share vehicle can replace up to 12 private vehicles that would otherwise compete for local parking (source: *www.cityofsydney.nsw.gov.au/live/residents/car-sharing*). Car share schemes provide flexibility to residents or businesses who either do not own a car, cannot justify car ownership given close proximity to public transport or lack of a parking space. Resident and businesses can book a car online when they need one and pick it up from a car share space.

292. Furthermore, car share users are charged by time and distance, at a rate set by each operator (e.g. GoGET, Hertz24/7). Costs associated with fuel, vehicle maintenance and insurance are usually included in the operator's hire fees. Car share spaces can be located on street with the agreement of Council or within larger scale developments.

293. The objectives around introducing a car sharing scheme is to minimise local car ownership and decrease private motor vehicle use.

294. The Discussion Paper's question (11e.) asks: *Do you support car sharing schemes as measures to decrease vehicle ownership and the potential impacts of decreasing parking rates for sites within walking distance of Epping Station?* This question sought feedback on reducing the rates of car parking provision in new development in the town centre.

Community Feedback

295. Community views were mixed on this question, with the majority of respondents supporting this approach to reducing traffic. Of those supporting the scheme:

    a. Many respondents offered feedback about providing and locating potential spaces:

        i. Some suggested dedicated spaces be created on both sides of the railway to reduce walking distance for all residents.

        ii. Some proposed a collaborative approach with neighbouring councils as was the idea of working in a network (along with existing car share facilities at Macquarie Park).

    b. Other views saw that car share spaces need to be dedicated for car share only, and that spaces should be included in new developments. One developer noted that they would be willing to include car share spaces in their basement parking allowance.

    c. Some views expressed uncertainty about the effectiveness of car share schemes (even across some of those who were supportive). Some were unsure if it would work effectively in the suburbs, while others were unsure if it would actually reduce car ownership rates.

    d. Some submissions suggested that Council would need to actively promote and make the community aware of alternative transport options like car sharing in order for this approach to have a positive impact.

Conclusions and recommendations

296. The scope of the Stage 1 analysis and recommendations has been to address the unintended impacts resulting from the new planning controls that came into effect by the State Government in March 2014.

297. Having considered the feedback from the Phase 2 consultations, Council Officers **conclude**:

    a. On 13 June 2017, the Parramatta Traffic Committee (PTC) and Traffic Engineering Advisory Group (TEAG) approved a number of car share spaces across the city (Item 1705 A3). However, it excluded a 6 car share parking spaces in Epping because whilst: *Council notes that car share may be an important element of creating a less private car dependent town centre, that car share arrangements be considered as part of the current traffic and land use study for Epping. No further action be taken on car share spaces in Epping until this study is complete.*

    b. The community feedback received on this issue reveals there is overwhelming support by Epping residents.

298. Council Officers therefore, **recommend the following principles**:

    a. That Council introduce a car share scheme in the Epping Town Centre as per the recommendations within the PTC report of 13 June 2017.

    b. That the potential for car share schemes to be provided within a development be further explored and if technically supported, be introduced as new DCP controls as part of Stage 2 of the Epping Planning Review.

Policies to manage local traffic congestion

299. Section 11.7.5 of the Discussion Paper proposes a “Stop/Go” traffic controller to manage pedestrian activity at the pedestrian crossing on Rawson Street adjacent to the Rawson Street car park.

300. The Discussion Paper’s standard question (11f.) asks: *Do you think Council should employ crossing attendants during peak conflict periods at the Rawson Street pedestrian crossing to manage the flow of pedestrians and vehicles to best manage congestion in Rawson Street?*

Community Feedback

301. With 44 submissions, the community was divided on this issue, with an equal number of submissions supporting/not supporting this approach and a small number undecided. The reasons for supporting the proposal were around improving pedestrian safety and managing congestion. The reasons for not supporting the proposal were around skepticism of its success.

302. The above views were also expressed at the Community Workshop Sessions. Refer to **Attachments 2 and 3** for a summary of the Community Workshop Session and submissions feedback.

Conclusions and recommendations

303. Having considered the feedback from the Phase 2 consultations, Council Officers **conclude**:

a. Council should consider funding a "Stop/Go" traffic controller on the crossing during peak times to control pedestrians, it would cost of up to $10,000 per month inclusive of all on costs.

b. There are technical legal questions over the enforceability of a "Stop/Go" traffic controller.

c. The effectiveness of a "Stop/Go" traffic controller is also limited, having to be positioned on one side of the street.

304. Council Officers therefore, **recommend the following principles**:

a. That Council trial a "Stop/Go" traffic controller at the pedestrian crossing on Rawson Street adjacent to the Rawson Street car park for a period of 2 months and report on the effectiveness of the trial to Council's PTC and TEAG by the middle of 2018.

COMMUNITY FEEDBACK – GENERAL COMMENTS

305. As has been noted within this report, the scope of the Stage 1 analysis and recommendations has been to address the unintended impacts resulting from the new planning controls that came into effect by the State Government in March 2014.

306. Whilst the purpose of the exhibition was to seek the wider community's opinion on the Discussion Paper's questions, other matters were raised that are outside the scope of this phase of the study. A broad summary of the issues raised is provided below:

a. The predominant theme from submitters are concerns around:

i. Overdevelopment of the Epping Town Centre in terms of what has been built since March 2014, and

ii. Further developer interest in the area by way of planning proposals (either existing, preliminary or future planning proposals).

These concerns largely relate to the associated traffic impacts, construction impacts, tree loss, character loss, heritage loss, parking concerns, visual impacts (regarding inappropriate building heights) and environmental impacts.

307. Some submitters situated outside the town centre core have requested upzonings. Council's response is that the Epping Town Centre has been doing a lot of the "heavy lifting" for the residential growth in this vicinity of Sydney. With the number of planning proposals and precinct planning projects across the LGA before Council, Council does not require any further uplift in Epping for the purpose of meeting its housing targets as expressed in the Greater Sydney Commission's *Draft West Central District Plan*. As has been made clear, the scope of the Epping Planning Review has been to address the failings of the planning system that came into effect in March 2014. As such, additional requests for rezoning (received through the submission process) will not be considered as part of the Epping Planning Review process.

308. A submission table details Council Officers response to general issues raised, is detailed in **Attachment 4.**

RECOMMENDATIONS

309. The recommendations detailed in this report are consolidated and contained in **Attachment 6**.

NEXT STEPS

310. As has been noted, the scope of the Epping Planning Review is limited to better managing the impacts of new development generated from planning controls that came into effect in March 2014 and allowing Council to manage current (formal and preliminary) planning proposals seeking growth in the town centre. It is also intended to allow Council to progress decisions made by Hornsby Shire Council on specific heritage matters when it governed part of the Epping suburb.
311. The recommended principles from Stage 1 also impact on other policy areas of Council which are outside the changes to planning controls to be covered in Stage 2. The findings and analysis carried out to date will be used to inform further work in these areas (ie. social infrastructure) as part of separate processes.
312. Once the new Councillors have been elected, a briefing will be undertaken on the Epping Planning Review process to date, including the endorsed principles, to confirm the future planning direction for Epping as part of progressing Stage 2 of the project.
313. Further discussion with the DP&E will be carried out to determine the appropriate mechanism for which to implement Stage 2 of the Epping Planning Review. For instance whether this can be carried out via a new State Environmental Planning Policy (similar to the previous mechanism which implemented the March 2014 planning controls) or alternatively, via a Planning Proposal process.
314. The community that have given their time in such a generous way to contribute to this stage of the Review will be thanked and advised of the outcomes. Council will continue to engage with the community through future stages of the review.

FINANCIAL IMPLICATIONS

The only recommended principle that would have an immediate and direct financial implication for Council is the trial of a Stop/Go Controller for 2 months (see **point 304**), which would cost Council $20,000. This would be funded from an existing operational budget.

Jacky Wilkes
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Team Leader Land Use Planning

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Director Strategic Outcomes and Development

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ATTACHMENTS:

1	Attachment 1 - Discussion Paper	111 Pages
2	Attachment 2 - Phase 2 Community Workshop Sessions Report	80 Pages
3	Attachment 3 - Summary of Submissions	45 Pages
4	Attachment 4 - General Comments	21 Pages
5	Attachment 5 - Stage 6 Summary and Recommendations	4 Pages
6	Attachment 6 - Consolidated List of Recommended Principles	8 Pages

REFERENCE MATERIAL

LEADING

ITEM NUMBER	13.9
SUBJECT	Submission to public consultation of Project Overview for Sydney Metro West
REFERENCE	F2018/00684 - D06013205
REPORT OF	Student Project Officer

PURPOSE:

The purpose of this report is for Council to consider a submission to Transport for NSW in response to public consultation of the Project Overview for Sydney Metro West released in March 2018.

RECOMMENDATION

(a) **That** Council note the information provided in this report that addresses, in part, the resolution of 14 May 2018 in relation to a metro station at Newington in conjunction with the Sydney Metro West Project;

(b) **That** Council endorses the draft submission at **Attachment 1**, as the formal position of Council in relation to the Project Overview of the Sydney Metro West Project and it be forwarded to Transport for NSW for their consideration.

(c) **Further, that** Council write to Transport for NSW (TfNSW) advocating for, and outlining the benefits of a metro station in the Newington/North Lidcombe (North of M4) area, as part of the Metro West rail line plans.

BACKGROUND

1. The following information is provided by way of background and response, in part, to the Council resolution of 14 May 2018 which stated:

   a) ***That*** *Council write to Transport for New South Wales (TfNSW) advocating for a Metro Station in the Newington/North Lidcombe (North of m4) area as part of the Metro West rail line plans;*

   b) ***Further, that*** *Council prepare an official Council submission to TfNSW and the NSW Government outlining benefits of such a proposal to be submitted by the 18th of May (Submissions will be accepted for this stage of the project until Friday, 18 May)*

2. This report considers a formal Council submission (at **Attachment 1**) drafted in response to the entirety of the Project Overview for Sydney Metro West, addressing considerations for the project for of Newington and North Lidcombe as part of the submission, in accordance with part (b) of this resolution.

3. The Sydney Metro West project was announced by the NSW Minister for Transport in November 2016, as the next component of the Sydney Metro network. Sydney Metro West envisions a direct connection between the Parramatta CBD, Sydney Olympic Park and Sydney CBD with potential stops at key locations.

4. The responsible authority, Transport for NSW (TfNSW), commenced early consultation with the community and key stakeholders in June 2017. As announced in the early public consultation in June 2017, the Sydney Metro West Study Area was defined to include investigations into metro stations at Parramatta and Sydney Olympic Park and other potential intermediate locations.

5. Council Officers made a submission to the very early public consultation in September 2017 (refer to **Attachment 2**) that advocated Council's strong support for a metro line between Parramatta CBD and Sydney CBD and highlighting the need for the metro's co-ordination and integration with the Parramatta Light Rail project and other LGA-wide strategic planning projects.

6. Further, the former Chief Executive Officer participated in a 'Health Check' process with Transport for NSW to understand the particular needs, challenges and aspirations of the City of Parramatta in relation to the project.

7. To date, Council Officers have consulted with Transport for NSW to inform the development of the early planning options for the project. This has involved:
   a) Active advocacy for the Sydney Metro West (SMW) Project;
   b) Providing information to Transport for NSW of significant development and planning policy changes and proposals within key study areas;
   c) Providing technical information and advice to inform details of the project, such as geotechnical, traffic modelling and flooding information;
   d) Information to inform urban design and public domain;
   e) Interface with major city projects, such as Parramatta Light Rail, Parramatta Square, Civic Link, future MAAS, etc.
   f) Consideration of existing and future land use scenarios around potential station locations.

CURRENT STATUS OF SYDNEY METRO WEST PROJECT

8. The Sydney Metro West Project is currently in an early planning phase. The NSW Government has not considered a Business Case for the project or committed funding for its delivery. Transport for NSW has been working with key stakeholders to undertake early planning for the Sydney Metro West project to inform the future Business Case to be considered by the NSW Government.

9. The release of the Project Overview in March 2018 is the result of a further expansion and refining of the scope of works by TfNSW. The Project Overview outlines the following components of the expanded project scope for further investigation:

   a) A new underground metro station at Westmead to support growing the health, educational and residential precincts;
   b) Reservation of the corridor to allow a potential extension of the new line west towards the future Western Sydney Airport at Badgerys Creek;
   c) New underground metro stations at Parramatta CBD and Sydney Olympic Park;

d) A potential intermediate station at either Camellia or Rydalmere;

e) A new connection to the T1 Northern Line at either Concord West or North Strathfield;

f) Potential intermediate stations at Burwood North, Five Dock, Kings Bay and Pyrmont; and,

g) At least one CBD station, likely to connect to City and Southwest Metro which is currently under construction.

10. The revised Project Study Area for Sydney Metro West is shown in **Figure 1** below.

Figure 1 – Project Study Area (Source: TfNSW, March 2018)

11. The release of the Project Overview of Sydney Metro West reflects a commitment by Transport for NSW to investigate a station and T1 Western Line connection/interchange at Westmead and a further connection with the T1 Northern Line, which were not previously part of the project scope for Sydney Metro West.

PREVIOUS COUNCIL OFFICER SUBMISSION – SEPTEMBER 2017

12. Council Officers made a submission to the very early public consultation in September 2017 that broadly expressed Council's strong support for a metro line between Parramatta and Sydney CBD. The Council Officer submission (September 2017) is provided at **Attachment 2.** Key issues and considerations of Council's previous submission include:

a) Council's broader aspirations for a Fast Rail station for Parramatta;

b) The need for a station at Westmead – establishment of Australia's largest Health and Education Super Precinct;

c) The need for a station for Parramatta CBD, centrally located with sufficient capacity to accommodate future expansions of rail services;

d) The need for a station at Camellia;

e) Need for well-considered integration with Parramatta Light Rail (Stages 1 and 2);

f) A future Western extension of the line to Western Sydney Airport; and,

g) Interchange opportunities for future Metro Lines centred on Parramatta.

PROJECT ALIGNMENT WITH STRATEGIC PLANNING

13. The Sydney Metro Project is important in delivering strategic planning objectives identified in both local and state strategic documents.

14. Alignment with *Western Sydney Rail Needs Scoping Study*

a) On 24 October 2016, Council adopted a submission to the Western Sydney Rail Needs Scoping Study (finalised in March 2018) which supported *"a (very fast) east-west shuttle from Sydney CBD to Parramatta CBD, and onto the Western Sydney Airport"* as the key priority major transport link for Parramatta to relieve congestion on the T1 Western Line and connect Parramatta CBD with Sydney CBD in under 30 minutes.

15. Alignment with *Greater Sydney Region Plan – A Metropolis of Three Cities* and *Central City District Plan* (2018)

a) The Sydney Metro West Project aligns with the objectives of the *Metropolis of Three Citie*s concept and the *Central City District Plan,* namely;

1. Greater Sydney Region Plan – A Metropolis of Three Cities:

- **Objective 1** – Infrastructure supports the three cities;
- **Objective 2** – Infrastructure aligns with forecast growth;
- **Objective 14** – Integrated land use and transport creates walkable and 30-minute cities;
- **Objective 15** – The Eastern, GPOP and Western Economic Corridors are better connected and more competitive;
- **Objective 17** – Regional connectivity is enhanced; and,
- **Objective 19** – Greater Parramatta is stronger and better connected

2. Central City District Plan:

- **Planning Priority N1** – Planning for a city supported by infrastructure;
- **Planning Priority N7** – Growing a stronger and more competitive Greater Parramatta;
- **Planning Priority N8** – Delivering a more connected and competitive GPOP Economic Corridor
- **Planning Priority N9** – delivering integrated land use and transport planning and a 30-minute city;

b) The Sydney Metro West project aims to enhance connections between the Central and Eastern Cities, and provision for extension of the line to provide Parramatta with a direct connection to the Western Parkland City centred on the Western Sydney Airport.

16. Alignment with *Future Transport Strategy 2056* (2018)

a) Future Transport Strategy 2056 envisions a high-capacity, turn-up-and-go rail service running between Sydney CBD and Western Sydney Airport via Greater Parramatta; part of a broader metro network that connects Greater Parramatta radially with Kogarah to the south-east, Hornsby to the north-east and Norwest to the north.

17. Alignment with Council's draft *Community Strategic Plan 2018-2038*

a) Council adopted the draft *Community Strategic Plan 2018-2038* ('draft CSP') on 9 April 2018 for public exhibition, as the highest level of plan for Council to guide how we will be achieving our community's vision for the city over the next 20 years. Sydney Metro West aligns strongly with the following key focuses of the draft CSP:

1. **Accessible** – we can all get to where we want to go;
2. **Thriving** – we benefit from having a thriving CBD and local centres;

SUMMARY OF DRAFT SUBMISSION

18. The key areas of consideration of the submission relate to locality-based issues and considerations at identified station precincts, and other key focus areas, namely:

a) Westmead;
b) Parramatta CBD;
c) Camellia;
d) Rydalmere;
e) Sydney Olympic Park;
f) Newington and North Lidcombe; and,
g) T1 Northern Line Connection (North Strathfield or Concord West)

19. The drafted submission also considers implications of the project on economic development within the corridor, the City's visitor economy and the management of development applications, planning proposals and precinct planning within the key identified study areas.

WESTMEAD

20. The refined project scope for Sydney Metro West has identified Westmead as a future station precinct to provide direct service to the Westmead Education and Health Super Precinct, and may provide a direct point of interchange between

Metro services and the existing T1 Western Line.

21. **Key issues/considerations for Westmead include:**

a) SMW would promote the re-vitalisation and re-configuration of the existing T1 Western Line station and the surrounding precincts, cataylsing development in line with the *Westmead Master Plan,* as well as development to the south of Westmead;

b) Supporting an activated streetscape along Hawkesbury Road, with clear legibility between movement and place functions;

c) Improving existing accessibility issues from the existing heavy rail station to T-way bus services, schools, Western Sydney University, the Health and Research precinct, as well as residential developments.

22. **Key recommendations for Westmead include:**

a) Council supports the expansion of the Project Scope to include an underground station at Westmead;

b) Council advocates for an interchange with clear legibility between modes; future metro, existing heavy rail, future Parramatta Light Rail, existing T-way bus services, cycling and walking within the Westmead Precinct;

c) Council advocates that the future Westmead metro station be planned/designed to accommodate a future Western connection (line continuation) towards Western Sydney Airport – Badgery's Creek Aerotropolis.

PARRAMATTA CBD

23. The Project Overview re-iterates Parramatta CBD as a key station location for the Sydney Metro West Project, either directly connected with the existing T1 Western Line station at Parramatta Transport Interchange or importantly another central CBD location.

24. **Key issues/considerations for Parramatta CBD include:**

a) The T1 Western Line is heavily constrained and nearing full operational capacity. Sydney Metro West will provide increased capacity east-west between Parramatta CBD and Sydney CBD. This has wider network benefits.

b) Parramatta is undergoing major revitalisation and growth. Council has prepared a Planning Proposal for the Parramatta CBD to provide for an expanded and intensified commercial core to facilitate the role of Parramatta as Sydney Central City, which provides for capacity for an additional 48,763 jobs and 20,297 dwellings.

c) The provision of Sydney Metro West is consistent with key recommendations of Council's Strategic Transport Strategy which supports the Parramatta CBD Planning Proposal. The STS identifies a requirement

for higher order transport solutions to support the identified growth projections in the Parramatta CBD Planning Proposal.

25. **Key recommendations for Parramatta CBD include:**

a) A new metro station in the Parramatta CBD is strongly supported, to facilitate Parramatta as Sydney's Central City, as identified in the Greater Sydney Commission's *Greater Sydney Region Plan - Metropolis of Three Cities* and *Central City District Plan* (2018);

b) The location of the station box within the Parramatta CBD needs to consider legibility between existing heavy rail and bus services at the Parramatta Transport Interchange, future light rail station locations in the CBD as well as integration with pedestrian links and major infrastructure;

c) Should Parramatta CBD be the location of the T1 Western Line connection, station planning must consider the implications on pedestrian flows and station performance for the entire CBD with consideration of future expected growth in demand for metro, heavy rail and bus services from that location;

d) A future station at Parramatta should be planned and designed to accommodate a north-south connection in the future, promoting a radial connection centred on the Parramatta CBD, as identified in the *Future Transport Strategy 2056.*

CAMELLIA

26. Camellia is identified the Project Overview (along with Rydalmere) as a potential location for an intermediate station between Parramatta CBD and Sydney Olympic Park, to support planned urban renewal for new mixed use land uses and the existing industrial precinct and provide a point of interchange with Parramatta Light Rail.

27. The primary objective of Sydney Metro West is to provide a faster, more direct connection between Greater Parramatta and the Sydney CBD in under 20 minutes. Intermediate stations between Parramatta CBD and Sydney Olympic Park may compromise the speed in which the service can travel between the two CBDs within this timeframe.

28. **Key issues/considerations for Camellia include:**

a) The draft Camellia Town Centre Master Plan (2018) ('CTC MP') proposes a new Town Centre Area – up to 10,000 dwellings and 25,000m2 of retail and commercial space in the north western section of the broader Camellia employment precinct;

b) As detailed in Council's submission to the draft CTC MP, the proposed density is greater than what would be recommended for a peninsula site, which is not embedded within a connected street network with limited public transport to adequately service the future population;

c) Considering the significant densities envisaged at Camellia and associated traffic impacts, it is considered that located a Metro station may be required to facilitate the 10,000 dwellings target proposed by the State Government in this precinct, despite Parramatta Light Rail servicing some of this demand;

29. **Key recommendations for Camellia include:**

d) If a station/stations between Parramatta and Sydney Olympic Park are considered, then Council advocates for an intermediate station at Camellia (in preference to Rydalmere) to facilitate the expected growth associated with the draft *Camellia Town Centre Master Plan,* as adopted in Council's submission to the Department of Planning and Environment on 9 April 2018;

e) Council recommends that a station box location at Camellia should be clearly legible for users to interchange from metro services to Parramatta Light Rail – Stages 1 and 2, and other transport modes;

f) Council recommends that the future station design consider pedestrian traffic movements to and from Rosehill Gardens, in order to support Rosehill Gardens as an event destination and to support the visitor economy.

RYDALMERE

30. Rydalmere has been identified the Project Overview (along with Camellia) as a potential location for an intermediate station between Parramatta CBD and Sydney Olympic Park, to support urban renewal opportunities in the precinct's light industrial and warehouse retail sectors and provide interchange with Parramatta Light Rail and the Victoria Road Bus Corridor.

31. **Key issues/considerations for Rydalmere include:**

a) Rydalmere is identified as a key employment precinct in the *Parramatta Employment Lands Strategy* (2016) ('ELS'). Council's vision is for Rydalmere to retained as an employment precinct;

b) Whilst a metro station at Rydalmere would promote increased employment opportunities and business viability, Council Officers express concern that a station in this precinct would add pressure to turning over existing employment lands to residential uses;

c) In light of the recommendations of the ELS, Rydalmere has yet to be structure planned to fully understand the future projected growth and renewal of the precinct;

d) The Rydalmere Precinct will be serviced by Parramatta Light Rail – Stage 1, and may (subject to project confirmation and preferred route alignment), be furthered serviced by an extension of service as part of Parramatta Light Rail - Stage 2. The impact of light rail on the transport network (and the future land use form) in Rydalmere is not well understood.

32. **Key recommendations for Rydalmere include:**

a) If a metro stop is considered between Parramatta and Sydney Olympic Park, Council advocates for a preference for a station at Camellia over Rydalmere as the location of an intermediate station between Parramatta CBD and Sydney Olympic Park;

b) Should a station at Rydalmere form part of the final station locations confirmed, Council advocates that a Structure Plan process urgently be undertaken, to consider the future land use of the Rydalmere Precinct, as recommended in the ELS;

c) Station planning for Rydalmere should consider mode integration with Parramatta Light Rail – Stages 1 and 2 and the function of the transport network within the entire precinct.

SYDNEY OLYMPIC PARK

33. The Project Overview re-iterates Sydney Olympic Park as a potential station location for Sydney Metro West to serve existing and future land uses, namely major events, commercial and residential growth and to promote Sydney Olympic Park as a key events destination.

34. **Key issues/considerations for Sydney Olympic Park include:**

a) A SMW station at Sydney Olympic Park is supported to support the existing mix of land uses, particularly event and destination uses of the precinct;

b) The proposed metro station will support significant future development identified in the *Sydney Olympic Park Master Plan Review* (2016), namely 10,700 new dwellings and up to 100,000 square metres of retail and commercial space to service future needs of the entire Sydney Olympic Peninsula, including Sydney Olympic Park, Wentworth Point, Newington and the future community of the Carter Street Planned Precinct;

c) A station at Sydney Olympic Park would be significant in boosting servicing for existing and future movements within the entire Sydney Olympic Park Peninsula;

d) More consultation is desired regarding station planning for Sydney Olympic Park, as well as the anticipated integration of the station with existing and future transport modes, particularly Parramatta Light Rail – Stage 2, which will have an important role as a feeder service from growing precincts such as Wentworth Point and the Carter Street Planned Precinct.

35. **Key recommendations for Sydney Olympic Park include:**

a) A station at Sydney Olympic Park needs to support existing and future planned growth within the Carter Street Planned Precinct, Wentworth Point, Newington and Silverwater, in addition to Sydney Olympic Park;

b) The station at Sydney Olympic Park needs to be planned in conjunction with significant improvements and mode integration with other public transport,

particularly buses and should consider the relationship with the future route of Parramatta Light Rail – Stage 2;

c) Council wishes to directly engage in the station planning for Sydney Olympic Park, due to the important role that a future SMW station at Sydney Olympic Park will have for the transport network and future planning on the entire Sydney Olympic Peninsula.

NEWINGTON AND NORTH LIDCOMBE

36. Newington and North Lidcombe have been identified as areas of particular interest as a potential site of an intermediate station between Parramatta CBD and Sydney Olympic Park. Like the considerations for Camellia and Rydalmere, it must be considered that providing for further additional intermediate stations would compromise the speed and efficiency of the line in achieving its stated objective of a fast connection between the two CBDs.

37. At its meeting of 14 May 2018, Council resolved to advocate for consideration of a metro station at a location in the Newington and North Lidcombe Precinct (refer to **Paragraph 1** in the **'Background'** section of this report).

38. In accordance with Council's resolution, the drafted submission advocates for the consideration of a station or, in lieu of a station in the precinct, significant public transport network improvements for Newington and North Lidcombe to service the existing and expected population and jobs growth in these precincts, including the Carter Street Planned Precinct to enable fast transfer to metro, heavy rail, light rail and bus services at Sydney Olympic Park and heavy rail services at Lidcombe Station.

39. **Key issues/considerations for Newington and North Lidcombe include:**

a) Given the density of established private uses within the precinct, a metro station would likely impact on existing properties and potentially require a significant scale of property acquisition, or could impact on valuable open space and parklands.

b) While the potential direct beneficial impact of a metro station at Newington is acknowledged, it is also likely that this would trigger new interest from the private development sector, including Planning Proposals, which could lead to potential residential uplifts and increased densities, thereby creating long-term issues that could impact existing residents.

c) Council has previously advocated to Transport for NSW for an extension of the alignment for Parramatta Light Rail – Stage 2 to Lidcombe to provide a direct link to existing heavy rail links at Lidcombe Station.

40. **Key recommendations for Newington and North Lidcombe include:**

a) Advocacy for a station and/or integrated transport solution within the Newington and North Lidcombe precinct that plans for and provides an easy, efficient and direct connection of these precincts to Westmead, Parramatta CBD and Sydney CBD from the Sydney Olympic Peninsula;

b) It is recommended that Transport for NSW plan for and increase bus service connections between the new Sydney Olympic Park metro station and Newington and North Lidcombe

c) Should Parramatta Light Rail – Stage 2 be designed with a station in the Carter Street Planned Precinct, it is recommended that adequate connections between light rail stations and Newington and North Lidcombe be considered during the design process;

d) Walking and cycling connections should also be considered, noting the opportunities potentially offered by the existing crossings over Haslams Creek, providing direct vehicular connections between Newington and the Carter Street Planning Precinct and Sydney Olympic Park.

T1 NORTHERN LINE CONNECTION

41. The refined scope of works for Sydney Metro West includes a direct metro station connection along the existing Sydney Trains T1 Northern Line, which runs between Strathfield and Epping Stations.

42. **Key issues/considerations for the T1 Northern Line Connection:**

a) Capacity for the interchange station to maximise the anticipated catchment able to access the station, by positioning it as close as is feasible to existing and future high density neighbourhoods;

b) Integrating transport modes effectively with the existing T1 Northern Line services between Strathfield and Epping and existing and future bus services;

c) Expected growth in patronage at Rhodes railway station, caused by heavy residential, employment and visitor growth to the Rhodes Town Centre and nearby high density developments, particularly at Wentworth Point.

43. **Key recommendations for the T1 Northern Connection include:**

a) Should a T1 Northern Line connection be included in the project, Council advocates for a station at Concord West to ensure the greatest level of access for residents in adjoining residential precincts that are currently under-serviced by public transport, particularly Wentworth Point;

b) Council advocates for greater transport connections between key centres (such as Newington and Wentworth Point) to the interchange station on the T1 Northern Line to enable travelers from these centres to access Parramatta and Sydney CBDs more efficiently.

OTHER CONSIDERATIONS

44. **Impact of significant development and planning proposals:**

a) The submission highlights the high level of major development applications, precinct plans and planning proposals under consideration by Council which are within the identified study area of Sydney Metro West.

b) It has been recommended that Council and Transport for NSW regularly discuss these significant strategic and development projects that may impact on the delivery of the project.

45. **Impact on the visitor economy:**

a) The submission highlights the importance of an efficient transport network in further developing the visitor economy of the City in line with Council's *Economic Development Plan 2017-2021* and draft *Destination Management Plan 2018-2022.* Sydney Metro West could potentially unlock and more greatly service key destination precincts, namely Parramatta, Camellia (Rosehill Gardens) and Sydney Olympic Park.

b) It has been recommended that a metro station in the Parramatta CBD should consider a location that support key event, sporting and cultural infrastructure, such as Parramatta Stadium, the future MAAS and the proposed Civic Link. Further, it has been recommended that a potential intermediate station at Camellia consider legibility between the metro station and existing and future pedestrian flows to Rosehill Gardens.

CONSULTATION & TIMING OF SUBMISSION

46. As Sydney Metro West is a NSW State Government project, Transport for NSW is the responsible authority for the project's funding, approval and delivery.

47. The public consultation of the Project Overview for Sydney Metro West occurred from 23 March 2018 until 18 May 2018.

48. Transport for NSW held several community consultation sessions in conjunction with the release of the Project Overview for Sydney Metro West at locations in Westmead, Parramatta CBD and Sydney Olympic Park over the length of the public consultation period. Community members within the study area was notified of the consultation period via letterbox drop.

49. To enable Councillors to be provided a Briefing from Transport for NSW and a Councillor Workshop to devise the focus and contents of Council's submission (both held on 2 May 2018), an extension to the advertised public consultation period was requested from Transport for NSW. This was to ensure that the submission could be considered at the 28 May Council meeting.

50. Council's Transport Planner contacted Transport for NSW on 26 March 2018 to request an extension for the receipt of a submission from City of Parramatta. The Development Director, Sydney Metro West granted an extension to Council to make a submission by 31 May 2018.

51. Key stakeholders and the community have been invited to make submissions to Transport for NSW regarding the refined scope of works for Sydney Metro West and to express key issues or considerations to TfNSW to inform further technical work as part of the Business Case development.

FINANCIAL IMPLICATION FOR COUNCIL

52. There are no direct financial implications for Council as a result of making the attached submission to Transport for NSW. There is potentially high benefits to the City should the project be delivered.

53. Where appropriate, the attached submission discusses issues regarding the financial implications for Council, such as infrastructure provision, servicing and other policy matters relevant to the future delivery of Sydney Metro West.

54. It is anticipated that as the project processes and station locations are determined, a deeper understanding of the financial implications for Council will be understood and Council's role is greater defined.

CONCLUSION AND NEXT STEPS

55. It is recommended that the draft submission provided at **Attachment 1** to the public consultation of the Project Overview for Sydney Metro West be endorsed by Council.

56. Further, should Council endorse the submission contained at **Attachment 1**, it will be forwarded to Transport for NSW for its consideration as part of the public consultation period by the extended deadline of 31 May 2018.

57. Further, should an intermediate station be provided between Parramatta CBD and Sydney Olympic Park, it is recommended that Council advocate for a preferred intermediate station at Camellia to facilitate the anticipated growth associated with the Camellia Town Centre, or an intermediate station at Newington/North Lidcombe.

58. Both Council and Council Officers will continue to work directly with Transport for NSW, other local Councils, government agencies and the local community to articulate the aspirations of the City in relation to the Sydney Metro West project.

59. Submissions to this public consultation will inform the future Business Case to commit funding for the delivery of Sydney Metro West. The future Business Case for the project is anticipated to be presented to the NSW Cabinet in the latter half of 2019 for its consideration.

Beau Reid
Student Project Officer

Michael Jollon
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Sue Weatherley
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ATTACHMENTS:

1⇩	Submission to Sydney Metro West	22 Pages
2⇩	Project Overview of Sydney Metro West	23 Pages
3⇩	Council Officer Submission to Sydney Metro West - September 2017	10 Pages

REFERENCE MATERIAL

SUBMISSION

PROJECT OVERVIEW – SYDNEY METRO WEST

City of Parramatta Council

DRAFT

>>SUBJECT TO COUNCIL ENDORSEMENT 28 MAY 2018<<

REF: F2018/00684

SUBMISSION TO PROJECT OVERVIEW SYDNEY METRO WEST
City of Parramatta Council

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BACKGROUND TO THIS SUBMISSION

1. Council considered a report on the submission to the Project Overview – Sydney Metro West at its meeting of 28 May 2018. At its meeting, Council resolved as follows:
   - ***(a) That*** *Council note the information provided within this report that considers and responses to, in part, the Council resolution of 14 May 2018;*
   - *(b)* ***That*** *Council endorses the draft submission at Attachment 1, as the formal position of Council in relation to the Project Overview of the Sydney Metro West Project.*
   - *(c)* ***That*** *the submission be forwarded to Transport for NSW as the formal position of Council in relation to the public consultation.*
   - *(d)* **Further, that** *Council write to Transport for NSW (TfNSW) advocating for, and outlining the benefits of a metro station in the Newington/North Lidcombe (North of M4) area, as part of the Metro West rail line plans.*
2. Further, Council considered a Notice of Motion in relation to the project (relating to a station at Newington) at its meeting of 14 May 2018. At this meeting, Council resolved as follows:
   - ***(a) That*** *Council write to Transport for New South Wales (TfNSW) advocating for a Metro Station in the Newington/North Lidcombe (North of M4) area as part of the Metro West rail line plans;*
   - ***(b) Further****, that Council prepare an official Council submission to TfNSW and the NSW Government outlining benefits of such a proposal to be submitted by the 18th of May (Submissions will be accepted for this stage of the project until Friday, 18 May)*
3. Council has considered the submission as attached and resolved to adopt the contents as the formal view of Council in relation to the Project Overview on Sydney Metro West.
4. A copy of the provided to Council by way of cover to this submission is provided at **Attachment 1.**

INTRODUCTION AND PURPOSE

5. City of Parramatta Council ('Council') wishes to thank Transport for NSW for the opportunity to provide a submission to the public consultation of the Project Overview for Sydney Metro West, released on 23 March 2018.

6. Council understands that Transport for NSW has released the Project Overview to further expand and refine the study area and scope of works of the project. These scope of works include:

   A) A new underground metro station at Westmead to support growing the health, educational and residential precincts;
   B) Reservation of the corridor to allow a potential extension of the new line west towards the future Western Sydney Airport at Badgerys Creek;
   C) A new underground metro station at Parramatta CBD and Sydney Olympic Park;
   D) A potential intermediate station at either Camellia or Rydalmere;
   E) A new connection to the T1 Northern Line at either Concord West or North Strathfield;
   F) Potential intermediate stations at Burwood North, Five Dock, Kings Bay and Pyrmont; and,
   G) At least one CBD station, likely to connect to City and Southwest Metro which is currently under construction.

7. In October 2016, the City of Parramatta made a submission to the Western Sydney Rail Needs Study – Discussion Paper. In this endorsed submission, Council ordered its priorities for heavy rail provision as follows:

   1. **A (very fast) east-west shuttle from Sydney CBD to Parramatta CBD,** and onto the Western Sydney Airport;
   2. **Sydney's first central North-South Metro link,** connecting Campbelltown and Liverpool via Parramatta, and further onwards to a Sydney Metro node at Norwest;
   3. **Provision for a future North-South link** through WSA, from Leppington to WSA, and then onto the existing T1 Western Line at St Marys.

8. Council further made a submission to the early consultation for Sydney Metro West in September 2017, which advocated for fast rail for Parramatta, a need for future metro stations at Westmead, Parramatta CBD and Camellia connecting onwards to Sydney CBD, the need for future integration with Parramatta Light Rail, extension towards the future Western Sydney Airport and need for future metro lines to create a radial network centred on Parramatta.

NOTE:
A copy of Council's submission to the Western Sydney Rail Needs Study – Discussion Paper is provided at **Attachment 2** to this submission. A copy of Council's previous submission to Sydney Metro West (September 2017) is provided at **Attachment 3** to this submission.

9. Council has reviewed the Project Overview for Sydney Metro West and wishes to provide a submission to outline Council's position and key considerations for Transport for NSW, and elements of the project that Transport for NSW and Council can actively work together as the project is further defined. This submission considers the revised scope of works identified in the Project Overview and broadly considers the implications of the project on identified and other key local precincts.

10. **Key considerations from our submission include;**

KEY CONSIDERATIONS:
1. City of Parramatta's support for Sydney Metro West and its alignment with our City's vision;
2. Alignment of the project with local and regional strategic planning;
3. Sydney Metro West as a catalyst for urban renewal and growth;
4. Locality-based considerations for future precinct planning within our key precincts;
5. Advocating the importance of transport integration with other modes of transport;
6. Future planning for expansion of Sydney Metro West to the west; and,
7. Other considerations;

11. City of Parramatta Council looks forward to continuing to work closely and proactively with Transport for NSW and partner organisations as the project is further refined and considered by the NSW Government.

ISSUES FOR CONSIDERATION

1. ALIGNMENT WITH REGIONAL STRATEGIC PLANNING OBJECTIVES

12. The Sydney Metro Project is important in delivering strategic planning objectives identified in both regional and state strategic planning documents.

***Western Sydney Rail Needs Scoping Study* (2018)**

13. On 24 October 2016, Council adopted a submission to the Western Sydney Rail Needs Scoping Study (finalised in March 2018) which supported "a (very fast) east-west shuttle from Sydney CBD to Parramatta CBD, and onto the Western Sydney Airport" as the key priority major transport link for Parramatta to relieve congestion on the T1 Western Line and connect Parramatta CBD with Sydney CBD in under 30 minutes.

***Greater Sydney Region Plan – A Metropolis of Three Cities* and *Central City District Plan* (2018)**

14. The Sydney Metro West Project aligns with the objectives of the *Metropolis of Three Cities* concept and the *Central City District Plan,* namely;

Greater Sydney Region Plan – A Metropolis of Three Cities:

- **Objective 1** – Infrastructure supports the three cities;
- **Objective 2** – Infrastructure aligns with forecast growth;
- **Objective 14** – integrated land use and transport creates walkable and 30-minute cities;
- **Objective 15** – the Eastern, GPOP and Western Economic Corridors are better connected and more competitive;
- **Objective 17** – Regional connectivity is enhanced; and,

- **Objective 19** – Greater Parramatta is stronger and better connected

Central City District Plan:

- **Planning Priority N1** – Planning for a city supported by infrastructure;
- **Planning Priority N7** – Growing a stronger and more competitive Greater Parramatta;
- **Planning Priority N8** – Delivering a more connected and competitive GPOP Economic Corridor
- **Planning Priority N9** – Delivering integrated land use and transport planning and a 30-minute city;

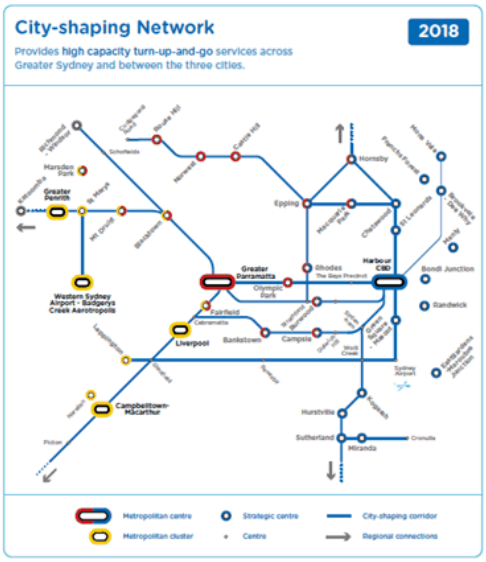
15. The Sydney Metro West Project aims to enhance connections between the Central and Eastern Cities, and provision for extension of the line to provide Parramatta with a direct connection to the Western Parkland City centred on the Western Sydney Airport, as shown in Figure 1 below.

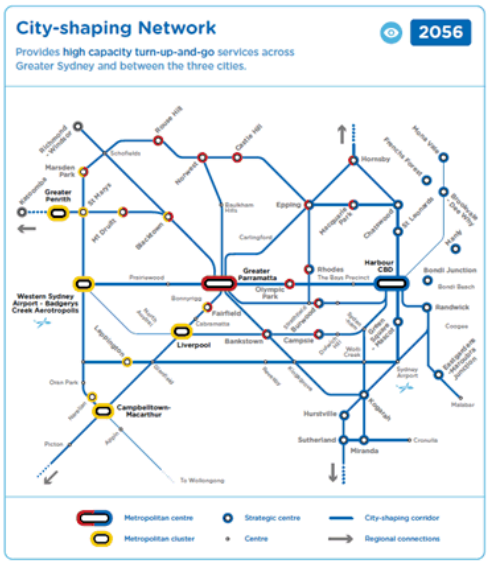
Figure 1 – 'Three-cities' concept for Greater Sydney (Greater Sydney Commission, 2018)

***Future Transport Strategy 2056* (2018)**

16. *The Future Transport Strategy 2056* envisions a high-capacity, turn-up-and-go service running between Sydney CBD and Western Sydney Airport via Greater Parramatta; part of a broader metro network that connects Greater Parramatta radially with Kogarah to the south-east, Hornsby to the north-east and Norwest to the north. As shown in **Figures 2 and 3** below, the east-west corridor between the Harbour CBD

(Sydney) and Greater Parramatta is envisioned to connect directly with the Western Sydney Airport at Badgerys Creek, should it be fully realised.





Figures 2 and 3 – *City Shaping Network 2018 and 2056* (Transport for NSW, 2018)

17. City of Parramatta Council supports Sydney Metro West to facilitate the realisation of the Greater Sydney Commission's three cities concept, and the 30-minute city identified in both the regional and district plans.

2. ALIGNMENT WITH THE CITY'S VISION

18. In 2016, the City of Parramatta conducted extensive consultations with over 9,000 residents and stakeholders to adopt the following vision statement:

    "Sydney's Central City, sustainable, liveable and productive – inspired by our communities"

19. Council's vision recognises the important role that Council will play in shaping Sydney's future as Sydney's Central River City, aligning with the Greater Sydney Commission's *Greater Sydney Region Plan* and the *Central City District Plan.*

20. City of Parramatta's *Draft Community Strategic Plan 2018-2038* ('draft CSP') was endorsed for public exhibition by Council on 9 April 2018. This is our highest level plan for Council – it will guide how we will be achieving our community's vision for the city over the next 20 years. The Sydney Metro West project aligns with the long term strategic vision identified by our community and stakeholders in the draft CSP. Over the next 20 years, the City of Parramatta will grow from 235,000 people to almost 400,000. This population growth is highlighting major infrastructure gaps, especially with respect to roads and public transport.

21. Our community have stated that they want future growth managed, with infrastructure improved to keep up with demand. In particular, our community want a strong public transport network in order to get where they need to go easily and efficiently.

22. In the City of Parramatta, much like the rest of Sydney, quality and ease of access to other places varies widely depending on where you live. The location of jobs and opportunities, the structure of transport networks and congestion all influence the time it takes to travel between places. Having a variety of options to get to places seamlessly and efficiently improves liveability and creates a better quality of life by reducing the time and stress associated with commuting. Better accessibility can also be life-changing for some residents, such as people with a disability, the less mobile and even people pushing prams, while also benefitting the wider community.

23. **ADD REFERENCE TO OUR DRAFT COMMUNITY PLAN**Key strategic priorities relating to Sydney Metro West include:

We can all get to where we want to go.

Strategy 2.1
Design our City so that it is usable by people of all ages and abilities;

Strategy 2.2
Improve public transport to and from Parramatta CBD, our local centres, neighbourhoods and the Greater Sydney region

We benefit from having a thriving CBD and local centres.

STRATEGY 5.1
Accelerate local jobs growth and support people in finding employment

STRATEGY 5.3
Plan and deliver a vibrant, attractive and safe CBD and local centres

STRATEGY 5.4
Ensure Parramatta has a thriving day and night time economy

LOCAL STATION PRECINCTS

1. WESTMEAD

22. City of Parramatta strongly supports the expanded scope of works for planning for Sydney Metro West to include a new underground metro station at Westmead. A stop at Westmead will support travel demands of existing and future workers and residents within and surrounding the Westmead Health and Medical Research Precinct.

FUTURE CHARACTER OF WESTMEAD

24. The Westmead Health and Medical Research precinct represents the largest concentration of hospital and health services in Australia, servicing Western Sydney

and providing other specialised services for the rest of NSW. Healthcare is one of the nation's largest and fastest growing industries. More than $3 billion has been committed by NSW Government, universities and the private sector to upgrade and expand the health services, education and medical research facilities at Westmead and to undertake urban transformation over the next ten years. The *NSW Department of Planning and Environment's Greater Parramatta Interim Land Use and Infrastructure Plan* (2017) identifies that Westmead will provide that 30,000 jobs by 2036.

25. A metro station at Westmead should be planned and built to serve planned growth as part of the Department of Planning and Environment (DP&E) Westmead Planned Precinct work for the residential area south of the rail line (within the Cumberland Council area) and the Council and NSW Health's Westmead Innovation District Master Plan project. The master plan includes aspirational targets for jobs and tertiary students, driven by the significant government investment currently planned for the area. The Westmead Innovation District Master Plan project will feed into the Planned Precinct process.

TRANSPORT INTEGRATION AND ACCESSIBILITY

26. Improved accessibility to and from the Westmead precinct will be a critical factor to its success as a growing precinct. The existing road, bus and heavy rail network within Westmead and its surrounds is under considerable strain and requires significant precinct planning and transport integration and legibility to be able to sustain expected residential, employment and visitor growth. The precinct has limited access from the south and west, and no private vehicle access from the north or east.

27. A metro station at Westmead would allow for an important interchange with the Sydney Trains Western T1 Line, Parramatta Light Rail – Stage 1 and the Bus Transit-way at Darcy Road. An integrated interchange between heavy rail, light rail and metro must be a paramount consideration in considering the location of the direct interchange between Sydney Metro West and the T1 Western Line, and its importance for mobility and interchange between these modes.

OPPORTUNITIES FOR WESTMEAD

28. The inclusion of an underground station for Westmead should consider:

a) Redevelopment of the existing heavy rail station and surrounding precincts; catalysing development beyond the health/education precinct;
b) Activating the streetscape along Hawkesbury Road with clear and effective legibility between movement and place;
c) Improving existing access issues from the existing heavy rail station to T-way Bus Services, schools, Western Sydney University, the Hospital Precinct and residential developments;
d) Opportunities to broaden the catchment of service to the south of the existing Western Line;

RECOMMENDATIONS:

R1. Council advocates for an interchange with clear legibility between modes; future metro, existing heavy rail, future Parramatta Light Rail, existing T-way bus services, cycling and walking within the Westmead Precinct.
R2. Council strongly recommends that the future Westmead Metro Station be planned and designed to accommodate a future Western connection and continuation, linking to key activity areas to the west, including the Western Sydney Airport – Badgerys's Creek Aerotropolis, as identified in the *Future Transport Strategy 2056.*
R3. Council recommends that the future metro station ought to be designed to assist in station and precinct planning that maximises the potential user catchment of the metro line, both from the north (Westmead Education and Health precinct) and south (existing residential) of Westmead.
R4. Council recommends that the future metro station improve the accessibility constraints between the existing Westmead railway station with T-way bus services and the hospital precinct. The future Metro station should also improve accessibility and legibility between the interchange and Hawkesbury Road.

2. PARRAMATTA CBD

29. Council strongly supports a new metro station in the Parramatta CBD to facilitate Parramatta as Sydney's Central River City identified in the Greater Sydney Commission's *Metropolis of Three Cities* and *Central City District Plan* (2018). Parramatta is located at the geographical centre of Sydney and is a focus for employment, housing, recreation and cultural opportunities. Parramatta sits at the heart of Sydney's Central City and is undergoing major revitalisation. To fully realise its potential, Parramatta must stimulate significant job and dwelling growth to increase its social and economic prosperity.

STRATEGIC PLANNING FOR PARRAMATTA CBD

30. To manage the significant growth and changes in the CBD, Council has prepared a Planning Proposal to amend the planning controls for the Parramatta CBD contained in the *Parramatta Local Environmental Plan 2011* (PLEP 2011). The purpose of the Parramatta CBD Planning Proposal is to provide for an expanded and more intense commercial core to strengthen and facilitate the role of Parramatta as the Central City CBD and support the CBD as a vibrant centre by surrounding the core with higher density mixed use development. There were 49,513 jobs and 4,769 dwellings in the Parramatta CBD (as at 2011) and the Planning Proposal will provide capacity for an additional 48,763 jobs and 20,297 dwellings.

TRANSPORT CAPACITY AND CONNECTIVITY FOR PARRAMATTA CBD

31. The provision of Sydney Metro West is consistent with key recommendations of Council's *Strategic Transport Strategy* (STS) 2016 which was endorsed as part of the Parramatta CBD Planning Proposal. The preparation of the STS involved RMS and Transport for NSW and was based on analysis of transport modelling, through the Sydney Strategic Travel Model (STM). The STS recommended that that higher order transport solutions are required to support the identified growth in Council's draft Parramatta CBD Planning Proposal.

32. Council supports a new metro station in the Parramatta CBD to enable fast connections to and from Sydney CBD and to relieve pressure on Sydney Trains' T1 Western Line. Current Parramatta CBD Railway Station forecasts of trips in the AM

peak demand are expected to increase significantly. Current station exit numbers at 2016 of 9,100 could increase by up to 90 per cent by 2036 and by up to 175 per cent by 2056. This would be equivalent to approximately 17,300 and 25,000 exits by 2036 and 2056 respectively. This would surpass existing station exits at Town Hall, estimated to be around 23,300 during the AM peak according to BTS (2014). Current station entry numbers at 2016 of 3,100, could double to 7,000 and quadruple to 15,100 by 2036 and 2056 respectively.

33. Further, Council believes a metro station in the Parramatta CBD will have a catalytic effect and will support the provision of jobs and services in Parramatta, and therefore go some way in redressing the current jobs deficit in Western Sydney. Over the past 10 years the region added 26,000 residents per year, but only created 9,000 jobs per year. Currently, every weekday 225,000 Western Sydney residents commute to places of work outside the region due to the undersupply of jobs.

RECOMMENDATIONS:
R5. Council would like to ensure that the Parramatta CBD Metro stop is designed and planned to accommodate a north-south connection in the future. To further Parramatta CBD as the Central City, it needs to link to employment markets and residential growth areas across all of Metropolitan Sydney. This includes a radial connection for Parramatta CBD as identified in the *Future Transport Strategy 2056*.
R6. Council supports a station at Parramatta CBD being located on, or in close proximity to the Civic Link, once realised. The Civic Link will be able to accommodate greater pedestrian densities than elsewhere in the city, and will form a strong and legible connection between Parramatta Square and the Parramatta River with other transport modes and to major cultural destinations.
R7. The location of the station box within the Parramatta CBD needs to consider legibility between existing heavy rail and bus services at the Parramatta Transport Interchange, future light rail station locations in the CBD as well as integration with pedestrian links and major infrastructure;
R8. Should Parramatta CBD be the location of the T1 Western Line connection, station planning must consider the implications on pedestrian flows and station performance for the entire CBD with consideration of future expected growth in demand for metro, heavy rail and bus services from that location;

3. CAMELLIA AND RYDALMERE

34. The primary objective of Sydney Metro West is to provide a faster, more direct connection between Greater Parramatta and the Sydney CBD in under 20 minutes. Additional intermediate stations between Parramatta CBD and Sydney Sydney CBD may compromise the speed in which the service can travel between the two CBDs within this timeframe.

35. Council acknowledges that there is significant value in providing an intermediate Sydney Metro West stop at either Rydalmere or Camellia. Both Camellia and Rydalmere are significant employment precincts, with part of Camellia also being identified as a Planned Precinct by the Department of Planning and Environment to accommodate a new Town Centre that will accommodate up to 10,000 new dwellings. Future metro stops within either of these precincts will have the effect of significantly improving access to and from these precincts and facilitate redevelopment opportunities. Consideration as to the preferred option must consider:

a) Effects of Sydney Metro West as a catalyst for urban renewal and to support future growth;
b) Relationship with strategic planning for these centres (i.e. draft *Camellia Town Centre Master Plan*, *Parramatta Employment Lands Strategy*);
c) Integration with Parramatta Light Rail (Stages 1 and 2) and the broader public and active transport network;
d) Support existing and future employment opportunities and educational facilities;

36. An outline of considerations for each of these intermediate centres is provided below:

CAMELLIA

DRAFT CAMELLIA TOWN CENTRE MASTER PLAN (2018)

37. The *draft Camellia Town Centre Master Plan* (CTC MP) proposes a new Town Centre area located in the north western section of the broader Camellia employment precinct and comprises an area of 40ha of the 320ha Camellia precinct. The draft Master Plan seeks to provide for up to 10,000 dwellings across the Town Centre precinct with 25,000m2 of retail/commercial space located in proximity to one light rail stop (based on Stage 1). As detailed in Council's submission to the draft CTC MP, the proposed density is greater than what would be recommended for a peninsula site which is not embedded within a connected street network with limited public transport to adequately service the future population.

38. However, Council acknowledges that this residential target has been identified in a number of State Government planning documents including the DP&E's *Greater Parramatta Interim Land Use and Infrastructure Implementation Plan* (LUIIP). Given the significant densities envisaged at Camellia and associated traffic impacts (despite Light Rail taking up some of this demand), it is considered that locating a Metro station may be required in order to facilitate the 10,000 dwellings proposed by the State Government in this precinct.

39. As part of Council's submission to the exhibition of the draft *Camellia Town Centre Master Plan* (adopted 9 April 2018), Council recommended advocacy to the State Government for a Sydney Metro West Stop at Camellia, as it is the preferred option in order to facilitate the future re-development of Camellia, as envisaged by the draft Master Plan.

RECOMMENDATIONS:
R9. Council advocates for an intermediate station at Camellia (in preference to Rydalmere) to facilitate the expected growth associated with the draft *Camellia Town Centre Master Plan.*
R10. Council recommends that the station box location at Camellia should be clearly legible to interchange with Parramatta Light Rail (Stages 1 and 2) and other transport modes.
R11. Council recommends that the future station design consider pedestrian traffic movements to and from Rosehill Gardens, in order to support Rosehill Gardens as an event destination and to support the visitor economy.

RYDALMERE

40. The Parramatta Employment Lands Strategy (2016) ('ELS') identifies Rydalmere as a key employment precinct that is critical to ensuring that the Rydalmere high tech and knowledge precinct achieves its full potential. This includes preparing a detailed structure plan to guide the development of new industries and employment opportunities that considers the impact of future light rail (both Stage 1 and Stage 2) and the potential for a business park around the Western Sydney University linked to its specialisations.

41. Council's vision is that Rydalmere be retained as an employment precinct. It is acknowledged that locating a Metro Stop will encourage increased employment opportunities by increasing viability for future businesses, however Council has significant concerns that a Metro stop would add pressure to the existing employment generating lands to turn over to predominately residential uses resulting in a reduction in the amount of strategic employment lands in this area.

42. A confirmed Sydney Metro West Station for Rydalmere would require significant strategic planning to be undertaken to understand the effects of the metro on the future fabric of the precinct. Council's ELS identifies Rydalmere as a Key Employment Precinct which is undergoing change, restructuring of key industries, and is of a significant scale and size to support urban renewal and increased employment densities. The ELS recommends that a Structure Plan be prepared for Rydalmere.

RECOMMENDATIONS:
R12. Should a Metro station be confirmed for Rydalmere, the station location should be considered in the contexts of the existing land use form and the capacity for the precinct to remain a Key Employment Precinct supporting primarily light industrial development uses (as prefaced in the ELS). This also would require an understanding of the interface between the Western Sydney University Rydalmere Campus and the future metro station.
R13. Should a Metro station be confirmed for Rydalmere, a Structure Plan for the entire precinct would be required that considers the future planning for Rydalmere, as recommended in the ELS.

1. SYDNEY OLYMPIC PARK

43. The proposed stop within the Sydney Olympic Park (SOP) precinct is strongly supported by Council. It is recognised that a Metro stop at SOP will support the existing mix of land uses, including the event and "destination" nature of the precinct and will assist in supporting the movements of visitors to and from the precinct during major events. The proposed Metro stop at SOP is also recognised to support the significant future development identified by the Sydney Olympic Park Masterplan Review (2016), as noted in the Project Overview as providing "10,700 homes and retail space will be increased to 100,000 square metres to service the growing community on the Olympic Peninsula, including Wentworth Point and Newington, and the future Carter Street community".

TRANSPORT WITHIN THE OLYMPIC PENINSULA

44. Council would like to ensure that there is evidence that the Metro Stop at SOP also supports the travel needs of existing and planned residential and business communities throughout the Sydney Olympic Peninsula (SO Peninsula), namely Wentworth Point, Carter Street and Newington. The NSW Department of Planning and Environment's *Greater Parramatta Interim Land Use and Infrastructure Implementation Plan* (2017) forecasts a total number of 23,638 dwellings by 2036 in the Sydney Olympic Park, Carter Street and Wentworth Point area. This represents approximately 49,600 persons.

45. Currently Council are assessing active planning proposals at Wentworth Point and the NSW DP&E currently reviewing the Carter Street Planned Precinct. In recent correspondence to Council, TfNSW have stated that *"traffic demands resulting from Wentworth Point, Carter Street and Sydney Olympic Park Master Plan Review are in excess of the road network capacity".* Council notes that the Metro stop at SOP will service existing and planned residential and commercial densities, as identified in planning documents for the SOP Master Plan, Carter Street, Wentworth Point and Newington. However, any additional density on the Sydney Olympic Peninsula should not be permitted until a comprehensive traffic and transport study is undertaken to clearly demonstrate further capacity for density.

46. Council understands that TfNSW is preparing a Transport Plan which will help to inform the Greater Sydney Commission's *Growth Infrastructure Compact* for the Greater Parramatta and Olympic Peninsula.

RECOMMENDATION:

R14. Council recommends that a critical part of this Transport Plan should identify how a proposed Sydney Metro West stop will service surrounding areas, including:

a) Quantifying the role of Parramatta Light Rail – Stage 2, planned through Wentworth Point, Sydney Olympic Park and Carter Street and provision optimal interchanges; and
b) A comprehensive review of bus services connections, particularly between Sydney Olympic Park and Newington and Sydney Olympic Park and Wentworth Point.

COUNCIL'S INVOLVEMENT IN STATION PLANNING FOR SYDNEY OLYMPIC PARK

47. To date, there has been little information provided to Council about the station planning or considerations made for Sydney Metro West's station at Sydney Olympic Park. This includes the drivers for the location of a station at Sydney Olympic Park, projected demand and catchment coverage and its alignment in delivering on key strategic planning objectives for the entire peninsula.

48. Whilst it is appreciated that planning for Sydney Olympic Park is primarily the responsibility of the Sydney Olympic Park Authority (SOPA), Council requests for direct involvement with Transport for NSW on station planning for Sydney Olympic Park. This is particularly important, as it is envisioned that the station at Sydney Olympic Park would be utilised heavily by residents, employees and visitors in key residential, commercial and industrial precincts outside of the SOPA boundary, namely Wentworth Point, Newington, Silverwater and the Carter Street Planned Precinct.

RECOMMENDATIONS:

R15. Council requests direct involvement in station and precinct planning for Sydney Olympic Park in conjunction with Transport for NSW. This highlights the role of the station at Sydney Olympic Park in servicing existing and future demand for the entire Sydney Olympic Peninsula (including areas within the direct control of the City of Parramatta).

2. NEWINGTON AND NORTH LIDCOMBE

49. Newington and North Lidcombe have been identified as areas of particular interest as a potential site of an intermediate station between Parramatta CBD and Sydney Olympic Park. Like the considerations for Camellia and Rydalmere, it must be considered that providing for further additional intermediate stations would compromise the speed and efficiency of the line in achieving its stated objective of a fast connection between the two CBDs.

50. Council notes the dense residential nature of the Newington suburb, and the dense industrial/light industrial and commercial nature of the Silverwater suburb. Those suburbs are bound by the Duck River, Parramatta River and Haslams Creek, as well as a number of wetlands and parklands. Another key land use is the Silverwater Correctional Complex, north of Holker Street, which is likely to represent a constraint in terms of underground infrastructure development.

51. Given the density of established private uses, a Metro network and station would likely substantially impact on existing properties and potentially require a significant scale of property acquisition, or could impact on valuable open space and parklands, which does not represent a good outcome.

52. While the potential direct beneficial impact of a metro station at Newington is acknowledged, it is also likely that this would trigger new interest from the private development sector, including planning proposals, which could lead to potential residential uplifts and increased densities thereby creating long-term issues that could impact existing residents.

53. Council supports a Metro stop to be located within the Sydney Olympic Park (SOP) precinct. In our view, the key objective is to ensure that there is evidence that the Metro Stop at SOP will also support the travel needs of existing and planned residential and business communities throughout the Sydney Olympic Peninsula, namely Wentworth Point, Carter Street and Newington.

54. As stated, Council notes that TfNSW are undertaking a comprehensive Transport Plan for the entire Olympic Park Peninsula which will include Sydney Olympic Park, Newington, Silverwater, Wentworth Point, the Carter Street Planned Precinct and North Lidcombe. This Transport Plan needs to strongly consider the impacts of a proposed metro station within the Sydney Olympic Peninsula and how it can be effectively accessed by residents of underserviced nearby precincts, particularly Newington and North Lidcombe.

COUNCIL RESOLUTION

55. As mentioned in the preface to this submission, Council considered a Notice of Motion at its meeting on 14 May 2018 considering the issue of a Sydney Metro West station being considered at Newington. Council resolved as follows:

    (a) ***That*** *Council write to Transport for New South Wales (TfNSW) advocating for a Metro Station in the Newington/North Lidcombe (North of m4) area as part of the Metro West rail line plans;*

    (b) ***Further****, that Council prepare an official Council submission to TfNSW and the NSW Government outlining benefits of such a proposal to be submitted by the 18th of May (Submissions will be accepted for this stage of the project until Friday, 18 May)*

NOTE:
A copy of the full motion and resolution, with the associated preamble and background is attached to this submission at **Attachment X.**

56. The resolution of Council reflects an overwhelming interest by the local community at Newington and Silverwater in the Sydney Metro West project, and its potential capacity to assist in providing for effective public transport options for either or both of these centres.

57. As the time of writing of this submission, Sydney Metro West's 'Social Pinpoint' for the project <https://tfnsw.mysocialpinpoint.com/sydney-metro-west#/> had an overwhelming response of over 300 submissions located within Newington and Silverwater. Some of the feedback provided include:

    "Newington has had the least public transport provided throughout its development. We do have buses but again these were provided in the last few years. Getting to the city by public transport takes at least 3 connections. The average time to the city is usually 90 minutes when the buses appear and the train have space for passengers."

    "Consideration needs to be given for a station at Newington. It's a growing area with great public transport needs for workers and students who currently have to use two modes of transport to get to the city. Development keeps being approved without any additional transport, causing traffic congestion - particularly during events when Olympic Park becomes impenetrable. We need a public transport option that won't be severely impacted as the population expands or when events are on."

    "Newington needs a transport plan that includes a metro rail station as buses are very congested. A metro will see residents being able to travel to many places much more efficiently, including just 20 minutes to the city CBD"

RECOMMENDATIONS:

R16. Council advocates for a station and/or comprehensive and significant increases to public transport to be considered within the Newington/Silverwater/North Lidcombe Precinct in order to provide a direct connection of these precincts with Westmead, Parramatta CBD and Sydney CBD.

R17. Council strongly recommends that Transport for NSW undertake a comprehensive Integrated Transport Plan for the entire Olympic Park Peninsula, including Sydney Olympic Park, Newington, Silverwater, Wentworth Point, the Carter Street Planned Precinct and North Lidcombe. This should consider Sydney Metro West in the contexts of: a) Integration with Parramatta Light Rail (Stage 2) to provide a feeder service to future metro stations; b) Integration with an expanded local bus network to sufficiently service adjoining local centres with high frequency transport nodes;
R18. Walking and cycling connections should also be considered, noting the opportunities potentially offered by the existing crossings over Haslams Creek, providing direct vehicular connections between Newington and the Carter Street/ Olympic Park precincts.

