GLENDENNING ROAD DATA CENTRE

2 GLENDENNING ROAD, GLENDENNING N.S.W. 2761 (LOT 2 DP 1137162)
STATE SIGNIFICANT DEVELOPMENT APPLICATION

SSDA CIVIL DRAWING LIST	
GRDC86-ACR-00-XX-DR-SSDA-C-0000	PROJECT COVER SHEET
GRDC86-ACR-00-XX-DR-SSDA-C-0002	LEGEND SHEET
GRDC86-ACR-00-XX-DR-SSDA-C-0005	GENERAL NOTES SHEET 1
GRDC86-ACR-00-XX-DR-SSDA-C-0010	EXISTING SURVEY AND SERVICES PLAN
GRDC86-ACR-00-XX-DR-SSDA-C-0020	SITE CLEARING PLAN
GRDC86-ACR-00-XX-DR-SSDA-C-0025	KEY PLAN
GRDC86-ACR-00-XX-DR-SSDA-C-0030	GENERAL ARRANGEMENT PLAN
GRDC86-ACR-00-XX-DR-SSDA-C-0050	SOIL EROSION AND SEDIMENT CONTROL PLAN
GRDC86-ACR-00-XX-DR-SSDA-C-0070	BULK EARTHWORKS PLAN
GRDC86-ACR-00-XX-DR-SSDA-C-0072	BULK EARTHWORKS SECTIONS - SHEET 1
GRDC86-ACR-00-XX-DR-SSDA-C-0073	BULK EARTHWORKS SECTIONS - SHEET 2
GRDC86-ACR-00-XX-DR-SSDA-C-1100	STORMWATER DRAINAGE PLAN - OVERALL SITE
GRDC86-ACR-00-XX-DR-SSDA-C-1101	STORMWATER DRAINAGE PLAN - SHEET 1
GRDC86-ACR-00-XX-DR-SSDA-C-1102	STORMWATER DRAINAGE PLAN - SHEET 2
GRDC86-ACR-00-XX-DR-SSDA-C-1103	STORMWATER DRAINAGE PLAN - SHEET 3
GRDC86-ACR-00-XX-DR-SSDA-C-1104	STORMWATER DRAINAGE PLAN - SHEET 4
GRDC86-ACR-00-XX-DR-SSDA-C-1105	STORMWATER DRAINAGE PLAN - SHEET 5
GRDC86-ACR-00-XX-DR-SSDA-C-1106	STORMWATER DRAINAGE PLAN - SHEET 6
GRDC86-ACR-00-XX-DR-SSDA-C-1107	STORMWATER DRAINAGE PLAN - SHEET 7
GRDC86-ACR-00-XX-DR-SSDA-C-1108	STORMWATER DRAINAGE PLAN - SHEET 8
GRDC86-ACR-00-XX-DR-SSDA-C-1109	STORMWATER DRAINAGE PLAN - SHEET 9
GRDC86-ACR-00-XX-DR-SSDA-C-1111	STORMWATER DRAINAGE - LONGITUDINAL SECTIONS - SHEET 1
GRDC86-ACR-00-XX-DR-SSDA-C-1112	STORMWATER DRAINAGE - LONGITUDINAL SECTIONS - SHEET 2
GRDC86-ACR-00-XX-DR-SSDA-C-1113	STORMWATER DRAINAGE - LONGITUDINAL SECTIONS - SHEET 3
GRDC86-ACR-00-XX-DR-SSDA-C-1114	STORMWATER DRAINAGE - LONGITUDINAL SECTIONS - SHEET 4
GRDC86-ACR-00-XX-DR-SSDA-C-1115	STORMWATER DRAINAGE - LONGITUDINAL SECTIONS - SHEET 5
GRDC86-ACR-00-XX-DR-SSDA-C-1120	STORMWATER DRAINAGE - DRAINAGE CATCHMENT
GRDC86-ACR-00-XX-DR-SSDA-C-1121	STORMWATER DRAINAGE - STORMWATER QUALITY CATCHMENT
GRDC86-ACR-00-XX-DR-SSDA-C-2225	TYPICAL ROAD SECTIONS - SHEET 1
GRDC86-ACR-00-XX-DR-SSDA-C-2226	TYPICAL ROAD SECTIONS - SHEET 2
GRDC86-ACR-00-XX-DR-SSDA-C-2240	HORIZONTAL CONTROL PLAN
GRDC86-ACR-00-XX-DR-SSDA-C-2251	ROAD LONGITUDINAL SECTIONS - SHEET 1
GRDC86-ACR-00-XX-DR-SSDA-C-2252	ROAD LONGITUDINAL SECTIONS - SHEET 2
GRDC86-ACR-00-XX-DR-SSDA-C-2253	ROAD LONGITUDINAL SECTIONS - SHEET 3
GRDC86-ACR-00-XX-DR-SSDA-C-2300	RETAINING WALL PLAN
GRDC86-ACR-00-XX-DR-SSDA-C-2310	RETAINING WALL LONGITUDINAL SECTIONS - SHEET 1
GRDC86-ACR-00-XX-DR-SSDA-C-2500	PAVEMENT PLAN
GRDC86-ACR-00-XX-DR-SSDA-C-2700	VEHICLE SWEPT PATH PLAN - OVERALL SITE
GRDC86-ACR-00-XX-DR-SSDA-C-2701	VEHICLE SWEPT PATH PLAN - SHEET 1
GRDC86-ACR-00-XX-DR-SSDA-C-2702	VEHICLE SWEPT PATH PLAN - SHEET 2
GRDC86-ACR-00-XX-DR-SSDA-C-2703	VEHICLE SWEPT PATH PLAN - SHEET 3
GRDC86-ACR-00-XX-DR-SSDA-C-2704	VEHICLE SWEPT PATH PLAN - SHEET 4
GRDC86-ACR-00-XX-DR-SSDA-C-2705	VEHICLE SWEPT PATH PLAN - SHEET 5
GRDC86-ACR-00-XX-DR-SSDA-C-3051	SOIL EROSION AND SEDIMENT CONTROL DETAILS
GRDC86-ACR-00-XX-DR-SSDA-C-3101	STORMWATER DRAINAGE DETAILS - SHEET 1
GRDC86-ACR-00-XX-DR-SSDA-C-3102	STORMWATER DRAINAGE DETAILS - SHEET 2
GRDC86-ACR-00-XX-DR-SSDA-C-3103	STORMWATER DRAINAGE DETAILS - SHEET 3
GRDC86-ACR-00-XX-DR-SSDA-C-3104	STORMWATER DRAINAGE DETAILS - SHEET 4
GRDC86-ACR-00-XX-DR-SSDA-C-3201	ROAD DETAILS - SHEET 1



NOTES

KEYNOTES

LEGEND

REV	DATE	DESCRIPTION	DRN	ENG	CHK	APP
P1	13NOV2024	DRAFT SSDA ISSUE	DW	JF	MB	MB
A	20NOV2024	SSDA ISSUE	DW	JF	MB	MB

MECHANICAL/ ELECTRICAL ENGINEER:
LCI CONSULTANTS
02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

HYDRAULIC/ FIRE ENGINEER:
LCI CONSULTANTS
02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

CIVIL ENGINEER:
ACOR CONSULTANTS PTY LTD
02 9438 5098
SUITE 2, LEVEL 1, 33 HERBERT STREET,
ST LEONARDS NSW 2065

STRUCTURAL ENGINEER:
VAN DER MEER CONSULTING
02 94306433
LEVEL 6, 39 CHANDOS ST,
ST LEONARDS NSW 2065

ARCHITECT:
GREENBOX ARCHITECTURE PTY LTD
02 8069 8939
LEVEL 22, 68 PITT STREET,
SYDNEY NSW 2000

LANDSCAPE:
GEOSCAPES
02 9411 1488
SUITE 3.03, 8 HELP STREET,
CHATSWOOD, NSW 2067

PROJECT: GLENDENNING ROAD DATA CENTRE

TITLE: CIVIL SERVICES
PROJECT COVER SHEET

DRAWING: GRDC86-ACR-00-XX-DR-SSDA-C-0000

PAPER SIZE:	SCALE:		REV:
ISO A0	NA		A

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EXISTING SERVICES LEGEND

- EXISTING WATER
- EXISTING GAS
- EXISTING COMMUNICATIONS
- EXISTING ELECTRICAL
- EXISTING OVERHEAD ELECTRICAL
- EXISTING STORMWATER
- EXISTING SEWER
- EXISTING ELECTRICAL BOX
- EXISTING ELECTRICITY POLE
- EXISTING STOP VALVE
- EXISTING HYDRANT
- EXISTING WATER TANK
- EXISTING STORMWATER PITS
- EXISTING GAS METER
- EXISTING SEWER MANHOLE
- EXISTING COMMUNICATION PITS

EXISTING SERVICES NOTE:

EXISTING SERVICE ALIGNMENTS HAVE BEEN PLOTTED UTILISING INFORMATION OBTAINED FROM DIAL BEFORE YOU DIG AND SERVICES SCANNING DATA WHERE INDICATED. ALL ALIGNMENTS ARE INDICATIVE ONLY FOR THE PURPOSES OF DESIGN.
THE CONTRACTOR IS TO DETERMINE LOCATION AND DEPTH OF ALL EXISTING SERVICES PRIOR TO COMMENCEMENT OF ANY WORK

SOIL EROSION AND SEDIMENT CONTROL LEGEND-PROPOSED WORKS

- SEDIMENT FENCE
- CUT OFF DRAIN
- DC01 BUILDING OUTLINE
- STORMWATER DRAINAGE LINE
- STORMWATER HEADWALL
- PIT INLET TRAP
- SAND BAG SEDIMENT TRAP
- ROCK CHECK DAM
- STABILISED CONSTRUCTION EXIT
- STOCKPILE
- STAGE 1 BOUNDARY
- BASIN 1 — SEDIMENT BASIN

CIVIL WORKS LEGENDS

- P35.18 — PROPOSED FINISHED SURFACE LEVEL
- IK33.98 — PROPOSED KERB INVERT LEVEL
- TK34.40 — PROPOSED TOP OF KERB LEVEL
- EX33.96 — EXISTING FINISHED SURFACE LEVEL
- CL35.20 — PIT COVER LEVEL
- EXIK42.38 — EXISTING KERB INVERT LEVEL
- EXBW35.01 — EXISTING BOTTOM OF WALL LEVEL
- EXTW39.00 — EXISTING TOP OF WALL LEVEL
- BOW34.08 — PROPOSED BOTTOM OF WALL LEVEL
- TOW39.00 — PROPOSED TOP OF WALL LEVEL
- KG — KERB ONLY
- KG — KERB AND GUTTER
- HK — HIGH KERB
- DD 900 — DISH DRAIN WITH WIDTH
- VC — VEHICULAR CROSSING
- RW — PROPOSED RETAINING WALL
- EXISTING RETAINING WALL
- STAGE 1 OUTER FENCE 2.4m HIGH WITH CONCRETE PATH
- STAGE 1 OUTER FENCE 3.0m HIGH WITH CONCRETE FENCE
- STAGE 1 TEMPORARY CONSTRUCTION FENCE
- STAGE 1 SECONDARY INNER FENCE 2.4m HIGH
- STAGE 3 PRIMARY OUTER FENCE 2.4m HIGH WITH CONCRETE PATH
- STAGE 3 OUTER FENCE 3.0m HIGH WITH CONCRETE FOOTPATH
- STAGE 3 SECONDARY INNER FENCE 2.4m HIGH
- SECONDARY INNER FENCE DOUBLE GATE 1800mm WIDE
- SECONDARY INNER FENCE SINGLE GATE 900mm WIDE
- TEMPORARY CONSTRUCTION GATE
- EXISTING TENANT FENCE
- 1.0% FALL — INDICATIVE DIRECTION OF SURFACE FALL AND GRADE
- KERB RAMP
- WHEEL STOP
- GRASS LINED SWALE DRAIN AND DIRECTION OF FLOW
- D1 — STORMWATER DRAINAGE STRUCTURE AND NUMBER
- STORMWATER HEADWALL WITH SCOUR PROTECTION
- GD — GRATED DRAIN
- RWT — RAINWATER TANK
- UNDERGROUND STORMWATER QUALITY TREATMENT TANK
- STORMWATER DRAINAGE PIPELINE AND DIRECTIONAL FLOW ARROW STAGE 1
- STORMWATER DRAINAGE PIPELINE AND DIRECTIONAL FLOW ARROW STAGE 2
- STORMWATER DRAINAGE PIPELINE AND DIRECTIONAL FLOW ARROW STAGE 3
- STORMWATER ROOF DRAINAGE BY HYDRAULIC CONSULTANT
- OVERLAND FLOW PATH
- DP — DOWNPIPE
- DC01 BUILDING FFL 35.05 — FINISHED FLOOR LEVEL
- FINISHED SURFACE MINOR CONTOUR
- FINISHED SURFACE MAJOR CONTOUR
- BIODIVERSITY ZONE
- MW01 — RETAINING WALL CONTROL LINE LABEL
- CONTROL LINE
- B1 — PERMANENT STEEL BOLLARD - NON CRASH RATED
- B2 — EXTERNAL IMPACT BOLLARD - PAS68 RATED
- BH108 — BOREHOLE TEST LOCATION
- CTP5 — TEST PIT LOCATION

PAVEMENT LEGEND

PAVEMENT TYPE F1
FULL DEPTH ASPHALT ENTRY PAVEMENT

DESIGN FINISHED SURFACE LEVEL
- 50mm COMPACTED THICKNESS AC14 C450
- PRIMER COAT (0.7 L/M²)
- 200mm COMPACTED THICKNESS AC20 C320 INTERMEDIATE COURSE
- 7mm PRIMER SEAL
- 150mm COMPACTED THICKNESS DGB20
- 150mm COMPACTED THICKNESS DGS40
- 300mm COMPACTED THICKNESS WELL-GRADED GRANULAR SUBGRADE REPLACEMENT (MIN CBR 15%)
- COMPACTED PROOF-ROLLED SUBGRADE. MIN 1% CBR

PAVEMENT TYPE F2
CIRCULATION ROAD ASPHALT PAVEMENT

DESIGN FINISHED SURFACE LEVEL
- 50mm COMPACTED THICKNESS AC14 C450
- 7mm PRIMER SEAL
- 150mm COMPACTED THICKNESS DGB20
- 250mm COMPACTED THICKNESS DGS40
- 300mm COMPACTED THICKNESS WELL-GRADED GRANULAR SUBGRADE REPLACEMENT (MIN CBR 15%)
- COMPACTED PROOF-ROLLED SUBGRADE. MIN 1% CBR

PAVEMENT TYPE F3
TEMPORARY CONSTRUCTION ROAD STAGE 1

DESIGN FINISHED SURFACE LEVEL
- 50mm COMPACTED THICKNESS AC14 C170
- PRIME (AMC00)
- 150mm COMPACTED THICKNESS DGB20
- 250mm COMPACTED THICKNESS DGS40
- 300mm COMPACTED THICKNESS WELL-GRADED GRANULAR SUBGRADE REPLACEMENT (MIN CBR 15%)
- COMPACTED PROOF-ROLLED SUBGRADE. MIN 1% CBR

PAVEMENT TYPE F4
CARPARK ASPHALT PAVEMENT

DESIGN FINISHED SURFACE LEVEL
- 40mm COMPACTED THICKNESS AC10 C320
- 7mm PRIMER SEAL
- 100mm COMPACTED THICKNESS DGB20
- 100mm COMPACTED THICKNESS DGS40
- 300mm COMPACTED THICKNESS WELL-GRADED GRANULAR SUBGRADE REPLACEMENT (MIN CBR 15%)
- COMPACTED PROOF-ROLLED SUBGRADE. MIN 1% CBR

PAVEMENT TYPE R1
LOADING DOCK CONCRETE PAVEMENT

DESIGN FINISHED SURFACE LEVEL
- 200mm COMPACTED THICKNESS CONCRETE (f'c = 40MPa, 28-DAY FLEXURAL STRENGTH 4.5MPa) WITH SL92 MESH TOP 50 COVER)
- 150mm COMPACTED THICKNESS DGB20
- 300mm COMPACTED THICKNESS WELL-GRADED GRANULAR SUBGRADE REPLACEMENT (MIN CBR 15%)
- COMPACTED PROOF-ROLLED SUBGRADE. MIN 1% CBR

PAVEMENT TYPE R2
FOOTPATH AND VERGE HARDSTAND PAVEMENT

DESIGN FINISHED SURFACE LEVEL
- 125mm COMPACTED THICKNESS CONCRETE (f'c = 32MPa) WITH SL92 MESH 50 TOP COVER
- 100mm COMPACTED THICKNESS DGB20
- COMPACTED PROOF-ROLLED SUBGRADE. MIN 1% CBR

- IJ — ISOLATION JOINT
- DDJ — DIAMOND DOWEL JOINT
- CDJ — CONTINUOUS POUR DOWEL JOINT
- SCJ — SAWN CONTRACTION JOINT

PAVEMENT MARKING LEGEND

- S1 — TWO LANE ROAD DIVIDING LINE
- P1 — PARKING BAY LINE
- SL — STOP LINE
- PX — PEDESTRIAN CROSSING LINE
- BB — DOUBLE DIVIDING LINE
- TB — GIVEWAY LINE
- DIRECTIONAL ARROW
- DIRECTIONAL ARROW
- DIRECTIONAL ARROW

DIRECTION ARROW LINEMARKING TO BE IN ACCORDANCE WITH THE DIMENSIONS SPECIFIED IN APPENDIX B OF AUSTROADS AP-R578-18

- PROPOSED DISABLED CAR PARKING SPACE AND SHARED ZONE WITH BOLLARD.
- INDUSTRIAL PEDESTRIAN CROSSING LINE
- CHEVRON

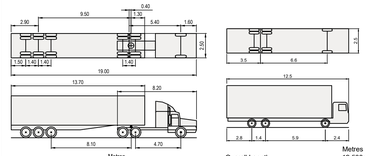
NOTES
1. ALL PAVEMENT MARKING AND SIGNAGE SHALL BE IN ACCORDANCE WITH AS1742, 1743, 2890 AND RELEVANT VICROADS GUIDELINES, TECHNICAL NOTES AND SPECIFICATIONS

SIGNAGE LEGEND

- STOP — STOP SIGN
- GIVE WAY (R1-2) — GIVE WAY SIGN
- AUTHORISED VEHICLES EXCEPTED — AUTHORISED VEHICLES EXCEPTED SIGN
- P ONLY (R5-1-3 (R)) — DISABLED PARKING TO THE RIGHT SIGN
- P ONLY (R5-1-3 (L)) — DISABLED PARKING TO THE LEFT SIGN
- ONLY (R2-14) — ALL TRAFFIC LEFT SIGN
- NO ENTRY (R2-4) — NO ENTRY SIGN
- 15 — SPEED LIMIT SIGN
- ELECTRIC VEHICLE PARKING ONLY — ELECTRICAL VEHICLE PARKING WHILE CHARGING ONLY SIGN

VEHICLE TURNPATH LEGEND

- VEHICLE BODY SWEPT PATH ENVELOPE - FORWARD MOVEMENT
- 0.5m VEHICLE SWEPT PATH CLEARANCE ENVELOPE
- VEHICLE BODY SWEPT PATH ENVELOPE - REVERSE MOVEMENT
- 0.5m VEHICLE SWEPT PATH CLEARANCE ENVELOPE



	Metres
Overall Length	19.000m
Overall Width	2.500m
Overall Body Height	4.301m
Min Body Ground Clearance	0.418
Track Width	2.500m
Lock-to-lock time	6.00s
Kerb to Kerb Turning Radius	12.500m

AV - ARTICULATED VEHICLE (AV 19.0m).

	Metres
Overall Length	12.500m
Overall Width	2.500m
Overall Body Height	4.300m
Min Body Ground Clearance	0.417m
Track Width	2.500m
Lock-to-lock time	6.00s
Kerb to Kerb Turning Radius	12.500m

HRV - HEAVY RIGID VEHICLE (HRV 12.5m)

NTS

NOTES

KEYNOTES

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MECHANICAL/ ELECTRICAL ENGINEER:
LCI CONSULTANTS
02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

HYDRAULIC/ FIRE ENGINEER:
LCI CONSULTANTS
02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

CIVIL ENGINEER:
ACOR CONSULTANTS PTY LTD
02 9438 5098
SUITE 2, LEVEL 1, 33 HERBERT STREET,
ST LEONARDS NSW 2065

STRUCTURAL ENGINEER:
VAN DER MEER CONSULTING
02 94360433
LEVEL 6, 39 CHANDOS ST,
ST LEONARDS NSW 2065

ARCHITECT:
GREENBOX ARCHITECTURE PTY LTD
02 9069 8939
LEVEL 22, 68 PITT STREET,
SYDNEY NSW 2000

LANDSCAPE:
GEOSCAPES
02 9411 1485
SUITE 3.03, 8 HELP STREET,
CHATSWOOD, NSW 2067

PROJECT: GLENDENNING ROAD DATA CENTRE

TITLE: CIVIL SERVICES LEGENDS SHEET

DRAWING: GRDC86-ACR-00-XX-DR-SSDA-C-0002

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GENERAL NOTES

1. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE CIVIL SPECIFICATIONS AND ALL OTHER RELEVANT SPECIFICATIONS.
2. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL GRDC CONSULTANTS DRAWINGS AND SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED.
3. ALL DIMENSIONS RELEVANT TO SETTING OUT AND OFF-SITE WORK SHALL BE VERIFIED BY THE CONTRACTOR BEFORE CONSTRUCTION
4. REFER TO LANDSCAPE ARCHITECTURAL DOCUMENTATION FOR DETAILS OF PERMANENT PLANTING AND ASSOCIATED FINISHES.
5. DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE DRAWINGS.
6. ALL DIMENSIONS ON DETAILS ARE IN MILLIMETRES UNLESS STATED OTHERWISE. ALL PLANS AND LEVELS ARE EXPRESSED IN METRES.
7. DURING CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE STRUCTURE IN A STABLE CONDITION AND ENSURING NO PART SHALL BE OVER STRESSED UNDER CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL PROVIDE TEMPORARY BRACING, SHORING AND PROPPING IN ORDER TO KEEP THE BUILDING WORKS AND EXCAVATIONS STABLE AT ALL TIMES
8. WORKMANSHIP AND MATERIALS ARE TO BE IN ACCORDANCE WITH THE RELEVANT CURRENT AUSTRALIAN STANDARDS INCLUDING ALL AMENDMENTS, AND THE LOCAL STATUTORY AUTHORITIES, EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.
9. THE APPROVAL OF A SUBSTITUTION SHALL BE SOUGHT FROM ACOR CONSULTANTS BUT IS NOT AN AUTHORISATION FOR A VARIATION. ANY VARIATIONS INVOLVED MUST BE TAKEN UP WITH ACOR CONSULTANTS / PRINCIPAL'S REPRESENTATIVE BEFORE THE WORK COMMENCES.
10. ANY DISCREPANCIES OR OMISSIONS SHALL BE REFERRED TO THE ENGINEER FOR A DECISION BEFORE PROCEEDING WITH THE WORK.
11. THE CONTRACTOR SHALL GIVE 48 HOURS NOTICE FOR ALL ENGINEERING INSPECTIONS. ALL INSPECTIONS AND CERTIFICATIONS TO BE INCLUDED IN CONTRACTORS COST.
12. BUILDING FROM THESE DRAWINGS IS NOT TO COMMENCE UNTIL APPROVED BY THE PRINCIPAL CERTIFYING AUTHORITY.
13. THE WORD 'ENGINEER' USED IN THESE NOTES REFER TO AN EMPLOYEE OR NOMINATED REPRESENTATIVE OF **ACOR CONSULTANTS PTY LTD.**
14. ALL CONSTRUCTION ACTIVITIES SHALL COMPLY WITH THE RELEVANT CURRENT WORKPLACE HEALTH AND SAFETY LEGISLATION.

SITEWORKS NOTES

1. ORIGIN OF LEVELS :- AUSTRALIAN HEIGHT DATUM (A.H.D.)
2. CONTRACTOR MUST VERIFY ALL DIMENSIONS AND EXISTING LEVELS ON SITE PRIOR TO COMMENCEMENT OF WORK.
3. ALL WORK IS TO BE UNDERTAKEN IN ACCORDANCE WITH THE DETAILS SHOWN ON THE DRAWINGS, THE SPECIFICATIONS AND THE DIRECTIONS OF THE PRINCIPAL'S REPRESENTATIVE.
4. EXISTING SERVICES HAVE BEEN PLOTTED FROM SUPPLIED DATA AND AS SUCH THEIR ACCURACY CANNOT BE GUARANTEED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH THE LOCATION AND LEVEL OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY WORK. ANY DISCREPANCIES SHALL BE REPORTED TO THE PRINCIPAL'S REPRESENTATIVE. CLEARANCES SHALL BE OBTAINED FROM THE RELEVANT SERVICE AUTHORITY.
5. WHERE NEW WORKS ABUT EXISTING THE CONTRACTOR SHALL ENSURE THAT A SMOOTH EVEN PROFILE, FREE FROM ABRUPT CHANGES IS OBTAINED.
6. THE CONTRACTOR SHALL ARRANGE ALL SURVEY SETOUT TO BE CARRIED OUT BY A REGISTERED SURVEYOR.
7. CARE IS TO BE TAKEN WHEN EXCAVATING NEAR EXISTING SERVICES. NO MECHANICAL EXCAVATIONS ARE TO BE UNDERTAKEN OVER COMMUNICATIONS OR ELECTRICAL SERVICES. HAND EXCAVATE IN THESE AREAS.
8. ON COMPLETION OF PIPE INSTALLATION ALL DISTURBED AREAS MUST BE RESTORED TO ORIGINAL, INCLUDING KERBS, FOOTPATHS, CONCRETE AREAS, GRAVEL AND GRASSED AREAS AND ROAD PAVEMENTS IN ACCORDANCE WITH ALL LOCAL COUNCIL REQUIREMENTS.
9. PROVIDE 10mm WIDE EXPANDING CORK JOINTS BETWEEN CONCRETE PAVEMENTS AND ALL BUILDINGS , WALLS, FOOTINGS, COLUMNS, KERBS, DISH DRAINS, GRATED DRAINS, BOLLARD FOOTINGS ETC
10. CONTRACTOR TO OBTAIN ALL AUTHORITY APPROVALS.
11. ALL BATTERS TO BE GRASSED LINED WITH MINIMUM 100 TOPSOIL AND APPROVED COUCH LAID AS TURF U.N.O.
12. MAKE SMOOTH TRANSITION TO EXISTING SERVICES AND MAKE GOOD.
13. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY DIVERSION DRAINS AND MOUNDS TO ENSURE THAT AT ALL TIMES EXPOSED SURFACES ARE FREE DRAINING AND WHERE NECESSARY EXCAVATE SUMPS AND PROVIDE PUMPING EQUIPMENT TO DRAIN EXPOSED AREAS.
14. ON COMPLETION OF WORKS ALL DISTURBED AREAS MUST BE RESTORED TO ORIGINAL INCLUDING, BUT NOT LIMITED TO, KERBS, FOOTPATHS, CONCRETE AREAS, GRASS AND LANDSCAPED AREAS.

EXISTING SERVICES AND FEATURES

1. THE CONTRACTOR SHALL ALLOW FOR THE CAPPING OFF, EXCAVATION, REMOVAL AND DISPOSAL IF REQUIRED OF ALL EXISTING SERVICES IN AREAS AFFECTED BY WORKS WITHIN THE CONTRACT AREA, AS SHOWN ON THE DRAWINGS UNLESS DIRECTED OTHERWISE BY THE SUPERINTENDENT.
2. THE CONTRACTOR SHALL ENSURE THAT AT ALL TIMES SERVICES TO ALL BUILDINGS NOT AFFECTED BY THE WORKS ARE NOT DISRUPTED.
3. PRIOR TO COMMENCEMENT OF ANY WORKS THE CONTRACTOR SHALL GAIN WRITTEN APPROVAL OF HIS PROGRAMME FOR THE RELOCATION/CONSTRUCTION OF TEMPORARY SERVICES.
4. EXISTING BUILDINGS, EXTERNAL STRUCTURES, AND TREES SHOWN ON THESE DRAWINGS ARE FEATURES EXISTING PRIOR TO ANY DEMOLITION WORKS.
5. CONTRACTOR SHALL CONSTRUCT TEMPORARY SERVICES TO MAINTAIN EXISTING SUPPLY TO BUILDINGS REMAINING IN OPERATION DURING WORKS TO THE SATISFACTION AND APPROVAL OF THE SUPERINTENDENT. ONCE DIVERSION IS IS COMPLETE AND COMMISSIONED THE CONTRACTOR SHALL REMOVE ALL SUCH TEMPORARY SERVICES AND MAKE GOOD TO THE SATISFACTION OF THE SUPERINTENDENT.
6. INTERRUPTION TO SUPPLY OF EXISTING SERVICES SHALL BE DONE SO AS NOT TO CAUSE ANY INCONVENIENCE TO THE PRINCIPAL, CONTRACTOR TO GAIN APPROVAL OF SUPERINTENDENT FOR TIME OF INTERRUPTION.

