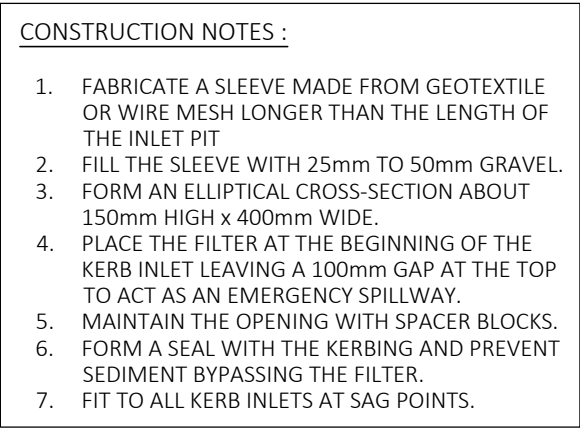
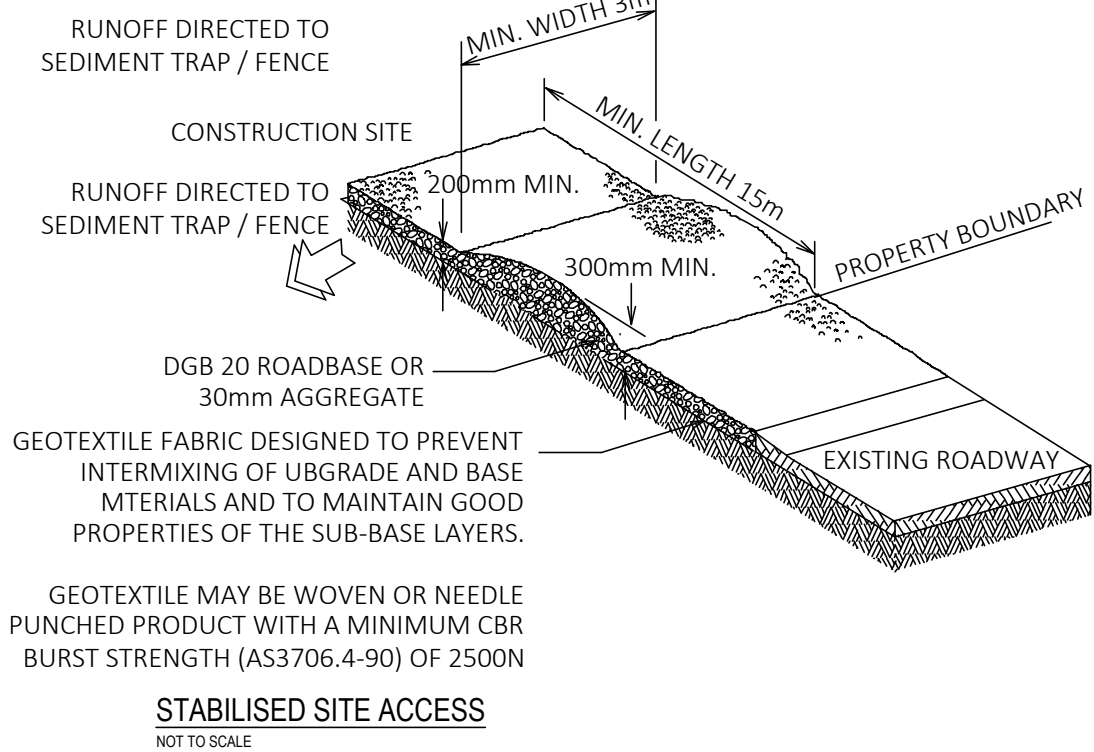


- DUST CONTROL:**
1. DUST IS TO BE WELL CONTROLLED ON THE CONSTRUCTION SITE AT ALL TIMES, ESPECIALLY AT EXCAVATIONS, DEMOLITION ETC.
 2. WATER SPRAY TO BE USED TO CONTROL DUST ON DIRT/GRADED AREAS ONLY.
 3. CARE TO BE EXERCISED TO ENSURE WATER SPRAY DISPENSE ONLY SUFFICIENT WATER FOR DUST CONTROL PURPOSES.
 4. CARE TO BE EXERCISED TO ENSURE ONLY OPTIMUM MOISTURE CONTENT OF THE SOIL IS REACHED FOR COMPACTION.
 5. FOR CONTROLLING DUST ON PAVED FOOTPATHS, A SWEEPER IS TO BE USED WITH WATER-JET SPRAYERS.
 6. NO SURFACE WATER RUN-OFF IS TO BE GENERATED.
 7. CARE IS TO BE EXERCISED TO ENSURE ONLY SUITABLE AMOUNTS OF WATER IS USED DURING SWEEPING.
 8. NO RUN-OFF FROM SPRAYERS TO FLOW INTO CATCH BASINS.
 9. MINIMISE THE AREAS OF EXISTING VEGETATED AREA THAT ARE DISTURBED DURING CONSTRUCTION.
 10. AREAS NOT BEING WORKED ON FOR 30 DAYS OR MORE ARE TO BE VEGETATED OR COVERED TO AVOID DUST GENERATION.
 11. SAND & SOIL STOCKPILE ARE TO BE SUFFICIENTLY COVERED DURING WEEKENDS AND AT TIMES WHEN WINDY CONDITIONS PREVAIL.




