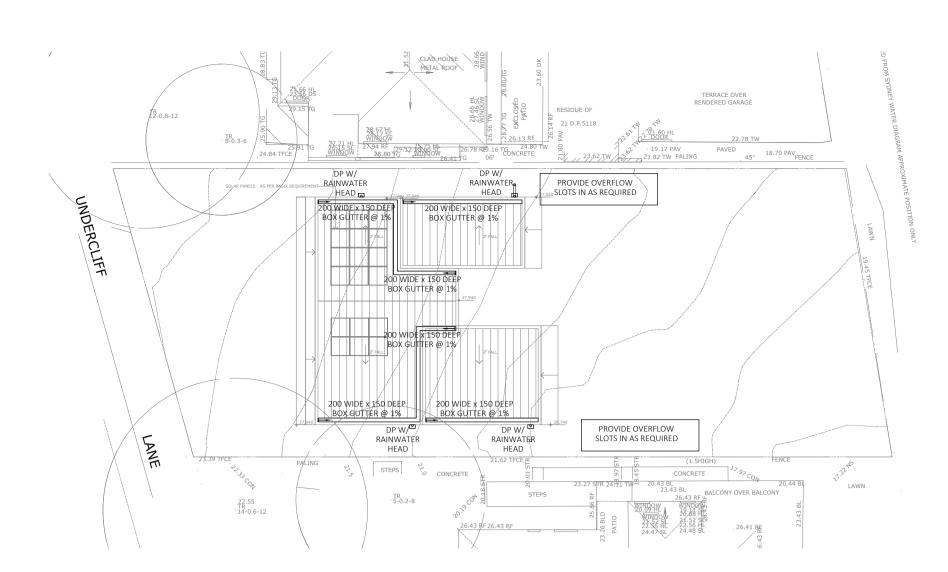


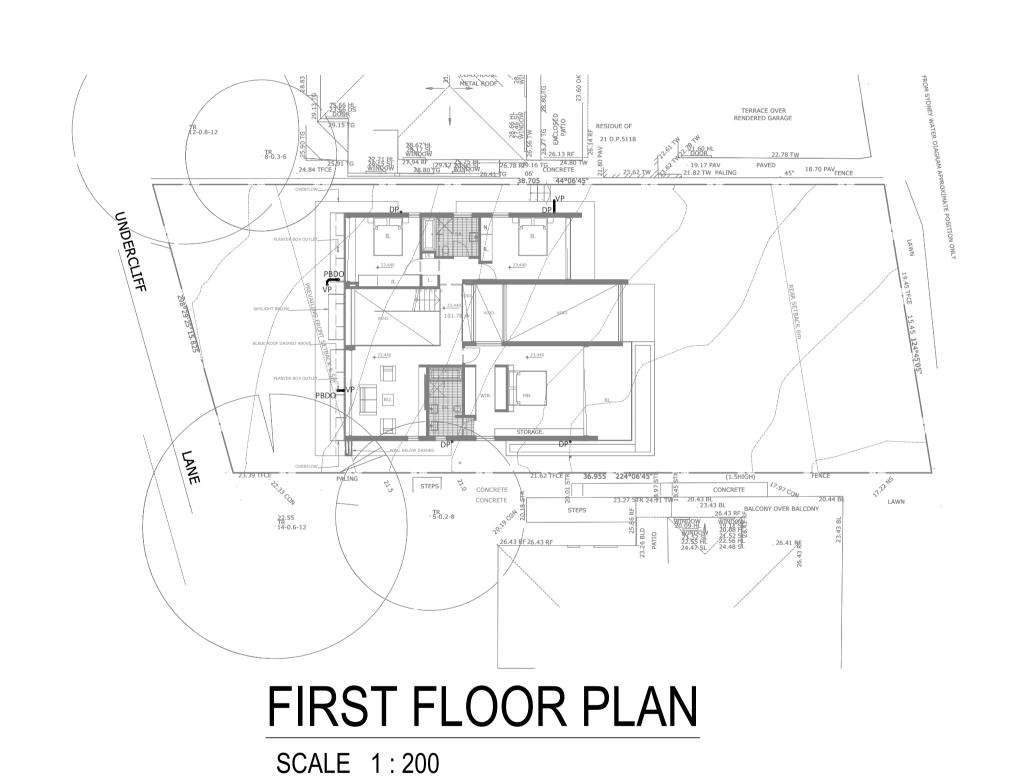
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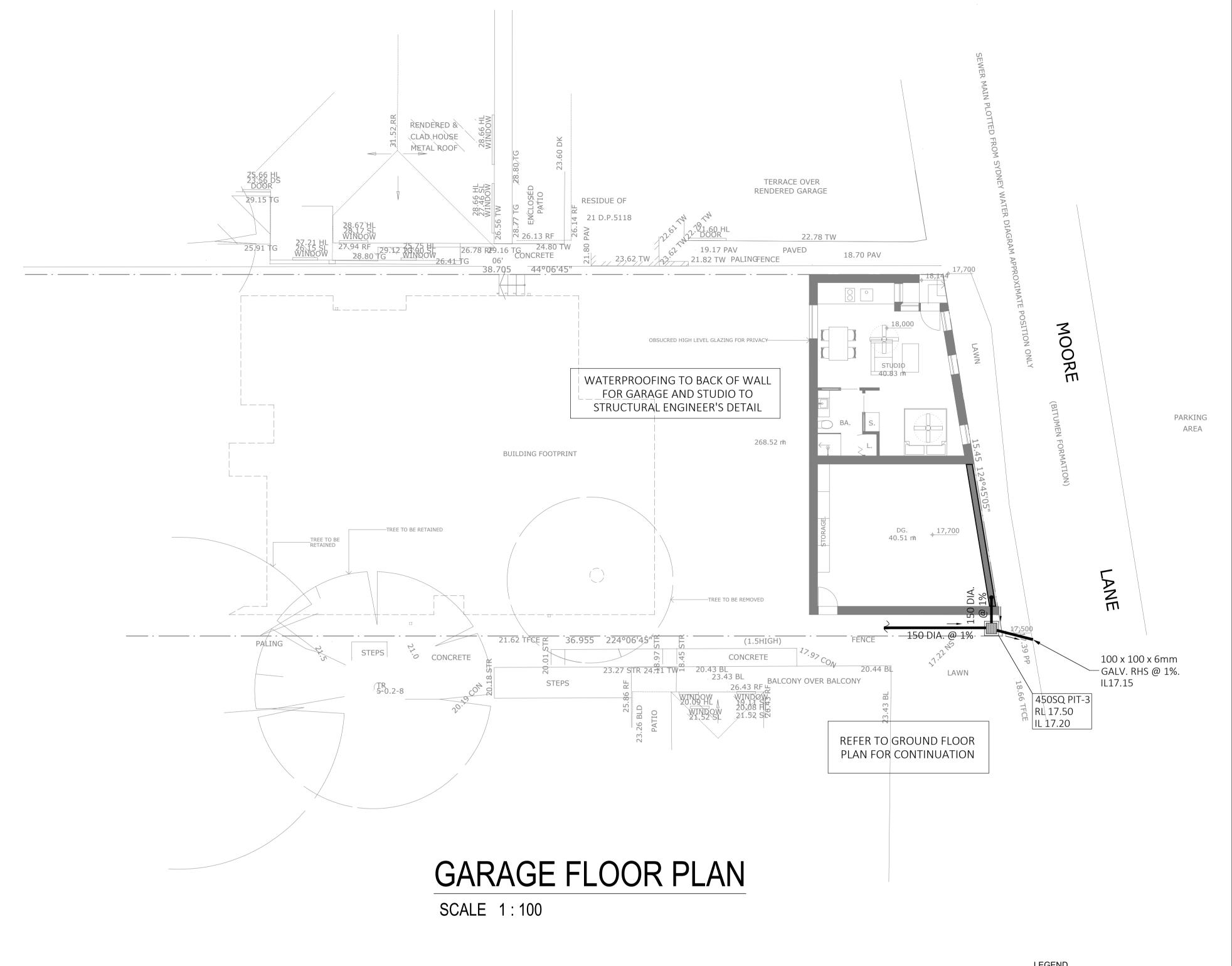
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		Drawn & Desig	gned by: K. Koh	h. A	Designed By ING CONSULTING	Projec	t Proposed New Dwelling	Drawing Title	Site Plan
C Architectural Revisions B Architectural Refinements and Landscaping	1 Nov. 2020 8 Sept. 2020	Checked by: Approved by:	WILE ROSE OF EING WEEK THE ES EINGWEST	72 Dec 72	ENGINEERS PTY LTD P. O BOX 1543 BAULKHAM HILLS NSW 1755	At	38 Undercliff Road Freshwater NSW 2096	Date August 2020	Scale As Shown @ A1
A Development Application Issue Description	14 Aug. 2020 Date	Accı (Cat	IntPE(Aus) (Reg. No. 2206352) RPEQ Accredited Certifier (Cat. C1-C4, C6 & C15) (Reg. No. BPB0827)	S THE STATE OF THE	F: (02) 8807 5656 M: 0433 778 109 E: ken@ingengineers.com.au	Client	Project No. 247082020DA	Drawing & Sheet No./Issue 24708-01/4 / C	