6. T1 NORTHERN LINE CONNECTION

58. Council is encouraged by, and actively supports the inclusion of a T1 Northern Line connection as part of the refined scope of works for the Sydney Metro West project. The T1 Northern Line, whilst not running through the City of Parramatta (except at the line terminus at Epping), has a key transport function for our residents particularly within the Olympic Peninsula (Sydney Olympic Park, Wentworth Point and Newington). A T1 Northern Line connection would enable an easier customer transfer for customers along this corridor to access Westmead and Parramatta CBD to the west without needing to transfer to other T1 Western Line services at Strathfield.

CONSIDERATIONS FOR STATION LOCATION

59. The location of the metro stop is incredibly important in leveraging the most value from the T1 Northern Line connection in shaping the potential future use of the corridor. As advised to Council by Transport for NSW, there is significant cost and difficulty in constructing an underground metro interchange on the T1 Northern Line at the existing Rhodes railway station. This is despite clear strategic transport and geographic advantages in enabling Sydney Metro West to service increased patronage from Rhodes caused by expediential growth in residential and commercial floor space within the Rhodes Town Centre and other nearby transport precincts.

60. Rhodes has high patronage by residents of nearby Wentworth Point, which is within the boundaries of City of Parramatta.

61. In order to maximise the effectiveness of Sydney Metro West as a transport function moving customers east-west, the location of the T1 Northern Line connection must consider:

    A) Capacity to maximise the anticipated catchment of customers able to access the station, by positioning it as close as feasible to existing and future high density neighbourhoods;
    B) Integrating transport modes effectively with the existing T1 Northern Line services between Strathfield and Epping, existing and future bus services, walking and cycling opportunities and parking; and,
    C) The expected growth in patronage at Rhodes railway station, caused by heavy residential, employment and visitor growth to the Town Centre and nearby high density residential developments, particularly at Wentworth Point;

RECOMMENDATIONS:

R19. Council advocates its preference for a metro station location at the existing Concord West station over North Strathfield on the T1 Northern Line. This is to ensure the greatest level of access for residents in adjoining residential precincts that are currently under-serviced, particularly Wentworth Point.

R20. Council advocates for greater transport connections between significant residential centres, such as Wentworth Point and Newington to the interchange station on the T1 Northern Line (whether at Concord West or North Strathfield, or another location) in order to unlock these centres in garnering easier, efficient transfer between Westmead, Parramatta CBD and the Sydney CBD.

IMPACT OF SIGNIFICANT DEVELOPMENT AND PLANNING PROPOSALS

62. City of Parramatta Council is currently assessing a high number of significant development applications and Planning Proposals within the existing identified Sydney Metro West route. Currently, Council staff and Transport for NSW's Parramatta Light Rail team have regular meetings to discuss significant development applications and planning proposals along the Parramatta Light Rail Route (PLR - Stage 1) that may have an impact on the project. It should also be considered that the future route of Parramatta Light Rail Stage 2.

RECOMMENDATION:

R21. Council recommends that a similar structure or arrangement should be put in place for Sydney Metro West to ensure the delivery of the project is 'future proofed' in light of existing and future development applications, planning proposals and other works undertaken by Council.

OPPORTUNITIES FOR THE VISITOR ECONOMY

PARRAMATTA CBD

63. Council is currently developing a Destination Management Plan (DMP) for building and managing the City of Parramatta LGA's growing visitor economy. The DMP will have a strong focus on 'uniquely Parramatta' experiences around food, cultural heritage, the outdoors, arts, culture, entertainment, sports, events and festivals.

64. The proposed metro station at Parramatta CBD could greatly support significant visitor flows to and from the CBD and its many existing and future cultural and sporting infrastructure, major events and other local destinations, such as Parramatta Park, the future Museum of Applied Arts and Sciences, the future Parramatta Aquatic Centre, Riverside Theatres, Eat Street and Parramatta Square.

65. As shown in **Figure 4**, The Civic Link will be a green, pedestrianed public space and cultural spine that connects public life from the heart of the Parramatta CBD to the River. A station that promotes a legible interface with the Civic Link will promote strong pedestrian and public transport connections through the Parramatta CBD. The Civic Link Framework Plan was endorsed in principle by Council on 10 July 2017.

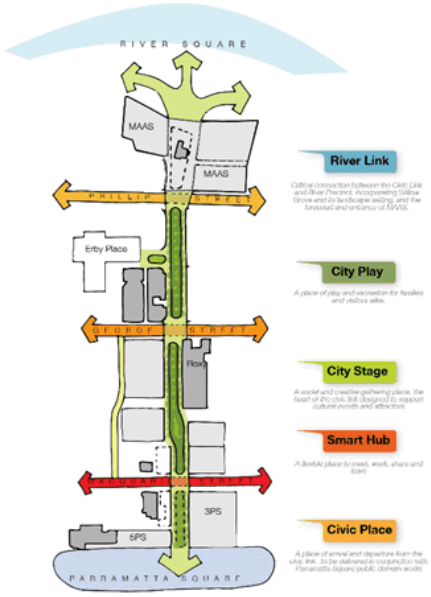


Figure 4 – Civic Link Concept Plan (City of Parramatta, 2017)

RECOMMENDATIONS:
R22. Council recommends that the station at Parramatta CBD considers location that will increase legibility between key visitor corridors, particular the Civic Link.
R23. Council recommends that the station at Parramatta CBD be located and designed in order to facilitate clear links between Parramatta Light Rail and significant arts, culture, sport and entertainment infrastructure, such as Parramatta North Precinct, Parramatta Stadium, Parramatta Aquatic Centre and future Museum of Arts and Applied Sciences, Riverside Theatres, Eat Street, Parramatta Square, etc.

ROSEHILL GARDENS – STATION AT CAMELLIA

66. City of Parramatta's *Economic Development Plan 2017-2021* and draft *Destination Management Plan 2018-2022* both identify the Rosehill area as an important precinct from both an economic and social perspective.

67. The ***Economic Development Plan 2017-2021*** notes that:

    "Rosehill will continue to attract visitors to horse racing and motor sport events and drive diversified jobs growth through business tourism, attracting conferences and exhibitions."

68. Strategies in the plan will see both the Rosehill Racecourse and Events Centre, and the Valvoline Raceway Sydney being promoted and leveraged as national and international visitor and business event destinations. The plan has a target for an additional **1,500 additional jobs** for the precinct by 2021.

69. The draft Destination Management Plan (DMP) for the City of Parramatta highlights the need to broaden the experience base and leverage the world class facilities that are being established across the LGA. Rosehill Gardens Racecourse and Events Centre is a significant venue for sporting and business tourism events, conferences and major exhibitions. The draft DMP also notes the opportunity to expand the range of visitor segments through motor sporting connections and an expanded series of events to attract new markets from both overseas and interstate. This will directly contribute to the State Government's target for the visitor economy of increased overnight stays.

70. Through industry consultations leading up the draft DMP, business tourism events, conferences and exhibitions have been identified as a priority growth/opportunity area for the city. This segment of the visitor economy is also identified as a key opportunity area in the NSW Government's *Western Sydney Visitor Economy Strategy.*

71. In order to realise the opportunities identified for the visitor economy, the draft DMP advocates a strong precinct-based approach and Rosehill/Harris Park (and surrounds) is identified as one the priority precincts.

72. The Rosehill complex currently attracts some 582,000 people per year to the venue. Add to that the visitation figures for the other attractions in and around the precinct, and there will be in excess of 651,000 people being drawn to the area in 2018.

73. The Rosehill Gardens complex is predicting a growth target of 800,000 per annum, involving more events spreads across the year, resulting in large influxes of people during concentrated periods. Add to that the number of people visiting the other venues across the precinct and there could be upwards of 884,00 going to the precinct over the course of a year.

RECOMMENDATION:

R24. Council recommends that a potential station at Camellia consider legibility between the station and event pedestrian flows to Rosehill Gardens.

NEXT STEPS

74. Council will continue to actively engage with the NSW Government in planning for the delivery of Sydney Metro West. Council looks forward to participating in the further detailed development of the preferred alignment, station locations and other considerations as part of the Business Case development for Sydney Metro West.

CONTACT DETAILS

75. Should you require any further information or have any questions in relation to Council's submission, please contact Beau Reid – Transport Planner on 9806 5538 or email BReid@cityofparramatta.nsw.gov.au

ATTACHMENTS

Attachment 1 – Council report (Submission to Sydney Metro West), 28 May 2018

Attachment 2 – City of Parramatta Council submission to Western Sydney Rail Needs Scoping Study – October 2016

Attachment 3 – Council Officer Submission to Sydney Metro West – September 2017

Attachment 4 – Notion of Motion and Resolution relating to Sydney Metro West at Newington – 14 May 2018

City of Parramatta Council
May 2018

NSW GOVERNMENT | sydney METRO

Sydney Metro West

A new railway for Western Sydney

Project overview, March 2018

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Strategic planning

Mass transit services are a fundamental part of a growing international city. Public transport improvements between Sydney's three cities – the Eastern Harbour City, Central River City and Western Parkland City – is part of Transport for NSW's Future Transport Strategy 2056. We are not only responding to the needs of today, but also planning for the future with new transport strategies and technology – looking beyond the current pipeline of projects to ensure communities are better places to live, work, play and visit.

Sydney Metro West is a critical step in the delivery of the Future Transport Strategy along with other initiatives such as the Western Sydney Rail Needs study, Parramatta Light Rail, and improvements to the heavy rail system.

Community and industry consultation will be vital in developing the Sydney Metro West project so that an investment decision can be made by the NSW Government at the appropriate time.

In the first half of next year, 13 metro stations will open in the booming North West region of Sydney on the world-class Sydney Metro railway.

Then, in 2024, Sydney Metro will be extended under our iconic Harbour, through new stations in the Sydney central business district (CBD) and beyond to Bankstown – all up, 31 metro stations and 66 kilometres of new metro rail.

Since we started work on this new generation railway system in 2011, we've been working hand in hand with the community to shape Sydney Metro for our city's future – adding new stations, extra car parks and more services following community feedback.

Now, as we progress down the development path for the city-shaping Sydney Metro West project, please take this opportunity to help us shape the future of our great global city.

Gladys Berejiklian MP
PREMIER OF NEW SOUTH WALES

Right now, across and under Sydney, a truly transformational mega project is taking shape.

From next year, Sydney Metro will forever change how we get around this great city.

Under the Sydney CBD, Sydney Metro will be able to operate a new metro train every two minutes in each direction – bringing us in line with other great global cities.

Remarkably, with two new metro lines already under delivery, it's this next step that will be the biggest – linking the Parramatta and Sydney CBDs, our two great centres.

Welcome aboard Sydney Metro – now's the time to have your say as the NSW Government delivers the biggest urban infrastructure investment in the nation's history.

Andrew Constance MP
MINISTER FOR TRANSPORT AND INFRASTRUCTURE

Project overview

In November 2016, the NSW Government announced the Sydney Metro West project – the city's next underground metro railway.

Connecting the Parramatta and Sydney central business districts, this once-in-a-century infrastructure investment will transform Sydney for generations to come; doubling rail capacity between these two areas, linking new communities to rail services and unlocking housing supply and employment growth between the two CBDs.

Sydney Metro West will service the key precincts of Greater Parramatta, Sydney Olympic Park, The Bays Precinct and the Sydney CBD.

Following extensive community and industry consultation in 2016 and 2017, the Sydney Metro West scope of works has been expanded and refined. It now includes:

- a new underground metro station at Westmead, to support the growing residential area as well as the health, research and education precinct
- a new metro station under an existing suburban station on the T1 Northern Line east of Sydney Olympic Park – allowing faster connections for customers from the Central Coast and Sydney's north to Parramatta and Sydney through a quick and easy interchange between suburban and metro services
- further consultation on new intermediate metro stations between Parramatta and Sydney Olympic Park and between Olympic Park and the Sydney CBD
- at least one Sydney Metro West station under the Sydney CBD, delivering an easy interchange between suburban rail, new light rail and the new metro stations currently under construction.

It is also proposed that Sydney Metro West will have an underground interchange with an existing suburban station on the T1 Western Line either at Parramatta or Westmead, allowing a fast and easy interchange to metro rail services for customers heading to and from the outer west and Blue Mountains.

Community and industry consultation is continuing into potential new metro stations between the key precincts.

The NSW Government will also safeguard the ability to extend Sydney Metro to the south-east of the Sydney CBD via Zetland, serving the Green Square town centre, as well as towards the west beyond Westmead – where one option could be to the new Western Sydney Aerotropolis.

Delivering a fast, safe and reliable metro service will be balanced with improving community benefits: Sydney Metro West will deliver faster public transport journey times than currently possible between the two CBDs while also getting the best outcomes for communities, connecting as many people as possible to a new world-class mass transit system.

In 2018, further community and industry consultation will take place to refine the project before any investment decision is made by the NSW Government.

This engagement process has been used by the Sydney Metro Delivery Office within Transport for NSW since 2011, and has delivered improved customer and community outcomes like extra metro stations, more car parking on metro rail projects currently being delivered by the NSW Government and reduced community impacts during construction.

New metro rail opens next year

Sydney's new metro train being tested at Rouse Hill

The new Sydney Metro railway system opens in the city's North West in the first half of next year – 13 stations between Rouse Hill and Chatswood will be serviced every four minutes in the peak in each direction by new fully-automated metro trains.

In 2024, Sydney Metro will be extended under Sydney Harbour, through new underground stations in the Sydney CBD and beyond to Bankstown – all up, delivering 31 metro stations and 66 kilometres of new metro rail.

Then, the Sydney Metro West project is expected to be operational in the late 2020s.

This new underground railway will become the fastest, easiest and most reliable journey between the Sydney and Parramatta CBDs.

Sydney Metro will have a capacity of a train every two minutes in each direction under the Sydney CBD, a level of reliable service never before seen in Australia but common around the world.

A new railway for Western Sydney

Sydney Metro West will deliver a new direct underground connection between the CBDs of Parramatta and Sydney.

This city-shaping infrastructure investment will link communities between the two centres that have not been previously serviced by rail, unlocking housing supply and boosting employment growth.

New metro rail will become the fastest, easiest and most reliable journey between the Sydney and Parramatta CBDs.

This means existing suburban and inter-city services will be freed up for customers from the city's outer west in areas like Blacktown, Penrith and the Blue Mountains.

In turn, these services will become more reliable, with less crowding and faster travel times.

As a new railway, Sydney Metro West will work together with the existing T1 Western Line, effectively doubling rail capacity from Parramatta to the CBD and supporting the Greater Sydney Commission's vision for better connections between these two major centres. Sydney's busiest rail corridor will be served by two stand-alone railway systems, working together to give customers more choices and delivering more reliable services for generations to come.

The NSW Government will integrate transport with planned land-use outcomes along the corridor, with the new metro railway line expected to be built largely underground.

Community, stakeholder and industry consultation is helping shape Sydney Metro West's development, including determining the alignment and potential station locations.

Servicing key precincts

The final number of potential stations will be identified following community and industry consultation. Key precincts to be serviced have initially been identified at:

- **Westmead**, one of the largest health, education, research and training precincts in Australia
- **Parramatta,** where the number of jobs is expected to double over the next 20 years to 100,000
- **Sydney Olympic Park**, where 34,000 jobs and more than 23,000 residents will be located by 2030
- **The Bays Precinct**, Sydney's new innovation hub where 95 hectares of land is being regenerated
- **The Sydney CBD**, allowing easy access to the existing public transport network and Stages 1 and 2 of Sydney Metro, which are currently under construction.

The need for new rail

More mass transit services are needed between Parramatta and the Sydney CBD because:

- an extra 420,000 people are expected to move into the corridor between Greater Parramatta and central Sydney over the next 20 years
- more than 300,000 new jobs will be created by 2036 in the corridor between Greater Parramatta and central Sydney at places like the Parramatta CBD, Sydney Olympic Park and the Bays Precinct
- the T1 Western Line needs relief because it will be severely overcrowded by the early 2030s.

The Parramatta CBD

Sydney Metro

Opening in the first half of 2019, Sydney Metro will transform the way Australia's biggest city travels and help shape its future.

This new world-class mass transit system will evolve with the city it will serve – cutting travel times, reducing congestion and delivering major economic and social benefits for generations to come.

Metro rail means a new generation of fast, safe and reliable trains easily connecting customers to where they want to go. Customers won't need timetables – you'll just turn up and go.

Sydney Metro will make it easier and faster to get around, boosting economic productivity by bringing new jobs and new educational opportunities closer to home.

With customers at the centre of all design decisions, stations will be fully accessible and quick and easy to get in and out of; trains will be fast, safe and reliable; and technology will keep people connected at every step of the journey.

Sydney Metro will integrate with new communities and transform existing urban centres, as well as the broader transport network so customers have a range of transport options to get to and from their destinations.

Sydney Metro

Sydney Metro's prototype underground station, including platform screen doors

Growing with the west

Sydney Metro West is expected to be built largely underground and to be operational in the second half of the 2020s.

The NSW Government has identified the key growth regions that need to be serviced by Sydney Metro West: Westmead, Parramatta, Sydney Olympic Park, the Bays Precinct and into the CBD.

This means a corridor will be investigated between the Parramatta River and existing T1 Western Line to:

- maximise the potential for growth
- transform and connect communities
- generate interest within industry to help deliver this mega project.

The NSW Government will work with the community, industry, businesses and local stakeholders like councils along the route to get feedback on potential station locations and the best outcomes to serve Sydney for the next century and beyond.

The NSW Government will integrate transport and land-use planning along the corridor.

The project supports the Greater Sydney Commission's vision for a Central City based around Parramatta that's connected to the established Eastern City by providing improved travel times and service frequency between these two CBDs.

Beyond this corridor, opportunities to extend the line east and west will also be considered.

The costs, final route and the final number of stations will be determined through more detailed planning and industry engagement.

Congestion busting

The new metro will take customers off existing suburban rail lines, especially in the busy morning peak – cutting crowding and easing congestion.

This means more efficient Sydney Trains services in the west, outer west and regional areas like the Blue Mountains.

The project would help improve the reliability of the T1 Western Line from areas such as Penrith by cutting crowding.

On the T1 Northern Line, crowding could be reduced as people move to new metro rail because of new and easier travel options.

Working together with the existing T1, Sydney Metro West effectively doubles rail capacity between the Parramatta and Sydney CBDs.

Metro rail moves more than 40,000 people an hour in each direction – significantly more than a current suburban line.

Maximum Sydney train customers per hour per line

Doubling rail capacity to the west

The Parramatta CBD

Priority No. 1 – Greater Western Sydney

New metro rail means a new focus on Parramatta and the outer west.

Sydney Metro West will make it faster and easier to get to Parramatta – from both the east and west, reinforcing it as the Central City.

Extra rail capacity will be delivered to both sides of Parramatta.

From the east, new metro rail on a stand-alone system will become the easiest and most reliable journey within this growing corridor and between the CBDs of Sydney and Parramatta.

This frees up capacity on the existing suburban rail system to the west, increasing the reliability of services to and from Blacktown, Penrith and the Blue Mountains, and cutting crowding.

The number of customers using the T1 Western Line has grown 8 per cent over the past two years, not the forecast 2 per cent.

It would be difficult to add significant extra capacity to this line: it cannot be widened for extra tracks without causing widespread community disruption and the acquisition of nearby properties.

Currently, trains can operate as little as every 15 minutes between Parramatta and Sydney outside peak hours, while freight trains also use the line.

The solution is Sydney Metro West – a new, stand-alone metro railway built mostly underground and able to move more than 40,000 people an hour in each direction, effectively doubling the rail capacity of the area.

More rail capacity

- The existing T1 Western Line – which is more than a century old – is expected to be severely overcrowded by the early 2030s, despite ongoing upgrade works and more services.
- Currently, it moves around 40,000 people in the morning peak hour and is operating at 135 per cent seated capacity.
- New metro rail will be able to move more than 40,000 people an hour in each direction.
- Sydney Metro West will work together with the T1 to service the growing needs of Western Sydney, effectively doubling the rail capacity of the Parramatta to Sydney corridor.
- The project also means faster and more frequent services can be delivered on the Sydney Trains network from outer western Sydney areas like Penrith and Blacktown, with increased capacity for those customers into Parramatta and the CBD.

"Connections are the key to realising the Greater Sydney Commission's vision for Three Cities to rebalance growth and opportunity across the region. With Greater Parramatta and the Olympic Peninsula (GPOP) as the unifying heart of the Central City, Sydney Metro West has the potential to help drive GPOP's transformation into one of Australia's most liveable and productive cities, by providing fast, frequent and reliable connections with the Eastern City's Harbour CBD."

Lucy Turnbull
Chief Commissioner, Greater Sydney Commission

Westmead

Westmead is one of the largest health, education, research and training precincts in Australia.

Following community and industry consultation in 2016 and 2017, the locality has been identified for a station location on Sydney Metro West.

Further stakeholder engagement and technical and engineering work is now taking place.

A metro station at Westmead would support the area's health, education and residential precinct.

It would deliver a more efficient rail link between Westmead and Parramatta. Customers would also be able to interchange with the new Parramatta Light Rail, T-way and other bus services.

Major employment areas include Westmead Hospital, The Children's Hospital at Westmead, The University of Sydney, Western Sydney University, the Westmead Medical Research Institute and the Children's Medical Research Institute.

By 2036, the number of full-time staff working across Westmead will increase to more than 30,000 and the number of students will grow beyond 10,000.

The NSW Government will also safeguard the ability to extend Sydney Metro towards the west beyond Westmead – where one option could be to the new Western Sydney Aerotropolis.

More travel choices for Western Sydney

The Westmead health precinct, the Parramatta CBD and the Sydney CBD in the distance

"The Westmead health and education precinct is transforming into a globally recognised health and education innovation district. It is already home to one of the most educated populations in Sydney will see more and more people residing, innovating, and producing on the precinct in partnership with the onsite clinicians, researchers, educators and the community. Sydney Metro West, linking directly into the Westmead Precinct, allows an accelerated achievement of the economic and social benefits that the precinct can offer. It will allow Westmead to be strategically located between the two remaining cities and will provide a competitive advantage to business opportunities in Sydney domestically."

Danny O'Connor

Chief Executive, Western Sydney Local Health District on behalf of the Westmead Precinct Partners

Connecting with the T1 Western Line

One of the key objectives for the Sydney Metro West project is to relieve pressure on the T1 Western Line and to provide greater transport options for customers in the Greater Parramatta area.

The T1 – which is more than a century old – is expected to be severely overcrowded by the early 2030s, despite ongoing upgrade works and more services.

To deliver the best outcomes for customers and take the pressure off the T1, Transport for NSW proposes connecting a new underground metro station to an existing suburban station – allowing customers a quick and easy interchange between metro and suburban rail services.

This interchange could happen at Westmead or Parramatta.

Sydney Metro West would take pressure off the T1 Western Line by reducing platform crowding at existing stations and also deliver more public transport options for customers in the Greater Parramatta area. The final decision will take into account the best outcomes for customers, the wider transport system and overall community benefits.

Westmead Station services the suburb's education and health precinct

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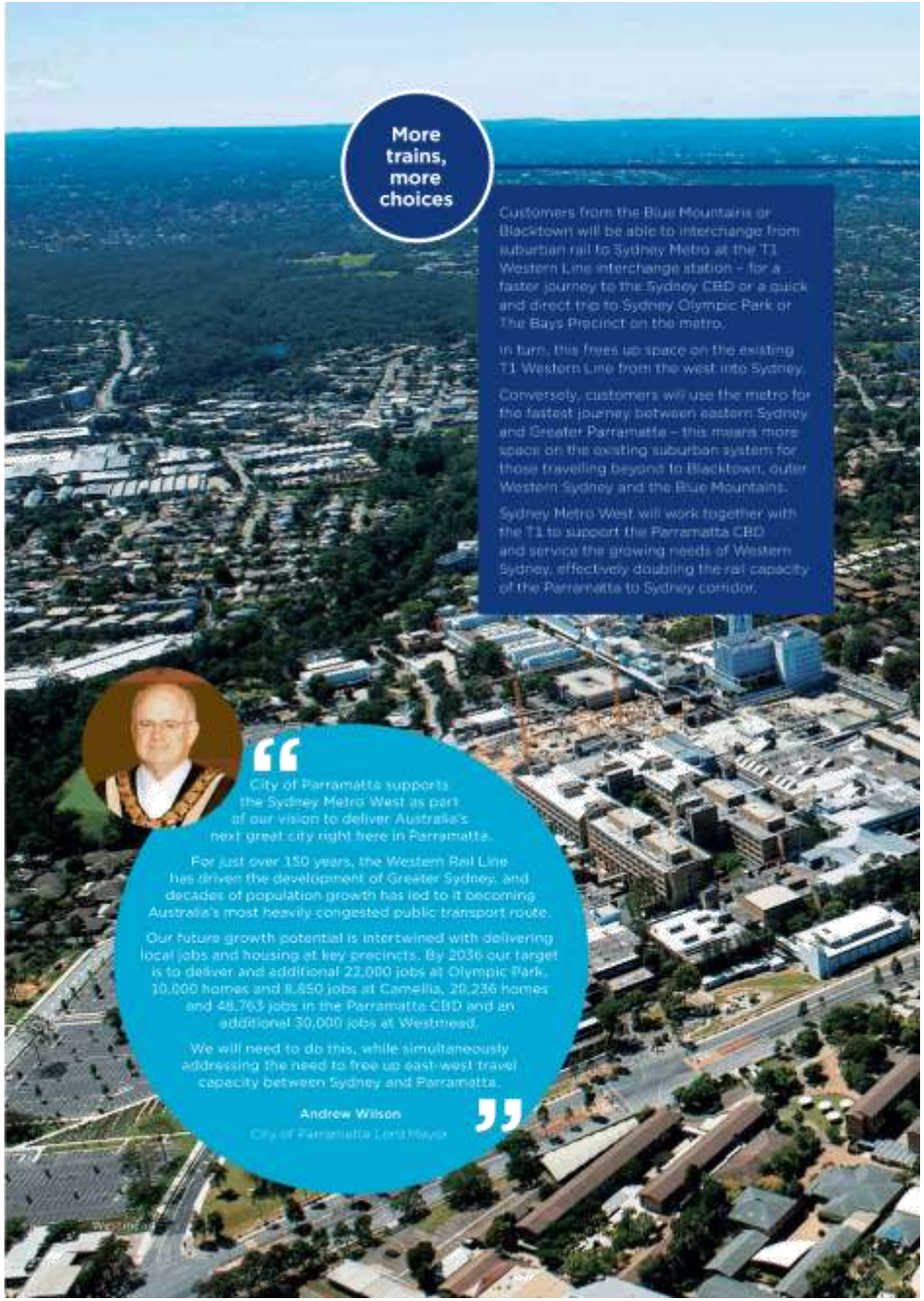

More trains, more choices

Customers from the Blue Mountains or Blacktown will be able to interchange from suburban rail to Sydney Metro at the T1 Western Line interchange station – for a faster journey to the Sydney CBD or a quick and direct trip to Sydney Olympic Park or The Bays Precinct on the metro.

In turn, this frees up space on the existing T1 Western Line from the west into Sydney.

Conversely, customers will use the metro for the fastest journey between eastern Sydney and Greater Parramatta – this means more space on the existing suburban system for those travelling beyond to Blacktown, outer Western Sydney and the Blue Mountains.

Sydney Metro West will work together with the T1 to support the Parramatta CBD and service the growing needs of Western Sydney, effectively doubling the rail capacity of the Parramatta to Sydney corridor.

"City of Parramatta supports the Sydney Metro West as part of our vision to deliver Australia's next great city right here in Parramatta.

For just over 150 years, the Western Rail Line has driven the development of Greater Sydney, and decades of population growth has led to it becoming Australia's most heavily congested public transport route.

Our future growth potential is intertwined with delivering local jobs and housing at key precincts. By 2036 our target is to deliver and additional 22,000 jobs at Olympic Park, 10,000 homes and 8,850 jobs at Camellia, 20,236 homes and 48,763 jobs in the Parramatta CBD and an additional 30,000 jobs at Westmead.

We will need to do this, while simultaneously addressing the need to free up east-west travel capacity between Sydney and Parramatta."

Andrew Wilson
City of Parramatta Lord Mayor

North Strathfield

A growing Central City

Over the next 20 years, the number of jobs in Parramatta is expected to double to 100,000.

Its central location will be one of its greatest advantages and it will be an important area for advanced manufacturing and innovation-driven enterprises.

By 2036, it will be one of Greater Sydney's major administrative and business centres, and the Westmead health and education super precinct will continue to grow and lead best practice in medical and education-related industries.

In November 2016, the Greater Sydney Commission released Towards our Greater Sydney 2056, which states now is the time to conceive and plan for Greater Sydney maturing into 'a metropolis of three cities'– the Eastern City (Sydney CBD), the Central City (Greater Parramatta) and the Western City (Western Sydney Airport).

A Metropolis of Three Cities. Source: The Greater Sydney Commission

Travel times

Sydney Metro West will become the fastest, easiest and most reliable journey between the Sydney and Parramatta CBDs.

However, the need for fast metro rail will be balanced with delivering improved community benefits.

Sydney Metro West will deliver faster public transport journey times than currently possible between the two CBDs while also getting the best outcomes for communities, connecting as many people as possible to a new world-class mass transit system.

Currently, the fastest trip between Parramatta and Wynyard takes between 31 and 33 minutes on the T1 Western Line.

Sydney Metro West will deliver a significantly faster journey time.

It will link communities between the two CBDs not previously serviced by rail and will support the Greater Sydney Commission's 30-minute city concept, where new infrastructure is focused on giving more people access to jobs, schools, hospitals and services within 30 minutes of their home.

Fast, safe and reliable metro rail

Sydney Olympic Park

More than 23,000 people will call Sydney Olympic Park home by 2030. This new growth area will house 34,000 jobs.

The region will provide for 10,700 homes and retail space will be increased to 100,000 square metres to service the growing community on the Olympic Peninsula, including Wentworth Point and Newington, and the future Carter Street community.

The suburb has grown quickly over the past 16 years since hosting the Sydney 2000 Olympic Games, with its Master Plan 2030 being re-calibrated to cater for the growth. This includes identifying potential sites for future primary and high schools.

"Sydney Metro West is an exciting prospect for Sydney Olympic Park. Sydney Olympic Park is a rapidly growing precinct that is a key to the success of growing Sydney – providing jobs, homes and places to study with a truly unique lifestyle an events offering unlike anywhere else in Australia. Sydney Metro West will accelerate this evolution whilst also unlocking even further opportunities for the growth and development of Sydney Olympic Park, re-imagining the possibilities under Master Plan 2030 as well as providing greater connectivity and sustainable transport solutions."

Charles Moore
Chief Executive Officer,
Sydney Olympic Park Authority

Connecting with the T1 Northern Line

Following community and industry feedback, Transport for NSW is investigating a potential new metro station connecting to an existing suburban station on the T1 Northern Line east of Sydney Olympic Park.

This metro station would take even further pressure off the T1 Western Line, including Strathfield Station.

The most direct and convenient metro connection for customers would be at Concord West or North Strathfield. The final decision will take into account the best outcomes for customers, the wider transport system and overall community benefits.

Customers from the Central Coast and Sydney's north will have faster journey times to Parramatta, The Bays Precinct and the Sydney CBD through a quick and easy interchange between suburban and metro services.

Customers from the Central Coast who travel to Parramatta could save about 30 minutes a day by changing to metro services, giving people more job opportunities and also leaving more time for families and recreation.

From Sydney's north, customers could save almost 20 minutes a day travelling between Hornsby and Parramatta, bringing more job opportunities closer to home for more people.

Sydney Olympic Park

The Bays Precinct

Almost 100 hectares of land is being regenerated at The Bays Precinct.

Sydney Metro West will facilitate the NSW Government's commitment to the area's renewal and creation of high value jobs in the precinct.

It will incorporate a mix of commercial, residential and retail developments to encourage innovation and the jobs of the future.

Recognising that an efficient transport system is an enabler to urban transformation, the new metro line will integrate with planning for the growing area.

Travel times (indicative)

Parramatta to The Bays Precinct

2036 AM peak: **58** MINUTES — Rail and bus

METRO RAIL: LESS THAN **20** MINUTES — Sydney Metro

"Sydney Metro will forever change how we get around our great city, bringing new opportunities closer for the next generation and beyond. At The Bays Precinct, a metro station will help turn this prospective innovation hub into a world-class beacon of ingenuity that will grow with Sydney and deliver opportunities we haven't yet even thought of. Our global city's prospects are only limited by our imagination; the delivery of world-class infrastructure like Sydney Metro takes us one step closer to a strong a vibrant future."

Patricia Forsythe

Chief Executive, Sydney Business Chamber

The Bays Precinct

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More CBD metro stations

Currently, the NSW Government is delivering new underground CBD metro stations at Barangaroo, Martin Place, Pitt Street and Central, which will all open in 2024.

As part of the Sydney Metro West project, at least one further underground metro station is proposed – giving customers more options including an easy interchange with metro rail, suburban rail, the new Sydney Light Rail and buses.

Following community and industry feedback, the location for new metro services under the Sydney CBD is still under consideration.

The final decision will take into account the best outcomes for customers, the transport system and overall community benefits.

Intermediate stations

Sydney Metro West will deliver a direct connection between the CBDs of Parramatta and Sydney, linking communities along the way that have not been previously serviced by rail and unlocking housing supply and employment growth between the two major CBDs.

Transport for NSW is investigating new metro stations between the four key precincts that the project will service.

Delivering a fast, safe and reliable metro service will be balanced with improving community benefits: the project will deliver faster public transport journey times than currently possible between the two CBDs while also getting the best outcomes for communities, connecting as many people as possible to a new world-class mass transit system.

Transport for NSW is investigating the following precincts within the Sydney Metro West corridor which could benefit from a station. We are asking the community and stakeholders like local government and industry for feedback and whether other areas warrant investigation.

Rydalmere

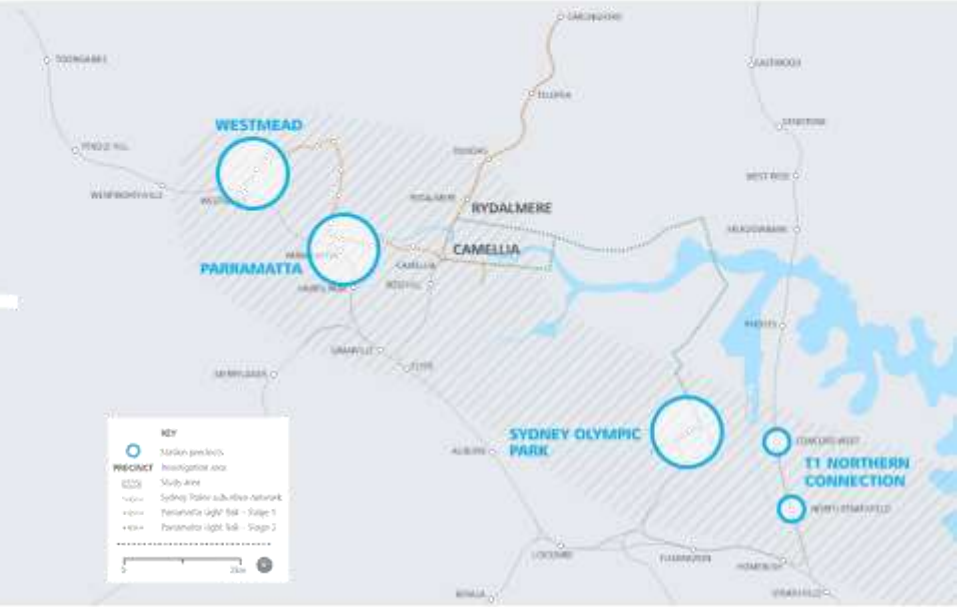
Sydney Metro West could support urban renewal opportunities, including education, residential and mixed-use employment opportunities in the suburb's light industrial and warehouse retail sectors.

A Rydalmere metro station could offer opportunities to interchange with Parramatta Light Rail and Victoria Road bus routes.

Camellia

A Camellia metro station offers opportunities to support planned urban renewal for this residential and industrial area on the Parramatta River.

There are opportunities for an interchange with Parramatta Light Rail and a metro station could support increased employment opportunities as well as residential growth.



Burwood North

A metro station at Burwood North could bring mass transit rail to a new area and could support planned employment and residential growth.

People could have more transport options with the potential to integrate the existing bus network to get customers where they need to go faster.

Kings Bay

A metro station at Kings Bay could support planned renewal of this precinct and provide a mass transit service to an area currently reliant on road-based transport.

A station could open a new rail catchment to provide customer benefits with a more frequent, reliable and fast mass transit service, and some interchange opportunities with local buses.

Five Dock

This area is currently not served by rail and relies on road-based transport.

A metro station could support planned urban renewal and could be a significant bus interchange point for Victoria Road and Parramatta Road services.

Pyrmont

Metro rail could improve accessibility to the suburb's jobs precinct and attractions.

It could also provide an opportunity to connect to the Inner West Light Rail line.

T1 Northern Connection

A new metro station connecting to either Concord West or North Strathfield station would take more pressure off the T1 line.

See page 21 for more information.

> "Residents in the City of Canada Bay have identified traffic, public transport and parking as key themes they want to improve in the future. This makes the NSW Government's investigations on Sydney Metro West an important initiative for our area. A metro between the Sydney and Parramatta CBDs creates a real opportunity to reduce traffic and provide an effective transport solution for planned growth along the Parramatta Road corridor."
>
> **Mayor Angelo Tsirekas**
> City of Canada Bay

Tunnelling

Sydney Metro West is expected to be built largely underground and operational in the second half of the 2020s.

A number of factors determine the tunnelling route and alignment. These include:

- the location, depth and structure of the stations
- vertical track grade
- rock conditions
- track curvature, to allow high train speeds
- the physical constraints of the route, including crossing under bodies of water like the Parramatta River.

Sydney Metro tunnels

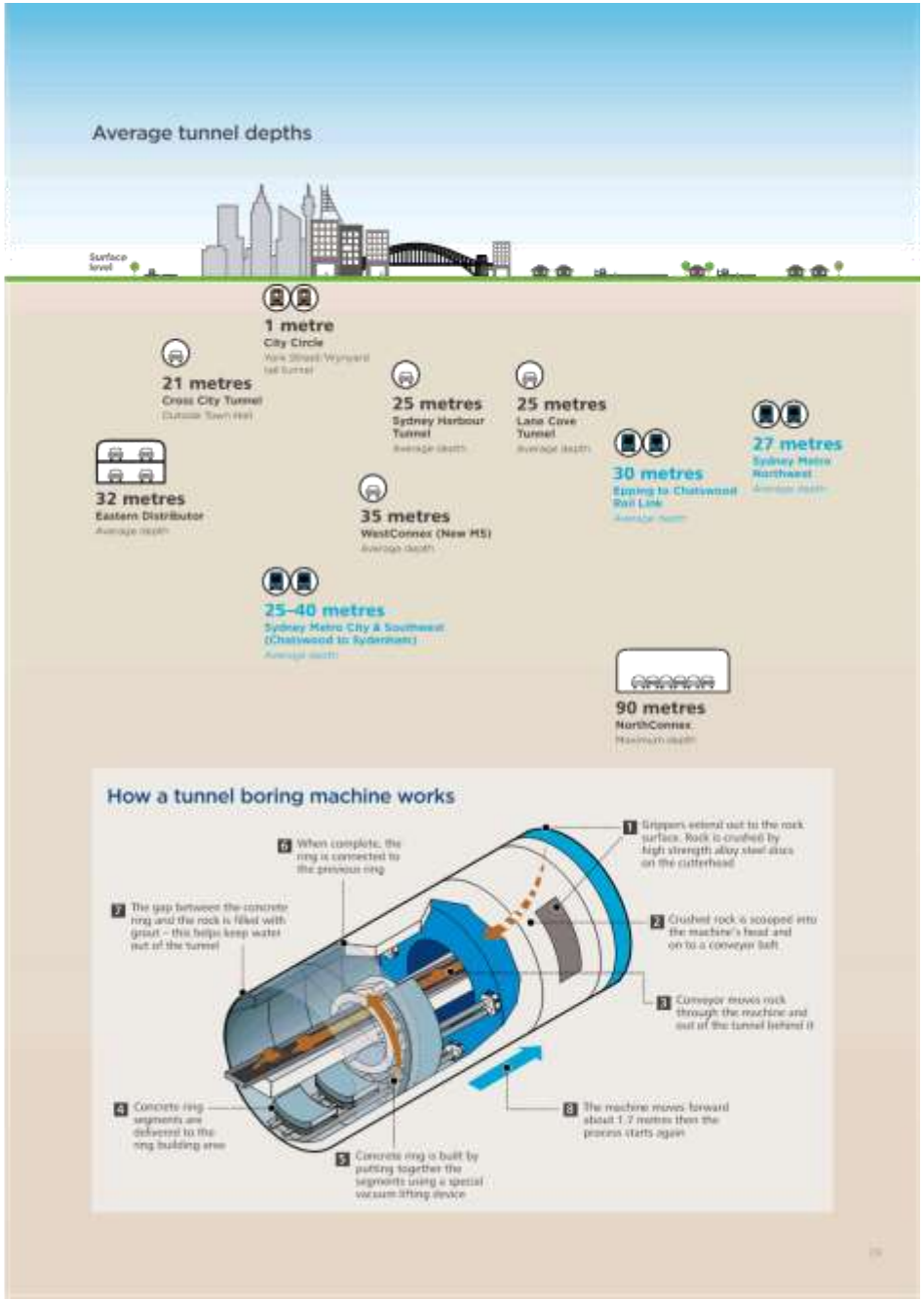
Twin 15-kilometre tunnels from Bella Vista to Epping were completed in early January 2016 – after just 16 months. At the time, they were the longest railway tunnels in Australia and were delivered by four mega tunnel boring machines.

Tunnelling will soon start again for Stage 2 of Sydney Metro – from Chatswood, under Sydney Harbour, through new underground CBD stations and southwest to Sydenham. The first of five tunnel boring machines (TBMs) will be in the ground by the end of 2018.

Tunnelling finished on 14 January 2016 with TBM2 Florence's break-through at Cherrybrook

Australia's longest railway tunnels run 15 kilometres from Bella Vista to Epping on Sydney Metro Northwest

Florence was the second of four mega tunnel boring machines which tunnelled 30 kilometres on Sydney Metro Northwest



Sydney's new metro train

KEY FACTS

2019 — **Northwest** Opens 2019

2024 — **City & Southwest** Opens 2024

Late 2020s — **Sydney Metro West** Late 2020s

00:04 — **In peak** Train every four minutes

31 M — **31 metro stations** State-of-the-art, fully accessible

66 kilometres — **66 kilometres** New metro rail for Sydney

No timetable — Customers will just turn up and go

98% — **On-time** Running reliability

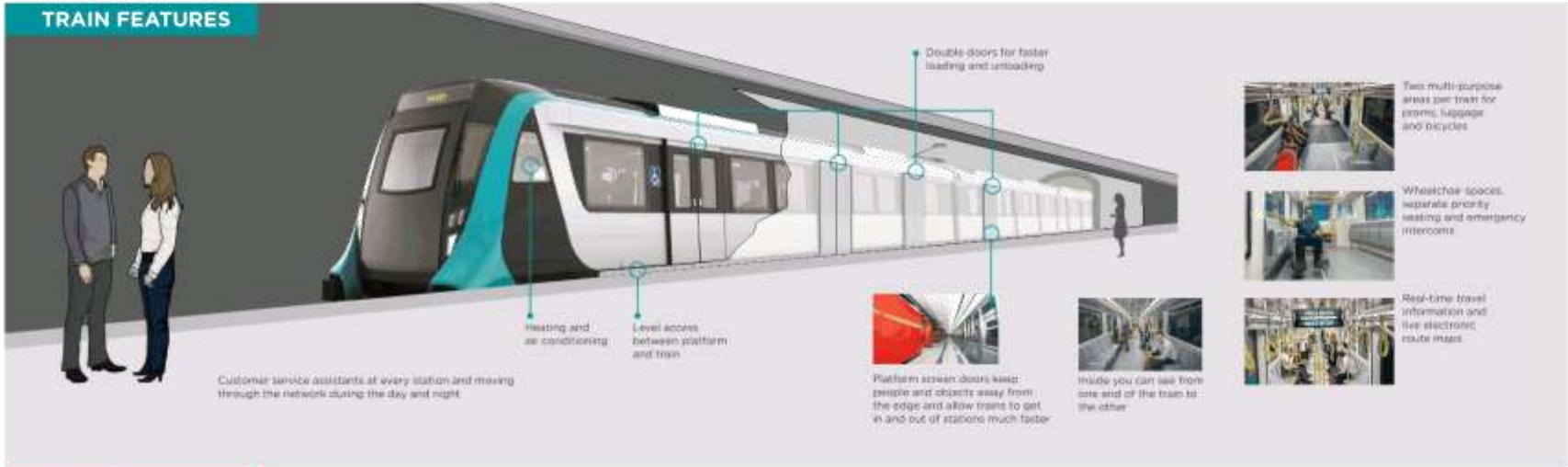
Connected — Continuous mobile phone coverage through network

38 cameras on each train

Video help points on all platforms

opal — **Opal ticketing**

TRAIN FEATURES



SAFETY

Sydney Metro is Australia's first fully-automated metro rail network

Around the world, millions of people use these networks every day in cities like Paris, Singapore, Dubai and Hong Kong

An example of a metro operations control centre

Constant monitoring
Expert train controllers monitor entire metro system

Security
More than 230 tunnel cameras on Sydney Metro Northwest alone

Signalling and communications systems
Control the trains, tunnels, platforms and skytrain to deliver a safe and reliable journey

Faster journeys
System minimises the time trains are stopped at stations and the time between each train

Operations Control Centre
State-of-the-art network controlled from new high-tech facility at Tallawong Road

Delivering new metro rail for Sydney

Customers are at the centre of Sydney Metro's stations – safety is our No. 1 priority.

Stations are designed to be an easy part of daily journeys.

State-of-the-art technology keeps customers connected – from planning a journey from home using smartphone travel apps to real-time information at metro stations and on board trains.

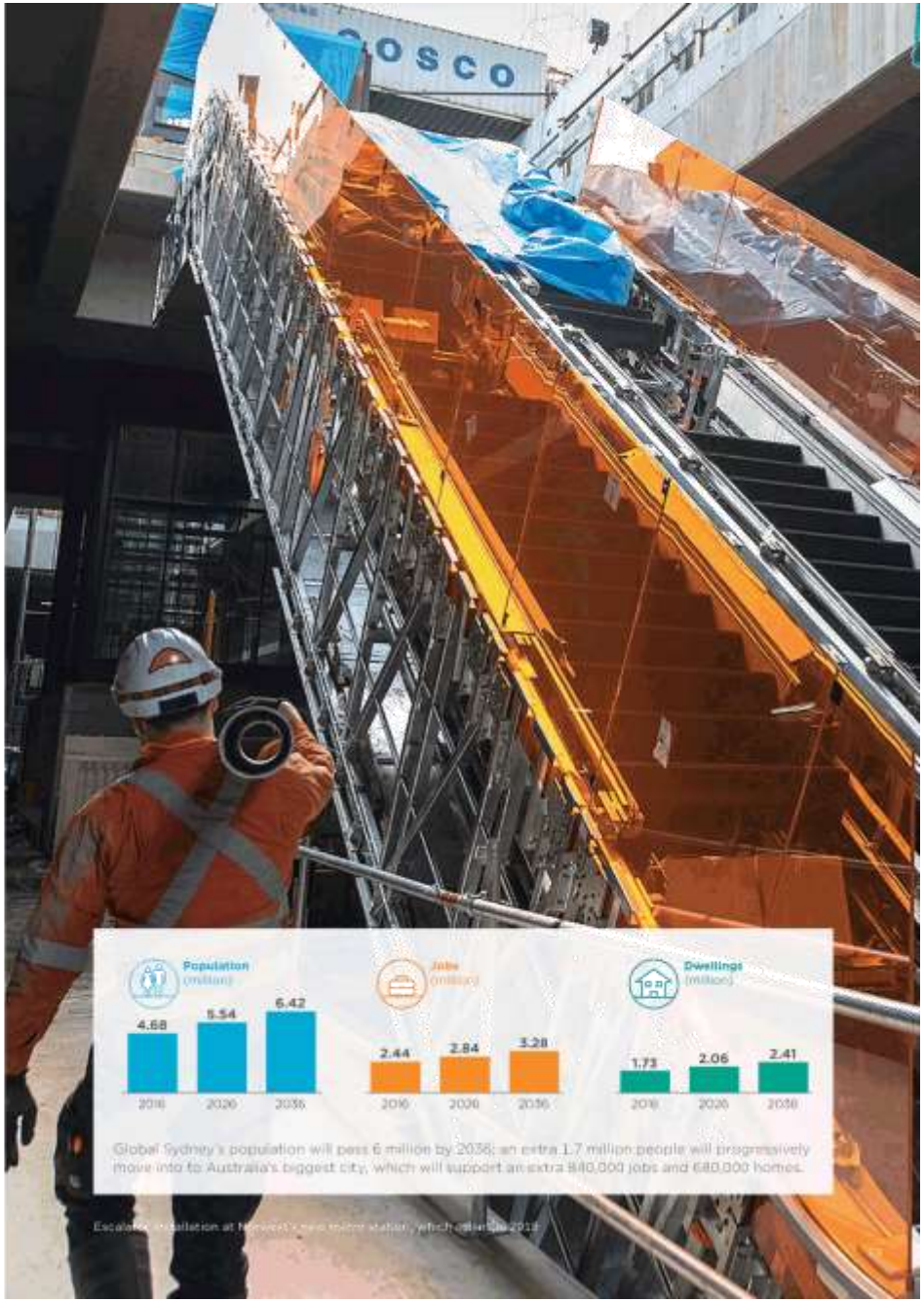
Sydney Metro stations are fully accessible for people with reduced mobility, prams and children including level access between platforms and trains.

Platform screen doors on all metro platforms keep people and objects away from the edge, improving customer safety and allowing trains to get in and out of stations much faster.

These doors run the full length of the platforms and only open at the same time as the train doors.

Sydney Metro is the first railway network in Australia to use platform screen doors, which are common around the world.

Artist's impression of Rouse Hill Station



Community consultation

Community consultation has helped plan Sydney Metro West.

Within the investigation area shown below, community consultation was initially planned to be undertaken from 27 June to 20 August 2017. However, due to the strong response from the community and stakeholders, the consultation period was extended until 3 September 2017.

The community information sessions were open events, where members of the public could view information about the Sydney Metro West proposal, talk to members of the project team and have their questions answered.

Sydney Metro West study area

Community information campaign

The residential and business community was invited to attend six information sessions staffed by project team subject matter experts. These sessions were advertised through:

- leaflet drops to 220,000 properties and businesses within the Sydney Metro West investigation area
- advertisements in the media prior to and throughout the consultation period
- project website updates – sydneymetro.info and yoursay.transport.nsw.gov.au
- email alerts to registered community members
- regular project Facebook page updates
- a project overview document, available on the project website and at all public information sessions.

Community consultation process

During the community consultation period, people were invited to provide feedback via:

- sydneymetrowest@transport.nsw.gov.au
- Sydney Metro West community information line 1800 612 173
- Sydney Metro West, PO Box K659, Haymarket NSW 1240
- Paper survey: completing a community consultation form at a public information session
- 'Have your say' on the project website at sydneymetro.info

Stakeholder engagement

Sydney Metro is committed to engaging with stakeholders at the early stage of project definition, to enable issues and concerns to be identified and addressed, in order to optimise project delivery outcomes.

Stakeholders consulted

Early engagement commenced with stakeholders in February 2017. Representatives from the Sydney Metro West project team briefed a number of key stakeholders from state government departments and agencies, local government, and peak organisations, listed in the table below.

Government departments and agencies	
Barangaroo Delivery Authority	Office of Environment and Heritage
Department of Education	Port Authority of NSW
Department of Family and Community Services	Property NSW
Department of Health	Roads and Maritime Services
Department of Industry	Sydney Motorway Corporation
Department of Planning and Environment	Sydney Olympic Park Authority
Destination NSW	Sydney Trains
Environmental Protection Authority	Transport for NSW
Greater Sydney Commission	UrbanGrowth NSW
Health Infrastructure	Venues NSW
Heritage Council of NSW	Western Sydney Local Health District
Land and Housing Corporation	Western Sydney Parklands Trust
Local government general managers, officers and administrators	
Burwood Council	Inner West Council
City of Canada Bay Council	Strathfield Council
City of Parramatta Council	Western Sydney Regional Organisation of Councils (WSROC)
City of Sydney Council	
Peak bodies, representative groups and organisations	
Olympic Park Business Association	University of Technology, Sydney
Royal Agricultural Society	Western Sydney University
University of Sydney	Committee for Sydney
Sydney Business Chamber	

High-level project information was provided at the briefings, including:

- broader transport context
- Western Sydney Rail Needs scoping study
- Sydney Metro West network objectives
- government-announced precincts at Parramatta, Sydney Olympic Park, The Bays Precinct and the Sydney CBD
- features of the Sydney Metro Northwest and Sydney Metro City & Southwest projects, to meet the needs of customers
- next steps.

Stakeholder consultation process

In addition to the high-level stakeholder briefings conducted in early to mid 2017, the following engagement activities occurred during the community consultation initially undertaken from 27 June to 3 September 2017.

In person:

- project briefings, meetings and speaking opportunities were held at the request of peak bodies, representative groups and organisations
- a stakeholder deliberative forum was held on 30 August 2017. The forum was attended by 37 senior stakeholders from a range of state, government departments and agencies, councils and some key local institutions. The primary objectives of the forum were to identify:
  - work that has already been done on developing a future vision for the corridor by local stakeholders
  - relevant issues and constraints in and around the four nominated precincts
  - stakeholder preferences in relation to the number and location of stations, journey times, and land-use opportunities and feedback on how best to connect important destinations along the alignment
  - possible stabling locations for metro train.

Written correspondence:

- Stakeholders were kept informed about the project at the following key milestones:
  - public consultation announcement, including a consultation overview and how to get involved
  - public consultation period extension notification
  - invitation to participate in a stakeholder deliberative forum.

Stakeholder consultation will continue throughout the planning process for Sydney Metro West, forming part of an ongoing engagement program undertaken by the project team.

Industry engagement

Purpose of industry engagement

Working with industry has been a hallmark of Sydney Metro since 2011.

Consultation has helped define and refine our projects by harnessing industry expertise and world's-best practice.

The NSW Government has been working with industry on Sydney Metro West to foster innovation and to help shape the project's development, maximising industry input at the early stages.

Transport for NSW has met with local and international industry participants, government agencies, peak bodies, comparator metro owners and operators, academics and other project stakeholders to get feedback.

Industry engagement process

Stage 1 of the industry engagement process took place in the second half of 2017 to build awareness of the project and to obtain market information to shape its scope and definition, ensuring the desired transport and land-use outcomes are met.

There was a high level of interest with local and international industry stakeholders:

- More than 200 enquiries from interested parties across the world and over 160 registrations to participate in the industry process;
- One-on-one meetings were held with 63 organisations, and 34 organisations provided written submissions
- Meetings included government stakeholders, peak bodies, infrastructure developers, investors and financiers, international trains and systems suppliers and land owners along the proposed corridor.

International benchmarking survey

Transport for NSW is also engaging with leading local and international metro owners and operators through an international benchmarking survey to help inform the project's development.

Topics discussed include train configuration, speeds, signalling and stabling, project delivery and lessons learned.

Participating organisations included Crossrail, GVB (Amsterdam Metro), MTR, Melbourne Metro Rail Authority, Cross River Rail Delivery Authority, Serco (Dubai Metro), Sound Transit Seattle and Régie Autonome des Transports Parisiens.

Next steps – industry engagement stage 2

A second round of industry engagement is being undertaken to seek feedback on:

- Market sounding on the level of industry appetite and preference for packaging options, contracting options, and transaction principles as identified in the initial delivery strategy
- The initial delivery strategy, particularly in relation to the packaging of metro operations and maintenance, and integrated place making, stations, and development
- Specific technical issues to inform the definition design and project definition report
- Options to enhance the benefits of Sydney Metro West through value sharing or the possible use of non-government land in partnership with the private sector to deliver greater value for money to the people of NSW.

For more information, contact the industry engagement team:
industry.sydneymetro@sydneymetro.info

Since 2011, Sydney Metro has worked with industry

Next steps

Developing the project will involve the following key stages, as outlined below.

Sydney Metro has worked with the community every step of the way since 2011, refining the program of works for better outcomes.

From the planning stage and now into delivery, the Sydney Metro Delivery Office within Transport for NSW has been constantly talking to the community and taking on board their feedback – so the best projects possible can be delivered.

Ongoing consultation every step of the way has been a hallmark of Sydney Metro since the establishment of the first project team in 2011.

The projects have been refined and defined through community consultation.

Further information

Further information can be found on the project website at **sydneymetro.info** or by contacting the project team via:

- **sydneymetrowest@transport.nsw.gov.au**
- Sydney Metro West community information line **1800 612 173**
- Sydney Metro West, PO Box K659, Haymarket NSW 1240

Appendix

Appendix A

The map illustrates the Sydney Metro Northwest, City and South West and Sydney Metro West Alignments.

Stage 1 of Sydney Metro is under construction. There are thirteen stations including:

- Cudgegong Road
- Rouse Hill
- Kellyville
- Bella Vista
- Norwest
- Showground
- Castle Hill
- Cherrybrook
- Epping
- Macquarie University
- Macquarie Park
- North Ryde
- Chatswood

Stage 2 of Sydney Metro will run from Chatswood to Bankstown including the following stations:

- Chatswood
- Crows Nest
- Victoria Cross
- Barangaroo
- Martin Place
- Pitt Street
- Central
- Waterloo
- Sydenham
- Marrickville
- Dulwich Hill
- Hurlstone Park
- Canterbury
- Campsie
- Belmore
- Lakemba
- Wiley Park
- Punchbowl
- Bankstown

Stage 3 of Sydney Metro will run from Sydney CBD to Westmead. The map shows the study area and includes announced stations and precincts being considered at Sydney CBD, The Bays Precinct, T1 Northern Connection, Sydney Olympic Park, Parramatta and Westmead.

Appendix B

Average tunnel depths

- City Circle, York Street/Wynyard rail tunnel – 1 metre
- Cross City Tunnel, outside Town Hall – 21 metres
- Sydney Harbour Tunnel, avergae depth – 25 metres
- Lane Cove Tunnel, average depth – 25 metres
- Sydney Metro Northwest, average depth – 27 metres
- Epping to Chatswood Rail Link, average depth – 30 metres
- Eastern Distributor, average depth – 32 metres
- WestConnex (New M5), average depth – 35 metres
- Sydney Metro City & Southwest (Chatswood to Sydenham) – 25–40 metres
- NorthConnex, maximum depth – 90 metres

How a tunnel boring machine works

1. Grippers extend out to the rock surface. Rock is crushed by high strength alloy steel discs on the cutterhead
2. Crushed rock is scooped into the machine's head and on to ta conveyor belt
3. Conveyor moves rock through the machine and out of the tunnel behind it
4. Concrete ring segments are delivered to the ring building area
5. Concrete righ is built by putting together the segments using a special vacuum lifting device
6. When complete, the rign is connected to the previous ring
7. The gap between the concrete ring and the rock is filled with grout – this helps keep water out of the tunnel
8. The machine moves forward about 1.7 metres then the process starts again

Appendix C

SYDNEY'S NEW METRO TRAIN

Key Sydney Metro facts

- Stage 1 – Sydney Metro Northwest opens in 2019
- Stage 2 – Sydney Metro City and Southwest opens in 2024
- 66 kilometres of new metro rail for Sydney
- 31 state-of-the-art, fully accessible metro stations
- 98 percent on time running reliability
- A train every four minutes in the peak
- A train every 10 minutes in the off peak
- Continuous mobile phone coverage through the network
- No timetable – customers will just turn up and go
- Opal Ticketing

Train features

- Three double doors per carriage for faster loading and unloading
- Level access between platform and train
- Two multi-purpose areas per train for prams, luggage and bicycles
- Wheelchair spaces, separate priority seating and emergency intercoms
- Real-time travel information and live electronic route maps
- Platform screen doors keep people and objects away from the edge and allow trains to get in and out of stations much faster
- Inside you can see from one end of the train to the other
- Heating and air conditioning
- 170 metres long platforms – longer than most of Sydney
- Customer service assistants at every station and moving through the network during the day and night

Safety

- Sydney Metro is Australia's first fully-automated metro rail network Around the world, millions of people use these networks every day in cities like Paris, Singapore, Dubai and Hong Kong

Operations Control Centre

- State-of-the-art network controlled from new high-tech facility at Tallawong Road
- Constant monitoring - Expert train controllers monitor entire metro system
- Security – More than 230 tunnel cameras on Sydney Metro Northwest alone
- Signalling and communication systems – Control the trains, tunnels, platforms and skytrain to deliver a safe and reliable journey
- Faster journeys – System minimises the time trains are stopped at stations and the time between each train

Appendix D

This infographic outlines the factors we consider when planning a new metro including:

- planned population and supporting new jobs
- connecting centres
- transport integration
- meeting customer needs
- cost and value for money
- engineering feasibility
- local heritage
- local environment
- stakeholder industry and community feedback.

Appendix E

This infographic outlines:

- population in 2016 at 4.68 million, in 2026 at 5.54 million and in 2036 at 6.42 million
- jobs in 2016 at 2.44 million, in 2026 at 2.84 million, in 2036 at 3.28 million
- dwellings in 2016 at 1.73 million, in 2026 at 2.06 million, in 2036 at 2.41 million.

Appendix F

This graphic describes community comments in 2017 about a need for faster and more frequent services between the two CBD's and reduced crowding on trains:

- a metro train service with faster more frequent services between Parramatta and the Sydney CBD – over 800 comments
- improve transport connections between other transport
- modes including existing trains, bus and light rail – over 800 comments
- reduced crowding on trains – over 700 comments
- improved transport options for Western Sydney – over 650 comments
- provide the opportunity to renew and revitalise areas with more cafés, restaurants and shops – over 600 comments
- create more homes and jobs near metro station locations – over 600 comments
- none of the above – over 20 comments.

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Information in this document has been prepared in good faith and is correct at the time of printing. March 2018.

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18044-SMW 3/2018

City of Parramatta

Submission to Sydney Metro West

8 September 2017

1. PURPOSE

Council officers of the City of Parramatta understand that Transport for NSW (TfNSW) is currently considering the number of stations and the alignment of Sydney Metro West through consultation with the community and industry. The project is expected to be built largely underground and be operational in the second half of the 2020s.

This document has been prepared by officers of the City of Parramatta Council to provide local input into consideration by TfNSW of an alignment and station locations for Sydney Metro West. This submission has been formed to reflect Council's endorsed (on 24 October 2016) *Submission to the Western Sydney Rail Needs Scoping Study – Discussion Paper* (refer to Attachment 1), other policies and positions adopted by Council, and Council officers' professional judgment and knowledge of the local government area.

TfNSW commenced a consultation on this project in June 2017. This submission has been prepared primarily with the limited public information released by TfNSW. The study area announced by TfNSW is reproduced at Figure 1.

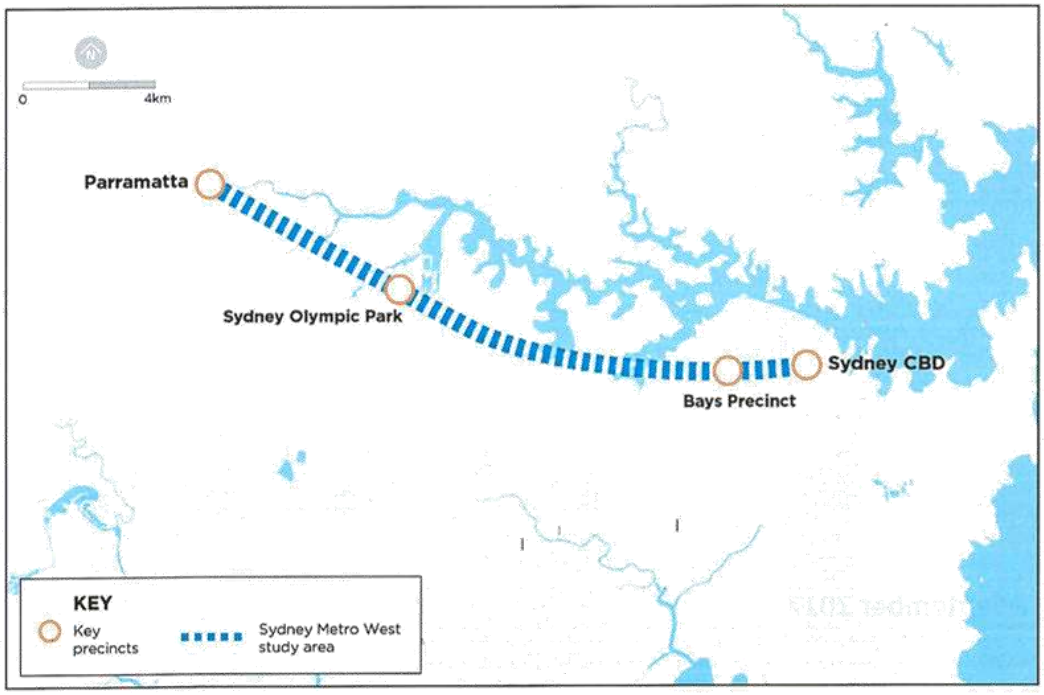

Figure 1: Sydney Metro West Study Area (source: TfNSW)

In addition to the public consultation, Council officers attended a deliberative consultation with TfNSW and other stakeholders on 30 August 2017.

