PROPOSED RESIDENCE 143 - 145 HIGHLAND AVENUE, YAGOONA

GENERAL

- 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 the Contract. Art discrepancies shall be referred to the Superintendent before proceeding with any relative works. Construction from these drawings, and their associated consultant's drawings is not to comment until approved by the Local Authontities. G1
- 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
- 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. 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 tende
- All services, or conduits for servicing shall be installed prior to commencement of pavement construction. G8
- 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
- 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

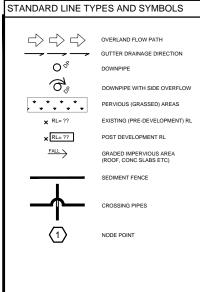
DRAINAGE NOTES

- All drainage levels to be confirmed on site, prior to any construction com
- 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 dury for landscaped areas Heavy dury where subjected to vehicular traffic
- All pits within the property to be constructed as one of the following: 2) Cast instrumass concrete 3) Cement rendered 230mm brickwork subject to the relevant local authority construction specifica
- 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 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

- 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 Usualizate to the site shall be permitted when that in the infinedule area on the works and no material shall be removed from the site without the relevant local authority approval. All derosion and sediment control devices to be installed and maintained in accordance with standards outlined in nsw department of housing's "managing intern stormwater, solis and constructions".
- 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 to of the distluted batter, uno. E3
- E4 Council approved filter fabric to be entrenched 150mm deep upslope towards disturbed surface. Fabric to be s animimum 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.
- Stabalised 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 if's function is not compromised. Construction of entry/exit point to be in accordance with the detail contained within this drawing set. E5
- E6 All drainage pipe inlets to be capped until: - downpipes connected - nits constructed and protected with silt barrier
- E6 Provide and maintain silt traps around all surface inlet pits until catchment is revegetated or paved.
- The contractor shall regularly maintain all erosion and sediment control devices and remove accumulated from such devices such that more than 60% of their capacity is lost. All the sill is to be placed outside th 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 respond later on areas to be revegetated and stabilised only, (i.e. all footpaths, batters, site regarding areas, basins and catchdrains). Topsoli 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 ension 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 _____ ss _____ 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 _____т _____ TELECOMUNICATION CONDUIT _____ G _____ GAS MAIN — w WATER MAIN _____s ____ SEWER MAIN _____v ___ UNDERGROUND ELECTRICITY CABLES PERMANENT MARK & S.S.M. A A BENCH MARK, SURVEY STATION



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 GSIP	Grated drain Grated surface inlet pit		
HED	High early discharge		
HP	High early discharge High point of gutter		
HP II	Invert level		
10	Inspection opening		
0/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		

