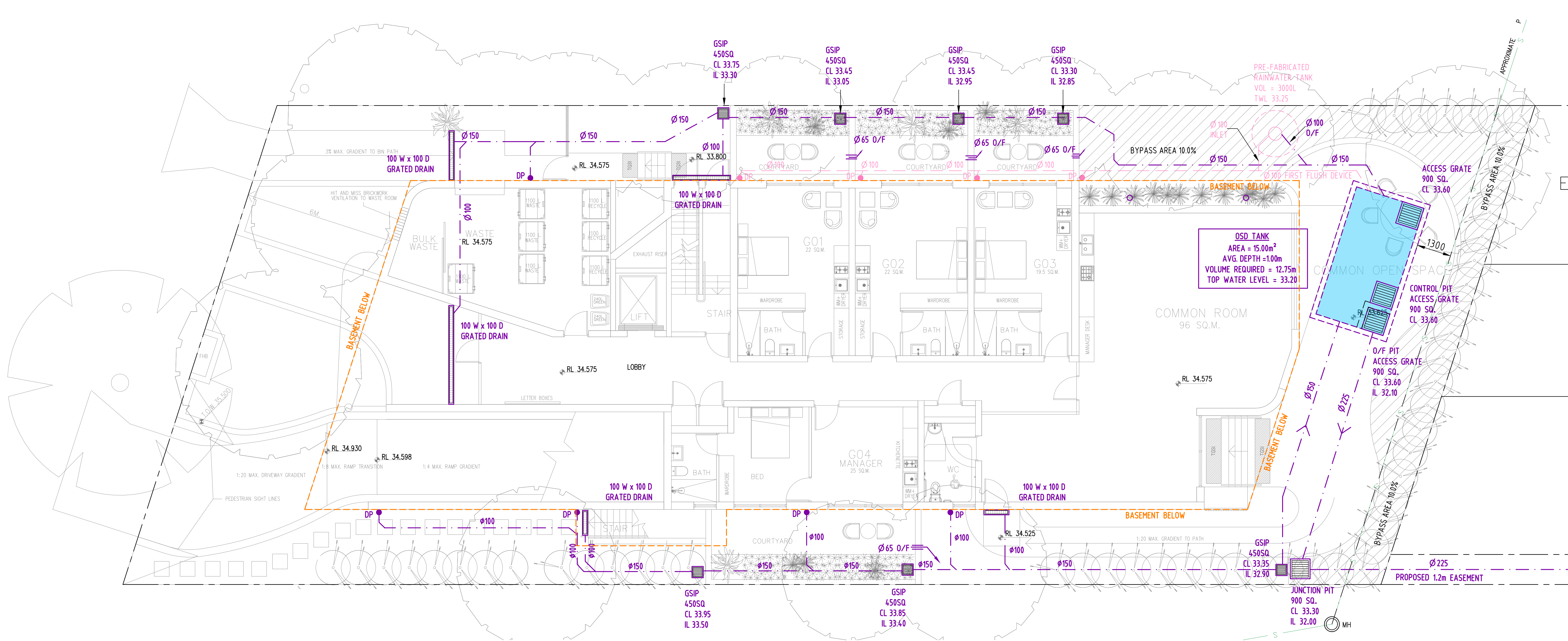
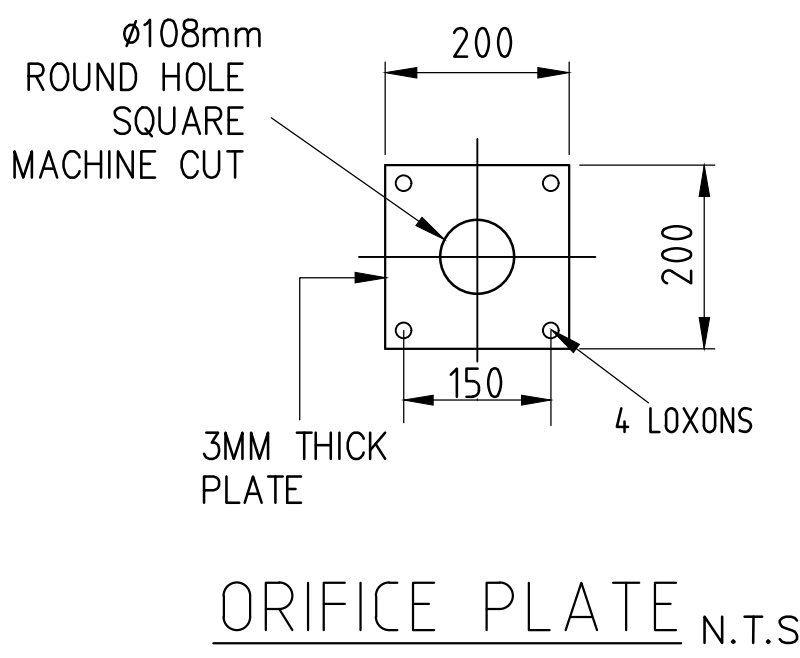




GROUND FLOOR DRAINAGE PLAN SCALE - 1:100

- ALL GUTTERS TO BE PROVIDED WITH LEAF GUARD.
- ALL BALCONIES ARE TO HAVE A 65mm DIAMETER OVERFLOW PIPE OR AND 80mm SQUARE OPENING ACTING AS AN OVERFLOW.
- ALL DOWNPIPES TO BE 100mm DIAMETER OR 100 x 75mm MIN. TO ARCHITECTURAL SPECIFICATIONS OR AS NOTED ON PLAN.
- PROVIDE AG. LINES BEHIND ALL RETAINING WALLS AND SUBSOIL DRAINAGE AS PER STRUCTURAL ENGINEERING DETAILS. ALL LINES TO DRAIN TO PITS.
- * DENOTES PROPOSED LEVEL
 - x DENOTES EXISTING LEVEL
 - DENOTES DOWNPIPE
 - PROPOSED RAINWATER PIPE
 - PROPOSED STORMWATER PIPE