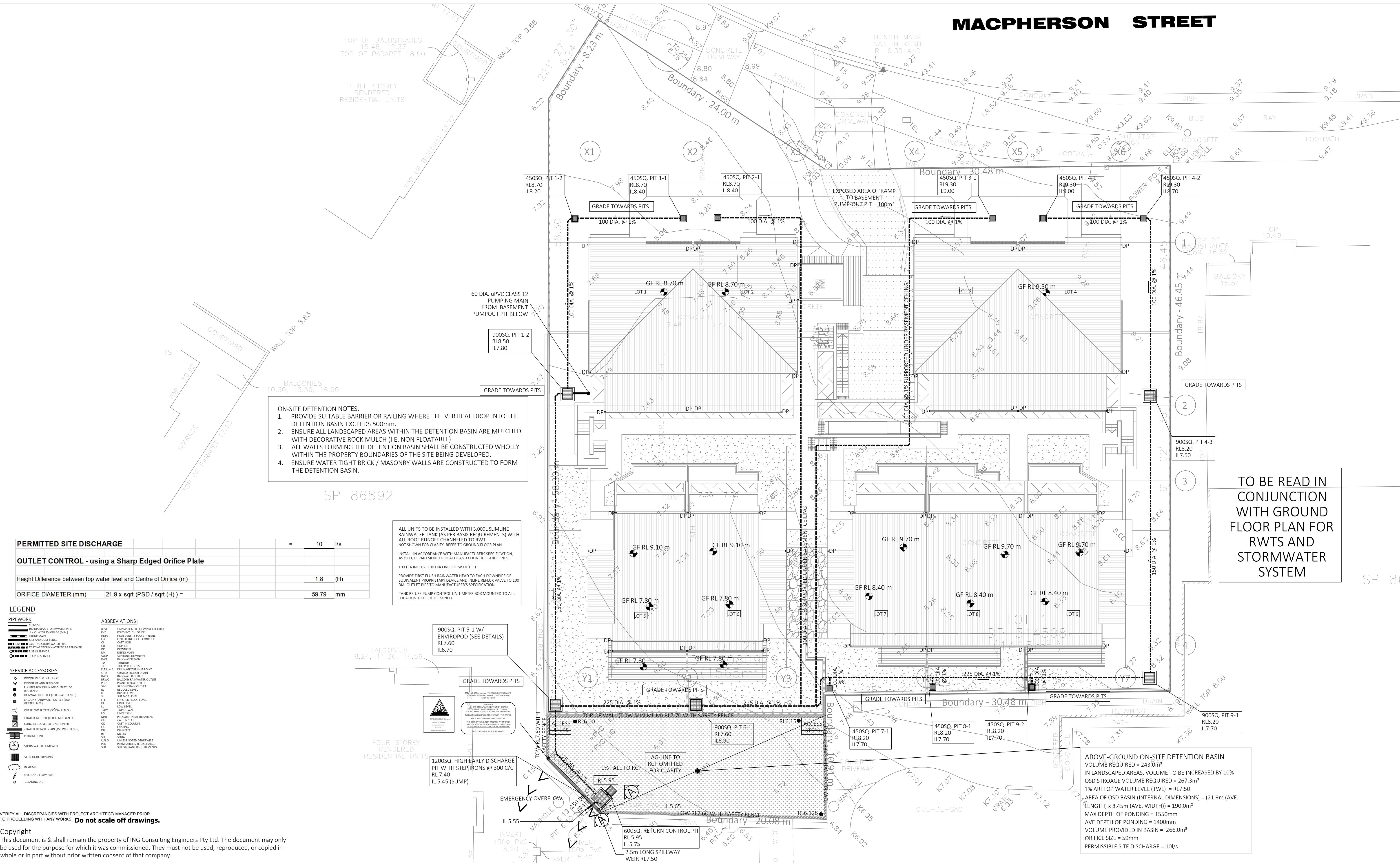
- CONSTRUCTION NOTES :**
1. STRIP TOPSOIL AND LEVEL SITE.
 2. COMPACT SUBGRADE.
 3. COVER AREA WITH NEEDLE PUNCHED GEOTEXTILE.
 4. CONSTRUCT 200mm THICK PAD OVER GEOTEXTILE USING ROADBASE OR 30mm AGGREGATE MINIMUM LENGTH 15m OR TO BUILDING ALIGNMENT. MINIMUM WITH 3m.
 5. CONSTRUCT HUMP IMMEDIATELY WITHIN BOUNDARY TO DIVERT WATER TO A SEDIMENT FENCE OR SEDIMENT TRAP.

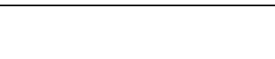


SCALE 1 : 250

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			Checked By : N. Evans			At 5 - 7 MacPherson Street Warriewood NSW 2102	Date February 2018	Scale As Shown @ A1
			Approved By : Kenneth T. NG MIEAust CPEng NER RPEQ (Reg. No. 2206352) Accredited Certifier (Cat. C1-C4, C6 & C15){BPB No. 0827}			Client Level 88 Developments Pty Ltd	Project No. 076102017S96	Drawing & Sheet No./Issue
A	Section 96 Application / Issued for Construction	28 Feb. 2018						
Issue	Description	Date of Drawing						

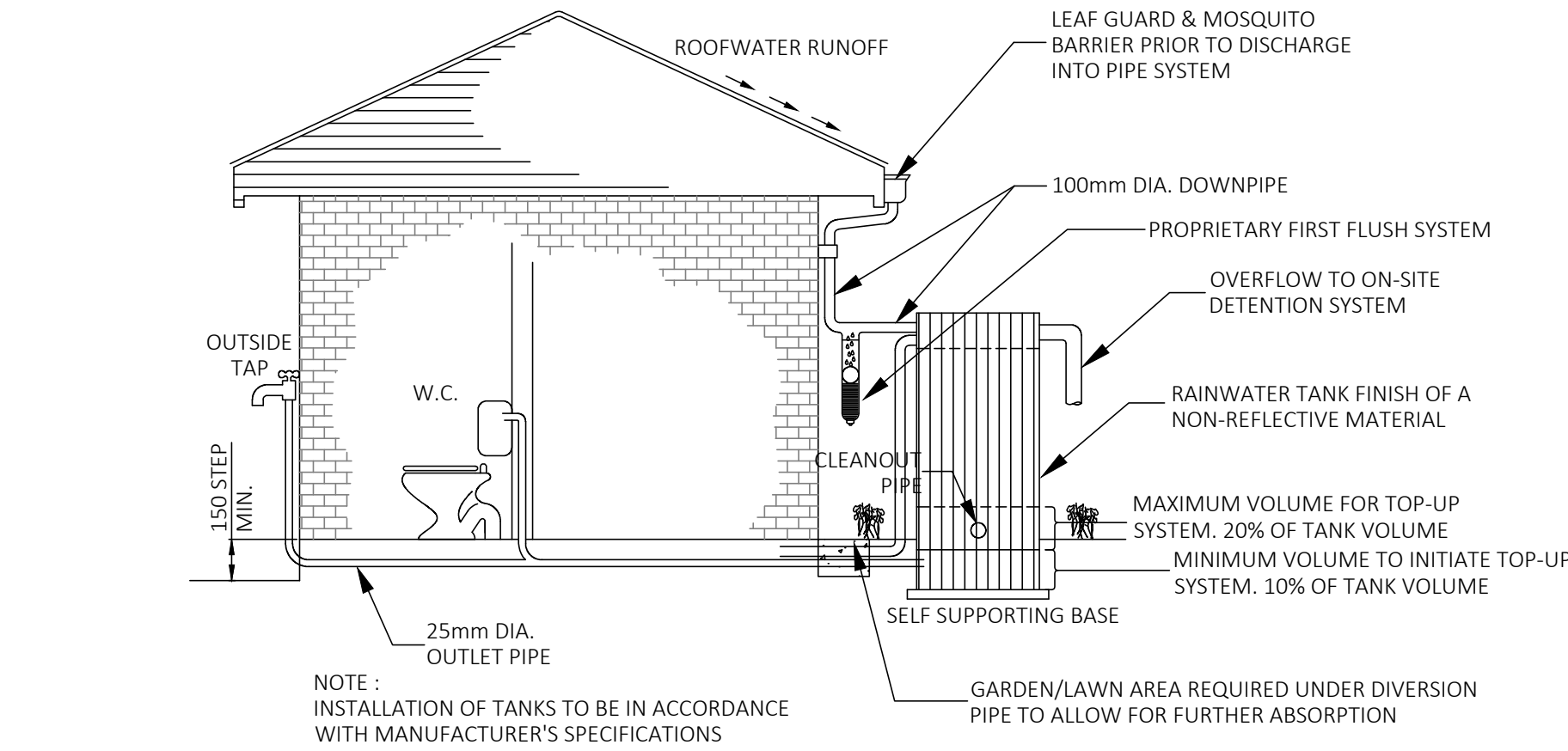


			Drawn & Designed By : K. Koh		Designed By ING CONSULTING ENGINEERS PTY LTD P. O BOX 1543 BAULKHAM HILLS NSW 1755 F : (02) 8807 5656 M: 0433 778 109 E : ken@ingengineers.com.au	Project Proposed Multi-Unit Development	Drawing Title Site Plan	
			Checked By : N. Evans			At 5 - 7 MacPherson Street Warriewood NSW 2102	Date February 2018	Scale 1 : 150 @ A1
			Approved By : Kenneth T. NG MIEAust CPEng NER RPEQ (Reg. No. 2206352) Accredited Certifier (Cat. C1-C4, C6 & C15)(BPB No. 0827)			Client Level 88 Developments Pty Ltd	Project No. 076102017S96	Drawing & Sheet No./Issu 07610-04/6 / A
A	Section 96 Application / Issued for Construction	28 Feb. 2018						
Issue	Description	Date of Drawing						