2. BACKGROUND

The Greater Sydney Commission's vision for a thriving economic corridor from Greater Parramatta to Olympic Park (GPOP) recognises the crucial part Parramatta will play in the future growth of Global Sydney. The GSC outlines the creation of a three city strategy for Sydney with GPOP as the Central City, Western Sydney Airport as the Western City and Sydney City as the Eastern City. GSC's plan, identifies Parramatta as the "connected, unifying heart" of Global Sydney. The City of Parramatta has worked closely with the GSC and other stakeholders to create a unified vision for what is a critical economic corridor, which will be underpinned by planned transport infrastructure such as Sydney Metro West and Parramatta Light Rail.

Council has a long history of advocating for rail facilities to serve Western Sydney, including, for example, the previous Sydney West Metro and the Parramatta to Epping Rail Link. In March 2016, Council, along with the Sydney Business Chamber – Western Sydney commissioned the *Western Sydney Airport Fast Train - Discussion Paper* to explore fast train connectivity between the Western Sydney Airport, Parramatta and Sydney. The study highlighted several viable routes, including a tunnel from Sydney CBD, with stations at the Bays Precinct, Sydney Olympic Park and Parramatta.

In October 2016, the City of Parramatta made a *Submission to the Western Sydney Rail Needs Study – Discussion Paper*. In this endorsed submission, the Council enumerated the following ordered priorities for heavy rail provision:

1. **A (very) fast East-West shuttle,** from Sydney CBD to Parramatta CBD, and on to the Western Sydney Airport.

2. **Sydney's first central North-South Metro link,** connecting Campbelltown and Liverpool via Parramatta and further onwards to a Sydney Metro node at Norwest

3. **Provision for a future North-South link** through WSA, from Leppington to WSA and then to the Western Line.

The priorities are mapped in Figure 2.

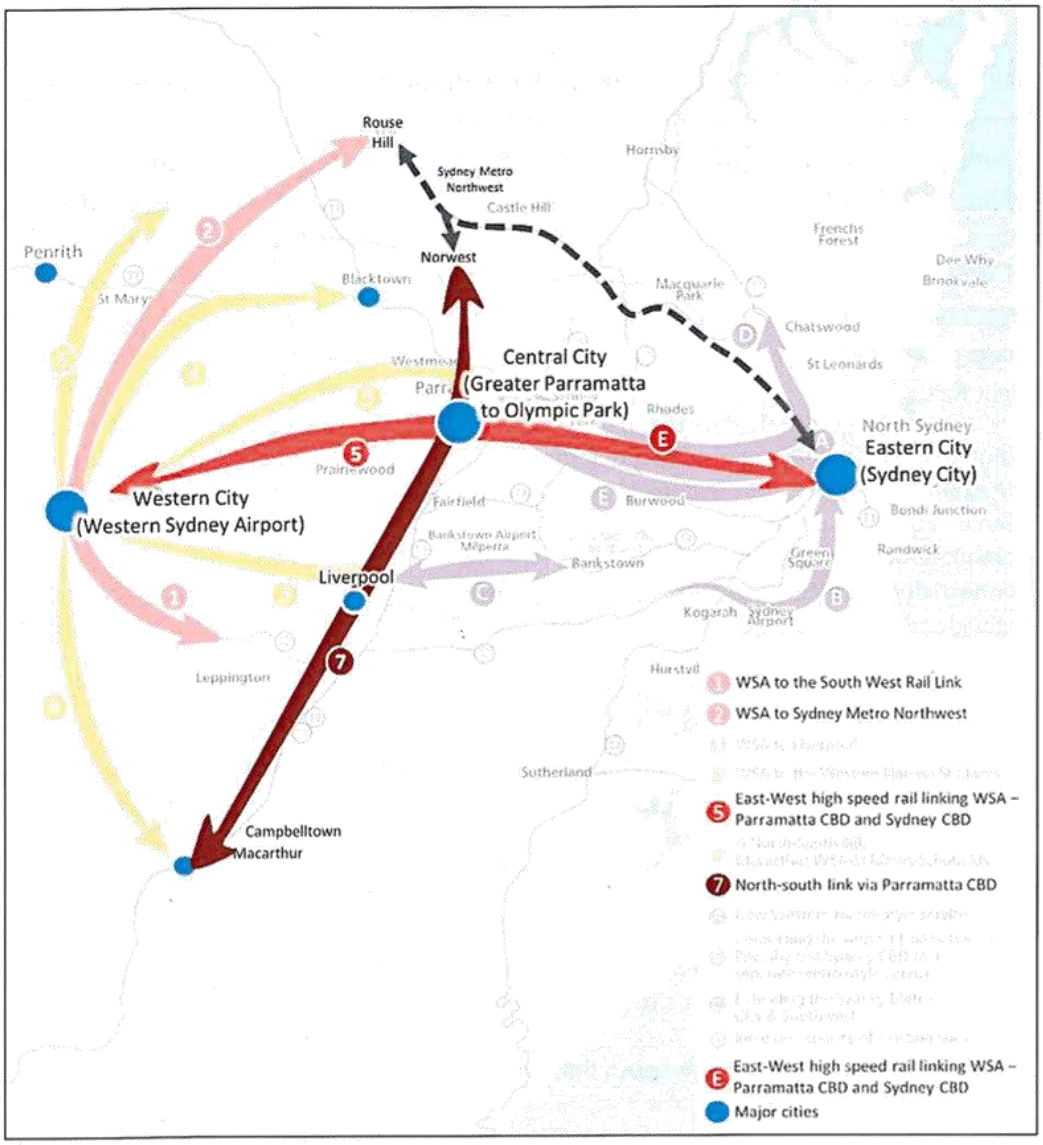

Figure 2: City of Parramatta Priorities for Western Sydney Rail Needs Scoping Study - Discussion Paper

In addition to heavy rail priorities, the City of Parramatta Council is working with Transport for NSW to deliver Parramatta Light Rail. In 2013, Parramatta City Council commissioned an initial feasibility study into light rail for Western Sydney. In 2014 the NSW Government shortlisted four corridors where light rail could play a key role in improving transport connections and cater for future growth. In December 2015, the NSW Government announced the first stage of the Parramatta Light Rail network, from Westmead through to Parramatta North, Parramatta CBD, Camellia, Silverwater, Sydney Olympic Park and Strathfield, with a spur line running north to Carlingford from Camellia.

In February 2017, the NSW Government announced that the preferred route for Stage 1 is to connect Westmead to Parramatta and Carlingford via Camellia. Stage 2, being Camellia to

Strathfield via Sydney Olympic Park, is being further investigated in conjunction with Sydney West Metro.

Parramatta Light Rail will significantly improve public transport options and connectivity across part of the City of Parramatta LGA. The NSW Government's metropolitan strategy, "A Plan for Growing Sydney" (2014), provides for Parramatta Light Rail investigations which would expand the network to Castle Hill, Macquarie Park and Bankstown in the future. Parramatta Light Rail is depicted in Figure 3.

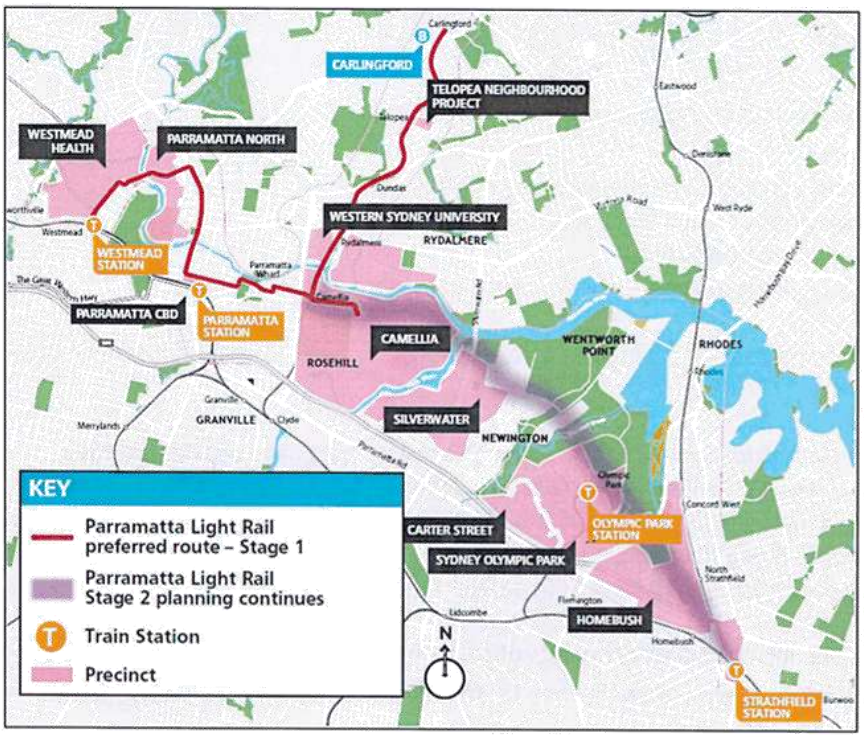

Figure 3: Parramatta Light Rail preferred alignment - Stage 1 and indicative Stage 2 alignment, source: TfNSW

3. GENERAL ISSUES

In 2016 the City of Parramatta conducted extensive consultations with over 9,000 residents and stakeholders to adopt the following vision statement:

'Sydney's central city, sustainable, liveable, and productive – inspired by our communities'

The new vision recognises the important role that Council will play in shaping Sydney's future as a Central City - aligning with the Greater Sydney Commission's recently released vision for the region.

Key priorities which relate to Sydney Metro West include:

- creating a strong economy with a strong city centre
- managing growth and transport
- having a community focus
- creating vibrant neighbourhoods and precincts

Council's priorities also include promoting a healthy environment, recreation opportunities and arts and culture.

In considering proposals for Sydney Metro West, Council officers have considered the application of the above priorities. Key issues for Council officers at this preliminary stage include providing a high quality integrated transport service, facilitating development which supports great public domain and places and promoting urban renewal and revitalisation, all while supporting the natural, social and built amenity of our local government area.

A key concern is serving the transport needs of current and expected residents, visitors and workers in our quickly growing area. Sydney Metro West will improve transport options for these areas now and for the future.

Stage1 design and procurement and Stage 2 preliminary investigations for Parramatta Light Rail are being developed at the same time as preliminary investigation for Sydney Metro West. Light rail and Metro may be expected to interface at up to four points (Westmead, Parramatta CBD, Camellia and Sydney Olympic Park). The integration of public transport services is critical to achieve positive urban design, land use and transport outcomes. Sydney Metro west should be coordinated with planning and design of Parramatta Light Rail to assure appropriate linkages to existing and planned land uses and seamless interchange between modes.

4. KEY ISSUES

Fast Rail

Metro West should have capacity and speed characteristics to meet the region's needs not only in 2030, but for decades to come as the GSC's Three Cities vision and the promise of the Western Sydney Airport is realised. As the Three Cities sit at the top of a hierarchy of urban centres, so too should the transport links which feed them. A typical Metro product with multiple intermediate stops will not reinforce the envisioned economic role of the Three Cities. Failure to address this city-shaping opportunity will lead to dispersed development, poorer transport and land use outcomes, and fewer agglomeration benefits in the three CBDs and across Greater Sydney.

At a recent deliberative consultation, Sydney Metro discussed optioneering among three indicative urban rail products which varied in terms of station density, average speed, and capacity. It appears to Council officers that a compromise product, featuring several intermediate stations and moderately fast speeds is favoured for further consideration because it provides a desirable 'mix' of speed and opportunities to serve existing development and catalyse new development. Council officers suggest that just comparing time savings and development opportunities along the lines is not an effective measure of the comparative benefits of different rail configurations. A preliminary step should be taken to determine the overall value of providing express service between the three cities and the airport. This would take in the considerable agglomeration and city-shaping benefits for each CBD. These may provide greater opportunities than redevelopment at intermediate stations along the routes.

If fast, direct train services are not the primary objective of the project, this frame of analysis should be employed to weigh options for faster services such as duplication and/or passing loops to facilitate express and skip-stop servicing.

Metro West Station in Parramatta CBD

Parramatta is located at the geographical centre of Sydney and is a focus for employment, housing, recreation and cultural opportunities. Parramatta has been designated by the greater Sydney Commission as Sydney's Central City. Parramatta is the central business district of the Greater Parramatta and the Olympic Peninsula (GPOP), which the Greater Sydney Commission has envisioned will become 'Greater Sydney's true centre'. To fully realise its potential, Parramatta must stimulate significant job and dwelling growth to increase its social and economic prosperity. Although the CBD is well-served by public transport, additional capacity, routes, and service patterns will be needed to accommodate expected growth and the new role Parramatta CBD is filling.

As part of its ongoing rail advocacy, Council has considered the merits of various station configurations and officers have formed a preliminary position that an additional rail station

in Parramatta should be centrally located, with sufficient capacity to accommodate future expansions of rail service to the north, south, east and west.

The benefits of locating the station centrally within Parramatta CBD easy access to major developments such as Parramatta Square, Western Sydney Stadium, and the Museum of Applied Arts and Sciences. A central location will also support seamless interchange between rail lines and with light rail.

Because of the fast pace of development in Parramatta CBD, the location of a station should be considered as a priority, and steps taken to reserve land for this critical infrastructure. Council has identified opportunities for station locations in Parramatta CBD and looks forward to working with Sydney Metro in this regard.

Metro West station in Westmead

Westmead is Australia's largest Health and Education Super Precinct with more than $3 billion committed by government, universities and the private sector. The precinct is on a trajectory to increase its high-value, knowledge-based jobs to more than 26,000 and increase student numbers to more than 10,000 by 2026. Long range planning for the precinct could include an additional university campus, with up to 50,000 students and up to 50,000 jobs. Westmead is a priority growth area and is part of the Greater Parramatta Priority Growth Area.

The precinct is poorly served by its road network, with very limited access from the south and west, and no private vehicle access from the north or east. Current levels of public transport, including light rail, the northwest T-way busway, and the existing Westmead train station will be inadequate for planned future development.

The Sydney Metro West should be planned and built to include a station in Westmead to serve the three hospitals and the growing innovation precinct. The City of Parramatta Council, along with the Western Sydney Local Health District and other partners of the Westmead Alliance, has begun a Master Plan for this important precinct which will identify opportunities to coordinate development with infrastructure projects like Parramatta Light Rail and Sydney Metro West. Outputs of this plan, including testing of station locations will be shared with Transport for NSW later this year.

Metro West station in Camellia

Council is currently working with the State Government on a master plan to accommodate up to 10,000 new homes (approximately 23,000 residents) and 8,550 jobs in a mixed use precinct which will still retain some industrial land and the entertainment precinct at Rosehill Racecourse. This former industrial land has poor road and public transport connections. Light Rail is planned to service the precinct, however, light rail alone is not likely to meet the needs of the planned residents, workers and visitors to the entertainment precinct. A station in this

location will benefit Camellia users and existing residents and those expected through planned redevelopment along the Carlingford Line. Parramatta Light Rail will close the Rosehill Station, severing direct connectivity to the Western Line via Clyde. Users will be required to travel to Parramatta to interchange with heavy rail. This will increase time-in-vehicle for all users from the Carlingford to Rosehill wishing to travel east on the rail network. A Camellia Metro Station will have a major impact on reduced travel times for residents and workers and visitors to the entertainment precinct.

Integration with Parramatta Light Rail

West Metro should have multiple transfer points along the Parramatta Light Rail. Metro Stations should be integrated with light rail stops at the following locations:

- Sydney Olympic Park – light rail will act as a feeder service to bring passengers to light rail from residential areas.
- Camellia – an important interchange for access to the rail network for users along the Carlingford Line.
- Parramatta CBD—critical for connecting Metro passengers to Greater Parramatta. Council understands that this is expected to be the busiest light rail stop with a high level of interchange to the T1 Western Line. Metro will probably have similar synergy.
- Westmead – important for connecting rail users with both hospitals and research and educational institutions in the Education and Innovation Precinct.

Western extension to Western Sydney Airport

Planning for route alignment, station locations and orientation should take into consideration future extension of Sydney Metro West, including faster services described above, to the Western Sydney Airport. Council has explored the critical importance of linking the Three Cities by rail in *Western Sydney Airport Fast Train – Discussion* Paper (refer to Attachment 2) and *15 Minutes: fast tracking the dual CBDs* (refer to Attachment 3).

Interchange with future Metro Lines

Planning for route alignment, station locations and orientation should take into consideration future interchange with a central north-south Metro link connecting Campbelltown and Liverpool via Parramatta and further onwards to Sydney Metro Northwest. The rationale for a north-south Metro line is discussed *in Western Sydney Airport Fast Train – Discussion Paper* (refer to Attachment 2). North-south and east-west Metro lines centred and intersecting on Parramatta CBD are needed to solidify Parramatta's role as Sydney's 'Central City'.

6. NEXT STEPS

Council will continue to actively engage with the NSW Government in planning for the delivery of the Sydney Metro West. Council looks forward to participating in the further development of the preferred alignment and station locations. Once a preferred alignment is chosen, Council will work with TfNSW on refinement of the alignment and station locations.

Attachments

Attachment 1: *Submission to the Western Sydney Rail Needs Study – Discussion Paper*

Attachment 2: *Western Sydney Airport Fast Train – Discussion Paper*

Attachment 3: *15 Minutes: fast tracking the dual CBDs*

LEADING

ITEM NUMBER	13.10
SUBJECT	Heritage Advisory Committee minutes for 18 April 2018
REFERENCE	F2013/00235 - D06121095
REPORT OF	Project Officer- Land Use Planning

PURPOSE:

To inform Council of the key discussion points of the meeting of the Heritage Advisory Committee on 18 April 2018.

RECOMMENDATION

a) **That** the minutes of the Heritage Advisory Committee meeting of 18 April 2018 be received and noted.

b) **Further, that** Council note with sadness the passing of Committee member David Shakespeare OAM and the significant contribution he has made to the work of the Heritage Advisory Committee and heritage in Parramatta and that Council conveys its condolences to his wife and family.

BACKGROUND

1. Council's Heritage Advisory Committee meets every two months and currently comprises 11 members. The purpose of the Committee is to advise Council on how best to conserve, promote and manage heritage within the Parramatta LGA for future generations.

2. Council's Heritage Advisory Committee met on 18 April 2018. This meeting did not have a quorum and consequently was not able to make recommendations and could only consider issues. This report provides a summary of the key discussion points of that meeting for Council's information and consideration. The minutes of the meeting are provided at **Attachment 1**.

ISSUES

3. The following items were considered at the meeting:

(a) <u>Briefing of Committee</u>

The Committee considered (item 23/18) that additional information on a number of matters including the original City of Parramatta Heritage Study 1993, how to access heritage inventories, look up development applications on Council's website and access Council's Business Papers would be beneficial to members of the Committee. Council staff will provide a briefing on these matters at the next meeting of the Committee.

(b) Development applications

The Committee was briefed on a number of Development Applications (Items 29/18 to 32/18) and made comments on the following two applications:

- 37 Marion Street, Parramatta (DA/823/2017)

  The application is for demolition of all existing buildings on site including a locally heritage listed dwelling. The Parramatta Local Planning Panel determined on 17 April 2018 that the application for demolition be approved.

  The Committee noted that the heritage inventory for this heritage item contained little historical information and requested that known history of heritage items should be added to the heritage inventories for these items. Generally, the heritage inventories for the 693 heritage items in Schedule 5 of Parramatta LEP 2011 contains some historical information. Historical information can be added to the inventories when drawn to the attention of Council staff or should Council decide to undertake a comprehensive review of heritage items at some stage in the future.

- 19 Sussex Street, Epping (DA/4/2018)

  The application is for demolition of existing buildings and erection of a two-storey residential building situated in the East Epping Heritage Conservation Area. The matter was raised to seek the Committee's general comments on the demolition of buildings from the Victorian, Federation, inter-war and post-war periods.

  The Committee noted that it is opposed to the demolition of buildings in heritage conservation areas. This comment has been forwarded to Council's Development Assessment Unit and Heritage Advisor for information.

(c) Cultural Heritage and Tourism Update

A written update was provided (Items 34/18 to 41/18) on the following matters:

- The Lennox Bridge interpretation.
- The completion of the Waves of People History, dealing with migration to Parramatta.
- Heritage interpretation of Parramatta Square.
- The 2018 Australian Heritage Festival and events being delivered by the Cultural Heritage and Tourism Team.
- The 2018 Community Grants Fund, and promising candidates that have applied.
- History through film – opportunities are being explored to feature extensive archive of films at Riverside Theatres.

- The digitisation of Council meeting minutes from 1851 to 1945. It was noted that students of Prof Carol Liston may be willing to assist in the transcription of handwritten Council meeting notes and make them accessible to all researchers.
- An EOI for external consultants has been prepared to develop a heritage strategy for the whole of the LGA.

(d) Heritage Near Me Western Sydney Event

The Committee was updated (Item 17/18) on the proposed heritage event for Western Sydney in October 2018 to be organised through the Heritage Near Me program of the NSW Office of Environment and Heritage. The update included events that are to be delivered by the City of Parramatta Council, including heritage seminars, as part of the Western Sydney event. The Committee commented that the proposed heritage seminars should be held not just in the Parramatta CBD, but in different locations around the Parramatta LGA and at different times during the week. This suggestion will be taking into account in the event planning.

PASSING OF DAVID SHAKESPEARE

5. Advice was recently received that Committee member, David Shakespeare OAM, passed away on 5 May 2018, after suffering ill health this year. David was a member of the Committee for approximately 25 years and also an active member of the Parramatta and District Historical Society. He played a significant role in expanding the understanding of Parramatta's heritage amongst schools in the Parramatta area and strengthening bonds between HMAS Parramatta IV and Parramatta City. In 2013, he received an Outstanding Heritage Award for heritage education at Council's Heritage Awards 2013. It is recommended that Council extend its condolences to his wife and family.

CONCLUSION

4. It is recommended that this report be received and noted. The next meeting of the Committee will be held on 20 June 2018.

Paul Kennedy
Project Officer – Land Use Planning

Robert Cologna
Acting Service Manager Land Use Planning

Sue Weatherley
Director Strategic Outcomes and Development

ATTACHMENTS:

1⇩ Heritage Advisory Committee minutes for 18 April 2018 7 Pages

REFERENCE MATERIAL

REPORT OF THE HERITAGE ADVISORY COMMITTEE MEETING HELD IN LEVEL 12 LEVEL MEETING ROOM 6, 26 CHURCH STREET, PARRAMATTA ON WEDNESDAY, 18 APRIL 2018 AT 5.12PM

PRESENT

Professor Carol Liston in the Chair, Jeffrey Allen and Ruth Evans

IN ATTENDANCE

Paul Kennedy (Project Officer Land Use) and Joy Bramham (Minute Clerk).

WELCOME

Chairperson, Carol, Liston welcomed all to the meeting.

APOLOGIES

Apologies were received and accepted for the absence of Diana Barez, Catherine Dolle – Samuel, Niamh Lowe, Brian Powyer, David Shakespeare, Dr Terry Smith and Justine Dowd (SM Cultural Heritage & Tourism)

DECLARATIONS OF INTEREST

There were no declarations of interest at this meeting.

CONFIRMATION OF MINUTES OF MEETING HELD WEDNESDAY, 21 FEBRUARY 2018,

23/18 As there was not a quorum, the minutes of 21 February 2018 were not confirmed.

It was noted that additional information regarding the history of the Committee, Heritage Study, how to access the Heritage Register, how to look up Development Applications on Council's website and access Council's Business Papers would be beneficial in building up the knowledge and engagement of the Committee.

BUSINESS ARISING FROM THE MINUTES

24/18 **Notification of Development Applications (Item 1/18)**

Mr Paul Kennedy contacted the Development and Transport Services Unit requesting that notification letters include information on the specific heritage items affected.The Unit indicated that this request would be actioned and that the project description would be updated to include information on affected heritage items.

It was further noted that notification letters dated 12 April 2018 did not contain this additional information. Mr Paul Kennedy will follow up.

25/18 **Development Application (Items 5/18, 9/18)**

The Committee's comments regarding 220 Church Street and the Roxy Theatres were provided to the relevant planners in Development Assessment.

It was noted that for the Roxy DA Council had received 35 objections, 2 submissions of support and 2 submissions with comments only.

Twenty five submissions noted that the Roxy is unique and that it should be retained for it's heritage value. Ten submissions noted that the Roxy should be returned to its original use and as a live venue theatre.

26/18 **Technology and heritage items (Item 21/18)**

A report on this issue will be brought to the Committee meeting in June 2018. It was again noted that there should be training for the Committee regarding how to use technology and Council systems. The Committee needs to know what information is in the public domain - that Councillors and Council staff use to make their decisions.

27/18 **Advanced notice of Development Applications (Item 22/18)**

Mr Zoran Popovic, Council's Heritage Advisor circulated information prior to the Committee meeting regarding DAs that were being considered due to their heritage significance.

COUNCIL REPORT

28/18 **Report to Council on 23 April 2018**

The Report on the 21 February 2018 Committee meeting was deferred and will be considered at the 23 April 2018 Council Meeting.

The Committee noted that the Epping Planning review will be reported to the 14 May 2018 Council Meeting. Business Papers for the Meeting will be available at https://www.cityofparramatta.nsw.gov.au/businesspapers from Monday 7 May 2018.

DEVELOPMENT APPLICATIONS

Paul Kennedy gave a brief presentation on the development applications that are currently being assessed.

29/18 **DA/194/2018, 8 Rawson Street EPPING NSW 2121**

This application is for tree removal and construction of a secondary dwelling.

30/18 **DA/409/2017/A, 18 Galloway Street NORTH PARRAMATTA NSW 2151**

This application is a Section 4.55(1A) modification to DA/409/2017 for alterations and additions to the rear of existing dwelling identified to be a heritage item of local significance.

The Committee noted that the heritage assessment of the works need to be considered in context and considered as a whole. If the item was listed due to architectural merits only, then alterations to the rear may not significantly detract from the heritage value. If the Item was listed due to the story of the building, then alternations the rear of the property may be significant.

Prof. Carol Liston will investigate the history of 18 Galloway Street, and provide feedback to Council Officers.

31/18 **NCA/2/2018, Parramatta West Public Primary School 59B Franklin Street PARRAMATTA NSW 2150:**

This application is for alterations and additions.

The Committee noted that the new buildings are on the Playground, no works are proposed to the two heritage items and that the application represents the best endeavour of providing facilities in the space available.

The Committee further noted that the Heritage Impact Study for the development is a good model. It states why the heritage is important, provides the logic for the proposed development and how the heritage items will be enhanced.

32/18 **DA/823/2017, 37 Marion Street, PARRAMATTA**

This application is for demolition of existing buildings, including a locally heritage listed dwelling (Heritage Item I731).

This Development Application was determined by the Parramatta Local Planning Panel on 17 April 2018. The determination of the Panel was to approve the demolition of the heritage item.

The Committee noted that the heritage inventory for the heritage item does not include the stories for the site or any information on the history of the item. Due to financial and time limitations, the original 1993 heritage study was only able to evaluate houses on their aesthetic merits.

The Committee requested that any known history of heritage items should be updated in the heritage inventories.

33/18

DA/4/2018, 19, Sussex Street, Epping

The application is for demolition of existing buildings and erection of a two-storey residential building situated in the East Epping Heritage Conservation Area.

This application raises the general issue of demolition of buildings from the Victorian, Federation, Inter-war and Post-war periods. It was noted that this item is not a heritage item.

The Committee noted that it is opposed to the demolition of buildings in a heritage conservation area.

CULTURAL HERITAGE & VISITOR SERVICES WRITTEN UPDATE

The following was provided by Justine Dowd and tabled at the Committee meeting.

34/18 **Lennox Bridge Interpretation**

- Interpretive exhibition is now installed
- Opening Monday 23rd April, 10am
- Face to face interpretive tours and programs will continue to build learning about the river crossing.

35/18 **Waves Of People History**

- Project with WSU completed very satisfactorily, though of course it only scratches the surface of movement/migration stories relating to Aboriginal, and Culturally and Linguistically Diverse communities.
- Publication will be available online (free) and in limited hard copy for sale at the Parramatta Heritage & Visitor Information Centre at cost (to cover printing) should you wish to purchase. Further details will be provided when available
- We will use the information in the document to develop interpretation for Parramatta Square and other sites, and we hope research grants and students continue to expand the knowledge and share it with CoPC

36/18 **Parramatta Square**

- Darug advisory group will assist with cultural knowledge and language for the public domain.
- 5PS interpretation planning has commenced.
- Public Domain interpretation design has commenced.
- There will be opportunity for community to participate – an EOI has been sent out on 5 April to the community.

37/18 **2018 Australian Heritage Festival (National Trust Festival)**

Cultural Heritage & Tourism team are working in partnership with key stakeholders to deliver the following activities during the festival:

SERIES	LOCATION	DATE	TIME	FOCUS

Art in the Park	Farmers Market	Fri 20 April	11-2	Make felted arts to include on installation at the Dairy
Art in the Park	Parramatta Park	From Sat 21 April – Saturday 20 May?	9-4	Felted items to adorn Dairy Cottage Cow, during the Heritage Festival
Art in the Park	Parramatta Park	Sat 21 April		Art inspired by architecture
Fertile Ground	Parramatta Ferry Wharf	Sun 22 April	10-1	Sarah Pye & Gok Wan
Fertile Ground	Rydalmere Ferry Wharf	Sun 22 April	10-1	Bush Tucker and Tools
Launch	Lennox Bridge Southern Portal	Mon 23 April		Lennox Portal Opening
Launch	Phillip Ruddock Centre	Mon 23 April		Festival Launch
Art in the Park	Parramatta Park	Mon 23 April	10-12	In the footsteps of a colonial botanist
Fertile Ground	Farmer's Market	Fri 4 May	11am-2pm	Bush Tucker and Tools
Art in the Park	Parramatta Park	Sun 6 May	10.30am-1pm	Painting with Ochre
Fertile Ground	Farmer's Market	Fri 11 May	11-2	Bush Tucker Tastings
Art in the Park	Parramatta Park	Sat 12 May	10am-1pm	Bringing our Voices from the Past into the Future
Art in the Park	Parramatta Park	Tues 15 May		Art inspired by architecture
Art in the Park	Parramatta Park	Fri 18 May	10-1.30	Parramatta: boom, bust and bustle

38/18 **2018 Community Grants - Cultural Heritage & Stories Research Fund**

- Three promising candidates have applied – still to receive final Council approval later in April – the proposals display fresh ways of representing history eg: teenagers conducting oral histories; magazine-style essays to give a contemporary view on the history and culture of Parramatta

The Committee noted that it would be interested in further information about these grants, as the stories give value to heritage items.

39/18 **History Through Film**

- Beyond YouTube, we're exploring proposals to feature our extensive archive of films from 1901 at the Riverside Theatres. We're using every opportunity to feature clips at all Council events to engage the public now that Archivist,

Michelle Goodman and her team, have compiled detailed metadata for each clip for our database.

40/18 **Digitalising Council Meetings**

Prof. Carol Liston noted that she had been in contact with Anna Namuren – Research & Collection Services Coordinator regarding the DigiVol crowdsourcing platform, hosted by the Australian Museum and Atlas of Living Australia. Some of her students may be willing to volunteer to assist in the transcription of handwritten Council meeting minutes and make them accessible to all researchers.

41/18 **Heritage Strategy**

It was noted that an EOI for external consultants has been prepared for a heritage strategy for the whole of Council.

CITY STRATEGY UPDATE

42/18 **Western Sydney Heritage Event**

The event, to be held in October 2018, is being organised through the Heritage Near Me program run by the NSW Office of Environment and Heritage. There will be a number of cornerstone activities that will be run across all participating Councils, and a number of events specific to Parramatta.

Council was successful in obtaining a grant from Heritage Near Me to fund a number of events focused on both tangible and intangible heritage themes. . These events include: -

- Diary Cottage tour
- Cemetery Tour –May include All Saints, St John's, St Patricks and Mays Hills cemeteries
- Places of worship Tour – Looking at different churches especially for different migrant groups such as Greek Orthodox.
- Taste Food Tour – A tour of the restaurants and heritage buildings in Harris Park
- Kids workshops
- Heritage walking Tour
- Lake Parramatta Aboriginal Walking Tour
- Heritage Seminars – Information could include practical advice for owners of heritage homes including property maintenance and available grants for property maintenance and conservation if you own a heritage property.
-

The Committee commented that the heritage seminars should not be just held in Parramatta but around the LGA and a different times, not just after work, but during the day and on a weekend.

43/18 **Community Strategic Plan**

Council's Community Strategic Plan is currently on public exhibition until 13 May 2018 and can be accessed here.
https://www.cityofparramatta.nsw.gov.au/yourparramatta

GENERAL BUSINESS

There was no general business this Committee meeting.

INFORMATION SHARING

44/18 **From Fruit Bowl Farms to Housing Boom by Chris Staples**

Chris Staples has released a new book "From Fruit Bowl Farms to Housing Boom" which is a pictorial reference of houses North of Carlingford Road. Council has obtained copies of the book for the Epping and other Branch libraries.

Chris Staples is currently researching houses south of Carlingford Road, and is looking for interesting information.

The Meeting closed at 6.38pm

Next Meeting – 20 June 2018

LEADING

ITEM NUMBER	13.11
SUBJECT	Update on Parramatta City Ring Road
REFERENCE	F2011/03214 - D06095213
REPORT OF	Service Manager Transport Planning

PURPOSE:

The purpose of this report is to provide Council with an update on the Parramatta City (Inner) Ring Road.

RECOMMENDATION

(a) **That** Council note the below report on the current situation and timing of the Parramatta City Ring Road.

(b) **That** Council continue to advocate for improvements to the City Ring Road to prioritise access and reduce traffic congestion around the CBD

(c) **Further, that** a report is presented to Council following a meeting with RMS concerning options to better-coordinate traffic signals in Marsden Street and O'Connell Street from Victoria Road to the Great Western Highway to enable better traffic flows in the afternoon peak period.

BACKGROUND

1. Council at its meeting of 23 April 2018 resolved:

(a) That a report be brought to the Council meeting scheduled for 28 May 2018 to advise on the current situation and timing with respect to the proposed Parramatta City Ring Road to alleviate traffic congestion in the CBD.

(b) Further, that Council arrange an urgent meeting with RMS to ascertain what options might be available to better co-ordinate traffic lights in Marsden St and O'Connell St from Victoria Rd up to Great Western Hwy in Parramatta to enable better flows of traffic during the afternoon peak hours.

2. This report addresses the above resolution.

3. Council adopted the Parramatta City Ring Road and the Western Sydney Regional Ring Road strategies in 2012.

4. The City Ring Road is intended to provide efficient access for traffic coming to the CBD. A series of intersection upgrades on key routes adjacent to the CBD was envisioned to provide circulation around the CBD without congesting the inner-CBD road network. The City ring road comprises chiefly Pitt and O'Connell Streets, Victoria Road, Macarthur and Harris Streets, Parkes Street and the Great Western Highway and it is depicted in **Figure 1**.

Figure 1 – Parramatta City Ring Road (Source: CoP)

5. The Regional Ring Road comprises a series of arterial roads intended to intercept and guide regional traffic around Parramatta and Westmead. The Regional Ring Road comprise the M4 Motorway, James Ruse Drive and Cumberland Highway. The City Ring Road and Regional Ring Road are meant to work together to improve accessibility and decrease traffic congestion in Parramatta CBD. The Regional Ring Road depicted in **Figure 2.**

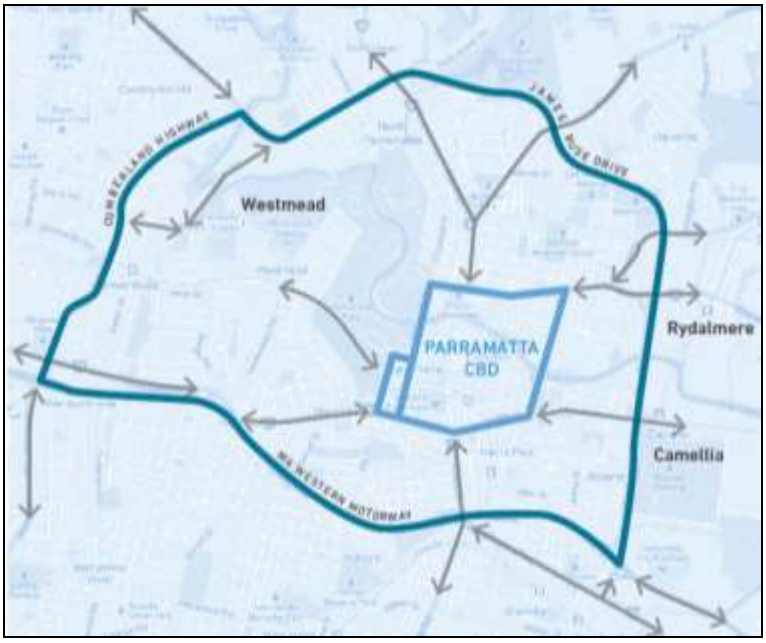

Figure 2 – Western Sydney Regional Ring Road (Source: CoP)

6. Council has worked in partnership with NSW Roads and Maritime Services (RMS) to fund and deliver needed upgrades. The original projects identified for the City (Inner) Ring Road and their status are summarized in the table below.

Project Name	Description	Status
Tudor Gates	Widen footpath in front of gates, provide signalised marked foot crossing on south side of the intersection	Completed 2014
Great Western Highway / Marsden Street	Provide left turn lane (eastbound) into Marsden Street	Begun by RMS March 2018
Church Street / Great Western Highway / Parkes Street	Provide additional right turn lane (northbound) into Parkes Street and additional signalised foot crossing on the north side of intersection	Marked foot crossing completed early 2018 Commencing mid-2019: - Additional right turn lane from Great Western Highway onto Church Street, - Additional right turn lane from northbound Church Street to Parkes Street
Parkes Street, between Church Street and Harris Street	Provide two through lanes in each direction by installing right turn bays and right turn bans and median, fence west of railway line to improve pedestrian safety	Anticipated to be advertised mid-2018. Construction could begin in 2019. (Note: lane configuration varies slightly from original concept.)
Parkes Street / Harris Street	Road widening to provide three lanes on southbound and westbound approaches, new signalised foot crossing on east side of intersection, pedestrian refuge island in Harris Street at Hassall Street	Concept design completed, not currently scheduled.
Harris Street / Macarthur Street	Duplicate Gasworks Bridge, provide pedestrian and cycle path on east side of bridge, upgrade approach intersections, make George Street two-way to east of Harris Street	Concept design amended in response to Parramatta Light Rail alignment and with respect to road widening requirements from adjacent developments. Not currently scheduled.
Victoria Road / Wilde Avenue	Additional northbound lane in Wilde Avenue for buses only and improve road geometry for westbound traffic	Not completed. Council will continue to advocate with State agencies.
Great Western Highway / Pitt Street	Provide left turn lane for westbound traffic into Pitt Street	Stage 1 (Begun March 2018): Extend WB RT lane, Improve signals at O'Connell Street Stage 2 (Begin late 2018): WB LT lane, provide three NB lanes in Pitt Street, additional departure lane on SB Pitt Street.

7. RMS, Transport for NSW (TfNSW), and other State agencies such as the Greater Sydney Commission and Department of Planning and Environment, continue to review and plan for roads infrastructure needs at local, precinct and metropolitan levels. Council officers continue to advocate with RMS to progress needed infrastructure through these processes.

8. In recent consideration for the *Future Transport 2056,* Council supported investigation of road improvements to the CBD (Inner) Ring Road in the 0-10 year timeframe.

9. Changes to the CBD road network by Transport for New South Wales to facilitate construction and operation of Parramatta Light Rail will change the way traffic moves through and into the CBD, and increase reliance on the City Ring Road. Traffic currently accessing the CBD by Church Street from the north will be diverted onto O'Connell Street, traffic heading west on Macquarie Street will be rerouted to George Street, which will be modified to accommodate two-way traffic. The light rail line will cross Harris Street, requiring an additional set of signals. These changes, and associated upgrades, will impact operation of the City Ring Road. In its November 2017 submission to the Environmental Impact Statement for the project, Council asked TfNSW to work with Council to improve traffic modelling and analysis and provide improved measures to mitigate traffic delays. Council officers are continuing to advocate with TfNSW for improved outcomes.

10. Council officers regularly liaise with counterparts at RMS on operational issues such as traffic signal timing. Council officers are seeking a meeting with RMS to discuss how better coordination of traffic signals in Marsden Street and O'Connell Street from Victoria Road to the Great Western Highway may enable better traffic flows in the afternoon peak period.

11. Councillors have identified some critical elements of the Western Sydney Regional Ring Road for recent advocacy – including the James Ruse Drive intersection at Camellia and the intersection of Darcy Street and Cumberland Hwy at Westmead. Staff will continue to present this concept in a range of forums, including in discussions relating to regional infrastructure requirements for Greater Parramatta.

ISSUES/OPTIONS/CONSEQUENCES

12. Many of the projects identified as part of the original City Ring Road Strategy have been completed or are scheduled for completion.

13. Council continues to advocate to RMA and Transport for NSW for improved transport infrastructure for the local government area generally and specifically around the CBD.

14. Council will continue its advocacy with RMS to priorities access and reduce traffic congestion around the CBD. This is particularly important considering the changes Parramatta Light Rail will bring to the local road network.

15. Transport improvements along the City (Inner) Ring Road should additionally be considered in light of other Council priorities, including amenity, sustainability, and encouragement for walking and cycling and a thriving CBD.

16. Council will meet with RMS shortly to discuss signal timing on Marsden and O'Connell Streets, particularly in the PM peak period.

CONSULTATION & TIMING

17. Although specific consultation on the City Ring Road has not been undertaken recently, questions and responses on access, transport and traffic issues have

been part of many Council consultations. The issue is frequently raised by residents, businesses and visitors.

18. Early works and enabling works, including changes to the road network, for Parramatta Light Rail are scheduled to begin (pending approval of the Environmental Impact Statement) in late 2018.

FINANCIAL IMPLICATION FOR COUNCIL

19. There are no direct financial implications for Council. Any projects identified would be subject to consideration through a business case, identification of funding sources and necessary approvals.

Michael Jollon
Service Manager Transport Planning

Sue Weatherley
Director Strategic Outcomes and Development

Jim Stefan
Acting Director City Services

ATTACHMENTS:

1⇩	Parramatta City Ring Road - Oct 2012	2 Pages
2⇩	Western Sydney Regional Ring Road - Oct 2012	2 Pages

REFERENCE MATERIAL

N/A

ROADS TO DELIVER NSW 2021 IN WESTERN SYDNEY

A focus on the social and economic development of Western Sydney and Parramatta is needed to advance the objectives of NSW 2021.

Efficient road networks can help the Western Sydney population access employment and training opportunities close to home, including in Sydney's central city, Parramatta. They can also help cross-region flows of people and freight passing through Parramatta on their way to other destinations.

Parramatta is the centre of Sydney and already the second largest employment centre outside the Sydney CBD, with a broad economic base and high value-adding industries.

It is uniquely placed to alleviate pressure on Sydney's transport networks and to progress the NSW 2021 priorities of:

Goal 1 – Improving the performance of the economy through investment, jobs growth and the emergence of specialised sectors.

Goal 4 – Increasing competitiveness through enhanced business confidence and innovation in key industries.

Goal 6 – Strengthening the NSW skill base by improving access to education and training.

Goal 20 – Building liveable centres that encourage jobs growth close to where people live.

Changes to existing road infrastructure is required to support the growth of Western Sydney and the emergence of a knowledge-based employment destination at Parramatta.

Two NSW 2021 goals form the basis of the road solution contained in this document:

Goal 7 – Reducing travel times by improving the efficiency of road networks during peak times.

Goal 10 – Improving road safety by targeting black spots.

NSW 2021 State Goal	Western Sydney Goal	Proposal	Estimated Cost
Goal 7 – Reducing travel times by improving the efficiency of road networks during peak times	Reducing congestion in and around regional city and improving efficiency and amenity	Establish City Ring Road around Parramatta CBD and Westmead	$36 million
Goal 10 – Improving road safety by targeting black spots	Reducing hazardous turns and pedestrian collisions		

To discuss this proposal please contact Parramatta Council on 02 9806 5642
parracity.nsw.gov.au/work
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PARRAMATTA FUTURE GENERATION

Image: Simon Collins / Alamy

PARRAMATTA CITY RING ROAD

PARRAMATTA CITY COUNCIL

PARRAMATTA FUTURE GENERATION

PARRAMATTA CITY RING ROAD

Issue

> The Parramatta CBD is congested in peak periods

> Traffic needs to be concentrated on the fringes of the CBD to minimise entanglement with public transport, taxis, pedestrians and cyclists

> Pedestrians are at risk in some key locations

Solution

> A series of intersection upgrades on roads around the CBD are required to encourage traffic out of the city and improve traffic flow

> This will improve conditions for buses, taxis, cyclists and pedestrians and generate better overall amenity within the public domain

> Hazards will be reduced and public transport options will be optimised.

Benefits

> A less congested more efficient Parramatta CBD

> Increased traffic network capacity on the edge of Parramatta CBD

> Reduced journey times for drivers

> Improved conditions for buses and taxis

> Improved pedestrian safety and amenity

> Reduced vehicle accidents via elimination of hazardous turns and use of right turn bays

Cost

> The estimated cost of the City Ring Road is $36 million

> Council is to provide some funding (TBC) from the City Improvement Plan (developer contributions)

> Design and detailed estimates are well progressed on several of the projects

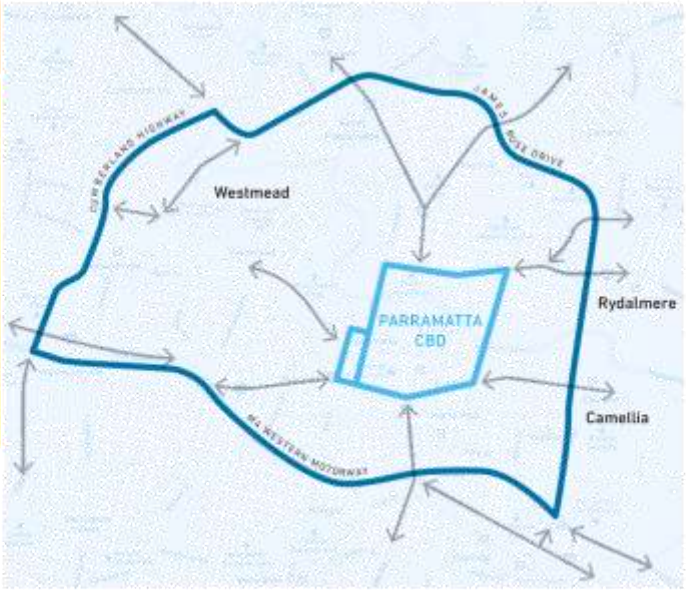
> The largest is the duplication of Gasworks Bridge – design and estimate has not yet commenced (see Item 6 overpage)

The proposed City Ring Road works hand-in-hand with the Regional Ring Road concept

Parramatta Council has already endorsed the concept of a Regional Ring Road designed to create a free flowing arterial road network around the Parramatta CBD and Westmead.

The City Ring Road is designed to complement the Regional Ring Road and alleviate congestion inside the Parramatta CBD.

State funding will see the City Ring Road delivered within 10-20 years, as opposed to the 50 years it will take Council to fund independently.



PROPOSED UPGRADES

1	**Tudor Gates** Widen footpath in front of gates, provide signalised marked foot crossing on south side of the intersection	$0.75 m
2	**Great Western Highway / Marsden Street** Provide left turn lane (eastbound) into Marsden Street	$0.75 m
3	**Church Street / Great Western Highway / Parkes Street** Provide additional right turn lane (northbound) into Parkes Street and additional signalised foot crossing on the north side of intersection	$3 m*
4	**Parkes Street, between Church Street and Harris Street** Provide two through lanes in each direction by installing right turn bays and right turn bans and median, fence west of railway line to improve pedestrian safety	$6 m
5	**Parkes Street / Harris Street** Road widening to provide three lanes on southbound and westbound approaches, new signalised foot crossing on east side of intersection, pedestrian refuge island in Harris Street at Hassell Street	$3.0 m
6	**Harris Street / Macarthur Street** Duplicate Gasworks Bridge, provide pedestrian and cycle path on east side of bridge, upgrade approach intersections, make George Street two-way to east of Harris Street	$18.0 m
7	**Victoria Road / Wilde Avenue** Additional northbound lane in Wilde Avenue for buses only and improve road geometry for westbound traffic	$1.5 m
8	**Great Western Highway / Pitt Street** Provide left turn lane for westbound traffic into Pitt Street	$3.0 m
	PROJECT TOTAL	**$36.0 m**

* Excluding land acquisition

The City Ring Road in detail

ROADS TO DELIVER NSW 2021 IN WESTERN SYDNEY

A focus on the social and economic development of Western Sydney and Parramatta is needed to advance the objectives of NSW 2021.

Efficient road networks can help the rapidly expanding Western Sydney population access employment and training opportunities close to home, including in the region's central city: Parramatta. They can also help cross-regional flows of people and freight passing through Parramatta on their way to other destinations.

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Goal 20 – Building liveable centres that encourage jobs growth close to where people live.

Changes to existing road infrastructure is required to support the growth of Western Sydney and the emergence of a knowledge-based employment destination at Parramatta.

Two NSW 2021 goals form the basis of the road solution contained in this document:

Goal 7 – Reducing travel times by improving the efficiency of road networks during peak times.

Goal 10 – Improving road safety by targeting black spots.

NSW 2021 State Goal	Western Sydney Goal	Proposal	Estimated Cost
Goal 7 – Reducing travel times by improving the efficiency of road networks during peak times	Reducing congestion in and around regional city and improving cross-regional traffic flows	Establish Regional Ring Road around Parramatta CBD and Westmead	**Stage 1** $66 million **Stage 2** $124 million **Stage 3** $156 million
Goal 10 – Improving road safety by targeting black spots	Reducing accidents by separating intersections and pedestrians		

To discuss this proposal please contact
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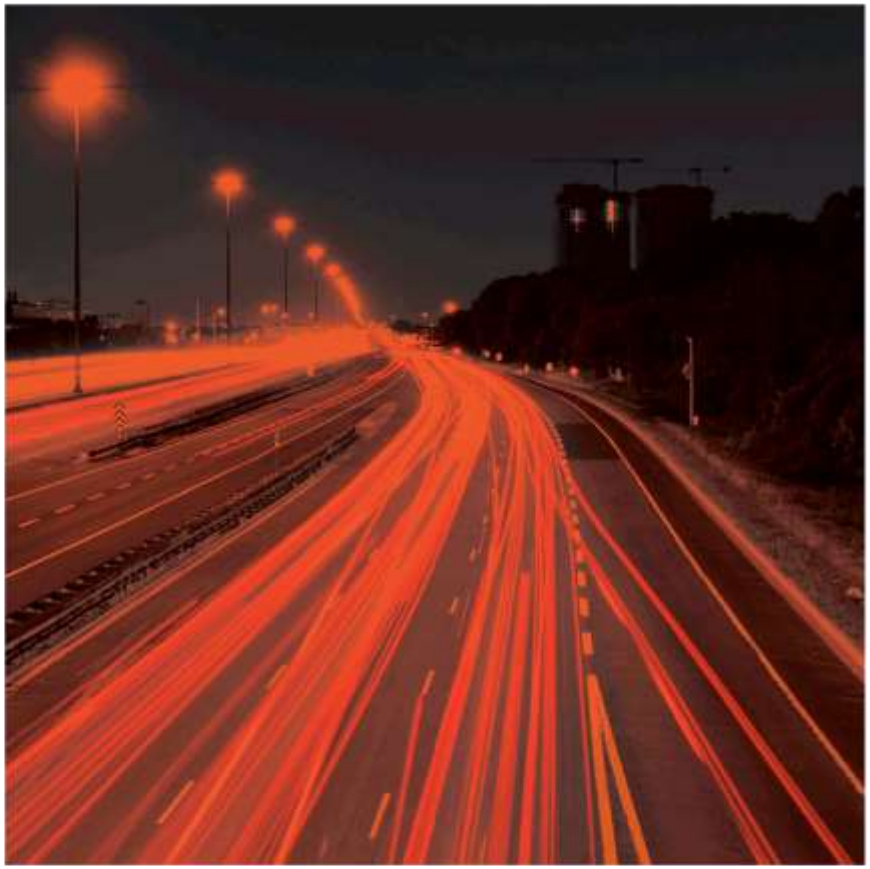
PARRAMATTA FUTURE GENERATION



WESTERN SYDNEY REGIONAL RING ROAD

PARRAMATTA CITY COUNCIL

Image: Barwon Kaz through Flickr.com

PARRAMATTA FUTURE GENERATION

WESTERN SYDNEY REGIONAL RING ROAD

Issue

Eight strategic road corridors converge on Parramatta, entangling cross-regional car and freight flows and causing excessive congestion. A Regional Ring Road can improve traffic flow in the region and support the continued growth of the city of Parramatta.

Solution

A series of intersection upgrades along the M4, James Ruse Drive and Cumberland Highway will create a free flowing arterial road and allow traffic to circumnavigate Parramatta and Westmead quickly and efficiently. Parramatta Council is developing a City Ring Road to complement the Regional Ring Road and establish best practice traffic management to, from and within the expanding regional city.

Benefit

- Untangles arterial road network converging on Parramatta / Westmead
- Improves cross-regional traffic flows
- Reduces journey times, improve network efficiency (productivity)
- Reduces accidents by separating intersections and pedestrians
- Reduces congestion and associated vehicle emissions
- Provides for future knowledge employment growth in Western Sydney via economic development of Parramatta CBD and Westmead biomedical hub (34,000 net additional jobs by 2036)
- Improves James Ruse Drive and access to Camellia

Cost

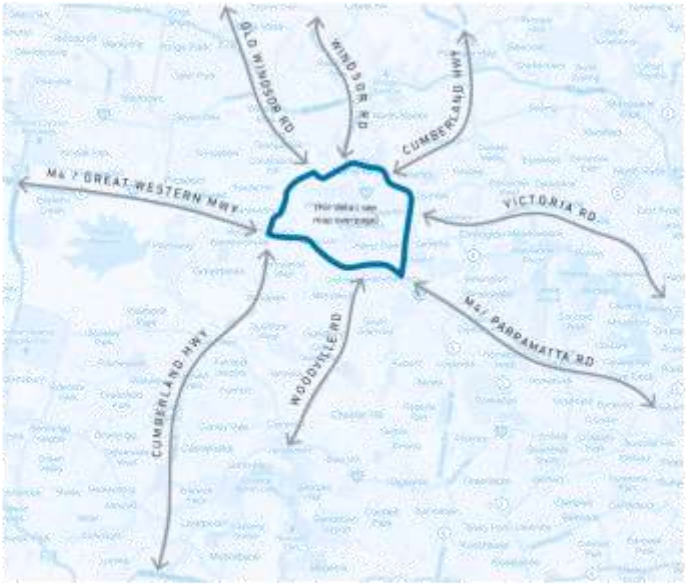
Three high priority schemes are required to establish the Regional Ring Road at an estimated cost of $66 million.

Eleven lower order schemes are also required at an estimated additional cost of $279 million.

Total state government investment: $345 million.

Western Sydney Regional Ring Road in context

- Eight strategic road corridors converge on Parramatta causing excessive congestion.
- The M4, James Ruse Drive and Cumberland Highway are focused on moving traffic to and from the Sydney CBD. With some modification, they could also manage traffic flows into and around Parramatta.
- Only the M4 and the Cumberland Highway are covered by the Roads & Maritime Services 'Fresh Paint Program'.



PROPOSED UPGRADES

STAGE 1 HIGH

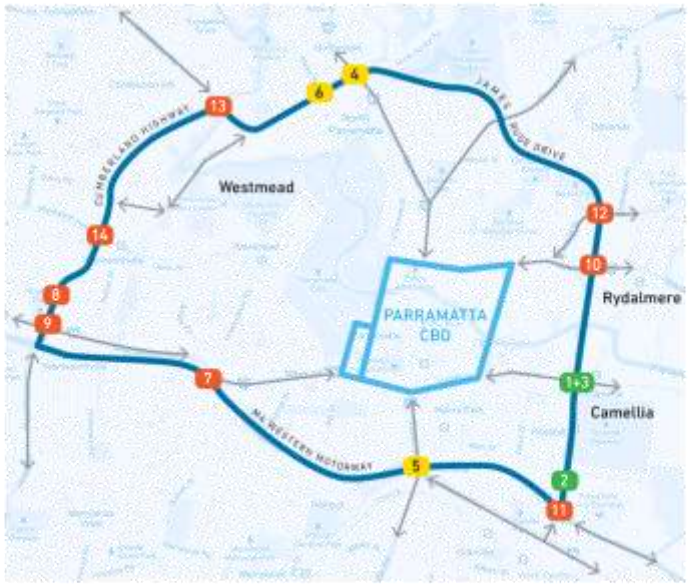
1	Extend right turn lane from James Ruse Dr to Grand Ave reduces congestion on James Ruse Dr	<$1 m
2	Camellia Link Road (under James Ruse Dr to Unwin St) provides a direct connection to the M4	$5 m
3	Grade separate James Ruse Dr from Grand Ave/Hassall St to remove delay to James Ruse Dr traffic	$60 m
	TOTAL	**$66 m**

STAGE 2 MEDIUM

4	Widen Windsor Rd bridge over Cumberland Hwy	$20 m
5	Increase access to the M4 from Woodville Rd and Church St	$4 m
6	Lower the Cumberland Hwy between Windsor Rd and Redbank Rd	$100 m
	TOTAL	**$124 m**

STAGE 3 LOW

7	New off-ramp from M4 to Great Western Hwy	$20 m
8	Reduce access from Smith St to Cumberland Hwy and new pedestrian bridge	$3 m
9	Grade separate Great Western Hwy/Cumberland Hwy and Cumberland Hwy/M4	$60 m
10	New ramps between James Ruse Dr and Victoria Rd	$40 m
11	New on-ramp from James Ruse Dr to M4	$20 m
12	Improve right turn from Kissing Point Rd to James Ruse Dr	$1 m
13	Improved turning capacity along Cumberland Hwy at Old Windsor Rd/Hart Dr	$4 m
14	Close Wentworth St, new pedestrian bridge & modify Darcy St	$7 m
	TOTAL	**$155 m**
	PROJECT TOTAL	**$345 m**



Western Sydney Regional Ring Road in context

- Proposed Regional Ring Road with complementary City Ring Road.
- The arrows show key road connections between proposed Ring Roads.
- The numbers refer to proposed improvement schemes 1-14. Colours indicate priority status: green - high, yellow - medium, red - low.

Regional Ring Road
City Ring Road

LEADING

ITEM NUMBER	13.12
SUBJECT	Q3 Review on the 2017/18 Operational Plan and Quarterly Budget Review Statement
REFERENCE	F2017/02802 - D06087109
REPORT OF	Commercial Manager; Service Manager IP & R

PURPOSE:

To present to Council the Quarter Three Budget Review Statement and Operational Plan 2017/2018 progress report

RECOMMENDATION

(a) **That** Council note the Quarter Three progress report against the Operational Plan 2017/2018

(b) **Further, that** Council note the March 2018 Quarterly Budget Review Statement and the Responsible Accounting Officer's report on the financial position of the Council and approves the revised estimates of income and expenditure.

BACKGROUND

1. The City of Parramatta Council's Operational Plan and Budget 2017/18 (the Plan) sets out a vision to become *Sydney's Central City – Sustainable, Liveable, and Productive, inspired by our communities*. Council's operations and resources have been aligned to contribute to achieving this vision and to address eight (8) community priorities, which were informed by extensive community engagement.
2. The Quarter Three Review shows Council's progress against targets and projects in the City's Operational Plan 2017/18. The review also provides commentary on Council's budget performance and position as at March 2018.
3. Council is required under the Local Government Act to provide progress reports to the community with respect to the principal activities detailed in the Delivery Program (inclusive of the annual Operational Plan) at least every 6 months.
4. Council does not currently have a Delivery Program. All councils formerly under administration are in the process of developing a Delivery Program for the period 2018-2021, i.e. aligned to the elected representatives' term of office.
5. Council's current practice is to provide quarterly reporting, with Quarters Two & Four being comprehensive reviews of all services, actions and projects along with outcomes commentary. This Quarter Three report, is a short form report addressing service targets and projects only.
6. Clause 203 of the Local Government (General) Regulation 2005 requires the Responsible Accounting Officer (Chief Financial Officer) to prepare and submit to the Council a Quarterly Budget Review Statement that shows, by reference to the estimates of income and expenditure set out in the Operational Plan, a revised estimate of the income and expenditure for the year.

7. The Responsible Accounting Officer is also required to report as to whether or not they believe the financial position of the Council is satisfactory, having regard to the original estimate of income and expenditure.

8. The Quarterly Review of the 2017/18 Operational Plan and Quarterly Budget Review Statement (QBRS) are included as **Attachment 1**.

ISSUES/OPTIONS/CONSEQUENCES

9. This quarter we have included the community dashboards, which are a subset of measures and indicators as outlined in the Operational Plan, and feature on our website. Of the 19 measures, 16 are either meeting their target or remain on track to meet future targets, with improving trends.
10. Two indicators, those tracking community activities and library services, do not have results available this quarter. This data is due to be captured in Quarter Four. The indicator for community engagement 'increasing trend in community engagement through additional survey responses' shows over 6,000 survey or consultation respondents for Quarter Three, however as 2017/18 is being used as a baseline the trend has not yet been established.
11. Our waste services target of 'responding to 95% of service requests regarding waste services within 48 hours' has improved significantly from 50.2% in Quarter Two to 87% in Quarter Three.
12. This report also provides an update on key projects being undertaken within the City. The report explains where projects have materially varied from the original scope or budget and reports progress.
13. The Quarterly Budget Review Statement (QBRS) provides a detailed view of Council's income and expenditure for the January – March period and the revised forward estimates.
14. The Responsible Accounting Officer's Report in the QBRS includes an analysis of the year to date result and the reasons for the major variances from the previously adopted budget. Explanations for major variances are in line with the parameters previously agreed by Council i.e. Budget variations greater than +/- 10% of the current budget or greater than +/- $100,000 of the current budget. Commentary on progress against the budget and any proposed changes to the budget are included in the QBRS.
15. The report also provides budgetary details for each Business Unit and the service areas that fall within them. Commentary on performance against the budget for the year is included in the QBRS.

FINANCIAL MANAGEMENT

16. Councils operating result (surplus) to March 2018 was $40.3m, which is $3.7m (10.1%) ahead of the forecast of $36.6m. This was as a result of expenditure being $4.7m below expectations, which was offset however, by revenue being $1.0m below expectations. Councils revenue target for user charges and fees was $1.6m below forecast due to lower utilisation of parking stations and reduced requests of development applications. Other revenue was $1.5m lower

than forecast for lease rentals of community properties and tower crane applications. This was offset by rates & annual charges being above forecast.

17. The major contributors to expenditure savings were materials and contacts, $2.6m due to the timing of operating and service projects. Savings to employment costs of $2.6m is a result of vacancy levels. Other operating costs savings of $0.3m is due to IT expenditure being phased into 2018/19.

18. Council has updated its forecast for the balance of the financial year based on the performance to March 2018 and is now forecasting a full year surplus of $1.7m, an increase of $0.2m. This is the result of expenditure reducing by $2.0m which is a result of savings in vacant positions. This is offset by a reduction of revenue of $1.8m mainly due to development applications slowing down.

