



PLANS AND DOCUMENTS referred to in the PDA DEVELOPMENT APPROVAL

Date: 6 August 2025

Project	PROPOSED CONCRETE BATCHING PLANT
Address	916-944 GREENBANK ROAD, NORTH MACLEAN
Job No	G24-062
Client	NUCRUSH GROUP

[illegible]

COPTES

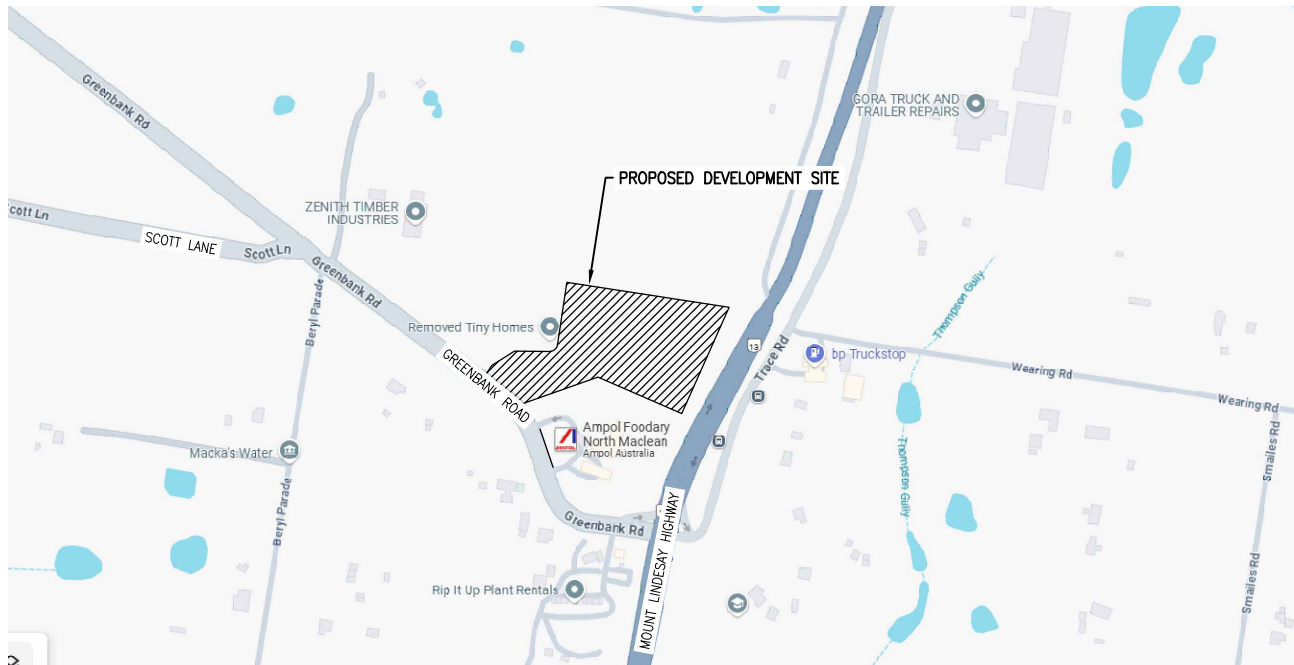
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PROPOSED CONCRETE BATCHING PLANT

916-944 GREENBANK ROAD, NORTH MACLEAN

NUCRUSH GROUP

Project Number: G24-062



LOCALITY PLAN
NOT TO SCALE

INDEX OF DRAWINGS

PRELIMINARY GENERAL DRAWINGS

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PRELIMINARY CIVIL DRAWINGS

G24-062-PC02 PRELIMINARY CIVIL NOTES AND LEGEND
G24-062-PC03 PRELIMINARY CIVIL WORKS SITE PLAN
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G24-062-PC05 PRELIMINARY EARTHWORKS PLAN
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STORMWATER MANAGEMENT DRAWINGS

G24-062-SW01 EXISTING CATCHMENT PLAN
G24-062-SW02 DEVELOPED CATCHMENT PLAN
G24-062-SW03 BIORETENTION BASIN 1 & 3 PLAN & SECTIONS
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G24-062-SW05 BIORETENTION BASIN NOTES & TYPICAL DETAILS

						DESIGNED G.G.J.		 WESTERA PARTNERS STRUCTURAL+ENVIRONMENTAL ENGINEERS www.westerapartners.com.au ABN 52 097 417 975	BRISBANE T 07 3852 4333 E brisbane@westerapartners.com.au GOLD COAST T 07 5571 1599 E goldcoast@westerapartners.com.au SUNSHINE COAST T 07 5391 3777 E sunshinecoast@westerapartners.com.au NORTHERN NSW T 02 6674 8047 E nsw@westerapartners.com.au CENTRAL VICTORIA T 03 5441 0922 E centralvic@westerapartners.com.au	SURVEYOR RPS GROUP PHONE 07 3539 9500 DATE A.H.D. P.M.152294 R.L.27.308	PROJECT LOCATION PROPOSED CONCRETE BATCHING PLANT LOT 2 on SP267252 916-944 GREENBANK ROAD, NORTH MACLEAN	TITLE PRELIMINARY COVER SHEET	CLIENT NUCRUSH GROUP	DRAWING STATUS PRELIMINARY N.F.C.	
		DRAWN Y.N.M.	DRAWING NUMBER G24-062-PC01												
		CHECKED B.C.A.	SHEET NUMBER 01 OF 07												
		APPROVED P.C.G.	REVISION												
No.	DATE	REVISIONS				DES	DRN	CHK	APD	DOCUMENT CONTROL	APPROVED				

WESTERA PARTNERS HAS LIMITED CONTROL OR INPUT TO LOCAL GOVERNMENT OR OTHER LEGISLATED APPROVALS UNLESS SPECIFICALLY ENGAGED BY IT'S CLIENT. ANY CHANGES TO APPROVAL REQUIREMENTS (INCLUDING ORDERS FOR SUSPENSION OF WORKS ETC) SHOULD BE COMMUNICATED TO WESTERA PARTNERS AND ALL OTHER RELEVANT DESIGNERS TO ALLOW ASSESSMENT OF POTENTIAL RISKS AND ENSURE DESIGN AND SAFETY COMPLIANCE.

G2 ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE LOCAL AUTHORITIES STANDARD DRAWINGS & SPECIFICATIONS AND COMPLETED TO THE SATISFACTION OF THE SUPERINTENDENT AND LOCAL AUTHORITY.

G3 UNLESS SPECIFIED OTHERWISE ALL MATERIALS AND WORK SHALL COMPLY WITH THE RELEVANT AUSTRALIAN STANDARDS.

G4 PRIOR TO THE COMMENCEMENT OF CONSTRUCTION THE CONTRACTOR MUST LOCATE ALL EXISTING SERVICES AND PROMPTLY PROVIDE THE LOCATION DATA TO THE DESIGN ENGINEER TO ASSESS IMPACTS ON THE DESIGN.

G5 ALL CONNECTIONS TO EXISTING SEWERS AND WATER MAINS ARE TO BE CONSTRUCTED BY THE LOCAL AUTHORITY OR AN APPROVED CONTRACTOR. THE CONTRACTOR IS TO ALLOW IN HIS CONTRACT SUM FOR THE COST OF ANY PROPOSED CONNECTIONS.

G6 ALL SEWERS ARE TO BE 150MM DIA. U.P.V.C. CLASS SN8 RUBBER RING JOINTED AND PROPERTY CONNECTIONS ARE TO BE 100MM DIA. U.P.V.C CLASS SN6 UNLESS NOTED OTHERWISE

G7 THE PAVEMENT DEPTHS SHOWN ARE PRELIMINARY ONLY AND ARE TO BE VERIFIED FOLLOWING SUB-SOIL TESTS OF THE SUB-GRADE MATERIAL.

G8 ALL ROOFWATER CONNECTIONS FROM KERB ADAPTERS ARE TO BE 100MM DIA CLASS SN10 AT A MIN GRADE OF 1.0% UNLESS SHOWN OTHERWISE. ROOFWATER CONNECTIONS FROM FIELD INLETS OR GULLY PITS ARE TO BE 150MM DIA CLASS SN8 AT A MIN GRADE OF 1.0% UNLESS NOTED OTHERWISE.

ALL U.P.V.C. STORMWATER DRAINAGE PIPES ARE TO BE CLASS SN8 (U.N.O.)

ALL R.C. PIPES ARE TO BE CLASS 3 (U.N.O.)
PIPES UP TO AND INCLUDING 600Ø SHALL BE SPIGOT AND SOCKET PIPES WITH RUBBER RING JOINTS. PIPES GREATER THAN 600Ø SHALL BE EITHER SPIGOT AND SOCKET PIPES WITH RUBBER RING JOINTS OR INTERNAL FLUSH JOINTED PIPES WITH EXTERNAL ELASTOMERIC BAND.

ALL F.R.C. PIPES ARE TO BE FRCPIPE+ CLASS 4 (U.N.O.) AND SHALL BE DUAL RUBBER RING JOINT WITH COLLAR. PIPES SHALL BE FROM 225Ø TO 600Ø ONLY.

POLYPROPYLENE/POLYETHYLENE STORMWATER PIPE MINIMUM CLASS SN8 (U.N.O.) SUBJECT TO ACCEPTANCE BY CERTIFYING ENGINEER AND LOCAL AUTHORITY. CONSTRUCTION AND EMBEDMENT TO BE IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.

