

20 QUIGG STREET NORTH LAKEMBA

Con Katsoulas
BE (Civil), MIEAust, CPEng No. 449924

SHEET INDEX:

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FOR DA APPROVAL


LEGEND

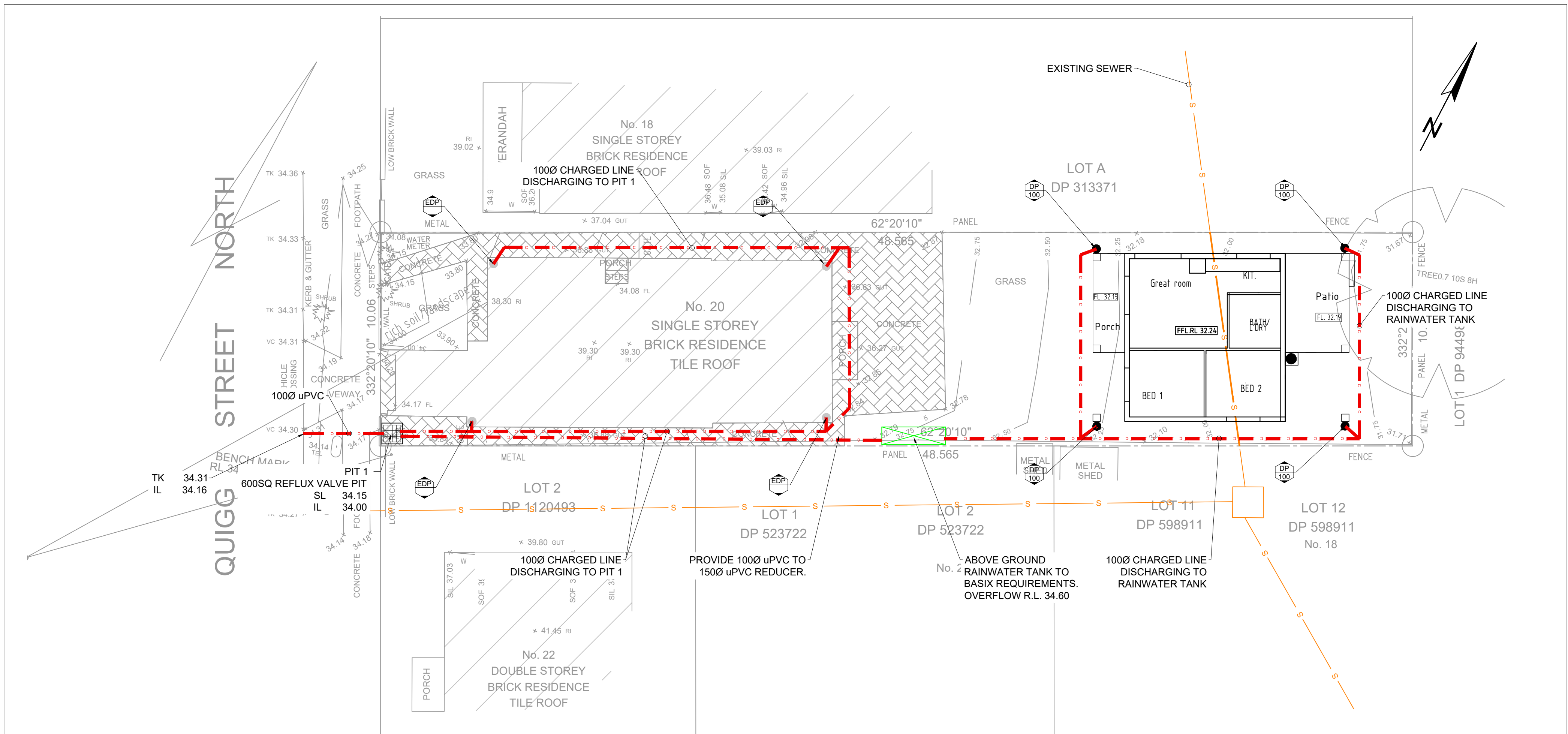
	FLOWPATH	5.
	FLOOR WASTE	6.
	FLOW SPREADER AND DOWNPIPE TYPE 2	7.
	PROPOSED GRATED PIT	8.
	PROPOSED SEALED WATER TIGHT PIT	
	PROPOSED STORMWATER PIPE - GRAVITY	
	PROPOSED V-DRAIN	9.
	PROPOSED STORMWATER PIPE - CHARGED	10.
	PROPOSED RISING MAIN (PRESSURE PIPE)	
	PROPOSED SUBSOIL DRAIN	
	PROPOSED BUILDING	11.
	PROPOSED BASEMENT CHANNEL	12.
	RAINHEAD	13.
	SUMP OVERFLOW	
IL 4.65	PIT INVERT LEVEL	
	GRATED DRAIN	
+ 48.34	EXISTING SURFACE LEVEL	
+ 30.99	PROPOSED SURFACE LEVEL	
o IP	SEALED INSPECTION OPENING	
● DP-1	DOWNPIPE - TYPE 1	
	BASIX ROOF AREA DRAINING TO RAINWATER TANK	
	AREA BYPASSING ON-SITE DETENTION TANK	

