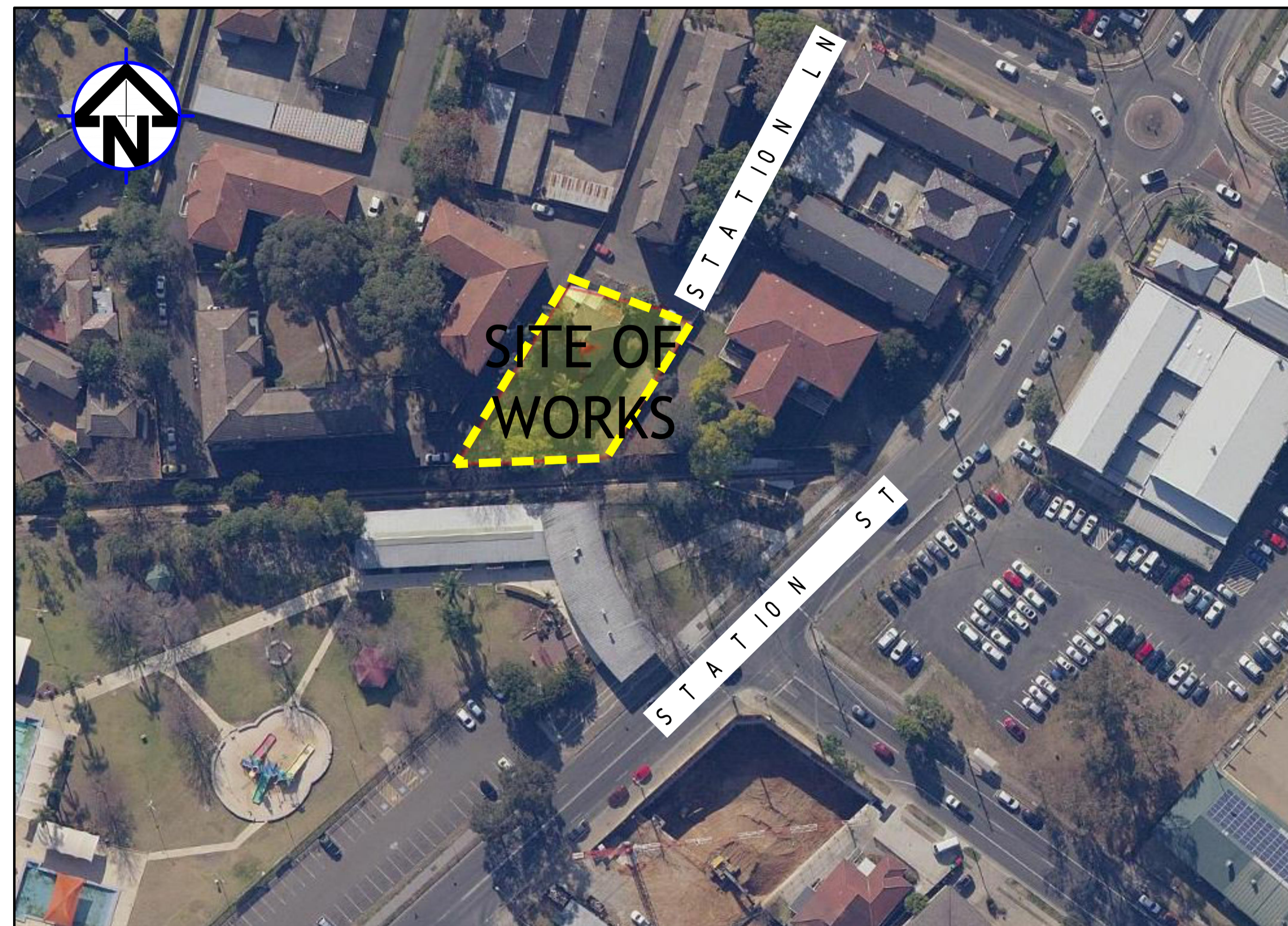


PROPOSED BOARDING HOUSE 1 STATION LANE, PENRITH STORMWATER CONCEPT DESIGN



LOCALITY PLAN
NOT TO SCALE
COPYRIGHT OF SIXMAP

DRAWINGS LIST			
SHEET No.	DWG No.	TITLE	REV
1	SW100	COVER SHEET	A
2	SW200	STORMWATER CONCEPT DESIGN - GROUND FLOOR PLAN	A
3	SW201	STORMWATER CONCEPT DESIGN - ROOF PLAN	A
4	SW300	STORMWATER CONCEPT DESIGN - DETAILS SHEET	A
5	SW400	EROSION AND SEDIMENT CONTROL - PLAN AND DETAILS	A
6	SW500	STORMWATER CONCEPT DESIGN - MUSIC CATCHMENT PLAN	A



PREPARED BY:

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ARCHITECT:



CLIENT:

GEORGE GHOSSAYN

SERVICES ON THIS DRAWING ARE SHOWN BELOW SLAB U.N.O.

DESIGN NOTES:

THE PROPOSED IS A BOARDING HOUSE LOCATED IN PENRITH CITY COUNCIL AND COVERED BY PENRITH DCP 2014.

SITE AREA: 862.8m²

THE SITE IS NOT FLOOD AFFECTED (CONFIRMED BY COUNCIL ENGINEER, DATE: 15.04.2021)

ON-SITE DETENTION IS NOT REQUIRED FOR THIS DEVELOPMENT CONFIRMED BY COUNCIL ENGINEER AND AS PER PENRITH CITY COUNCIL STORMWATER DRAINAGE SPECIFICATION FOR BUILDING DEVELOPMENT (2016) SECTION 4.1

WSUD IS MANDATORY FOR MULTI DWELLING HOUSING DEVELOPMENTS EXCEEDING 5 DWELLINGS AS PER COUNCIL'S DCP SECTION 3.2 - TABLE C3.1

WATER QUALITY TARGET:
 TOTAL SUSPENDED SOLID (TSS)- 85%
 TOTAL PHOSPHOROUS (TP)- 60%
 TOTAL NITROGEN (TN)- 45%

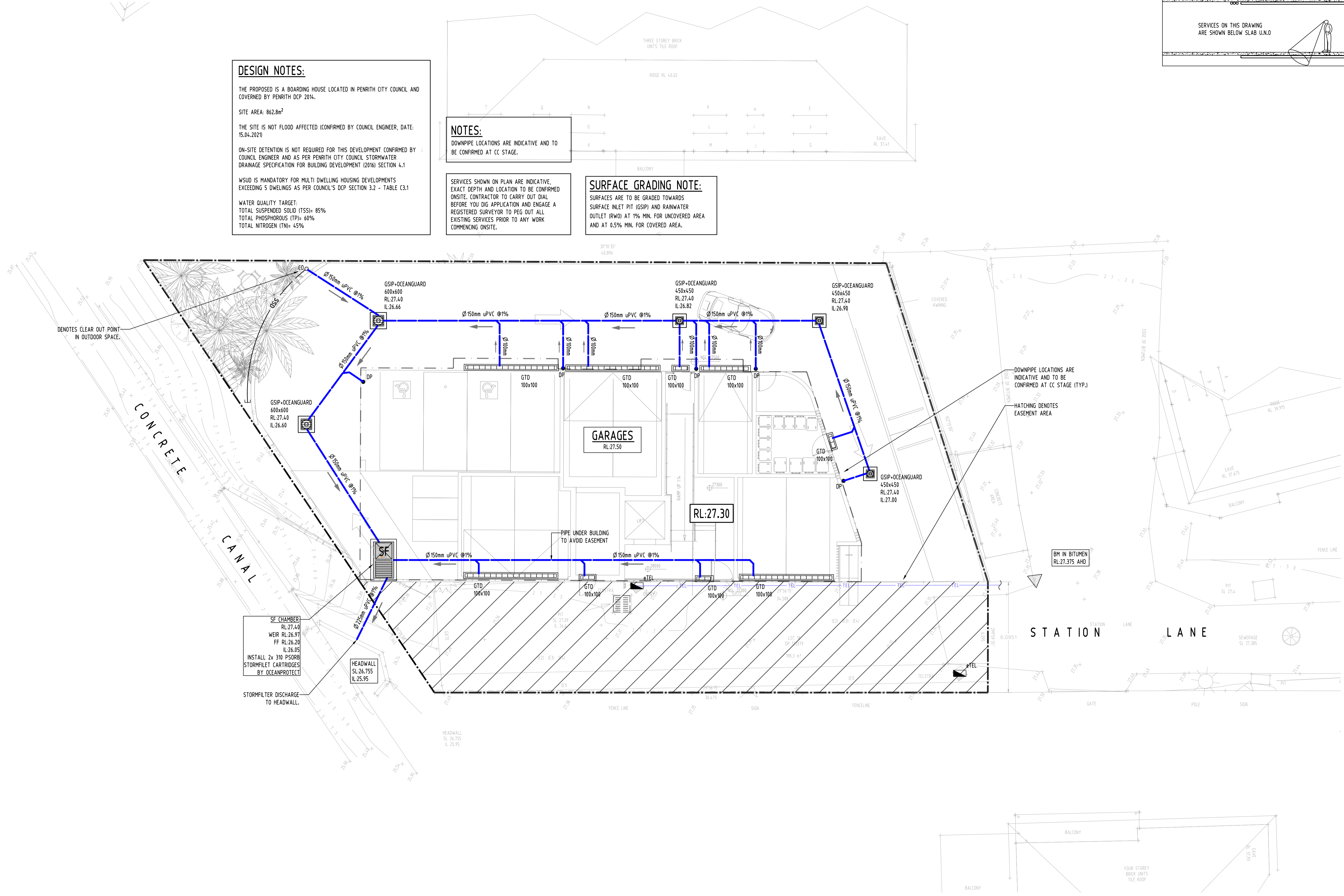
NOTES:

DOWNPIPE LOCATIONS ARE INDICATIVE AND TO BE CONFIRMED AT CC STAGE.