CONSULTATION & TIMING

20. Consultation has taken place with relevant staff with Operational Plan and budgetary responsibilities.

FINANCIAL IMPLICATION FOR COUNCIL

21. Details of the financial implications are contained within the QBRS.

Lisa Oldridge
Manager Governance & Risk

Tim Butler
Chief Operating Officer

Alistair Cochrane
Acting Chief Financial Officer

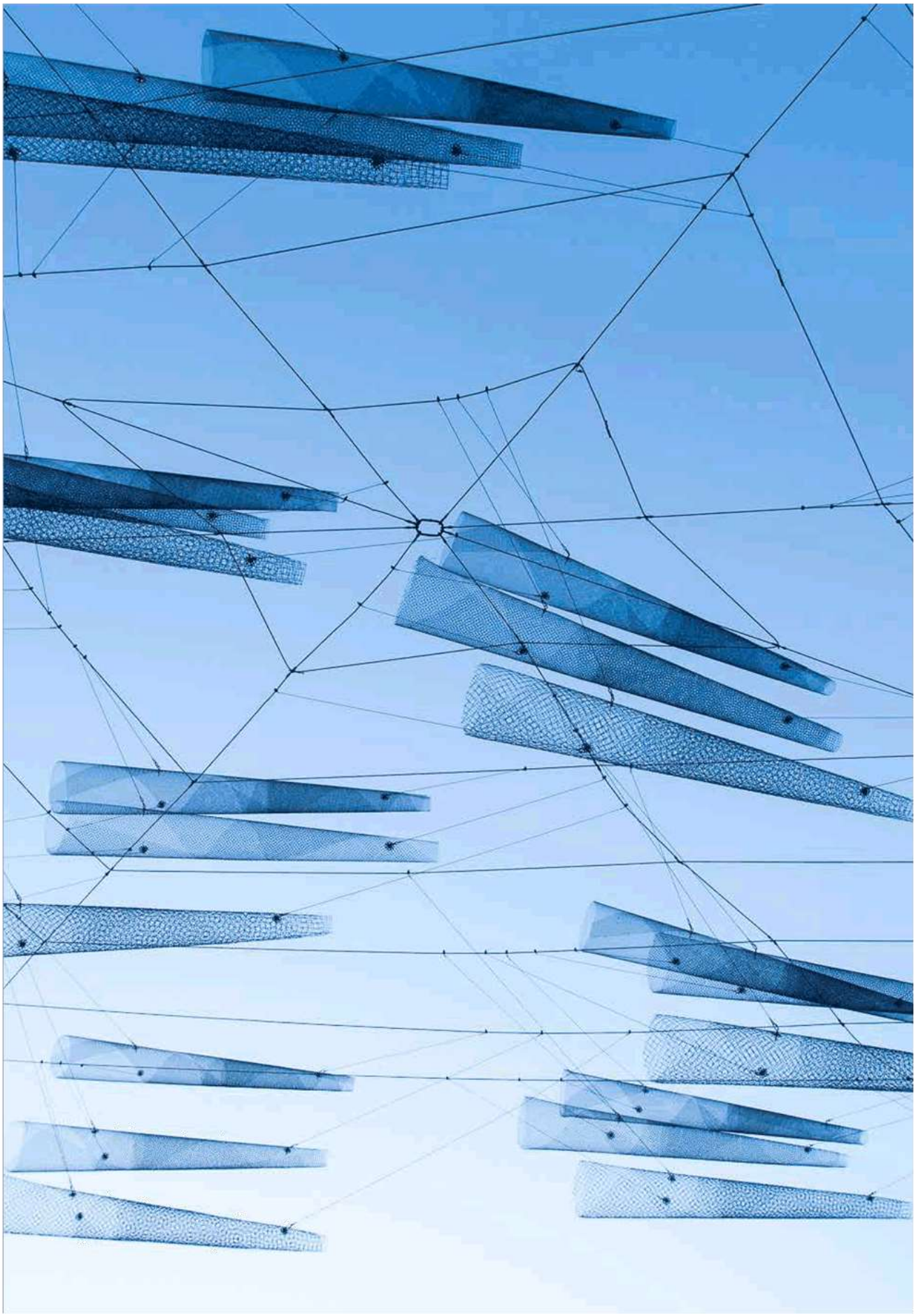
ATTACHMENTS:

1⇩ Quarter 3 Report 2018 97 Pages

REFERENCE MATERIAL

OPERATIONAL PLAN 2017/18
PROGRESS REPORT
Q3 REVIEW

CITY OF PARRAMATTA



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ACTING CHIEF EXECUTIVE OFFICER'S MESSAGE

Regular progress reports are an important part of Council's commitment to be open, transparent and accountable. This Progress Report summarises achievements against the Operational Plan 2017/18 and Council's financial position at the end of quarter three (January – March 2018).

The Operational Plan describes the services, activities and expenditure committed for 2017/18, and how we will measure progress. This third quarter report is a short form, meaning that we will report the measures and indicators, and select project updates, in addition to the full financial report.

I hope you'll notice the many good things happening around Greater Parramatta. We have made some significant progress during the quarter and you can read about some of these highlights in the Executive Summary.

If you want to provide feedback on this report or learn more about City of Parramatta Council, you can call us on 1300 617 058 or send an email to council@cityofparramatta.nsw.gov.au. Joining Council's community panel is another way to keep informed of what's happening. If you want to have your say about issues affecting your local community, Our City Your Say is a great way for you to get involved. Your local Councillors are also available. To learn more about your Councillors or how to join the community panel visit our website, cityofparramatta.nsw.gov.au.

MAJOR PROJECTS

Parramatta Square

Parramatta Square continues to be a powerful example of our City's growth. While construction has commenced on site for some of the projects, an Architectural Design Competition for the combined 6 & 8 Parramatta Square commercial scheme was also undertaken consistent with Design Excellence Guidelines. Three competitors were selected by Walker Corporation to participate in the competition, and the Competition Jury unanimously selected Johnson Pilton Walker as the winning architect.

Community Infrastructure

Work continues in building the social infrastructure to serve the needs of our growing community. The West Epping Park upgrades were completed this quarter as planned. The Wentworth Point Community Centre Library will be open to the public towards the end of 2018. New parks and new playgrounds are also being planned over the next two years under the Stronger Communities Fund.

West Epping Park

On March 24 the City of Parramatta officially opened West Epping Park. The $11.23 million project has delivered City of Parramatta's first synthetic, all-weather soccer and cricket fields; three new cricket practice nets; a basketball court; 'street' style skate area; play areas for toddlers and large climbing structures; picnic and barbecue areas; shelters; informal open lawns; lighting and new footpaths; and improved traffic and parking facilities.

Aquatic Services

A critical milestone was achieved during this quarter with Council endorsing plans for a new Parramatta aquatic centre, to be located on the former golf course site, at the corner of Park and Pitt Streets. The business case has been prepared and submitted to the NSW State Government in the hope of securing its financial contribution to the new centre. We have also commenced a design competition to get the best architects helping us to maximise the community benefits from this challenging project.

In the meantime, work is continuing on the redevelopment of the Macarthur Girls High School pool which Council is upgrading for public use. Council has also decided to keep the Epping Aquatic Centre open through the cooler months, from April to September. This is due in large part to the wonderful community response and support for the pool, through attendance and enrolments in the (Epping) Dolphin Swim School, which is double what it was last year.

New Waste Contract

As reported last quarter, Council's Domestic Waste Services experienced a significant reduction in the normally high service standards during the transition period to a single, new contractor. We are pleased to report that most of these issues were resolved through the hard work and dedication of our waste management and environmental teams, supported by our customer service officers, and many other Council staff. Council appreciates the patience shown by residents during this transitional period. For any further issues please use our dedicated hotline 02 9806 5544.

SERVICE EXCELLENCE PROGRAM

The Service Excellence Program is now well underway, with six new service reviews having commenced this quarter:

- Building & Facilities Maintenance
- Community Care Services
- Customer Contact Centre
- Development Assessment
- Printing Services
- Recruitment & Business Partnering
-

While some of these reviews are internally facing, and part of our internal operations, the goal is always the same: to identify improvement opportunities to ensure greater consistency, efficiency and quality in the way that we work, and to deliver exceptional customer experience and outcomes every time.

PLANS AND STRATEGIES AS GUIDING DOCUMENTS

Council is finalising a number of plans and strategies, to be released for comment in the next few months. I want to express my thanks for those of you in the community who have participated in our workshops, our surveys, and our numerous requests for your input. We could not do this without you.

Now that we have drafts of the documents below, you will be invited to read these and again offer your input. Each document will be placed on exhibition, which means released for public comment, with instructions for how you can get involved.

- **The Community Strategic Plan (CSP)** identifies the main priorities and aspirations of Parramatta's communities and sets out strategies to address these over the next 20 years. We have been listening to your feedback and are busy finalising the Plan based on feedback received during the public exhibition period which ran from 16 April and 13 May.
- **The Delivery Program 2018-2021** and Operational Plan 2018/19 define what Council's priorities will be for the next three years. It also outlines our budget and fees and charges for 2018/19. The Plan will be on public exhibition between 15 May and 11 June.

SUE COLEMAN
ACTING CEO, CITY OF PARRAMATTA

EXECUTIVE SUMMARY

FINANCIAL PERFORMANCE

Statement of Revenue/ Expenditure, against original budget and revised estimates.

Councils operating result (surplus) to March 2018 was $40.3m, which is $3.7m (10.1%) ahead of the forecast of $36.6m. This was as a result of expenditure being $4.7m below expectations, which was offset however, by revenue being $1.0m below expectations. Councils revenue target for user charges and fees was $1.6m below forecast due to lower utilisation of parking stations and reduced requests of development applications. Other revenue was $1.5m lower than forecast for lease rentals of community properties and tower crane applications. This was offset by rates & annual charges being above forecast.

The major contributors to expenditure savings were materials and contacts, $2.6m due to the timing of operating and service projects. Savings to employment costs of $2.6m is a result of vacancy levels. Other operating costs savings of $0.3m is due to IT expenditure being phased into 2018/19.

Council has updated its forecast for the balance of the financial year based on the performance to March 2018 and is now forecasting a full year surplus of $1.7m, an increase of $0.2m. This is the result of expenditure reducing by $2.0m which is a result of savings in vacant positions. This is offset by a reduction of revenue of $1.8m mainly due to development applications slowing down.

HIGHLIGHTS

PARRAMATTA SQUARE

Located across a prime three-hectare Parramatta city block, it will comprise six new buildings and a refurbished Town Hall, linked by a 20,000sqm central public domain that will serve as an important place to meet, trade, shop, dine, learn, celebrate and connect.

3 Parramatta Square

Work is proceeding on 3 Parramatta Square. It is estimated the tower will be completed in the first quarter of 2020. Much like the current underground transition from the Station into Westfield Parramatta, Darcy Street will deliver commuters and travellers directly into the new Parramatta Square public domain and the northern part of the CBD via a lively passageway packed with cafes, retail stores and convenience shopping.

In the meantime, to prepare for construction, some temporary changes to travel to-and-from Parramatta Station via Darcy Street are required and were implemented from December 2017.

Darcy Street has closed completely in early 2018 so now is a great time to get used to new routes around the city. Detailed information including a map of the changes is available from: https://www.cityofparramatta.nsw.gov.au/parramatta-square-updates

4 Parramatta Square

Ground breaking for 4 Parramatta Square, a centrepiece commercial building set to house numerous government agencies, happened in mid-November, works are continuing.

5 Parramatta Square

Council has lodged the Development Application (DA) for the exterior design of its landmark civic and community building at 5 Parramatta Square. Parramatta's new civic and community building will be a 21st century design. The building will provide a hub for the community, behind a stunning glass

façade, encapsulating a library, roof garden, meeting rooms and much more. Design modifications respond to new planning regulations have been applied to ensure sun access to Parramatta Square. The completion date for the building is anticipated to be 2020.

Council has appointed CBP Contractors (formerly Leightons and Thiess Contractors) to assist in the design of the new landmark project at Parramatta Square. The appointment is for a period of six months, and Council at the conclusion of the appointment will have a high level of certainty in pricing for the project.

Following the community engagement workshop in December to gather feedback on the proposed user experience for 5 Parramatta Square and the new public domain, Council is continuing to incorporate the feedback that was submitted, to more closely align the needs and aspirations of the community.

6 & 8 Parramatta Square

Council agreed in November 2017 to provide Walker Corporation with an option for a combined 6 & 8 Parramatta Square commercial scheme, which will see a minimum of 118,000 m2 of premium A-grade office space in the heart of Parramatta. It is anticipated the DA for the combined commercial scheme will be lodged in early 2018.

As reported last quarter, City of Parramatta Council has agreed to changing the predominant use of 8 Parramatta Square from residential to commercial, in order to accommodate increased demand for A-grade office space. The change of use of 8 Parramatta Square – also known as Aspire Tower –accommodates up to 71,000 square metres of A-grade commercial floor space, with a potential to create an extra 10,000 jobs, resulting in an estimated $31.6 million in retail expenditure in the Parramatta CBD.

Local Planning Panel

Changes to the Environmental Planning and Assessment Act 1979, that commenced on the 1 March 2018, meant that the decision to have an Independent Hearing and Assessment Panel (IHAP) or Local Planning Panel was no longer voluntary for Councils within the Greater Sydney Region. Members to the Panel were appointed and submitted to Council on 12 February 2018. The first City of Parramatta Local Planning Panel was held on the 17 March 2018. The Local Planning Panel was formerly named Independent Hearing and Assessment Panel (IHAP)

PARRAMATTA LIGHT RAIL

The NSW Government has announced Stage 2 of the Parramatta Light Rail with the nine kilometre preferred route to extend from Carter Street, Lidcombe through Sydney Olympic Park and Wentworth Point before crossing the Parramatta River to Melrose Park, Ermington, Rydalmere and Camellia. Council is actively engaged with Transport for New South Wales to collaboratively plan and provide input to the formation of this important transportation network. Stage 2 will be further developed and informed by consultation with the community and stakeholders. Council has made a submission on the Environmental Impact Statement (EIS) for the Parramatta Light Rail. Council's formal submission to the project's Stage 1 Environmental Impact Statement (EIS) acknowledges the many environmental, social and economic benefits light rail will deliver for the Greater Parramatta area.

More information about the Light Rail, both stages, is available on the web, here: http://www.parramattalightrail.nsw.gov.au/ and here: https://www.cityofparramatta.nsw.gov.au/parramattalightrail

BICYCLES

With the Parramatta Bike Plan currently in place since 2017, the City of Parramatta is moving forward with various options to encourage safe and sustainable cycling options in thecentral business district and various neighbourhoods. Some residents have expressed concerns or support for dockless bike sharing options around the Local Government Area. This opportunity is being investigated to determine the best approach, based on the successes and lessons learned from other cities and councils. Have you cycled on the Subiaco Creek Link? It is located in Rydalmere near the intersection of South St and Clyde St. This link makes it possible to walk and cycle off road from traffic for almost 20km on a path network between Parramatta Park and Sydney Olympic Park via Parramatta CBD and the Western Sydney University (WSU) campus in Rydalmere.

MUSEUM AND CULTURAL PRECINCT

An important milestone was reached with the announcement of an agreement to sell the Riverbank Land for the new Museum of Applied Arts and Sciences (MAAS) and a proposed joint venture between State Government and Council to deliver a transformed Riverside Theatres. The development of a new arts and culture precinct will include a new flagship Museum of Applied Arts and Sciences (MAAS), and an enlarged and enhanced Riverside Theatres. All of this will be underpinned by $40 million to deliver Council's Cultural Plan, with a renewed focus on arts and culture for greater Western Sydney. The cultural precinct will be both a local and an international tourist destination.

COMMUNITY HIGHLIGHTS

Swimming in the City

Council continues to make progress on delivering a new aquatic leisure centre in the Parramatta CBD. The preferred location for the new centre has been confirmed with Parramatta Park Trust, as the site adjacent to Park Parade, near the corner of Pitt Street on the former golf course site. The Councillor workshop held in February provided important decisions for the new facility.

The business case has been submitted to Council to assist decision makers to determine the best option for the development of a new Aquatic Leisure Centre, given the impacts on the City, the wider community and the social, economic and financial costs and benefits to the NSW community as a whole. It also details the requirement for Council to enter into an agreement with the Parramatta Park Trust with which negotiations are underway.

In the meantime, we have approval to keep the Epping Aquatic centre open through the cooler months, from April to September. This is due in large part to the wonderful community response and support for the pool, through attendance and enrolments in the (Epping) Dolphin Swim School, which is double what it was last year. Lake Parramatta closed for swimming on 2 April 2018 and will reopen again in the spring.

Draft Master Plans for Robin Thomas Reserve and James Ruse Reserve

The exhibition for these two important reserves has completed, and we want to thank those of you who provided your input. The Master Plans as amended following exhibition were submitted to Council for endorsement in March. These master plans have been coordinated with the New South Wales Office of Environment and Heritage, and are also impacted or are a part of the Environmental Impact Statement for the Parramatta Light Rail project. These master plans address amenities such as synthetic turf, shade, cricket nets, exercise equipment, use of water, and pedestrian access.

Events and festivals this quarter

This quarter Council hosted and supported a number of festivals, many of which the community have come to expect and enjoy year upon year. These include Australia Day, Lunar New Year, Tropfest, Parramasala, & Youth Week.

During Australia Day celebrations, council hosted Parravision. Australian pop and jazz icon Kate Ceberano was one of the judges of this year's Parravision talent quest. Now in its third year, Parravision is one of the highlights of City of Parramatta's spectacular Australia Day celebrations, showcasing the talents of the City's emerging performing artists. Other judges included Mushroom Music Ian James and celebrated dance performer/choreographer Dr Laura Osweiler.

The evening entertainment, capped by a spectacular fireworks display, was part of a 15-hour marathon Australia Day celebration in the picturesque surrounds of the World Heritage-listed Parramatta Park.

SOCIAL MEDIA

As always, you can engage with Council through our social media channels. Find out the latest news, and participate in our consultation sessions, our workshops, or our myriad activities throughout the Local Government Area!

- Facebook: https://www.facebook.com/cityofparramatta
- Twitter: https://twitter.com/parracity
- Instagram: https://www.instagram.com/cityofparramatta/?hl=en
- YouTube: https://www.youtube.com/user/pccweb

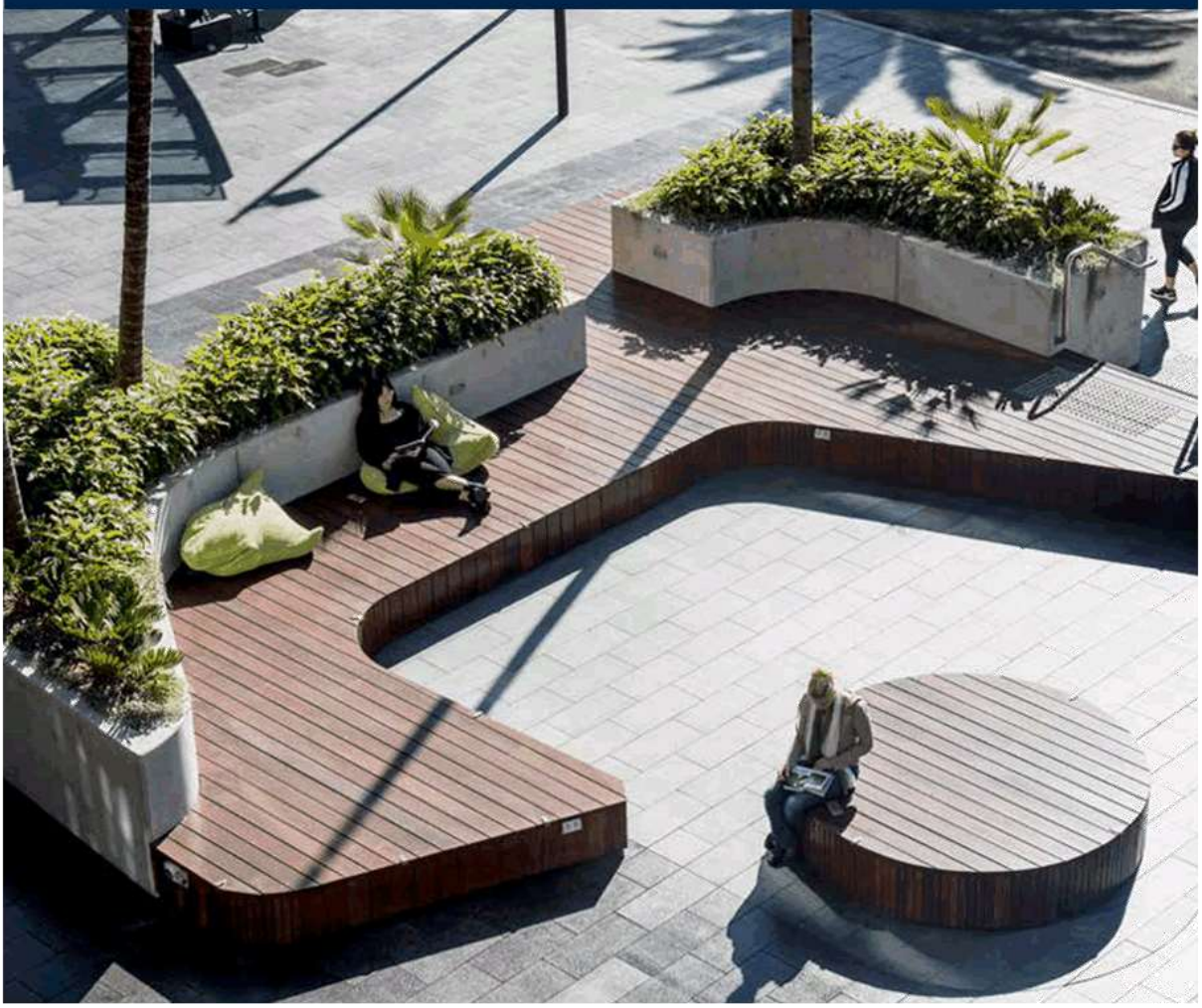
And of course, we have a mailing list specifically for you to have your say on important topics affecting our community. Check it out and sign up here: https://www.cityofparramatta.nsw.gov.au/living-and-community/our-city-your-say

INVESTING IN COMMUNITY FACILITIES

- West Epping Park transformation was completed in late February 2018. The upgrade provides superb sports and leisure facilities for local residents, schools and other users. Delivery of the project included overcoming unexpected amounts of buried asbestos and very poor sub-grade, which were not identified in the project planning.

- The Wentworth Point Community Centre and Library will provide much needed community facilities and programs for local residents. A revised internal design and fit out scheme has been prepared and a development application lodged. The tender process was completed in March 2018, and fitout works are scheduled to commence next quarter. Works are due to be completed towards the end of the 2018.

Council is continuing to participate in the Light Years Ahead project by replacing almost 6,000 Mercury Vapour street lights across the Local Government Area with energy-efficient LEDs. The upgrade is being undertaken in collaboration with the Western Sydney Regional Organisation of Councils (WSROC), which earned a 2017 Green Globe Award for environmental sustainability. The new lighting incorporates the ability to install sensors to monitor a variety of conditions such as temperatures and air quality, furthering City of Parramatta's 'Smart City' vision. Endeavour Energy started the first stage in November 2017 going through to March 2018 in the following suburbs: Carlingford, Dundas Valley, Eastwood, Epping, Melrose Park, North Rocks, Parramatta and Telopea. Additional suburbs will follow through to the conclusion of the project in mid-2019.



UNDERSTANDING DASHBOARDS

In the report below, for each section, Liveable, Sustainable, Productive, and Leading, you will see the topic 'Measuring our Success.' These are a few select measures that we have brought forward as a kind of community dashboard. These same measures will also appear on our website, following the adoption of this report. For each measure you will see the following:

At the top, the topic for the measure

Community activites

increase the number of participants in Council's seniors, health and sporting promotion activities by 10%

The target for the measure, which may be a number, a percentage or a trend

Results next quarter

TARGET MET:
N/A Quarter 1 is being used as a baseline

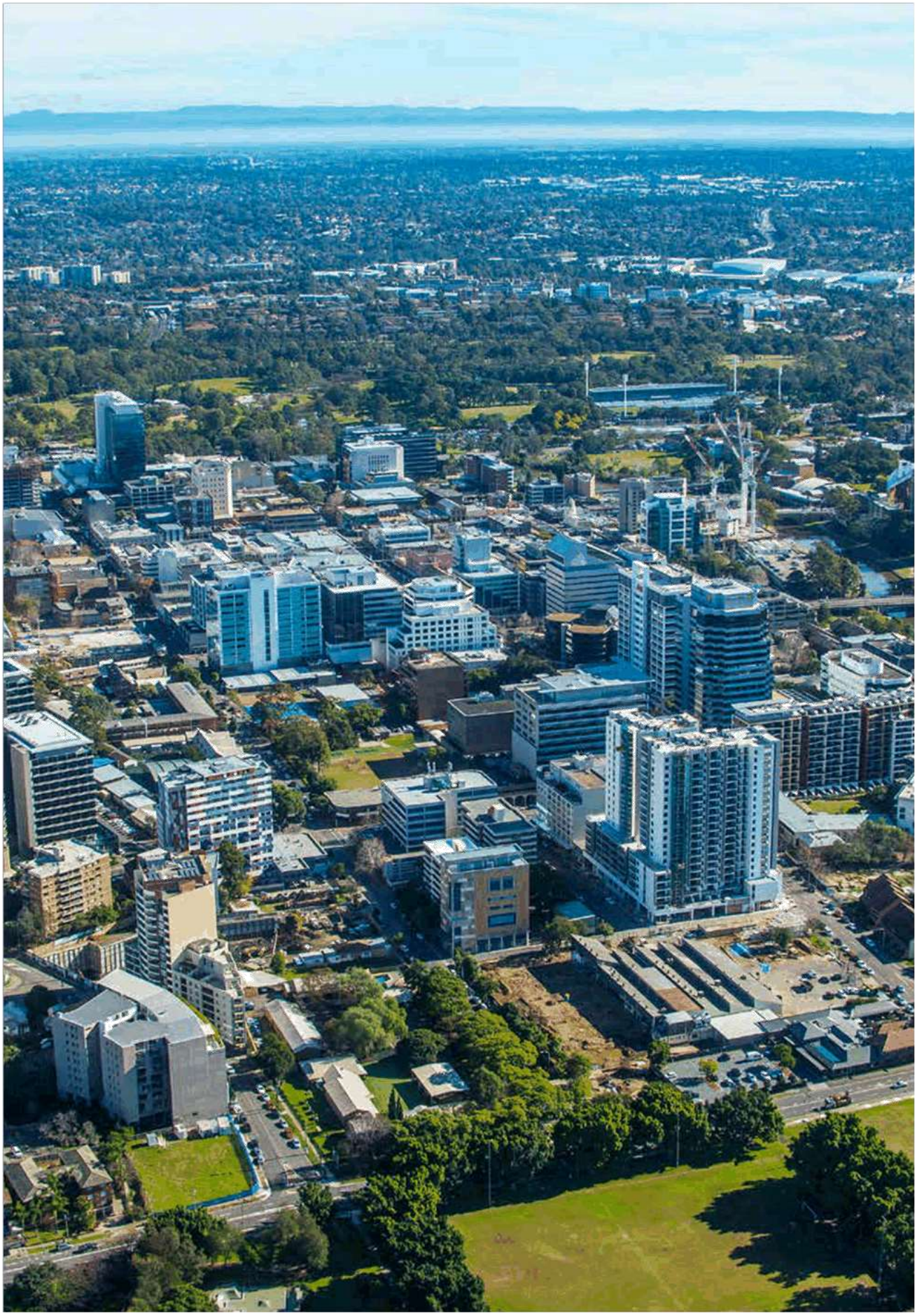
A coloured arrow which quickly indicates if the target was achieved

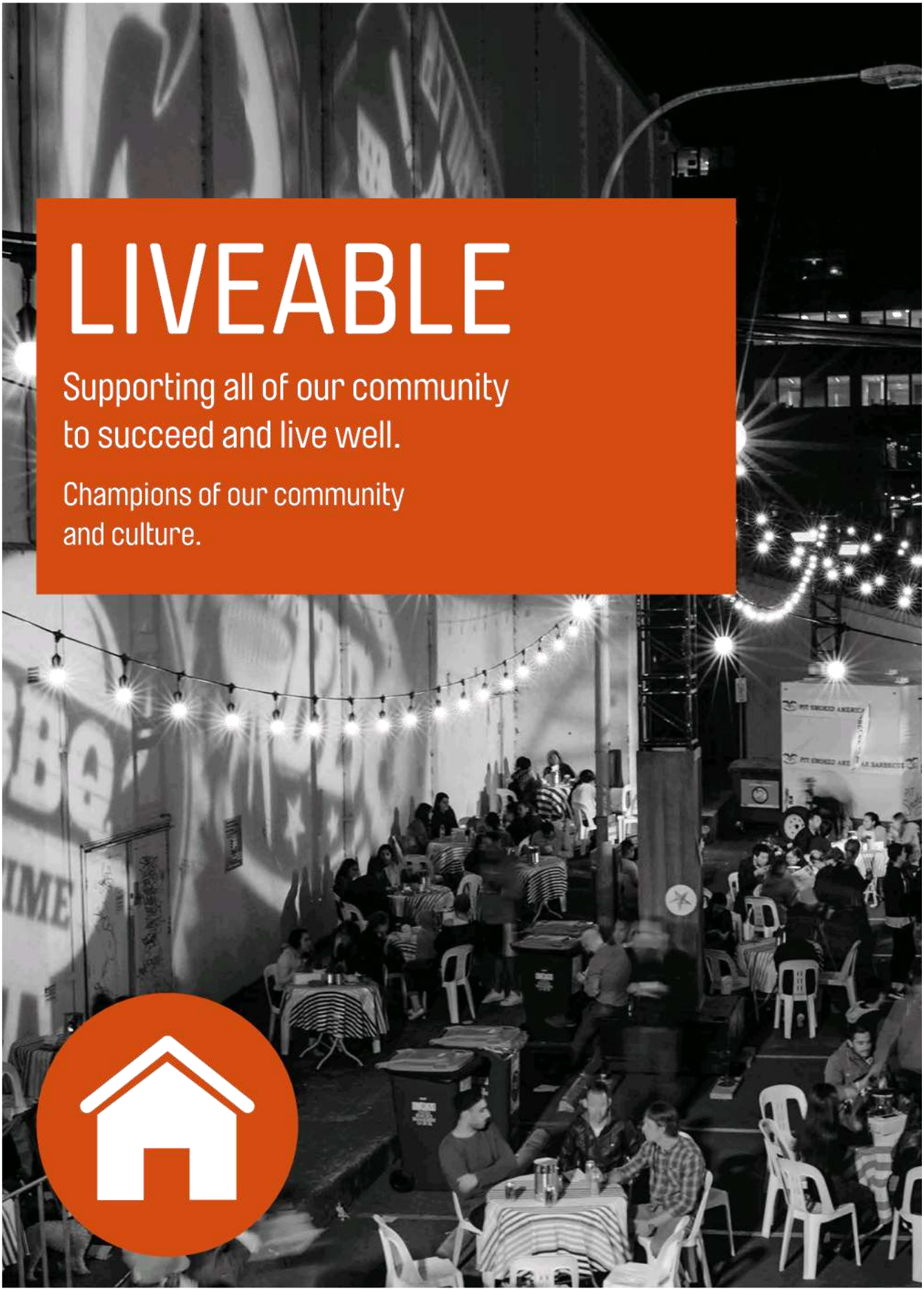
Text explanation whether the target was met, and if not, what Council is doing to meet the target

The goal is to improve the social connectedness and the physical and mental health of community members. If we increase participation in these types of programs we can help maintain seniors living well and independntly at home and also contribute to reducing obesity and improving mental health across the community

Underneath these indicators, you will find a clearer explanation of the goal, and why this measure is important

12 City of Parramatta




LIVEABLE
Supporting all of our community to succeed and live well.
Champions of our community and culture.

QUARTER 3
LIVEABLE SUMMARY

COMMUNITY PRIORITIES

- Managing Growth and Transport
- Supporting Arts and Culture Celebrations and Destinations

COMMUNITY OUTCOME

Pride in the City. Our community with access to a range of quality recreational activities. Greater sense of community and a perception of personal and neighbourhood safety. Partnerships to deliver effective community services and programs. A community-focused approach to planning and urban design. Strong advocacy for better public transport to reduce congestion as part of a well-connected, sustainable transport system that encourages walking, bike-riding and car-pooling.

BUSINESS UNITS

- Social & Community Services
- City Operations
- Regulatory Services
- Place Services
- Riverside Theatres

LIVEABLE SPEND

Revised Operating Expenditure: $75,385,000
Original Operating Budget: $76,181,000

Revised Capital Expenditure: $13,596,000
Original Capital Budget: $25,662,000

MEASURING OUR SUCCESS

To know if we are successfully delivering the outcomes proposed by this Plan, we have identified key measures to be published regularly. Explanatory detail is provided further down in this section of the report.

Regulatory Enforcement

Decreasing trend in the percentage of fines and warnings issued compared to hours officers spent on **parking compliance enforcement**

46%

TARGET MET:
NO, however trend is increasing towards the target

The goal is to reduce the amount of unlawful activity related to building compliance, food health safety, and parking.

If we can reduce the unlawful activity, it stands to reason that fewer fines are issued, and less officer time is wasted chasing illegal activity.

Regulatory Enforcement

Decreasing trend in the percentage of fines and warnings issued compared to hours officers spent on **food health safety compliance enforcement**

7.2%

TARGET MET:
Yes

The goal is to reduce the amount of unlawful activity related to building compliance, food health safety, and parking.

If we can reduce the unlawful activity, it stands to reason that fewer fines are issued, and less officer time is wasted chasing illegal activity.

Regulatory Enforcement

Decreasing trend in the percentage of fines and warnings issued compared to hours officers spent on **building compliance enforcement**

12.4%

TARGET MET:
NO, however trend is increasing towards the target

The goal is to reduce the amount of unlawful activity related to building compliance, food health safety, and parking.

If we can reduce the unlawful activity, it stands to reason that fewer fines are issued, and less officer time is wasted chasing illegal activity.

Community activites

increase the number of participants in Council's seniors, health and sporting promotion activities by 10%

Results not available

TARGET MET: 2017/18 is being used as a baseline

The goal is to improve the social connectedness and the physical and mental health of community members. If we increase participation in these types of programs we can help maintain seniors living well and independntly at home and also contribute to reducing obesity and improving mental health across the community

Library

Increase usage of library services through 10% increase in vists and 5% increase in loans

Results not available

TARGET MET: 2017/18 is being used as a baseline

The goal is to enhance lifelong learning, to promote cultural enrichment, to value diversity and inclusion and to increase digital access and skills. If we increase usage of contemporary library spaces and programs the community will benefit from higher levels of education and general social wellbeing

Child Care

Utilisation of council child care centres at 93% or above

90%

TARGET MET: NO, however trend is increasing towards the target

The goal is to maintain the high standards of early years development services being provided and to ensure that enough spaces are made available to vulnerable families and children across the network. If we provide high quality childrens' services, then strong evidence exists to show that families and the broader community will benefit both socially and economically.

COUNCIL'S PERFORMANCE MONITORING
MEASURES AND INDICATORS

Expand Council's seniors, health and sporting promotion activities	Increase in overall program hours and levels of participation, based on 2016/17 benchmark	2016/17 used as a benchmark	Increase unknown RECREATION delivered 237 hours of programming to 3711 participants in programs like Active Parramatta, Healthy Lifestyles mobile van, and school holiday activities. COMMUNITY CAPACITY BUILDING ran programs as part of Council's health promotion activities, covering topics like the primary prevention of domestic violence and youth empowerment. Total hours of participation were 1145, and total participants were 153. Of note, 96.3% of participants this quarter reported positive change in the skills and confidence associated with building strong communities. LIBRARY hosted talks in other languages, such as Diabetes Awareness (Mandarin); Caring for People with Dementia; and a Prevention and Screening of Bowel Cancer (Bi-Lingual). were attended by 95 people. COMMUNITY CARE saw 4462 hours of participation in Over 55's Leisure and Learning and a slightly higher number of participants at 575. CHILDREN & FAMILIES implemented 50 hours of fundamental movement programs for 219 children this quarter, ranging from topics like nutrition and mental health, a healthy eating project, child friendly Tai Chi and Yoga programs.	Social & Community Services
Effectiveness of Council's Community Grants program	Increase in projects (%) successfully implemented and delivering outcomes based on benchmark from projects acquitted from 2016/17	2016/17 used as a benchmark	**Increase unknown** Of the 12 Acquittal Reports completed in Q3, 92% were deemed to have strongly achieved their planned outcomes, with the remaining 8% (1 grant) being deemed to have somewhat achieved their planned outcomes. All acquitted grants reported that they felt supported by Council in the implementation of their project.	Social & Community Services

Measure	Target	Q3	Comment	Business Unit
Utilisation of library services	Increase visits by 10% and increase loans by 5% on previous year at central/ branch libraries and library website	2017/18 used as a benchmark	Increase unknown. Visitation - door count for Q3 was 240,502 (includes Easter break - closed for 4 days) compared to Q3 2017 254,749 (Easter not included) = 5.5% drop from same period 2017 to 2018. Library website visits in Q3 2018 totalled 877,610 as compared with Q3 2017 which was 698,727 visits an impressive 20.38% increase. During Q3 2018 11,630 attendees to 484 programs which is an increase of 19.01% of Q3 2017 which recorded 9,418 attendees. Loans/renewals for physical items Q3 2018 was 272,176 (includes 4 days Easter break) and Q3 2017 was 282,786 (did not include Easter) which is -3.75%	Social & Community Services
Utilisation of early years' centres	Sustain at 93% utilisation across all 5 early years' centre	90%	Target nearly met Early Learning Centres experienced more fluctuating attendance patterns from new families which resulted in lower utilisation than previously experienced.	Social & Community Services
Satisfaction rates with Council services in social inclusion, meal options, practical support and leisure and learning services, for people over 55 and people with a disability	Sustain 90% satisfaction rate with surveyed service users	Not available	Survey not completed in Q3 due to its 2 yearly implementation. Planning for next survey is currently progressing with results being available in 2018/19 Q2.	Social & Community Services
Utilisation of Epping Aquatic Centre	10% increase on number of visits based on 2016 /17 benchmark	+204%	Target met Total visitation to the Epping Aquatic Centre for the period was 28,863. An increase of 204% compared to the same time last year. Swim School enrolments at the Epping Aquatic Centre were 363. An increase of 210% compared to the same time last year. Delivered 19 School Swimming Carnivals over 4 weeks.	Social & Community Services
Satisfaction and effectiveness with Council's social enterprise programs and sustainability	Sustain satisfaction with Council's social enterprise and capacity building programs and improved sustainability	96.3%	Target met. Of the community capacity building activities run during this quarter, 96.3% of participants reported positive change in the skills and confidence associated with building strong communities.	Social & Community Services
Sustainability of social enterprises that are assisted by Council's program	50% or greater of supported enterprises are sustainable	Not available	No events have occurred in Q3 to indicate that rate of sustainability has changed. Social enterprise grant acquittals and applications received indicate that challenges being faced, like marketing, are similar to those challenges experienced by for-profit small businesses.	Social & Community Services

Measure	Target	Q3	Comment	Business Unit
Satisfaction with cleanliness of streets & parks resulting from Council's cleansing services	Sustain 80% satisfaction with cleanliness of streets and parks (Annual Survey)	80% for parks 76% for streets	Target nearly met	City Operations
Delivery of Council's Footpath, Kerb & Gutter Construction and Replacement Programs	Implement 100% of the annual Footpath, Kerb & Gutter Construction and Replacement programs	Not available	This will be reported in the final quarter when the program for the year is completed.	City Operations
Survey satisfaction with Open Spaces	Sustain 80% satisfaction in the Integrated Open Space Services (IOSS) Benchmarking Survey	Not available	The survey is undertaken in March each year and will be reported in the final quarter.	City Operations
Responsiveness of Council's Public Tree Maintenance Program	Implement 85% of the annual Public Tree Proactive Maintenance Program	Not available	The Proactive Tree Maintenance Program has commenced and will be reported on in the final quarter.	City Operations
Determination of Complying Development Certificates for house approvals within timeframe	100% completed within 40 days	100%	Target met. All Complying Development Certificates determined within the statutory 40 days	Regulatory Services
Food outlets health and safety inspection program	Sustain 100% of high and medium risk food related outlets inspected twice annually and 100% of low risk food related outlets inspected annually.	High risk premises: 385 inspected 65 re-inspected Low risk premises: 7 inspected 2 re-inspected	On track to meet target.	Regulatory Services
Cooling tower inspection program	Sustain 100% of cooling towers inspected annually	42 / 25% inspections (YTD total 68%)	On track to meet target. Year to date total is 68% completed	Regulatory Services
Public swimming pool inspection program	Sustain 100% of public swimming pools inspected annually	6 / 22% inspections (YTD total 111%)	On track to meet target. Year to date total is 111% completed	Regulatory Services

Measure	Target	Q3	Comment	Business Unit
Skin penetration premises health and safety inspection program	Sustain 100% of skin penetration premises inspected annually and 100% of hairdressers and low risk beauty premises inspected biennially	28 / 15% premises (YTD total 63%)	On track to meet target. Year to date total is 63% completed	Regulatory Services
Management of companion animals by use of de-sexing, animal tags, micro chipping and registration	66% of seized companion animals returned to owners	55%	Target nearly met. 86 dogs captured with 47 re-homed. As per the first two Quarters the overall annual return and or re-homing figures will show a more accurate re-homing rate when Rescue Figures are also included.	Regulatory Services
To reduce the unlawful activity related to building compliance, food health safety and parking	Percentage of fines and warnings issued versus the number of hours officers spend on compliance enforcement	27%	Target not met. Total of 13983 PINS Issued, 8113 for timed parking offences with 29,380 vehicles marked during the quarter equalling 27% non-compliance rate.	Regulatory Services
Riverside Theatres program of performances and events	Sustain or increase number and type of professional and community performances and events based on 2016/17 benchmark	6%	Target met. Community 68/Professional 402 In Q3 there was a 6% increase in professional performances compared to the previous year. This was primarily due to the return of production companies Pakemin and Return Fire as well additional appearances in this period by production companies Sydney Theatre Company, Luckiest Productions and The Wiggles.	Riverside Theatres
Attendance and satisfaction levels at Riverside Theatres	Sustain or increase attendance and annual satisfaction levels are based on 2016/17 benchmark	11%	Target met. Total attendance: 40,267 Total attendance for Q3 increased by 11% on the previous year. This was primarily due to increased ticket sales. Notably in the Riverside Theatre, Pakemin Productions -Shrek, Sydney Theatre Company -Black is the New White, Return Fire-Seniors Moments and The Wiggles and in Lennox Theatre, Luckiest Productions - Calamity Jane.	Riverside Theatres

CAPITAL PROJECTS

Riverside Theatres Plant, Equipment & Refurbishment	150,000	150,000	0.0%	No Change Riverside Theatres equipment installation included FM receivers for hearing impaired patrons, HD Cameras for Theatre to foyer viewing screens, Box Office Scanners for Print at Home ticketing other projects under design for completion June 2018 include refurbishment of the Courtyard and Foyer entrance and production lighting.	City Identity, Experience and Engagement
Riverside Refurbishment and Upgrades	300,000	300,000	0.0%	No Change The lighting upgrade work for Riverside Theatre and its courtyard is on track for completion by the end of June 2018, within the allocated budget.	City Identity, Experience and Engagement
Library Capital Resources	820,000	860,000	(4.9%)	Request for more funds Library book purchases are on target so far this Financial Year.	City Services
Council Plant, Fleet & Other Equipment Replacement Program	4,000,000	4,305,000	(7.6%)	Request for more funds Project tracks CoP replacement of Fleet Vehicles and Other Equipment & Plant. On target for full spend this Financial Year.	City Services
Lonely Lane Artwork	80,523	158,671	(97.1%)	Revote from 16/17 Council is currently working with artist to ensure that delivery occurs in January. The work is currently being installed with and to be completed by June 2018.	City Services
Westmead Strategic Planning & Public Domain Works		177,653	0.0%	Revote from 16/17 Project has been completed and delivered to the community	City Services
Foreshore Stairs	141,124	141,124	0.0%	No Change The aim of this project is to Install stairs on the southern side of the Elizabeth Street (Orr) pedestrian bridge which will connect Phillip Street to the lower foreshore. This project looks to improve pedestrian access to the foreshore especially during large events. The design and approval have been completed. The project is due for completion by June 2018.	City Services

Project	Original budget	Current budget	Variance	Comment	Business Unit
St Johns Cathedral Feature Lighting Treatment	300,000	210,000	30.0%	Moved to 18/19 Council is working with the St John Cathedral, with the aim of installing a decorative lighting feature. The lighting will highlight the heritage Cathedral and will also have a colour element to enable the lighting to be used at major events held in the adjacent Centenary Square. The detailed design is due to be completed by June 2018 with installation of the lighting to take place in the 2018/19 financial year	City Services
"Imagine" Program Connectivity and Access Improvements	255,000	263,211	(3.2%)	No Change This project includes delivering Imagine Ermington projects within the Ermington community. The first project to be delivered is the 'winning' community garden in Bruce Miller Reserve. This was completed in December 2018. The garden is now acessible to the community group. The remaining funding will deliver a tennis court in George Kendall Reserve. This project is currently in procurement, with an expected delivery date of June 2018.	City Services
Dundas Station Centre Upgrade	102,000	102,000	0.0%	No Change This project is currently in construction phase and to be completed by June 2018.	City Services
Harris Park - Station Street East Upgrade	170,000	445,000	(161.8%)	Reallocation The Streetscape improvements at Station Street East will complete the scheduled streetscape improvements for the Harris Park Town Centre. The Streetscape improvement will address and improve pedestrian safety as well as refreshing the area with new footpaths and street furniture. The project is on schedule to be completed by May 2018.	City Services
Toongabbie Street Upgrade Wentworth Avenue	355,000	420,000	(18.3%)	Reallocation A project to improve pedestrain access from the commuter car park located in Ancona Avenue to Toongabbie Train Station. Works include a new pedestrian crossing of Wentworth Ave. The construction works commenced in March 2018 and are expected to be completed in June.	City Services
Connecting Centres Lake North Parramatta	170,000	176,930	(4.1%)	Revote from 16/17 A project to improve pedestrian connectivity from Belmore Park to Lake Parramatta Reserve. Works have now been completed and include new street trees to provide future shade, kerb ramps, new pathways and resting points.	City Services
Prince Alfred Square Power Upgrade	200,000	442,047	(121.0%)	Revote from 16/17 Council is installing a substation at Prince Alfred Square to improve access to power for Major Events. The installation of the substation is due for completion by June 2018	City Services

Project	Original budget	Current budget	Variance	Comment	Business Unit
Wentworth Point Library and Community Centre	9,000,000	250,000	97.2%	Moved to 18/19 Assessment of tenders for the interior fit-out of the Community Centre and Library at Wentworth Point is currently in progress with target for appointment of fit-out contractor and commencement by June 2018.	City Services
Upgrade to Lawndale Shops, North Rocks	260,000	310,000	(19.2%)	Reallocation This project involves the design and construct of an upgraded local streetscape including landscaping, paving improvements, new signage and additional trees. A contractor was engaged for this project, and construction works is scheduled to start in April 2018. The works are anticipated to be complete by June 2018.	City Services
Upgrade to Carlingford North Shops	260,000	630,000	(142.3%)	Reallocation This project will see major improvements to the streetscape and parking at Carlingford North Shops, located at Plympton Road in Carlingford. A contractor has been engaged, and the construction works started in early April. The works are anticipated to be complete by June 2018.	City Services
Southern Precinct Renewal Project	850,000	950,000	(11.8%)	Request for more funds As the Southern precinct of Parramatta grows and with the Design Collage, Councils library and Council Customer Service Centre moving into the precinct pedestrian numbers have increased especially in the Fire Horse lane. This project is to facilitate the precinct planning and designs and to deliver the Shared Zone and streetscape improvement works in Firehorse lane. The aim of the upgrade is to improve pedestrian safety and connectivity in the Fire Horse lane and the surrounding lane network. The project is currently out to Tender with delivery of the project planned in the Autumn 2018	City Services
Phillip Street Smart Street Design	250,000	150,000	40.0%	Reduced The project will produce detailed plans for a new streetscape for Phillip Street in Parramatta's CBD. These plans will deliver a vibrate urban amenity to cater for Parramatta's young and multicultural community. The new streetscape will allow Philip Street to foresee its potential as a night time destination and will be flexible to allow for the changes of a growing and ever changing city. The project is on schedule with a concept to be ready for Council consideration and public consultation by the end of June 2018	City Services
Implement Sue Savage Park Masterplan	280,000	280,000	0.0%	No Change This project is stage one of a youth precinct that will be constructed within the park and follows Council's adopted Sue Savage a Reynolds Park Masterplan. A full size basketball court has just been completed. Further stages of the Masterplan will be implemented in the next financial year.	City Services

Project	Original budget	Current budget	Variance	Comment	Business Unit
NCIF - External Signage City Operations		395,000	0.0%	Moved to 18/19 The manufacture and installation of the new City of Parramatta street name signs has been completed in the Parramatta, Epping CBD areas including the suburbs of Granville, Harris Park, Rosehill, Mays Hill. The installation of signs is nearing completion in the Silverwater, Newington, Wentworth Point suburbs. The manufacture of the street name signs is currently being produced for zone four, the Westmead area. Installation of the signs in this area will commence shortly.	City Services
SCF North Rocks Park Master Plan - Capital		234,300	0.0%	Reallocation This project has been allocated funding under the Major Projects component of the NSW Government's Stronger Communities Fund. The City of Parramatta is developing a Master Plan for North Rocks Park and John Wearn Reserve, referred to as the 'North Rocks Park Precinct, Carlingford'. The Master Plan will make recommendations for the entire Park Precinct including building use, condition and placement as well as the surrounding parkland, sports fields and recreation and community facilities. The Draft Master Plan has been prepared and will go to the June Council meeting for endorsement for public exhibition.	City Services
SCF Newington Dog Park		500,000	0.0%	Reallocation This project has been allocated funding under the Major Projects component of the NSW Government's Stronger Communities Fund. The fence, concrete works, plumbing and landscaping works are complete and the dog park was opened in March 2018. The water play component will be delivered by the end of 2018.	City Services
Centenary Square Review		147,538	0.0%	Reallocation To ensure pedestrian safety within Centenary Square, Council has commenced investigations to upgrade infrastructure, including moveable bollards. Council will proceed with installing moveable bollards along the edge of Macquarie Street below Church. This will provide Council with the ability to control all vehicle access to and from the Square. Minor electrical works will also be undertaken to allow for more distributed activations around the Square and improved lighting. Works to commence in 2018/19.	City Services
SCF Sommerville Park Upgrade, Eastwood		105,000	0.0%	Reallocation This project has been allocated funding under the Major Projects component of the NSW Government's Stronger Communities Fund. The project will upgrade the facilities at Somerville Park, Eastwood and will likely include an upgrade of the amenities building and playground, tree planting, landscaping, additional seating, shade cover, and adult exercise equipment. Community consultation took place in November 2017 with onsite face to face consultation, and an online survey. A draft amenities building and landscape concept design are expected to be completed by March 2018.	City Services

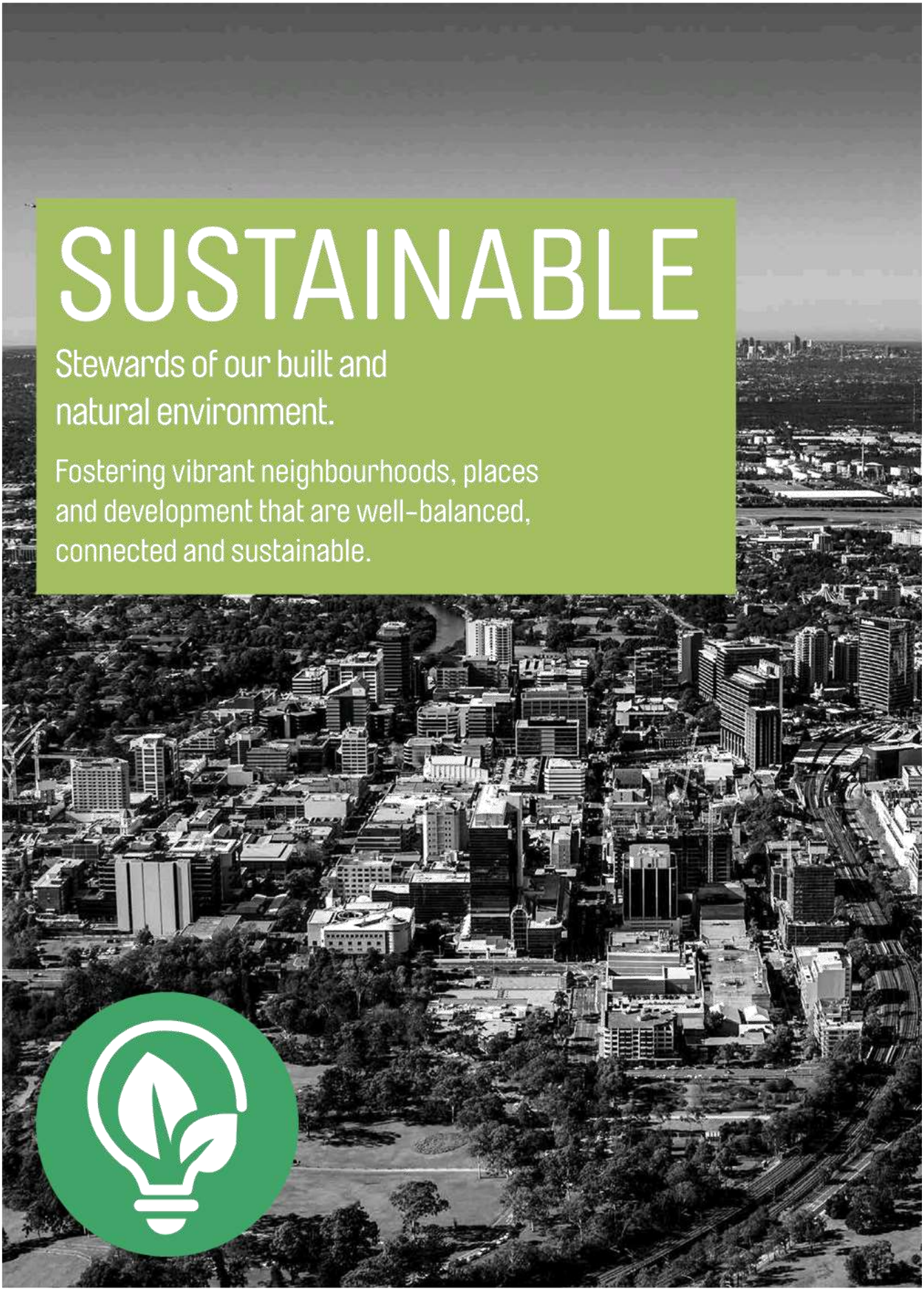
Project	Original budget	Current budget	Variance	Comment	Business Unit
George Kendall Reserve Park Upgrade		384,000	0.0%	Reallocation This project is currently in the procurement stage. Works are expected to commence in April 2018 and be completed by June 2018.	City Services
Lighting Under the Bridge		132,000	0.0%	Reallocation Project has been completed and delivered to the community	City Services
Victoria and Park Road Shops Minor Upgrade		150,000	0.0%	Reallocation This project is to deliver street trees, landscpaing tidy up and amenity improvements to the area. The project is to be completed by June 2018.	City Services
Newington Central Precinct Upgrade		109,324	0.0%	Reallocation Works to the Newington Public School include minor streetscape upgrading with completion expected by June 2018.	City Services

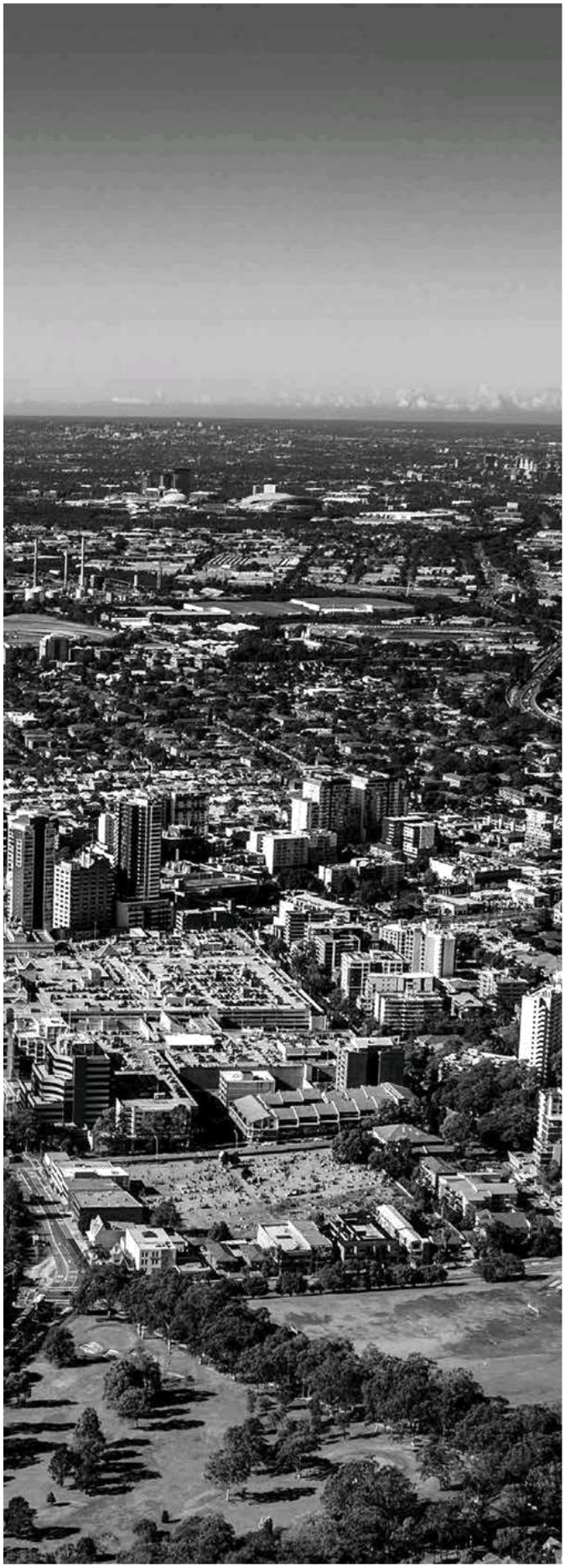
*SCF = Stronger Communities Fund
*NCIF = New Council Implementation Fund

OPERATING PROJECTS

Project	Original budget	Current budget	Variance	Comment	Business Unit
Aquatic Playground Maintenance	200,000	160,000	20.00%	Reduced Monthly maintenance to the Aquatic Playgrounds have been occurring and no new developments.	City Services
Temporary Relocation of Parramatta Pools	700,000	1,500,000	(114.30%)	Request for more funds Pool facility upgrade nearing completion. DA for change of use has been approved and Construction Certificate has been issued. The existing Amenity Building is 100% complete with two new accessible toilets / shower structures installed and the Administration Building is in place and currently being connected with services. Pool Plant Room and pool structural work is complete with tiling to finish before testing and handover. Completion is expected in June 2018. Over expenditure is due to unanticipated service improvements, additional structure works to the pool and reconditioning of re-used plant.	City Services
Hill Road Masterplan	250,000	100,000	60.00%	Reduced Community consultation including surveys and focus groups occurred in late November 2017, Council is currently engaging traffic consultants and site surveyors, with the draft Masterplan due end of May 2018.	City Services
Rydalemere Park Masterplan	200,000	200,000	0.00%	No Change To meet current and future social infrastructure needs of our community, Council is embarking on developing a Masterplan for Rydalmere Park. The Masterplan will review the entire park and specifically determine future use of the existing bowling club area. Stage one community consultation has been completed as well as detailed analysis of demographic and sports trend data. Draft master plan options will be presented to the Community for further comment in February/March 2018.	City Services
SCF Mobile Active Health		147,297	0.00%	Reallocation The Active Parramatta Van is now operational and running regular healthy lifestyle classes in various parks. The van is funded through the Major Projects component of the NSW Government's Stronger Communities Fund and as such will operate with this funding until 2019.	City Services
Dence Park Master Plan		150,000	0.00%	New Project will consider improved community and/or recreation infrastructure within the Dence Park precinct.	City Services

*SCF = Stronger Communities Fund
*NCIF = New Council Implementation Fund


SUSTAINABLE
Stewards of our built and natural environment.
Fostering vibrant neighbourhoods, places and development that are well-balanced, connected and sustainable.



QUARTER 3
SUSTAINABLE SUMMARY

COMMUNITY PRIORITIES

- Promoting Green Spaces and the Environment
- Providing Opportunities for Recreation and Leisure

COMMUNITY OUTCOME

Balance between development and the health and protection of the environment. Natural areas and infrastructure well maintained and enhanced. Environmentally sustainable practices are mainstream, including responsible energy and water use, minimising of food waste and more awareness of initiatives available for individuals, households and businesses looking to incorporate environmental practices into their operations.

BUSINESS UNITS

- City Assets & Environment
- Development & Traffic Services

SUSTAINABLE SPEND

Revised Operating Expenditure: $59,784,000
Original Operating Budget: $59,258,000

Revised Capital Expenditure: $40,703,000
Original Capital Budget: $40,397,000

MEASURING OUR SUCCESS

To know if we are successfully delivering the outcomes proposed by this Plan, we have identified key measures to be published regularly. Explanatory detail is provided further down in this section of the report.

Development Applications

Increase percentage of houses and dual occupancy applications approved within 40 days by 100% over 2016/17

80%

TARGET MET: **NO** **however trend is increasing to the target**

The goal is to reduce the time for approval of development applications for houses and dual occupancy developments

If we can reduce the time for approval, we will be more in compliance with state legislation, not to mention our community will benefit from reduced wait times.

Waste Services

Respond to 95% of service requests regarding waste services within 48 hours

87%

TARGET MET: **NO, resources are required to make progress**

The goal is to respond to customer requests in a timely and efficient manner.

Timely response results in higher customer satisfaction with the service.

Waste Services

More than 70% of waste is diverted from landfill

66.0%

TARGET MET: **NO** **however trend is increasing to the target**

The goal is to reduce waste to landfill.

