

PROPOSED DEVELOPMENT AT 56 PANK PARADE, BLACKTOWN

GENERAL

- G1** These drawings shall be read in conjunction with all architectural and other consultants drawings and specifications and with such other written instructions and sketches as may be issued during the course of the Contract. Any discrepancies shall be referred to the Superintendent before proceeding with any related works. Construction from these drawings, and their associated consultant's drawings is not to commence until approved by the Local Authorities.
- G2** All materials and workmanship shall be in accordance with the relevant and current Standards Australia codes and with the By-Laws and Ordinances of the relevant building authorities except where varied by the project specification.
- G3** All set out dimensions shall be obtained from Architect's and Engineer's details. All discrepancies shall be referred to the Architect and Engineer for decision before proceeding with related work.
- G4** During construction the structure shall be maintained in a stable condition and no part shall be overstressed. Temporary bracing shall be provided by the builder/subcontractor to keep the works and excavations stable at all times.
- G5** Unless noted otherwise levels are in metres and dimensions are in millimetres.
- G6** The alignment and level of all services shown are approximate only. The contractor shall confirm the position and level of all services prior to commencement of construction. Any damage to services shall be rectified at the contractors expense.
- G7** Any substitution of materials shall be approved by the Engineer and included in any tender.
- G8** All services, or conduits for servicing shall be installed prior to commencement of pavement construction.
- G9** Subsoil drainage, comprising 100 agriculture pipe in geo-stocking to be placed as shown and as may be directed by the superintendent. Subsoil drainage shall be constructed in accordance with the relevant local authority construction specification.
- G10** The structural components detailed on these drawings have been designed in accordance with the relevant Standards Australia codes and Local Government Ordinances for the following loadings. Refer to the Architectural drawings for proposed floor usage. Refer to drawings for live loads and superimposed dead loads.

DRAINAGE NOTES

- D1** All drainage levels to be confirmed on site, prior to any construction commencing.
- D2** All pipes within the property to be a minimum of 100 dia upvc @ 1% minimum grade, uno.
- D3** All pits within the property are to be fitted with "weldlok" or approved equivalent grates:
- Light duty for landscaped areas
- Heavy duty where subjected to vehicular traffic
- D4** All pits within the property to be constructed as one of the following:
1) Precast stormwater pits
2) Cast in situ mass concrete
3) Cement rendered 230mm brickwork subject to the relevant local authority construction specification.
- D5** Ensure all grates to pits are set below finished surface level within the property. Top of pit RL's are approximate only and may be varied subject to approval of the engineer. All invert levels are to be achieved.
- D6** Any pipes beneath relevant local authority road to be rubber ring jointed RCP, uno.
- D7** All pits in roadways are to be fitted with heavy duty grates with locking bolts and continuous hinge.
- D8** Provide step irons to stormwater pits greater than 1200 in depth.
- D9** Trench back fill in roadways shall comprise sharp, clean granular back fill in accordance with the relevant local authority specification to non-trafficable areas to be compacted by rodding and tamping using a flat plate vibrator.
- D10** Where a high early discharge (hed) pit is provided all pipes are to be connected to the hed pit, uno.
- D11** Down pipes shall be a minimum of dn100 sw grade upvc or 100 x100 colorbond/zincalume steel, uno.
- D12** Colorbond or zincalume steel box gutters shall be a minimum of 450 wide x 150 deep.
- D13** Eaves gutters shall be a minimum of 125 wide x 100 deep (or of equivalent area) colorbond or zincalume steel, uno.
- D14** Subsoil drainage shall be provided to all retaining walls & embankments, with the lines feeding into the stormwater drainage system, uno.

EROSION AND SEDIMENT CONTROL NOTES

- E1** These notes are to be read in conjunction with erosion and sediment control details in this drawing set.
- E2** The contractor shall implement all soil erosion and sediment control measures as necessary and to the satisfaction of the relevant local authority prior to the commencement of and during construction. No disturbance to the site shall be permitted other than in the immediate area of the works and no material shall be removed from the site without the relevant local authority approval. All erosion and sediment control devices to be installed and maintained in accordance with standards outlined in nsw department of housing's "managing urban stormwater - soils and constructions".
- E3** Place straw bales length wise in a row as parallel as possible to the site contours, uno. Bale ends to be tightly butted. Bales are to be placed so that straws are parallel to the row. Bales are to be placed 1.5m to 2m downslope from the toe of the disturbed batter, uno.
- E4** Council approved filter fabric to be entrenched 150mm deep upslope towards disturbed surface. Fabric to be a minimum SF2000 or better. Fix fabric to posts with wire ties or as recommended with manufacturer's specifications. Fabric joints to have a minimum of 150mm overlap. Wire to be strung between posts with filter fabric overlap to prevent sagging.
- E5** Stabilised entry/exit points to remain intact until finished driveway is complete. Construction of entry/exit points to be maintained and repaired as required so that it's function is not compromised. Construction of entry/exit point to be in accordance with the detail contained within this drawing set.
- E6** All drainage pipe inlets to be capped until:
- downpipes connected
- pits constructed and protected with silt barrier
- E6** Provide and maintain silt traps around all surface inlet pits until catchment is revegetated or paved.
- E7** The contractor shall regularly maintain all erosion and sediment control devices and remove accumulated silt from such devices such that more than 60% of their capacity is lost. All the silt is to be placed outside the limit of works. The period for maintaining these devices shall be at least until all disturbed areas are revegetated and further as may be directed by the superintendent or council.
- E8** The contractor shall implement dust control by regularly wetting down (but not saturating) disturbed area.
- E9** Topsoil shall be stripped and stockpiled outside hazard areas such as drainage lines. This topsoil shall be respread later on areas to be revegetated and stabilised only, (i.e. all footpaths, batters, site regarding areas, basins and catchdrains). Topsoil shall not be respread on any other areas unless specifically instructed by the superintendent. If they are to remain for longer than one month stockpiles shall be protected from erosion by covering them with a mulch and hydroseeding and, if necessary, by locating banks or drains downstream of a stockpile to retard silt laden runoff.
- E10** Lay 300 wide minimum turf strip on 100 topsoil behind all kerb and gutter with 1000 long returns every 6000 and around structures immediately after backfilling as per the relevant local authority specification.
- E11** The contractor shall grass seed all disturbed areas with an approved mix as soon as practicable after completion of earthworks and regrading.
- E12** Revegetate all trenches immediately upon completion of backfilling.
- E13** When any devices are to be handed over to council they shall be in clean and stable condition.