ROOF PLAN

SCALE 1:200





NOT FOR CONSTRUCTION



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С	Architectural Revisions	1 Nov. 2020
В	Architectural Refinements and Landscaping	8 Sept. 2020
Α	Development Application	14 Aug. 2020
Issue	Description	Date

Drawn & Designed by: K. Koh N. Evans Checked by:

(Reg. No. BPB0827)

Kenneth T. NG MIEAust CPEng NER APEC Engineer IntPE(Aus) (Reg. No. 2206352) RPEQ Accredited Certifier (Cat. C1-C4, C6 & C15)

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		VERIFY ALL DISCREPANCIES WITH PROTO TO PROCEEDING WITH ANY WORKS.	o not scale off drawings.			
Project	Proposed New Dwelling	Drawing Title Roof, First Floor and Garage Plan				
At	38 Undercliff Road Freshwater NSW 2096	Date Scale August 2020 As Sh	nown @ A1			
Client			& Sheet No./Issue 08-02/4 / C			

GENERAL NOTES

- THE CONTRACTOR MUST VERIFY ALL DIMENSIONS AND EXISTING LEVELS ON SITE PRIOR TO COMMENCEMENT OF
- ALL WORKS ARE TO BE CARRIED OUT TO THE DETAILS SHOWN ON THE DRAWINGS.
- THESE PLANS ARE READ IN CONJUNCTION WITH APPROVED ARCHITECTURAL, STRUCTURAL, HYDRAULIC AND
- MECHANICAL DRAWINGS AND SPECIFICATIONS. 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. DIAL 1100 BEFORE YOU DIG FOR LOCATION OF UNDERGROUND SERVICES PRIOR TO ANY
- CONSTRUCTION WORKS.
- 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.
- THESE DRAWINGS ARE ONLY APPROVED WHEN THEY ARE SIGNED WITH AN ORIGINAL SIGNATURE BY THE ENGINEER.

- ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH AS 3500 AND THE REQUIREMENTS OF THE LOCAL COUNCIL'S POLICIES AND CODES.
- ALL GUTTERS TO BE 100 x 75 MIN. AND DOWNPIPES TO BE 100 x 75 (76 DIA.) UNLESS OTHERWISE NOTED.
- ALL PIPES TO BE 100mm uPVC SEWER GRADE UNLESS NOTED OTHERWISE.
- ALL GRADIENTS FOR STORMWATER PIPES TO BE NOT LESS THAN 1.0% UNLESS NOTED OTHERWISE.
- 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.
- 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
- MINIMUM SLOPE FOR PAVED AREAS SHALL BE 0.5%, FOR LANDSCAPED AREAS MINIMUM SLOPE SHALL BE 1% AND
- GRADED TOWARDS THE GRATED PITS. ALL EXCAVATIONS WITHIN THE INFLUENCE OF BUILDINGS AND SERVICES SHALL BE UNDERTAKEN WITH THE
- KNOWLEDGE OF THE HYDRAULIC AND STRUCTURAL ENGINEER. THE DETENTION AND DRAINAGE SYSTEM SHALL BE MAINTAINED AT REGULAR INTERVALS AND THE CONTRACTOR
- SHALL MAKE NECESSARY ARRANGEMENTS. 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. PROVIDE STEP-IRONS 'MASCOT S1:104' OR SIMILAR STAGGERED TO GIVE SPACING 300 VERTICAL AND 220
- HORIZONTAL TO ALL PIT DEEPER THAN 1m.

SUITABLE AG-LINES SHALL BE PROVIDED AND CONNECTED TO STORMWATER SYSTEM OR AS INSTRUCTED BY THE ENGINEER ON SITE PRIOR TO BACKFILLING.

- 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.

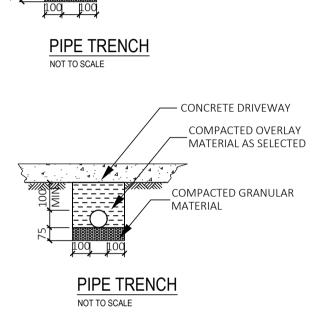
- THE RAINWATER TANKS MUST BE MAINTAINED AT ALL TIMES SO AS NOT TO CAUSE A NUISANCE WITH RESPE MOSQUITO BREEDING OR OVERLAND FLOW OF WATER.
- A SIGN MUST BE AFFIXED TO THE RAINWATER TANKS CLEARLY STATING THAT THE WATER IN THE TANKS IS
- RAINWATER.
- SUITABLE FOR DRINKING" ALL ROOF GUTTERS ARE TO BE FITTED WITH LEAF GUARDS AND INSPECTED REGULARLY AND CLEANED TO ENSURE