COMPACTION NOTES

1. REFER TO GEOTECHNICAL ASSESSMENT REPORT PREPARED BY MARTENS AND ASSOCIATES PTY LTD, REF: P2310014JR01V03 DATED: SEPTEMBER 2024
2. STRIP TOPSOIL TO EXPOSE NATURALLY OCCURRING MATERIAL AND STOCKPILE ON SITE FOR SELECTIVE RE-USE OR DISPOSE OFF-SITE AS DIRECTED BY THE SUPERINTENDENT. DEPTH OF TOPSOIL TO BE STRIPPED SHOWN ON THE BULK EARTHWORKS PLANS IS INDICATIVE ONLY BASED ON AVAILABLE GEOTECHNICAL INFORMATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ALLOW TO STRIP TOPSOIL TO THE APPROPRIATE DEPTH TO EXPOSE THE UNDERLYING NATURALLY OCCURRING MATERIAL.
3. UNCONTROLLED FILLING IS TO BE REMOVED FROM THE FOOTPRINT OF THE BUILDING AND PAVEMENT AREAS OR COMPACTED IN-SITU BY HIGH ENERGY IMPACT COMPACTION TECHNIQUES TO THE APPROVAL OF THE GITA. THE STRIPPED SURFACE SHALL BE INSPECTED BY A GEOTECHNICAL ENGINEER.
4. PROOF ROLL EXPOSED NATURAL SURFACE WITH A MINIMUM OF EIGHT PASSES OF A SMOOTH DRUM ROLLER (MINIMUM STATIC WEIGHT OF 10 TONNES) THE FINAL PASS SHALL BE IN THE PRESENCE OF A GEOTECHNICAL ENGINEER.
5. ALL SOFT, WET OR UNSUITABLE MATERIAL TO BE REMOVED AS DIRECTED BY THE GEOTECHNICAL ENGINEER AND REPLACED WITH APPROVED MATERIAL SATISFYING THE REQUIREMENTS LISTED BELOW.
6. WASTE CLASSIFICATION OF SPOIL MATERIAL, INCLUDING PROVISION OF APPROPRIATE HAZARDOUS MATERIALS HANDLING (AS REQUIRED) IS THE RESPONSIBILITY OF THE CONTRACTOR PRIOR TO UNDERTAKING THE EXCAVATION WORKS.
7. ALL FILL MATERIAL SHALL BE FROM A SOURCE APPROVED BY THE GEOTECHNICAL ENGINEER AND SHALL COMPLY WITH THE FOLLOWING :
   a. FREE FROM ORGANIC, PERISHABLE AND CONTAMINATED MATTER
   b. MAXIMUM PARTICLE SIZE 40MM
   c. PLASTICITY INDEX BETWEEN 2% AND 15%
8. ALL FILL MATERIAL SHALL BE PLACED IN MAXIMUM 200MM THICK LAYERS AND COMPACTED AT OPTIMUM MOISTURE CONTENT (+ OR - 2%) TO ACHIEVE A DRY DENSITY DETERMINED IN ACCORDANCE WITH AS 1289 5.3.1 OF NOT LESS THAN THE FOLLOWING STANDARD MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS 1289 E5.1.1 :

LOCATION	STANDARD DRY DENSITY
UNDER BUILDING SLABS	98%
AREAS OF SERVICE TRENCHES	98%
EXTERNAL PAVED AREAS, ROADS AND CARPARKS	98%
LANDSCAPED AREAS	90%

THE UPPER 0.5m THICKNESS FOR THE FOLLOWING AREAS MUST BE COMPACTED AT OPTIMUM MOISTURE CONTENT (+ OR -2%) AS FOLLOWS

LOCATION	STANDARD DRY DENSITY
UNDER BUILDING SLABS	100%
PAVEMENTS AND CARPARKS	100%

9. THE CONTRACTOR SHALL PROGRAM THE EARTHWORKS OPERATION SO THAT THE WORKING AREAS ARE ADEQUATELY DRAINED DURING THE PERIOD OF CONSTRUCTION. THE SURFACE SHALL BE GRADED AND SEALED OFF TO REMOVE DEPRESSIONS, ROLLER MARKS AND SIMILAR WHICH WOULD ALLOW WATER TO POND AND PENETRATE THE UNDERLYING MATERIAL. ANY DAMAGE RESULTING FROM THE CONTRACTOR NOT OBSERVING THESE REQUIREMENTS SHALL BE RECTIFIED BY THE CONTRACTOR AT THEIR COST.
10. TESTING OF THE SUBGRADE SHALL BE CARRIED OUT BY AN APPROVED NATA REGISTERED LABORATORY AT THE CONTRACTORS EXPENSE.TESTING FREQUENCY SHALL BE IN ACCORDANCE WITH THE FREQUENCY SPECIFIED IN AS1289
11. DO NOT CARRY OUT BACKFILLING UNTIL AT LEAST 100% OF THE SPECIFIED MINIMUM 28 DAY CONCRETE COMPRESSIVE STRENGTH OF THE STRUCTURE HAS BEEN ACHIEVED, BUT IN ANY CASE NOT EARLIER THAN 7 DAYS AFTER CONCRETE PLACEMENT
12. DO NOT USE VIBRATING ROLLERS OF MASS EXCEEDING ONE TONNE, OR ANY OTHER EQUIPMENT THAT MAY POTENTIALLY CAUSE DAMAGE TO EARTH RETAINING STRUCTURES, TO COMPACT FILL MATERIAL LOCATED WITHIN 2m BEHIND THE STRUCTURE.

STORMWATER NOTES

1. ALL 225 DIA. DRAINAGE PIPES AND LARGER SHALL BE CLASS "2" APPROVED SPIGOT AND SOCKET FRC OR RCP PIPES WITH RUBBER RING JOINTS. (U.N.O.)
2. ALL PIPE JUNCTIONS UP TO AND INCLUDING 450 DIA. AND TAPERS SHALL BE VIA PURPOSE MADE FITTINGS.
3. CONTRACTOR TO SUPPLY AND INSTALL ALL FITTINGS AND SPECIALS INCLUDING VARIOUS PIPE ADAPTORS TO ENSURE PROPER CONNECTION BETWEEN DISSIMILAR PIPEWORK.
4. ALL CONNECTIONS TO EXISTING DRAINAGE PITS SHALL BE MADE IN A TRADESMAN-LIKE MANNER AND THE INTERNAL WALL OF THE PIT AT THE POINT OF ENTRY SHALL BE CEMENT RENDERED TO ENSURE A SMOOTH FINISH.
5. PRECAST PITS SHALL NOT BE USED UNLESS WRITTEN APPROVAL IS OBTAINED FROM THE ENGINEER.
6. WHERE TRENCHES ARE IN ROCK, THE PIPE SHALL BE BEDDED ON A MIN. 50MM CONCRETE BED (OR 75MM THICK BED OF 12MM BLUE METAL) UNDER THE BARREL OF THE PIPE. THE PIPE COLLAR AT NO POINT SHALL BEAR ON THE ROCK. IN OTHER THAN ROCK, PIPES SHALL BE LAID ON A 75MM THICK SAND BED. IN ALL CASES BACKFILL THE TRENCH WITH SAND TO 200MM ABOVE THE PIPE. WHERE THE PIPE IS UNDER PAVEMENTS BACKFILL REMAINDER OF TRENCH WITH SAND OR APPROVED GRANULAR BACKFILL COMPACTED IN 150MM LAYERS TO 98% STANDARD MAX. DRY DENSITY.
7. BEDDING SHALL BE (U.N.O.) TYPE HS2, IN ACCORDANCE WITH CURRENT RELEVANT AUSTRALIAN STANDARDS.
8. WHERE STORMWATER LINES PASS UNDER FLOOR SLABS, SEWER GRADE RUBBER RING JOINTS ARE TO BE USED.
9. WHERE SUBSOIL DRAINAGE LINES PASS UNDER FLOOR SLABS AND VEHICULAR PAVEMENTS UNSLOTTED UPVC SEWER GRADE PIPE SHALL BE USED.
10. PROVIDE 3.0M LENGTH OF 100 DIA. SUBSOIL DRAINAGE PIPE WRAPPED IN FABRIC SOCK, AT UPSTREAM END OF EACH PIT.

ASPHALTIC CONCRETE NOTES

1. GENERAL
   a) MINERAL AGGREGATES TO COMPLY WITH AUSTRALIAN STANDARDS
   b) MINERAL FILLER TO COMPLY WITH AS.2357 MINERAL FILLERS OR ASPHALT.
   c) BITUMEN BINDER SHALL COMPLY WITH AS 2008
2. MIX PROPORTIONS
   a) JOB MIX - 10mm NOMINAL SIZE AGGREGATE. MINIMUM BITUMEN CONTENT BY MASS OF TOTAL MASS - 5.1%
   b) MIX STABILITY - BETWEEN 16kN AND 36kN AS DETERMINED BY AS 2891
   c) AIR VOIDS IN COMPACTED MIX - BETWEEN 4% AND 7% OF THE VOLUME OF THE MIX.
   d) VOIDS FILLED IN BINDER - 65-80% OF AIR VOIDS IN THE TOTAL MINERAL AGGREGATE FILLED BY BINDER IN ACCORDANCE WITH AUSTRALIAN STANDARDS
3. PAVEMENT PREPARATION
   a) THE EXISTING SURFACE TO BE SEALED SHALL BE DRY AND BROOMED BEFORE COMMENCEMENT OF WORK TO ENSURE COMPLETE REMOVAL OF ALL SUPERFICIAL FOREIGN MATTER.
   b) ALL DEPRESSIONS OR UNEVEN AREAS ARE TO BE TACK-COATED AND BROUGHT UP TO GENERAL LEVEL OF PAVEMENT WITH ASPHALTIC CONCRETE BEFORE LAYING OF MAIN COURSE.
4. TACK COAT
   a) THE WHOLE OF THE AREA TO BE SHEETED WITH ASPHALTIC CONCRETE SHALL BE LIGHTLY AND EVENLY COATED WITH RAPID SETTING BITUMEN COMPLYING WITH AUSTRALIAN STANDARDS. APPLICATION RATE FOR RESIDUAL BITUMEN SHALL BE 0.15 TO 0.30 LITRES/SQUARE METRE. APPLICATION SHALL BE BY MEANS OF A MECHANICAL SPRAYER WITH SPRAY BAR.
5. SPREADING
   a) ALL ASPHALTIC CONCRETE SHALL BE SPREAD WITH A SELF PROPELLED PAVING MACHINE.
   b) THE ASPHALTIC CONCRETE SHALL BE LAID AT A MIX TEMPERATURE AS SHOWN BELOW;

ROAD SURFACE TEMPERATURE IN SHADE (°C)	MIX TEMPERATURES (°C)
5 - 10	NOT PERMITTED
10 - 15	150
15 - 25	145
OVER 25	140

   c) ASPHALTIC CONCRETE SHALL NOT BE LAID WHEN THE ROAD SURFACE IS WET OR WHEN COLD WINDS CHILL THE MIX ADVERSELY AFFECT SPREADING AND COMPACTION.
   d) THE MINIMUM COMPACTED THICKNESS IS 30mm OVER EXISTING SEALED PAVEMENTS AND 50mm OVER NEW PAVEMENTS
6. JOINTS
   a) THE NUMBER OF JOINTS BOTH LONGITUDINAL AND TRANSVERSE SHALL BE KEPT TO A MINIMUM.
   b) THE DENSITY AND SURFACE FINISH AT JOINTS SHALL BE SIMILAR TO THOSE OF THE REMAINDER OF THE LAYER.
7. COMPACTION
   a) ALL COMPACTION SHALL BE UNDERTAKEN USING SELF PROPELLED ROLLERS.
   b) INITIAL ROLLING SHALL BE COMPLETE BEFORE THE MIX TEMPERATURE FALLS BELOW 105°C
   c) SECONDARY ROLLING SHALL BE COMPLETED BEFORE THE MIX TEMPERATURE FALLS BELOW 60°C
   d) MINIMUM CHARACTERISTICS VALUE OF RELATIVE COMPACTION OF A LOT WHEN TESTED IN ACCORDANCE WITH AS2150
8. FINISHED PAVEMENT PROPERTIES
   a) FINISHED SURFACES SHALL BE SMOOTH, DENSE AND TRUE TO SHAPE AND SHALL NOT VARY MORE THAN 10mm FROM THE SPECIFIED PLAN LEVEL AT ANY POINT AND SHALL NOT DEVIATE FROM THE BOTTOM OF A 3m STRAIGHT EDGE LAID IN ANY DIRECTION BY MORE THAN 5mm.

CONCRETE PAVEMENT NOTES

GENERAL

1. ALL WORKMANSHIP AND MATERIALS SHALL COMPLY WITH AS 3600 CURRENT EDITIONS WITH AMENDMENTS, AND THE ACSE CONCRETE SPECIFICATION EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.
2. VERIFY ALL SETTING OUT DIMENSIONS WITH THE ARCHITECT AND/OR THE SURVEYOR.
3. DO NOT OBTAIN DIMENSIONS BY SCALING THE DRAWINGS.
4. IN CASE OF DOUBT - ASK.

CONCRETE

1. PLACE CONCRETE OF THE FOLLOWING CHARACTERISTIC COMPRESSIVE STRENGTH F'C AS DEFINED IN AS.3600 OR M.R. FORM 609. ADD WATER REDUCING ADMIXTURE EQUAL TO WRDA.

LOCATION	AS.3600 F'c MPa AT 28 DAYS	SPECIFIED SLUMP	NOMINAL AGG. SIZE
ALL KERB PITS ETC.	25	80	20
VEHICULAR PAVEMENTS	32	80	20

2. USE "A.C.S.E. SPECIFICATION TYPE A" CEMENT.
3. ALL CONCRETE SHALL BE SUBJECT TO PROJECT CONTROL SAMPLE AND TESTING TO AS.3600.
4. CONSOLIDATE BY VIBRATION.
5. THE TENDERERS SHALL PROVIDE A COST OPTION FOR USING CONCRETES WITH REDUCED PORTLAND CEMENT CONTENT TO 50% WHILST ACHIEVING THE PROPERTIES OF CONCRETES SPECIFIED IN THESE DOCUMENTS. THESE PROPERTIES INCLUDE SPECIFIED COMPRESSIVE AND FLEXURAL STRENGTHS AT 28-DAYS AND 90-DAYS AND SHRINKAGE LIMITS

REINFORCEMENT

1. FIX REINFORCEMENT AS SHOWN ON DRAWINGS. THE TYPE AND GRADE IS INDICATED BY A SYMBOL AS SHOWN BELOW. ON THE DRAWING N IS FOLLOWED BY A NUMERAL WHICH INDICATES THE SIZE IN MILLIMETRES. A MARK NUMERAL (IF USED) FOLLOWS THIS NUMERAL.
   N. HOT ROLLED DEFORMED BARS, GRADE 500N
   R. HOT ROLLED PLAIN BARS, GRADE 250N
   W. COLD DRAWN PLAIN ROUND WIRE, GRADE 500L
   SL. SQUARE WELDED MESH, GRADE 500L
   RL. RECTANGULAR WELDED MESH, GRADE 500L
   LTM. RECTANGULAR WELDED TRENCH MESH, GRADE 500L

CURING

1. CURING OF ALL CONCRETE SHALL BE IN ACCORDANCE WITH AS3600 AND SHALL COMMENCE WITHIN 2 HOURS OF FINISHING OPERATIONS.
2. CURING SHALL BE CONTINUAL SATURATION WITH POTABLE WATER FOR 3 DAYS FOLLOWED BY PREVENTION OF MOISTURE LOSS FOR THE NEXT 4 DAYS, USING POLYTHENE SHEETING OR WET HESSIAN PROTECTED BY WIND OR TRAFFIC AND THEN ALLOWING GRADUAL DRYING OUT.
3. CURING COMPOUNDS MAY BE USED PROVIDED THAT THEY COMPLY WITH AS3799 AND NOT AFFECT THE PROPOSED FINISH.
4. THE COMPATIBILITY OF CURING COMPOUNDS WITH THE PROPOSED FINISH AND OTHER CONCRETE ADMIXTURES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ORDERING AND APPLICATION.
5. CURING COMPOUNDS ARE APPLIED UNIFORMLY IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS. PVA - BASED CURING COMPOUNDS ARE NOT ACCEPTABLE.
6. CURING SHALL BE UNDERTAKEN BY AN EXPERIENCED CONTRACTOR FAMILIAR WITH THE PROPOSED COMPOUNDS AND THE MANUFACTURER'S SPECIFICATIONS.
7. WHERE SHADE TEMPERATURES EXCEEDS 35°C, SPRAY THE EXPOSED SURFACE OF THE CONCRETE PAVEMENT / SLAB DURING THE PLACING OF FINISHING OPERATION WITH A FINE FILM OR APPROVED ALIPHATIC ALCOHOL. REPEAT THE SPRAY IF THE SPRAY SURFACE HAS BEEN RE-WORKED.
8. ENSURE ADEQUATE SUPPLY OF ALIPHATIC ALCOHOL ON-SITE PRIOR TO CONCRETE WORKS.

LINEMARKING NOTES

1. THE WORK SHALL INCLUDE ALL LINE MARKING TO ROADS, HARDSTANDS, PATHS, CARPARKS AND THE TRAFFICABLE AREAS.
2. THE PAVEMENT MARKING AND PAINT SHALL BE IN ACCORDANCE WITH AS 1742.2 AND THE RELEVANT LOCAL AND STATE AUTHORITY GUIDELINES.
3. PAINT SHALL BE TYPE 3, CLASS A AND THE COLOUR SHALL BE WHITE AND NOT SUBJECT TO DISCOLOURATION BY BITUMEN FROM THE ROAD SURFACE. EACH LINE SHALL BE 80mm WIDE, UNO IN LEGEND. ALL PAINT SHALL BE APPLIED BY MECHANICAL SPRAYER.
4. LINE MARKING SHALL BE SPOTTED OUT AND APPROVED PRIOR TO SPRAYING.
5. PAINT SHALL BE APPLIED AT A WET THICKNESS OF BETWEEN 0.35mm TO 0.40mm.
6. ALL EXISTING PAVEMENT MARKING WHICH IS LOCATED ON EXISTING PAVEMENT TO BE RETAINED SHALL BE REMOVED BY GRINDING WHERE THE EXISTING MARKINGS ARE MADE REDUNDANT BY THE PROPOSED WORKS.

CONCRETE PAVEMENT JOINT NOTES

PJ1. CONCRETE MIX PARAMETERS ;
- MAXIMUM AGGREGATE SIZE 20mm
- FLEXURAL STRENGTH AT 28 DAYS = 4.5 MPa
- MAXIMUM WATER / CEMENT RATIO = 0.55
- MAXIMUM SHRINKAGE LIMIT = 650 MICRON STRAINS (AS 1012 Pt 13)
- MINIMUM CEMENT CONTENT = 300kg/m3
- CEMENT TO BE TYPE "A" (NORMAL CEMENT) TO AS.1315
- NOMINAL SLUMP = 80mm

PJ2. JOINT TO BE SAWN AS SOON AS CONCRETE HAS HARDENED SUFFICIENTLY THAT IT WILL NOT BE DAMAGED BY SAWING. IF AN UNPLANNED CRACK OCCURS THE CONTRACTOR SHALL REPLACE WHOLE SLABS EITHER SIDE OF THE UNPLANNED CRACK, UNLESS DIRECTED OTHERWISE.

PJ3.
   a. CONSTRUCT JOINTS AS DETAILED
   b. CONSTRUCTION JOINTS WHERE REQUIRED BUT NOT SHOWN, SHALL BE LOCATED TO THE APPROVAL OF THE ENGINEER AND CONSTRUCTED AT THE CONTRACTORS EXPENSE.
   c. ALL LONGITUDINAL CONSTRUCTION JOINTS SHALL BE FORMED AND INCLUDE DOWEL BARS AS SPECIFIED. ALL TRANSVERSE CONSTRUCTION JOINTS SHALL BE FORMED AND INCLUDE DOWEL BARS AS SPECIFIED.
   d. BOND BREAKER TO BE TWO (2) UNIFORM COATS OF BITUMEN EMULSION ALL OVER THE EXPOSED SURFACE AND ON END.

PJ4. DOWELS AND TIE BARS TO MEET STRENGTH REQUIREMENTS OF STRUCTURAL GRADE STEEL IN ACCORDANCE AS. 1302. DOWELS AND TIE BARS SHALL BE ;-
- STRAIGHT
- TO LENGTH SPECIFIED
- CLEAN AND FREE FROM MILL SCALE, RUST AND OIL.
- SAWN TO LENGTH NOT CROPPED.

PJ5. DIMENSIONS OF SEALANT RESERVOIR DEPENDANT ON THE SEALANT TYPE ADOPTED. ENGINEERS APPROVAL TO BE OBTAINED FOR SEALANT AND RESERVOIR DIMENSIONS AND DETAIL PROPOSED BY THE CONTRACTOR. REFER DETAIL "B" FOR TYPICAL ARRANGEMENT AND SEALANT.

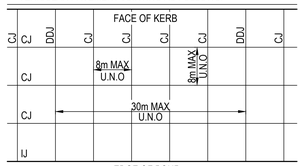
PJ6. PRIOR TO THE PLACEMENT OF CONCRETE IN THE ADJACENT SLAB, SELF EXPANDING CORK FILLER SHALL BE ADHERED TO THE ALREADY CAST AND CLEANED CONCRETE FACE USING AN APPROVED WATERPROOF ADHESIVE. ADHESIVE SHALL BE LIBERALLY APPLIED TO THE FULL FACE OF THE CONCRETE SLAB TO BE COVERED BY THE FILLER, AND ON THE FULL FACE OF THE FILLER TO BE ADHERED.

PJ7. REFER TO COMPACTION NOTES FOR PREPARATION OF SUB-BASE AND SUB-GRADE.

PJ8. ALL WORK TO BE BROOM FINISH.

VEHICULAR PAVEMENT JOINTING

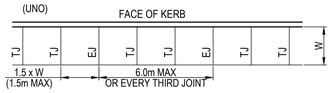
1. ALL VEHICULAR PAVEMENT TO BE JOINTED AS SHOWN ON DRAWINGS.
2. KEYED CONSTRUCTION JOINTS SHOULD GENERALLY BE LOCATED AT A MAXIMUM OF 6m CENTRES.
3. SAWN JOINTS SHOULD GENERALLY BE LOCATED AT A MAXIMUM OF 6m CENTRES OR 1.5 x THE SPACING OF KEYED JOINTS, WHERE KEY JOINT SPACING IS LESS THAN 4m, WITH DOWELLED EXPANSION JOINTS AT MAXIMUM OF 30m CENTRES.
4. PROVIDE 10mm WIDE FULL DEPTH ISOLATION JOINTS BETWEEN BUILDINGS AND ALL CONCRETE OR UNIT PAVERS.
5. VEHICULAR PAVEMENT JOINTING AS FOLLOWS.



CJ = CONTRACTION JOINT (SCJ OR CDJ AS NOTED ON PLAN)

PEDESTRIAN FOOTPATH JOINTING

1. DOWELED JOINTS ARE TO BE LOCATED WHERE POSSIBLE AT TANGENT POINTS OF CURVES AND ELSEWHERE AT MAX 6.0m CENTRES.
2. TOOLED JOINTS ARE TO BE LOCATED AT A MAX 1.5 x WIDTH OF THE PAVEMENT.
3. WHERE POSSIBLE JOINTS SHOULD BE LOCATED TO MATCH KERBING AND/OR ADJACENT PAVEMENT JOINTS.
4. ALL PEDESTRIAN FOOTPATH JOINTING LAYOUTS AS FOLLOWS (UNO)



5. ALL RAMPED CROSSINGS SHALL BE DOWELED INTO ADJOINING PATH PAVEMENT

EROSION AND SEDIMENT CONTROL NOTES

GENERAL INSTRUCTIONS

E1. THE GENERAL CONTRACTOR IS RESPONSIBLE TO PREPARE AND IMPLEMENT A TEMPORARY SITE STORMWATER MANAGEMENT PLAN FOR CONSTRUCTION PHASE FOR REVIEW AND APPROVAL BY THE PRINCIPAL'S REPRESENTATIVE. ADDITIONAL SOIL AND WATER MANAGEMENT WORKS, BEYOND WHAT IS DOCUMENTED IN THESE DRAWINGS, TO MAINTAIN COMPLIANCE WITH THE LANDCOM BLUE BOOK REQUIREMENTS IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND SHALL BEAR THE COSTS FOR SUCH WORKS.

E2. THE PRINCIPAL'S REPRESENTATIVE WILL ENSURE THAT ALL SOIL AND WATER MANAGEMENT WORKS ARE LOCATED AS INSTRUCTED IN THIS SPECIFICATION.

E3. THE GENERAL CONTRACTOR IS RESPONSIBLE TO MANAGE AND MAINTAIN SOIL EROSION AND SEDIMENT CONTROLS ON-SITE THROUGHOUT THE CONSTRUCTION PHASE. ALL BUILDERS AND SUB-CONTRACTORS WILL BE INFORMED OF THEIR RESPONSIBILITIES IN MINIMISING THE POTENTIAL FOR SOIL EROSION AND POLLUTION TO DOWNSLOPE LANDS AND WATERWAYS.

CONSTRUCTION SEQUENCE

E4. THE SOIL EROSION POTENTIAL ON THIS SITE SHALL BE MINIMISED. HENCE WORKS SHALL BE UNDERTAKEN IN THE FOLLOWING SEQUENCE :
   a. INSTALL SEDIMENT FENCES, TEMPORARY CONSTRUCTION EXIT AND SANDBAG KERB INLET SEDIMENT TRAP.
   b. UNDERTAKE SITE DEVELOPMENT WORKS IN ACCORDANCE WITH THE ENGINEERING PLANS. PHASE DEVELOPMENT SO THAT LAND DISTURBANCE IS CONFINED TO AREAS OF WORKABLE SIZE.

EROSION CONTROL

E5. DURING WINDY CONDITIONS, LARGE, UNPROTECTED AREAS WILL BE KEPT MOIST (NOT WET) BY SPRINKLING WITH WATER TO KEEP DUST UNDER CONTROL.

E6. FINAL SITE LANDSCAPING WILL BE UNDERTAKEN AS SOON AS POSSIBLE AND WITHIN 20 WORKING DAYS FROM COMPLETION OF CONSTRUCTION ACTIVITIES.

FENCING

E7. STOCKPILES WILL NOT BE LOCATED WITHIN 2 METRES OF HAZARD AREAS, INCLUDING LIKELY AREAS OF CONCENTRATED OR HIGH VELOCITY FLOWS SUCH AS WATERWAYS. WHERE THEY ARE BETWEEN 2 AND 5 METRES FROM SUCH AREAS, SPECIAL SEDIMENT CONTROL MEASURES SHOULD BE TAKEN TO MINIMISE POSSIBLE POLLUTION TO DOWNSLOPE WATERS, E.G. THROUGH INSTALLATION OF SEDIMENT FENCING.

E8. ANY SAND USED IN THE CONCRETE CURING PROCESS (SPREAD OVER THE SURFACE) WILL BE REMOVED AS SOON AS POSSIBLE AND WITHIN 10 WORKING DAYS FROM PLACEMENT.

E9. WATER WILL BE PREVENTED FROM ENTERING THE PERMANENT DRAINAGE SYSTEM UNLESS IT IS RELATIVELY SEDIMENT FREE, I.E. THE CATCHMENT AREA HAS BEEN PERMANENTLY LANDSCAPED AND/OR ANY LIKELY SEDIMENT HAS BEEN FILTERED THROUGH AN APPROVED STRUCTURE.