STANDARD LINE TYPES AND SYMBOLS

	PROPOSED KERB & GUTTER
	EXISTING KERB & GUTTER
	PROPOSED BELOW GROUND PIPELINE
	PROPOSED SUSPENDED PIPELINE
	EXISTING PIPELINE
	SUBSOIL DRAINAGE LINE
	PROPOSED KERB INLET PIT
	EXISTING KERB INLET PIT
	PROPOSED JUNCTION OR INLET PIT
	EXISTING JUNCTION OR INLET PIT
	DESIGN CENTRELINE
	EXISTING EDGE OF BITUMEN
	TELECOMMUNICATION CONDUIT
	GAS MAIN
	WATER MAIN
	SEWER MAIN
	UNDERGROUND ELECTRICITY CABLES
	PERMANENT MARK & S.S.M.
	BENCHMARK, SURVEY STATION

STANDARD LINE TYPES AND SYMBOLS

	OVERLAND FLOW PATH
	GUTTER DRAINAGE DIRECTION
	DOWNSPIPE
	DOWNSPIPE WITH SIDE OVERFLOW
	PERVIOUS (GRASSED) AREAS
	EXISTING (PRE-DEVELOPMENT) RL
	POST DEVELOPMENT RL
	GRADED IMPERVIOUS AREA (ROOF, CONC SLABS ETC)
	SEDIMENT FENCE
	CROSSING PIPES
	NODE POINT

LEGEND

AHD	Australian height datum	SS	Stainless steel
AG	Ag pipe (Sub soil drainage)	SU	Box gutter sump
ARI	Average recurrence interval	TW	Top of wall
BG	Box Gutter	TWL	Top water level
BWL	Bottom water level	U/S	Underside of slab
CL	Cover level	VG	Vally gutter
CO	Clean out inspection opening	UNO	Unless noted otherwise
DCP	Discharge control pit		
DP	Down pipe		
DRP	Dropper pipe		
EBG	Existing box gutter		
EDP	Existing down pipe		
EEG	Existing eaves gutter		
EG	Eaves gutter		
FRC	Fiber reinforced concrete		
FW	Floor waste		
GD	Grated drain		
GSP	Grated surface inlet pit		
HED	High early discharge		
HP	High point of gutter		
IL	Invert level		
IO	Inspection opening		
O/F	Overflow		
OSD	On-site detention		
PSD	Permissible site discharge		
P1	Pipe 1		
RCP	Reinforced concrete pipe		
RHS	Rectangular hollow section		
RL	Reduced level		
RRJ	Rubber ring joint		
RRT	Rainwater re-use tank		
RWH	Rain water head		
RWO	Rain water outlet		
SLAP	Sealed lid access pit		
SP	Spreader pipe		
SPR	Spreader		

RECOMMENDED MAINTENANCE SCHEDULE

DISCHARGE CONTROL PIT (DCP)	FREQUENCY	RESPONSIBILITY	PROCEDURE
Inspect flap valve and remove any blockage.	Six monthly	Owner	Remove grate. Ensure flap valve moves freely and remove any blockages or debris.
Inspect screen and clean.	Six monthly	Owner	Remove grate and screen if required and clean it.
Inspect & remove any blockage of orifice.	Six monthly	Owner	Remove grate & screen to inspect orifice. see plan for location of dcp.
Inspect dcp sump & remove any sediment-sludge.	Six monthly	Owner	Remove grate and screen. Remove sediment/sludge build-up and check orifice and flap valve clear.
Inspect grate for damage or blockage.	Six monthly	Owner	Check both sides of grate for corrosion, (especially corners and welds) damage or blockage.
Inspect return pipe from storage and return any blockages.	Six monthly	Owner	Remove grate and screen. ventilate underground storage if present. open flap valve and remove any blockages in return line. Check for sludge/debris on upstream side of return line.
Inspect outlet pipe and remove any blockage.	Six monthly	Maintenance Contractor	Remove grate and screen. ventilate underground storage if present. Check orifice and remove any blockages in outlet pipe. Flush outlet pipe to confirm it drains freely. Check for sludge/debris on upstream side of return line.
Check fixing of step irons is secure.	Six monthly	Maintenance Contractor	Remove grate and ensure fixings secure prior to placing weight on step iron.
Inspect overflow weir & remove any blockage.	Six monthly	Maintenance Contractor	Remove grate and open cover to ventilate underground storage if present. ensure weir clear of blockages.
Empty basket at overflow weir (if present).	Six monthly	Maintenance Contractor	Remove grate and ventilate underground storage chamber if present. Empty basket, check fixings secure and not corroded.
Check attachment of orifice plate to wall of pit (gaps less than 5 mm).	Annually	Maintenance Contractor	Remove grate and screen. ensure plate mounted securely, tighten fixings if required. seal gaps as required.
Check attachment of screen to wall of pit.	Annually	Maintenance Contractor	Remove grate and screen. ensure screen fixings secure. repair as required.
Check screen for corrosion.	Annually	Maintenance Contractor	Remove grate and examine screen for rust or corrosion, especially at corners or welds.
Check attachment of flap valve to wall of .	Annually	Maintenance Contractor	Remove grate. Ensure fixings of valve are secure.
Check flap valve seals against wall of pit.	Annually	Maintenance Contractor	Remove grate. fill pit with water and check that flap seals against side of pit with minimal leakage.
Check any hinges of flap valve move freely.	Annually	Maintenance Contractor	Remove grate. Test valve hinge by moving flap to full extent.
Inspect dcp walls (internal and external, if appropriate) for cracks or spalling.	Annually	Maintenance Contractor	Remove grate to inspect internal walls. Repair as required. Clear vegetation from external walls if necessary and repair as required.
Check step irons for corrosion.	Annually	Maintenance Contractor	Remove grate. Examine step irons and repair any corrosion or damage.
Check orifice diameter correct and retains sharp edge.	Five yearly	Maintenance Contractor	Compare diameter to design (see work-as- executed) and ensure edge is not pitted or damaged.
STORAGE			
Inspect & remove any blockage of orifice.	Six monthly	Owner	Remove grate and screen. remove sediment/sludge build-up.
Check orifice diameter correct and retains sharp edge.	Six monthly	Owner	Remove blockages from grate and check if pit blocked.
Inspect screen and clean.	Six monthly	Owner	Remove debris and floatable material likely to be carried to grates.
Check attachment of orifice plate to wall of pit (gaps less than 5 mm).	Annually	Maintenance	Remove grate to inspect internal walls. repair as required. clear vegetation from external walls if necessary and repair as required.
Check attachment of screen to wall of pit.	Five yearly	Maintenance Contractor	Compare actual storage available with work-as executed plans. If volume loss is greater than 5%, arrange for reconstruction to replace the volume lost. Council to be notified of the proposal.
Check attachment of screen to wall of pit.	Five yearly	Maintenance Contractor	Check along drainage lines and at pits for subsidence likely to indicate leakages.