DESIGN SUMMARY

QUANTITY	VALUE
SITE AREA FOR EACH PROPOSED LOT	936.22 m ²
IMPERVIOUS PRE-DEVELOPMENT	70 %
IMPERVIOUS POST-DEVELOPMENT	70 %
AREA DRAINED TO THE CONTROL PIT (%)	90 %
PRE DEVELOPMENT PERMISSIBLE SITE DISCHARGE @ 5yr. ARI.	20.40 l/s
REQUIRED STORAGE @ 5yr. ARI.	8.65 m ³
PRE DEVELOPMENT PERMISSIBLE SITE DISCHARGE @ 10yr. ARI.	25.45 l/s
REQUIRED STORAGE @ 10yr. ARI.	9.67 m ³
PRE DEVELOPMENT PERMISSIBLE SITE DISCHARGE @ 20yr. ARI.	32.05 l/s
REQUIRED STORAGE @ 20yr. ARI.	10.69 m ³
PRE DEVELOPMENT PERMISSIBLE SITE DISCHARGE @ 50yr. ARI.	37.65 l/s
REQUIRED STORAGE @ 50yr. ARI.	11.70 m ³
PRE DEVELOPMENT PERMISSIBLE SITE DISCHARGE @ 100yr. ARI.	48.85 l/s
REQUIRED STORAGE @ 100yr. ARI.	12.75 m ³

The post and pre-development peak discharge from the subject site was determined for the 5, 10, 20, 50 & 100 yrs ARI, for storm duration from 10 minutes to 4.5 hours using ILSAX computer program and CITY OF CANTERBURY BANKSTOWN COUNCIL Rainfall Files.

ON SITE-DETENTION (CONTRIBUTING AREA 90 % OF SITE)

LOWER CONTROL ORIFICE {
LOWER CONTROL ORIFICE SIZE
UPPER CONTROL IL
UPPER CONTROL WEIR

RL 32.15
Ø108
RL 32.85
350 D x 70 W

$Q_{max} = C_d \times A \times (2 \times g \times h)^{0.5}$ $C_d = 0.8$ PIPE

ARI	Required Discharge (L/s)	Required Volume (m ³)	Top Water Level (RL)	ORIFICE Discharge (L/s)	Upper Control Discharge (L/s)	Total Discharge (L/s)
5	20.40	8.65	32.85	20.40	0.00	20.40
10	25.45	9.67	32.95	21.40	3.70	25.10
20	32.05	10.69	33.00	22.00	6.80	28.80
50	37.65	11.70	33.10	23.30	14.60	37.90
100	48.85	12.75	33.20	24.50	24.20	48.70

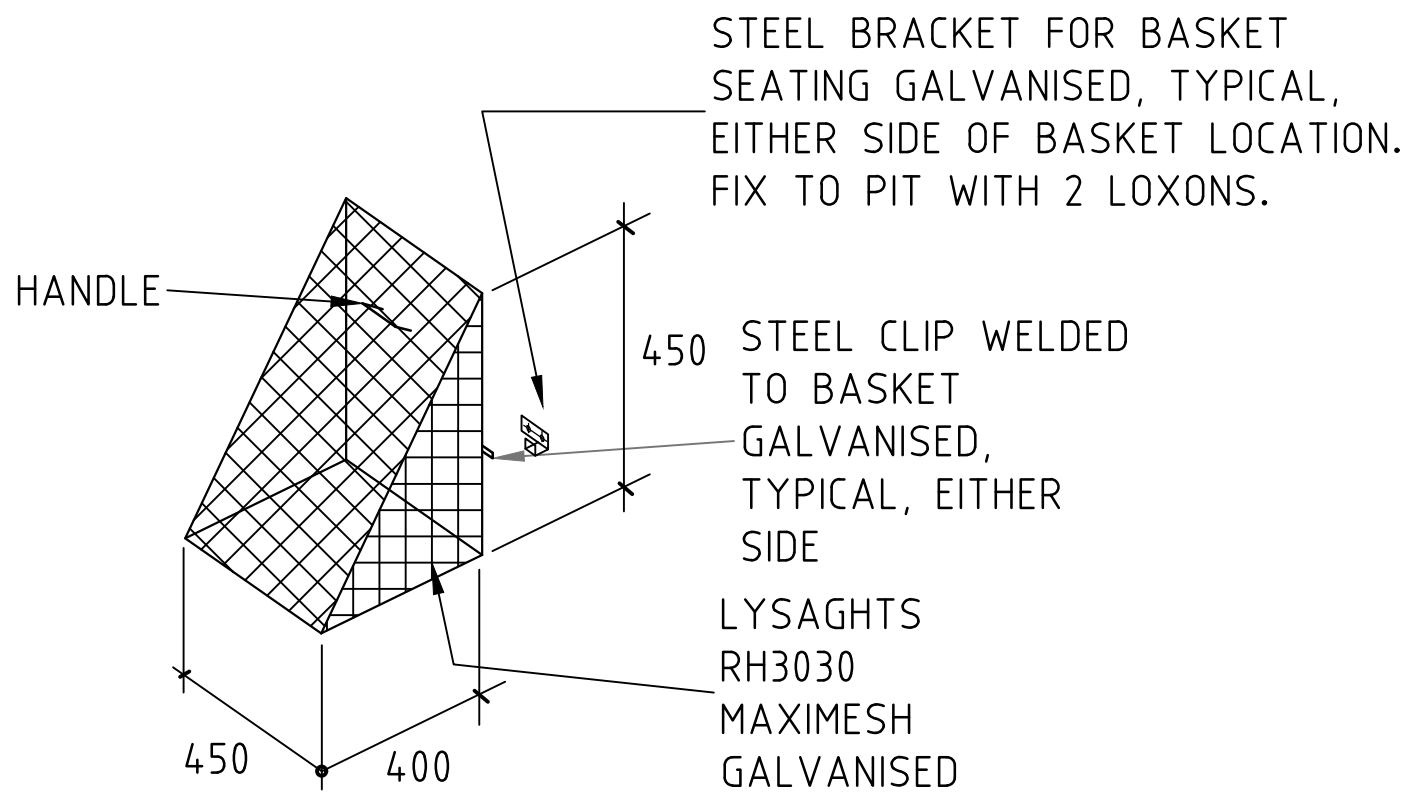
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LEGEND