SERVICES SHOWN ON PLAN ARE INDICATIVE, EXACT DEPTH AND LOCATION TO BE CONFIRMED ONSITE. CONTRACTOR TO CARRY OUT DIAL BEFORE YOU DIG APPLICATION AND ENGAGE A REGISTERED SURVEYOR TO PEG OUT ALL EXISTING SERVICES PRIOR TO ANY WORK COMMENCING ONSITE.

SURFACE GRADING NOTE:

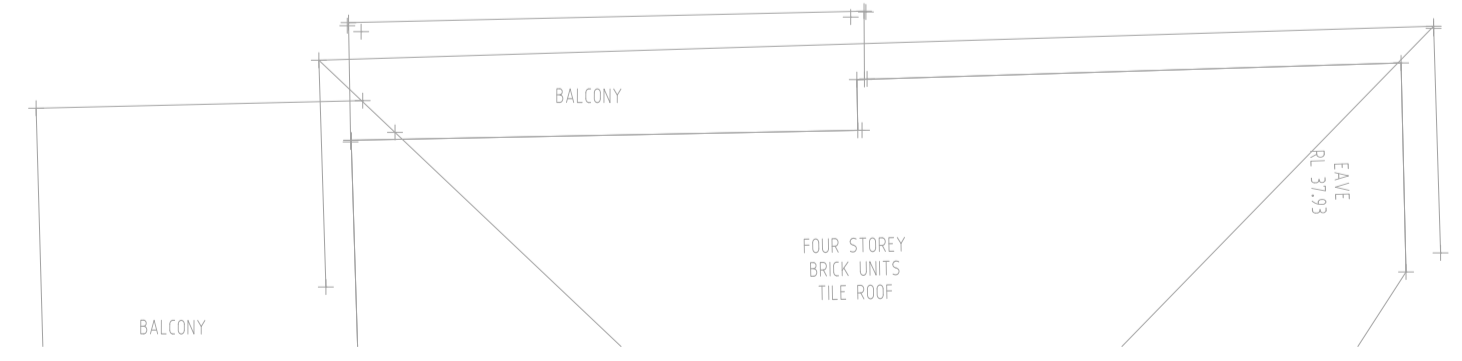
SURFACES ARE TO BE GRADED TOWARDS SURFACE INLET PIT (GSIP) AND RAINWATER OUTLET (RWO) AT 1% MIN. FOR UNCOVERED AREA AND AT 0.5% MIN. FOR COVERED AREA.



SF CHAMBER
 RL:27.40
 WEIR RL:26.97
 FF RL:26.20
 IL:26.05
 INSTALL 2x 310 PSORB STORMFILET CARTRIDGES BY OCEANPROTECT

HEADWALL
 SL:26.755
 IL:25.95

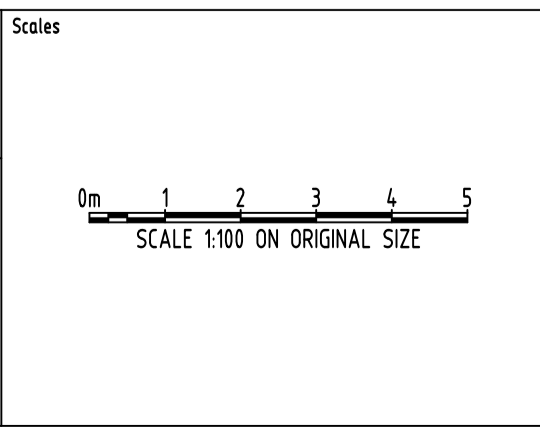
STORMFILTER DISCHARGE TO HEADWALL.



Reference Coordination Drawing			
Discipline	Drawing Title and Number	Date	Rev.
ARCH			
ARCH			
STRUCT			
MECH			
ELEC			
HYD			
FRG			
LANDS			
CIVIL			
SURVEY			

QUALITY CONTROL			
DRAWN	SC	DATE	16.06.21
CHECKED	SH	DATE	16.06.21
DESIGNED	SC	DATE	16.06.21
VERIFIED	SH	DATE	16.06.21
APPROVED	SH	DATE	16.06.21

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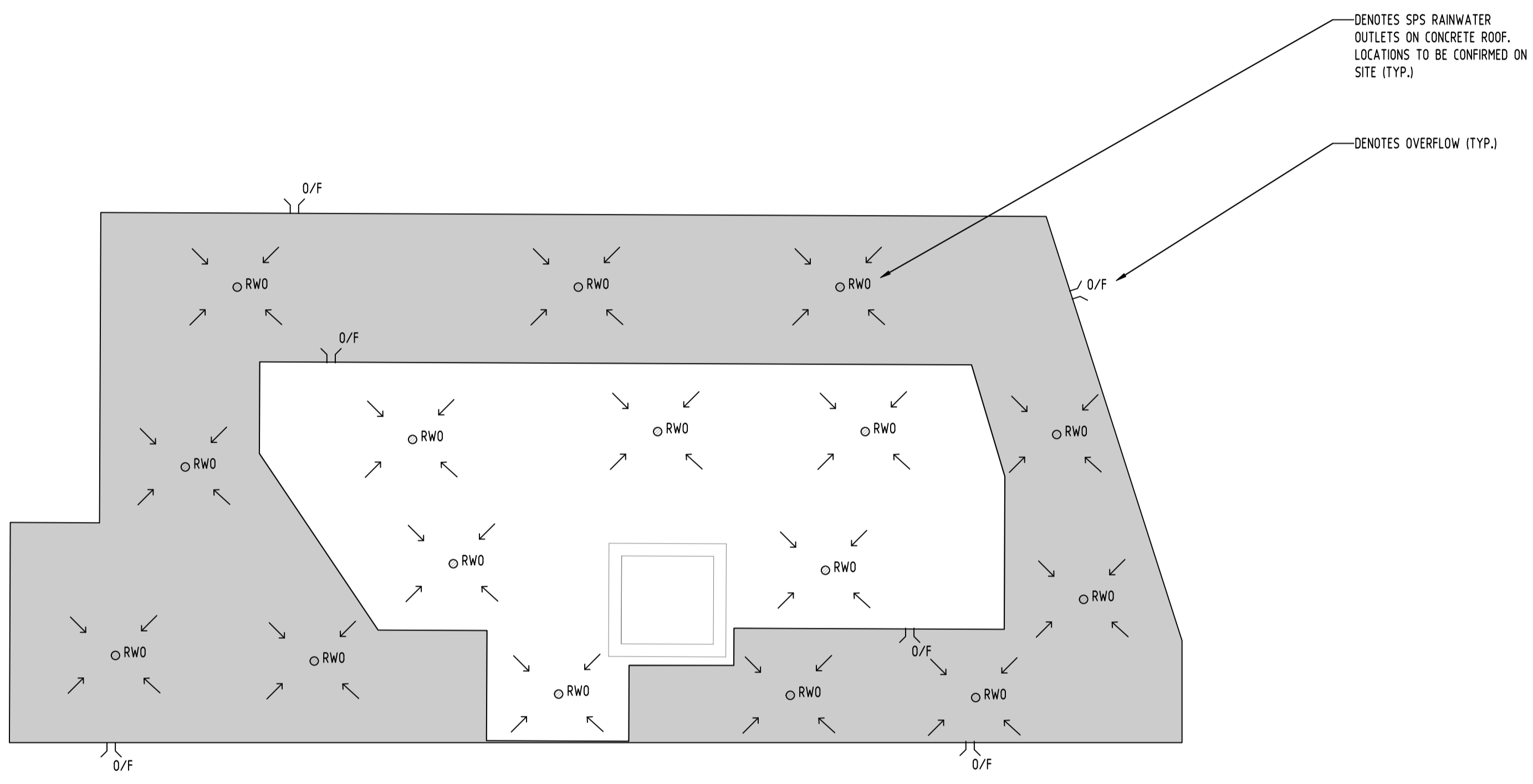


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PROJECT
PROPOSED BOARDING HOUSE
 1 STATION LANE
 PENRITH

Drawing Status FOR APPROVAL		
NOT TO BE USED FOR CONSTRUCTION PURPOSES		
Drawing Title STORMWATER CONCEPT DESIGN GROUND FLOOR PLAN		
Project No 20210048	Drawing No SW200	Revision No A

SERVICES ON THIS DRAWING
ARE SHOWN BELOW SLAB U.N.O.



DENOTES SPS RAINWATER
OUTLETS ON CONCRETE ROOF.
LOCATIONS TO BE CONFIRMED ON
SITE (TYP.)

DENOTES OVERFLOW (TYP.)