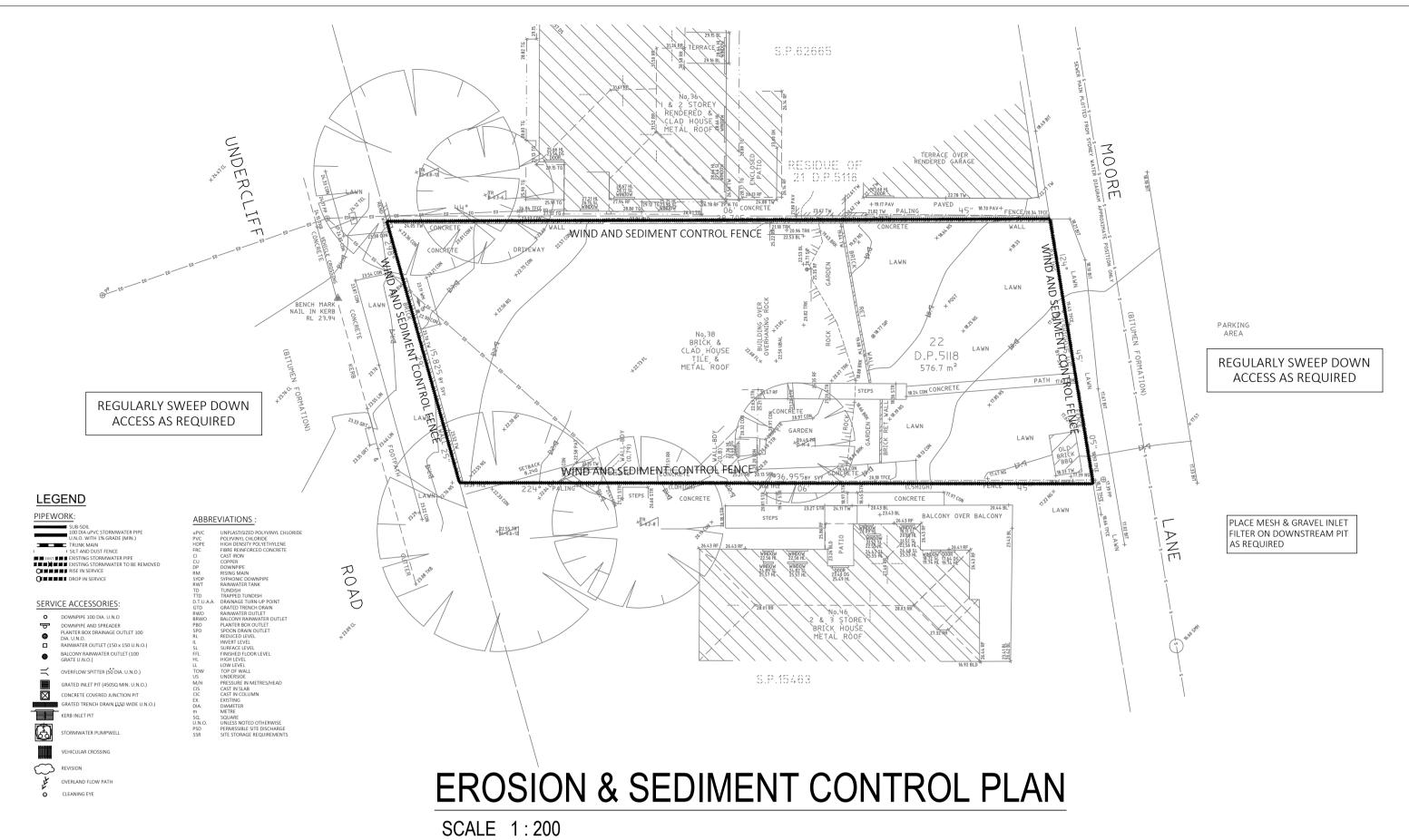
BOTH THE RE-USE AND ANY FITTINGS CONNECTED TO THE RAINWATER TANKS MUST BE LABELED "RAINWATER , NO

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- LEAF LITTER CANNOT ENTER THE DOWNPIPES.
- PRESSURE PUMP ELECTRICAL CONNECTION TO BE CARRIED OUT BY A LICENSED ELECTRICIAN.

