

14 May 2024
Ref: 24050

The General Manager
Parramatta City Council
PO Box 32
PARRAMATTA NSW 2124

Dear Sir/Madam,

90-94 Phillip Street, Parramatta
Planning Proposal to amend Parramatta Local Environmental Plan 2023
Traffic & Parking Assessment Report

Introduction

This Traffic & Parking Assessment Report (TPAR) has been prepared in support of a Planning Proposal (PP) to Parramatta City Council (Council), involving amending the Parramatta Local Environmental Plan 2023 (PLEP 2023) to allow for the redevelopment of the site for the purposes of a mixed use development, as follows:

- Amending the maximum building height map to permit a maximum building height of 153m, and
- Amending the maximum floor space ratio map to permit an FSR of 15.4:1, inclusive of all bonuses.

In amending the PLEP 2023, the PP envisages the construction of a new 47-storey tower on the site, comprising commercial space within a four-level podium, along with 43 levels of residential apartments on the levels above.

It is pertinent to note in this regard that the proposed amendments to the PLEP 2023, and in turn, the indicative yields, are less than the original draft Parramatta CBD PP endorsed by Council in June 2021. As part of the CBD PP, AECOM prepared a Strategic Transport Study (STS), which ultimately supported the uplift densities proposed in the draft CBD PP. This was on the basis of off-street parking being provided in accordance with City of Sydney's CBD rates compared to the City of Parramatta's CBD rates.

In essence, the traffic impacts of the subject PP have already been assessed and captured as part of a CBD wide mesoscopic model that led to its recommendation of uplift in the CBD. The NSW Department of Planning & Environment ultimately gazetted an uplift well below that identified in the mesoscopic model, such that the subject PP will not result in traffic volumes that Council has not already considered and accepted.

Subject Site

The subject site is located on the northern side of Phillip Street, just to the west of the Parramatta Ferry Wharf, and is situated within the "Parramatta City Centre", as defined under the Parramatta DCP 2023. The site has a street frontage approximately 69m in length to Phillip Street and occupies an area of approximately 2,192m².

The existing site is currently occupied by a multi-storey commercial building with an estimated floor area in the order of 6,200m² and off-street parking for 86 cars. Vehicular access to the site is currently provided via an entry/exit driveway located at the western end of the Phillip Street site frontage, as well as an entry/exit driveway located at the eastern end of the site, accessed via an easement through the Charles Street public domain.

A series of maps and Streetview images of the site and its surroundings are reproduced on the following pages.

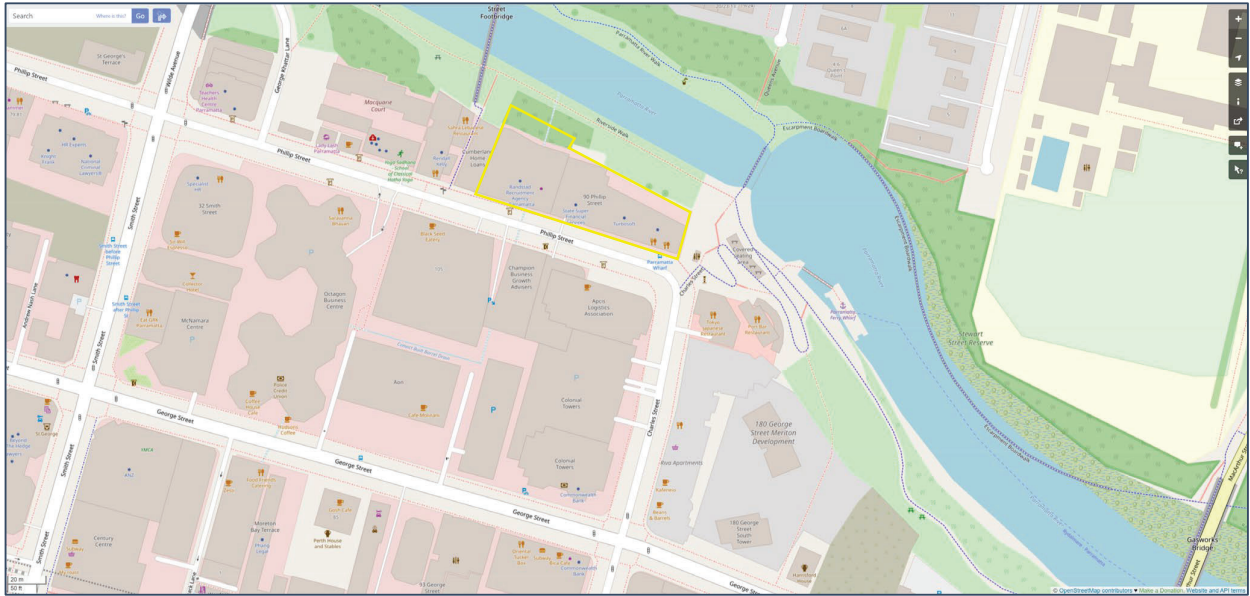


Figure 1 – Site location (Source: OpenStreetMap)



Figure 2 – Aerial image of the subject site from March 13, 2024 (Source: Nearmap)