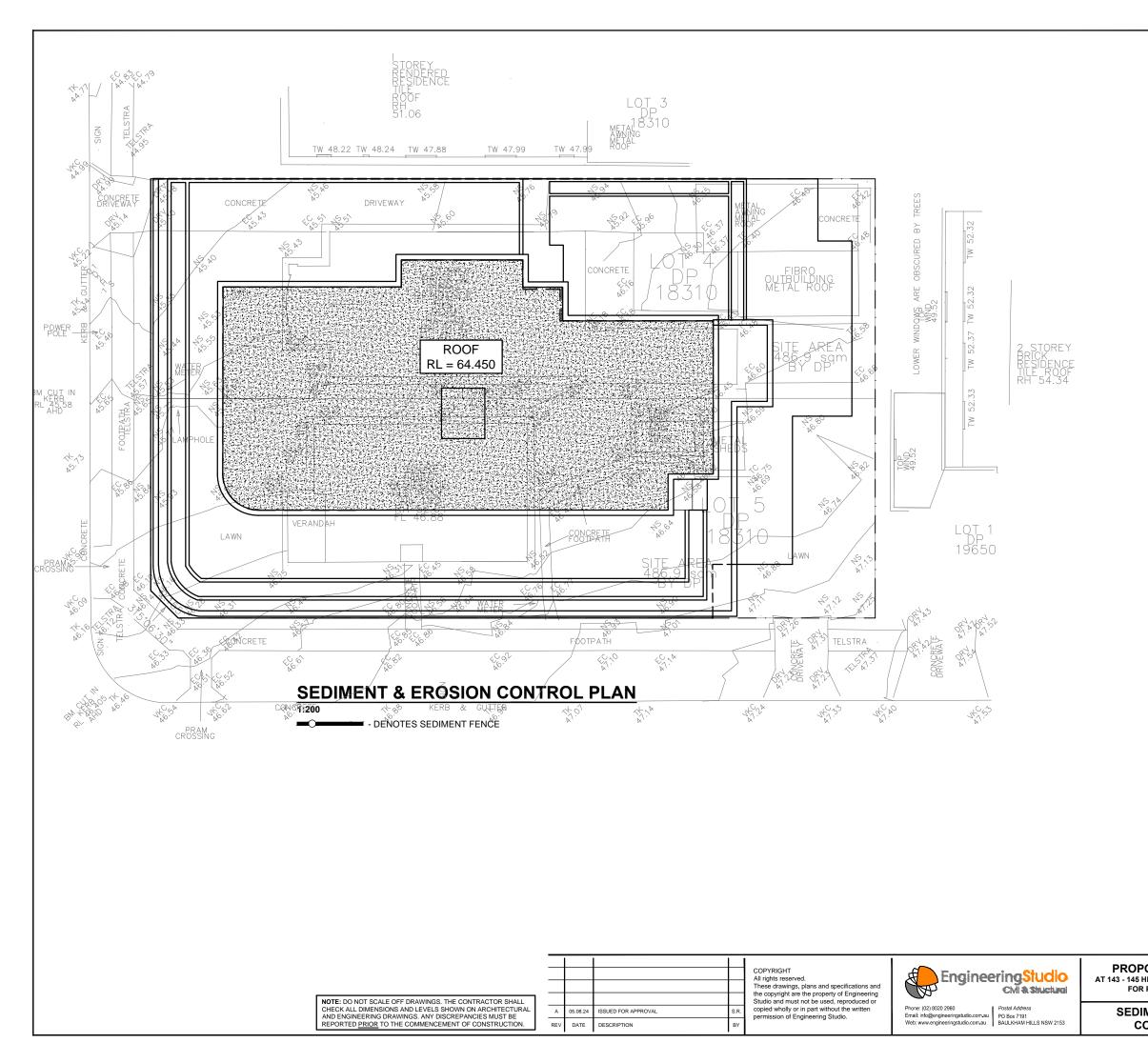
RECOMMENDED MAINTENANCE SCHEDULE						
DISCHARGE CONTROL PIT (DCP)	FREQUENCY	RESPONSIBILITY	PROCEDURE			
Inspect flap valve and remove any blockage.	Six monthly	Owner	Remove grate. Ensure flap valve moves freely and remove any blockages or debris.			
Inspect screen and clean.	Six monthly	Owner	Revove 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 blockage.	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.			

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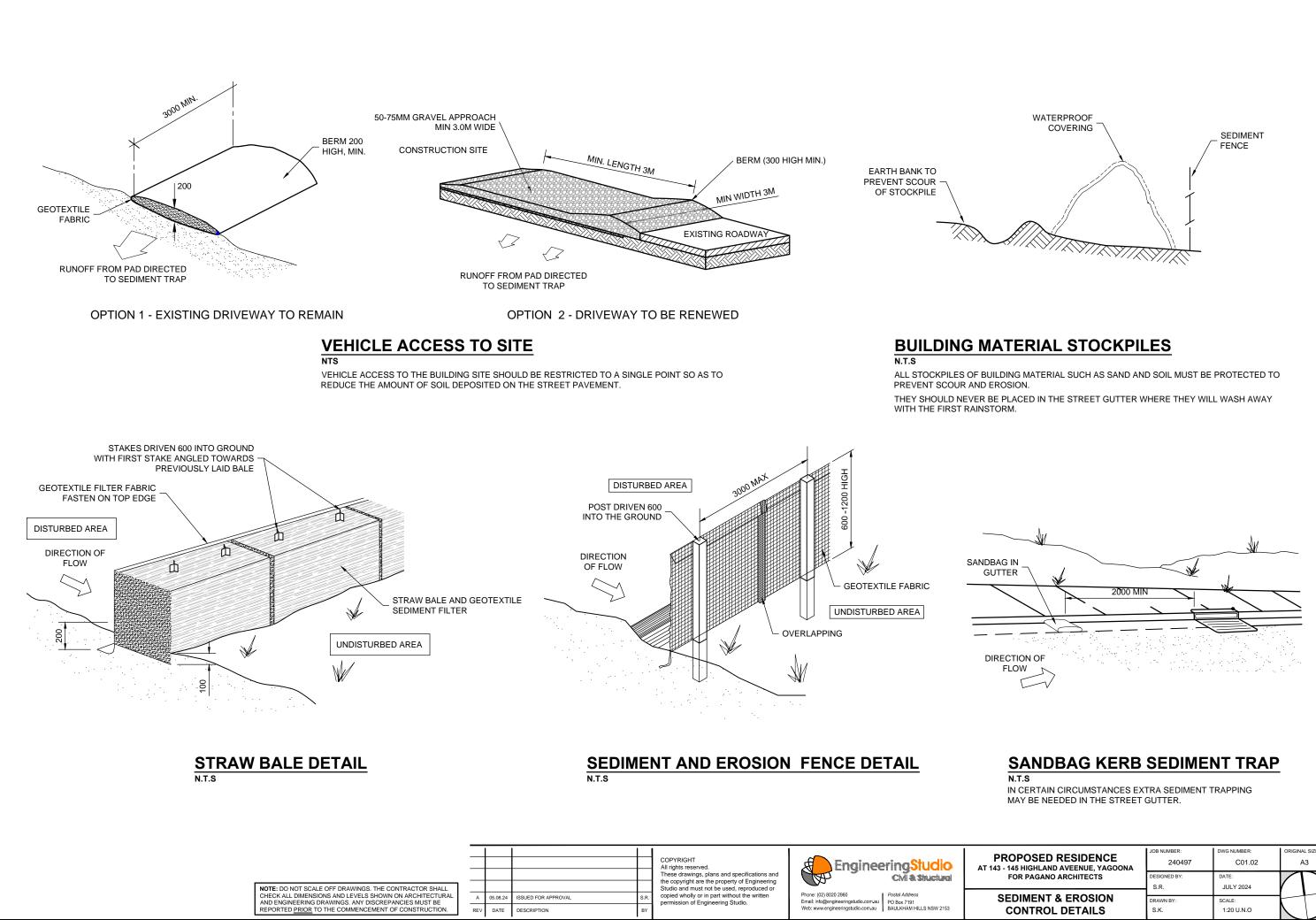
EngineeringStudio (B) CM & Shuckurg Phone: (02) 8020 2960 Postal Addres Phone: (02) 8020 2960 Postal Address Email: info@engineeringstudio.com.au PO Box 7191 BAULKHAM HILLS NSW 2153