Y-12-300 'Z' BARS 225mm MEDIUM DUTY GRATE-200 LEGS, 4Y12 GRATED DRAIN DETAIL - COARSE SAND 75 DIA. AG-PIPE IN BLUE METAL OR AS SELECTED · COMPACTED EXCAVATED SPOI MATERIAL AS SELECTED COMPACTED GRANULAR PIPE TRENCH MATERIAL AS SELECTED COMPACTED GRANULAR





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 CREAT THE PARKS. 27. THE PARKS.

CONSTRUCTION NOTES

FABRICATE A SLEEVE MADE FROM GEOTEXTILE SELF-SUPPORTING GEOTEXTILE OR WIRE MESH LONGER THAN THE LENGTH OF 1.5m STAR PICKETS AT FABRIC TIED TO PICKET POSTS AND THE INLET PIT MAX. 3m CENTRE OR WIRE MESH 2. FILL THE SLEEVE WITH 25mm TO 50mm GRAVEL. 3. FORM AN ELLIPTICAL CROSS-SECTION ABOUT 150mm HIGH x 400mm WIDE. 4. PLACE THE FILTER AT THE BEGINNING OF THE KERB INLET LEAVING A 100mm GAP AT THE TOP **DIRECTION OF FLOW** TO ACT AS AN EMERGENCY SPILLWAY. MAINTAIN THE OPENING WITH SPACER BLOCKS. FORM A SEAL WITH THE KERBING AND PREVENT ÖN SOIL, 150mm x 100mm SEDIMENT BYPASSING THE FILTER. TRENCH WITH COMPACTED FIT TO ALL KERB INLETS AT SAG POINTS BACKFILL AND ON ROCK SET INTO SURFACE WITH CONCRETE -OVERFLOW **SECTION VIEW** TIMBER SPACER **RUNOFF WATER** WITH SEDIMENT **SEDIMENT** DIRECTION OF FLOW. 1.5m STAR PICKETS · water AT MAX. 3m CENTRE GRAVEL-FILLED WIRE MESH **SECTION VIEW** OR GEOTEXTILE 'SAUSAGE' GRAVEL-FILLED WIRE MESH SEDIMENT CONTROL FENCE OR GEOTEXTILE 'SAUSAGE MESH AND GRAVEL INLET FILTER