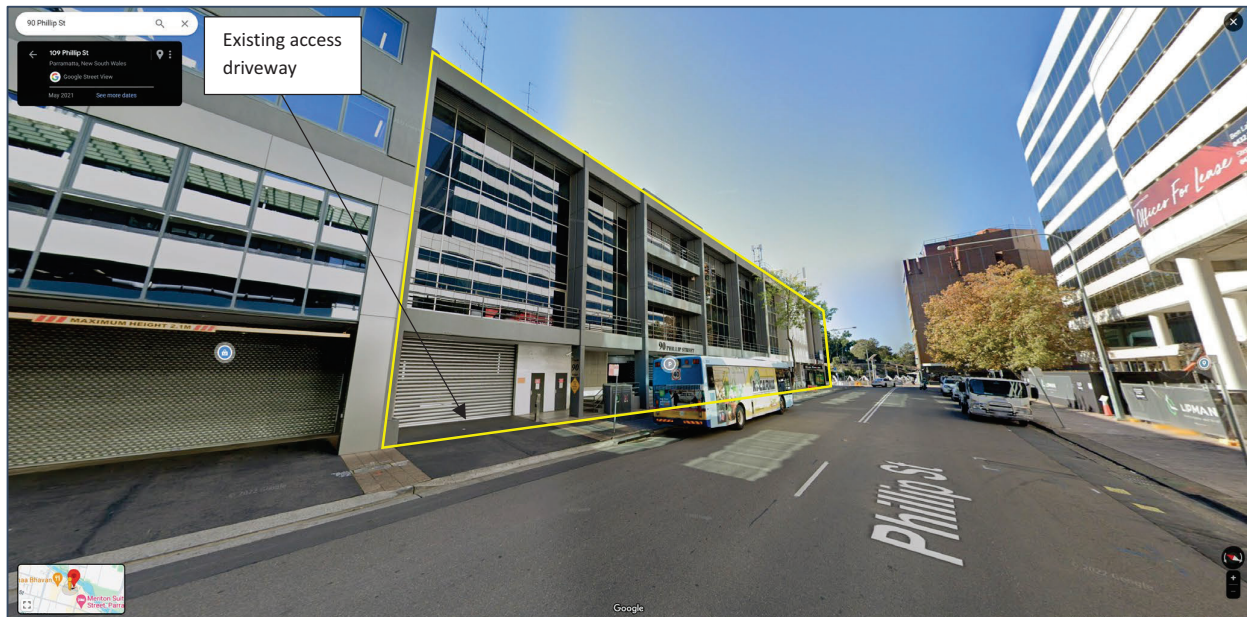


Figure 3 – Streetview image of the Phillip Street site frontage, looking east (Source: Google Maps)



Figure 4 – Streetview image of the Phillip Street site frontage, looking west (Source: Google Maps)

Existing Planning Controls

The current planning controls which apply to the site are outlined in the Parramatta LEP 2023, as follows:

- Land zoning: MU1 Mixed Use & RE1 Public Recreation
- Floor space ratio (FSR): 6:1
- Height of Building (HOB): 80m



Figure 5 – Zoning Map (Source: ePlanning Spatial Viewer)

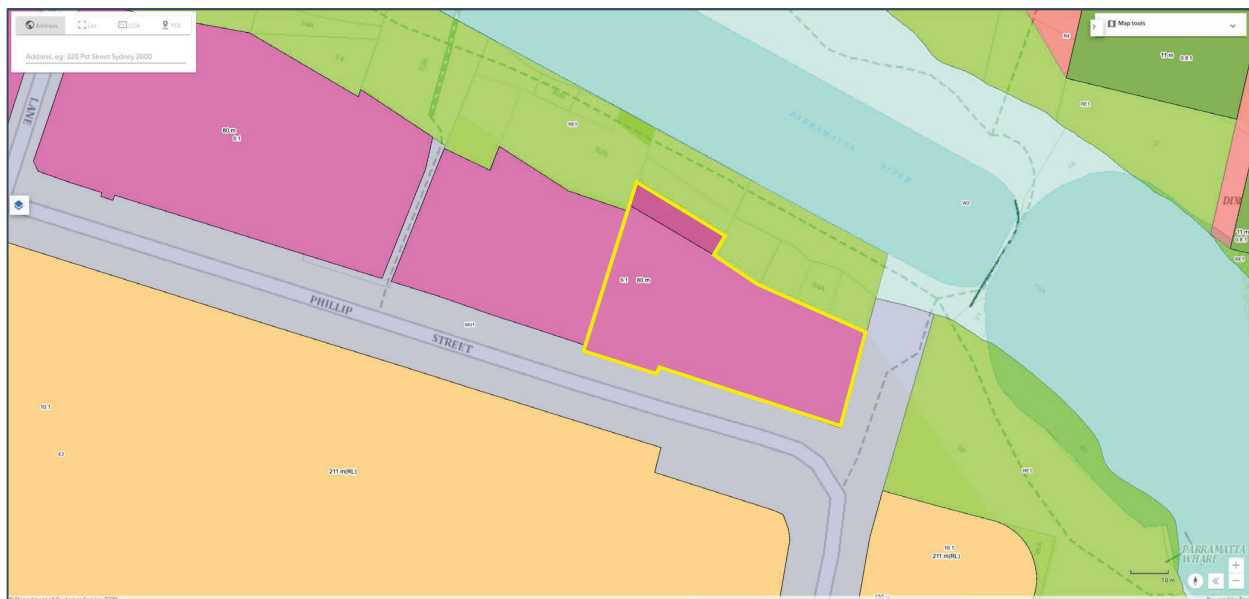


Figure 6 – FSR & Height Control Map (Source: ePlanning Spatial Viewer)

Based on the existing PLEP 2023 controls which apply to the site, a compliant scheme has the potential to achieve a 21-storey tower on the site, comprising commercial space within a four-level podium, along with 17 levels of residential apartments on the levels above.

