MIXED USE DEVELOPMENT

64-66 PACIFIC HIGHWAY, ROSEVILLE

Job No. 17011201

PIPEWORK

- PROPOSED STORMWATER DRAINAGE LINE (IN THE GROUND) Φ100 @ 1.0% MIN GRADE UNO.
- PROPOSED RAINWATER DRAINAGE LINE Φ100 @ 1.0% MIN GRADE UNO. USE PRESSURE GRADE PIPES FOR CHARGED SYSTEM
- 90Φ SUBSOIL LINE CONNECT TO STORMWATER OUTLET OR VERTICAL SLOT DRAIN
- EXISTING STORMWATER DRAINAGE LINE
- DOWNPIPE, RISER OR VERTICAL DROP

STORMWATER FIXERS & EQUIPMENT

- PROPOSED SEALED JUNCTION PIT
- PROPOSED GRATED SUFACE INLET PIT, PIT DIMENSIONS ARE GOVERNED BY DEPTH REFER TO DETAIL.
- PROPOSED KERB INLET PIT
- PROPOSED GRATED DRAIN
- PROPOSED RAINWATER TANK

TAGS & MISCELLANEOUS

- SERVICE / SIZE — PIPE TO ABOVE
- SERVICE / SIZE — PIPE TO BELOW
- 225 DIA uPVC @ 1.0% MIN — PIPE SIZE, TYPE AND GRADE
- OVERLAND FLOW PATH
- ROOF FALL DIRECTION
- P 35.05 — PROPOSED PAVEMENT SURFACE LEVEL
- GL 35.05 — PROPOSED PIT SURFACE LEVEL
- IL 34.75 — PROPOSED PIT INVERT LEVEL
- FFL 23.56 — PROPOSED FINISHED FLOOR LEVEL
- + 35.11 — EXISTING SURFACE LEVEL
- 36.00 — EXISTING SURVEY CONTOUR

* DEPTH AND LOCATION OF ALL EXISTING SERVICES TO BE CONFIRMED BY BUILDER ON SITE PRIOR TO COMMENCEMENT OF CONSTRUCTION

* ALL EXISTING LEVELS TO BE CONFIRMED ON SITE PRIOR TO COMMENCEMENT OF WORKS

GENERAL

1. ALL EXISTING LEVELS TO BE CONFIRMED ON SITE PRIOR TO COMMENCEMENT OF WORKS
2. ALL WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE NOMINATED OR APPLICABLE COUNCIL SPECIFICATION. WHERE A SPECIFICATION HAS NOT BEEN NOMINATED THEN THE CURRENT NSW DEPARTMENT OF HOUSING CONSTRUCTION SPECIFICATION IS TO BE USED. THE NOMINATED SPECIFICATION SHALL TAKE PRECEDENCE TO THESE NOTES.
3. THESE DRAWINGS ARE DIAGRAMMATIC AND SHOW THE GENERAL ARRANGEMENT, ALL DIMENSIONS SHOWN SHALL BE VERIFIED BY THE CONTRACTOR ON SITE, ENGINEERS DRAWINGS SHALL NOT BE SCALED FOR DIMENSIONS.
4. ALL DRAWINGS SHOULD BE READ IN CONJUNCTION WITH THE RELEVANT ARCHITECTURAL DRAWINGS & DRAWINGS FROM OTHER CONSULTANTS.
5. THE CONTRACTOR SHOULD REPORT ANY DISCREPANCIES ON THE DRAWINGS TO THE ENGINEER RESPONSIBLE FOR THE DESIGN.
6. THE CONTRACTOR SHOULD LOCATE AND LEVEL ALL EXISTING SERVICES PRIOR TO COMMENCING CONSTRUCTION AND PROTECT AND MAKE ARRANGEMENTS WITH THE RELEVANT AUTHORITY TO RELOCATE AND/OR ADJUST IF NECESSARY. INFORMATION GIVEN ON THE DRAWINGS IN RESPECT TO SERVICES IS FOR GUIDANCE ONLY AND IS NOT GUARANTEED COMPLETE NOR CORRECT.
7. CONTRACTOR IS NOT TO ENTER UPON NOR DO ANY WORK WITHIN ADJACENT LANDS WITHOUT THE PERMISSION OF THE OWNER.
8. SURPLUS EXCAVATED MATERIAL SHALL BE PLACED WHERE DIRECTED OR REMOVED FROM SITE.
9. ALL NEW WORKS SHALL MAKE A SMOOTH JUNCTION WITH EXISTING.
10. ALL DRAINAGE LINES THROUGH ADJACENT LOTS SHALL BE CONTAINED WITHIN EASEMENTS CONFORMING TO COUNCIL'S STANDARDS.
11. THE CONTRACTOR SHALL CLEAR THE SITE BY REMOVING ALL RUBBISH, FENCES AND DEBRIS ETC., TO THE EXTENT SPECIFIED.
12. PRIOR TO COMMENCEMENT OF WORK, THE CONTRACTOR SHALL PROVIDE A TRAFFIC MANAGEMENT PLAN PREPARED BY AN ACCREDITED PERSON IN ACCORDANCE WITH RMS REQUIREMENTS, FOR ANY WORK ON OR ADJACENT TO PUBLIC ROADS, PLAN TO BE SUBMITTED TO COUNCIL & RMS.

SURVEY

1. JONES NICHOLSON IS NOT RESPONSIBLE FOR THE ACCURACY OF ANY 3rd PARTY INFORMATION PROVIDED ON THIS DRAWING.
2. ALL LEVELS ARE TO A.H.D.
3. ALL CHAINAGES AND LEVELS ARE IN METRES, AND DIMENSIONS IN MILLIMETRES.
4. CONTRACTORS SHALL ARRANGE FOR THE WORKS TO BE SET OUT BY A REGISTERED SURVEYOR.

STORMWATER DRAINAGE INSTALLATION

1. SUPPLY & INSTALLATION OF DRAINAGE WORKS TO BE IN ACCORDANCE WITH THESE DRAWINGS, THE COUNCIL SPECIFICATION AND THE CURRENT APPLICABLE AUSTRALIAN STANDARDS.
2. BACKFILL SHALL BE PLACED & COMPACTED IN ACCORDANCE WITH THE SPECIFICATION. A GRANULAR GRAVEL AGGREGATE MATERIAL (<10mm BACKFILL IS RECOMMENDED FOR THE BEDDING, HAUNCH SUPPORT AND SIDE ZONE DUE TO IT'S SELF COMPACTING ABILITY.
3. A MINIMUM OF 150mm CLEARANCE IS TO BE PROVIDED BETWEEN THE OUTSIDE OF THE PIPE BARREL AND THE TRENCH WALL FOR PIPES < 600 DIA. 200mm CLEARANCE FOR PIPES 600 TO 1200 DIA AND D/6 CLEARANCE FOR PIPES >200 DIA.
4. BEDDING OF THE PIPELINES IS TO BE TYPE 'HS2' IN ACCORDANCE WITH THE STANDARDS AND AS FOLLOWS:
5. BEDDING DEPTH UNDER THE PIPE TO BE 100mm.
6. BEDDING MATERIAL TO BE EXTENDED FROM THE TOP OF THE BEDDING ZONE UP TO 0.3 TIMES PIPE OUTSIDE DIAMETER. THIS REPRESENTS THE 'HAUNCH ZONE'.
7. THE BEDDING & HAUNCH ZONE MATERIAL IS TO BE COMPACTED TO A MINIMUM RELATIVE COMPACTION OF 98% WITHIN ROAD RESERVES AND TRAFFICABLE AREAS AND 95% ELSEWHERE FOR COHESIVE MATERIAL OR A MINIMUM DENSITY INDEX OF 70% IN ACCORDANCE WITH THE STANDARDS FOR COHESIONLESS MATERIAL.
8. COMPACTION TESTING SHALL BE CARRIED OUT BY AN APPROVED ORGANISATION WITH A NATA CERTIFIED LABORATORY FOR ALL DRAINAGE LINES LAID WHOLLY OR IN PART UNDER THE KERB & GUTTER OR PAVEMENT.
9. COMPACTED GRANULAR MATERIAL IS TO COMPLY WITH THE FOLLOWING GRADINGS AND THE MATERIAL PASSING THE 0.075 SIEVE HAVING LOW PLASTICITYAS DESCRIBED IN APPENDIX D OF AS1726.

SIEVE SIZE (mm)	19	2.36	0.60	0.30	0.15	0.075
% MASS PASSING	100	50-100	20-90	10-60	0-25	0-10

SAFETY IN DESIGN

THERE ARE INHERENT RISKS WITH CONSTRUCTING, MAINTAINING, OPERATING, DEMOLISHING, DISMANTLING AND DISPOSING THIS DESIGN THAT ARE TYPICAL OF SIMILAR DESIGNS. AS FAR AS IS REASONABLY PRACTICABLE RISKS HAVE BEEN ELIMINATED OR MINIMISED THROUGH THE DESIGN PROCESS. HAZARD CONTROLS MUST STILL BE IMPLEMENTED BY THE CONTRACTOR, OWNER OR OPERATOR TO ENSURE THE SAFETY OF WORKERS.

- JN DO NOT CONSIDER THAT THERE ARE ANY UNIQUE RISKS ASSOCIATED WITH THE DESIGN OF THIS PROJECT.

STORMWATER DRAINAGE

1. STORMWATER DRAINAGE SHALL BE GENERALLY IN ACCORDANCE WITH CURRENT AUSTRALIAN STANDARDS AND COUNCIL'S SPECIFICATION.
2. PIPES OF 225mm DIA. AND UNDER SHALL BE UPVC.
3. PIPES OF 300mm DIA. AND LARGER SHALL BE FRC OR CONCRETE CLASS 2 RUBBER RING JOINTED UNO.
4. ALL FRC OR RCP STORMWATER PIPES WITHIN ROAD RESERVE AREAS TO BE CLASS 3 U.N.O.
5. MINIMUM COVER TO PIPES 300mm DIA. AND OVER GENERALLY SHALL BE 600mm IN CARPARK & ROADWAY AREAS UNO.
6. PIPES SHALL GENERALLY BE LAID AT THE GRADES INDICATED ON THE DRAWINGS.
7. PIPES UP TO 150mm DIA SHALL BE LAID AT 1.0% MIN. GRADE U.N.O.
8. PIPES 225mm DIA AND OVER SHALL BE LAID AT 0.5% MIN. GRADE U.N.O.
9. BACKFILL TRENCHES WITH APPROVED FILL COMPACTED IN 200mm LAYERS TO 98% OF STANDARD DENSITY.
10. ANY PIPES OVER 16% GRADE SHALL HAVE CONCRETE BULKHEADS AT ALL JOINTS.
11. PITS SHALL BE AS DETAILED WITH METAL GRATES AT LEVELS INDICATED. ALL PITS DEEPER THAN 1200mm TO HAVE CLIMB IRONS.
12. BUILD INTO UPSTREAM FACE OF ALL PITS A 3.0m SUBSOIL LINE FALLING TO PITS TO MATCH PIT INVERTS.
13. ALL COURTYARD & LANDSCAPED PITS TO BE 450 SQUARE UNLESS NOTED OTHERWISE.
14. ALL DRIVEWAY & OSD PITS TO BE 600 SQUARE UNLESS NOTED OTHERWISE.
15. INSTALL TEMPORARY SEDIMENT BARRIERS TO INLET PITS, TO COUNCIL'S STANDARDS UNTIL SURROUNDING AREAS ARE PAVED OR GRASSED.
16. PITS & DOWNPIPE LOCATIONS AND LEVELS MAY BE VARIED TO SUIT SITE CONDITIONS AFTER CONSULTING THE ENGINEER.
17. DOWNPIPES SHOWN ARE INDICATIVE ONLY, ALL ROOF GUTTERING AND DOWNPIPES TO THE CURRENT AUSTRALIAN STANDARDS.
18. ALL PLANTER BOXES AND BALCONIES TO BE CONNECTED TO THE PROPOSED STORMWATER DRAINAGE LINE.
19. HAND-EXCAVATE STORMWATER PIPES IN VICINITY OF TREE ROOTS.
20. FOOTPATH CROSSING LEVELS SHOWN ARE TO BE ADJUSTED TO FINAL COUNCIL'S ISSUED LEVELS.
21. GEOTEXTILE FABRIC TO BE PLACED UNDER RIP RAP SCOUR PROTECTION.
22. ALL BASES OF PITS TO BE BENICHED TO HALF PIPE DEPTH AND PROVIDE GALVANISED ANGLE SURROUNDINGS TO GRATE.
23. SUBSOIL LINE PIPES AND FITTINGS SHALL BE PERFORATED PLASTIC TO CURRENT AUSTRALIAN STANDARDS. LAY PIPES ON FLOOR OF TRENCH GRADED AT 1% MIN. AND OVERLAY WITH FILTER MATERIAL EXTENDING TO WITHIN 200mm OF SURFACE. PROVIDE FILTER FABRIC OF PERMEABLE POLYPROPYLENE BETWEEN FILTER MATERIAL AND TOPSOIL.