NOTES:

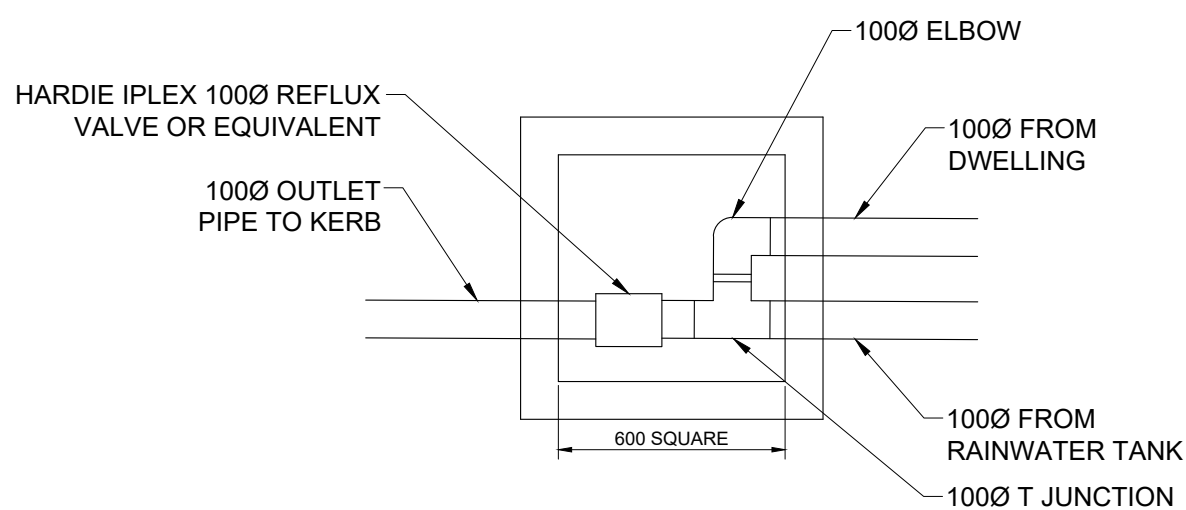
1. ALL PROPOSED PITS TO BE 450 x 450 CAST IN-SITU OR PRECAST PITS UNLESS SHOWN OTHERWISE.
2. ALL CHARGED LINE PIPES TO BE 100Ø uPVC SEWER CLASS UNLESS SHOWN OTHERWISE
3. ALL DOWNPIPES TO BE 90Ø uPVC OR 100 x 50 UNLESS OTHERWISE SHOWN
4. ALL NON-PRESSURE STORMWATER PIPES TO BE 100Ø uPVC UNLESS SHOWN OTHERWISE
5. ALL GRATED DRAINS TO BE MINIMUM 150 WIDE GALVANIZED HEAVY DUTY GRATES.
6. ALL NON-TRAFFICABLE PITS TO BE LIGHT DUTY. PITS IN TRAFFICABLE AREAS TO BE HEAVY DUTY.
7. ALL WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH COUNCILS SPECIFICATIONS.
8. ALL PITS GREATER THAN 1.2m DEPTH SHALL INCLUDE STEP IRONS AND HAVE MINIMUM CLEAR DIMENSIONS OF 600 x 600.
9. ALL PITS ARE TO BE BENCHED TO ALLOW SMOOTH FLOW OF WATER THROUGH PITS
10. ALL DOWNPIPES SHALL CONFORM TO AS/NZS 1866 FOR ALUMINIUM PIPES AND AS 1254, AS/NZS 1260, AS 1273, AS/NZS 1477, AS/NZS 2179.2 AND AS 2032 FOR uPVC PIPES.
11. ALL BOX GUTTERS SHALL COMPLY WITH AS/NZS 2179.1
12. ALL BOX GUTTERS SHALL BE CONSTRUCTED WITH A MINIMUM 1:200 GRADE TO SUMP/DOWNPIPES
13. ALL DRAINAGE WORKS SHALL BE IN ACCORDANCE WITH AS 3500.3.2