Table 1 – Hypothetical Scheme under Existing PLEP 2023 FSR & GFA Controls			
Land Use	Yield	FSR	GFA
Residential	61 x 1 bed 84 x 2 bed <u>11 x 3 bed</u> 156 units	6:1	13,152m ²
Commercial/retail	2,192m ²	1:1	2,192m ²

Existing Surrounding Traffic Controls

The existing surrounding traffic controls in the vicinity of the site comprise:

- Traffic signals at the intersection of Phillip Street, Wilde Avenue & Smith Street, with opposing right-turn lanes on Wilde Street & Smith Street, turning into Phillip Street
- Traffic signals at the Smith Street & George Street intersection
- Traffic signals at the Charles Street & George Street intersection
- a 40km/h speed limit along Phillip Street, Charles Street and generally, throughout the Parramatta CBD.

Existing Surrounding Parking Restrictions

The existing on-street parking restrictions in the surrounding area comprise:

- a mix of 2P/4P Ticket parking along both sides of Phillip Street and Charles Street
- No Stopping/No Parking restrictions around the bend at the Phillip Street & Charles Street intersection, outside the site
- Loading Zones located at various locations in the vicinity of the site, including directly opposite
- a Bus Zone along the full frontage of the site in Phillip Street.

Planning Proposal

As noted in the foregoing, the Planning Proposal to Parramatta City Council involves amending the Parramatta Local Environmental Plan 2023 (PLEP 2023) as follows:

- Amending the maximum building height map to permit a maximum building height of 153m, and
- Amending the maximum floor space ratio map to permit an FSR of 15.4:1, inclusive of all bonuses.

In amending the PLEP 2023, the PP envisages the construction of a new 47-storey tower on the site, comprising commercial space within a four-level podium, along with 43 levels of residential apartments on the levels above.

Table 2 – Proposed FSR & GFA Controls and Indicative Yields			
Land Use	Yield	FSR	GFA
Residential	158 x 1 bed 218 x 2 bed 29 x 3 bed 405 units	13.2:1	29,025m ²
Commercial	4,576m ²	2.09:1	4,576m ²
Total		15.4:1	33,601m ²

Off-street car parking is proposed to be provided in accordance with the relevant parking rates which are a maximum, given the site's location within the Parramatta CBD. It is envisaged that the parking will be provided within a basement structure beneath the building. Whether the basement will be designed with a traditional ramp system, a semi/fully automated system, or a combination of the two, is not yet known and subject to further investigation and costing.

A dedicated on-site service area will also ultimately be provided for the building. Similarly, it is not yet known whether the service area will be located on the ground floor level of the building or within basement level 1.

Vehicular access to the site will be provided via a driveway located towards the western end of the Phillip Street site frontage, approximately where the existing driveway crossover is located. At this stage it is not yet known whether the design will include separate driveways for the car park and service area or a combined driveway. This will also be further investigated during the development application (DA) stage.

Existing Public Transport Options

Parramatta railway station and bus interchange is located approximately 600m radius of the site, which lies on the T1 Western Line, T2 Inner West Line and T5 Cumberland Line. Train services operate approximately every 10 minutes during commuter peak periods, as well as regular services during shoulder and off-peak periods.

Parramatta ferry wharf is located immediately to the east of the site which forms part of the F3 Parramatta River ferry service, operating between Parramatta and Circular Quay. Ferry services operate approximately every 60 minutes.

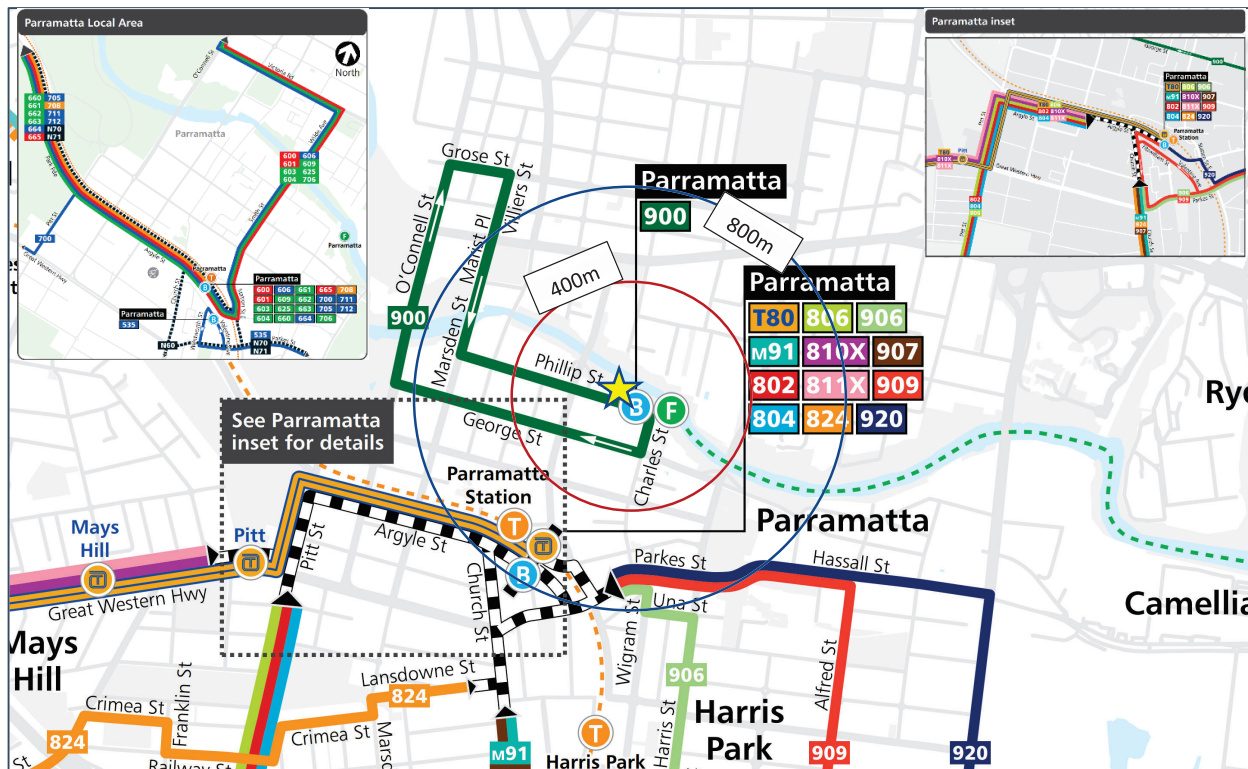


Figure 7 – Existing Public Transport Map (Source: Transport for NSW)