If waste is successfully diverted to more useful purposes such as recycling or composting, then Council saves money on landfill costs, plus the waste becomes a resource and an environmental benefit

COUNCIL'S PERFORMANCE MEASURES AND INDICATORS

Reduce the amount of waste sent to landfill	Sustain 70% of waste diverted from landfill	66%	Target nearly met	City Assets and Environment Unit
Satisfaction with domestic waste collection services	Sustain 85% Satisfied and Very Satisfied (Annual Community Satisfaction Survey)	89%	Target met. Annual satisfaction survey was reported in Q1.	City Assets and Environment Unit
Establish new domestic and commercial waste contract and communicate change	Commencement of Waste contract by November 2017 and ongoing implementation of Communication Plan	Complete	Completed 6 November 2017	City Assets and Environment Unit
Implementation of Capital Works Program (local roads, footpaths, stormwater drainage, bushland and natural waterways and parks)	95% completed to time, quality and budget	Various	On track to meet target. Completion for civil assets works programs as follows (estimated): Roads 70% Footpaths 85% Drainage 67% Bridges 30%	City Assets and Environment Unit
Maintain Council's asset infrastructure at 'satisfactory' condition	Council assets maintained at 'satisfactory' condition assessment	Civil Assets in all categories are in Condition 3 (Average) or better	Target not met. Council is constantly working on planning, resourcing, and delivering a satisfactory rating for all asset classes, according to funding levels, and this remains ongoing.	City Assets and Environment Unit
Satisfaction with bushland, parks, natural resources resulting from Council's management services	Sustain community satisfaction (Annual survey)	Not available this quarter	Survey to be completed in 2018	City Assets and Environment Unit

Measure	Target	Q3	Comment	Business Unit
Satisfaction in the Integrated Open Space Services (IOSS) Benchmarking Survey	Sustain 80% satisfaction (Integrated Open Space Services (IOSS) Benchmarking Survey)	Not available this quarter	Survey to be reported in Q4.	City Assets and Environment Unit
Volunteers supporting environmental programs	Sustain number of volunteers on based on 2016 /17 benchmark	280	Target met. Number has been maintained consistently through Q3	City Assets and Environment Unit
Number of street trees planted	Sustain number of trees planted based on 2016 /17 benchmark	70 trees	Comparison unknown	City Assets and Environment Unit
House Development Applications approvals within timeframe	50% completed within 40 days	36%	Target not met Whilst the target is yet to be met, the most recent stats show that the number is rising. New prelodgement processes have assisted with this and further improvements to the process as a result of the current Service Excellence Review will further assist with reaching the target set by the State Government.	Development & Traffic Services
Mean and median assessment times for Development Applications	20% or better improvement on assessment time	57 days average 36 days median	Target met. Average 57 days, Median 36 days (net). Average days shows a 22% improvement over last quarter, and a decrease in the number of days taken to determine an application. The new lodgement system has now been in place for six months and we are seeing a reduction in assessment times to reflect this.	Development & Traffic Services
Audit of approved and constructed development to identify design issues (to be improved for future development)	Audit completed by December 2018	Ongoing	A process is in development which when implemented, will audit 3-4 completed or near to completed developments per quarter to compare the approved development with the as built development.	Development & Traffic Services
Process improvements and planning control changes identified (to improve the quality of design of future developments)	Process improvements and changes to development controls identified by March 2018	Ongoing	Development and Traffic Services Unit (DTSU) have commenced a Service Excellence Review and are participating in the review of development controls under the Harmonisation Project	Development & Traffic Services

Measure	Target	Q3	Comment	Business Unit
Effectiveness of Design Excellence Advisory Panel (DEAP) **(review prior to lodgement of the Development Application)**	50% of proposals reviewed prior to lodgement of DA	Not enough data	Target not met. Number of DAs referred to DEAP during Q3 that had a pre-lodgement DA was a total of 1 DA. As it is not legislated to go to DEAP before DA lodgement; it is difficult to force applicants to go through the process.	Development & Traffic Services
Effectiveness of Local Planning Panel	Sustain 70% satisfaction with the completeness, transparency and independence of the Local Planning Panel	33%	Target not met. Changes to the Environmental Planning and Assessment Act 1979, that commenced on the 1 March 2018, meant that the decision to have an IHAP or Local Planning Panel was no longer voluntary for Council's within the Greater Sydney Region. The first City of Parramatta Local Planning Panel was held on the 17 March 2018. Note: the Local Planning Panel was formerly named Independent Hearing and Assessment Panel (IHAP)	Development & Traffic Services
Reduce Land and Environment Court (LEC) appeals	10% reduction of appeals based on 2016/17 benchmark	3 appeals	Target met. The number of appeals received has decreased compared to last quarter.	Development & Traffic Services
Tree permits determined within 21 days	Sustain 80% permits determined within timeframe	91.4%	Target met. 91.4% of all tree applications determined with 21 days; maintaining the improvements made from the 2016/2017 year.	Development & Traffic Services
Temporary Road Occupancy permit applications completed within timeframe	90% completed within two working days	95%	Target met.	Development & Traffic Services
Service Request completed within the specified service standard	90% finalised within service standard	71%	Target not met. Further improvements proposed in the next 6 months.	Development & Traffic Services

CAPITAL PROJECTS

Pavilion Program	150,000	150,000	0.00%	No Change Consultants engaged to prepare design for West Epping Park sporting pavilion. Scope of works prepared for engagement of consultants engaged to prepare design for replacement of sporting pavilion at Dundas Park.	City Services
Sportsground Program	510,000	510,000	0.00%	No Change Round one of the sportsground floodlighting improvements completed at 17 fields. Works commenced for replacement of floodlighting poles at Barton Park, North Parramatta. Cricket wicket installed at Roselea Park.	City Services
Playground Replacement Program	520,000	520,000	0.00%	No Change A new playground at Silverwater Park was completed. Design & community consultation for replacement of playgrounds at Hillcrest Ave Winston Hills; Cumberland Park Newington & Winjoy Park Dundas completed.	City Services
Parks Program	410,000	416,500	(1.59%)	No Change Funds minor parks improvement works such as seating and drinking fountains throughout City of Parramatta parklands.	City Services
Public Trees Program	380,000	380,000	0.00%	No Change 25 local playgrounds have benefited from more shade as part of Councils Public Tree Planting Program. Autumn street tree planting commenced.	City Services
Walking Track Construction	130,000	170,000	(30.77%)	Request for more funds Track improvements completed for Ponds Creek, Quarry Branch Creek, Lake Parramatta Reserve & Russell Walker Track North Rocks. Remaining works on schedule for Toongabbie Creek, Darling Mills Creek, Beecroft Reserve & Terry's Creek.	City Services
Restoration of Natural Areas	720,000	720,000	0.00%	No Change Contractors engaged to undertake the bush regeneration in Toongabbie, Quarry Branch and Ponds Creek Catchments	City Services
Waterways Restoration	560,000	560,000	(0.00%)	No Change Contractors engaged to undertake the bush regeneration in Toongabbie, Quarry Branch and Ponds Creek Catchments. Tenders invited for Cowells Lane Reserve rock armouring & erosion control project.	City Services

Project	Original budget	Current budget	Variance	Comment	Business Unit
Flood Mitigation Program	350,000	350,000	0.00%	No Change Completed stormwater connection to Sydney Water open channel at Alfred St, Parramatta	City Services
Kerb & Gutter Renewal Program	1,330,000	1,330,000	(0.00%)	No Change Completed 22 out of 30 projects, examples include Hemsworth Ave, Northmead, Nada St, Old Toongabbie, Timbertop Ave, Carlingford and Flinders St, Ermington.	City Services
Drainage Construction Program	600,000	600,000	(0.00%)	No Change Completed stormwater channel clearing works at eastern end of Grand Avenue, Camellia.	City Services
Footpaths Construction Program	1,700,000	1,765,000	(3.82%)	Revote from 16/17 23 projects out of 37 completed, examples include Sandringham Drive, Carlingford (from Felton Road to Westminster Ave South), Brelogail Street, Northmead (entire length), Hillman Ave, Rydalmere (loop around Pine Street)	City Services
Roads Renewal Program	6,175,000	6,175,000	(0.00%)	No Change Completed 29 projects, examples include Adderton Rd, Telopea (from Manson St to Leamington Rd), Dickens St, Winston Hills (entire length), Hill Rd, Rosehille (from Pondage Link to Haslams Creek Bridge)	City Services
Improving Water Quality in Parramatta Waterways	400,000	400,000	0.00%	No Change Funding reallocated to complete water quality improvement at West Epping Park.	City Services
Public Domain Lighting	100,000	100,000	0.00%	No Change Lighting infill at various locations to improve public lighting.	City Services
Bridge assets - safety upgrades	150,000	150,000	0.00%	No Change Minor urgent repairs undertaken at Moxhams Rd bridge. Structural engineer to be engaged for Level 3 (detailed structural) inspection and investigation for Haslams Creek bridge.	City Services
Bridge Upgrades & Renewal Program	250,000	250,000	0.00%	No Change Completed replacement of 2 pedestrian bridges at Ponds Creek Reserve and Upjohn Park. Replacement of bridge decking at Hunts Creek bridge completed	City Services
Additional Roads, Kerb & Gutter Maintenance	3,800,000	3,800,000	(0.00%)	No Change Completed 21 projects, examples include Epping Ave, Eastwood (from Lakeside Rd to Wingate Ave), Vignes St, Dundas (from Kissing Point Rd to Cleal St), Perry St, North Rocks (from Randal Crescent to Williams Rd).	City Services

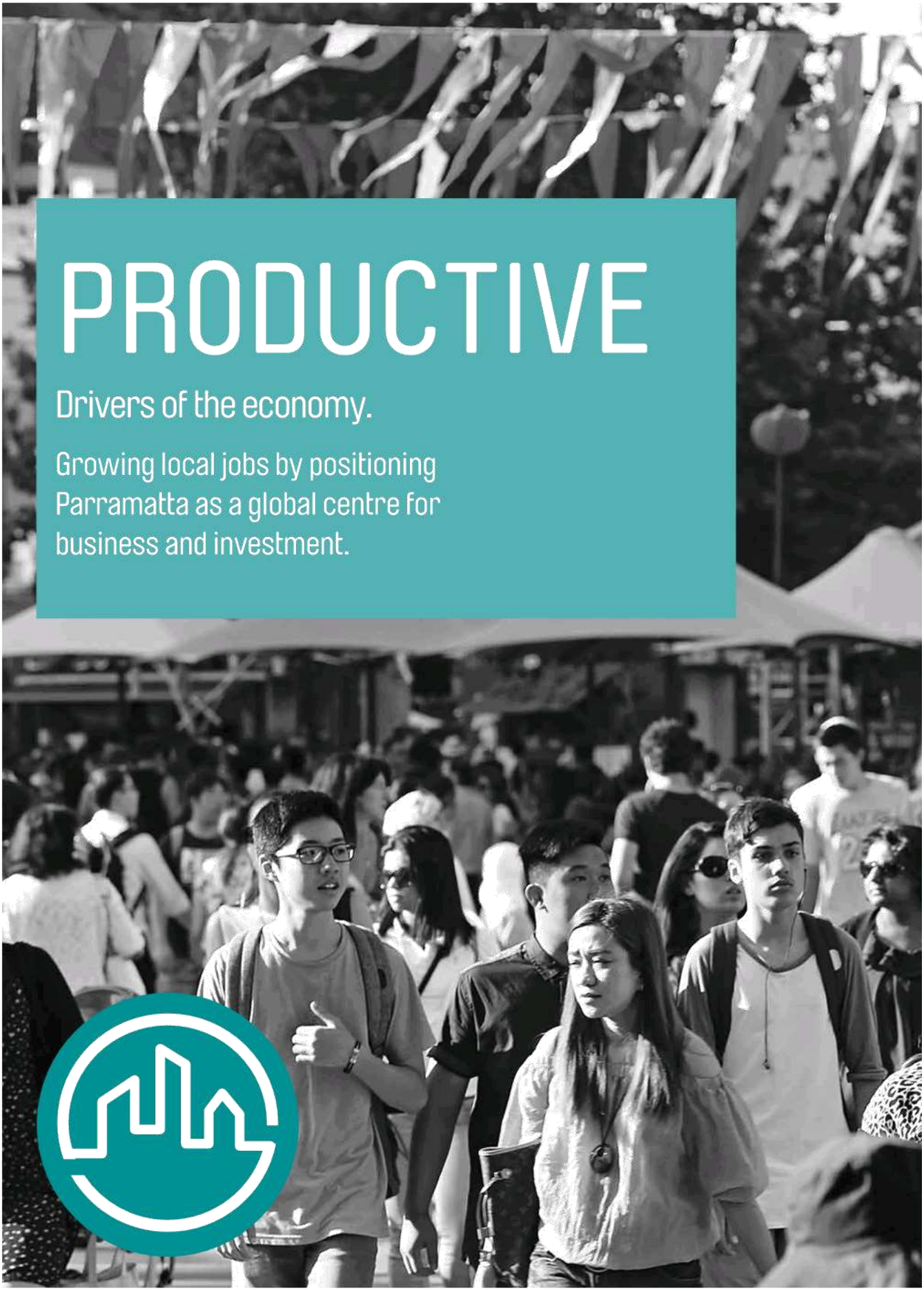
Project	Original budget	Current budget	Variance	Comment	Business Unit
Nursery Management for Bushland Plants & Landscaping Works	130,000	170,000	(30.77%)	Reallocation Project involves provision of native plants from council's plant nursery for use within various annual bushland reserves by contractors & volunteers.	City Services
Protecting Dams Capital Works Program	270,000	270,000	(0.00%)	No Change Completed Dam Safety Emergency Plans (DSEP's) for Lake Parramatta Reserve Dam and McCoy Park Detention Basin.	City Services
Lake Parramatta Improvement Works		190,095	0.00%	Revote from 16/17 Project completed. Work included additional picnic shelters, BBQ's, timber viewing deck, improved path & stairway access to swimming area & additional lawn area within former parking area.	City Services
Supply and Installation of Street Furniture	150,000	110,000	26.67%	Reduced Ordered 20 bin enclosures for future replacement of old bin enclosures in Epping.	City Services
Civil Construction Program	400,000	550,000	(0.00%)	Request for more funds Completed stormwater relocation and driveway adjustment at 113 Oakes Rd, Carlingford. Substantially completed civil works at the front of Macarthur Girls High School, Parramatta.	City Services
Roads to Recovery Program	1,441,608	1,441,608	(0.00%)	No Change Completed 3 project at Spurway St (from Kissing Point Rd to Dorahy St), Dundas. Six (6) projects in progress.	City Services
Mobile Garbage Bin Roll Program	250,000	250,129	(0.05%)	No Change Project has planned roll out of new bins for November 2017 and April 2018 to coincide with the commencement of the new waste collection contract in November. Budget to be re-phased for expenditure in Q3 and Q4.	City Services
Installation of Rooftop Solar Panels on City Assets Program	100,000	100,000	(0.00%)	No Change Feasibility study completed and installation to commence in February across five council assets including libraries and community centres.	City Services
Footpath Renewal Program	1,600,000	1,600,000	(0.00%)	No Change Completed 33 out of 36 projects, examples include Asquith St, Silverwater (from Melton St North to Stubbs St), Midson Rd, Eastwood (from Boronia St to Chelmsford Ave), Victoria Rd, Ermington (from Kissing Point Rd to Marsden Rd).	City Services
Stormwater Drainage Renewal Program	4,400,000	4,400,000	(0.00%)	No Change Peter Parade Levee reconstruction in progress, drilling for piles approximately 50% complete. Calder Road, Rydalmere major stormwater repair project significantly progressed.	City Services

Project	Original budget	Current budget	Variance	Comment	Business Unit
Major Drainage Construction at Lyndelle Place, Carlingford	700,000	102,378	85.37%	Moved to 18/19 Detailed design being finalised to be followed by resident consultation and tender procurement process. Anticipated construction of Stage 1 works to commence in the later part of 2018.	City Services
West Epping Park - Major	5,900,000	6,682,781	(13.27%)	Request for more funds Completion of the the major upgrade of the sporting and recreation facilities at West Epping Park.	City Services
Hills Area Road Renewal Works	1,290,000	690,000	46.51%	Moved to 18/19 Completed roadworks at Baker St, Carlingford (from Felton Rd to Jenkins Rd). Murray Farm Road & Oakes Road being delayed due to development in the area. Works will commence after January 2019.	City Services
SCF Playground Upgrade- Lynbrae Ave Park		120,000	0.00%	Reallocation This project has been allocated funding under the Major Projects component of the NSW Government's Stronger Communities Fund. The project will upgrade the playground at Lynbrae Ave Park, Beecroft. Community consultation and the concept design have been completed. Detailed design is expected to be completed by Dec 2018. Procurement and construction will be undertaken in early 2018.	City Services
SCF Playground Upgrades - Irving St Reserve		120,000	0.00%	Reallocation This project has been allocated funding under the Major Projects component of the NSW Government's Stronger Communities Fund. The project will upgrade the playground at Irving St Reserve, Parramatta. Community consultation, concept design, detailed design and procurement have been completed. Construction will commence in early 2018.	City Services
SCF Playground Upgrades - Pinetree Dr Reserve		120,000	0.00%	Reallocation This project has been allocated funding under the Major Projects component of the NSW Government's Stronger Communities Fund. The project will upgrade the playground at Pinetree Dr Reserve, Carlingford. Community consultation and the concept design have been completed. Detailed design and procurement will be undertaken in early 2018.	City Services
Asbestos Remediation Works Program		2,000,000	0.00%	New Major remediation works commenced at PH Jeffery Reserve, North Parramatta and construction documentation completed for other smaller reserves, including Unnamed Reserve Ruse Street.	City Services

Project	Original budget	Current budget	Variance	Comment	Business Unit
Murray Farm Reserve Park Improvements		120,509	0.00%	Reallocation Currently finishing the construction of footpath and other proposed improvements in continuation with the works from 2016/17 financial year. Scheduled for completion by late June 2018.	City Services
Barrack Lane Shared Zone Construction	150,000	150,000	0.00%	No Change A design has been undertaken. Council is currently undertaking an Aboriginal Heritage Study. Counci is also working with Parramatta Light Rail and the Department of Education to coorindate construction and design matters.	Outcomes & Development Services
Active Transport Program	300,000	2,310,171	(670.06%)	Request for more funds The 3 traffic signal construction projects have commenced and one is scheduled to be completed in mid May. The other 2 projects are scheduled to be completed in September and October 2018. The 3 traffic signal design only projects are currently going through a process of refinement and approval through RMS. Of the other 4 projects within this program, Alfred Street is complete, Sutherland Road has commenced construction, the tender for Keeler Street will be considered by Council in mid May, and Coffey Street is intended to be constructed in June 2018.	Outcomes & Development Services

OPERATING PROJECTS

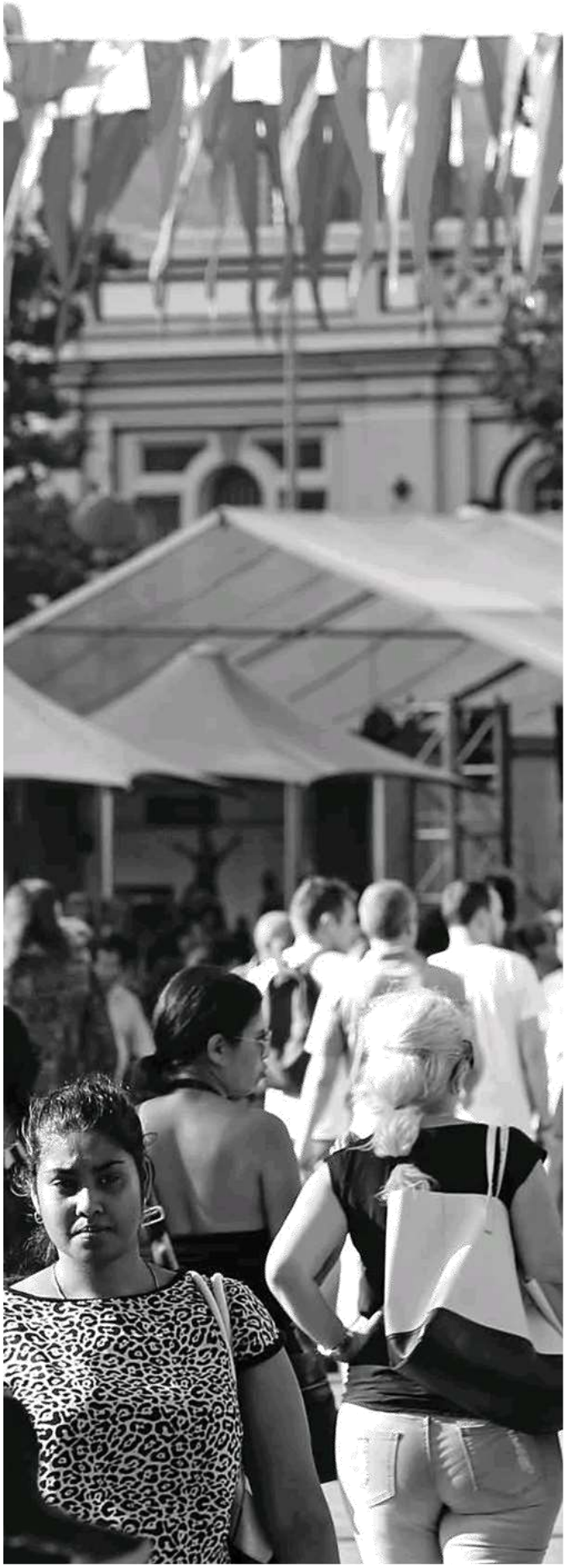
Bushland Resources Management	650,000	700,000	(7.69%)	Request for more funds Contractors engaged for Lake Parramatta Reserve bush regeneration, Darling Mills bush regeneration and maintaining Asset Protection Zone areas adjoining private properties in consultation with Rural Fire Services.	City Services
Parramatta River Flood Study	509,330	700,000	(37.44%)	Request for more funds Project progressing well with significant additional survey work added to the scope. Project scheduled for completion in Dec 2019.	City Services
Contaminated Land Management in Public Parks and Land	500,000	550,000	(10.00%)	Request for more funds Remediation works completed at various sites, including removal or capping within Bushland Reserves, Hassell Street footpath, and Rangihou Reserve.	City Services
Better Waste and Recycling Program	450,000	450,000	0.00%	No Change Grant funded program comprising several waste diversion and recycling projects. Majority of funds to be spent or committed in May and June 2018 including a new Waste and Resource Recovery Strategy and more solar powered compacting bins for commercial centres.	City Services
Parra River Catchment Group Management	171,482	305,168	(77.96%)	Request for more funds The Parramatta River Catchment Group is hosted by Parramatta Council, it works for 11 Council's and State Government Agencies to improve the water quality in the Parramatta River.	City Services



PRODUCTIVE

Drivers of the economy.

Growing local jobs by positioning Parramatta as a global centre for business and investment.



QUARTER 3
PRODUCTIVE SUMMARY

COMMUNITY PRIORITIES

- Creating A Strong Economy with a Strong City Centre
- Creating Vibrant Neighbourhoods and Precincts

COMMUNITY OUTCOME

Significant investment coming into the City. Growth is shared with the community, through initiatives, such as upskilling the workforce and supporting local small businesses. Creation of sustainable (office/ retail) buildings, efficient transport and a skilled workforce.

City is attractive to residents, students, workers, business owners and visitors, with range of entertainment, hospitality and retail. Workers and small business can see professional development and opportunities. A City that is fun, innovative, productive, with a more visitors.

BUSINESS UNITS

- City Marketing & Economic Development
- City Activation
- Property Development
- Asset Strategy & Property Management

PRODUCTIVE SPEND

Revised Operating Expenditure: $21,193,000
Original Operating Budget: $23,195,000

Revised Capital Expenditure: $23,354,000
Original Capital Budget: $36,091,000

MEASURING
OUR SUCCESS

To know if we are successfully delivering the outcomes proposed by this Plan, we have identified key measures to be published regularly. Explanatory detail is provided further down in this section of the report.

Engagement

Increasing trend in community engagement through Our City Your Say membership

+ 500 Members

TARGET MET: Yes

The goal is to increase community engagement in Council's decision making process

If we can get more engagement, we as a Council are better equipped to serve the community by delivering services and infrastructure that the community actually wants.

Engagement

Increasing trend in community engagement through additional survey items

> 6,000
Survey or consultation responses

TARGET MET: 2017/18 is being used as a baseline

The goal is to increase community engagement in Council's decision making process

If we can get more engagement, we as a Council are better equipped to serve the community by delivering services and infrastructure that the community actually wants.

Cultural Events

Increased attendance, increased satisfaction with Riverside Theatre programs and shows

+11%

TARGET MET: Yes

The goal is to increase participation in Council's cultural events, festivals, and activities

If we can increase the participation, we generate more community and social benefit, and grow the economy

Cultural Events

Increased attendance, increased satisfaction with Council's major events

+13%

TARGET MET:
Yes

The goal is to increase participation in Council's cultural events, festivals, and activities

If we can increase the participation, we generate more community and social benefit, and grow the economy

COUNCIL'S PERFORMANCE MEASURES AND INDICATORS

Satisfaction with Council's community engagement activities	Improved satisfaction on previous survey results	Annual survey reported in Q1	Target met. The Community Satisfaction Survey results were reported in Q1. with nearly 8 in 10 residents being satisfied or very satisfied with Council services overall, compared to 6 in 10 (59%) in 2016. 7 in 10 (71%) business owners are satisfied or very satisfied with Council in 2017 compared to 6 in 10 (60%) in 2016.	City Engagement
Participation levels in community engagement activities	Increase 'Your City Our Say' (OCYS) participation to 3% of total LGA population	+500	On track to meet target. The Our City Your Say (OCYS) panel has grown to 8,900 subscribed members with 500 new sign-ups within Jan-Mar 2018 through a series of promotions. The panel has increased representation across various hard-to-reach segments, including Aboriginal and Torres Strait Islander (ATSI), young people, those from a Cognitive and Learning Disability (CALD) background, and those who identified as living with a disability. Other highlights include a new service including interviews conducted in Mandarin, enhancing reach among Mandarin-speaking community members across Hill Road Masterplan and Robin Thomas and James Ruse Drive Masterplan consultations.	City Engagement
Perceptions on City of Parramatta LGA	Improved perceptions against previous survey results	Annual survey reported in Q1	Annual Perception tracking research was completed on time in July 2017. Perceptions have remained mostly consistent.	City Engagement

Measure	Target	Q3	Comment	Business Unit
Net job growth in City of Parramatta LGA	Job growth based on previous available data	+2.8%	Target met. Local jobs Increased substantially in the December quart 2017/18, rising by approximately 1700. Over the past year, local jobs grew by 3.6%, well above the five-year average of 2.1%. More broadly, Gross Regional Product in the June Quarter 2017/18 was estimated to be $6,415 million, up $56 million from the previous quarter. Council hosted 12 workshops on small business and employment skills during in the recent quarter. Small business workshops covered topics including business planning, marketing, contracts and legal matters, and financial planning, assisting businesses establish and grow. The employment skills programs covered application, interview and communication skills, access to training for skilled migrants and long term unemployed people. Council partnered with local colleges, training organisations and business advisors to deliver these workshops, including a new partnership with The Parramatta College.	City Economy
Investment in the City	Investment growth on previous available data	+62.9%	Target met. During the December 2017/18 quarter, the total value of building approvals was $761 million. Of this $574 million were Non Residential buildings. The value of building approvals in the December 2017/18 quarter was $630 million higher than at the same time in the 2016, almost five times higher. Council continues to attract investment to the City by providing economic analysis, CBD walk-throughs, guidance on Council's policies, strategies and planning requirements. This has occurred with multiple office and high profile retail businesses this financial quarter.	City Economy

Measure	Target	Q3	Comment	Business Unit
Benefits of Council Events & Festivals program	Improved benefits by measuring audience growth, diversity, satisfaction, economic benefit and media impact	+13% attendance	Target met. During Q3 2017/18 Council delivered the 2018 Australia Day event, the 2018 Australian Day Awards and the 2018 Australia Day citizenship ceremony. The City hosted the 2018 Sydney Festival in Parramatta program at Riverside Theatres and in Prince Alfred Square; the 26th Tropfest event in Parramatta Park, and the 2018 Parramasala festival in Prince Alfred Square and Riverside Theatres. Event attendance totalled 177,000 representing an 13% increase on total attendance for the same period in 2016/17 (156,000). Customer satisfaction remained high across all events delivered within the period with an average of 8.0 out of a possible 10.	City Experience
Cultural & Heritage services and experience programs	Increase program attendance and satisfaction based on 2016/17 benchmark	Not available	Increase not determined. Council's Cultural Heritage & Tourism team continued to deliver the wide suite of cultural programs, tours and activities on offer, in particular increasing the frequency during the school holidays. The Visitor Services Cultural Heritage Public Programs Calendar 2018 has been widely promoted. The Host & Guides and Destination Ambassadors continue to support community consultation. Information packs are distributed to event organisers to give to participants/ delegates during events. Cultural Heritage & Tourism team continues to develop the draft Destination Management Plan, with industry stakeholders. Staff have engaged more than 20,000 people through education activities, events and programs. These programs were rated 9.0 out of 10 for customer satisfaction. Visitor and research information, had more than 240,000 visitors online this quarter. Research & Collections Services celebrated the 125th Anniversary of the Royal NSW Lancers continuous association with the City of Parramatta Council.	City Experience
Visits at key destinations and tourist attractions and increased economic benefit	Increase in visits based on 2016/17 benchmark	Not available	Data to be reported annually in Quarter 4	City Experience

Measure	Target	Q3	Comment	Business Unit
Access to arts and cultural spaces and experiences	Increase in number and range of arts and cultural space and experiences	Not available	Increase not determined. Parramatta Artists Studios hosted a range of programs including the Mosaic exhibition in February featuring Western Sydney artists as part of the 40th annual Sydney Gay and Lesbian Mardi Gras Festival and a 24-hour live drawing program as part of Art Month 2018 in March 2018. Parramatta Artists Studios Weave workshops were included in the 2018 Parramasala festival program. Commenced discussions with Urban Growth Development Group on collaborative opportunities for future activation programs and adaptive reuse of heritage buildings for creative businesses, organisations and projects at the North Parramatta precinct.	City Experience
Risk Management of Property development portfolio	Risks are reviewed and a risk register updated monthly	100%	Target met. Project risks are monitored and reviewed monthly by Project Managers and Director at monthly meetings.	Property Development Group
Governance on property development activities	Monthly reports to Council	100%	Target met. Monthly project reporting underway to various audiences, including Executive, Committee and Council.	Property Development Group
Effectiveness of Asset Management	Council asset infrastructure are maintained in 'satisfactory' condition	Not available	Target not yet measured. Community levels of service have been documented through community consultation in February. Results have been incorporated into level of service scenarios for Asset Management Strategy. 'Satisfactory' condition to be refined and outcomes developed in Asset Management Plans	Asset Strategy & Property Management
Preparation of Asset Management Strategy, Policy, Plans	Adopted by Council in June 2018	Not available	On track to achieve target Draft Asset Management Strategy developed and to be adopted in line with Resourcing Strategy suite of documents. Community engagement results have been used to develop service level scenarios for plans and alignment with Long Term Financial Plan (LTFP) is underway.	Asset Strategy & Property Management

CAPITAL PROJECTS

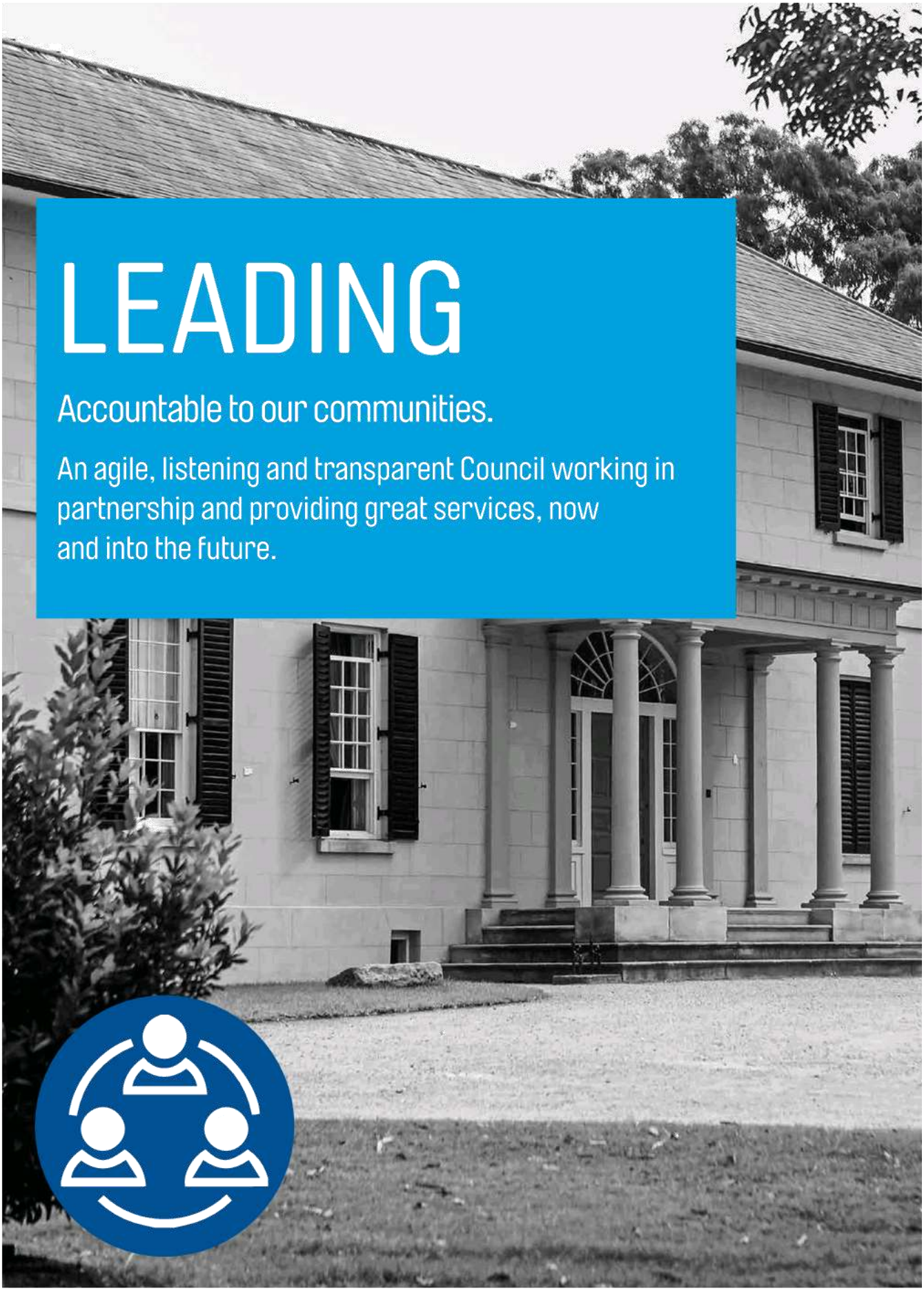
Parramatta Square Business Planning for 5PS & Public Domain		880,000	0.0%	New The Project Team is continuing the process of stakeholder and community engagement to articulate the desired user experience(s) and community aspirations, which will inform the development of the business plan for the site.	Chief Executive Office
Lennox Bridge Carpark Development	237,932	230,028	3.3%	Project Spend Rephased The Developer has submitted a DA for an additional 3 levels of residential floor space. Excavation and shoring works are completed and preliminary structural works to anticipated begin..	Property Development Group
Riverbank Development	737,111	288,087	60.9%	Project Spend Rephased Council and the New South Wales State Government have signed an option agreement for the development of a future Museum of Applied Arts and Science Centre to be located at Parramatta.	Property Development Group
189 Macquarie Street, Parramatta	371,132	477,759	(28.7%)	Project Spend Rephased The development has been paused due to the recent Land and Environment Court Judgement to uphold the stop work order on the project. This matter is currently subject to further discussion between Council and the Developer.	Property Development Group
Church Street Office Fit out (60 desks)		548,182	0.0%	New Fitout to accommodate additional Administration Staff throughout Council at 126 Church Street, Parramatta. Project finalised in January 2018.	Property Development Group
8 Parramatta Square Development	682,459	1,183,475	(73.4%)	Project Spend Rephased The Developer has lodged a development application for a commercial development on the combined 6 & 8 Parramatta Square sites.	Property Development Group
Parramatta Square Public Domain Development	11,011,360	1,030,437	90.6%	Project Spend Rephased Council resolved landowner's consent to the Developer to lodge a DA for the Public Domain for 3, 4 and 6 Parramatta Square. DA for public domain to be lodged by Developer.	Property Development Group
Community Buildings Capital Improvement	255,000	382,090	(49.8%)	Request for more funds Epping Creative Centre: Installation of new Awning - Lodgement of Development Application (DA) programmed for April 2018 while its construction is set next year under a new project.	Property Development Group

Project	Original budget	Current budget	Variance	Comment	Business Unit
Libraries Capital Renewal		102,302	0.0%	New Renewal of Carpet at Epping Library scheduled for completion in February 2018. Project budget reduced transferred to Community buildings Security Upgrade Projects.	Property Development Group
Child Care Centres Capital Renewal	390,000	312,549	19.9%	Project Spend Rephased Toongabbie Bay Health Centre: Internal & External Refurbishments completed in October 2017. Redbank Early Learning Centre: Renewal of Bathrooms completed in January 2018. North Rocks Child Care Centre: Renewal of Playground Development Application lodged in March 2018.	Property Development Group
3 Parramatta Square Development	663,815	1,209,188	(82.2%)	Project Spend Rephased Early works have commenced. Construction of 3 Parramatta Square to commence June 2018.	Property Development Group
4 & 6 Parramatta Square Development	836,260	1,405,538	(68.1%)	Project Spend Rephased 4 Parramatta Square - Basement works for 4 Parramatta Square commenced in mid December 2017. 6 Parramatta Square - DA lodged for a combined 6 & 8 Parramatta Square commercial scheme.	Property Development Group
Multi level Car Parks Capital Renewal Program	640,000	531,285	17.0%	Reduced Eat Street and City Centre Car Parks: Safety upgrades completed in November 2017. Justice Precinct Car Park Lift no. 1 renewed in November 2017 with Lift no. 2 scheduled for completion in March 2018.	Property Development Group
5 Parramatta Square Development - New Council Facilities	17,805,798	8,940,736	49.8%	Project Spend Rephased During this quarter Council has progressed design work. Early Contractor Involvement (ECI) has been appointed. The objective of the ECI process is to arrive at the final guarnateed price for the construction of the new civic and community building.	Property Development Group
Riverside Theatres Building Renewal Program	400,000	265,189	33.7%	Project Spend Rephased Upgrade of the Smoke Control system scheduled for design in June 2018 with installation in October 2018.	Property Development Group
1 Parramatta Square (Retail 6)		1,612,030	0.0%	Request for more funds Project now complete.	Property Development Group
Finalise Construction of new Pre-school in North Rocks Park,	200,000	1,581,492	(690.7%)	Project Spend Rephased Preschool relocated from North Rocks Shopping Centre to the newly constructed building at North Rocks Park in December 2017.	Property Development Group

Project	Original budget	Current budget	Variance	Comment	Business Unit
New Aquatics & Leisure Facility	800,000	920,000	-15.0%	Request for more funds Business case for a new aquatic leisure centre has been submitted to the State Government, Infrastructure NSW and the Office of Local Government.	Property Development Group
Pitt Row Headmaster's Cottage	200,000	200,000	0.0%	No Change Project on-hold pending consultation with user groups and Aboriginal Land Council Assessment.	Property Development Group
Riverside, Events & City Activation Storage Facility	300,000	300,000	0.0%	No Change Council Creative Arts storage requirements to be collected and procured in June 2018.	Property Development Group
Digital Activation (LED) of Parramatta Square Hoardings	200,000	200,000	0.0%	No Change Council is in discussion with the developer regarding digital hoarding for the Parramatta Square site.	Property Development Group
126 Church Street Level 3 Fit Out		580,000	0.0%	New Fitout of new floor at 126 Church Street, Parramatta to accommodate administration staff growth.	Property Development Group
Aquatic Leisure Centre Parramatta		736,000		New Council endorsed Option 2A and a $75M budget for a new aquatic leisure centre in Parramatta. Design Excellence process underway.	Property Development Group

OPERATING PROJECTS

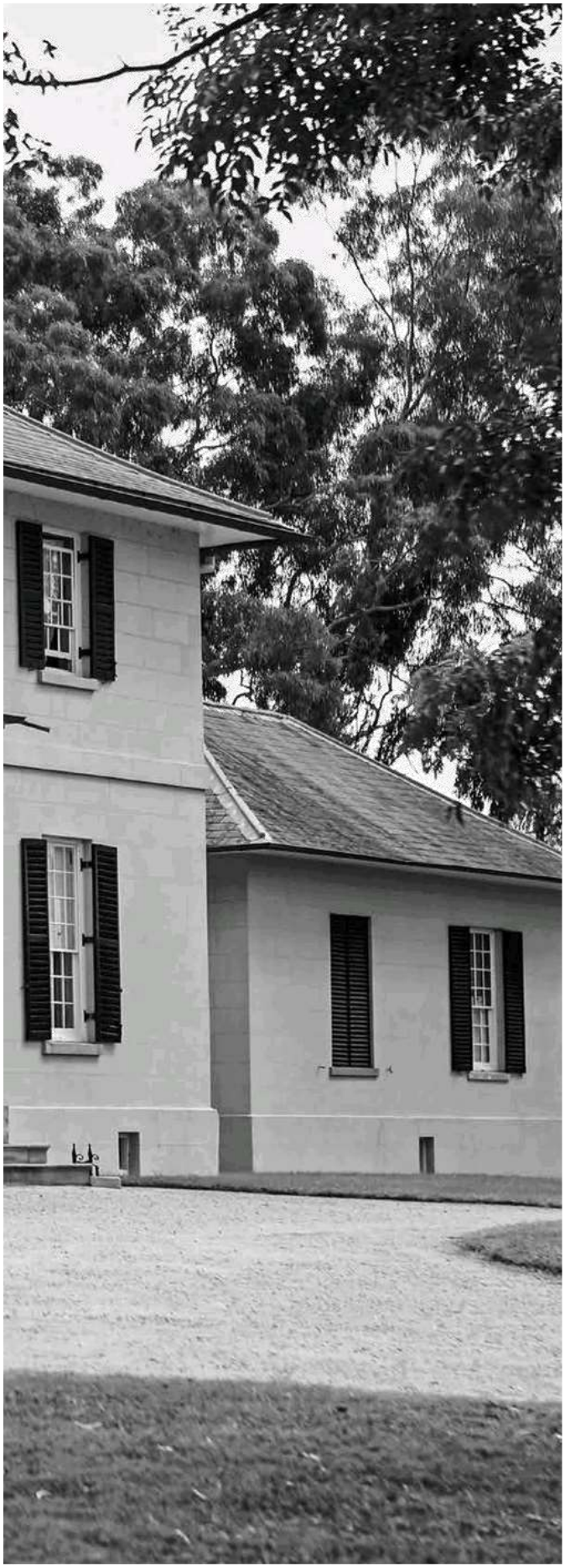
Parramasala- PCC funding	200,000	200,000	0.00%	No Change Council has drafted the 2017/18 funding agreement with Parramasala Ltd to deliver the 2018 Parramasala Festival in the City of Parramatta from 9 to 11 March 2018. Parramasala 2018 was successfully delivered in March 2018 attracting an estimated audience of 30,000 over the three-day festival.	City Identity, Experience and Engagement
NCIF - External Signage City Visual Identity	300,000	70,000	76.7%	Moved to 18/19 The second stage (implementation) of the project is under way. Implementation is expected to complete by December 2018.	City Identity, Experience and Engagement
Brand		103,319	0.00%	Reallocation Stage 3 of the brand project was completed end of 2017. Stage 4 - Implementation has commenced and includes building a digital brand portal and delivering a brand book. The design of these elements is within this original project budget and the production elements are covered under the project 122150 NCIF - External Signage City Visual Identity.	City Identity, Experience and Engagement
ED - Branding and Communications		659,285	0.00%	Reallocation The Economic Development Plan guides Council's strategy in sustaining and growing a strong economy for the City of Parramatta, with a focus on jobs growth. Council supported the Parramatta Chamber of Commerce 'State of the City, event and continued to support small business development through our short courses. Key activities also included conducting research, marketing and partnering with key stakeholders to change perceptions and attract investment. Activities in the plan are spread across the key economic development strategies approved by IPART, and Council uses these to monitor and report on outcomes of the plan.	City Identity, Experience and Engagement
Fair Value Assets and Condition Assessments	120,000	131,339	(9.45%)	Request for more funds This is a yearly project forecast condition assessment and valuation. Quotation to be sent out to engage consultant for the set of sets to be revalued next year. Different asset groups are revalued every four years.	Property Development Group



LEADING

Accountable to our communities.

An agile, listening and transparent Council working in partnership and providing great services, now and into the future.



QUARTER 3
LEADING SUMMARY

COMMUNITY PRIORITIES

- Building a Stronger, more innovative Council for our community's future
- Having a Community Focus

COMMUNITY OUTCOME

Council has maintained its strong reputation as an effective, efficient, ethical and transparent organisation through good governance, sound financial management and strong community leadership. Council operates in accordance with its values, sound business practices and a comprehensive understanding of community needs and aspirations. The community has confidence and trust in the elected representatives and considers the organisation to be ethical, sustainable, responsible and efficient.

BUSINESS UNITS

- Chief Executive's Office
- City Strategy
- Customer Contact Centre
- Governance & Risk
- Finance Services
- Project Management Office
- Information Technology (IT)
- Human Resources
- Legal Services
- City Engagement

LEADING SPEND

ACTUAL OPERATING EXPENDITURE: $54,705,000
Original Budget: $47,373,000

ACTUAL CAPITAL EXPENDITURE: $9,459,000
Original Budget: $7,525,000

MEASURING
OUR SUCCESS

To know if we are successfully delivering the outcomes proposed by this Plan, we have identified key measures to be published regularly. Explanatory detail is provided further down in this section of the report.

Financial

1% greater than the UBSA Bank Bill Index

3.05%

TARGET MET: Yes

The goal is to maintain the security of Council's investments

If Council investments are secure, then Council are acting as wise stewards for the funds that have been entrusted to it.

Financial

100% compliance with statuory and council requirements of the management of financial investments

100%

TARGET MET: Yes

The goal is to maintain the security of Council's investments

If Council investments are secure, then Council are acting as wise stewards for the funds that have been entrusted to it.

Financial

All performance indicators above industry standards

6 of 6

TARGET MET: Yes

The goal is to monitor and measure our performance indicators against industry standards and ensure that variances are detected and addressed.

Financial

Capital and operating expenditure is no more than the adopted budget for the quarter

Operating expenditure
3% below budget
Capital expenditure
39% below budget

TARGET MET:
Yes

The goal is to measure spend in dollars, providing an explicit figure and a strong message of fiscal responsibility

Financial

Project expenditure variances of less than 10%

33 of 172

TARGET MET:
NO
however trend is increasing to the target

The goal is to measure spend in dollars, providing an explicit figure and a strong message of fiscal responsibility pertaining to capital projects

Customer Service

- 80% of calls answered within 20 seconds
- 85% of queries resolved at first point of contact
- 92% of web chats addressed in real time
- 0.25% of customers making formal complaints about face to face services
- 80% of face to face customers served within 5 minutes

4 of 5

TARGET MET:
NO
however trend is increasing to the target

The goal is to maintain customer satisfaction with Council's customer contact centre services

If we provide excellent customer service, and are easy to do business with, our community will be more trusting and willing to participate, and make this LGA an enjoyable place to live

COUNCIL'S PERFORMANCE MONITORING
MEASURES AND INDICATORS

Implementation of Integrated Planning and Reporting Framework	IPR implemented in compliance with legislation (Community Strategic Plan, Resourcing Strategy, Delivery Program and Operational Plan)	Ongoing	Preparation of Council's Integrated Planning & Reporting suite of documents is on track. A draft Community Strategic Plan is on exhibition, work has continued on the preparation of a Resourcing Strategy, Delivery Program and Operational Plan and Budget.	Chief Executive's Office
Implementation of Operational Plan 2017/18	Achieving the service, actions and projects deliverables set out in the Plan	Ongoing	Quarter 2 Progress Report was placed before Council at the meeting 26 February. These reports include updates on the service, actions and project deliverables set out in the Operational Plan.	Chief Executive's Office
Lodgement of CEO Service Requests	Sustain 85% of Service Requests completed within agreed service standards	80%	Target nearly met Additional effort required to meet the target.	Chief Executive's Office
Effectiveness of CEO correspondence management	100% of all correspondence is acknowledged within 7 business days	100%	Target met	Chief Executive's Office
Effectiveness of complaints management	100% of complaints investigated. Complex complaints resolved within 21 days	69%	Target not met. New complaints process required in order to investigate and resolve complaints in a timely manner.	Chief Executive's Office
Effectiveness of Executive Support Correspondence Management	100% of all correspondence is acknowledged within 7 days	100%	Target met. A review of the Executive Support Correspondence process, for Lord Mayor and Councillor correspondence, was undertaken in October 2017 which has impacted this measure. A new process for the actioning and tracking of correspondence is being refined and implemented.	Chief of Staff
Lodgement of Executive Support Service Requests	Sustain 85% of Service Requests completed within required timeframes.	88%	Target met	Chief of Staff

Measure	Target	Q3	Comment	Business Unit
Implementation of strategic plans	Actions meet targets and objectives set in strategic plans and by individual projects	Not available	Data to be reported annually in June.	City Strategy
Quality and best practice in planning and design	Demonstrated high quality planning and design	Not available	Data to be reported annually in June.	City Strategy
Community and industry satisfaction with Council's strategic planning	Positive consultation and feedback	Not available	Data to be reported annually in June.	City Strategy
Provision of open data	Provided on Council' website by June 2018	Not available	Data to be reported annually in June.	City Strategy
Answering customer telephone calls - percentage of calls answered within 20 seconds (80% in 20 seconds)	Sustain 80% > of calls answered within 20 seconds	82%	Target met 82% of our call volumes this quarter were answered within 20 seconds. We answered approximately 37,000 calls.	Customer Contact Centre
Resolving customer queries	Sustain 85% or better of queries resolved at first point of contact	Not available	There is a new methodology that is currently being implemented, for measuring resolutions of queries. Data under this new methodology will be reported in Q4.	Customer Contact Centre
Lodgement of Service Requests	Sustain 85% or better of Service Requests completed within agreed service standards	86%	Target met.	Customer Contact Centre
Effectiveness of Customer Contact Centre (counter management) - Level of formal complaints	Less than 0.25% of all customer contacts result in complaints	0%	Target met No complaints received.	Customer Contact Centre
Effectiveness of Web Chat service	92% of web chats addressed in real time.	94%	Target met	Customer Contact Centre

Measure	Target	Q3	Comment	Business Unit
Efficiency of Customer Contact Centre counters	Sustain 80% of average customer wait time is less than 5 minutes	79%	Target nearly met	Customer Contact Centre
Management of critical projects through Project Management Office	Total number of critical projects at end of period	29	Council is managing 29 'Critical Projects', as at the end of Q3.	Project Management Office
Implementing continuous improvement	Number of Innovation Central improvements and number of endorsed projects	120 staff 10 Innovation Central Improvement Ideas Captured	The Service Excellence Program launched this quarter. 120 staff & 10 Innovation Central Improvement ideas captured. Note: Innovation Central was formerly referred to as 'quick win.'	Project Management Office
Compliance with Integrated Planning & Reporting legislation	100% compliance with legislation	75% This quarter	On track to achieve target. The Community Strategic Plan is ready for public exhibition. The Resourcing Strategy and Delivery Program (inclusive of the Operational Plan and Budget) are in draft. All plans remain on track for either endorsement or adoption by 30 June 2018.	Governance & Risk
Management of Council's Internal Audit program	100% of Internal Audit program achieved	75% This quarter	On track to achieve target. Council's Audit program is on track. The only audit not undertaken as scheduled was the audit into procurement, which was deferred as this area was subject of a significant review in 2017 at the direction of the Administrator, and the Unit is still implementing the recommendations from this review. The Audit will be undertaken when implementation is complete.	Governance & Risk
Effectiveness of Internal Audit program	95% of Internal Audit actions are implemented by due date	85%	Target nearly met. Audit recommendations continue to be tracked and liaison with business units remains active to achieve implementation of recommendations.	Governance & Risk

Measure	Target	Q3	Comment	Business Unit
Management of Information Access requests (GIPA formal)	100% completed within statutory timeframe	90%	Target nearly met. 90% of formal applications made under GIPA were addressed within the statutory timeframes. 10% of formal applications received required an extension of time to allow for an adequate search for information requested. The extensions of time were granted after consulting with the applicants.	Governance & Risk
Access to Council business papers	100% of Council business papers available within 3 business days, before Council meeting	100%	Target met. 100% of Business papers were delivered within the timeframe of 1 week prior to the Council Meetings of February and March, including both ordinary and extraordinary meetings.	Governance & Risk
Council's achievement of containing operating expenditure within operating revenue - Operating surplus ratio	Council revenue is greater than expenditure	No	Target nearly met. Revenue was $245.7m which was below expenditure of $251.4m	Finance
The availability of operating cash to service debt including interest, principal and lease payments -Debt servicing costs (as a percentage of total revenue)	Debt servicing cover ratio is more than 2%	2.58%	Target met.	Finance
Adequacy of working capital and its ability to satisfy obligations in the short term for the unrestricted activities of Council - Unrestricted current ratio	Better than minimum of 1.5%	2.2%	Target met.	Finance
Collection of rates in accordance with Debt Recovery Policy	Less than 5% outstanding at year end	3.62%	Target met. Data reported annually, this result is for year ending June 2017.	Finance

Measure	Target	Q3	Comment	Business Unit
Return on investments	Outperforms the Ausbond bank bill index by 10%	77%	Target met. Councils investment return for the period was 3.05%. The result achieved is consistent with council's strong investment performance despite difficult market conditions. Council continues to outperform the Ausbond index which was 1.72% for the period. Council has consistently outperformed the Ausbond index by over 30% over the past 4 years	Finance
Legal service and support to management and business units	Number of active legal matters at month's end	Ongoing	Total matters for months end: 160. Total matters active 51. Total matters completed 109. of the 109 - 75 are mini matters which do not require a file to be opened but are handled within hours or on the day.	Legal Services
Improving workforce health, safety and wellbeing	Reduction in percentage of workforce incurring lost time workers' compensation claims	-42%	Target met.	Human Resources
Effectiveness of media and communications activities	20 % improved audience reach as measured by half-yearly media monitor reports	Not available	Reported half yearly. Media coverage achieved from July - September reached a total audience 117,045,101 with an advertising value of $29,592,815 Media coverage achieved from October - December reached a total audience of 77,911,535 with an Advertising value of $20,429,271 ASR at $50m was twice the ASR recorded in the six months to June 30; volume was 5 times greater and circulation of 195 million compared to 140 million in the first half of 2017	City Engagement
Engagement through Social Media	20% increased engagement on social media platforms annually	7.9% This quarter	On track to reach annual target Engagement this quarter was similar to last quarter, relative to the number of people that were reached through social media.	City Engagement

Measure	Target	Q3	Comment	Business Unit
Process all incoming correspondence for Council	100% within 48 hours and respond within ten business days	99.7%	Target nearly met.	Information Technology
Compliance with the State Records Act 1998	100% compliance	100%	Target met.	Information Technology
IT systems availability	99% up time	99.9%	Target met	Information Technology
Website and external facing technology availability	100% up time	100%	Target met	Information Technology

CAPITAL PROJECTS

IT Works Upgrade Program	980,000	305,000	68.9%	Reallocation Councils IT program is on track with costs being allocated to specific projects from this program of works to ensure delivery of critical technology across the council	Finance
Office IT Assets & Equipment	1,280,000	267,248	79.1%	Reduced Council has chosen to move from a lease model to a purchase model with regards to IT equipment. The change in the budget is a reflection of the timing of purchasing the assets	Finance
TM1 Financial and Reporting System	150,000	150,000	0.0%	No Change Council has embarked on a reporting platform upgrade to assist with internal and external reporting. This will allow greater transparency and reporting to both the community and to allow management to make informed and timely decisions.	Finance
Enhancing Security to Protect Privacy and Tackle Cyber Crime	850,000	486,327	42.8%	Moved to 18/19 Cyber security along with disaster recovery is being address across the IT network to ensure security and safely of council information	Finance
Outdoor Staff Mobile Technology	535,000	253,247	52.7%	Project Spend Rephased Implementation for a new tablet system, doing away with paper and forms allowing the City of Parramatta staff the ability to focus on servicing the community	Finance
Bear Card Solution		161,890	0.0%	Reallocation The implementation of a new card system for the libraries to improve the user experience for patrons at our libraries	Finance
ICT Network Upgrade		250,000	0.0%	Reallocation A hardware review was undertake to ensure that council had the right IT infrastructure to cope with the expanded CoP Council	Finance
RTA River Cities PVC Stg 22		129,218	0.0%	Reallocation The project involved the installation of solar lighting and a metal element on the red sails structure, scheduled to be done in November 2017. This work will not be completed.	Outcomes & Development Services

Project	Original budget	Current budget	Variance	Comment	Business Unit
Cycle Route Maintenance to Encouraging Cycling	125,000	125,000	0.0%	No Change This project is for the maintenance of various cycle paths around the City of Parramatta. Officers have prepared a program for the delivery of maintenance works at Rydalmere and PVC and periodic maintenance and vegetation clearing across the LGA to deliver through to June 2018.	Outcomes & Development Services
Rapid Deployment CCTV Cameras	100,000	100,000	0.0%	No Change New model cameras and configuration currently being trialled by vendor. Awaiting results prior to confirming orders	Outcomes & Development Services
Parramatta Light Rail Scheme	400,000	1,851,543	(362.9%)	Request for more funds In the March quarter, Transport for NSW lodged a submissions report with the NSW Department of Planning and Environment that responds to all issues raised in submissions (including Council's submission) on the Stage 1 Parramatta Light Rail Environmental Impact Statement. In March, Council entered into a development agreement with Transport for NSW. This agreement sets out both parties rights and responsibilities for the carrying out of the Parramatta Light Rail project. Council staff continue to work with Transport for NSW on both Stages 1 and 2 of the Parramatta Light Rail.	Outcomes & Development Services
River Cities Renewal Project		534,471	0.0%	New The Lennox Bridge Interpretation was installed this quarter and opened in April 2018. Actual spend also includes Escarpment Boardwalk redesign.The Escarpment Boardwalk is a river level shared path on the northern side of the river. It will connect the existing path in Rangihou Reserve, under Gasworks Bridge to the Charles Street Weir and CBD foreshore. It will also provide pedestrian links to Stewart Street, Queens Avenue, and Macarthur Street. Council has secured funding and environmental approvals for this project, and it is currently out to tender. Construction is scheduled in 2019.	Outcomes & Development Services
Public Safety CCTV Network	500,000	450,607	9.9%	Request for more funds Council is proceeding with the Eatsafe lighting and CCTV upgrade in Church Street which will be delivered by 30 June 2018. Planning for other CCTV projects was undertaken in conjunction with other major projects such as Parramatta Light Rail during the quarter.	Outcomes & Development Services

Project	Original budget	Current budget	Variance	Comment	Business Unit
Pedestrian Bridge Works - Morton/Alfred	600,000	506,345	15.6%	Project Spend Rephased he detail design of the bridge has been completed. Council is currently actively pursuing opportunities for matched construction funding.	Outcomes & Development Services
City River Program of Works	450,000	231,268	48.6%	Project Spend Rephased The City River 5-year program of works formulated for funding consideration and business case development. Draft findings of the Charles Street Square Economic Feasibility Study on track for circulation to stakeholders next month. Liaison with RMS regarding Ferry Terminal upgrade ongoing. Liaison with TfNSW regarding works near Gasworks Bridge ongoing. Staff recruitment to support program implementation underway. Draft forward program under development. Charles Street Square Economic Feasibility Study commenced and liaison with RMS regarding Ferry Terminal upgrade ongoing.	Outcomes & Development Services
Flood Information System for Parramatta River	50,000	238,520	(377.0%)	Request for more funds FISH - Flood modelling technical work continues to near completion, with trigger levels to be set in the next stage. Communication materials drafted for review by key stakeholders. Expected launch timeframes are June/July 2018.	Outcomes & Development Services
LED Street Lighting Upgrade - Phase 2	750,000	1,650,000	(120.0%)	Project Spend Rephased Phase 2 LED street lighting replacement program is 38% complete with over 2,200 inefficient street lights replaced with efficiency LED street lights.	Outcomes & Development Services
WSU Link		100,000	0.0%	New The WSU Link project will enable the community to cycle between the two WSU campuses at Rydalmere and Parramatta Square via a well-connected, safe and convenient route. Western Sydney University (WSU) has identified that a significant number of students would cycle between their two campuses if this route existed. Building this link will contribute positively to WSU students and staff, but the project will also improve links for the wider community and provide them with a missing link connection between the CBD and Rydalmere, and other suburbs to the east. The addition of this link could potentially contribute to decreasing traffic congestion in the area. This will increase both liveability and sustainability for the community. In terms of milestones – Concept Designs, Consultation, and Detailed Design are scheduled to be completed in February and March 2018, and construction is scheduled between March and May 2018.	Outcomes & Development Services

Project	Original budget	Current budget	Variance	Comment	Business Unit
Escarpment Boardwalk		150,000	0.0%	New The Escarpment Boardwalk is a river level shared path on the northern side of the river. It will connect the existing path in Rangihou Reserve, under Gasworks Bridge to the Charles Street Weir and CBD foreshore.It will also provide pedestrian links to Stewart Street, Queens Avenue, and Macarthur Street.Council has secured funding and environmental approvals for this project, and it is currently out to tender.	Outcomes & Development Services

OPERATING PROJECTS

NCIF - HR Transition	199,473	151,893	23.85%	Reduced This project is completed	Corporate Services
NCIF -	1,000,000	959,344	4.07%	Reduced Continuous review and improvements are being identify post amalgamation, this project is in place to ensure the transition is a smooth and seamless transition. Funding for this project was awards as part of the State Government amalgamation initiatives.	Finance
NCIF - IT Data Migration Project	500,000	273,403	45.32%	Reduced Pathway Operational data and Electronic records migration from Cumberland and Hills Councils have been completed. CoP business units are now able to process transactions for properties within the new CoP LGA.	Finance
3D Model Coordination	150,000	170,131	(13.42%)	Request for more funds The Council is continuing to receive virtual 3D models from proponents. DTSU / Major development too have been sourcing models from proponents/ applicants. The Physical model in customer service area is being updated quarterly with buildings being added & repainted to another colour as it moves to a different stage. The 3D virtual model has been helping Urban Design with built form, solar access and view testing. We are incrementally expanding the area covered by virtual 3D models in the LGA with the intention of having the entire LGA covered by 2020.	Outcomes & Development Services
Beat the Heat	120,000	147,050	(22.54%)	Request for more funds Project on track, key quarterly activity includes the commencement of an urban heat baseline investigation with the University of New South Wales to determine priority mitigation approaches and locations for reducing urban heat stress, heat rejection options study completed, participation in and membership contribution to Resilient Sydney Project, and Western Sydney University study underway in regards to the use of land satellite imagery to monitor vegetation changes over time.	Outcomes & Development Services

Project	Original budget	Current budget	Variance	Comment	Business Unit
Citysafe VSS (Video Surveillance System) Operational Budget	190,000	461,117	(142.69%)	Reallocation Council continues to focus on the use of CCTV as a public safety tool. Integration of video analytics has begun and this will increase the functionality of the video monitoring systems and improve its effectiveness. This will provide for example the ability to extract data on people counting, crowd density, traffic path analysis or specific security related functions such as detecting left objects in public spaces.	Outcomes & Development Services
High Visibility Community Policing	150,000	149,470	0.35%	No Change The NSW Police have been engaged to undertake additional patrols within the Parramatta CBD over the summer period. This commenced in early October 2017 and will finish in early April 2018.	Outcomes & Development Services
CBD Planning Framework Studies	350,000	275,000	21.43%	Project Spend Rephased Council is working proactively with the Department of Planning and Environment to issue a Gateway Determination to enable the CBD planning proposal to be placed on public exhibition.	Outcomes & Development Services
Parramatta Ways	475,000	413,849	12.87%	Project Spend Rephased Toongabbie Creek Crossing construction project continues to be implemented. Westmead foreshore stakeholder discussions ongoing and stage 1 contamination assessment underway. Parramatta Light Rail Tree Offset Guide moving into more detailed development.	Outcomes & Development Services
Planning Framework Harmonization	476,347	437,183	8.22%	Project Spend Rephased The project team has completed an initial review of the suite of planning controls which currently apply to the different areas of the LGA following the proclamation process. This work has identified key policy issues and inconsistencies which will need to be addressed through the Harmonisation process. Work has commenced on preparing options and proposals for consolidating controls in response to these issues.	Outcomes & Development Services
GIS Visual Data and Dashboard	250,000	125,000	50.00%	Reduced Work continues to develop a prototype City Dashboard to provide easy to access City data as well as mapping information. A new Corporate Dashboard is also under development.	Outcomes & Development Services
Greening the CBD		150,000	0.00%	Reallocation Project is on track. Sustainability assessments to improve building performance was undertaken for 9 significant development applications, coupled with a sustainability review of Design Excellence Competition submissions received by Council during 2016 & 2017.	Outcomes & Development Services

CITY OF PARRAMATTA

FINANCIAL REPORT

Quarterly Review – March 2018

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FINANCIAL OVERVIEW

QUARTERLY REVIEW HEADLINES

A review of Councils year to date financial position and full year forecasts have been undertaken during the March quarter. This has resulted in a number of changes being made to the full year forecasts for both Operating and Capital related items.

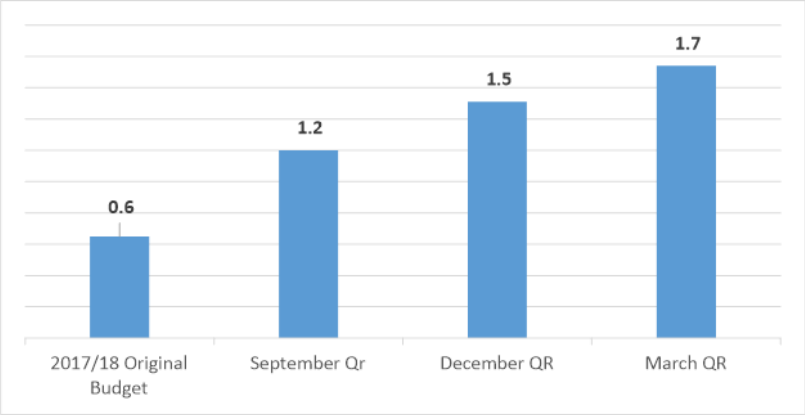
Council is forecasting a surplus of $1.7m, an improvement of $0.2m on the December Forecast.

Operating Revenues have been decreased by $1.8m; Operating Expenses have been decreased by $2.0m.

Capital Revenues have been reduced by $4.9m; Capital Expenditures have been reduced by $18.4m.

The following chart shows the forecast movement from the original over the first two quarters of the financial year.

OPERATING RESULT HISTORY ($m)



CAPITAL WORKS

The December Forecast Capital Works Program full year forecast was $105.6m. A review of all projects during the March quarter, focusing on time and the availability resources, has resulted in a decrease of spend for the balance of the year. The full year Capital works expenditure has been reduced to a full year spend of $87.2m, a decrease of $18.4m.

A summary of the major changes to the previous quarter full year forecast is contained in this document.

FINANCIAL POSITION AND FULL YEAR OUTLOOK

The City of Parramatta's financial position is reflected in the following pages of the 2017-18 March Quarterly Review.

	March YTD Actual	March YTD Forecast	YTD Variance	2017/18 Original Budget	December QR	March QR	Full Year Variance
Rates & Annual Charges	168.5	165.8	2.7	165.0	168.0	171.9	3.9
User Charges & Fees	26.6	28.2	-1.6	38.4	38.1	35.9	-2.2
Other Revenue	9.1	10.6	-1.5	16.1	15.8	13.9	-1.9
Interest	6.4	6.8	-0.4	6.7	9.6	8.7	-0.9
Operating Grants	7.8	8.0	-0.2	12.2	12.9	12.3	-0.6
Operating Contributions & Donations	2.2	2.2	0.0	2.9	3.1	3.0	-0.1
Total Operating Revenue	**220.6**	**221.6**	**-1.0**	**241.3**	**247.5**	**245.7**	**-1.8**
Employee Costs	77.1	79.7	2.6	107.4	108.3	105.7	2.6
Borrowing Costs	2.1	2.1	0.0	2.9	2.9	2.9	0.0
Materials & Contracts	39.0	41.6	2.6	54.7	57.9	60.1	-2.2
Depreciation & Amortisation	30.7	29.9	-0.8	39.4	39.4	40.1	-0.7
Other Operating Expenses	31.4	31.7	0.3	45.3	44.9	42.6	2.3
Total Operating Expenses	**180.3**	**185.0**	**4.7**	**249.7**	**253.4**	**251.4**	**2.0**
Operating Surplus/Deficit	**40.3**	**36.6**	**3.7**	**-8.4**	**-5.9**	**-5.7**	**0.2**
Add: One Off FAG Grant				3.7	3.7	3.7	0.0
Add: One Off NCIF				4.8	3.7	3.7	0.0
Add: One Off Other Variations				0.5			0.0
Net Operating Result	**40.3**	**36.6**	**3.7**	**0.6**	**1.5**	**1.7**	**0.2**

THIRD QUARTER YEAR TO DATE RESULT

The net operating result before capital revenue is $3.7m higher than forecast of $36.6m at the half year. This is principally due to vacant positions not being filled as previously forecasted and higher than expected rates from domestic waste as a result of new developments.

FULL YEAR OUTLOOK

The net surplus is forecast to increase by $1.1m on the December forecast. Revenue is forecasted to decrease by $1.8m, predominately due to development applications slowing down resulting in a reduction in fees and lower utilisations of car parks. The expense forecast decrease of $2.0m from the December forecast is mainly due to savings from vacancy positions not being filled.

