

issue k:		
issue j:	PLANNING PANEL MINUTES	21/10/2021
issue i:	DA RFI	22/07/2021
issue h:	DA RFI	28/05/2021
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issue d:	Pre - DA	29/07/2020
issue c:	Schematic design	30/06/2020
issue b:	Schematic 64	
issue a:	Schematic 60	05/06/2020

drawing:	COVER SHEET		
project:	PROPOSED CHILD CARE CENTRE @ 45 MOBBS LANE CARLINGFORD		
client:	SKYCORP CONSTRUCTION GROUP	sheet size: A3	Council
drawn:	E.K.	scale: as shown	COP
checked:	J.E.	date: OCT	ref: 2020-192

i1

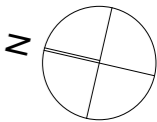
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PROPOSED CHILD CARE CENTRE
@ 45 MOBBS LANE CARLINGFORD
DEVELOPMENT APPROVAL



SHEET SCHEDULE	
SHEET	TITLE
1	COVER SHEET
2	SITE ANALYSIS
3	LEP CONTROLS
4	ROOF SITE ANALYSIS
5	BASEMENT
6	GROUND
7	FIRST
8	ROOF PLAN
9	FSR CALC LAYOUTS
10	PLAY AREA CALC LAYOUTS
11	GROUND FL LANDSACPE DESIGN
12	EVACUATION PLAN LAYOUTS
13	EVACUATION PLAN LAYOUTS
14	ELEVATIONS
15	ELEVATIONS
16	SECTIONS
17	SHADOWS - JUN
18	3D SHADOWS
19	LANDSCAPED AREA CALS
20	MATERIALS & FINISHES
21	STREETSCAPE ANALYSIS

SITE CONTEXT ANALYSIS

1:3000



LANDMARKS

- Ⓐ Mobbs Lane Reserve
- Ⓑ Fred Spurway Reserve
- Ⓒ Carlingford Kindergarten
- Ⓓ Papilio Early Learning Epping

Bus Stop

Proposed development

Sites being developed

ZONING

- RE1 Public Recreation
- SP2 Infrastructure
- B1 Neighbourhood Centre
- R1 General Residential
- R2 Low Density Residential
- E2 Environmental Conservation
- Heritage
- 9m Max Height of Building



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drawing:	SITE ANALYSIS		
project:	PROPOSED CHILD CARE CENTRE @ 45 MOBBS LANE CARLINGFORD		
client:	SKYCORP CONSTRUCTION GROUP		
drawn:	E.K.	scale: as shown	sheet size: A3
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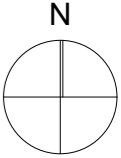
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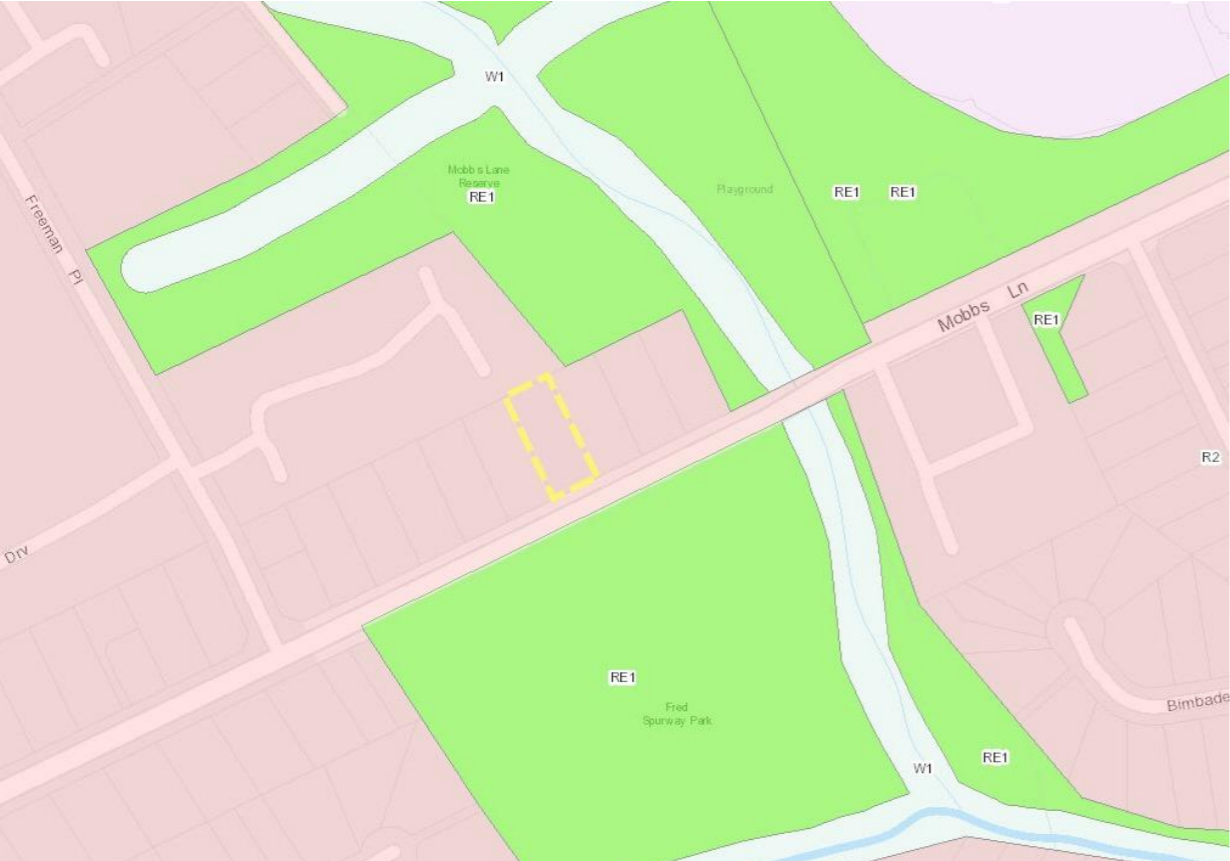


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LAND ZONING - R2



BUILDING HEIGHT - 9M



FSR -0.5:1



HERITAGE - N/A



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drawing:	scale:	date:	Council
project:	as shown	OCT	COP
client:	sheet size:	A3	
drawn:	E.K.		
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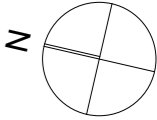
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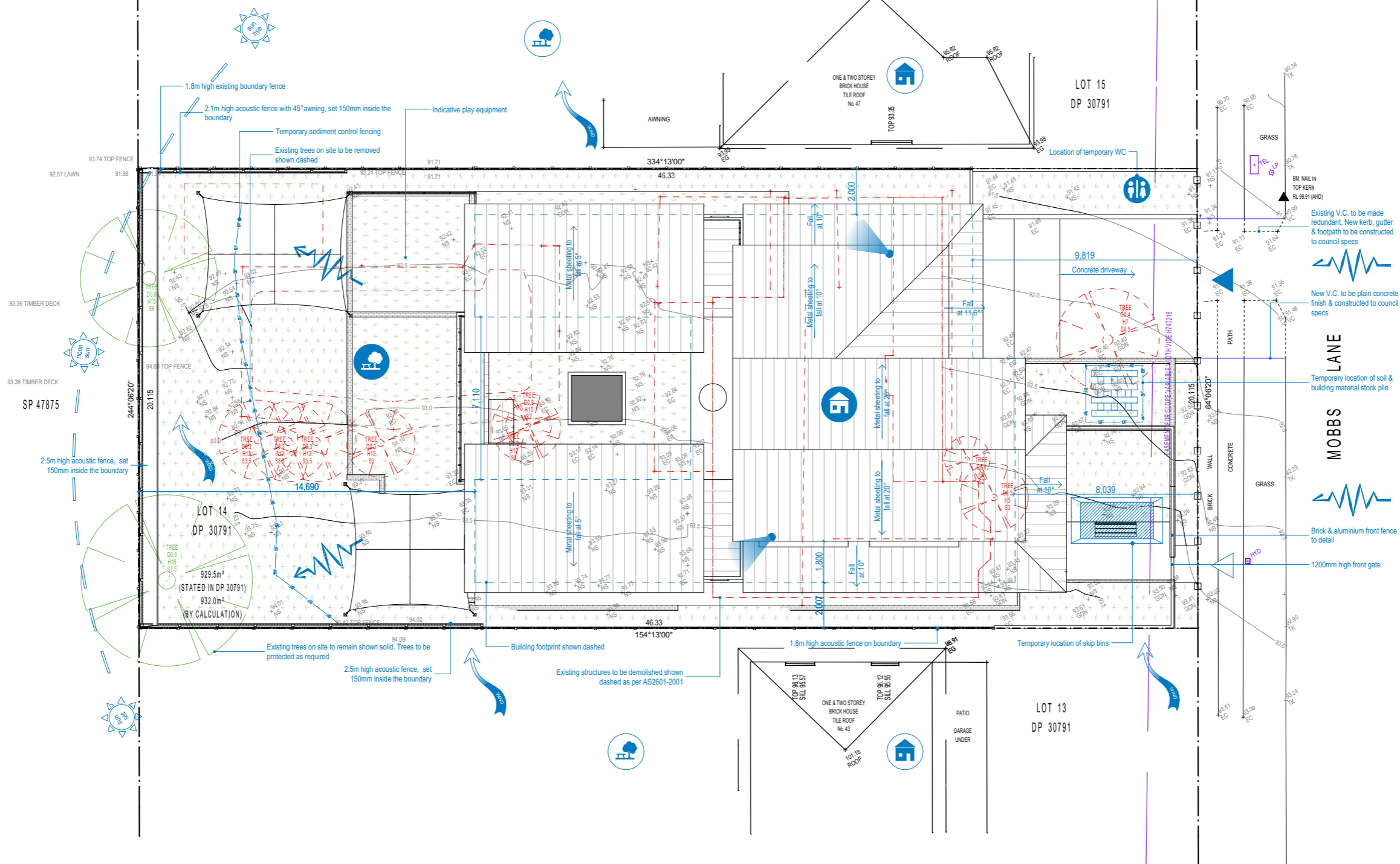
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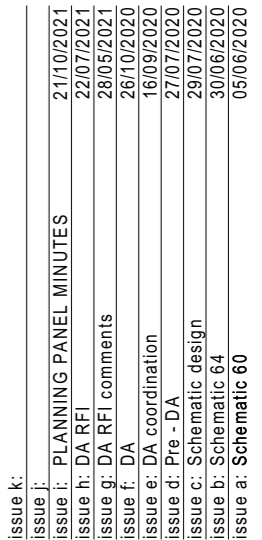
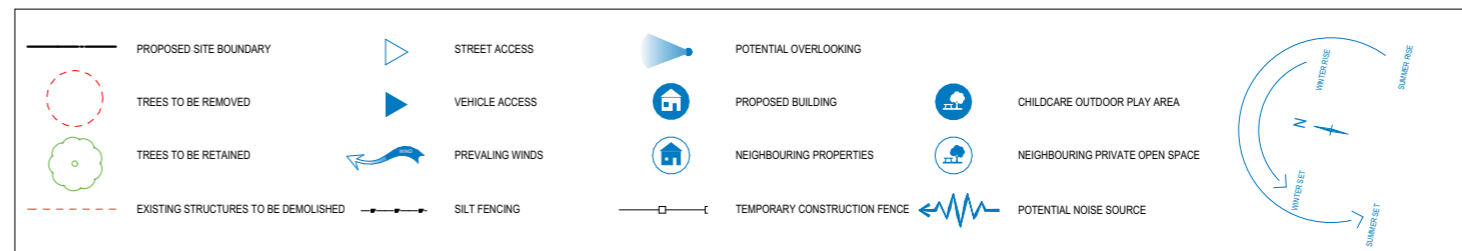
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1:200



drawing: **ROOF SITE ANALYSIS**

project: **PROPOSED CHILD CARE CENTRE
@ 45 MOBBS LANE CARLINGFORD**

client: **SKYCORP CONSTRUCTION GROUP**

drawn: **E.K.**

scale: as shown

sheet size: A3

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checked: **J.E.**

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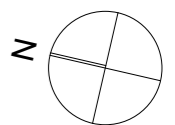
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drawing:	BASEMENT	scale:	as shown	date:	OCT	sheet size:	A3	Council	COP
project:	PROPOSED CHILD CARE CENTRE @ 45 MOBBS LANE CARLINGFORD	checked:	J.E.	drawn:	E.K.	ref:	2020-192		
client:	SKYCORP CONSTRUCTION GROUP								

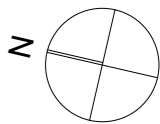
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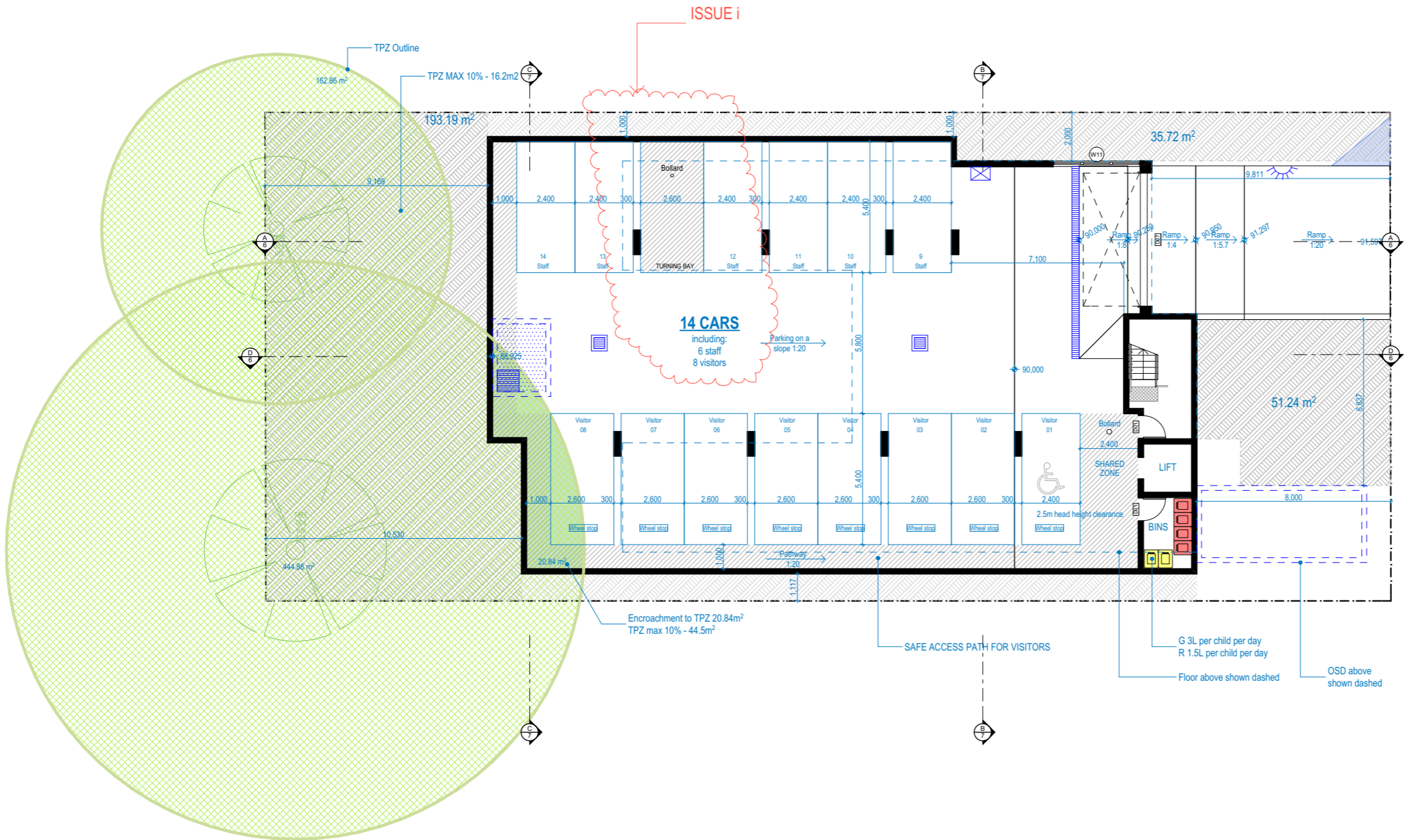


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59 KIDS
Parking req 1 per 4 kids - 15 cars



BASEMENT

1:200

COMPLIANCE TABLE		
CONTROL	REQUIRED	PROPOSED
Site Area (m ²) R2	N/A	932
Building Height	max 9m	8.6
Floor Space Ratio (0.5:1)	466.00	461.83
Transition area	min 4m	5
Outdoor play area	392	453.5
Indoor play area	182	196.2
Front Setback	Average	7.9
Side Setback	2m	2
Rear Setback	13.899	14.69
Landscaping - min 40% of site (2m min dim)	372.8	359.17
Landscaping - min 40% of site (2m min dim, < 1m soil depth)	372.8	423.04
Deep Soil - min 30 % of site (4m min dim)	279.60	244.43
Deep Soil - min 30 % of site (2m min dim)	279.60	280.15
Staff requirement	8.8	11
Parking 1 per 4 children	14	14

	Number of children	Age group (years)	Indoor Play area min 3.25m2 per child		Outdoor Play area min 7m2 per child		Staff		Storage req m3		Storage provided m3	
			Required	Provided	Required	Provided	Required	Provided	indoor	outdoor	indoor	outdoor
Playroom 01	15	2-3	48.75	51.51	105	315.91	3	3	3	4.5	7.63	9.32
Playroom 02	16	3-6	52	53.23	112		1.6	2	3.2	4.8	3.24	
Playroom 03	17	0-2	55.25	56.43	119		3.4	4	3.4	5.1	5.55	
Playroom 04	8	3-6	26	35.03	56	96.77	0.8	2	1.6	2.4	6	8.29
Total	56		182	196.2	392	412.68	8.8	11	11.2	16.8	14.79	17.61

ISSUE i

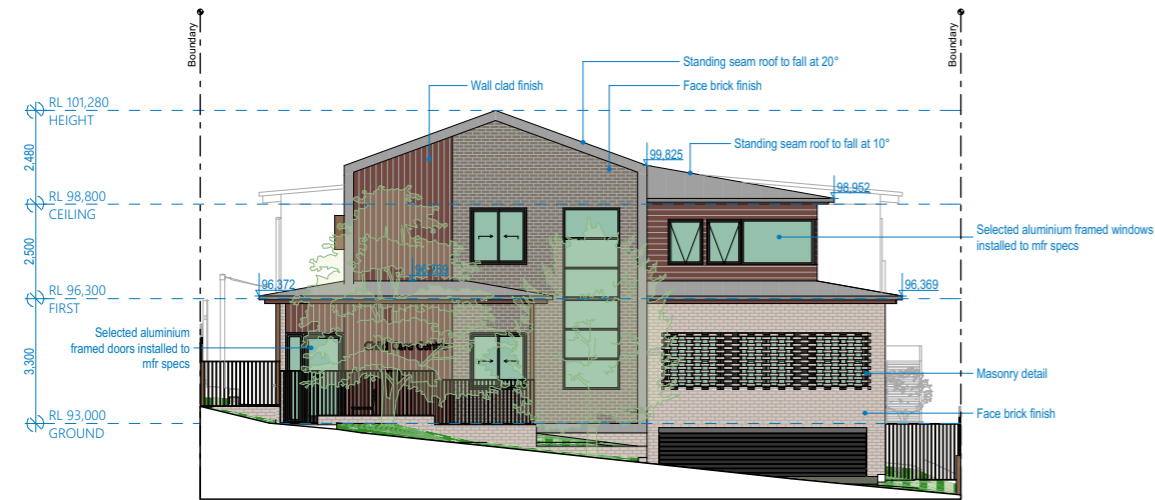
ISSUE i

SITE DATA

SITE AREA 932.00

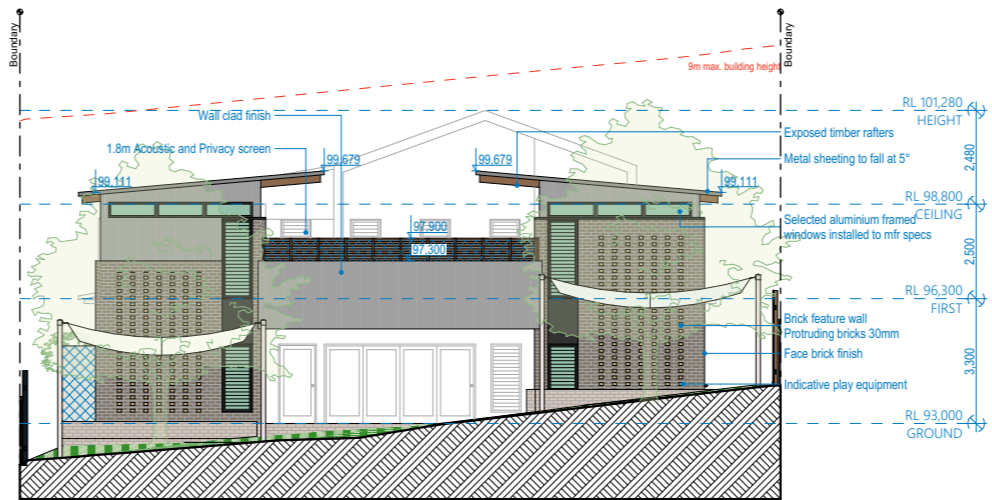
CHILD CARE CENTRE

Ground Floor Area	270.8
First Floor Area	191.03
Total	461.83
FSR	1 = 0.496



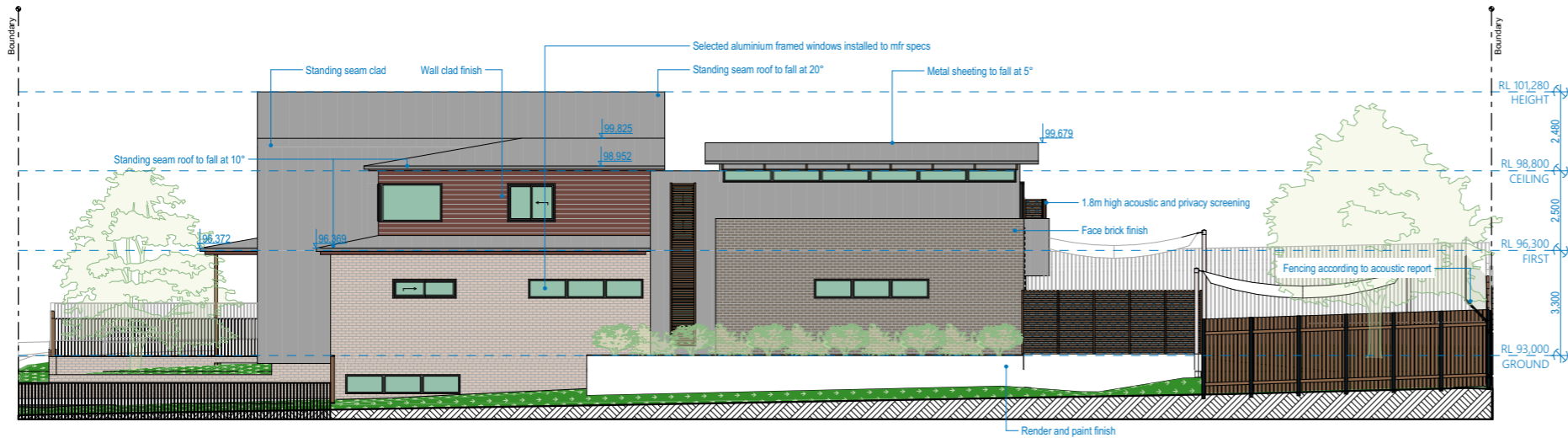
SOUTH ELEVATION

1:200



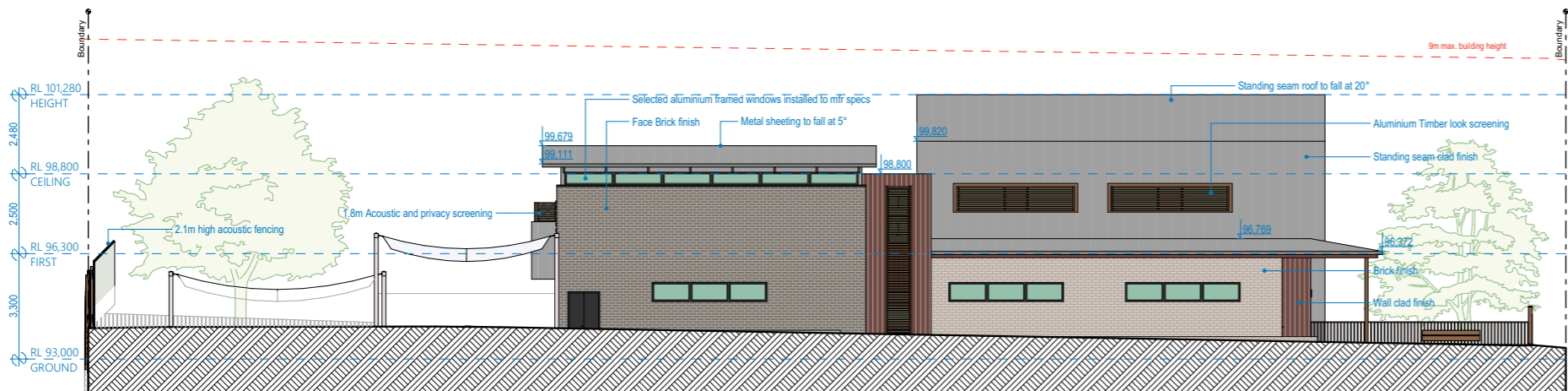
NORTH ELEVATION

1:200



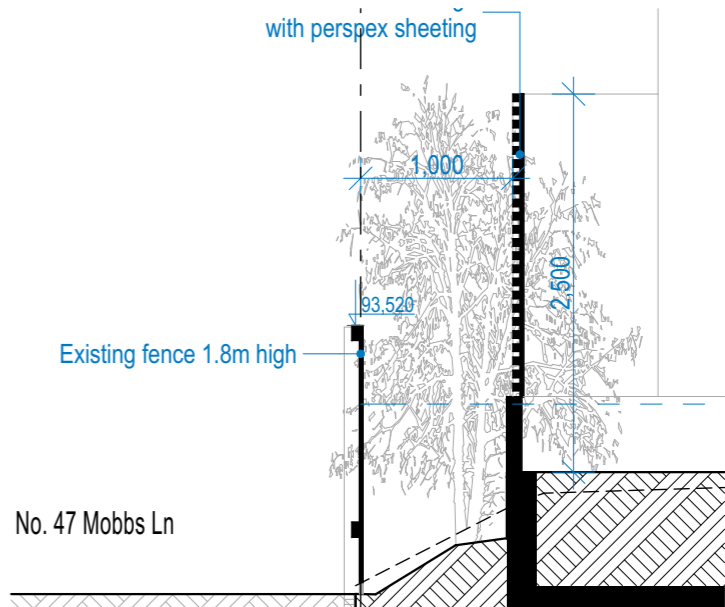
EAST ELEVATION

1:200



WEST ELEVATION

1:200



SECTION C - TYPICAL FENCE DETAIL

1:50

drawing: ELEVATIONS

project: PROPOSED CHILD CARE CENTRE
@ 45 MOBBS LANE CARLINGFORD

client: SKYCORP CONSTRUCTION GROUP

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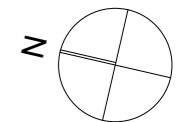
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issue a:	