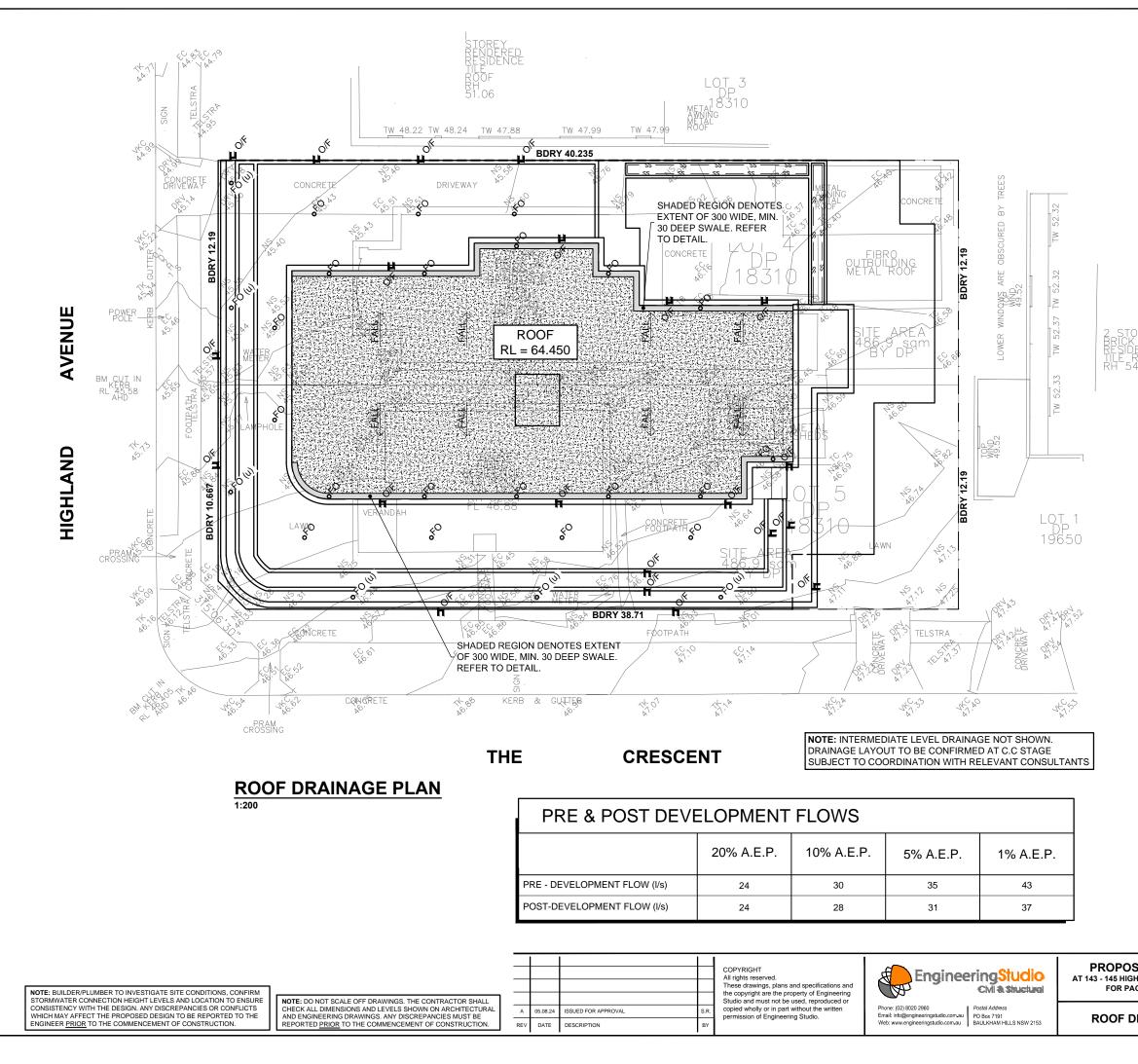
OPOSED RESIDENCE	JOB NUMBER:	DWG NUMBER:	ORIGINAL SIZE:	
	240497	C00.01	A3	
145 HIGHLAND AVEENUE, YAGOONA	DESIGNED BY:	DATE:	$ \land \land$	
FOR PAGANO ARCHITECTS	S.R.	JULY 2024		
GENERAL NOTES	DRAWN BY: S.K.	SCALE: N.T.S		