A bus stop is also located directly outside the site, which is serviced by the 900 bus, a free shuttle bus that links key destinations within the Parramatta City Centre. The 90 service operates at 10-minute intervals between 7:00am-6:30pm Monday-Friday and 8:00am-4:00pm on Saturday, Sunday and Public Holidays.

Furthermore, within a short walk, or utilising the free shuttle bus services, there is a significant number of bus services operating in the Parramatta City Centre, including along nearby Smith Street, approximately 250m west of the site. These include:

- M41 (Hurstville to Macquarie Park), M90 (Burwood to Liverpool),
- 407 (Burwood to Strathfield),

- 408 (Rookwood Cemetery to Burwood via Flemington),
- 458 (Ryde to Burwood)
- 461 (Burwood to City Domain)
- 464 (Ashfield to Mortlake)
- 466 (Ashfield to Cabarita Park).

In addition to rail, ferry and bus services, Parramatta Light Rail Stage 1 will connect Westmead to Carlingford via the Parramatta CBD and Camellia, with a two-way track spanning 12km, and is expected to open in mid-2024.

Parramatta Light Rail is one of the NSW Government's largest major infrastructure projects being delivered to serve a growing Sydney. Light rail will create new communities, connect great places and help both locals and visitors move around and explore what the region has to offer.

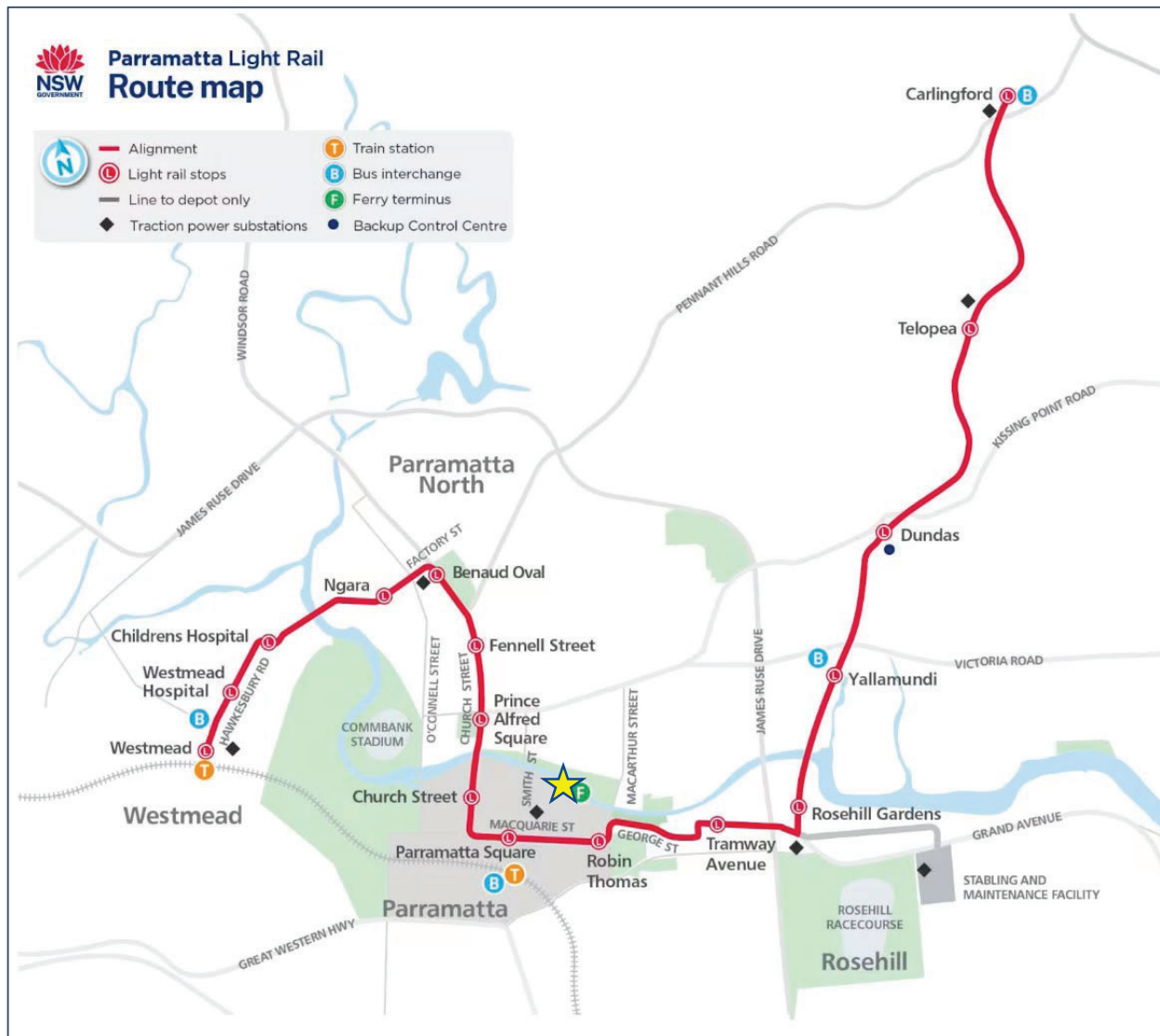


Figure 8 – Parramatta Light Rail Stage 1 Map (Source: Transport for NSW)