DOWNPIPE TYPE	DOWNPIPE SIZES	
	ROUND	RECTANGULAR
1	90Ø	100 X 75
2	100Ø	100 X 75
3	125Ø	100 X 100
4	150Ø	150 X 150

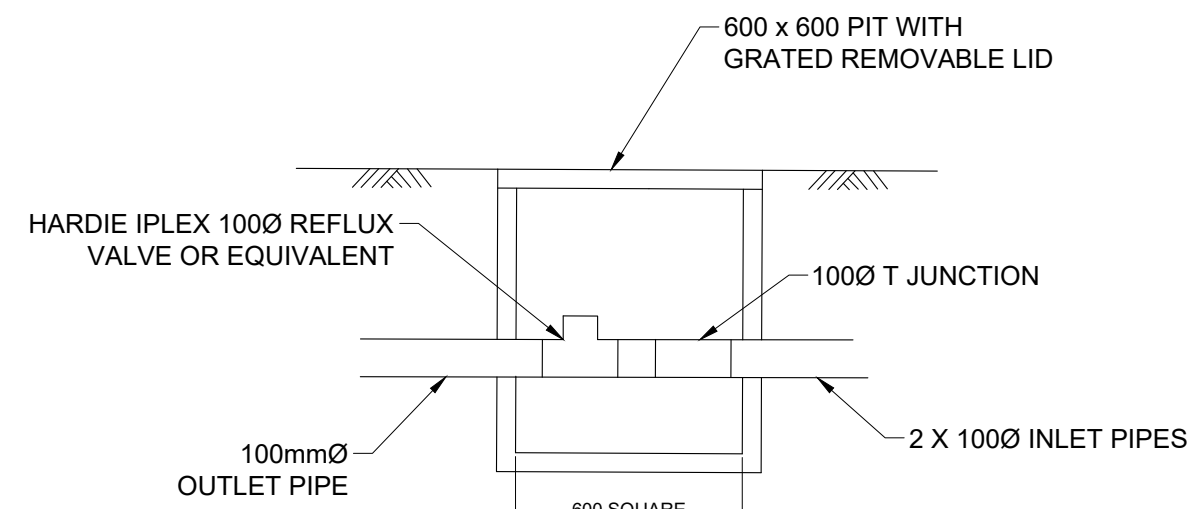
SURVEYOR ENSURE CONSULTING PTY LTD		0	DA ISSUE		11/07/24				C.K. ENGINEERING SERVICES ABN : 67 115 216 496 49 FLORA ST ROSELANDS, NSW 2196 MOB: 0403 329 327 EMAIL: ckatsoulas@gmail.com	CLIENT: VINH NGUYEN BROS & ASSOC PTY LTD	DRAWING TITLE: INDEX	DRAWN: S.C.	SIGNED: 	DATE: JULY 2024	
ARCHITECT VINH NGUYEN BROS & ASSOC PTY LTD								DESIGNED: C.K.				SCALE: AS SHOWN			
CONSULTANT -		No.	AMMENDMENT		DATE	No.	AMMENDMENT			DATE		CHECKED: C.K.		DATUM: AHD	
					DO NOT SCALE					JOB & DRAWING No: 242488					
										No. IN SET: 1 OF 6 ISSUE: 0					



SITE PLAN
SCALE: 1:100



REFLUX VALVE PLAN DETAIL
SCALE: 1:20



REFLUX VALVE SECTION DETAIL
SCALE: N.T.S.