E10. TEMPORARY SOIL AND WATER MANAGEMENT STRUCTURES WILL BE REMOVED ONLY AFTER THE LANDS THEY ARE PROTECTING ARE REHABILITATED.

OTHER MATTERS

E11. ACCEPTABLE RECEPTORS WILL BE PROVIDED FOR CONCRETE AND MORTAR SLURRIES, PAINTS, ACID WASHINGS, LIGHT-WEIGHT WASTE MATERIALS AND LITTER.

E12. RECEPTORS FOR CONCRETE AND MORTAR SLURRIES, PAINTS, ACID WASHINGS, LIGHT-WEIGHT WASTE MATERIALS AND LITTER ARE TO BE EMPTIED AS NECESSARY. DISPOSAL OF WASTE SHALL BE IN A MANNER APPROVED BY THE PRINCIPAL'S REPRESENTATIVE.

SITE INSPECTION & MAINTENANCE

E13. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED AFTER RAINFALL EVENTS TO ENSURE THAT THEY OPERATE EFFECTIVELY. REPAIR AND OR MAINTENANCE SHALL BE UNDERTAKEN AS REQUIRED.

RAINWATER REUSE SYSTEM

MARKING & LABELLING

1. THE WATER SUPPLY SYSTEM FROM A RAINWATER TANK SHALL BE CLEARLY MARKED `RAINWATER' AT IN

EXISTING VARIABLE WIDTH EASEMENT TO DRAIN WATER. LOCATION AND DEPTHS OF EXISTING REINFORCED CONCRETE BOX CULVERTS TO BE CONFIRMED THROUGH ADDITIONAL SURVEY DATA AT NEXT DESIGN STAGE

EXISTING ON-SITE DETENTION TANK TO BE RETAINED AS PART OF STAGE 1

ACCESS REQUIREMENTS FOR MAINTENANCE OF EXISTING SYDNEY WATER SEWER ASSET TO BE DETERMINED SUBJECT TO CONFIRMATION BY SYDNEY WATER SERVICES COORDINATOR

BIODIVERSITY ZONE SHOWN IS BASED ON PRELIMINARY BIODIVERSITY MAPPING.

EXISTING TWIN 3000x1200MM REINFORCED CONCRETE BOX CULVERTS SHOWN INDICATIVELY. REFER TO NOTE 3

RETAINED TENANT ON SITE (ASSUMED TO 2031)

BUILDING 'C'

EXISTING TENANT FENCE LINE

EXISTING BUILDING AND HARDSTAND TO BE DEMOLISHED AS PART OF STAGE 1 WORKS

BUILDING 'B'

DENOTES 45m RADIUS FROM HIGH VOLTAGE TRANSMISSION TOWER INDICATING THE RISK IN CASE OF VERTICAL COLLAPSE

45m RADIUS FROM HIGH VOLTAGE TRANSMISSION TOWER INDICATING THE RISK IN CASE OF VERTICAL COLLAPSE

EXISTING KIOSK SUBSTANTION AND EASEMENT SERVICING EXISTING TENANTS

POWER LINES AND 30m WIDE ENDEAVOUR ENERGY EASEMENT

EXISTING ENDEAVOUR ENERGY TRANSMISSION TOWER CONSTRUCTION WITHIN 10m RADIUS EXCLUSION ZONE FROM STANCHIONS PROHIBITED

EXISTING 132kV ENDEAVOUR ENERGY TRANSMISSION TOWER

SITE CURRENTLY LEASED UNTIL 2023

LAND CLASSIFIED "TERRESTRIAL BIODIVERSITY" IN LOCAL ENVIRONMENTAL PLAN - SIGNIFICANT ADVERSE ENVIRONMENTAL IMPACTS TO BE AVOIDED

EXISTING 132kV ENDEAVOUR ENERGY TRANSMISSION TOWER

CONSTRUCTION WITHIN 10m RADIUS EXCLUSION ZONE FROM STANCHIONS PROHIBITED

GLENDENNING ROAD

WOODSTOCK AVENUE

EASTERN CREEK

SURVEYED BY REMOTE SENSING (NO ACCESS) HEAVILY OVERGROWN

SCALE 1:500 @ A0

0 5 10 20 30 40 50 metres

NOTES

KEYNOTES

1. THE SURVEY AND SERVICES DATA SHOWN ON PLAN IS BASED ON THE SURVEY PREPARED BY LTS (REF: 52282 001DT_3). THE ACCURACY OF ALL SURVEY AND SERVICES DATA SHOWN IS THE RESPONSIBILITY OF THE REGISTERED SURVEYOR.
2. DEMOLITION OF THE EXISTING "BUILDING B" WAREHOUSE AND ASSOCIATED HARDSTAND, FEATURES, FURNITURE AND REDUNDANT SERVICES HAVE NOT BEEN SHOWN AND ARE OUTSIDE OF THE SCOPE OF THIS PROJECT.
3. REINFORCED CONCRETE BOX CULVERTS HAVE BEEN DRAWN INDICATIVELY BASED ON AVAILABLE WORK-AS-EXECUTED DATA FROM COUNCIL. THE GC SHALL BE RESPONSIBLE TO VERIFY THE LOCATION, ALIGNMENT, DEPTH AND CONDITION OF THE BOX CULVERTS FOR ANY TEMPORARY OR PERMANENT WORKS WITHIN THE EASEMENT OF ZONE OF INFLUENCE.

LEGEND

REV	DATE	DESCRIPTION	DRN	ENG	CHK	APP
P1	13NOV2024	DRAFT SSDA ISSUE	DW	JF	MB	MB
A	20NOV2024	SSDA ISSUE	DW	JF	MB	MB

MECHANICAL/ ELECTRICAL ENGINEER:
LCI CONSULTANTS
02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

HYDRAULIC/ FIRE ENGINEER:
LCI CONSULTANTS
02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

CIVIL ENGINEER:
ACOR CONSULTANTS PTY LTD
02 9438 5098
SUITE 2, LEVEL 1, 33 HERBERT STREET,
ST LEONARDS NSW 2065

STRUCTURAL ENGINEER:
VAN DER MEER CONSULTING
02 94360433
LEVEL 6, 39 CHANDOS ST.,
ST LEONARDS NSW 2065

ARCHITECT:
GREENBOX ARCHITECTURE PTY LTD
02 8069 8939
LEVEL 22, 68 PITT STREET,
SYDNEY NSW 2000

LANDSCAPE:
GEOSCAPES
02 9411 1485
SUITE 3.03, 8 HELP STREET,
CHATSWOOD, NSW 2067

PROJECT: GLENDENNING ROAD DATA CENTRE

TITLE: CIVIL SERVICES
EXISTING SURVEY AND SERVICES PLAN

DRAWING: GRDC86-ACR-00-XX-DR-SSDA-C-0010

PAPER SIZE:	SCALE:		REV:
ISO A0	1:500		A

PRINT IN COLOUR

EXISTING TWIN 3000x1200MM REINFORCED CONCRETE BOX CULVERTS SHOWN INDICATIVELY.

EXISTING LV FEEDER SERVICING EXISTING TENANT. GENERAL CONTRACTOR TO PROTECT AND RETAIN. RELOCATE AS REQUIRED TO FACILITATE DEMOLITION AND CONSTRUCTION WORKS

EXISTING KIOSK SUBSTANTION AND EASEMENT SERVICING EXISTING TENANTS TO BE PROTECTED AND RETAINED AS PART OF STAGE 1 WORKS

EXISTING ENDEAVOUR ENERGY TRANSMISSION TOWER CONSTRUCTION WITHIN 10m RADIUS EXCLUSION ZONE FROM STANCHIONS PROHIBITED

RETAINED TENANT ON SITE (ASSUMED TO 2026)

BUILDING "C"

EXISTING TENANT BUILDING, HARDSTAND AND SERVICES TO BE PROTECTED AND RETAINED DURING STAGE 1 DEMOLITION AND SITE CLEARING WORKS

EXISTING TENANT FENCE LINE AND RETAINING WALL TO BE PROTECTED AND RETAINED

EXISTING FENCE TO BE REMOVED AS PART OF STAGE 1 WORKS (NOT PART OF THIS PROJECT SCOPE)

EXISTING BUILDING AND HARDSTAND TO BE DEMOLISHED AS PART OF STAGE 1 WORKS

BUILDING "B"

EXISTING BUILDING AND ASSOCIATED REDUNDANT FOOTINGS AND SERVICES TO BE DEMOLISHED. GENERAL CONTRACTOR TO ALLOW TO DEMOLISH AND REMOVE FROM SITE ALL FOOTINGS, PILES AND SERVICES. TYPICAL

REFER TO DRAWING GRDC86-ACR-00-XX-DR-SSDA-C-1108 FOR DEMOLITION AND RECONSTRUCTION REQUIREMENTS TO ENDEAVOUR ENERGY EASEMENT STORMWATER SYSTEM AND PAVEMENT HARDSTAND

POWER LINES AND 30m WIDE ENDEAVOUR ENERGY EASEMENT

45m RADIUS FROM HIGH VOLTAGE TRANSMISSION TOWER INDICATING THE RISK IN CASE OF VERTICAL COLLAPSE

CONSTRUCTION WITHIN 10m RADIUS EXCLUSION ZONE FROM STANCHIONS PROHIBITED

SITE CURRENTLY LEASED UNTIL 2023

LAND CLASSIFIED "TERRESTRIAL BIODIVERSITY" IN LOCAL ENVIRONMENTAL PLAN - SIGNIFICANT ADVERSE ENVIRONMENTAL IMPACTS TO BE AVOIDED

GLENDENNING ROAD

WOODSTOCK AVENUE

EASTERN CREEK

SCALE 1:500 @ A0

0 5 10 20 30 40 50 metres

NOTES

N

KEYNOTES

1. THE SURVEY AND SERVICES DATA SHOWN ON PLAN IS BASED ON THE SURVEY PREPARED BY LTS (REF: 52282 001DT_3). THE ACCURACY OF ALL SURVEY AND SERVICES DATA SHOWN IS THE RESPONSIBILITY OF THE REGISTERED SURVEYOR.
2. REINFORCED CONCRETE BOX CULVERTS HAVE BEEN DRAWN INDICATIVELY BASED ON AVAILABLE WORK-AS-EXECUTED DATA FROM COUNCIL. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THE LOCATION, ALIGNMENT, DEPTH AND CONDITION OF THE BOX CULVERTS FOR ANY TEMPORARY OR PERMANENT WORKS WITHIN THE EASEMENT OF ZONE OF INFLUENC
3. REFER TO ARBORIST REPORT PREPARED BY CAPABILITY GREEN CO FOR DETAILS OF TREE PROTECTION ZONES, TREE REMOVAL REQUIREMENTS AND TREE PRUNING REQUIREMENTS.
4. THE GENERAL CONTRACTOR SHALL ALLOW TO REMOVE FROM SITE ALL EXISTING TREES AS NOMINATED ON THIS PLAN AND THE ARBORIST'S REPORT INCLUDING ALL TREE ROOTS, STUMPS AND OTHER ORGANIC MATERIAL WITHIN THE TREE ROOT ZONE. BACKFILL WITH COMPACTED STRUCTURAL FILL IN ACCORDANCE WITH THE CIVIL ARTHWORKS SPECIFICATION.
5. THE GENERAL CONTRACTOR SHALL STRIP ALL ORGANIC GROUND COVER AND TOPSOIL FROM THE STAGE 1 DEVELOPMENT FOOTPRINT. EXISTING TOPSOIL SHALL BE STOCKPILED ON SITE FOR REUSE IF DEEMED SATISFACTORY BY THE PROJECT LANDSCAPE ARCHITECT. EXCESS STOCKPILED TOPSOIL SHALL BE DISPOSED OFF-SITE TO A LICENCED WASTE MANAGEMENT CENTRE.
6. THE GENERAL CONTRACTOR SHALL ALLOW TO DEMOLISH AND MAKE GOOD ALL EXISTING PAVEMENTS, LANDSCAPING AND OTHER INFRASTRUCTURE TO FACILITATE CONSTRUCTION OF PROPOSED SERVICES AND INFRASTRUCTURE.

LEGEND

10m EXCLUSION ZONE FROM TRANSMISSION TOWER STANCHIONS

TREE PROTECTION ZONE (TPZ) OF TREE TO BE RETAINED

TREES TO BE REMOVED

REV	DATE	DESCRIPTION	DRN	ENG	CHK	APP
P1	13NOV2024	DRAFT SSDA ISSUE	DW	JF	MB	MB
A	20NOV2024	SSDA ISSUE	DW	JF	MB	MB

MECHANICAL/ ELECTRICAL ENGINEER:
LCI CONSULTANTS
02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

HYDRAULIC/ FIRE ENGINEER:
LCI CONSULTANTS
02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

CIVIL ENGINEER:
ACOR CONSULTANTS PTY LTD
02 9438 5098
SUITE 2, LEVEL 1, 33 HERBERT STREET,
ST LEONARDS NSW 2065

STRUCTURAL ENGINEER:
VAN DER MEER CONSULTING
02 94393433
LEVEL 6, 39 CHANDOS ST,
ST LEONARDS NSW 2065

ARCHITECT:
GREENBOX ARCHITECTURE PTY LTD
02 8069 8939
LEVEL 22, 68 PITT STREET,
SYDNEY NSW 2000

LANDSCAPE:
GEOSCAPES
02 9411 1485
SUITE 3.03, 8 HELP STREET,
CHATSWOOD, NSW 2067

PROJECT: GLENDENNING ROAD DATA CENTRE

TITLE: CIVIL SERVICES SITE CLEARING PLAN

DRAWING: GRDC86-ACR-00-XX-DR-SSDA-C-0020

PAPER SIZE:	SCALE:		REV:
ISO A0	1:500		A

PRINT IN COLOUR

GRDC86-ACR-00-XX-DR-SSDA-C-1101

GRDC86-ACR-00-XX-DR-SSDA-C-1102

GRDC86-ACR-00-XX-DR-SSDA-C-1103

GRDC86-ACR-00-XX-DR-SSDA-C-1104

GRDC86-ACR-00-XX-DR-SSDA-C-1105

GRDC86-ACR-00-XX-DR-SSDA-C-1106

GRDC86-ACR-00-XX-DR-SSDA-C-1107

GRDC86-ACR-00-XX-DR-SSDA-C-1108

GRDC86-ACR-00-XX-DR-SSDA-C-1109

DC03 BUILDING
FFL 35.75

DC02 BUILDING
FFL 36.05

DC01 BUILDING
FFL 35.05

DC01 BUILDING
FFL 35.05

GLENDENNING ROAD

NO PARKING

EASTERN CREEK

WOODSTOCK AVENUE

SURVEYED BY REMOTE SENSING (NO ACCESS) HEAVILY OVERGROWN

SCALE 1:500 @ A0

0 5 10 20 30 40 50 metres

NOTES

KEYNOTES

LEGEND

REV	DATE	DESCRIPTION	DRN	ENG	CHK	APP
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LCI CONSULTANTS
02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

HYDRAULIC/ FIRE ENGINEER:
LCI CONSULTANTS
02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

CIVIL ENGINEER:
ACOR CONSULTANTS PTY LTD
02 9438 5098
SUITE 2, LEVEL 1, 33 HERBERT STREET,
ST LEONARDS NSW 2065

STRUCTURAL ENGINEER:
VAN DER MEER CONSULTING
02 94306433
LEVEL 6, 39 CHANDOS ST.,
ST LEONARDS NSW 2065

ARCHITECT:
GREENBOX ARCHITECTURE PTY LTD
02 8069 8939
LEVEL 22, 68 PITT STREET,
SYDNEY NSW 2000

LANDSCAPE:
GEOSCAPES
02 9411 1485
SUITE 3.03, 8 HELP STREET,
CHATSWOOD, NSW 2067

PROJECT: GLENDENNING ROAD DATA CENTRE

TITLE: CIVIL SERVICES
KEY PLAN

DRAWING: GRDC86-ACR-00-XX-DR-SSDA-C-0025

PAPER SIZE:	SCALE:		REV:
ISO A0	1:500		A

PRINT IN COLOUR

PROPOSED NON CRASH RATED SLIDING GATE WITH CRASH RATED WEDGE BARRIERS

PROPOSED SECONDARY VEHICLE ENTRY

PROPOSED DC03 FUEL FILL POINT AND FILL BAY

EXISTING STORMWATER EASEMENT WITH TWIN 3000W X 1200H BOX CULVERTS

PROPOSED DC03 UNDERGROUND BULK FUEL STORAGE TANKS

PROPOSED DC03 CARPARKING

DC03 RECESSED LOADING DOCK WITH 1.15m SET DOWN BETWEEN LOADING DOCK LEVELLER AND EXTERNAL PAVEMENT

PROPOSED MAIN ENTRY AND EXIT WITH VEHICLE REJECTION

DC02 RECESSED LOADING DOCK WITH 1.15m SET DOWN BETWEEN LOADING DOCK LEVELLER AND EXTERNAL PAVEMENT

EXISTING KIOSK SUBSTATION TO BE PROTECTED AND RETAINED

PROPOSED SALLY PORT WITH GUARD HOUSE AND CRASH-RATED BI-FOLD GATES

2.0mm MAX RETAINING WALL

EXISTING ENDEAVOUR ENERGY TRANSMISSION TOWER

EXISTING RETAINING WALL TO BE PROTECTED AND RETAINED

ROAD

GLENDENNING

PROPOSED DC03 ABOVE GROUND INDUSTRIAL WATER TANKS

1.3m MAX HIGH RETAINING WALL

0.7m MAX HIGH RETAINING WALL

EXISTING DRAINAGE CHANNEL

EXISTING RETAINING WALL TO BE PROTECTED RETAINED

ACCESS REQUIREMENTS FOR MAINTENANCE OF EXISTING SYDNEY WATER SEWER ASSET TO BE DETERMINED SUBJECT TO CONFIRMATION BY SYDNEY WATER SERVICES COORDINATOR

UNDERGROUND STORMWATER QUALITY TREATMENT TANK

EXISTING RETAINING WALL TO BE PROTECTED AND RETAINED

PROPOSED DC01 INDUSTRIAL WATER TANKS

BREAKOUT AREA

ENEDEAVOUR ENERGY CONTROL ROOM

PROPOSED DC01 CARPARKING

EXISTING PUBLIC SHARED PATH

EASTERN CREEK

RECESSED LOADING DOCK WITH 1.15M SET DOWN BETWEEN LOADING DOCK LEVELLER AND EXTERNAL PAVEMENT. TYPICAL

PROPOSED DC01 CARPARKING

PROPOSED DC01 UNDERGROUND BULK FUEL STORAGE TANKS

PROPOSED DIVERSION SWALE

EXISTING ENDEAVOUR ENERGY TRANSMISSION TOWER

DC01 FUEL FILL POINT AND FILL BAY

2.10m MAX HIGH RETAINING WALL

PROPOSED DC02 CARPARKING

PROPOSED FIRE PUMP ROOM

PROPOSED FIRE TANKS

TERRESTRIAL BIODIVERSITY AREA TO BE PROTECTED AND RETAINED

EXISTING WAREHOUSE AND HARDSTAND TO BE DEMOLISHED

EXISTING ENDEAVOUR ENERGY OVERHEAD TRANSMISSION CABLES

PROPOSED LANDSCAPING OF EXISTING BUILDING AND HARDSTAND

WOODSTOCK AVENUE

DC03 BUILDING
FFL 35.75

GENERATOR ROOM FFL 34.40

GENERATOR ROOM FFL 34.10

PROPOSED DC03 PARKING

PROPOSED DC03 100kL RAINWATER TANK

PROPOSED DC03 BIKE PARKING

GENERATOR ROOM FFL 35.25

GENERATOR ROOM FFL 34.70

DC01 BUILDING
FFL 35.05

GENERATOR ROOM FFL 33.80

PROPOSED DC01 100kL RAINWATER TANK

GENERATOR ROOM FFL 33.60

GENERATOR ROOM FFL 34.70

GENERATOR ROOM FFL 34.00

DC02 BUILDING
FFL 36.05

PROPOSED DC02 PARKING

PROPOSED DC02 FUEL FILL POINT AND FILL BAY

PROPOSED DC02 UNDERGROUND BULK FUEL STORAGE TANKS

PROPOSED DC02 ABOVE GROUND 100kL RAINWATER TANK

PROPOSED RETAINING WALL

PROPOSED DC02 ABOVE GROUND INDUSTRIAL WATER TANKS

GENERATOR ROOM FFL 35.50

GENERATOR ROOM FFL 35.25

RS1 C-2225

RS2 C-2225

RS3 C-2225

RS4 C-2226

RS5 C-2226

SURVEYED BY BONEZ SIGNING AND ACCESS HEAVILY OVERGROWN

SCALE 1:500 @ A0 0 5 10 20 30 40 50 metres

NOTES

KEYNOTES

LEGEND

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02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

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LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

CIVIL ENGINEER:
ACOR CONSULTANTS PTY LTD
02 9438 5098
SUITE 2, LEVEL 1, 33 HERBERT STREET,
ST LEONARDS NSW 2065

STRUCTURAL ENGINEER:
VAN DER MEER CONSULTING
02 94360433
LEVEL 6, 39 CHANDOS ST,
ST LEONARDS NSW 2065

ARCHITECT:
GREENBOX ARCHITECTURE PTY LTD
02 8069 8939
LEVEL 22, 68 PITT STREET,
SYDNEY NSW 2000

LANDSCAPE:
GEOSCAPES
02 9411 1486
SUITE 3.03, 8 HELP STREET,
CHATSWOOD, NSW 2067

PROJECT: GLENDENNING ROAD DATA CENTRE

TITLE: CIVIL SERVICES
GENERAL ARRANGEMENT PLAN

DRAWING: GRDC86-ACR-00-XX-DR-SSDA-C-0030

PAPER SIZE: ISO A0 | SCALE: 1:500 | REV: A

PRINT IN COLOUR

N

CUT OFF DRAIN WITH ROCK CHECK DAMS AT MAX 40m SPACING TO DISCHARGE TO SEDIMENT BASIN

PROVIDE NOMINAL 75m3 SEDIMENT BASIN (600mm DEEP) TO TREAT RUNOFF FROM DISTURBED AREAS PRIOR TO DISCHARGING TO EASTERN CREEK. CONSTRUCT TEMPORARY OUTLET PIT WITH GRATE SET NOM 800mm ABOVE BASIN INVERT AND OUTLET PIPE DISCHARGING TO EASTERN CREEK BY HEADWALL WITH SCOUR PROTECTION. SPILLWAY FOR BASIN TO BE SET NOMINALLY 300mm ABOVE PIT GRATE. PIT, OUTLET PIPE AND HEADWALL TO BE MADE REDUNDANT AND REMOVED FROM SITE WHEN SEDIMENT BASIN IS REMOVED. MAKE GOOD AREA.
ALTERNATIVELY SEDIMENT LADEN WATER CAN BE FLOCCULATED AND DISCHARGE BY PUMP TO THE ADJACENT WATERCOURSE.

GRADE EARTHWORKS PAD TO CATCH DRAINS

BATTER AND GRASSED SWALE TO BE CONSTRUCTED AS PART OF SITE ESTABLISHMENT AND DISCHARGE AT DOWNSTREAM END TO CUT OFF DRAIN AS SHOWN

WRAP ALL GRATES AND PIT OPENINGS IN BIDUM A14 OR APPROVED EQUIVALENT GEOTEXTILE FABRIC UNTIL COMPLETION OF WORKS. REFER TO DRAWING GRDC86-ACR-00-XX-DR-SSDA-C-3051 FOR DETAIL. TYPICAL

LOCATE AND PROTECT EXISTING SERVICES AS REQUIRED PRIOR TO ESTABLISHMENT OF TEMPORARY STABILISED CONSTRUCTION EXIT.

CUT OFF DRAIN TO DIRECT RUNOFF FROM DISTURBED AREAS TO SEDIMENT BASINS PRIOR TO DISCHARGE INTO EASTERN CREEK. CONSTRUCT ROCK CHECK DAMS AT MAX 40m SPACING

CONSTRUCT TEMPORARY CUT OFF DRAIN TO COLLECT RUNOFF FROM EARTHWORKS FILL PLATFORM AND BATTERS. REFER TO DRAWING GRDC86-ACR-00-XX-DR-SSDA-C-3051 FOR DETAIL

SANDBAG SEDIMENT TRAP AROUND ALL KERB INLET PITS. REFER TO DRAWING GRDC86-ACR-00-XX-DR-SSDA-C-3051 FOR DETAIL. TYPICAL

TEMPORARY STABILISED CONSTRUCTION EXIT WITH WASH DOWN FACITILITY AT EXISTING VEHICLE CROSSING. REFER TO DRAWING GRDC86-ACR-00-XX-DR-SSDA-C-3051 FOR DETAIL.

PROVIDE NOMINAL 75m3 SEDIMENT BASIN (500mm DEEP) TO TREAT RUNOFF FROM DISTURBED AREAS PRIOR TO DISCHARGING TO EASTERN CREEK. CONSTRUCT TEMPORARY OUTLET PIT WITH GRATE SET NOM 800mm ABOVE BASIN INVERT, AND OUTLET PIPE DISCHARGING TO THE ADJACENT GRASS SWALE. SPILLWAY FOR BASIN TO BE SET NOMINALLY 300mm ABOVE PIT GRATE.
PIT AND OUTLET PIPE TO BE MADE REDUNDANT AND REMOVED FROM SITE WHEN SEDIMENT BASIN IS REMOVED. MAKE GOOD GRASS SWALE TO FINAL DESIGN INTENT.
ALTERNATIVELY SEDIMENT LADEN WATER CAN BE FLOCCULATED AND DISCHARGE BY PUMP TO THE ADJACENT SWALE.

PROVISION FOR TEMPORARY CONSTRUCTION CARPARK ACCESS - CUT OFF DRAIN TO BE DIRECTED TO HEADWALLS AND A TEMPORARY PIPE NOM DN300 BELOW CARPARK ACCESS POINT

CONSTRUCT ROCK CHECK DAMS AT 40m MAXIMUM SPACING. REFER TO DRAWING GRDC86-ACR-00-XX-DR-SSDA-C-3051 FOR DETAIL

CONSTRUCT 7m WIDE GRASSED SWALE AS PART OF SITE ESTABLISHMENT WORKS. SWALE TO FUNCTION AS A CUT OFF DRAIN TO CAPTURE AND DIVERT CLEAN RUNOFF FROM THE UPSTREAM CATCHMENT AROUND THE DISTURBED AREA DURING CONSTRUCTION.

EDGE OF SWALE TO MATCH EXISTING LEVELS

PROVISION FOR TEMP CONSTRUCTION ACCESS OVER CUT OFF DRAINS. CONSTRUCT HEADWALLS EITHER SIDE OF ROAD WITH NOM DN450 PIPE BELOW CONSTRUCTION ROAD. EXACT CONFIGURATION AND LOCATION TO BE FINALISED BY CONTRACTOR TO ALIGN WITH THEIR CONSTRUCTION MANAGEMENT PLANS

CONSTRUCT 12.35m LONG SCOUR PROTECTION AT END OF SWALE
d50 = 200mm

BASIN 1

BASIN 2

SITE CARPARK / MATERIALS LAY DOWN AREA

BUILDING 'C'

ROAD

CREEK

EASTERN

GLENDENNING

WOODSTOCK AVENUE

SCALE 1:500 @ A0
0 5 10 20 30 40 50 metres

KEYNOTES

FINAL SOIL EROSION AND SEDIMENT CONTROL CONFIGURATION IS THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE COORDINATED WITH THE CONTRACTOR'S FINAL CONSTRUCTION MANAGEMENT PLAN, INCLUDING MATERIALS LAY DOWN AREAS, TEMPORARY CARPARKING AND THE LIKE. SOIL EROSION AND SEDIMENT CONTROLS SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH LANDCOM'S BLUE BOOK 2004.