The nearest light rail stations to the site will be located on Macquarie Street, just west of Smith Street and just west of Harris Street, both within approximately 450m radius of the site. The Stage 1 route will link the Westmead Precinct and railway station to Carlingford, via Parramatta North, Parramatta's CBD and train station, Rosehill Gardens, Dundas and Telopea. Key features of the Stage 1 Light Rail are:

- High-frequency 'turn-up-and-go' light rail services seven days a week, departing approximately every 7.5 minutes in peak periods.
- Modern and comfortable air-conditioned vehicles that are driver-operated and Opal card network integrated.
- The Parramatta Light Rail will replace the train line between Camellia and Carlingford. This will provide more frequent services and better connections to town centres, including Parramatta and Sydney CBD.
- A new Active Transport Link (shared walking and bike riding path) between Carlingford and Parramatta.
- The first green track delivered for a light rail project in NSW, totalling 1.3kms. Green track reduces urban heat among other benefits.

NSW planning approval has also been granted for the Parramatta Light Rail Stage 2. The project will be staged, starting with the delivery of a new public and active transport bridge over Parramatta River between Wentworth Point and Melrose Park, including approaches on either side of the river – totalling 1.3km (enabling works).

Parramatta Light Rail Stage 2 will connect local communities in the Greater Parramatta and Olympic Peninsula, and bring the vision of a "30-minute city" closer to reality.

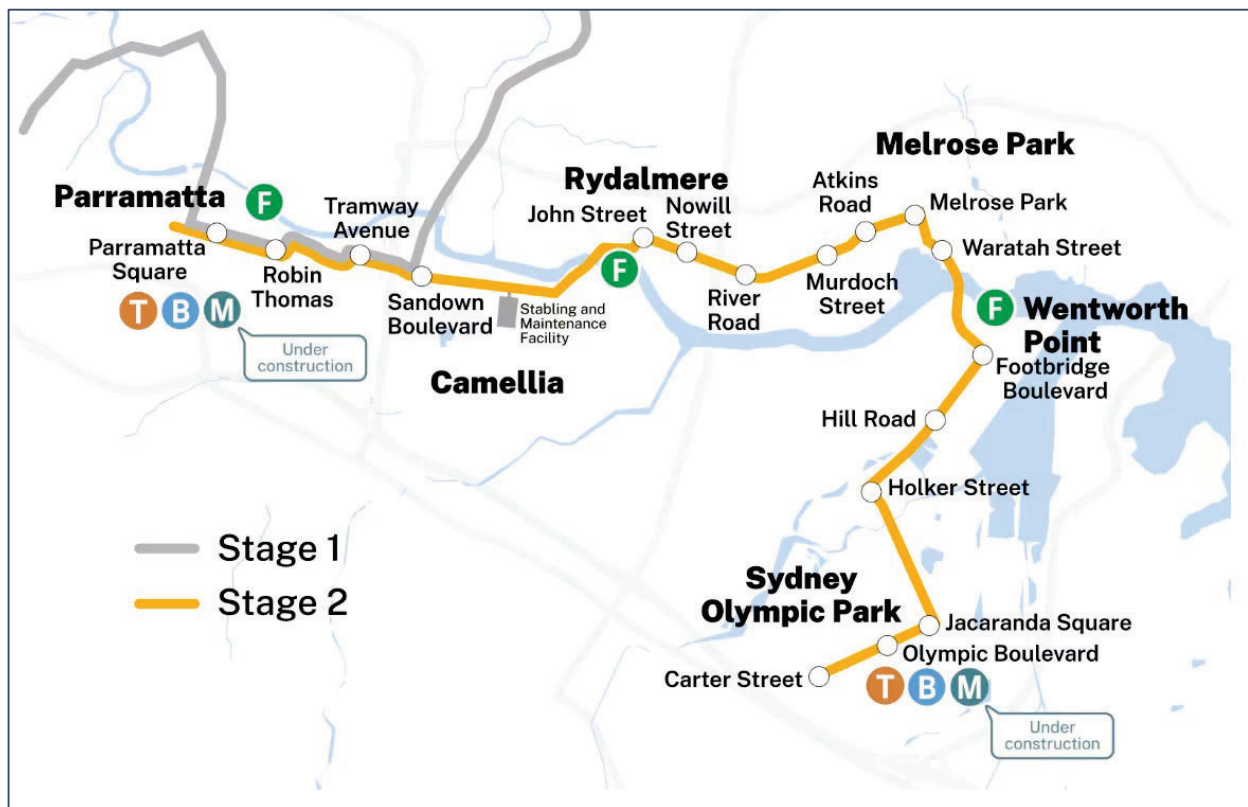


Figure 9 – Parramatta Light Rail Stage 2 Map (Source: Transport for NSW)

Stage 2 will have:

- 14 stops over a 10km two-way track
- travel times of around 31 minutes from Camellia to the Carter Street Precinct via Sydney Olympic Park, and a further 7 minutes to the Parramatta CBD
- high frequency 'turn up and go' services every 7.5 minutes on weekdays between 7am to 7pm, and around every 10-15 minutes outside those times, on weekends and public holidays.