EARTHWORKS

1. PROVIDE PROTECTION BARRIERS TO PROTECTED/SENSITIVE AREAS PRIOR TO ANY BULK EXCAVATION.
2. OVER FULL AREA OF EARTHWORKS, CLEAR VEGETATION, RUBBISH, SLABS ETC., AND STRIP TOP SOIL, AVERAGE 200mm THICK. REMOVE FROM SITE. EXCEPT TOP SOIL FOR RE-USE.
3. CUT AND FILL OVER THE SITE TO LEVELS REQUIRED.
4. PRIOR TO ANY FILLING IN AREAS OF CUT OR IN EXISTING GROUND, PROOF ROLL THE EXPOSED SURFACE, REFER TO PROJECT INFORMATION TABLES FOR MINIMUM ROLLER WEIGHT AND THE MINIMUM NUMBER OF PASSES.
5. EXCAVATE AND REMOVE ANY SOFT SPOTS ENCOUNTERED DURING PROOF ROLLING AND REPLACE WITH APPROVED FILL COMPACTED IN LAYERS. THE WHOLE OF THE EXPOSED SUBGRADE AND FILL SHALL BE COMPACTED TO 98% STANDARD MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT ± 2%.
6. FOR ON SITE FILLING AREAS, THE CONTRACTOR SHALL TAKE LEVELS OF EXISTING SURFACE AFTER STRIPPING TOPSOIL AND PRIOR TO COMMENCING FILL OPERATIONS.
7. WHERE HARD ROCK IS EXPOSED IN THE EXCAVATED SUB-GRADE, THIS WILL BE INSPECTED AND A DECISION MADE ON THE LEVEL TO WHICH EXCAVATION IS TAKEN.
8. FILL IN 200mm MAXIMUM (LOOSE THICKNESS) LAYERS TO UNDERSIDE OF BASECOURSE USING THE EXCAVATED MATERIAL AND COMPACTED TO 98% STANDARD (AS 1289 5.1.1). MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT ± 2% SHOULD THERE BE INSUFFICIENT MATERIAL FROM SITE EXCAVATIONS, IMPORT AS NECESSARY CLEAN GRANULAR FILL TO the DESIGN ENGINEERS APPROVAL.
9. COMPACTION TESTING TO BE CARRIED OUT IN ACCORDANCE WITH THE PROJECT INFORMATION TABLE. THE COSTS OF TESTING AND RE-TESTING ARE TO BE ALLOWED FOR BY THE BUILDER.
10. BATTERS TO BE AS SHOWN, OR MAXIMUM 1 VERT : 4 HORIZ. ALL CONDUITS AND MAINS SHALL BE LAID PRIOR TO LAYING FINAL PAVEMENT.
11. ALL BATTERS AND FOOTPATHS ADJACENT TO ROADS SHALL BE TOP SOILED WITH 150mm APPROVED LOAM AND SEEDED UNLESS OTHERWISE SPECIFIED.

PAVEMENT - FLEXIBLE

1. THE PAVEMENT DESIGN AS DETAILED ASSUMES A PROPERLY PREPARED UNIFORM AND STABLE SUBGRADE. CONFIRMATION OF DESIGN CBR RATIO IS REQUIRED BY A GEOTECHNICAL ENGINEER PRIOR TO WORKS COMMENCING.
2. ASSUMED DESIGN CBR TO BE CONFIRMED ONSITE DURING CONSTRUCTION PRIOR TO PLACEMENT OF PAVEMENT MATERIALS. THE CONTRACTOR IS TO UNDERTAKE SUFFICIENT CBR TESTING TO CONFIRM THE ASSUMED VALUE. WHERE A LESSER VALUE HAS BEEN DETERMINED, THE SUPERVISING ENGINEER IS TO BE NOTIFIED TO DETERMINE A REVISED PAVEMENT DESIGN.
3. PAVEMENT TO BE CONSTRUCTED AS FOLLOWS:
   SURFACE COURSE - DENSE GRADED ASPHALT
   PRIMERSEAL - EMULSION BASED HOT BITUMEN
   BASE COURSE - DGB 20
   SUB BASE - DGS 40
4. SUBGRADE SHALL BE COMPACTED TO 100% STANDARD MAXIMUM DRY DENSITY RATIO AT OPTIMUM MOISTURE CONTENT ±2%. IN ACCORDANCE WITH CURRENT AUSTRALIAN STANDARDS.
5. SUBBASE COURSE SHALL BE COMPACTED TO 95% MODIFIED MAXIMUM DRY DENSITY.
6. BASECOURSE SHALL BE COMPACTED TO 98% MODIFIED MAXIMUM DRY DENSITY.
7. PRIOR TO THE PLACEMENT OF THE PRIMERSEAL AND AFTER THE REQUIRED DENSITY IS ACHIEVED, THE PAVEMENT IS TO BE ALLOWED TO DRY BACK TO APPROXIMATELY 60% TO 70% OPTIMUM MOISTURE CONTENT.
8. ALL SUBGRADES TO BE ROOF ROLLED & APPROVED BY SUPERVISING ENGINEER
9. COMPACTION TESTS ARE TO BE UNDERTAKEN FOR ALL PAVEMENT LAYERS INCLUDING SUBGRADE AT A RATE TO BE DETERMINED BY THE SUPERVISING ENGINEER & THE RESULTS TO BE SUPPLIED TO THE ENGINEER PRIOR TO PLACEMENT OF THE NEXT PAVEMENT LAYER.

PAVEMENT - RIGID

1. THE PAVEMENT DESIGN AS DETAILED ASSUMES A PROPERLY PREPARED UNIFORM AND STABLE SUBGRADE. CONFIRMATION OF DESIGN CBR RATIO IS REQUIRED BY A GEOTECHNICAL ENGINEER PRIOR TO WORKS COMMENCING.
2. PREPARATION FOR PAVEMENT: CLEAR SITE, STRIP TOPSOIL, CUT AND FILL AND PREPARATION OF SUBGRADE SHALL BE AS DESCRIBED IN "EARTHWORKS" NOTES.
3. SUBGRADE SHALL BE COMPACTED TO 98% STANDARD MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT ± 2% IN ACCORDANCE WITH AS 1289 5.1.1.
4. BASE COURSE SHALL BE CONSTRUCTED FROM FINE CRUSHED ROCK DGB20 COMPACTED TO 100% STANDARD MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT ± 2% IN ACCORDANCE WITH AS 1289 5.1.11
5. CONCRETE PAVEMENT SLABS SHALL BE AS DETAILED ON THE DRAWINGS.
6. ALL WORKMANSHIP AND MATERIALS FOR CONCRETE WORK SHALL BE IN ACCORDANCE WITH AS 3600 AND AS 3610 CURRENT EDITIONS WITH AMENDMENTS, EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.
7. CONCRETE QUALITY ALL CEMENT SHALL BE TYPE SL SHRINKAGE LIMITED CEMENT IN ACCORDANCE WITH AS3972

ELEMENT	STRENGTH GRADE (MPa)	SLUMP	MAXIMUM AGGREG. SIZE (mm)
PAVEMENT	32	80	20

8. PROJECT CONTROL TESTING SHALL BE CARRIED OUT IN ACCORDANCE WITH AS 3600.
9. NO ADMIXTURES SHALL BE USED IN CONCRETE UNLESS APPROVED IN WRITING.
10. CLEAR CONCRETE COVER TO ALL REINFORCEMENT FOR DURABILITY SHALL BE 40mm.
11. CONSTRUCTION JOINTS WHERE NOT SHOWN SHALL BE LOCATED TO THE APPROVAL OF THE ENGINEER.
12. THE FINISHED CONCRETE SHALL BE MECHANICALLY VIBRATED TO ACHIEVE A DENSE HOMOGENEOUS MASS. COMPLETELY FILLING THE FORMWORK THOROUGHLY EMBEDDING THE REINFORCEMENT AND FREE OF STONE POCKETS. CONCRETE SHALL BE COMPACTED WITH MECHANICAL VBRATORS.
13. CURING OF ALL CONCRETE IS TO BE ACHIEVED BY KEEPING SURFACES CONTINUOUSLY WET FOR A PERIOD OF THREE DAYS, AND THE PREVENTION OF LOSS OF MOISTURE FOR A TOTAL OF 7 DAYS FOLLOWED BY A GRADUAL DRYING OUT.
14. REPAIRS TO CONCRETE SHALL NOT BE ATTEMPTED WITHOUT THE PERMISSION OF THE ENGINEER.

PROOF ROLLING

PROOF ROLLING SPECIFICATIONS

(min) ROLLER WEIGHT	(min) NUMBER OF PASSES
5 TONNE	10

COMPACTION TESTING

RATE OF TESTS	TEST AREA PER LAYER
2	1000m²

-TESTING SHALL BE CARRIED OUT BY A REGISTERED NATA LABORATORY.

CIVIL DRAWING LIST

No	DATE	BY	DESCRIPTION
3	09.08.23	ER	REISSUED FOR DA
2	25.11.22	ER	ISSUED FOR DA
1	15.11.22	ER	ISSUED FOR DA

JN Responsive Engineering

CLIENT
HYECORP

STATUS
PRELIMINARY

DISCIPLINE
CIVIL DESIGN
R22

DRAWING TITLE
NOTES & LEGEND

PROJECT
MIXED USE DEVELOPMENT

ADDRESS
64-66 PACIFIC HIGHWAY, ROSEVILLE

PROJECT DETAILS

DESIGN	SD
DRAWN	ELR
DATE	NOV 22
DRG SIZE	A1
SCALE	1 : 1
PROJECT MGR	S McM

WWW.JN.COM.AU

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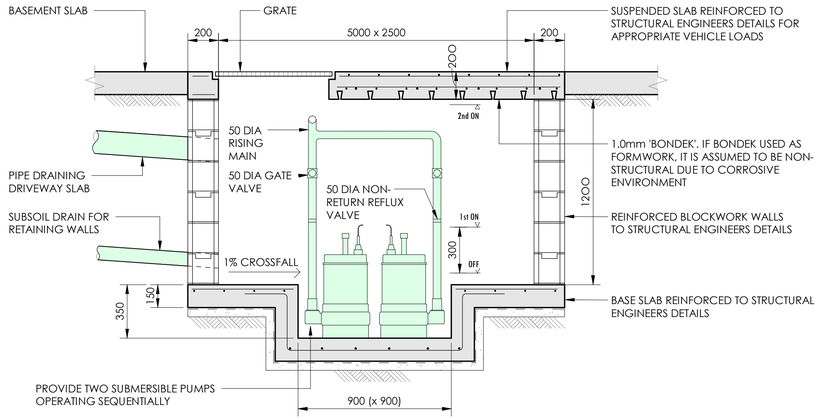


PUMP-OUT PIT DESIGN NOTES

THE PUMP OUT SYSTEM SHALL BE DESIGNED TO BE OPERATED IN THE FOLLOWING MANNER:

* THE PUMPS SHALL BE PROGRAMMED TO WORK ALTERNATELY SO AS TO ALLOW BOTH PUMPS TO HAVE AN EQUAL OPERATION LOAD AND PUMP LIFE.
* A LOW LEVEL FLOAT SHALL BE PROVIDED TO ENSURE THAT THE MINIMUM REQUIRED WATER LEVEL IS MAINTAINED WITHIN THE SUMP AREA OF THE BELOW GROUND TANK. IN THIS REGARD THIS FLOAT WILL FUNCTION AS AN OFF SWITCH FOR THE PUMPS.
* A SECOND FLOAT SHALL BE PROVIDED AT A HIGHER LEVEL, APPROXIMATELY 300mm ABOVE THE MINIMUM WATER LEVEL, WHEREBY ONE OF THE PUMPS WILL OPERATE AND DRAIN THE TANK TO THE LEVEL OF THE LOW LEVEL FLOAT.
* A THIRD FLOAT SHALL BE PROVIDED AT A HIGH LEVEL, WHICH IS APPROXIMATELY THE ROOF LEVEL OF THE BELOW GROUND TANK. THIS FLOAT SHOULD START THE OTHER PUMP THAT IS NOT OPERATING AND ACTIVATE THE ALARM
* AN ALARM SYSTEM SHALL BE PROVIDED WITH A FLASHING STROBE LIGHT AND A PUMP FAILURE WARNING SIGN WHICH ARE TO BE LOCATED AT THE DRIVEWAY ENTRANCE TO THE BASEMENT LEVEL. THE ALARM SYSTEM SHALL BE PROVIDED WITH A BATTERY BACK-UP IN CASE OF POWER FAILURE.
* CONTRACTOR IS TO CONFIRM PUMP ELECTRICAL LOAD AND CONNECTION WITH ELECTRICAL CONTRACTOR AT THE BEGINNING OF THE PROJECT.

PUMP OUT CALCULATIONS

DRIVEWAY

AREA OF EXPOSED DRIVEWAY = 125m²
MINIMUM VOLUME: 100YR, 2HR = 14.9m³
SUGGESTED ADOPTED V = 15m³
QPEAK: 100YR, 5MIN = 9.7 L/s

SUBSOIL CALCULATIONS

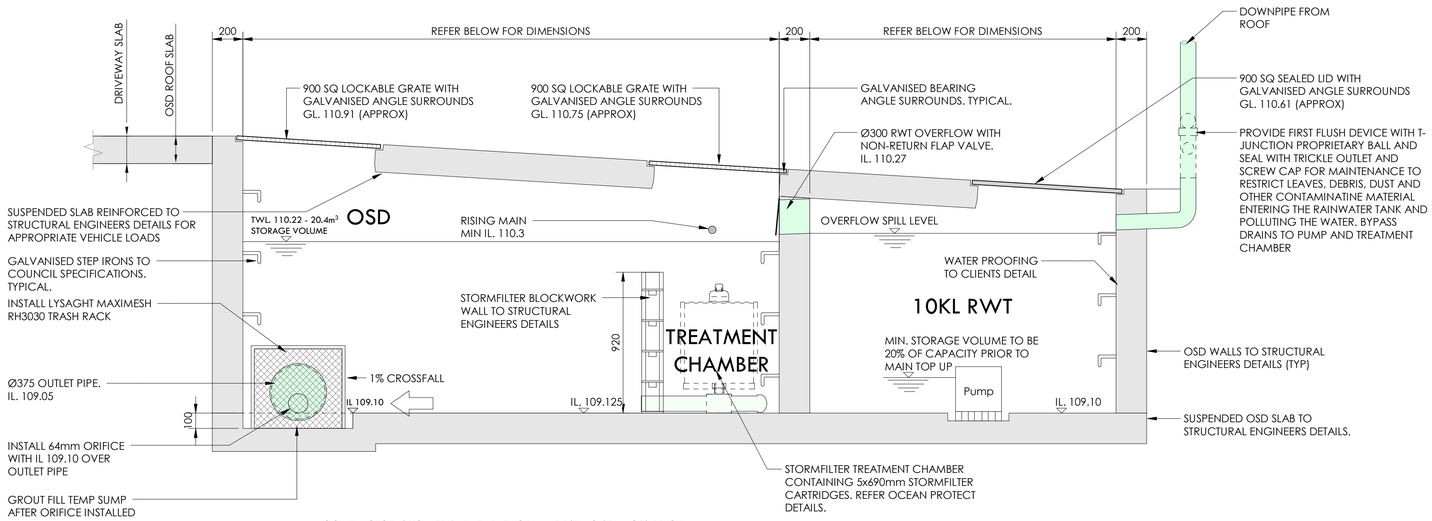
ASSUME SOIL IS SATURATED TO GROUND LEVEL AND INFLOWS CAN BE APPROXIMATED BY SUB-SOIL FLOW NET:
Q = 2/3 x K x H (m3/s PER M OF SUBSOIL LINE)
ASSUMED SUBSOIL INFILTRATION, K = 1x10⁻⁵ (CLAYEY SAND)
H = HEIGHT = 12m LENGTH OF SUBSOIL = 150m
Q = 2/3 x 1x10⁻⁵ x (150x12) = 12 L/s

COMBINED

THEREFORE, SUGGESTED PUMP CAPACITY
= 1.1 x (9.7 + 12) = 24 L/s

NOTE: CONTRACTOR TO VERIFY SUBSOIL INFILTRATION RATES VIA GEOTECHNICAL ENGINEERS TESTING, PRIOR TO CONSTRUCTION. SUPERVISING ENGINEER TO VERIFY CHANGES IF INFILTRATION RATES DIFFER SIGNIFICANTLY FROM ASSUMED VALUES.