G10 WATER PIPES SHALL BE;
- P.V.C.-M WATER PIPES ARE TO BE SERIES 2 PN16 SN10 R.R.J.
- D.I.C.L. WATER PIPES ARE TO BE PN35 WITH ALL FITTINGS TO BE FUSION BONDED POLYMERIC COATED.
- PE WATER PIPES ARE TO BE PN16 SDR11 PE100. DN25 AND DN32 WATER SERVICES SHALL BE PE80B.

G11 ALL "AS CONSTRUCTED" INFORMATION IS TO BE RECORDED AS REQUIRED BY THE LOCAL AUTHORITY AND SUBMITTED TO THE SUPERINTENDENT IMMEDIATELY AFTER COMPLETION OF THE WORKS.

G12 ALL ALLOTMENTS ARE TO BE GRADED AT A MINIMUM GRADE OF 1 IN 200.

C1 ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH A53600 CONCRETE STRUCTURES CODE AND THE REFERENCED STANDARDS THEREIN.

C2 THE CONCRETE STRENGTH GRADE AND THE COVER TO REINFORCEMENT FOR THE VARIOUS CONCRETE ELEMENTS SHALL BE AS LISTED BELOW:

- CLIMATE ZONE:

- LOCATION:

ELEMENT	EXPOSURE CLASSIFICATION	STRENGTH GRADE	MINIMUM COVER
MANHOLES	B1	N32	40
FIELD INLET PITS	B1	N32	40
INTERNAL ROADS	B1	N32	40
KERB/CHANNEL	B1	N32	—
FOOTPATHS	B1	N32	40

- | | |
|----|---|
| C3 | CONCRETE TO HAVE A MAXIMUM AGGREGATE SIZE OF 20mm WITH 80mm MAXIMUM SLUMP, A WATER/CEMENT RATIO OF NOT GREATER THAN 0.65 AND A MAXIMUM FINAL BASIC DRYING SHRINKAGE STRAIN OF 800×10^{-6} UNLESS APPROVED OTHERWISE. |
| C4 | NO ADDITIVES SHALL BE ADDED OR APPLIED TO THE CONCRETE MIX WITHOUT THE APPROVAL OF THE ENGINEER. |

- | THE MAXIMUM PERMISSIBLE TRANSPORT TIME FOR CONCRETE BETWEEN BATCHING AND PLACEMENT ON SITE SHALL BE IN ACCORDANCE WITH THE FOLLOWING TABLE. | | |
|--|---|---|
| AMBIENT AIR TEMPERATURE | MAX. BATCHING TO PLACEMENT TIME | |
| 10° – 24°C | 120 MINUTES | |
| 25° – 27°C | 90 MINUTES | |
| 28° – 30°C | 60 MINUTES | |
| 31° – 33°C | 45 MINUTES | |
| 34° – 36°C | 30 MINUTES | |
| 37°C+ | NO PLACEMENT OF CONCRETE UNLESS CHILLED WATER OR ICE IN MIX | |
| C6 | ALL CONCRETE SHALL BE MECHANICALLY VIBRATED. VIBRATORS SHALL NOT BE USED TO SPREAD CONCRETE. | |
| C7 | ALL CONCRETE SHALL BE SAMPLED AND TESTED IN ACCORDANCE WITH AS1379 ADOPTING THE PROJECT ASSESSMENT METHOD FOR COMPRESSIVE STRENGTH AND SLUMP COMPLIANCE. THE RESULTS OF ALL TESTS SHALL BE PROMPTLY SUBMITTED TO THE ENGINEER FOR REVIEW. | |
| C8 | WHEN THE AIR TEMPERATURE EXCEEDS 30°C, ALIPHATIC ALCOHOL SHALL BE APPLIED TO THE CONCRETE SURFACE OF SLABS IMMEDIATELY AFTER THE INITIAL SCREED AND AGAIN AFTER BULL FLOATING. | |
| C9 | CURING OF ALL CONCRETE SURFACES SHALL COMMENCE IMMEDIATELY AFTER COMPLETING CONCRETE FINISHING AND SHALL CONTINUE FOR 7 DAYS. CONTRACTOR TO CONFIRM METHOD OF CURING WITH ENGINEER PRIOR TO USE. | |
| C10 | SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES. | |
| C11 | BEAM DEPTHS ARE WRITTEN FIRST AND INCLUDE SLAB THICKNESS, IF ANY. | |
| C12 | NO HOLES, CHASES OR EMBEDDED ITEMS OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT PRIOR APPROVAL OF THE ENGINEER. CONDUITS, PIPES ETC. SHALL NOT BE PLACED IN THE COVER THICKNESS OF THE CONCRETE. | |
| C13 | WHERE SERVICE PIPES PENETRATE CONCRETE ELEMENTS, PROVISION SHOULD BE MADE TO ALLOW FOR MOVEMENT OF THE ELEMENT. | |
| C14 | FORMWORK SHALL BE DESIGNED, CONSTRUCTED AND STRIPPED IN ACCORDANCE WITH AS3610 FORMWORK CODE, UNLESS NOTED OTHERWISE ON THE DRAWINGS. | |
| C15 | REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY AND NOT NECESSARILY SHOWN IN TRUE PROJECTION OR SCALE. | |
| C16 | ALL REINFORCEMENT SHALL BE SECURELY SUPPORTED IN ITS CORRECT POSITION ON PLASTIC BAR CHAIRS, GENERALLY AT NOT GREATER THAN 800mm CENTRES IN BOTH DIRECTIONS. | |
| C17 | WELDING AND HEATING OF REINFORCEMENT SHALL NOT BE PERMITTED WITHOUT APPROVAL OF THE ENGINEER. | |
| C18 | ALL STEEL REINFORCEMENT IN CONCRETE ELEMENTS SHALL BE INSPECTED BY THE ENGINEER AND PASSED PRIOR TO POURING OF ANY CONCRETE. | |
| C19 | LAP REINFORCEMENT ONLY AT LOCATIONS SHOWN ON THE DRAWINGS OR AS APPROVED BY THE ENGINEER. | |
| C20 | SLAB FABRIC SHALL BE LAPPED ONE FULL PANEL OF FABRIC PLUS 50mm SO THAT THE TWO OUTERMOST TRANSVERSE WIRES OF ONE SHEET OVERLAP THE TWO OUTERMOST TRANSVERSE WIRES OF THE SHEET BEING LAPPED BY 50mm. | |
| C21 | BAR REINFORCEMENT SHALL BE LAPPED IN ACCORDANCE WITH THE FOLLOWING TABLE. | |
| TYPICAL BAR REINFORCEMENT LAP LENGTHS | | |
| BAR | LAP LENGTH UNO | HORIZONTAL BARS WITH GREATER THAN 300mm OF CONCRETE CAST BELOW THEM |
| N12 | 550 | 750 |
| N16 | 800 | 1100 |
| N20 | 1100 | 1400 |
| N24 | 1250 | 1600 |
| N28 | 1400 | 1800 |
| N32 | 1600 | 2100 |
| N36 | 2000 | 2500 |
| WHERE LAPS ARE SHOWN ON THE DRAWINGS THE ABOVE LAP LENGTHS SHALL BE ADOPTED UNLESS NOTED OTHERWISE. WHERE BARS OF DIFFERENT DIAMETER ARE SHOWN LAPPED, ADOPT THE LAP LENGTH APPROPRIATE TO THE SMALLER DIAMETER BAR. | | |
| C22 | A VAPOUR BARRIER OF 0.2mm (200um) MINIMUM THICK POLYTHENE SHEETING SHALL BE PLACED BENEATH SLABS ON GROUND UNLESS NOTED OTHERWISE. | |

TYPICAL BAR REINFORCEMENT LAP LENGTHS		
BAR	LAP LENGTH UNO	HORIZONTAL BARS WITH GREATER THAN 300mm OF CONCRETE CAST BELOW THEM
N12	550	750
N16	800	1100
N20	1100	1400
N24	1250	1600
N28	1400	1800
N32	1600	2100
N36	2000	2500

WHERE LAPS ARE SHOWN ON THE DRAWINGS THE ABOVE LAP LENGTHS SHALL BE ADOPTED UNLESS NOTED OTHERWISE. WHERE BARS OF DIFFERENT DIAMETER ARE SHOWN LAPPED, ADOPT THE LAP LENGTH APPROPRIATE TO THE SMALLER DIAMETER BAR.

- C22 A VAPOUR BARRIER OF 0.2mm (200um) MINIMUM THICK POLYTHENE SHEETING SHALL BE PLACED BENEATH SLABS ON GROUND UNLESS NOTED OTHERWISE.