LEGEND

- SEDIMENT FENCE
- CUT OFF DRAIN
- DC01 BUILDING OUTLINE
- STORMWATER DRAINAGE LINE
- STORMWATER HEADWALL
- PIT INLET TRAP
- SAND BAG SEDIMENT TRAP
- ROCK CHECK DAM
- STABILISED CONSTRUCTION EXIT
- STOCKPILE
- STAGE 1 BOUNDARY
- BASIN 1 — SEDIMENT BASIN

REV	DATE	DESCRIPTION	DRN	ENG	CHK	APP
P1	13NOV2024	DRAFT SSDA ISSUE	DW	JF	MB	MB
A	26NOV2024	SSDA ISSUE	DW	JF	MB	MB

MECHANICAL/ ELECTRICAL ENGINEER:
LCI CONSULTANTS
02 9157 5570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

HYDRAULIC/ FIRE ENGINEER:
LCI CONSULTANTS
02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

CIVIL ENGINEER:
ACOR CONSULTANTS PTY LTD
02 9438 5098
SUITE 2, LEVEL 1, 33 HERBERT STREET,
ST LEONARDS NSW 2065

STRUCTURAL ENGINEER:
VAN DER MEER CONSULTING
02 94366433
LEVEL 6, 39 CHANDOS ST,
ST LEONARDS NSW 2065

ARCHITECT:
GREENBOX ARCHITECTURE PTY LTD
02 8069 8539
LEVEL 22, 68 PITT STREET,
SYDNEY NSW 2000

LANDSCAPE:
GEOSCAPES
02 9411 1485
SUITE 3.03, 8 HELP STREET,
CHATSWOOD, NSW 2067

PROJECT: GLENDENNING ROAD DATA CENTRE

TITLE: CIVIL SERVICES
SOIL EROSION AND SEDIMENT CONTROL PLAN

DRAWING: GRDC86-ACR-00-XX-DR-SSDA-C-0050

PAPER SIZE:	SCALE:		REV:
ISO A0	1:500		A

PRINT IN COLOUR

N

GENERATOR ROOM
FFL 34.40
BEL 33.82

GENERATOR ROOM
FFL 35.25
BEL 34.67

300974.217 E
6262487.545 N

UNDERGROUND FUEL TANKS
HAVE NOT BEEN INCLUDED IN THE
CUT AND FILL CALCULATIONS.
REFER TO NOTE 8.

GUARD HOUSE
FFL 35.30
BEL 34.95

300959.419 E
6262408.195 N

301106.966 E
6262533.372 N

MAX 1.3m HIGH
RETAINING WALL

DC03 INDUSTRIAL
WATER TANKS
FFL 33.80
BEL 33.25

MAX 0.7m HIGH
RETAINING WALL

301235.531 E
6262533.745 N

GENERATOR ROOM
FFL 33.80
BEL 33.22

GENERATOR ROOM
FFL 33.60
BEL 33.02

WATER QUALITY TANK HAS
NOT BEEN INCLUDED IN THE
CUT AND FILL CALCULATIONS.
REFER TO NOTE 8.

DC01 INDUSTRIAL
WATER TANKS
FFL 33.30
BEL 32.75

BASEMENT TO GIS ROOM HAS
NOT BEEN INCLUDED IN THE CUT
AND FILL CALCULATIONS. REFER
TO NOTE 8. SIZE AND LOCATION
TO BE CONFIRMED.

ENDEAVOUR ENERGY
CONTROL ROOM
FFL 33.40
BEL 33.05

GENERATOR ROOM
FFL 34.70
BEL 34.12

GENERATOR ROOM
FFL 34.00
BEL 33.42

GENERATOR ROOM
FFL 34.10
BEL 33.52

GENERATOR ROOM
FFL 35.20
BEL 34.62

DC03 BUILDING
FFL 35.75
BEL35.345

DC01 BUILDING
FFL 35.05
BEL 34.645

DC02 BUILDING
FFL 36.05
BEL 35.645

UNDERGROUND FUEL TANKS
HAVE NOT BEEN INCLUDED IN THE
CUT AND FILL CALCULATIONS.
REFER TO NOTE 8.

GENERATOR ROOM
FFL 35.50
BEL 34.92

GENERATOR ROOM
FFL 35.25
BEL 34.67

MAX 2.0m HIGH
RETAINING WALL

MAX 2.1m HIGH
RETAINING WALL

UNDERGROUND FUEL TANKS
HAVE NOT BEEN INCLUDED IN THE
CUT AND FILL CALCULATIONS.
REFER TO NOTE 8.

FIRE PUMP ROOM
AND FIRE TANK
FFL 34.50
BEL 33.95

EXISTING WAREHOUSE
AND HARDSTAND TO
BE DEMOLISHED

TERRESTRIAL BIODIVERSITY AREA TO
BE PROTECTED AND RETAINED

DEMOLITION AND RE-VEGETATION OF WAREHOUSE AND
HARDSTAND HAS NOT BEEN INCLUDED IN CUT AND FILL
CALCULATIONS. FINAL GRADING AND LANDSCAPE WORKS
TO LANDSCAPE ARCHITECT'S DETAILS

BH101 BH102 BH103 BH104 BH105 BH106 BH107 BH108 BH109 BH110
CTP3 CTP5 CTP13 CTP15

S1 C-0072 13.95
S2 C-0072 11.74
S3 C-0073 -8.79
S4 C-0073 -7.32

371.42
380.08

ROAD
GLENDENNING
EASTERN CREEK
WOODSTOCK AVENUE

SURVEYED BY REMOTE SENSING (NO ACCESS REALTY OVERGROWN)

SCALE 1:500 @ A0 0 5 10 20 30 40 50 metres

NOTES

1. A NOMINAL 200mm DEPTH ALLOWANCE FOR STRIP TOPSOIL THROUGHOUT THE SITE, INCLUDING A MINIMUM 500mm STRIPPED DEPTH TO THE EXISTING AND PROPOSED BUILDING AREAS HAS BEEN INCLUDED IN THE STRIPPED TOPSOIL CALCULATIONS ONLY.
2. A BOXING OUT OF 405mm TO THE DATA CENTRE FLOOR SLAB HAS BEEN ALLOWED FOR IN THE CUT AND FILL CALCULATIONS.
3. A BOXING OUT OF 580mm TO THE DATA CENTRE GENERATOR FLOOR SLABS HAS HAS BEEN ALLOWED FOR IN THE CUT AND FILL CALCULATIONS.
3. A BOXING OUT OF 550mm TO WATER TANK AND FIRE PUMP ROOM/FIRE TANK SLABS HAS HAS BEEN ALLOWED FOR IN THE CUT AND FILL CALCULATIONS.
4. A BOXING OUT OF 350mm TO THE GUARDHOUSE SLAB HAS HAS BEEN ALLOWED FOR IN THE CUT AND FILL CALCULATIONS.
5. AN ASSUMED BOXING OUT OF 350mm TO THE ENDEAVOUR ENERGY CONTROL ROOM SLAB HAS BEEN ALLOWED FOR IN THE CUT AND FILL CALCULATIONS. DETAIL TO BE CONFIRMED BY OTHERS.
6. BOXING OUT TO ALL CIRCULATION PAVEMENTS AND CONCRETE HARDSTANDS HAVE BEEN APPLIED IN ACCORDANCE WITH THE PAVEMENT PLAN DETAILS SHOWN ON SHEET GRDC86-ACR-00-XX-DR-SSDA-C-0002.
7. A BOXING OUT OF 100mm TO ALL LANDSCAPED AREAS HAS BEEN ALLOWED FOR IN THE CUT AND FILL CALCULATIONS.
8. DETAILED BULKING AND CUT / FILL QUANTITIES FOR FOOTINGS, UNDERGROUND TANKS, BASEMENTS, TRENCHING AND THE LIKE HAS NOT BEEN INCLUDED IN THE CUT AND FILL ASSESSMENT.
9. ALL TOPSOIL AND SITE-WON EXCAVATED MATERIALS SHALL BE STOCKPILED ON THE DEVELOPMENT SITE WHERE PRACTICAL AND UTILISED EFFECTIVELY TO ENCOURAGE APPROPRIATE REVEGETATION. REFER TO LANDSCAPE DRAWINGS FOR DETAILS. EXCESS MATERIALS TO BE DISPOSED OFF-SITE TO BE CONFIRMED BY GENERAL CONTRACTOR DURING CONSTRUCTION.
10. ALL DISTURBED EARTHWORKS AREAS TO BE STABILISED WITH A MINIMUM 75MM OF FRIABLE SANDY-LOAM SOIL AN APPROVED DROUGHT - TOLERANT HYDROSEED VARIETY. TYPICAL U.N.O.

LEGEND

CUT		FILL	
-8.00 to -6.50 m		0.00 to 0.50 m	
-6.50 to -5.00 m		0.50 to 1.00 m	
-5.00 to -4.50 m		1.00 to 1.50 m	
-4.50 to -4.00 m		1.50 to 2.00 m	
-4.00 to -3.50 m		2.00 to 2.50 m	
-3.50 to -3.00 m		2.50 to 3.00 m	
-3.00 to -2.50 m		3.00 to 3.50 m	
-2.50 to -2.00 m		3.50 to 4.00 m	
-2.00 to -1.50 m		4.00 to 4.50 m	
-1.50 to -1.00 m		4.50 to 5.00 m	
-1.00 to -0.50 m		5.00 to 6.50 m	
-0.50 to 0.00 m		6.50 to 8.00 m	

BH108 CTP5 BOREHOLE AND TEST PIT NUMBERS

34.00 BULK EARTHWORKS SURFACE MAJOR CONTOUR

34.75 BULK EARTHWORKS SURFACE MINOR CONTOUR

REV	DATE	DESCRIPTION	DRN	ENG	CHK	APP
P1	13NOV2024	DRAFT SSDA ISSUE	DW	JF	MB	MB
A	20NOV2024	SSDA ISSUE	DW	JF	MB	MB

NOTE: ALL EARTHWORKS QUANTITIES ARE THEORETICAL AND INDICATIVE ONLY, BASED UPON ESTIMATED VOLUMES WITH NO ALLOWANCE FOR BULKING OR COMPACTION FACTORS. THE CONTRACTOR IS RESPONSIBLE FOR FINALISING EARTHWORKS CUT AND FILL QUANTITIES BASED ON SITE CONDITIONS ENCOUNTERED DURING EARTHWORKS OPERATIONS

CUT / FILL QUANTITIES

STRIPPED TOPSOIL (SEE NOTE 1)	-27100m³
TOTAL CUT (FROM STRIPPED SURFACE TO FINAL BULK EARTHWORKS LEVEL)	-10520m³
TOTAL FILL (FROM FINAL BULK EARTHWORKS LEVEL TO STRIPPED SURFACE EXCLUDING DATA CENTRE BUILDING AREAS)	13630m³
CUT/FILL BALANCE (EXCLUDING STRIPPED TOPSOIL)	3110m³ (FILL)
IMPORTED FILL MATERIAL (FROM FINAL BULK EARTHWORKS LEVEL TO STRIPPED SURFACE BELOW DATA CENTRE BUILDING AREAS)	40610m³ (FILL)
TOTAL IMPORTED FILL MATERIAL (FROM FINAL BULK EARTHWORKS LEVEL TO STRIPPED SURFACE LEVEL)	43720m³ (FILL)

MECHANICAL/ ELECTRICAL ENGINEER:
LCI CONSULTANTS
02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

HYDRAULIC/ FIRE ENGINEER:
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CIVIL ENGINEER:
ACOR CONSULTANTS PTY LTD
02 9436 5098
SUITE 2, LEVEL 1, 33 HERBERT STREET,
ST LEONARDS NSW 2065

STRUCTURAL ENGINEER:
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ARCHITECT:
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LEVEL 22, 68 PITT STREET,
SYDNEY NSW 2000

LANDSCAPE:
GEOSCAPES
02 9411 1485
SUITE 3.03, 8 HELP STREET,
CHATSWOOD, NSW 2067

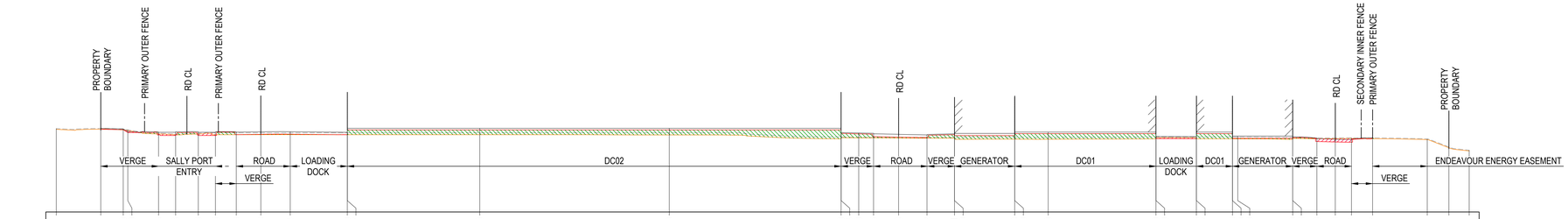
PROJECT: GLENDENNING ROAD DATA CENTRE

TITLE: CIVIL SERVICES
BULK EARTHWORKS PLAN

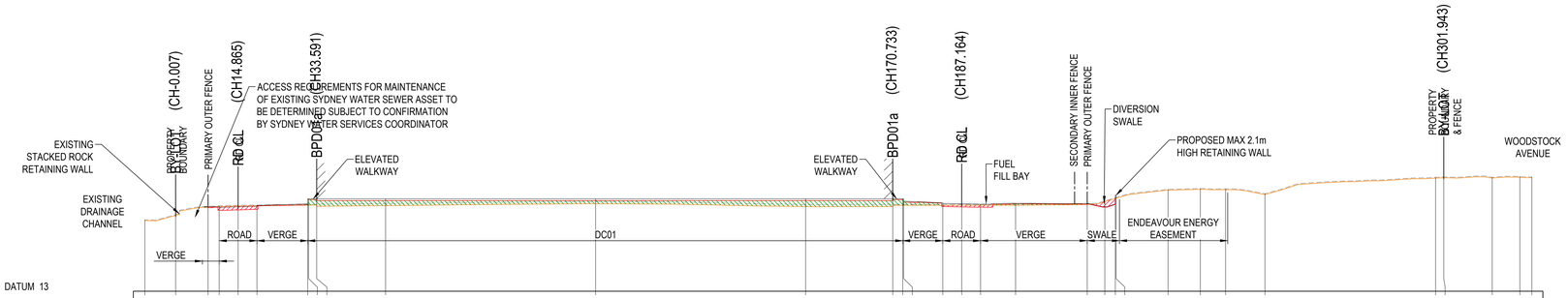
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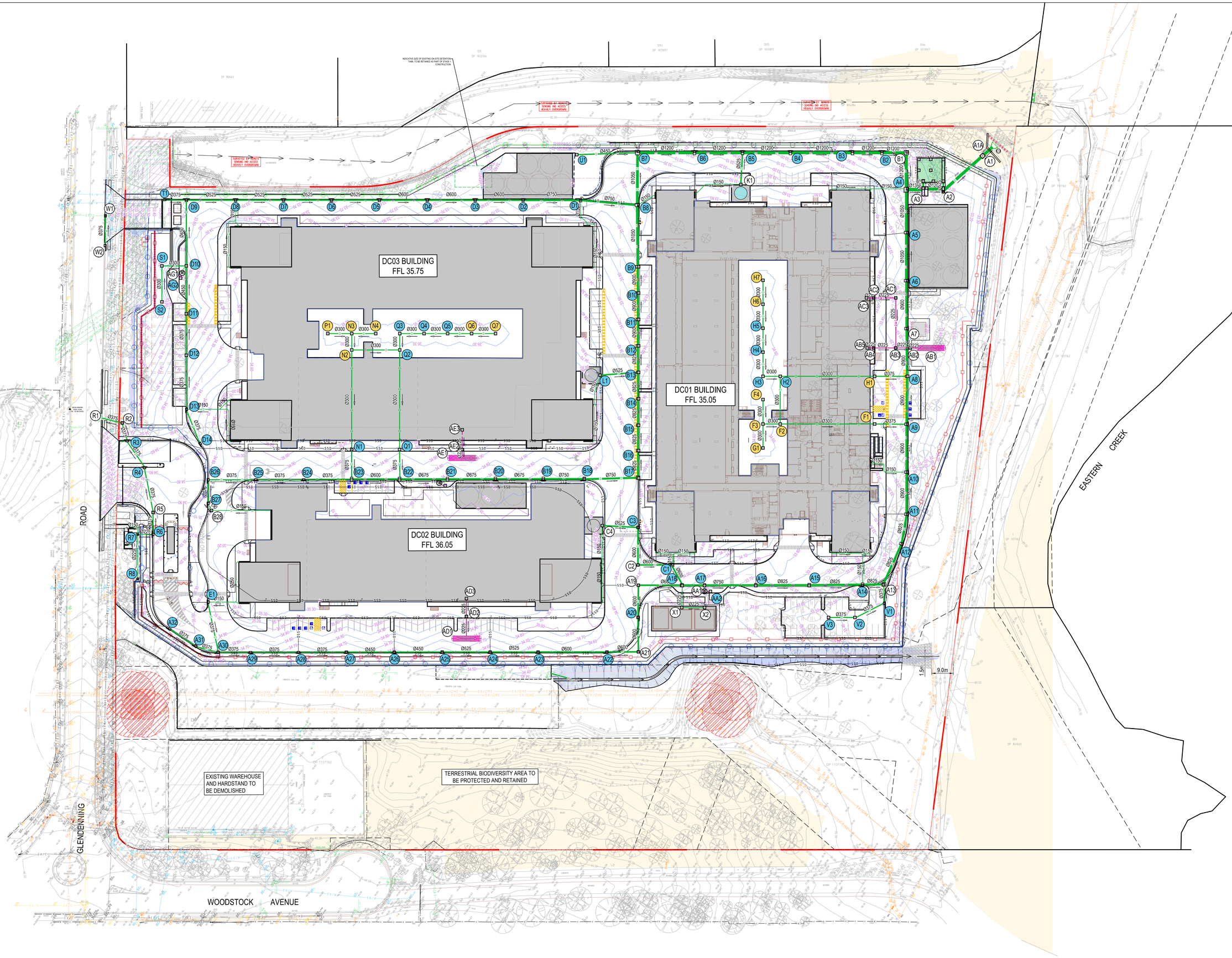
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PROPERTY BOUNDARY
PRIMARY OUTER FENCE
RD CL
PRIMARY OUTER FENCE
RD CL
RD CL
RD CL
SECONDARY INNER FENCE
PRIMARY OUTER FENCE
PROPERTY BOUNDARY
VERGE
SALLY PORT ENTRY
ROAD
LOADING DOCK
DC02
VERGE
ROAD
VERGE
GENERATOR
DC01
LOADING DOCK
DC01
GENERATOR
VERGE
ROAD
ENDEAVOUR ENERGY EASEMENT
VERGE

| | | |


EXISTING STACKED ROCK RETAINING WALL
EXISTING DRAINAGE CHANNEL
PROPERTY BOUNDARY (CH-0.007)
PRIMARY OUTER FENCE
RD CL (CH14.865)
ACCESS REQUIREMENTS FOR MAINTENANCE OF EXISTING SYDNEY WATER SEWER ASSET TO BE DETERMINED SUBJECT TO CONFIRMATION BY SYDNEY WATER SERVICES COORDINATOR
BPD03a (CH33.591)
ELEVATED WALKWAY
VERGE
ROAD
VERGE
DC01
ELEVATED WALKWAY
BPD01a (CH170.733)
RD CL (CH187.164)
FUEL FILL BAY
SECONDARY INNER FENCE
PRIMARY OUTER FENCE
DIVERSION SWALE
PROPOSED MAX 2.1m HIGH RETAINING WALL
VERGE
ROAD
VERGE
SWALE
ENDEAVOUR ENERGY EASEMENT
PROPERTY BOUNDARY & FENCE (CH301.943)
WOODSTOCK AVENUE
DATUM 13
DESIGN LEVELS
BULK EARTHWORKS LEVELS
STRIPPED SURFACE LEVELS
EXISTING LEVELS
CHAINAGE

| | | |



SCALE 1:500 @ A0 — 0 5 10 20 30 40 50 metres

N

KEYNOTES

LEGEND

- A7 — PIT WITHOUT OCEANGUARD
- B11 — PIT WITH OCEANGUARD AND >600MM PIPE COVER
- F4 — PIT WITH OCEANGUARD AND <600MM PIPE COVER
- • CL35.18 — PROPOSED COVER LEVEL
- GRASS LINED SWALE DRAIN AND DIRECTION OF FLOW
- D1 — STORMWATER DRAINAGE STRUCTURE AND NUMBER
- STORMWATER HEADWALL WITH SCOUR PROTECTION
- GRATED DRAIN
- RWT — RAINWATER TANK
- UNDERGROUND STORMWATER QUALITY TREATMENT TANK
- STORMWATER DRAINAGE PIPELINE AND DIRECTIONAL FLOW ARROW
- DP — DOWNPIPE
- DC01 BUILDING FFL 35.05 — FINISHED FLOOR LEVEL
- FINISHED SURFACE MINOR CONTOUR
- FINISHED SURFACE MAJOR CONTOUR
- BIODIVERSITY ZONE

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02 9411 1485
SUITE 3.03, 8 HELP STREET,
CHATSWOOD, NSW 2067

PROJECT: GLENDENNING ROAD DATA CENTRE

TITLE: CIVIL SERVICES
STORMWATER MANAGEMENT PLAN
OVERALL SITE PLAN

DRAWING: GRDC86-ACR-00-XX-DR-SSDA-C-1100

PAPER SIZE:	SCALE:		REV:
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ADJOINS GRDC86-ACR-00-XX-DR-SSDA-C-1102

ADJOINS GRDC86-ACR-00-XX-DR-SSDA-C-1104

EXISTING COUNCIL Ø525 STORMWATER PIPELINE CONNECTING TO TRUNK DRAINAGE CULVERTS

REMOVE LINTEL FROM EXISTING KERB INLET PIT AND RECONSTRUCT PIT WITH V-DRAIN GRATE TO SUIT LAYBACK PROFILE

PROPOSED Ø375 RCP-4 PIPELINE TO CONNECT TO EXISTING STORMWATER PIT W1

DRIVEWAY RUNOFF TO BYPASS SITE STORMWATER SYSTEM DUE TO SITE LEVELS. REFER TO WATER QUALITY CATCHMENT PLAN FOR EXTENT OF BYPASS CATCHMENT

CONSTRUCT KERB INLET PIT AND CONNECT DISCHARGE PIPE TO RECONSTRUCTED PIT

ESK-20-B-2250 OIL/WATER SEPARATOR SUPPLIED AND INSTALLED BY OCEAN PROTECT OR APPROVED EQUIVALENT.

EXISTING STORMWATER EASEMENT WITH TWIN 3000W X 1200H BOX CULVERTS. CONTRACTOR TO ACCURATELY SIZE AND LOCATE CULVERTS BEFORE ANY WORKS ARE TO COMMENCE.

SP 80663

RENDERED BUILDING

SITE BOUNDARY

SURVEYED BY REMOTE SENSING (NO ACCESS HEAVILY OVERGROWN)

DP 864587

ROAD

GLENDENNING

DC01 BUILDING FFL 35.05

DC03 BUILDING FFL 35.75

SCALE 1:200 @ A0

0 2 4 8 12 16 20 metres

N

KEYNOTES

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- D1 — STORMWATER DRAINAGE STRUCTURE AND NUMBER
- STORMWATER HEADWALL WITH SCOUR PROTECTION
- ACO KS200 WITH CLASS 'D' GRATE AND FRAME. TYPICAL U.N.O.
- RWT — RAINWATER TANK
- UNDERGROUND STORMWATER QUALITY TREATMENT TANK
- STORMWATER DRAINAGE PIPELINE AND DIRECTIONAL FLOW ARROW
- DC01 BUILDING FFL 35.05 — FINISHED FLOOR LEVEL
- FINISHED SURFACE MINOR CONTOUR
- FINISHED SURFACE MAJOR CONTOUR
- BIODIVERSITY ZONE
- OVERLAND FLOW PATH

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A	26NOV2024	SSDA ISSUE	DW	JF	MB	MB

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CHATSWOOD, NSW 2067

PROJECT: GLENDENNING ROAD DATA CENTRE

TITLE: CIVIL SERVICES STORMWATER MANAGEMENT PLAN SHEET 1

DRAWING: GRDC86-ACR-00-XX-DR-SSDA-C-1101

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PAPER SIZE:	SCALE:	REV:
ISO A0	1:200	A

DRAWING:
GRDC086-ACR-00-XX-DR-SSDA-C-1102

TITLE:
CIVIL SERVICES
STORMWATER MANAGEMENT PLAN
SHEET 2

PROJECT:
GLENDENNING ROAD DATA CENTRE

MECHANICAL, ELECTRICAL ENGINEER LCI CONSULTANTS 02 9157 0570 LEVEL 5, 73 MILLER STREET, NORTH SYDNEY NSW 2060	HYDRAULIC FIRE ENGINEER LCI CONSULTANTS 02 9157 0570 LEVEL 5, 73 MILLER STREET NORTH SYDNEY NSW 2060
ACOUSTICS ACOR CONSULTANTS PTY LTD 02 9439 3298 SUITE 2, LEVEL 1, 51 HERBERT STREET, ST LEONARDS NSW 2065	TRAFFIC/CIVIL ENGINEER TARGET TRAFFIC CONSULTING 02 9436421 LEVEL 6, 39 CHANDOS ST ST LEONARDS NSW 2065
ARCHITECT ORDINARCH ARCHITECTURE PTY LTD 02 8068 8939 LEVEL 22, 69 PITT STREET, SYDNEY NSW 2000	LANDSCAPE LANDSCAPES 02 9411 1486 SUITE 3.03, 9 HELP STREET CHATSWOOD, NSW 2067

REV	DATE	DESCRIPTION	DRN	CHK	APP
P1	19/NOV/2024	DRAFT SSDA ISSUE	DW	JF	MB
A	29/NOV/2024	SSDA ISSUE	DW	JF	MB

OVERLAND FLOW PATH

BIODIVERSITY ZONE

FINISHED SURFACE MAJOR CONTOUR

FINISHED SURFACE MINOR CONTOUR

DC01 BUILDING
FFL 35.05
FINISHED FLOOR LEVEL

STORMWATER DRAINAGE PIPELINE AND DIRECTIONAL FLOW ARROW

UNDERGROUND STORMWATER QUALITY TREATMENT TANK

RWT
RAINWATER TANK

ACO KS200 WITH CLASS 'D' GRATE AND FRAME. TYPICAL U.N.O.