BASEMENT PUMPOUT TANK DETAIL



- CONTRACTOR IS TO VERIFY THE LEVEL OF ALL EXISTING SERVICES PRIOR TO COMMENCEMENT OF EXCAVATION FOR DRAINAGE.

SECTION 1 C1200
SCALE 1 : 20

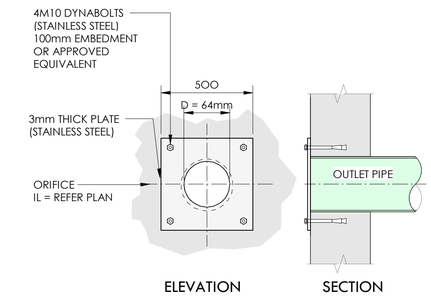
NOTE:
RAINWATER TANKS TO BE 10,000 LITRE CAPACITY USED FOR INDOOR TOILET FLUSHING, & OUTDOOR IRRIGATION.
SYDNEY WATER TOP-UP SYSTEM INSTALLED TO AS/NZS 3500.1 (2003) IS TO BE PROVIDED FOR TRICKLE TOP-UP OF RAINWATER TANK IF THE STORED WATER BECOMES LESS THAN SET MINIMUM WATER LEVEL.

ALTERNATE PUMP WITH 3 WAY SWITCHING DEVICE, (RAINBANK OR EQUIVALENT) CONNECTED TO WATER SUPPLY TO HYDRAULIC CONSULTANTS DETAIL.

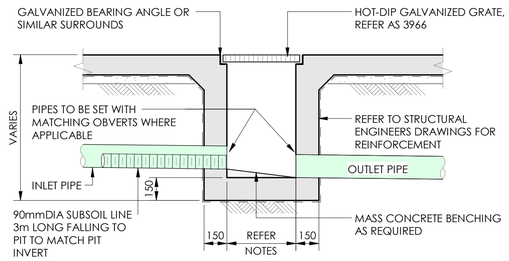
INSTALL FIRST FLUSH DEVICE TO RESTRICT LEAVES, DEBRIS, DUST AND OTHER CONTAMINATING MATERIAL ENTERING THE RAINWATER TANK AND POLLUTING THE WATER. VOLUME OF INITIAL STORAGE TO BE APPROXIMATELY 0.1m2 WITH A 5mm DIAMETER LEAKAGE HOLE.

VOLUME AND RETICULATION REQUIREMENTS TO BASIX AND SECTION J ASSESSMENT.

OSD/RWT DETAIL - PLAN
SCALE 1 : 50



TYPICAL ORIFICE PLATE DETAIL



MINIMUM INTERNAL DIMENSIONS FOR STORMWATER PITS			
DEPTH OF INVERT OF OUTLET		DEPTH OF INVERT OF OUTLET	
		WIDTH	LENGTH
	< 600	450	450
> 600		600	600
> 900		600	900
> 1200		900	900
*STEP IRONS SHALL BE PROVIDED FOR PITS WITH DEPTHS EXCEEDING 1000mm			

NOTE:
1. CLIMB IRONS SHALL BE PROVIDED UNDER LID AT 300 CTS TO COUNCIL STANDARDS WHERE PIT DEPTH IS DEEPER THAN 1000.
2. PROVIDE 90Dia x 3000 LONG SUBSOIL DRAINAGE STUB PIPE SURROUNDED WITH 100mm THICKNESS OF NOMINAL 20mm COARSE FILTER MATERIAL WRAPPED IN GEOTEXTILE FILTER FABRIC.(BIDUM A24 OR APPROVED SIMILAR). TO BE PARALLEL TO UPSTREAM SIDE OF EACH INLET PIPE.
3. ALTERNATIVE PIT CONSTRUCTION MAY BE USED SUBJECT TO THE ENGINEERS APPROVAL.
4. CONCRETE STRENGTH F'c = 32 MPa

TYPICAL CONCRETE INLET PIT - CONCRETE SURFACE

No	DATE	BY	DESCRIPTION
3	09.08.23	ER	REISSUED FOR DA
2	25.11.22	ER	ISSUED FOR DA
1	15.11.22	ER	ISSUED FOR DA

Responsive Engineering

CLIENT
HYECORP

STATUS
PRELIMINARY

DISCIPLINE
CIVIL DESIGN
R22

DRAWING TITLE
TYPICAL DETAILS - SHEET 1

PROJECT
MIXED USE DEVELOPMENT

ADDRESS
64-66 PACIFIC HIGHWAY, ROSEVILLE

PROJECT DETAILS
DESIGN SD
DRAWN ELR
DATE NOV 22
DRG SIZE A1
SCALE As indicated
PROJECT MGR S McM
WWW.JN.COM.AU

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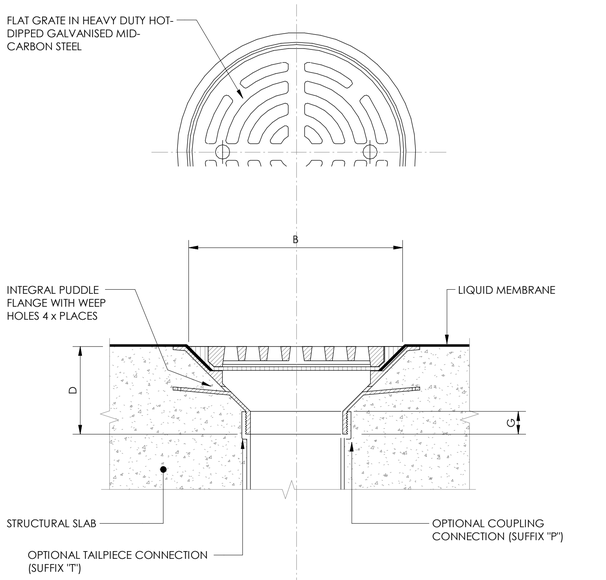
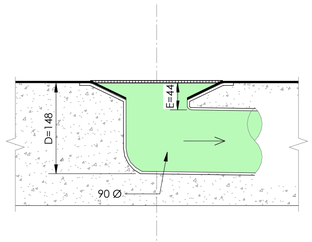


N.B.	A	B	C	D	E	F	G	FLOW RATE * L/S
100	260	200	110	100	44	26	25	8.2
150	260	200	160	80	48	4	28	10.2

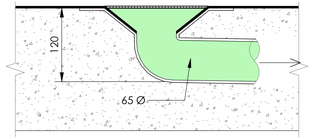
* BASED ON 50mm HEAD OF WATER ABOVE SURFACE LEVEL. FOR FURTHER DATA REFER TO FLOW CHARTS.

SPECIFICATION CODE:
- SIA150F2 (150mm SUPERFLO C1 BODY, GALVANISED CAST IRON FLAT GRATE AND ALUMINIUM MEMBRANE CLAMP RING).
- SIA150D2 (150mm SUPERFLO - C1 BODY, ALUMINIUM DOME GRATE AND MEMBRANE CLAMP RING).

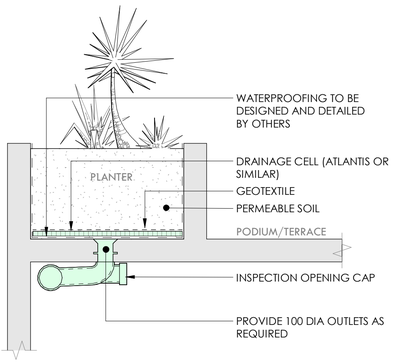
SPS 100mm & 150mm SUPERFLO FLAT RWO
SCALE 1 : 5



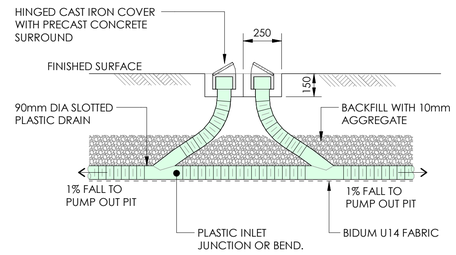
SPS 100 TRUFB 90° RWO
SCALE 1 : 5



SPS 65 BALCONY DRAIN
SCALE 1 : 5

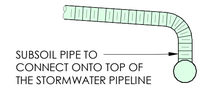


TYPICAL PLANTER DRAINAGE DETAIL
SCALE 1 : 20

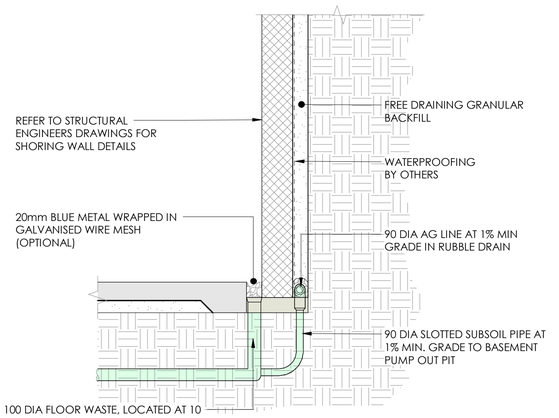


NOTES :
- MINIMUM GRADE OF SUBSOIL DRAINAGE PIPES IS TO BE 1.0%. JOINTS IN FILTER FABRIC TO BE LAPPED A MINIMUM 300mm.

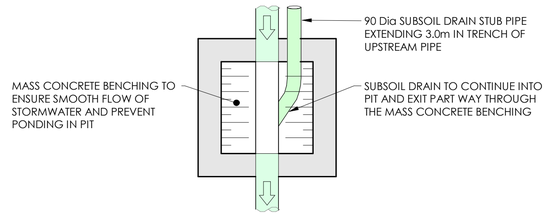
SUBSOIL PIPE FLUSHING POINT



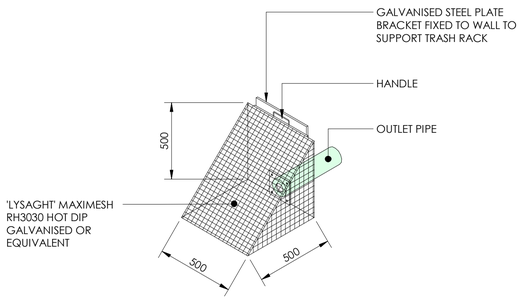
SUBSOIL PIPE CONNECTION



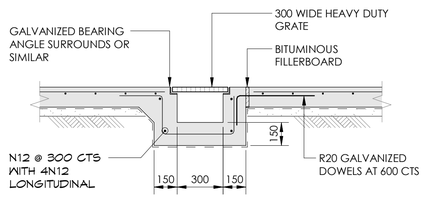
TYPICAL GROUNDWATER DRAINAGE DETAIL
SCALE 1 : 20



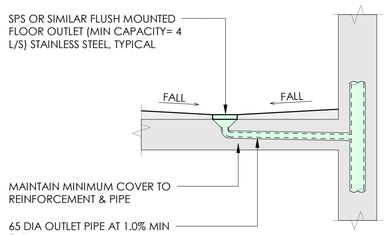
TYPICAL SUBSOIL PIPE/PIT BENCHING



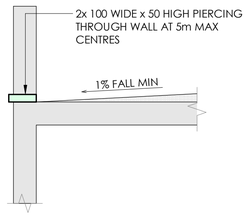
TYPICAL TRASH RACK SCREEN DETAIL
SCALE 1 : 20