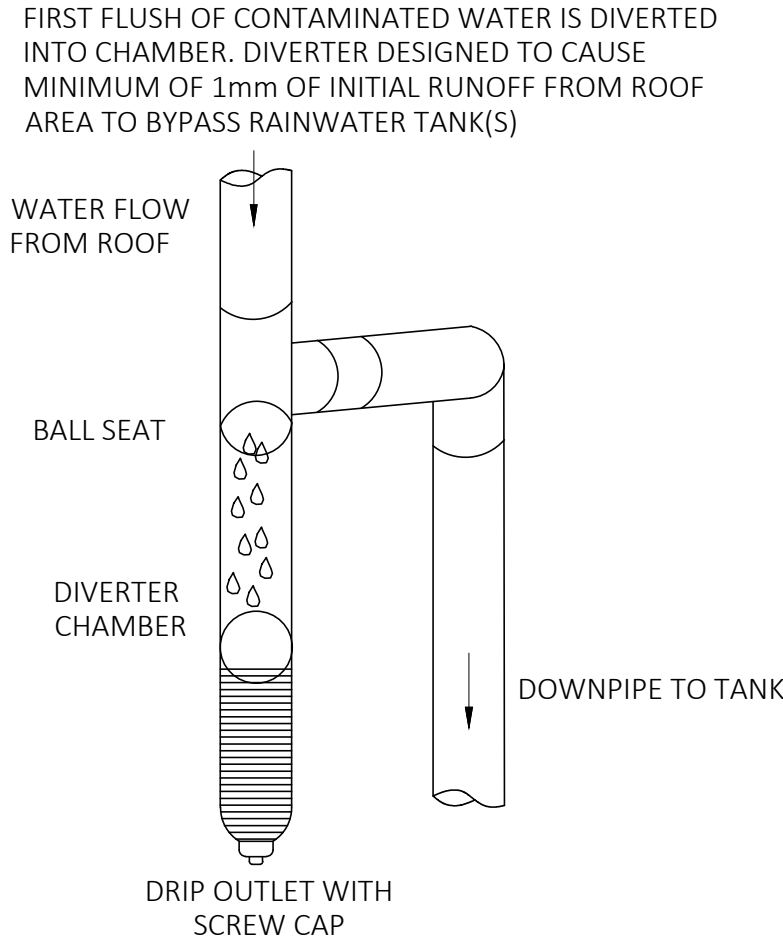
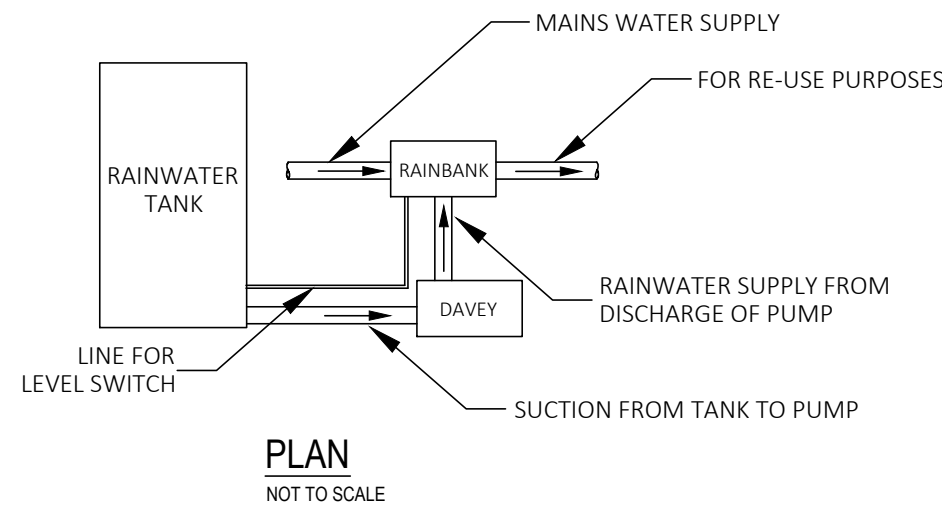
- GENERAL NOTES
1. THE CONTRACTOR MUST VERIFY ALL DIMENSIONS AND EXISTING LEVELS ON SITE PRIOR TO COMMENCEMENT OF WORKS.
 2. ALL WORKS ARE TO BE CARRIED OUT TO THE DETAILS SHOWN ON THE DRAWINGS.
 3. THESE PLANS ARE READ IN CONJUNCTION WITH APPROVED ARCHITECTURAL, STRUCTURAL, HYDRAULIC AND MECHANICAL DRAWINGS AND SPECIFICATIONS.
 4. CARE IS TO BE TAKEN WHEN EXCAVATING NEAR SERVICES. NO MECHANICAL EXCAVATION ARE TO BE UNDERTAKEN OVER TELECOMMUNICATION OR ELECTRICAL SERVICES. HAND EXCAVATE IN THESE AREAS ONLY.
 5. DIAL 1100 BEFORE YOU DIG FOR LOCATION OF UNDERGROUND SERVICES PRIOR TO ANY CONSTRUCTION WORKS.
 6. SERVICES HAVE NOT BEEN SHOWN ON THIS PLAN. FIELD INVESTIGATIONS ARE TO BE CARRIED OUT SEPARATELY TO DETERMINE EXACT POSITIONS OF SERVICES OR INFORMATION IS TO BE PROVIDED BY THE PROPERTY PROPRIETOR. NOT WITSTANDING THIS, ALL INFORMATION PROVIDED SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF CONSTRUCTION WORKS.
 7. THESE DRAWINGS ARE ONLY APPROVED WHEN THEY ARE SIGNED WITH AN ORIGINAL SIGNATURE BY THE ENGINEER.