drawing:	ELEVATIONS
project:	PROPOSED CHILD CARE CENTRE @ 45 MOBBS LANE CARLINGFORD
client:	SKYCORP CONSTRUCTION GROUP
drawn:	E.K.
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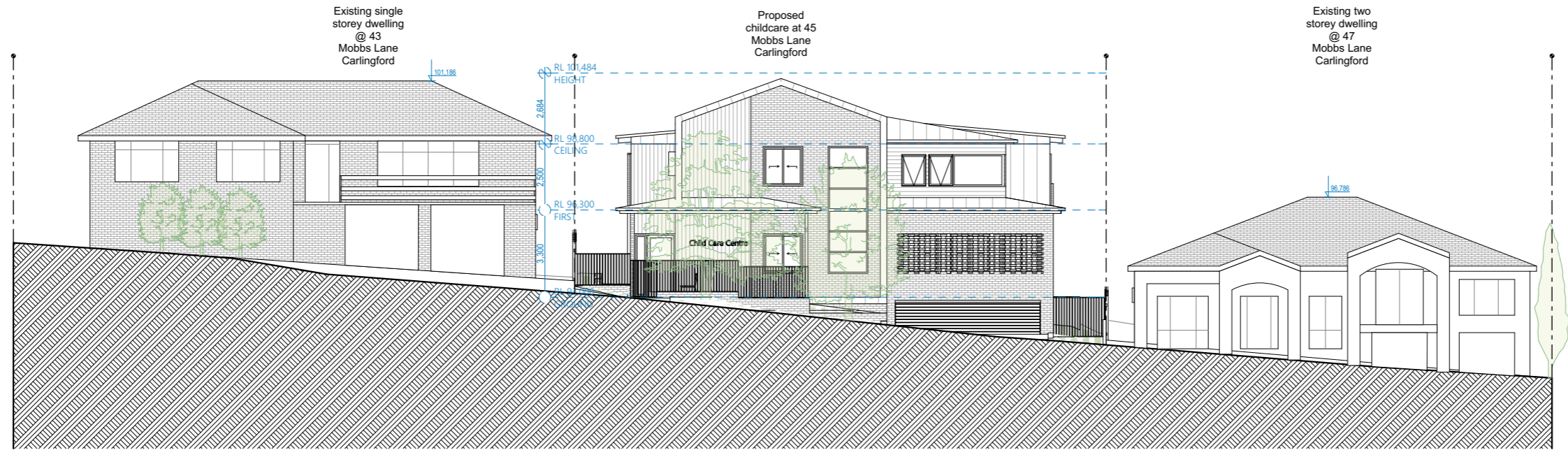
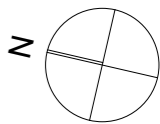
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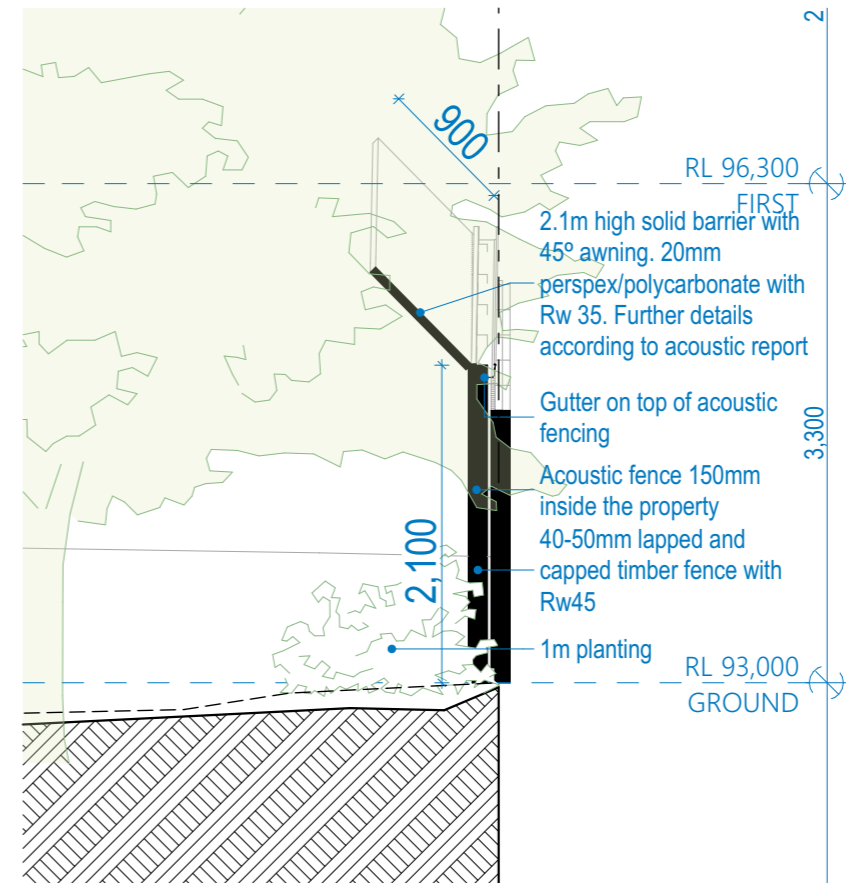
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SOUTH STREETSCAPE
1:200



SOUTH FENCE DETAIL
1:100



SECTION D - ACOUSTIC DETAIL
1:50

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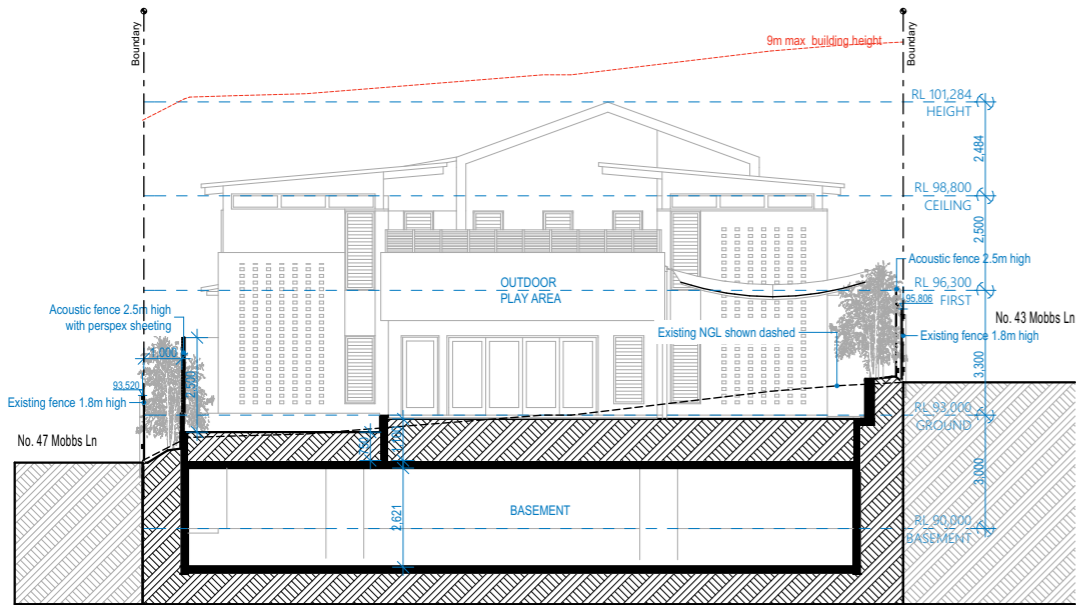
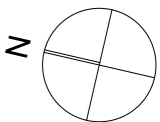
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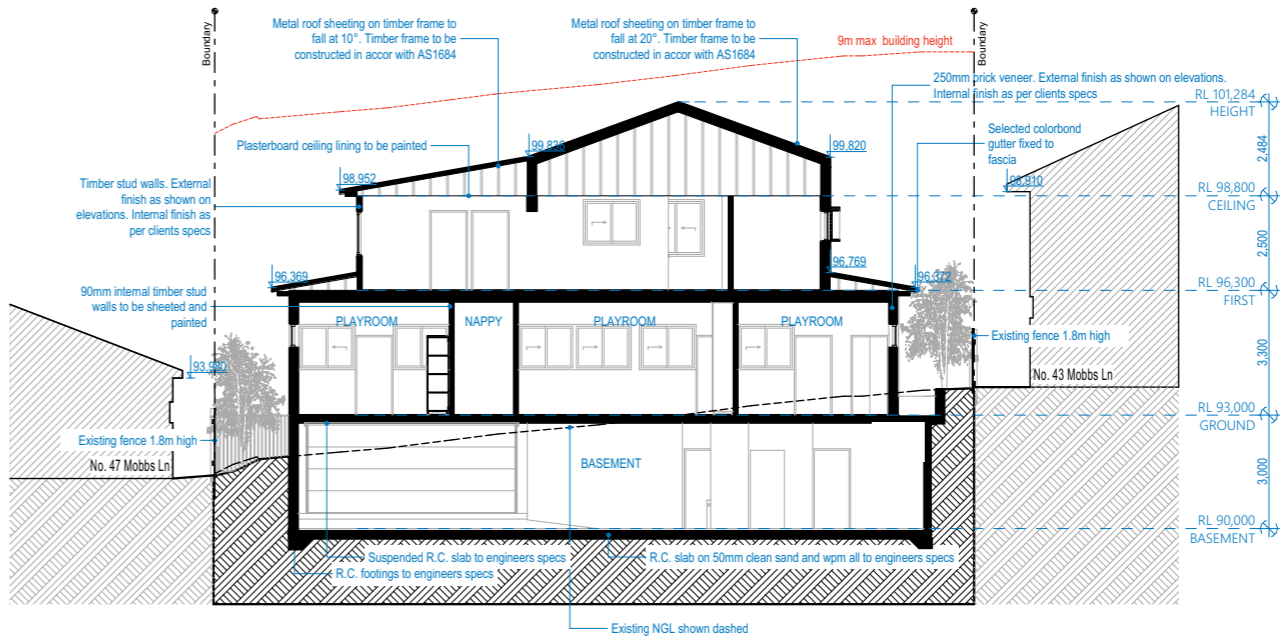
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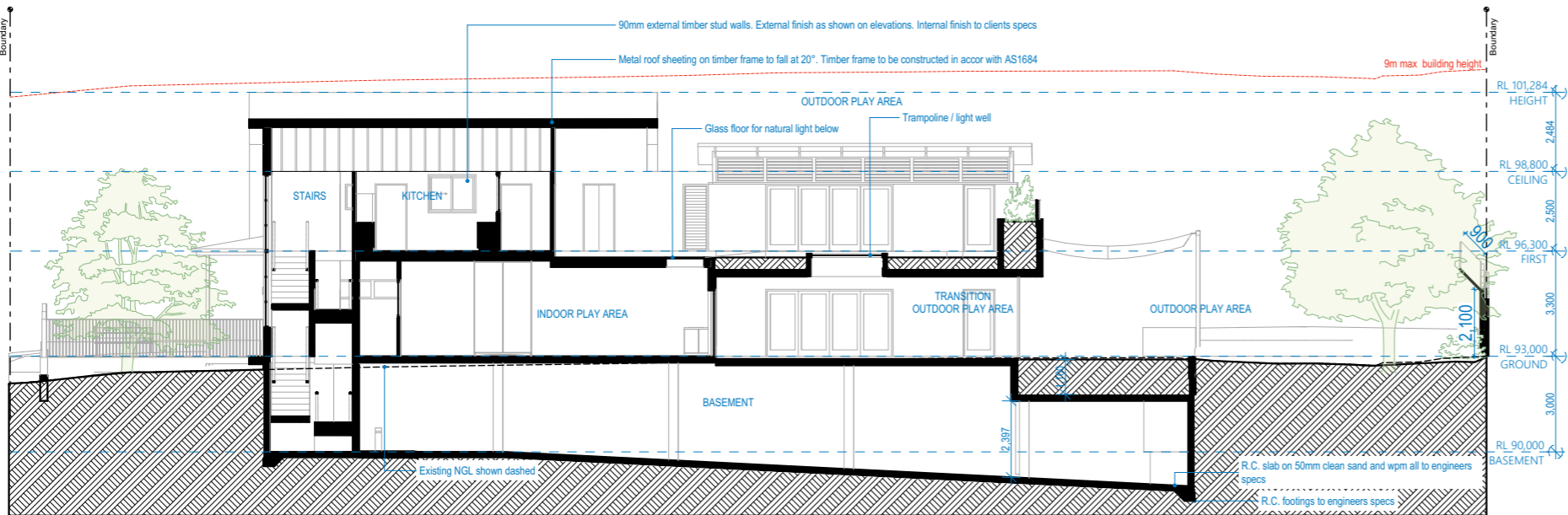
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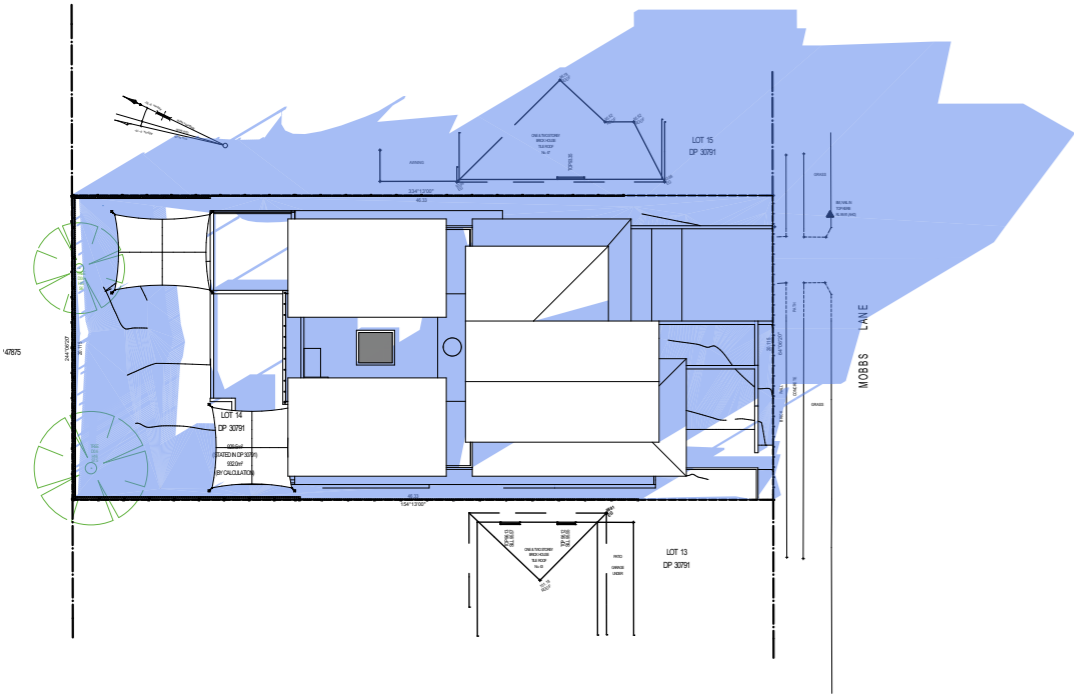
SECTION C
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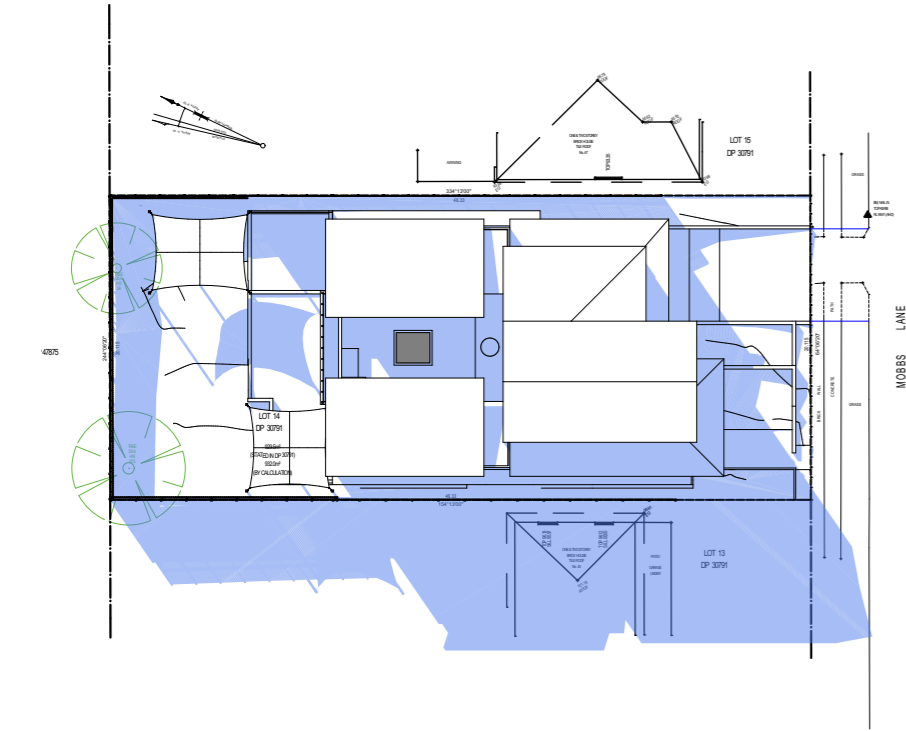
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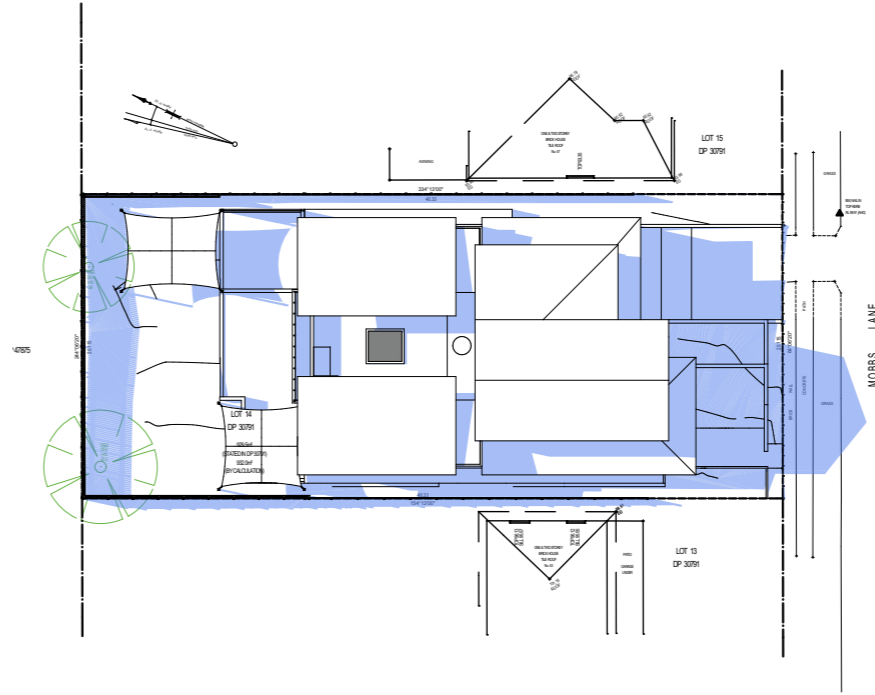
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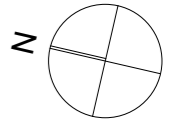
Jun-21-3pm
1:500



Jun-21-9am
1:500



Jun-21-12pm
1:500



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drawing: **SHADOWS - JUN**
project: **PROPOSED CHILD CARE CENTRE
@ 45 MOBBS LANE CARLINGFORD**
client: **SKYCORP CONSTRUCTION GROUP**
drawn: E.K. scale: as shown sheet size: A3 Council
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issue w:	Schematic design
issue v:	30/06/2020
issue u:	Schematic 64
issue t:	05/06/2020
issue s:	Schematic 60

3D VIEWS FROM THE SUN - SHADOW ANALYSIS - JUN 21

SOLAR ACCESS ANALYSIS

* EVERY SURFACE SEEN IN THIS VIEW RECEIVES SUN ON THE
NOMINATED HOUR

9AM



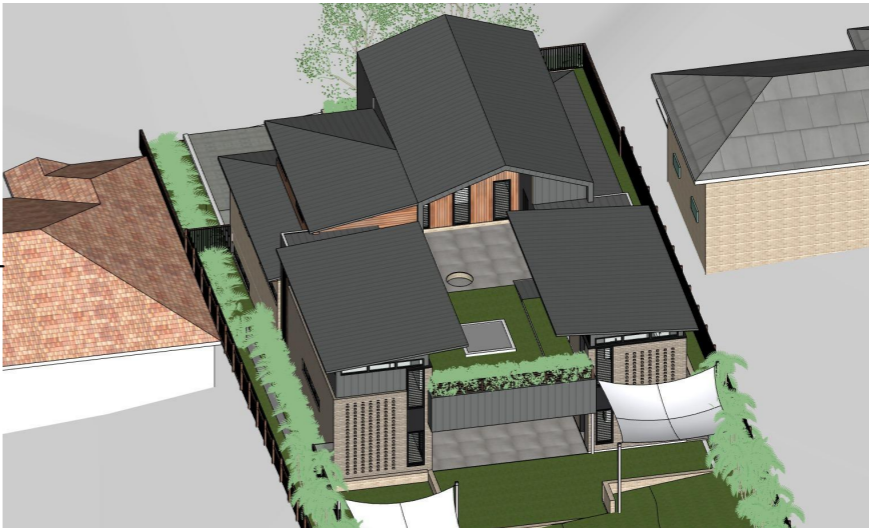
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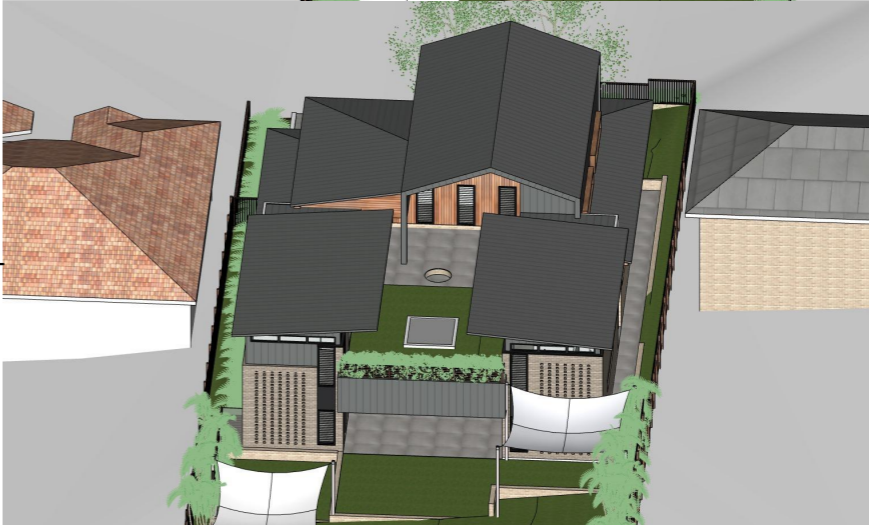
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12PM