**CONCRETE ROOF DRAINAGE
NOTES:**

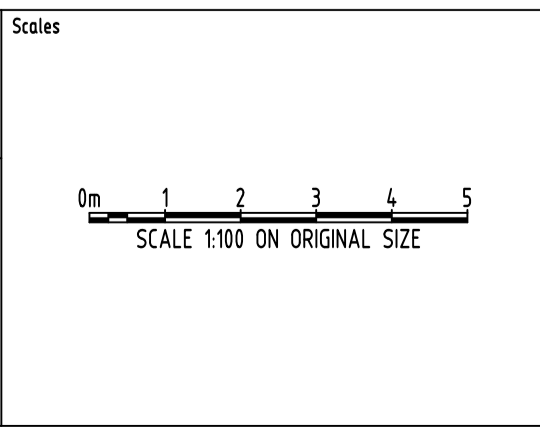
1. ALL STORMWATER PIPES SHOWN ON PLAN ARE Ø100mm uPVC AND SLOPING AT 1.0% (MIN) U.N.O.
2. INSTALL 50mm uPVC SPITTER PIPES 20mm ABOVE SURFACE LEVEL FOR BALCONY AND CONCRETE ROOF AREAS TO ALLOW FOR EMERGENCY OVERFLOW IN CASE OF BLOCKAGE DURING HEAVY STORM. PLUMBER/CONTRACTOR TO LOCATION DURING CONSTRUCTION.
3. BALCONY, TERRACE & CONCRETE ROOF AREA TO SLOPE TOWARDS RAINWATER OUTLETS (TYP.)
4. PROVIDE BREAK/CUT IN HOB OR SIMILAR ADEQUATE STORMWATER DRAINAGE FEATURE, WHERE REQUIRED (TYP.)
5. STORMWATER PIPES TO BE CONCEALED WITH FALSE CEILING, COLUMNS AND BULKHEADS, IF REQUIRED.
6. PLUMBER TO PROVIDE SPEARDER DOWNPIPE, WHERE REQUIRED TO DIRECT STORMWATER ONTO LOWER ROOF AREAS.
7. ALL BUILDING & HYDRAULIC SERVICES TO BE PROPERLY CO-ORDINATED WITH STORMWATER PIPES TO ENSURE NO CLASHES ARE PRESENT DURING CONSTRUCTION (TYP.)

Reference Coordination Drawing			
Discipline	Drawing Title and Number	Date	Rev.
ARCH			
ARCH			
STRUCT			
MECH			
ELEC			
HYD			
FIRE			
LANDS			
CIVIL			
SURVEY			

ENGINEERS AUSTRALIA
Chartered Professional Engineer
MEMBER

QUALITY CONTROL			
DRAWN	SC	DATE	16.06.21
CHECKED	SH <td>DATE</td> <td>16.06.21</td>	DATE	16.06.21
DESIGNED	SC <td>DATE</td> <td>16.06.21</td>	DATE	16.06.21
VERIFIED	SH <td>DATE</td> <td>16.06.21</td>	DATE	16.06.21
APPROVED	SH <td>DATE</td> <td>16.06.21</td>	DATE	16.06.21