Current Revenue Position and Outlook

Table 1.2: Operating Revenue ($m) summarises the key movements by revenue category.

	March YTD Actual	March YTD Forecast	YTD Variance	2017/18 Original Budget	December QR	March QR	Full Year Variance
Rates & Annual Charges	168.5	165.8	2.7	165.0	168.0	171.9	3.9
User Charges & Fees	26.6	28.2	-1.6	38.4	38.1	35.9	-2.2
Other Revenue	9.1	10.6	-1.5	16.1	15.8	13.9	-1.9
Interest	6.4	6.8	-0.4	6.7	9.6	8.7	-0.9
Operating Grants	7.8	8.0	-0.2	12.2	12.9	12.3	-0.6
Operating Contributions & Donations	2.2	2.2	0.0	2.9	3.1	3.0	-0.1
Total Operating Revenue	**220.6**	**221.6**	**-1.0**	**241.3**	**247.5**	**245.7**	**-1.8**

THIRD QUARTER YEAR TO DATE RESULT

The year to date total revenue is $1.0m lower than the forecast of $221.6m. Rates and annual charges were higher than forecast by $2.7m due to an increase of developments being completed resulting in additional residential and domestic waste rates above what was forecasted. Other Revenue is $1.5m lower than forecast due to reduced parking fines, lease rentals of community properties and tower crane applications. Grants are $0.2m lower than forecast due to timing of receiving the financial assistance grant. User charges and fees were $1.6m lower than forecast with due to lower utilisation of parking stations, timing of revenue from riverside theatres and reduced requests of development applications. Interest Income is $0.4m lower than forecast due to lower yields from low interest rates during the period.

FULL YEAR OUTLOOK

The full-year revenue forecast has been decreased by $1.8m to a full year forecast of $245.7m. Rates and annual charges has increased by $3.9m to reflect the year to date results. Interest income has been decreased by $0.9m to reflect lower yields on investment balances. User charges and fees has decreased by $2.2m mainly due to lower utilisation of the multi-level parking stations and parking meters and a reduction in forecasted development application fees due to softening residential market. Other Revenues have reduced by $1.9m due to over-estimated lease rentals on community properties, lower commissions & rebates and tower crane applications. Operating grants is $0.6m lower than Dec forecast due to reduced amounts be received from RMS and financial assistance grant in 2017/18.

Table 1.3: User Charges and Fees ($m), reflects the year to date March result and the full year forecast by major category.

	March YTD Actual	March YTD Forecast	YTD Variance	2017/18 Original Budget	December QR	March QR	Full Year Variance
Aquatic Centres	0.3	0.3	0.0	0.2	0.2	0.3	0.1
Community Facilities	1.0	0.9	0.1	1.0	1.0	1.1	0.1
Childcare	2.0	2.1	-0.1	3.3	3.0	2.9	-0.1
Parking	12.9	13.3	-0.4	18.4	17.9	17.2	-0.7
Other User Charges	0.1	0.2	-0.1	0.7	0.4	0.1	-0.3
Riverside Theatres	2.0	2.3	-0.3	3.1	3.2	3.1	-0.1
Regulatory/Statutory Fees	3.2	3.9	-0.7	5.5	5.6	4.5	-1.1
Discretionary Fees	5.1	5.2	-0.1	6.2	6.8	6.7	-0.1
Total User Charges & Fees	**26.6**	**28.2**	**-1.6**	**38.4**	**38.1**	**35.9**	**-2.2**

THIRD QUARTER YEAR TO DATE RESULT

The year to date user charges and fees revenue is $1.6m lower than the forecast of $28.2m. Parking is lower than forecast by $0.4m due to lower utilisation of multi-level car parks, in particular the City Centre, Eat Street and Parramatta Station. Riverside Theatres is $0.3m lower than forecast mainly due to timing of revenue from riverside theatres. Regulatory and statutory fees are lower than forecast by $0.7m driven by reduced requests of development applications

FULL YEAR OUTLOOK

The full-year forecast for user charges and fees revenue is a $2.2m reduction on the December forecast of $35.9m. Parking Fees reduced by $0.7m from the December forecast due to lower utilisation of multi-level car parks and parking meters, in particular the City Centre, Eat Street and Parramatta Station. Other user charges are lower than December forecast of $0.3m due to a request for extended hours of application of development sites that was not offered due to resourcing, with this service anticipated to start in July 2018. Regulatory/Statutory fees are lower by $1.1m than December forecast due to a reduction of development application fees as a result of the softening residential market.

Current Expenses Position and Outlook

Table 1.4: Expenses by category ($m) summarises the key movements in expenses.

	March YTD Actual	March YTD Forecast	YTD Variance	2017/18 Original Budget	December QR	March QR	Full Year Variance
Employee Costs	77.1	79.7	2.6	107.4	108.3	105.7	2.6
Borrowing Costs	2.1	2.1	0.0	2.9	2.9	2.9	0.0
Materials & Contracts	39.0	41.6	2.6	54.7	57.9	60.1	-2.2
Depreciation & Amortisation	30.7	29.9	-0.8	39.4	39.4	40.1	-0.7
Other Operating Expenses	31.4	31.7	0.3	45.3	44.9	42.6	2.3
Total Operating Expenses	**180.3**	**185.0**	**4.7**	**249.7**	**253.4**	**251.4**	**2.0**

THIRD QUARTER YEAR TO DATE RESULT

The year to date operating expense is $4.7m lower than forecast of $185.0m. Employee costs is $2.6m lower than forecast of $79.7m attributed to the timing of filling vacant positions. Materials & Contracts is lower than forecast by $2.6m driven by the timing of expenses for operating and service projects. It is expected that these expenses will continue to be spent in the last quarter of the financial year. Other Operating Expenses are lower than forecast by $0.3m mainly due to the phasing of costs for ICT purchases which have been delayed to the 2018/19 financial year. Depreciation is up by $0.8m due to the continual reassessment of our assets and the new assets inherited from the outer councils. As we receive more accurate data we will continue to amend the forecast.

FULL YEAR OUTLOOK

The full year forecast for operating expenses is $2.0m lower than the December forecast of $253.4m. Employee costs decrease of $2.6m is a result of vacant positions that will not be filled in the 2017/18 financial year. Materials and contracts increase of $2.2m is mainly due to allocation of budget from tipping expense in domestic waste to cover the higher than expected costs for garbage costs for domestic waste. Other expenses decrease of $2.3m is due to the reallocation of tipping costs from domestic waste management to materials and contracts. Depreciation increase of $0.7m to cover for the continual reassessment of our assets and the new assets inherited from the outer councils that has occurred year to date.

Table 1.5: Materials and Contracts ($m) are reflected below for the March YTD result and the full year forecast.

	March YTD Actual	March YTD Forecast	YTD Variance	2017/18 Original Budget	December QR	March QR	Full Year Variance
Materials	4.4	4.9	0.5	6.4	6.9	7.0	-0.1
Contracts	28.0	31.0	3.0	42.0	43.8	44.8	-1.0
Audit Fees	0.3	0.3	0.0	0.4	0.4	0.5	-0.1
Legal Expenses	1.8	1.3	-0.5	0.8	1.5	2.4	-0.9
Operating Lease Rentals	4.5	4.1	-0.4	5.1	5.3	5.4	-0.1
Total Materials & Contracts	**39.0**	**41.6**	**2.6**	**54.7**	**57.9**	**60.1**	**-2.2**

THIRD QUARTER YEAR TO DATE RESULT

The year to date material and contracts expense is $2.6m below forecast of $41.6m. Materials is$0.5 lower than forecast due to a delay in spending for various service projects. Contracts is $3.0m lower than forecast due to phasing of operating projects and delay of projects expenditure. Legal expenses were $0.5m higher than forecast mainly due an influx of legal matters regarding development assessments. Operating lease rentals are $0.4m higher than forecast due to leasing of an additional floor for Councils Head Office at 126 Church Street commencing September 2017.

FULL YEAR OUTLOOK

The full year forecast for materials and contract expense is $2.2m higher than the December forecast of $60.1m. Contracts increase of $1.0m is due to allocation of budget from tipping costs from domestic waste management. Legal Expenses increase of $0.9m is mainly in relation to the increased litigation costs for a number of matters being contested particularly in Development Assessments and Regulatory Business Units.

Table 1.6: Other Operating expenses ($m) details the YTD and full year position for the other expense categories.

	March YTD Actual	March YTD Forecast	YTD Variance	2017/18 Original Budget	December QR	March QR	Full Year Variance
Tipping Fees	11.8	11.5	-0.3	18.2	16.9	15.4	1.5
Computer Expenses	2.1	2.9	0.8	4.1	4.4	3.6	0.8
Advertising & Promotions	2.2	2.3	0.1	3.3	3.0	2.9	0.1
Street Lighting	2.4	2.3	-0.1	3.0	3.0	3.1	-0.1
Insurance	1.8	2.0	0.2	2.3	2.4	2.3	0.1
Light Power & Heating	0.9	0.9	0.0	2.0	2.0	1.0	1.0
Telephone & Communications	0.5	0.6	0.1	0.7	0.9	0.8	0.1
Parking Space Levy	1.3	1.4	0.1	2.0	1.9	1.9	0.0
Other Operating Expenses	8.4	7.8	-0.6	9.7	10.4	11.6	-1.2
Total Other Operating Expenses	**31.4**	**31.7**	**0.3**	**45.3**	**44.9**	**42.6**	**2.3**

THIRD QUARTER YEAR TO DATE RESULT

The year to date other operating expenses is $0.3m below forecast of $31.7m. Tipping Fees is $0.3m above forecast due to payments for domestic waste being higher than expected in the third quarter as back payments from previous months was made in the third quarter. Computer Expenses is $0.8m below forecast due to timing of licenses expenditure being delayed. Insurance is $0.2m below forecast due to the timing of insurance of fleet vehicles. Other Operating Expenses is $0.6m above forecast mainly due for the Board of Fire Commissioners being above originally what was forecasted.

FULL YEAR OUTLOOK

The full year forecast for other operating expense is $2.3m lower than the December forecast of $44.9m. Tipping fees decrease of $1.5m is a result of transferring the estimated savings in domestic waste tipping to cover the over expenditure of contracts relating to domestic waste. Computer expenses increase of $0.8m due to timing of licenses expenditure being pushed for purchase in 2018/19. Light Power and Heating decrease of $1.0m due to reallocation and timing of expenses to be pushed in 2018/19. Other Operating Expenses increase of $1.2m is mainly due reallocation of corporate costs from other accounts and transfer of costs from contracts to artist in the mall for major events.

Current Capital Position and Outlook

Table 1.7: Capital Revenue and Expenses ($m).

	March YTD Actual	March YTD Forecast	YTD Variance	2017/18 Original Budget	December QR	March QR	Full Year Variance
State Capital Grants	0.0	1.2	-1.2	0.0	2.4	2.4	0.0
Federal Capital Grants	0.8	1.0	-0.2	2.9	1.3	1.3	0.0
Section 94	21.0	26.6	-5.6	32.0	34.2	28.6	-5.6
Other	3.4	2.8	0.6	0.0	2.8	3.5	0.7
Total Capital Revenue	**25.2**	**31.6**	**-6.4**	**34.9**	**40.7**	**35.8**	**-4.9**
Liveable	5.4	7.2	1.8	20.8	23.8	13.6	10.2
Productive	13.8	17.8	4.0	36.9	27.1	23.4	3.7
Leading	5.5	7.4	1.9	11.4	11.0	9.5	1.5
Sustainable	23.5	28.2	4.7	40.4	43.7	40.7	3.0
Total Capital Expenditure	**48.2**	**60.6**	**12.4**	**109.5**	**105.6**	**87.2**	**18.4**

THIRD QUARTER YEAR TO DATE RESULT

The year to date capital revenue is $6.4m lower than forecast of $31.6m. State Capital Grants were lower than forecast by $1.2m mainly due to delay in receiving the active transport grant from RMS, which is expected in the last quarter. Section 94 Developer contributions are $5.6m lower than forecast mainly due to an overstatement of funds relating to Parramatta Square Public Domain this financial year. Other Grants are higher than forecast by $0.6m due to funding being received for voluntary planning agreements. The year to date capital expenditure is $12.4m lower than forecast of $60.6m. A full review of capital projects has been undertaken during the March quarter with major variances as result of phasing of budget being moved to the last quarter and projects work being moved to the next financial year.

FULL YEAR OUTLOOK

The full year forecast for capital revenue is $4.9m lower than the December forecast of $40.7m. Section 94 Developer contributions are $5.6m lower than forecast mainly due to an overstatement of funds relating to Parramatta Square Public Domain this financial year. Other grants increase of $0.7m is due to the funding received for voluntary planning agreements as noted above. The full year capital expenditure forecast has been reduced by $18.4m to a full year spend of $87.2m. The decrease is a result of reducing the scope of works for projects to be completed in the next financial year which includes the Wentworth Point Library and Community Centre, Public Safety CCTV Network and 5 Parramatta Square Development (New Council Facilities).

Capital Project Movements

Below is a table of capital expenditure forecast movements above/below $100k by project ($m).

Project Description	2017/18 Original Budget	December QR	March QR	Full Year Variance	Comments
Drainage Improvements in Growth Areas S94A Program	150.0	150.0	50.0	100.0	Reduced
Kerb & Gutter Renewal Program	1,330.0	1,224.5	1,330.0	-105.5	Correction to Budget
Master Plan Implementation for George Kendall Riverside Park	100.0	100.0	0.0	100.0	Revote 2018/19
Riverbank Development	737.1	701.6	288.1	413.5	Project Spend Re-phased
189 Macquarie Street, Parramatta	371.1	581.9	477.8	104.2	Project Spend Re-phased
Parramatta Square Public Domain Development	11,011.4	1,224.9	1,030.4	194.5	Project Spend Re-phased
River Cities Renewal Project	0.0	148.7	534.5	-385.7	New
IT Works Upgrade Program	980.0	610.0	305.0	305.0	Reallocation
Public Safety CCTV Network	500.0	1,094.2	450.6	643.6	Reduced
4 & 6 Parramatta Square Development	836.3	1,658.1	1,405.5	252.5	Project Spend Re-phased
Multi-level Car Parks Capital Renewal Program	640.0	641.0	531.3	109.7	Reduced
5 Parramatta Square Development - New Council Facilities	17,805.8	11,513.7	8,940.7	2,573.0	Project Spend Re-phased
Updating of Existing Park Signs	132.5	132.5	0.0	132.5	Reduced
City River Program of Works	450.0	450.0	231.3	218.7	Project Spend Re-phased
Horwood Place Redevelopment	233.9	212.4	28.9	183.6	Project Spend Re-phased
Civil Construction Program	400.0	400.0	550.0	-150.0	Request for more funds
Enhancing Church Street Vibrancy	450.0	274.0	0.0	274.0	Reallocation
St John's Cathedral Feature Lighting Treatment	300.0	360.0	210.0	150.0	Revote 2018/19
Australian Government Black Spot Program	1,500.0	1,000.0	102.8	897.2	Revote 2018/19
Wentworth Point Library and Community Centre	9,000.0	9,000.0	250.0	8,750.0	Revote 2018/19
Flood Information System for Parramatta River	50.0	67.6	238.5	-170.9	Request for more funds

Capital Project Movements (Continued)

Project Description	2017/18 Original Budget	December QR	March QR	Full Year Variance	Comments
Major Drainage Construction at Lyndelle Place, Carlingford	700.0	250.0	102.4	147.6	Revote 2018/19
West Epping Park - Major Redevelopment	5,900.0	6,421.5	6,682.8	-261.3	Request for more funds
Peggy Womersley Reserve - to Pavilion Upgrade	250.0	250.0	20.5	229.5	Revote 2018/19
Ollie Webb Reserve Water Playground	300.0	300.0	0.0	300.0	Revote 2018/19
Southern Precinct Renewal Project	850.0	850.0	950.0	-100.0	Request for more funds
Phillip Street Smart Street Design	250.0	250.0	150.0	100.0	Reduced
Enhancing Security to Protect Privacy and Tackle Cyber Crime	850.0	850.1	486.3	363.8	Moved to 18/19
Cycleway - Oakes Rd to Lake Parramatta	500.0	500.0	37.5	462.5	Moved to 18/19
Hills Area Road Renewal Works	1,290.0	1,290.0	690.0	600.0	Moved to 18/19
Hills Area Drainage Renewal Works	963.1	150.0	0.0	150.0	Moved to 18/19
NCIF - External Signage City Operations	0.0	1,040.0	395.0	645.0	Moved to 18/19
SCF North Rocks Park Master Plan - Capital	0.0	350.0	234.3	115.7	Reallocation
SCF Playground Upgrades - Pembroke St Reserve	0.0	120.0	20.0	100.0	Reallocation
Centenary Square Review	0.0	27.5	147.5	-120.0	Reallocation
SCF Cycleway infrastructure linking Epping with Carlingford	0.0	225.0	52.5	172.5	Reallocation
SCF Parramatta Artist Studio – Satellite Studios Fit Out	0.0	114.0	10.0	104.0	Reallocation
SCF Eastern River Foreshore Transformation	0.0	510.0	96.3	413.7	Reallocation
George Kendall Reserve Park Upgrade	0.0	200.0	384.0	-184.0	Request for more funds
Boronia Park Building Amenities Upgrade	0.0	668.5	0.0	668.5	Moved to 18/19
Aquatic Leisure Centre Parramatta	0.0	0.0	736.0	-736.0	New
Escarpment Boardwalk Construction	0.0	0.0	150.0	-150.0	New

Operating Project Movements

Below is a table of operating expenditure forecast movements above/below $100k by project ($m).

Project Description	2017/18 Original Budget	December QR	March QR	Full Year Variance	Comments
Parramatta River Flood Study	509.3	529.5	700.0	-170.5	Request for more funds
Temporary Relocation of Parramatta Pools	700.0	1,000.0	1,500.0	-500.0	Request for more funds
NCIF - IT Data Migration Project	500.0	500.0	273.4	226.6	Reduced
NCIF - External Signage City Visual Identity	300.0	300.0	70.0	230.0	Reduced
Hill Road Masterplan	250.0	250.0	100.0	150.0	Reduced
Place/ Neighbourhood Plan	125.0	125.0	0.0	125.0	Revote 2018/19
GIS Visual Data and Dashboard	250.0	250.0	125.0	125.0	Reduced
SCF Parramatta Artist Studio – Satellite Studios	0.0	262.9	80.0	182.9	Reduced
Dence Park Master Plan	0.0	0.0	150.0	-150.0	New

Strategic Objective Financial Summary

Strategic Objective Total Expenditure by Services $'000

Annual Forecast (2017/18)

Liveable		**Leading**	
City Operations	38,625	City Strategy & Future City	19,209
Regulatory Unit	10,176	Governance & Risk	2,635
Social & Community Services	22,997	Legal	876
Place	9,741	Councillor Support & CEO Office	3,961
Riverside Theatres	7,442	Project Management Office	641
Total Liveable	**88,981**	Human Resources	4,588
		Financial Services	16,149
Productive		Information Technology	10,913
Property Development Group	20,646	Customer Contact Centre	2,450
Asset Strategy & Property Management	8,991	City Engagement	2,739
City Economy	1,454	**Total Leading**	**64,161**
City Experience	9,692		
City Identity, Experience & Engagement	1,183	**Sustainable**	
City Identity	2,581	Development & Traffic	13,378
Total Productive	**44,547**	City Assets & Environment	87,109
		Total Sustainable	**100,487**

Total	**298,176**
Depreciation	40,146
Grand Total	**338,322**

Projects by Strategic Objective

	March YTD Actual	March YTD Forecast	YTD Variance	2017/18 Original Budget	December QR	March QR	Full Year Variance
LEADING PROJECT PROGRESS							
Capital Projects							
Customer Contact Centre Security Upgrade	-	-	-	-	-	16	(16)
IP & R Framework and Systems Development	-	1	1	-	2	-	2
Windows 10/O365	25	20	(5)	-	20	25	(5)
ICT Network Upgrade	15	133	117	-	250	250	(0)
Kronos Clock Installation	70	70	-	-	70	70	-
Kofax Digital Scanning	60	74	14	-	98	84	14
Drupal Enhancement of CoP Website	93	50	(43)	-	50	93	(43)
Bear Card Solution	162	203	41	-	203	162	41
Community Care Online	63	120	58	-	120	63	58
Councillor Portal	20	53	32	-	53	20	32
Office IT Assets & Equipment	267	180	(88)	1,280	180	267	(88)
IT Works Upgrade Program	-	305	305	980	610	305	305
Enhancing Security to Protect Privacy and Tackle Cyber Crime	123	486	364	850	850	486	364
Outdoor Staff Mobile Technology	106	253	147	535	253	253	(0)
TM1 Financial and Reporting System	70	103	33	150	150	150	-
Stronger Communities Fund - Non Capital	-	-	-	432	-	-	-
Stronger Communities Fund - Capital Works	-	-	-	3,426	-	-	-
Public Safety CCTV Network	114	595	482	500	1,094	451	644
Rapid Deployment CCTV Cameras	1	50	50	100	100	100	-
Cycleway - Oakes Rd to Lake Parramatta	25	250	225	500	500	38	463
SCF Cycleway infrastructure linking Epping with Carlingford	40	54	14	-	225	53	173
WSU Link	10	50	40	-	100	100	-
Marsden Street Cycleway	-	-	-	-	-	95	(95)
River Cities Renewal Project	237	193	(44)	-	149	534	(386)
Cycle Route Maintenance to Encouraging Cycling	66	94	28	125	136	125	11
Local Bike Facilities Encouraging Cycling	-	25	25	50	50	25	25
RTA River Cities PVC Stg 22	80	128	48	-	177	129	48
Pedestrian Bridge Works - Morton/Alfred	406	502	96	600	600	506	94
Greening the CBD	-	-	-	150	-	-	-
LED Street Lighting Upgrade - Phase 2	1,650	1,200	(450)	750	1,650	1,650	-
Flood Information System for Parramatta River	83	43	(40)	50	68	239	(171)
Parramatta City River Strategy Development	8	8	-	-	8	-	8
City River Program of Works	65	225	160	450	450	231	219

Projects by Strategic Objective

	March YTD Actual	March YTD Forecast	YTD Variance	2017/18 Original Budget	December QR	March QR	Full Year Variance
Parramatta Square (Study & Design Public Domain)	1	(0)	(1)	-	(0)	-	(0)
Parramatta Light Rail Scheme	1,189	1,299	110	400	1,852	1,852	0
EscarpmentBoardwalk Construction	-	-	-	-	-	150	(150)
People Counters Projects	-	28	28	55	55	55	-
Parramatta Square Business Planning for 5PS & Public Domain	403	582	179	-	880	882	(2)
Total Capital Projects	**5,453**	**7,377**	**1,924**	**11,383**	**11,003**	**9,459**	**1,544**
LEADING PROJECT PROGRESS							
Operating Projects							
NCIF - HR Transition	152	74	(78)	199	74	152	(78)
NCIF - IT Data Migration Project	36	263	227	500	500	273	227
Info hub Phase 3	12	-	(12)	-	-	12	(12)
NCIF - Transformation Project	659	701	41	1,000	1,000	959	41
Accounts Payable	9	43	34	-	43	(0)	43
Stronger Communities Fund - Operating	109	21	(88)	-	21	109	(88)
Citysafe VSS (Video Surveillance System) Operational Budget	272	309	38	190	499	461	38
High Visibility Community Policing	99	100	1	150	150	149	1
Parramatta Safety Plan - Implementation	24	21	(3)	-	18	24	(6)
Light Rail Feasibility Study	39	1	(38)	214	1	39	(38)
RIVER CITIES RENEWAL PROJECT - OP	5	-	(5)	-	-	5	(5)
Walking Access Study	1	1	-	-	1	1	-
Integrated Transport Plan	-	75	75	150	150	75	75
Beat the Heat	86	69	(17)	120	130	147	(17)
Improving Water Quality in Parramatta River	(0)	(0)	-	-	(0)	0	(0)
Parramatta Ways	81	188	108	475	377	414	(37)
Floodplain Risk Mgt Rds	2	27	26	55	55	74	(19)
Greening the CBD	89	102	12	-	150	150	-
Planning Framework Harmonization	298	291	(7)	476	391	437	(47)
CBD Planning Framework Studies	201	279	78	350	358	275	83
3D Model Coordination	74	108	33	150	169	170	(1)
GIS Visual Data and Dashboard	-	125	125	250	250	125	125
Total Operating Projects	**2,247**	**2,797**	**551**	**4,280**	**4,336**	**4,051**	**284**
TOTAL LEADING PROJECTS	**7,700**	**10,174**	**2,474**	**15,663**	**15,339**	**13,510**	**1,828**

Projects by Strategic Objective

	March YTD Actual	March YTD Forecast	YTD Variance	2017/18 Original Budget	December QR	March QR	Full Year Variance
LIVEABLE PROJECT PROGRESS							
Capital Projects							
Riverside Refurbishment and Upgrades	141	150	9	300	335	300	35
Riverside Theatres Plant, Equipment & Refurbishment	122	126	5	150	150	150	0
Wentworth Point Library and Community Centre	149	61	(88)	9,000	9,000	250	8,750
Library Capital Resources	547	607	60	820	860	860	-
NCIF - External Signage City Operations	236	471	234	-	1,040	395	645
Updating of Existing Park Signs	-	-	-	132	132	-	132
Council Plant, Fleet & Other Equipment Replacement Program	2,082	2,831	750	4,000	4,305	4,305	(0)
CAP N'Hood Imp Program	-	-	-	1,460	-	-	-
Lonely Lane Artwork	107	114	7	81	159	159	-
Westmead- Strategic Planning & Public Domain Works	178	178	-	-	178	178	-
Boronia Park Master Plan Implementation	-	-	-	669	-	-	-
Dundas Station Centre Upgrade	-	22	22	102	102	102	-
Ermington Centre upgrade	0	0	-	-	0	0	-
Harris Park - Station Street East Upgrade	18	60	42	170	445	445	-
Toongabbie Street Upgrade Wentworth Avenue	5	90	85	355	455	420	35
Connecting Centres Lake North Parramatta	177	188	12	170	200	177	23
"Imagine" Program Connectivity and Access Improvements	(1)	44	45	255	263	263	-
Enhancing Church Street Vibrancy	-	-	-	450	274	-	274
Foreshore Stairs	1	30	29	141	141	141	(0)
St Johns Cathedral Feature Lighting Treatment	20	43	23	300	360	210	150
Victoria and Park Road Shops Minor Upgrade	10	30	20	-	100	150	(50)
Oatlands Connecting Centres	25	12	(13)	-	24	27	(3)
Tintern Avenue Shops Upgrade	15	11	(4)	-	23	23	-
Dan Mahoney Reserve Service Provision	-	19	19	-	39	-	39
Yates Avenue Shops Precinct upgrade	20	15	(5)	-	30	30	-
Epping Town Centre Improvement	21	15	(6)	-	30	30	-
Carmen Drive Shops Minor Upgrade	9	7	(2)	-	14	14	-
Picasso Shops Minor Upgrade	5	25	20	-	50	40	10
Station Road Shops Upgrade	15	11	(4)	-	23	23	-
Windsor Road Shops Minor Upgrade	5	25	20	-	50	60	(10)
Constitution Hills Shops Upgrade	10	8	(2)	-	15	15	-
Rebecca Parade Shops Minor Upgrade	5	4	(1)	-	8	8	-
Newington Central Precinct Upgrade	59	50	(9)	-	100	109	(9)

Projects by Strategic Objective

	March YTD Actual	March YTD Forecast	YTD Variance	2017/18 Original Budget	December QR	March QR	Full Year Variance
Hospital Farm Reserve Public Easement	28	32	3	-	35	35	-
Erby Place Pocket Park Lighting Upgrade	27	39	11	-	50	27	23
Lighting Under the Bridge	126	126	0	-	126	132	(6)
Community Garden at Bruce Miller Reserve	68	61	(7)	-	61	68	(7)
George Kendall Reserve Park Upgrade	37	80	43	-	200	384	(184)
Centenary Square Review	43	28	(16)	-	28	148	(120)
SCF All Access Toilet at Ollie Webb Reserve, Parramatta	-	-	-	-	-	-	-
SCF Barnett Park Dog Park Upgrade	-	5	5	-	20	-	20
SCF Wallawa Reserve Upgrade, Meehan Street, Granville	12	20	7	-	39	19	20
SCF Sommerville Park Upgrade, Eastwood	69	51	(18)	-	105	105	-
SCF Newington Dog Park	363	327	(35)	-	500	500	-
SCF North Rocks Park Master Plan - Capital	179	195	16	-	350	234	116
SCF Eastern River Foreshore Transformation	65	10	(55)	-	510	96	414
Upgrade to Lawndale Shops, North Rocks	4	60	56	260	310	310	-
Upgrade to Carlingford North Shops	23	80	57	260	630	630	-
Carlingford Masterplan	-	-	-	150	80	80	-
Southern Precinct Renewal Project	112	175	62	850	850	950	(100)
Phillip Street Smart Street Design	40	113	72	250	250	150	100
Implement Sue Savage Park Masterplan	3	93	90	280	280	280	-
Newington Street Tree Strategy	22	-	(22)	-	-	75	(75)
Bennelong Parkway Pedestrian Refuge	48	48	-	-	48	48	-
Prince Alfred Square Power Upgrade	132	442	311	200	442	442	0
Total Capital Projects	**5,380**	**7,230**	**1,850**	**20,805**	**23,816**	**13,596**	**10,220**

Projects by Strategic Objective

	March YTD Actual	March YTD Forecast	YTD Variance	2017/18 Original Budget	December QR	March QR	Full Year Variance
LIVEABLE PROJECT PROGRESS							
Operating Projects							
Catchment Management Program of Environmental Audit & Buildi	-	25	25	100	50	50	(0)
Scores on Doors Program	-	-	-	25	-	-	-
Mum & Dad' development Education Program	-	4	4	7	7	7	-
ParraPets Matter	-	14	14	27	27	27	-
SCF Wentworthville Early Childhood Development Initiative	23	56	32	-	122	37	85
SCF Mobile Active Health	80	110	30	-	176	147	29
Temporary Relocation of Parramatta Pools	1,291	1,000	(291)	700	1,000	1,500	(500)
Healthy and Active Communities Program	3	21	18	50	50	50	-
Aquatic Playground Maintenance	117	138	21	200	200	160	40
NCIF - External Signage City Operations	-	-	-	1,040	-	-	-
Dence Park Master Plan	-	-	-	-	-	150	(150)
Church Street Frontage Improvement Program	-	25	25	200	100	60	40
Hill Road Masterplan	6	116	110	250	250	100	150
Newington Street Tree Strategy	-	44	44	75	75	-	75
Place/ Neighbourhood Plan	-	15	15	125	125	-	125
Rydalemere Park Masterplan	133	170	37	200	200	200	-
NCIF - Place	31	46	15	76	76	76	-
Total Operating Projects	**1,685**	**1,784**	**99**	**3,076**	**2,458**	**2,564**	**(106)**
TOTAL LIVEABLE PROJECTS	**7,064**	**9,014**	**1,949**	**23,880**	**26,274**	**16,160**	**10,114**

Projects by Strategic Objective

	March YTD Actual	March YTD Forecast	YTD Variance	2017/18 Original Budget	December QR	March QR	Full Year Variance
PRODUCTIVE PROJECT PROGRESS							
Capital Projects							
SCF Parramatta Artist Studio – Satellite Studios Fit Out	0	57	57	-	114	10	104
Governor Phillip Commemorative Public Art Project	0	75	75	150	149	50	99
Public Art Project	2	41	38	-	41	12	29
Heritage Centre Core Exhibition Renovations	-	5	5	39	10	12	(2)
Heritage Centre Building Renewal Works	-	50	50	49	50	-	50
Lennox Bridge Carpark Development	67	138	71	238	256	230	26
Riverbank Development	110	314	204	737	702	288	414
40-48 Cowper Street, Granville	-	10	10	10	10	-	10
189 Macquarie Street, Parramatta	351	455	104	371	582	478	104
Hunter Street Carpark	1	-	(1)	-	-	1	(1)
8 Parramatta Square Development	841	1,039	198	682	1,197	1,183	13
Parramatta Square Public Domain Development	399	799	400	11,011	1,225	1,030	194
PDG Project Management	6	(0)	(6)	-	(0)	6	(6)
Parramatta Square Site Wide	66	(0)	(66)	-	(0)	-	(0)
5 Parramatta Square Development - New Council Facilities	4,203	5,888	1,684	17,806	11,514	8,941	2,573
Eat Street Carpark Development	0	14	14	39	29	15	14
Horwood Place Redevelopment	0	29	29	234	212	29	184
1 Paramatta Square (Retail 6)	1,587	1,587	-	-	1,587	1,612	(25)
Fennell Street Car Park Development	15	27	12	39	39	26	13
4 & 6 Parramatta Square Development	980	1,157	177	836	1,658	1,406	253
3 Parramatta Square Development	986	1,048	62	664	1,271	1,209	62
400A Victoria Road, Rydalmere	-	-	-	5	5	-	5
38 - 40 Marion Street Parramatta Development	6	6	-	120	71	33	38
Aquatic Leisure Centre Parramatta	-	-	-	-	-	736	(736)
Digital Activation (LED) of Parramatta Square Hoardings	1	100	100	200	200	200	0
10 Hillside Crescent Epping (Capital)	2	-	(2)	-	-	2	(2)
New Aquatics & Leisure Facility	535	862	327	800	862	920	(58)
126 Church Street Level 3 Fit Out	104	289	185	-	580	580	-
Riverside Theatres Building Renewal Program	235	294	59	400	324	265	59
Parramatta Town Hall Capital Renewal Program	15	9	(6)	-	9	15	(6)
Hambledon Cottage Renewal Program	-	-	-	20	35	35	-
Willow Grove Building Works	-	-	-	20	-	-	-
Multi level Car Parks Capital Renewal Program	429	538	110	640	641	531	110

Projects by Strategic Objective

	March YTD Actual	March YTD Forecast	YTD Variance	2017/18 Original Budget	December QR	March QR	Full Year Variance
Early Childhood Centres Capital Renewal	-	-	-	125	-	-	-
Child Care Centres Capital Renewal	211	214	2	390	315	313	2
Finalise Construction of new PreSchool in North Rocks Park,	1,581	1,546	(36)	200	1,546	1,581	(36)
Pitt Row Headmaster's Cottage	-	-	-	200	200	200	-
Riverside, Events & City Activation Storage Facility	-	-	-	300	300	300	-
Hills Area Building Improvements & Upgrades	-	-	-	159	-	-	-
Community Buildings Capital Improvement	382	370	(12)	255	370	382	(12)
Libraries Capital Renewal	95	193	98	-	200	102	98
Demolition Works in Parramatta & Telopea	17	94	78	150	150	72	78
Church Street Office Fit out (60 desks)	550	598	49	-	597	548	49
Total Capital Projects	**13,778**	**17,847**	**4,069**	**36,890**	**27,051**	**23,354**	**3,696**

Projects by Strategic Objective

	March YTD Actual	March YTD Forecast	YTD Variance	2017/18 Original Budget	December QR	March QR	Full Year Variance
PRODUCTIVE PROJECT PROGRESS							
Operating Projects							
ED - Branding and Communications	96	76	(20)	-	120	140	(20)
ED - Business Attraction and Industry Development	66	119	53	-	185	132	53
ED - City Culture and Liveability	77	113	36	-	150	114	36
ED - Infrastructure	35	43	7	-	50	43	7
ED - Regional Leadership, Advocacy & Governance	57	59	3	-	73	71	3
ED - Research	21	66	45	-	110	66	45
ED - Workforce and Skills	37	93	55	-	150	95	55
SCF Parramatta Artist Studio – Satellite Studios	-	88	88	-	263	80	183
Parramasala- PCC funding	200	200	-	200	200	200	-
Major Events Show Reel	-	8	8	15	15	-	15
World War One (WW1) Centenary	-	-	-	45	45	-	45
Christmas Lights Competition	2	2	-	-	2	2	-
Sydney Writers Festival	-	-	-	-	-	-	-
Foundation Day & Parramatta Open (Celebrating Heritage)	-	-	-	13	-	-	-
Cultural Heritage Collection Conservation and Asset Mgt	-	5	5	10	10	-	10
NCIF - External Signage City Visual Identity	19	51	32	300	300	70	230
Brand	103	107	4	-	144	103	41
Removal and Storage of Tom Thompson Public Mural	13	17	5	46	24	24	-
NCIF - Asset Audit & Data Transition	84	84	(0)	68	84	84	(0)
Fair Value Assets and Condition Assessments	20	19	(1)	120	130	131	(1)
Buildings Asbestos Management	-	60	60	250	100	40	60
Total Operating Projects	**830**	**1,208**	**378**	**1,067**	**2,154**	**1,393**	**761**
TOTAL PRODUCTIVE PROJECTS	**14,608**	**19,055**	**4,447**	**37,958**	**29,205**	**24,748**	**4,457**

Projects by Strategic Objective

	March YTD Actual	March YTD Forecast	YTD Variance	2017/18 Original Budget	December QR	March QR	Full Year Variance
SUSTAINABLE PROJECT PROGRESS							
Capital Projects							
Mobile Garbage Bin Roll Program	82	202	120	250	250	250	(0)
Boronia Park Building Amenities Upgrade	-	-	-	-	669	-	669
Murray Farm Reserve Park Improvements	-	121	121	-	121	121	-
Tree Offset Program	-	10	10	-	20	-	20
Asbestos Remediation Works Program	68	1,000	932	-	2,000	2,000	-
SCF Walking Track to Hunts Creek Waterfall, Carlingford	-	25	25	-	75	75	-
SCF Sporting Amenity Building at West Epping Park	12	-	(12)	-	-	12	(12)
SCF Playground Upgrades - Rainbow Farm Reserve	12	10	(2)	-	60	60	-
SCF Playground Upgrades - Hunts Creek Reserve	12	10	(2)	-	60	60	-
SCF Playground Upgrade- Lynbrae Ave Park	12	20	8	-	120	120	-
SCF Playground Upgrades - Pembroke St Reserve	12	20	8	-	120	20	100
SCF Playground Upgrades - Irving St Reserve	117	120	3	-	120	120	-
SCF Playground Upgrades - GKRP District Playground	15	25	10	-	50	23	28
SCF Playground Upgrades - Pinetree Dr Reserve	12	10	(2)	-	60	120	(60)
SCF Playground Upgrades - Blankers Koen Park	6	10	4	-	60	20	40
SCF Playground Upgrades - Forest Park	12	20	8	-	120	60	60
West Epping Park - Major Redevelopment	6,299	6,421	123	5,900	6,421	6,683	(261)
Peggy Womersley Reserve - to Pavilion Upgrade	20	20	-	250	250	20	230
Ollie Webb Reserve Water Playground	-	-	-	300	300	-	300
Master Plan Implementation for George Kendall Riverside Park	-	-	-	100	100	-	100
Sportsground Program	111	261	150	510	510	510	-
Cemeteries and Memorials Program	40	46	6	92	92	44	48
Pavilion Program	-	45	45	150	150	150	-
Playground Replacement Program	279	292	13	520	520	520	0
Parks Program	237	250	13	410	417	417	-
Public Trees Program	296	284	(12)	380	380	380	-
Robin Thomas Reserve Masterplan Works	8	8	-	-	8	8	-
Parks Stormwater Reuse Program	6	-	(6)	360	75	75	-
Lake Parramatta Improvement Works	186	190	4	-	190	190	-
Waterways Restoration	356	318	(38)	560	560	560	(0)
Walking Track Construction	60	94	34	130	170	170	-
Restoration of Natural Areas	514	509	(5)	720	720	720	-
Nursery Management for Bushland Plants & Landscaping Works	24	71	46	130	170	170	-

Projects by Strategic Objective

	March YTD Actual	March YTD Forecast	YTD Variance	2017/18 Original Budget	December QR	March QR	Full Year Variance
Metro Greenspace Sue Savage (Toongabbie Crossing)	-	-	-	-	-	20	(20)
Sustainable Water Program	30	55	25	80	80	80	0
Installation of Rooftop Solar Panels on City Assets Program	23	17	(5)	100	100	100	(0)
Hills Area Road Renewal Works	656	846	189	1,290	1,290	690	600
Footpath Renewal Program	1,446	1,382	(64)	1,600	1,600	1,600	(0)
Stormwater Drainage Renewal Program	2,737	2,965	229	4,400	4,400	4,400	(0)
Supply and Installation of Street Furnit	64	104	40	150	150	110	40
Civil Construction Program	287	271	(16)	400	400	550	(150)
Roads to Recovery Program	509	626	117	1,442	1,442	1,442	(0)
Robotic Equipment to Assist with Surveying	25	25	-	33	33	33	-
Kerb & Gutter Renewal Program	363	569	206	1,330	1,224	1,330	(106)
Footpaths Construction Program	1,044	1,187	143	1,700	1,765	1,765	0
Roads Renewal Program	4,375	4,576	202	6,175	6,175	6,175	(0)
Bridge assets - safety upgrades	27	82	55	150	150	150	0
Bridge Upgrades & Renewal Program	141	94	(48)	250	250	250	-
Additional Roads, Kerb & Gutter Maintenance	2,072	2,172	100	3,800	3,800	3,800	(0)
Additional Stormwater Drainage Upgrade Works	122	0	(122)	-	0	-	0
Public Domain Lighting	5	60	55	100	100	100	-
Major Drainage Construction at Lyndelle Place, Carlingford	44	99	55	700	250	102	148
Hills Area Drainage Renewal Works	-	-	-	963	150	-	150
Protecting Dams Capital Works Program	100	129	30	270	270	270	(0)
Improving Water Quality in Parramatta Waterways	-	-	-	400	400	400	-
Drainage Construction Program	134	332	198	600	600	600	(0)
Flood Mitigation Program	125	203	78	350	350	350	-
Drainage Improvements in Growth Areas S94A Program	37	94	56	150	150	50	100
Australian Government Black Spot Program	-	500	500	1,500	1,000	103	897
Active Transport Program	269	1,212	942	300	2,310	2,310	(0)
Barrack Lane Shared Zone Construction	50	87	38	150	150	150	-
Barrack Lane Shared Zone Design	-	-	-	-	-	17	(17)
Design Parkes -Valentine Traffic Upgrade	41	-	(41)	-	-	-	-
Former Hills Area Traffic Improvements	-	62	62	1,252	125	80	45
Total Capital Projects	**23,532**	**28,162**	**4,630**	**40,397**	**43,651**	**40,703**	**2,948**

Projects by Strategic Objective

	March YTD Actual	March YTD Forecast	YTD Variance	2017/18 Original Budget	December QR	March QR	Full Year Variance
SUSTAINABLE PROJECT PROGRESS							
Operating Projects							
NCIF - Domestic Waste	-	89	89	89	89	89	-
SCF Terrys Creek Rehabilitation - Maintenance	14	54	40	-	100	60	40
Contaminated Land Management in Public Parks and Land	415	446	30	500	554	550	4
Threatened Species Management	12	29	17	50	50	50	-
Bushland Resources Management	401	454	53	650	700	700	-
Protection of Aboriginal Heritage & Cultural Sites	2	2	-	30	30	30	-
Waterways and Bushland Rehabilitation Fauna Study	27	41	14	75	75	75	-
Waterways Litter Removal	51	54	3	85	85	85	-
Parra River Catchment Group Management	176	217	41	171	347	305	42
PRCG Landcare Coordinator Grant	37	39	1	48	54	52	1
River Aware Program	4	-	(4)	-	-	9	(9)
LLS Loyalty Road Dam	50	50	(0)	-	50	50	(0)
Environmental Education Program to Encourage Sustainability	15	31	16	60	62	62	-
Better Waste and Recycling Program	7	226	219	450	450	450	-
Lake Parramatta Dam	-	-	-	-	-	77	(77)
Parramatta River Flood Study	638	383	(256)	509	530	700	(170)
Total Operating Projects	**1,851**	**2,115**	**264**	**2,718**	**3,175**	**3,344**	**(169)**
TOTAL SUSTAINABLE PROJECTS	**25,383**	**30,277**	**4,894**	**43,115**	**46,825**	**44,047**	**2,778**

RESPONSIBLE ACCOUNTING OFFICERS REPORT

Responsible Accounting Officer's Statement

Quarterly Budget Review

For the period 1 July 2017 to 31 March 2018

The following statement is made in accordance with Clause 203(2) of the Local Government (General) Regulations 2005:

It is my opinion that the Quarterly Budget Review statement for the City of Parramatta Council for the quarter ended 31/03/2018 indicates that Council's projected financial position at 30/6/2018 will be satisfactory at year-end, having regard to the projected estimates of income and expenditure and the original budgeted income and expenditure.

Alistair Cochrane

Responsible Accounting Officer

FOR FURTHER INFORMATION

CUSTOMER CONTACT CENTRE

126 Church Street, Parramatta NSW 2150

PO BOX 32, Parramatta NSW 2124

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Fax: (02) 9806 5917

Email: council@cityofparramatta.nsw.gov.au
Website: www.cityofparramatta.nsw.gov.au

LEADING

ITEM NUMBER 13.13
SUBJECT Investment Report for April 2018
REFERENCE F2009/00971 - D06118060
REPORT OF Finance Manager, Governance, Planning and Analysis

PURPOSE:

The purpose of this report is to inform Council of the investment portfolio performance for the month of April 2018.

RECOMMENDATION

That Council receives and notes the Investment Report for April 2018.

BACKGROUND

1. In accordance with clause 212 of the Local Government (General) Regulation 2005, a report setting out details of all money invested must be presented to Council on a monthly basis.
2. The report must include a certificate as to whether or not the investments have been made in accordance with the Act, the Regulations and the Investment Policy of Council.

ISSUES/OPTIONS/CONSEQUENCES

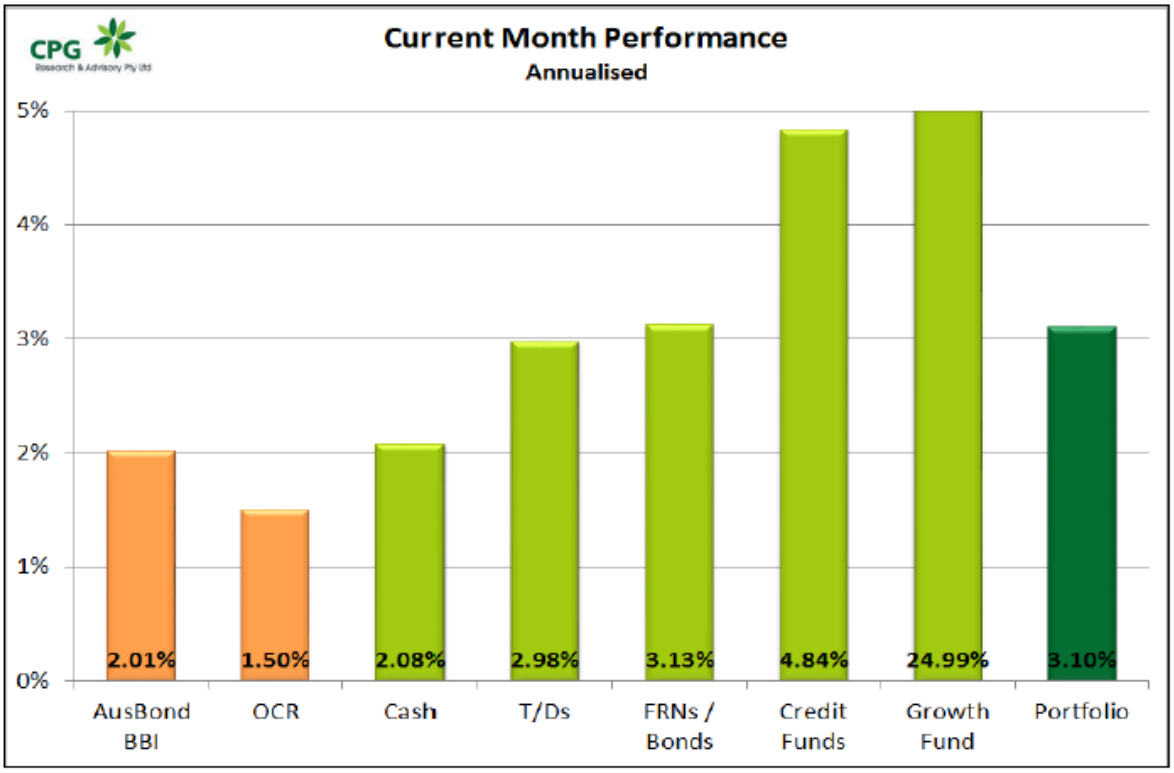
3. The investment portfolio closing balance as at the 30th April 2018 was $275.1m The average portfolio holdings held throughout the month was $275.7m.
4. Council holds a diversified range of investment products which as at 30th April 2018 included:

Investment Product	$000	% Held	Return %	Annualised
Term Deposits	$170,078	61.82%	0.25%	2.98%
Floating Rate Notes / Bonds	$69,875	25.40%	0.26%	3.13%
Cash at Call	$11,171	4.06%	0.17%	2.08%
Managed Funds	$13,404	4.87%	0.40%	4.84%
Long Term Growth	$10,577	3.84%	2.08%	24.99%
Total Investment Funds	$275,105	100.00%	0.26%	3.10%

The annualised one month return for April 2018 is 3.10% outperforming the Ausbond bank bill index by 1.09%.

Council engages CPG Research and Advisory & Imperium Markets for assistance in all investment matter's relating to advice, risk and portfolio weighting. CPG monitor the portfolio daily and conduct a monthly health check review. This confirms that Council's portfolio is being conducted within Ministerial and rated counterparty guidelines.

5. **Council's investment portfolio returns** are continuously compared to the Ausbond Bank Bill Index Benchmark to ensure investment returns are acceptable for the investment strategy Council has adopted. Current and Historical Performance as follows:



Past and Present Performance	FYTD	1 Year	2 Year	3 Year	4 Year
Total Portfolio	3.06%	3.08%	3.22%	3.31%	3.62%
Ausbond Bank Bill Index Benchmark	1.75%	1.82%	1.82%	1.96%	2.14%
Outperformance	**1.31%**	**1.26%**	**1.40%**	**1.35%**	**1.48%**

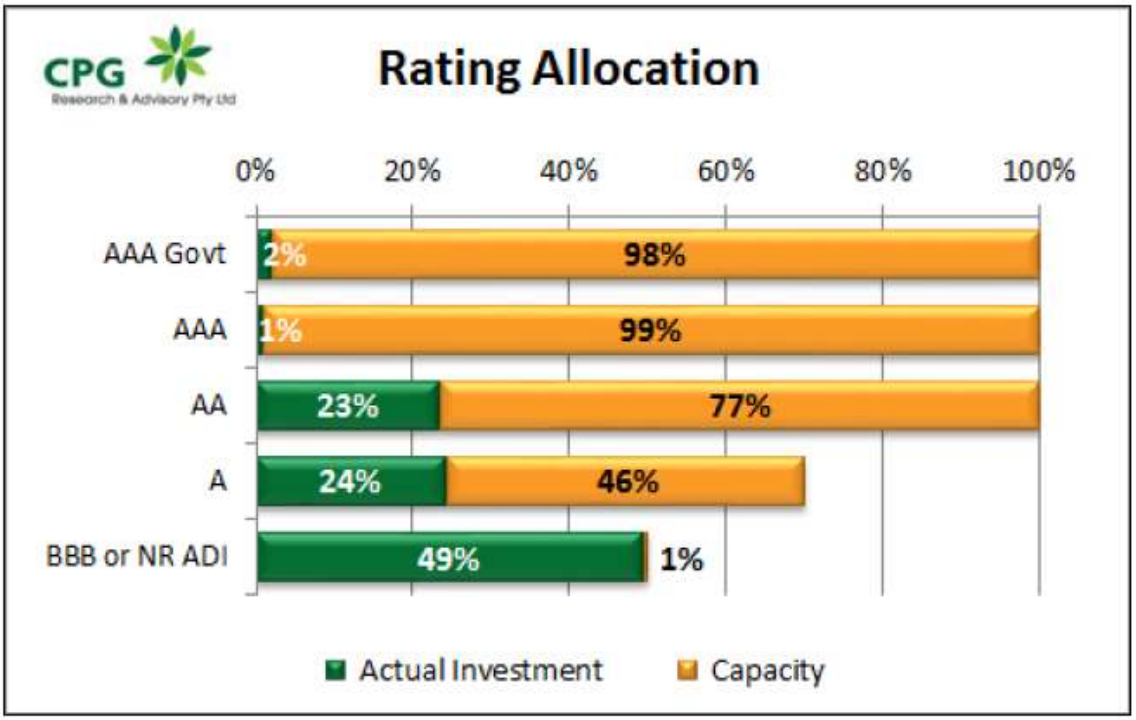
6. **Aggregate Rating Limits** comply with the adopted Investment policy.

BBB and Non rated holdings (49%) have now reached the portfolio capacity, and at current levels future investment opportunity would need to be offset by BBB/NR sales or maturities. The portfolio will also have further rating capacity as inflows from the 4th rates instalment occurs during mid to late May.

Individual Counterparty ratings are within policy limits with the minor exception of Bank of QLD which is over invested by approximately $600k as at 10th May 18.

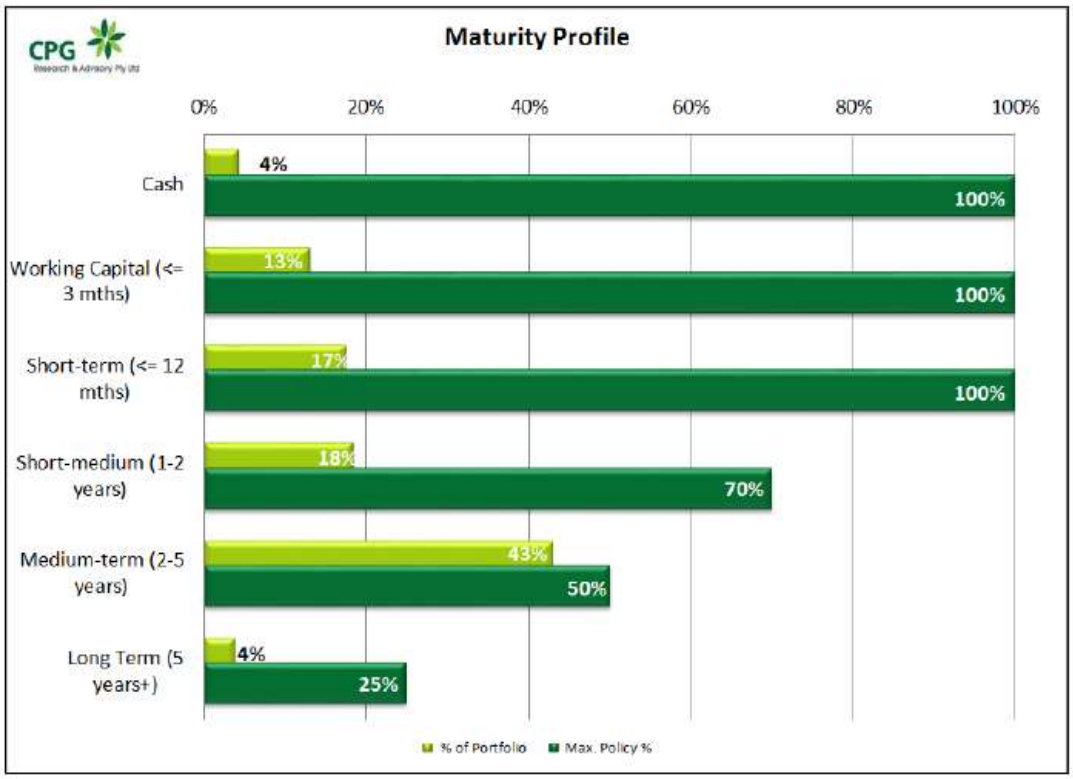
This has occurred due to maturities from other institutions which can change the overall weightings. The policy allows for this overweight position and has been supported by our Investment advisor's CPG/Imperium. We anticipate that ongoing maturities with BOQ will be redeemed and placed in other institutions.

The rating allocation as at 30th April 18 was as follows:



7. The portfolio continues to have strong **liquidity** with 4% available in cash @ call funds, and a further 13% maturing in the next 3 months.

   Council holds senior Floating Rate Notes, Bonds and Managed Funds which also provide additional liquidity. The table below identifies the term/duration that the investment portfolio has been invested.



8. The total investment portfolio had a strong month and provided a **strong return** of **3.10%** p.a.(annualised), outperforming the Ausbond Bank Bill Index return 1.09% annualised.

   The TCorp IM Long Term Growth Fund pushed performance with a 1.81% net absolute return for the month (24.99% annualised)

9. Floating Rate Notes and fixed bonds account for approximately 26% of the portfolio ($69.9m) with margins locked in at 0.83% to 1.65% above the Bank Bill Swap Reference Rate (BBSW). The FRN/Bond section of the portfolio recorded a monthly annualised return of 3.13%. Council has also actively managed the portfolio, selling or swapping approximately $7m in April resulting in a **$79k** realized **capital gain**.

10. Term Deposits accounted for approximately 62% of the total investment portfolio. The weighted average return FOR April is 2.98% with a maturity duration of 1.61 years. This duration is considerably higher than the majority of the Local Government peer group. Maintaining a longer duration will provide protection to budgeted interest income 2018-19.

    Imperium markets has recently released a Council performance ranking for Term deposit portfolio's in NSW. The City of Parramatta has ranked 6th out of 46 councils for both performance and duration as at 31st March 2018. Councils return of 3.18% is an outstanding performance given the short term Cashflow that is required for the high volume of development projects.

11. During April 2018, Council reinvested approximately $16.5m in new and maturing funds as follows:

    - Members Equity 3 year Floating Rate Note BBSW +1.27% $1.6m (BBB)
    - Bank of China 3 year Floating Rate Note BBSW +1.03% $2m (A)
    - Suncorp Term Deposits 6 months 2.75% $4m
    - Bankwest Cash @ Call $8.9m (Used for weekly operating expenditure) (AA-) 2%

12. The following details are provided on the attachments for information

    - Comparison of average funds invested with loans balance (Attachment 1)
    - Average interest rate comparison to Ausbond Bank Bill Index (Attachment 1)
    - Investments and loans interest compared to budget (Attachment 1)
    - Current Term Deposit Listing by maturity (Attachment 2)
    - Summary of investment portfolio (Attachments 3 & 4)
    - CPG Monthly comprehensive report (Attachment 5)
    - Imperium NSW Term Deposit Performance Ranking (Attachment 6)

13. The Certificate of Investments for April 2018 is provided below:

Certificate of Investments

I hereby certify that the investments for the month of April 2018 have been made in accordance with the Act, the Regulations and Council's Investment Policy – Alistair Cochrane, Acting Chief Financial Officer.

CONSULTATION & TIMING

14. Council officers consulted with its financial advisors' CPG & Imperium during the preparation of this report.

FINANCIAL IMPLICATION FOR COUNCIL

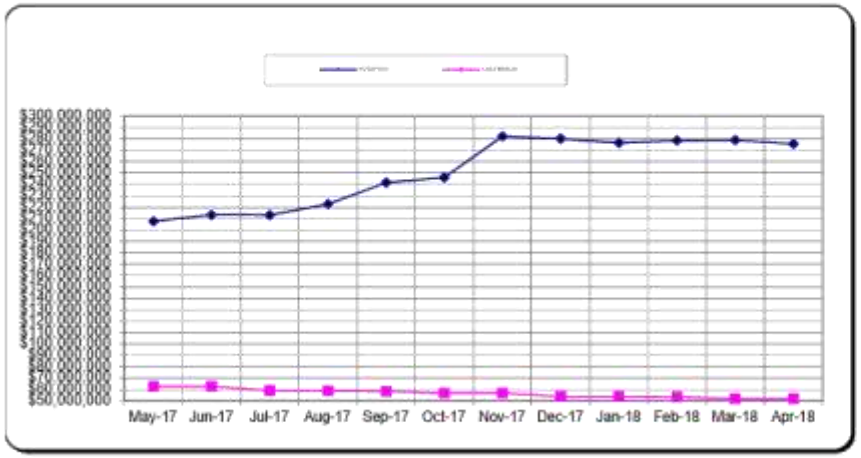
15. There are no financial implications for council not already noted in this report.