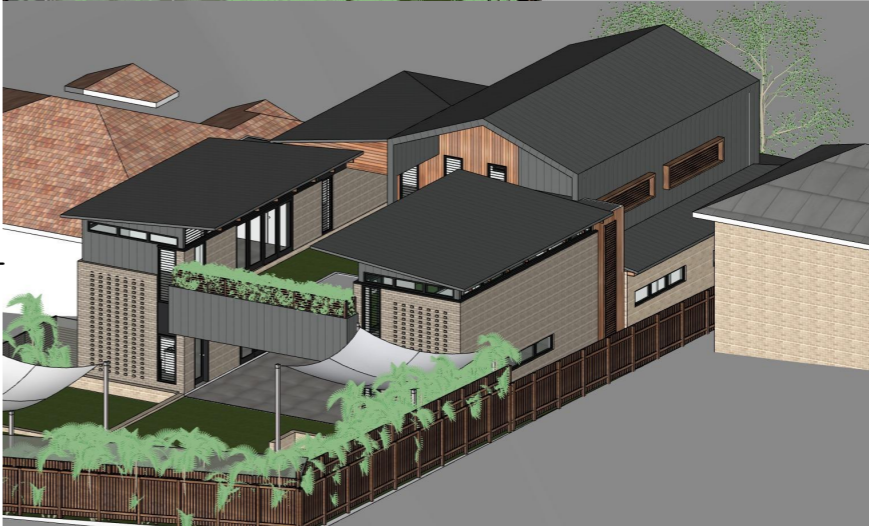
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2PM



3PM



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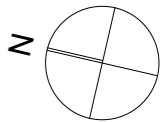
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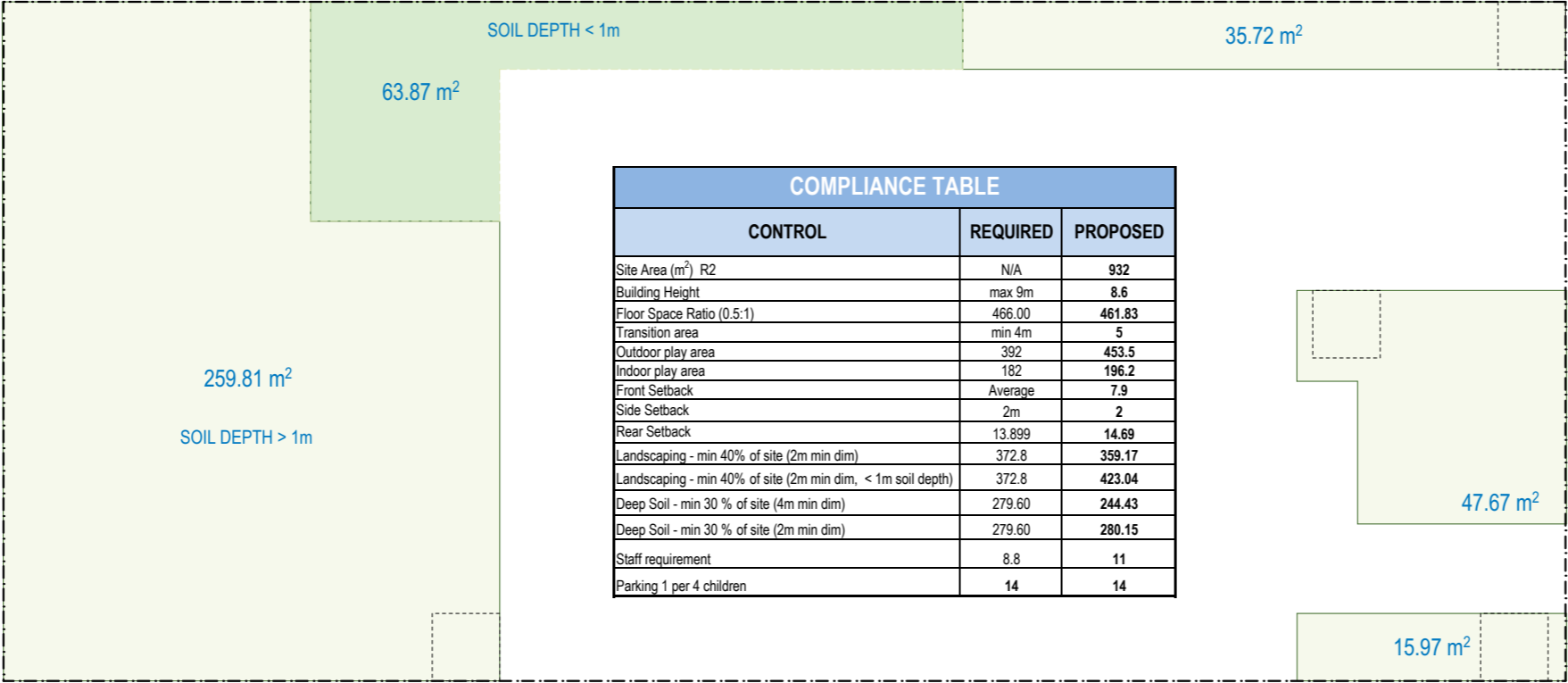
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LANDSCAPED ARAE CALCS

1:200



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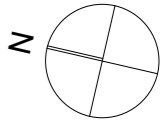
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MATERIALS & FINISHES SCHEDULE

@ 45 MOBBS LANE CARLINGFORD



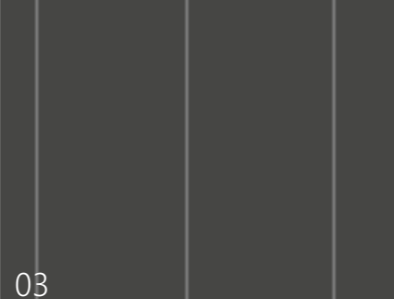
EXTERNAL BRICK WALLS 01
FACE BRICK - PGH VOLCANIC



EXTERNAL BRICK WALLS 02
FACE BRICK - PGH MINERAL



EXTERNAL CLADDING 01
COLORBOND MATT STANDING SEAM



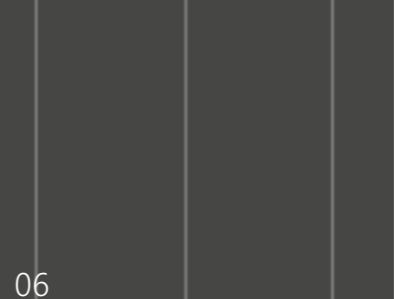
EXTERNAL CLADDING 02
TIMBER LOOK - JAMES HARDIE OR SIMILAR



DOORS & WINDOWS
ALUMINIUM - COLORBOND MONUMENT



ROOF MATERIAL
COLORBOND STANDING SEAM MATT



issue k:	21/10/2021
issue j:	22/07/2021
issue i:	28/05/2021
issue h:	26/10/2020
issue g:	16/09/2020
issue f:	27/07/2020
issue e:	29/07/2020
issue d:	30/06/2020
issue c:	05/06/2020
issue b:	
issue a:	

drawing:	MATERIALS & FINISHES	scale:	as shown	date:	OCT	sheet size:	A3	Council	COP
project:	PROPOSED CHILD CARE CENTRE @ 45 MOBBS LANE CARLINGFORD	drawn:	E.K.	checked:	J.E.	ref:	2020-192		
client:	SKYCORP CONSTRUCTION GROUP								

i20

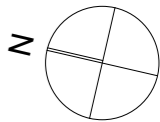
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north parramatta nsw 2151
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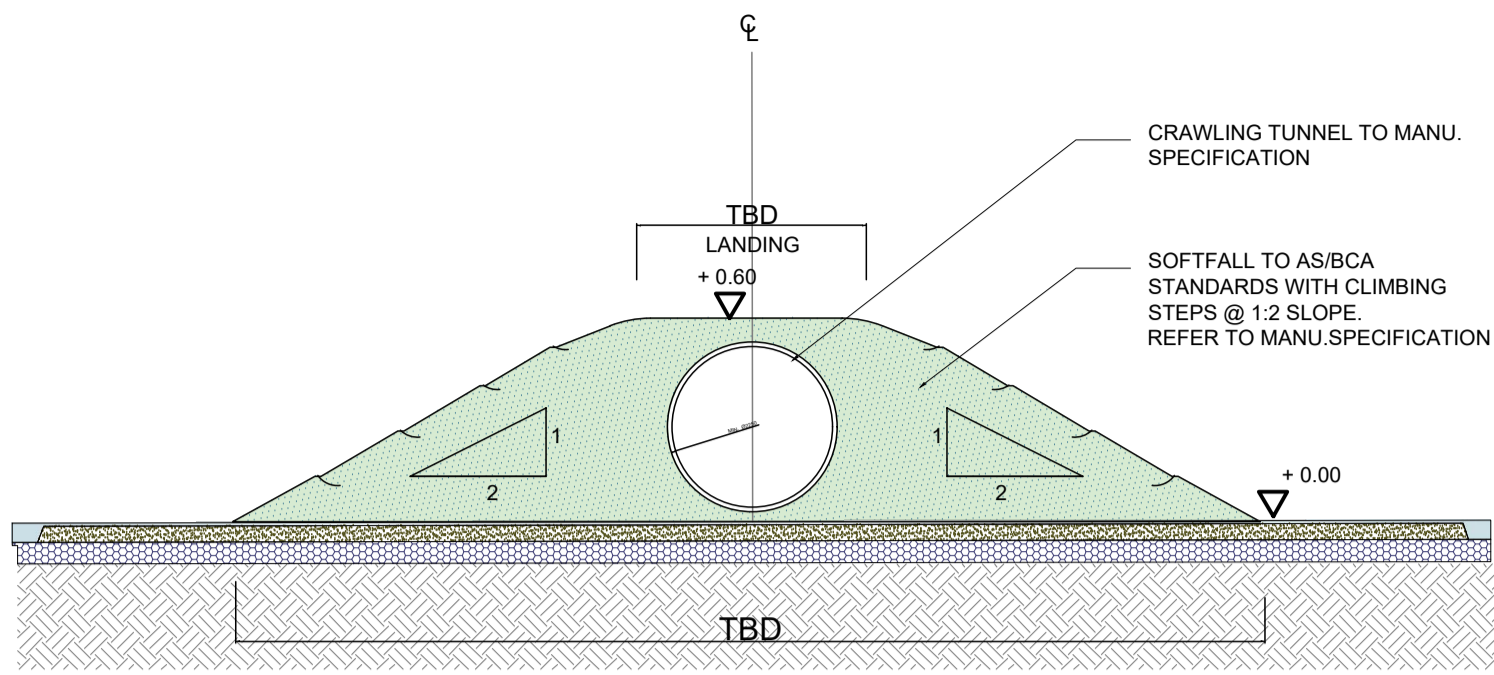


nominated architect - joe el-sabbagh 8707

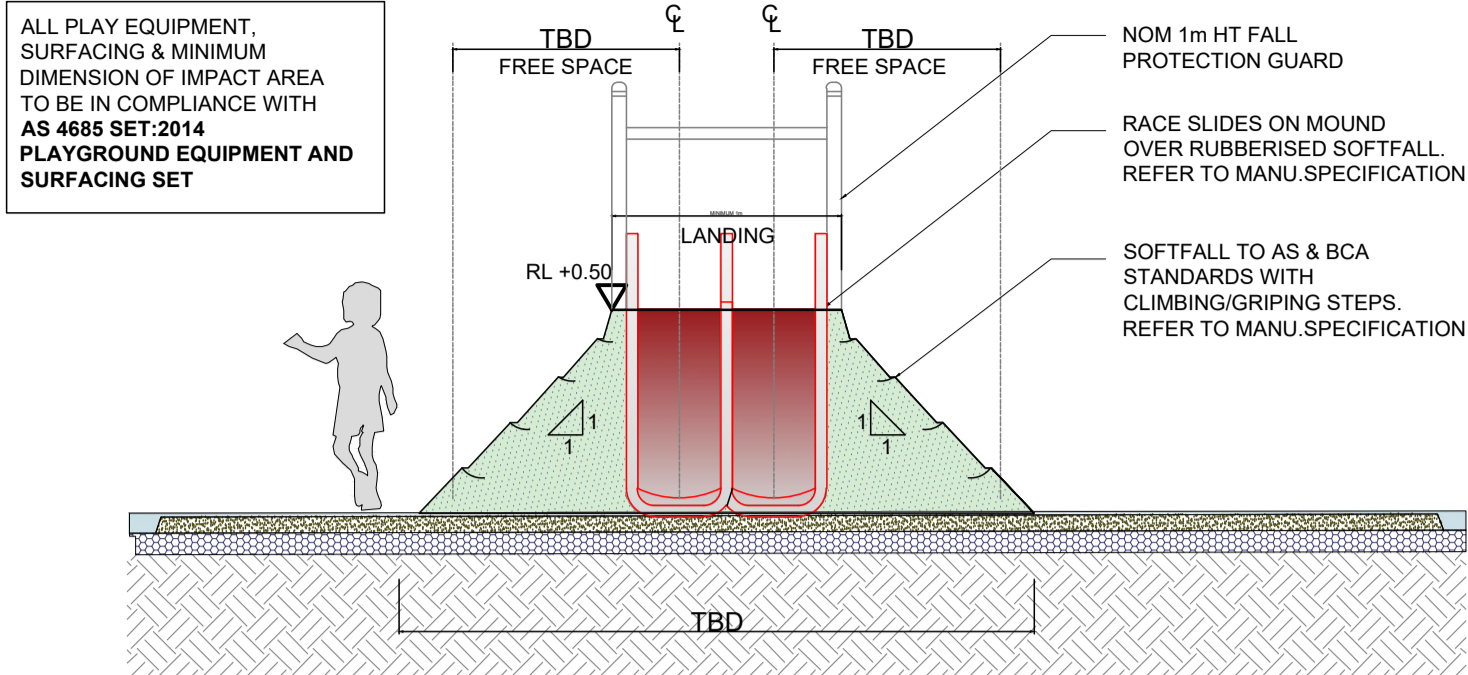
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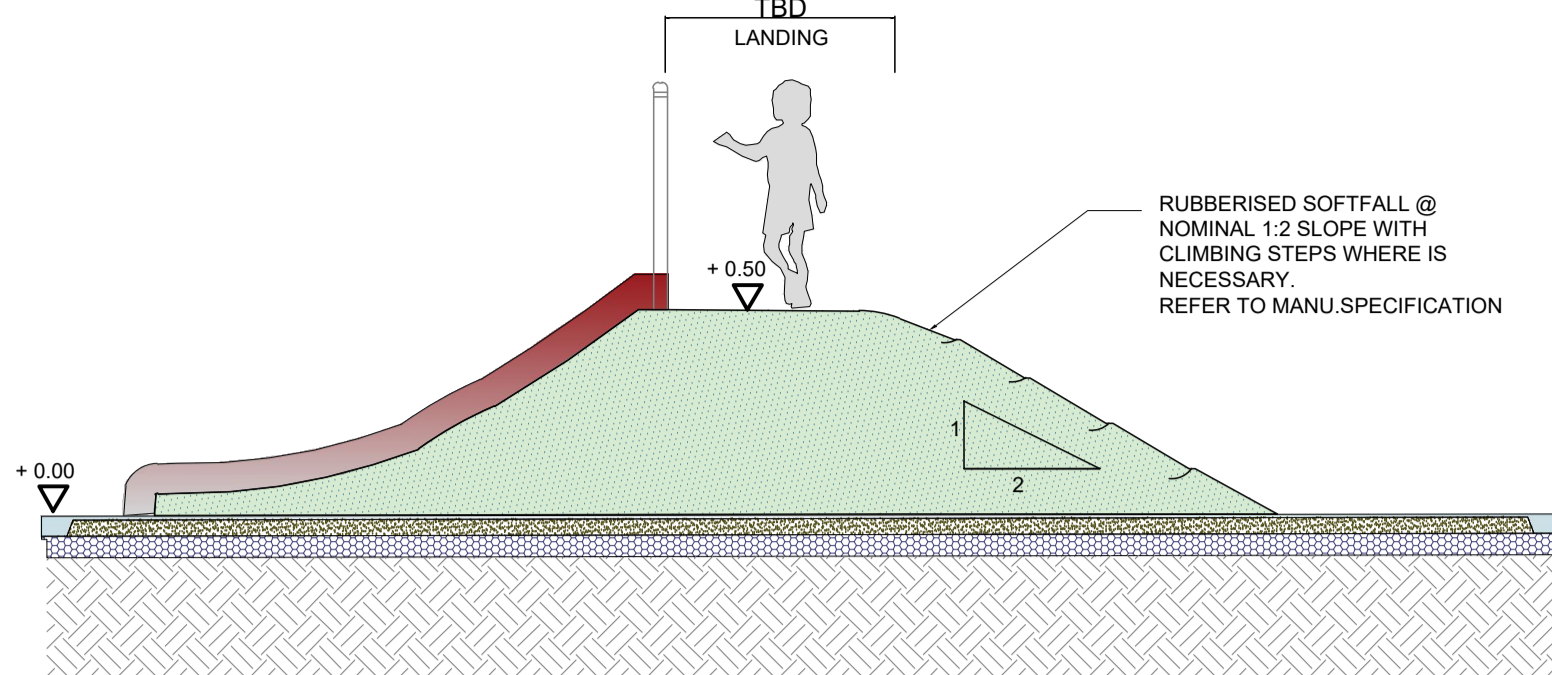




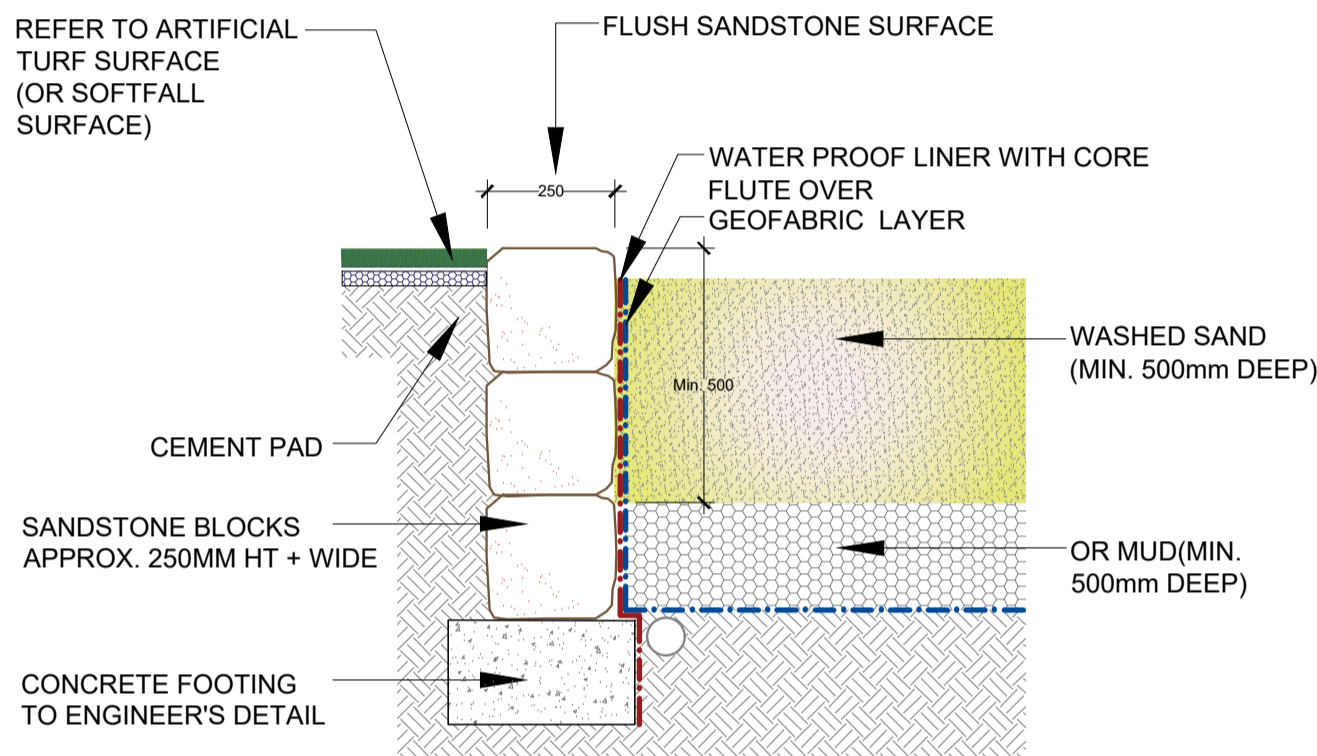
CRAWLING TUNNEL - FRONT ELEVATION
SCALE: 1:20



SLIDE ON MOUND - FRONT ELEVATION
SCALE: 1:20



SLIDE ON MOUND - SECTION/ ELEVATION
SCALE: 1:20



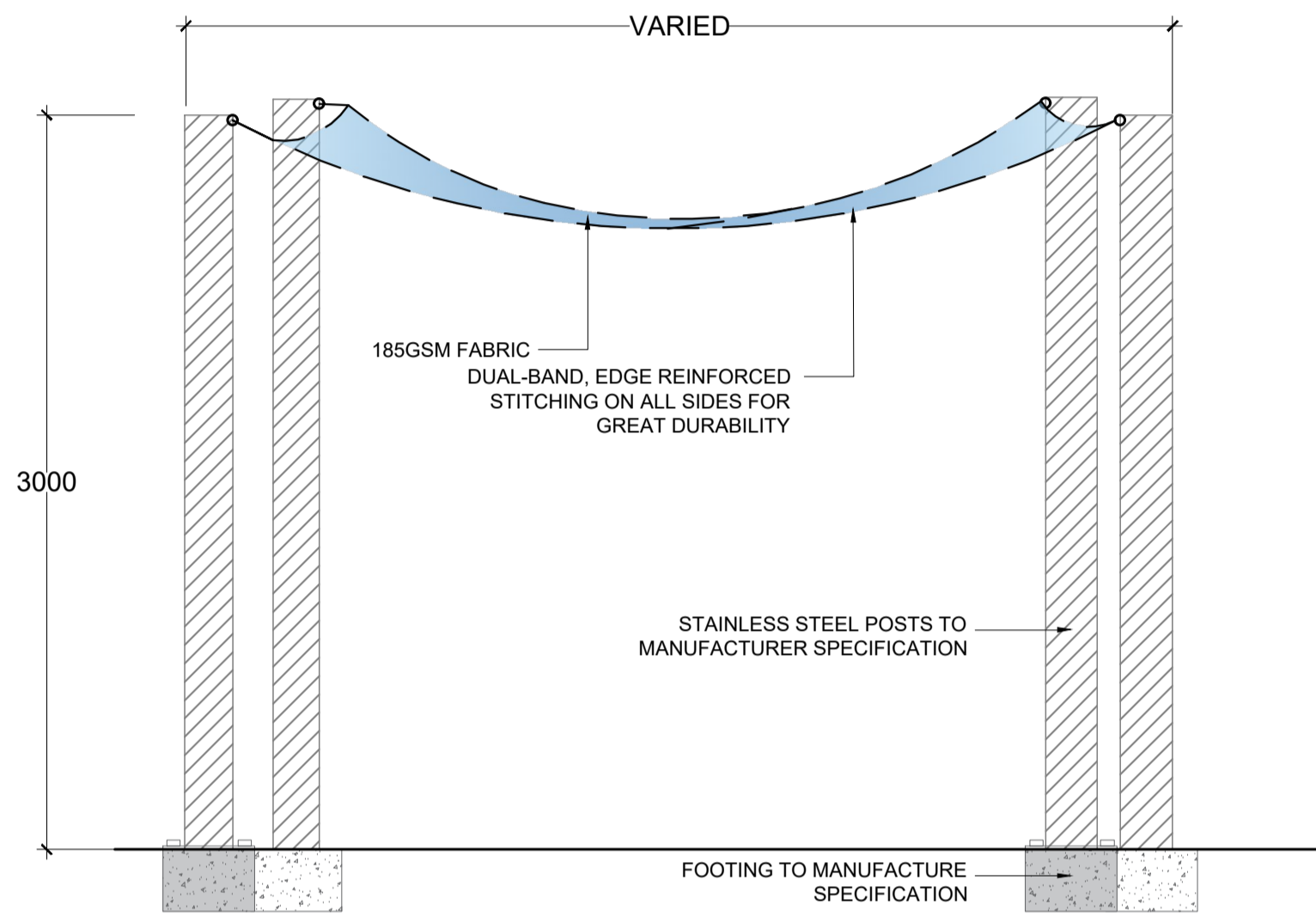
TYPICAL SANDPIT & SANDSTONE EDGING DETAIL
SCALE 1:20

FENCESCREEN SPECIFICATIONS	
PROPERTIES	RESULTS
Filament Strength	75 lbs. per ft.
Material Break Strength	750 lbs. per ft.
Material Weight	325 gsm
Crystalline Melt Point	132° C
Composition of UV Inhibitor	1.5% Amplos CH11027 / 1.5% Equasorb CM 100000
Flammability Point	364° C
Shade / Wind Blockage	86%

