STORMWATER DRAINAGE PROPOSED FOUR-STOREY DWELLING 5 GRAYLIND CLOSE, COLLAROY NSW 2097

REVISION	REVISION DETAILS	DATE	DRAWN	DESIGN	CHECK	APPROVED	PREPARED BY
А	ISSUED FOR DA	20.12.2024	D.D.	M.N.	D.S.	D.S.	
							VAN
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			PROPOSED FOUR-STOREY DWELLING				
			5 GRAYLIND CLOSE, CO	OLLAROY NSW 2097			
-	ET	DRAWING	NUMBER	REFERENCE NUMBER	REVISION		
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DRAWING REGISTER				
DRAWING NO.	DRAWING TITLE			
V241704 - SW000	COVER SHEET			
V241704 - SW001	GENERAL NOTES			
V241704 - SW100	RUMPUS FLOOR DRAINAGE PLAN			
V241704 - SW110	LOWER FLOOR DRAINAGE PLAN			
V241704 - SW120	GROUND FLOOR DRAINAGE PLAN			
V241704 - SW130	FIRST FLOOR DRAINAGE PLAN			
V241704 - SW200	POST-DEVELOPMENT CATCHMENT PLAN			
V241704 - SW300	STORMWATER DETAILS - SHEET 1			

SITEWORKS NOTES

- 1. ORIGIN OF LEVELS:- REFER SURVEY NOTES
- 2. ALL WORKS TO BE CONSTRUCTED IN ACCORDANCE WITH THE LOCAL GOVERNMENT AUTHORITIES ENGINEERING CONSTRUCTION SPECIFICATION FOR CIVIL WORKS.
- PRIOR TO THE COMMENCEMENT OF THE WORKS THE CONTRACTOR MUST VERIFY ALL DIMENSIONS AND EXISTING LEVELS ON SITE PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES TO BE REPORTED TO VANGUARD.
- PRIOR TO THE COMMENCEMENT OF THE WORKS, THE CONTRACTOR IS TO VERIFY THE ALIGNMENT AND LEVELS OF ALL EXISTING SERVICES AT ALL LOCATIONS WHERE THE PROPOSED SERVICES ARE TO CROSS. CONNECT TO OR ARE LOCATED IN CLOSE PROXIMITY TO THE EXISTING SERVICES. ANY DISCREPANCIES TO BE REPORTED TO VANGUARD.
- CONTRACTOR MUST MAKE SMOOTH CONNECTION WITH ALL EXISTING WORKS.
- ALL TRENCH BACKFILL MATERIAL SHALL BE COMPACTED TO THE SAME DENSITY AS THE ADJACENT MATERIAL.
- ALL SERVICE TRENCHES UNDER VEHICULAR PAVEMENTS SHALL BE BACKFILLED WITH SAND TO 300mm ABOVE PIPE. WHERE PIPE IS UNDER PAVEMENTS BACKFILL, REMAINDER OF TRENCH TO UNDERSIDE OF PAVEMENT WITH SAND OR APPROVED GRANULAR MATERIAL COMPACTED IN 150mm LAYERS TO MINIMUM 98% MODIFIED MAXIMUM DRY DENSITY IN ACCORDANCE WITH THE CURRENT AS 1289.5.2.1 (OR A DENSITY INDEX OF NOT LESS THAN 75).
- PROVIDE 10mm WIDE ISOLATION JOINTS BETWEEN BUILDINGS AND ALL CONCRETE OR UNIT PAVEMENTS.
- ASPHALTIC CONCRETE SHALL CONFORM TO THE CURRENT TFNSW SPECIFICATION TS 03283.1 (R116) HEAVY DUTY DENSE GRADED ASPHALT.
- 10. ALL BASECOURSE AND SUB-BASE MATERIAL SHALL BE IGNEOUS ROCK QUARRIED MATERIAL TO COMPLY WITH THE CURRENT TFNSW SPECIFICATION TS 03315.1 (3051) GRANULAR BASE AND SUBBASE MATERIALS FOR SURFACED ROAD PAVEMENTS COMPACTED TO MINIMUM 98% MODIFIED DENSITY IN ACCORDANCE WITH THE CURRENT AS 1289 5.2.1. FREQUENCY OF COMPACTION TESTING SHALL NOT BE LESS THAN

1 TEST PER 50m³ OF SUB-BASE COURSE MATERIAL PLACED UNLESS OTHERWISED APPROVED BY VANGUARD.

- AS AN ALTERNATIVE TO THE USE OF IGNEOUS ROCK AS A SUB-BASE MATERIAL (IN NOTE 10) A CERTIFIED RECYCLED CONCRETE MATERIAL COMPLYING WITH THE CURRENT TFNSW SPECIFICATION TS 03315.1 (3051) GRANULAR BASE AND SUBBASE MATERIALS FOR SURFACED ROAD PAVEMENTS WILL BE CONSIDERED. SUBJECT TO MATERIAL SAMPLES AND APPROPRIATE CERTIFICATIONS BEING PROVIDED TO THE SATISFACTION OF VANGUARD.
- 12. SHOULD THE CONTRACTOR WISH TO USE A RECYCLED PRODUCT THE CONTRACTOR IS TO SEEK ACCEPTANCE OF THE PRODUCT FROM VANGUARD. THE PRICE DIFFERENCE BETWEEN AN IGNEOUS PRODUCT AND A RECYCLED PRODUCT SHALL BE CLEARLY INDICATED.
- 13. WHERE NOTED ON THE DRAWINGS THAT WORKS ARE TO BE CARRIED BY OTHERS, (EG. ADJUSTMENT OF SERVICES), THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CO-ORDINATION OF THESE WORKS.
- 14. ALL WORKS CARRIED OUT ADJACENT TO AND WITHIN SERVICE EASEMENTS ARE TO COMPLY WITH THE RELEVANT SERVICE AUTHORITIES GUIDELINES AND REQUIREMENTS.

EXISTING UNDERGROUND SERVICES NOTES

THE LOCATIONS OF UNDERGROUND SERVICES SHOWN IN THIS SET OF DRAWINGS HAVE BEEN PLOTTED FROM SURVEY INFORMATION AND SERVICE AUTHORITY INFORMATION. THE SERVICE INFORMATION HAS BEEN PREPARED ONLY TO SHOW THE APPROXIMATE POSITIONS OF ANY KNOWN SERVICES AND MAY NOT BE AS CONSTRUCTED OR ACCURATE. AT & L CAN NOT GUARANTEE THAT THE SERVICES INFORMATION SHOWN ON THESE DRAWINGS ACCURATELY INDICATES THE PRESENCE OR ABSENCE OF SERVICES OR THEIR LOCATION AND WILL ACCEPT NO LIABILITY FOR INACCURACIES IN THE SERVICES INFORMATION SHOWN FROM ANY CAUSE WHATSOEVER.

CONTRACTORS SHALL TAKE DUE CARE WHEN EXCAVATING ONSITE INCLUDING HAND EXCAVATION WHERE NECESSARY.

CONTRACTORS ARE TO CONTACT THE RELEVANT SERVICE AUTHORITY PRIOR TO COMMENCEMENT OF EXCAVATION WORKS.

CONTRACTORS ARE TO UNDERTAKE A SERVICES SEARCH, PRIOR TO COMMENCEMENT OF WORKS ON SITE. SEARCH RESULTS ARE TO BE KEPT ON SITE AT ALL TIMES.