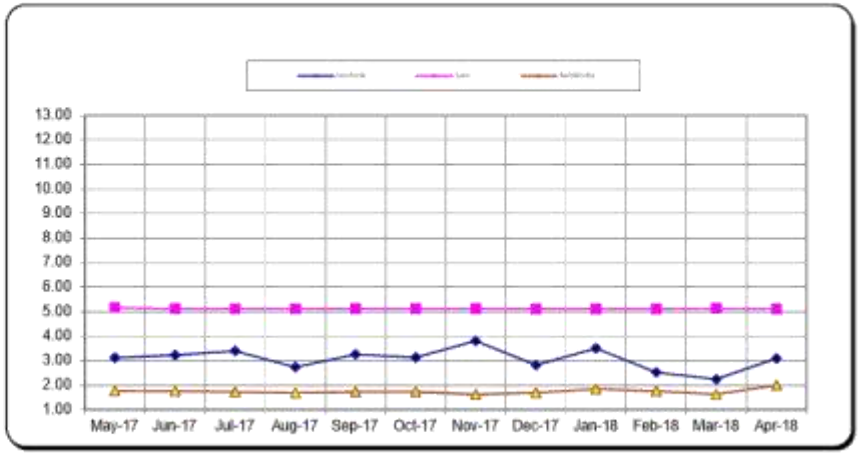
Alistair Cochrane
Acting Chief Financial Officer

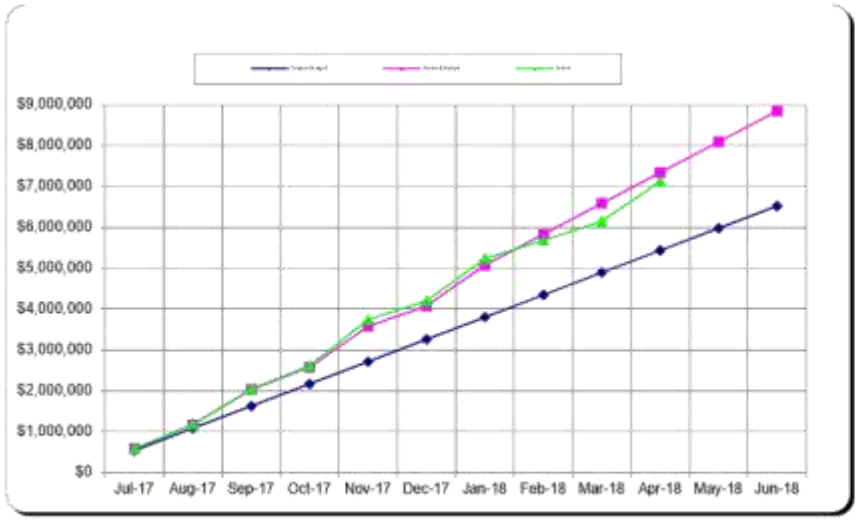
ATTACHMENTS:

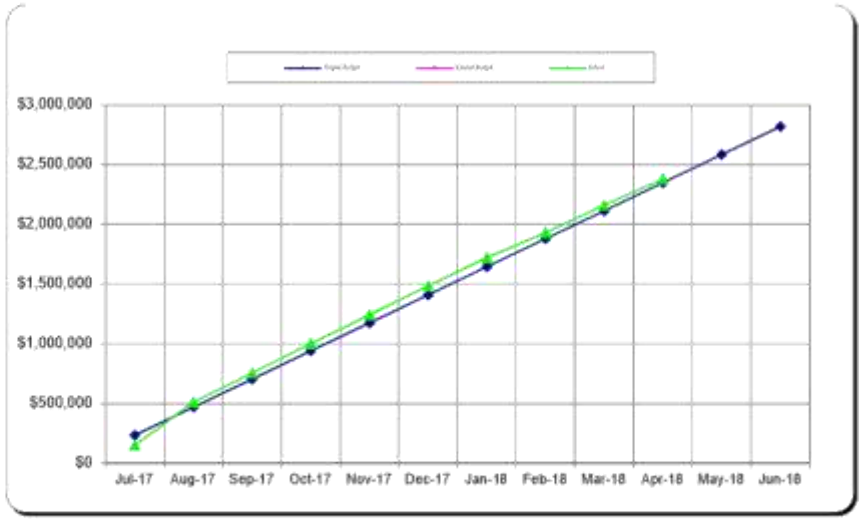
1⇩	Investment and Loans Performance Graph April 2018	1 Page
2⇩	Current Term Deposits by Maturity April 2018	3 Pages
3⇩	Summary of Investment Portfolio Page 1 of 2 April 2018	1 Page
4⇩	Summary of Investment Portfolio Page 2 of 2 April 2018	1 Page
5⇩	CPG Comprehensive Investment Report April 2018	15 Pages
6⇩	NSW Council Term Deposit Performance Ranking 1 Year to 31st March 18.	2 Pages

REFERENCE MATERIAL









G:\Financial Mgt Team\Investments\2017-18 Investment Graphs for Monthly Report to Council\Investment Report Graphs April 18.xls

Page 1 of 1

City of Parramatta Council
Term Deposit Portfolio
30-April-2018

Total:	$170,077,868.08

Institution	Rating	Purchase Date	Maturity Date	Rate %	Principal
ECU Australia	Unrated	Fri Nov 17 2017 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Thu May 03 2018 23:59:59 GMT+1000 (AUS Eastern Standard Time)	2.55	$2,000,000.00
Australian Military Bank	Unrated	Fri Dec 01 2017 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Thu May 10 2018 23:59:59 GMT+1000 (AUS Eastern Standard Time)	2.65	$2,500,000.00
Australian Military Bank	Unrated	Fri Dec 01 2017 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Thu May 17 2018 23:59:59 GMT+1000 (AUS Eastern Standard Time)	2.65	$2,500,000.00
Auswide Bank	A-2	Tue Dec 05 2017 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Thu May 24 2018 23:59:59 GMT+1000 (AUS Eastern Standard Time)	2.70	$3,000,000.00
Auswide Bank	A-2	Tue Dec 05 2017 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Thu May 31 2018 23:59:59 GMT+1000 (AUS Eastern Standard Time)	2.70	$3,000,000.00
Auswide Bank	A-2	Thu Dec 07 2017 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Thu Jun 07 2018 23:59:59 GMT+1000 (AUS Eastern Standard Time)	2.65	$4,000,000.00
People's Choice	A-2	Thu Dec 07 2017 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Thu Jun 14 2018 23:59:59 GMT+1000 (AUS Eastern Standard Time)	2.62	$3,500,000.00
Auswide Bank	A-2	Thu Dec 14 2017 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Thu Jun 21 2018 23:59:59 GMT+1000 (AUS Eastern Standard Time)	2.67	$2,000,000.00
Auswide Bank	A-2	Tue Dec 19 2017 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Thu Jun 28 2018 23:59:59 GMT+1000 (AUS Eastern Standard Time)	2.65	$2,500,000.00
Auswide Bank	A-2	Tue Dec 19 2017 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Thu Jul 05 2018 23:59:59 GMT+1000 (AUS Eastern Standard Time)	2.65	$2,500,000.00
NAB	A-1+	Tue Jan 02 2018 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Thu Jul 12 2018 23:59:59 GMT+1000 (AUS Eastern Standard Time)	2.50	$3,528,853.43
Auswide Bank	A-2	Fri Dec 22 2017 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Thu Jul 19 2018 23:59:59 GMT+1000 (AUS Eastern Standard Time)	2.65	$1,500,000.00
Members Equity Bank	A-2	Fri Jan 05 2018 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Thu Jul 26 2018 23:59:59 GMT+1000 (AUS Eastern Standard Time)	2.61	$2,500,000.00
Bankwest	A-1+	Wed Jan 31 2018 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Thu Aug 02 2018 23:59:59 GMT+1000 (AUS Eastern Standard Time)	2.56	$3,000,000.00
NAB	A-1+	Thu Feb 01 2018 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Thu Aug 09 2018 23:59:59 GMT+1000 (AUS Eastern Standard Time)	2.56	$3,069,429.37
Rural Bank	A-2	Thu Feb 01 2018 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Thu Aug 16 2018 23:59:59 GMT+1000 (AUS Eastern Standard Time)	2.62	$1,000,000.00
AMP Bank	A-1	Thu Feb 22 2018 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Thu Aug 23 2018 23:59:59 GMT+1000 (AUS Eastern Standard Time)	2.60	$2,000,000.00
AMP Bank	A-1	Tue Feb 27 2018 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Thu Aug 30 2018 23:59:59 GMT+1000 (AUS Eastern Standard Time)	2.60	$3,000,000.00
QBANK	A-3	Thu Sep 03 2015 00:00:00 GMT+1000 (AUS Eastern Standard Time)	Wed Sep 05 2018 23:59:59 GMT+1000 (AUS Eastern Standard Time)	3.07	$1,000,000.00
NAB	A-1+	Thu Sep 07 2017 00:00:00 GMT+1000 (AUS Eastern Standard Time)	Fri Sep 07 2018 23:59:59 GMT+1000 (AUS Eastern Standard Time)	2.65	$3,500,000.00
BOQ	A-2	Fri Sep 13 2013 00:00:00 GMT+1000 (AUS Eastern Standard Time)	Thu Sep 13 2018 23:59:59 GMT+1000 (AUS Eastern Standard Time)	5.29	$1,000,000.00
Suncorp	A-1	Thu Mar 01 2018 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Thu Sep 20 2018 23:59:59 GMT+1000 (AUS Eastern Standard Time)	2.50	$4,073,002.50

Bank of Sydney	Unrated	Fri Mar 02 2018 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Thu Sep 27 2018 23:59:59 GMT+1000 (AUS Eastern Standard Time)	2.60	$3,000,000.00
Hunter United Employees	Unrated	Thu Mar 15 2018 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Thu Oct 04 2018 23:59:59 GMT+1000 (AUS Eastern Standard Time)	2.70	$1,000,000.00
Auswide Bank	A-2	Thu Mar 15 2018 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Thu Oct 04 2018 23:59:59 GMT+1000 (AUS Eastern Standard Time)	2.69	$2,015,970.41
Bank of Us	Unrated	Thu Mar 15 2018 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Thu Oct 11 2018 23:59:59 GMT+1100 (AUS Eastern Daylight Time)	2.70	$2,016,164.38
Police Credit Union SA	Unrated	Thu Apr 05 2018 00:00:00 GMT+1000 (AUS Eastern Standard Time)	Thu Oct 18 2018 23:59:59 GMT+1100 (AUS Eastern Daylight Time)	2.85	$2,500,000.00
Australian Military Bank	Unrated	Fri Apr 06 2018 00:00:00 GMT+1000 (AUS Eastern Standard Time)	Thu Oct 25 2018 23:59:59 GMT+1100 (AUS Eastern Daylight Time)	2.80	$4,000,000.00
Suncorp	A-1	Fri Apr 27 2018 00:00:00 GMT+1000 (AUS Eastern Standard Time)	Thu Nov 01 2018 23:59:59 GMT+1100 (AUS Eastern Daylight Time)	2.75	$4,000,000.00
Citigroup	A-2	Fri Jan 16 2015 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Wed Jan 16 2019 23:59:59 GMT+1100 (AUS Eastern Daylight Time)	3.90	$1,000,000.00
Rabobank Australia Branch	A-1	Mon Jan 19 2015 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Mon Jan 21 2019 23:59:59 GMT+1100 (AUS Eastern Daylight Time)	3.90	$1,000,000.00
Members Equity Bank	A-2	Thu Jan 30 2014 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Wed Jan 30 2019 23:59:59 GMT+1100 (AUS Eastern Daylight Time)	5.00	$1,500,000.00
Police Credit Union SA	Unrated	Tue Feb 04 2014 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Mon Feb 04 2019 23:59:59 GMT+1100 (AUS Eastern Daylight Time)	5.01	$1,500,000.00
Police Credit Union SA	Unrated	Tue Feb 04 2014 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Mon Feb 11 2019 23:59:59 GMT+1100 (AUS Eastern Daylight Time)	5.01	$2,000,000.00
Members Equity Bank	A-2	Wed Mar 12 2014 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Tue Mar 12 2019 23:59:59 GMT+1100 (AUS Eastern Daylight Time)	5.00	$1,000,000.00
ING Direct	A	Mon Aug 21 2017 00:00:00 GMT+1000 (AUS Eastern Standard Time)	Thu Aug 22 2019 23:59:59 GMT+1000 (AUS Eastern Standard Time)	2.75	$2,544,323.51
ING Direct	A	Thu Nov 16 2017 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Thu Nov 21 2019 23:59:59 GMT+1100 (AUS Eastern Daylight Time)	2.91	$5,000,000.00
ING Direct	A	Fri Nov 24 2017 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Thu Nov 28 2019 23:59:59 GMT+1100 (AUS Eastern Daylight Time)	2.88	$4,000,000.00
ING Direct	A	Tue Dec 05 2017 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Thu Dec 05 2019 23:59:59 GMT+1100 (AUS Eastern Daylight Time)	2.87	$3,000,000.00
ING Direct	A	Tue Dec 19 2017 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Thu Dec 19 2019 23:59:59 GMT+1100 (AUS Eastern Daylight Time)	2.87	$4,000,000.00
NAB	AA-	Thu Jan 22 2015 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Wed Jan 22 2020 23:59:59 GMT+1100 (AUS Eastern Daylight Time)	3.70	$2,000,000.00
ING Direct	A	Fri Feb 16 2018 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Thu Feb 20 2020 23:59:59 GMT+1100 (AUS Eastern Daylight Time)	2.89	$3,000,000.00
ING Direct	A	Tue Feb 27 2018 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Thu Feb 27 2020 23:59:59 GMT+1100 (AUS Eastern Daylight Time)	2.89	$3,000,000.00
G&C Mutual Bank	BBB-	Thu Mar 12 2015 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Thu Mar 12 2020 23:59:59 GMT+1100 (AUS Eastern Daylight Time)	4.00	$1,000,000.00
NAB	AA-	Thu Sep 07 2017 00:00:00 GMT+1000 (AUS Eastern Standard Time)	Mon Sep 07 2020 23:59:59 GMT+1000 (AUS Eastern Standard Time)	2.95	$6,000,000.00
BOQ	BBB+	Thu Nov 16 2017 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Mon Nov 16 2020 23:59:59 GMT+1100 (AUS Eastern Daylight Time)	3.02	$4,000,000.00
P&N Bank	BBB	Thu Nov 24 2016 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Thu Nov 26 2020 23:59:59 GMT+1100 (AUS Eastern Daylight Time)	3.55	$2,000,000.00

BOQ	BBB+	Thu Nov 24 2016 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Thu Nov 26 2020 23:59:59 GMT+1100 (AUS Eastern Daylight Time)	3.53	$5,624,688.86
Police Credit Union SA	Unrated	Wed Nov 30 2016 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Tue Dec 08 2020 23:59:59 GMT+1100 (AUS Eastern Daylight Time)	3.55	$2,000,000.00
Westpac	AA-	Tue Dec 19 2017 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Mon Dec 21 2020 23:59:59 GMT+1100 (AUS Eastern Daylight Time)	2.97	$3,000,000.00
BOQ	BBB+	Thu Nov 16 2017 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Tue Nov 16 2021 23:59:59 GMT+1100 (AUS Eastern Daylight Time)	3.37	$4,000,000.00
BOQ	BBB+	Thu Nov 23 2017 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Tue Nov 23 2021 23:59:59 GMT+1100 (AUS Eastern Daylight Time)	3.37	$3,000,000.00
BOQ	BBB+	Fri Dec 08 2017 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Wed Dec 08 2021 23:59:59 GMT+1100 (AUS Eastern Daylight Time)	3.37	$1,000,000.00
Westpac	AA-	Fri Dec 23 2016 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Thu Dec 23 2021 23:59:59 GMT+1100 (AUS Eastern Daylight Time)	3.00	$2,500,000.00
BOQ	BBB+	Fri Feb 02 2018 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Thu Feb 03 2022 23:59:59 GMT+1100 (AUS Eastern Daylight Time)	3.45	$3,000,000.00
BOQ	BBB+	Mon Feb 05 2018 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Fri Feb 04 2022 23:59:59 GMT+1100 (AUS Eastern Daylight Time)	3.45	$4,205,435.62
BOQ	BBB+	Mon Feb 26 2018 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Mon Feb 28 2022 23:59:59 GMT+1100 (AUS Eastern Daylight Time)	3.45	$2,000,000.00
Westpac	AA-	Fri Jun 02 2017 00:00:00 GMT+1000 (AUS Eastern Standard Time)	Thu Jun 02 2022 23:59:59 GMT+1000 (AUS Eastern Standard Time)	2.83	$2,000,000.00
Westpac	AA-	Fri Jun 16 2017 00:00:00 GMT+1000 (AUS Eastern Standard Time)	Thu Jun 16 2022 23:59:59 GMT+1000 (AUS Eastern Standard Time)	2.77	$2,000,000.00
Westpac	AA-	Fri Jul 14 2017 00:00:00 GMT+1000 (AUS Eastern Standard Time)	Thu Jul 14 2022 23:59:59 GMT+1000 (AUS Eastern Standard Time)	2.75	$1,000,000.00
Westpac	AA-	Thu Aug 17 2017 00:00:00 GMT+1000 (AUS Eastern Standard Time)	Wed Aug 17 2022 23:59:59 GMT+1000 (AUS Eastern Standard Time)	2.96	$3,000,000.00
Westpac	AA-	Thu Sep 07 2017 00:00:00 GMT+1000 (AUS Eastern Standard Time)	Wed Sep 07 2022 23:59:59 GMT+1000 (AUS Eastern Standard Time)	2.74	$6,000,000.00
Westpac	AA-	Tue Dec 05 2017 00:00:00 GMT+1100 (AUS Eastern Daylight Time)	Mon Dec 05 2022 23:59:59 GMT+1100 (AUS Eastern Daylight Time)	2.86	$3,000,000.00

ATTACHMENT 2

CL..... Governance & Corporate

Portfolio and Average Interest Rate Comparison for last 3 Months													Same time last year	
	Apr-18				Mar-18				Feb-18				Apr-17	
			Annualised				Annualised				Annualised			
	Investment Amount ($000)	% Monthly Rate	% Yearly Rate	% Rate Change from previous	Investment Amount ($000)	% Monthly Rate	% Yearly Rate	% Rate Change from previous	Investment Amount ($000)	% Monthly Rate	% Yearly Rate	% Rate Change from previous	Investment Amount ($000)	% Monthly Rate
AMP 31 DAY NOTICE	$2	0.18	2.15	0.00	$795	0.18	2.15	0.00	$793	0.18	2.15	2.15		
AMP EASY SAVER	$2	0.15	1.80	0.00	$2	0.15	1.80	0.00	$2	0.15	1.80	1.80		
BANKWEST MONEY MARKET CASH	$9,014	0.17	2.00	0.00	$103	0.17	2.00	0.00	$7,193	0.17	2.00	2.00		
CBA CASH MGMT	$141	0.14	1.65	0.00	$134	0.14	1.65	0.00	$135	0.14	1.65	1.65		
T-CORP IM CASH	$2,011	0.17	2.04	0.72	$2,008	0.11	1.32	-0.12	$2,005	0.12	1.44	1.44		
Working Cap Fund:	**$11,171**				**$3,042**				**$10,129**				**$13,969**	
CFS	$13,404	0.40	4.84	7.81	$13,352	-0.25	-2.97	-1.82	$13,386	-0.10	-1.15	-1.15		
Frozen Funds Managers	**$13,404**				**$13,352**				**$13,386**				**$12,945**	
TERM DEPOSITS	$170,078	0.25	2.98	0.03	$176,117	0.25	2.95	-0.01	$180,751	0.25	2.96	2.96		
Term Deposits	**$170,078**				**$176,117**				**$180,751**				**$95,720**	
BANK OF QLD FRN FEB 2020	$1,007	0.24	2.82	0.00	$1,005	0.24	2.82	0.00	$1,003	0.24	2.82	2.82		
BENDIGO ADELAIDE FRN AUG 2020	$2,023	0.24	2.87	-0.16	$2,019	0.25	3.03	0.16	$2,017	0.24	2.87	2.87		
BOC BANK OF CHINA FRN APR 2021	$2,062	0.26	3.11	3.11	$0	0.00	0.00	0.00	$0	0.00	0.00	0.00		
CBA COVER BOND 17 NOVEMBER 2021	$2,538	0.22	2.61	0.00	$2,529	0.22	2.61	0.00	$2,531	0.22	2.61	2.61		
CREDIT SUISSE FRN APR 2020	$1,016	0.27	3.19	0.26	$1,014	0.24	2.93	0.00	$1,014	0.24	2.93	2.93		
GREATER BANK FRN NOVEMBER 19	$3,023	0.27	3.29	0.00	$3,017	0.27	3.29	0.00	$3,013	0.27	3.29	3.29		
GREATER BANK FRN AUGUST 19	$2,016	0.28	3.34	0.00	$2,011	0.28	3.34	0.00	$2,006	0.28	3.34	3.34		
HERITAGE FRN MAY 2018	$1,000	0.24	2.92	0.00	$1,005	0.24	2.92	0.00	$4,012	0.24	2.92	2.92		
HERITAGE FRN MAR 2021	$3,007	0.27	3.26	0.00	$2,997	0.27	3.26	3.26	$0	0.00	0.00	0.00		
ME FRN JULY 2019	$15,115	0.29	3.52	0.26	$15,197	0.27	3.26	0.00	$15,179	0.27	3.26	3.26		
ME FRN NOV 2020	$2,001	0.25	3.01	0.00	$2,009	0.25	3.01	0.00	$2,009	0.25	3.01	3.01		
ME FRN APR 2021	$1,503	0.28	3.35	3.35	$0	0.00	0.00	0.00	$0	0.00	0.00	0.00		
NAB FRN FEB 2023	$5,008	0.21	2.57	0.00	$4,982	0.21	2.57	0.00	$5,002	0.21	2.57	2.57		
NEWCASTLE PERMANENT FRN APR 2020	$1,007	0.28	3.40	0.24	$1,004	0.26	3.16	0.00	$1,010	0.26	3.16	3.16		
NEWCASTLE PERMANENT FRN JAN 2022	$1,011	0.29	3.43	0.00	$1,017	0.29	3.43	0.00	$1,016	0.29	3.43	3.43		
NEWCASTLE PERMANENT FRN FEB 2023	$2,492	0.28	3.40	0.23	$2,506	0.26	3.17	0.00	$2,507	0.26	3.17	3.17		
QBANK FRN DEC 2020	$5,043	0.28	3.34	0.00	$5,030	0.28	3.34	0.08	$5,001	0.27	3.26	3.26		
QBANK FRN MAR 2021	$1,004	0.28	3.37	0.00	$1,000	0.28	3.37	3.37	$0	0.00	0.00	0.00		
RABOBANK FRN MAR 2022	$3,045	0.24	2.90	0.00	$3,038	0.24	2.90	0.07	$3,041	0.24	2.83	2.83		
SUNCORP FRN OCT 2020	$2,534	0.28	3.32	0.27	$2,542	0.25	3.05	0.00	$2,542	0.25	3.05	3.05		
SUNCORP FRN AUG 2022	$2,272	0.23	2.74	0.00	$2,266	0.23	2.74	0.00	$2,269	0.23	2.74	2.74		
UBS FRN MAR 2023	$3,012	0.23	2.78	0.00	$2,999	0.23	2.78	2.78	$0	0.00	0.00	0.00		
WESTPAC FRN FEB 2022	$2,024	0.26	3.11	0.23	$2,033	0.24	2.88	0.00	$2,034	0.24	2.88	2.88		
WESTPAC FRN MAR 2023	$5,011	0.22	2.68	0.00	$4,990	0.22	2.68	2.68	$0	0.00	0.00	0.00		
Floating Rate Notes & Bonds	**$69,875**				**$66,213**				**$67,196**				**$82,697**	
T-CORP LTGF	$10,577	2.08	24.99	33.06	$10,385	-0.67	-8.07	-4.65	$10,459	-0.29	-3.42	-3.42	$0	
Long Term Growth Funds	**$10,577**				**$10,385**				**$10,459**				**$0**	
Total:	**$275,105**				**$269,109**				**$271,921**				**$205,331**	
Funds Managers		0.40	4.84	5.99		-0.10	-1.15	0.00		-0.10	-1.15	-1.15	0.48	5.79
Total Portfolio		0.26	3.10	0.57		0.21	2.53	0.00		0.21	2.53	2.53	0.27	3.29
Ausbond Bank Bill Index		0.17	2.01	0.25		0.15	1.76	0.00		0.15	1.76	1.76	0.15	1.82

Funds Managers - Rates shown for Funds Managers are monthly results which have been annualised.

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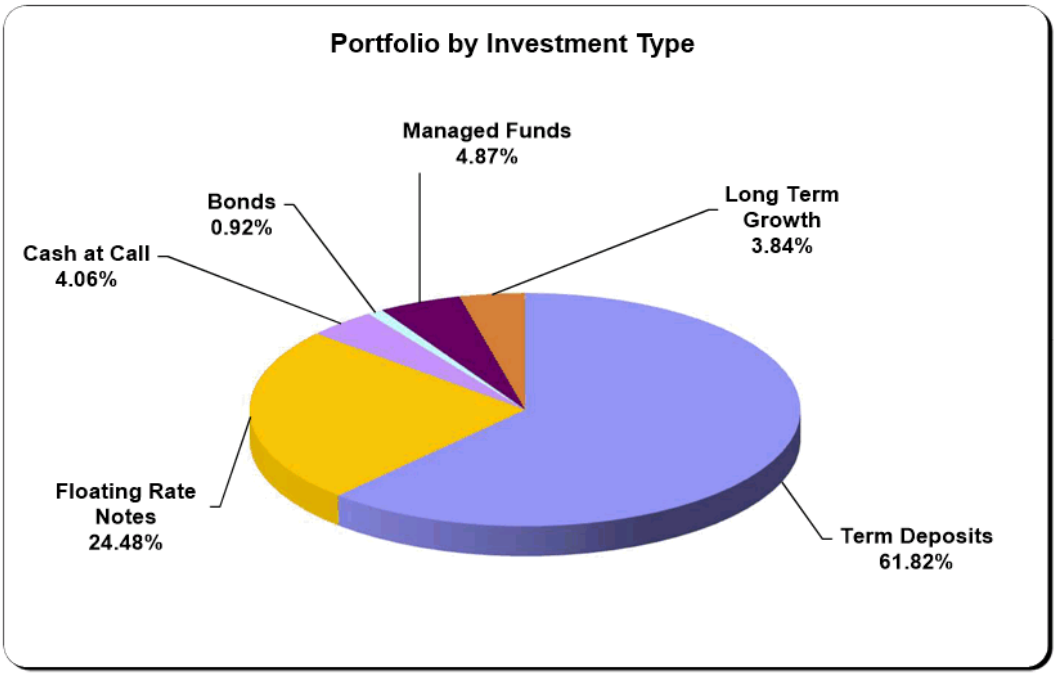
ATTACHMENT 2 **Governance & Corporate**

Summary of Investment Portfolio April 18



Other Interest Rates

Interest rates quoted during the reporting month for investments of 90 days were:

	Low	High
Term Deposits	2.40%	2.85%

Source: Rimsec

Redemption Terms of Investments

Term Deposits: Redemption at specified Maturity Date
Managed Funds: Redemption within 3 working days Subject to market valuation
Floating Rate Note: Redemption within 3-5 working days Subject to market valuation and unit price
Bonds: Redemption within 3-5 working days Subject to market valuation and unit price
Tcorp Long Term Growth: Redemption within 3-5 working days - Longterm View 5-7 Years
Cash @ Call: Daily redemption available (Except for 31 Day Notice Account)

Additional Information

Council's investment policy, which was adopted at the Council meeting held on 10 July 2017, complies fully with Section 625 of the Local Government Act, 1993.

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Monthly Investment Report

City of Parramatta

April 2018

CPG Research & Advisory Pty Ltd

25th ANNIVERSARY YEAR

Market

International Markets

Stocks recovered globally, on Korean peace talks targeting a 2018 treaty and de-escalation of trade rhetoric. The MSCI World ex-AUS gained +1.89%. The MSCI Emerging Markets Index gained +1.17% (in local currencies) in April as Russia and Turkey weighed on returns. The Dow Jones, S&P500 and NASDAQ ended +0.34%, +0.38% and +0.08% respectively.

US 10-year yields equalled 7-year highs of 3.04% before closing +21bp at 2.95%.

US GDP beat forecasts with a first estimate of +2.3% p.a. for Q1, taking YoY to +2.9%. Prices fell, but YoY CPI increased to +2.4%. Core CPI (+2.1%) went above the 2% target for the first time in a year. Wages grew +4.5% YoY. Retail sales grew +0.6%

US unemployment was steady at +4.1%, as initial jobless claims set a 49-year low week of 209k but a muted non-farm payroll reading (+103k) followed a strong February. Long-term unemployment of 0.82% was the lowest recorded (in a statistic only recently tracked).

EU unemployment (8.5%) and long-term unemployment (4.1%) fell to cyclical lows. Participation equalled its 2008 record. Q4 GDP was confirmed at +0.6%. Still, the central bank has not tightened.

The "tiger economies" soared. India, Turkey, Bangladesh and Vietnam exceeded 7% growth; Ireland continued its recovery with +8.4% GDP YoY and over +40% since 2012. Unemployment is 6.1%.

China's new central bank chief eased policy by cutting the reserve ratio. In Japan, PM Abe faces a scandal that has weakened his administration but is unlikely to cause a change in direction.

Domestic

The ASX200 finished +3.91% higher. Australian 10-year bonds lost ground, but did better than US bonds as yields rose +18bp to 2.77%. The RBA *Minutes* acknowledged that the next rate move is up. Its criteria of 2.5% core CPI, stronger wages and lower unemployment delays this beyond the Q2 markets had been expecting, and was seen as an easing of guidance. Final PPI of +1.7% was kept low by flat import prices.

The Treasurer announced that stronger than budgeted tax receipts have removed the need for an NDIS levy. Further tax cuts are also anticipated.

Q1 CPI of +0.4% gives the RBA no rush to raise rates. The preferred trimmed mean measure was +1.9% YoY. Housing was the only material increase.

Retail sales gained +0.6%, taking trend to a year-high +0.4%. Unit building approvals were -16.4%, with the trend broadly flat. Trade remained in surplus at +$825m in February (-13% to January).

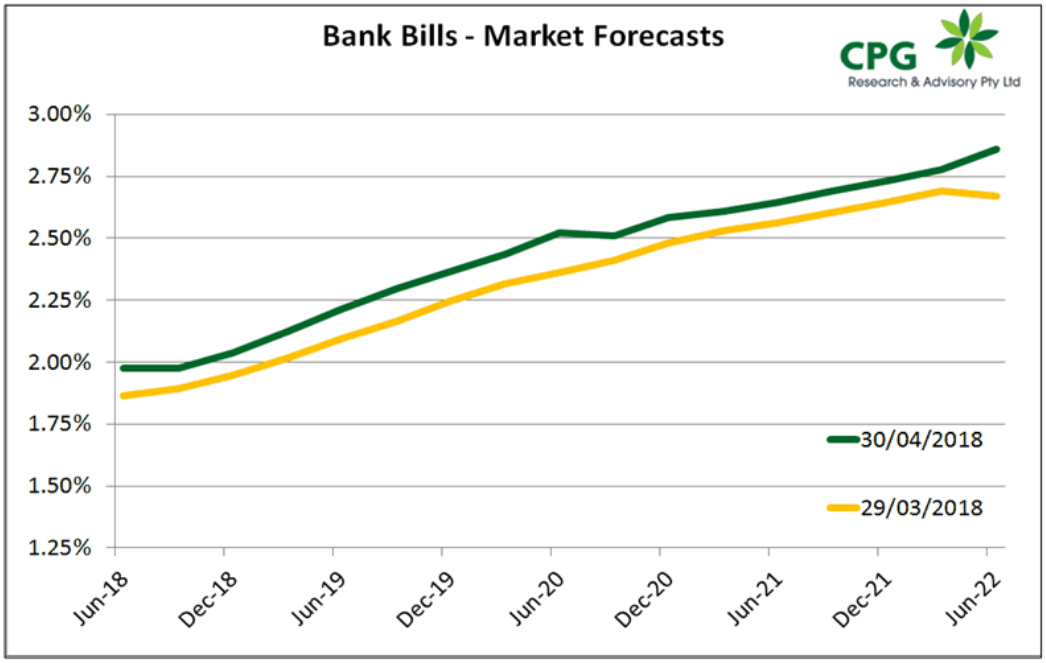
Unemployment was flat at 5.5% in March, as a poor +4.900 jobs (with fulltime -24,800) was offset by lower participation.

Other Markets

Improving sentiment as investors expected a trade resolution boosted economically sensitive commodities. WTI oil was higher at $68.57/bbl (+5.59%) and Gold closed at $1,320 (-0.19%). Iron Ore gained +1.17% to $65.65/t. The $A was -1.24% lower at US75.70c.

Base metals were generally higher in April as Tin (+0.19%), Nickel (+3.63%) Aluminium (+11.35%), Copper (+1.47%) rose. Zinc (-4.82%) fell.

A recovery in global sentiment saw rate expectations higher, despite the RBA apparently guiding below market expectations:



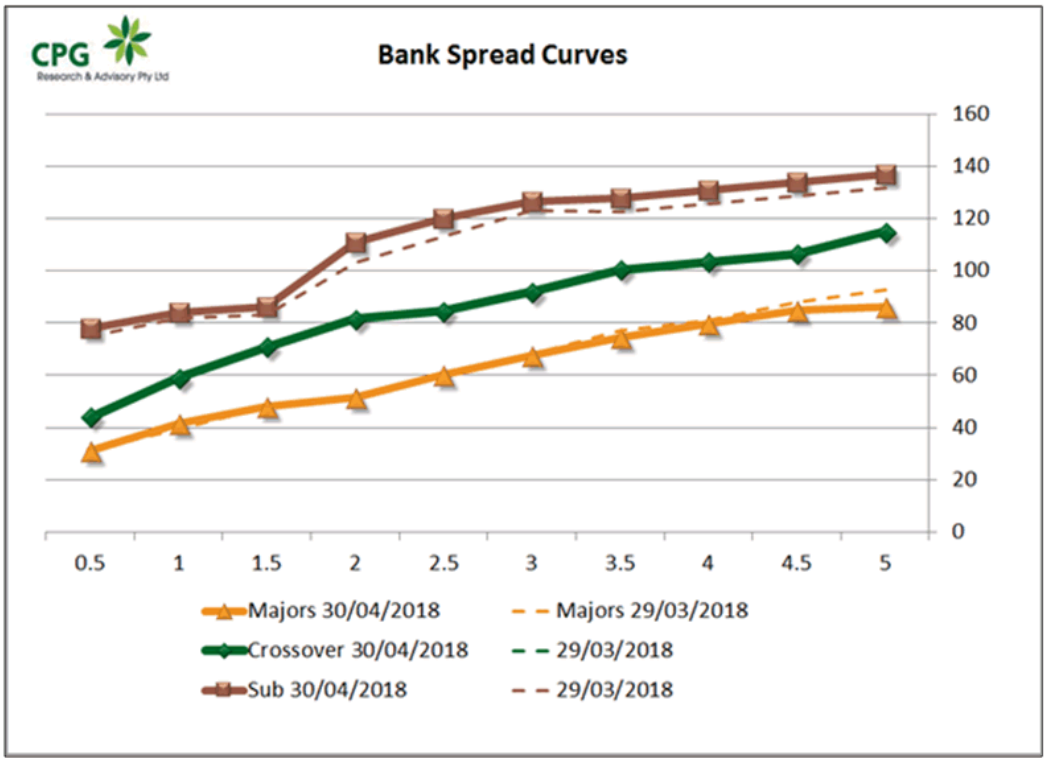
Credit Market

Risk assets recovered in April, as markets took the view that the US and China would produce a reasonable compromise rather than a full-blown trade war. They were also cheered by Korean peace talks.

This saw credit rally across the board:

Credit Indices	30 Apr 18	31 Mar 18	30 Apr 17
iTraxx Australia 5 Yr CDS	65bp	70bp	82bp
iTraxx European 5 Yr CDS	54bp	60bp	67bp
CDX IG North American 5 Yr CDS	61bp	66bp	64bp
CDX HY North American 5 Yr CDS	339bp	360bp	327bp

Bank FRNs performed well, as major bank FRNs tightened up to 8bp. They had been heavily oversold in March, as US investors sold assets to return capital. Crossover FRNs (former 'A' rated, now in 'BBB' category) were left behind, and major bank subs widened – confirming our suspicion that March prices were stale.



High yield bond spreads tightened, from +372bp at end of March to +346bp (BoA Merrill Lynch HY Index, option-adjusted).

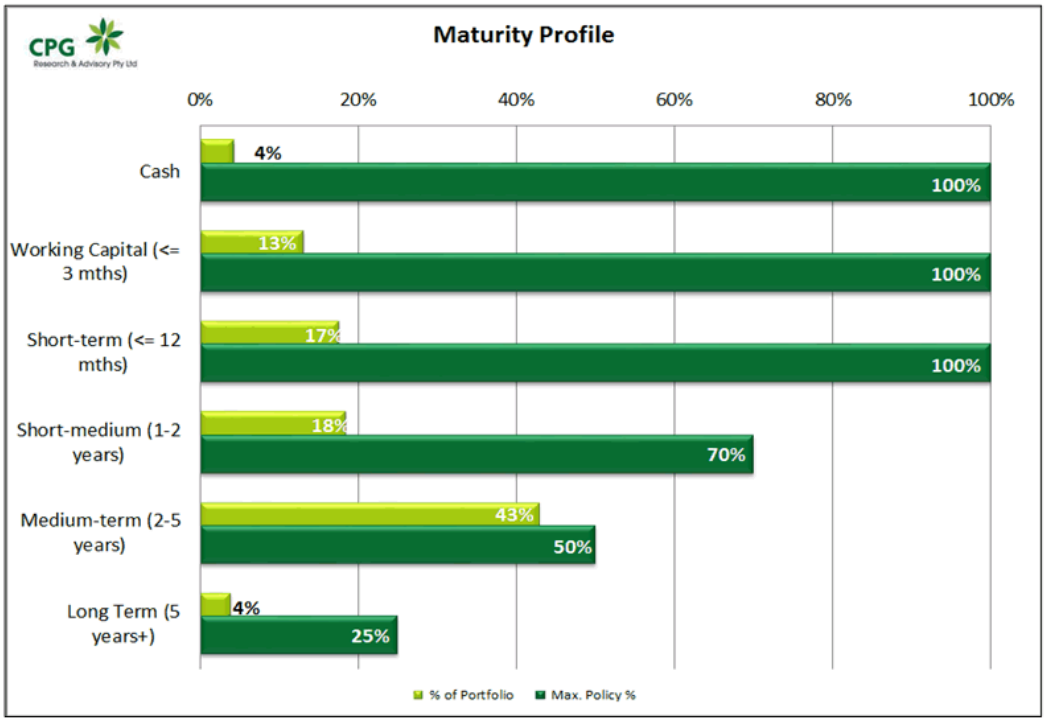
At the short end, deposit margins increased in April, mainly pushed by higher rates offered by AMP. From longer end, margins further squeezed as swap rates traded higher.

Council's Portfolio and Term Deposits

The portfolio is fully invested, with 4% of investments available at-call and a further 13% of assets maturing within 3 months.

Council has an additional allocation to securities and bonds, as well as the CFS credit managed fund, for additional liquidity requirements. There is full utilisation of Policy flexibility on cash holdings, medium-term credit, and ratings.

The portfolio is well diversified across maturities, with a large allocation towards medium term assets. Increasingly new investment activity is supported by actively rolling existing holdings.



The majority of Council's portfolio is deposits, at 62% of the total assets. The portfolio also includes liquid credit securities (including indirectly, *via* funds) and cash, as well as recently invested TCorpIM Long Term Growth Fund.

Around 9% of the portfolio is less defensive, and should be regarded as long-term.

Following discussions with TCorp and CPG, Council has invested Reserve funds (4% of the total portfolio) in October 2017 to back specified long-term liabilities with the TCorpIM Long Term Growth Fund. This investment is considered for the longer term, despite short term volatility.

(This is having considered a number of alternatives from the TCorpIM universe, and follows meetings with management.)

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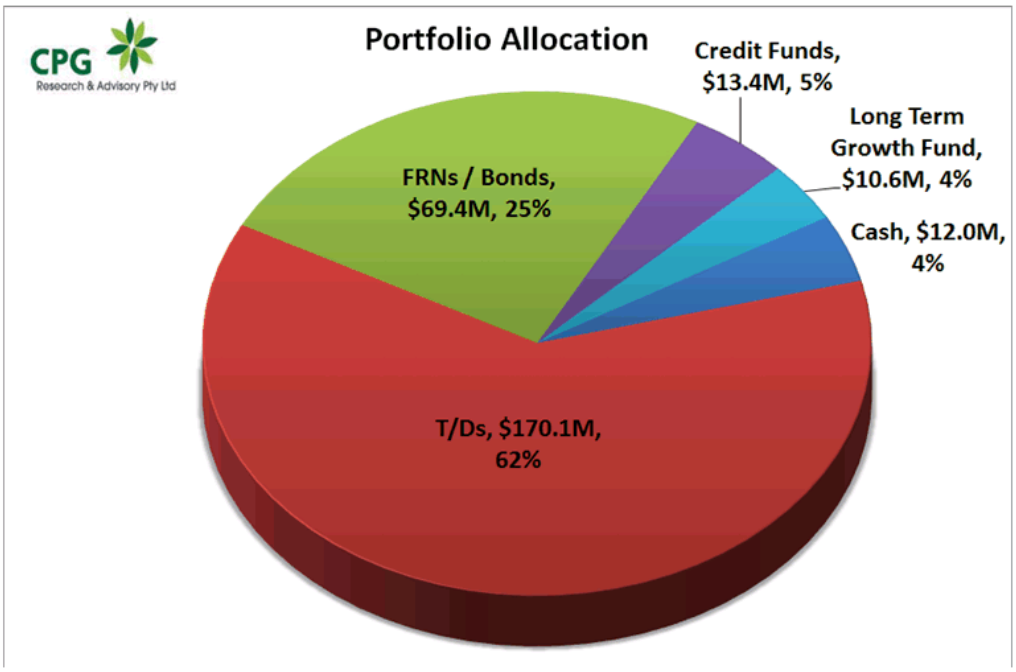

The portfolio is invested in what should be close to its stable configuration.

The investment portfolio is well diversified in complying assets across the entire credit spectrum; with no one credit dominating.

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Credit Quality

Council's current position is as follows:

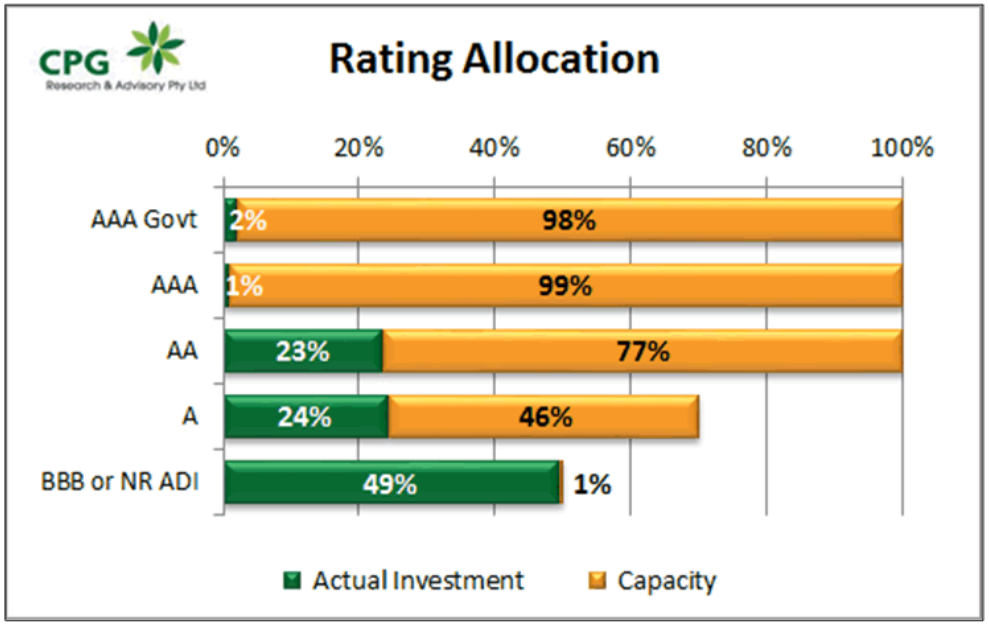
All ADIs remain within policy limits of the latest investment policy.

Aggregate credit limits are in compliance, with BBB's touching capacity:

Rating Category	Actual	Per C/Party	Aggregate	Rating Category	Actual Investment	Capacity
AAA Govt	2%	100%	100%	AAA Govt	2%	98%
AAA	1%	40%	100%	AAA	1%	99%
AA	23%	30%	100%	AA	23%	77%
A	24%	20%	70%	A	24%	46%
BBB or NR ADI	49%	15%	50%	BBB or NR ADI	49%	1%

BBB and lower rated investment grade ADIs are at capacity now, and at current levels future investment opportunities would need to be offset by sales or maturities.

We are working with Council to identify such sale opportunities –the relative value in BBB securities is concentrated in the smaller names. **Additional capacity enables Council to continue to provide capital in a period where relatively few investors have flexibility, and institutions are forced to pay for access.** We also note a large impending deposit maturity.



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Other Compliance

We have tested the portfolio provided against Council's current investment policy and report the following:

All counterparties other than a very small overweight to BoQ comply. The next maturity is in September, BoQ 2019 FRN was sold during the month releasing some capacity.

Counterparties	Exposure $M	FCS	Net	Rating	Policy Limit	Actual	Capacity
TCorpIM Cash	$2.01M	$0.00M	$2.01M	AAA	100%	0.73%	$273.35M
CBA Cov	$2.50M	$0.00M	$2.50M	AAA	26%	0.91%	$68.21M
ANZ	$0.00M	$0.00M	$0.00M	AA-	30%	0.00%	$82.61M
CBA	$12.14M	$0.25M	$11.89M	AA-	30%	4.32%	$70.71M
NAB	$23.10M	$0.25M	$22.85M	AA-	30%	8.30%	$59.76M
Westpac	$29.50M	$0.25M	$29.25M	AA-	30%	10.62%	$53.36M
RaboBank	$4.00M	$0.25M	$3.75M	A+	20%	1.36%	$51.32M
Suncorp	$12.82M	$0.25M	$12.57M	A+	20%	4.57%	$42.50M
UBS	$3.00M	$0.00M	$3.00M	A+	20%	1.09%	$52.07M
AMP	$5.80M	$0.25M	$5.55M	A	20%	2.01%	$49.52M
Bank of China	$2.00M	$0.00M	$2.00M	A	20%	0.73%	$53.07M
CS	$1.00M	$0.00M	$1.00M	A	20%	0.36%	$54.07M
Macquarie	$0.00M	$0.00M	$0.00M	A	20%	0.00%	$55.07M
CFS GCI	$13.40M	$0.00M	$13.40M	A	20%	4.87%	$41.67M
ING	$24.54M	$0.25M	$24.29M	A	20%	8.82%	$30.78M
Citibank	$1.00M	$0.25M	$0.75M	A-	20%	0.27%	$54.32M
BoQ	$28.83M	$0.25M	$28.58M	BBB+	10%	10.38%	-$1.04M
Bendigo-Adelaide	$3.00M	$0.25M	$2.75M	BBB+	10%	1.00%	$24.79M
Heritage	$4.00M	$0.00M	$4.00M	BBB+	10%	1.45%	$23.54M
Newcastle Permanent	$4.50M	$0.00M	$4.50M	BBB	10%	1.63%	$23.04M
ME Bank	$23.60M	$0.25M	$23.35M	BBB	10%	8.48%	$4.19M
Greater	$5.00M	$0.00M	$5.00M	BBB	10%	1.82%	$22.54M
P&N Bank	$2.00M	$0.25M	$1.75M	BBB	10%	0.64%	$25.79M
People's Choice CU	$3.50M	$0.25M	$3.25M	BBB	10%	1.18%	$24.29M
G&C Mutual	$1.00M	$0.25M	$0.75M	BBB-	10%	0.27%	$26.79M
Q BANK	$7.00M	$0.25M	$6.75M	BBB-	10%	2.45%	$20.79M
Auswide	$20.52M	$0.25M	$20.27M	BBB-	10%	7.36%	$7.27M
B & E Limited	$2.02M	$0.25M	$1.77M	NR	5%	0.64%	$12.00M
Bank of Sydney	$3.00M	$0.25M	$2.75M	NR	5%	1.00%	$11.02M
Hunter United CU	$3.00M	$0.25M	$2.75M	NR	5%	1.00%	$11.02M
Police CU	$8.00M	$0.25M	$7.75M	NR	5%	2.81%	$6.02M
Australian Military Bank	$9.00M	$0.25M	$8.75M	NR	5%	3.18%	$5.02M
TCorpIM LTGF	$10.58M	$0.00M	$10.58M	NR	5%	3.84%	$3.19M
	$275.36M		$270.11M			98%	
C'Wealth Govt		$5.25M	$5.25M	AAA	100%	2%	
Total	**$275.36M**		**$275.36M**			**100%**	

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Term Deposits

At month-end, deposits accounted for approximately 62% of the total investment portfolio. The weighted average duration of the deposit portfolio is again very long, at approximately **589 days (~1.61 years),** in line with last month. This is considerably longer than the peer group. Duration was previously reduced ahead of substantial spending, and has been rebuilt over the current financial year (including after amalgamation-related transfers).

Maintaining a longer duration will provide protection to Council's budgeted. As at the end of April, the weighted average deposit yield stood at **2.99% (up 3bp from the previous month, on short maturities)** - ***higher than any deposits up to 2 years in today's market,*** at around +91bp over bank bills. New investments tend to be dilutive to the average return, except at long durations or lesser credit.

Across the short-end of the curve, both swap rates and wholesale deposit margins were higher, mainly driven by higher rates from AMP – after a week in the news.

Spreads were tighter at the longer end, as swap rates were higher and deposit rates were little changed – again, 4 years is the point of best value but the limit of 3-years still creating opportunities that are interesting given the RBA's guidance during the month.

With capacity in the BBB relatively tight, we believe Council will benefit from rolling BBB sales and deposit maturities into new FRNs –2018 has provided a diverse range of issuers.

Relevant portfolio data follows:

Term Deposit Statistics

Percentage of total portfolio	62%
Weighted Average Yield	2.99%
Weighted Average Duration	589 days

Credit Quality of Deposits

AAA^	0%
AA	26%
A	23%
BBB	36%
Unrated ADI	15%
Total	**100%**

^ *Calculation excludes the Financial Claims Scheme (FCS)*

We refer to the detailed analysis in our April ***Fixed Interest Analytics***.

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25th ANNIVERSARY YEAR

FRNs & Fixed Bonds

Bank FRNs performed well, as major bank FRNs narrowed up to 8bp.

CBA's latest FRN at +80bp from late January is marked +86bp (-7bp tighter from a March-end +93bp), and Westpac March 2023 FRN, issued at +83bp, is now marked at +87.5bp.

ANZ latest issue closed at +90bps – around its issue level, after pricing inside its indication on solid demand.

The curve is steeper from the effect of a new issue at month end. It has the expectation of well above deposit-like returns.

Major bank spreads are out from the 70's to mid 80's area again on the secondary market, and are likely to issue around ~+90 for future issues.

The rally in April was partly due to improving sentiment, but also confirms the view that aggressive selling in March was one-off, and due to tax-driven flows. There was little more in the lower rated banks.

Council has actively managed the FRN portfolio, with around -$7m sold last month, resulting in $79,000 of realised capital gains. Out of this, Council invested $3.6m in new purchases including $2M with Bank of China at what we considered excellent pricing, and $1.6m with ME Bank.

We believe BBB rated FRNs are the best fit for Council's current circumstances as asset sales permit – dramatically overpaying for slight differences in credit rating. Given the timing of future maturities, we expect to seek sales of 2019 BBBs in coming months to fund further purchasers. **We now look forward towards a large block sale of ME Bank 2019s, releasing $15m of BBB capacity.** ME Bank does not converge as quickly to low spreads ahead of maturity as the larger, more liquid BBB names. However, we anticipate a selling opportunity in due course.

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25th ANNIVERSARY YEAR

Credit Fund - CFS

The CFS Wholesale Global Credit Income Fund returned +0.39% (net actual) for the month of April, trading in a tight range. *Annualised return longer terms exceed 4%.*

Investment-grade credit saw panic as stockmarkets fell in March. While April brought a recovery in sentiment, this was concentrated in the banks – particularly the majors, as they recovered very strongly from heavy falls ahead of the Easter holiday.

There was less buying of broader investment-grade credit; as often the case, buying was led by the very liquid credit derivatives indices.

During the month, new issues were well supported, and tended to price inside their initial guidance. This bodes well for investor support in coming weeks.

GCI includes some high yield and/or emerging markets credit, which tends to magnify moves relative to Council's other credit investments, but in 2018 volatility has been very low. Drawdowns have been less than ½% in magnitude, and have rebounded quickly. YTD returns are positive.

Over the long term the fund has significantly exceeded the risk-free benchmark – with a return of 4.4% (~211bp p.a. over benchmark) through 5 years, and mid-100's since investment pre-GFC this has been an excellent investment compared to eligible alternatives.

The Fund continues to hold a diverse range of securities across the global credit market. Consistently just under 20% are speculative grade, with corporate securities dominating. While the bulk of assets are in the major developed markets of North America and Europe, it does hold a modest exposure to Emerging Markets.

As we highlighted at audit time, Council does need to take care not to budget for abnormally high distributions to be repeated; nor to spend at that "run rate" where they do not reflect earnings. This is a fund that trades quite actively, and this can result in over-crediting of distributable profits. **We expect this effect to be less extreme in FY18 for three reasons**:

- Spreads are sideways through FY18, so capital gains in pure credit will be less pronounced than in FY17
- Fewer securities purchased at the extremes of FY16's lows remain available for sale
- Bond yields have tended to rise in recent years, so (hedged) fixed rate securities will generate realised losses.

With a running yield near ~3½% p.a., we recommend Council retain this investment which we regard as a core access to investment-grade credit (a sector which systemically overpays for risk). Discussion papers to Council in 2015 and 2016 provided further details and the rationale behind our recommendations to retain the Fund. It has performed strongly and shown at or above trend returns.

We continually monitor for overvaluation in the sector. Our current view is Neutral, but the potential to exceed Council's other asset returns is not what it once was.

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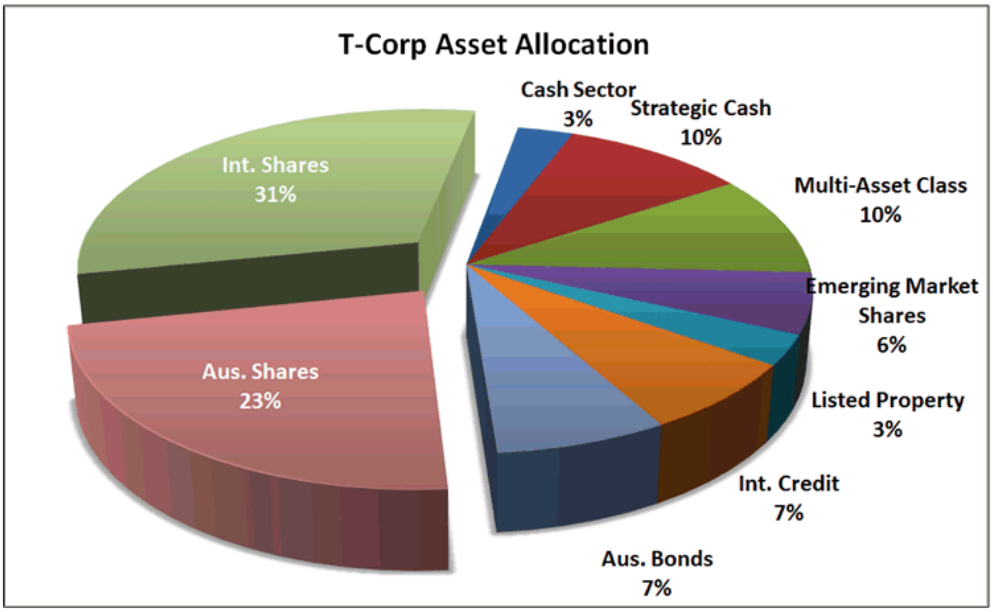
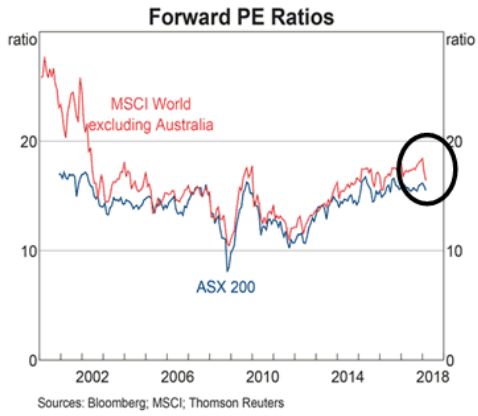
TCorpIM L/T Growth Fund

The TCorpIM Long-Term Growth Fund returned +1.85% (net actual) in April following the recovery in global markets – in line with the benchmark. The $A weakened again, boosting returns for the second month. Given the timing of estimates used in Council's reports, accounting returns reported can vary slightly.

The current allocation is as follows:



The ***Quarterly Strategy Review*** had more expansive comment on equity markets, earnings and valuations. For this report, we point to an extract from the reports – the derating of Australian equities relative to the developed world, based on a poor earnings performance. Initial estimates for **FY18 earnings have begun much lower than FY17 at the same month**.



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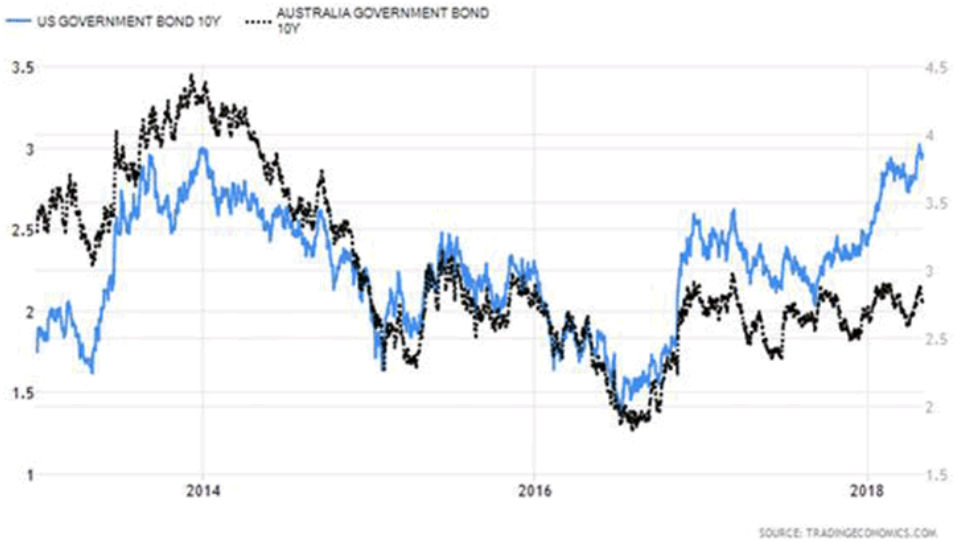
Fixed Interest Outlook

Stocks recovered globally on Korean peace talks and de-escalation of trade rhetoric. As panic abated, **US yields closed +21bp higher at 2.95%.** Q1 GDP was estimated at +2.3% p.a., which should not alarm bond markets, but US yields have tended to trend higher regardless of data in recent months.

Australian 10-year also traded weaker, following the US - **closing +17bp higher to 2.77%.**

Australian bonds continue to trade inside US yields, and the gap has widened.



Divergence of policy continues, with the US Federal Reserve increasing rates by 25bp in March but the RBA on hold again in its May meeting. The RBA Minutes acknowledged that the next rate move is up. Its criteria of 2.5% core CPI and lower unemployment (as well as the desire to see stronger wage growth) delays this beyond the Q2 markets had been expecting. It was seen as a weakening of guidance, even if the "*next move up*" wording could have sounded otherwise.

The Treasurer announced that stronger than budgeted tax receipts have removed the need for an NDIS levy. Further tax cuts are also anticipated.

The RBA's May meeting produced no change, and weak employment data looks to have further delayed any pressure domestically.

BBSW is higher, as is the US LIBOR spread relative to the cash rate. This signifies tight money market conditions, probably due to the size of recent flows. Capital returning to the US, the dislocation of the near-shutdown, and similar one-offs have been blamed**.**

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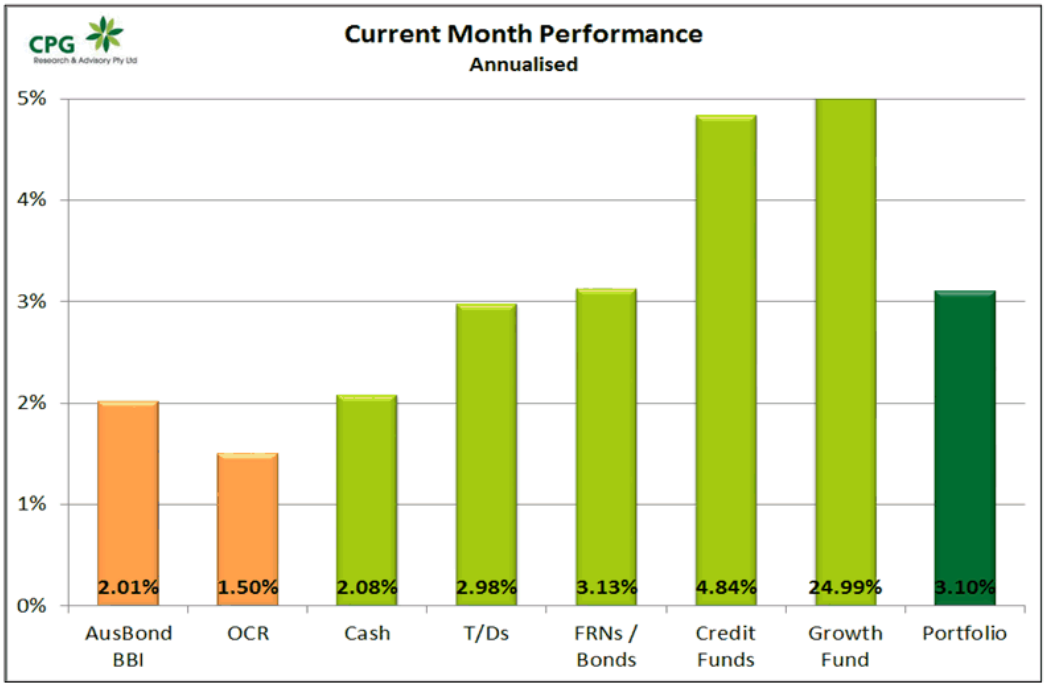
Conclusions and Returns - Accrual

Actual	1 month	3 months	6 months	FYTD	CYTD	1 year	2 years	3 years	4 years	5 years
Official Cash Rate	0.12%	0.36%	0.74%	1.25%	0.49%	1.50%	1.53%	1.69%	1.88%	2.01%
AusBond Bank Bill Index	0.16%	0.44%	0.87%	1.45%	0.59%	1.75%	1.82%	1.96%	2.14%	2.26%
Council Cash	0.17%	0.49%	1.01%	1.70%	0.66%	2.04%	2.21%	2.38%	2.62%	2.79%
Council T/Ds	0.24%	0.71%	1.46%	2.55%	0.97%	3.13%	3.29%	3.49%	3.73%	4.01%
Council FRNs / Bonds	0.25%	0.76%	1.50%	2.48%	1.02%	2.97%	3.02%	3.24%	3.87%	4.11%
Council Credit Funds	0.39%	0.04%	1.05%	2.86%	0.78%	3.55%	5.09%	3.89%	3.99%	4.39%
Council Growth Funds	1.85%	0.85%	3.30%	5.77%	1.75%	-	-	-	-	-
Council Total Portfolio	0.25%	0.63%	1.48%	2.54%	0.93%	3.08%	3.22%	3.31%	3.62%	3.89%

Annualised	1 month	3 months	6 months	FYTD	CYTD	1 year	2 years	3 years	4 years	5 years
Official Cash Rate	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.53%	1.69%	1.88%	2.01%
AusBond Bank Bill Index	2.01%	1.80%	1.77%	1.75%	1.82%	1.75%	1.82%	1.96%	2.14%	2.26%
Council Cash	2.08%	2.02%	2.04%	2.04%	2.02%	2.04%	2.21%	2.38%	2.62%	2.79%
Council T/Ds	2.98%	2.96%	2.96%	3.07%	2.96%	3.13%	3.29%	3.49%	3.73%	4.01%
Council FRNs / Bonds	3.13%	3.17%	3.05%	2.98%	3.12%	2.97%	3.02%	3.24%	3.87%	4.11%
Council Credit Funds	4.84%	0.18%	2.14%	3.45%	2.38%	3.55%	5.09%	3.89%	3.99%	4.39%
Council Growth Funds	24.99%	3.55%	6.77%	6.97%	5.41%	-	-	-	-	-
Council Total Portfolio	3.10%	2.62%	3.01%	3.06%	2.85%	3.08%	3.22%	3.31%	3.62%	3.89%

The Investment portfolio had a strong month with 3.10% p.a. in April, exceeded the benchmark AusBond Bank Bill Index (+2.01% p.a.) by 109bps. The TCorpIM long term Growth fund pushed the returns with 1.81% net absolute for the month, fuelled by the rally in global markets.



CFS returned +4.84% annualised for the month.

Longer dated deposits continue to support the total portfolio performance.

Disclaimer

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NSW Council Performance & Rankings – March 2018

Client	Rank	Michael Chandra Currently or Previously Advised	1yr T/D Port. Return 31/03/2018	Wgt. Avg. T/D Yield 31/03/2018	Wgt Avg. Duration (days)	T/D Size	Dollar Diff. vs Avg. Return	Dollar Diff. vs Median Return
North Sydney	1	Yes	3.54	3.39	445	$59,000,000	$413,128	$472,000
Coffs	2	Yes	3.46	3.09	395	$109,750,000	$680,689	$790,200
Ku-ring-gai	3	Yes	3.40	3.27	680	$136,000,000	$761,896	$897,600
Georges River	4	Yes	3.30	3.17	718	$97,041,386	$446,601	$543,432
Liverpool	5	Yes	3.29	3.07	493	$133,000,000	$598,789	$731,500
Parramatta	6	Yes	3.18	2.96	587	$176,117,376	$599,182	$774,916
Goldenfields	6	Yes	3.18	3.00	607	$46,000,000	$156,500	$202,400
Wagga	8	Yes	3.12	2.92	474	$46,000,000	$128,900	$174,800
Queanbeyan-Palerang	8	Yes	3.12	3.02	498	$68,250,000	$191,248	$259,350
Camden	10	Yes	3.11	2.98	359	$114,700,000	$309,939	$424,390
Port Macquarie	10	Yes	3.11	3.01	436	$260,000,000	$702,565	$962,000
Nambucca	12	Yes	3.05	2.81	417	$22,802,299	$47,934	$70,687
Clarence Valley	13	Yes	2.95	2.96	658	$96,000,000	$105,809	$201,600
Leeton	14	Yes	2.94	2.91	292	$34,110,000	$34,184	$68,220
Orange	15	Yes	2.88	2.70	284	$92,108,614	$37,044	$128,952
Lachlan	15	Yes	2.88	2.83	231	$27,699,998	$11,140	$38,780
Blacktown	17	Yes	2.85	2.78	307	$402,000,000	$41,074	$442,200
Lismore	18	No	2.81	2.62	189	$48,000,000	-$14,296	$33,600
Sutherland	19	No	2.79	2.68	146	$102,200,000	-$50,878	$51,100
Waverley	20	No	2.78	2.73	245	$117,750,000	-$70,394	$47,100
Oberon	21	No	2.77	2.72	326	$11,800,000	-$8,234	$3,540
Albury	21	Yes	2.77	2.71	279	$113,066,563	-$78,901	$33,920
Hornsby	23	No	2.74	2.72	276	$128,118,080	-$127,840	$0
Gunnedah	23	No	2.74	2.69	234	$60,500,000	-$60,368	$0

Client	Rank	Michael Chandra Currently or Previously Advised	1yr T/D Port. Return 31/03/2018	Wgt. Avg. T/D Yield 31/03/2018	Wgt Avg. Duration (days)	T/D Size	Dollar Diff. vs Avg. Return	Dollar Diff. vs Median Return
Inverell	25	Yes	2.72	2.61	186	$52,000,000	-$62,287	-$10,400
Maitland	25	No	2.72	2.67	228	$81,000,000	-$97,024	-$16,200
Narrabri	27	No	2.70	2.59	160	$50,000,000	-$69,891	-$20,000
Inner West	28	No	2.69	2.64	168	$176,000,000	-$263,617	-$88,000
Willoughby	28	No	2.69	2.66	245	$123,079,857	-$184,352	-$61,540
Rous	30	No	2.68	2.64	219	$33,450,000	-$53,447	-$20,070
Wollongong	30	No	2.68	2.66	265	$104,030,000	-$166,222	-$62,418
Canada Bay	32	No	2.65	2.64	160	$86,045,308	-$163,299	-$77,441
City of Sydney	32	No	2.65	2.51	213	$340,000,000	-$645,261	-$306,000
Tamworth	32	No	2.65	2.57	229	$127,000,000	-$241,024	-$114,300
Richmond Valley	32	No	2.65	2.66	234	$21,000,000	-$39,854	-$18,900
Burwood	32	Yes	2.65	2.70	386	$41,500,000	-$78,760	-$37,350
Port Stephens	37	No	2.64	2.63	152	$31,350,000	-$62,632	-$31,350
Fairfield	37	No	2.64	2.60	326	$71,000,000	-$141,846	-$71,000
Kiama	37	No	2.64	2.58	106	$35,000,000	-$69,924	-$35,000
MidCoast	40	No	2.63	2.57	121	$131,621,559	-$276,119	-$144,784
Randwick	41	Yes	2.62	2.57	115	$33,500,000	-$73,627	-$40,200
Blue Mountains	42	No	2.56	2.56	121	$31,000,000	-$86,733	-$55,800
Upper Lachlan	43	No	2.54	2.52	115	$26,200,000	-$78,543	-$52,400
Cabonne	44	No	2.52	2.50	113	$39,500,000	-$126,314	-$86,900
Kempsey	45	No	2.48	2.49	60	$38,500,001	-$138,516	-$100,100
Carrathool	46	No	2.47	2.45	61	$12,855,943	-$47,539	-$34,711
# Portfolios	46	Avg	2.84	2.76	295	$91,035,804		
		Median	2.74	2.69	245	$69,625,000		

LEADING

ITEM NUMBER	13.14
SUBJECT	Council Membership to LGNSW and WSROC
REFERENCE	F2013/00131 - D05773300
REPORT OF	Finance Manager, Governance, Planning and Analysis

PURPOSE:

The purpose of this report is to consider Council's ongoing membership with LGNSW (Local Government NSW) and WSROC (Western Sydney Regional Organisation of Councils).