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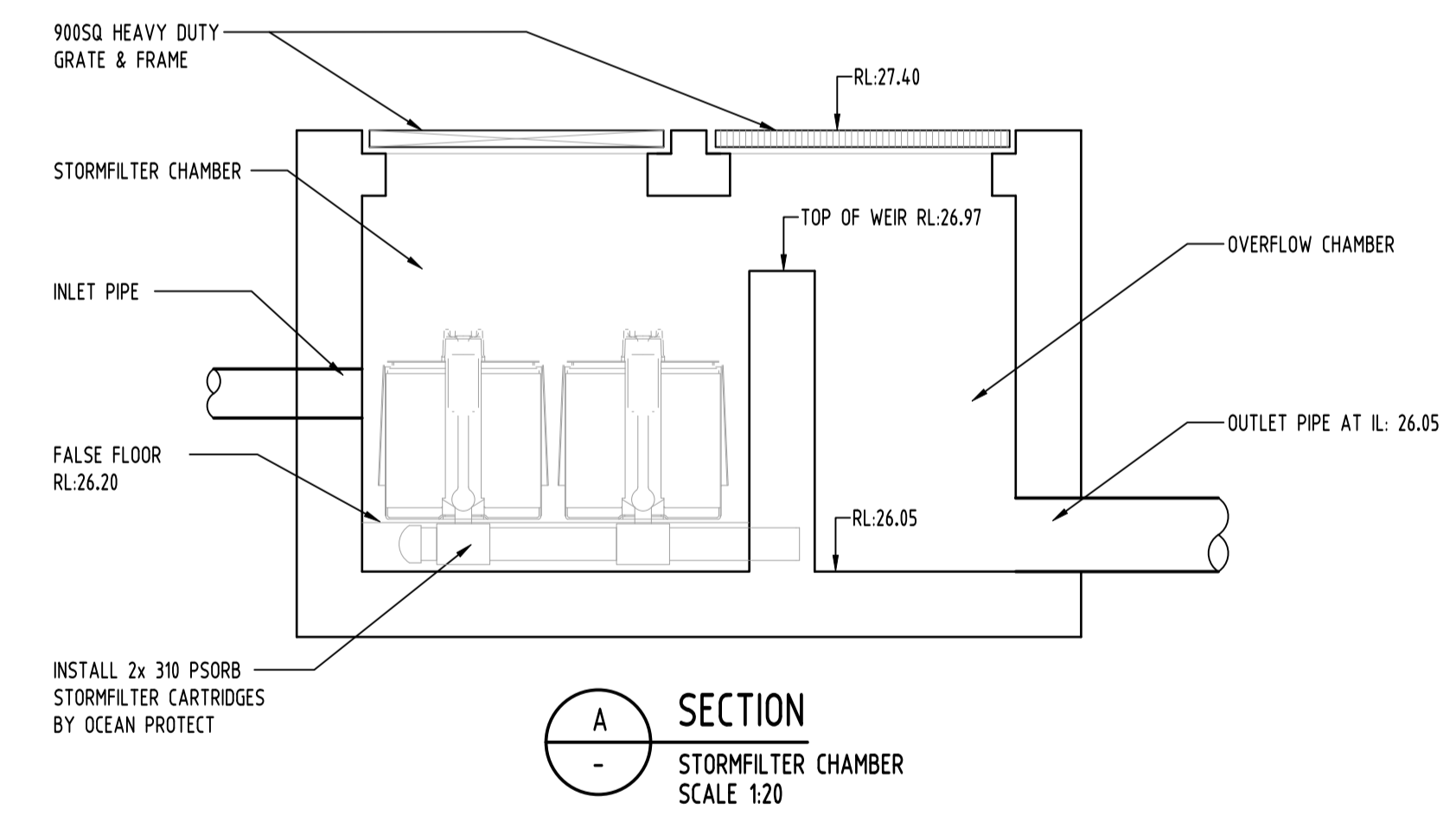
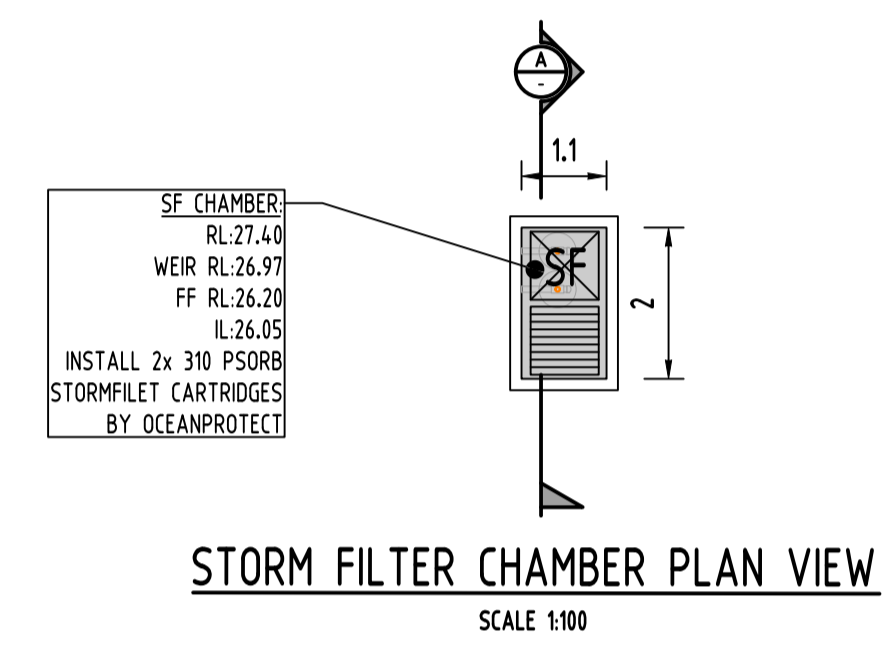
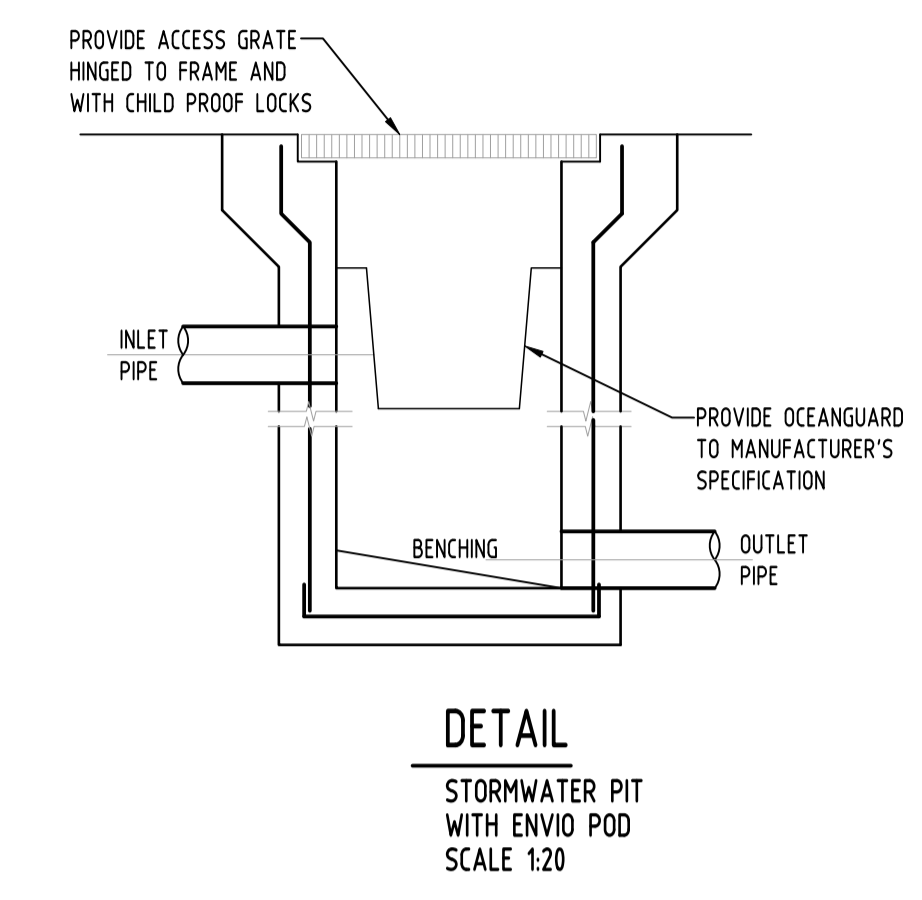
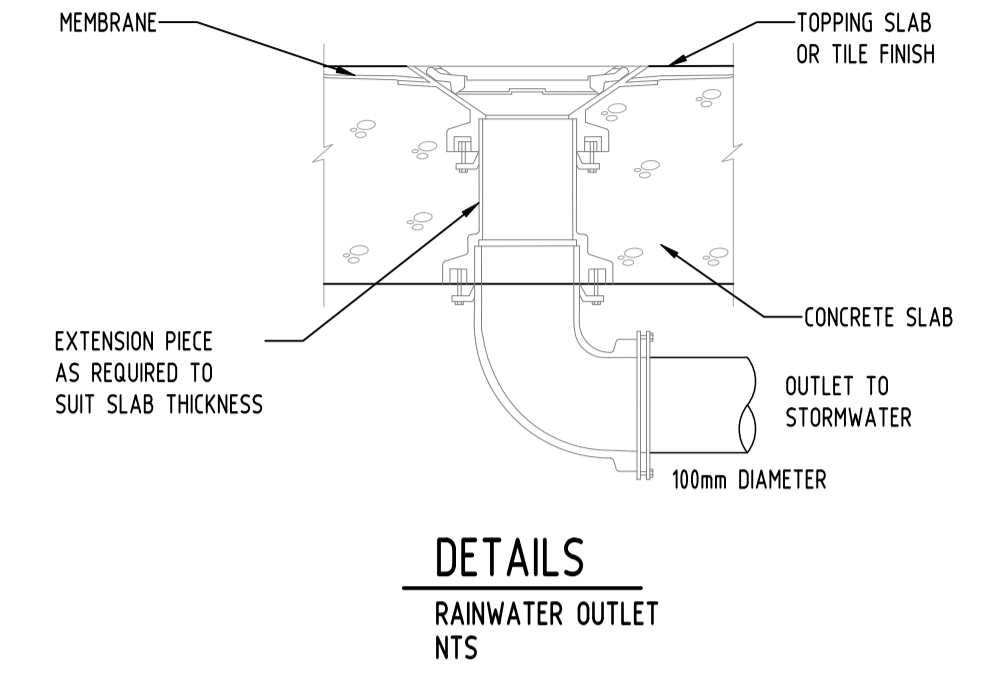
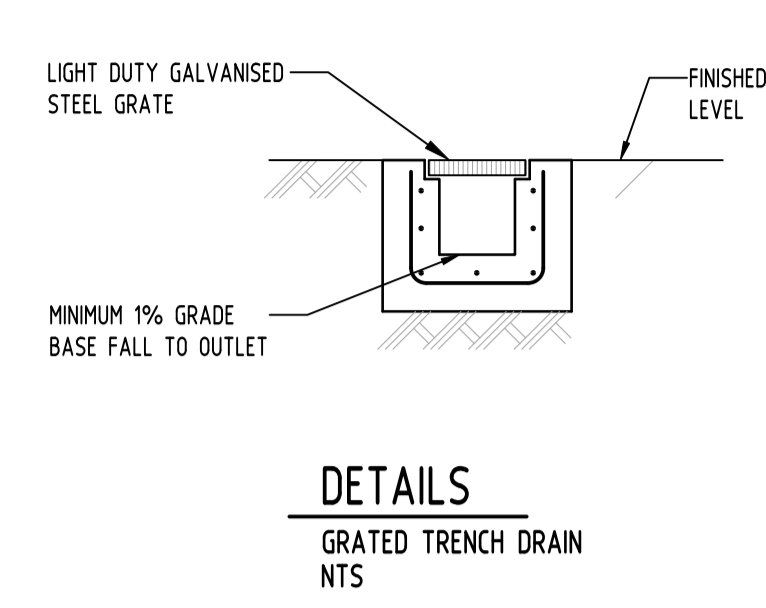
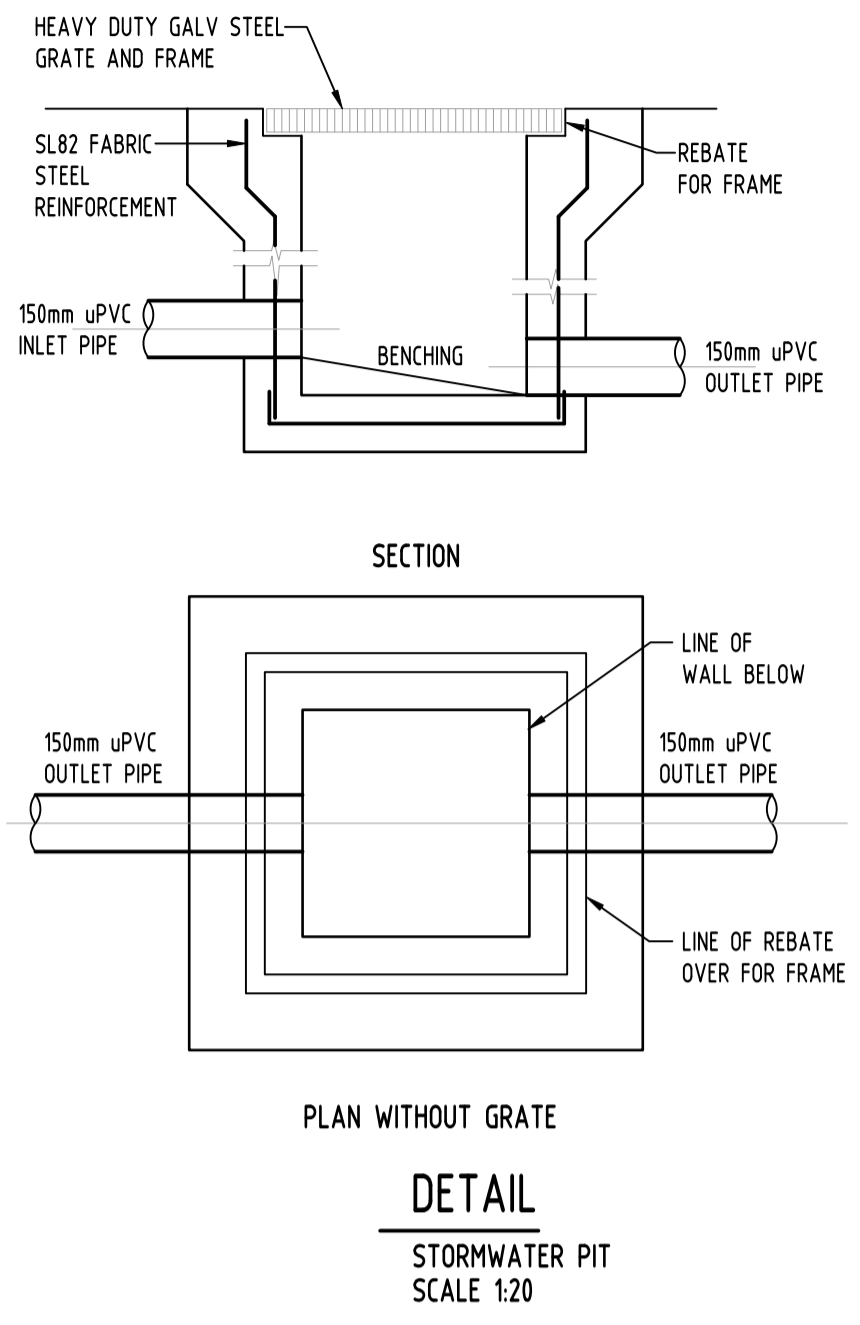
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PROJECT
PROPOSED BOARDING HOUSE
1 STATION LANE
PENRITH

Drawing Status FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION PURPOSES		
Drawing Title STORMWATER CONCEPT DESIGN ROOF PLAN		
Project No 20210048	Drawing No SW201	Revision No A