BEFORE YOU DIG AUSTRALIA SHOULD BE CONTACTED PRIOR TO ANY EXCAVATION ON SITE TM: TRADE MARK OF THE ASSOCIATION OF DIAL BEFORE YOU DIG SERVICES LTD. USED UNDER LICENSE.

REVISION DETAILS

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STORMWATER DRAINAGE NOTES

GENERAL NOTES

1. STORMWATER DESIGN CRITERIA: ANNUAL EXCEEDANCE PROBABILITY:

MINOR STORM: 5% AEP

- MAJOR STORM: 1% AEP
- PIPES LESS THAN 300 DIA SHALL BE SEWER GRADE uPVC WITH SOLVENT WELDED JOINTS.
- 3. ENLARGERS, CONNECTIONS AND JUNCTIONS TO BE PREFABRICATED
- FITTINGS WHERE PIPES ARE LESS THAN DN300. ALL INTERNAL WORKS WITHIN PROPERTY BOUNDARIES ARE TO COMPLY WITH THE REQUIREMENTS OF THE CURRENT AS 3500 3.1 AND AS/NZS 3500 3.2.
- 5. ALL STORMWATER DRAINAGE LINES UNDER PROPOSED BUILDING SLABS TO BE UPVC PRESSURE PIPE GRADE 6. ENSURE ALL VERTICALS AND DOWNPIPES ARE uPVC PRESSURE PIPE, GRADE 6 FOR A MIN OF 3.0m IN HEIGHT.
- 6. ALL DRAINAGE LINES TO PROVIDE A 3.0M LENGTH OF DN100 SUBSOIL DRAINAGE PIPE WRAPPED IN FABRIC SOCK, ON THE UPSTREAM SIDE OF EACH PIT. ALLOW FOR SECONDARY SUBSOIL FOR PIPES FOR PIPE GRATER THAN DN825.
- SUBSOIL DRAIN WRAPPED IN APPROVED FILTER SOCK SHALL BE PROVIDED BENEATH ALL KERBLINES WHERE NO DRAINAGE LINES ARE SHOWN ON THE DRAWINGS AND SHALL DISCHARGE INTO DOWNSTREAM PITS.
- 8. WHERE SUBSOIL DRAINS PASS UNDER FLOOR SLABS AND VEHICULAR PAVEMENTS, UNSLOTTED uPVC SEWER GRADE PIPES ARE TO BE USED. 9. CARE IS TO BE TAKEN WITH LEVELS OF STORMWATER LINES. GRADES SHOWN ARE NOT TO BE REDUCED WITHOUT APPROVAL FROM
- VANGUARD. 10. GRATES AND COVERS SHALL CONFORM TO THE CURRENT AS 3996. CLASS D COVER (MINIMUM) SHALL BE PROVIDED IN TRAFFICKED PAVEMENTS WITH CLASS B (MINIMUM) BEING PROVIDED IN
- NON-TRAFFICKED AREAS. 11. AT ALL TIMES DURING CONSTRUCTION OF STORMWATER PITS. THE CONTRACTOR SHALL PROVIDE ADEQUATE SAFETY PROCEDURES TO
- PREVENT THE POSSIBILITY OF PERSONNEL FALLING DOWN PITS. 12. ALL PITS AND PIPES TO BE FOUNDED ON SUITABLE MATERIAL WITH A MINIMUM ALLOWABLE BEARING CAPACITY OF 100KPa UP TO 3.0m DEPTH TO INVERT AND 150KPa FROM 3.0m TO 6.0m DEPTH TO INVERT ONCE EXCAVATED, A CONCRETE BLINDING LAYER (MINIMUM 100mm THICK 25MPa OR DEEPER TO ENSURE MINIMUM SPECIFIED BEARING CAPACITY IS ACHIEVED) MAY BE PROVIDED. CONTRACTOR TO ENGAGE GEOTECHNICAL ENGINEER TO PROVIDE WRITTEN CONFIRMATION.
- 13. ALL EXISTING STORMWATER DRAINAGE LINES AND PITS THAT ARE TO REMAIN ARE TO BE INSPECTED AND CLEANED. DURING THIS PROCESS ANY PART OF THE STORMWATER DRAINAGE SYSTEM THAT WARRANTS REPAIR SHALL BE REPORTED TO THE SUPERINTENDENT/ENGINEER FOR FURTHER DIRECTIONS.
- 14. ALL STORMWATER PITS ARE TO BE CAST IN-SITU IN ACCORDANCE WITH THE STORMWATER DETAILS AND SPECIFICATIONS. 15. ALL PITS MUST BE BENCHED AND STREAMLINED TO DIRECT WATER FROM
- THE INLET PIPE TO THE OUTLET PIPE. 16. PITS DEEPER THAN 600mm MUST BE FITTED WITH DOUBLE STEP-IRONS IN
- ACCORDANCE WITH THE CURRENT AS1657. PLASTIC ENCAPSULATED MAY BE USED. STEP-IRONS TO BE PROVIDED ON A SINGLE FACE WHERE POSSIBLE. SHOULD STEP-IRONS REQUIRE TO CHANGE FACE THEN 3 OVERLAPPING STEP IRONS ARE TO BE LOCATED ON EACH FACE. 17. FREQUENCY OF COMPACTION TESTING SHALL BE NOT LESS THAN 1 TEST
- PER 2 LAYERS PER 40 LINEAR METERS. **RIGID & SEMI-RIGID PIPE NOTES**
- 18. PIPES 300 DIA. AND LARGER TO BE STEEL REINFORCED CONCRETE CLASS '3' APPROVED SPIGOT AND SOCKET WITH RUBBER RING JOINTS. U.N.O. ALL ROAD CROSSINGS TO BE CLASS '4' U.N.O. EQUIVALENT STRENGTH FIBRE REINFORCED CONCRETE PIPES MAY BE USED SUBJECT TO APPROVAL BY VANGUARD OR THE LOCAL
- GOVERNMENT AUTHORITY. 19. REINFORCED CONCRETE PIPES TO COMPLY WITH THE CURRENT AS/NZS 4058. FIBRE REINFORCED CONCRETE PIPES TO COMPLY WITH THE CURRENT
- AS 4139. PIPES TO BE INSTALLED WITH TYPE HS3 (ROAD) AND HS2 (LOTS) SUPPORT IN ACCORDANCE WITH THE CURRENT AS/NZS 3725. N ALL CASES BACKFILL EMBEDMENT ZONE WITH SELECT FILL (MINIMUM CBR 15%) TO 300mm ABOVE PIPE. WHERE PIPE IS UNDER PAVEMENTS BACKFILL REMAINDER OF TRENCH TO UNDERSIDE OF PAVEMENT WITH SAND OR APPROVED GRANULAR MATERIAL COMPACTED IN 150mm LAYERS TO MINIMUM 98% STANDARD MAXIMUM DRY DENSITY IN ACCORDANCE WITH THE CURRENT AS 1289.5.2.1. (OR A DENSITY INDEX
- OF NOT LESS THAN 75). FLEXIBLE PIPE NOTES