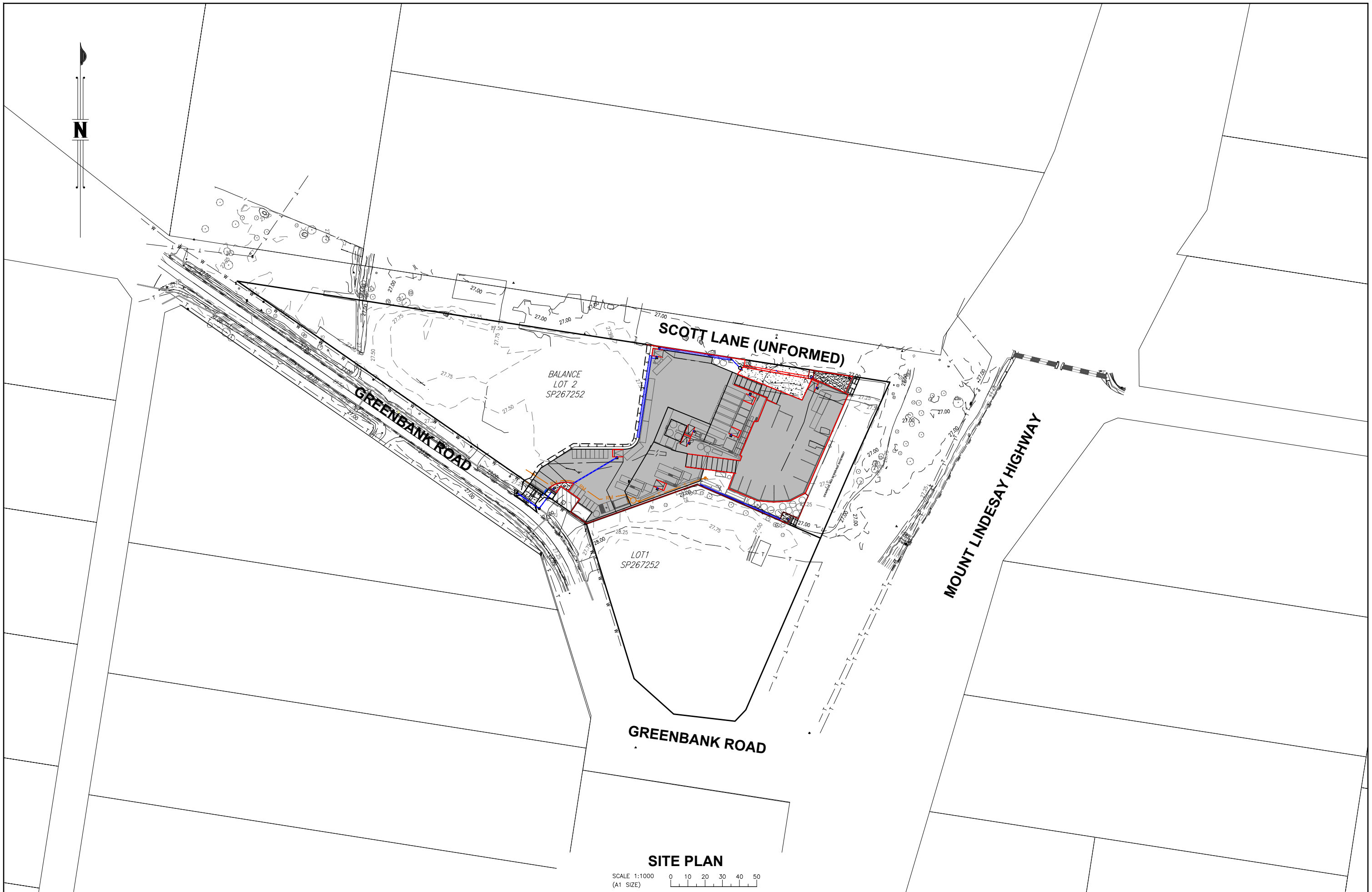
REINFORCED CONCRETE PAVEMENT	
REINFORCED CONCRETE PATHWAY/CROSSOVER	
TURF	
STONE PITCHING	
CEMENT GROUTED STONE PITCHING	
TELECOMMUNICATION	
GAS MAIN	
ELECTRICITY OVERHEAD	
ELECTRICITY UNDERGROUND	
LIGHT POLE	
POWER POLE	
PIT (TELSTRA/ELEC)	
EDGE OF BITUMEN	
FENCE	
EXISTING SURFACE LEVEL	
EXISTING CONTOUR MINOR	
EXISTING CONTOUR MAJOR	
DESIGN SURFACE LEVEL	
DESIGN CONTOUR MINOR	
DESIGN CONTOUR MAJOR	
RETAINING WALL	
STAGE BOUNDARY	
SETTLEMENT PIT	

	NEW	EXISTING
STORMWATER PIPE		
SAG GULLY PIT		
ON GRADE GULLY PIT		
MANHOLE		
600 x 600 FIELD INLET		
900 x 600 FIELD INLET		
1050 DIA FIELD INLET		
HEADWALL		
KERB ADAPTER WITH ROOFWATER PIPE		
STORMWATER STRUCTURE LABEL		

	NEW	EXISTING	DISUSED
WATER MAIN			
FIRE HYDRANT			
DUAL OUTLET FIRE HYDRANT			
SWABBING DUAL OUTLET FIRE HYDRANT			
ISOLATION VALVE			
SCOUR VALVE			
AIR VALVE			
DEAD END			
TEST/CHLORINATION POINT			
REDUCER			
PIPE MATERIAL CHANGE			
WATER SERVICE PRE-TAPPED TEE			
WATER SERVICE PIPE & CONDUIT			
FLOW METER			
FLUSHING POINT			

	NEW	EXISTING	DISUSED
GRAVITY SEWER MAIN			
SEWER RISING MAIN			
SEWER VACUUM MAIN			
MAINTENANCE HOLE & END OF LINE			
END OF LINE			
MAINTENANCE SHAFT			
HORIZONTAL/VERTICAL BEND			
COMPOUND BEND			
STUB / TEMPORARY END			
RODDING END			
PROPERTY CONNECTION			
OVERFLOW MAINTENANCE HOLE			
ISOLATION VALVE			
SCOUR VALVE AND CHAMBER			
GAS RELEASE VALVE			
FLUSHING POINT			
DISCHARGE MAINTENANCE HOLE			
ISOLATION VALVE			
VENT POLE / ODOUR CONTROL UNIT			

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SITE PLAN

SCALE 1:1000
(A1 SIZE)

				DESIGNED G.G.J.	 P. GARRETT RPEQ 23609 For and on behalf of WESTERA PARTNERS PTY. LTD.	 WESTERA PARTNERS STRUCTURAL+CIVIL+ENVIRONMENTAL ENGINEERS www.westerapartners.com.au ABN 52 097 417 975		BRISBANE T 07 3852 4333 E: brisbane@westerapartners.com.au GOLD COAST T 07 5571 1599 E: goldcoast@westerapartners.com.au SUNSHINE COAST T 07 5391 3777 E: sunshinecoast@westerapartners.com.au NORTHERN NSW T 02 6674 8047 E: nsw@westerapartners.com.au CENTRAL VICTORIA T 03 5441 0922 E: centralvic@westerapartners.com.au		SURVEYOR RPS GROUP PHONE 07 3539 9500 DATUM A.H.D. P.M.152294 R.L.27.308 USE FIGURED DIMENSIONS ONLY. DO NOT SCALE. IF A DISCREPANCY ARISES CHECK WITH THE PROJECT ENGINEER AND/OR SUPERVISING AUTHORITY. DO NOT WORK FROM REDUCED SCALE DRAWINGS (A1-A3 SIZE PAPER). COPYRIGHT OF ALL DRAWINGS & WORKS EXECUTED FROM THEM IS VESTED IN WESTERA PARTNERS AND USE OF THERE FORE WITHOUT PERMISSION IS STRICTLY PROHIBITED. IT IS THE BUILDERS RESPONSIBILITY TO ENSURE ALL WORKS ARE CARRIED OUT WITH DUE CARE AND DILIGENCE TO COMPLY WITH THE CONTRACT DOCUMENTS.		PROJECT LOCATION TITLE CLIENT	PROPOSED CONCRETE BATCHING PLANT LOT 2 on SP267252 916-944 GREENBANK ROAD, NORTH MACLEAN PRELIMINARY CIVIL WORKS SITE PLAN NUCRUSH GROUP	DRAWING STATUS PRELIMINARY N.F.C. DRAWING NUMBER G24-062-PC03 SHEET NUMBER 03 OF 07 REVISION												
No.	DATE	REVISIONS																								
		DES	DRN	CHK												APD	DOCUMENT CONTROL	APPROVED								

EW1	IN CASE OF DOUBT – ASK!
EW2	ALL LEVELS TO AHD, DIMENSIONS IN METERS U.N.O.
EW3	ALL LIAISON WITH LOCAL, STATE & STATUTORY AUTHORITIES IS THE CONTRACTOR'S RESPONSIBILITY.
EW4	THE LOCATION OF EXISTING SERVICES IS FOR CONTRACTOR'S INFORMATION ONLY, THE LOCATION OF SERVICES WILL BE CONFIRMED BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF WORKS.
EW5	ANY DAMAGE CAUSED TO THE EXISTING SERVICE WILL BE MADE GOOD AT THE CONTRACTOR'S EXPENSE.
EW6	EARTHWORK PROCEDURES ARE TO BE CARRIED OUT IN ACCORDANCE WITH AS 3798 – 2007 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS".
EW7	EARTHWORKS OPERATIONS ARE TO BE CARRIED OUT IN GENERAL ACCORDANCE WITH THE GEOTECHNICAL REPORT.
EW8	WORKS NOT SPECIFICALLY REFERRED TO, ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE GENERAL DRAWINGS AND SPECIFICATIONS OF THE LOCAL AUTHORITY (LOGAN CITY COUNCIL).
EW9	THE CONTRACTOR IS TO ALLOW FOR ALL FEES AND HAULAGE COSTS ASSOCIATED WITH DISPOSAL OF MATERIAL FROM THE SITE.
EW10	ALL COSTS ASSOCIATED WITH NOISE AND DUST SUPPRESSION FOR SITE WORKS ARE DEEMED THE CONTRACTOR'S RESPONSIBILITY.
EW11	COMPACTION STANDARDS – MINIMUM RELATIVE COMPACTIONS TO AS 3798 TABLE 5.1 (REFER BELOW