- STORMWATER DRAINAGE
8. ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH AS 3500 AND THE REQUIREMENTS OF THE LOCAL COUNCIL'S POLICIES AND CODES.
 9. ALL GUTTERS TO BE 100 x 75 MIN. AND DOWNPIPES TO BE 100 x 75 (76 DIA.) UNLESS OTHERWISE NOTED.
 10. ALL PIPES TO BE 100mm uPVC SEWER GRADE UNLESS NOTED OTHERWISE.
 11. ALL GRADIENTS FOR STORMWATER PIPES TO BE NOT LESS THAN 1.0% UNLESS NOTED OTHERWISE.
 12. THE INVERTS OF ALL OUTLET PIPES ARE TO BE INSTALLED FLUSHED WITH THE BASE OF ALL STORMWATER/RAINWATER PIT.
 13. ALL FENCES SHALL BE KEPT AT LEAST 100mm ABOVE THE GROUND LEVEL TO FACILITATE THE FREE PASSAGE FOR STORMWATER OVERLAND FLOW.
 14. MANUFACTURER'S CERTIFICATE SHALL BE OBTAINED BY THE BUILDER FOR PIPES, PRE-CAST PITS AND GRATES FOR THE STRUCTURAL ADEQUACY RELATING TO ITS LOCATION.
 15. AREAS SPREAD WITH BARK SHALL BE BARRICADED TO PREVENT BARK GETTING INTO THE PITS AND STORMWATER SYSTEMS.
 16. MINIMUM SLOPE FOR PAVED AREAS SHALL BE 0.5%, FOR LANDSCAPED AREAS MINIMUM SLOPE SHALL BE 1% AND GRADED TOWARDS THE GRATED PITS.
 17. ALL EXCAVATIONS WITHIN THE INFLUENCE OF BUILDINGS AND SERVICES SHALL BE UNDERTAKEN WITH THE KNOWLEDGE OF THE HYDRAULIC AND STRUCTURAL ENGINEER.
 18. THE DETENTION AND DRAINAGE SYSTEM SHALL BE MAINTAINED AT REGULAR INTERVALS AND THE CONTRACTOR SHALL MAKE NECESSARY ARRANGEMENTS.
 19. CONNECTION OF DISCHARGE PIPE TO EXISTING COUNCIL KERB AND GUTTER, PIPE OR KERB INLET PIT SHALL BE CARRIED OUT IN ACCORDANCE WITH COUNCIL'S REQUIREMENTS.
 20. PROVIDE STEP-IRONS 'MASCOT S1:104' OR SIMILAR STAGGERED TO GIVE SPACING 300 VERTICAL AND 220 HORIZONTAL TO ALL PIT DEEPER THAN 1m.
 21. SUITABLE AG-LINES SHALL BE PROVIDED AND CONNECTED TO STORMWATER SYSTEM OR AS INSTRUCTED BY THE ENGINEER ON SITE PRIOR TO BACKFILLING.

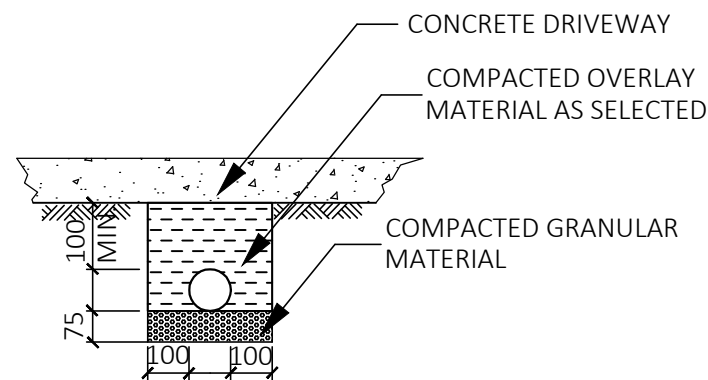
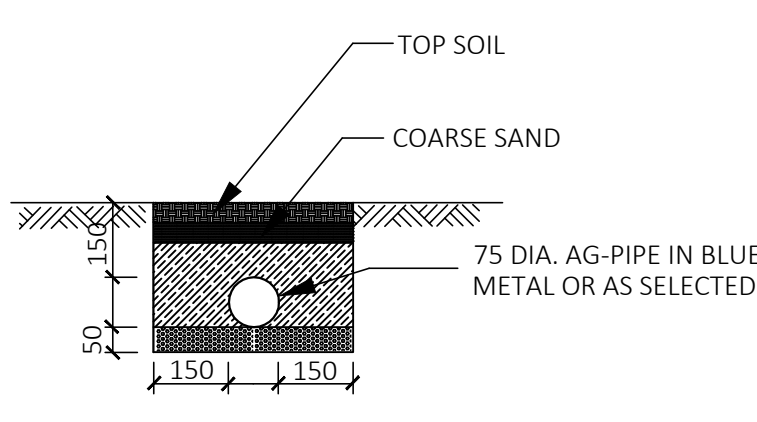
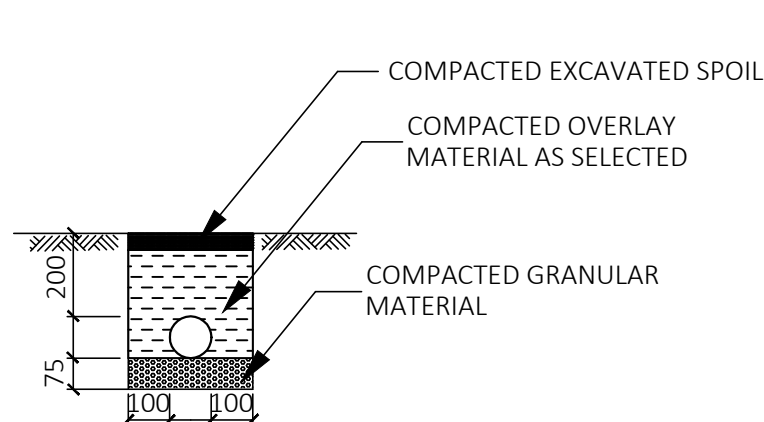
- RAINWATER TANK
22. DRAWING IS TO BE READ IN CONJUNCTION WITH SYDNEY WATER'S "PLUMBING REQUIREMENTS - GUIDELINES FOR RAINWATER TANKS ON RESIDENTIAL PROPERTIES".
 23. ALL PLUMBING WORK UNDERTAKEN ON OR FOR THE TANK THAT AFFECTS THE WATER SERVICE PIPE OR WATER MAIN MUST BE UNDERTAKEN WITH THE CONSENT OF SYDNEY WATER IN ACCORDANCE WITH THE REQUIREMENTS OF SYDNEY WATER, AND THE MANUFACTURER'S SPECIFICATIONS.
 24. ALL PLUMBING WORKS UNDERTAKEN SHALL BE UNDERTAKEN BY A LICENSED PLUMBER IN ACCORDNACE WITH THE NEW SOUTH WALES CODE OF PRACTICE - PLUMBING AND DRAINAGE PRODUCED BY THE COMMITTEE ON UNIFORMITY OF PLUMBING AND DRAINAGE REGULATIONS IN NEW SOUTH WALES.
 25. ALL PLUMBING MUST BE COMPLETED BY A LICENSED PLUMBER IN COMPLIANCE WITH AS/NZS3500.5, AND ANY OTHER RELEVANT NATIONAL STANDARDS.
 26. INLET TO THE RAINWATER TANKS MUST BE SCREENED OR FILTERED TO PREVENT ENTRY OF FOREIGN MATTER AND CREATURES.
 27. THE RAINWATER TANKS MUST BE MAINTAINED AT ALL TIMES SO AS NOT TO CAUSE A NUISANCE WITH RESPECT TO MOSQUITO BREEDING OR OVERLAND FLOW OF WATER.
 28. A SIGN MUST BE AFFIXED TO THE RAINWATER TANKS CLEARLY STATING THAT THE WATER IN THE TANKS IS RAINWATER.
 29. BOTH THE RE-USE AND ANY FITTINGS CONNECTED TO THE RAINWATER TANKS MUST BE LABELED "RAINWATER , NOT SUITABLE FOR DRINKING".
 30. ALL ROOF GUTTERS ARE TO BE FITTED WITH LEAF GUARDS AND INSPECTED REGULARLY AND CLEANED TO ENSURE LEAF LITTER CANNOT ENTER THE DOWNPIPES.
 31. PRESSURE PUMP ELECTRICAL CONNECTION TO BE CARRIED OUT BY A LICENSED ELECTRICIAN.