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20. FLEXIBLE PIPES TO COMPLY WITH THE CURRENT AS/NZS 2566.1. PIPES TO BE INSTALLED IN ACCORDANCE WITH THE CURRENT AS/NZS 2566.2. IN ALL CASES BACKFILL EMBEDMENT ZONE WITH GRAVEL OR SAND TO 300mm ABOVE PIPE. WHERE PIPE IS UNDER PAVEMENTS BACKFILL REMAINDER OF TRENCH TO UNDERSIDE OF PAVEMENT WITH SAND OR APPROVED GRANULAR MATERIAL COMPACTED IN 150mm LAYERS TO MINIMUM 98% STANDARD MAXIMUM DRY DENSITY IN ACCORDANCE WITH THE CURRENT AS 1289.5.2.1. (OR A DENSITY INDEX OF NOT LESS THAN 75)

PRECAST CONCRETE PIT NOTES

- 21. PRECAST PIT MAY BE USED WITH THE APPROVAL OF VANGUARD THE SUPERINTENDENT AND THE LOCAL GOVERNMENT AUTHORITY AND SHALL BE INSTALLED TO THE MANUFACTURERS RECOMENDATIONS.
- 22. ALL PRE-CAST PITS ARE TO BE STRUCTURALLY CERTIFIED TO MEET RELEVANT REQUIREMENTS OF THE CURRENT AS3600 AND AS3996 (2019). 23. PRE-CAST STORMWATER PITS ARE TO BE APPROVED FOR TFNSW
- CONSTRUCTION (R11) AND ARE TO ARE TO BE DESIGNED AND CUSTOM MADE WITH OPENINGS UP TO A MAXIMUM +50mm OD OF THE STORMWATER PIPES. PITS ARE ALSO TO INCLUDE PENETRATIONS FOR SUBSOIL CONNECTIONS AND DOUBLE STEP-IRONS INSTALLED FOR PITS >0.6m DEEP. DEMOLITION SAWS MAY BE USED PROVIDING A NEAT FULL DEPTH CUT IS APPLIED AND ANY ADDITIONAL PENETRATIONS REQUIRED ARE TO BE CORE DRILLED.
- 24. SHOP DRAWINGS ARE TO BE PROVIDED FOR REVIEW AND ACCEPTANCE. IT SHOULD BE NOTED THAT THE CONTRACTOR IS TO ENSURE THAT THE STRUCTURAL COMPONENTS OF THE PITS ARE NOT COMPROMISED AND ONLY THE PIPE KNOCKOUTS ARE TO BE REMOVED FOR THE PIPE PENETRATIONS.

D.S.

(CONTINUED)

- WITH THE INTERNAL WALL.
- - SIMILAR).
 - RECOMMENDATIONS.

<u>AS3500.3</u> MINIMUM GRADIENT OF SITE STORMWATER DRAINS							
NOMINAL SIZE	MINIMUM	GRADIENT	NOMINAL SIZE	MINIMUM	GRADIENT		
DN	AU	NZ	DN	AU	NZ		
90	1:100	1:90	225	1:200	1:350		
100	1:100	1:120	300	1:250	1:350		
150	1:100	1:200	375	1:300	1:350		

1	NOT S	SUBJE	ст то
	(A) WI⁻	THOU	T PAV
	(i)	FOR	SINGL
	(ii)	FOR	OTHEI
	(B) WI UN		VEME FORCE
2	SUBJE	ECT T	O VEH
	(A) OT	HER 1	THAN F
	(i)	WITH	IOUT F
	(ii)	WITH	I PAVE
		(A)	REINF VEHIC
		(B)	BRICH FOR I
	(B) RO	ADS -	
	(i)	SEAL	.ED
	(ii)	UNSE	EALED
3			O CON ANKME

(*)	INCLUDE OVERLAY
(†)	BELOW THE UNDER
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STORMWATER DRAINAGE NOTES

ALL PRECAST PITS TO BE FOUNDED ON CONCRETE BLINDING LAYER (100mm ON AN EARTH FOUNDATION OR 150mm ON A ROCK FORMATION) WITH A MINIMUM ALLOWABLE BEARING CAPACITY OF 100KPa UP TO 3.0m DEPTH TO INVERT AND 150KPa FROM 3.0m TO 6.0m DEPTH TO INVERT (MINIMUM 100mm THICK 25MPa OR DEEPER TO ENSURE MINIMUM SPECIFIED BEARING CAPACITY IS ACHIEVED). CONTRACTOR TO ENGAGE GEOTECHNICAL ENGINEER TO PROVIDE WRITTEN CONFIRMATION. ALL PRE-CAST PIT PENETRATIONS SHALL BE CUT SO THAT IT IS FLUSH

ALL PIPE JOINTING, SPARGING, RENDERING, FILLING OF GAPS TO BE FILLED WITH A HIGH STRENGTH NON-SHRINK GROUT WITH A MINIMUM 40MPa COMPRESSIVE STRENGTH AT 28 DAYS. (LANKO DURABED 702 OR

SINGLE UNITS PREFERRED BUT IF REQUIRED MINIMUM RISER DEPTH 600mm PIT INSTALLATION AND JOINTING BETWEEN UNITS SHALL BE UNDERTAKEN IN ACCORDANCE WITH MANUFACTURERS

ANY DAMAGE TO THE STRUCTURAL INTEGRITY OF THE PRE-CAST PIT WILL BE REPAIRED AND STRUCTURALLY CERTIFIED AT THE CONTRACTORS EXPENCE TO THE SATISFACTION OF THE VANGUARD, SUPERINTENDENT / LOCAL GOVERNMENT AUTHORITY.

SURVEY NOTES

THE EXISTING SITE CONDITIONS SHOWN ON THE FOLLOWING DRAWINGS HAVE BEEN INVESTIGATED BY REGISTERED SURVEYORS. THE INFORMATION IS SHOWN TO PROVIDE A BASIS FOR DESIGN. VANGUARD CONSULTING ENGINEERS DOES NOT GUARANTEE THE ACCURACY OR COMPLETENESS OF THE SURVEY BASE OR ITS SUITABILITY AS A BASIS FOR CONSTRUCTION DRAWINGS.

SHOULD DISCREPANCIES BE ENCOUNTERED DURING CONSTRUCTION BETWEEN THE SURVEY DATA AND ACTUAL FIELD DATA. CONTACT VANGUARD CONSULTING ENGINEERS.

	<u>AS3500.3</u> MINIMUM INTERNAL DIMENSIONS FOR STORMWATER AND INLET PITS					
MINIMUM INTERNAL DIME				SIONS		
DEPTH TO INVERT OF OUTLET		RECTANGULAR		CIRCULAR		
		WIDTH	LENGTH	DIAMETER		
	≤ 600	450	450	600		
> 600	≤ 900	600	600 600			
> 900	≤ 1200	600	600 900			
> 1200		900	900	1000		

TABLE 7.1: MII	S3500.3 NIMUM PIPE COVER SURFACE TO TOP OF PIPE)	
LOCATION	CAST IRON, DUCTILE IRON, GALVANIZED STEEL	OTHER AUTHORIZED(*) PRODUCTS
	MINIMUM COVER (r	nillimeters)
O VEHICULAR LOADING		
'EMENT -		
LE DWELLINGS	NIL	100
R THAN ITEM (i)	NIL	300
ENT OF BRICK OR ED CONCRETE	NIL (†)	50 (†)
HICULAR LOADING		
ROADS -		
PAVEMENT	300	450
EMENT OF -		
FORCED CONCRETE FOR HEAVY CULAR LOADING	NIL (†‡)	100 (†‡)
K OR UNREINFORCED CONCRETE LIGHT VEHICULAR LOADING	NIL (†‡)	75 (†‡)
	300	500 (†‡)
)	300	500 (†‡)
NSTRUCTION EQUIPMENT LOADING ENT CONDITIONS	300	500 (†‡)
BOVE THE TOP OF THE PIPE OF NOT LESS THA	N 50mm THICK.	