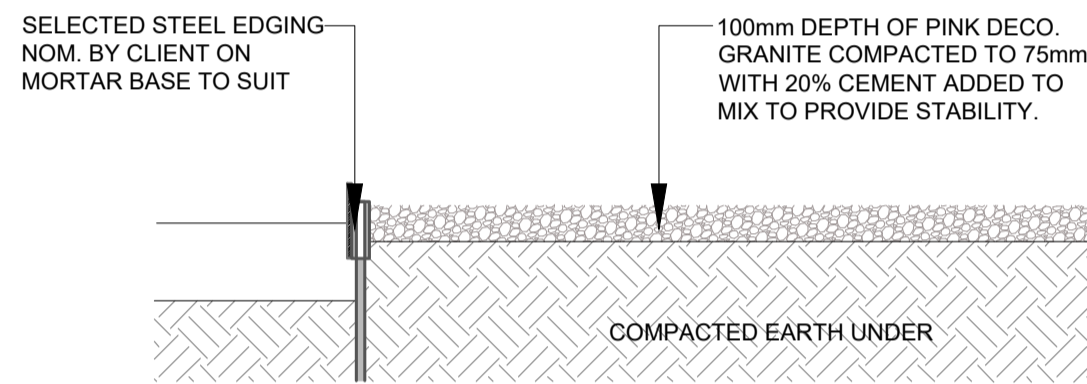
Attachment Enlargement

1 10 Shade Sail 2 10 Carabiner 3 3/4 Nylon Cord 4 10 Turnbuckle 5 10 PadEye

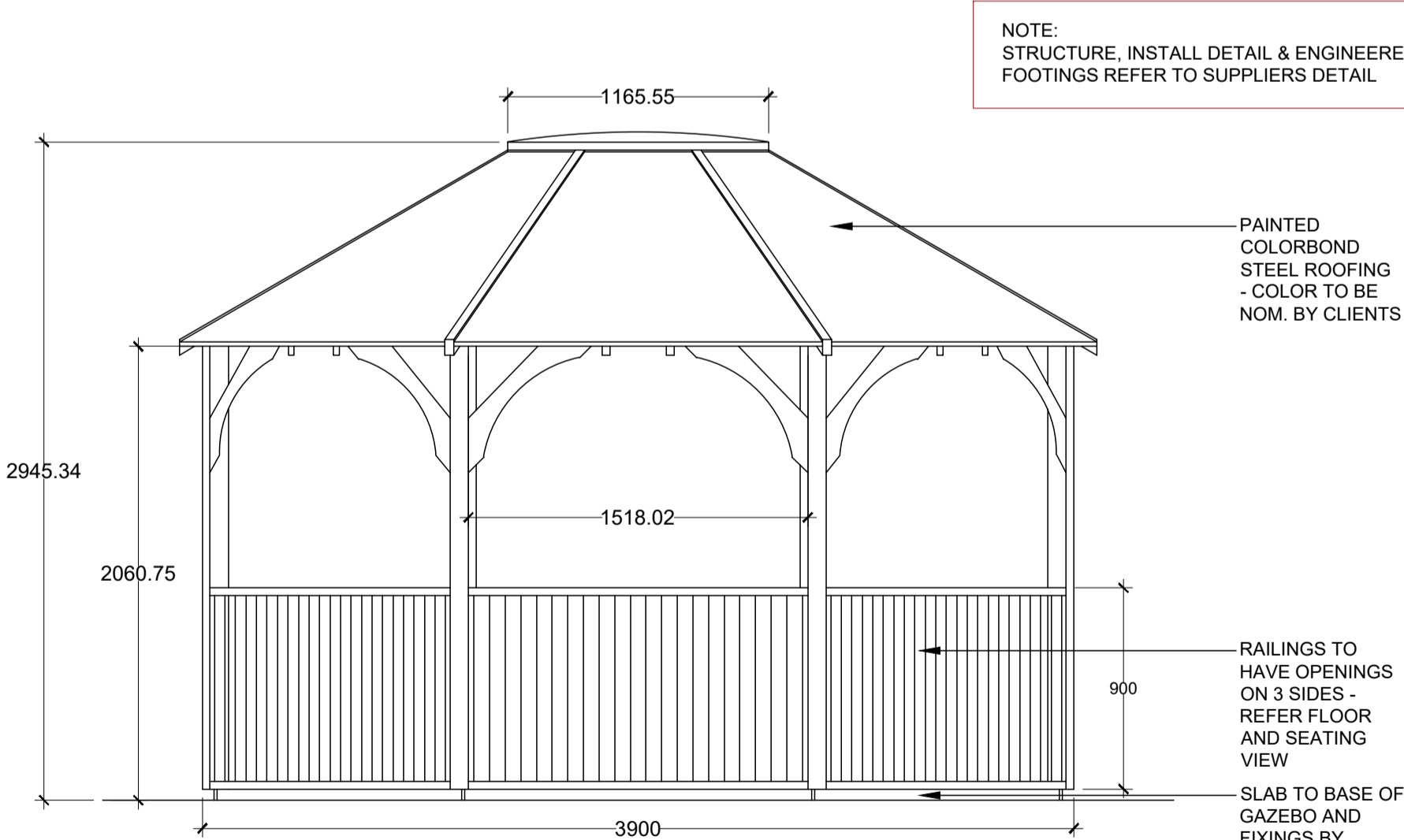
NOTE:
- INSTALL PER FENCESCREEN MANUFACTURER RECOMMENDATIONS.
- REFER TO STRUCTURAL PLANS FOR ALL FOOTING SIZES.



TRELLIS FIXED ON TIMBER FENCE
SCALE: 1:20

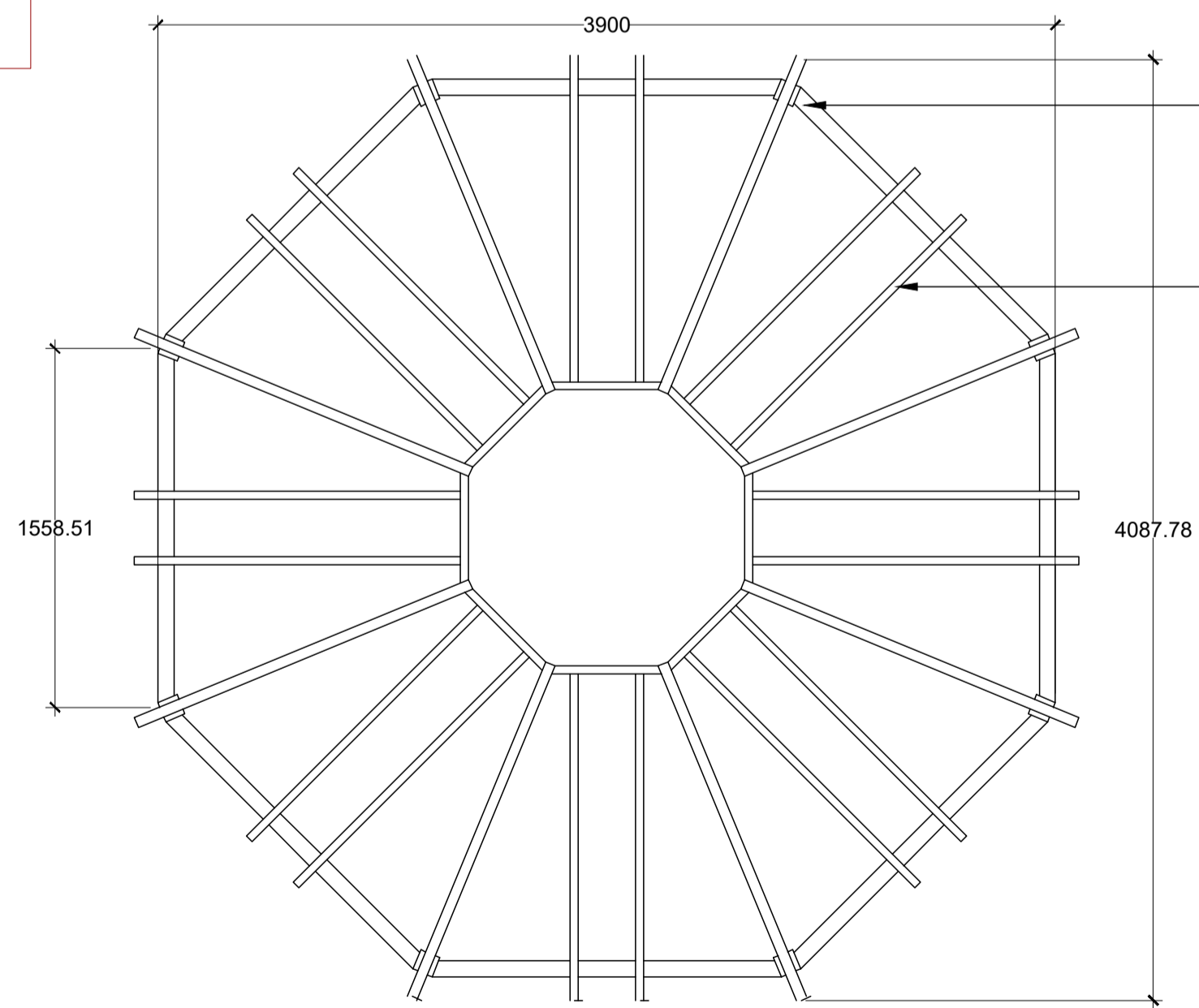


TYPICAL COMPACTED DECO GRANITE DETAIL
SCALE 1:10

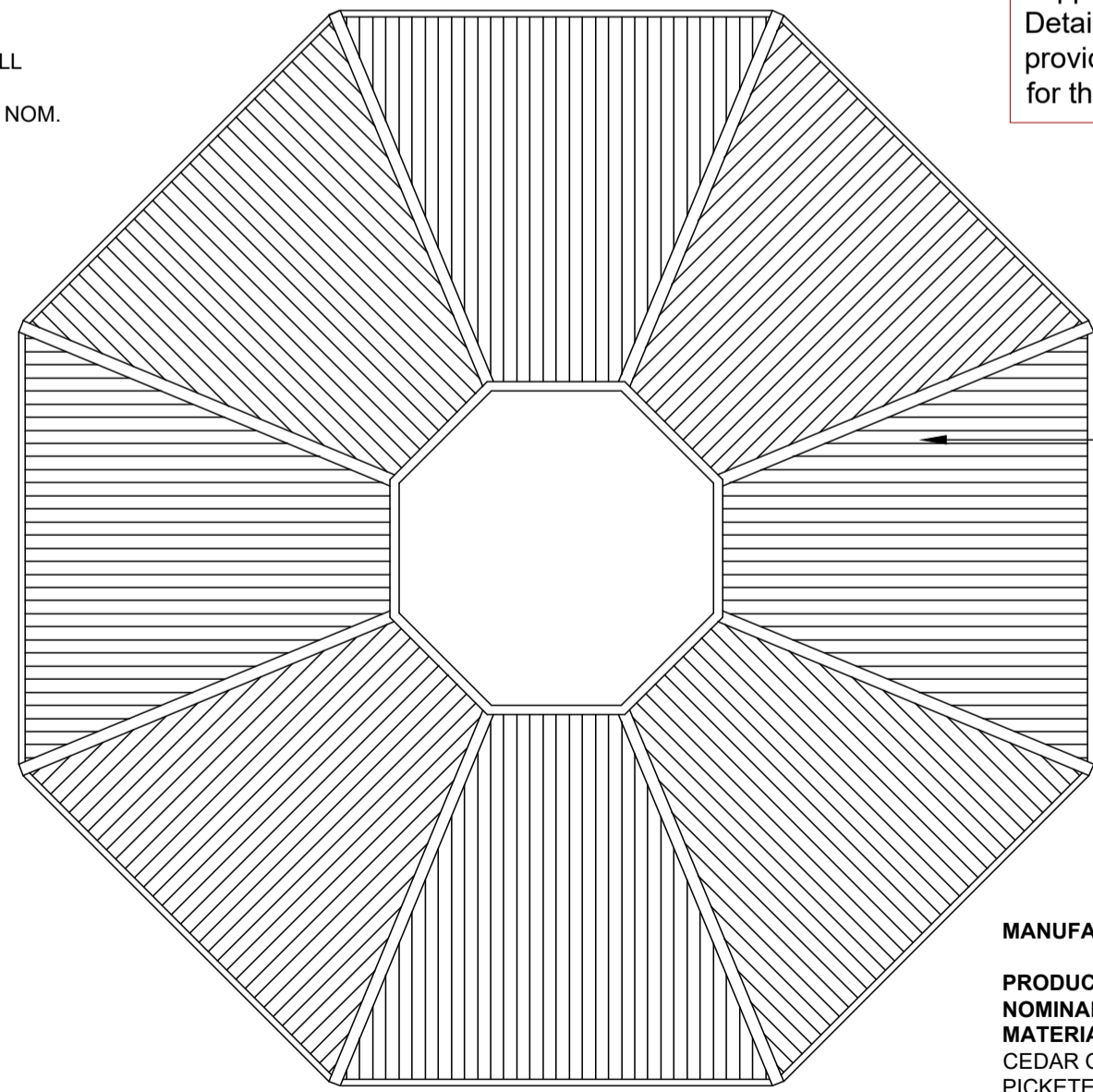


FRONT ELEVATION
SCALE 1:50

OCTAGONAL GAZEBO TYPICAL DETAIL
scale as shown



BEAM & RAFTERS VIEW
SCALE 1:50



ROOF VIEW
SCALE 1:50

Outdoor octagonal gazebo supplied by Gaxebos Galore. Details adapted from drawings provided by Gaxebos Galore for this product

MANUFACTURER: GAZEBOS GALORE
PRODUCT NAME: OCTAGONAL GAZEBO
NOMINAL SIZE: 2.1m OR 2.4m POSTS
MATERIAL: CEDAR OR COLOURBOND ROOF
PICKETED SIDES
STAINED OR PAINTED FINISHE
PH: 1800500129
WEBSITE: <https://gaxebosgalore.com.au/octagonal-hexagonal-pentagon-gazebos/octagonal-gazebo>

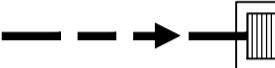


45 MOBBS LANE, CARLINGFORD

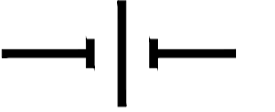
PROPOSED CHILD CARE CENTRE

STORMWATER CONCEPT PLANS


LEGEND




PROPOSED STORMWATER




PIPE OVERCROSSING
MINIMUM 150mm CLEARANCE




EXISTING SEWER MAIN
(FROM RECORDS)




EXISTING WATER
(FROM RECORDS)




EXISTING POWER
(FROM RECORDS)




EXISTING TELSTRA
(FROM RECORDS)




GUTTER DOWNPIPE




ROOF SLOPE




PLANTER GRATE




FLOOR GRATE




RAINWATER OUTLET




SURFACE FLOW ARROWS



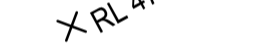
DESIGN SURFACE LEVEL




EXISTING SURFACE LEVEL




INVERT LEVEL OF PIPE JUNCTION



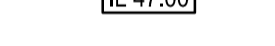
FENCE WITH 50mm GAP
BENEATH FOR OVERLAND FLOWS




CLOSED STYLE FENCING



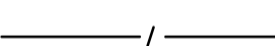
MASONRY RETAINING WALL TO
STRUCTURAL ENGINEER'S DETAILS




SWALE DRAIN




PROPOSED OSD STORAGE



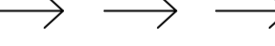
ROOF AREA TO
RAINWATER TANK




AREA BYPASSING OSD



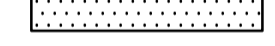
PROPOSED WSUD / BIO-RETENTION
AREA / POND



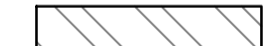
TREES TO BE RETAINED



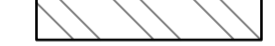
TREES TO BE REMOVED



RAISED CONCRETE EDGING



065 RISER WITH
NON-RETURN VALVE



EMERGENCY OVERFLOW
SPITTERS/PIPES

DRAWING INDEX	
Drawing No.	DESCRIPTION
000	COVER SHEET, LEGEND & NOTES
101	STORMWATER CONCEPT PLAN BASEMENT LEVEL SHEET 1 OF 2
102	STORMWATER CONCEPT PLAN BASEMENT LEVEL SHEET 2 OF 2
103	STORMWATER CONCEPT PLAN
104	OSD & WSUD DETAILS AND CALCULATION SHEETS SHEET 1 OF 3
105	OSD & WSUD DETAILS AND CALCULATION SHEETS SHEET 2 OF 3
106	OSD & WSUD DETAILS AND CALCULATION SHEETS SHEET 3 OF 3
107	SEDIMENT & EROSION CONTROL PLAN AND DETAILS
108	MISCELLANEOUS DETAILS SHEET

GENERAL NOTES

- ALL LINES ARE TO BE Ø90 uPVC 1.0% GRADE UNLESS NOTED OTHERWISE. CHARGED LINES TO BE SEWERGRADE & SEALED.
- EXISTING SERVICES LOCATIONS SHOWN INDICATIVE ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE & LEVEL ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY EARTHWORKS.
- ALL PIPES TO HAVE MIN 150mm COVER IF LOCATED WITHIN PROPERTY.
- ALL PITS IN DRIVEWAYS TO BE 450x450 CONCRETE AND ALL PITS IN LANDSCAPED AREAS TO BE 450x450 PLASTIC.
- PITS LESS THAN 600mm DEEP MAY BE BRICK, PRECAST OR CONCRETE.
- ALL BALCONIES AND ROOFS TO BE DRAINED AND TO HAVE SAFETY OVERFLOWS IN ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARDS.
- ALL EXTERNAL SLABS TO BE WATERPROOFED.
- ALL GRATES TO HAVE CHILD PROOF LOCKS.
- ALL DRAINAGE WORKS TO AVOID TREE ROOTS.
- ALL DPs TO HAVE LEAF GUARDS.
- ALL EXISTING LEVELS TO BE CONFIRMED BY BUILDER PRIOR TO CONSTRUCTION.
- ALL WORK WITHIN COUNCIL RESERVE TO BE INSPECTED BY COUNCIL PRIOR TO CONSTRUCTION.
- COUNCIL'S ISSUED FOOTWAY DESIGN LEVELS TO BE INCORPORATED INTO THE FINISHED LEVELS ONCE ISSUED BY COUNCIL.
- ALL WORK SHALL BE IN ACCORDANCE WITH B.C.A. AND A.S.3500.3.
- REFER TO LANDSCAPE ARCHITECT'S DRAWINGS FOR LANDSCAPING.
- CARE TO BE TAKEN AROUND EXISTING SEWER. STRUCTURAL ADVICE IS REQUIRED FOR SEWER PROTECTION AGAINST ADDITIONAL LOADING FROM NEW PITS, PIPES, RETAINING WALLS AND OSD BASIN WATER LEVELS.
- ALL WALLS FORMING THE DETENTION BASINS SHALL BE CONSTRUCTED WHOLLY WITHIN THE PROPERTY BOUNDARIES OF THE SITE BEING DEVELOPED.
- OSD WARNING SIGN AND SAFETY FENCING SHALL BE PROVIDED TO ABOVE GROUND OSD STORAGE AREA IN ACCORDANCE WITH COUNCIL REQUIREMENTS.
- ENSURE THAT NON FLOATABLE MULCH IS USED IN DETENTION BASINS, ie, USE DECORATIVE ROCK MULCH OR EQUIVALENT.
- ALL PIPES IN BALCONIES TO BE Ø65 uPVC CAST IN CONCRETE SLAB. CONTRACTOR TO PROVIDE A BREAK / OPEN VOID IN RAIL / BALLUSTRADE FOR STORMWATER EMERGENCY OVERFLOW. ALL ENCLOSED AREAS/PLANTER BOXES TO BE FITTED WITH FLOOR WASTES & DRAINED TO OSD. DOWNPIPES TO BE CHECKED BY ARCHITECT & PLUMBER PRIOR TO CONSTRUCTION.
- THE OSD BASIN / TANK IS TO BE BUILT TO THE CORRECT LEVELS & SIZE AS PER THIS DESIGN. ANY VARIATIONS ARE TO BE DONE UNDER CONSULTATION FROM OUR OFFICE ONLY. ANY AMENDMENTS WITHOUT OUR APPROVAL WOULD RESULT IN ADDITIONAL FEES FOR REDESIGN AT OC STAGE OR IF A SOLUTION CANNOT BE FOUND, RECONSTRUCTION IS REQUIRED UNDER THE CONTRACTOR'S EXPENSES.

ROOF NOTE:

IT IS CONTRACTOR'S RESPONSABILITY TO ENSURE MINIMUM 30 TO 40mm OF PONDING IS ACHIEVED OVER THE FLOOR WASTES BY GRADING CATCHMENT'S SURFACES AT MINIMUM 1% FALL.