STORMWATER HEADWALL WITH SCOUR PROTECTION

D1
STORMWATER DRAINAGE STRUCTURE AND NUMBER

PROPOSED COVER LEVEL
GRASS LINED SWALE DRAIN AND DIRECTION OF FLOW
• CL35.18

LEGEND

1. ALL GRATED STORMWATER PITS SHALL HAVE OCEANGUARD DROP INLET FILTER BASKETS
2. ROOF DOWNPIPES AND DRAINAGE SYSTEM HAS NOT BEEN SHOWN AND IS SUBJECT TO DETAILED DESIGN BY THE HYDRAULIC CONSULTANT
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4. RAINWATER TANKS SHALL BE CONNECTED TO TOILETS, LANDSCAPE IRRIGATION AND THE BUILDING MECHANICAL COOLING SYSTEM FOR REUSE
5. THE TRAPPED COURTYARD STORMWATER DRAINAGE SYSTEM TO DC01 AND D03 HAS BEEN DESIGNED FOR THE 1% AEP STORM EVENT INCLUDING A CLIMATE CHANGE FACTOR OF 1.12
SEPARATE STORMWATER OUTLET PIPELINES EACH CAPABLE OF CONVEYING THE 1% AEP STORM HAVE BEEN PROVIDED TO THE TRAPPED COURTYARD FOR REDUNDANCY. A BALANCE PIPELINE BETWEEN THE TWO OUTLETS HAS BEEN PROVIDED IN CASE OF BLOCKAGE OF ONE OUTLET PIPELINE

KEYNOTES

N

SCALE 1:200 @ A0
0 2 4 8 12 16 20 metres

DC01 BUILDING
FFL 35.05

DC03 BUILDING
FFL 35.75

ADJOINS GRDC086-ACR-00-XX-DR-SSDA-C-1105

SITE BOUNDARY

ADJOINS GRDC086-ACR-00-XX-DR-SSDA-C-1103

ADJOINS GRDC086-ACR-00-XX-DR-SSDA-C-1101

ELEVATED WALKWAYS ALONG BUILDING TO GRADE AT MINIMUM 1% FALL TO SHED WATER TO TRUNK STORMWATER SYSTEM. TYPICAL

150DIA UPVC PIPELINE FROM GRATED DRAIN TO CONNECT TO STORMWATER SYSTEM. TYPICAL

RAINWATER TANK OVERFLOW PIPE TO DRAIN TO PIT B5

100KL EFFECTIVE CAPACITY ABOVE GROUND RAINWATER TANK CAPTURING RUNOFF FROM ENTIRE DC01 ROOF AREA. CONNECT TO TOILETS, LANDSCAPE IRRIGATION AND DATA CENTRE MECHANICAL COOLING SYSTEM FOR REUSE

SURVEYED BY RS1016
SENSING (NO ACCESS
HEAVILY OVERGROWN)

AREA BEYOND WATER TANKS AND RETAINING WALL TO BYPASS STORMWATER SYSTEM AND SHEET FLOW TO DRAINAGE CHANNEL. REFER TO WATER QUALITY CATCHMENT PLAN FOR BYPASS CATCHMENT

ADJOINS GRDC86-ACR-00-XX-DR-SSDA-C-1102

UNDERGROUND STORMWATER QUALITY TREATMENT TANK - REFER TO DRAWING C-3104 FOR DETAILS

DEMOLISH EXISTING STACKED ROCK RETAINING WALL TO ENABLE CONSTRUCTION OF HEADWALL OUTLET

SURVEYED BY REMOTE SENSING (NO ACCESS HEAVILY OVERGROWN)

CONSTRUCT CONCRETE HEADWALL WITH SCOUR PROTECTION WITHIN EXISTING OVERLAND FLOW PATH OF SITE. RE-GRADE AREA TO SUIT HEADWALL. REFER TO DETAIL ON DRAWING C-3101.
D50 = 300MM

RECONSTRUCT STACKED ROCK RETAINING WALL TO NEW ALIGNMENT. MAXIMUM RETAINING WALL HEIGHT 1.0M. RE-GRADE AREA ON LOW SIDE OF RETAINING WALL TO PROVIDE LEVEL SURFACE FOR HEADWALL

SPLITTER PIT TO DIRECT 2EY FLOWS TO TREATMENT TANK

TRANSFORMER ROOM VALVE PITS TO COMPLY WITH AS1940 REQUIREMENTS. REFER TO DETAIL ON DRAWING C-3102

DC01 BUILDING
FFL 35.05

FLAME TRAP PITS FOR DC01 INTERNAL TRANSFORMER ROOM. FINAL POSITION TO BE COORDINATED WITH SUBSTATION DESIGN. FLAME TRAP GRATE TO BE SET DOWN NOMINALLY 100MM BELOW FFL TO RL34.95 TO ALLOW FOR FALL IN TRANSFORMER ROOM SLAB. REFER TO DETAIL ON DRAWING C-3102

ALL PIPEWORK FROM TRANSFORMER ROOMS TO SPILL CONTAINMENT TANK TO BE GALVANISED STEEL. TYPICAL

SPILL CONTAINMENT TANK (SCT) TO BE 45kL ATLAN "TANKSTOR" BELOW GROUND TANK. 2.2m DIAMETER X 12.3m LONG. TYPICAL

ADJOINS GRDC86-ACR-00-XX-DR-SSDA-C-1106

SCALE 1:200 @ A0 0 2 4 8 12 16 20 metres

N

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LEGEND

- CL35.18 — PROPOSED COVER LEVEL
- GRASS LINED SWALE DRAIN AND DIRECTION OF FLOW
- D1 — STORMWATER DRAINAGE STRUCTURE AND NUMBER
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- ACO KS200 WITH CLASS 'D' GRATE AND FRAME. TYPICAL U.N.O.
- RWT — RAINWATER TANK
- UNDERGROUND STORMWATER QUALITY TREATMENT TANK
- STORMWATER DRAINAGE PIPELINE AND DIRECTIONAL FLOW ARROW
- DC01 BUILDING FFL 35.05 — FINISHED FLOOR LEVEL
- FINISHED SURFACE MINOR CONTOUR
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PROJECT: GLENDENNING ROAD DATA CENTRE

TITLE: CIVIL SERVICES
STORMWATER MANAGEMENT PLAN
SHEET 3

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ADJOINS GRDC86-ACR-00-XX-DR-SSDA-C-1105

ADJOINS GRDC86-ACR-00-XX-DR-SSDA-C-1107

MAX 1:4 BATTER TO EXISTING LEVELS. SITE FRONTAGE TO BYPASS STORMWATER SYSTEM AND SHEET FLOW TO GLENDENNING ROAD STORMWATER SYSTEM. REFER TO WATER QUALITY CATCHMENT PLAN FOR BYPASS CATCHMENT EXTENT

REDUNDANT DRIVEWAY CROSSINGS TO BE DEMOLISHED AND REPLACED WITH NEW KERB AND GUTTER TO BLACKTOWN COUNCIL STANDARD DETAILS. RESTORE FRONTAGE WITH NEW FOOTPATH AND VERGE TURFING TO COUNCIL SPECIFICATIONS.

CONNECT TO EXISTING COUNCIL STORMWATER PIT. RECONSTRUCT PIT AS REQUIRED FOR NEW PIPE PENETRATION. CONTRACTOR TO POTHOLE ALL EXISTING SERVICES WITHIN THE ROAD RESERVE PRIOR TO ANY CONSTRUCTION WORKS

300MM WIDE ACO K300 GRATED DRAIN WITH CLASS 'D' GRATE TO CONNECT TO PIT R3 WITH 225 DIA PIPE AT 1% GRADE

EXISTING KIOSK SUBSTATION TO BE DEMOLISHED AFTER DEMOLITION OF EXISTING WAREHOUSE BUILDINGS

REDUNDANT DRIVEWAY CROSSINGS TO BE DEMOLISHED AND REPLACED WITH NEW KERB AND GUTTER TO BLACKTOWN COUNCIL STANDARD DETAILS. RESTORE FRONTAGE WITH NEW FOOTPATH AND VERGE TURFING TO COUNCIL SPECIFICATIONS.

GRASSED SWALE TYPE 3

EXISTING DRIVEWAY LAYBACK TO BE RETAINED FRO ACCESS TO ENDEAVOUR ENERGY EASEMENT

RECONSTRUCT EXISTING DRIVEWAY TO SUIT PERIMETER SITE FENCE ALIGNMENT

BENCHMARK
SSM 13205
RL. 33.69 (AHD)

ROAD

GLENDENNING

DC03 BUILDING
FFL 35.75

DC02 BUILDING
FFL 36.05

ESK

SCALE 1:200 @ A0

0 2 4 8 12 16 20 metres

N

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- DC01 BUILDING FFL 35.05 — FINISHED FLOOR LEVEL
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NORTH SYDNEY NSW 2060

CIVIL ENGINEER:
ACOR CONSULTANTS PTY LTD
02 9438 5098
SUITE 2, LEVEL 1, 33 HERBERT STREET,
ST LEONARDS NSW 2065

STRUCTURAL ENGINEER:
VAN DER MEER CONSULTING
02 94360433
LEVEL 6, 39 CHANDOS ST,
ST LEONARDS NSW 2065

ARCHITECT:
GREENBOX ARCHITECTURE PTY LTD
02 8069 8939
LEVEL 22, 68 PITT STREET,
SYDNEY NSW 2000

LANDSCAPE:
GEOSCAPES
02 9411 1486
SUITE 3.03, 8 HELP STREET,
CHATSWOOD, NSW 2067

PROJECT: GLENDENNING ROAD DATA CENTRE

TITLE: CIVIL SERVICES
STORMWATER MANAGEMENT PLAN
SHEET 4

DRAWING: GRDC86-ACR-00-XX-DR-SSDA-C-1104

PAPER SIZE:	SCALE:		REV:
ISO A0	1:200		A

PRINT IN COLOUR

ADJOINS GRDC86-ACR-00-XX-DR-SSDA-C-1102

ADJOINS GRDC86-ACR-00-XX-DR-SSDA-C-1104

ADJOINS GRDC86-ACR-00-XX-DR-SSDA-C-1106

ADJOINS GRDC86-ACR-00-XX-DR-SSDA-C-1108

DC03 BUILDING
FFL 35.75

DC01 BUILDING
FFL 35.05

DC02 BUILDING
FFL 36.05

FLAME TRAP PIT FOR DC03 INTERNAL TRANSFORMER ROOM. FINAL POSITION TO BE COORDINATED WITH SUBSTATION DESIGN. FLAME TRAP GRATE TO BE SET DOWN NOMINALLY 100MM BELOW FFL TO RL35.65 TO ALLOW FOR FALL IN TRANSFORMER ROOM SLAB. REFER TO DETAIL ON DRAWING C-3102

TRANSFORMER ROOM VALVE PIT TO COMPLY WITH AS1940 REQUIREMENTS. REFER TO DETAIL ON DRAWING C-3102

SPILL CONTAINMENT TANK (SCT) TO BE 45kL ATLAN "TANKSTOR" BELOW GROUND TANK. 2.2m DIAMETER X 12.3m LONG. TYPICAL

MAX 1:4 BATTER TO KERB

ESK-20-B-2250 OIL/WATER SEPARATOR SUPPLIED AND INSTALLED BY OCEAN PROTECT OR APPROVED EQUIVALENT.

FLAME TRAP PIT FOR DC02 INTERNAL TRANSFORMER ROOM. FINAL POSITION TO BE COORDINATED WITH SUBSTATION DESIGN. FLAME TRAP GRATE TO BE SET DOWN NOMINALLY 100MM BELOW FFL TO RL35.95 TO ALLOW FOR FALL IN TRANSFORMER ROOM SLAB. REFER TO DETAIL ON DRAWING C-3102

TRANSFORMER ROOM VALVE PIT TO COMPLY WITH AS1940 REQUIREMENTS. REFER TO DETAIL ON DRAWING C-3102

SPILL CONTAINMENT TANK (SCT) TO BE 45kL ATLAN "TANKSTOR" BELOW GROUND TANK. 2.2m DIAMETER X 12.3m LONG. TYPICAL

RWT

RWT

SCALE 1:200 @ A0

0 2 4 8 12 16 20 metres

N

KEYNOTES

1. ALL GRATED STORMWATER PITS SHALL HAVE OCEANGUARD DROP INLET FILTER BASKETS. TYPICAL.
2. ROOF DOWNPIPES AND DRAINAGE SYSTEM HAS NOT BEEN SHOWN AND IS SUBJECT TO DETAILED DESIGN BY THE HYDRAULIC CONSULTANT.
3. ALL RAINWATER TANKS VOLUMES SHOWN ARE EFFECTIVE CAPACITY VOLUMES AND SHALL HAVE AN ADDITIONAL 10% VOLUME ALLOWANCE FOR ANAEROBIC ZONE AND AIR GAP PROVISIONS
4. RAINWATER TANKS SHALL BE CONNECTED TO TOILETS, LANDSCAPE IRRIGATION AND THE BUILDING MECHANICAL COOLING SYSTEM FOR REUSE.
5. THE TRAPPED COURTYARD STORMWATER DRAINAGE SYSTEM TO DC01 AND DC03 HAS BEEN DESIGNED FOR THE 1% AEP STORM EVENT INCLUDING A CLIMATE CHANGE FACTOR OF 1.12. SEPARATE STORMWATER OUTLET PIPELINES EACH CAPABLE OF CONVEYING THE 1% AEP STORM HAVE BEEN PROVIDED TO THE TRAPPED COURTYARD FOR REDUNDANCY. A BALANCE PIPELINE BETWEEN THE TWO OUTLETS HAS BEEN PROVIDED IN CASE OF BLOCKAGE OF ONE OUTLET PIPELINE.

LEGEND

- CL35.18 — PROPOSED COVER LEVEL
- GRASS LINED SWALE DRAIN AND DIRECTION OF FLOW
- D1 — STORMWATER DRAINAGE STRUCTURE AND NUMBER
- STORMWATER HEADWALL WITH SCOUR PROTECTION
- ACO KS200 WITH CLASS 'D' GRATE AND FRAME. TYPICAL U.N.O.
- RWT — RAINWATER TANK
- UNDERGROUND STORMWATER QUALITY TREATMENT TANK
- STORMWATER DRAINAGE PIPELINE AND DIRECTIONAL FLOW ARROW
- DC01 BUILDING FFL 35.05 — FINISHED FLOOR LEVEL
- FINISHED SURFACE MINOR CONTOUR
- FINISHED SURFACE MAJOR CONTOUR
- BIODIVERSITY ZONE
- OVERLAND FLOW PATH

REV.	DATE	DESCRIPTION	DRN	ENG	CHK	APP
P1	13NOV2024	DRAFT SSDA ISSUE	DW	JF	MB	MB
A	20NOV2024	SSDA ISSUE	DW	JF	MB	MB

MECHANICAL/ ELECTRICAL ENGINEER:
LCI CONSULTANTS
02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

HYDRAULIC/ FIRE ENGINEER:
LCI CONSULTANTS
02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

CIVIL ENGINEER:
ACOR CONSULTANTS PTY LTD
02 9438 5098
SUITE 2, LEVEL 1, 33 HERBERT STREET,
ST LEONARDS NSW 2065

STRUCTURAL ENGINEER:
VAN DER MEER CONSULTING
02 94380433
LEVEL 6, 39 CHANDOS ST,
ST LEONARDS NSW 2065

ARCHITECT:
GREENBOX ARCHITECTURE PTY LTD
02 8069 8939
LEVEL 22, 68 PITT STREET,
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LANDSCAPE:
GEOSCAPES
02 9411 1485
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PROJECT: GLENDENNING ROAD DATA CENTRE

TITLE: CIVIL SERVICES
STORMWATER MANAGEMENT PLAN
SHEET 5

DRAWING: GRDC86-ACR-00-XX-DR-SSDA-C-1105

PAPER SIZE:	SCALE:		REV:
ISO A0	1:200		A

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ALL PIPEWORK FROM TRANSFORMER ROOMS TO SPILL CONTAINMENT TANK TO BE GALVANISED STEEL. TYPICAL

SPILL CONTAINMENT TANK (SCT) TO BE 45kL ATLAN "TANKSTOR" BELOW GROUND TANK. 2.2m DIAMETER X 12.3m LONG. TYPICAL

ADJOINS GRDC86-ACR-00-XX-DR-SSDA-C-1103

ADJOINS GRDC86-ACR-00-XX-DR-SSDA-C-1105

DC01 BUILDING
FFL 35.05

ADJOINS GRDC86-ACR-00-XX-DR-SSDA-C-1109

SCALE 1:200 @ A0

0 2 4 8 12 16 20 metres

N

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STRUCTURAL ENGINEER:
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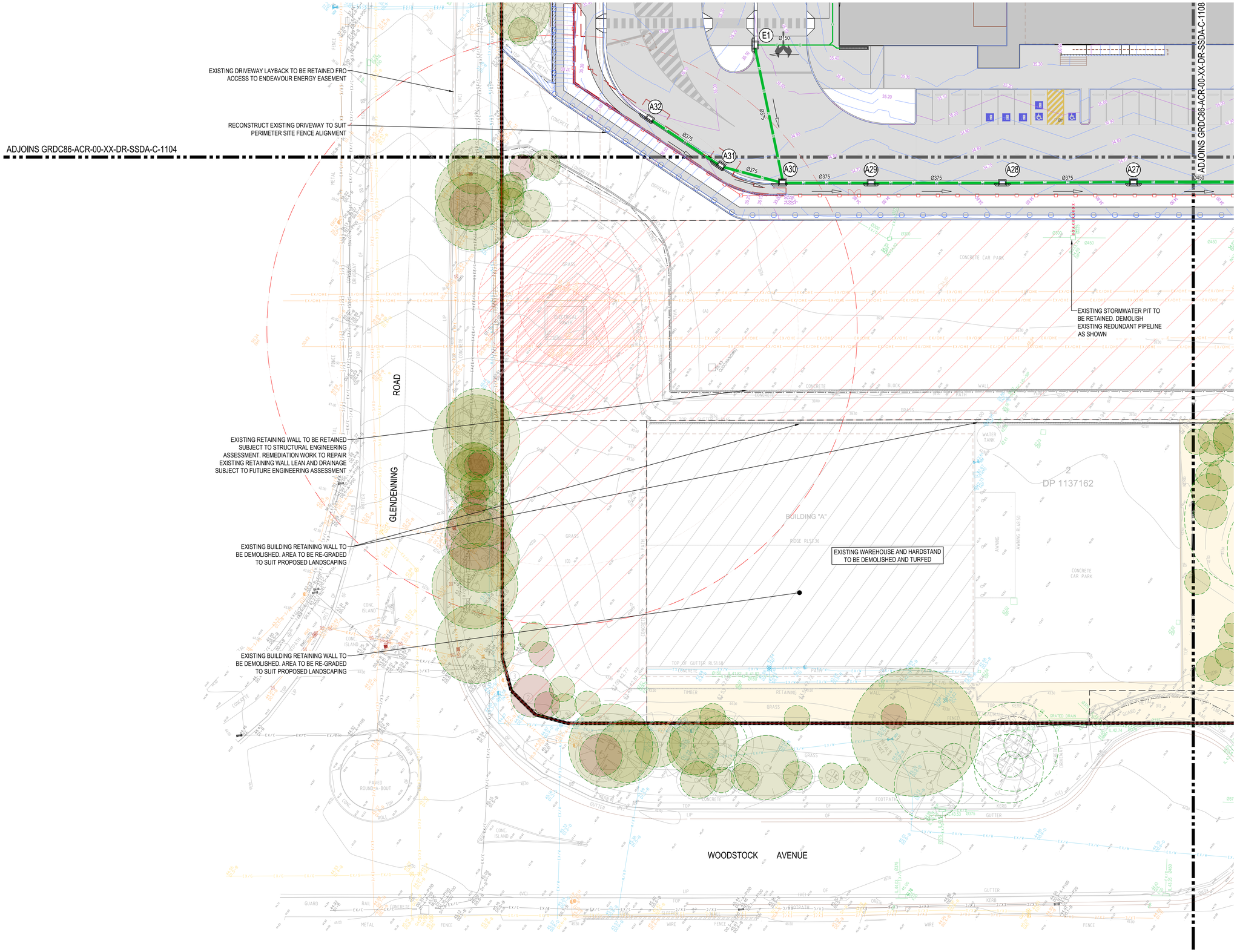
PROJECT: GLENDENNING ROAD DATA CENTRE

TITLE: CIVIL SERVICES
STORMWATER MANAGEMENT PLAN
SHEET 6

DRAWING: GRDC86-ACR-00-XX-DR-SSDA-C-1106

PAPER SIZE:	SCALE:		REV:
ISO A0	1:200		A

PRINT IN COLOUR



SCALE 1:200 @ A0 0 2 4 8 12 16 20 metres

N

KEYNOTES

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LCI CONSULTANTS
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NORTH SYDNEY NSW 2060

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NORTH SYDNEY NSW 2060

CIVIL ENGINEER:
ACOR CONSULTANTS PTY LTD
02 9438 5098
SUITE 2, LEVEL 1, 33 HERBERT STREET,
ST LEONARDS NSW 2065

STRUCTURAL ENGINEER:
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02 94306433
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ST LEONARDS NSW 2065

ARCHITECT:
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LEVEL 22, 68 PITT STREET,
SYDNEY NSW 2000

LANDSCAPE:
GEOSCAPES
02 9411 1485
SUITE 3.03, 8 HELP STREET,
CHATSWOOD, NSW 2067

PROJECT: GLENDENNING ROAD DATA CENTRE

TITLE: CIVIL SERVICES
STORMWATER MANAGEMENT PLAN
SHEET 7

DRAWING: GRDC86-ACR-00-XX-DR-SSDA-C-1107

PAPER SIZE:	SCALE:		REV:
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ADJOINS GRDC86-ACR-00-XX-DR-SSDA-C-1105

ADJOINS GRDC86-ACR-00-XX-DR-SSDA-C-1107

ADJOINS GRDC66-ACR-00-XX-DR-SSDA-C-1109

EXISTING STORMWATER PIT TO BE RETAINED. DEMOLISH EXISTING REDUNDANT PIPELINE AS SHOWN

EXISTING STORMWATER PIT TO BE RETAINED. DEMOLISH EXISTING REDUNDANT PIPELINE AS SHOWN

EXISTING STORMWATER PIT TO BE RETAINED. DEMOLISH EXISTING REDUNDANT PIPELINE AS SHOWN

EXTENT OF EXISTING CONCRETE PAVEMENT SLAB TO BE RECONSTRUCTED TO SUIT NEW LEVELS. MAKE SMOOTH CONNECTION TO EXISTING SLAB

EXISTING STORMWATER PIT TO BE RETAINED. DEMOLISH EXISTING REDUNDANT PIPELINE AS SHOWN

EXISTING STORMWATER PIT TO BE RETAINED. DEMOLISH EXISTING REDUNDANT PIPELINE AS SHOWN. CONSTRUCT NEW 375DIA RCP 'Z' OUTLET PIPELINE TO DISCHARGE INTO DIVERSION SWALE WITH SCOUR PROTECTION. REFER TO BLACKTOWN COUNCIL STANDARD DRAWING A(BS)175M
D50 = 200MM
SCOUR PAD LENGTH = 2.2M

GRASSED SWALE TO DIVERT UPSTREAM CATCHMENT FLOWS

ESK-20-B-2250 OIL/WATER SEPARATOR SUPPLIED AND INSTALLED BY OCEAN PROTECT OR APPROVED EQUIVALENT.

EXISTING HEADWALL FROM WOODSTOCK AVENUE DISCHARGING FLOWS TOWARDS DEVELOPMENT SITE. REFER TO DRAINAGE CATCHMENT PLAN FOR UPSTREAM EXTERNAL CATCHMENT PLAN AREA

INDICATIVE OVERLAND FLOW PATH OF EXTERNAL UPSTREAM CATCHMENT

WOODSTOCK AVENUE

DP 1137162

SCALE 1:200 @ A0 0 2 4 8 12 16 20 metres

KEYNOTES

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MECHANICAL/ ELECTRICAL ENGINEER:
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02 9157 0570
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NORTH SYDNEY NSW 2060

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02 9438 5098
SUITE 2, LEVEL 1, 33 HERBERT STREET,
ST LEONARDS NSW 2065

STRUCTURAL ENGINEER:
VAN DER MEER CONSULTING
02 94360433
LEVEL 6, 39 CHANDOS ST.,
ST LEONARDS NSW 2065

ARCHITECT:
GREENBOX ARCHITECTURE PTY LTD
02 8069 8939
LEVEL 22, 68 PITT STREET,
SYDNEY NSW 2000

LANDSCAPE:
GEOSCAPES
02 9411 1485
SUITE 3.03, 8 HELP STREET,
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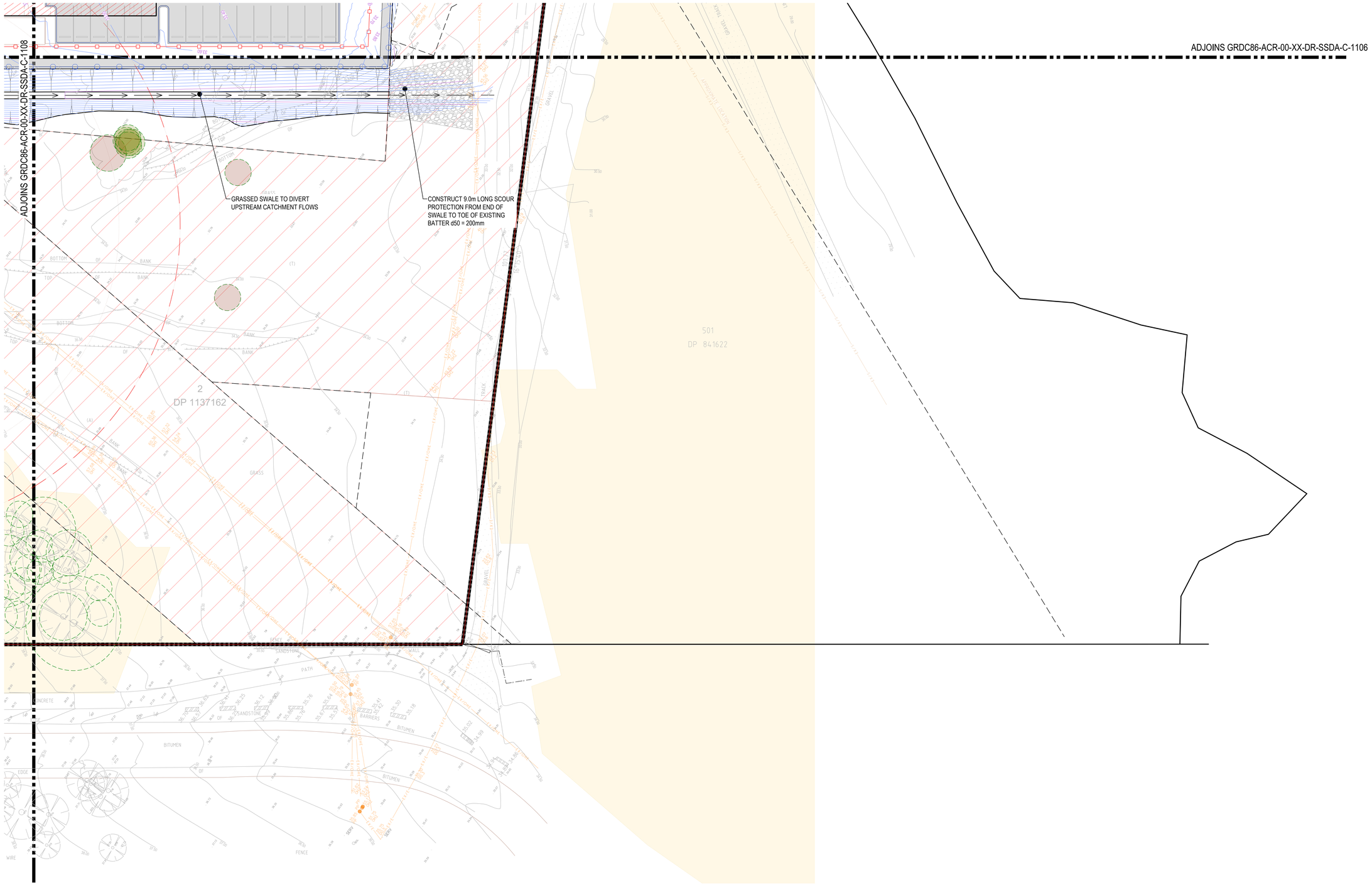
PROJECT: GLENDENNING ROAD DATA CENTRE

TITLE: CIVIL SERVICES
STORMWATER MANAGEMENT PLAN
SHEET 8

DRAWING: GRDC86-ACR-00-XX-DR-SSDA-C-1108

PAPER SIZE:	SCALE:		REV:
ISO A0	1:200		A

PRINT IN COLOUR



SCALE 1:200 @ A0

0 2 4 8 12 16 20 metres

N

KEYNOTES

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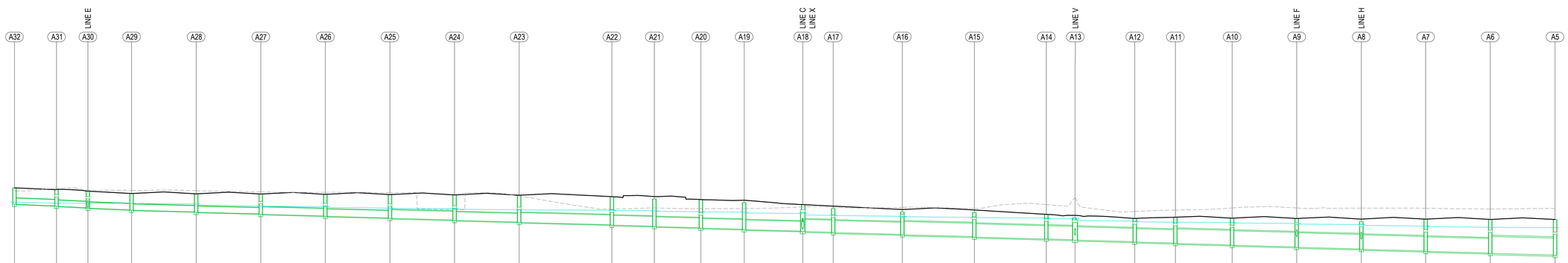
PROJECT: GLENDENNING ROAD DATA CENTRE

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STORMWATER MANAGEMENT PLAN
SHEET 9