RSIDE OF THE PAVEMENT. LIANCE WITH AS1762, AS2033, AS/NZS 2566.1, AS3725 OR AS4060.



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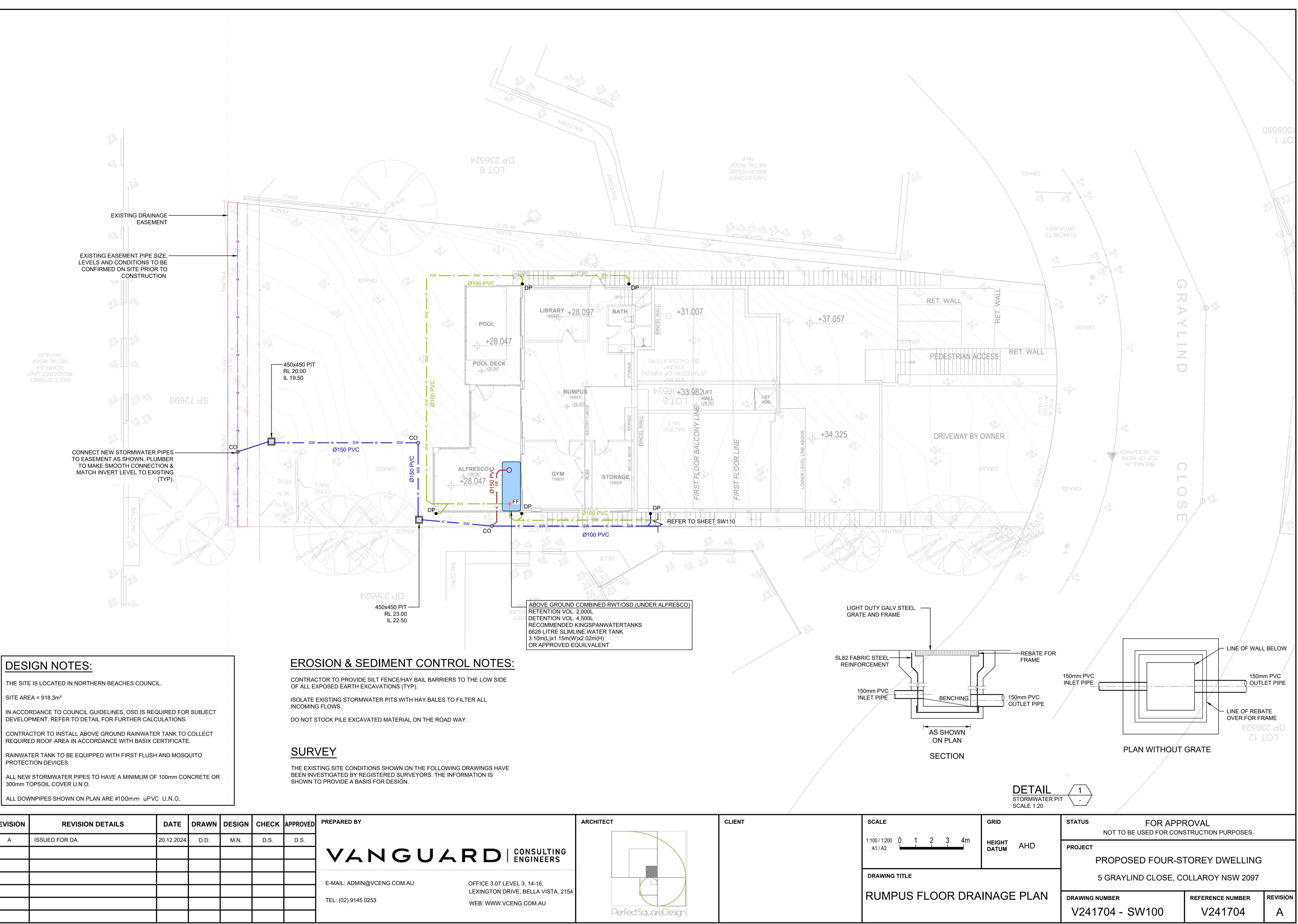
LEGEND		LEGEND	
DP	DOWNPIPE	FF ⊘	FIRST FLUSH
— sw — > —	STORMWATER LINE	RH 🖸	RAINHEAD
— RW — > —	ROOF WATER LINE	•	DOWNPIPE DROP
SSD	SUBSOIL DRAINAGE LINE		NON RETURN VALVE
OF >	OVERFLOW LINE		WALL PENETRATION
— SWRM—— SWRM—	STORMWATER RISING MAIN		DOWNPIPE SPREADER
e	EXISTING STORMWATER LINE	_`\.	
SW SW	AUTHORITY STORMWATER LINE		WARNING LIGHT
HL HL	HIGH LEVEL STORMWATER LINE	♦80.00	SPOT LEVELS
S	AUTHORITY SEWER LINE	Δ	BENCHMARK
w	AUTHORITY WATER LINE		
G G	AUTHORITY GAS LINE	[
E	AUTHORITY ELECTRICITY LINE	ABBREVI	ATIONS:
FO FO	AUTHORITY FIBRE OPTIC LINE	Ø or DIA DIAME CBR CALIFO	TER DRNIA BEARING RATIO
TEL	AUTHORITY COMMS LINE	CH CHAIN CL CENTE	AGE ER LINE
OH(E)	AUTHORITY OVERHEAD ELECTRICAL LINE	CO CLEAR DD DISH D DDO DISH D	
///	FENCE LINE	DEJ DOWE DGB DENSE	LLED EXPANSION JOINT E GRADED BASECOURSE
	GRATED SURFACE INLET PIT	DP DOWN e EXISTI	NG
	GRATED SURFACE INLET PIT WITH OCEANGUARD BASKET	GTD GRATE GSIP GRATE HYD HYDRA IJ ISOLA	IED FLOOR LEVEL ED TRENCH DRAIN ED SURFACE INLET PIT ANT TING JOINT RAL KERB
	JUNCTION PIT	IL INVER IP INTER KIP KERB KO KERB	T LEVEL SECTION POINT INLET PIT ONLY
	KERB INLET PIT	KR KERB I LS LONGI NGL NATUR	& GUTTER RETURN TUDINAL SECTION RAL GROUND LEVEL _AND FLOW PATH
	EXISTING GRATED SURFACE INLET PIT	OSD ON-SIT R RADIU RCP REINFO	TE DETENTION S ORCED CONCRETE PIPE
	GRATED TRENCH DRAIN	RL REDUC RW RETAIL	KERB & GUTTER CED LEVEL NING WALL /ATER TANK
	EXISTING JUNCTION PIT	SJ SAWN SMH SEWEI SW STORM	CONTROL JOINT R MAN HOLE MWATER
	EXISTING KERB INLET PIT	SWRM STORM SWS STORM	MWATER PIT MWATER RISING MAIN MWATER SUMP VALVE
etel	EXISTING TELSTRA PIT	ТОК ТОР О ТОW ТОР О	F KERB F WALL
🗎 eHYD	EXISTING HYDRANT		ATER LEVEL ENT POINT SED POI YVINYI
⊠ eSV	EXISTING STOP VALVE	CHLOF UNO UNLES	RIDE SS NOTED OTHERWISE
🛛 eGAS	EXISTING GAS VALVE		ENED PLANE JOINT FLUSH DEVICE AL
O ePP	EXISTING POWER POLE	BM BENCH MA	
💢 eBT	EXISTING BOUNDARY TRAP		
eSMH	EXISTING SEWER MANHOLE		
	OVERLAND FLOW PATH		
RWOØ	RAINWATER OUTLET		
CO Ø	CLEAR OUT POINT		
DDO Ø	DISH DRAIN OUTLET		
PD Ø	PLANTER DRAIN		
C	CAPPING		
(A.05)	PIT TAG/NUMBER		