RAINWATER TANK (3000L AS PER BASIX) DETAILS
NOT TO SCALE



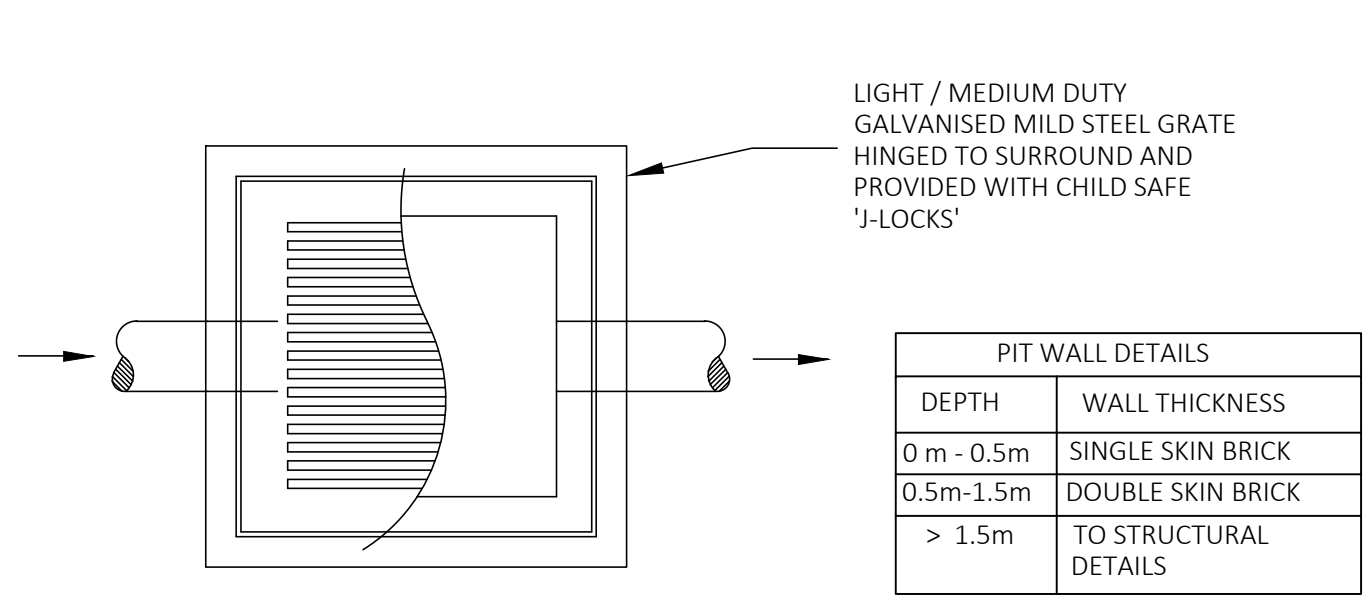
PROPRIETARY FIRST FLUSH DIVERTER
NOT TO SCALE



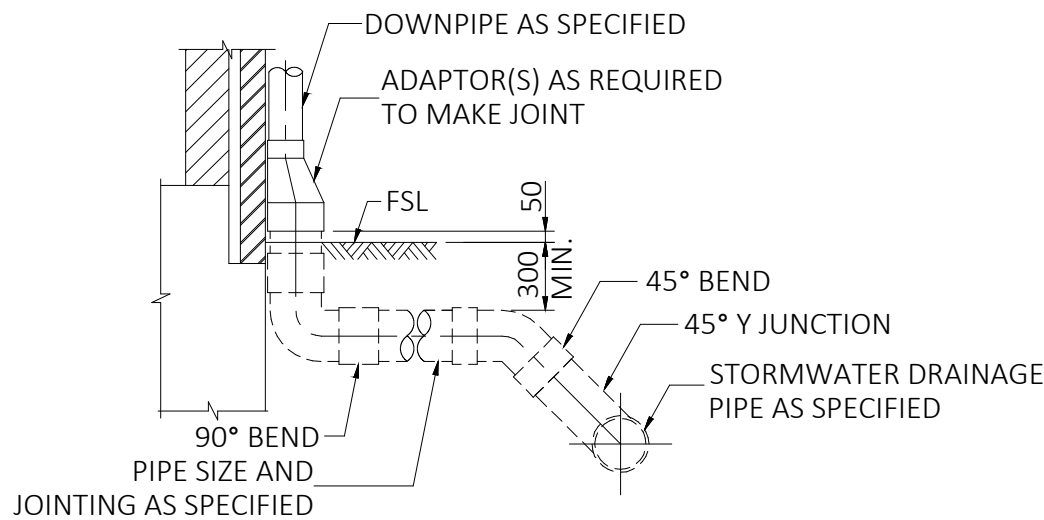
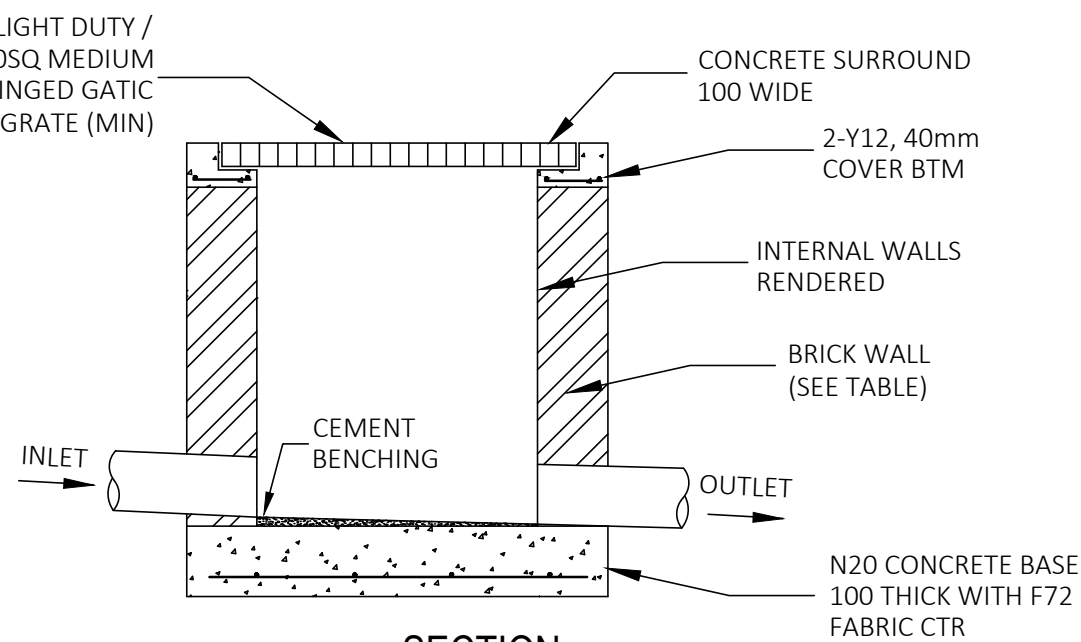
PIPE TRENCH
NOT TO SCALE