TYPICAL GRATED DRAIN DETAIL
SCALE 1 : 20



TYPICAL BALCONY FLOOR OUTLET DETAIL
SCALE 1 : 20



TYPICAL BALCONY SPITTIER DETAIL
SCALE 1 : 20

No	DATE	BY	DESCRIPTION
3	09.08.23	ER	REISSUED FOR DA
2	25.11.22	ER	ISSUED FOR DA
1	15.11.22	ER	ISSUED FOR DA

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CLIENT
HYECORP

STATUS
PRELIMINARY

DISCIPLINE
CIVIL DESIGN
R22

DRAWING TITLE
TYPICAL DETAILS - SHEET 2

PROJECT
MIXED USE DEVELOPMENT

ADDRESS
64-66 PACIFIC HIGHWAY, ROSEVILLE

PROJECT DETAILS

DESIGN	SD
DRAWN	ELR
DATE	NOV 22
DRG SIZE	A1
SCALE	As indicated
PROJECT MGR	S McM

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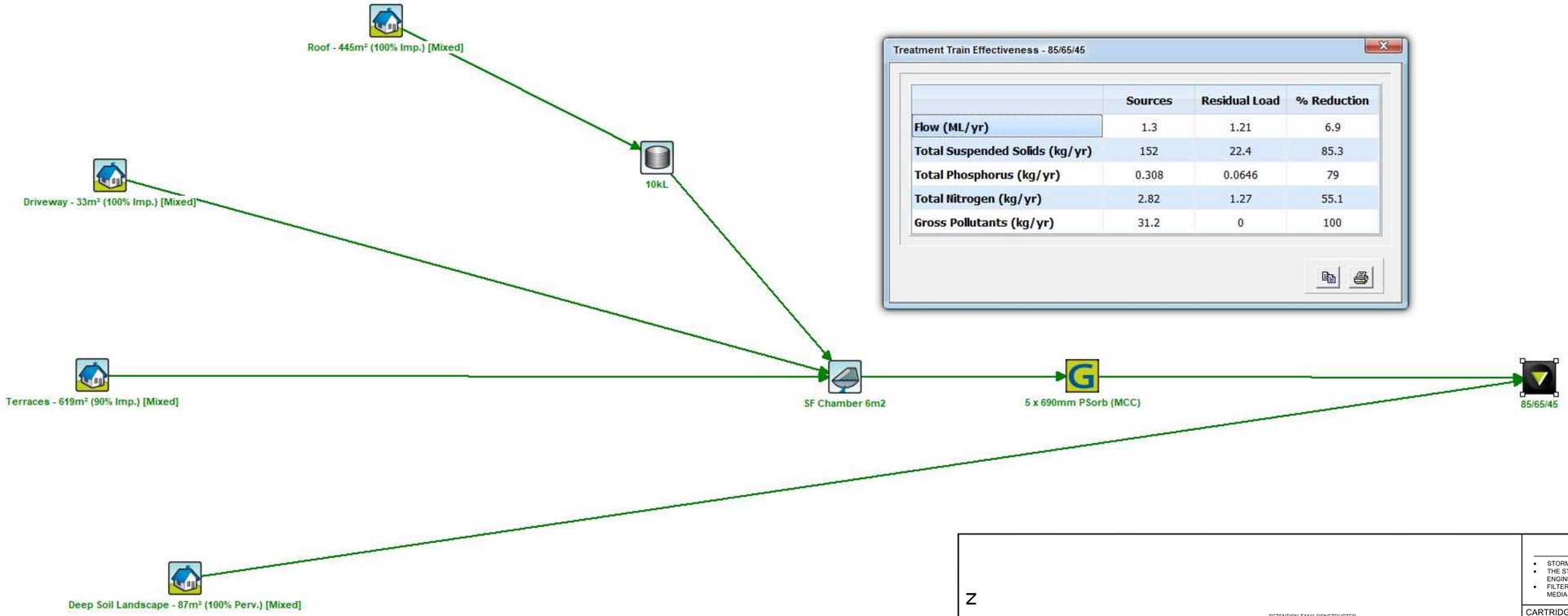
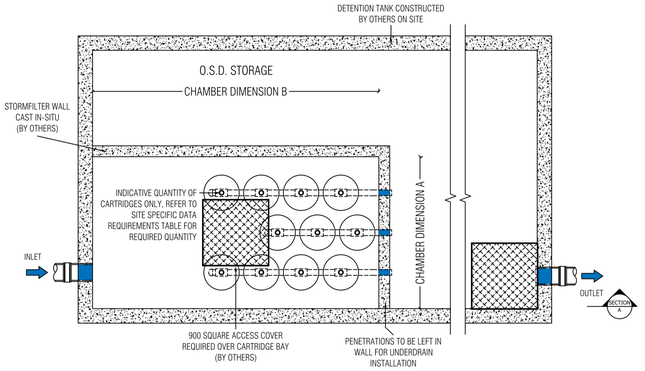
C1051 3



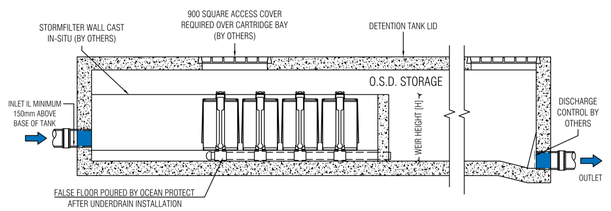
Treatment Train Effectiveness - 85/65/45

	Sources	Residual Load	% Reduction
Flow (ML/yr)	1.3	1.21	6.9
Total Suspended Solids (kg/yr)	152	22.4	85.3
Total Phosphorus (kg/yr)	0.308	0.0646	79
Total Nitrogen (kg/yr)	2.82	1.27	55.1
Gross Pollutants (kg/yr)	31.2	0	100

NOT FOR CONSTRUCTION



PLAN LAYOUT



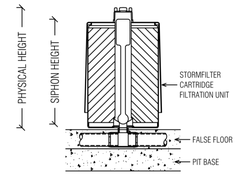
SECTION A

LAST MODIFIED: 07-03-19

STORMFILTER DESIGN TABLE

- STORMFILTER TREATMENT CAPACITY VARIES BY NUMBER OF FILTER CARTRIDGES INSTALLED.
- THE STANDARD CONFIGURATION IS SHOWN. ACTUAL CONFIGURATION OF THE SPECIFIED STRUCTURE(S) PER CERTIFYING ENGINEER WILL BE SHOWN ON SUBMITTAL DRAWING(S).
- FILTER CARTRIDGES SHALL BE MEDIA-FILLED, PASSIVE, SIPHON ACTUATED, RADIAL FLOW, AND SELF-CLEANING. RADIAL MEDIA DEPTH SHALL BE 178mm.

CARTRIDGE NAME / SIPHON HEIGHT (mm)	690	460	310
CARTRIDGE PHYSICAL HEIGHT (mm)	840	600	600
TYPICAL WEIR HEIGHT **[H]** (mm)	920	690	540
CARTRIDGE FLOW RATE FOR ZPG MEDIA (L/s)	1.6	1.1	0.7
CARTRIDGE FLOW RATE FOR PSORB MEDIA (L/s)	0.9	0.46	0.39



STORMFILTER CARTRIDGE DETAIL

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID	[ ]
NUMBER OF CARTRIDGES REQ'D	[ ]
SIPHON HEIGHT (310 / 460 / 690)	[ ]
MEDIA TYPE (ZPG / PSORB)	[ ]
WATER QUALITY FLOW RATE (L/S)	[ ]
DIMENSION A	[ ]
DIMENSION B	[ ]

TOTAL CARTRIDGE BAY AREA (A x B) TO MATCH AREA REQUIRED BY MUSIC MODELLING OR COUNCIL SPECIFIC REQUIREMENTS

GENERAL NOTES

1. INLET AND OUTLET PIPES TO BE IN ACCORDANCE WITH APPROVED PLANS.
2. A HIGH FLOW BYPASS ARRANGEMENT OR DISSIPATION STRUCTURE MAY BE REQUIRED TO MINIMISE RE-SUSPENSION OF SOLIDS OR ANY SIGNIFICANT INERTIAL FORCES ON THE CARTRIDGES.
3. ALL WATER QUALITY TREATMENT DEVICES REQUIRE PERIODIC MAINTENANCE. REFER TO OPERATION AND MAINTENANCE MANUAL FOR GUIDELINES AND ACCESS REQUIREMENTS.
4. SITE SPECIFIC PRODUCTION DRAWING WILL BE PROVIDED ON PLACEMENT OF ORDER.
5. THE INVERT LEVEL OF THE INLET PIPE MUST BE GREATER THAN THE RL OF THE FALSE FLOOR WITHIN THE CARTRIDGE CHAMBER.
6. CONCRETE STRUCTURE AND ACCESS COVERS DESIGNED AND PROVIDED BY OTHERS. ACCESS COVERS TO BE A MINIMUM 900 X 900 ABOVE CARTRIDGES. OH&S REGARDING ACCESS COVERS AND TANK ACCESS TO BE ASSESSED BY OTHERS ON SITE.
7. THE STRUCTURE THICKNESSES SHOWN ARE FOR REPRESENTATIONAL PURPOSES.
8. DRAWINGS NOT TO SCALE.

INSTALLATION NOTES

1. UNDERDRAIN AND FALSE FLOOR INSTALLED BY OCEAN PROTECT.

OCEAN PROTECT
PHONE: 1300 354 722 www.oceanprotect.com.au

OCEAN PROTECT
STORMFILTER SYSTEM
DETENTION TANK ARRANGEMENT
SPECIFICATION DRAWING

No	DATE	BY	DESCRIPTION
3	09.08.23	ER	REISSUED FOR DA
2	25.11.22	ER	ISSUED FOR DA
1	15.11.22	ER	ISSUED FOR DA

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HYECORP

STATUS
PRELIMINARY

DISCIPLINE
CIVIL DESIGN R22

DRAWING TITLE
WSUD DETAILS

PROJECT
MIXED USE DEVELOPMENT

ADDRESS
64-66 PACIFIC HIGHWAY, ROSEVILLE

PROJECT DETAILS

DESIGN	SD
DRAWN	ELR
DATE	NOV 22
DRG SIZE	A1
SCALE	
PROJECT MGR	S McM
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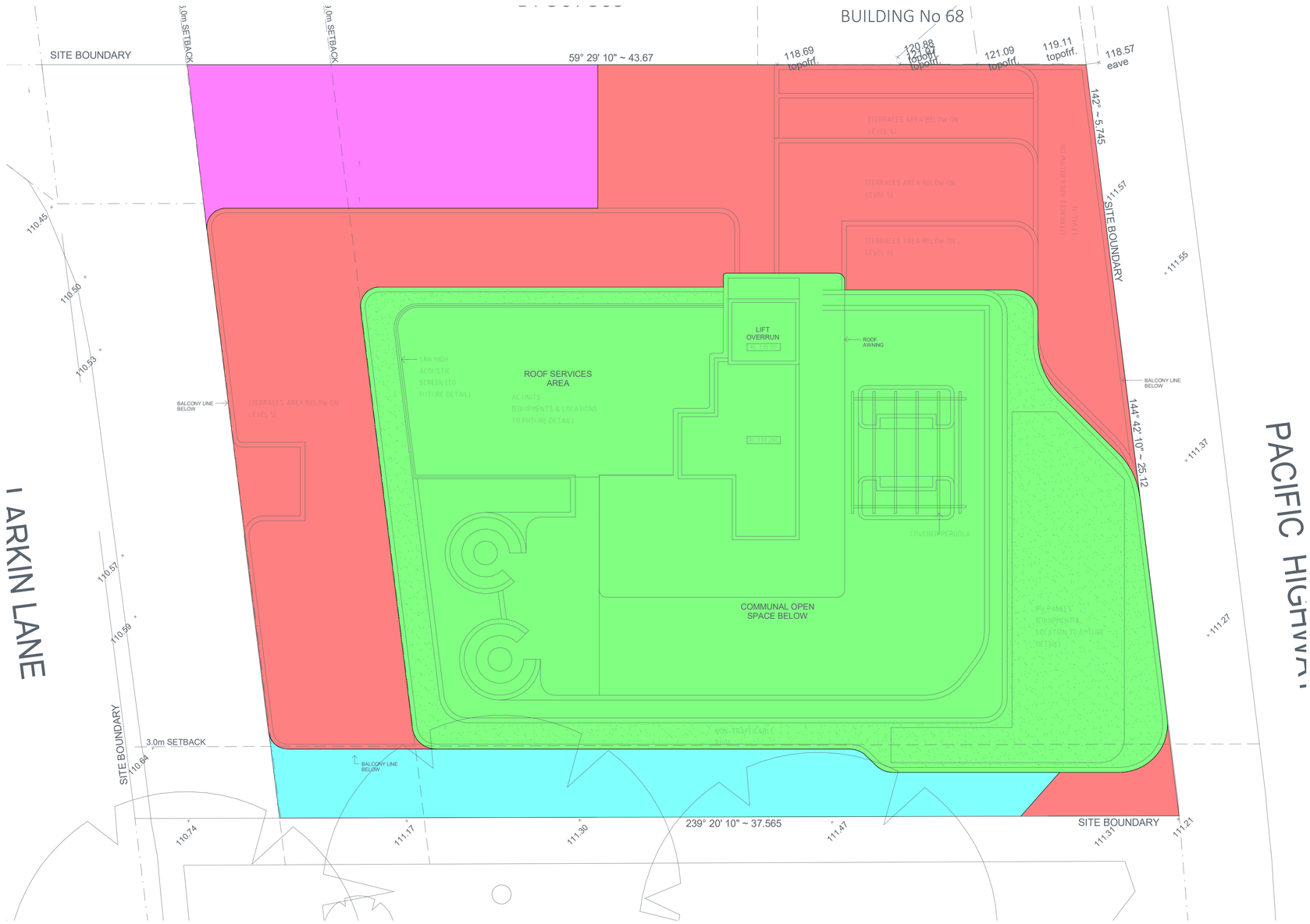

STORMWATER CATCHMENT LEGEND

HATCH	DESCRIPTION	AREA	NOTE
	IMPERVIOUS BUILDING	394m²	DRAINS TO FILTER CHAMBER/OSD
	IMPERVIOUS DRIVEWAY	101m²	DRAINS TO PUMPOUT PIT
	IMPERVIOUS ROOF	604m²	DRAINS TO RWT
	PERVIOUS TERRACE	84m²	BYPASS AREA