RECOMMENDATION

(a) **That** Council continue its membership with LGNSW (Local Government NSW).

(b) **That** Council consider its membership with WSROC (Western Sydney Regional Organisation of Councils) in accordance with either option b)i), b)ii) or b)iii) in paragraph 17 of this report.

(c) **That** Council investigate expanding its procurement sources to include SSROC (Southern Sydney Regional Organisation of Council's) procurement services.

(d) **Further that,** Council investigate other sources to deliver Waste Management and City Strategy initiatives.

BACKGROUND

1. Council officers were requested to review Council's ongoing membership with LGNSW and WSROC, with any changes to the ongoing membership of these organisations to coincide with the anniversary of our membership renewal.

2. It is noted that other Councils have undertaken, or are considering, a similar review of their membership to these organisations.
3. Membership to LGNSW currently costs Council $76,096 per annum and is due for renewal in June 2018.
4. Membership to WSROC currently costs Council $93,500 per annum and is due for renewal in July 2018.

LGNSW (Local Government NSW)

5. Council is a foundation member of LGNSW, originally known as the Municipal Association, which came into existence in the early 1880's.
6. The <u>benefits</u> of being a member of LGNSW include:
    - Having access to and support of a peak body for NSW local government

- Coordination and support for responding to issues as a collective on behalf of Councils
- Provision of mentoring and professional development for Councillors and staff
- Ongoing updates and notifications of activities both within and impacting on local government
- Advocacy arm for NSW local government
- Research, submission and report writing and media activities
- Provision of advice on local government policy and legal matters
- Provision of a range of services including industrial relations, legal advice, management solutions, learning solutions, mentoring for Mayor and Councillors, Councillor support, local government procurement & sustainable choice, grants, service awards and member's discounts on various services

7. The challenges associated with continuing membership include:

- Cost of membership - currently costs Council $76k per annum
- Councillors inability to attend some training and seminars due to course availability
- Councillors views in conflict with sector policy stance facilitated by LGNSW

WSROC (Western Sydney Regional Organisation of Councils)

8. Council is a foundation member of WSROC, which came into existence in 1973.

9. The benefits of being a member of WSROC include:

- Access to a range of services including advocating on key policy issues relevant to western Sydney, joint procurement activities, joint regional projects that benefit member Councils, business improvement, strategic leadership, research and partnerships, preparation of submissions, reports and media releases

- Purchasing through WSROC provided contracts

  (Note – see point 10 below which identifies a reduced level of benefits from WSROC procurements as a result of the planned exit from traditional procurement activities)

- WSROC advocating on Council's behalf on a number of issues including urban heat mitigation, economic development, GWS infrastructure and transport networks, etc.

- Staff participation in specialist groups established by WSROC and outcomes that benefit Council, these include NSW State Governments Better Waste and Recycling program (BWAR), LED street lighting initiatives, energy efficiency programs and Western Sydney's urban heat strategy forums.

10. The challenges associated with continuing membership with WSROC include:

- Cost of membership – currently costs Council $93,500 per annum

- WSROC's demonstrated reduction in traditional procurement activities resulting in increases to Council's costs associated with additional

contract administration and a potential loss of purchasing power. It is estimated that this will result in a drop in Council's spend through WSROC contracts from $6.8m to $500k, resulting in a drop in discounts/rebates received from $136,000 to $10,000

- Parramatta's positioning as Sydney's "Central City" raises questions about the alignment of WSROC as a "Western Sydney" organization and what conflicts this may raise for WSROC members in actively advocating on behalf of City of Parramatta Council as the "Central City"
- Lack of visibility as to how Parramatta as the "Central City" is taken into consideration in the future of WSROC

Alternative Representative Groups

11. Council has been approached - as have other WSROC Councils - to join SSROC (Southern Sydney Regional Organisation of Councils), which is a similar type organization to WSROC, but focuses on Councils in southern Sydney. SSROC undertakes similar advocacy activities to that of WSROC and also has a strong procurement element to its operations. Council may wish to consider this or other potential membership opportunities with other ROCs.
12. Other significant representative groups that Council is currently a member of include Sydney Business Chamber – Western Sydney and Sydney Business Connection. Both are strong advocates for economic growth, innovation and major infrastructure initiatives, business engagement, training & development and marketing in western Sydney and the Parramatta area.

MOVING FORWARD

13. As can be seen from the above comparison LGNSW and WSROC provide a range of services many of which are similar in nature including:
    - advocacy on local and regional issues
    - procurement services
    - media activities
    - major projects that benefit a broad range of members
    - local government industry related research
14. Over time there has been a continual increase in the overlapping of the services provided by LGNSW and WSROC, to the point where they currently both provide very similar services for City of Parramatta Council.
15. WSROC has indicated it is withdrawing from its traditional procurement activities and will refer member councils to LGNSW's procurement arm – LG Procurement (LGP). Council also has access to the procurement services of the State Government Contracts Board and can investigate also accessing the procurement services of SSROC.
16. WSROC has a much more local focus whilst LGNSW has a state wide industry focus. Both have supported the needs of Parramatta at various times.
17. Based on:

i) the increasing overlap of the two organisations, LGNSW and WSROC

ii) the planned withdrawal of WSROC from the traditional procurement activities, and

iii) the annual membership fee being cheaper for LGNSW

it is recommended that Council:

a) Continue its membership with LGNSW

b) Consider its continued membership with WSROC on the basis of:

   i) Continuing its membership, OR

   ii) Continuing its membership for one year only at which time Council review its ongoing association with WSROC, OR

   iii) Ceasing its membership at the end of the current 2018 term

c) investigate expanding Council's procurement sources to include SSROC's procurement services and,

d) Investigate other sources to deliver waste management and City Strategy initiatives, which previously involved WSROC.

CONSULTATION & TIMING

18. On the 7 March 2018, the President and CEO of WSROC provided Council a presentation reviewing the previous year's activities, the year ahead and WSROC's role, purpose and vision.

19. Council's Executive Team and Procurement Section have been consulted in the preparation and recommendations contained in this report.

FINANCIAL IMPLICATION FOR COUNCIL

20. The future net annual dollar costs to Council for being a member of WSROC and LGNSW are estimated respectively to be $83,500 and $76,000. The costs of both these memberships is currently being provided for in Council's annual operating budget.

Alistair Cochrane
Acting Chief Financial Officer

Tim Butler
Chief Operating Officer

ATTACHMENTS:
There are no attachments for this report.

REFERENCE MATERIAL

LEADING

ITEM NUMBER	13.15
SUBJECT	Minutes of the Committee to Review the decisions of the Administrator
REFERENCE	F2017/02813 - D06121963
REPORT OF	Service Manager Governance

PURPOSE:

To inform Council of the key discussion points of the meeting of the Committee established to review decisions of the Administrator held on Tuesday 8 May 2018.

RECOMMENDATION

That the minutes of the meeting of the Committee to Review the Decisions of the Administrator held on the 8 May 2018 be received and noted.

BACKGROUND

1. At its meeting of 9 October 2017, Council resolved to establish a Committee of Councillors to review the actions, progress and chan

2. The purpose of this Committee is to review the actions undertaken by Council under the NSW Government appointed Administrator and produce a report to Council recommending which actions may require independent review.

3. The Committee had its first meeting on the 13 March 2018 and its second meeting on the 17 April 2018. Minutes of these two meetings were reported to Council at the 14 May 2018 Council Meeting.

4. The Committee met again on the 8 May 2018 and this report provides a summary of the key discussion points of this meeting for Council's information and consideration. The minutes of this meeting are provided at **Attachment 1**.

ISSUES/OPTIONS/CONSEQUENCES

5. Prior to the committee meeting held on the 8 May 2018, the Committee members were provided with background information on the following matters as requested:

    i. Boarding Houses in Parramatta LGA
    ii. Current status of Boarding Houses in the City of Parramatta LGA
    iii. Review of Council policies, specifically relating to the following-
        - Delegations Policy
        - Parking Enforcement Policy
        - Interaction Between Councillors and Staff Policy
    iv. Review of Aboriginal and Torres Strait Islander (ATSI) Advisory Committee
    v. Audit and Risk Committee Revised Charter
    vi. External Community Sponsorship Requests

vii. Review of Council's Planning Proposal and Voluntary Planning Agreement Processes
viii. Experience and Discovery Centre Property Report.

6. After assessment of the above matters, the Committee recommended the following action be undertaken in relation to each item;

Boarding Houses in Parramatta LGA & Current status of boarding houses in Parramatta LGA
Committee's recommendation • **That** no further action be undertaken in relation to reviewing the decisions of the Administrator relating to this matter. • **Further, that** Council write a follow up letter to the DPE regarding the amending of the SEPP.

Review of Council Policies
Committee's recommendation • **That** no further action be undertaken in relation to reviewing the decision of the Administrator relating to the Delegations Policy; • **That** a copy of the report to Council relating to the CEO's delegations and a copy of the Instrument of Delegation be forwarded to Clrs Barrak, Pandey & Wearne; • **That** a Councillor workshop be held within 6 weeks to discuss the Parking Enforcement Policy, specifically dealing with the capacity to resurrect what was once a review committee for fines, whether it is an option still available to Council and what are the implementation issues and costs that would be associated with it; • **Further, that** a Councillor workshop be held within 6 weeks to discuss the Interaction Between Councillors and Staff Policy to review how strictly this policy is being applied within a social setting. The Committee would also like to see this policy reference the service level agreement between Councillors & Staff that ensures Councillors requests will be acknowledged and responded to within specific timeframes.

Review of Aboriginal and Torres Strait Islander (ATSI) Advisory Committee
Committee's recommendation • **That** no further action be undertaken in relation to reviewing the decision of the Administrator relating to this matter.

Audit & Risk Committee Revised Charter
Committee's recommendation • **That** no further action be undertaken in relation to reviewing the decisions of the Administrator relating to this item; • **Further, that** notice of the next meeting of the Audit & Risk Committee be forwarded to Clr Pandey and any other interested Councillors.

Review of Council's Planning Proposal and Voluntary Planning Agreement
Committee's recommendation • **That** no further action be undertaken in relation to reviewing the decision of the Administrator relating to this item; • **Further, that** the ongoing work relating to this review process is noted.

External Community Sponsorship Requests
Committee's recommendation • **That** no further action be undertaken in relation to reviewing the decision of the Administrator relating to this item; • **Further, that** a workshop be organised to commence the review of the three (3) policies and the policy documents be circulated to all members of the Committee.

Experience and Discovery Centre Property Report
Committee's recommendation • **That** this item be deferred to the next meeting of the Committee • **Further, that** the report and background information relating to the sale of the Museum of Applied Arts and Sciences (Powerhouse Museum) be brought to the next Committee meeting for consideration.

CONSULTATION & TIMING

7. There was no external consultation undertaken in relation to this report.

FINANCIAL IMPLICATION FOR COUNCIL

8. There are no financial or legal implications associated with this report.

NEXT STEPS AND CONCLUSION

9. The next meeting of the Committee will be held on the **23 July 2018** and will take the form of a Councillor Workshop where all Councillors will be invited to attend.

10. At this meeting, the Committee will give consideration to the following shortlisted matters;
    i. Review of the Parking and Enforcement Policy
    ii. Review of the Interaction with Councillors Policy
    iii. Review of the Grants and Donations Policy, Sponsorship Policy and Social Investment Funding Policy.
    iv. Consideration of the report and background information relating to the sale of the Museum of Applied Arts and Sciences (Powerhouse Museum).

Towela Mbirimi
Service Manager Governance

Lisa Oldridge
Manager Governance & Risk

Tim Butler
Chief Operating Officer

Sue Coleman
Acting Chief Executive Officer

ATTACHMENTS:

1⇩	Draft Minutes of the Committee to Review the decisions of the Administrator held on the 8 May 2018	8 Pages

COMMITTEE TO REVIEW THE DECISIONS OF THE ADMINISTRATOR

MINUTES

Tuesday, 8 May 2018 at 6.00pm

LEVEL 12 BOARDROOM, 126 CHURCH STREET,

PARRAMATTA

MEMBERS OF THE COMMITTEE

Lord Mayor Andrew Wilson	Clr Steven Issa
Clr Michelle Garrard	Clr Benjamin Barrak
Clr Lorraine Wearne	Clr Sameer Pandey
Clr Pierre Esber	

STAFF

Tim Butler	Chief Operating Officer (Convenor)
Towela Mbirimi	Service Manager Governance (Minute Taker)

AIMS AND OBJECTIVES

A Committee to review the actions, progress and changes made by Council during the period of Administration and determine which actions require independent review.

AGENDA

1. **Welcome and Introductions**

Councillors

- Clr Benjamin Barrak
- Clr Sameer Pandey
- Clr Lorraine Wearne

Staff

- Tim Butler – Chief Operating Officer
- Towela Mbirimi – Service Manager Governance (Minute Taker)

2. **Apologies**

- Lord Mayor Wilson

- Clr Steven Issa
- Clr Pierre Esber
- Clr Michelle Garrard

3. **Conflict of Interest Declarations**

Nil

4. **Confirmation of Minutes**

Minutes of Meeting held on Tuesday, 17 April 2018 -**Attachment 1**.

5. **Business arising from the previous meeting**

i. The Committee undertook a review of the resolutions that had been shortlisted for consideration at its second meeting. The Committee had the opportunity to assess the council report items and consider the background information provided to the Administrator. After assessment of the reports and consideration of the updates, the Committee made recommendations for each item as listed in the tables below.

1. Boarding Houses in Parramatta LGA

Council Meeting Date	Item No	Report Title	Committee's Comments
28 November 2016	8.1	Boarding Houses in Parramatta LGA	Provide a list of changes to Council's Policy that were made during the period of administration? Are Boarding Houses a permissible use in R2 Zone?
28 November 2016	8.3	Current Status of Boarding Housing in the City of Parramatta LGA	
Response to Committee's comments By way of background, the former Parramatta City Council, had been seeking to make Boarding Houses a prohibited land use in the R2 zone. They are a permissible land use under the provision of the standard LEP template and the State Environmental Planning Policy (Affordable Rental Housing) 2009. The state government did not grant council an exemption to the SEPP and therefore the Council sought to have the SEPP amended, to ensure that Boarding Houses were of a scale similar to a dual occupancy. The report to Council in December 2016 reported the Department of Planning did not support this approach, but it recommended that Council should continue to at least ensure that the SEPP was amended to ensure that Boarding Houses were located on suitable sites in the R2 zone. This report to council and the resolution was about amending the SEPP, and was not about Council policy. Council is still awaiting a response from the DPE on this matter (we last wrote to them in early March 2018). The reason for the delay has not been explained, however it may be to do with the fact that the car parking provisions for boarding houses within the ARHSEPP are currently being reviewed by the DPE. A web link on the DPE's website to these changes is provided here:			

http://www.planning.nsw.gov.au/Policy-and-Legislation/Housing/Affordable-Rental-Housing

Land Use Planners did not see the need to lodge a submission on the matter because the changes they were proposing on car parking rates was consistent with Council's position from a Council report (Item 7.11) from the 24 August 2015 Council meeting where council resolved to resolved: "*parking rates for all boarding houses at 0.5 car spaces per room*".

Are Boarding Houses a permissible use in R2 Zone?

Yes. ***boarding houses*** are permissible within the R2 Low Density Residential zone, as per the NSW Standard Instrument Order (it is a mandatory permissible use in this zone which Councils cannot remove) and the SEPP.

Committee's recommendation

- **That** no further action be undertaken in relation to reviewing the decisions of the Administrator relating to this matter;
- **Further, that** Council write a follow up letter to the DPE regarding the amending of the SEPP.

2. Review of Council Policies

Council Meeting Date	Item No	Report Title	Committee's Comments
28 November 2016 & 10 July 2017	11.1 & 11.24	Review of Council Policies Review of Council Policies	Provide background information on the following policies. Specifically, the Committee would like to know; a. What the previous policy was; b. What the current policy is; & c. The changes effected by the Administrators decision highlighted. d. What consultation was undertaken? The policies are; 1) Delegations policy 2) Parking Enforcement policy 3) Interaction between Councillors and Staff Policy

Response to Committee's comments

I. **Delegations Policy**
The policy was last adopted by Council in July 2009, hence it was overdue for review. It required rebranding and it was also a pre-merger policy. The changes were also to ensure staff were more aware of and acknowledged their delegations. This is a staff related policy and deals with the CEO's sub-delegations to staff.

II. **Parking Enforcement Policy**
The changes to this policy involved the following;

- Adapting the policy to the new format including new Council name and logo to project a consistent, modern and professional image of Council;
- Update the policy with new legislation to ensure the correct legislative references are used;
- Updating of the Penalty Review Process as there were two methods for representations to be assessed,1. Via the City of Parramatta Council Penalty Review Panel or 2. Via the Office of State Revenue's State Debt Recovery Office (SDRO). The Proposed change is to remove the option of review via CoPC with all representations to be adjudicated via the SDRO.
- Rollback Kerb's – the policy had a list of streets which quickly became outdated relevant to allowing vehicles to park on the adjoining nature strips without fear of enforcement. With the new LGA boundaries, several suburbs have been previously constructed with increased use of rollback kerbs on narrow streets requiring vehicles to park partially on the nature strips to avoid blocking the vehicle access/egress. The Policy was further enhanced that such parking cannot occur if there is signage prohibiting such parking. This now allows, were circumstances are identified and justified the limiting of such parking if there is a detrimental effect to public assets or infrastructure.

III. Interaction between Councillors and Staff Policy

Minor amendments of an organisational nature (change in titles, name of organisation). The Interaction policy was amended to reflect current processes/practice. Amendments were made to strengthen procedure of staff and Councillor interaction especially regarding planning and regulatory functions.

Consultation for all three (3) policies involved reviewing other Council's Policies, one on one meetings with selected key departments and public exhibition of the proposed documents.

Committee's recommendation

- **That** no further action be undertaken in relation to reviewing the decision of the Administrator relating to the Delegations Policy;
- **That** a copy of the report to Council relating to the CEO's delegations and a copy of the Instrument of Delegation be forwarded to Clrs Barrak, Pandey & Wearne;
- **That** a Councillor workshop be held within 6 weeks to discuss the Parking Enforcement Policy, specifically dealing with the capacity to resurrect what was once a review committee for fines, whether it is an option still available to Council and what are the implementation issues and costs that would be associated with it;
- **Further, that** a Councillor workshop be held within 6 weeks to discuss the Interaction with Councillors Policy to review how strictly this policy is being applied within a social setting. The Committee would like to see this policy reference the Service Level Agreement between Councillors & Staff that ensures Councillors requests will be acknowledged and responded to within specific timeframes.

3. Review of Aboriginal and Torres Strait Islander (ATSI) Advisory Committee

Council Meeting Date	Item No	Report Title	Committee's Comments
13 February 2017	11.4	Review of Aboriginal and Torres Strait Islander (ATSI) Advisory	The Committee requested Staff contact Clr Phil Bradley to ascertain what information he would like to be

		Committee	considered.
Response to Committee's comments At the request of the Committee, Clr Bradley was consulted to ascertain what information he would like the Committee to consider. Clr Bradley advised that he supported all of the ATSIAC decisions to the best of his knowledge, but needed to know if there was any decision or decisions that the Committee was challenging. Clr Bradley was advised there were no decisions being challenged by the Committee and therefore, there is no further action required for this matter.			
Committee's recommendation • **That** no further action be undertaken in relation to reviewing the decision of the Administrator relating to this matter.			

4. Audit & Risk Committee Revised Charter

Council Meeting Date	Item No	Report Title	Committee's Comments
10 July 2017	11.26	Audit & Risk Committee Revised Charter	The Committee would like to compare the previous charter with the current charter, with the changes highlighted.
Response to Committee's Comments The revisions of the Charter were to allow for several changes including; • Permitting the Administrator to become a member of the Audit & Risk Committee; • Change the quorum so that it does not need to include a Councillor; and • Allow for the appointment of potential independent community representatives from the NSW Government Panel of Prequalified members in conjunction with an Expression Of Interest process.			
Committee's recommendation • **That** no further action be undertaken in relation to reviewing the decision of the Administrator relating to this item; • **Further, that** notice of the next meeting of the Audit & Risk Committee be forwarded to Clr Pandey and any other interested Councillors.			

5. Review of Councils Planning Proposal and Voluntary Planning Agreement Processes

Council Meeting Date	Item No	Report Title	Committee's Comments
10 July 2017	11.2	Review of Council's Planning Proposal and Voluntary Planning Agreement Processes	Has this review been finalised? The Committee would like to view a full copy of the report, including any supporting attachments.
Response to Committee's Comments The review has been occurring through several separate processes. Currently, the Land Use team are reviewing our planning proposal system which is mainly looking at internal processes. There is also separate work underway on the VPA Policy. A draft Planning			

Agreements Policy was endorsed by Council for public exhibition in June 2017. The exhibition was undertaken between August and October 2017. A number of information sessions were facilitated by Council for developers and industry specialists during the exhibition period. Following public exhibition, Council engaged SGS Economics & Planning to undertake a further review of the draft Policy having regard to industry best practice and matters raised in submissions. Council officers are proposing to report the outcomes of the public exhibition and revised draft policy to Council in late May 2018.
Committee's recommendation • **That** no further action be undertaken in relation to reviewing the decision of the Administrator relating to this item; • **Further, that** the ongoing work relating to this review process is noted.

6. External Community Sponsorship Requests

Council Meeting Date	Item No	Report Title	Committee's Comments
11 July 2016	4.4	External Community Sponsorship Requests	What actions were undertaken following the Administrations resolution on this item?

Response to Committee's comments

The action to develop a sponsorship, donations and grants policy that guides the principles of administration and assessment for funding opportunities provided by the City of Parramatta Council, including those within the Office of the Administrator and Lord Mayor came about following the Administrator's awareness that Council was being asked to make a number of ad hoc decisions related to sponsorship and donations without reference to established criteria. Council had a Community Grants Program, but no endorsed policy for how the program was administered. Hence the request for policies to be developed for grants, donations and sponsorship.

The decision was actioned through the development of three policies – Grants and Donations Policy, Sponsorship Policy and Social Investment Funding Policy. The drafts of those policies were endorsed for public exhibition on 26 September 2016. The results of public exhibition and final versions of the policies were then presented to Council at its meeting of 12 December 2016.

These policies have now been used to administer all of Council's Grant programs and have provided the framework for replying to unsolicited requests for donation and/or sponsorship.

At its meeting of 18 December 2017, Council resolved to amend the Grants and Donations Policy to have a Councillor Grants Committee participate in the assessment process for the 2018 Community Grants round.

The decision of Council from 26 September 2016 indicates that any financial implications of the establishment of the new funding policies be covered by moving past budgets from Councillor donations into the Quarterly Grants Program budget and the sponsorship budgets managed within the Directorate of City Identity, Experience and Engagement.

The suite of Community Funding Policies are reviewed every two years, with the next review being due in December 2018.

Committee's recommendation • **That** no further action be undertaken in relation to reviewing the decision of the Administrator relating to this item; • **Further, that** a workshop be organised to commence the review of the three (3) policies and the policy documents be circulated to all members of the Committee.

7. Experience and Discovery Centre Property Report

Council Meeting Date	Item No	Report Title	Committee's Comments
10 July 2017	12.11	Experience and Discovery Centre Property Report	Check if these reasons were in the original report. The Committee would like to review a full copy of the report including any supporting documentation.

Response to Committee's comments

On 10 October 2016, the Administrator considered a report (Item 8.8) regarding the integration and co-location of the existing Heritage and Visitor Centre, Discover Centre and Experience Centre into a consolidated single location at 5 Parramatta Square.

Following the NSW State Government confirmation that a new state cultural facility, the MAAS, to be located on the Parramatta River foreshore between the Lennox and Barry Wilde Bridges, it was considered that the MAAS had the potential to achieve the City's need for a world-class visitor attraction and cultural offering on the river, prompting Council to re-consider its role in providing this function through the proposed Discovery Centre incorporated into the Riverside Towers.

At the time that the decisions regarding separate locations for the Discovery Centre and Experience Centre were made, the design and ownership of 5PS, nor the proposed relocation of the MAAS to the riverfront were known or envisaged.

The consolidation of these facilities into a single facility sought:

- The establishment of an iconic and accessible Council cultural facility taking advantage of the Council owned space to be constructed as part of 5PS;
- Avoid capital expenditure and ongoing recurring costs which will free-up funds that can be allocated to other community uses;
- Recognise the role that the proposed MAAS will play as an iconic cultural facility on the riverfront; and
- Achieve an overall better outcome for the community.

On 10 July 2017, the Administrator endorsed the design for the 5 Parramatta Square development, incorporating the consolidated facilities into the site (Item 10.14).

Committee's recommendation

- **That** this item be deferred to the next meeting of the Committee
- **Further, that** the report and background information relating to the sale of the Museum of Applied Arts and Sciences (Powerhouse Museum) be brought to the next Committee meeting for consideration.

6. General Business

7. **Next Meeting**

The next meeting will be held within the next 6 weeks.

LEADING

ITEM NUMBER	13.16
SUBJECT	Dates and Location of Council Meetings for July - December 2018
REFERENCE	F2004/07851 - D06045137
REPORT OF	Council Secretariat and Policy Officer

PURPOSE:

To determine Council Meeting dates and locations from 9 July 2018 to 10 December 2018.

RECOMMENDATION

(a) **That** the starting time for Council Meetings be 6.30pm.

(b) **That** the location of all Ordinary Council Meetings from 9 July 2018 to 10 December 2018 inclusive, be held in the Cloister Function Rooms at St Patrick's Cathedral, 1 Marist Place, Parramatta.

(c) **That** where only one meeting is scheduled in a month, it be held on the second Monday of the month. Where two meetings are scheduled for a month, they be scheduled for second and fourth Mondays of that month.

(d) **That** in accordance with Section 365 of the Local Government Act 1993, Council hold Ordinary Council Meetings for the period 9 July 2018 to 10 December 2018 inclusive on the following dates:

Monday, 9 July 2018
Monday, 23 July 2018
Monday, 13 August 2018
Monday, 27 August 2018
Monday, 10 September 2018
Monday, 24 September 2018
Monday, 8 October 2018
Monday, 29 October 2018
Monday, 12 November 2018
Monday, 26 November 2018
Monday, 10 December 2018
Monday 17 December 2018

(e) **That** additional Ordinary Council Meetings be held on the fourth Monday of the month until December 2018.

(f) **Further, that** the starting time, location and dates for Ordinary Council Meetings outlined in a), b) and d) above be widely publicised via normal communication channels used by Council in accordance with Clause 232 of the Local Government (General) Regulations 2005.

BACKGROUND

1. Each year Council adopts a meeting schedule for the following year. Council at its meeting on 13 November 2017 adopted Council Meeting dates until June 2018.

2. In accordance with Council's adopted meeting cycle, the Council meets on the 2nd Monday of each month.

3. Following consultation with the Lord Mayor, it is recommended that Council consider holding two (2) Council Meetings a month.

ISSUES/OPTIONS/CONSEQUENCES

4. The election of the Deputy Lord Mayor will take place during the Ordinary Council Meeting on Monday, 10 September 2018.

5. The 2018 Local Government NSW Annual Conference (generally well attended by Councillors) will be held in Albury from Sunday 21 October to Tuesday 23 October 2018. This creates a scheduling conflict for many Councillors who are likely to be planning to attend the Conference.

6. Accordingly, it is recommended the second Council Meeting for October be scheduled on 29 October 2018 to accommodate attendances at the *Local Government NSW Annual Conference*.

7. Due to the proximity of Christmas, Councillors may prefer to hold the meeting on 3 or 17 December 2018 rather than 24 December 2018 which is the fourth Monday on the month.

8. Council has historically moved into recess over Christmas/New Year for a period between the last meeting in December and the first meeting in February the following year being 11 February 2019. A report will be placed before Council at the November 2018 Council Meeting suggesting that delegated authority be given to the Lord Mayor and Chief Executive Officer to deal with matters of an urgent nature during this period.

FINANCIAL IMPLICATION FOR COUNCIL

9. The costs associated with holding meetings such as hall hire, provision of technology and microphones, security and catering are provided for in existing budgets.

CONCLUSION

10. That Council adopt the proposed dates for Council Meetings to be held in the second half of 2018 as referred to in this report.

Joy Bramham
Council Secretariat and Policy Officer

Tim Butler
Chief Operating Officer

Alistair Cochrane
Acting Chief Financial Officer

ATTACHMENTS:
There are no attachments for this report.

LEADING

ITEM NUMBER	13.17
SUBJECT	Public exhibition of the Councillors' Expenses and Facilities Policy
REFERENCE	F2018/01312 - D06125261
REPORT OF	Chief of Staff

PURPOSE:

To seek Council's endorsement for the public exhibition of the Councillors' Expenses and Facilities Policy.

RECOMMENDATION

(a) **That** the draft Councillors' Expenses and Facilities Policy (**Attachment 1**) be endorsed by Council for public exhibition.

(b) **That** the policy be placed on public exhibition for no less than 28 days, and submissions received for a period of 42 days from the initial advertising date in accordance with Section 253 of the *Local Government Act 1993.*

(c) **That** copies of the policy be made available via Council's library network and contact centres, and on Council's website.

(d) **Further, that** following public exhibition, the revised Councillors' Expenses and Facilities Policy, together with a summary of public submissions, be referred back to Council for consideration.

BACKGROUND

1. Under the *Local Government Act 1993* (the Act), City of Parramatta Council (Council) is required to prepare, exhibit and adopt a policy governing the payment of expenses and provision of facilities to the Lord Mayor and Councillors.

2. Under section 252 of the Act, Councillor expenses and facilities policies must be adopted within 12 months of the commencement of the new Council term.

3. Once exhibited and adopted, the policy must be made publicly available on the Council website.

4. Copies of the policy are no longer required to be provided to the Office of Local Government.

ISSUES/OPTIONS/CONSEQUENCES

5. The proposed changes to the policy align with the provisions of the Act, the *Local Government Regulation 2005* and the guidelines set out by the Office of Local Government.

CONSULTATION & TIMING

6. Under the Act, this policy is to be reviewed and adopted by Council within 12 months of the term of a new Council, in accordance with the provisions of Section 252 of the Act.

7. The draft Policy will be placed on Public Notice in June 2018, accompanied by a table summarising the proposed revisions.

8. During this period, copies of the draft Policy will be made publicly available in Council's library network and contact centres, and on Council's website.

9. Following a minimum 28-day period for public submissions, the proposed Policy will be submitted to Council, together with a summary of public submissions, for adoption or further action in August 2018.

10. Consultation on the existing Policy and proposed changes took place with the Lord Mayor, Councillors and Council's Executive Team through a strategic workshop.

11. Policies for other NSW Councils were also considered in the review process.

FINANCIAL IMPLICATION FOR COUNCIL

12. The financial implications will be reported to Council as part of the report on the Policy in August 2018.

Justin Mulder
Chief of Staff – Executive Office

Sue Coleman
Acting Chief Executive Officer

ATTACHMENTS:

1⇩ DRAFT Councillors' Expenses and Facilities Policy May 2018 19 Pages

REFERENCE MATERIAL

Councillors' Expenses and Facilities Policy

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Document History
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Owner: Manager Governance and Risk	Area: Governance and Risk	POL No: 217
Date of Commencement: 13/11/2017	Approval Authority: Council	Date Approved: 13/11/2017
Amendment 9	Date of Next Review: By September 2018	Review: 4 years

Policy Summary

This policy enables the reasonable and appropriate reimbursement of expenses and provision of facilities to Councillors to help them undertake their civic duties.

It ensures accountability and transparency, and seeks to align Councillor expenses and facilities with community expectations. Councillors must not obtain private or political benefit from any expense or facility provided under this policy.

The policy has been prepared in accordance with the Local Government Act 1993 (the Act) and Local Government (General) Regulation 2005 (the Regulation), and complies with the Office of Local Government's Guidelines for the payment of expenses and provision of facilities to Mayors and Councillors in NSW.

The policy sets out the maximum amounts council will pay for specific expenses and facilities. Expenses not explicitly addressed in this policy will not be paid or reimbursed.

The main expenses and facilities are summarised in the table below. All monetary amounts are exclusive of GST.

Expense or facility	**Maximum amount**	**Frequency**
General travel expenses	$5,000 per Councillor $6,500 for the Lord Mayor	Per year
Interstate and overseas travel expenses	$2,000 per Councillor for interstate All overseas travel to go to a full Council meeting for approval	Per year
Accommodation and meals	As per the *NSW Crown Employees (Public Service Conditions of Employment) Reviewed Award 2009*, adjusted annually	Per meal/night
Professional development, including Conferences and Seminars	$5,000 per Councillor	Per year
Non-Council Functions and Other Events	$1,000 per Councillor	Per year
ICT expenses	$4,000 per Councillor in the first year of the council term $2,000 per Councillor every year after	Per year
Carer expenses	$4,000 per Councillor	Per year

Home office expenses	$300 per Councillor	Per year
Postage stamps	1,500	Per year
Christmas or festive cards	200 per Councillor 600 for the Lord Mayor	Per year
Expense or facility	**Maximum amount**	**Frequency**
Access to facilities in a Councillor common area and access to shared private work spaces/offices as per Clause 9.1	Provided to all Councillors	Not relevant
Council vehicle, fuel card and toll road tag supplied for official use to the Lord Mayor	Provided to the Lord Mayor	Not relevant
Reserved parking space at council's offices for the Lord Mayor's council-issued vehicle and parking spaces sufficient to allow Councillors to park when in the office or at council meetings.	Provided to the Lord Mayor and Councillors	Not relevant
Furnished office incorporating a computer configured to council's standard operating environment, telephone and meeting space	Provided to the Lord Mayor	Not relevant

Additional costs incurred by a Councillor in excess of these limits are considered a personal expense that is the responsibility of the Councillor.

Councillors must provide claims for reimbursement within three months of an expense being incurred. Claims made after this time can only be approved by the Lord Mayor and Chief Executive Officer (CEO).

Detailed reports on the provision of expenses and facilities to Councillors will be published publicly in accordance with the requirements of the Local Government Act 1993 (NSW).

PART A – INTRODUCTION

1. Introduction

1.1. The provision of expenses and facilities enables Councillors to fulfil their civic duties as the elected representatives of City of Parramatta Council.

1.2. The community is entitled to know the extent of expenses paid to Councillors, as well as the facilities provided.

1.3. The purpose of this policy is to clearly state the facilities and support that are available to Councillors to assist them in fulfilling their civic duties.

1.4. Council staff are empowered to question or refuse a request for payment from a Councillor when it does not accord with this policy.

1.5. Expenses and facilities provided by this policy are in addition to fees paid to Councillors. The minimum and maximum fees a council may pay each Councillor are set by the Local Government Remuneration Tribunal as per Section 241 of the Act and reviewed annually. Council must adopt its annual fees within this set range.

2. Policy objectives

2.1. The objectives of this policy are to:

- ensure accountability and transparency in the reasonable and appropriate reimbursement of expenses incurred by Councillors in the course of discharging their civic duties
- ensure that the facilities provided to Councillors to carry out their civic duties are reasonable, are at a standard appropriate to their professional role as a Councillor and meet community expectations
- promote a diversity of representation
- fulfil council's statutory responsibilities.

3. Principles

3.1. Council commits to the following principles:

- **Proper conduct**: Councillors acting lawfully and honestly, exercising care and diligence in carrying out their functions
- **Direct expenses**: Providing for Councillors to be reimbursed for expenses directly incurred as part of their role as a Councillor.
- **Participation, equity and access**: Enabling people from diverse backgrounds, underrepresented groups, those in carer roles and those with special needs to serve as a Councillor.

- **Appropriate use of resources**: Providing clear direction on the appropriate use of council resources in accordance with legal requirements and community expectations.
- **Accountability and transparency**: Clearly stating and reporting on the expenses and facilities provided to Councillors.

4. Definitions

The following definitions apply throughout this policy.

All monetary amounts stated in the policy are exclusive of GST.

Term	**Definition**
Accompanying person	Means a spouse, partner or de facto or other person who has a close personal relationship with or provides carer support to a Councillor
Appropriate refreshments	Means food and beverages provided by council to support Councillors
Act	Means the Local Government Act 1993 (NSW)
Annual Conference	Means Local Government NSW Annual Conference
Clause	Unless stated otherwise, a reference to a clause is a reference to a clause of this policy
Code of Conduct	Means the Code of Conduct adopted by council
Councillor	Means a person elected or appointed to civic office as a member of the governing body of council, including the Lord Mayor
CEO	Means the Chief Executive Officer/General Manager of council and includes their delegate or authorised representative
ICT	Means Telecommunications and Information Communications and Technology
Incidental personal use	Means use that is infrequent and brief and use that does not breach this policy or the Code of Conduct
Maximum limit	Means the maximum limit for an expense or facility provided in the text
NSW	New South Wales
Official business	Means functions that the Lord Mayor or Councillors are required or invited to attend to fulfil their legislated role and responsibilities for council or result in a direct benefit for council and/or for the local government area, and includes but is not limited to: • meetings of council and committees of the whole • meetings of committees facilitated by council • meetings, functions, workshops and other events to which attendance by a Councillor has been requested or approved by council • any activity in the service of the Council approved by CEO, in consultation with the Lord Mayor.
Professional development	Means a seminar, conference, training course or other development opportunity relevant to the role of a Councillor or the Lord Mayor
Regulation	Means the Local Government (General) Regulation 2005 (NSW)

Year	Means the financial year, that is the 12 month period commencing on 1 July each year

5. Private or political benefit

5.1. Councillors must not obtain private or political benefit from any expense or facility provided under this policy.

5.2. Private use of council equipment and facilities by Councillors may occur from time to time. Such incidental private use is not subject to a compensatory payment back to council. For example, telephoning home to advise that a council meeting will run later than expected.

5.3. Councillors should avoid obtaining any greater private benefit from council than an incidental benefit. Where there are unavoidable circumstances and more substantial private use of council equipment of facilities does occur, Councillors must reimburse council.

5.4. Campaigns for re-election are considered to be a private interest. The following in connection with a re-election campaign are considered to be private to Councillors:

- production of election material
- use of council resources for campaigning
- use of official council letterhead, publications, websites or services for political benefit
- fundraising activities of political parties or individuals, including political fundraising events

PART B – EXPENSES

6. General expenses

6.1. All expenses provided under this policy will be for a purpose specific to the functions of holding civic office. Allowances for general expenses are not permitted under this policy.

6.2. Expenses not explicitly addressed in this policy will not be paid or reimbursed.

7. Specific expenses

General travel arrangements and expenses

7.1. All travel by Councillors should be undertaken by using the most direct route and the most practicable and economical mode of transport.

7.2. Councillors may be reimbursed up to $5,000 per year for travel expenses incurred while undertaking official business or professional development or attending approved conferences and seminars within NSW. The Lord Mayor may be reimbursed up to $6,500.00 per year. This includes provision of or reimbursement:

- for public transport fares
- of mileage allowance for the use of private vehicle per kilometre as provided for in the Local Government (State) Award
- for parking costs for council and other meetings
- by Cabcharge.

7.3. Any Councillor seeking reimbursement for travel expenses above the limit must have prior written approval from the CEO.

7.4. The Lord Mayor and Councillors may, upon request, be issued with a Cabcharge account card, the use of which must comply with this policy.

7.5. Councillors may use Cabcharge vouchers/cards for taxi travel for journeys in the Sydney metropolitan region to assist them to carry out their civic duties.

7.6. Upon being issued with a Cabcharge Card, Councillors must sign a form agreeing to comply with the conditions of use for the card. Council will only meet the cost of taxi journeys undertaken by Councillors for Council business purposes.

7.7. At the end of each Cabcharge billing period, each Councillor will receive a statement detailing taxi journeys undertaken during that period. Councillors are required to check the statement, complete an “Authority Confirmation Form” to verify that all travel listed on the statement is correct, and complete a “Business Purpose Form” providing the details of, and reasons for, each journey, identify any non-Council business related journey, and submit the completed form, and matching receipt for each journey detailed on the statement, to the Executive Support Unit within 14 days of each statement date.

7.8. These statements will be checked by the Executive Support Unit and, in accordance with Section 11 of this Policy, an invoice will be issued for reimbursement to Council of any non-Council business related journey identified by the Councillors.

Interstate and overseas travel expenses

7.9. In accordance with Section 5, council will assess the value and need for Councillors to undertake overseas travel. Councillors should ensure direct and tangible benefits can be established for the Council and the local community for interstate and overseas trips.

7.10. Total interstate travel expenses will be capped at $2,000 per Councillor per year.

7.11. Councillors seeking to undertake any interstate travel must submit a business case to the CEO. The business case must include:

- objectives to be achieved in travel, including an explanation of how the travel aligns with current council priorities and business.
- who is to take part in the travel and duration and itinerary of travel
- a detailed budget of any amounts expected to be reimbursed by the participant/s.

7.12. Approval for undertaking, and reimbursement of costs related to interstate travel, is to be granted by the CEO, in consultation with the Lord Mayor.

7.13. For approved interstate journeys by air, the class of air travel is to be economy class. Council will only reimburse up to the cost of economy class should Councillors prefer to book their own air travel.

7.14. Councillors seeking to undertake overseas travel must submit a business case to the CEO for consideration at a full council meeting. The business case must be submitted ten days prior to the meeting and include:

- objectives to be achieved in travel, including an explanation of how the travel aligns with current council priorities and business.
- who is to take part in the travel and duration and itinerary of travel
- a detailed budget of any amounts expected to be reimbursed by the participant/s.

7.15. All overseas travel costs must be approved by a full council meeting.

7.16. For approved international travel, the class of air travel is to be premium economy, if available. Otherwise, the class of travel is to be economy. Council will only reimburse up to the cost of economy class, or premium economy if available, should Councillors wish to book their own air travel.

7.17. For direct payment of approved air travel, bookings are to be made through the Executive Support Unit.

Travel expenses not paid by council

7.18. Council will not pay any traffic or parking fines or administrative charges for toll road usage, except for those toll road charges incurred by use of the motor vehicle provided to the Lord Mayor as per clause 10.1 of this Policy.

Accommodation and meals

7.19. Council will reimburse costs for accommodation and meals while Councillors are undertaking approved travel or professional development.

7.20. The daily limits for accommodation and meal expenses within Australia are to be consistent with those set out in Part B Monetary Rates of the *NSW Crown Employees (Public Service Conditions of Employment) Reviewed Award 2009*, as adjusted annually.

7.21. The daily limits for accommodation and meal expenses outside Australia are to be determined in advance by the CEO, being mindful of Clause 7.18.

Refreshments for council related meetings

7.22. Appropriate refreshments will be available for council meetings, council committee meetings, other official council committees, Councillor briefings and workshops, approved meetings and engagements, and official council functions as approved by the CEO.

7.23. As an indicative guide for the standard of refreshments to be provided at council related meetings, the CEO should be mindful of *Part B Monetary Rates* of the NSW *Crown Employees (Public Service Conditions of Employment) Reviewed Award 2009*, as adjusted annually.

Professional development including Conferences and Seminars

7.24. As part of this Policy, Council will facilitate and promote the professional development of Councillors through programs, training, education courses, conferences, seminars and membership of professional bodies, with a total maximum annual expenditure of $5,000 per Councillor.

7.25. In the first year of a new Council term, Council will provide a comprehensive induction program for all Councillors which considers any guidelines issued by the Office of Local Government (OLG). The cost of the induction program will be in addition to the ongoing professional development funding.

7.26. Annual membership of professional bodies will only be covered where the membership is relevant to the exercise of the Councillor's civic duties, the Councillor actively participates in the body and the cost of membership is likely to be fully offset by savings from attending events as a member. This approval is subject to a written request to the CEO.

7.27. Approval for professional development activities is subject to a prior written request to the CEO outlining the:

- details of the proposed professional development.
- relevance to Council priorities and business.
- relevance to the exercise of the Councillor's civic duties.

7.28. Approval to attend a conference or seminar is subject to a written request to the CEO or by resolution of the Council. In assessing a Councillor request, the CEO must consider factors including the:

- relevance of the topics and presenters to current Council priorities and business and the exercise of the Councillor's civic duties
- cost of the conference or seminar in relation to the total remaining budget.

7.29. Council will meet the reasonable cost of registration fees and accommodation associated with attendance at conferences approved by the CEO, in accordance with clause 7.22 – 7.26 of this policy. Council will also meet the reasonable cost of meals when they are not included in the conference fees.

7.30. The provisions of clauses 7.1 – 7.8 of this Policy will apply to transport arrangements associated with Councillor's attendance at approved professional development activities including Conferences and seminars.

Exempt Conference and Professional Development Programs

7.31. Councillors may voluntarily elect to either complete the UTS Centre for Local Government Certificate Program for Councillors or the full Company Directors Course conducted by the Australian Institute of Company Directors

7.32. Councillors may attend the Local Government NSW Annual Conference.

7.33. For the Local Government NSW Annual Conference only, Council will meet the costs of the official conference dinner for an accompanying person of a Councillor.

7.34. Attendance at these conferences and professional development programs is voluntary, and do not contribute to the monetary limits for conferences and professional development mentioned elsewhere in this policy.

7.35. The provisions of clauses 7.1 – 7.8 of this Policy will apply to transport arrangements associated with the Local Government NSW Annual Conference attendance.

Council Representation at Non-Council Functions and Other Events

7.36. The annual limit for attending dinners, non-council functions, community and corporate or industry events where Councillor representation would be expected, such as award nights which are relevant to Council's interests, is $1,000 for each Councillor.

7.37. The approval of the CEO is required for attendance at dinners, non-council functions and community events where the cost exceeds $250.

7.38. Council will pay the entry fee/ticket cost associated with the attendance of a Councillor at a dinner, non-council functions, community and corporate or industry events relevant to Council's interest.

7.39. Council will not pay for or reimburse to a Councillor costs associated with attendance at any political fundraising event, any donation to a political party or candidate's electoral fund or for some other private benefit.

7.40. Likewise, no payment shall be made or reimbursed by Council for any component of a ticket that is additional to the service cost, such as a donation to a political party or candidate's electoral fund or any other private benefit.

ICT expenses

7.41. Council will provide or reimburse Councillors for expenses associated with ICT devices and services up to a limit of $4,000.00 for the first year of a council term and $2,000.00 per year for the remaining years of a term. This may include mobile phones and tablets, mobile phone and tablet data, and home internet costs.

7.42. Reimbursements will be made only for communications devices and services used for Councillors to undertake their civic duties.

7.43. Councillors may seek reimbursement for applications on their mobile electronic communication devices that are directly related to their duties as a Councillor, within the maximum limit.

Carer's and special requirement expenses

7.44. Council encourages wide participation and interest in civic office. It will ensure council premises and associated facilities are accessible, including provision for sight or hearing impaired Councillors and those with other disabilities.

7.45. Transportation provisions as outlined in this policy, such as access to Cabcharge cards, will also assist Councillors who may be unable or unwilling to drive a vehicle.

7.46. In addition to the provisions above, the CEO may authorise the provision of reasonable additional facilities and expenses in order to allow a Councillor with a disability to perform their civic duties.

7.47. Councillors who are the principal carer of a child or other elderly, disabled and/or sick immediate family member will be entitled to re-imbursement of carer's expenses up to a maximum of $4,000 per annum for attendance at official business, plus reasonable travel from the principal place of residence.

7.48. Child care expenses may be claimed for children up to and including the age of 16 years where the carer is not a relative.

7.49. In the event of caring for an adult person, Councillors will need to provide suitable evidence to the CEO that reimbursement is applicable. This may take the form of advice from a medical practitioner.

Home office expenses

7.50. Each Councillor may be reimbursed up to $300 per year for costs associated with the maintenance of a home office, such as minor items of consumable stationery and printer ink cartridges.

Insurance and legal expenses

7.51. Councillors are to receive the benefit of insurance cover while in or on any activity directly or indirectly connected with or on behalf of council including while travelling to and/or from such activity. Such injury being bodily injury caused by violent, accidental, external and visible means and including death, permanent disablement, temporary total disablement, bed care benefit and non-medical expenses but not including medical expenses, subject to the conditions and limitations of council's personal accident insurance policy current at the time of occurrence of the injury as follows:

Personal Injury

7.49.1. While ever on council authorised business, worldwide, covering bodily injury caused by accidental, violent, external and visible means up to a sublimit for death and capital limits of $350,000 but subject to any limitation or conditions set out in the policy of insurance which is taken out at the direction of council. Also covering permanent disablement, temporary total disability and temporary partial disability. The cover does not include medical expenses.

Professional Indemnity

7.49.2. For matters arising out of Councillors' performance of civic duties or exercise of their functions as Councillors provided the performance or exercise of the relevant civic duty or function is in the opinion of council bona fide and/or proper and is carried out in good faith, as required under Section 731 of the Act, but subject to any limitation or conditions set out in the policy of insurance which is taken out at the direction of council.

Public Liability

7.49.3. For matters arising out of Councillors' performance of civic duties or exercise of their functions as Councillors, carried out in good faith but subject to any limitations or conditions set out in the policy of insurance which is taken out at the direction of council.

Travel Insurance

7.49.4. Appropriate travel insurances will be provided for any Councillors traveling on approved overseas and interstate travel on council business, subject to any limitations or conditions set out in the policy of insurance which is taken out at the direction of council.

8. Legal assistance

8.1. Council may, if requested reimburse the reasonable legal expenses of:

- a Councillor defending an action arising from the performance in good faith of a function under the Local Government Act, provided that the outcome of the legal proceedings is favourable to the Councillor;
- a Councillor defending an action in defamation, provided the statements complained of were made in good faith in the course of exercising a function under the Local Government Act in a council meeting or on council related business (such as on-site meetings) and provided that council is satisfied that such statements complained of occurred during the bona fide consideration of council business, in good faith and without malice and the outcome of the legal proceedings is favourable to the Councillor;
- a Councillor for proceedings before an appropriate investigative or review body, provided the subject of the proceedings arises from the performance in good faith of a function under the Local Government Act and the matter has proceeded past any initial assessment phase to a formal investigation or review and the investigative or review body makes a finding substantially favourable to the Councillor.

8.2. In the case of a code of conduct complaint made against a Councillor, legal costs will only be made available where the matter has been referred by the CEO to a conduct reviewer and the conduct reviewer has commenced a formal investigation of the matter and makes a finding substantially favourable to the Councillor.

8.3. Legal expenses incurred in relation to proceedings arising out of the performance by a Councillor of his or her functions under the Local Government Act are distinguished from expenses incurred in relation to proceedings arising merely from something that a Councillor has done during his or her term in office. For example, expenses arising from an investigation as to whether a Councillor acted corruptly would not be covered by this section and such legal expenses would not be reimbursed by council.

8.4. Council will not meet the legal costs:

- of legal proceedings initiated by a Councillor under any circumstances (including but not limited to any action by one Councillor against another Councillor);
- of a Councillor seeking advice in respect of possible defamation, or in seeking a non-litigious remedy for possible defamation; or
- for legal proceedings that do not involve a Councillor performing their role as a Councillor.

8.5. Reimbursement of expenses for reasonable legal expenses must have Council approval by way of a resolution at a council meeting prior to costs being incurred. Any reimbursement of a Councillor’s reasonable legal costs by council would also be subject to:

- the amount of such reimbursement being reduced by the amount of any monies that may be or are otherwise recouped by the Councillor on any basis;
- the amount of such reimbursement of solicitors fees being limited to the extent that only fees charged at a rate equivalent to the average hourly rate then being charged by council's legal services panel will be paid (i.e. any portion of the expenses representing any hourly charge rate higher than the then average hourly charge rate then being charged by law firms on council's legal services panel will not be reimbursed). Where Counsel is used, the reimbursement of Counsel fees is to be submitted to council for approval; and
- any reimbursement not including any damages awarded to, or made against the Councillor.

PART C – FACILITIES

9. General facilities for all Councillors

Facilities

9.1. Council will provide the following facilities to Councillors to assist them to effectively discharge their civic duties:

- Councillors' common area appropriately furnished to include photocopier, printer, pigeon holes, lockable cupboards and appropriate refreshments
- access to shared private work spaces/offices equipped with a telephone, computer terminal and desk
- access to shared car parking spaces while attending council offices on official business
- a name badge which may be worn at official functions, indicating that the wearer holds the office of a Councillor and/or Lord Mayor or Deputy Lord Mayor.

9.2. Councillors may book meeting rooms for official business in a specified council building at no cost. Rooms may be booked through a specified officer in the CEO's office or another specified staff member.

9.3. The provision of facilities will be of a standard deemed by the CEO, in consultation with the Lord Mayor, as appropriate for the purpose.

Stationery

9.4. Council will provide the following stationery to Councillors each year:

- letterhead, to be used only for correspondence associated with civic duties
- business cards
- up to 1,500 ordinary postage stamps
- up to 200 Christmas or festive cards per year for Councillors and 600 for the Lord Mayor
- minor items of consumable stationery, such as pens, pencils and paper clips.

9.5. As per Section 5, stamps shall only be used to support a Councillor's civic duties. Councillor mail will only be posted using the stamps provided. Any stamps not used will not be carried over to the next year's allocation.

Administrative support

9.6. Council will provide administrative support to Councillors to assist them with their civic duties only. Administrative support may be provided by staff in the CEO's office or by a member of council's administrative staff as arranged by the CEO or their delegate.

9.7. As per Section 5, council staff are expected to assist Councillors with civic duties only, and not assist with matters of personal or political interest, including campaigning.

10. Additional facilities for the Lord Mayor

10.1. Council will provide the Lord Mayor with a maintained motor vehicle to a similar standard of other council vehicles, with a fuel card and toll road tag. The vehicle will be supplied for use in attending official business or professional development and attendance at the Lord Mayor's office.

10.2. A parking space at council's offices will be reserved for the Lord Mayor's council issued vehicle for use on official business, professional development and attendance at the Lord Mayor's office.

10.3. Council will provide the Lord Mayor with a furnished office incorporating a computer configured to council's standard operating environment, telephone and meeting space.

10.4. In performing his or her civic duties, the Lord Mayor will be assisted by a number of staff providing administrative, secretarial and policy support. The number of staff supporting the Lord Mayor and Councillors will be determined by the CEO in consultation with the Lord Mayor.

10.5. As per Section 5, staff assisting the Lord Mayor are to work on official business only, and not for matters of personal or political interest, including campaigning.

PART D – PROCESSES RELATED TO THIS POLICY

11. Approval, payment and reimbursement arrangements

11.1. Expenses should only be incurred by Councillors in accordance with the provisions of this policy.

11.2. Approval for incurring expenses, or for the reimbursement of such expenses, should be obtained before the expense is incurred.

11.3. Up to the maximum limits specified in this policy, approval for the following may be sought after the expense is incurred:

- local travel relating to the conduct of official business
- emergency carer costs associated with the need to attend to official business
- ICT expenditure.

11.4. Final approval for payments made under this policy will be granted by the CEO or their delegate.

Direct payment

11.5. Council may approve and directly pay expenses. Requests for direct payment must be submitted to the CEO for assessment against this policy using prescribed form, with sufficient information and time to allow for the claim to be assessed and processed.

Reimbursement

11.6. All claims for reimbursement of expenses incurred must be made on the prescribed form, supported by appropriate receipts and/or tax invoices and be submitted to the CEO or his/her delegate.

Timeframe for reimbursement

11.7. Unless otherwise specified in this policy, Councillors must provide all claims for reimbursement within three months of an expense being incurred. Claims made after this time can only be approved by the CEO, in consultation with the Lord Mayor.

Advance payment

11.8. Council may pay a cash advance for Councillors attending approved conferences, seminars or professional development.

11.9. The maximum value of a cash advance is $150 per day of the conference, seminar or professional development to a maximum of $500.

11.10. Requests for advance payment must be submitted to the CEO for assessment against this policy using the prescribed form with sufficient information and time to allow for the claim to be assessed and processed.

11.11. Councillors must fully reconcile all expenses against the cost of the advance within one month of incurring the cost and/or returning home. This includes providing to council:

- a full reconciliation of all expenses including appropriate receipts and/or tax invoices
- reimbursement of any amount of the advance payment not spent in attending to official business or professional development.

Notification

11.12. If a claim is approved, council will make payment directly or reimburse the Councillor through accounts payable. If a claim is refused, council will inform the Councillor in writing that the claim has been refused and the reason for the refusal.

Reimbursement to council

11.13. In accordance with the Model Code of Conduct for Local Councils in NSW Councillors must use council resources ethically, effectively, efficiently and carefully in the course of public duties.

11.14. If a Councillor, or council has incurred an expense on behalf of a Councillor, that exceeds a maximum limit, exceeds reasonable incidental private use or is not provided for in this policy:

- council will invoice the Councillor for the expense
- the Councillor will reimburse council for that expense within 28 days of the invoice date.

11.15. If the Councillor cannot reimburse council within 28 days of the invoice date, they are to submit a written explanation to the CEO. The CEO may elect to deduct the amount out of the Councillor's allowance.

11.16. Council's Executive Support Unit will provide Councillors regular updates on expenditure and provide additional notifications when approaching maximum limits.

12. Disputes

12.1. If the Councillor disputes a determination under this policy, the Councillor should discuss the matter with the CEO.

12.2. If the Councillor and the CEO cannot resolve the dispute, the Councillor may submit a notice of motion to council seeking to have the dispute resolved.

13. Return or retention of facilities

13.1. All unexpended facilities or equipment supplied under this policy are to be relinquished immediately upon a Councillor or Lord Mayor ceasing to hold office.

14. Reporting

14.1. Under the Act and Regulation, Council is required to include specific information in its Annual Report about the payment of expenses and facilities to Councillors in relation to their civic functions.

14.2. In addition to the statutory reporting requirements, Council reports the total cost of expenses and the provision of facilities for the Lord Mayor and Councillors by way of Council's Integrated Planning and Reporting program and quarterly financial performance reporting.

14.3 Under the Regulation, Council is also required to report on the Councillors Professional Development Program through the following:

- Council is required to report to the first council meeting after the induction program is delivered the activities offered to the Lord Mayor and Councillors as part of the program, and whether or not the Lord Mayor and each Councillor participated in them.

- Council is also required to report to the first council meeting held after 30 June each year the ongoing professional development activities that were offered to the Lord Mayor and each Councillor in the year to 30 June, and whether or not the Lord Mayor and each Councillor participated in them.

- The CEO is also required to ensure these reports are published on Council's website.

15. Auditing

15.1. The operation of this policy, including claims made under this policy, will be included in Council's audit program and an audit undertaken annually.

16. Breaches

16.1. Suspected breaches of this policy are to be reported to the CEO.

16.2. Alleged breaches of this policy shall be dealt with by following the processes outlined for breaches of the Code of Conduct, as detailed in the Code and in the Procedures for the Administration of the Code.

PART E – HISTORY

Document History

2012	Policy was reviewed and amended by Parramatta City Council resolution on 25 June 2012
2013	Policy was amended. Part 13.17 Facilities, Charitable and Community function part 2 was included via Councillor Notice of Motion on 25 February 2013.
2017	Draft Policy was revised after review.
Sept 2017	clause 6.33 to include “provide or” as per admin briefing note
Nov 2017	Definition of “official business” revised as per NOM 13.11.2017 min 913
May 2018	Policy reviewed and revised for pubic exhibition.

Associated documents

Relevant legislation

- Local Government Act 1993, Section 252
- Local Government (General) Regulation 2005

Related council policies

- Code of Conduct
- Gifts and Benefits Policy

NOTICES OF MOTION

28 MAY 2018

14.1 Creating an accessible for all and inclusive City of Parramatta, particularly achieving an age-friendly City 1605

14.2 Blueprint of Future Possibilities for Parramatta 1608

NOTICE OF MOTION

ITEM NUMBER	14.1
SUBJECT	Creating an accessible for all and inclusive City of Parramatta, particularly achieving an age-friendly City
REFERENCE	F2005/01944 - D06126923
REPORT OF	Councillor

To be Moved by Councillor Sameer Pandey.

RECOMMENDATION

That staff provide a consolidated report to Council on the existing and future actions being undertaken to create an accessible and inclusive city, including consideration of the actions included in the background to this notice of motion and the attached correspondence.

BACKGROUND

As a Councillor, I recently received a letter from the Council on the Ageing (COTA-letter attached).

COTA pointed out that the people they represent – those over 50 years old, make up almost 28 % of the Parramatta population.

During a consultation with their local consumer reference group, a number of issues relating to the city were raised by local older people, including footpaths, parks, parking, seating and quality liveable urban environments.

While I am aware that many actions are currently in progress, I would like a consolidated summary on how we are addressing these issues to create a city which meets the needs of older residents and address accessibility issues.

I would like staff to consider a number of actions in their report, including (but not limited to) the following:

- a comprehensive audit of footpaths that considers the quality of walking access, particularly from North Parramatta, Westmead and surrounding areas into the CBD.
- Braille street name strips on multi-function street poles (such as used in Sydney CBD)
- Broad implementation of timed pedestrian crossings
- Safety considerations
- Recognise the great diversity within the City of Parramatta.
- Wayfinding and mapping accessible areas
- Tactile strips at crossings and footpath
- Meaningful Signage.
- An accessibility map for the CBD.

In addition, I recommend staff also review the World Health Organisation Age-friendly Cities Framework website which contains some excellent resource information on this issue.

ATTACHMENTS:

1⇩ Letter from Council on the Ageing (COTA) NSW 1 Page

COTA NEW SOUTH WALES
Level 6, 280 Pitt Street
Sydney NSW 2000
www.cotansw.com.au
ABN 31 090 328 955
P:(02) 9286 3860
F:(02) 9286 3872

April 17, 2018

Councillor Sameer Pandey
City of Parramatta Council
PO Box 32
Parramatta NSW 2124

Dear Councillor Pandey,

Council on the Ageing (COTA) NSW is the state's peak body representing people over 50. Our constituency is large and growing. There are 2.58 million people in NSW aged over 50. In the Parramatta Local Government Area, people aged 50+ represent 27.9% of the population.

COTA NSW is committed to engaging with our community to ensure that the opinions and needs of older people are heard. Through our Consumer Reference Groups (CRG) we undertake consultations across the state to find out what matters most to older people and how these challenges or opportunities could be best addressed.

On the 15th March, we visited Parramatta to undertake a CRG. As the local representative, we feel it is important that we provide you with a summary of the main issues that were raised and prioritised by participants.

1. A lack of proper infrastructure such as footpaths, parks and open spaces to accompany fast paced development in the area was a big issue for people in the Parramatta group.
2. Non-existent or uneven and broken footpaths were an issue for older people in the group and those with mobility issues.
3. A lack of parking in the Parramatta CBD and a need for more accessible parking close to public transport.
4. More seating in public areas for people to stop and rest is needed.
5. The group discussed the link between healthy, well planned urban environments and health and wellbeing. They were concerned that the pace of development was not creating liveable urban environments.

We hope that this information is of assistance to you in your continued representation of the people of City of Parramatta Council. If you would have any questions, or would like any other information about COTA, please call the number above or via email Meagan.lawson@cotansw.com.au.

Kind Regards,

Meagan Lawson
CEO - COTA NSW

NOTICE OF MOTION

ITEM NUMBER	14.2
SUBJECT	Blueprint of Future Possibilities for Parramatta
REFERENCE	F2017/01922 - D06126913
REPORT OF	Councillor

To be Moved by Councillor Sameer Pandey.

RECOMMENDATION

That staff provide a summary of draft city ideas that will form the blueprint to address the long term needs of the City of Parramatta for Councillor consideration by the end of 2018.

BACKGROUND

In the past Council has identified a number of significant infrastructure elements and successfully advocated with State and Federal Governments for these to be included in project delivery, grant funding programs and future strategies. Current projects under consideration include the Parramatta Light Rail, West Metro, Westmead hospital expansion, and ring road projects.

As the city grows, it is important that we as Councillors start thinking not only of the next major infrastructure projects for the Central City, but also the social infrastructure investments required to make this a great city. By this I mean not just a summary of our views on jobs, connections and transport, but also the open space, schools, libraries, traffic solutions, services etc. that will be required to service the Parramatta of the future.

While I appreciate that some of these ideas will be physical, others might initially be benchmarks or simply advocating for minimum future provision across precincts or broader areas. Some ideas are already in long term government plans, but are not yet prioritised or scheduled. Other ideas might be presently unfunded, but still be great opportunities for a future city deal or a private investment such as an unsolicited proposal.

Where possible, a consolidated summary plan of these ideas and how they might benefit Parramatta and its community in the future would be a useful starting point for discussion. Once agreed, Councillors could use this resource as an advocacy tool, and potentially prompt a different approach at all levels of Government to addressing the needs of the city.

ATTACHMENTS:

There are no attachments for this report.