EROSION AND SEDIMENT CONTROL

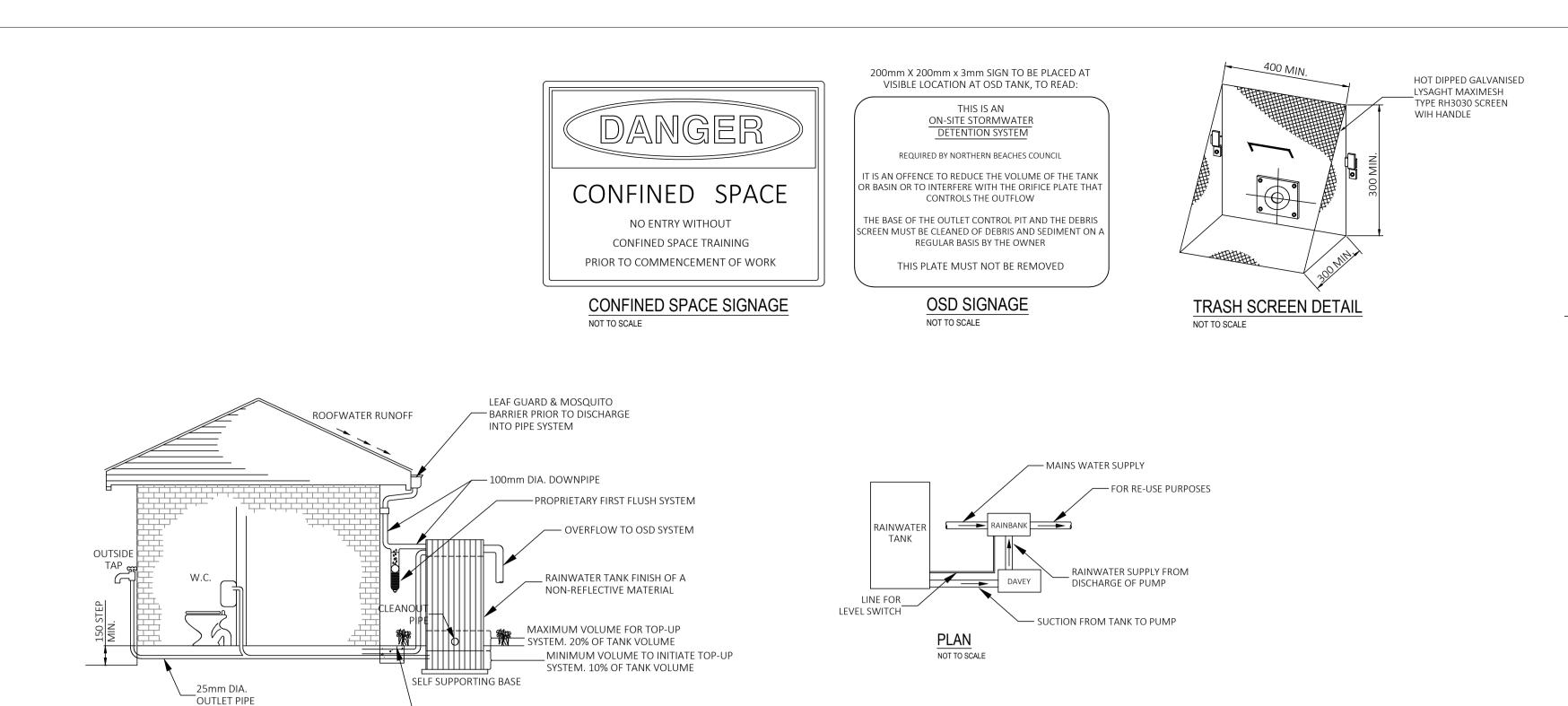
- THE NOTES AND MEASURES STATED HEREAFTER SHALL BE READ IN CONJUNCTION WITH THE NSW PUBLICATION "MANAGING URBAN STORMWATER, SOILS & CONSTRUCTION, FOURTH EDITION 2004 VOLUME 1" PREPARED BY LANDCOM. PARTICULAR ATTENTION SHALL BE PAID TO CHAPTERS 6 & 8.
- EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN PLACE PRIOR AND DURING THE CONSTRUCTION PERIOD. THESE CONTROL MEASURES SHALL BE INSPECTED AND MAINTAINED REGULARLY BY THE CONTRACTOR TO ENSURE THE EFFECTIVES OF THE SYSTEM, ESPECIALLY
- ALL NECESSARY WORKS SHALL BE CARRIED OUT TO PREVENT EROSION, CONTAMINATION AND SEDIMENTATION OF THE PROJECT SITE AND ADJACENT PROPERTIES AND DRAINAGE SYSTEMS.
- 4. MINIMISE DISTURBED AREAS COVERED WITH NATURAL VEGETATION, ONLY THOSE AREAS DIRECTLY REQUIRED FOR CONSTRUCTION ARE TO BE DISTURBED
- DIVERT CLEAN WATER FROM UNDISTURBED AREAS AROUND THE WORKING AREAS.
- ADOPT TEMPORARY MEASURES AS MAY BE NECESSARY FOR EROSION AND SEDIMENT
- CONTROL, INCLUDING BUT NOT LIMTED TO THE FOLLOWING
- DRAINS CONSTRUCT TEMPORARY DRAINS AND CATCH DRAINS CONSTRUCT SPREADER BANKS OR OTHER STRUCTURES - DISPERSE CONCENTRATED
- SILT TRAPS CONSTRUCT AND MAINTAIN SILT TRAPS TO PREVENT DISCHARGE OF SCOURED MATERIAL TO DOWNSTREAM AREAS
- TEMPORARY FENCING CONSTRUCT, MAINTAIN AND KEEP IN GOOD REPAIR ALL SILT AND WIND FENCES. CHECK AND CLAEN FENCES FOLLOWING RIN AND STORM EVENTS
- REMOVE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES WHEN THEY
- ARE NO LONGER REQUIRED ALL DISCOLOURED WATER SHALL BE TREATED TO EPA TANDARDS PRIOR TO DICHARGE
- OFF SITE, OR ALTERNATIVELY REMOVED BY TANKER WITH A LICENSED TRADE WASTE
- ALL STORMWATER INLET PITS ARE TO BE PROTECTED FILTER FABRIC DROP INLET SEDIMENT TRAPS OR GRAVEL SAUSAGE, WHICH IS BLUE METAL WRAPPED IN GEOTEXTILE FABRIC.
- STOCKPILED MATERIALS SHALL BE KEPT WITHIN THE SITE BOUNDARIES IN A POSITION NOT **VULNERABLE TO CONCENTRATED SURFACE RUNOFF**