TOTAL AREA = 1183m²
TOTAL IMPERVIOUS AREA = 1099m²
TOTAL PERVIOUS AREA = 84m²

STORMWATER CATCHMENT PLAN

SCALE 1 : 100

No	DATE	BY	DESCRIPTION
1	09.08.23	ER	REISSUED FOR DA

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HYECORP

STATUS
PRELIMINARY

DISCIPLINE
CIVIL DESIGN

DRAWING TITLE
STORMWATER CATCHMENT PLAN

PROJECT
MIXED USE DEVELOPMENT

ADDRESS
64-66 PACIFIC HIGHWAY, ROSEVILLE

PROJECT DETAILS
DESIGN SD
DRAWN ELR
DATE NOV 22
DRG SIZE A1
SCALE As indicated
PROJECT MGR S McM
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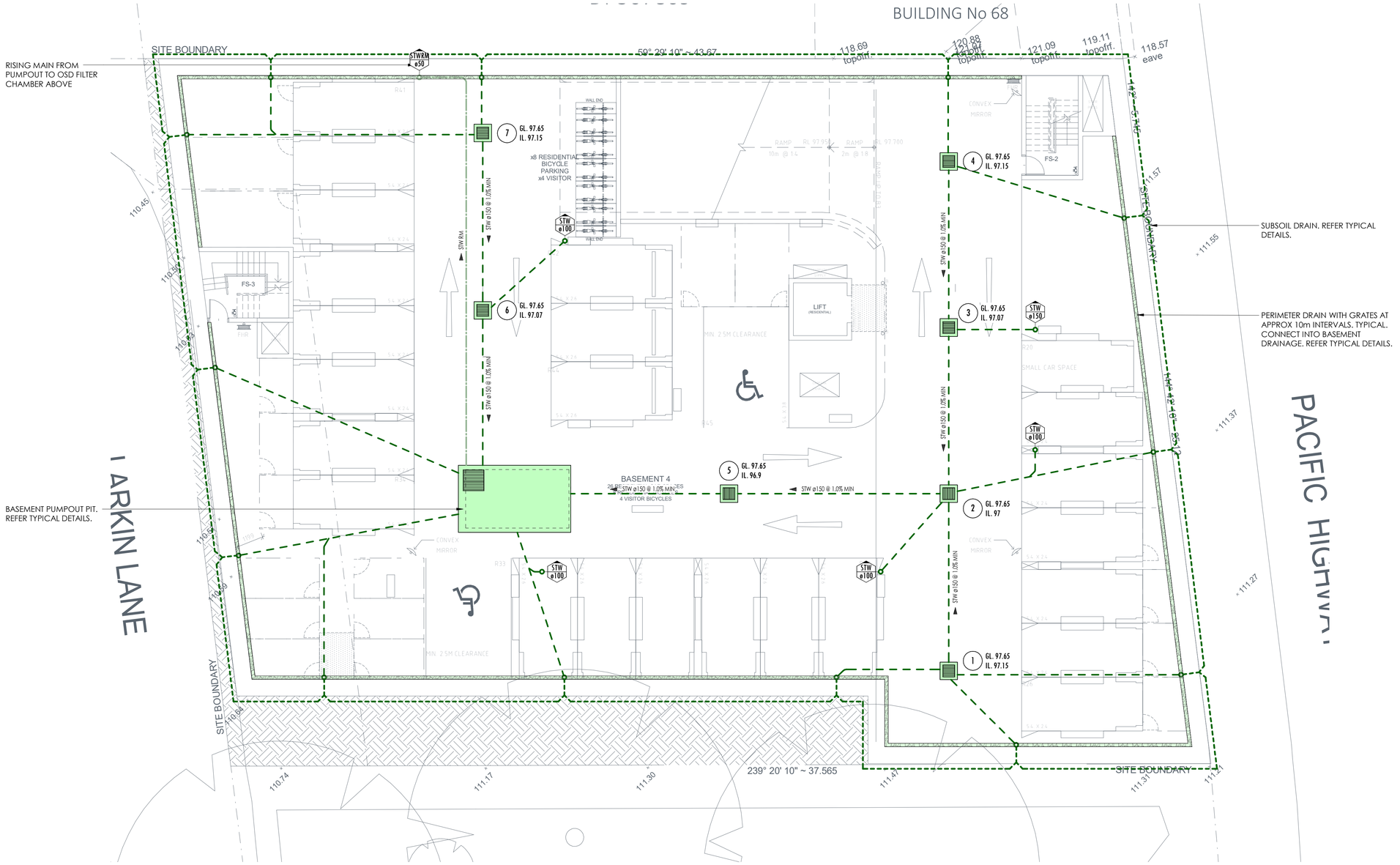

BASEMENT 4 STORMWATER PLAN

SCALE 1 : 100

NOTE:
- ALL STORMWATER PIPES 100DIA PVC LAID AT 1% MINIMUM GRADE U.N.O

No	DATE	BY	DESCRIPTION
4	16.08.23	ER	REISSUED FOR DA
3	09.08.23	ER	REISSUED FOR DA
2	25.11.22	ER	ISSUED FOR DA
1	15.11.22	ER	ISSUED FOR DA

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STATUS
PRELIMINARY

DISCIPLINE
CIVIL DESIGN

DRAWING TITLE
BASEMENT 4 STORMWATER PLAN

PROJECT
MIXED USE DEVELOPMENT

ADDRESS
64-66 PACIFIC HIGHWAY, ROSEVILLE

PROJECT DETAILS
DESIGN SD
DRAWN ELR
DATE NOV 22
DRG SIZE A1
SCALE 1 : 100
PROJECT MGR S McM
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POTENTIAL PERIMETER DRAIN FOR SEEPAGE WATERS. SUBJECT TO FINAL DESIGN.

BASEMENT 3 STORMWATER PLAN

SCALE 1 : 100

NOTE:

- ALL STORMWATER PIPES 100DIA PVC LAID AT 1% MINIMUM GRADE U.N.O

No	DATE	BY	DESCRIPTION
4	16.08.23	ER	REISSUED FOR DA
3	09.08.23	ER	REISSUED FOR DA
2	25.11.22	ER	ISSUED FOR DA
1	15.11.22	ER	ISSUED FOR DA

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STATUS
PRELIMINARY

DISCIPLINE
CIVIL DESIGN R22

DRAWING TITLE
BASEMENT 3 STORMWATER PLAN

PROJECT
MIXED USE DEVELOPMENT

ADDRESS
64-66 PACIFIC HIGHWAY, ROSEVILLE

PROJECT DETAILS

DESIGN	SD
DRAWN	ELR
DATE	NOV 22
DRG SIZE	A1
SCALE	1 : 100
PROJECT MGR	S McM

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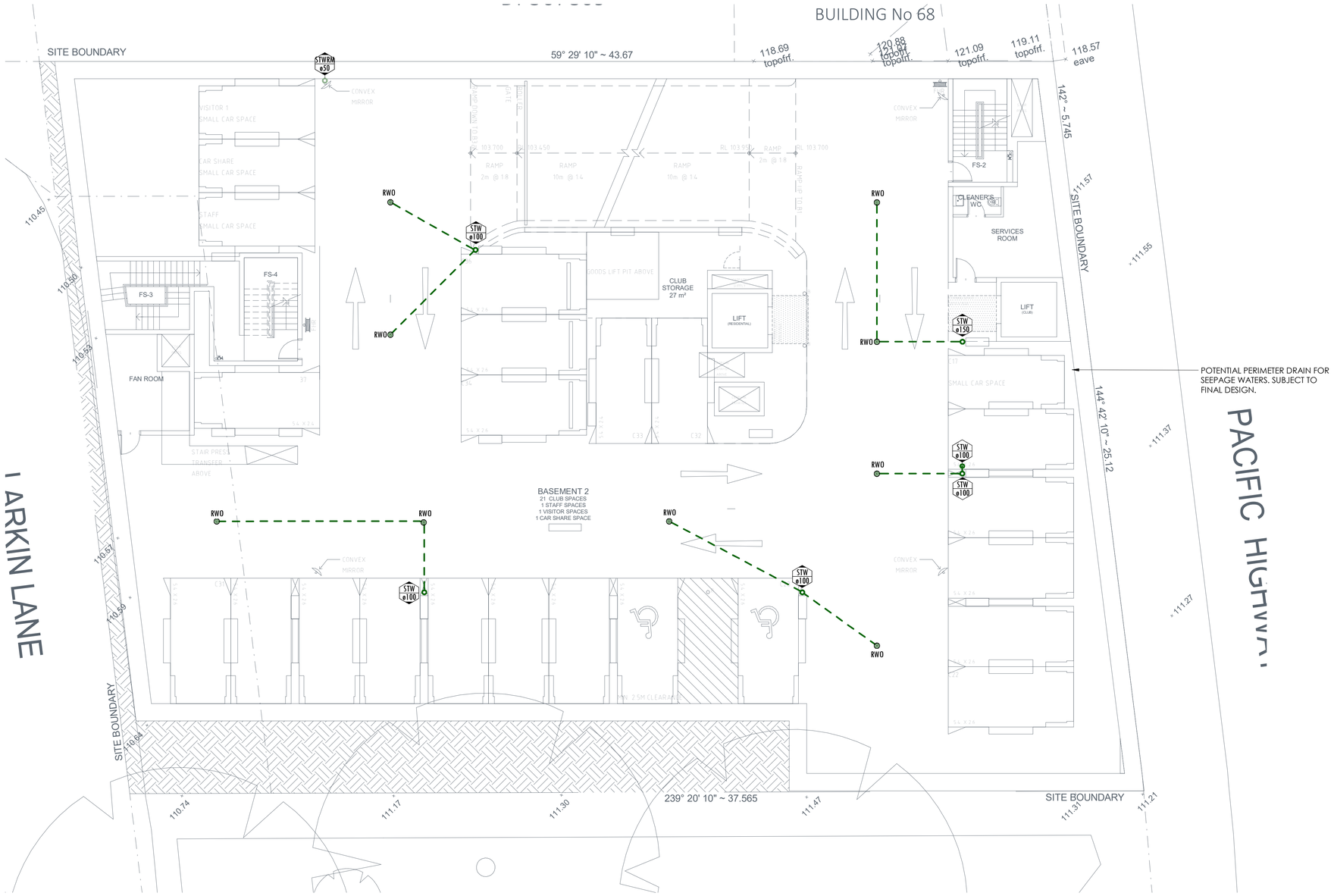

BASEMENT 2 STORMWATER PLAN

SCALE 1 : 100

NOTE:

- ALL STORMWATER PIPES 100DIA PVC LAID AT 1% MINIMUM GRADE U.N.O

No	DATE	BY	DESCRIPTION
4	16.08.23	ER	REISSUED FOR DA
3	09.08.23	ER	REISSUED FOR DA
2	25.11.22	ER	ISSUED FOR DA
1	15.11.22	ER	ISSUED FOR DA

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CLIENT
HYECORP

STATUS
PRELIMINARY

DISCIPLINE
CIVIL DESIGN R22

DRAWING TITLE
BASEMENT 2 STORMWATER PLAN

PROJECT
MIXED USE DEVELOPMENT

ADDRESS
64-66 PACIFIC HIGHWAY, ROSEVILLE

PROJECT DETAILS

DESIGN	SD
DRAWN	ELR
DATE	NOV 22
DRG SIZE	A1
SCALE	1 : 100
PROJECT MGR	S McM

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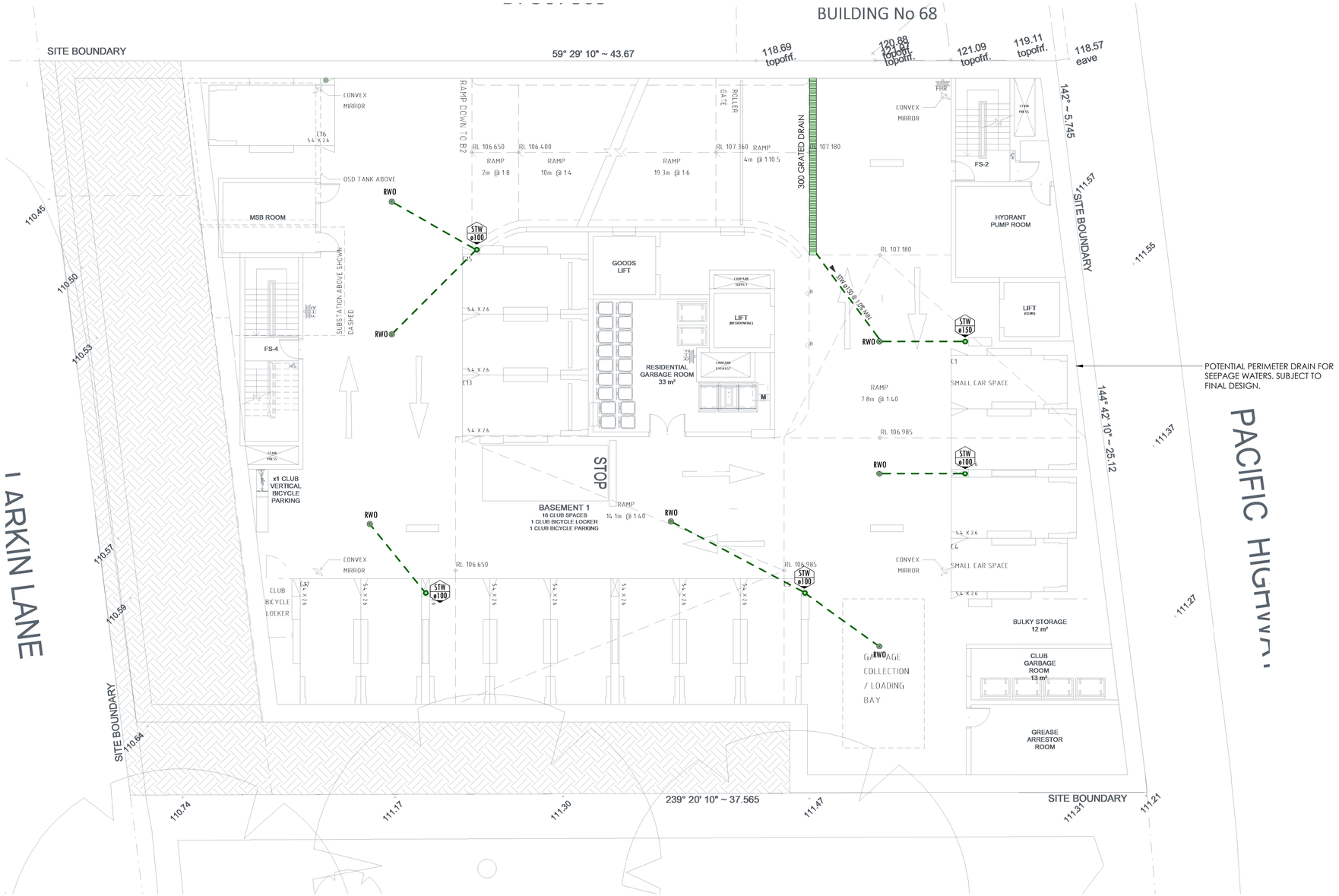