POSED RESIDENCE	JOB NUMBER:	DWG NUMBER:	ORIGINAL SIZE:	
HIGHLAND AVEENUE, YAGOONA	240497	C01.01	A3	
R PAGANO ARCHITECTS	DESIGNED BY: S.R.	DATE: JULY 2024	$\langle \rangle$	
MENT & EROSION	DRAWN BY:	SCALE:		
ONTROL PLAN	S.K.	1:200 U.N.O		

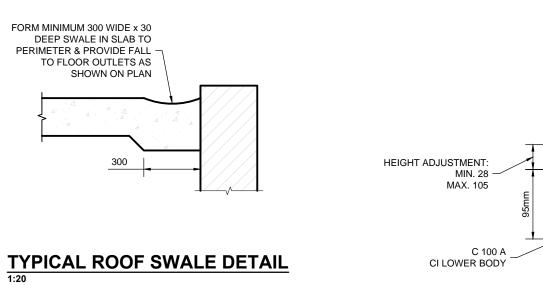


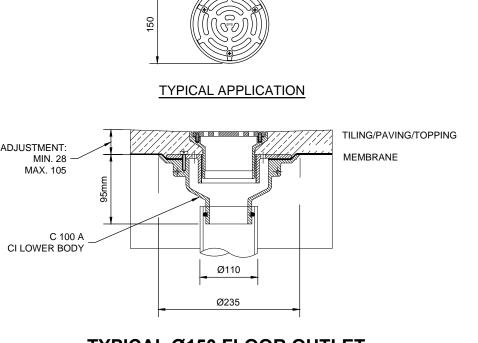
POSED RESIDENCE	JOB NUMBER:	DWG NUMBER:	ORIGINAL SIZE:	
HIGHLAND AVEENUE, YAGOONA	240497	C01.02	A3	
R PAGANO ARCHITECTS	DESIGNED BY: S.R.	DATE: JULY 2024	$ \land $	
IMENT & EROSION	DRAWN BY:	SCALE:		
INTROL DETAILS	S.K.	1:20 U.N.O		