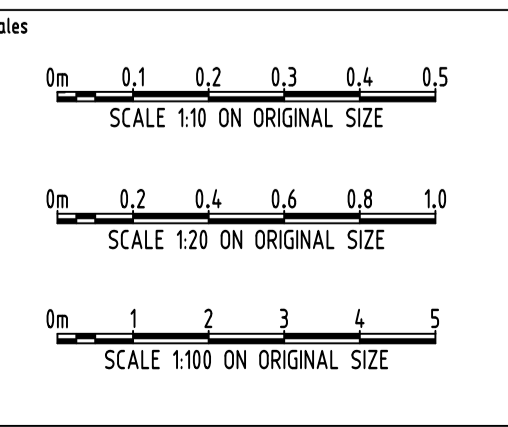
LEGEND

---	EXISTING BOUNDARY
---	STORMWATER LINE
TEL	AUTHORITY COMMS LINE
eTEL	EXISTING TELSTRA PIT
[Symbol]	EXISTING GRATED SURFACE INLET PIT
[Symbol]	GRATED SURFACE INLET PIT + OCEANGUARD
[Symbol]	GRATED SURFACE INLET PIT
[Symbol]	JUNCTION PIT
[Symbol]	GRATED TRENCH DRAIN
RWD	RAINWATER OUTLET
[Symbol]	DOWNPIPE DROP
DP	DOWNPIPE
RL00.00	SPOT LEVEL

Reference Coordination Drawing			
Discipline	Drawing Title and Number	Date	Rev.
ARCH			
ARCH			
STRUCT			
MEEH			
ELEC			
HYD			
FRS			
LANDS			
CIVIL			
SURVEY			

QUALITY CONTROL			
DRAWN	SC	DATE	
CHECKED	SH	DATE	16.06.21
DESIGNED	SC	DATE	16.06.21
VERIFIED	SH	DATE	16.06.21
APPROVED	SH	DATE	16.06.21

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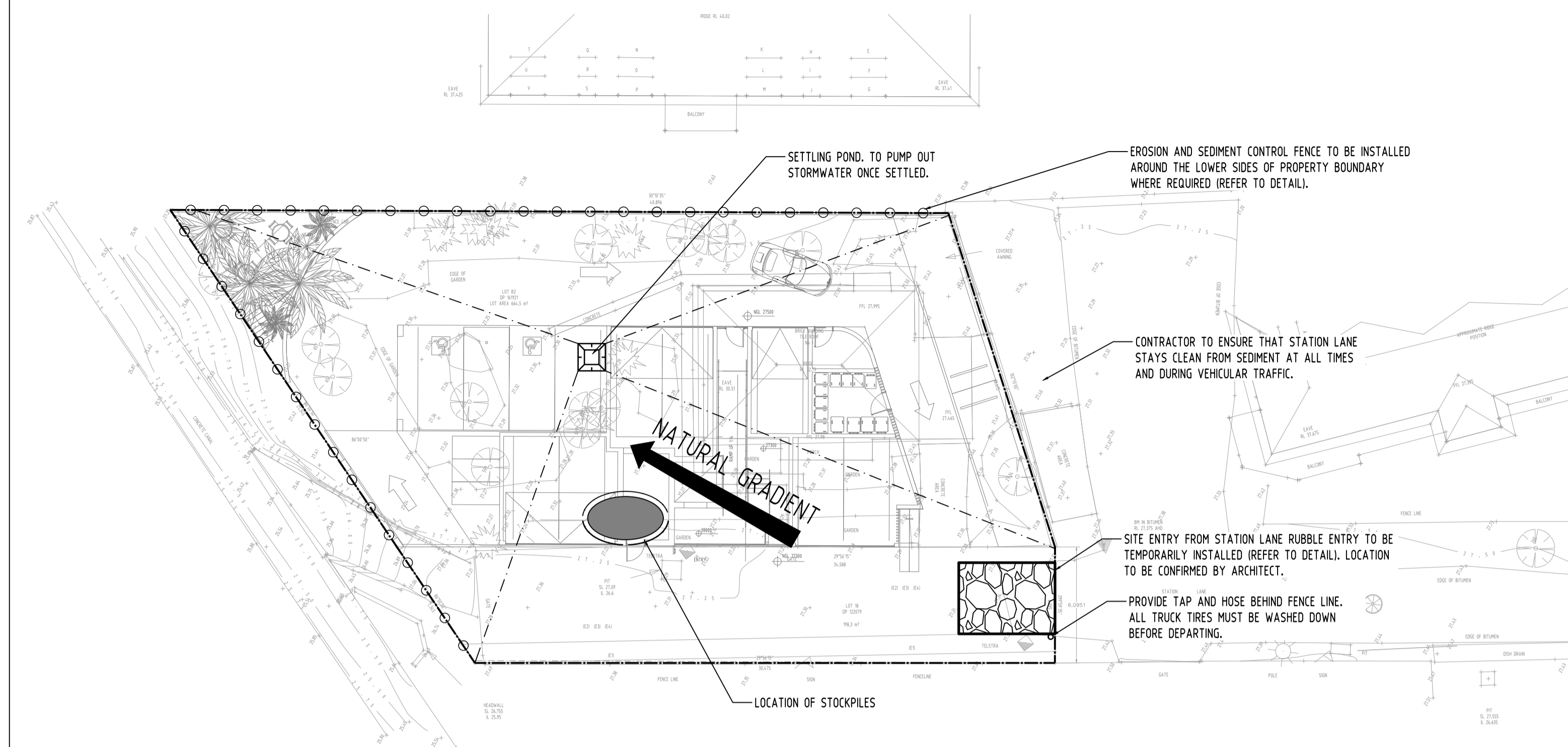
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PROJECT
PROPOSED BOARDING HOUSE
1 STATION LANE
PENRITH

Drawing Status			FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION PURPOSES			
Drawing Title			STORMWATER CONCEPT DESIGN DETAILS SHEET
Project No	Drawing No	Revision No	
20210048	SW300	A	



EROSION AND SEDIMENT CONTROL
SCALE 1:200

EROSION & SEDIMENTATION CONTROL NOTES

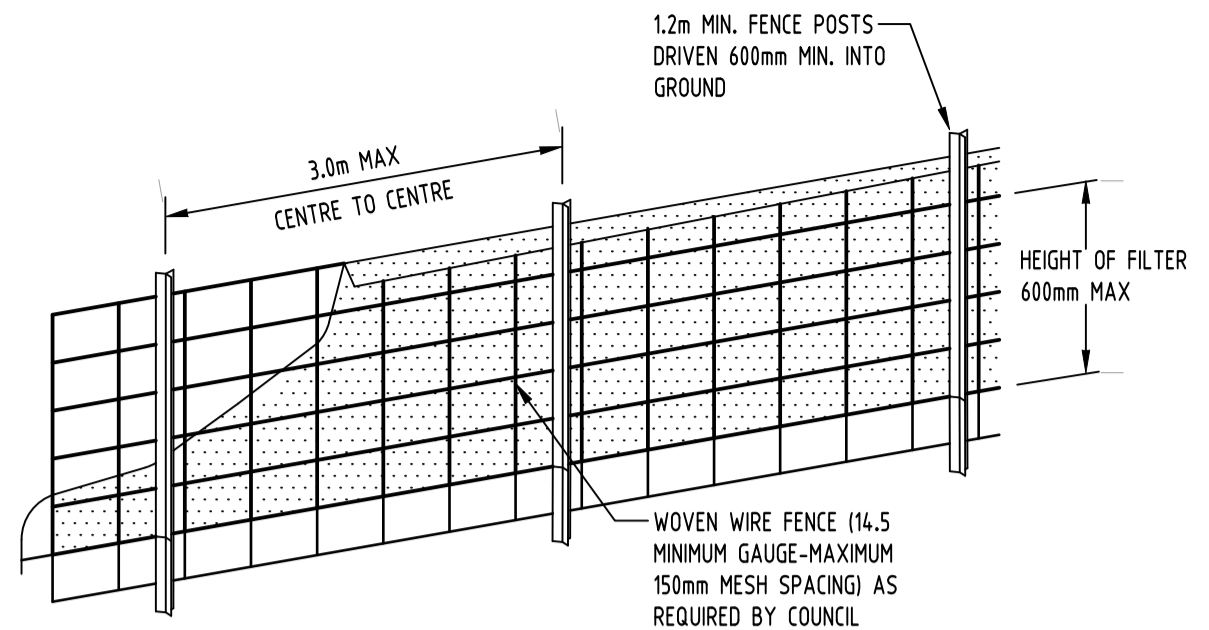
- CONTRACTOR SHALL PROVIDE SEDIMENT FENCING MATERIAL DURING CONSTRUCTION TO THE LOW SIDE OF THE WORKS. THE SEDIMENT FENCING MATERIAL TO CYCLONE WIRE SECURITY FENCE. SEDIMENT CONTROL FABRIC SHALL BE AN APPROVED MATERIAL (EG. HUMES PROPEX SILT STOP) STANDING 300mm ABOVE GROUND & EXTENDING 150mm BELOW GROUND.
- EXISTING DRAINS LOCATED WITHIN THE SITE SHALL ALSO BE ISOLATED BY SEDIMENT FENCING MATERIAL.
- NO PARKING OR STOCKPILING OF MATERIALS IS PERMITTED ON THE LOWER SIDE OF THE SEDIMENT FENCE.
- GRASS VERGES SHALL BE MAINTAINED AS MUCH AS PRACTICAL TO PROVIDE A BUFFER ZONE TO THE CONSTRUCTION SITE.
- CONSTRUCTION ENTRY/EXIT SHALL BE VIA THE LOCATION NOTED ON THE DRAWING. CONTRACTOR SHALL ENSURE ALL DROPPABLE SOIL & SEDIMENT IS REMOVED PRIOR TO CONSTRUCTION TRAFFIC EXITING SITE. CONTRACTOR SHALL ENSURE ALL CONSTRUCTION TRAFFIC ENTERING & LEAVING THE SITE DO SO IN A FORWARD DIRECTION.