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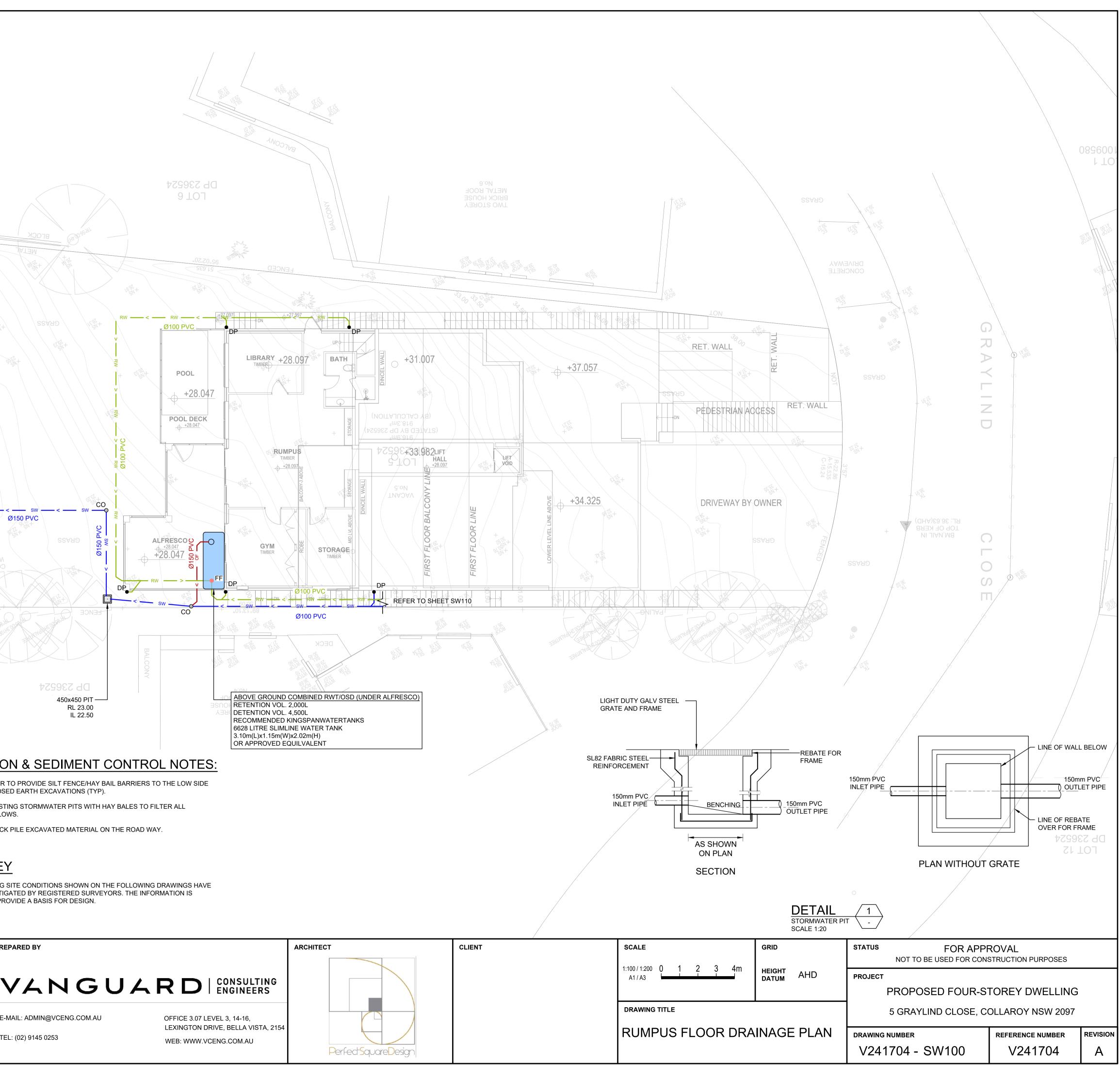
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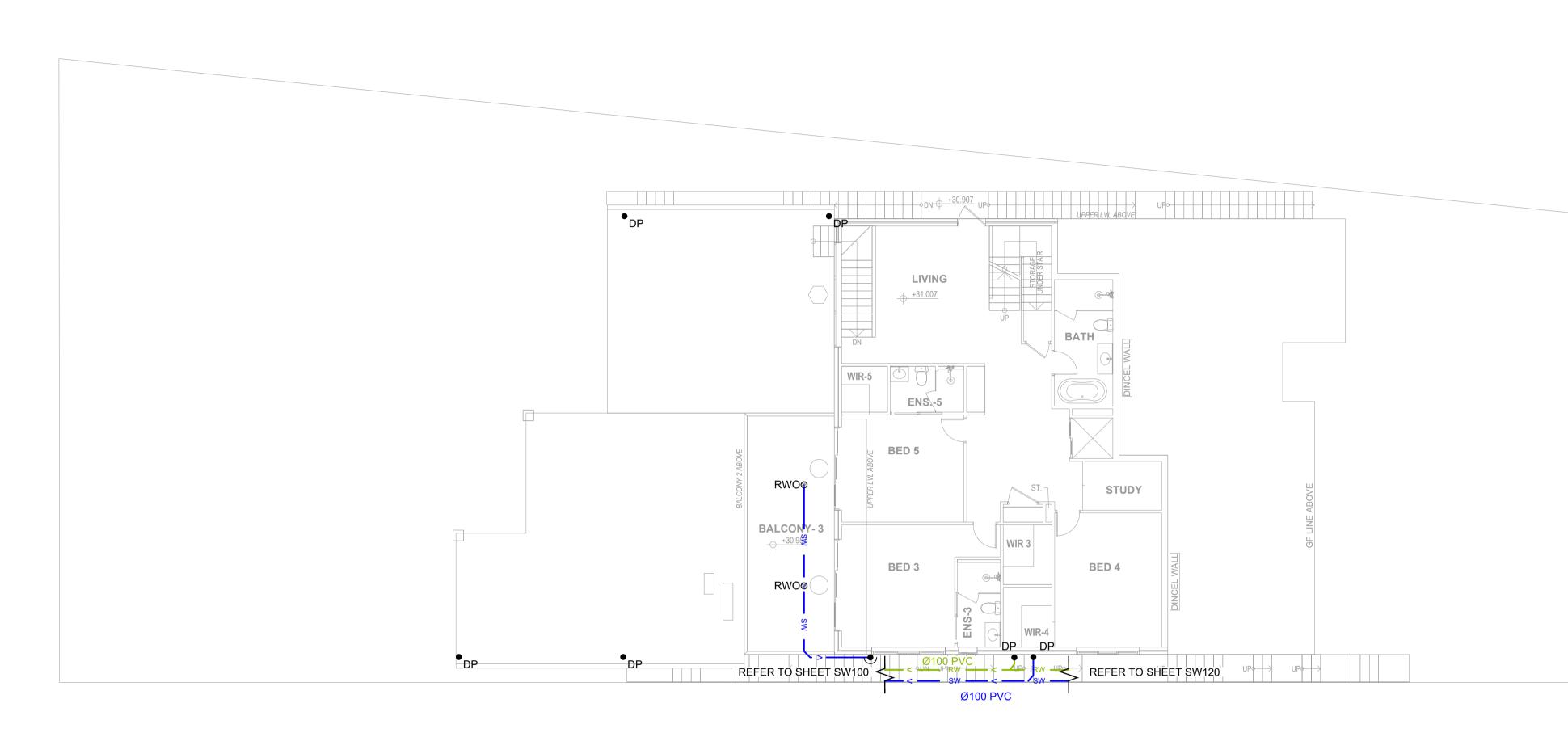
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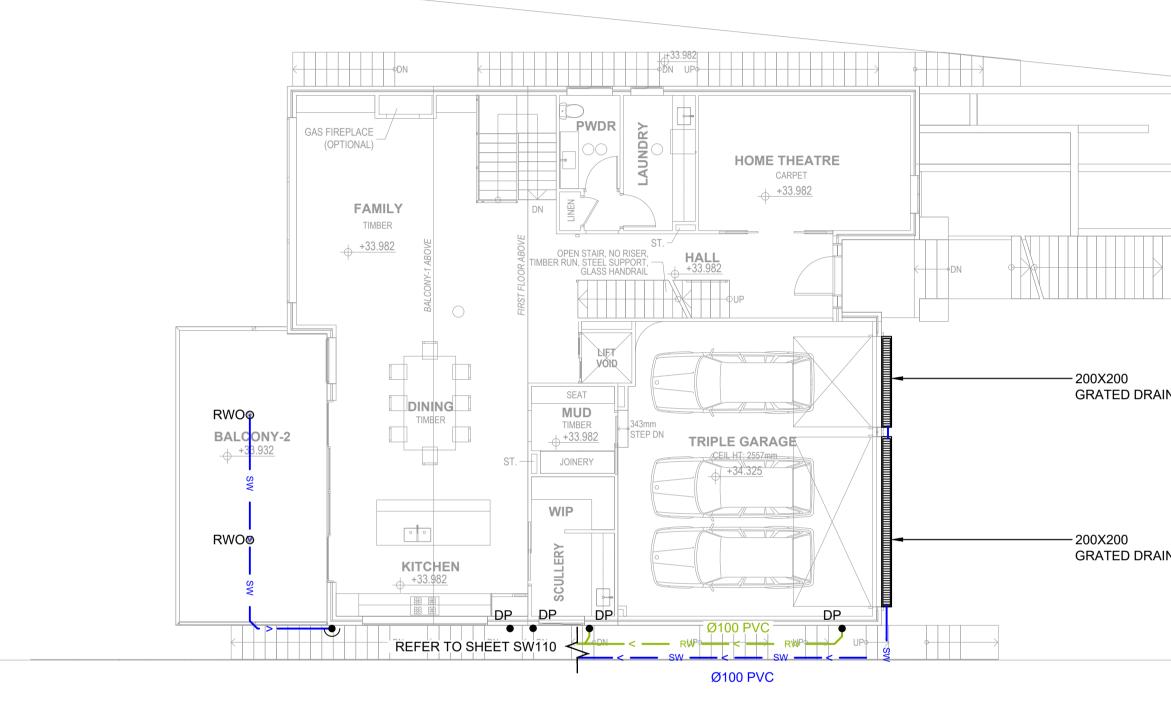
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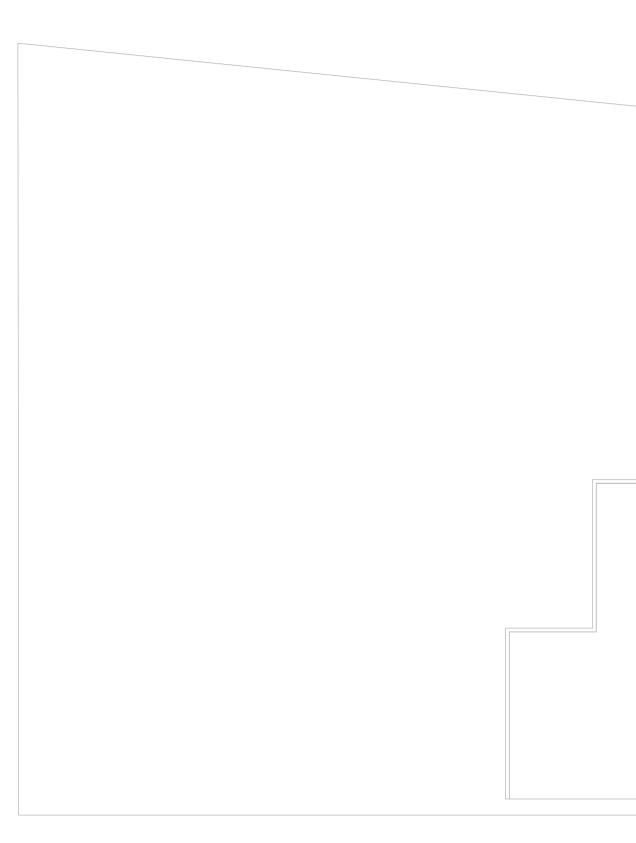