NOTE: DO NOT SCALE OFF DRAWINGS. REFER TO ARCHITECTURAL PLANS. VERIFY DIMENSIONS ON SITE

REV	DATE	DESCRIPTION	BY
P3	11.11.22	ISSUED FOR CO-ORDINATION	O.G.
P2	09.11.22	ISSUED FOR CO-ORDINATION	O.G.
P1	11.10.22	ISSUED FOR REVIEW	O.G.

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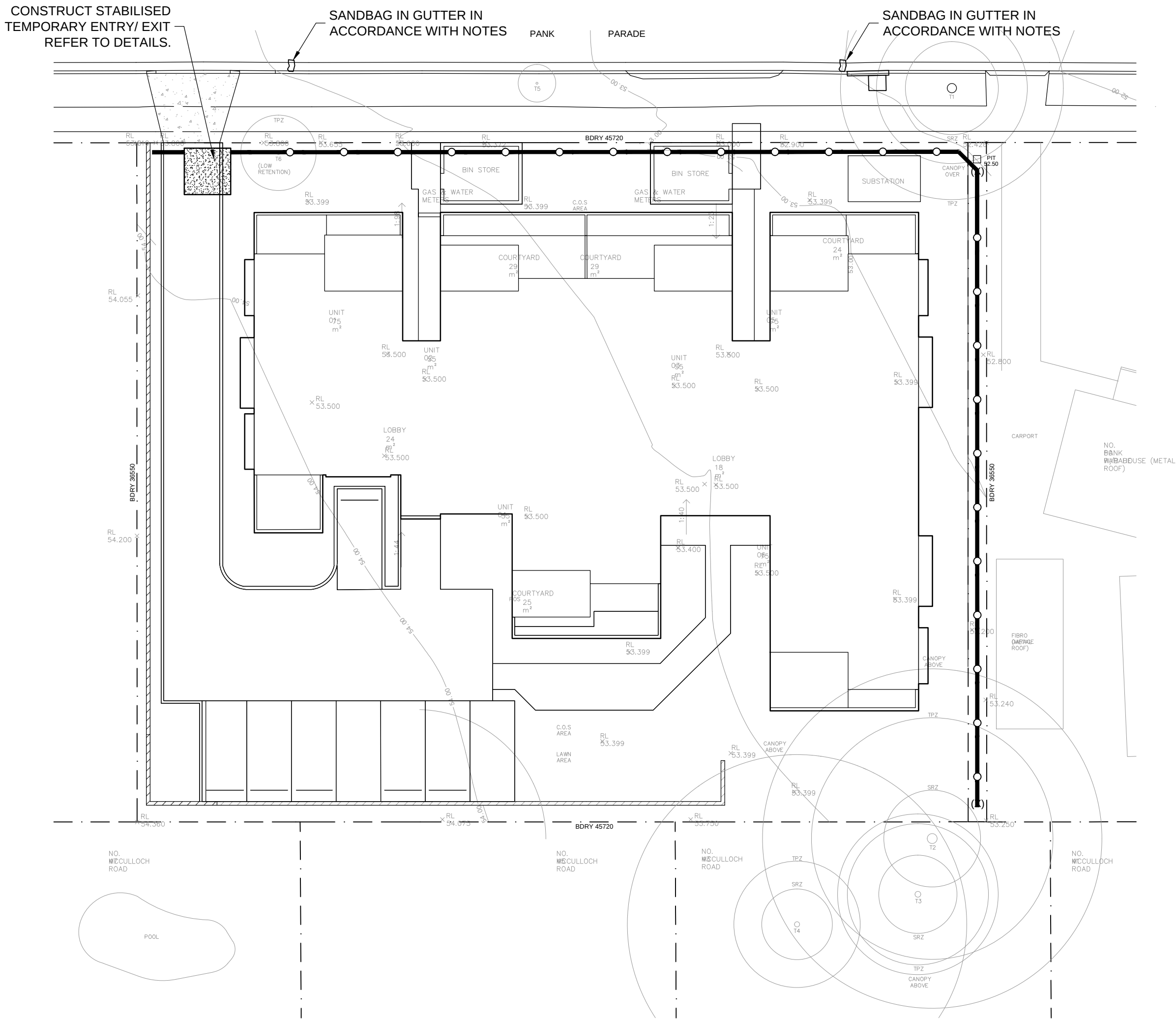
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PROPOSED DEVELOPMENT AT 56 PANK PARADE, BLACKTOWN FOR MODE DESIGN

GENERAL NOTES

JOB NUMBER: 220109	DWG NUMBER: C10.01	ORIGINAL SIZE: A1
DESIGNED BY: O.G.	DATE: SEPTEMBER 2022	
DRAWN BY: O.G.	SCALE: SCALE	



SEDIMENT & EROSION CONTROL PLAN
1:200

○ — DENOTES SEDIMENT FENCE

COMMENCEMENT OF WORKS

THE CONTRACTOR SHALL ENSURE THAT NO SPOIL OR FILL ENCLOSES UPON ADJACENT AREAS FOR THE DURATION OF WORKS.

THE CONTRACTOR SHALL ENSURE THAT KERB INLETS AND DRAINS RECEIVING STORMWATER SHALL BE PROTECTED AT ALL TIMES DURING DEVELOPMENT. KERB INLET SEDIMENT TRAPS SHALL BE INSTALLED ALONG THE IMMEDIATE VICINITY ALONG THE STREET FRONTAGE.

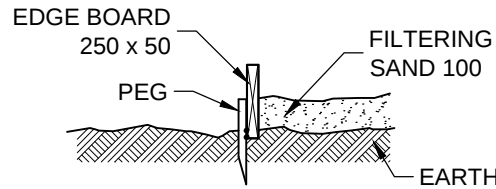
SEDIMENT FENCING SHALL BE SECURED BY POST (WHERE METAL STAR PICKETS ARE USED PLASTIC SAFETY CAPS SHALL BE USED) AT 2000 INTERVALS WITH GEOTEXTILE FABRIC EMBEDDED 200 IN SOIL.