GENERAL NOTES

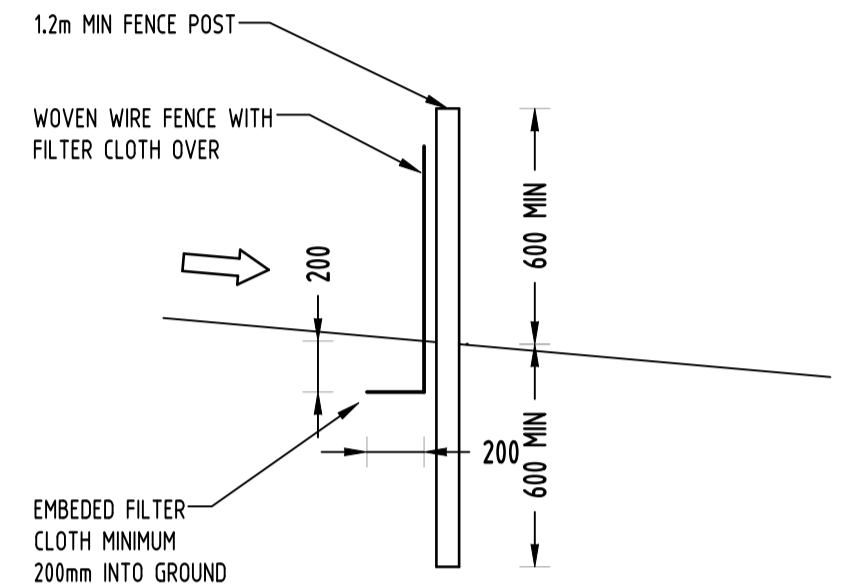
- THIS PLAN IS A CONCEPT PLAN ONLY FOR STORMWATER DISPOSAL & EROSION CONTROL. IT IS NOT SUITABLE FOR CONSTRUCTION. THIS PLAN SHOULD BE ADAPTED BY THE BUILDER DURING DEMOLITION, EXCAVATION & CONSTRUCTION PHASES TO ENSURE ADEQUATE PERFORMANCE.
- ALL DRAINAGE LAYOUT & DETAILS ARE DIAGRAMMATIC & INDICATIVE ONLY. ACTUAL LOCATION, SIZES, LEVELS & GRADES MAY ALTER WHEN DETAIL DESIGN WORKS ARE DOCUMENTED.

CLAY SOILS

- A SYSTEM SHALL BE INSTALLED TO EITHER:
- TRANSPORT STORMWATER RUNOFF WITH SUSPENDED SOLIDS FROM SITE VIA PUMP TRUCKS.
 - TREAT THE STORMWATER RUNOFF WITH SUSPENDED SOLIDS SO THE DISCHARGE WATER QUALITY TO COUNCIL STORMWATER DRAINAGE SYSTEM HAS A MAXIMUM CONCENTRATION OF SUSPENDED SOLIDS THAT DOES NOT EXCEED 50 MILLIGRAMS PER LITRE IN ACCORDANCE WITH THE PROTECTION OF THE ENVIRONMENT OPERATION ACT (POEO 1997) AND SHALL BE APPROVED BY LOCAL COUNCIL.

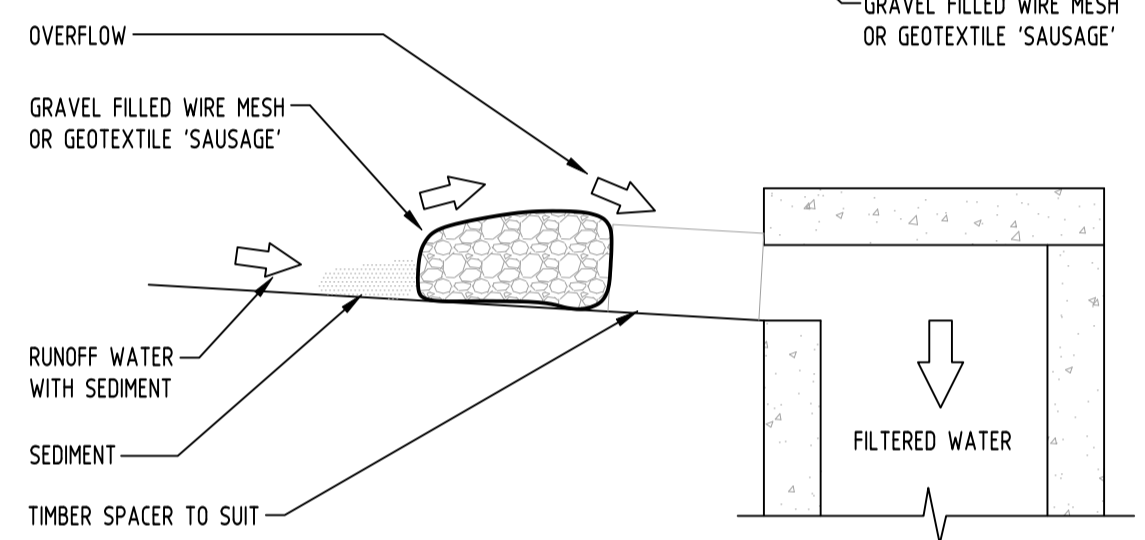
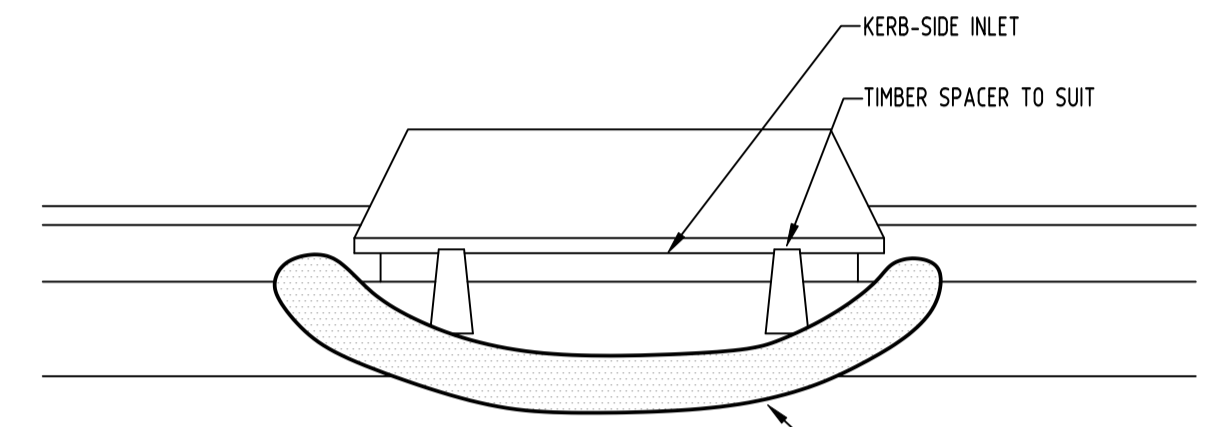


DIAGRAMMATIC VIEW



TYPICAL SECTION

SEDIMENT FENCE
NOT TO SCALE



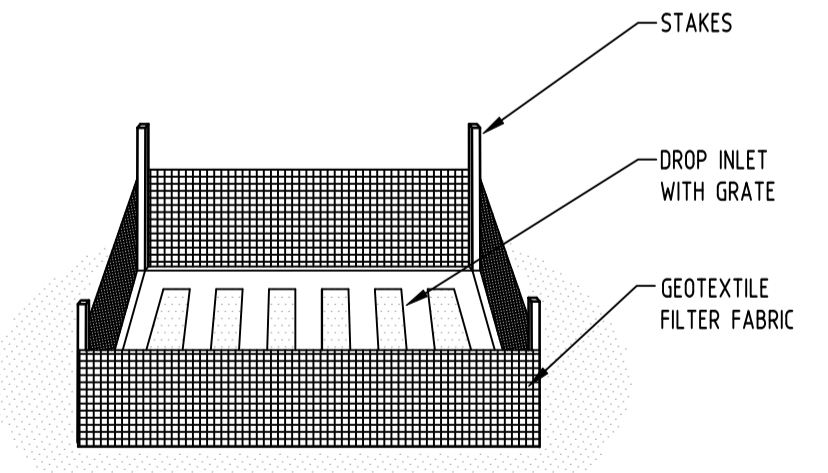
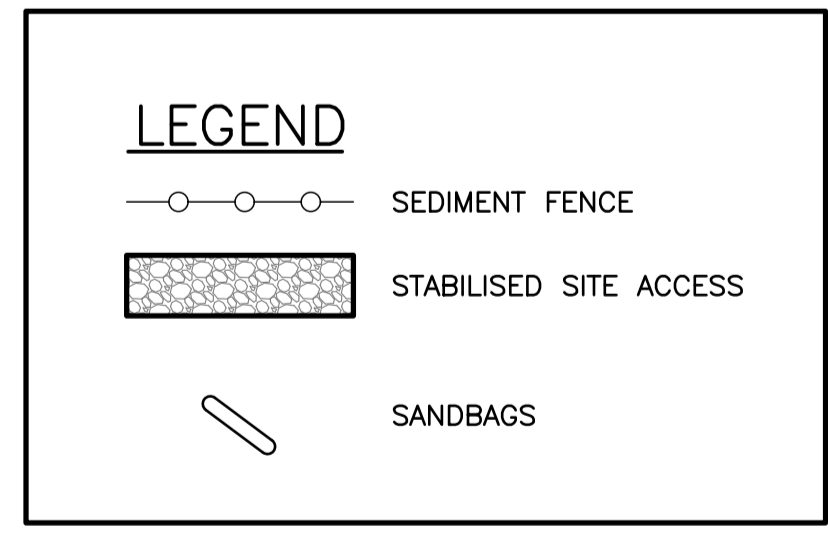
CONSTRUCTION NOTES:

- FABRICATE A SLEEVE MADE FROM GEOTEXTILE OR WIRE MESH LONGER THAN THE LENGTH OF THE INLET PIT
- FILL THE SLEEVE WITH 25mm TO 50mm GRAVEL
- FORM AN ELLIPTICAL CROSS-SECTION OF THE KERB INLET LEAVING A 100mm GAP AT THE TOP TO ACT AS AN EMERGENCY SPILLWAY
- MAINTAIN THE OPENING WITH SPACER BLOCKS
- FORM A SEAL WITH THE KERBING AND PREVENT SEDIMENT BYPASSING THE FILTER
- FIT TO ALL KERB INLETS AT SAG POINTS

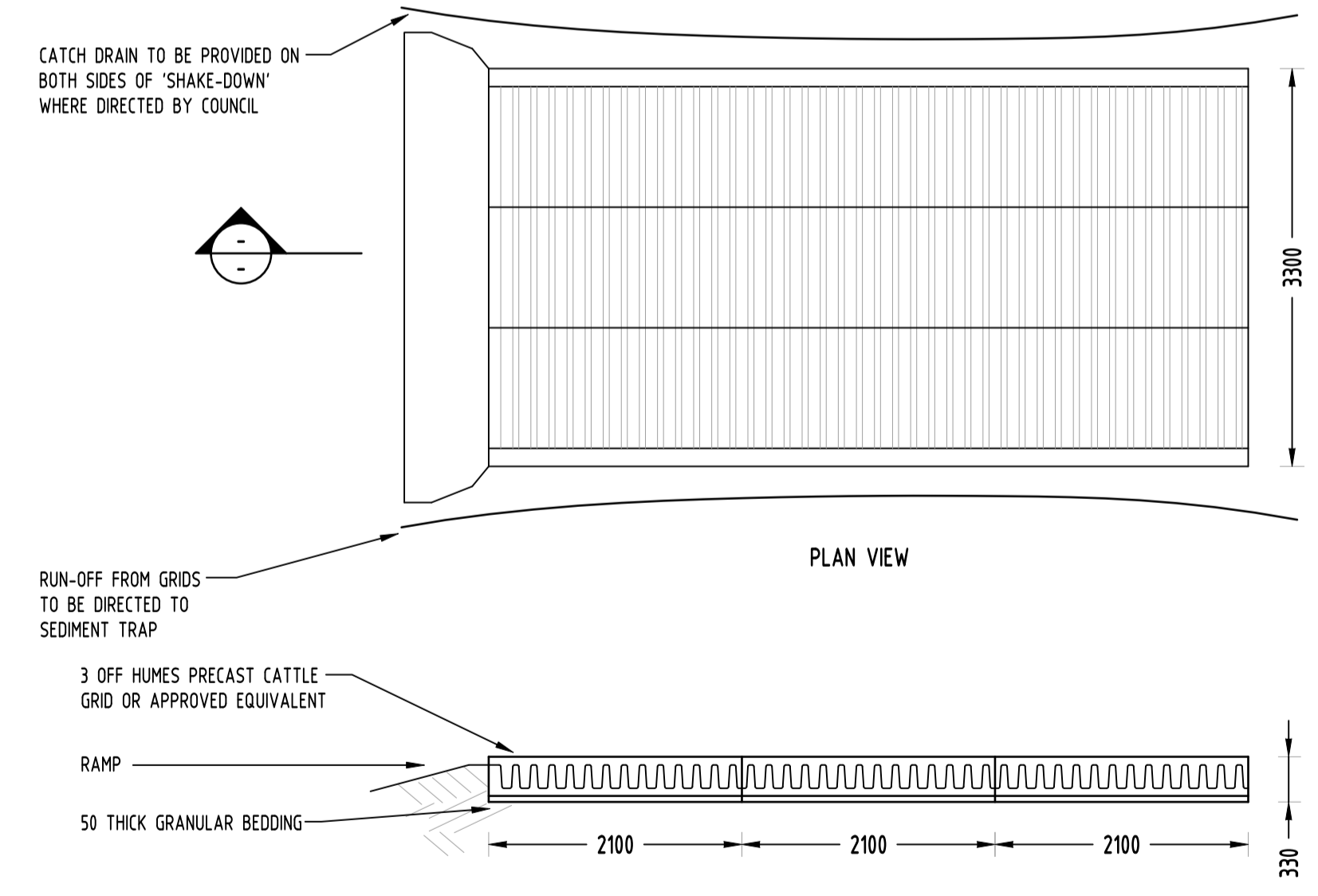
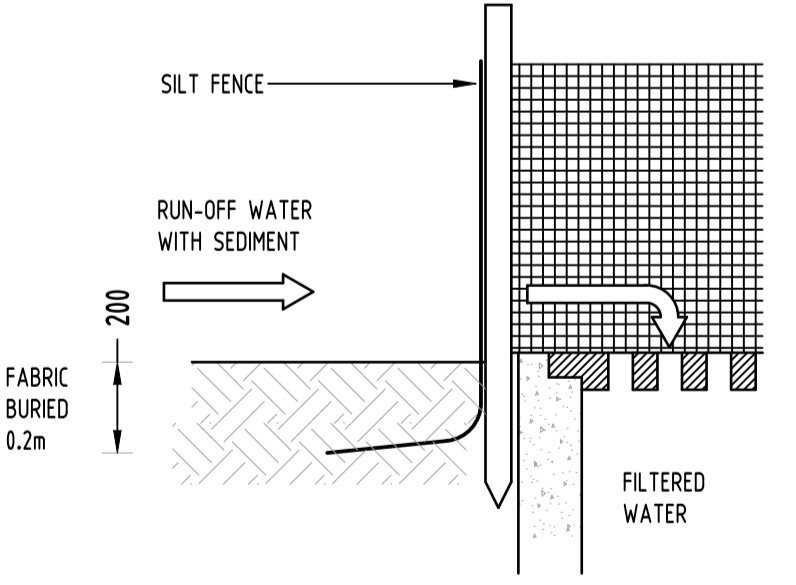
GRAVEL INLET FILTER (SAUSAGE)
NOT TO SCALE

GEOTEXTILE INLET FILTER

GEOTEXTILE INLET FILTER IS PLACED IN EVERY PIT WITHIN THE SITE TO ENSURE THE RUNOFF WATER DURING CONSTRUCTION NOT ENTER THE PITS.



GEOTEXTILE INLET FILTER
NOT TO SCALE

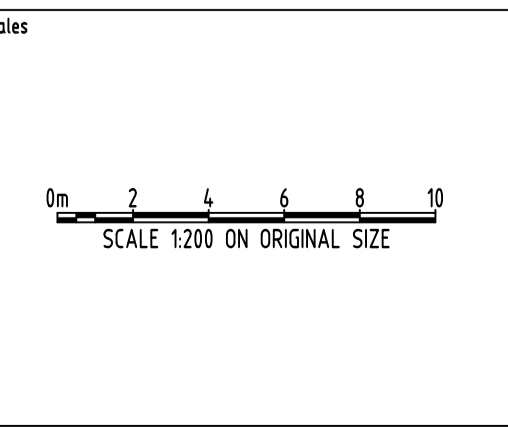


TYPICAL SECTION
'CATTLE GRID' ALTERNATIVE
TEMPORARY CONSTRUCTION EXIT
NOT TO SCALE

Reference Coordination Drawing			
Discipline	Drawing Title and Number	Date	Rev.
ARCH			
ARCH			
STRUCT			
MECH			
ELEC			
HYD			
FRG			
LANDS			
CIVIL			
SURVEY			

QUALITY CONTROL			
DRAWN	SC	DATE	16.06.21
CHECKED	SH	DATE	16.06.21
DESIGNED	SC	DATE	16.06.21
VERIFIED	SH	DATE	16.06.21
APPROVED	SH	DATE	16.06.21