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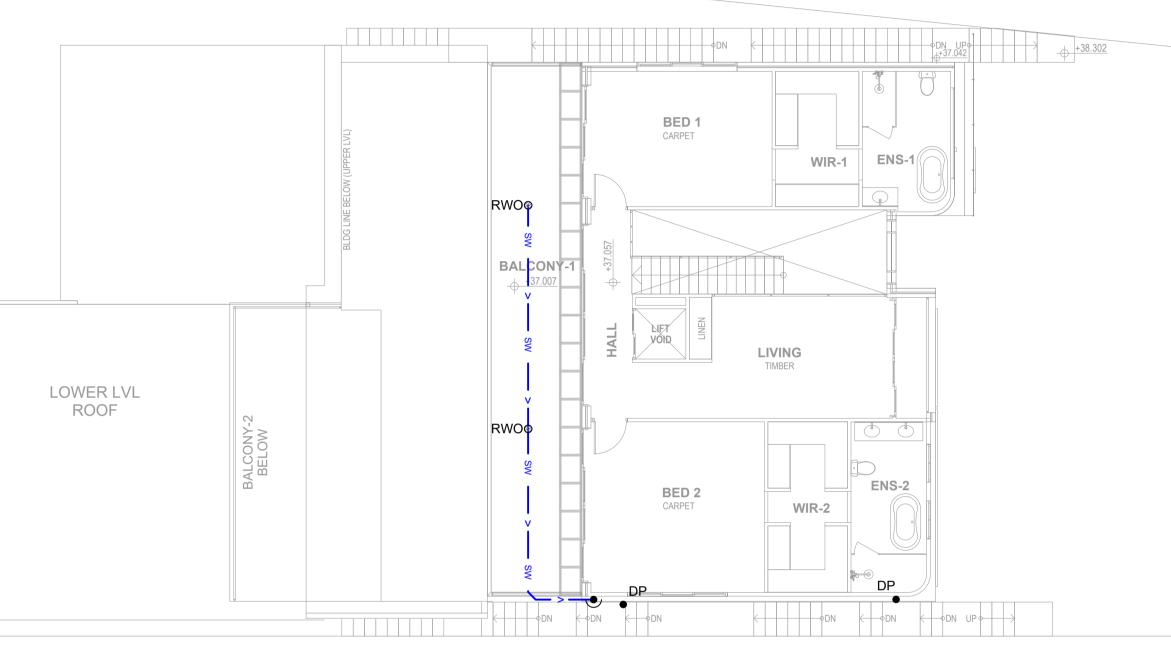