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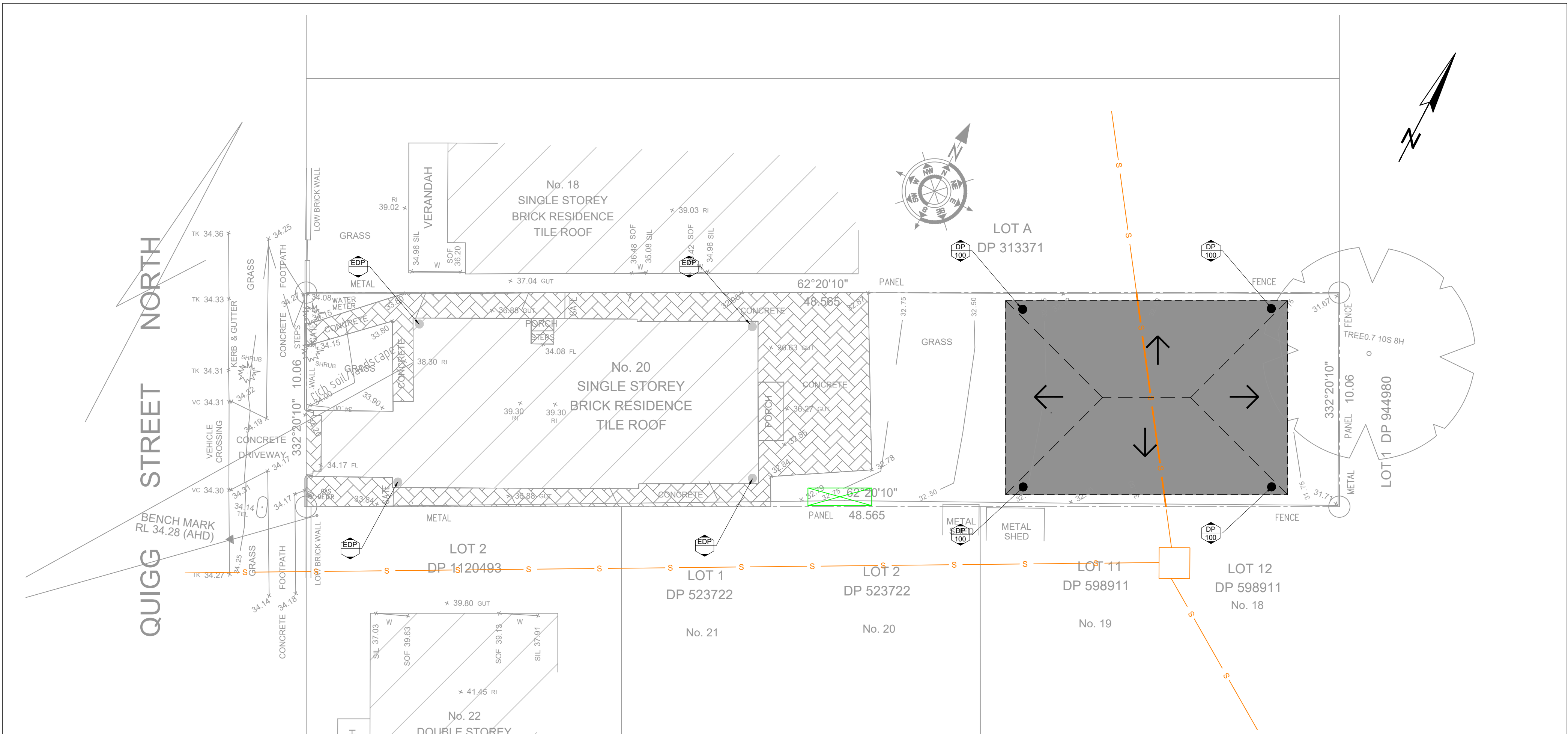
0 5 10 METRES
SCALE 1 : 100
A2

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ALL PIPES TO BE 1000 uPVC UNLESS OTHERWISE SHOWN

ALL GUTTERS TO HAVE MIN. 8600mm2 X-SECT AREA.

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ARCHITECT VINH NGUYEN BROS & ASSOC PTY LTD							PROJECT: 20 QUIGG STREET NORTH LAKEMBA		JOB & DRAWING No:	242488	No. IN SET: 2 OF 6 ISSUE: 0
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ROOF PLAN
SCALE: 1:100




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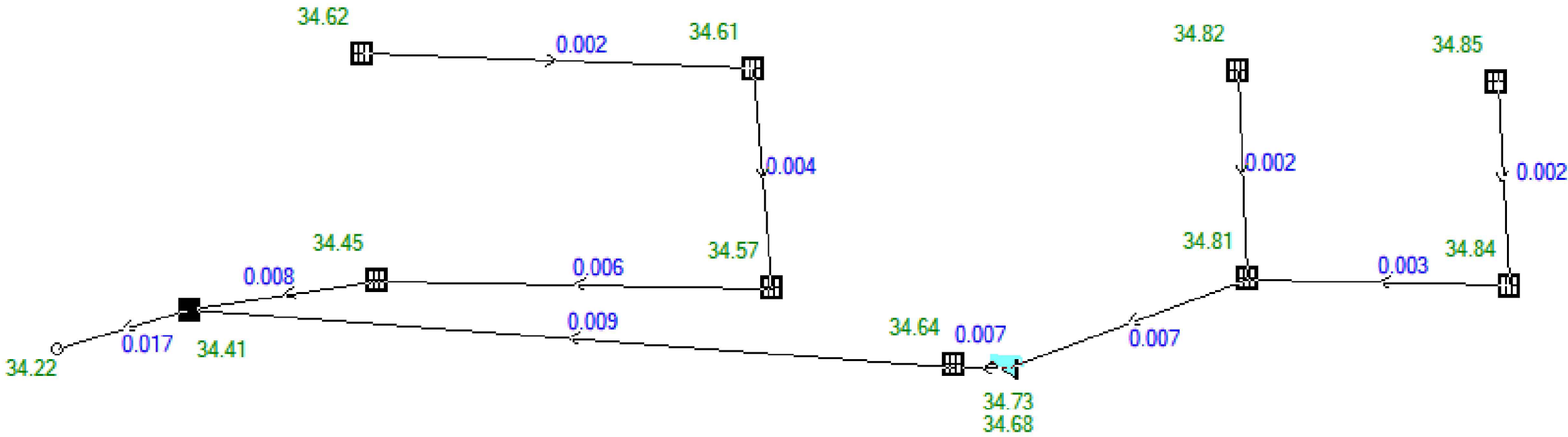
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METRES