PIT SCHEDULE

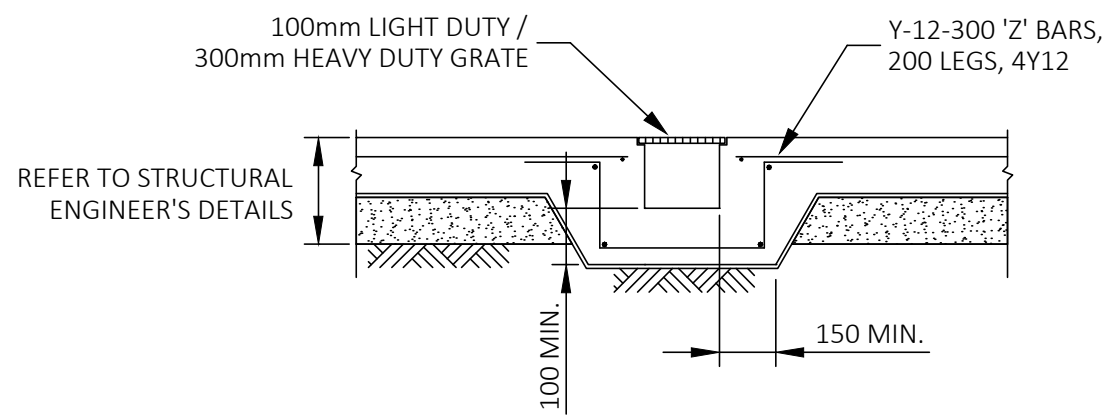
1. PROVIDE LIGHT DUTY GRATES FOR NON VEHICULAR TRAFFICKED AREAS.
2. PROVIDE HEAVY DUTY GRATES FOR VEHICULAR TRAFFICKED AREAS.
3. PROVIDE 450 x 450 CLEAR OPENING FOR PIT DEPTHS UP TO 600mm U.N.O.
4. PROVIDE 600 x 600 CLEAR OPENING FOR PIT DEPTHS UP TO 900mm U.N.O.
5. PROVIDE 900 x 900 CLEAR OPENING FOR PIT DEPTHS GREATER THAN 900mm U.N.O.
6. ALL REINFORCED CONCRETE PIPES SHALL BE OF RUBBER RING JOINTS
7. ALL DISCHARGE CONTROL PITS SHALL HAVE A MINIMUM OF 900 x 900 CLEAR OPENING U.N.O.
8. ALL GRATED TRENCH SHALL BE A MINIMUM OF 150(W) x 200(H) U.N.O.



TYPICAL INLET PIT DETAIL
NOT TO SCALE



TYPICAL DETAIL - DOWNPIPE CONNECTION TO STORMWATER DRAINAGE PIPE
NOT TO SCALE



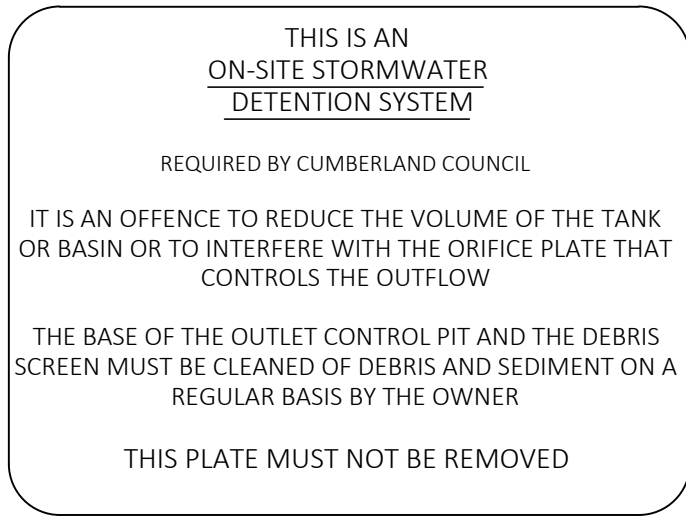
GRATED DRAIN DETAIL
NOT TO SCALE

VERIFY ALL DISCREPANCIES WITH PROJECT ARCHITECT/ MANAGER PRIOR TO PROCEEDING WITH ANY WORKS. **Do not scale off drawings.**

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			Checked By : N. Evans			At 5 - 7 MacPherson Street Warriewood NSW 2102	Date February 2018	Scale As Shown @ A1
			Approved By : Kenneth T. NG MIEAust CPEng NER RPEQ (Reg. No. 2206352) Accredited Certifier (Cat. C1-C4, C6 & C15)(BPB No. 0827)			Client Level 88 Developments Pty Ltd	Project No. 076102017S96	Drawing & Sheet No./Issue 07610-05/6 / A
A	Section 96 Application / Issued for Construction	28 Feb. 2018						
Issue	Description	Date of Drawing						

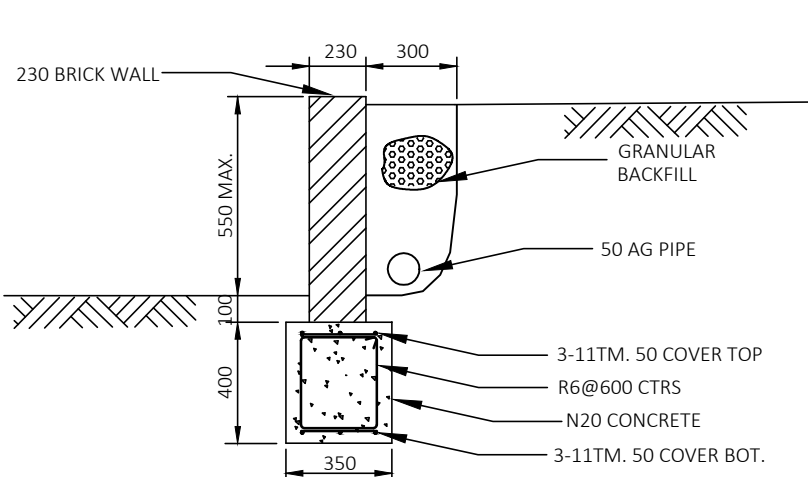
110mm X 80mm SIGN TO BE PLACED AT VISIBLE LOCATION AT OSD TANK, TO READ:



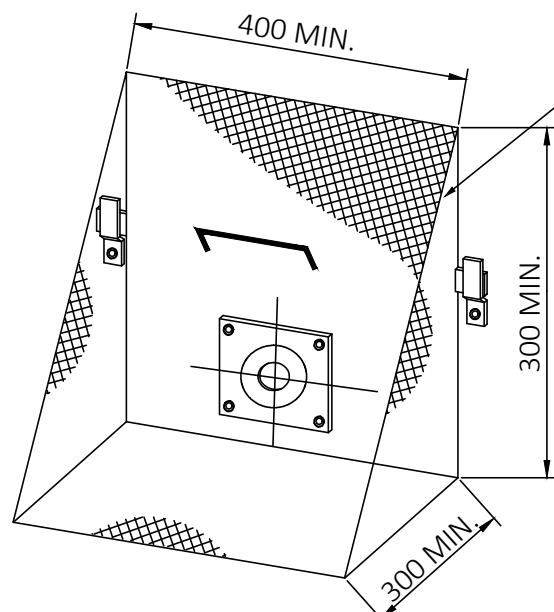
OSD SIGNAGE
NOT TO SCALE



OSD WARNING SIGN (SIZE 300(L) x 225(W))
NOT TO SCALE

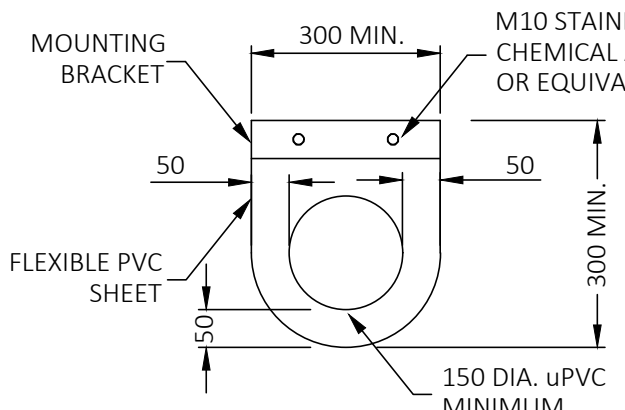


OSD WALL DETAIL
NOT TO SCALE



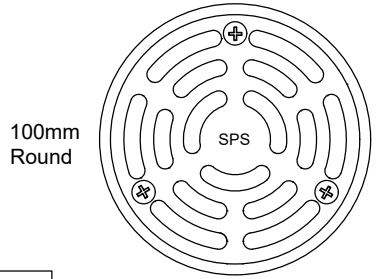
TRASH SCREEN DETAIL
NOT TO SCALE

HOT DIPPED GALVANISED
LYSAGHT MAXIMESH
TYPE RH3030 SCREEN
WIH HANDLE

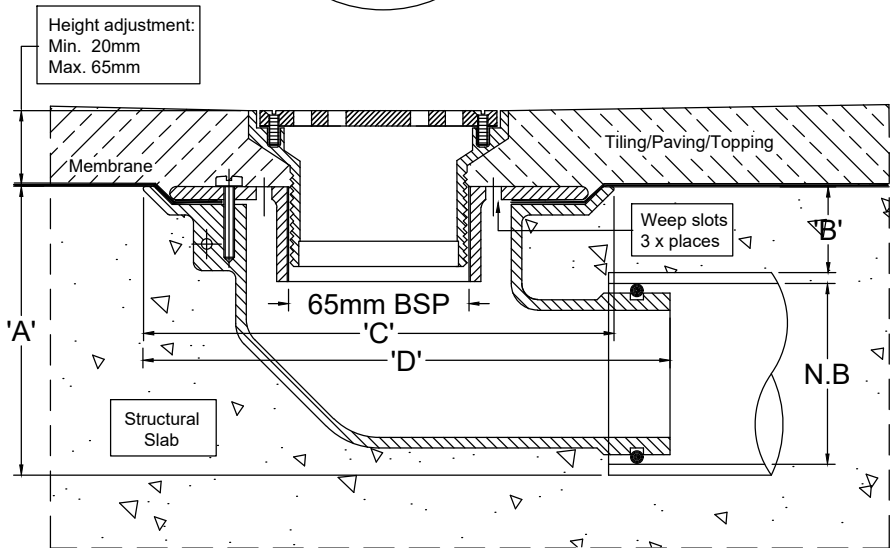


NICOLAS FLEXI FLAP VALVE DETAIL
NOT TO SCALE

Specification code:
R100B/C90 (brass grate, ABS lower body)
R100N/C90 (nickel bronze grate, ABS lower body)
R100SA/C90 (polished 304 stainless steel, ABS lower body)
R100S/C90 (satin 316 stainless steel grate, ABS lower body)



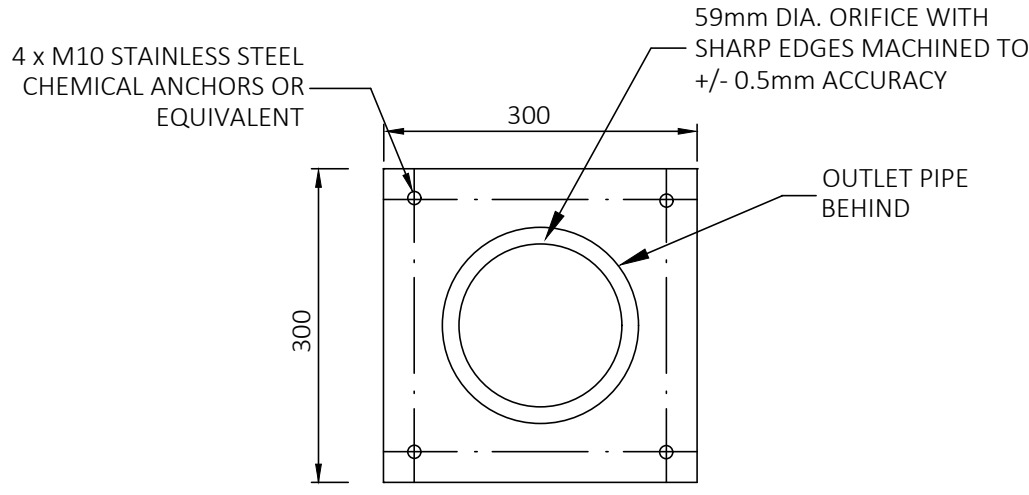
- Round grate available in nickel bronze, 304 & 316 stainless Steel. Bronze non-stock option.
- ABS 90° Body and Reversible Membrane Clamp Collar with female 65mm BSP thread.



Spigot pushes into 65mm PVC or copper with o-ring connection, or connects to 50mm PVC/HDPE with no-hub coupling.