- RL REDUCED LEVEL
- CL COVER LEVEL
- IL INVERT LEVEL
- GSIP GRATED SURFACE INLET PIT
- OSD ON-SITE DETENTION
- TWL TOP WATER LEVEL
- BWL BOTTOM WATER LEVEL
- TW TOP OF WALL
- IO INSPECTION OPENING
- ARI AVERAGE RECURRENCE INTERVAL
- FW FLOOR WASTE
- AHD AUSTRALIAN HEIGHT DATUM
- PSD PERMISSIBLE SITE DISCHARGE
- HED HIGH EARLY DISCHARGE
- RHS RECTANGULAR HOLLOW SECTION
- SS STAINLESS STEEL
- FRC FIBER REINFORCED CONCRETE
- RCP REINFORCED CONCRETE PIPE
- RRJ RUBBER RING JOINT
- U/S UNDERSIDE OF SLAB
- O/S OVER THE SLAB
- O/F OVERFLOW
- DP DOWN PIPE
- DR DROPPER
- RWO RAIN WATER OUTLET
- RWH RAIN WATER HEAD
- FFL FINISHED FLOOR LEVEL
- EX. EXISTING
- CI PIPE CAST IN SLAB

GENERAL NOTES:

- ALL SERVICES ARE TO BE LOCATED IN THE FIELD IN CONJUNCTION WITH A RESPONSIBLE OFFICER OF EACH RELEVANT AUTHORITY PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- DRAINAGE PITS ARE TO BE A 450mm SQUARE OR LARGER AS SHOWN, AND FITTED WITH A GALVANIZED GRATE.
- ALL PITS ARE TO HAVE A GALVANISED GRATE AND FRAME. FRAME TO BE CAST INTEGRALLY WITH THE PIT.
- ALL PITS ARE TO BE BENCH TO HALF PIPE LEVEL.
- PROVIDE STEP IRONS WHERE PIT IS DEEPER THAN 1m. AT 450mm CENTERS.
- DRAINAGE PIPES SHALL BE SEWER GRADE UPVC UNLESS OTHERWISE NOTED.
- DRAINAGE PIPE SIZES ARE 100mm DIAMETER UNLESS OTHERWISE NOTED.
- ALL BARE SOIL AREAS ARE TO BE PROTECTED FROM EROSION BY TEMPORARY MEASURES AND REVEGETATED AT THE CESSATION OF CONSTRUCTION.
- THE DOWNHILL BOUNDARY OF THE SITE IS TO BE PROTECTED BY HAY BALES OR A FILTER FABRIC FENCE DURING CONSTRUCTION AS SHOWN IN THE ATTACHED DETAILS.
- THE STREET DRAINAGE PIT LOCATED DOWNHILL OF THE SITE SHALL BE PROTECTED FROM SEDIMENT WITH SEDIMENT BARRIER.
- A SINGLE CONSTRUCTION ENTRANCE SHALL BE ESTABLISHED IN THE MANNER SHOWN IN THE ATTACHED DETAILS.
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND STRUCTURAL ENGINEERING DOCUMENTS. ANY DISCREPANCIES SHALL BE REPORTED BY THE BUILDER TO THE ARCHITECT PRIOR TO COMMENCEMENT OF THE ITEM.
- THESE PLANS ARE DIAGRAMMATIC AND SHOW THE GENERAL LOCATION OF STRUCTURES AND PIPES. WORK SHALL BE SET OUT ON SITE BY THE SITE FOREMAN & MAY VARY FROM THE PLANS TO THE EXTENT REQUIRED, TO ENSURE COMPATIBLE CONSTRUCTION OF OTHER SERVICES AND STRUCTURAL REQUIREMENTS. VARIATION IN LOCATION OF MORE THAN 1.0M & ANY CHANGES IN SIZE OF ANY COMPONENT NOMINATED HEREON SHALL BE REFERRED TO THE DESIGNER FOR COMMENT.
- IF IN DOUBT, ASK THE SUPERINTENDENT WHO SHALL CONSULT THE DESIGNER.