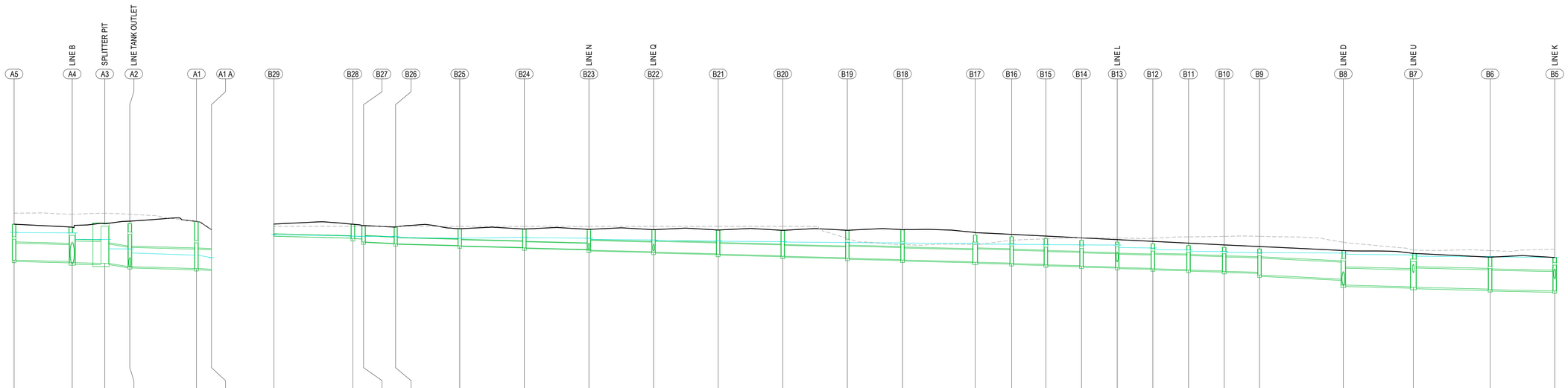
DRAWING: GRDC86-ACR-00-XX-DR-SSDA-C-1109

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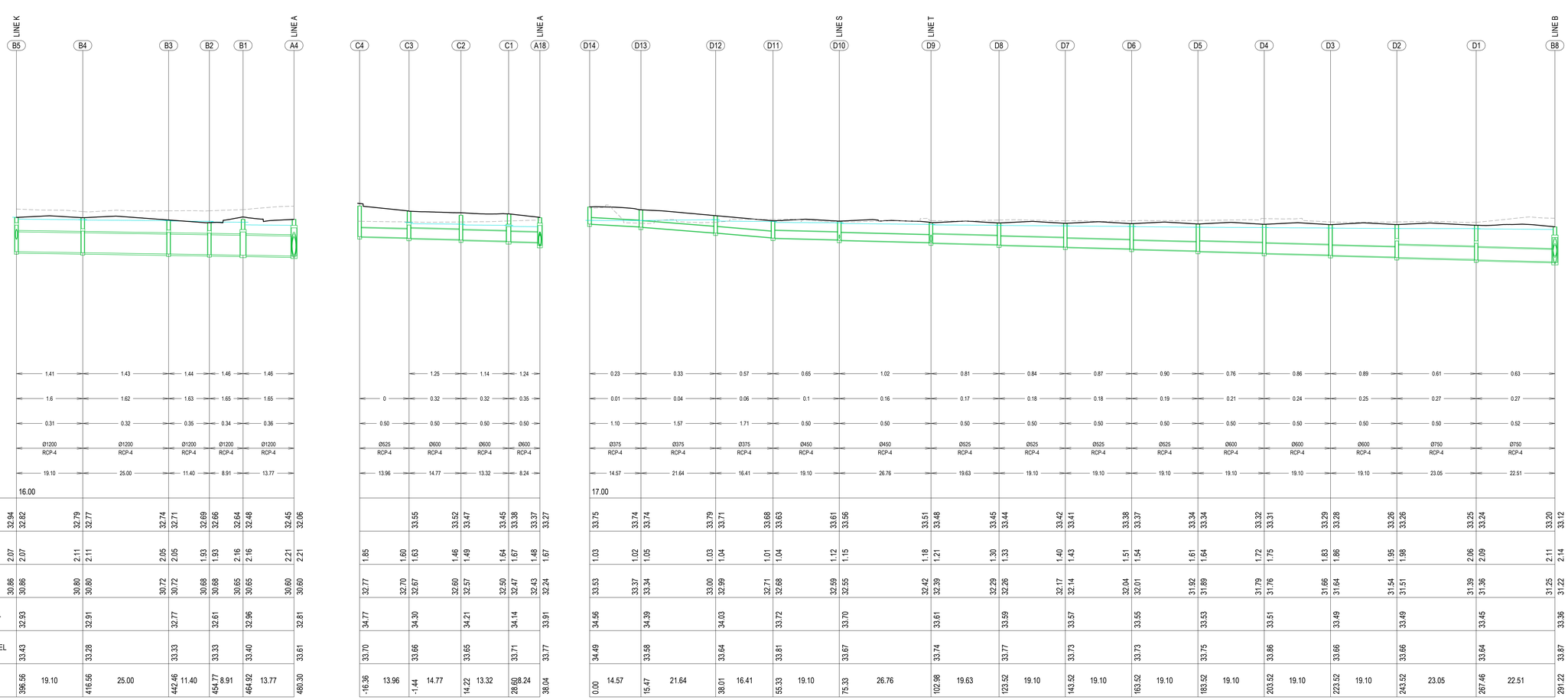
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A32
A31
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LINE C
LINE X
A18
A17
A16
A15
A14
LINE V
A13
A12
A11
A10
LINE F
A9
LINE H
A8
A7
A6
A5

| | | |


LINE B
SPLITTER PIT
LINE TANK OUTLET
LINE N
LINE Q
LINE L
LINE D
LINE U
LINE K

| | | |



LINE B
A1 Horizontal Scale 1 : 500
A1 Vertical scale 1 : 100

LINE C
A1 Horizontal Scale 1 : 500
A1 Vertical scale 1 : 100

LINE D
A1 Horizontal Scale 1 : 500
A1 Vertical scale 1 : 100

SCALE 1:100 @ A0 0 1 2 4 6 8 10 metres

SCALE 1:500 @ A0 0 5 10 20 30 40 50 metres

NOTES

KEYNOTES

LEGEND

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P1	13NOV2024	DRAFT SSDA ISSUE	DW	JF	MB	MB
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B	08OCT2025	RE-ISSUE SSDA ISSUE	JK	JF	MB	MB

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CHATSWOOD, NSW 2067

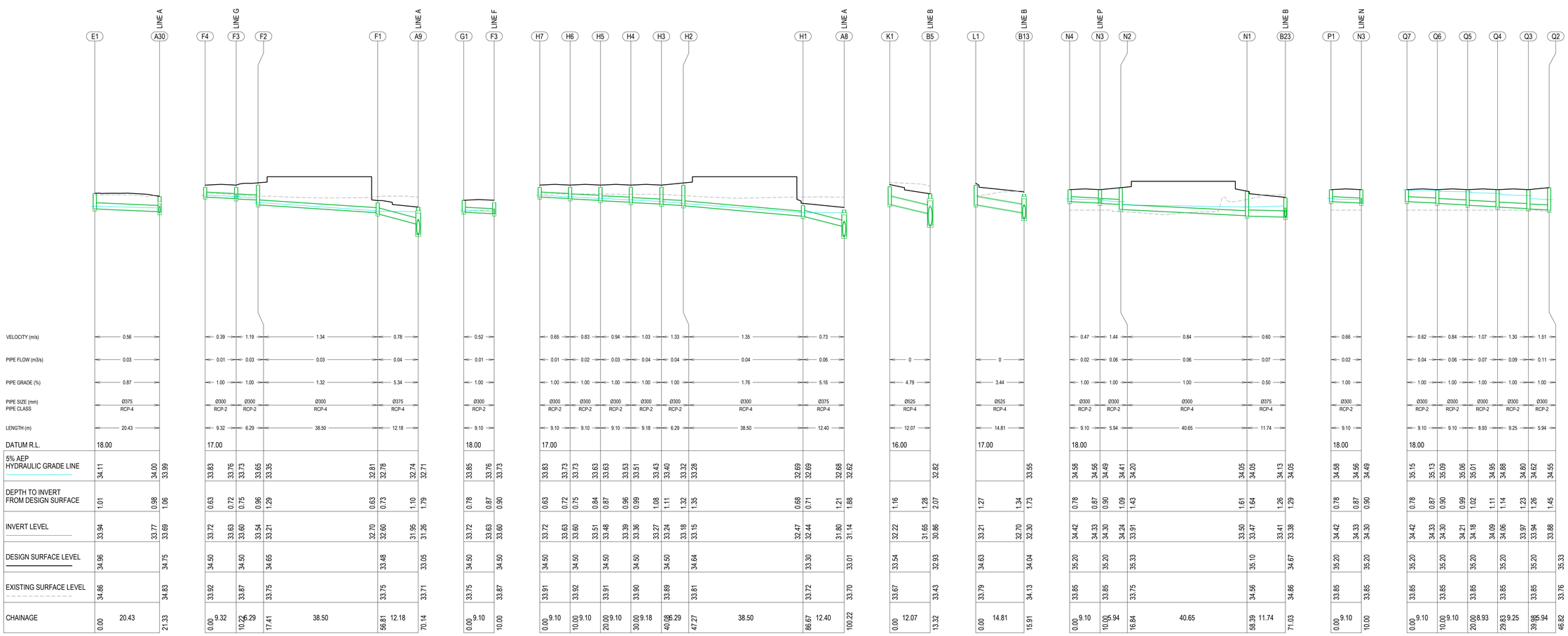
PROJECT: GLENDENNING ROAD DATA CENTRE

TITLE: CIVIL SERVICES
STORMWATER DRAINAGE LONGITUDINAL SECTIONS
SHEET 3

DRAWING: GRDC86-ACR-00-XX-DR-SSDA-C-1113

PAPER SIZE:	SCALE:	REV:
ISO A0	AS SHOWN	B

PRINT IN COLOUR



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VELOCITY (m/s)		0.56					0.39		1.19		1.34				0.78		0.52		0.65		0.83		0.94		1.03		1.33		1.35		0.73		0.47		1.44		0.84		0.60		0.66		0.62		0.84		1.07		1.30		1.51
PIPE FLOW (m3/s)		0.03					0.01		0.03		0.03				0.04		0.01		0.01		0.02		0.03		0.04		0.04		0.04		0.06		0.02		0.06		0.06		0.07		0.02		0.04		0.06		0.07		0.09		0.11
PIPE GRADE (%)		0.87					1.00		1.00		1.32				5.34		1.00		1.00		1.00		1.00		1.00		1.00		1.76		5.16		4.79		1.00		1.00		0.50		1.00		1.00		1.00		1.00		1.00		1.00
PIPE SIZE (mm)		Ø375					Ø300		Ø300		Ø300				Ø375		Ø300		Ø300		Ø300		Ø300		Ø300		Ø300		Ø300		Ø375		Ø525		Ø300		Ø300		Ø375		Ø300		Ø300		Ø300		Ø300		Ø300		Ø300
PIPE CLASS		RCP-4					RCP-2		RCP-2		RCP-4				RCP-4		RCP-2		RCP-2		RCP-2		RCP-2		RCP-2		RCP-2		RCP-4		RCP-4		RCP-4		RCP-2		RCP-2		RCP-4		RCP-2		RCP-2		RCP-2		RCP-2		RCP-2		RCP-2
LENGTH (m)		20.43					9.32		6.29		38.50				12.18		9.10		9.10		9.10		9.10		9.18		6.29		38.50		12.40		12.07		14.81		9.10		5.94		40.65		11.74		9.10		9.10		8.93		9.25		5.94
DATUM R.L.	18.00					17.00										18.00			17.00													16.00		17.00		18.00						18.00										
5% AEP HYDRAULIC GRADE LINE	34.11			34.00	33.99	33.83	33.76	33.73	33.65	33.35				32.81	32.78	32.74	32.71	33.85	33.76	33.73	33.83	33.73	33.73	33.63	33.63	33.53	33.51	33.43	33.40	33.32	33.28		32.69	32.69	32.68	32.62			32.82		33.55		34.58	34.56	34.49	34.41	34.20			34.05	34.05	34.13	34.05	34.58	34.56	34.49	35.15	35.13	35.09	35.06	35.01	34.95	34.88	34.80	34.62	34.55
DEPTH TO INVERT FROM DESIGN SURFACE	1.01			0.98	1.06	0.63	0.72	0.75	0.96	1.29				0.63	0.73	1.10	1.79	0.78	0.87	0.90	0.63	0.72	0.75	0.84	0.87	0.96	0.99	1.08	1.11	1.32	1.35		0.68	0.71	1.21	1.88	1.16		1.28	2.07	1.27		1.34	1.73	0.78	0.87	0.90	1.43			1.61	1.64	1.26	1.29	0.78	0.87	0.90	0.78	0.87	0.90	0.99	1.02	1.11	1.14	1.23	1.26	1.45
INVERT LEVEL	33.94			33.77	33.69	33.72	33.63	33.60	33.54	33.21				32.70	32.60	31.95	31.26	33.72	33.63	33.60	33.72	33.63	33.60	33.51	33.48	33.39	33.36	33.27	33.24	33.18	33.15		32.47	32.44	31.80	31.14	32.22		31.65	30.86	33.21		32.70	32.30	34.42	34.33	34.30	33.91			33.50	33.47	33.41	33.38	34.42	34.33	34.30	34.42	34.33	34.30	34.21	34.18	34.09	34.06	33.97	33.94	33.88
DESIGN SURFACE LEVEL	34.96			34.75		34.50	34.50	34.50	34.65					33.48		33.05		34.50	34.50	34.50	34.50	34.50	34.50	34.50	34.50	34.50	34.50	34.50	34.50	34.64		33.30			33.01		33.54		32.93		34.63		34.04		35.20	35.20		35.33			35.10		34.67		35.20		35.20	35.20	35.20	35.20	35.20	35.20	35.20	35.33
EXISTING SURFACE LEVEL	34.86			34.83		33.92	33.87	33.75						33.75		33.71		33.75	33.67	33.67	33.91	33.92	33.91	33.90	33.90	33.89	33.89	33.81		33.72			33.70		33.67		33.43		33.79		34.13		33.85	33.85		33.76			34.56		34.66		33.85		33.85	33.85	33.85	33.85	33.85	33.85	33.85	33.76
CHAINAGE	0.00	20.43			21.33	0.00	9.32	10.22	16.29	17.41	38.50			56.61	12.18	70.14		0.00	9.10	10.00	0.00	9.10	10.00	20.00	29.10	30.00	39.18	40.08	46.29	47.27	38.50		86.67	12.40	100.22		0.00	12.07	13.32		0.00	14.81		15.91	0.00	9.10	10.00	15.94	16.84	40.65		58.39	11.74	71.03	0.00	9.10	10.00	0.00	9.10	10.00	19.10	20.00	28.93	29.83	39.25	39.95	45.94	46.62

LINE E
A1 Horizontal Scale 1 : 500
A1 Vertical scale 1 : 100

LINE F
A1 Horizontal Scale 1 : 500
A1 Vertical scale 1 : 100

LINE G
A1 Horizontal Scale 1 : 500
A1 Vertical scale 1 : 100

LINE H
A1 Horizontal Scale 1 : 500
A1 Vertical scale 1 : 100

LINE K
A1 Horizontal Scale 1 : 500
A1 Vertical scale 1 : 100

LINE L
A1 Horizontal Scale 1 : 500
A1 Vertical scale 1 : 100

LINE N
A1 Horizontal Scale 1 : 500
A1 Vertical scale 1 : 100

LINE P
A1 Horizontal Scale 1 : 500
A1 Vertical scale 1 : 100

LINE Q
A1 Horizontal Scale 1 : 500
A1 Vertical scale 1 : 100

SCALE 1:100 @ A0 0 1 2 4 6 8 10 metres

SCALE 1:500 @ A0 0 5 10 20 30 40 50 metres

NOTES

KEYNOTES

LEGEND

REV	DATE	DESCRIPTION	DRN	ENG	CHK	APP
P1	13NOV2024	DRAFT SSDA ISSUE	DW	JF	MB	MB
A	20NOV2024	SSDA ISSUE	DW	JF	MB	MB

MECHANICAL/ ELECTRICAL ENGINEER:
LCI CONSULTANTS
02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

HYDRAULIC/ FIRE ENGINEER:
LCI CONSULTANTS
02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

CIVIL ENGINEER:
ACOR CONSULTANTS PTY LTD
02 9438 5098
SUITE 2, LEVEL 1, 33 HERBERT STREET,
ST LEONARDS NSW 2065

STRUCTURAL ENGINEER:
VAN DER MEER CONSULTING
02 94360433
LEVEL 6, 39 CHANDOS ST,
ST LEONARDS NSW 2065

ARCHITECT:
GREENBOX ARCHITECTURE PTY LTD
02 8069 8939
LEVEL 22, 68 PITT STREET,
SYDNEY NSW 2000

LANDSCAPE:
GEOSCAPES
02 9411 1486
SUITE 3.03, 3 HELP STREET,
CHATSWOOD, NSW 2067

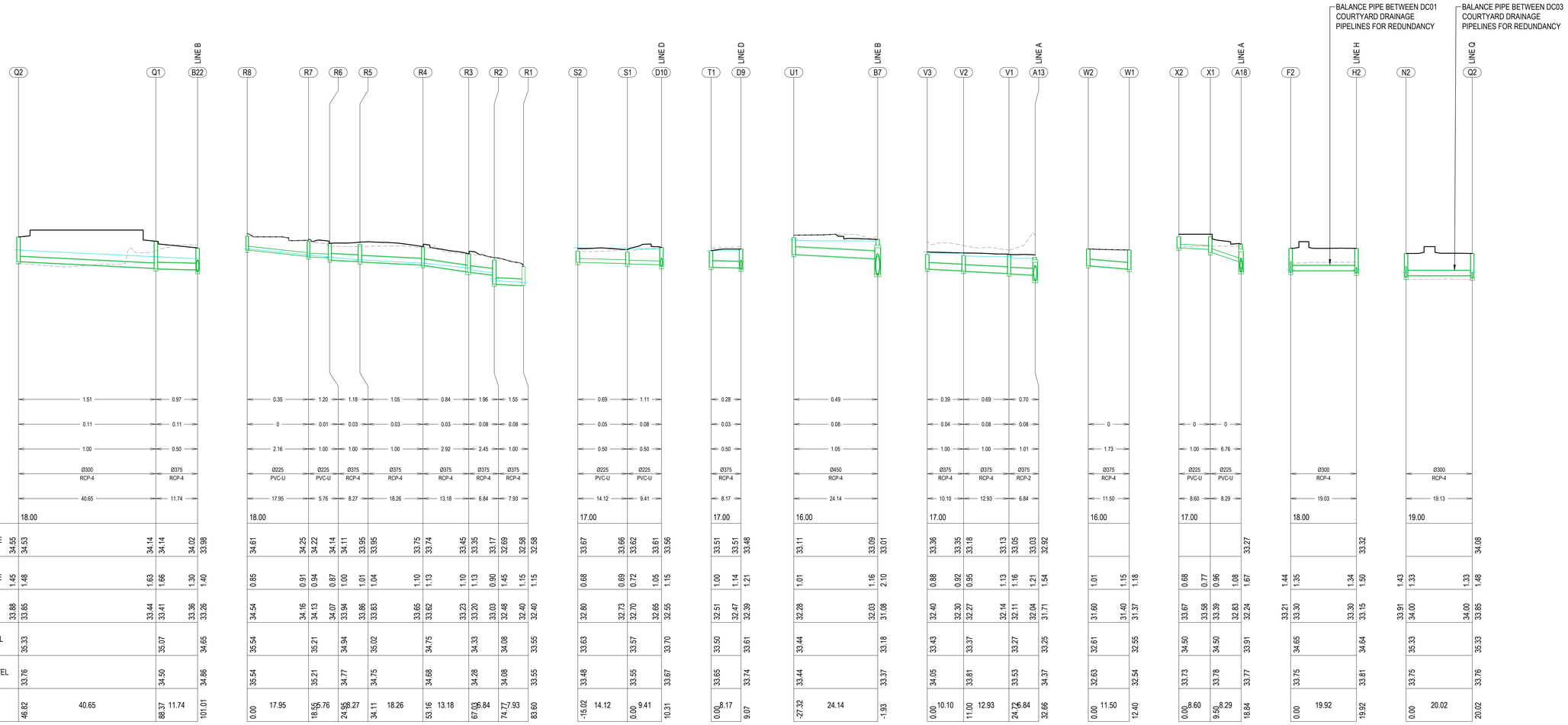
PROJECT: GLENDENNING ROAD DATA CENTRE

TITLE: CIVIL SERVICES
STORMWATER DRAINAGE LONGITUDINAL SECTIONS
SHEET 4

DRAWING: GRDC86-ACR-00-XX-DR-SSDA-C-1114

PAPER SIZE:	SCALE:		REV:
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R8
R7
R6
R5
R4
R3
R2
R1
S2
S1
LINE D
D10
T1
LINE D
D9
U1
LINE B
B7
V3
V2
V1
LINE A
A13
W2
W1
X2
X1
LINE A
A18
F2
BALANCE PIPE BETWEEN DC01
COURTYARD DRAINAGE
PIPELINES FOR REDUNDANCY
LINE H
H2
N2
BALANCE PIPE BETWEEN DC03
COURTYARD DRAINAGE
PIPELINES FOR REDUNDANCY
LINE Q
Q2

| | | |

MAJOR FLOWS WILL OVETOP KERB INTO DRAINAGE CHANNEL

DC03 BUILDING
FFL 35.75

DC02 BUILDING
FFL 36.05

DC01 BUILDING
FFL 35.05

GLENDENNING ROAD FRONTAGE BYPASS CATCHMENT

GLENDENNING ROAD

EASTERN CREEK

WOODSTOCK AVENUE

EXISTING WAREHOUSE AND HARDSTAND TO BE DEMOLISHED

TERRESTRIAL BIODIVERSITY AREA TO BE PROTECTED AND RETAINED

CAT1A
CATCHMENT AREA = 7604m²
IMPERVIOUS AREA = 3042m²
FRACTION IMPERVIOUS = 40%

CAT1B
CATCHMENT AREA = 853m²
IMPERVIOUS AREA = 85m²
FRACTION IMPERVIOUS = 10%

CAT2A
CATCHMENT AREA = 8724m²
IMPERVIOUS AREA = 872m²
FRACTION IMPERVIOUS = 10%

CAT2B
CATCHMENT AREA = 5419m²
IMPERVIOUS AREA = 2439m²
FRACTION IMPERVIOUS = 45%

CAT3
CATCHMENT AREA = 3023m²
IMPERVIOUS AREA = 302m²
FRACTION IMPERVIOUS = 10%

CAT4
CATCHMENT AREA = 1430m²
FRACTION IMPERVIOUS = 0%

NOTE:

DENOTES IMPERVIOUS ROOF AREAS

SCALE 1:500 @ A0 — 0 5 10 20 30 40 50 metres

NOTES

KEYNOTES

OVERLAND FLOW PATH ROUTE FOR UPSTREAM DIVERSION SWALE AND EXTERNAL UPSTREAM CATCHMENT

OVERLAND FLOW PATH ROUTE WITHIN ROAD NETWORK

OVERLAND FLOW PATH ROUTE FROM SITE TO EXTERNAL TRUNK DRAINAGE SYSTEM

LEGEND

REV	DATE	DESCRIPTION	DRN	ENG	CHK	APP
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MECHANICAL/ ELECTRICAL ENGINEER:
LCI CONSULTANTS
02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

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02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

CIVIL ENGINEER:
ACOR CONSULTANTS PTY LTD
02 9438 5098
SUITE 2, LEVEL 1, 33 HERBERT STREET,
ST LEONARDS NSW 2065

STRUCTURAL ENGINEER:
VAN DER MEER CONSULTING
02 94360433
LEVEL 6, 39 CHANDOS ST.
ST LEONARDS NSW 2065

ARCHITECT:
GREENNOVA ARCHITECTURE PTY LTD
02 8069 8939
LEVEL 22, 68 PITT STREET,
SYDNEY NSW 2000

LANDSCAPE:
GEOSCAPES
02 9411 1488
SUITE 3.03, 8 HELP STREET,
CHATSWOOD, NSW 2067

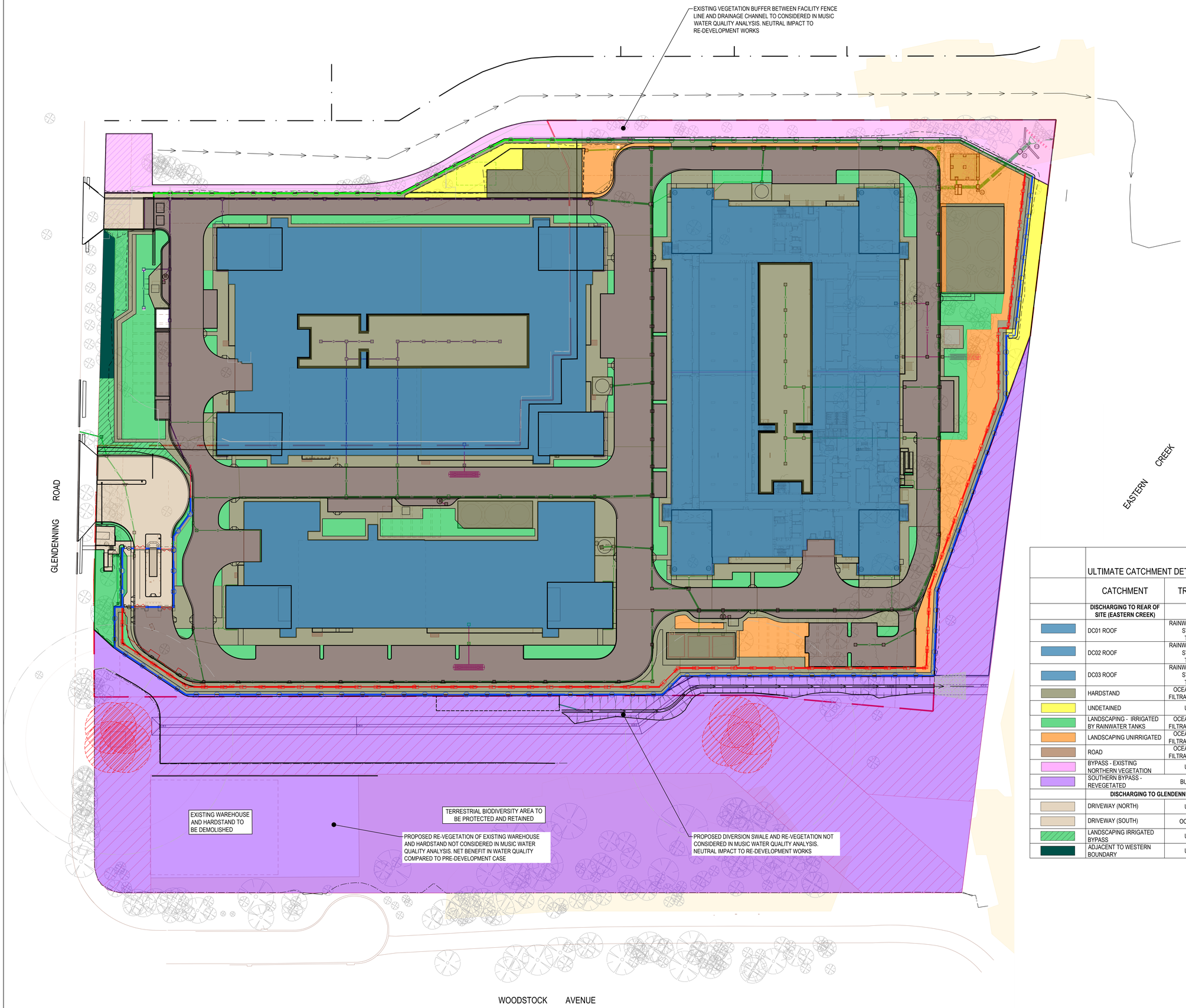
PROJECT: GLENDENNING ROAD DATA CENTRE

TITLE: CIVIL SERVICES
STORMWATER DRAINAGE - DRAINAGE CATCHMENT

DRAWING: GRDC86-ACR-00-XX-DR-SSDA-C-1120

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ISO A0	1:500		A

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ULTIMATE CATCHMENT DETAILS

	CATCHMENT	TREATMENT	AREA	PERCENTAGE IMPERVIOUS
	DISCHARGING TO REAR OF SITE (EASTERN CREEK)		(m²)	
	DC01 ROOF	RAINWATER REUSE AND STORMFILTER TREATMENT	11010	100
	DC02 ROOF	RAINWATER REUSE AND STORMFILTER TREATMENT	5725	100
	DC03 ROOF	RAINWATER REUSE AND STORMFILTER TREATMENT	11010	100
	HARDSTAND	OCEAN GUARDS AND FILTRATION TREATMENT	13976	100
	UNDETAINED	UNTREATED	995	100
	LANDSCAPING - IRRIGATED BY RAINWATER TANKS	OCEAN GUARDS AND FILTRATION TREATMENT	4419	0
	LANDSCAPING UNIRRIGATED	OCEAN GUARDS AND FILTRATION TREATMENT	2880	0
	ROAD	OCEAN GUARDS AND FILTRATION TREATMENT	17824	100
	BYPASS - EXISTING NORTHERN VEGETATION	UNTREATED	2930	0
	SOUTHERN BYPASS - REVEGETATED	BUFFER SWALE	29980	16
	DISCHARGING TO GLENDENNING ROAD			
	DRIVEWAY (NORTH)	UNTREATED	224	0
	DRIVEWAY (SOUTH)	OCEAN GUARDS	1675	100
	LANDSCAPING IRRIGATED BYPASS	UNTREATED	291	0
	ADJACENT TO WESTERN BOUNDARY	UNTREATED	290	0