Stage 2 will also connect to the:

- Sydney Metro West (under construction) and heavy rail in Parramatta and Sydney Olympic Park
- ferry services at Rydalmere and Sydney Olympic Park.

Broadly speaking, research suggests that proximity to train and light rail services influence the travel mode choice for areas within 800m (approximately 10 minutes) of a train station or light rail stop. As such, the proposed development has excellent potential for future residents and employees of the development to utilise heavy and light rail for their commute to work and/or social trips.

Research also suggests that proximity to public transport services influence the travel mode choice for areas within 400m walking distance (approximately 5 minutes) of a bus stop. As such, the proposed development also has excellent potential for future residents and employees within the building to utilise bus for their commute to work and/or social trips.

Existing Active Transport Options

There is also a good level of pedestrian connectivity, including safe and convenient footpaths to the abovementioned ferry stop, bus stops, railway station and future light rail stops. All existing footpaths in the surrounding area are of good quality, with appropriate widths and pram ramps provided at most intersections.

The existing bicycle network in the vicinity of the site is reproduced in the figure below, which shows there are a number of formal and informal cycle routes throughout the surrounding area, connecting to the greater cycle network.

The *Planning Guidelines for Walking and Cycling* identifies a number of city-scale design principles that can assist the creation of walkable and cyclable cities and neighbourhoods. These principles emphasise urban renewal and the creation of compact, mixed use, accessible centres around public transport stops. At the neighbourhood scale, design principles can be reinforced through the creation of local and accessible centres and neighbourhoods with connected street patterns and road design which aim to reinforce local walking and cycling networks.

In particular, the *Guidelines* note that increased population density is an important element in creating a walkable and cyclable city. A compact development brings activities close together, making them more accessible by foot or by bicycle, without the need to use a car. Increased population density also enhances the viability of public transport services.

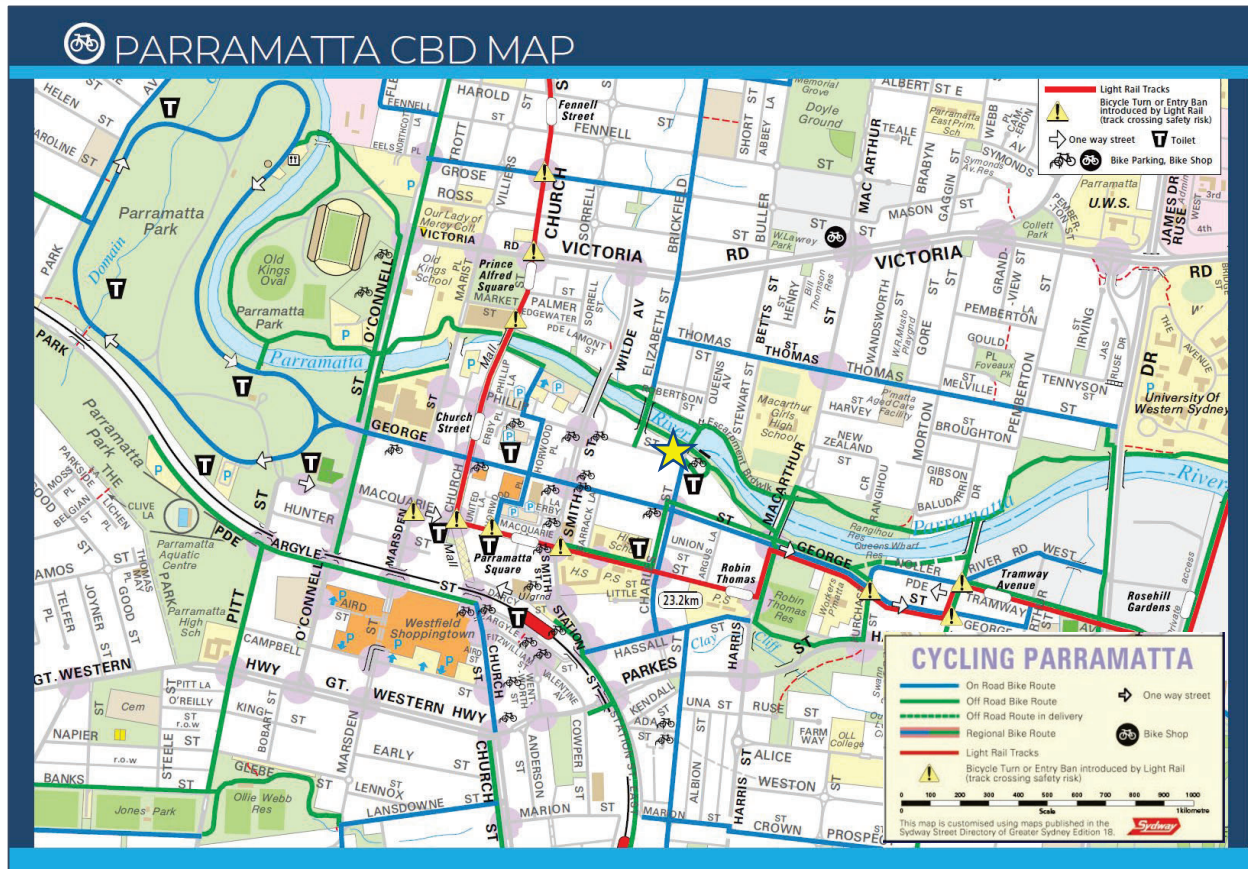


Figure 10 – Parramatta CBD Bike Map (Source: Parramatta Council)