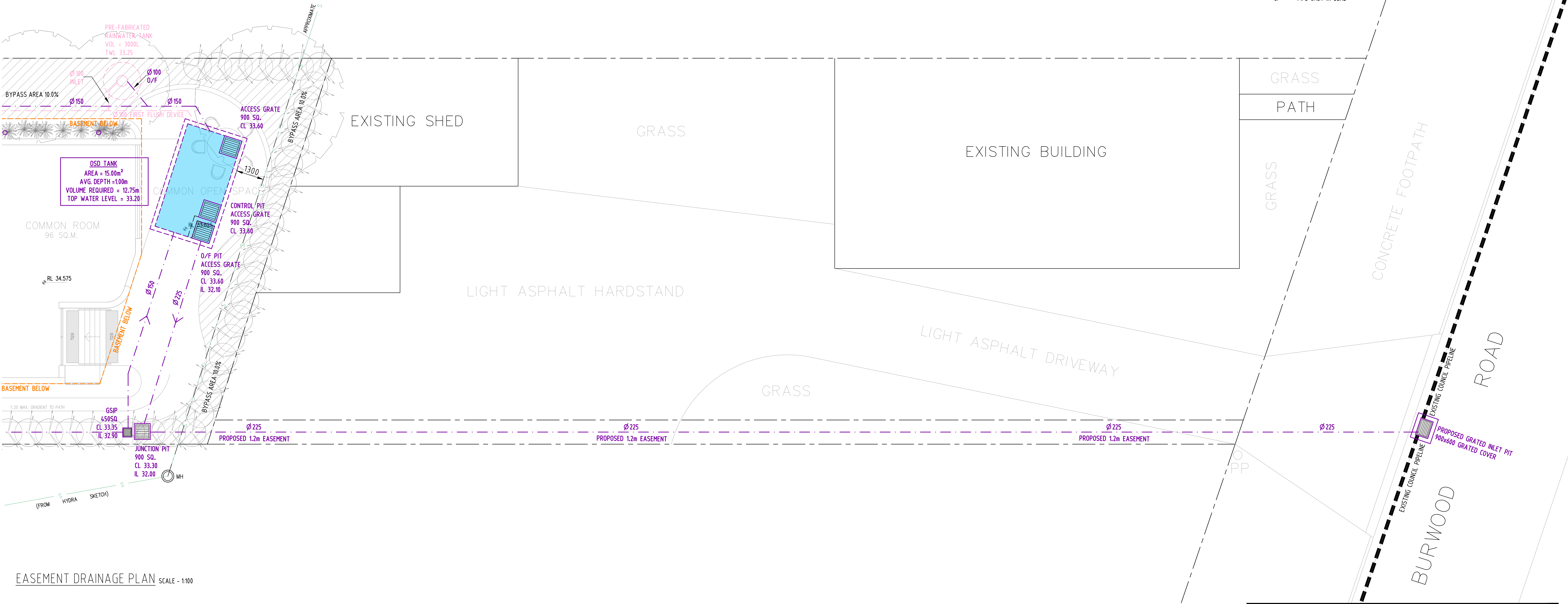
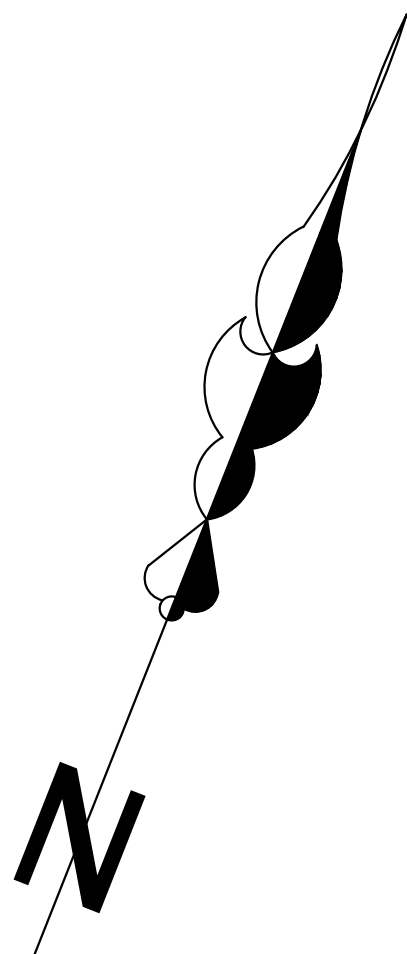
SCREEN DETAIL N.T.S.

NOT FOR CONSTRUCTION

D	26.06.2026	ISSUED TO THE ARCHITECT			HE
C	22.07.2025	ISSUED TO THE ARCHITECT			HE
B	01.04.2025	ISSUED TO THE ARCHITECT			JDR
A	27.03.2025	ISSUED TO THE ARCHITECT			JDR
REV.	DATE	AMENDMENT DESCRIPTION			DRAWN
JOHN ROMANOUS & ASSOCIATES PTY. LTD. CONSULTING CIVIL & STRUCTURAL ENGINEERS ACN 054 595 005 SUITE 2D / 322 KINGSGROVE RD, KINGSGROVE NSW 2208 Ph (02) 83 87 68 26					
PROPOSED DEVELOPMENT AT: 32 - 34 KENT STREET, BELMORE.					
STORMWATER DRAINAGE / SEDIMENT CONTROL DETAILS					
DRAWN	CHECKED	SCALE	DATUM	DRAWING No.	REV.
JDR	D.M.ROMANOUS (B.E., M.I.E.AUST.)	AS SHOWN @A1	A.H.D	2550 - S2/4	D

LEGEND

RL	REDUCED LEVEL
CL	COVER LEVEL
IL	INVERT LEVEL
GSP	GRADED SURFACE INLET PIT
OSD	ON-SITE DETENTION
TWL	TOP WATER LEVEL
BWL	BOTTOM WATER LEVEL
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ARI	AVERAGE RECURRENCE INTERVAL
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RWO	RAIN WATER OUTLET
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CI	PIPE CAST IN SLAB



EASEMENT DRAINAGE PLAN SCALE - 1:100

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- × DENOTES EXISTING LEVEL
- DENOTES DOWNPIPE
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JOHN ROMANOUS & ASSOCIATES

PTY. LTD.