PIPES NOTE:

Ø65 PVC @ MIN 1.0%
Ø90 PVC @ MIN 1.0%
Ø100 PVC @ MIN 1.0%
Ø150 PVC @ MIN 1.0%
Ø225 PVC @ MIN 0.5%
Ø300 PVC @ MIN 0.4%
UNLESS NOTED OTHERWISE

NOT FOR CONSTRUCTION

B COUNCIL COMMENTS		27/07/2021	AGN	JSF
A ISSUE FOR DEVELOPMENT APPLICATION		22/10/2020	EHZ	JSF
Issue	Description	Date	Design	Checked
10m at full size 100m 200m				

Certification By Dr. Anthony Hasham (NPER)

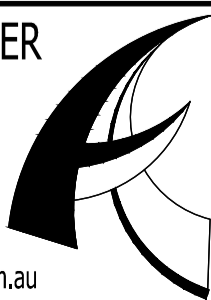
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16 dunlop street
north parramattaNSW 2151
PHONE : +61 2 9630 9911
Email :admin@designcorp.com.au

Client
Skycorp
Construction Group
Council
City of
Parramatta Council

Scale



ACE CIVIL STORMWATER
SERVICES PTY LTD
ABN: 27 644 422 506
SHOP 2-141 CONCORD RD,
NORTH STRATHFIELD, NSW 2137
P:(02) 9763 1500 E:info@aceeng.com.au

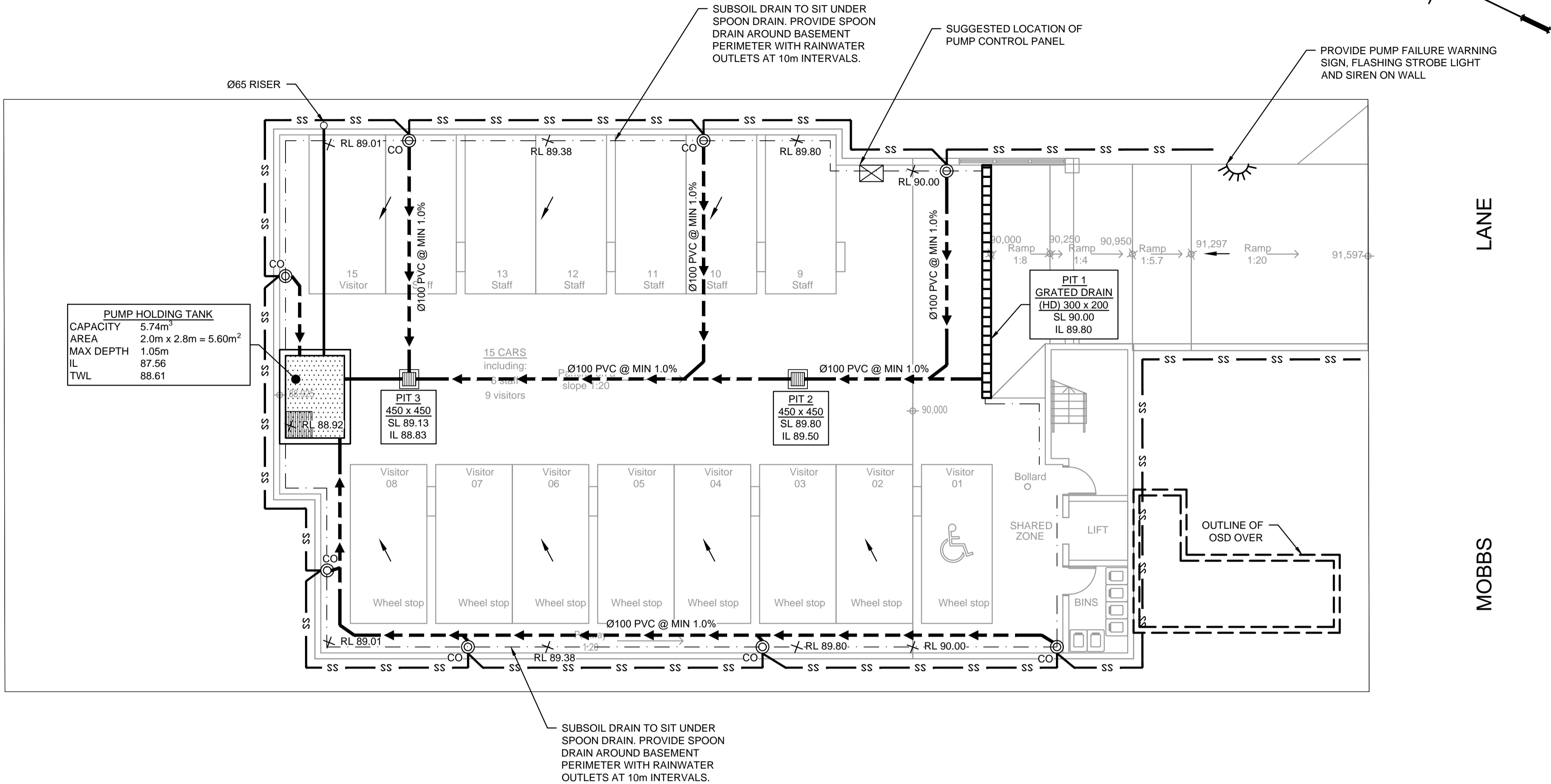


Project
45 MOBBS LANE, CARLINGFORD
PROPOSED CHILD CARE CENTRE
STORMWATER CONCEPT PLANS
DEVELOPMENT APPLICATION

Drawing Title
**COVER SHEET,
NOTES & LEGEND**

Scale	A1	Project No.	Dwg. No.	Issue
N.T.S.		200934	000	B

Regulated Design Record				
Project Address: 45 Mobbs Lane, Carlingford				
Project Title: CHILD CARE CENTRE				
Consent No: DA/725/2020		Body Corporate Reg No: -		
Drawing Title:STORMWATER CONCEPT PLAN BASEMENT LEVEL SHEET 1 OF 2 Drawing No: 101				
Rev	Date dd.mm.yy	Description	DP Full Name	Reg No
1	27.07.21	COUNCIL COMMENTS	ANTHONY HASHAM	DEP0000109



LEGEND

- PROPOSED STORMWATER
- SURFACE FLOW ARROWS
- SUBSOIL DRAINAGE
- CLEANING EYE (OR INSPECTION EYE)
- PROPOSED STORAGE AREA
- FINISHED SURFACE LEVEL
- GRATED DRAIN

STANDARD PUMP OUT DESIGN NOTES

- THE PUMP OUT SYSTEM SHALL BE DESIGN TO BE OPERATED IN THE FOLLOWING MANNER:
- 1 - THE PUMP SHALL BE PROGRAMMED TO WORK ALTERNATELY TO ALLOW BOTH PUMPS TO HAVE AN EQUAL OPERATION LOAD AND PUMP LIFE.
 - 2 - A FLOAT SHALL BE PROVIDED TO ENSURE OF THE MINIMUM REQUIRED WATER LEVEL IS MAINTAINED WITHIN THE SUMP AREA OF THE BELOW GROUND TANK. IN THIS REGARD THIS FLOAT WILL FUNCTION AS AN OFF SWITCH FOR THE PUMPS AT THE MINIMUM WATER LEVEL. THE SAME FLOAT SHALL BE SET TO TURN ONE OF THE PUMPS ON UPON THE WATER LEVEL IN THE TANK RISING TO APPROXIMATELY 300mm ABOVE THE MINIMUM WATER LEVEL. THE PUMP SHALL OPERATE UNTIL THE TANK IS DRAINED TO THE MINIMUM WATER LEVEL.
 - 3 - A SECOND FLOAT SHALL BE PROVIDE AT A HIGH LEVEL, WHICH IS APPROXIMATELY THE ROOF LEVEL OF THE BELOW GROUND TANK. THIS FLOAT SHALL START THE OTHER PUMP THAT IS NOT OPERATING AND ACTIVATE THE ALARM.
 - 4 - AN ALARM SYSTEM SHALL BE PROVIDE WITH A FLASHING STROBE LIGHT AND A PUMP FAILURE WARNING SIGN WHICH ARE TO BE LOCATED AT THE DRIVEWAY ENTRANCE TO THE BASEMENT LEVEL THE ALARM SYSTEM SHALL BE PROVIDED WITH A BATTERY BACK-UP IN CASE OF POWER FAILURE.
 - 5 - A CONFINED SPACE DANGER SIGN SHALL BE PROVIDED AT ALL ACCESS POINT TO THE PUMP-OUT STORAGE TANK IN ACCORDANCE WITH THE UPPER PARRAMATTA RIVER CATCHMENT TRUST OSD HANDBOOK.



BASEMENT PUMP OUT FAILURE WARNING SIGN

SIGN SHALL BE PLACED IN A CLEAR AND VISIBLE LOCATION WHERE VEHICLES ENTER THE BASEMENT

COLOURS:
"WARNING" = RED
BORDER AND OTHER LETTERING = BLACK



CONFINED SPACE DANGER SIGN

A) A CONFINED SPACE DANGER SIGN SHALL BE POSITIONED IN A LOCATION AT ALL ACCESS POINTS, SUCH THAT IT IS CLEARLY VISIBLE TO PERSONS PROPOSING TO ENTER THE BELOW GROUND TANK/S CONFINED SPACE.

B) MINIMUM DIMENSIONS OF THE SIGN - 300mm x 450mm (LARGE ENTRIES, SUCH AS DOORS) - 250mm x 180mm (SMALL ENTRIES SUCH AS GRATES & MANHOLES)

C) THE SIGN SHALL BE MANUFACTURED FROM COLOUR BONDED ALUMINUM OR POLYPROPYLENE

D) SIGN SHALL BE AFFIXED USING SCREWS AT EACH CORNER OF THE SIGN

COLOURS:
"DANGER" & BACKGROUND = WHITE
ELLIPTICAL AREA = RED
RECTANGLE CONTAINING ELLIPSE = BLACK
BORDER AND OTHER LETTERING = BLACK

NOT FOR CONSTRUCTION

B	COUNCIL COMMENTS	27/07/2021	AGN	JSF	
A	ISSUE FOR DEVELOPMENT APPLICATION	22/10/2020	EHZ	JSF	
Issue	Description	Date	Design	Checked	

Certification By Dr. Anthony Hasham (NPER)

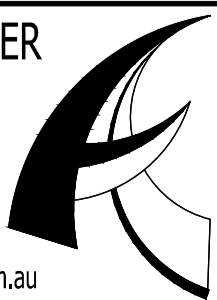
Architect
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16 dunlop street
north parramatta NSW 2151
PHONE : +61 2 9630 9911
Email : admin@designcorp.com.au

Client
Skycorp Construction Group
Council
City of Parramatta Council

Scale
0 2 4 6 m
SCALE 1:100 @ A1

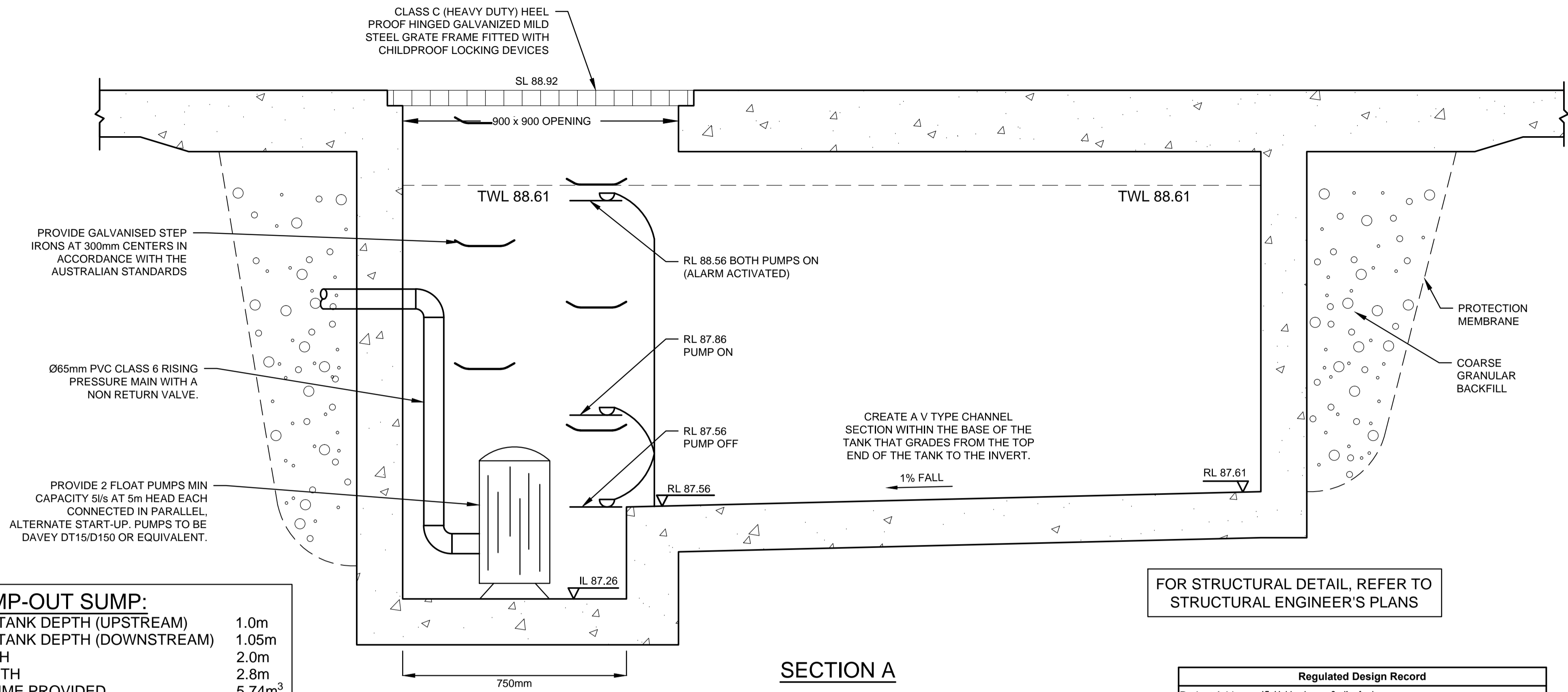
ACE
ENGINEERING THE FUTURE

ACE CIVIL STORMWATER
SERVICES PTY LTD
ABN: 27 644 422 506
SHOP 2-141 CONCORD RD,
NORTH STRATHFIELD, NSW 2137
P:(02) 9763 1500 E:info@aceeng.com.au



Project
**45 MOBBS LANE, CARLINGFORD
PROPOSED CHILD CARE CENTRE
STORMWATER CONCEPT PLANS
DEVELOPMENT APPLICATION**

Drawing Title STORMWATER CONCEPT PLAN BASEMENT LEVEL SHEET 1 OF 2	Scale 1:100	Project No. 200934	Dwg. No. 101	Issue B
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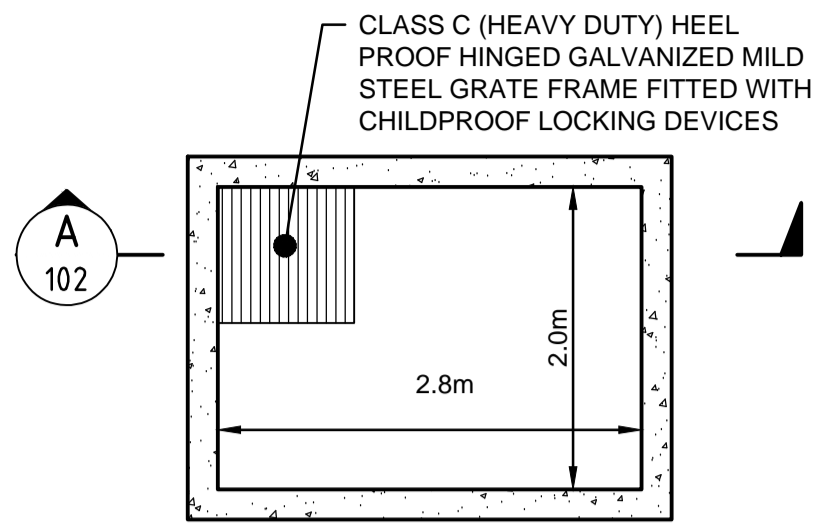


PUMP-OUT SUMP:	
MAX TANK DEPTH (UPSTREAM)	1.0m
MAX TANK DEPTH (DOWNSTREAM)	1.05m
WIDTH	2.0m
LENGTH	2.8m
VOLUME PROVIDED	5.74m ³

SECTION A
STORMWATER PUMP-OUT SUMP
SCALE 1:10

FOR STRUCTURAL DETAIL, REFER TO
STRUCTURAL ENGINEER'S PLANS

Regulated Design Record				
Project Address: 45 Mobbs Lane, Carlingford				
Project Title: CHILD CARE CENTRE				
Consent No: DA/725/2020			Body Corporate Reg No: -	
Drawing Title:STORMWATER CONCEPT PLAN BASEMENT LEVEL SHEET 2 OF 2 Drawing No: 102				
Rev	Date dd.mm.yy	Description	DP Full Name	Reg No
1	27.07.21	COUNCIL COMMENTS	ANTHONY HASHAM	DEP0000109

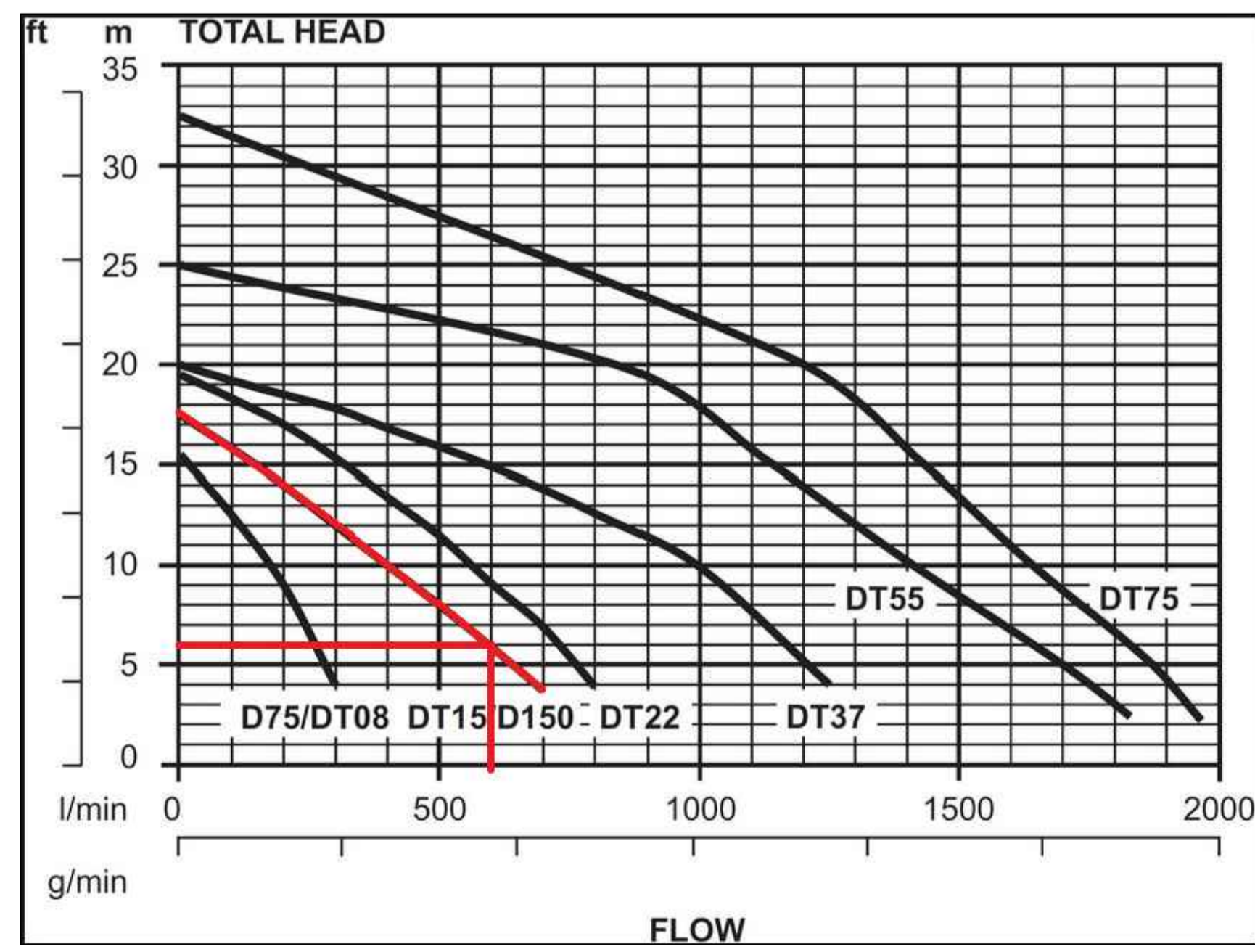


NOTE:
1- FOR ALL THE STRUCTURAL DETAILS, REFER TO STRUCTURAL ENGINEER'S PLAN.
2- ALL THE AG LINES BEHIND BASEMENT WALLS TO BE CONNECTED TO PUMP-OUT SUMP.

PUMP-OUT SUMP DETAIL
PLAN VIEW
SCALE 1:50

PUMP STORAGE VOLUME CALCULATION

- $I_{100, 90 \text{ min}} = 62.25 \text{ mm/hour}$
- PUMP STORAGE CATCHMENT AREA: $A = 57.1 \text{ m}^2 = 0.00571 \text{ ha}$
- $Q = C \times I \times A / 360$ WHERE $C = 1.0$ (REFER TO AS3500.3.5.4.6 (a))
 $= 1.0 \times 62.25 \times 0.00571 / 360$
 $= 0.000987 \text{ m}^3/\text{s}$
 $= 0.987 \text{ L/s}$
- THEREFORE, THE PUMP HOLDING TANK VOLUME IS:
 $V = 0.987 \times 1.5 \times 3600$
 $= 5.33 \text{ m}^3$



PUMP CALCULATIONS												
Project Address:		45 Mobbs Lane, Carlingford										
HL=(3.35x10e6xQ/(d^2.63xC))^1.852			h1=kv^2/2g			H(total head)=Hf+h1+Elevation Head(static head)						
HL(m/100m), Q(L/s, d(mm)			k(cum), v(m/s), g=9.8(m									
d(mm)= 65			v(m/s)= 0.00			Elevation Head(m)= 5			Pipe Length(m)= 10			
Bend Losses, Kb= 3.06												
Valve Losses, Kv= 2.13												
Entry/Exit Losses, Ke= 5.00												
Cum Losses, K= 10.19												
Start Flow=		0										
Increment=		1										
Q(L/s)		0	1	2	3	4	5	6	7	8	9	10
HL(m/100m)		0.00	0.18	0.64	1.36	2.32	3.51	4.92	6.55	8.39	10.44	12.68
Hf(m)	HL x pipe Length/100	0.00	0.02	0.06	0.14	0.23	0.35	0.49	0.66	0.84	1.04	1.27
v(m/s)	Q(L/s) / area of pipe crossing section	0.00	0.30	0.60	0.90	1.21	1.51	1.81	2.11	2.41	2.71	3.01
h1(m)	k(cum) x v(m/s)^2/2xg	0.00	0.05	0.19	0.42	0.76	1.18	1.70	2.31	3.02	3.82	4.72
H(m)	=Hf+H1+Elevation Head	5.00	5.07	5.25	5.56	5.99	6.53	7.19	7.97	8.86	9.87	10.99

UNDERGROUND PUMP - OUT SUMP
STAGED STORAGE CALCULATIONS

DEPTH (mm)	AREA (m ²)	CUMULATIVE VOLUME (m ³)
0	5.6	0
100	5.6	0.420
200	5.6	0.980
300	5.6	1.540
400	5.6	2.100
500	5.6	2.660
600	5.6	3.220
700	5.6	3.780
800	5.6	4.340
900	5.6	4.900
1000	5.6	5.460
1050	5.6	5.740

NOT FOR CONSTRUCTION

B	COUNCIL COMMENTS	27/07/2021	AGN	JSF
A	ISSUE FOR DEVELOPMENT APPLICATION	22/10/2020	EHZ	JSF
Issue	Description	Date	Design	Checked

Certification By Dr. Anthony Hasham (NPER)

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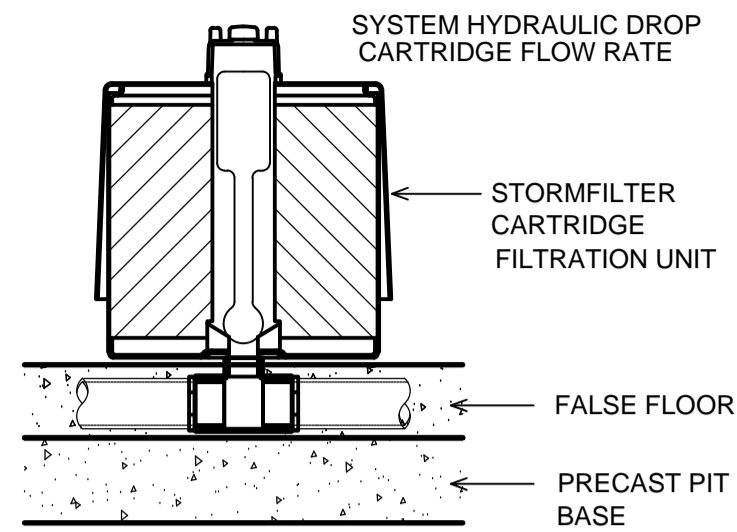
Client
Skycorp Construction Group
Council
City of Parramatta Council

Scale
0 200 400 600mm
SCALE 1:10 @ A1
0 1 2 3 m
SCALE 1:50 @ A1

ACE CIVIL STORMWATER SERVICES PTY LTD
ABN: 27 644 422 506
SHOP 2-141 CONCORD RD,
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Project
45 MOBBS LANE, CARLINGFORD
PROPOSED CHILD CARE CENTRE
STORMWATER CONCEPT PLANS
DEVELOPMENT APPLICATION

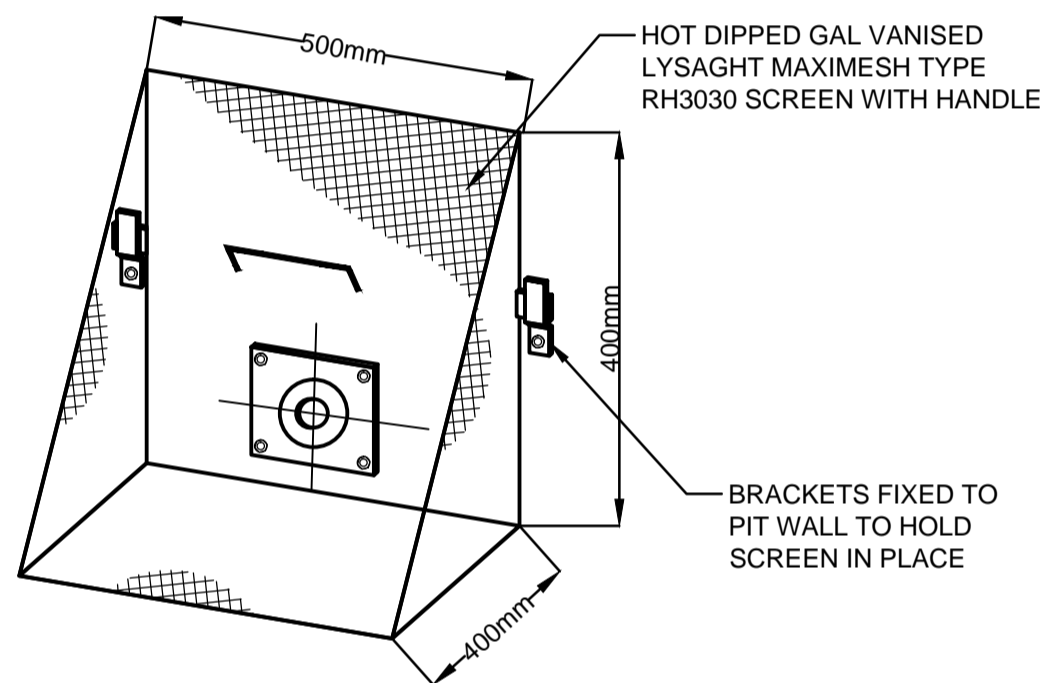
Drawing Title
STORMWATER CONCEPT PLAN
BASEMENT LEVEL
SHEET 2 OF 2
Scale As Shown A1 Project No. 200934 Dwg. No. 102 Issue B



STORMFILTER DESIGN TABLE

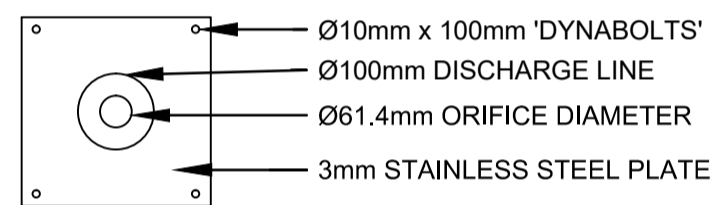
- STORMFILTER TREATMENT CAPACITY VARIES BY NUMBER OF FILTER CARTRIDGES INSTALLED AND BY REGION SPECIFIC INTERNAL FLOW CONTROLS. CONVEYANCE CAPACITY IS RATED AT 80L/S.
- ALL PARTS PROVIDED AND INTERNAL ASSEMBLY BY STORMWATER360 AUSTRALIA UNLESS OTHERWISE NOTED.