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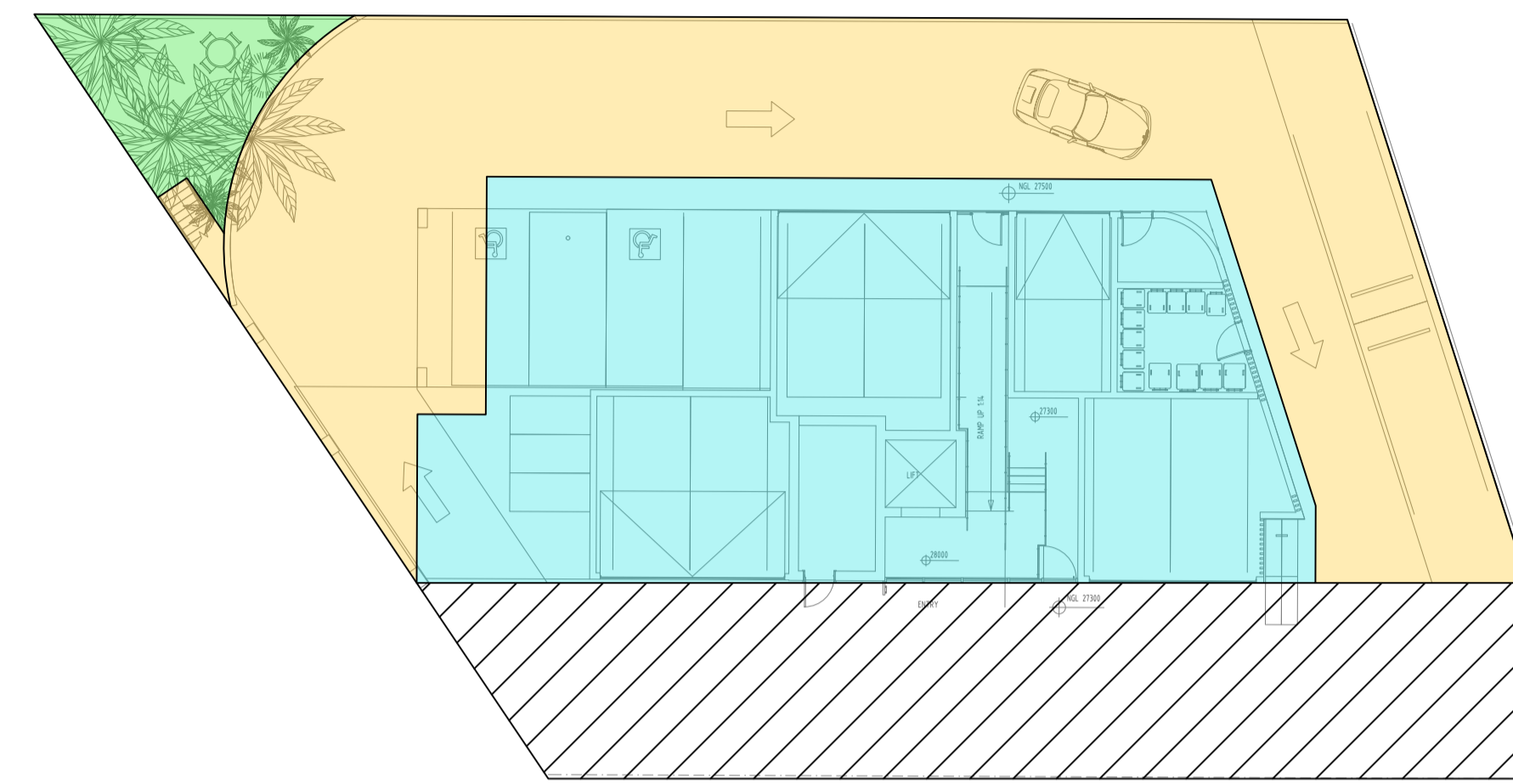
ARCHITECT
PRODOC ARCHITECTS

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PROJECT
PROPOSED BOARDING HOUSE
1 STATION LANE
PENRITH

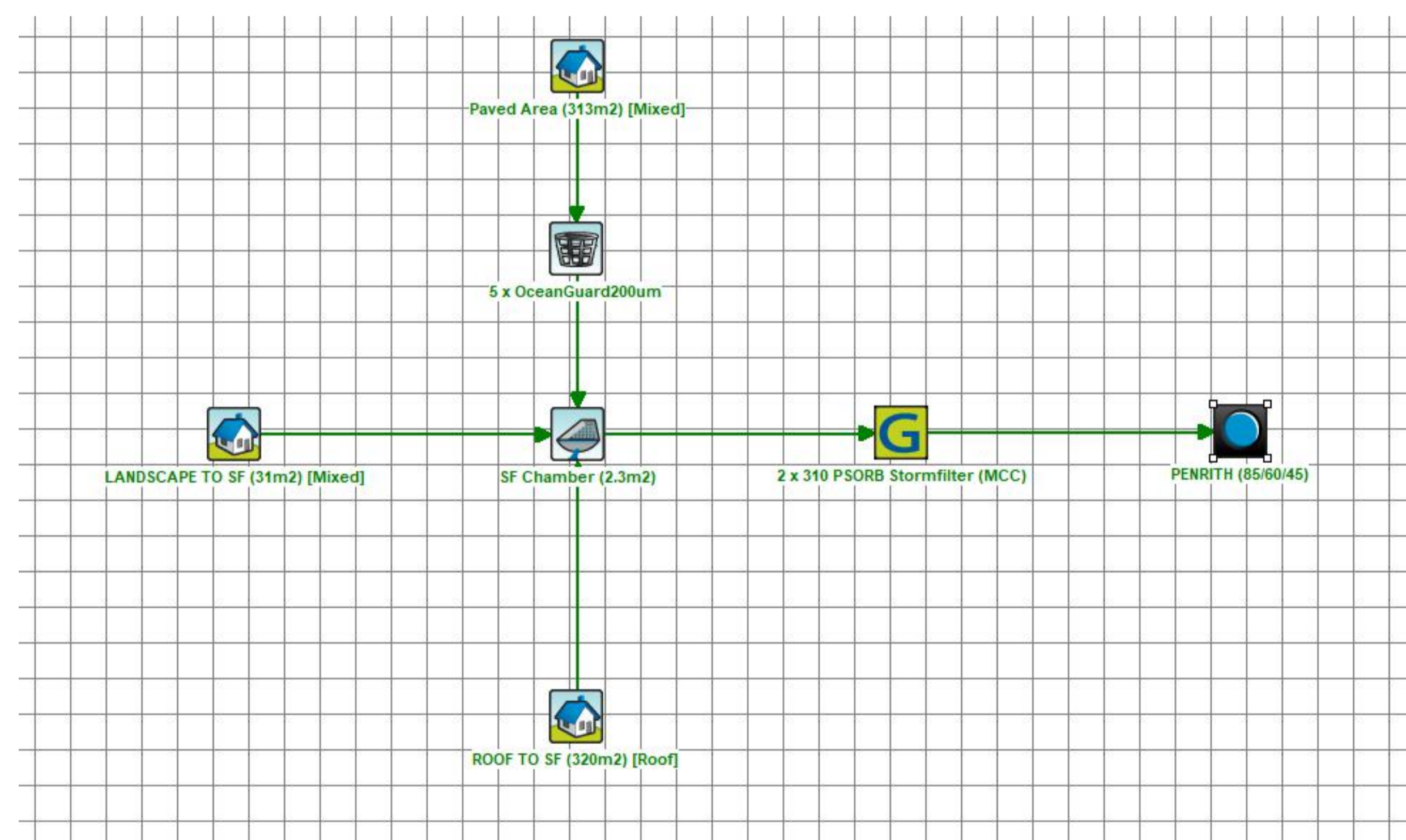
Drawing Status	FOR APPROVAL
Drawing Title	NOT TO BE USED FOR CONSTRUCTION PURPOSES
EROSION AND SEDIMENT CONTROL PLAN AND DETAILS	
Project No	20210048
Drawing No	SW400
Revision No	A



LEGEND:

	ROOF AREA TO SF (100% IMPERVIOUS) 320m ²
	LANDSCAPE AREA TO SF (100% PERVIOUS) 31m ²
	PAVED AREA TO OCEANGUARD (100% IMPERVIOUS) 313m ²
	EASEMENT NOT INCLUDED IN IN CALCULATIONS 198.3 m ²

MUSIC MODEL SITE BRAEKUP PLAN
SCALE 1:200



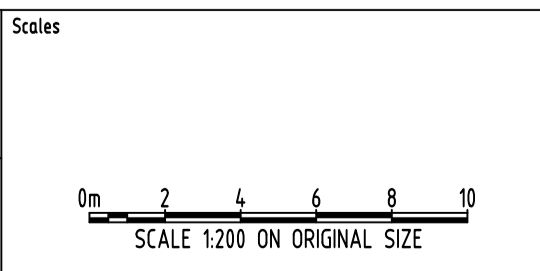
Treatment Train Effectiveness - PENRITH (85/60/45)

	Sources	Residual Load	% Reduction
Flow (ML/yr)	0.375	0.375	0
Total Suspended Solids (kg/yr)	39.5	4.3	89.1
Total Phosphorus (kg/yr)	0.0834	0.0261	68.7
Total Nitrogen (kg/yr)	0.824	0.443	46.2
Gross Pollutants (kg/yr)	10.4	0	100

Reference Coordination Drawing				
Discipline	Drawing Title and Number	Date	Rev.	
ARCH				
ARCH				
STRUCT				
MEECH				
ELEC				
HYD				
FIRE				
LANDS				
CIVIL				
SURVEY				

QUALITY CONTROL			
DRIVEN	SC	DATE	16.06.21
CHECKED	SH	DATE	16.06.21
DESIGNED	SC	DATE	16.06.21
VERIFIED	SH	DATE	16.06.21
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PROJECT
PROPOSED BOARDING HOUSE
1 STATION LANE
PENRITH

Grid - Datum A.H.D. Sheet 6 OF 6 Scale (at original size) 1:100 @ A1

Drawing Status	FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION PURPOSES	
Drawing Title	STORMWATER CONCEPT DESIGN MUSIC CATCHMENT PLAN
Project No	20210048
Drawing No	SW500
Revision No	A