Existing Traffic Conditions

An indication of the existing traffic conditions on the road network in the vicinity of the site is provided by peak period traffic surveys undertaken in 2018 as part of a previous traffic study for the subject site. The traffic surveys were undertaken at the intersections of Phillip Street/Wilde Avenue/Smith Street and also Charles Street/George Street on Tuesday 1st May 2018, between 6:30am-9:30am and 3:30pm-6:30pm. The results of the 2018 traffic surveys are summarised below:

- two-way traffic flows in Phillip Street were in the order of 500-600 vehicles per hour (vph) in the weekday AM and PM peak periods
- two-way traffic flows in Wilde Avenue were in the order of 1,200-1,300 vph in the weekday AM and PM peak periods
- two-way traffic flows in Smith Street were in the order of 700-800 vph in the weekday AM and PM peak periods
- two-way traffic flows in Charles Street were in the order of 400-700 vph in the weekday AM and PM peak periods
- one-way traffic flows in George Street were in the order of 500-800 vph in the weekday AM and PM peak periods.

Car Parking Assessment

As noted in the foregoing, the Strategic Transport Study (STS) mesoscopic model prepared by AECOM, as part of the draft Parramatta CBD PP and endorsed by Council in June 2021, was on the basis of off-street parking being provided in accordance with City of Sydney's CBD rates compared to the City of Parramatta's CBD rates.

Accordingly, based on the PP's indicative yields and the City of Sydney CBD parking rates, the proposed development requires the maximum provision of 235 car parking spaces, as set out in the table below.

Table 3 – Planning Proposal's Off-Street Car Parking Requirements			
Proposed Land Use	Maximum Car Parking Rates	Quantum	Maximum Requirement
Residential	0.3 spaces/1 bed	158 apartments	47 spaces
	0.7 spaces/2 bed	218 apartments	153 spaces
	1 space/3 bed	29 apartments	29 spaces
<i>Sub-total</i>			<i>229 spaces</i>
Commercial	$M = (G \times A) / (50 \times T)$	4,576m ²	6 spaces
Total maximum provision			235 spaces

Where M = Max parking provision, G = Comm GFA, A = Site area & T = total GFA

Whilst the layout of the vehicular access and car park is not yet known, off-street parking will be capped in accordance with the City of Sydney CBD parking rates, based on the yields provided in any DA scheme at the time of DA lodgement. This in turn supports the city-wide sustainable transport planning objectives.

Bicycle Parking Assessment

In order to encourage the use of alternate forms of transport, Parramatta Council's DCP 2023, Part 6, Section 6.3 Bicycle Parking, requires the following to be provided for the proposed mixed use development:

Table 6.3.1 – Minimum Bicycle Parking Rates

Development type	Minimum number of bicycle parking spaces required
Residential flat buildings and the residential component of Mixed-Use development	1 space per dwelling, plus 1 space per 10 dwellings for visitors.
Commercial premises with a gross floor area of 600m ² or more (including offices, business premises, restaurants, cafes and shops)	1 space per 250m ² of gross floor area for employees, plus 1 space per 500m ² of GFA for visitors.

Figure 11 – Parramatta minimum bicycle parking rates (Source: Parramatta DCP 2023)

Table 4 – Planning Proposal's Off-Street Bicycle Parking Requirements			
Proposed Land Use	Minimum Bicycle Parking Rates	Quantum	Minimum Requirement
Residential	1 space/dwelling	405 units	405 spaces
Residential visitors	1 space/10 dwellings	405 units	41 spaces
Commercial staff	1 space/250m ² GFA	4,576m ² GFA	18 spaces
Commercial visitors	1 space/500m ² GFA	4,576m ² GFA	9 spaces
Total minimum provision			473 spaces

Other key requirements from the PDCP 2023 which relate to bicycle parking, and indeed active transport in general, include:

- Bicycle parking is to be provided in the form of Class B lockers for resident/employees and Class C rails for visitor parking, as specified in Australian Standard AS2890.3 – Bicycle Parking Facilities.
- All bicycle parking should be located in a safe and secure location that is under cover and convenient for users. Resident/staff parking is to be provided within one level of the ground floor to ensure it is convenient and accessible to users.
- End-of-trip facilities must be provided at the following rates to adequately service the number of bicycle parking spaces required in non-residential premises:
 - 1 shower and change facilities per 10 staff/employees, and
 - 1 locker per employee/staff bicycle parking spot provided.
- Visitor parking must be located as close as possible to the main entrance of the building at ground level.
- Bicycle parking facilities should not impede pedestrian or vehicular circulation.
- Bicycle parking should be located in highly visible, illuminated areas to minimise theft and vandalism.
- Bicycle parking facilities are required for all new and redeveloping business + industrial zones.
- If bicycle parking requirement is greater than 30, suitable end of trip facilities must be provided.
- Bicycle parking facilities are to include 10A e-bike charging outlets to 10% of spaces with no space being more than 20 metres away from a charging outlet. Chargers are to be provided by the owner.

Again, whilst the layout of the bicycle parking and end-of-trip facilities are not yet designed, they will ultimately be provided and designed in accordance with the Parramatta DCP 2023 parking rates, based on the yields provided in any DA scheme at the time of DA lodgement. This also in turn also supports the city-wide sustainable transport planning objectives.

Traffic Assessment

The traffic implications of development proposals primarily concern the *nett change* in the traffic generation potential of a site compared to its existing and/or approved uses, and its impact on the operational performance of the surrounding road network, particularly during the weekday morning and afternoon road network peak periods.

An indication of the traffic generation potential of the proposed uses on the site is provided by reference to the following documents:

- RMS Guide to Traffic Generating Developments 2002 (RMS Guide)
- RMS Technical Direction 2013/04a (TDT)

The proposed development on the site is defined by the RMS Guide and TDT as a mixed use development, comprising “commercial” space and a “high density residential flat building”.