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ARCHITECT VINH NGUYEN BROS & ASSOC PTY LTD								DESIGNED: C.K.		SCALE: AS SHOWN		
CONSULTANT -	No.	AMMENDMENT	DATE	No.	AMMENDMENT	DATE		CHECKED: C.K.		DATUM: AHD		
								PROJECT: 20 QUIGG STREET NORTH LAKEMBA		JOB & DRAWING No: 242488	No. IN SET: 3 OF 6	ISSUE: 0
								DO NOT SCALE				



Results for median storm in critical 1% AEP ensembles using Lite hydraulic model.



HYDRAULIC GRADE LINE ANALYSIS

HYDRAULIC GRADE LINE CALCULATIONS
DESIGN ARI = 20 YR ARI


FLOW PER DOWN PIPE;
EXISTING DWELLING = 2 L/s
GRANNY FLAT = 1.7 L/s

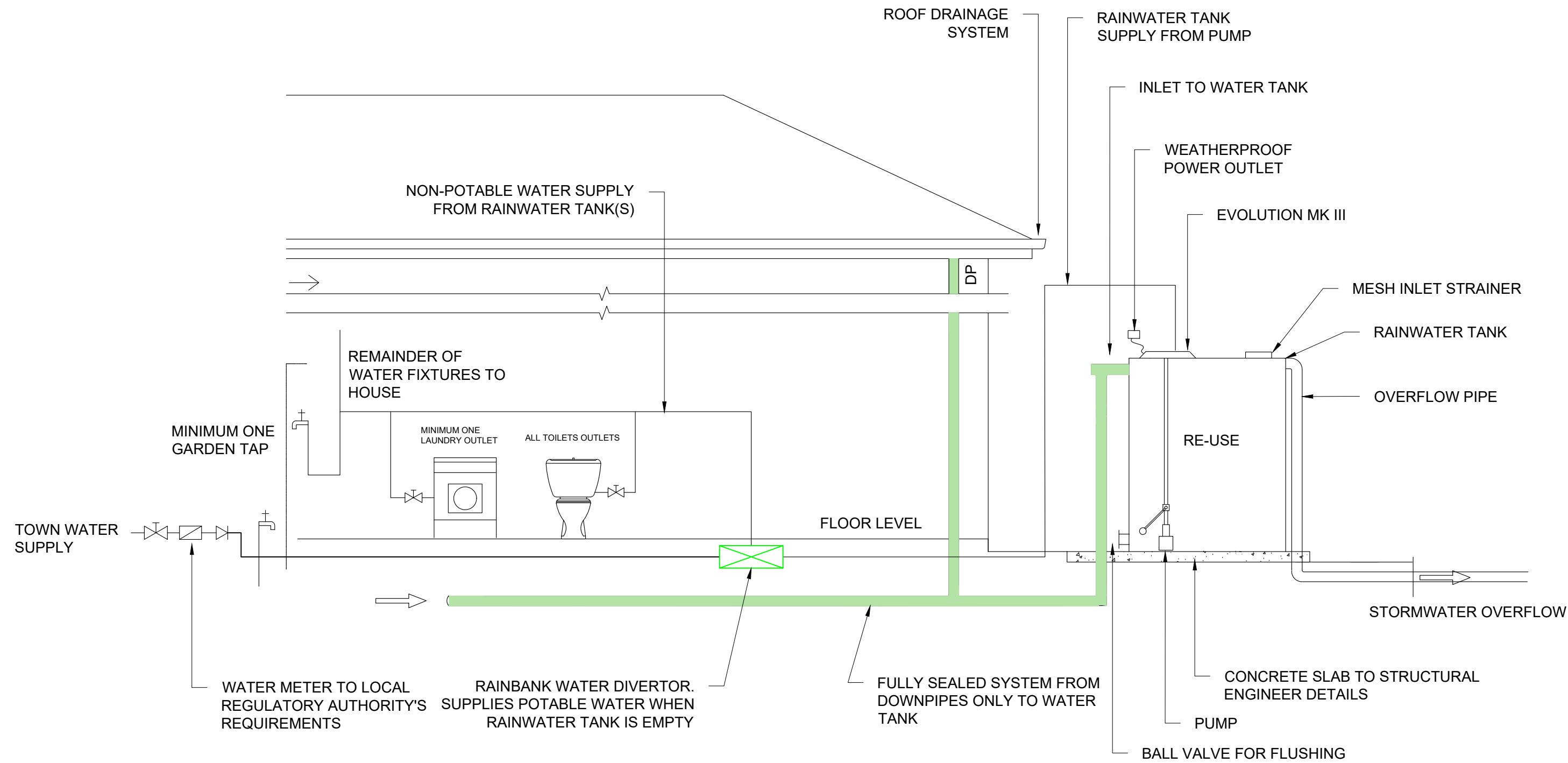
GUTTER LEVEL
EXISTING DWELLING = 36.6 m AHD
GRANNY FLAT = 34.985m AHD