CARTRIDGE HEIGHT	690	460	310
SYSTEM HYDRAULIC DROP (H - REQ'D. MIN.)	930	700	550
TREATMENT BY MEDIA SURFACE AREA L/S/m ²	1.4	0.7	1.4
CARTRIDGE FLOW RATE (L/s)	1.42	0.71	0.95



TRASH SCREEN DETAIL

N.T.S.



ORIFICE PLATE DETAIL

N.T.S.

UNDERGROUND OSD TANK STAGED STORAGE CALCULATIONS

DEPTH (mm)	AREA (m ²)	CUMULATIVE VOLUME (m ³)
0	15.91	0
100	15.91	0.9546
200	15.91	2.5456
300	15.91	4.1366
400	15.91	5.7276
500	15.91	7.3186
600	15.91	8.9096
700	15.91	10.5006
800	15.91	12.0916
900	15.91	13.6826
1000	15.91	15.2736
1100	15.91	16.8646
1200	15.91	18.4556
1300	15.91	20.0466
1400	15.91	21.6376
1500	15.91	23.2286
1600	15.91	24.8196
1630	15.91	25.2969

CITY OF PARRAMATTA COUNCIL				
On-Site Detention Calculation Sheet				
Project:	ACE200934.SW.DA	Lot No.	14	
Location:	45 Mobbs lane, Carlingford	DP No.	30791	
Designer:	Albert Nasseh	D.A. No.		
Phone:	02 9763 1500			
OSD Area:	Front Lot	UPRCT	UPRCT	
Site Area	0.093		Downed	0.093
Basic Storage Volume	23.30			43.80
Basic Discharge	19.57			7.46
Area of Site to Storage	0.084	91%		0.084 91%
Percentage of Site	90.58			90.58
Storage per ha of contributing area	276.00			8.88
Volume/PSD Adjustment	166.35			9.95
PSD for site	14.04			5.90
Maximum Head to Orifice Centre	1.630			630
Calculated Orifice Diameter	0.071			0.071
Maximum discharge	14.035			14.044
Head for high early discharge	1.530			1.530
High Early Discharge	13.598	97%		13.006 231%
Mean Discharge	13.817			13.225
Average Discharge per Hectare	163.666			163.666
Final Site Storage Ratio	280			80
Site Storage Volume	23.67			23.66
Volume Provided	25.29	107%		25.29 107%
Checked By:	Joe Frangie			
Date Checked:	26-Jul-21			
OSD Plan Number:	101-108			

NOTE:
USE 61.4mm ORIFICE
DIAMETER. REFER TO
ORIFICE CALCULATIONS
ON SHEET 105

StormFilter Flow Calculator - Psorb Media

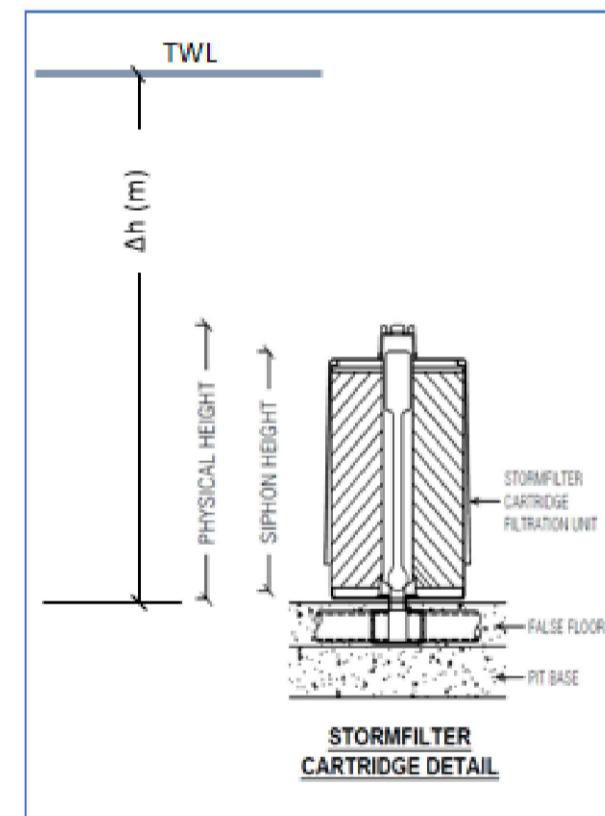
The equation below defines the relationship between the diameter of the orifice plate, the flow rate through the cartridge and head.

$Q = (0.111d^2 \cdot 2.06h^{0.5}) / 60$
where d = Restrictor Disc Diameter
 Δh = head

Cartridge Name: 690
Cartridge Quantity: 3
 Δh (m): 1.53

Total Q at head: 3.81

OCEAN PROTECT



WSUD CHAMBER DETAILS

TOTAL SITE AREA = 932m²
BY-PASS AREA = 87.7m²
SITE AREA DRAINING TO OSD = 844.3m²

EFFECTIVE DEPTH OF WATER WITHIN FILTRATION CHAMBER =
0.69 (CARTRIDGE HEIGHT) + 0.08 (HEAD REQUIRED FOR SW 690 CARTRIDGE) = 0.77m
AREA NEEDED FOR THE FILTRATION CARTRIDGES = 844.3 * 0.003 / 0.77 = 3.29m²
AREA PROVIDED = 3.4 m²

3x690mm PSORB CARTRIDGES PROVIDED - OUTFLOW = 3.81 L/s

OSD ORIFICE DETAILS

PSD (2) = PSD (1) - 3.81 L/s
= 14.03 - 3.81 = 10.22 L/s
ORIFICE HEAD = 92.25 - 90.62 = 1.63m NEW ORIFICE DIAMETER = Ø51mm

GENERAL NOTES

1. INLET AND OUTLET PIPING SHALL BE SPECIFIED BY SITE CIVIL ENGINEER (SEE PLANS) AND PROVIDED BY CONTRACTOR. STORMFILTER IS PROVIDED WITH OPENINGS AT INLET AND OUTLET LOCATIONS.
2. IF THE PEAK FLOW RATE, AS DETERMINED BY THE SITE CIVIL ENGINEER, EXCEEDS THE PEAK HYDRAULIC CAPACITY OF THE PRODUCT, AN UPSTREAM BYPASS STRUCTURE IS REQUIRED. PLEASE CONTACT STORMWATER360 FOR OPTIONS.
3. THE FILTER CARTRIDGE(S) ARE SIPHON-ACTUATED AND SELF-CLEANING. THE STANDARD DETAIL DRAWING SHOWS THE MAXIMUM NUMBER OF CARTRIDGES. THE ACTUAL NUMBER SHALL BE SPECIFIED BY THE SITE CIVIL ENGINEER ON SITE PLANS OR IN DATA TABLE BELOW. PRECAST STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH AS3600.
4. FOR SHALLOW, LOW DROP OR SPECIAL DESIGN CONSTRAINTS, CONTACT STORMWATER360 FOR DESIGN OPTIONS.
5. ALL WATER QUALITY PRODUCTS REQUIRE PERIODIC MAINTENANCE AS OUTLINED IN THE O&M GUIDELINES. PROVIDE MINIMUM CLEARANCE FOR MAINTENANCE ACCESS.
6. STRUCTURE AND ACCESS COVERS DESIGNED TO MEET AUSTRROADS T44 LOAD RATING WITH 0.2m FILL MAXIMUM.
7. THE STRUCTURE THICKNESSES SHOWN ARE FOR REPRESENTATIONAL PURPOSES AND VARY REGIONALLY.
8. ANY BACKFILL DEPTH, SUB-BASE, AND OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY SITE CIVIL ENGINEER.
9. STORMFILTER BY STORMWATER360:
SYDNEY (AU) PHONE: (02) 9525 5833,
BRISBANE (AU) PHONE: (07) 3272 1872.

ORIFICE CALCULATIONS:

$$Q = C \times A \times (2 \times g \times h)^{0.5}$$

$$\begin{aligned} \text{SO: } A &= Q / (C \times \text{sqrt}(2 \times g \times h)) \\ &= 0.01022 / (0.61 \times \text{sqrt}(2 \times 9.81 \times 1.63)) \\ &= 0.00296 \text{ m}^2 \end{aligned}$$

THEREFORE:

$$\begin{aligned} d &= \text{sqrt}(4 \times A / \pi) \\ &= \text{sqrt}(4 \times 0.00296 / 3.14159) \\ &= 61.4 \text{ mm} \end{aligned}$$

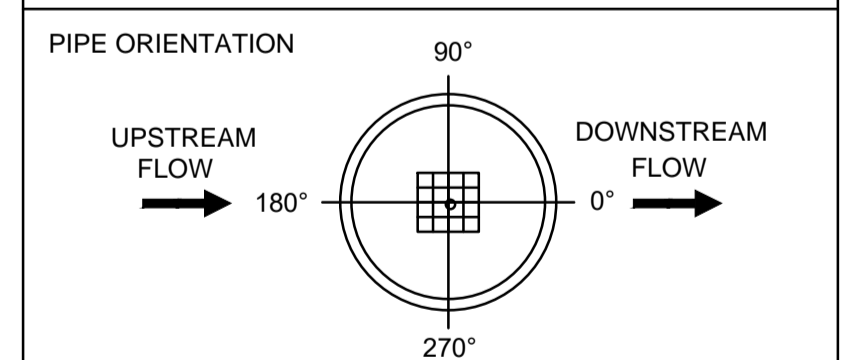
Regulated Design Record				
Project Address: 45 Mobbs Lane, Carlingford				
Project Title: CHILD CARE CENTRE				
Consent No: DA/725/2020			Body Corporate Reg No: -	
Drawing Title: OSD & WSUD DETAILS AND CALCULATION SHEETS SHEET 1 OF 3		Drawing No: 104		
Rev	Date dd.mm.yy	Description	DP Full Name	Reg No
1	27.07.21	COUNCIL COMMENTS	ANTHONY HASHAM	DEP0000109

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID	1
WATER QUALITY FLOW RATE (L/S)	-
PEAK FLOW RATE (L/S)	-
RETURN PERIOD OF PEAK FLOW (yrs)	-
# OF CARTRIDGES REQUIRED (8-22)	3
CARTRIDGE HEIGHT (310, 460 or 690mm)	690
MEDIA TYPE (PERLITE, PERLITE/ZEOLITE OR ZPG)	PSORB

PRECAST VAULT WEIGHT	- kg
PRECAST LID WEIGHT	- kg

PIPE DATA:	I.L.	MATERIAL	DIAMETER



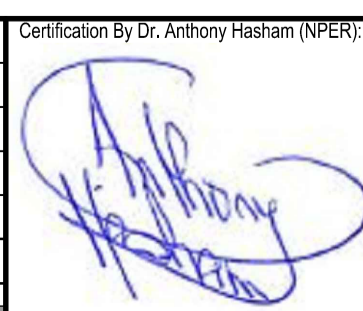
LADDER	YES/NO	
ANTI-FLOTATION BALLAST	N/A	N/A
	N/A	N/A

STORMFILTER TABLE

N.T.S.

NOT FOR CONSTRUCTION

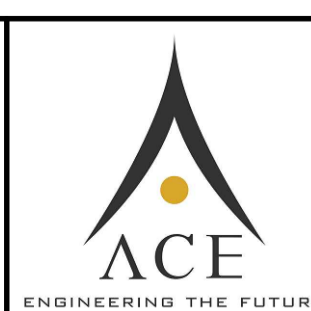
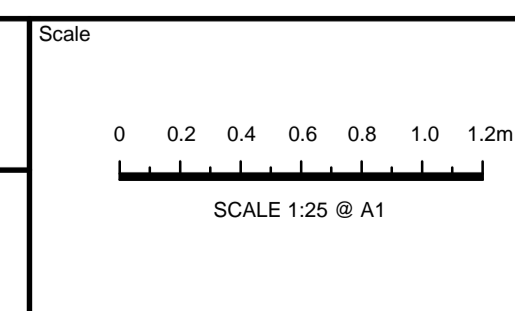
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City of
Parramatta Council

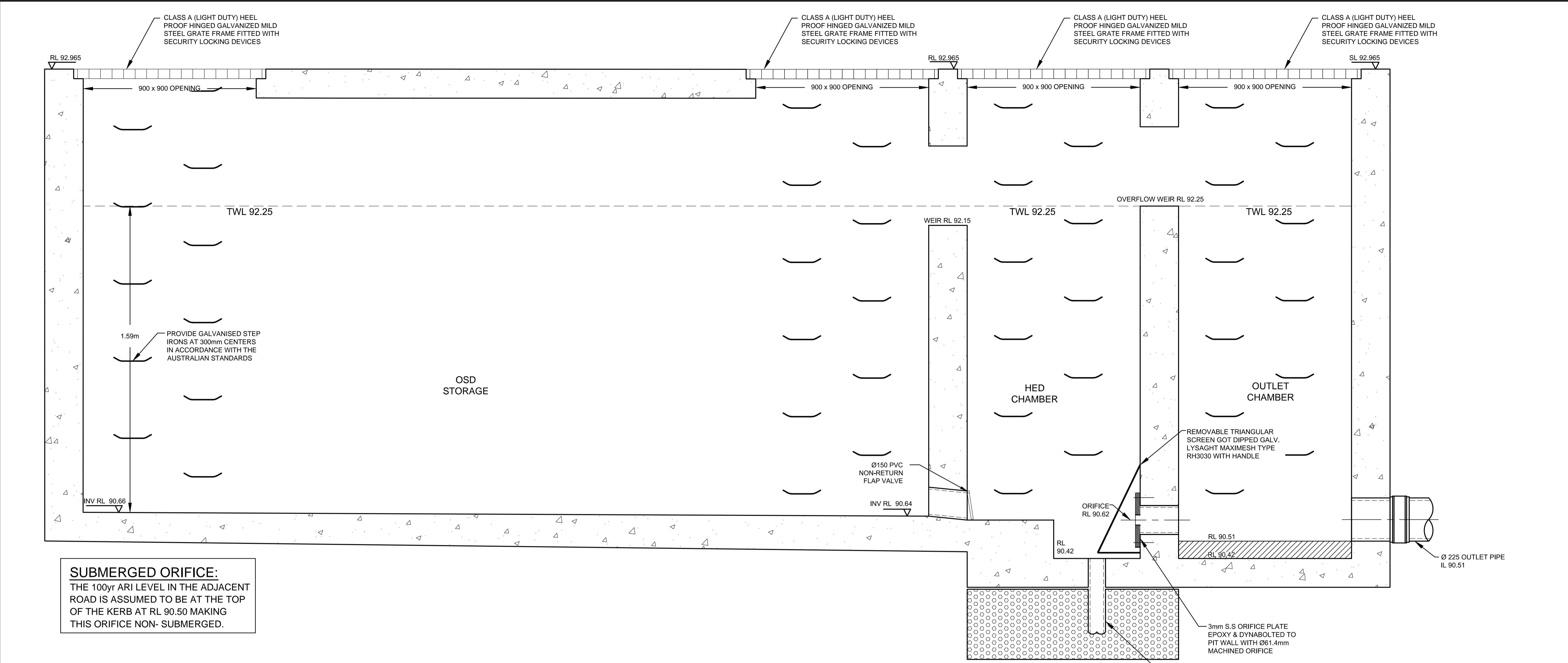


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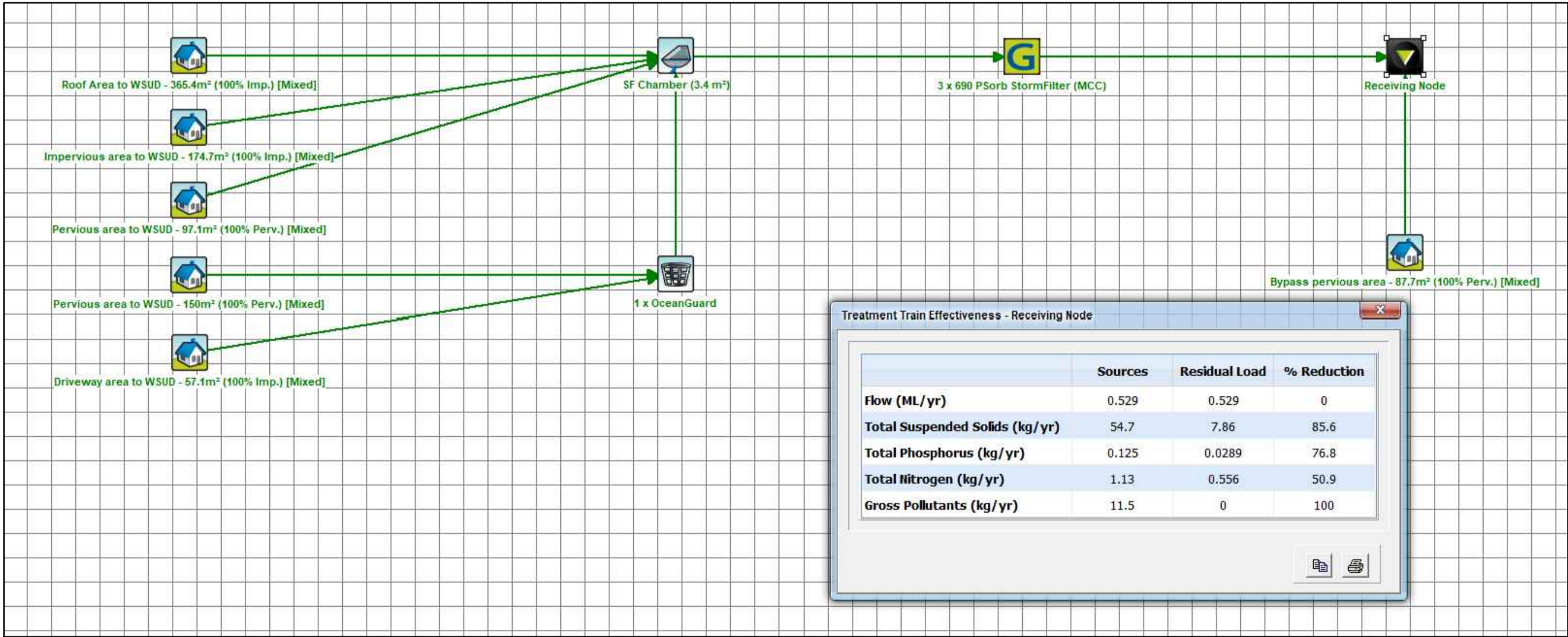
Project
45 MOBBS LANE, CARLINGFORD
PROPOSED CHILD CARE CENTRE
STORMWATER CONCEPT PLANS
DEVELOPMENT APPLICATION

Drawing Title	OSD & WSUD DETAILS AND CALCULATION SHEETS SHEET 1 OF 3		
Scale	A1	Project No.	200934
As Shown		Dwg. No.	104
		Issue	B



SUBMERGED ORIFICE:
THE 100yr ARI LEVEL IN THE ADJACENT ROAD IS ASSUMED TO BE AT THE TOP OF THE KERB AT RL 90.50 MAKING THIS ORIFICE NON- SUBMERGED.