NOTES

KEYNOTES

LEGEND

REV	DATE	DESCRIPTION	DRN	ENG	CHK	APP
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A	20NOV2024	SSDA ISSUE	DW	JF	MB	MB
B	08OCT2025	RE-ISSUE SSDA ISSUE	JK	JF	MB	MB

MECHANICAL/ ELECTRICAL ENGINEER:
LCI CONSULTANTS
02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

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02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

CIVIL ENGINEER:
ACOR CONSULTANTS PTY LTD
02 9438 5088
SUITE 2, LEVEL 1, 33 HERBERT STREET,
ST LEONARDS NSW 2065

STRUCTURAL ENGINEER:
VAN DER MEER CONSULTING
02 94360433
LEVEL 8, 39 CHANDOS ST,
ST LEONARDS NSW 2065

ARCHITECT:
GREENBOX ARCHITECTURE PTY LTD
02 8069 8939
LEVEL 22, 68 PITT STREET,
SYDNEY NSW 2000

LANDSCAPE:
GEOSCAPES
02 9411 1485
SUITE 3.03, 6 HELP STREET,
CHATSWOOD, NSW 2067

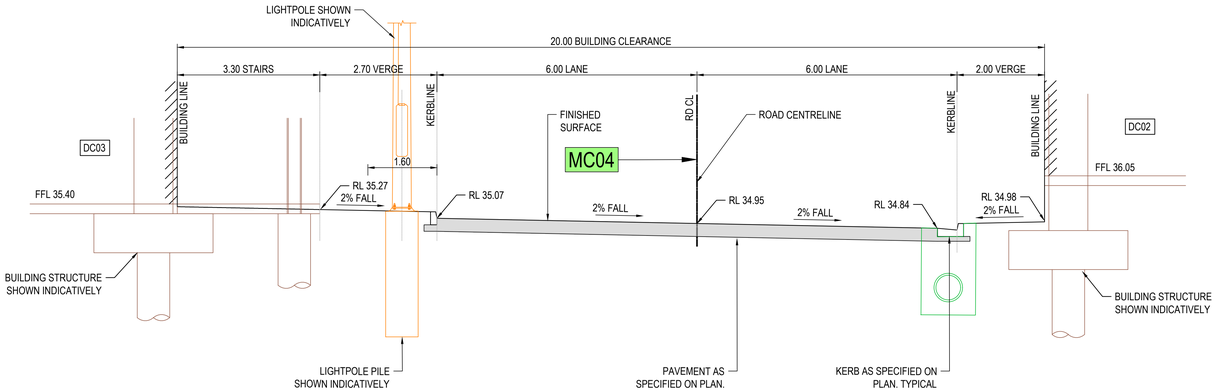
PROJECT: GLENDENNING ROAD DATA CENTRE

TITLE: CIVIL SERVICES
STORMWATER DRAINAGE
STORMWATER QUALITY CATCHMENT

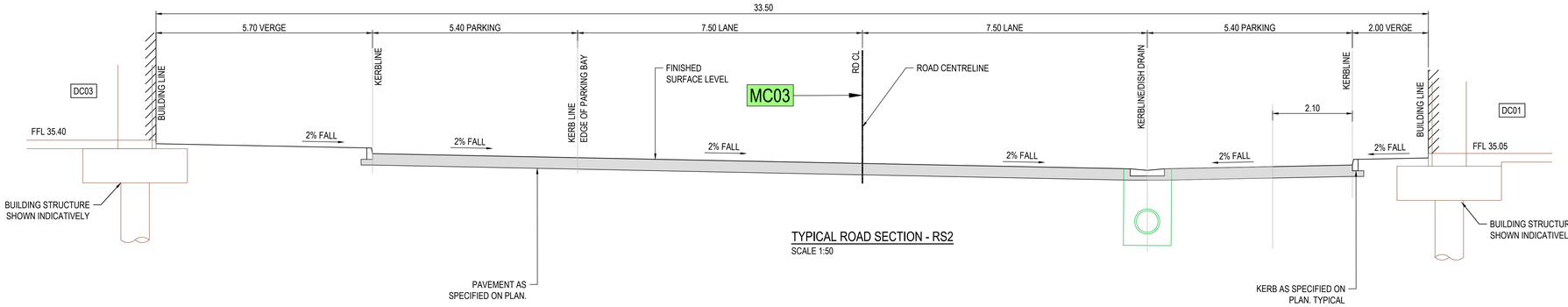
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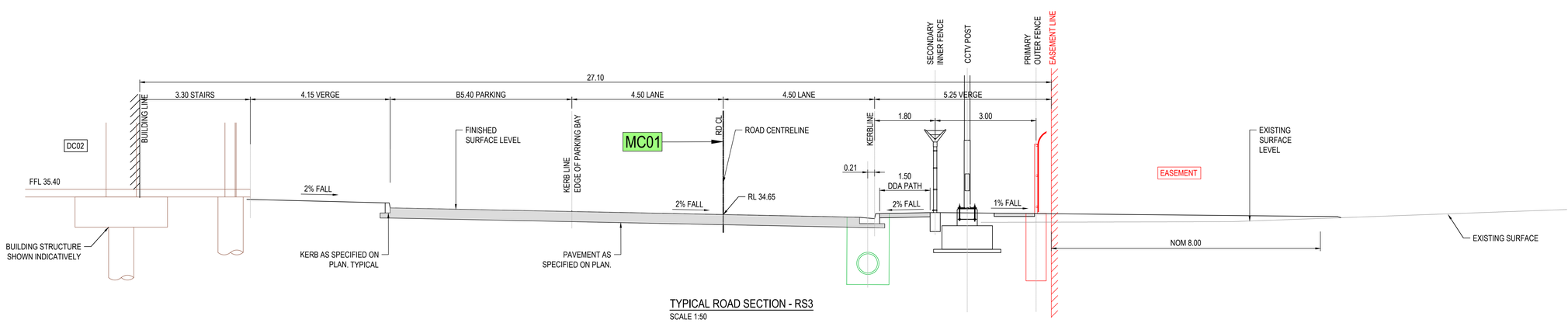
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TYPICAL ROAD SECTION - RS1
SCALE 1:50



TYPICAL ROAD SECTION - RS2
SCALE 1:50



TYPICAL ROAD SECTION - RS3
SCALE 1:50

SCALE 1:50 @ A0 0 0.5 1 2 3 4 5 metres

NOTES

KEYNOTES

LEGEND

REV	DATE	DESCRIPTION	DRN	ENG	CHK	APP
P1	13NOV2024	DRAFT SSDA ISSUE	DW	JF	MB	MB
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ST LEONARDS NSW 2065

STRUCTURAL ENGINEER:
VAN DER MEER CONSULTING
02 94360433
LEVEL 6, 39 CHANDOS ST.,
ST LEONARDS NSW 2065

ARCHITECT:
GREENBOX ARCHITECTURE PTY LTD
02 8069 8939
LEVEL 22, 68 PITT STREET,
SYDNEY NSW 2000

LANDSCAPE:
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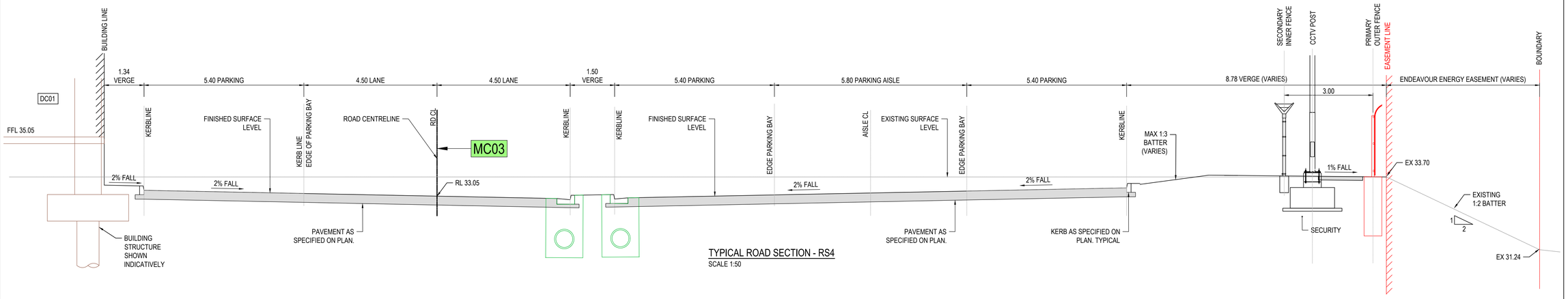
PROJECT: GLENDENNING ROAD DATA CENTRE

TITLE: CIVIL SERVICES
TYPICAL ROAD SECTIONS - SHEET 1

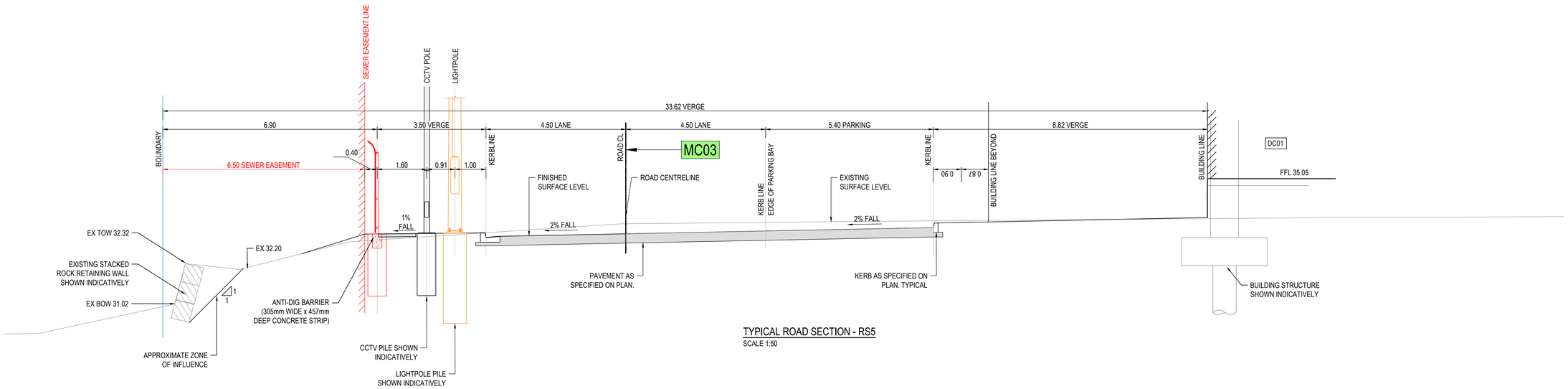
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ISO A0	AS SHOWN		A

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TYPICAL ROAD SECTION - RS4
SCALE 1:50



TYPICAL ROAD SECTION - RS5
SCALE 1:50

SCALE 1:50 @ A0 0 0.5 1 2 3 4 5 metres

NOTES

KEYNOTES

LEGEND

REV	DATE	DESCRIPTION	DRN	ENG	CHK	APP
P1	13NOV2024	DRAFT SSDA ISSUE	DW	JF	MB	MB
A	20NOV2024	SSDA ISSUE	DW	JF	MB	MB

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02 9157 0570
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NORTH SYDNEY NSW 2060

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NORTH SYDNEY NSW 2060

CIVIL ENGINEER:
ACOR CONSULTANTS PTY LTD
02 9438 5098
SUITE 2, LEVEL 1, 33 HERBERT STREET,
ST LEONARDS NSW 2065

STRUCTURAL ENGINEER:
VAN DER MEER CONSULTING
02 94360433
LEVEL 6, 39 CHANDOS ST,
ST LEONARDS NSW 2065

ARCHITECT:
GRIDINDOX ARCHITECTURE PTY LTD
02 8069 8939
LEVEL 22, 66 PITT STREET,
SYDNEY NSW 2000

LANDSCAPE:
GEOSCAPES
02 9411 1488
SUITE 3.03, 8 HELP STREET,
CHATSWOOD, NSW 2067

PROJECT: GLENDENNING ROAD DATA CENTRE

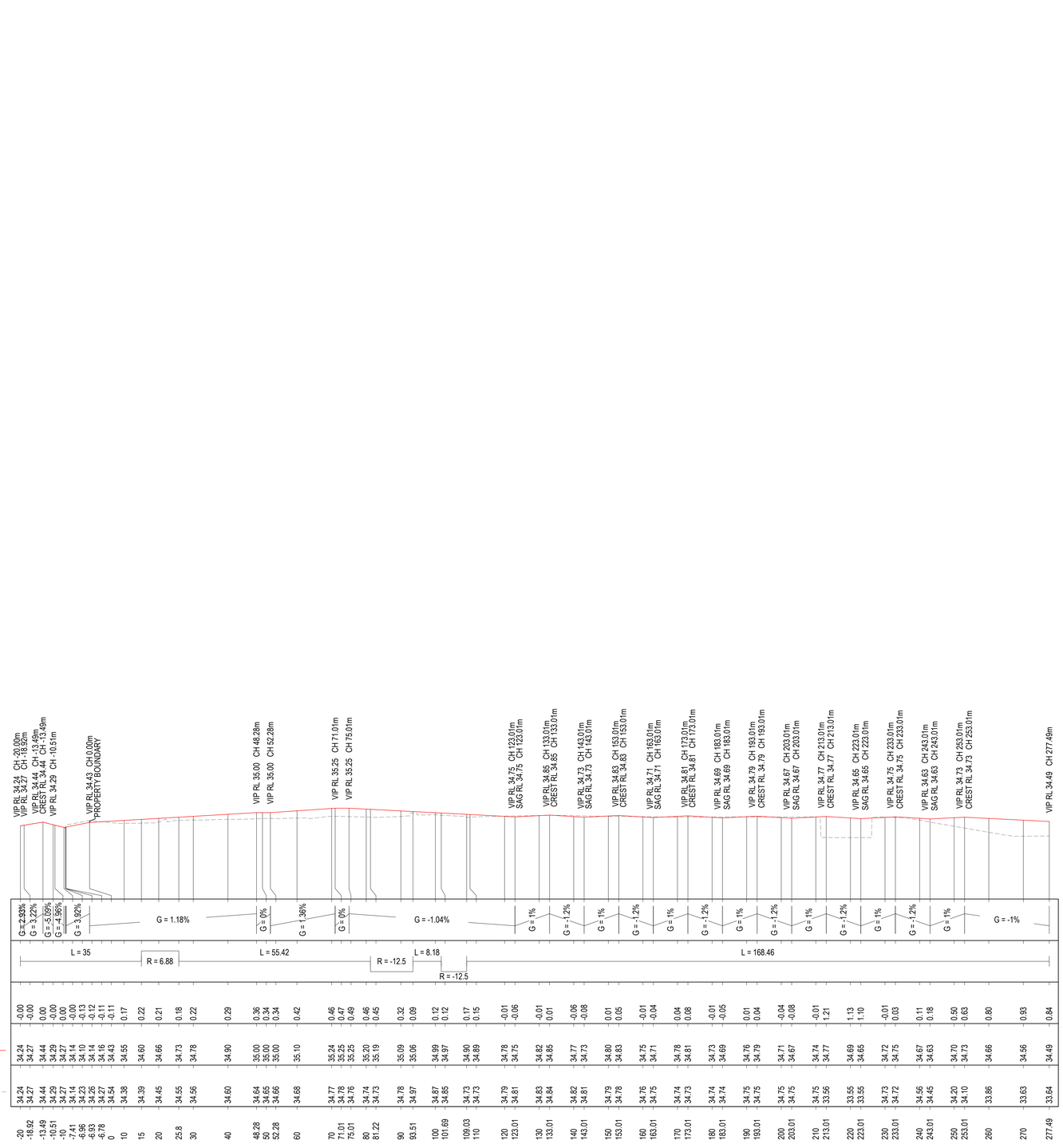
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TYPICAL ROAD SECTIONS - SHEET 2

DRAWING: GRDC86-ACR-00-XX-DR-SSDA-C-2226

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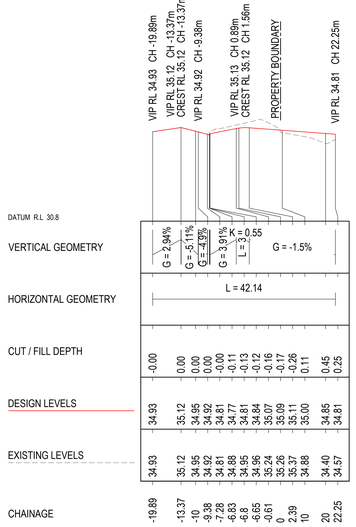
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MC08
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DC03 BUILDING
FFL 35.75
DC01 BUILDING
FFL 35.05
DC02 BUILDING
FFL 36.05
GENERATOR ROOM FFL 34.40
GENERATOR ROOM FFL 34.10
GENERATOR ROOM FFL 35.25
GENERATOR ROOM FFL 34.70
GENERATOR ROOM FFL 33.80
GENERATOR ROOM FFL 33.60
GENERATOR ROOM FFL 34.70
GENERATOR ROOM FFL 34.00
GENERATOR ROOM FFL 35.50
GENERATOR ROOM FFL 35.25
ROAD
GLENDENNING
EASTERN CREEK
WOODSTOCK AVENUE
EXISTING WAREHOUSE AND HARDSTAND TO BE DEMOLISHED
TERRESTRIAL BIODIVERSITY AREA TO BE PROTECTED AND RETAINED
CT 207.44
TC 306.22
CT 312.5
TC 459.47
CT 468.32
TC 474.41
CT 487.26
TC 13.13
CT 22.56
TC 81.22
CT 95.68
TC 101.03
CT 109.52
CT 21.69
TC 15.37
CT 25.8
TC 33.58
CT 277.49
CT 168.28
CT 187.77
CT 206.85
CT 220.59
CT 233.37
CT 247.07
CT 260.85
CT 274.63
CT 288.41
CT 302.19
CT 315.97
CT 329.75
CT 343.53
CT 357.31
CT 371.09
CT 384.87
CT 398.65
CT 412.43
CT 426.21
CT 439.99
CT 453.77
CT 467.55
CT 481.33
CT 495.11
CT 508.89
CT



ROAD LONGITUDINAL SECTION - MC01

A1 Horizontal Scale 1 : 500
A1 Vertical scale 1 : 100



ROAD LONGITUDINAL SECTION - MC02

A1 Horizontal Scale 1 : 500
A1 Vertical scale 1 : 100

SCALE 1:100 @ A0 — 0 1 2 4 6 8 10 metres

SCALE 1:500 @ A0 — 0 5 10 20 30 40 50 metres

NOTES

KEYNOTES

LEGEND

REV	DATE	DESCRIPTION	DRN	ENG	CHK	APP
P1	13NOV2024	DRAFT SSDA ISSUE	DW	JF	MB	MB
A	26NOV2024	SSDA ISSUE	DW	JF	MB	MB

MECHANICAL/ ELECTRICAL ENGINEER:
LCI CONSULTANTS
02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

HYDRAULIC/ FIRE ENGINEER:
LCI CONSULTANTS
02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

CIVIL ENGINEER:
ACOR CONSULTANTS PTY LTD
02 9438 5098
SUITE 2, LEVEL 1, 33 HERBERT STREET,
ST LEONARDS NSW 2065

STRUCTURAL ENGINEER:
VAN DER MEER CONSULTING
02 94380433
LEVEL 6, 39 CHANDOS ST,
ST LEONARDS NSW 2065

ARCHITECT:
GREENBOX ARCHITECTURE PTY LTD
02 8065 8539
LEVEL 22, 68 PITT STREET,
SYDNEY NSW 2000

LANDSCAPE:
GEOSCAPES
02 9411 1485
SUITE 3.03, 8 HELP STREET,
CHATSWOOD, NSW 2067

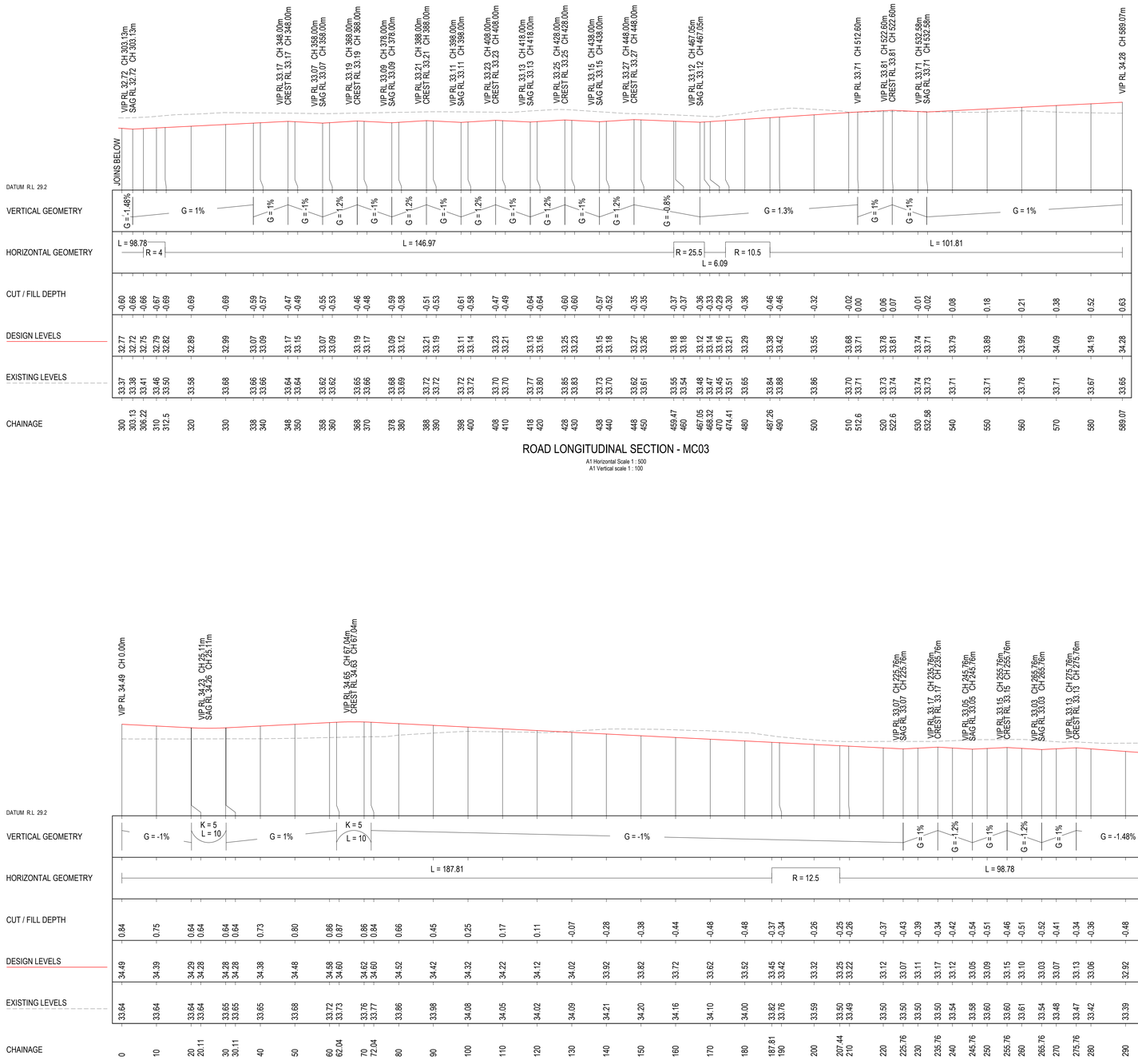
PROJECT: GLENDENNING ROAD DATA CENTRE

TITLE: CIVIL SERVICES
ROAD LONGITUDINAL SECTIONS - SHEET 1

DRAWING: GRDC86-ACR-00-XX-DR-SSDA-C-2251

PAPER SIZE:	SCALE:	REV:
ISO A0	AS SHOWN	A

PRINT IN COLOUR



ROAD LONGITUDINAL SECTION - MC03

A1 Horizontal Scale 1 : 500
A1 Vertical scale 1 : 100

ROAD LONGITUDINAL SECTION - MC03

A1 Horizontal Scale 1 : 500
A1 Vertical scale 1 : 100

SCALE 1:100 @ A0 — 0 1 2 4 6 8 10 metres

SCALE 1:500 @ A0 — 0 5 10 20 30 40 50 metres

NOTES

KEYNOTES

LEGEND

REV	DATE	DESCRIPTION	DRN	ENG	CHK	APP
P1	13NOV2024	DRAFT SSDA ISSUE	DW	JF	MB	MB
A	20NOV2024	SSDA ISSUE	DW	JF	MB	MB

MECHANICAL/ ELECTRICAL ENGINEER:
LCI CONSULTANTS
02 9157 0570
LEVEL 5, 73 MILLER S TREET,
NORTH SYDNEY NSW 2060

HYDRAULIC/ FIRE ENGINEER:
LCI CONSULTANTS
02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

CIVIL ENGINEER:
ACOR CONSULTANTS PTY LTD
02 9438 5098
SUITE 2, LEVEL 1, 33 HERBERT STREET,
ST LEONARDS NSW 2065

STRUCTURAL ENGINEER:
VAN DER MEER CONSULTING
02 94360433
LEVEL 6, 39 CHANDOS ST.,
ST LEONARDS NSW 2065

ARCHITECT:
GREENBOX ARCHITECTURE PTY LTD
02 8069 8939
LEVEL 22, 68 PITT STREET,
SYDNEY NSW 2000

LANDSCAPE:
GEOSCAPES
02 9411 1488
SUITE 3.03, 8 HELP STREET,
CHATSWOOD, NSW 2067

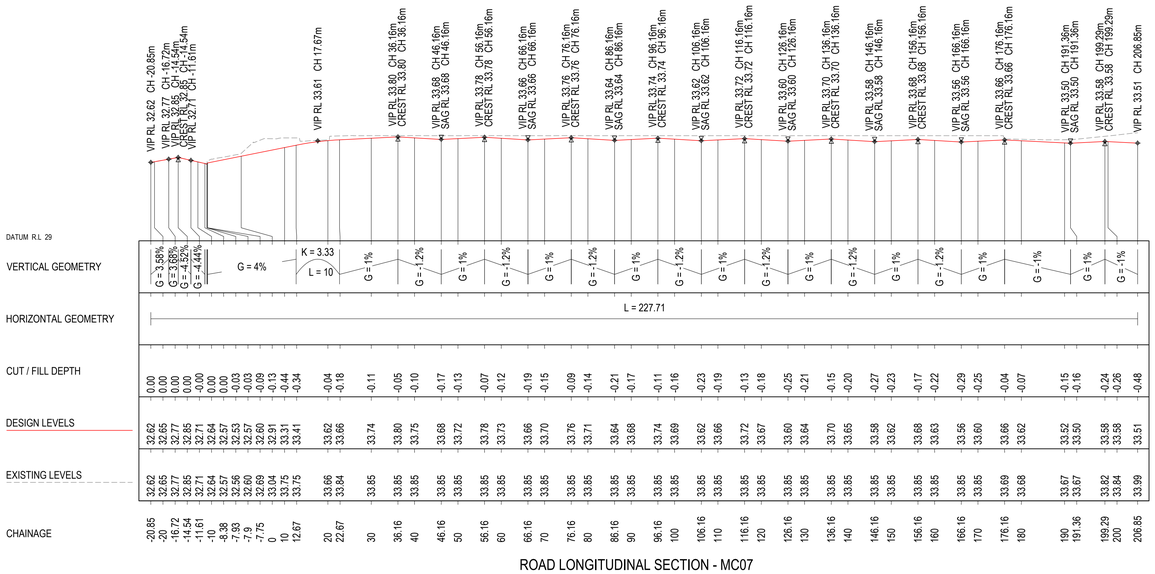
PROJECT: GLENDENNING ROAD DATA CENTRE

TITLE: CIVIL SERVICES
ROAD LONGITUDINAL SECTIONS - SHEET 2

DRAWING: GRDC86-ACR-00-XX-DR-SSDA-C-2252

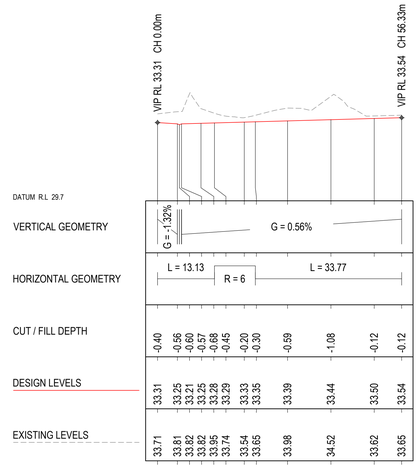
PAPER SIZE:	SCALE:	REV:
ISO A0	AS SHOWN	A