ALL TOPSOIL STRIPPED FROM THE SITE AND STOCKPILED DOES NOT INTERFERE WITH DRAINAGE LINES AND STORMWATER INLETS AND WILL BE SUITABLY COVERED WITH AN IMPERVIOUS MEMBRANE MATERIAL AND SCREENED BY SEDIMENT FENCING.

SEDIMENT TRAP

1000 x 1000 WIDE 500 DEEP PIT, LOCATED AT THE LOWEST POINT TO THE TRAP SEDIMENT.

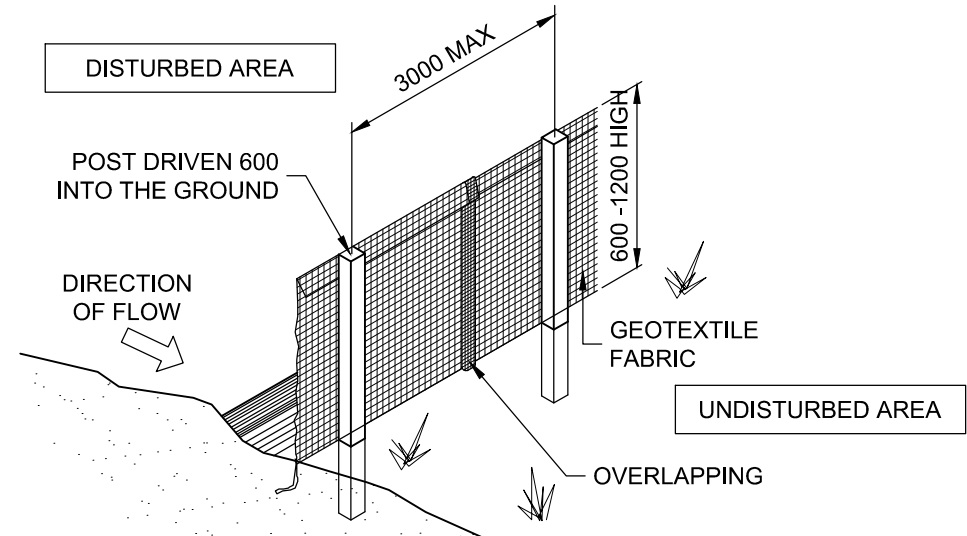
WASHOUT AREA TO BE 1800 x 1800 ALLOCATED FOR THE WASHING OF TOOL & EQUIPMENT.



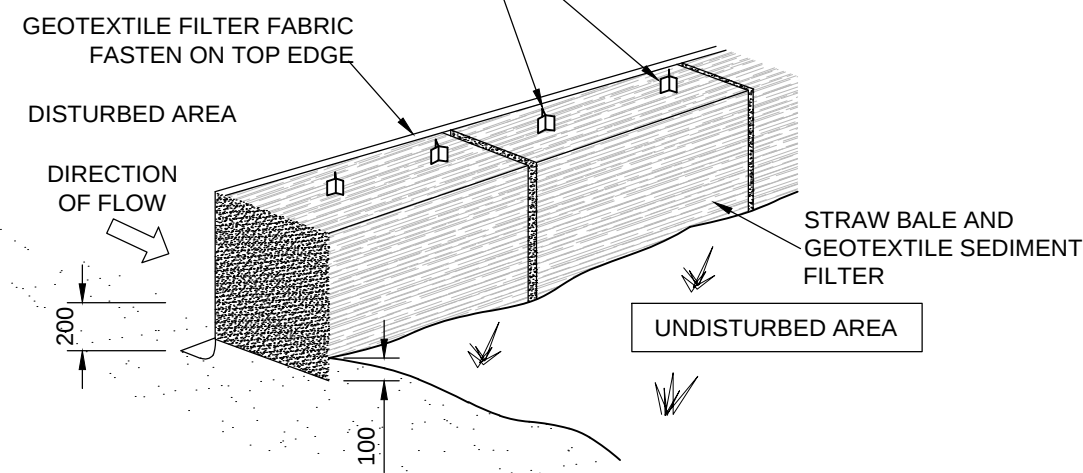
SEDIMENT FENCE

PROVIDE 'SEDIMENT FENCE' ON DOWN SLOPE BOUNDARY AS SHOWN ON PLAN.

FABRIC TO BE BURIED BELOW GROUND AT LOWER EDGE.



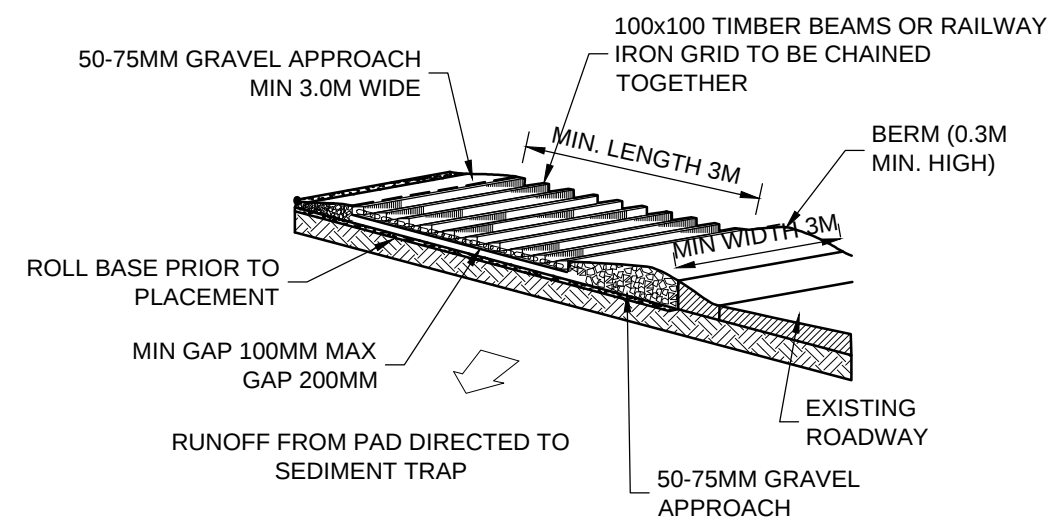
STAKES DRIVEN 600 INTO GROUND WITH FIRST STAKE ANGLED TOWARDS PREVIOUSLY LAID BALE



DRAINAGE AREA 0.5 HA. MAX. SLOPE GRADIENT 1:2 MAX. SLOPE LENGTH 50m.