CONSULTING CIVIL & STRUCTURAL ENGINEERS

ACN 054 595 005

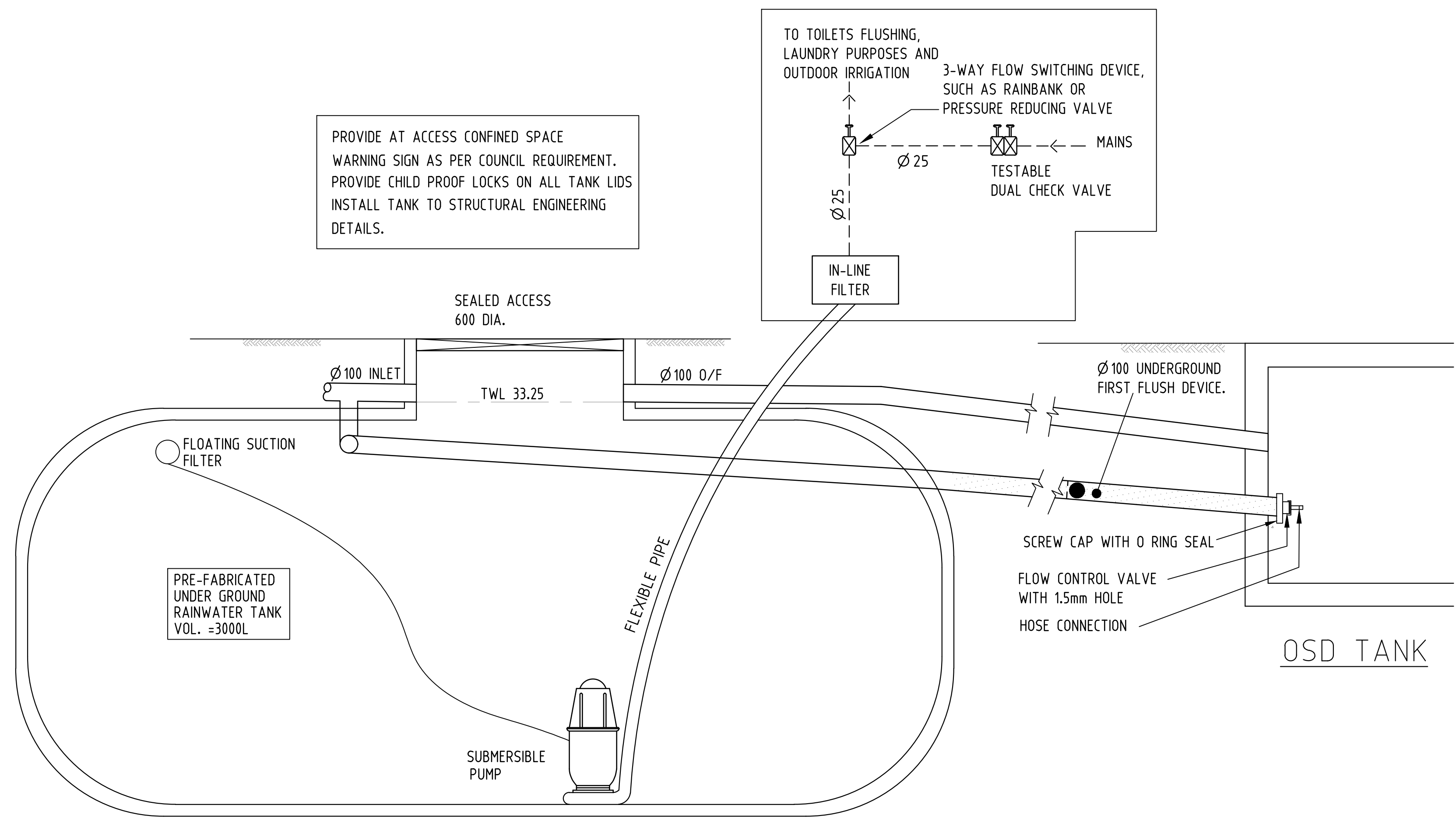
SUITE 2D / 322 KINGSGROVE RD, KINGSGROVE NSW 2208

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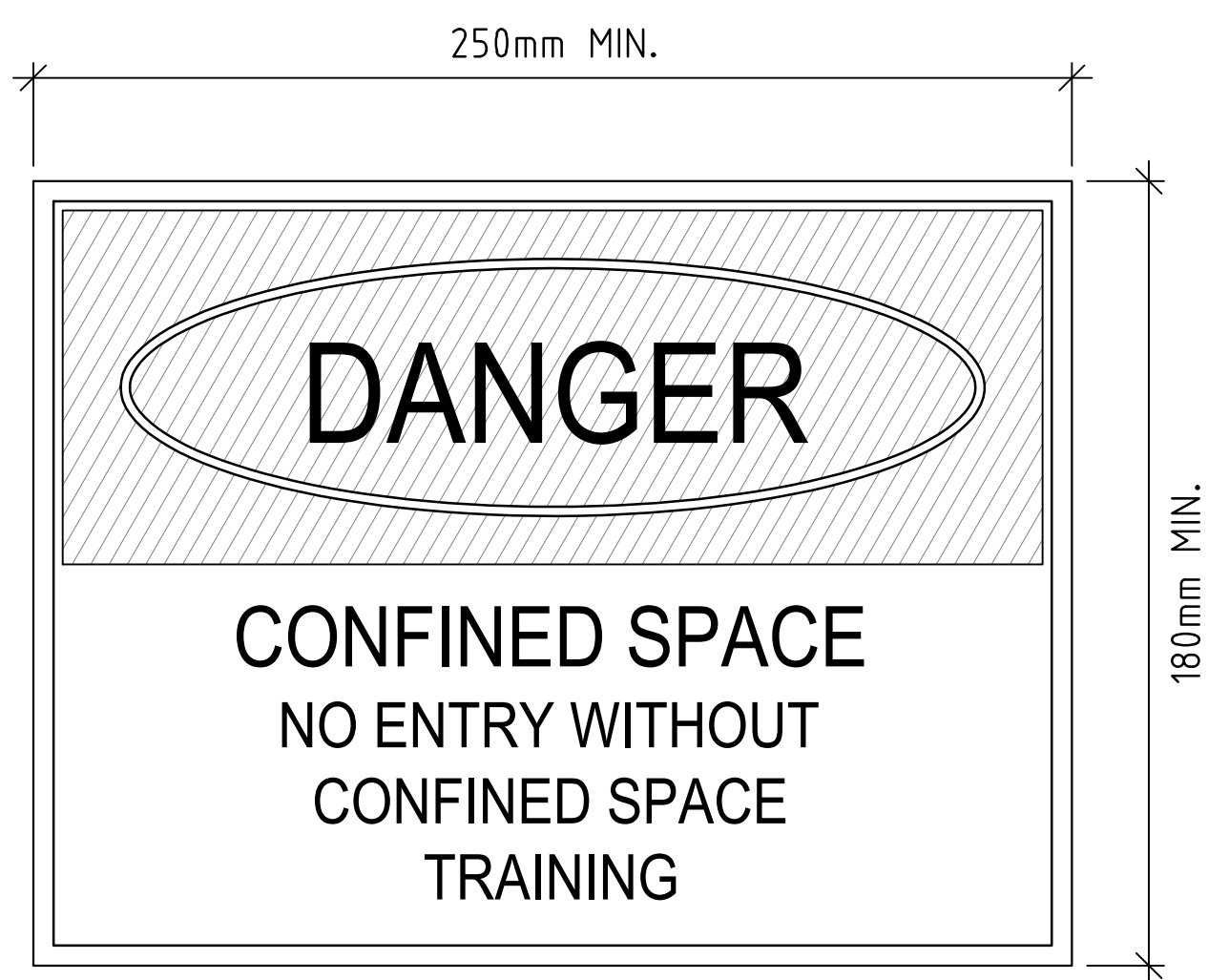
PROPOSED DEVELOPMENT AT:
32 - 34 KENT STREET, BELMORE.