BASEMENT 1 STORMWATER PLAN

SCALE 1 : 100

NOTE:

- ALL STORMWATER PIPES 100DIA PVC LAID AT 1% MINIMUM GRADE U.N.O

No	DATE	BY	DESCRIPTION
4	16.08.23	ER	REISSUED FOR DA
3	09.08.23	ER	REISSUED FOR DA
2	25.11.22	ER	ISSUED FOR DA
1	15.11.22	ER	ISSUED FOR DA

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HYECORP

STATUS
PRELIMINARY

DISCIPLINE
CIVIL DESIGN
#22

DRAWING TITLE
BASEMENT 1 STORMWATER PLAN

PROJECT
MIXED USE DEVELOPMENT

ADDRESS
64-66 PACIFIC HIGHWAY, ROSEVILLE

PROJECT DETAILS

DESIGN	SD
DRAWN	ELR
DATE	NOV 22
DRG SIZE	A1
SCALE	1 : 100
PROJECT MGR	S McM

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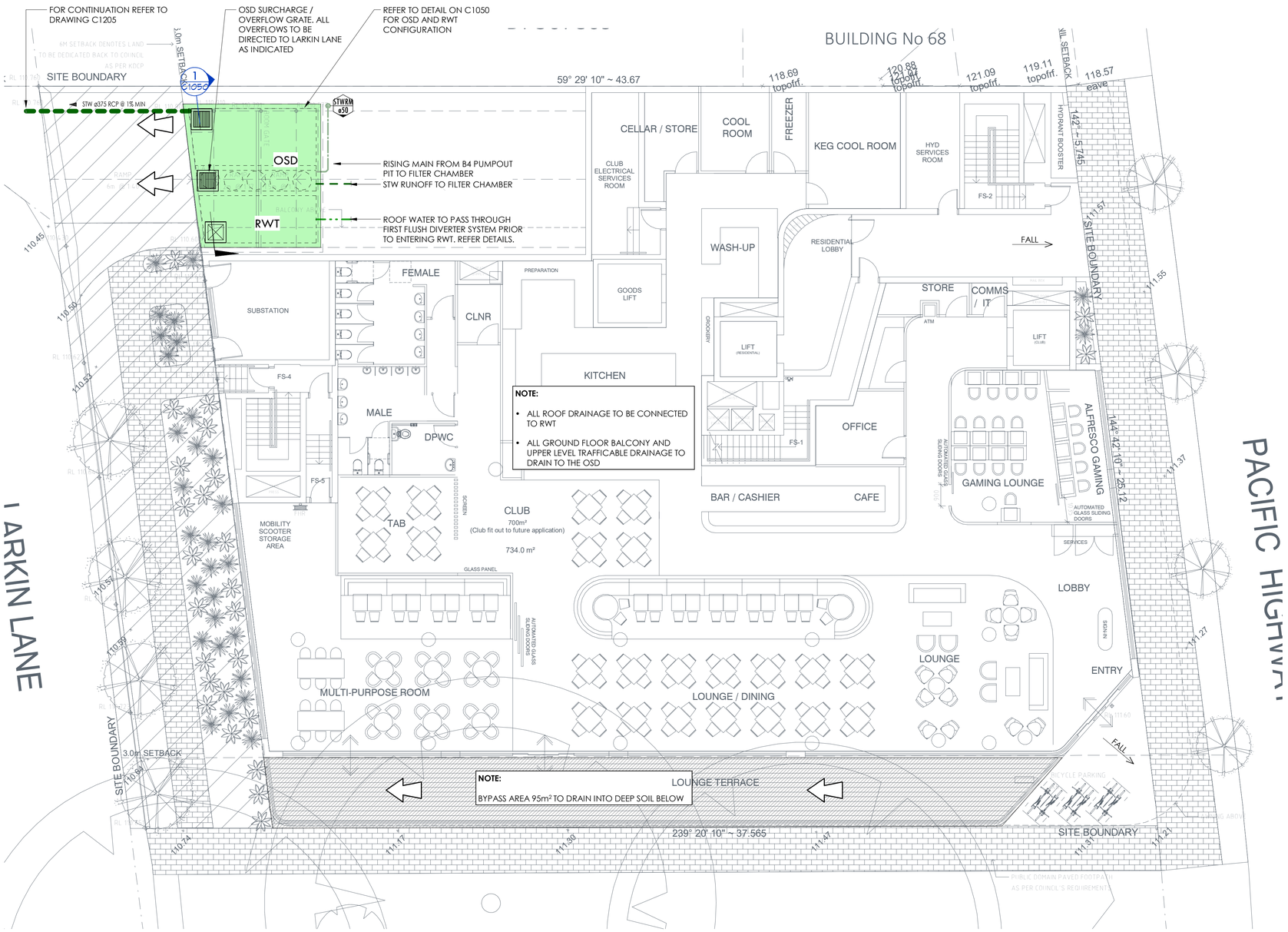

GROUND FLOOR STORMWATER PLAN

SCALE 1 : 100

No	DATE	BY	DESCRIPTION
4	16.08.23	ER	REISSUED FOR DA
3	09.08.23	ER	REISSUED FOR DA
2	25.11.22	ER	ISSUED FOR DA
1	15.11.22	ER	ISSUED FOR DA

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STATUS
PRELIMINARY

DISCIPLINE
CIVIL DESIGN
R22

DRAWING TITLE
GROUND STORMWATER PLAN

PROJECT
MIXED USE DEVELOPMENT

ADDRESS
64-66 PACIFIC HIGHWAY, ROSEVILLE

PROJECT DETAILS

DESIGN	SD
DRAWN	ELR
DATE	NOV 22
DRG SIZE	A1
SCALE	1 : 100
PROJECT MGR	S McM

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ROAD FRONTAGE STORMWATER PLAN
SCALE 1 : 100

No	DATE	BY	DESCRIPTION
2	09.08.23	ER	REISSUED FOR DA
1	25.11.22	ER	ISSUED FOR DA

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STATUS
PRELIMINARY

DISCIPLINE
CIVIL DESIGN R22

DRAWING TITLE
ROAD FRONTAGE
STORMWATER PLAN

PROJECT
MIXED USE DEVELOPMENT

ADDRESS
64-66 PACIFIC HIGHWAY, ROSEVILLE

PROJECT DETAILS

DESIGN	SD
DRAWN	ELR
DATE	NOV 22
DRG SIZE	A1
SCALE	1 : 100
PROJECT MGR	S McM

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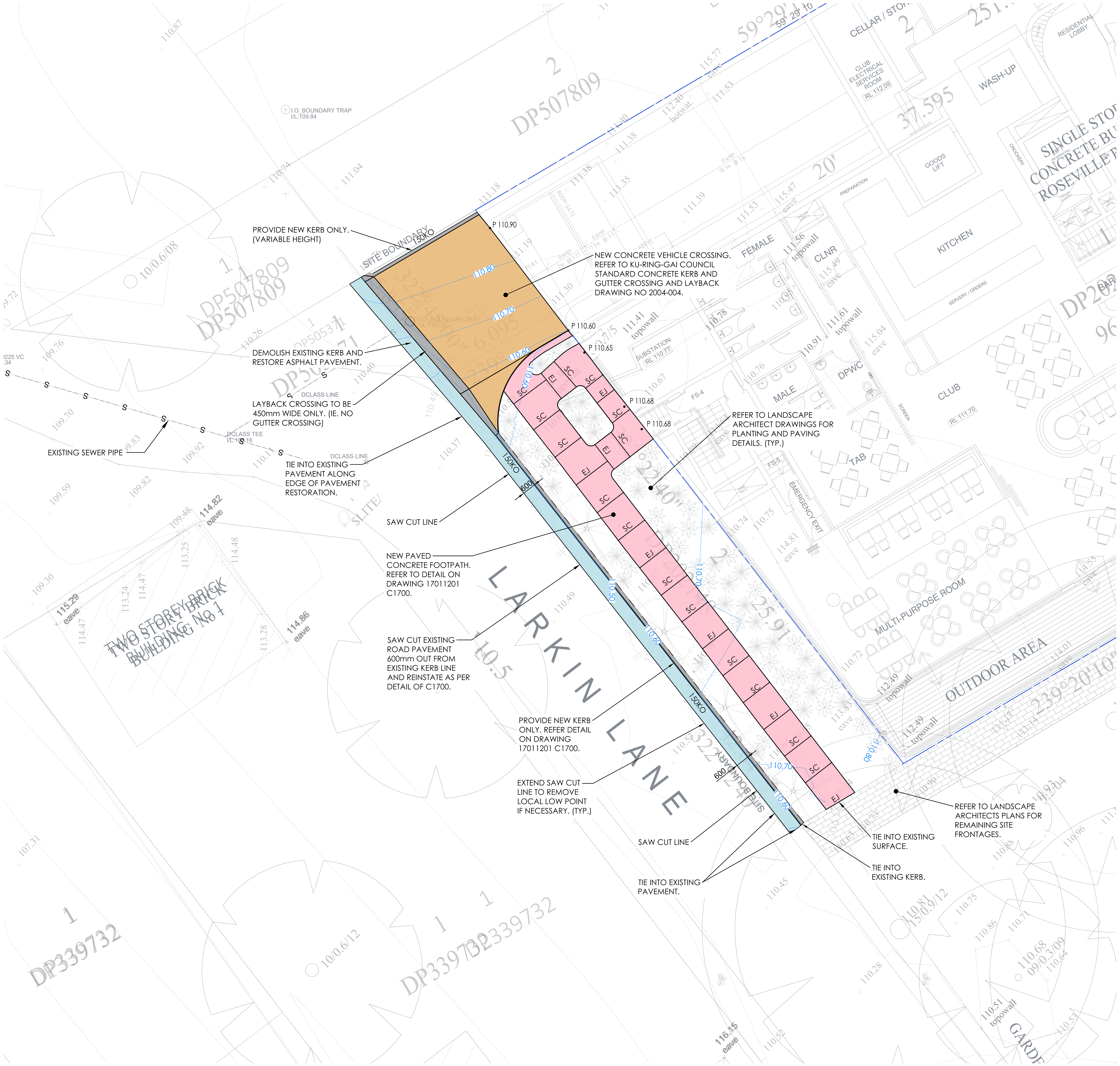

PAVEMENT LEGEND

SYMBOL	DESCRIPTION
(solid line)	EXTENT OF CONCRETE PAVEMENT
SC	SAW CUT JOINT
EJ	EXPANSION JOINT
150 KO	150mm HIGH KERB ONLY
(solid line)	EXTENT OF BITUMEN PAVEMENT
(blue dashed line)	BOUNDARY LINE
110.60	DESIGN CONTOUR
S S	EXISTING SEWER PIPE
• P35.85	FINISHED PAVEMENT LEVEL
150 KO	150 HIGH KERB ONLY
(orange fill)	PAVEMENT TYPE 1 - PAVED DRIVEWAY
(blue fill)	PAVEMENT TYPE 2 - BITUMEN
(pink fill)	PAVEMENT TYPE 3 - PAVED FOOTPATH
(grey fill)	PAVEMENT TYPE 4 - CONCRETE

ALL EXISTING LEVELS TO BE CONFIRMED ON SITE PRIOR TO COMMENCEMENT OF WORKS.

DEPTH AND LOCATION OF ALL EXISTING SERVICES TO BE CONFIRMED BY BUILDER ON SITE PRIOR TO COMMENCEMENT OF CONSTRUCTION.