DUST CONTROL

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

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

Designed By Drawing Title **Erosion & Sediment** Drawn & Designed by: K. Koh ING CONSULTING Proposed New Dwelling Control Plan, Notes & Details N. Evans Checked by: **ENGINEERS PTY LTD** 38 Undercliff Road Architectural Revisions Date Scale 1 Nov. 2020 P. O BOX 1543 As Shown @ A1 Kenneth T. NG August 2020 Approved by: Freshwater NSW 2096 Architectural Refinements and Landscaping 8 Sept. 2020 BAULKHAM HILLS NSW 1755 MIEAust CPEng NER APEC Engineer IntPE(Aus) (Reg. No. 2206352) RPEQ F: (02) 8807 5656 Client Project No. Drawing & Sheet No./Issue Development Application 14 Aug. 2020 **Accredited Certifier** M: 0433 778 109 247082020DA 24708-03/4 / C (Cat. C1-C4, C6 & C15) Issue Description Date E: ken@ingengineers.com.au (Reg. No. BPB0827)



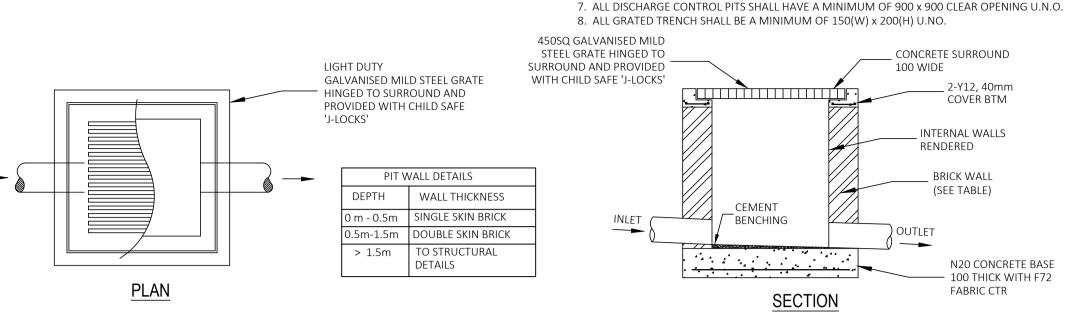
_GARDEN/LAWN AREA REQUIRED UNDER DIVERSION

3,000L RAINWATER TANK (SCHEMATIC) DETAILS

PIPE TO ALLOW FOR FURTHER ABSORPTION

INSTALLATION OF TANKS TO BE IN ACCORDANCE

WITH MANUFACTURER'S SPECIFICATIONS



TYPICAL INLET PIT DETAIL

SPS TRUFLO & SUPERFLO DOME GRATE RWO (2-PIECE DOME GRATE, MEMBRANE CLAMP)

1. PROVIDE LIGHT DUTY GRATES FOR NON VEHICULAR TRAFFICKED AREAS.

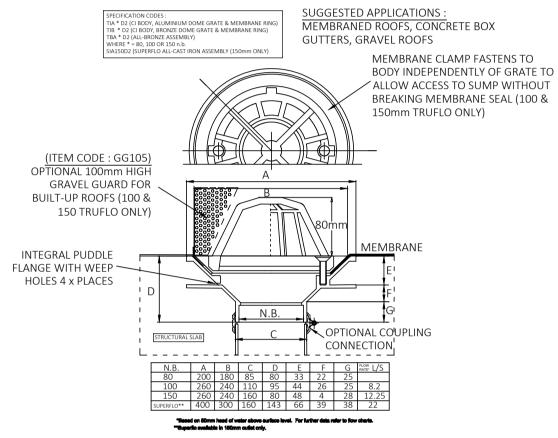
4. PROVIDE 600 x 600 CLEAR OPENING FOR PIT DEPTHS UP TO 900mm U.N.O.

5. PROVIDE 900 x 900 CLEAR OPENING FOR PIT DEPTHS GREATER THAN 900mm U.N.O.

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.