	STORMWA	TER DESIGN SUMMAR	Y
	COUNCIL: CAN 100 YEAR, 5 MIN 20 YEAR, 5 MIN		CIL = 201 mm/hr = 160 mm/hr
	TOTAL SITE AR	EA	= 979.9 m ²
	TOTAL IMPERV	OF AREA ATHS & DRIVEWAYS IOUS SITE AREA TE PERCENTAGE	= 890.3 m ² = 0.0 m ² = 890.3 m ² = 90.90 %
	GROUND ON-SI COUNCIL SPEC	ED ROOF AREA DIRECTED TO 5 TE DETENTION TANK IN ACCO IFICATIONS. ORIFICE OUTLET RECTED TO STREET KERB AND	RDANCE WITH AND HIGH LEVEL
	ON-SITE DI	ETENTION DESIGN SU	MMARY
	IN ACCORDANC DEVELOPMENT ENGINEERING 3 MULTI-DWELLIN REGARDLESS 0 THE DEVELOPM FALLS TOWARD	TION REQUIRED FOR PROPOS CE WITH "CANTERBURY-BANKS CONTROL PLAN CHAPTER 3.1 STANDARDS, CLAUSE 4.2" WHI NG DEVELOPMENT WILL REQUI OF THE IMPERVIOUS AREA BEF MENT, AND REGARDLESS OF W O OR TO THE STREET.	TOWN DEVELOPMENT CH STATES THAT RE OSD ORE AND AFTER
ENCE ROOF 1.34	DEVELOPMENT RUNOFF. VOLU CALCULATED B RUNOFF FOR A UP TO THE 100 SUMMARY TAB	EL HAS BEEN PREPARED TO A AND POST DEVELOPMENT ST ME REQUIRED FOR DETENTIOI Y LIMITING THE POST TO PRE LL STORM EVENTS FROM THE YEAR ARI STORM EVENT. REFI LE BELOW. AN ELECTRONIC CO LABLE UPON REQUEST.	ORMWATER N PURPOSES DEVELOPMENT 1 YEAR ARI STORM ER TO FLOW
	DETERMINED S	ITE STORAGE REQUIREMENT	= 4.82 m ³
	MAXIMUM HEAD	D TO ORIFICE CENTRELINE	= 1.65 m
	DETERMINED C	RIFICE DIAMETER	= 125 mm
	TOTAL SITE ST	ORAGE PROVIDED IN TANK	= 5.00m ³
	STORMWA	TER DRAINAGE NOTE	S
	STORMWATEI - ALL DRAINAG - FIRST FLUSH	E LINES SHALL BE uPVC (CLAS R DRAINAGE PIPE, U.N.O. E LINES SHALL BE LAID @ 1% I RAINWATER DEVICES TO BE F NES TO BUILDER'S DETAIL, TYP	FALL MIN, U.N.O. ITTED TO
	LEGEND		
	X 100.00	PROPOSED FINISHED SURFAC	CE LEVEL
	4 ⁰	Ø150 FLOOR OUTLET	
	OF	200W x 75D SIDE OVERFLOW	OPENING
	ss	SUBSOIL DRAINAGE LINE	

POSED RESIDENCE HIGHLAND AVEENUE, YAGOONA	JOB NUMBER: 240497	DWG NUMBER: C02.01	ORIGINAL SIZE:	
R PAGANO ARCHITECTS	DESIGNED BY: S.R.	DATE: JULY 2024	$ \land $	
F DRAINAGE PLAN	DRAWN BY: S.K.	SCALE: 1:200 U.N.O	$\overline{7}$	