STORMWATER DRAINAGE / SEDIMENT CONTROL DETAILS

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JDR	D.M.ROMANOUS (B.E., M.I.E.AUST.)	AS SHOWN @A1	A.H.D	2550 - S3/4	D



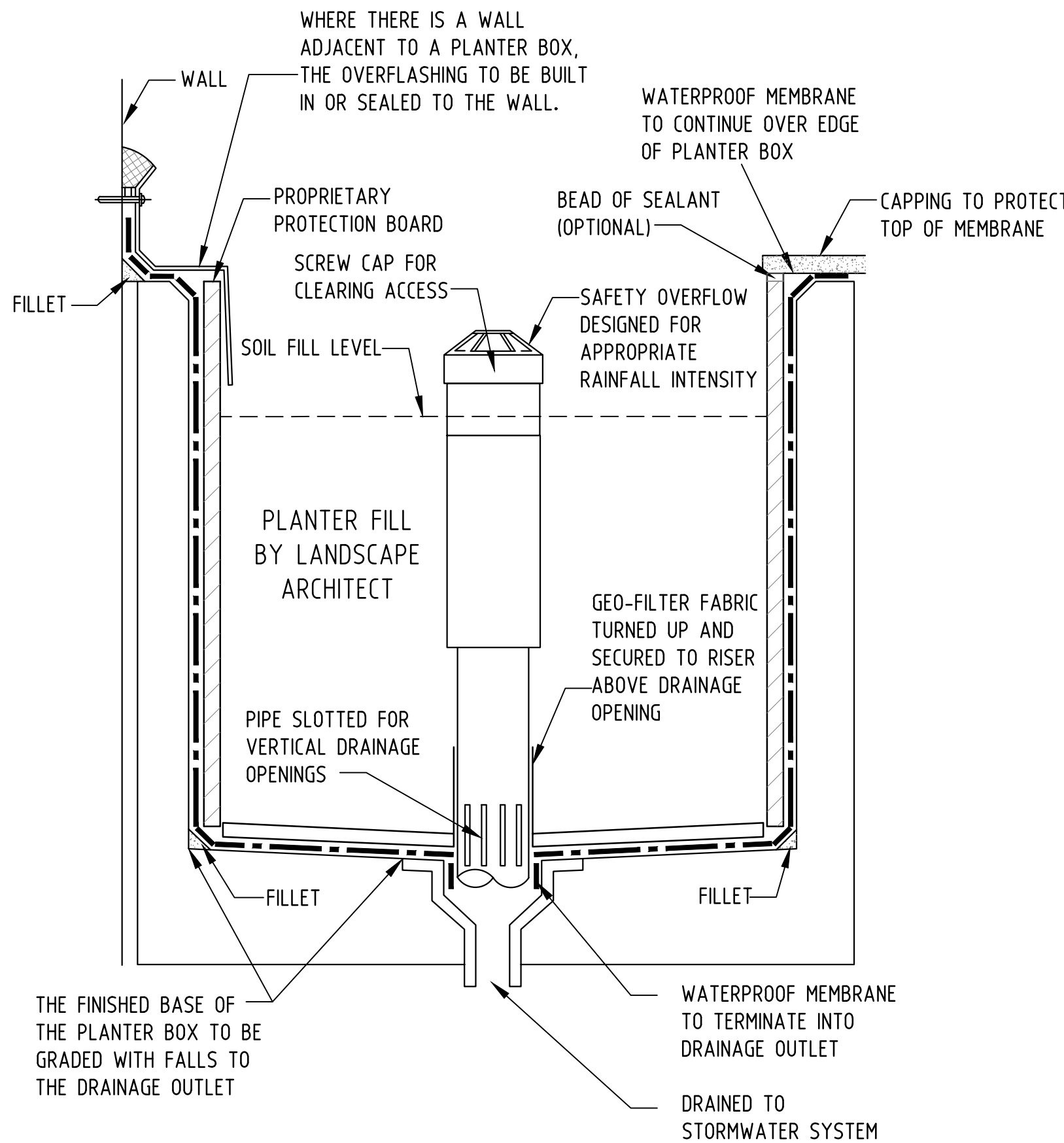
RAINWATER TANK DETAIL N.T.S.