ITEM	APPLICATION	MINIMUM RELATIVE COMPACTION, %	
		MINIMUM DENSITY RATIO (COHESIVE SOILS) (SEE NOTE 1*)	MINIMUM DENSITY INDEX (COHESIONLESS SOILS) (SEE NOTE 2*)
1	RESIDENTIAL – LOT FILL, HOUSE SITES	95 std (SEE NOTE 3*)	65
2	COMMERCIAL – FILLS TO SUPPORT MINOR LOADINGS, INCLUDING FLOOR LANDINGS OF UP TO 20 kPa AND ISOLATED PAD OR STRIP FOOTINGS TO 100 kPa	98 std (SEE NOTE 4*)	70
3	PAVEMENTS (SEE NOTE 5*)		
	(a) FILL TO SUPPORT PAVEMENTS – PAVEMENT –	95 std	65
	(b) SUBGRADE (TO DEPTH OF 0.3m)	98 std	80
	(c) SUB-BASE COURSES	95 mod	NOT USUALLY APPLICABLE
	(d) BASE COURSE		
	– HEAVILY LOADED	98 mod	NOT USUALLY APPLICABLE
	– OTHER	95 mod (SEE NOTE 5*)	NOT USUALLY APPLICABLE

*REFER TO AS 3798 FOR TABLE NOTES.

EW12	PRIOR TO COMMENCEMENT OF WORKS THE CONTRACTOR WILL PROVIDE SCOUR AND EROSION PROTECTION INCLUDING PROVISION OF SILT TRAPS AND FENCES TO MINIMISE DEPOSITION OF MATERIAL DOWNSTREAM OF THE PROPERTY.
EW13	NO BLASTING WILL BE PERMITTED.
EW14	THE LOCATION OF THE SITE SHEDS, SITE OFFICE AND AMENITIES BUILDING WILL BE LOCATED TO SUIT TEMPORARY UTILITY SERVICES OR AS AGREED WITH THE MANAGER.
EW15	TESTING FREQUENCY AS 3798 – 2007 SECTION 8.0 OR AS APPROVED BY THE GEOTECHNICAL ENGINEER.
EW16	AT COMPLETION OF CONSTRUCTION THE CONTRACTOR SHALL ARRANGE FOR AN INDEPENDENT LICENSED SURVEYOR TO CARRY OUT A "WORKS AS CONSTRUCTED" SURVEY AND SUBMIT THE DETAIL PLAN TO THE MANAGER.
EW17	THE LOCATION OF TEMPORARY STOCKPILES DURING CONSTRUCTION IS TO BE AGREED WITH THE MANAGER.

AREA OF FILL – 10,569 m²
AREA OF CUT – 890 m²
VOLUME OF FILL – 11,434 m³
VOLUME OF CUT – 266 m³

THE EARTHWORKS VOLUMES SHOWN ARE INDICATIVE NETT FIGURES ONLY BETWEEN THE EARTHWORKS SURFACE AND AN EXISTING SURFACE AND DO NOT ALLOW FOR ANY STRIPPING, DEMOLITION WORKS, UNSUITABLE MATERIAL AND VEGETATION OR COMPACTION LOSSES.

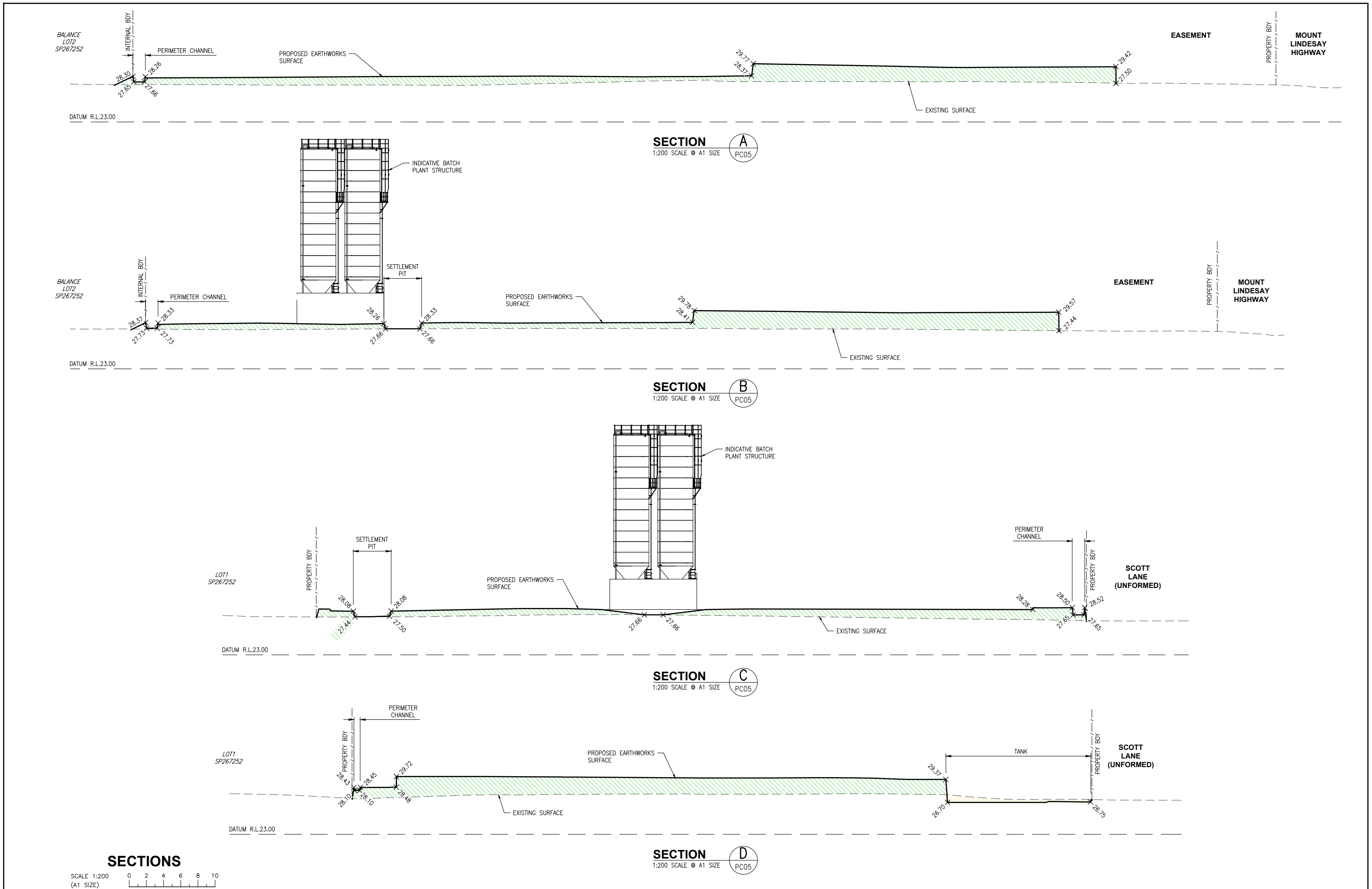
PAVEMENT SUBGRADE LEVELS SHOWN ARE 300mm BELOW F.S.L
LANDSCAPE/BATTER LEVELS SHOWN ARE 100mm BELOW F.S.L

EARTHWORK LEVELS MAY BE ADJUSTED TO SUIT FSL'S
AND CONCRETE THICKNESS BASED ON STRUCTURAL
DESIGN AS APPROVED BY SUPERINTENDENT.

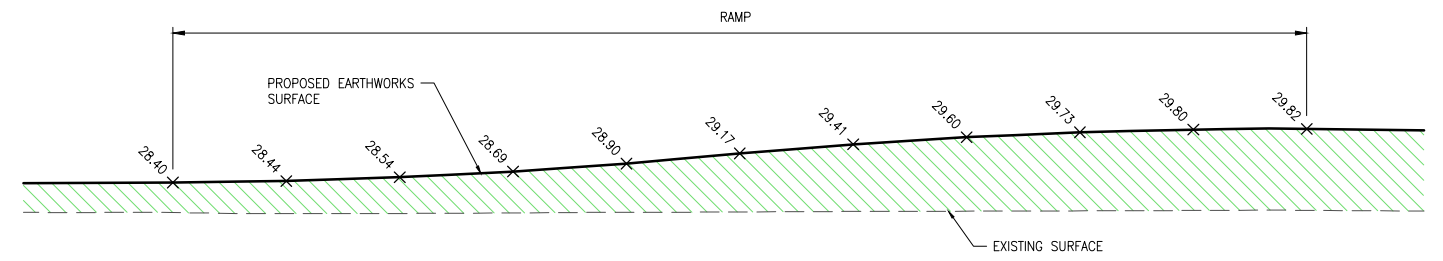
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-0.25m to -0.5m		0.25m to 0.5m	
-0.5m to -0.75m		0.5m to 0.75m	
-0.75m to -1.0m		0.75m to 1.0m	
-1.0m to -1.25m		1.0m to 1.25m	
-1.25m to -1.5m		1.25m to 1.5m	
-1.5m to -1.75m		1.5m to 1.75m	
-1.75m to -2.0m		1.75m to 2.0m	
-2.0m to -2.25m		2.0m to 2.25m	
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> -2.5m		> 2.5m	