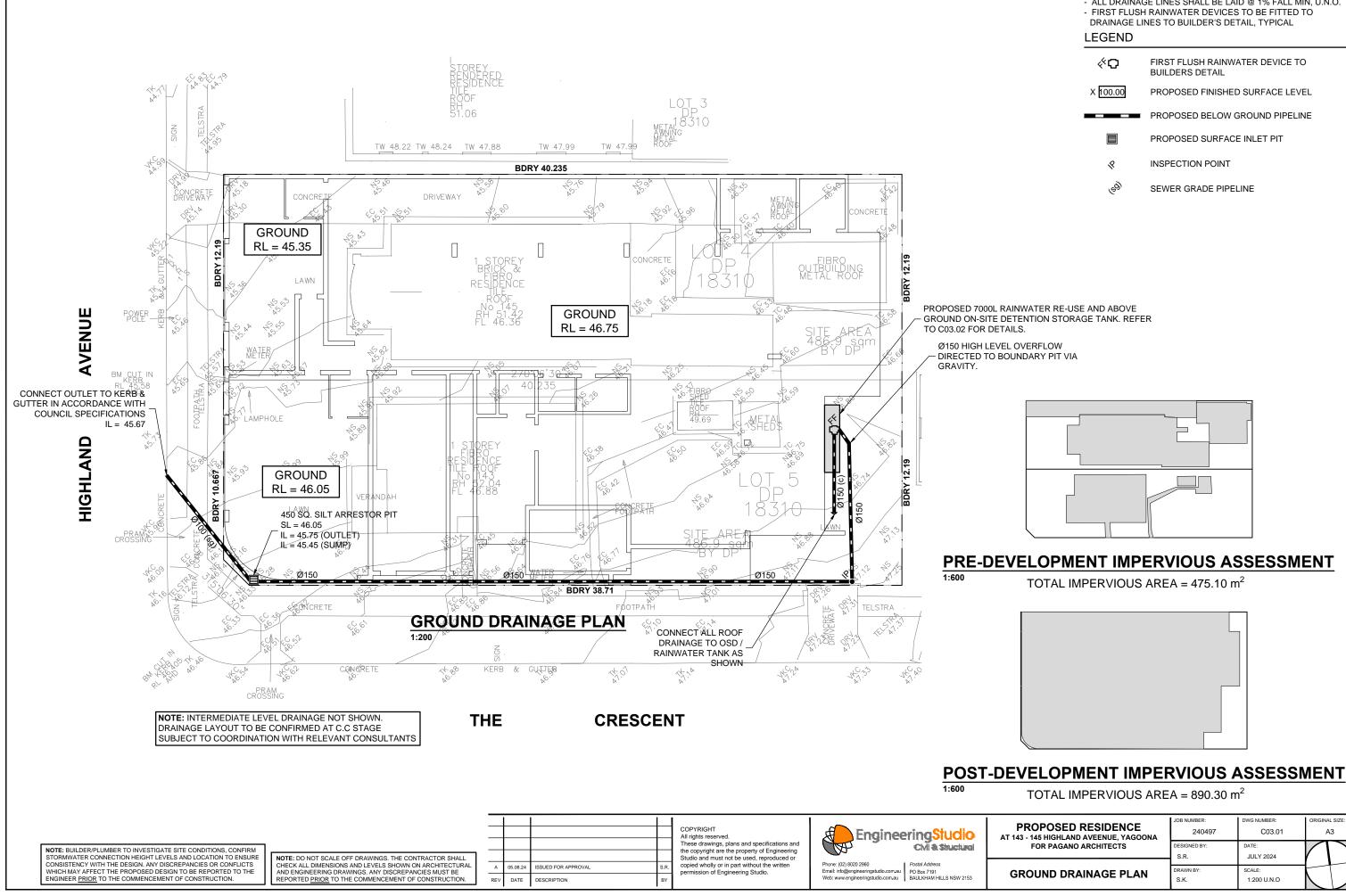




TYPICAL Ø150 FLOOR OUTLET 1:5 SPECIFICATION CODE: R 150 G/C (BRONZE GRATE, CI LOWER BODY) R150 N/C (NICKEL - BRONZE GRATE, CI LOWER BODY) R150 S/C (316 STAINLESS STEEL GRATE, CI LOWER BODY)

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CHECK ALL DIMENSIONS AND LEVELS SHOWN ON ARCHITECTURAL AND ENGINEERING DRAWINGS, ANY DISCREPANCIES MUST BE	Α	05.08.24	ISSUED FOR APPROVAL	S.R.	copied wholly or in part without the written permission of Engineering Studio.	Phone: (02) 8020 2960 Email: info@engineeringstudio.com.au	Postal Address PO Box 7191	R
REPORTED PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.	REV	DATE	DESCRIPTION	BY	· · · · · · · · · · · · · · · · · · ·	Web: www.engineeringstudio.com.au	BAULKHAM HILLS NSW 2153	

PROPOSED RESIDENCE AT 143 - 145 HIGHLAND AVEENUE, YAGOONA	JOB NUMBER: DWG NUMBER: ORIGINAL 240497 C02.02 A:		
FOR PAGANO ARCHITECTS	DESIGNED BY: S.R.	DATE: JULY 2024	\square
OOF DRAINAGE DETAILS SHEET	DRAWN BY: S.K.	SCALE: 1:20 U.N.O	