Based on the RMS trip generation rates, the planning proposal scheme has a traffic generation potential of approximately 39 vehicle trips during the weekday morning peak period and approximately 32 vehicle trips during the weekday afternoon peak period, as set out in the table below (entry & exit, combined).

Table 5 – Planning Proposal Peak Traffic Generation						
Land Use	AM			PM		
	Vehicle Trip Rate	Quantum	Proposed Peak Trips*	Vehicle Trip Rate	Quantum	Proposed Peak Trips*
Residential	0.15 trips/car space	229 car spaces	34	0.12 trips/car space	229 car spaces	28
Commercial	0.83 trips/car space	6 car spaces	5	0.64 trips/car space	6 car spaces	4
Total			39			32

* entry/exit combined

That projected future level of traffic generation potential should, however, be offset or *discounted* by the volume of traffic which could reasonably be expected to be generated by a hypothetical scheme under the current planning controls which apply to the site, in order to determine the *nett increase* in traffic generation potential as a consequence of the planning proposal.

Based on the indicative bedroom mix in Table 1 of this report as well as maximum car parking rates stipulated in Table 3 of this report, a hypothetical scheme which is compliant with the current planning controls which apply to the site, would be permitted to provide a maximum of 90 car parking spaces, comprising 88 residential spaces and 2 commercial spaces.

Based on the RMS trip generation rates, a “compliant” scheme has a traffic generation potential of approximately 15 vehicle trips during the weekday morning peak period and approximately 13 vehicle trips during the weekday afternoon peak period, as set out in the table below (entry & exit, combined).

Table 6 – PLEP 2023 Compliant Scheme Peak Traffic Generation						
Land Use	AM			PM		
	Vehicle Trip Rate	Quantum	Proposed Peak Trips*	Vehicle Trip Rate	Quantum	Proposed Peak Trips*
Residential	0.15 trips/car space	88 car spaces	13	0.12 trips/car space	88 car spaces	11
Commercial	0.83 trips/car space	2 car spaces	2	0.64 trips/car space	2 car spaces	2
Total			15			13

* entry/exit combined

Accordingly, it is likely that the planning proposal will result in a *nett increase* in the traffic generation potential of the site of approximately 24 vph during the AM peak period and 19 vph during the PM peak period, compared to a scheme compliant with current planning controls.

These nett increases in peak period traffic volumes are minimal and represent, on average, 1 additional vehicle trip approximately every 3 minutes during the weekday peak periods. These additional trips fall within typical daily fluctuations of the local road network and will have minimal impacts on the surrounding road network.

Furthermore, and critically, the traffic impacts of the subject PP have already been assessed and captured as part of a CBD wide mesoscopic model that led to its recommendation of uplift in the CBD as part of the Draft Parramatta CBD PP. The NSW Department of Planning & Environment ultimately gazetted an uplift well below that identified in the mesoscopic model, such that the subject PP will not result in traffic volumes that Council has not already considered and accepted.

Accordingly, the planning proposal for the subject site is therefore supportable on traffic grounds and there is nothing to gain by “reinventing the wheel” in terms of traffic modelling.

Loading & Servicing

Loading and servicing for the future mixed use development on the site will be undertaken by a variety of commercial vehicles ranging from courier vans and tradesmen's utilities, up to and including small and medium rigid waste trucks and removalist trucks.

Parramatta Council's DCP 2023, Part 6, Section 6.4 Loading and Servicing, provides objectives and controls with respect to loading and servicing requirements of new development.

Whilst the layout of the vehicular access and service area is not yet known, sufficient loading facilities will ultimately be provided in any DA scheme at the time of DA lodgement, in accordance with Council's objectives and controls.

As such, the planning proposal is not expected to result in any unacceptable loading or servicing implications.

Conclusion

In summary, this TPAR has been prepared in support of a PP to Council, involving amending the PLEP 2023 to allow for the redevelopment of the site for the purposes of a mixed use development, as follows:

- Amending the maximum building height map to permit a maximum building height of 153m, and
- Amending the maximum floor space ratio map to permit an FSR of 15.4:1, inclusive of all bonuses.

In amending the PLEP 2023, the PP envisages the construction of a new 47-storey tower on the site, comprising commercial space within a four-level podium, along with 43 levels of residential apartments on the levels above.

Based on RMS trip rates, the planning proposal scheme has a traffic generation potential of approximately 39 vehicle trips during the weekday morning peak period and approximately 32 vehicle trips during the weekday afternoon peak period (entry & exit, combined).

When compared to a hypothetical scheme compliant with the current PLEP 2023 planning controls, the planning proposal results in a *nett increase* in the traffic generation potential of just 24 vph during the AM peak period and 19 vph during the PM peak period.

In any event, the traffic impacts of the subject PP have already been assessed and captured as part of a CBD wide mesoscopic model that led to its recommendation of uplift in the CBD. The NSW Department of Planning & Environment ultimately gazetted an uplift well below that identified in the mesoscopic model, such that the subject PP will not result in traffic volumes that Council has not already considered and accepted.

Lastly, whilst the vehicular access, parking and loading arrangements are not yet known, they will ultimately comply with the numerical parking rates, be it maximum for car parking and minimum for bicycle parking, and comply with the relevant requirements of the AS2890 series.

In the circumstances, it is therefore concluded that the planning proposal will not result in any unacceptable traffic, parking, access, transport or servicing implications.

Please do not hesitate to contact me should you have any comments or questions.

Kind regards



Chris Palmer
Director
B.Eng (Civil), MAITPM