TEMPORARY CONSTRUCTION ENTRY/EXIT

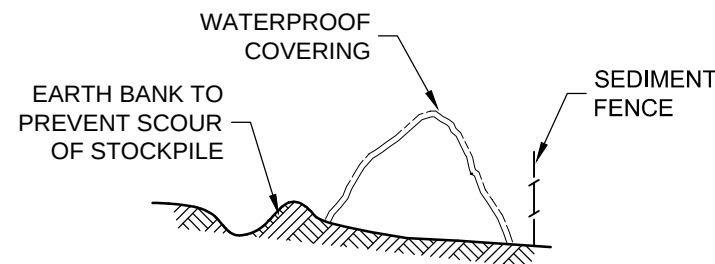
VEHICLE ACCESS TO THE BUILDING SITE SHOULD BE RESTRICTED TO A SINGLE POINT SO AS TO REDUCE THE AMOUNT OF SOIL DEPOSITED ON THE STREET PAVEMENT.



BUILDING MATERIAL STOCKPILE

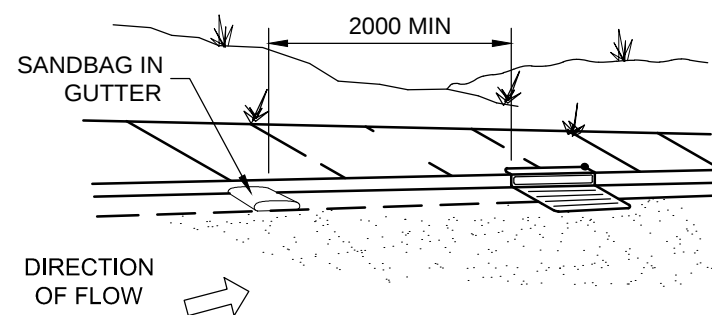
ALL STOCKPILES OF BUILDING MATERIAL SUCH AS SAND AND SOIL MUST BE PROTECTED TO PREVENT SCOUR AND EROSION.

THEY SHOULD NEVER BE PLACED IN THE STREET GUTTER WHERE THEY WILL WASH AWAY WITH THE FIRST RAINSTORM.



SANDBAG KERB SEDIMENT TRAP

IN CERTAIN CIRCUMSTANCES EXTRA SEDIMENT TRAPPING MAY BE NEEDED IN THE STREET GUTTER.



GENERAL NOTES

THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH OTHER CONSULTANTS' DRAWINGS AND SPECIFICATIONS AND WITH OTHER SUCH WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT. ANY DISCREPANCY SHALL BE REFERRED TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK.

ALL DIMENSIONS ARE IN MILLIMETRES & ALL LEVELS ARE IN METRES, UNO (UNLESS NOTED OTHERWISE). NO DIMENSION SHALL BE OBTAINED BY SCALING THE DRAWINGS.

ALL LEVELS AND SETTING OUT DIMENSIONS SHOWN ON THE DRAWINGS SHALL BE CHECKED ON SITE PRIOR TO THE COMMENCEMENT OF THE WORK.

DURING EXCAVATION WORK THE STRUCTURE SHALL BE MAINTAINED IN A STABLE AND NO PART SHALL BE OVERSTRESSED.

ALL WORK IS TO BE UNDERTAKEN IN ACCORDANCE WITH THE DETAILS SHOWN ON THE DRAWINGS & THE SPECIFICATION.

EXISTING SERVICES WHERE SHOWN HAVE BEEN PLOTTED FROM SUPPLIED DATA AND SUCH THEIR ACCURACY CAN NOT BE GUARANTEED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH THE LEVEL OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF WORK.

ALL SERVICE TRENCHES UNDER VEHICULAR PAVEMENTS SHALL BE BACK FILLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL COUNCIL.

ALL TRENCH BACK FILL MATERIAL SHALL BE COMPACTED TO THE SAME DENSITY AS THE ADJACENT MATERIAL.

ON COMPLETION OF STORMWATER INSTALLATION, ALL DISTURBED AREAS MUST BE RESTORED TO ORIGINAL CONDITION, INCLUDING KERBS, FOOTPATHS, CONCRETE AREAS, GRAVEL AND GRASSED AREAS AND ROAD PAVEMENTS, UNLESS DIRECTED OTHERWISE.

CONTRACTOR TO OBTAIN ALL AUTHORITY APPROVALS UNLESS DIRECTED OTHERWISE.

STORMWATER DRAINAGE

THE STORMWATER DRAINAGE DESIGN HAS BEEN CARRIED OUT IN ACCORDANCE WITH AS/NZS 3500.3 - 1990 "STORMWATER DRAINAGE" & AS/NZS 3500.3.2-1998 "STORMWATER DRAINAGE - ACCEPTABLE SOLUTIONS".

ANY VARIATIONS TO THE NOMINATED LEVELS SHALL BE REFERRED TO ENGINEER IMMEDIATELY.

ANY VARIATIONS TO SPECIFIED PRODUCTS OR DETAILS SHALL BE REFERRED TO THE ENGINEER FOR APPROVAL.

DOWN PIPES SHALL BE A MINIMUM OF DN100 SW GRADE uPVC OR 100 X 100 COLORBOND OR ZINCALUME STEEL, UNO.

BOX COLORBOND OR ZINCALUME STEEL. GUTTERS SHALL BE A MINIMUM OF 450 WIDE X 150 DEEP.

EAVES GUTTERS SHALL BE A MINIMUM OF 125 WIDE X 100 DEEP (OR OF EQUIVALENT AREA) COLORBOND OR ZINCALUME STEEL.

SUBSOIL DRAINAGE SHALL BE PROVIDED TO ALL RETAINING WALLS & EMBANKMENTS, WITH THE LINES FEEDING INTO THE STORMWATER DRAINAGE SYSTEM.