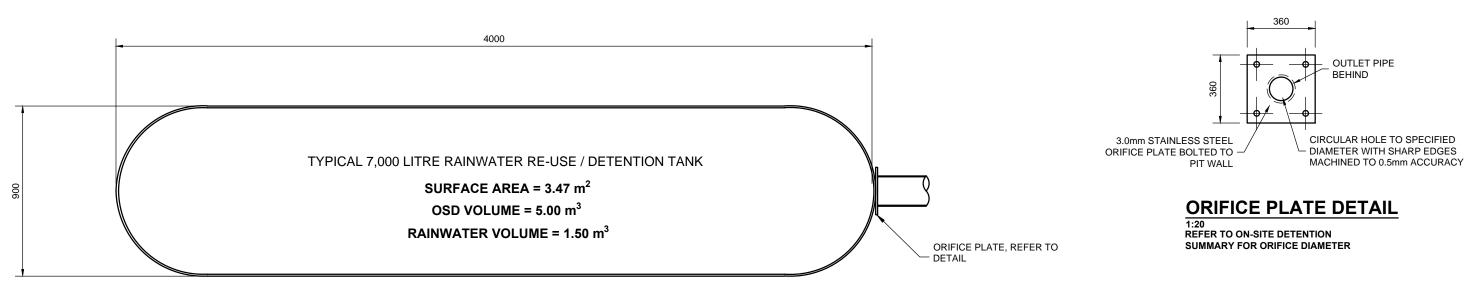
STORMWATER DRAINAGE NOTES

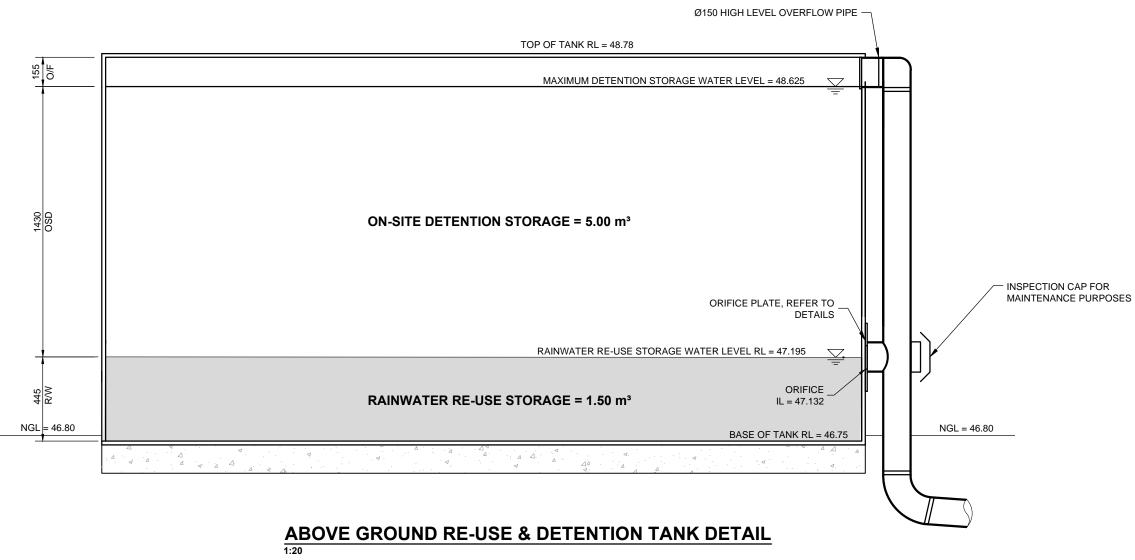
- ALL DRAINAGE LINES SHALL BE uPVC (CLASS SH) STORMWATER DRAINAGE PIPE, U.N.O. - ALL DRAINAGE LINES SHALL BE LAID @ 1% FALL MIN, U.N.O.

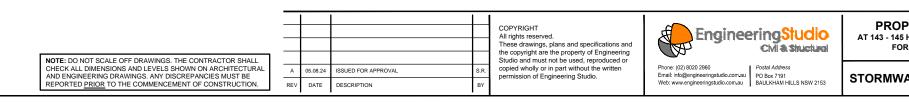
- FIRST FLUSH RAINWATER DEVICES TO BE FITTED TO

LEGEND	
¢Φ	FIRST FLUSH RAINWATER DEVICE TO BUILDERS DETAIL
X 100.00	PROPOSED FINISHED SURFACE LEVEL
	PROPOSED BELOW GROUND PIPELINE
	PROPOSED SURFACE INLET PIT
*	INSPECTION POINT
63)	SEWER GRADE PIPELINE

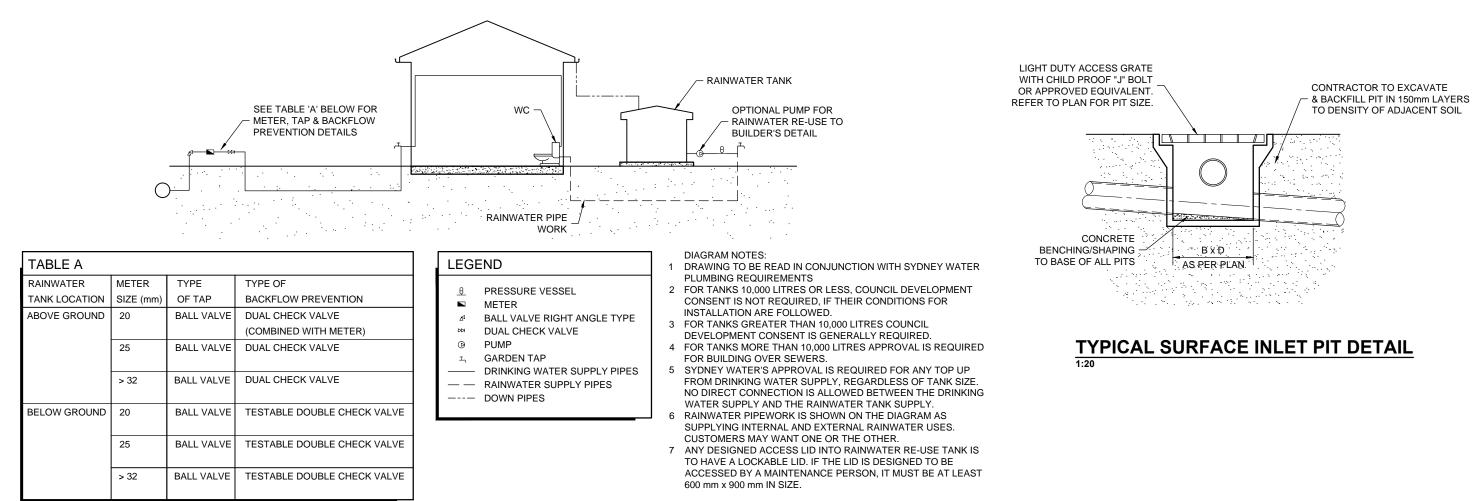
POSED RESIDENCE	JOB NUMBER: 240497	DWG NUMBER: C03.01	ORIGINAL SIZE: A3	
PAGANO ARCHITECTS	DESIGNED BY: S.R.	DATE: JULY 2024	\square	
ND DRAINAGE PLAN	DRAWN BY: S.K.	SCALE: 1:200 U.N.O		