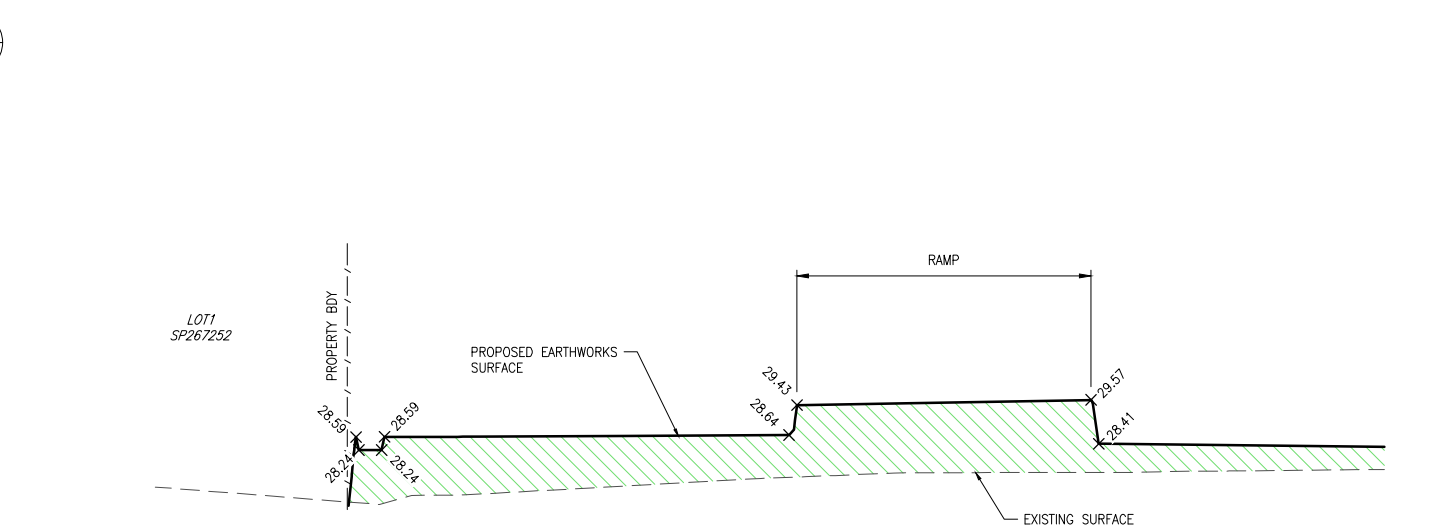
										DESIGNED G.G.J.	  WESTERA PARTNERS STRUCTURAL-CIVIL-ENVIRONMENTAL ENGINEERS www.westerapartners.com.au ABN 52 097 417 975	BRISBANE T 07 3852 4333 E brisbane@westerapartners.com.au GOLD COAST T 07 5571 1599 E goldcoast@westerapartners.com.au SUNSHINE COAST T 07 5391 3777 E sunshinecoast@westerapartners.com.au NORTHERN NSW T 02 6674 8047 E nsw@westerapartners.com.au CENTRAL VICTORIA T 03 5441 0922 E centralvic@westerapartners.com.au		SURVEYOR RPS GROUP PHONE 07 3539 9500 DATUM A.H.D. P.M.152294 R.L.27.308		PROJECT PROPOSED CONCRETE BATCHING PLANT LOCATION LOT 2 on SP267252 916-944 GREENBANK ROAD, NORTH MACLEAN TITLE PRELIMINARY EARTHWORKS PLAN CLIENT NUCRUSH GROUP		DRAWING STATUS PRELIMINARY N.F.C. DRAWING NUMBER G24-062-PC05 SHEET NUMBER 05 OF 07 REVISION	
										DRAWN Y.N.M.									
										CHECKED B.C.A.									
										APPROVED P.C.G.									
										DATE DECEMBER 2024									
No.	DATE	REVISIONS				DES	DRN	CHK	APD	DOCUMENT CONTROL	APPROVED								



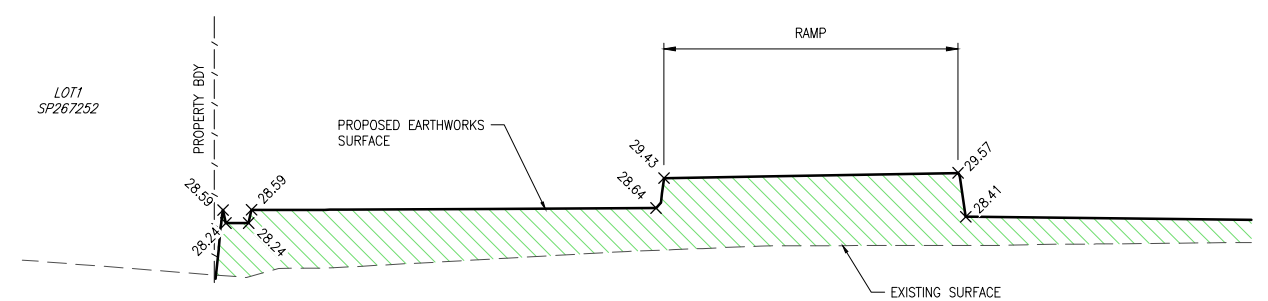
												DESIGNED G.C.J.												BRISBANE T 07 3852 4333 E brisbane@westerapartners.com.au GOLD COAST T 07 5571 1599 E goldcoast@westerapartners.com.au SUNSHINE COAST T 07 5391 3777 E sunshinecoast@westerapartners.com.au NORTHERN NSW T 02 6674 8047 E nsw@westerapartners.com.au CENTRAL VICTORIA T 03 5441 0922 E centralvic@westerapartners.com.au				SURVEYOR RPS GROUP P.M.152294 R.L.27.308 DATE 15/12/2024				PROJECT PROPOSED CONCRETE BATCHING PLANT LOCATION LOT 2 on SP267252 916-944 GREENBANK ROAD, NORTH MACLEAN TITLE PRELIMINARY EARTHWORKS SECTIONS 1 of 2 CLIENT NUCRUSH GROUP				DRAWING STATUS PRELIMINARY N.F.C. DRAWING NUMBER G24-062-PC06 SHEET NUMBER 06 OF 07 REVISION																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
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SECTION F
1:100 SCALE @ A1 SIZE PC05