5% AEP DRAINS RESULTS

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ARCHITECT VINH NGUYEN BROS & ASSOC PTY LTD								PROJECT: 20 QUIGG STREET NORTH LAKEMBA				
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TYPICAL RAINWATER TANK SYSTEM
SCALE: N.T.S

RAINWATER TANK NOTES

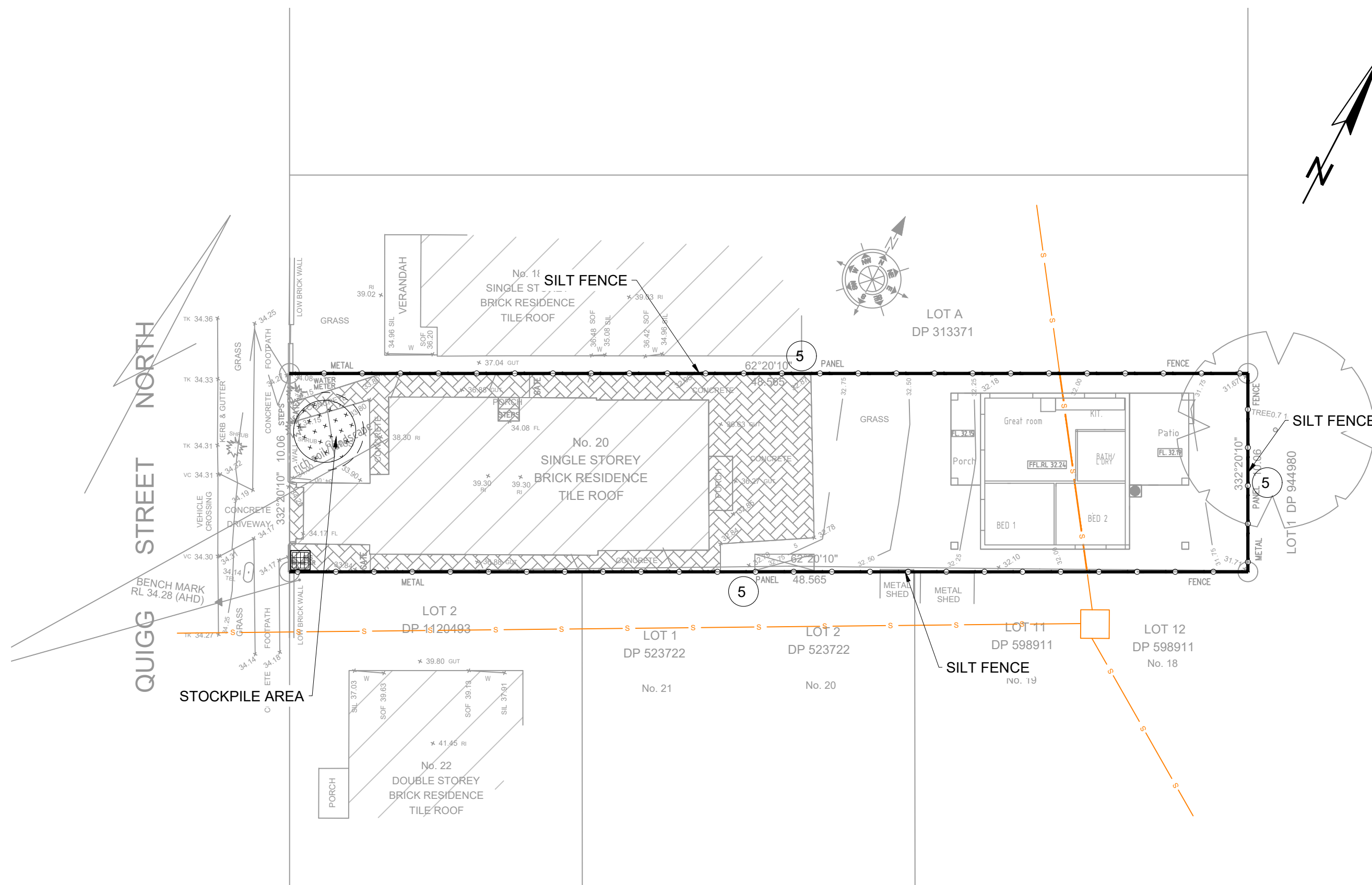
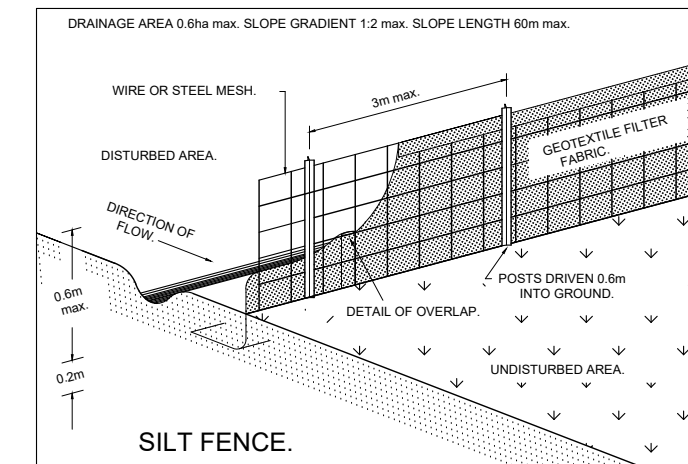
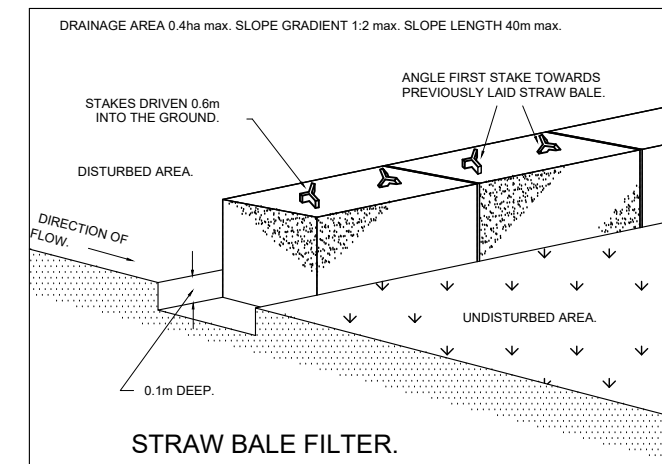
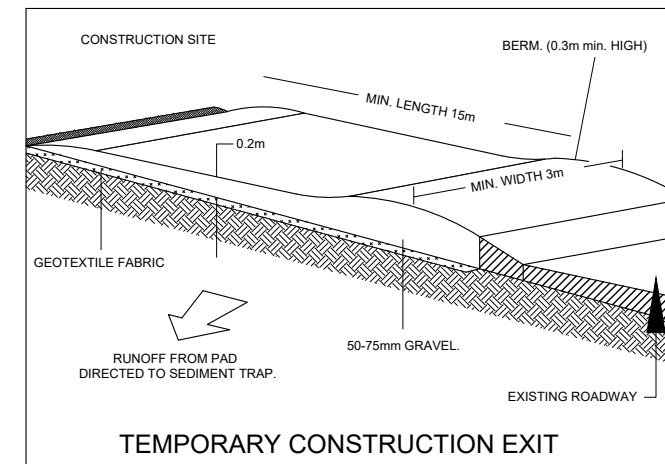
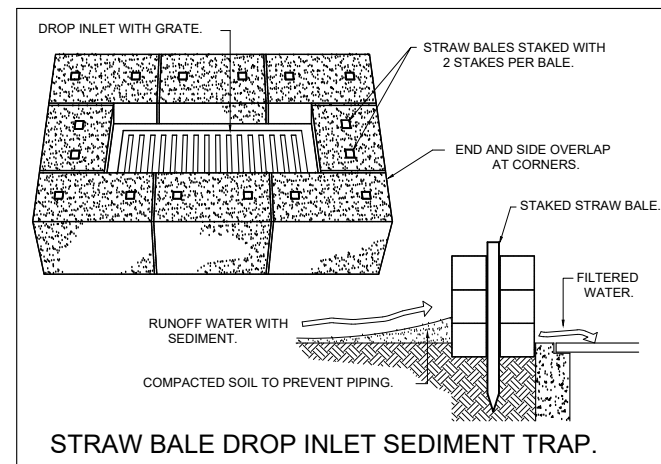
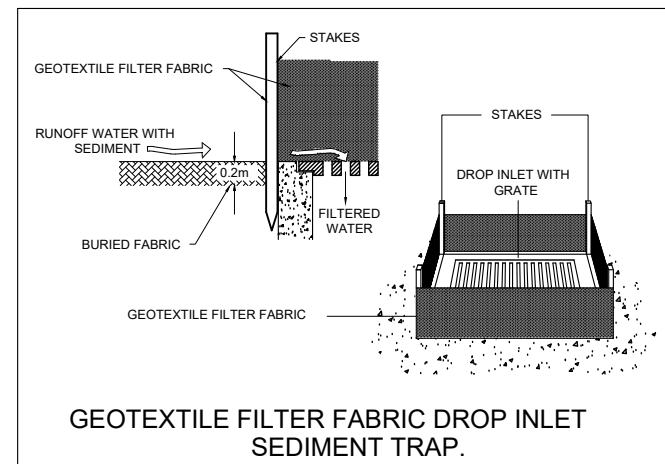
RAINWATER TANKS ARE TO BE:
ERECTED ON A SELF-SUPPORTING BASE IN THE APPROVED LOCATION ON THE PROPERTY IN ACCORDANCE WITH THE STAMPED-APPROVED SITE PLANS FOR THE DEVELOPMENT,
STRUCTURALLY SOUND AND CONSTRUCTED IN ACCORDANCE WITH AS/NZS 3500 1.2- 1998: NATIONAL PLUMBING AND DRAINAGE - WATER SUPPLY - ACCEPTABLE SOLUTIONS,
FULLY ENCLOSED AND ALL OPENINGS SEALED TO PREVENT ACCESS BY MOSQUITOES,
FITTED WITH A FIRST FLUSH DEVICE,
FITTED WITH A TRICKLE SYSTEM TO TOP UP FROM MAINS WATER, PROVIDED WITH AN AIR GAP, AND
INSTALLED BY A LICENSED PLUMBER IN ACCORDANCE WITH SYDNEY WATER'S "PLUMBING REQUIREMENTS INFORMATION FOR RAINWATER TANK SUPPLIERS AND PLUMBERS APRIL 2003" AND THE NSW CODE OF PRACTICE: PLUMBING AND DRAINAGE.