GENERAL ABREVIATIONS

AB	ABOVE BENCH
AFFL	ABOVE FINISHED FLOOR LEVEL
CIS	CAST IN SLAB
CL	CENTRELINE
CS	CEILING SPACE
Cu	COPPER
DIA	DIAMETER
DP	DOWNPIPE
Ex.	EXISTING
FC	FALSE CEILING
FFL	FINISHED FLOOR LEVEL
GL	GROUND LEVEL
HBS	PIPES HUNG BELOW SLAB
HL	HIGH LEVEL
IG	IN-GROUND
IL	INVERT LEVEL
LL	LOW LEVEL
O/F	OVERFLOW
PVC	POLYVINYLCHLORIDE
RL	REDUCED LEVEL
SL	SURFACE LEVEL
S/S	STAINLESS STEEL
UB	UNDER BENCH
uPVC	UNPLASTICISED POLYVINYLCHLORIDE
U/S	UNDER SIDE
VD	VERTICAL DROP

SCALE 1:100

NOT TO BE USED FOR CONSTRUCTION

AMDT	DATE	DESCRIPTION	BY
2	09.08.23	REISSUED FOR DA	SC
1	25.11.22	ISSUED FOR DA	SC

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CLIENT: HYECORP
STATUS: PRELIMINARY

DISCIPLINE: CIVIL DESIGN
DRAWING TITLE: ROAD FRONTAGE WORKS PLAN

PROJECT: MIXED USE DEVELOPMENT ROAD FRONTAGE DESIGN
ADDRESS: 64-66 PACIFIC HIGHWAY, ROSEVILLE

PROJECT DETAILS
DESIGN SD
DRAWN SC
DATE NOV 2022
DRG SIZE A1
SCALE 1:250
PROJECT MGR SD
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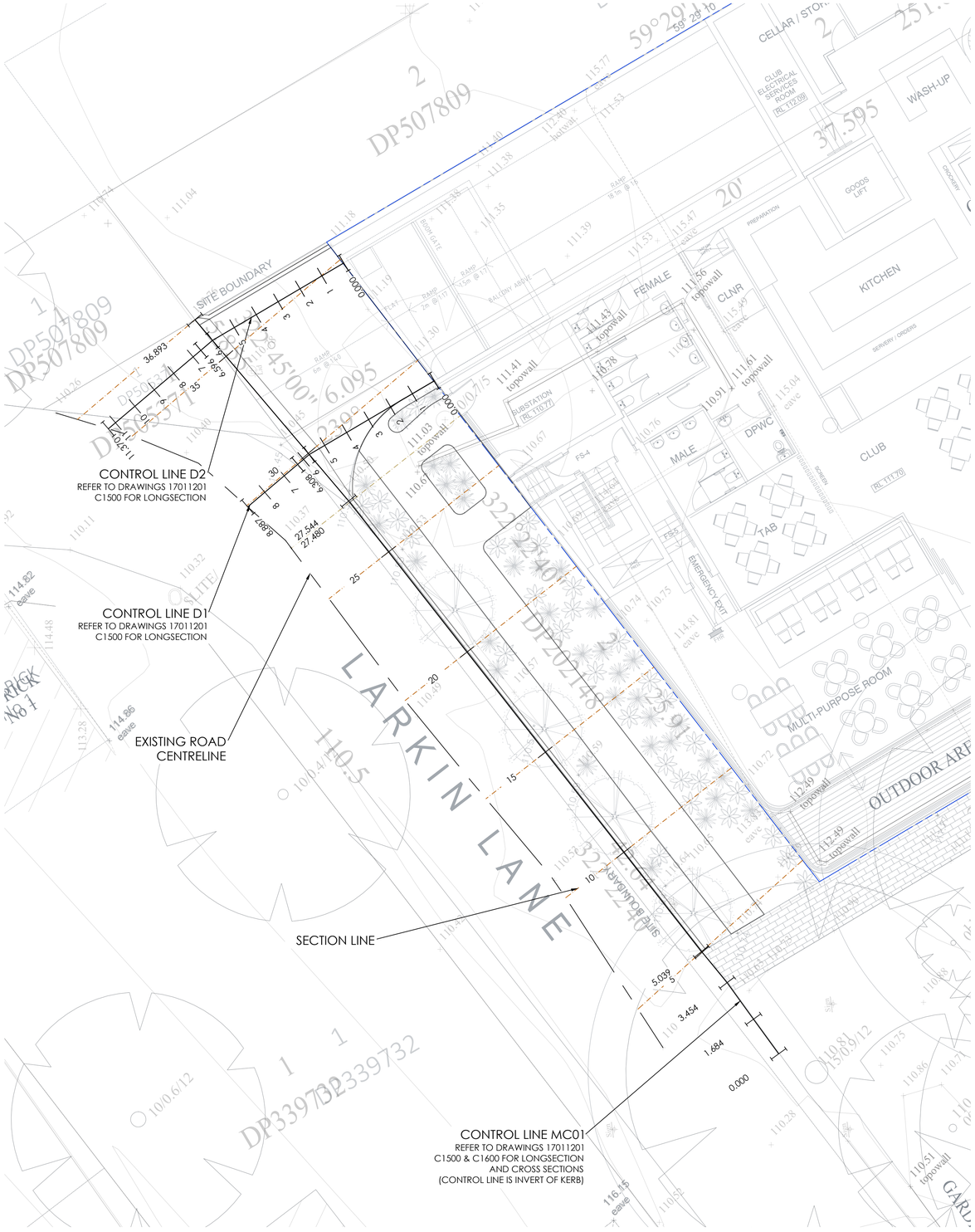

0 2 4 6 8 10m
2 1
SCALE 1:100

NOT TO BE USED FOR CONSTRUCTION

AMDT	DATE	DESCRIPTION	BY
2	09.08.23	REISSUED FOR DA	SC
1	25.11.22	ISSUED FOR DA	SC

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CLIENT
HYECORP

STATUS
PRELIMINARY

DISCIPLINE
CIVIL DESIGN

DRAWING TITLE
ALIGNMENT CONTROL LINE PLAN

PROJECT
MIXED USE DEVELOPMENT ROAD FRONTAGE DESIGN

ADDRESS
64-66 PACIFIC HIGHWAY, ROSEVILLE

PROJECT DETAILS

DESIGN	SD
DRAWN	SC
DATE	NOV 2022
DRG SIZE	A1
SCALE	1:1000
PROJECT MGR	SD

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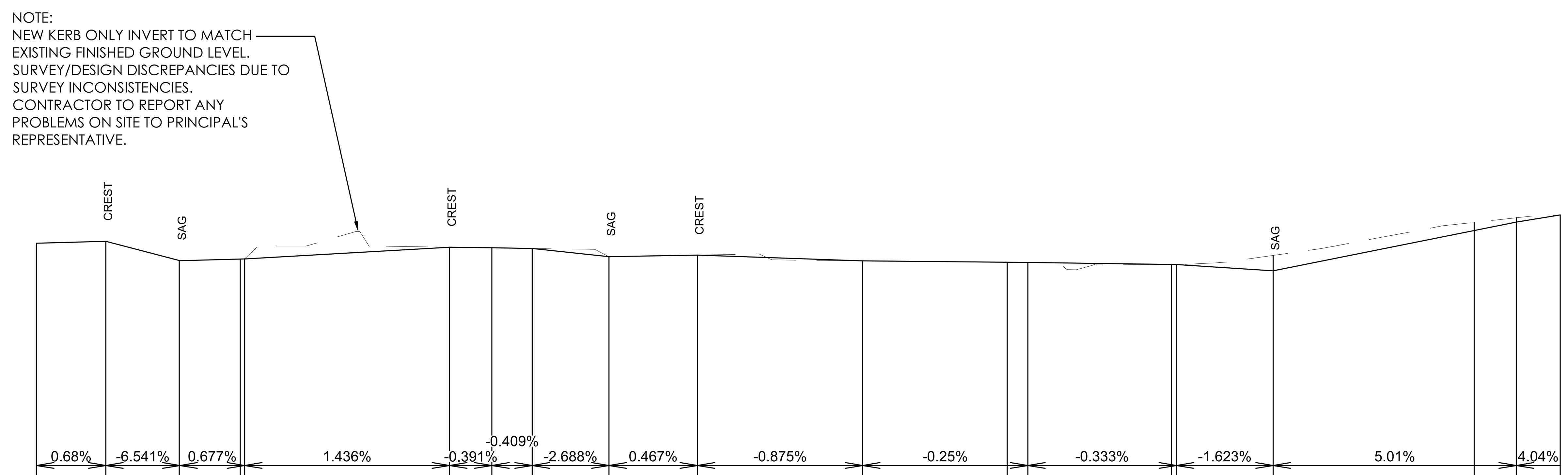


VERTICAL CURVE LENGTH (m)

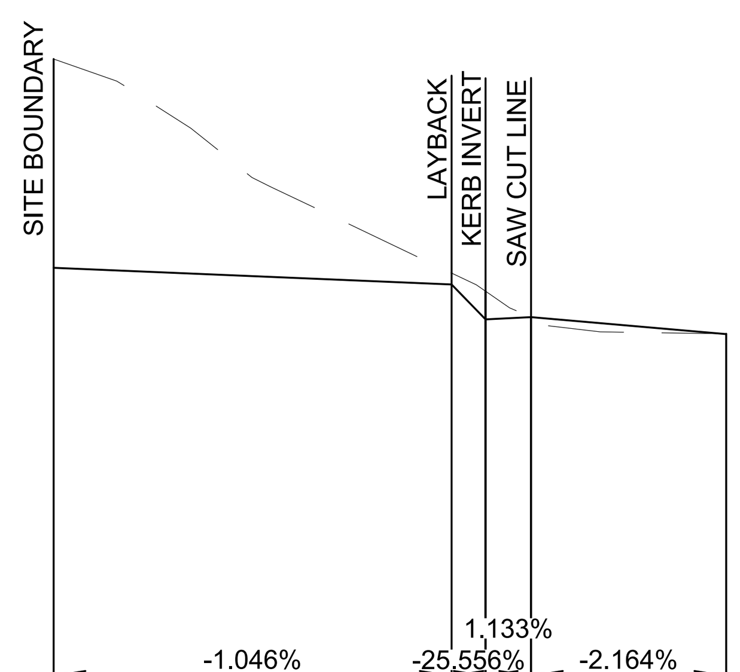
VERTICAL GRADE (%): 0.68% | -6.541% | 0.677% | 1.436% | -0.391% | -0.409% | -2.688% | 0.467% | -0.875% | -0.25% | -0.333% | -1.623% | 5.01% | 4.04%

DATUM (m) 109

HEIGHT DIFFERENCES	-0	-0	-0.001	0	0.001	-0	-0	0	0	0	0	-0	-0	-0.001	-0.001	0.093	0.049	0.026	-0
DESIGN LEVELS	110.597	110.608	110.492	110.501	110.502	110.573	110.569	110.565	110.515	110.525	110.490	110.481	110.480	110.468	110.468	110.430	110.674	110.725	110.768
EXISTING LEVELS	110.597	110.608	110.491	110.501	110.502	110.573	110.569	110.565	110.515	110.525	110.490	110.481	110.480	110.467	110.467	110.523	110.723	110.751	110.768
ROAD CHAINAGE	0.000	1.676	3.454	4.931	5.036	10.000	11.023	12.000	13.860	16.000	20.000	23.500	24.000	27.480	27.600	29.941	34.808	35.829	36.893

LONGITUDINAL SECTION MC01 (INVERT OF KERB)

SCALE 1:100 (HOR)
1:25 (VER)



VERTICAL CURVE LENGTH (m)

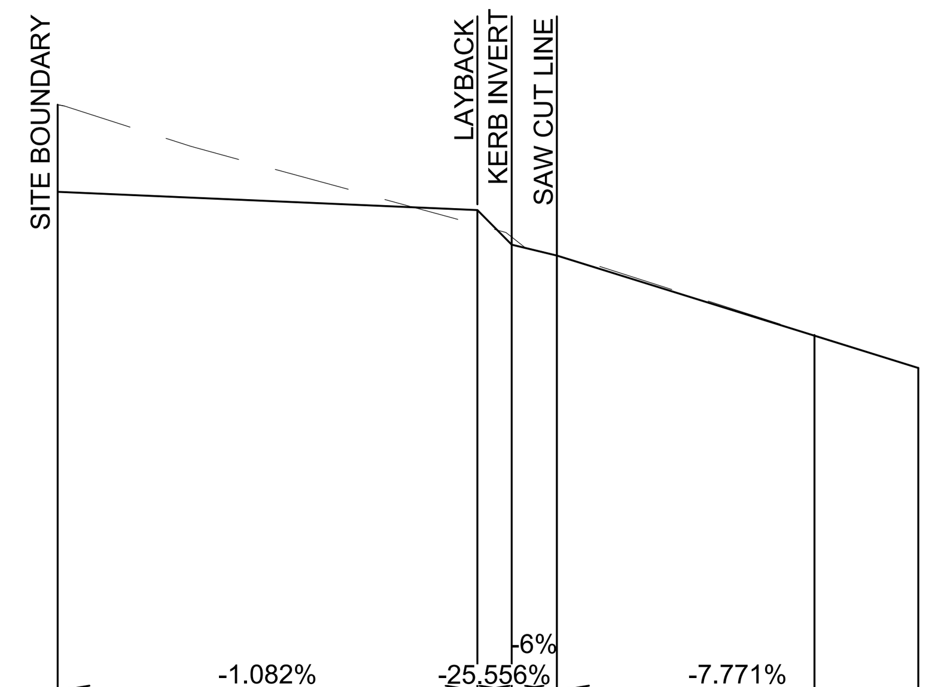
VERTICAL GRADE (%): -1.046% | -25.556% | 1.133% | -2.164%

DATUM (m) 109

HEIGHT DIFFERENCES	0.69	0.038	0.093	0	0
DESIGN LEVELS	110.600	110.545	110.430	110.437	110.381
EXISTING LEVELS	111.290	110.583	110.523	110.437	110.381
ROAD CHAINAGE	0.000	5.258	5.708	6.308	8.887

DRIVEWAY LONGITUDINAL SECTION D1 (RIGHT SIDE)

SCALE 1:100 (HOR)
1:25 (VER)



VERTICAL CURVE LENGTH (m)

VERTICAL GRADE (%): -1.082% | -25.556% | -6% | -7.771%

DATUM (m) 109

HEIGHT DIFFERENCES	0.287	-0.049	0.026	0	0.002	-0
DESIGN LEVELS	110.900	110.840	110.725	110.689	110.424	110.318
EXISTING LEVELS	111.187	110.791	110.751	110.689	110.427	110.318
ROAD CHAINAGE	0.000	5.546	5.996	6.596	10.000	11.370

DRIVEWAY LONGITUDINAL SECTION D2 (LEFT SIDE)

SCALE 1:100 (HOR)
1:25 (VER)