SECTION A
UNDERGROUND OSD/WSUD TANK DETAIL
SCALE 1:10

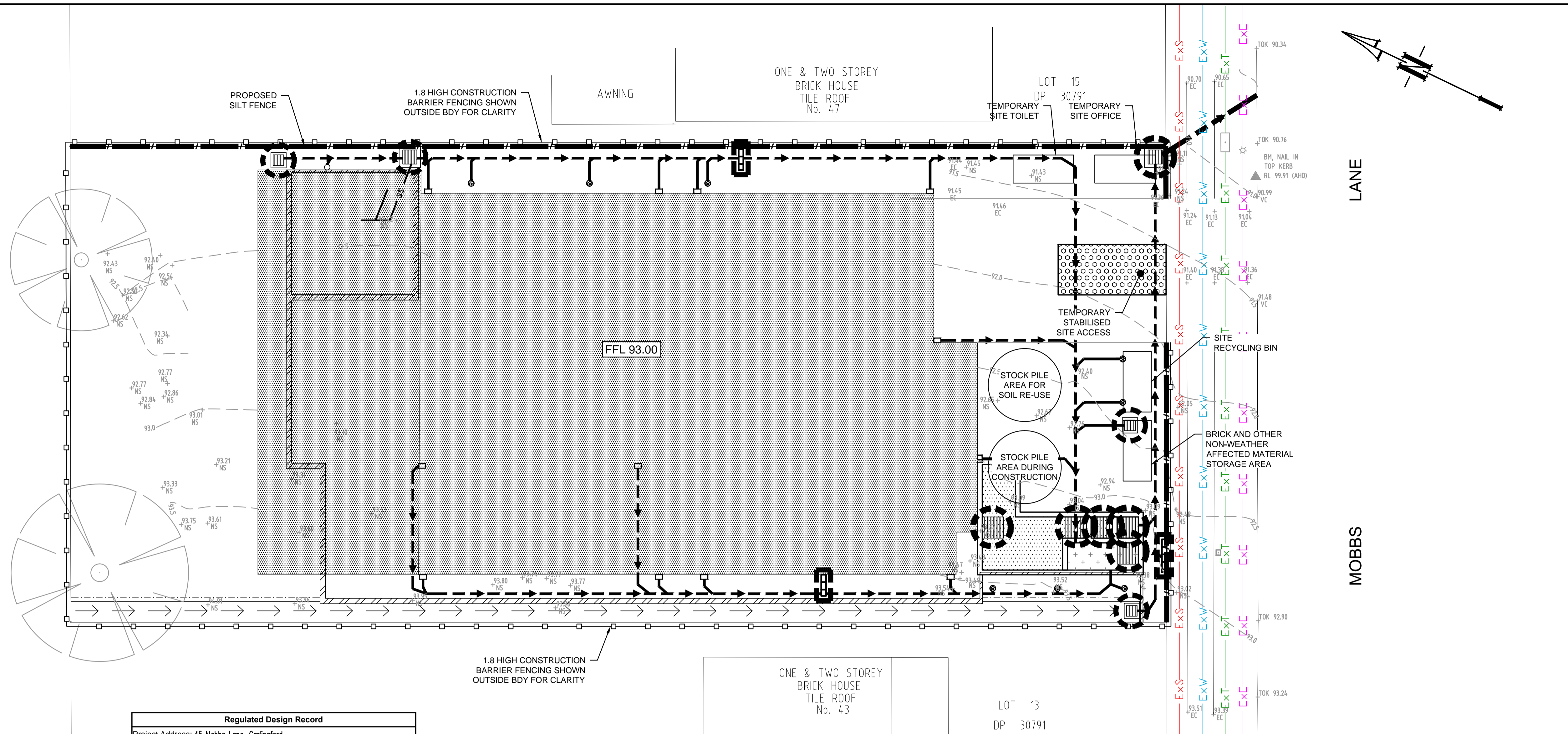


MUSIC MODEL AND RESULTS

Regulated Design Record				
Project Address: 45 Mobbs Lane, Carlingford				
Project Title: CHILd CARE CENTRE				
Consent No: DA/725/2020		Body Corporate Reg No: --		
Drawing Title: OSD & WSUD DETAILS AND CALCULATION SHEETS SHEET 2 OF 3				
Drawing No: 105				
Rev	Date dd.mm.yy	Description	DP Full Name	Reg No
1	27.07.21	COUNCIL COMMENTS	ANTHONY HASHAM	DEP0000109

NOT FOR CONSTRUCTION

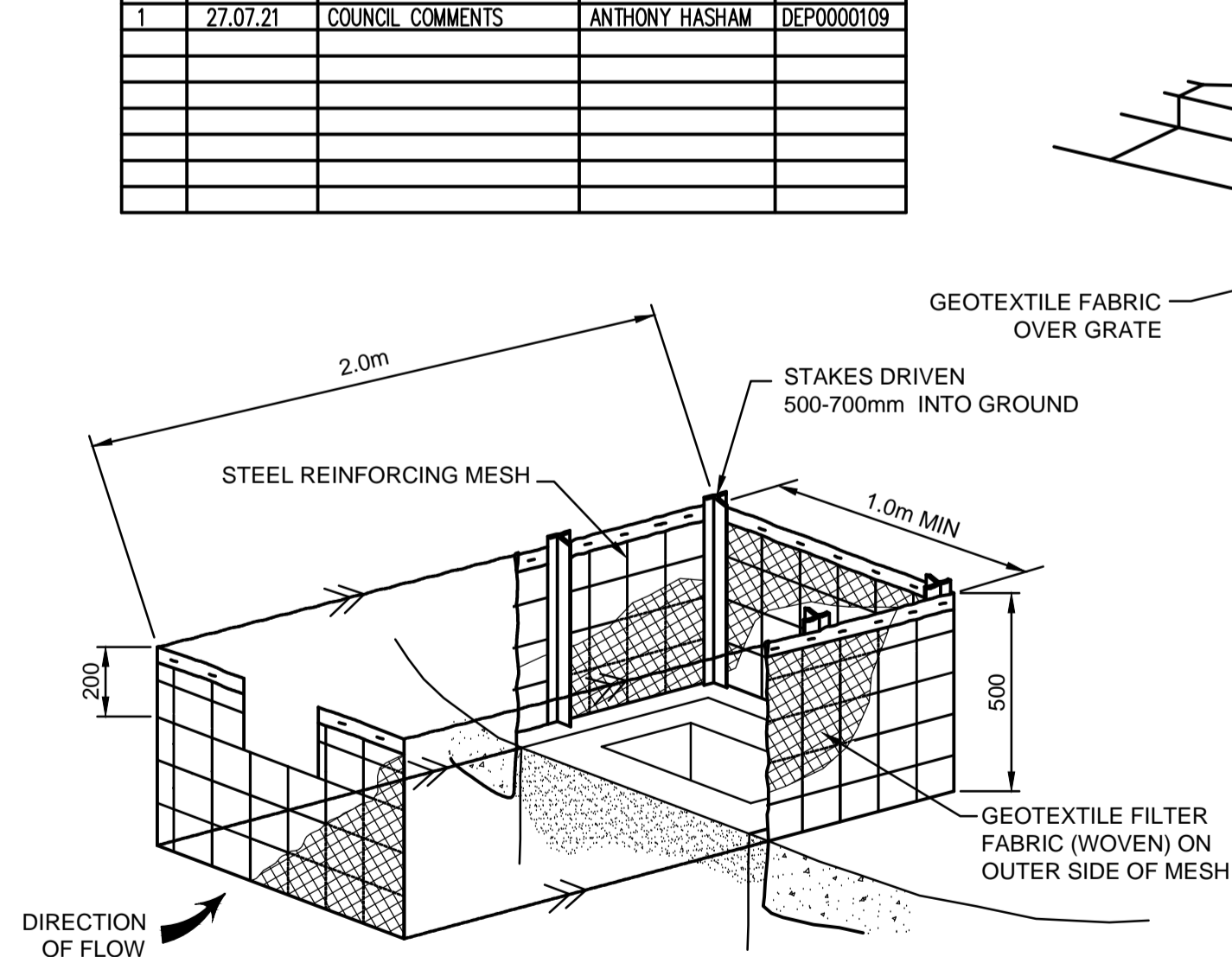
	EXISTING SEWER MAIN (FROM RECORDS)
	EXISTING WATER (FROM RECORDS)
	EXISTING POWER (FROM RECORDS)
	EXISTING TELSTRA (FROM RECORDS)
	EXISTING CONTOUR
	EXISTING SURFACE LEVEL
	EARTHWORKS LEVEL
	DESIGN SURFACE LEVEL
	SILT FENCE
	CUT AREA
	STABILISED SITE ACCESS
	1.8 HIGH CONSTRUCTION BARRIER FENCING
	TREES TO BE RETAINED
	TREES TO BE REMOVED
	INLET PROTECTION



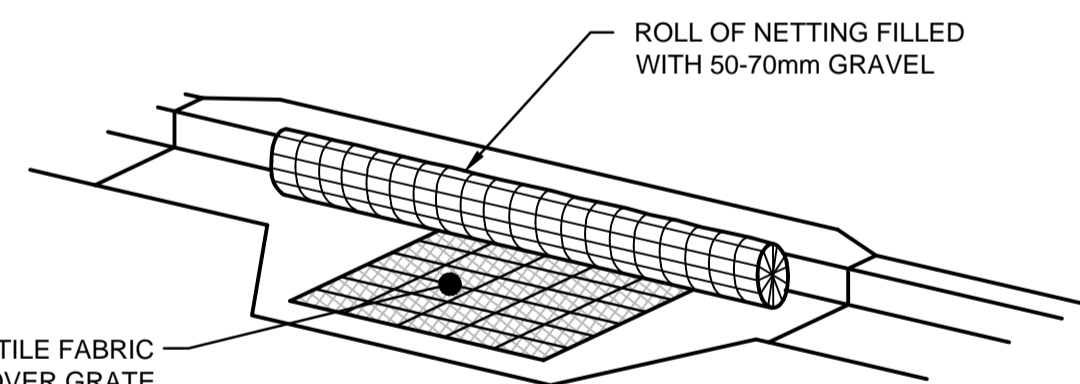
1. IMMEDIATELY FOLLOWING SETTING OUT OF THE WORKS, BUT PRIOR TO COMMENCEMENT OF ANY CLEARING OR EARTHWORKS, THE CONTRACTOR AND SUPERINTENDENT SHALL WALK THE SITE TO NOMINATE THE LOCATIONS AND TYPES OF SEDIMENT AND EROSION CONTROL MEASURES TO BE ADOPTED. THESE MEASURES SHALL BE IMPLEMENTED PRIOR TO ANY CLEARING OR EARTHWORKS AND MAINTAINED UNTIL THE WORKS ARE COMPLETED AND NO LONGER POSE AN EROSION HAZARD, UNLESS OTHERWISE APPROVED BY THE SUPERINTENDENT.
2. IMMEDIATELY FOLLOWING SETTING OUT OF THE WORKS, BUT PRIOR TO COMMENCEMENT OF ANY CLEARING OR EARTHWORKS, THE CONTRACTOR AND SUPERINTENDENT SHALL WALK THE SITE TO IDENTIFY AND MARK TREES WHICH ARE TO BE PRESERVED. NOTWITHSTANDING THE ABOVE, THE CONTRACTOR SHALL TAKE ALL REASONABLE PRECAUTIONS TO MINIMISE DISTURBANCE TO EXISTING VEGETATION AND GROUND COVER OUTSIDE THE MINIMUM AREAS REQUIRED TO COMPLETE THE WORKS AND SHALL BE RESPONSIBLE FOR RECTIFICATION, AT ITS OWN COST, OF ANY DISTURBANCE BEYOND THOSE AREAS.
3. PROVIDE GULLY GRATE INLET SEDIMENT TRAPS AT ALL GULLY PITS.
4. PROVIDE SILT FENCING ALONG PROPERTY LINE AS DIRECTED BY SUPERINTENDENT.
5. ADDITIONAL CONTROL DEVICES TO BE PLACED WHERE DIRECTED BY THE PRINCIPLE.
6. ALTERNATIVE DESIGNS TO BE APPROVED BY SUPERINTENDENT PRIOR TO CONSTRUCTION.
7. WASH DOWN/RUMBLE AREA TO BE CONSTRUCTED WITH PROVISIONS RESTRICTING ALL SILT AND TRAFFICKED DEBRIS FROM ENTERING THE STORMWATER SYSTEM.
8. NO WORK OR STOCKPILING OF MATERIALS TO BE PLACED OUTSIDE OF SITE WORK BOUNDARY.
9. APPROPRIATE EROSION AND SEDIMENT CONTROLS TO BE USED TO PROTECT STOCKPILES AND MAINTAINED THROUGH OUT CONSTRUCTION.
10. IT IS THE CONTRACTORS RESPONSIBILITY TO TAKE DUE CARE OF NATURAL VEGETATION. NO CLEARING IS TO BE UNDERTAKEN WITHOUT PRIOR APPROVAL FROM THE SUPERINTENDENT.
11. TO AVOID DISTURBANCE TO EXISTING TREES, EARTHWORKS WILL BE MODIFIED AS DIRECTED ON-SITE BY THE SUPERINTENDENT.
12. THE LOCATION OF EROSION AND SEDIMENTATION CONTROLS WILL BE DETERMINED ON SITE BY THE SUPERINTENDENT.
13. ACCESS TRACKS THROUGH THE SITE WILL BE LIMITED TO THOSE DETERMINED BY THE SUPERINTENDENT AND THE CONTRACTOR PRIOR TO ANY WORK COMMENCING.
14. ALL SETTING OUT IS THE RESPONSIBILITY OF THE CONTRACTOR PRIOR TO WORKS COMMENCING ON SITE. THE SUPERINTENDENT'S SURVEYOR SHALL PEG ALL ALLOTMENT BOUNDARIES, PROVIDE COORDINATE INFORMATION TO THESE PEGS AND PLACE BENCH MARKS. THE CONTRACTOR SHALL SET OUT THE WORKS FROM AND MAINTAIN THESE PEGS.
15. PLANS ARE MINIMUM REQUIREMENTS AND ARE TO BE USED AS A GUIDE ONLY. EXACT MEASURES USED SHALL BE DETERMINED ON SITE IN CONJUNCTION WITH PROGRAM OF CONTRACTORS WORKS etc.

[illegible]

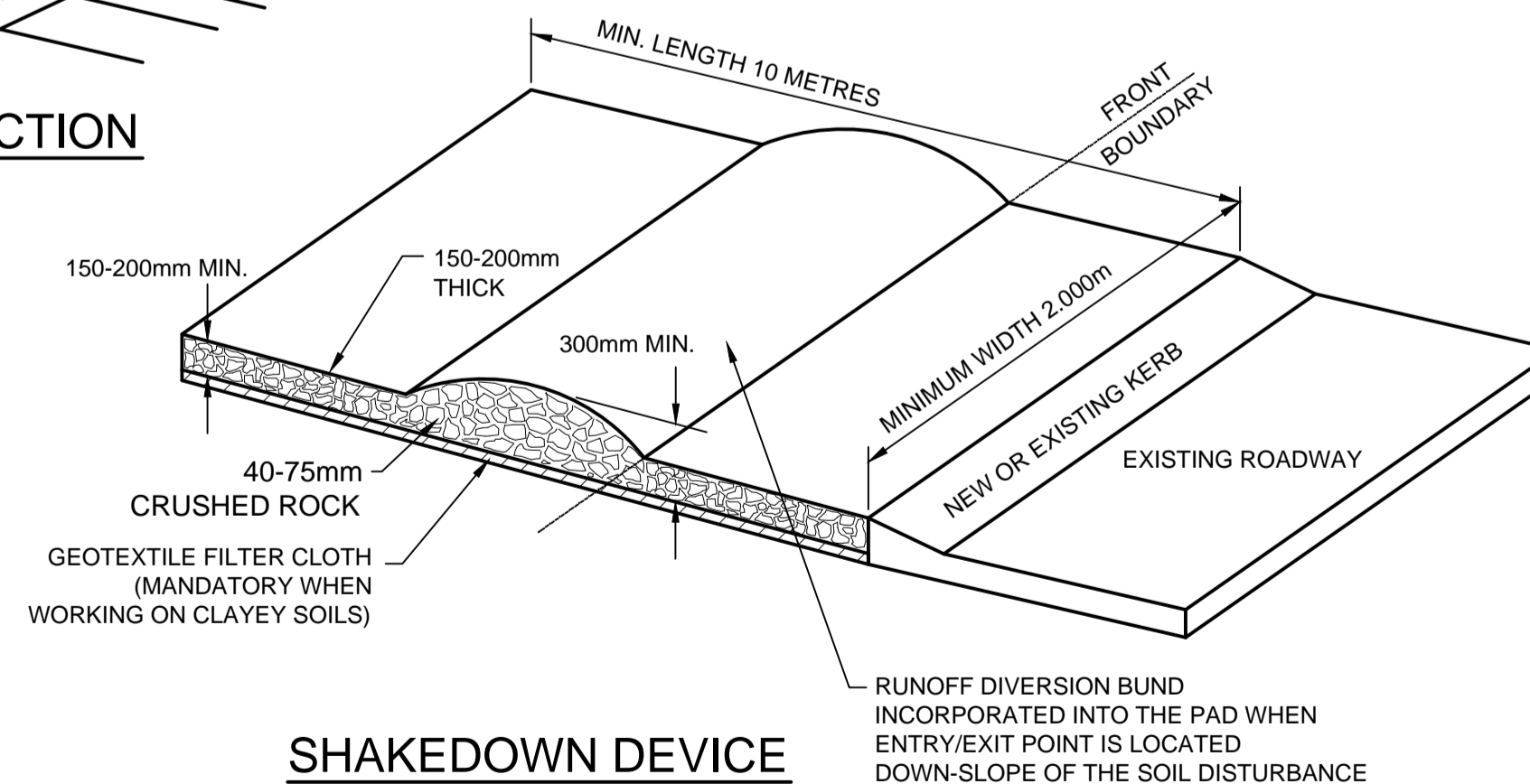
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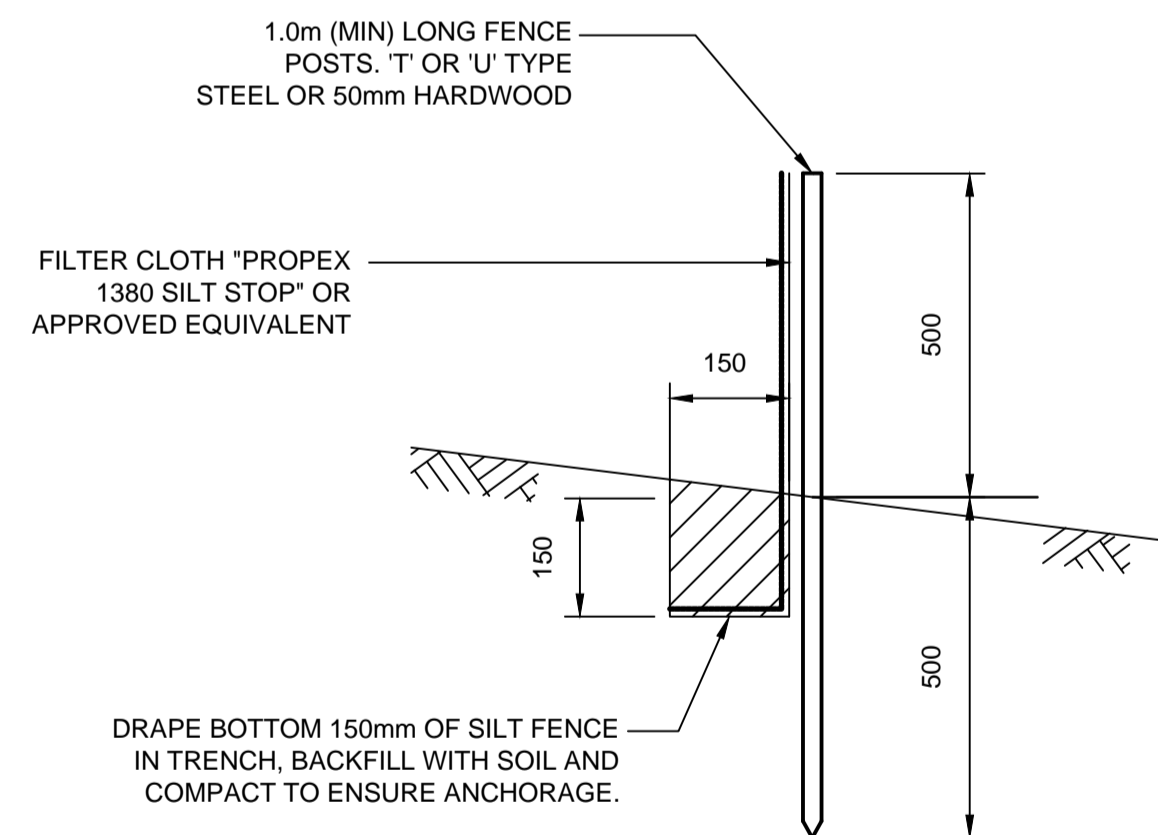
N.T.S



N.T.S



N.T.S



N.T.S

1. FILTER CLOTH TO BE FASTENED SECURELY TO POSTS WITH GALVANISED WIRE TIES, STAPLES OR ATTACHMENT BELTS.
2. POSTS SHOULD NOT BE SPACED MORE THAN 3.0m APART.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 150mm AND FOLDED.
4. FOR EXTRA STRENGTH TO SILT FENCE, WOVEN WIRE (14mm GAUGE, 150mm MESH SPACING) TO BE FASTENED SECURELY BETWEEN FILTER CLOTH AND POSTS BY WIRE TIES OR STAPLES
5. INSPECTIONS SHALL BE PROVIDED ON A REGULAR BASIS, ESPECIALLY AFTER RAINFALL AND EXCESSIVE SILT DEPOSITS REMOVED WHEN SUFFICIENT DEVELOP IN SILT FENCE.
6. SEDIMENT FENCES SHALL BE CONSTRUCTED WITH SEDIMENT TRAPS AND EMERGENCY SPILLWAYS AT SPACINGS NO GREATER THAN 40m ON FLAT TERRAIN DECREASING TO 20m SPACINGS ON STEEP TERRAIN.

NOT FOR CONSTRUCTION

[illegible]

Certification By Dr. Anthony Hasham (NPER)

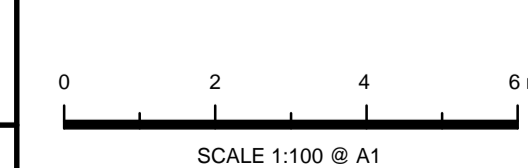
Architect

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Client	
--------	--

Skycorp
Construction Group
Council
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Scale



ACE
ENGINEERING THE FUTURE

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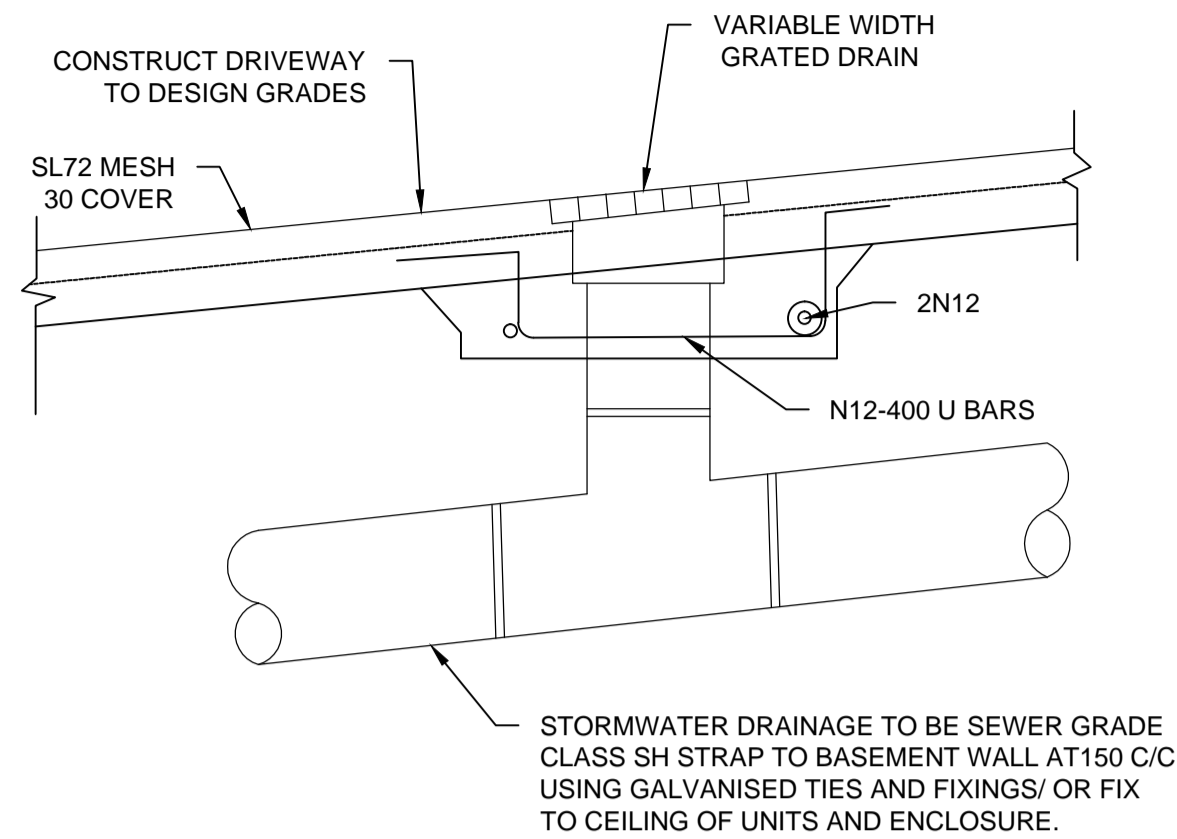
Project	
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45 MOBBS LANE, CARLINGFORD
PROPOSED CHILD CARE CENTRE
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DEVELOPMENT APPLICATION