— 200X200 GRATED DRAIN — 200X200 GRATED DRAIN

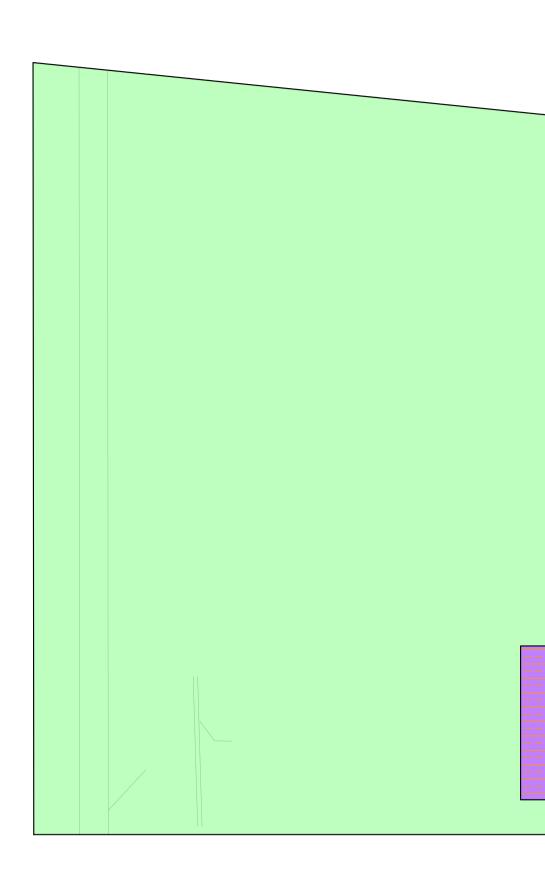


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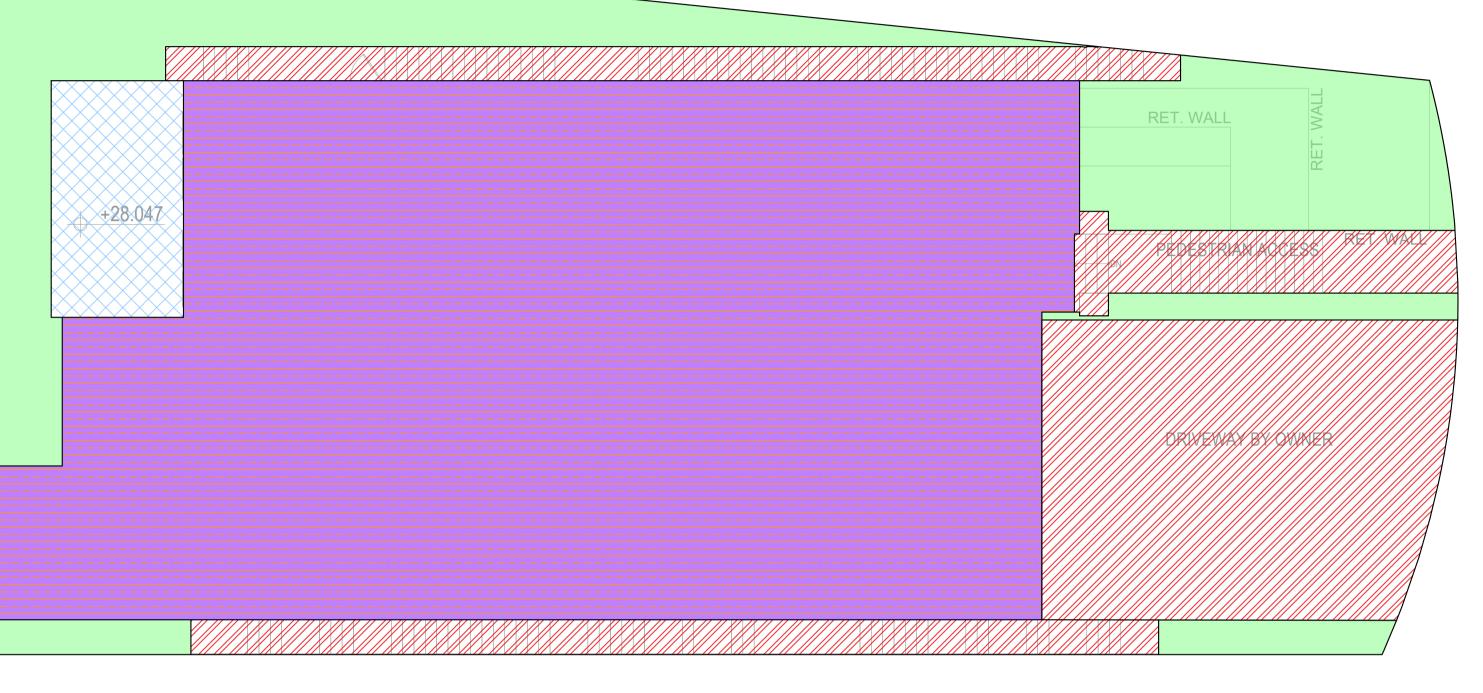




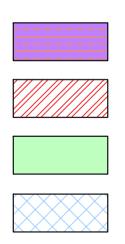
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IAGE PLAN	DRAWING	NUMBER	REFERENCE NUMBER	REVISION			
	V24´	1704 - SW130	V241704	Α			



REVISION	REVISION DETAILS	DATE	DRAWN	DESIGN	CHECK	APPROVED	PREPARED BY
А	ISSUED FOR DA	20.12.2024	D.D.	M.N.	D.S.	D.S.	
							VANGUA
							E-MAIL: ADMIN@VCENG.COM.AU
							TEL: (02) 9145 0253