SEDIMENT AND EROSION CONTROL NOTES

SEDIMENT AND EROSION CONTROL SHALL BE EFFECTIVELY MAINTAINED AT ALL TIMES DURING THE COURSE OF CONSTRUCTION AND SHALL NOT BE REMOVED UNTIL THE SITE HAS BEEN STABILISED OR LANDSCAPED TO THE SUPERINTENDENT'S SATISFACTION

A SINGLE ALL WEATHER ACCESS WAY WILL BE PROVIDED AT THE FRONT OF THE PROPERTY CONSISTING OF 50-75 AGGREGATE OR SIMILAR MATERIAL AT A MINIMUM THICKNESS OF 150 LAID OVER NEEDLE-PUNCHED GEOTEXTILE FABRIC AND CONSTRUCTED PRIOR TO COMMENCEMENT OF WORKS.

SOIL CONSERVATION NOTE

PRIOR TO COMMENCEMENT OF CONSTRUCTION PROVIDE 'SEDIMENT FENCE', 'SEDIMENT TRAP' AND WASHOUT AREA TO ENSURE THE CAPTURE OF WATER BORNE MATERIAL GENERATED FROM THE SITE.

MAINTAIN THE ABOVE DURING THE COURSE OF CONSTRUCTION, AND CLEAR THE 'SEDIMENT TRAP' AFTER EACH STORM.

NOTE: DO NOT SCALE OFF DRAWINGS. REFER TO ARCHITECTURAL PLANS. VERIFY DIMENSIONS ON SITE

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PROPOSED DEVELOPMENT
AT 56 PANK PARADE, BLACKTOWN
FOR MODE DESIGN

SEDIMENT & EROSION CONTROL PLAN

JOB NUMBER:	DWG NUMBER:	ORIGINAL SIZE:
220109	C11.01	A1
DESIGNED BY: O.G.	DATE: SEPTEMBER 2022	
DRAWN BY: O.G.	SCALE: 1:200 U.N.O.	

STORMWATER DESIGN SUMMARY

COUNCIL: BLACKTOWN CITY COUNCIL	= 225 mm/h
100 YEAR, 5 MIN STORM	= 172 mm/h
20 YEAR, 5 MIN STORM	
TOTAL SITE AREA	= 1670 m ²
PROPOSED BUILDING FOOTPRINT	= 700 m ²
IMPERVIOUS PATHS & DRIVEWAYS	= 412 m ²
TOTAL IMPERVIOUS SITE AREA	= 1112 m ²
IMPERVIOUS SITE PERCENTAGE	= 67%

100% PROPOSED ROOF AREA DIRECTED TO 7,000 LITRE RAINWATER RE-USE TANK TO BUILDERS DETAILS IN ACCORDANCE WITH BASIX SPECIFICATIONS. HIGH LEVEL OVERFLOW DIRECTED TO PROPOSED BELOW GROUND ON-SITE DETENTION (OSD) TANK. OSD DISCHARGE DIRECTED TO STREET KERB INLET PIT VIA GRAVITY IN ACCORDANCE WITH COUNCIL STORMWATER SPECIFICATIONS.

WATER SENSITIVE URBAN DESIGN SUMMARY
SITE LOCATED WITHIN SECTION 7.11 CONTRIBUTIONS PLAN No.19 - BLACKTOWN GROWTH PRECINCT AREA THEREFORE NO WATER CONSERVATION & QUALITY CONTROLS REQUIRED SUBJECT TO VOLUNTARY CONTRIBUTION IN ACCORDANCE WITH BLACKTOWN COUNCIL CODE.

ON-SITE DETENTION DESIGN SUMMARY

CATCHMENT: HAWKESBURY RIVER SUBCATCHMENT AREA 4
ON-SITE DETENTION REQUIRED FOR PROPOSED COMMERCIAL DEVELOPMENTS WITH A SITE AREA GREATER THAN 500m² IN ACCORDANCE WITH 'BLACKTOWN COUNCIL ENGINEERING GUIDE FOR DEVELOPMENT SECTION A.2'.

PERCENTAGE OF TOTAL SITE DRAINED	= 85%
DETERMINED SITE STORAGE REQUIREMENT 50%	= 50.1 m ³
DETERMINED SITE STORAGE REQUIREMENT 100%	= 75.985 m ³

DETERMINED PERMISSIBLE SITE DISCHARGE	= 24.1 l/s
MAXIMUM HEAD TO ORIFICE CENTRE LINE	= 1.10 m
DETERMINED 100 YEAR ORIFICE DIAMETER	= 105 mm
DETERMINED 1.5 YEAR ORIFICE DIAMETER	= 57.0 mm

STORAGE PROVIDED IN OSD TANK	= 76.3 m ³
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STORMWATER DRAINAGE NOTES

- ALL DRAINAGE LINES SHALL BE uPVC (CLASS SH) STORMWATER DRAINAGE PIPE, U.N.O.
- ALL DRAINAGE LINES SHALL BE LAID @ 1% FALL MIN, U.N.O.
- FIRST FLUSH RAINWATER DEVICES TO BE FITTED TO DRAINAGE LINES TO BUILDER'S DETAIL, TYPICAL

LEGEND

- DOWNPIPE BY OTHERS
- INSPECTION POINT
- FIRST FLUSH RAINWATER DEVICE TO BUILDERS DETAIL
- PROPOSED FINISHED SURFACE LEVEL
- CHARGED PIPE
- PROPOSED BELOW GROUND PIPELINE
- SUBSOIL DRAINAGE LINE
- PROPOSED SURFACE INLET PIT
- OVERLAND FLOW PATH