6. ALL REINFORCED CONCRETE PIPES SHALL BE OF RUBBER RING JOINTS



SPECIALITY PLUMBING SUPPLIES PTY LTD

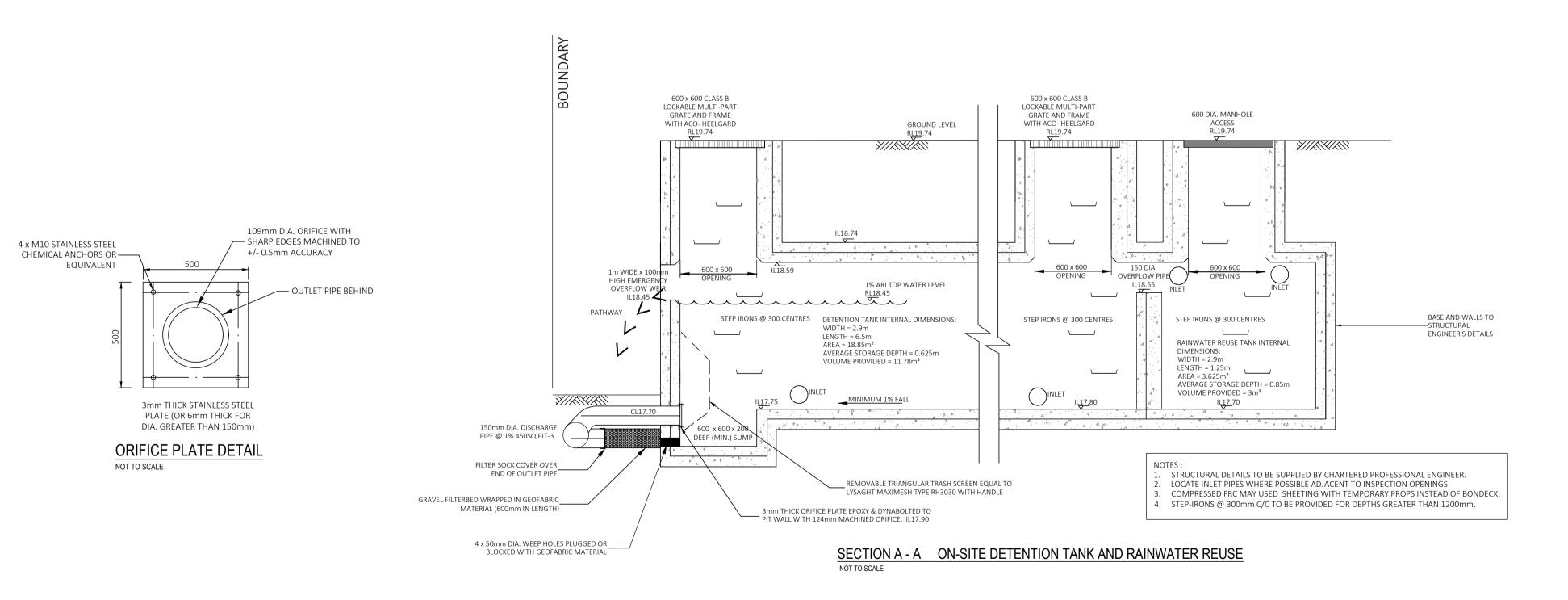
TEL: (02) 9416 8031 FAX: (02) 9416 7614 E-MAIL: SPS@BIGPOND.NET.AU

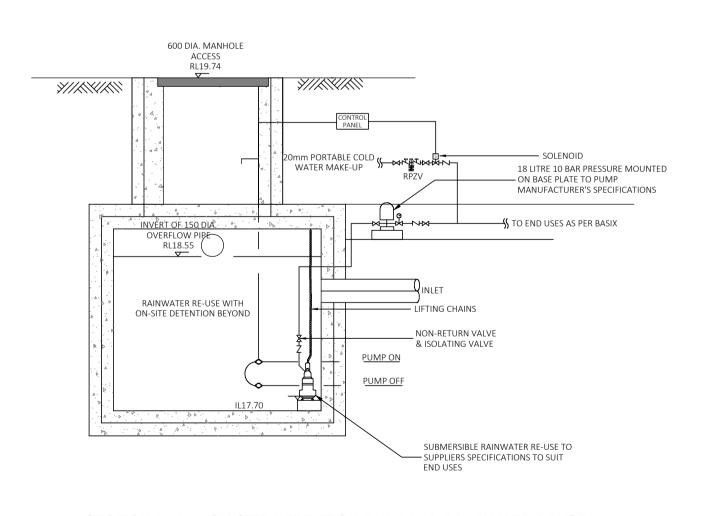
ROOF RAINWATER OUTLET (RWO) 100 TRUFLOW

NOT TO SCALE

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SECTION B - B ON-SITE DETENTION TANK AND RAINWATER REUSE

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C Architectural Revisions	1 Nov. 2020	Checked by:	N. Evans	ENGINEERS PTY LTD	At 38 Undercliff Road	Date	Scale
B Architectural Refinements and Landscaping		Approved by:	Kenneth T. NG MIEAust CPEng NER APEC Engineer IntPE(Aus) (Reg. No. 2206352) RPEQ		Freshwater NSW 2096	August 2020	As Shown @ A1
A Development Application	14 Aug. 2020		Accredited Certifier	F: (02) 8807 5656 M: 0433 778 109	Client		Drawing & Sheet No./Issue
Issue Description	Date		(Cat. C1-C4, C6 & C15) (Reg. No. BPB0827)	E: ken@ingengineers.com.au		247082020DA	24708-04/4 /C