NOT TO BE USED FOR CONSTRUCTION

AMDT	DATE	DESCRIPTION	BY
2	09.08.23	REISSUED FOR DA	SC
1	25.11.22	ISSUED FOR DA	SC

JN Responsive Engineering

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HYECORP
STATUS
PRELIMINARY

DISCIPLINE
CIVIL DESIGN
DRAWING TITLE
ROAD FRONTAGE & DRIVEWAY LONGSECTIONS

PROJECT
MIXED USE DEVELOPMENT ROAD FRONTAGE DESIGN
ADDRESS
64-66 PACIFIC HIGHWAY, ROSEVILLE

PROJECT DETAILS
DESIGN SD
DRAWN SC
DATE NOV 2022
DRG SIZE A1
SCALE 1:1000
PROJECT MGR SD
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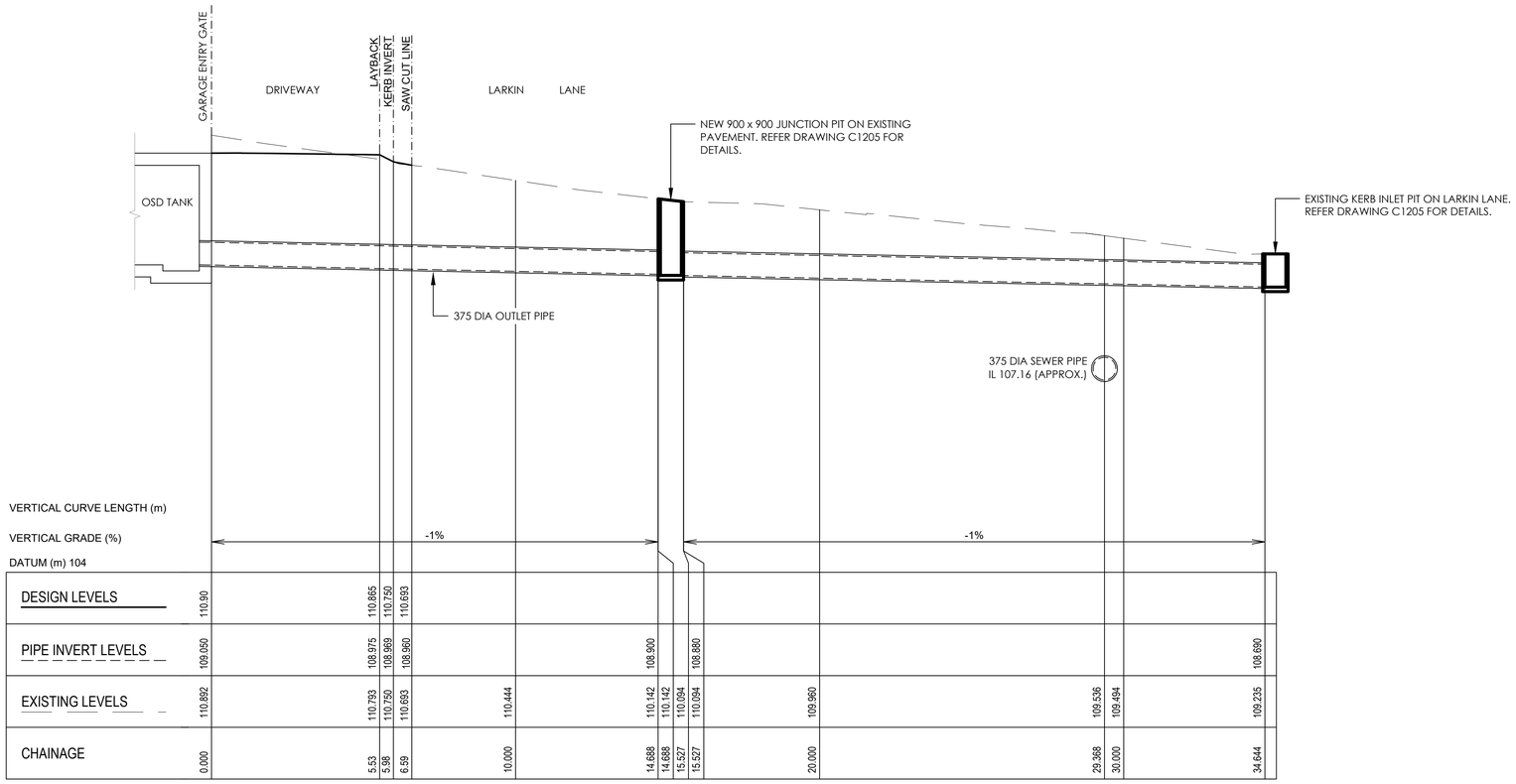
17011201
C1500 2



LONGITUDINAL SECTION SW1

SCALE 1:100 (HOR)
1:50 (VER)

0 20 40 60 80 100m
20 15 10 5
SCALE 1:1000

NOT TO BE USED FOR CONSTRUCTION

AMDT	DATE	DESCRIPTION	BY
1	09.08.23	ISSUED FOR DA	SC

Responsive Engineering

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HYECORP

STATUS
PRELIMINARY

DISCIPLINE
CIVIL DESIGN

DRAWING TITLE
STORMWATER LONGSECTION

PROJECT
MIXED USE DEVELOPMENT
ROAD FRONTAGE DESIGN

ADDRESS
64-66 PACIFIC HIGHWAY, ROSEVILLE

PROJECT DETAILS

DESIGN	SD
DRAWN	SC
DATE	NOV 2022
DRG SIZE	A1
SCALE	1:1000
PROJECT MGR	SD

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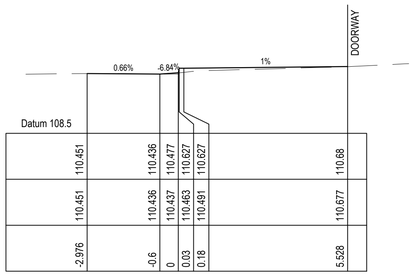
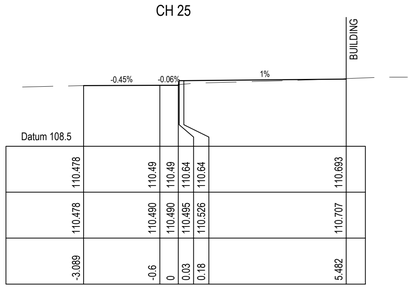
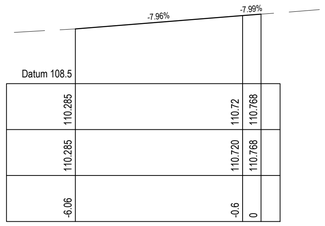
17011201
C1510 1



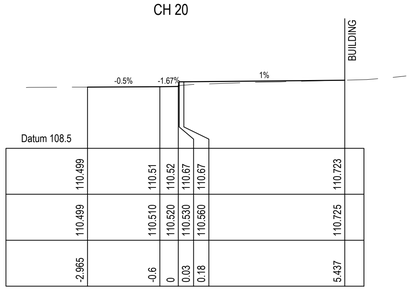
CH 25



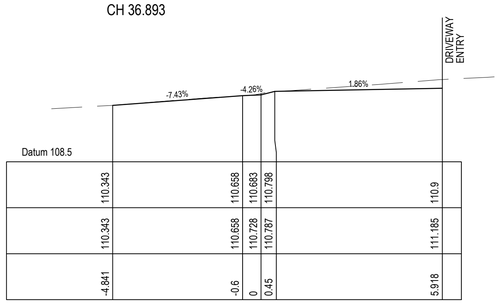
CH 20



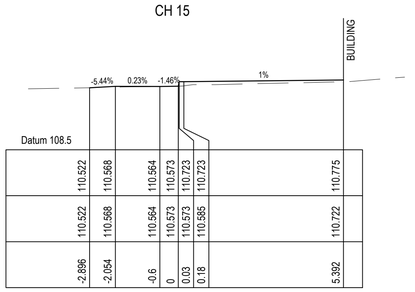
CH 36.893



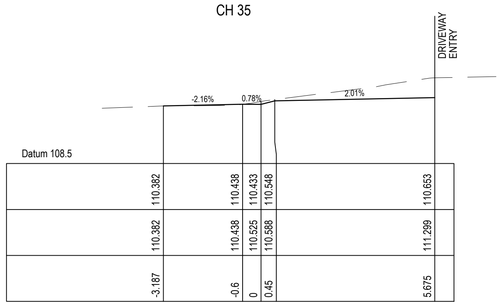
CH 15



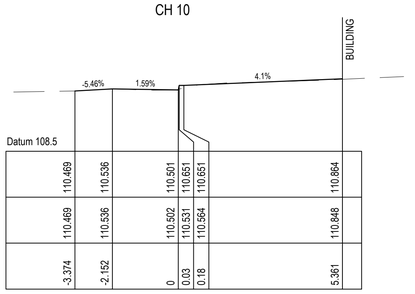
CH 35



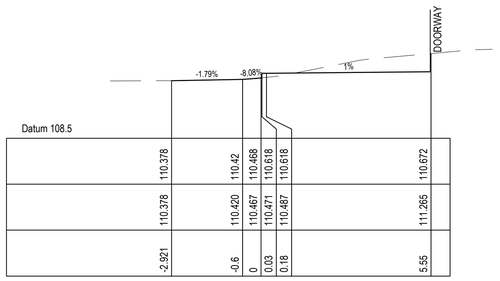
CH 10



CH 30



CH 5



CH 27.48

DESIGN LEVELS

EXISTING LEVELS

OFFSET

MC01 CROSS SECTIONS

SCALE 1:100

0 2 4 6 8 10m

2 1

SCALE 1:100

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AMDT	DATE	DESCRIPTION	BY
2	09.08.23	REISSUED FOR DA	SC
1	25.11.22	ISSUED FOR DA	SC

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HYECORP

STATUS
PRELIMINARY

DISCIPLINE
CIVIL DESIGN

DRAWING TITLE
ROAD FRONTAGE
CROSS SECTIONS

PROJECT
MIXED USE DEVELOPMENT
ROAD FRONTAGE DESIGN

ADDRESS
64-66 PACIFIC HIGHWAY, ROSEVILLE

PROJECT DETAILS

DESIGN	SD
DRAWN	SC
DATE	NOV 2022
DRG SIZE	A1
SCALE	1:1000
PROJECT MGR	SD

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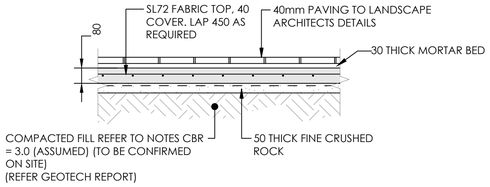
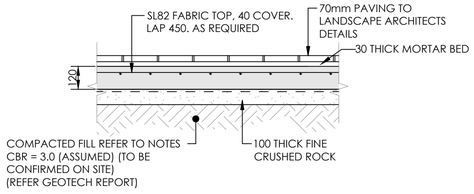
17011201
C1600 2



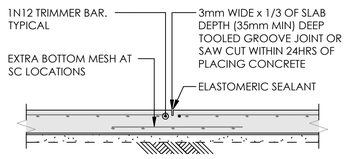
PAVED CONCRETE FOOTPATH PAVEMENT TYPICAL DETAIL

SCALE 1:20

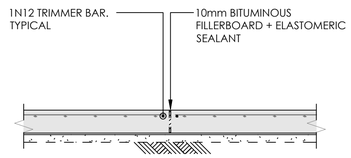


PAVED CONCRETE DRIVEWAY PAVEMENT TYPICAL DETAIL

SCALE 1:20

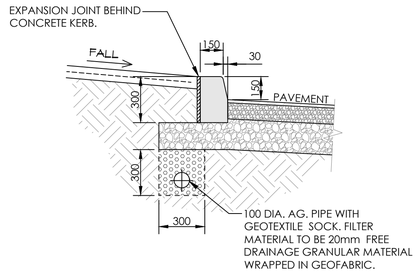


SAW CUT JOINT 'SC'



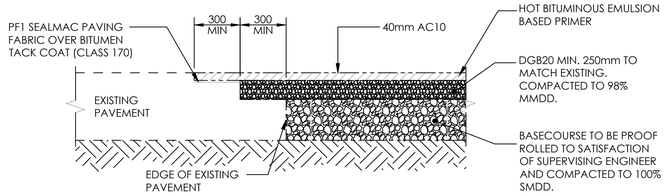
EXPANSION JOINT 'EJ'

NOTE:
EXPANSION JOINTS ARE TO ALIGN WITH EJ'S IN PAVING.



TYPICAL KERB ONLY (150KO) DETAIL

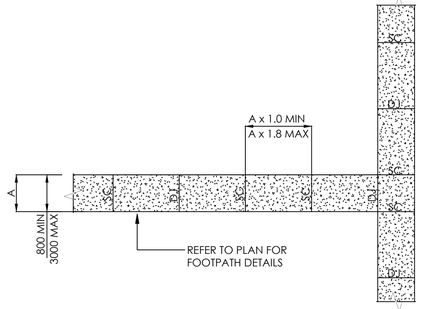
SCALE 1:20



TYPICAL ROAD PAVEMENT JUNCTION WITH EXISTING PAVEMENTS DETAIL

SCALE 1:20

NOTE:
1. EXPANSION JOINTS TO BE PLACED AT MAXIMUM 6m INTERVALS.
2. ALL KERBS TO BE MIN. 25MPa CONCRETE UNLESS NOTED OTHERWISE.



TYPICAL FOOTPATH JOINT LAYOUT PLAN

SCALE 1:100

NOT TO BE USED FOR CONSTRUCTION

AMDT	DATE	DESCRIPTION	BY
1	25.11.22	ISSUED FOR DA	SC

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HYECORP

STATUS
PRELIMINARY

DISCIPLINE
CIVIL DESIGN

DRAWING TITLE
CIVIL WORKS DETAILS

PROJECT
MIXED USE DEVELOPMENT
ROAD FRONTAGE DESIGN

ADDRESS
64-66 PACIFIC HIGHWAY, ROSEVILLE

PROJECT DETAILS

DESIGN	SD
DRAWN	SC
DATE	NOV 2022
DRG SIZE	A1
SCALE	1:100
PROJECT MGR	S McM

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