NOTE: DO NOT SCALE OFF DRAWINGS. REFER TO ARCHITECTURAL PLANS. VERIFY DIMENSIONS ON SITE

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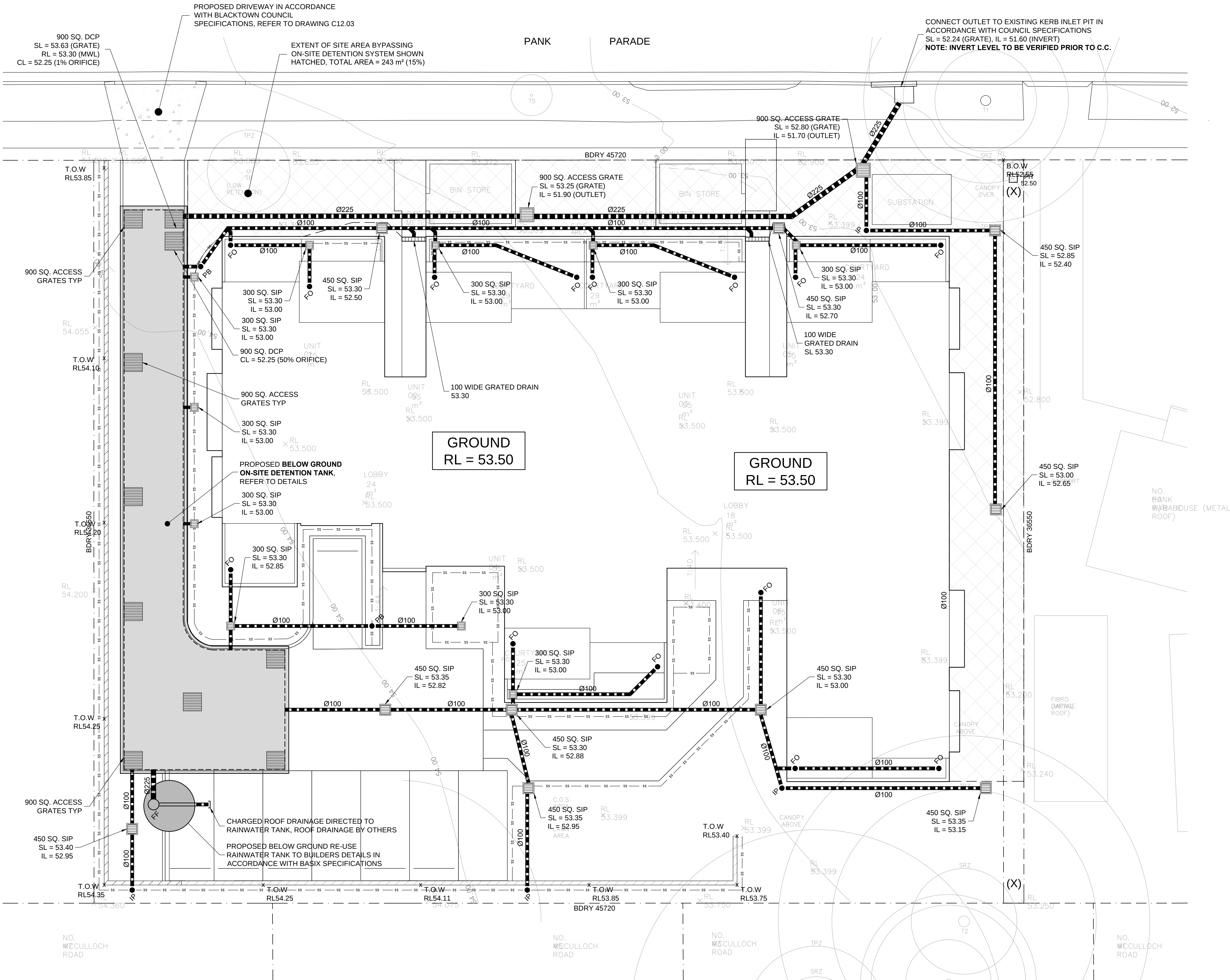


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AT 56 PANK PARADE, BLACKTOWN
FOR MODE DESIGN

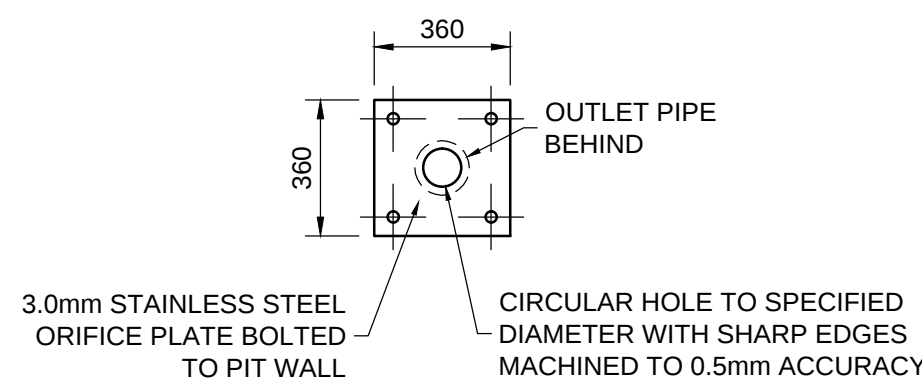
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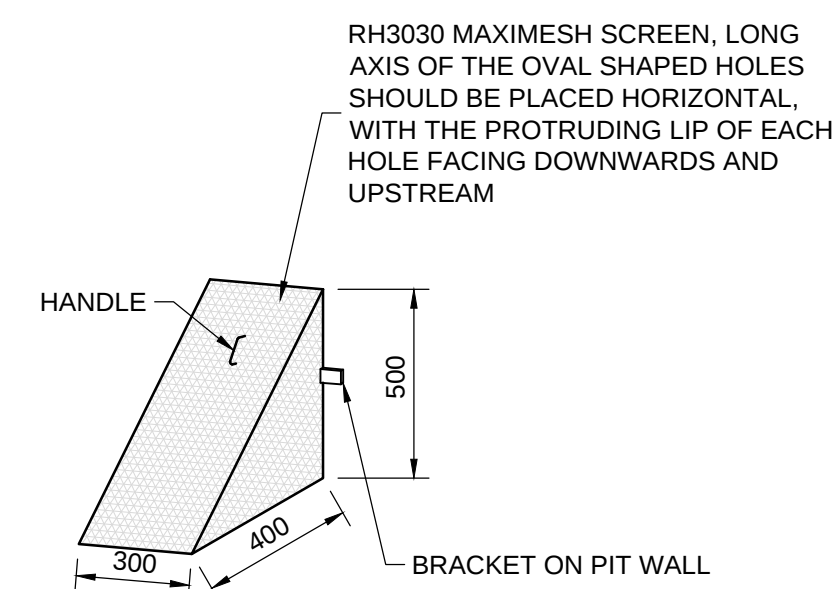


STORMWATER DRAINAGE PLAN

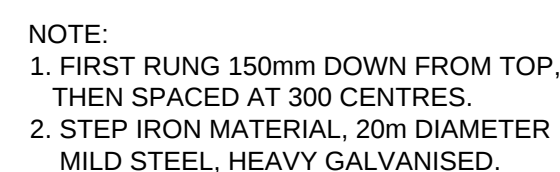
1:100



NTS
REFER TO ON-SITE DETENTION SUMMARY
FOR ORIFICE DIAMETER



1:20



1:20



:20



JOB NUMBER: 220109	DWG NUMBER: C12.02	ORIGINAL SIZE: A1
DESIGNED BY: O. G.	DATE: SEPTEMBER 2022	
DRAWN BY: O. G.	SCALE: 1:20 U.N.O.	