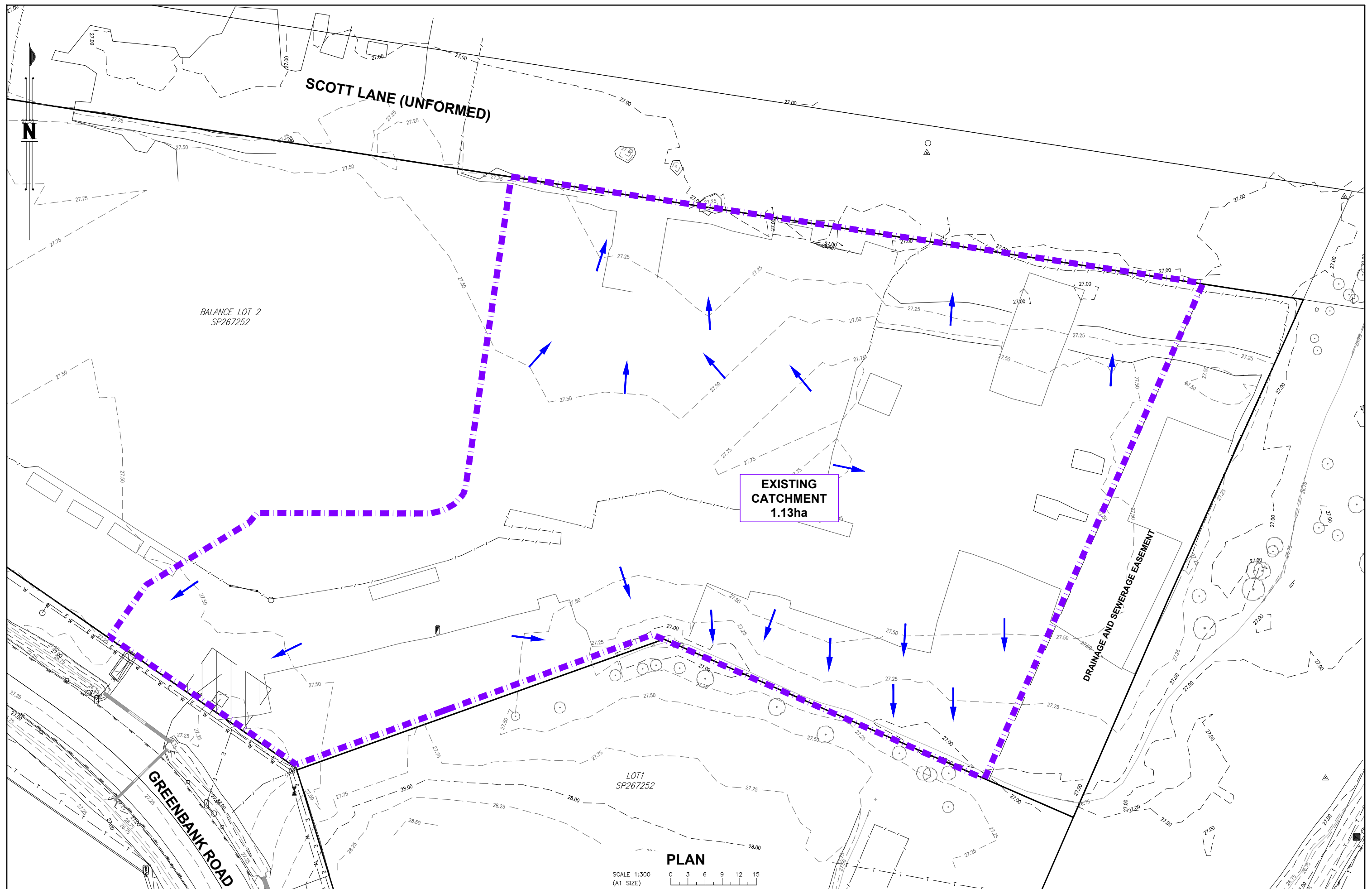
SECTION 1
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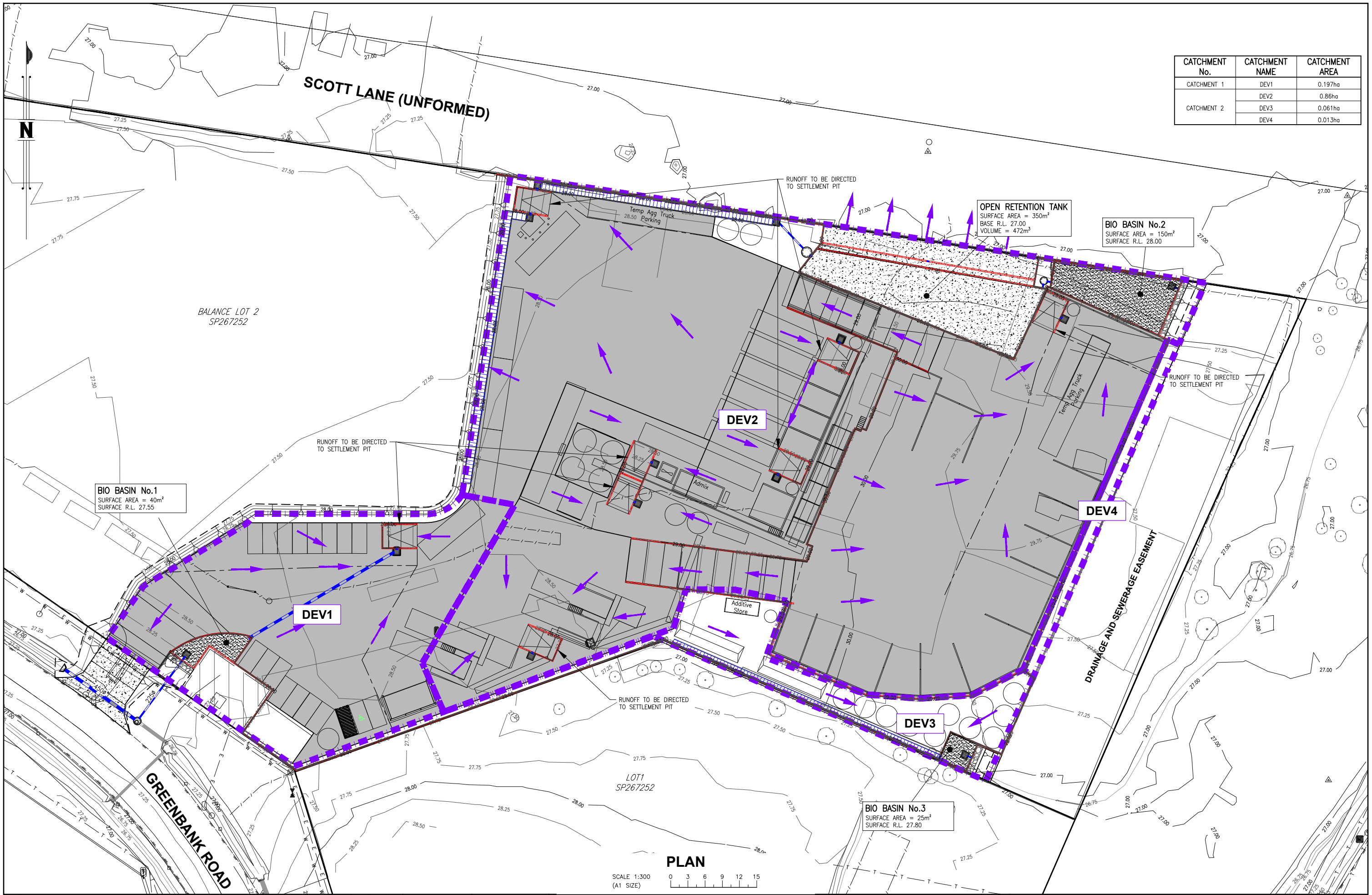
SECTION H
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SCALE 1:100 (A1 SIZE)

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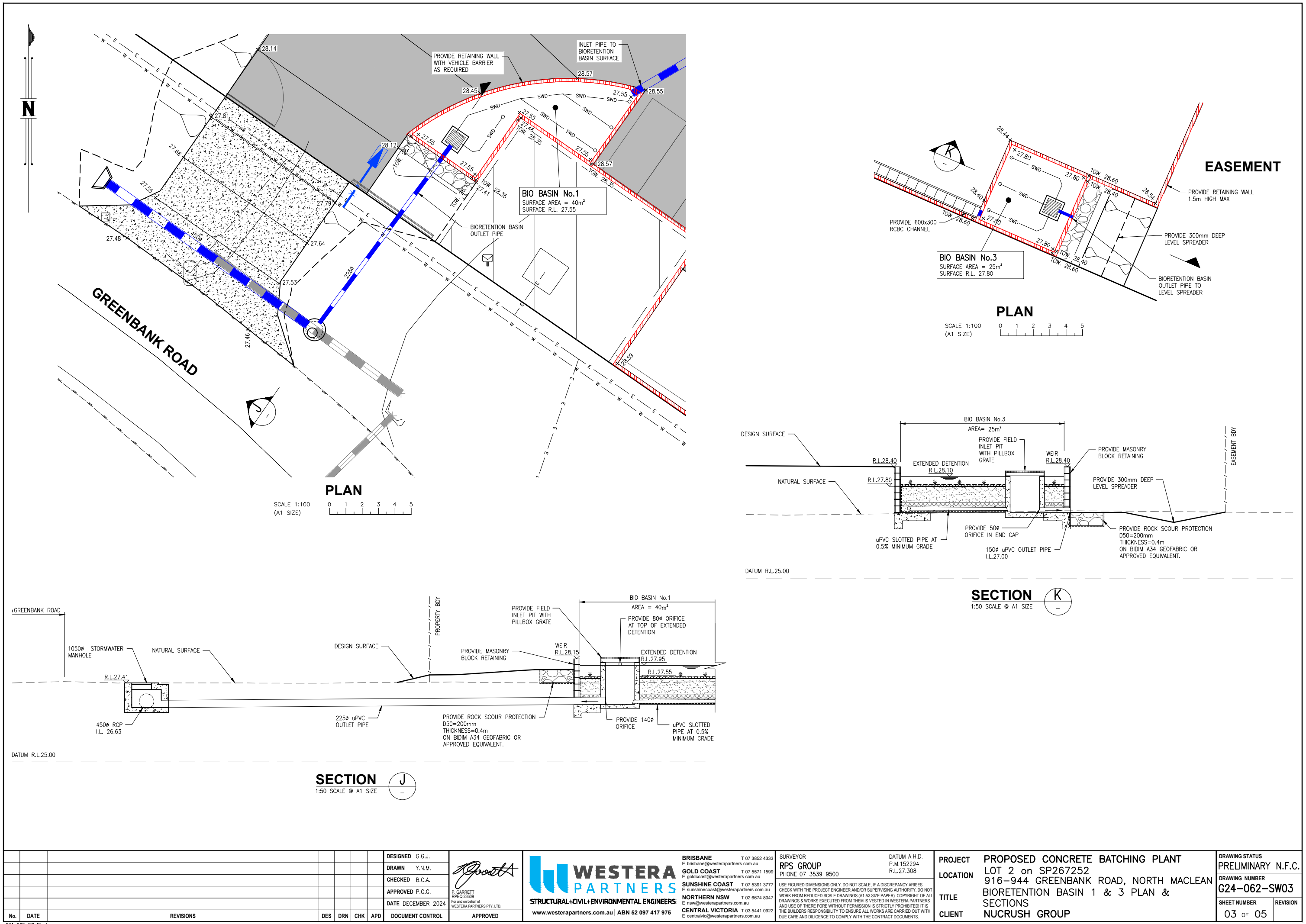