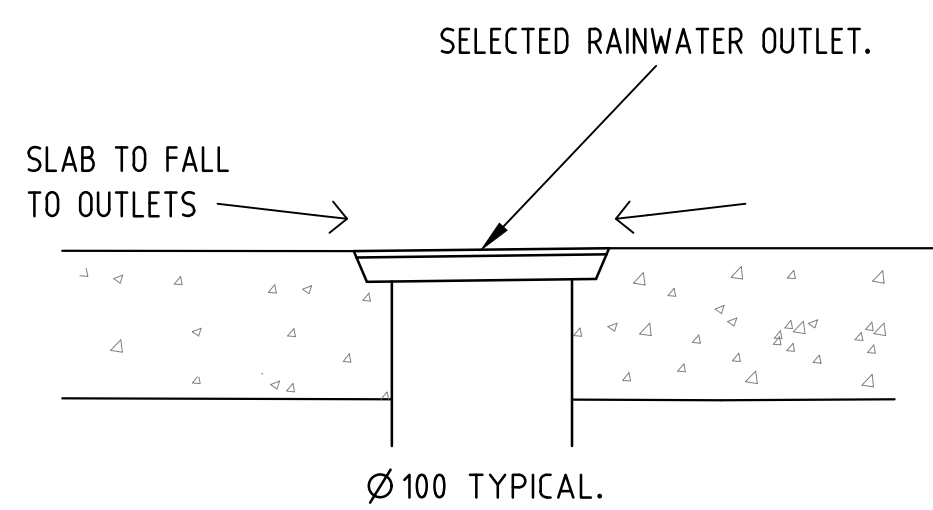
COLOURS:
'DANGER' AND BACKGROUND - WHITE
ELLIPTICLE AREA - RED
RECTANGLE CONTAINING ELLIPSE - BLACK
OTHER LETTERING AND BORDER - BLACK

CONFINED SPACE DANGER SIGN N.T.S

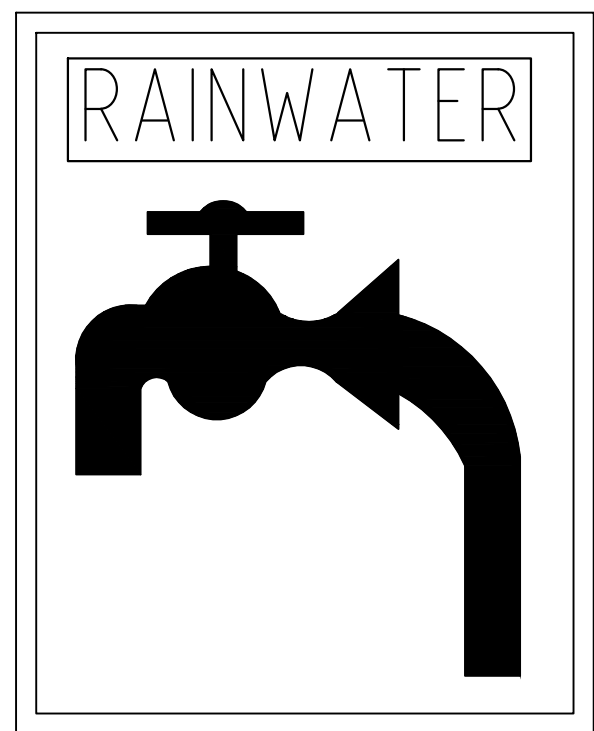
1. A CONFINED SPACE DANGER SIGN SHALL BE POSITIONED IN A LOCATION AT ALL ACCESS POINTS, SUCH THAT IT IS CLEARLY VISIBLE TO PERSONS PROPOSING TO ENTER THE BELOW GROUND TANK/S CONFINED SPACE.
2. MINIMUM DIMENSIONS OF THE SIGN
 - 300mm x 450mm (LARGE ENTRIES, SUCH AS DOORS)
 - 250mm x 180mm (SMALL ENTRIES SUCH AS GRATES & MANHOLES)
3. THE SIGN SHALL BE MANUFACTURED FROM COLOUR BONDED ALUMINIUM OR POLYPROPYLENE.
4. SIGN SHALL BE AFIXED USING SCREWS AT EACH CORNER OF THE SIGN.



TYPICAL PLANTER DETAIL N.T.S.



RAINWATER OUTLET DETAIL (RWO) WITH DOWN PIPE BELOW DETAIL N.T.S



SIGNAGE FOR RAINWATER TANKS AND OUTLETS

-DIMENSIONS: 80mm X 60mm
-BACKGROUND COLOUR SHOULD BE YELLOW,
-TEXT IS WHITE ON A BLACK BACKGROUND;
-TAP SYMBOL IS BLACK.

RAINWATER RE-USE NOTES

PROVIDE SIGN IN PROMINENT LOCATION AT FRONT OF PROPERTY NOTING "RAINWATER IN USE".

MARK TANK OUTLETS "NON-POTABLE WATER"

RECYCLED RAINWATER TO SERVICE BUILDING AS PER THE BASIX CERTIFICATE.

OVER FLOW FROM RAINWATER TANK TO BE CONNECTED TO STORMWATER SYSTEM.

RAINWATER SUPPLY PIPE WORK ABOVE GROUND MUST BE LABELLED ALONG THEIR LENGTH WITH A PERMANENT MARKING STATING 'RAINWATER' EVERY 500mm OR LESS. BELOW GROUND RAINWATER SUPPLY PIPE WORK MUST HAVE IDENTIFICATION TAPE AT LEAST 75mm WIDE AND MARKED 'RAINWATER' ON THE RAINWATER SUPPLY PIPE AND FASTENED TO THE PIPE AT NOT MORE THAN 3m INTERVALS.

SYDNEY WATER BACKFLOW PREVENTION DEPARTMENT MUST BE CONTACTED REGARDING RECYCLED WATER ON THIS BUILDING AND FOR THE BACKFLOW PREVENTION REQUIREMENTS AND TOP-UP SYSTEM.