P3	11.11.22	ISSUED FOR CO-ORDINATION	O.G.
P2	09.11.22	ISSUED FOR CO-ORDINATION	O.G.
P1	11.10.22	ISSUED FOR REVIEW	O.G.
REV	DATE	DESCRIPTION	BY



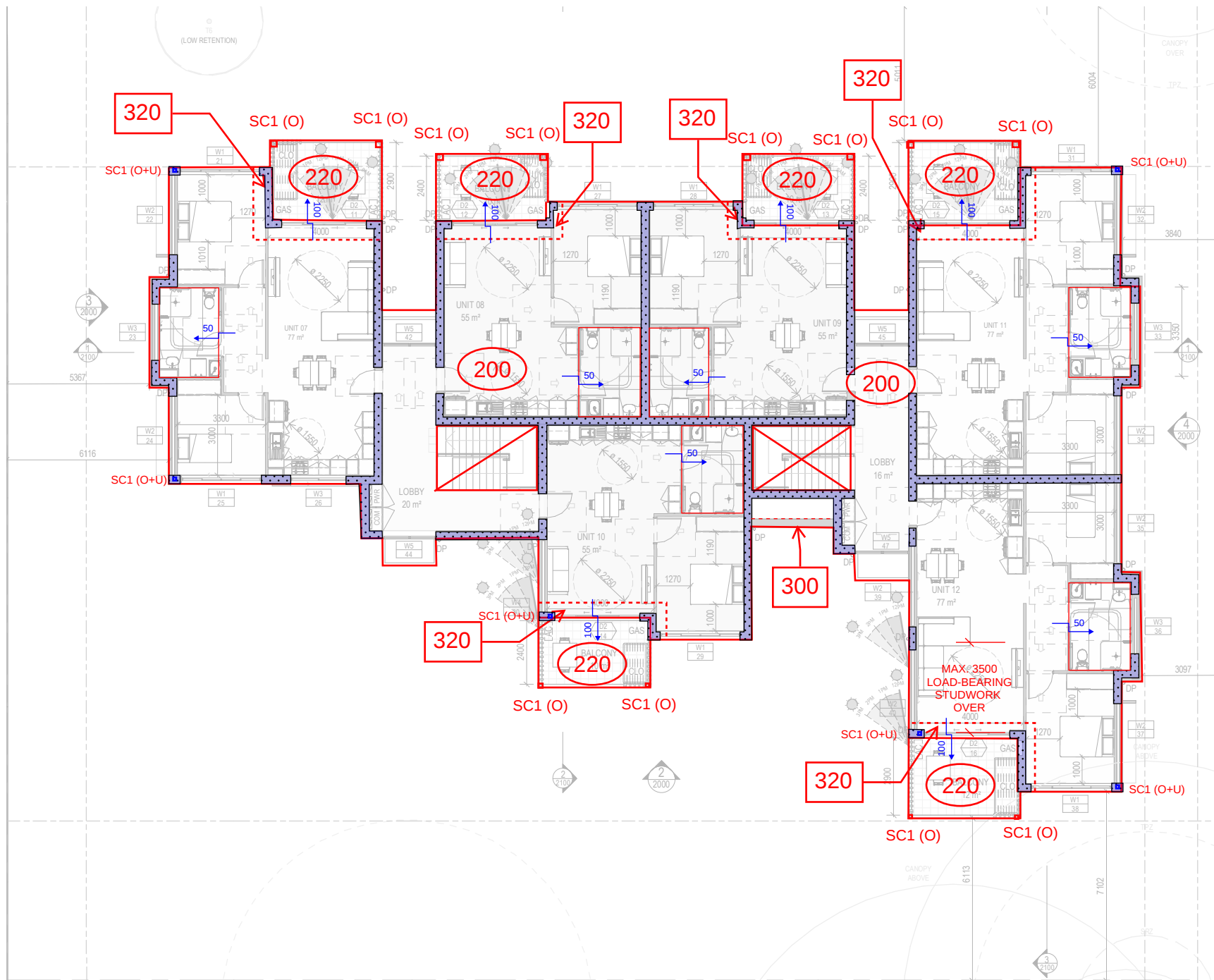
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Civil & Structural

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Web: www.engineeringstudio.com.au

Postal Address
PO Box 7191
NORWEST NSW 2153

PROPOSED DESIGN LEVELS

JOB NUMBER: 220109	DWG NUMBER: C12.03	ORIGINAL SIZE: A1
DESIGNED BY: O.G.	DATE: SEPTEMBER 2022	
DRAWN BY: O.G.	SCALE: 1:200 U.N.O.	



NOTES

- * 200 THICK SLAB 32 MPa
N12-200 CTS T&B + ADDITIONAL TOP
OVER INTERNAL WALLS
- * ALL LOAD-BEARING WALLS TO BE
EITHER SINGLE SKIN MASONRY OR
DOUBLE BRICK WITH A 50mm CAVITY
(U.N.O)
- * 90mm THICK LOAD-BEARING STUDWORK
- * 50mm SETDOWN FOR ALL INTERNAL WET
AREAS

MEMBER SCHEDULE

SC1 -	89 x 89 SHS STEEL COLUMN
	LOAD BEARING MEMBER OVER
	LOAD BEARING MEMBER UNDER

PART 5

ISSUE	DATE	AMENDMENT	CLIENT / BUILDER / ARCHITECT	STRUCTURAL	NORTH :	SCALE :	VERIFIED :	DRAWING TITLE :	DATE :	SCALE :
1	27.09.22	CONCEPT ONLY	 SYDNEY Level 5, 111-117 Devonshire St Surry Hills NSW 2010 T +61 2 8396 9500 syd@modedesign.com.au ABN: 65 112 807 931	 ELECTRICAL • FIRE • HYDRAULIC • MECHANICAL • STRUCTURAL • CIVIL • FACADES			DON	FIRST FLOOR - PLAN	18.10.22	1:200
2	10.10.22	CONCEPT ONLY					DESIGNED :	PROJECT : BLACKTOWN LAHC, 52-56 PANK PARADE, BLACKTOWN NSW 2148	PROJECT No :	ISSUE :
3	18.11.22	PART 5					JN		AC3403	3
							DRAWN :		DRAWING No :	SK02
							JN			