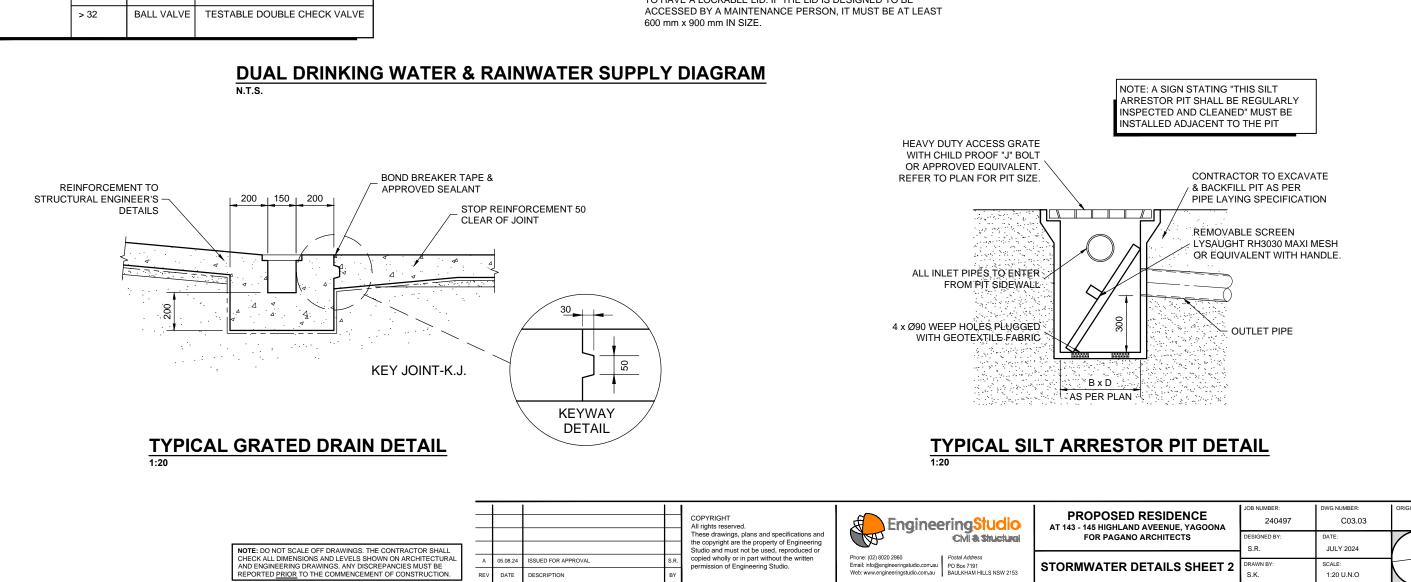


POSED RESIDENCE HIGHLAND AVEENUE, YAGOONA	JOB NUMBER: 240497	DWG NUMBER: C03.02	ORIGINAL SIZE:	
PAGANO ARCHITECTS	DESIGNED BY: S.R.	DATE: JULY 2024	\square	
ATER DETAILS SHEET 1	DRAWN BY: S.K.	SCALE: 1:20 U.N.O		



REV DATE DESCRIPTION





POSED RESIDENCE HIGHLAND AVEENUE, YAGOONA R PAGANO ARCHITECTS	JOB NUMBER: 240497	DWG NUMBER: C03.03	ORIGINAL SIZE: A3
	DESIGNED BY: S.R.	DATE: JULY 2024	\square
ATER DETAILS SHEET 2	DRAWN BY: S.K.	SCALE: 1:20 U.N.O	