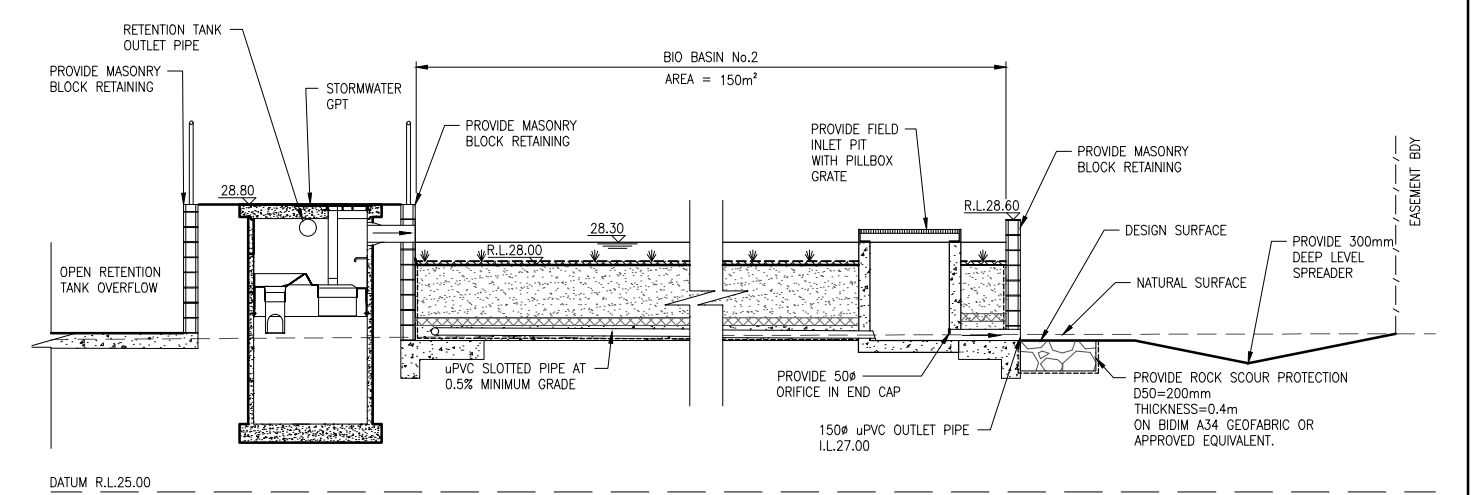
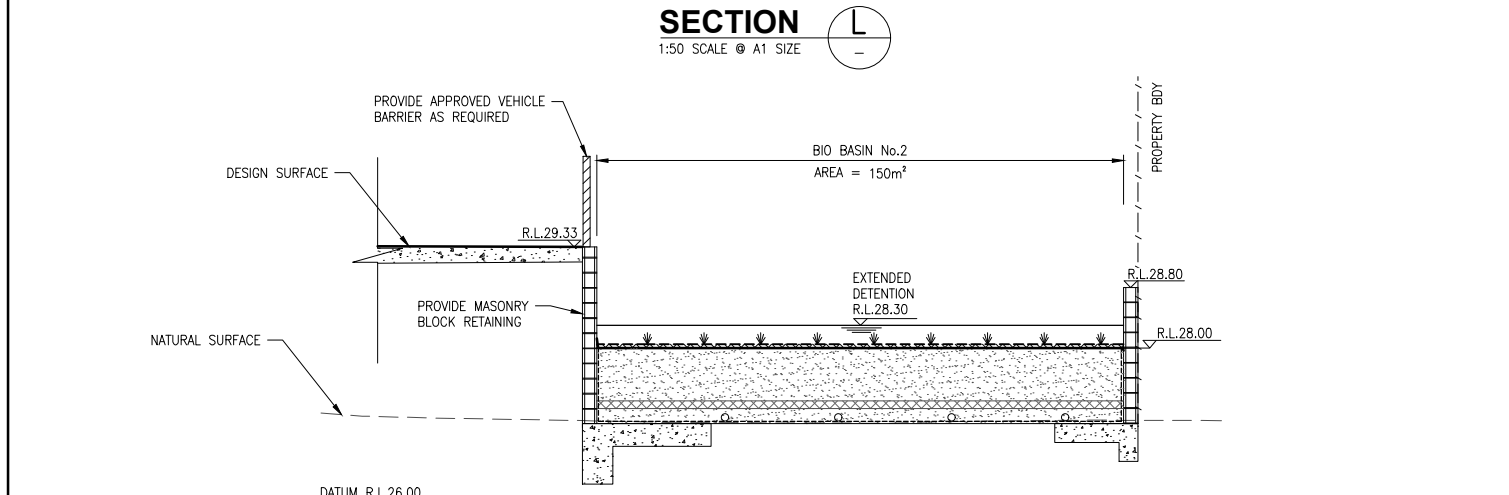
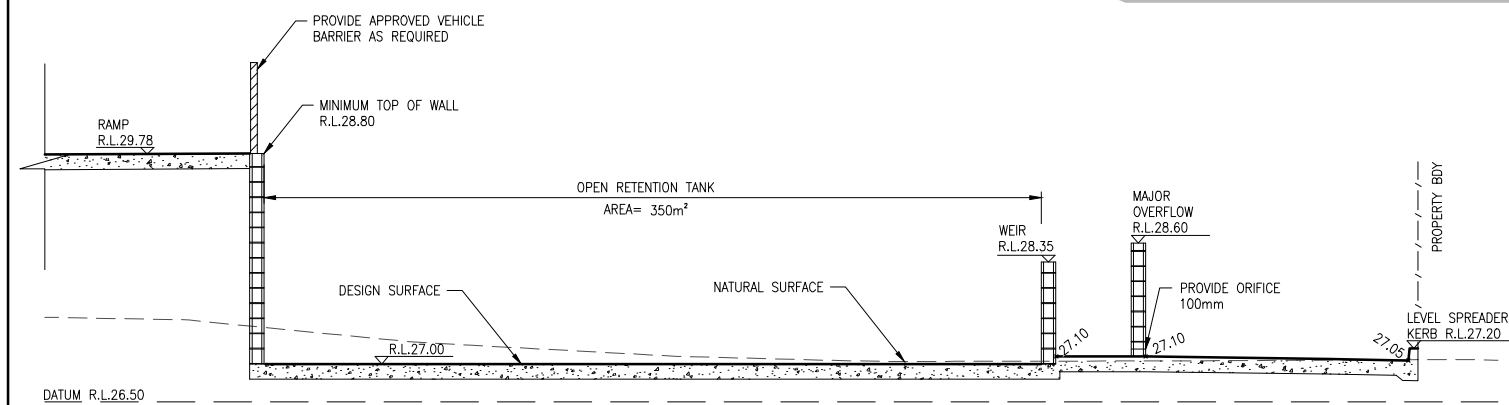
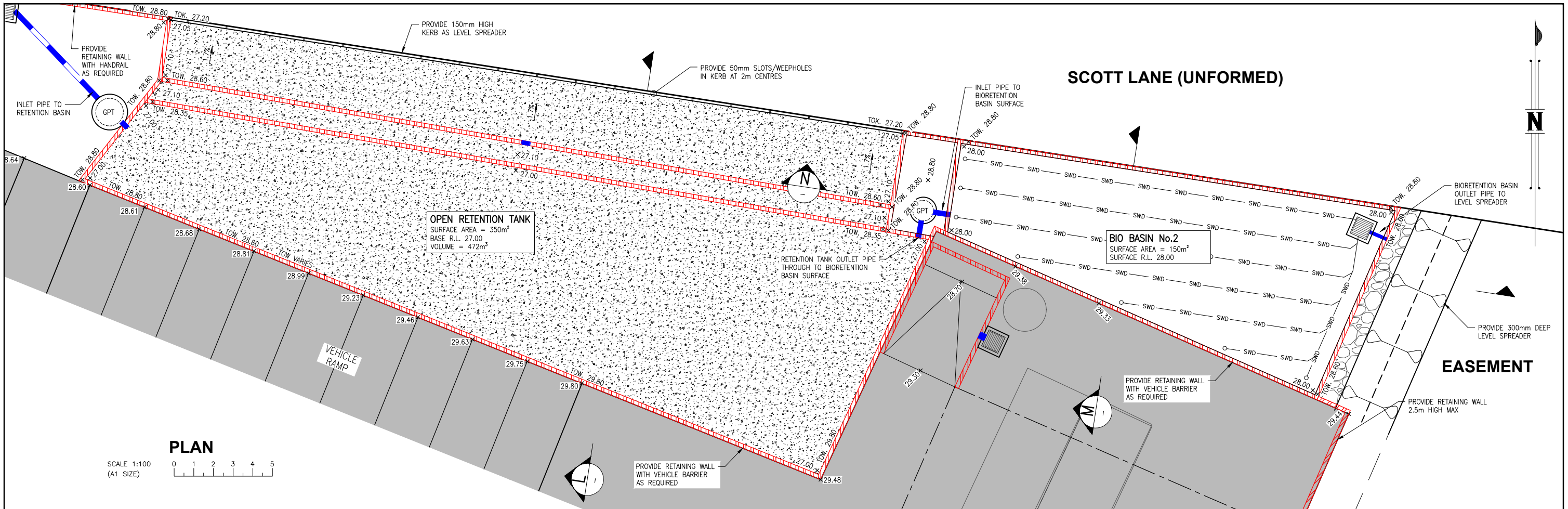
				DESIGNED G.G.J.		 WESTERA PARTNERS STRUCTURAL·CIVIL·ENVIRONMENTAL ENGINEERS www.westerapartners.com.au ABN 52 097 417 975	BRISBANE T 07 3852 4333 E brisbane@westerapartners.com.au GOLD COAST T 07 5571 1599 E goldcoast@westerapartners.com.au SUNSHINE COAST T 07 5391 3777 E sunshinecoast@westerapartners.com.au NORTHERN NSW T 02 6674 8047 E nsw@westerapartners.com.au CENTRAL VICTORIA T 03 5441 0922 E centralvic@westerapartners.com.au		SURVEYOR RPS GROUP PHONE 07 3539 9500 DATUM A.H.D. P.M.152294 R.L.27.308		PROJECT PROPOSED CONCRETE BATCHING PLANT LOCATION LOT 2 on SP267252 916-944 GREENBANK ROAD, NORTH MACLEAN		DRAWING STATUS PRELIMINARY N.F.C. DRAWING NUMBER G24-062-SW01		
				DRAWN Y.N.M.											
				CHECKED B.C.A.											
				APPROVED P.C.G.											
				DATE DECEMBER 2024	P. GARNETT RPEQ 23609 For and on behalf of WESTERA PARTNERS PTY. LTD.		USE FIGURED DIMENSIONS ONLY. DO NOT SCALE. IF A DISCREPANCY ARISES CHECK WITH THE PROJECT ENGINEER AND/OR SUPERVISING AUTHORITY. DO NOT WORK FROM REDUCED SCALE DRAWINGS (A1-A3 SIZE PAPER). COPYRIGHT OF ALL DRAWINGS & WORKS EXECUTED FROM THEM IS VESTED IN WESTERA PARTNERS AND USE OF THERE FORE WITHOUT PERMISSION IS STRICTLY PROHIBITED IT IS THE BUILDERS RESPONSIBILITY TO ENSURE ALL WORKS ARE CARRIED OUT WITH DUE CARE AND DILIGENCE TO COMPLY WITH THE CONTRACT DOCUMENTS.		TITLE EXISTING CATCHMENT PLAN CLIENT NUCRUSH GROUP		SHEET NUMBER 01 OF 05		REVISION		
No.	DATE	REVISIONS			DES	DRN	CHK	APD	DOCUMENT CONTROL	APPROVED					