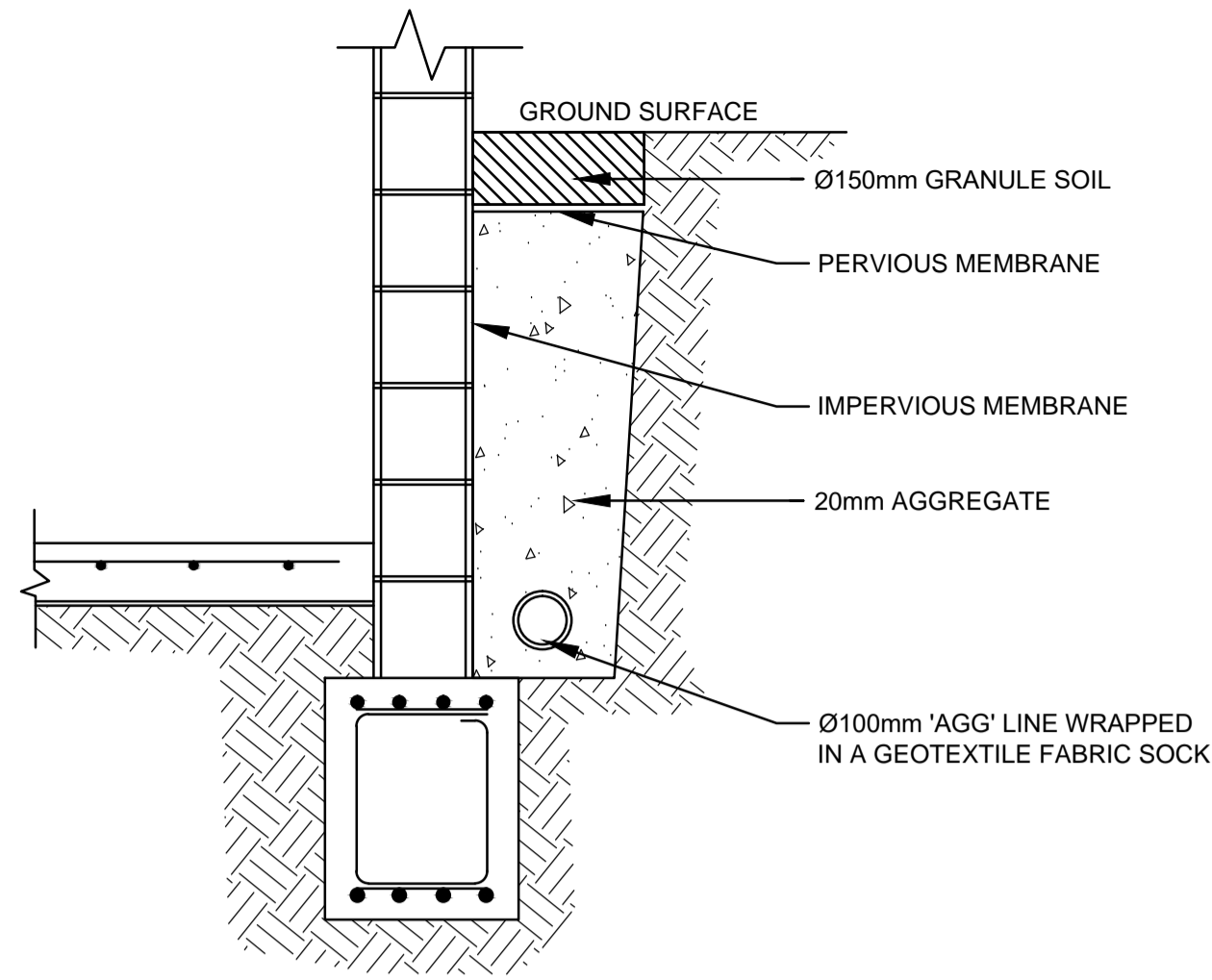
Drawing Title

SEDIMENT & EROSION CONTROL PLAN AND DETAILS

Scale	A1	Project No.	Dwg. No.	Issue
As Shown		200934	107	B



GRATED DRAIN DETAIL
N.T.S.



TYPICAL SUBSOIL DRAIN
N.T.S.

CALCULATION OF OPEN CHANNEL FLOW CAPACITY

Width (m)	0.65	Velocity (m/s)	1.655
Depth (m)	0.1	Capacity (m3/s)	0.108
Slope (%)	1.80	Capacity (L/s)	107.6
n	0.01	Multi Capacity (m3/s)	0.108
No parallel conduits	1		
X-Sect Area	0.065		

$$C = 0.9$$

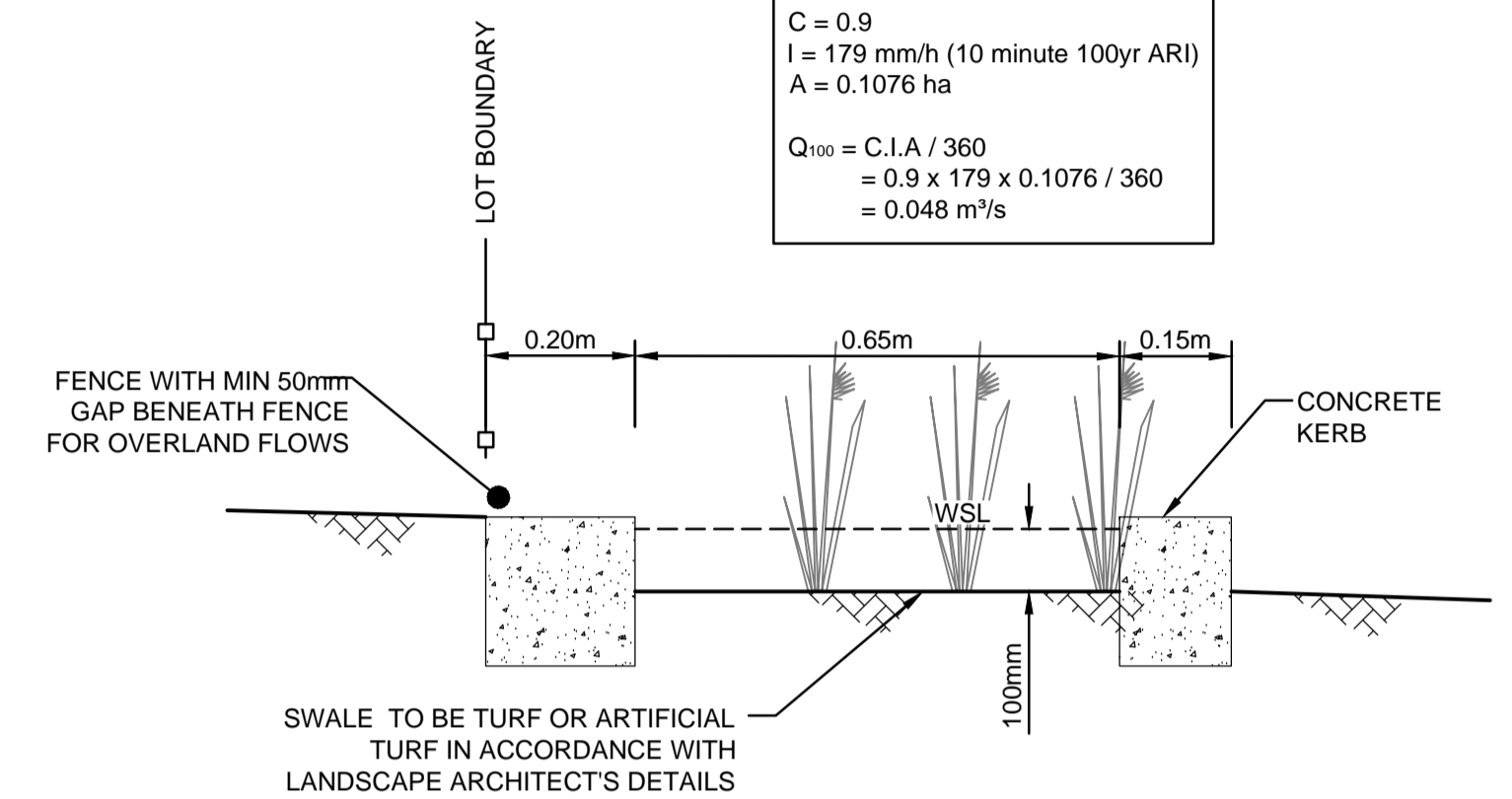
$$I = 179 \text{ mm/h (10 minute 100yr ARI)}$$

$$A = 0.1076 \text{ ha}$$

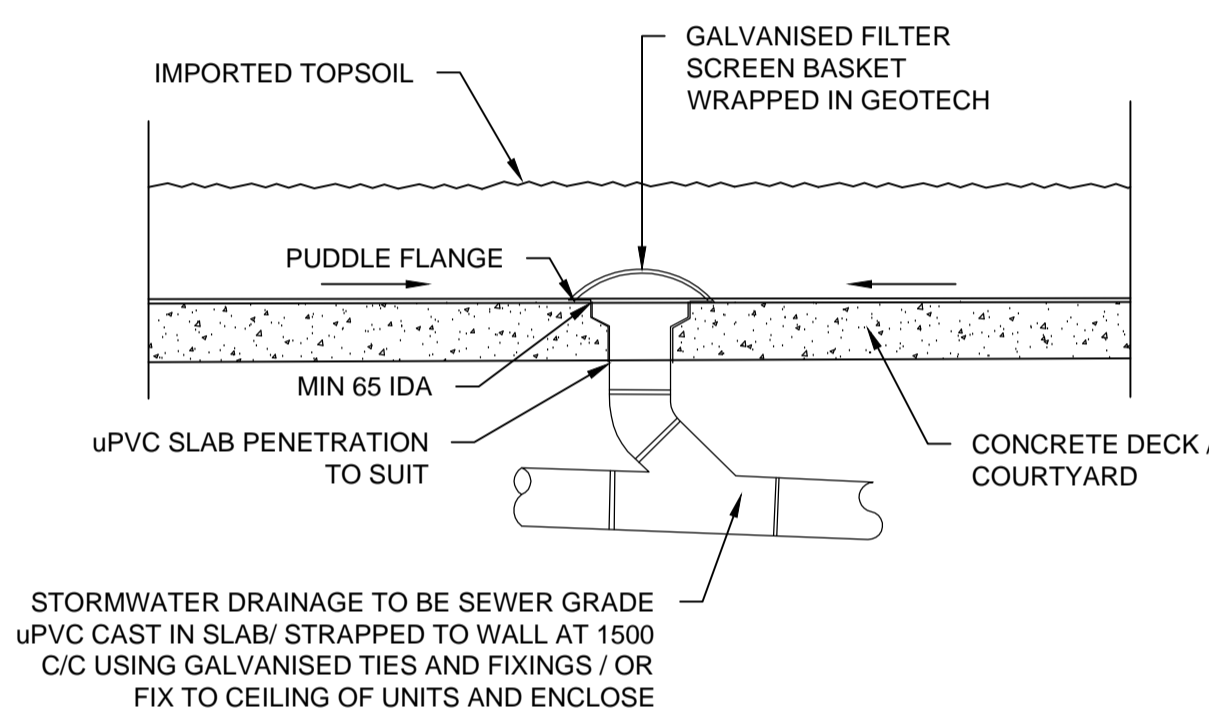
$$Q_{100} = C.I.A / 360$$

$$= 0.9 \times 179 \times 0.1076 / 360$$

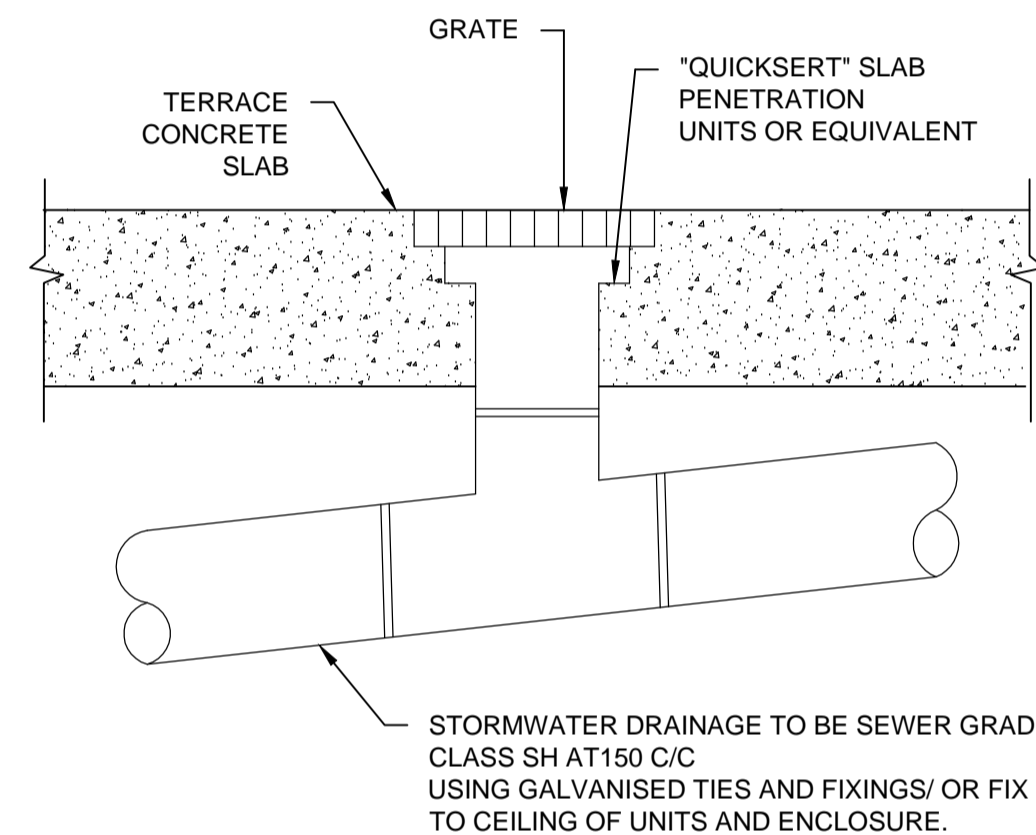
$$= 0.048 \text{ m}^3/\text{s}$$



TYPICAL SWALE DRAIN DETAIL
SCALE 1:10

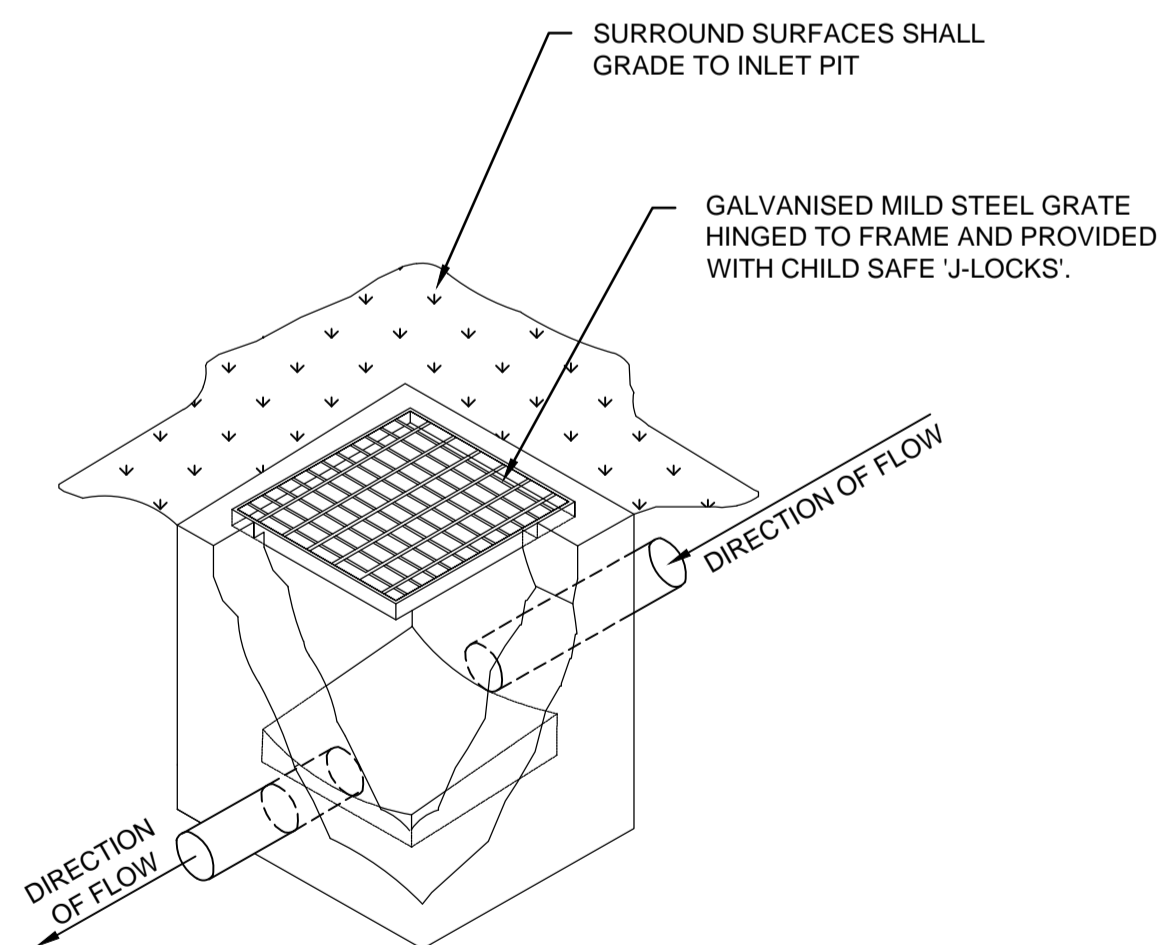


PLANTER GRATE DETAIL
N.T.S.

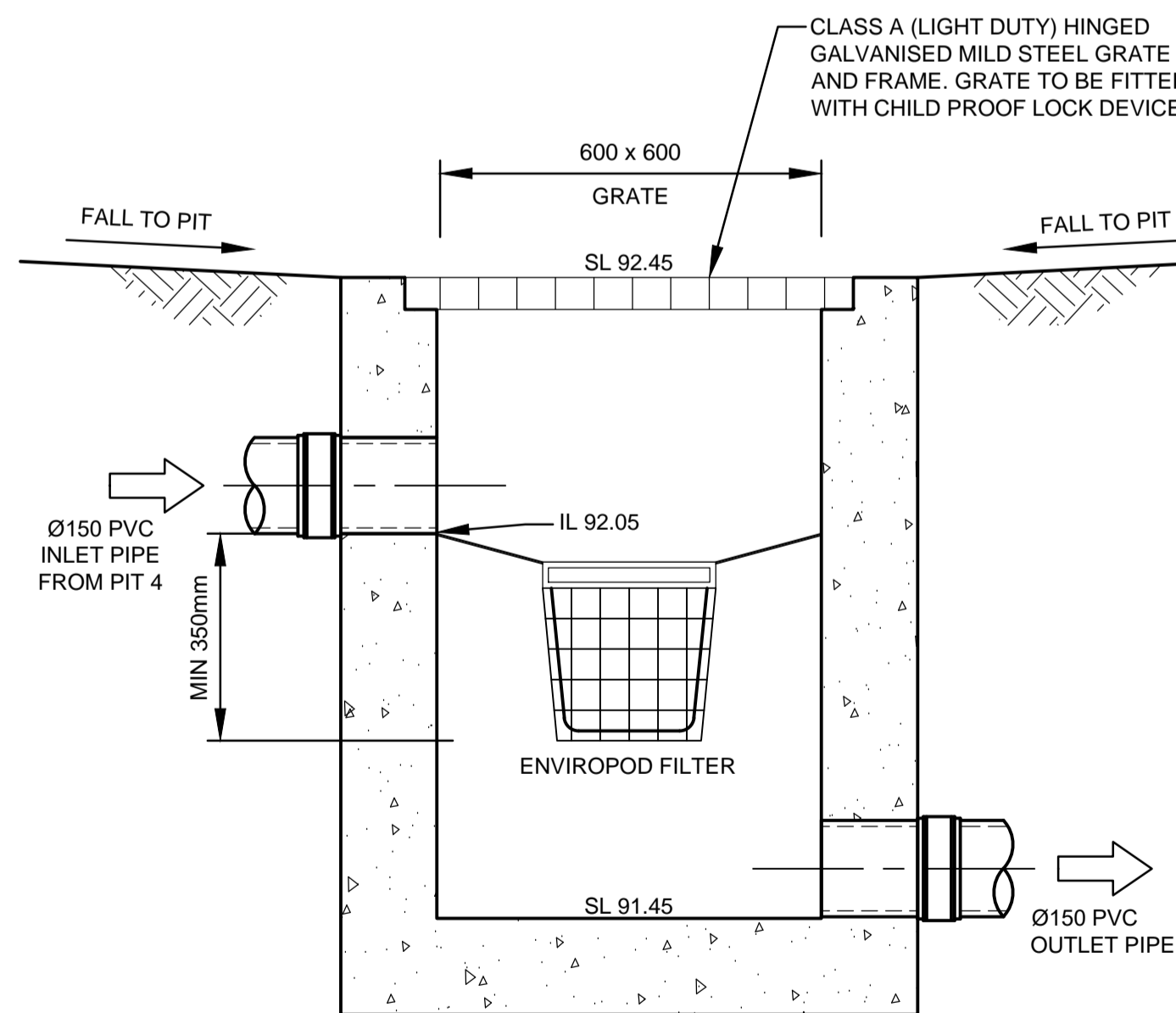


RAINWATER OUTLET DETAIL
N.T.S.

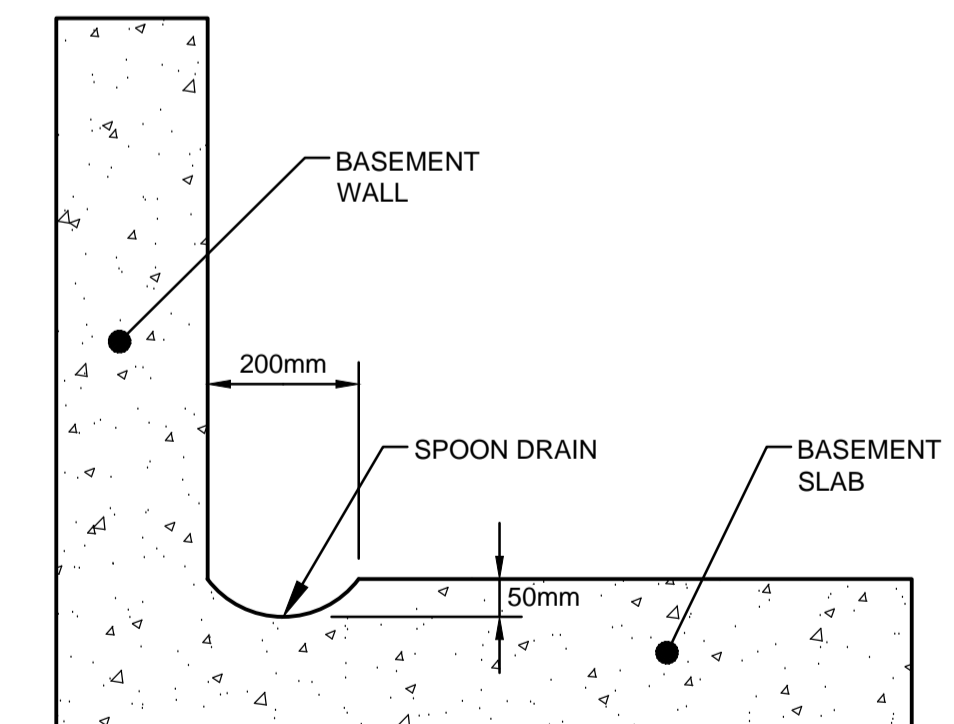
Regulated Design Record				
Project Address: 45 Mobbs Lane, Carlingford				
Project Title: CHILD CARE CENTRE				
Consent No: DA/725/2020			Body Corporate Reg No: -	
Drawing Title: MISCELLANEOUS DETAILS SHEET			Drawing No: 108	
Rev	Date dd.mm.yy	Description	DP Full Name	Reg No
1	27.07.21	COUNCIL COMMENTS	ANTHONY HASHAM	DEP0000109



TYPICAL GRATED INLET PIT DETAIL
N.T.S.



PIT 3 OceanGuard CONFIGURATION SECTION
SCALE 1:10



SPOON DRAIN SECTION DETAIL
SCALE 1:10

NOT FOR CONSTRUCTION

Issue	Description	Date	Design	Checked
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Scale
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SCALE 1:10 @ A1

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Project
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Drawing Title
MISCELLANEOUS DETAILS SHEET
Scale A1 Project No. 200934 Dwg. No. 108 Issue B