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EROSION CONTROL NOTES:

1. ALL WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH COUNCIL'S STANDARD SPECIFICATIONS AND TO THE SATISFACTION OF COUNCIL'S ENGINEER.
2. EROSION AND SEDIMENTATION CONTROLS SHALL BE CONSTRUCTED AS SHOWN ON SHEET 2 AND 3 OF THIS PLAN AND/OR WHERE DIRECTED BY COUNCIL'S ENGINEER.
3. SEDIMENTATION AND EROSION CONTROL DEVICES SHALL BE IMPLEMENTED PRIOR TO OR IN CONJUNCTION WITH THE FIRST PHASE OF EARTHWORKS AND SHALL BE REMOVED ONLY WHEN THE AREAS ABOVE IT HAVE BEEN STABILISED. EACH SEDIMENTATION AND EROSION CONTROL DEVICE SHALL BE INSPECTED AFTER EACH STORM FOR STRUCTURAL DAMAGE OR CLOGGING BY SILT AND OTHER DEBRIS AND PROMPTLY DESILTED, REPAIRED OR REPLACED IF REQUIRED.
4. TOPSOIL STOCKPILES SHALL BE LOCATED OUTSIDE HAZARD AREAS SUCH AS DRAINAGE DEPRESSIONS.
5. ALL AREAS NOT SUBJECT TO CONSTRUCTION WORKS SHALL BE RETAINED FREE FROM DISTURBANCE OR DAMAGE FOR THE DURATION OF THE WORKS.
6. TREES TO BE RETAINED SHALL BE PROTECTED DURING SITE WORKS AND CONSTRUCTION BY THE ERECTION OF SOLID BARRICADES AT THE DRIP LINE OR AS SPECIFIED BY COUNCIL'S ENGINEER.
7. THE DEVELOPER OR CONTRACTOR WILL TAKE ALL MEASURES TO PREVENT DAMAGE TO TREES AND ROOT SYSTEMS DURING SITE WORKS AND CONSTRUCTION ACTIVITIES INCLUDING THE PROVISION OF WATER, SEWERAGE AND STORMWATER DRAINAGE SERVICES. IN PARTICULAR, WORKS, ERECTION OF STRUCTURES, EXCAVATION OR CHANGES TO SOIL LEVELS WITHIN 4 METRES OF THE TRUNKS OF TREES TO BE RETAINED ARE NOT PERMITTED UNLESS PART OF THE DEVELOPMENT AS APPROVED, AND THE STORAGE OF SPOIL, BUILDING MATERIALS, SOILS OR THE DRIVING OR PARKING OF ANY VEHICLE OR MACHINERY WITHIN 4 METRES OF THE TRUNK OF A TREE TO BE RETAINED, IS NOT PERMITTED.
8. WETTING OF THE SITE SHOULD BE CARRIED OUT AS OFTEN AS NECESSARY AS A FORM OF DUST CONTROL.
9. SILT FENCES TO BE CONSTRUCTED WHERE EVER NATURAL SURFACE SLOPES AWAY FROM DISTURBED AREAS OR WHERE DIRECTED BY THE ENGINEER.

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JOB & DRAWING No: 242488														No. IN SET: 6 OF 6	ISSUE: 0