CATCHMENT No.	CATCHMENT NAME	CATCHMENT AREA
CATCHMENT 1	DEV1	0.197ha
	DEV2	0.86ha
CATCHMENT 2	DEV3	0.061ha
	DEV4	0.013ha

					DESIGNED G.C.J.				BRISBANE T 07 3852 4333 E brisbane@westerapartners.com.au GOLD COAST T 07 5571 1599 E goldcoast@westerapartners.com.au SUNSHINE COAST T 07 5391 3777 E sunshinecoast@westerapartners.com.au NORTHERN NSW T 02 6674 8047 E nsw@westerapartners.com.au CENTRAL VICTORIA T 03 5441 0922 E centralvic@westerapartners.com.au	SURVEYOR RPS GROUP PHONE 07 3539 9500 DATUM A.H.D. P.M.152294 R.L.27.308	PROJECT LOCATION TITLE CLIENT	PROPOSED CONCRETE BATCHING PLANT LOT 2 on SP267252 916-944 GREENBANK ROAD, NORTH MACLEAN DEVELOPED CATCHMENT PLAN NUCRUSH GROUP	DRAWING STATUS PRELIMINARY N.F.C.									
					DRAWN Y.N.M.								DRAWING NUMBER G24-062-SW02									
					CHECKED B.C.A.								SHEET NUMBER 02 OF 05									
					APPROVED P.C.G.								REVISION									
					DATE DECEMBER 2024		P. GARRETT RPEO 23069 For and on behalf of WESTERA PARTNERS PTY. LTD.															
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- PLEASE ASK IF THERE ARE ANY DOUBTS REGARDING DETAILS SUPPLIED ON THIS DRAWING.
2. GENERAL CONSTRUCTION AND PROCUREMENT CONSIDERATIONS SHALL COMPLY WITH THE LATEST VERSION OF THE HEALTHY WATERWAYS GUIDELINE FOR CONSTRUCTION AND ESTABLISHMENT OF VEGETATED STORMWATER MANAGEMENT SYSTEMS. WHERE CONFLICT EXISTS BETWEEN THE GUIDELINE AND THE SPECIFICATIONS ON THIS DRAWING THE SPECIFICATIONS ON THIS DRAWING SHALL BE FOLLOWED.
3. THE HYDRAULIC CONDUCTIVITY OF POTENTIAL FILTER MEDIA SHOULD BE MEASURED USING THE ASTM F1815-06 METHOD. TESTING SHOULD BE UNDERTAKEN AT LEAST
 - (i) ONE MONTH FOLLOWING COMMENCEMENT OF OPERATION
 - (ii) IN THE SECOND YEAR OF OPERATIONTESTING SHOULD BE CHECKED AT A MINIMUM OF THREE POINTS WITHIN THE SYSTEM.
4. THE FOLLOWING PARTICLE SIZE DISTRIBUTION FOR FILTER MEDIA IS A GUIDE FOR SELECTING AN APPROPRIATE MATERIAL

CLAY & SILT	< 3%	(<0.05mm)
VERY FINE SAND	5-30%	(<0.05 - 0.15mm)
FINE SAND	10-30%	(<0.15 - 0.25mm)
MEDIUM TO COARSE SAND	40-60%	(<0.25 - 1.0mm)
COARSE SAND	7-10%	(<1.0 - 2.0mm)
FINE GRAVEL	< 3%	(<2.0 - 3.4mm)

THE FILTER MEDIA SHOULD BE WELL GRADED, ie. IT SHOULD HAVE ALL PARTICLE SIZE RANGES PRESENT FROM THE 0.075mm TO THE 4.75mm. THERE SHOULD BE NO GAP IN THE PARTICLE SIZE GRADING, AND THE COMPOSITION SHOULD NOT BE DOMINATED BY A SMALL PARTICLE SIZE RANGE.
5. SOIL PROPERTIES AS4419-2003 (SOILS FOR LANDSCAPING & GARDEN USE) FILTER MEDIA THAT DOES NOT MEET THE FOLLOWING SPECIFICATION WILL BE REJECTED :
 - i) ORGANIC MATTER CONTENT - LESS THAN 5 % (w/w)
 - ii) PH - 5.5 - 7.5
 - iii) ELECTRICAL CONDUCTIVITY (E/C) - < 1.2dS/m
 - iv) PHOSPHORUS < 100mg/kg
 - v) ORTHOPHOSPHATE < 45mg/kg
6. POTENTIAL FILTER MEDIA SHOULD BE ASSESSED BY A HORTICULTURALIST TO ENSURE THAT THEY ARE CAPABLE OF SUPPORTING A HEALTHY VEGETATION COMMUNITY.
7. THE TRANSITION LAYER MATERIAL IS TO BE A CLEAN WELL GRADED SAND/COARSE SAND MATERIAL CONTAINING LITTLE OR NO FINES.
8. THE DRAINAGE LAYER IS TO BE CLEAN, FINE GRAVEL, SUCH AS 2-5mm WASHED SCREENINGS.
9. THE FILTER MATERIAL IS TO BE LIGHTLY COMPACTED DURING INSTALLATION TO PREVENT MIGRATION OF FINE PARTICLES. IN SMALL SYSTEMS, A SINGLE PASS WITH A VIBRATING PLATE, WHILE IN LARGE SYSTEMS A SINGLE PASS WITH A ROLLER MACHINERY (eg. A DRUM LAWN ROLLER) WILL BE ADEQUATE. FILTER MEDIA SHOULD BE INSTALLED IN TWO LIFTS UNLESS THE DEPTH IS LESS THAN 500mm.
10. FILTER MEDIA SHALL COMPLY WITH THE LATEST VERSION OF THE FAWB GUIDELINES FOR SOIL FILTER MEDIA IN BIO-RETENTION SYSTEMS. WHERE CONFLICT EXISTS BETWEEN THE FAWB GUIDELINE AND THE SPECIFICATIONS ON THIS DRAWING THE SPECIFICATIONS ON THIS DRAWING SHALL BE FOLLOWED.
11. LANDSCAPING, SUCH AS PLANTING AND MULCH SHALL COMPLY WITH THE LATEST VERSION OF THE HEALTHY WATERWAYS GUIDELINE FOR CONSTRUCTION AND ESTABLISHMENT OF VEGETATED STORMWATER MANAGEMENT SYSTEMS. PLANT SPECIES AND CHARACTERISTICS MUST BE IN ACCORDANCE WITH APPENDIX A- PLANT SELECTION FOR WSD SYSTEMS, OF THE WSD TECHNICAL DESIGN GUIDELINES FOR SOUTH EAST QUEENSLAND VERSION 1 JUNE 2006.
12. MULCH SHALL BE ORGANIC FRIABLE MULCH THAT DEGRADES WITHIN 6 MONTHS eg. FINE SUGAR CANE OR TEA TREE MULCH. MULCH TYPE TO BE CONFIRMED WITH DESIGNER PRIOR TO PROCUREMENT OR INSTALLATION. THE MULCH SHALL BE PINNED DOWN WITH LOOSE WEAVE JUTE NETTING AND PINNED AT NOT MORE THAN 500mm CENTRES. HEAVY DUTY MATTING eg. 500gsm JUTE MAT, SHALL BE AVOIDED.
13. THE BIO-RETENTION BASIN SHALL BE PROTECTED WITH GEOTEXTILE, 75mm TOPSOIL AND TURF FOR AT LEAST 12 MONTHS AND UNTIL 80% OF HOUSES HAVE BEEN CONSTRUCTED. THE PROTECTION IS THEN TO BE REMOVED, PLANTED OUT AND MAINTAINED FOR A FURTHER 12 MONTHS.
14. THE BIO-RETENTION BASIN SHALL TYPICALLY BE LINED WITH BIDIM A34 GEOFABRIC. IMPERMEABLE PE SHEETING SHALL BE PROVIDED WHERE SITE CONDITIONS DICTATE INCLUDING STRUCTURES IN CLOSE VICINITY, PERCHED WATER TABLE OR WHERE OTHERWISE CALLED UP BY INSPECTING ENGINEER.

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