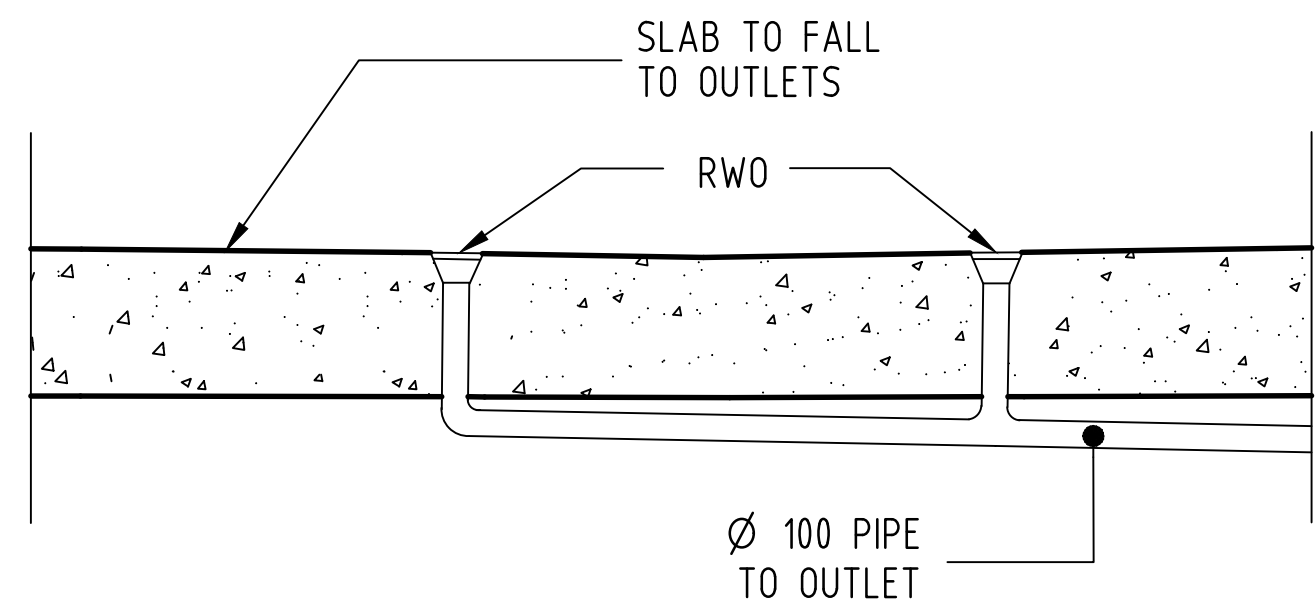
APPROPRIATE WATER METER MUST BE OBTAINED FROM SYDNEY WATER TAKING INTO ACCOUNT RAINWATER RE-USE.

ANY GARDEN OR CARWASH TAPS CONNECTED TO RECYCLED SYSTEM MUST BE LOCATED 15m MIN. ABOVE THE SURFACE OR PROVIDE WITH REMOVABLE HANDLE.

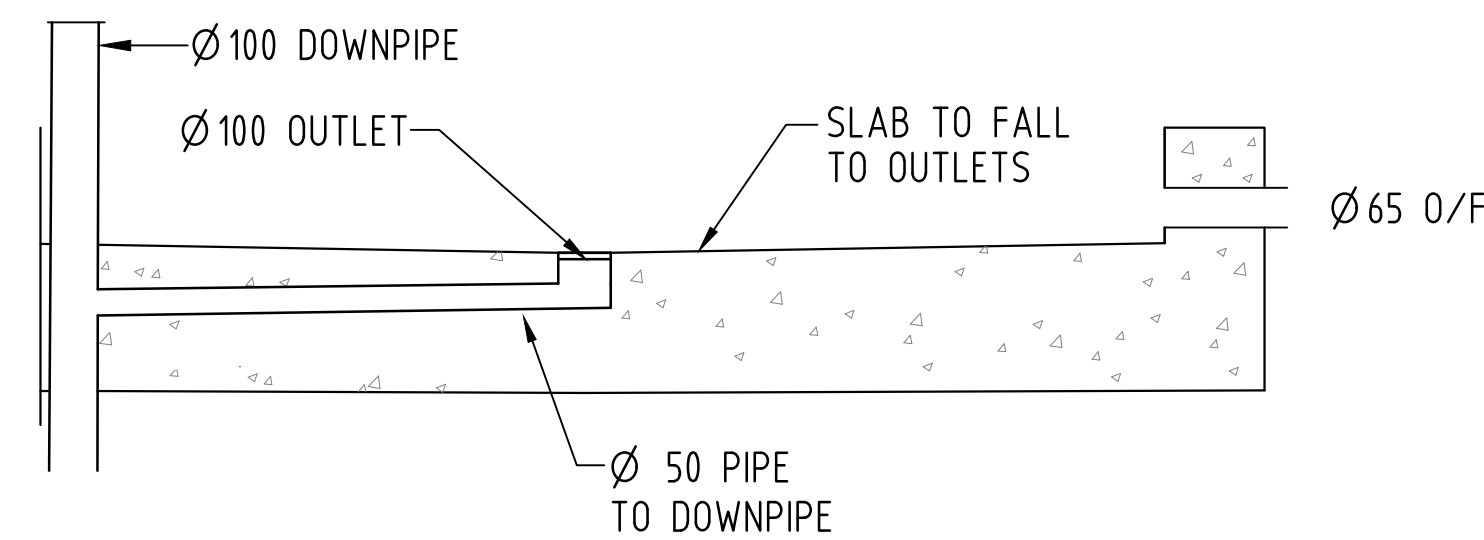
EVERY FIXTURE SERVICED FROM THE RECYCLED WATER SUPPLY MUST BE CLEARLY LABELLED 'RAINWATER'. REFER TO SIGNAGE.

FOR PERIOD OF LOW WATER LEVEL IN THE RAIN WATER TANK A CONNECTION TO THE WATER MAIN IS NEEDED AND TO BE PROVIDED IN ACCORDANCE WITH THE SYDNEY WATER REQUIREMENTS.

PUMPS AND FILTERS ON OUTLETS FROM RECYCLED SYSTEM TO BE SUPPLIED BY OTHERS AS MAY BE REQUIRED.



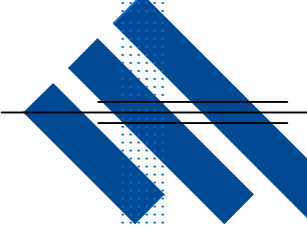
TERRACE OUTLET DETAIL N.T.S.



BALCONY OUTLET DETAIL N.T.S.

NOT FOR CONSTRUCTION

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