POST-DEVELOPMENT CATCHMENT PLAN SCALE 1:100

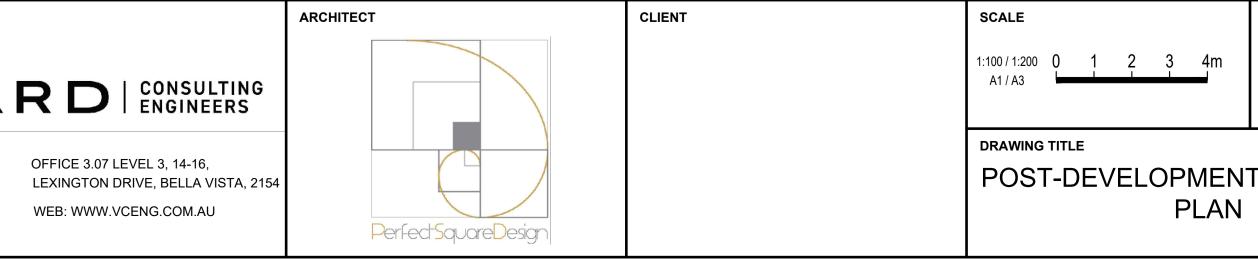


ROOF TO OSD/RWT = 364.64m²

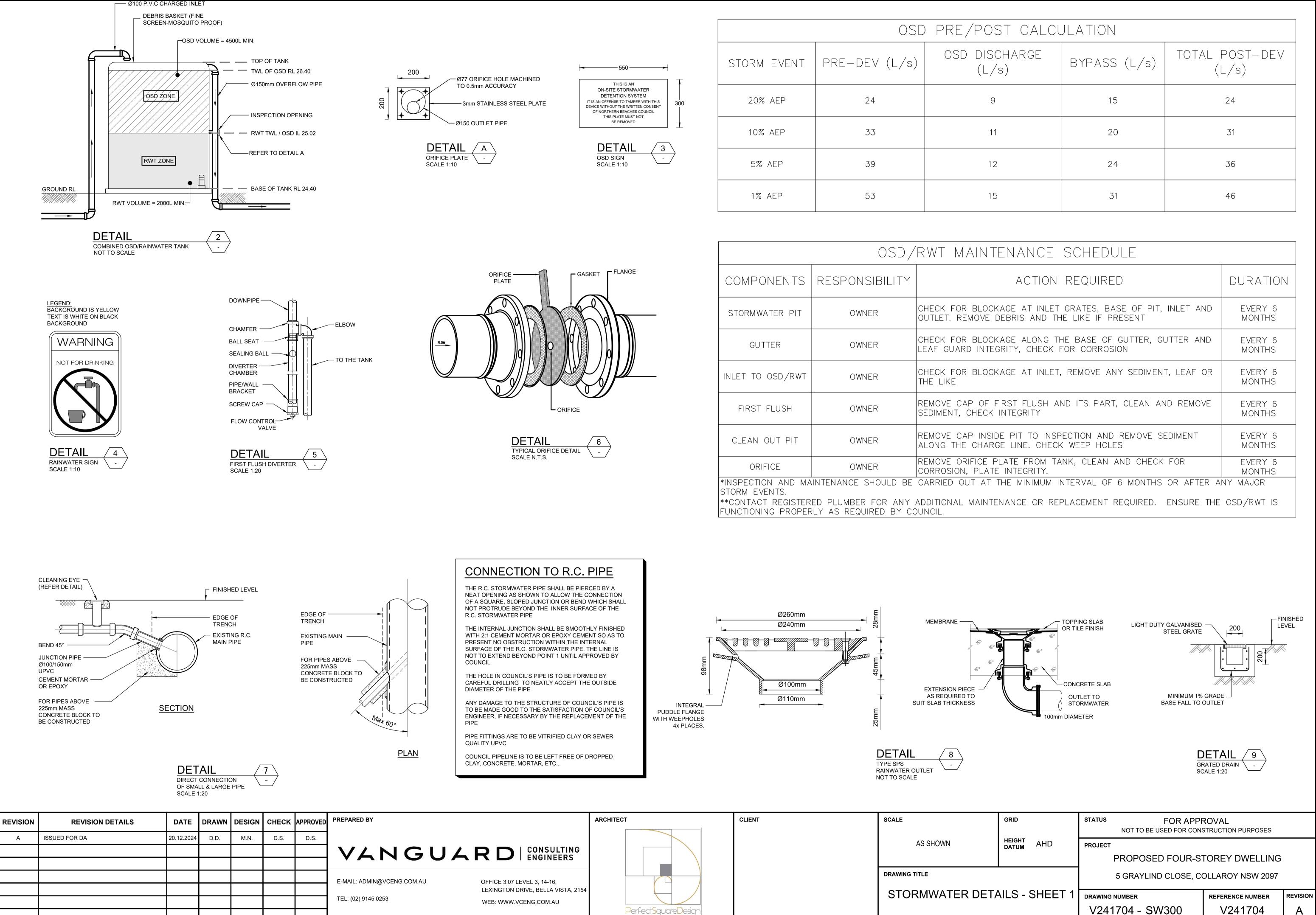
IMPERVIOUS BYPASS AREA = 147.99m²

PERVIOUS BYPASS AREA = 383.56m²

POOL & COPPING TO DRAIN TO SEWER = 21.91m²



GRID	STATUS	STATUSFOR APPROVALNOT TO BE USED FOR CONSTRUCTION PURPOSES					
HEIGHT AHD DATUM AHD	PROJECT	PROJECT PROPOSED FOUR-STOREY DWELLING					
T CATCHMENT		5 GRAYLIND CLOSE, CO	OLLAROY NSW 2097				
	DRAWING	NUMBER 1704 - SW200	reference number V241704	REVISION A			



	OSD PRE/POST CALCULATION							
STORM EVENT	PRE-DEV (L/s)	OSD DISCHARGE (L/s)	BYPASS (L/s)	TOTAL POST-DEV (L/s)				
20% AEP	24	9	15	24				
10% AEP	33	11	20	31				
5% AEP	39	12	24	36				
1% AEP	53	15	31	46				

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OLE MACHINED URACY	THIS IS AN ON-SITE STORMWATER DETENTION SYSTEM
ESS STEEL PLATE	IT IS AN OFFENSE TO TAMPER WITH THIS DEVICE WITHOUT THE WRITTEN CONSENT OF NORTHERN BEACHES COUNCIL THIS PLATE MUST NOT
PIPE	BE REMOVED
	DETAIL 3 OSD SIGN SCALE 1:10

	OSD/RWT MAINTENANCE SCHEDULE						
COMPONENTS	RESPONSIBILITY	ACTION REQUIRED	DURATION				
STORMWATER PIT	OWNER	CHECK FOR BLOCKAGE AT INLET GRATES, BASE OF PIT, INLET AND OUTLET. REMOVE DEBRIS AND THE LIKE IF PRESENT	EVERY 6 MONTHS				
GUTTER	OWNER	CHECK FOR BLOCKAGE ALONG THE BASE OF GUTTER, GUTTER AND LEAF GUARD INTEGRITY, CHECK FOR CORROSION	EVERY 6 MONTHS				
INLET TO OSD/RWT	OWNER	CHECK FOR BLOCKAGE AT INLET, REMOVE ANY SEDIMENT, LEAF OR THE LIKE	EVERY 6 MONTHS				
FIRST FLUSH	OWNER	REMOVE CAP OF FIRST FLUSH AND ITS PART, CLEAN AND REMOVE SEDIMENT, CHECK INTEGRITY	EVERY 6 MONTHS				
CLEAN OUT PIT	OWNER	REMOVE CAP INSIDE PIT TO INSPECTION AND REMOVE SEDIMENT ALONG THE CHARGE LINE. CHECK WEEP HOLES	EVERY 6 MONTHS				
ORIFICE	OWNER	REMOVE ORIFICE PLATE FROM TANK, CLEAN AND CHECK FOR CORROSION, PLATE INTEGRITY.	EVERY 6 MONTHS				
*INSPECTION AND MA STORM EVENTS.	INTENANCE SHOULD BE	CARRIED OUT AT THE MINIMUM INTERVAL OF 6 MONTHS OR AFTER A	NY MAJOR				
**CONTACT REGISTERED PLUMBER FOR ANY ADDITIONAL MAINTENANCE OR REPLACEMENT REQUIRED. ENSURE THE OSD/RWT IS FUNCTIONING PROPERLY AS REQUIRED BY COUNCIL.							

LS - SHEET 1	DRAWING NUMBER	REFERENCE NUMBER	REVISION
	V241704 - SW300	V241704	А