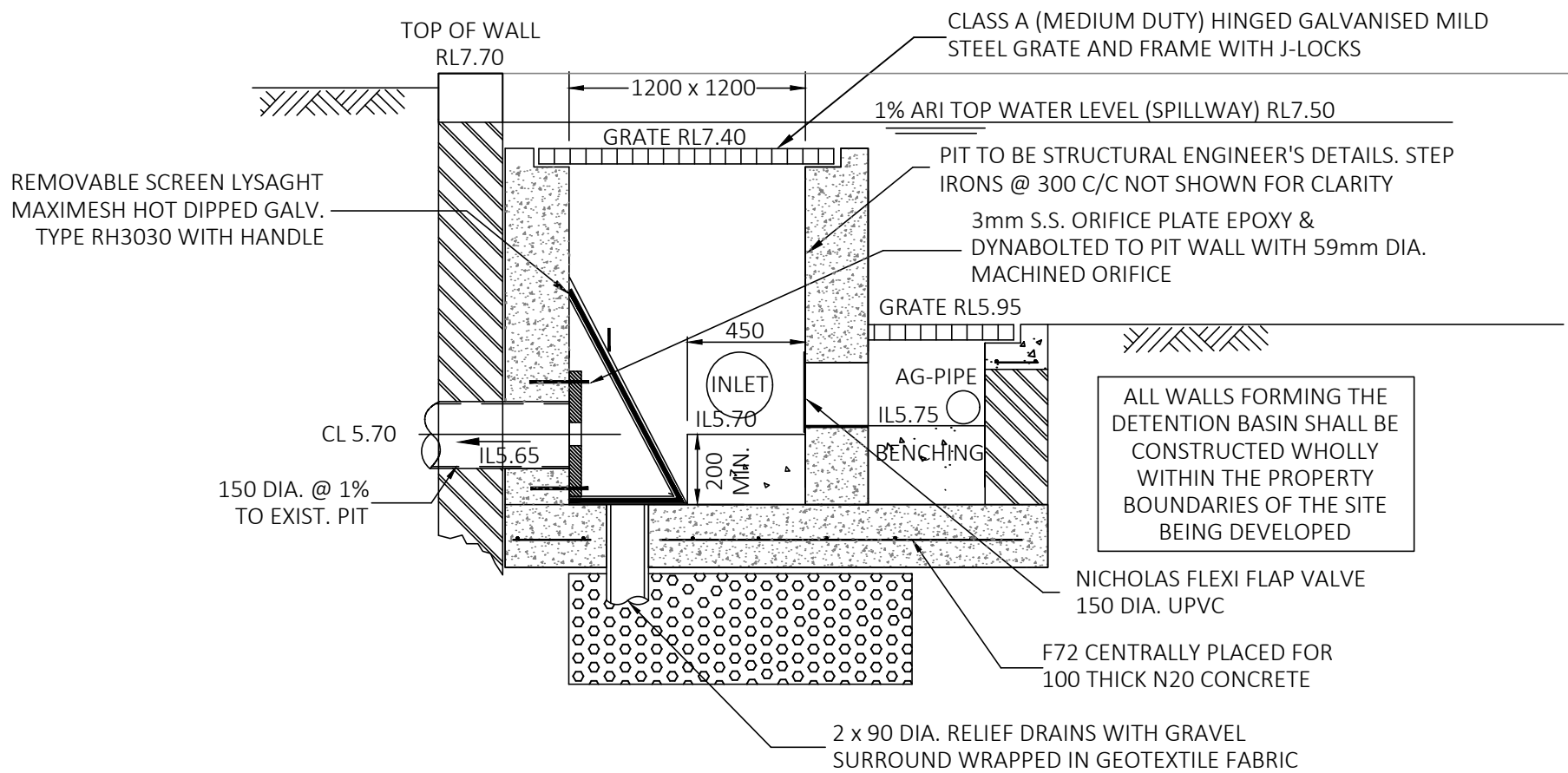
N.B.	A	B	C	D
50	100	40	180	200
65	105	37	180	200

RAINWATER OUTLET (RWO) (TERRACE AND COURTYARDS) AND
BRWO(BALCONIES)
NOT TO SCALE



3mm THICK STAINLESS STEEL
PLATE (OR 6mm THICK FOR
DIA. GREATER THAN 150mm)

ORIFICE PLATE DETAIL
NOT TO SCALE

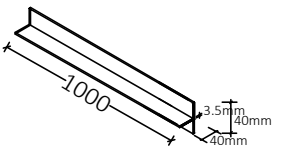


SECTION A-A HIGH EARLY DISCHARGE PIT (HED) DETAIL
NOT TO SCALE

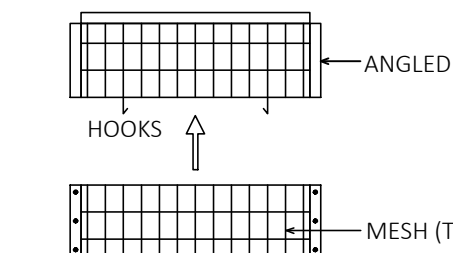
A-TYPE UNIT CONFIGURATIONS

UNIT TYPE	STRUT TYPE	TOP TYPE	CAGE TYPE (HEIGHT mm)	RING TYPE	BAG TYPE (HEIGHT mm)
A1	A	A	A1(600)	A	A1(600)
A3	A	A	A3(350)	A	A3(350)
A5	A	A	N/A	A	A5(170)

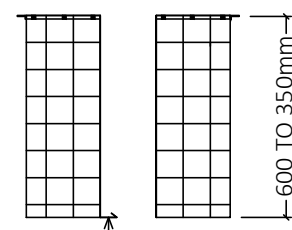
NOTE : UNIT TYPES AS ARE INSTALLED WITHOUT ANY CAGES. USE ONLY STRUT, TOP, BAG & RING



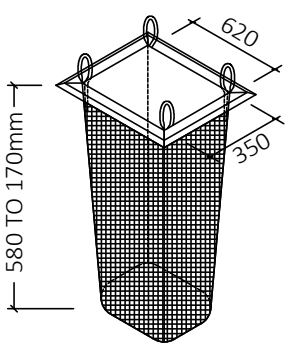
A-TYPE ALUMINIUM STRUT



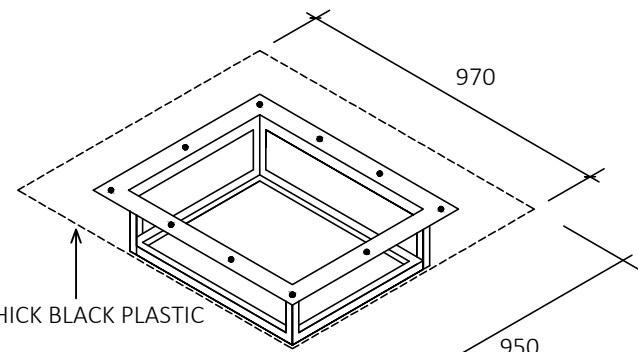
A1(600mm) TO A3(300mm) CAGES - PLAN



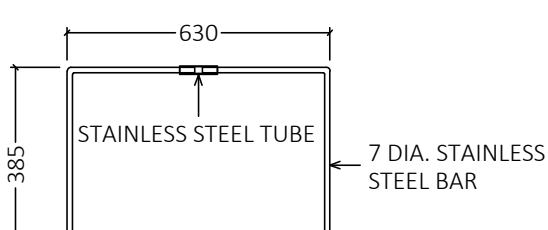
2 HOOKS TO ATTACH BOTTOM OF CAGES
A1(600mm) TO A3(350mm)
CAGES - SECTION



A1(600mm) TO A5(100mm NOM.) BAGS



A-TYPE TOP



A-TYPE RING

STANDARD ENVIROPOD FILTER A-TYPE CONFIGURATION & COMPONENTS
GENERAL ARRANGEMENT
NOT TO SCALE

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			Checked By : N. Evans		At 5 - 7 MacPherson Street Warriewood NSW 2102	Date February 2018	Scale As Shown @ A1
A	Section 96 Application / Issued for Construction	28 Feb. 2018	Approved By :Kenneth T. NG MIEAust CPEng NER RPEQ (Reg. No. 2206352) Accredited Certifier (Cat. C1-C4, C6 & C15)(BPB No. 0827)		Client Level 88 Developments Pty Ltd	Project No. 076102017S96	Drawing & Sheet No./Issue 07610-06/6 / A
Issue	Description	Date of Drawing					