PRINT IN COLOUR



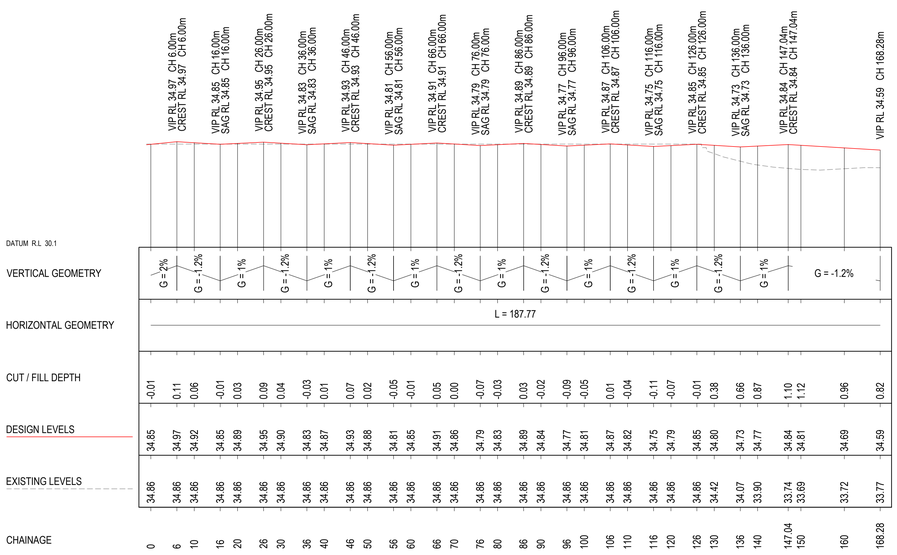
ROAD LONGITUDINAL SECTION - MC07

A1 Horizontal Scale 1 : 500
A1 Vertical scale 1 : 100



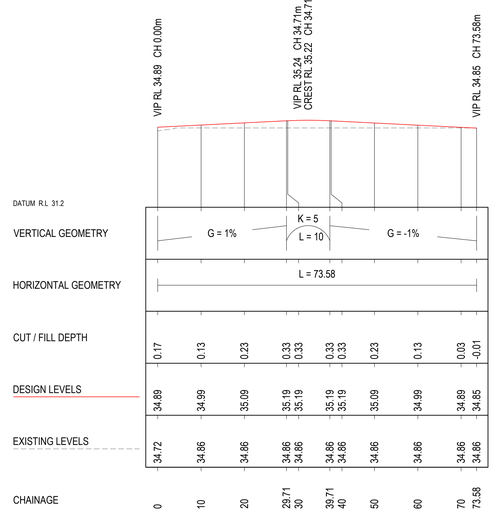
ROAD LONGITUDINAL SECTION - MC08

A1 Horizontal Scale 1 : 500
A1 Vertical scale 1 : 100



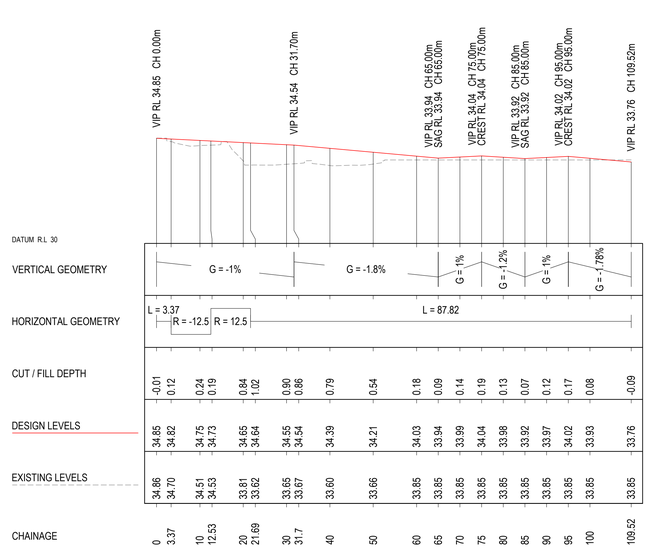
ROAD LONGITUDINAL SECTION - MC04

A1 Horizontal Scale 1 : 500
A1 Vertical scale 1 : 100



ROAD LONGITUDINAL SECTION - MC05

A1 Horizontal Scale 1 : 500
A1 Vertical scale 1 : 100



ROAD LONGITUDINAL SECTION - MC06

A1 Horizontal Scale 1 : 500
A1 Vertical scale 1 : 100

SCALE 1:100 @ A0 0 1 2 4 6 8 10 metres

SCALE 1:500 @ A0 0 5 10 20 30 40 50 metres

NOTES

KEYNOTES

LEGEND

REV	DATE	DESCRIPTION	DRN	ENG	CHK	APP
P1	13NOV2024	DRAFT SSDA ISSUE	DW	JF	MB	MB
A	20NOV2024	SSDA ISSUE	DW	JF	MB	MB

MECHANICAL/ ELECTRICAL ENGINEER:
LCI CONSULTANTS
02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

HYDRAULIC/ FIRE ENGINEER:
LCI CONSULTANTS
02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

CIVIL ENGINEER:
ACOR CONSULTANTS PTY LTD
02 9438 5098
SUITE 2, LEVEL 1, 33 HERBERT STREET,
ST LEONARDS NSW 2065

STRUCTURAL ENGINEER:
VAN DER MEER CONSULTING
02 94360433
LEVEL 6, 39 CHANDOS ST,
ST LEONARDS NSW 2065

ARCHITECT:
GREENBOX ARCHITECTURE PTY LTD
02 8069 8939
LEVEL 22, 68 PITT STREET,
SYDNEY NSW 2000

LANDSCAPE:
GEOSCAPES
02 9411 1486
SUITE 3.03, 8 HELP STREET,
CHATSWOOD, NSW 2067

PROJECT: GLENDENNING ROAD DATA CENTRE

TITLE: CIVIL SERVICES
ROAD LONGITUDINAL SECTIONS - SHEET 3

DRAWING: GRDC86-ACR-00-XX-DR-SSDA-C-2253

PAPER SIZE:	SCALE:	REV:
ISO A0	AS SHOWN	A

PRINT IN COLOUR

MW13

MW14

301187.911 E
6262534.660 N

301133.041 E
6262531.875 N

SURVEYED BY REMOTE SENSING AND ACCESS HEAVILY OVERGROWN

SURVEYED BY REMOTE SENSING AND ACCESS HEAVILY OVERGROWN

SURVEYED BY REMOTE SENSING AND ACCESS HEAVILY OVERGROWN

L 12.294
20
40.51
0
20.12
98°59'59"
L 25
98°52'16"
L 29.216
65°39'
L 12.284

ROAD

REFER TO INSET A

MW15

300961.199 E
6262370.247 N

16.36
49.205
37.148
40
20
CT 10.812
CT 2.294
0
300993.478 E
6262347.989 N

MW02

GLENDENNING

MW16

301152.830 E
6262336.678 N

32.6
L 27.316
20
CT 5.281
0
R 5.281

301185.215 E
6262314.345 N

20
20.019
0
30.104
98°32'32"
L 20.019
104°17'
L 10.085

MW01

EASTERN CREEK

WOODSTOCK AVENUE

300967.896 E
6262411.649 N

MW04

5.982
L 11.211
98°05'20"
L 11.24
10.24
L 5.982
MW05
300963.438 E
6262400.123 N
0
MW06
300964.679 E
6262398.367 N

INSET A
SCALE 1:200

SCALE 1:500 @ A0

0 5 10 20 30 40 50 metres

NOTES

KEYNOTES

LEGEND

MW01 RETAINING WALL CONTROL LINE LABEL

CONTROL LINE

REV	DATE	DESCRIPTION	DRN	ENG	CHK	APP
P1	13NOV2024	DRAFT SSDA ISSUE	DW	JF	MB	MB
A	20NOV2024	SSDA ISSUE	DW	JF	MB	MB

MECHANICAL/ ELECTRICAL ENGINEER:
LCI CONSULTANTS
02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

HYDRAULIC/ FIRE ENGINEER:
LCI CONSULTANTS
02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

CIVIL ENGINEER:
ACOR CONSULTANTS PTY LTD
02 9438 5098
SUITE 2, LEVEL 1, 33 HERBERT STREET,
ST LEONARDS NSW 2065

STRUCTURAL ENGINEER:
VAN DER MEER CONSULTING
02 94380433
LEVEL 6, 39 CHANDOS ST,
ST LEONARDS NSW 2065

ARCHITECT:
GREENBOX ARCHITECTURE PTY LTD
02 8069 8939
LEVEL 22, 68 PITT STREET,
SYDNEY NSW 2000

LANDSCAPE:
GEOSCAPES
02 9411 1486
SUITE 3.03, 8 HELP STREET,
CHATSWOOD, NSW 2067

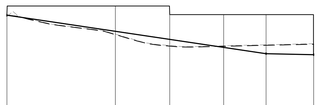
PROJECT: GLENDENNING ROAD DATA CENTRE

TITLE: CIVIL SERVICES
RETAINING WALL PLAN

DRAWING: GRDC86-ACR-00-XX-DR-SSDA-C-2300

PAPER SIZE:	SCALE:		REV:
ISO A0	1:500		A

PRINT IN COLOUR



DATUM R.L 33						
TOP OF FOOTING (NOM)	37.33	36.58	36.21	35.84	35.55	35.50
TOP OF WALL	37.37	37.75	37.35	37.35	37.35	35.50
BOTTOM OF WALL	37.33	36.58	36.21	35.84	35.55	35.50
BACK OF WALL	37.33	36.43	35.90	35.89	35.94	35.98
RETAINED HEIGHT (m)	-0.00	0.15	0.31	-0.05	-0.39	-0.48
EXISTING LEVELS	37.34	36.45	35.93	35.91	35.96	36.00
CHAINAGE	0	5	7.51	10	11.95	14.15

RETAINING WALL ELEVATION - MW15

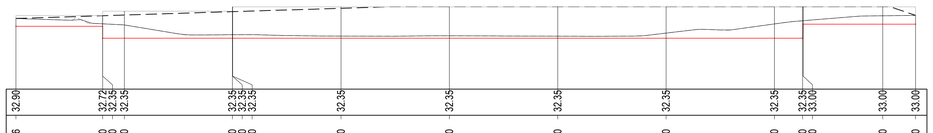
A1 Horizontal Scale 1 : 100
A1 Vertical scale 1 : 100



DATUM R.L 32																								
TOP OF FOOTING (NOM)	34.20	34.20	34.20	34.20	34.20	34.20	34.20	34.20	34.20	34.20	34.20	34.20	34.20	34.20	34.20	34.20	34.20	34.20	34.20	34.20	34.20	34.20	34.20	34.20
TOP OF WALL	35.00	35.25	35.25	35.25	35.25	35.25	35.25	35.25	35.25	35.25	35.25	35.25	35.25	35.25	35.25	35.25	35.25	35.25	35.25	35.25	35.25	35.25	35.25	34.91
BOTTOM OF WALL	34.60	34.54	34.51	34.50	34.45	34.41	34.40	34.40	34.40	34.42	34.44	34.44	34.46	34.49	34.51									
BACK OF WALL	35.00	35.14	35.16	35.17	35.18	35.12	35.12	35.12	35.12	35.12	35.12	35.13	35.22	35.10										
RETAINED HEIGHT (m)	-0.80	-0.94	-0.96	-0.97	-0.98	-0.92	-0.92	-0.92	-0.92	-0.92	-0.92	-0.93	-1.02	-0.90										
EXISTING LEVELS	33.63	33.63	33.63	33.63	33.64	33.64	33.65	33.65	33.65	33.66	33.66	33.66	33.66	33.67	33.67									
CHAINAGE	0	2.35	3.96	5	10	15	16.01	19.61	20	23	25	25.66	27.63	30	32.61									

RETAINING WALL ELEVATION - MW16

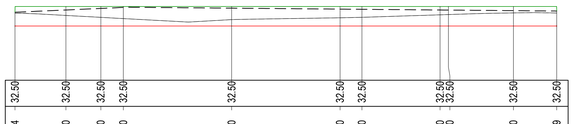
A1 Horizontal Scale 1 : 100
A1 Vertical scale 1 : 100



DATUM R.L 30																								
TOP OF FOOTING (NOM)	32.90	32.72	32.35	32.35	32.35	32.35	32.35	32.35	32.35	32.35	32.35	33.00	33.00	33.00										
TOP OF WALL	33.26	33.40	33.60	33.80	33.80	33.80	33.80	33.80	33.80	33.80	33.80	33.80	33.80	33.40										
BOTTOM OF WALL	33.26	33.02	32.96	32.51	32.51	32.45	32.46	32.44	32.59	33.01	33.16	33.39	33.40											
BACK OF WALL	33.26	33.39	33.42	33.58	33.58	33.73	33.80	33.80	33.80	33.80	33.80	33.80												
RETAINED HEIGHT (m)	-0.36	-0.67	-1.04	-1.23	-1.23	-1.38	-1.45	-1.45	-1.45	-1.45	-1.45	-0.80	-0.80											
EXISTING LEVELS	33.26	33.02	32.96	32.51	32.51	32.45	32.46	32.44	32.59	33.01	33.16	33.39	33.40											
CHAINAGE	0	4	5	9.99	9.99	10	15	20	25	30	35	36.3	36.33	40	41.52									

RETAINING WALL ELEVATION - MW13

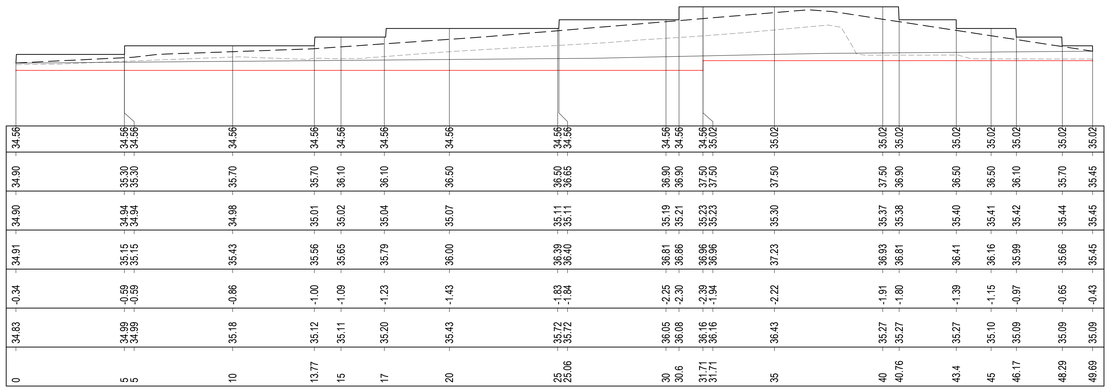
A1 Horizontal Scale 1 : 100
A1 Vertical scale 1 : 100



DATUM R.L 30																								
TOP OF FOOTING (NOM)	32.50	32.50	32.50	32.50	32.50	32.50	32.50	32.50	32.50	32.50	32.50	32.50	32.50	32.50										
TOP OF WALL	33.14	33.40	33.40	33.40	33.40	33.40	33.40	33.40	33.40	33.40	33.40	33.40	33.40	33.19										
BOTTOM OF WALL	33.09	32.99	32.90	32.84	32.80	32.88	32.90	33.02	33.03	33.11	33.10													
BACK OF WALL	33.14	33.24	33.31	33.36	33.32	33.28	33.27	33.24	33.24	33.21														
RETAINED HEIGHT (m)	-0.64	-0.74	-0.81	-0.86	-0.82	-0.78	-0.77	-0.74	-0.74	-0.71														
EXISTING LEVELS	33.09	32.99	32.90	32.84	32.80	32.88	32.90	33.02	33.03	33.10	33.10													
CHAINAGE	0	2.35	3.96	5	10	15	16.01	19.61	20	23	25													

RETAINING WALL ELEVATION - MW14

A1 Horizontal Scale 1 : 100
A1 Vertical scale 1 : 100



DATUM R.L 32																								
TOP OF FOOTING (NOM)	34.56	34.56	34.56	34.56	34.56	34.56	34.56	34.56	34.56	34.56	34.56	35.02	35.02	35.02	35.02	35.02	35.02	35.02	35.02					
TOP OF WALL	34.90	35.30	35.70	35.70	36.10	36.10	36.50	36.50	36.65	36.90	36.90	37.50	37.50	37.50	36.90	36.50	36.50	36.10	35.70	35.45				
BOTTOM OF WALL	34.90	34.94	34.98	35.01	35.02	35.04	35.07	35.11	35.11	35.19	35.21	35.23	35.23	35.30	35.37	35.38	35.40	35.41	35.42	35.44	35.45			
BACK OF WALL	34.91	35.15	35.43	35.56	35.65	35.79	36.00	36.39	36.40	36.81	36.86	36.96	36.96	37.23	36.93	36.81	36.41	36.16	35.99	35.66	35.45			
RETAINED HEIGHT (m)	-0.34	-0.59	-0.86	-1.00	-1.09	-1.23	-1.43	-1.83	-1.84	-2.25	-2.30	-2.39	-1.94	-2.22	-1.91	-1.80	-1.39	-1.15	-0.97	-0.65	-0.43			
EXISTING LEVELS	34.83	34.99	35.18	35.12	35.11	35.20	35.43	35.72	35.72	36.05	36.08	36.16	36.16	36.43	35.27	35.27	35.27	35.10	35.09	35.09	35.09			
CHAINAGE	0	5	10	13.77	15	17	20	25	25.06	30	30.6	31.71	31.71	35	40	40.76	43.4	45	46.17	48.29	49.69			

RETAINING WALL ELEVATION - MW02

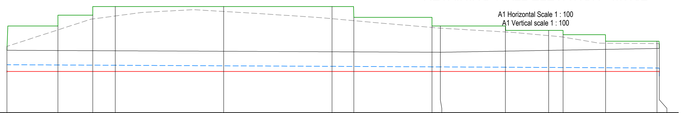
A1 Horizontal Scale 1 : 100
A1 Vertical scale 1 : 100



DATUM R.L 33						
TOP OF FOOTING (NOM)	35.40	35.40	35.40			
TOP OF WALL	35.60	36.10	36.10			
BOTTOM OF WALL	35.52	35.54	35.90			
EXISTING LEVELS	35.42	35.83	36.00			
HEIGHT	-0.02	-0.43	-0.60			
CHAINAGE	0	5	10			

RETAINING WALL ELEVATION - MW06

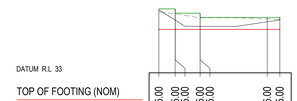
A1 Horizontal Scale 1 : 100
A1 Vertical scale 1 : 100



DATUM R.L 31									
TOP OF FOOTING (NOM)	32.90	32.90	32.90	32.90	32.90	32.90	32.90	32.90	32.90	32.90	32.90	32.90	32.90	32.90	32.90	32.90	32.90	32.90	32.90	32.90	32.90	32.90	32.90	32.90
TOP OF WALL	33.88	35.00	35.50	35.90	35.90	35.90	35.40	35.00	35.00	35.00	34.80	34.61	34.30	34.10	33.95									
BOTTOM OF WALL	33.88	33.87	33.86	33.86	33.83	33.81	33.81	33.79	33.79	33.84	33.88	33.89	33.92	33.95	33.95									
BASE OF SWALE	33.21	33.20	33.19	33.19	33.16	33.14	33.13	33.12	33.11	33.10	33.09	33.08	33.07	33.06	33.06									
EXISTING LEVELS	34.06	34.82	35.33	35.46	35.67	35.34	35.25	34.94	34.90	34.73	34.56	34.49	34.21	34.19	34.19									
RETAINED HEIGHT (m)	-1.16	-1.92	-2.43	-2.56	-2.77	-2.44	-2.35	-2.04	-2.00	-1.83	-1.66	-1.59	-1.31	-1.29	-1.29									
CHAINAGE	0	2.35	3.96	5	10	15	16.01	19.61	20	23	25	25.66	27.63	30	30.11									

RETAINING WALL ELEVATION - MW01

A1 Horizontal Scale 1 : 100
A1 Vertical scale 1 : 100



DATUM R.L 33						
TOP OF FOOTING (NOM)	35.00	35.00	35.00	35.00	35.00	35.00
TOP OF WALL	35.90	35.95	35.75	35.55	35.55	35.44
BOTTOM OF WALL	35.90	35.43	35.14	35.14	35.35	35.44
EXISTING LEVELS	35.81	35.72	35.54	35.54	35.48	35.46
RETAINED HEIGHT (m)	-0.81	-0.72	-0.54	-0.54	-0.48	-0.46
CHAINAGE	0	0.75	0.76	1.9	1.9	5	5.58

RETAINING WALL ELEVATION - MW04

A1 Horizontal Scale 1 : 100
A1 Vertical scale 1 : 100



DATUM R.L 33			
TOP OF FOOTING (NOM)	35.00	35.00	35.00
TOP OF WALL	35.52	35.88	35.16
BOTTOM OF WALL	35.52	35.17	35.16
EXISTING LEVELS	35.60	35.78	35.63
HEIGHT	-0.60	-0.78	-0.63
CHAINAGE	0	5	8.38

RETAINING WALL ELEVATION - MW05

A1 Horizontal Scale 1 : 100
A1 Vertical scale 1 : 100

SCALE 1:100 @ A0 — 0 1 2 4 6 8 10 metres

NOTES

KEYNOTES

1. THE REFERENCE TOP OF WALL HAS BEEN SHOWN AS THE FINISHED SURFACE LEVEL AT THE TOP OF WALL
2. THE REFERENCE BOTTOM OF WALL LEVEL HAS BEEN TAKEN AT THE SURFACE LEVEL AT THE BOTTOM OF THE WALL.
3. REFER TO STRUCTURAL DRAWING GRDC-VDM-00-XX-DR-S-5011 FOR RETAINING WALL STRUCTURAL DETAILS.

LEGEND

REV	DATE	DESCRIPTION	DRN	ENG	CHK	APP
P1	13NOV2024	DRAFT SSDA ISSUE	DW	JF	MB	MB
A	20NOV2024	SSDA ISSUE	DW	JF	MB	MB

MECHANICAL/ ELECTRICAL ENGINEER:
LCI CONSULTANTS
02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

HYDRAULIC/ FIRE ENGINEER:
LCI CONSULTANTS
02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

CIVIL ENGINEER:
ACOR CONSULTANTS PTY LTD
02 9438 0398
SUITE 2, LEVEL 1, 33 HERBERT STREET,
ST LEONARDS NSW 2065

STRUCTURAL ENGINEER:
VAN DER MEER CONSULTING
02 94360433
LEVEL 6, 39 CHANDOS ST,
ST LEONARDS NSW 2065

ARCHITECT:
GREENBOX ARCHITECTURE PTY LTD
02 8069 8939
LEVEL 22, 68 PITT STREET,
SYDNEY NSW 2000

LANDSCAPE:
GEOSCAPES
02 9411 1485
SUITE 3.03, 8 HELP STREET,
CHATSWOOD, NSW 2067

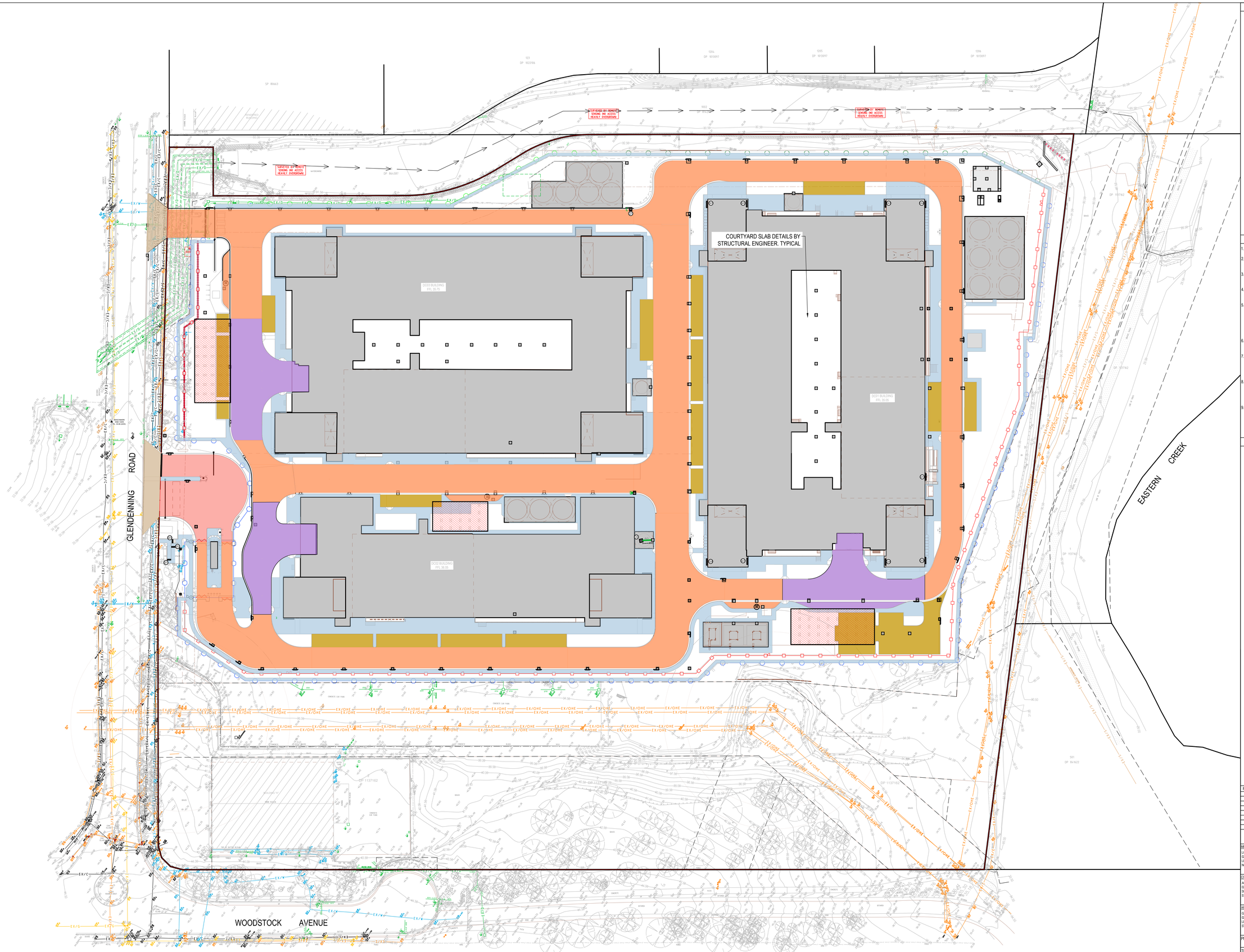
PROJECT: GLENDENNING ROAD DATA CENTRE

TITLE: CIVIL SERVICES
RETAINING WALL LONGITUDINAL SECTIONS
SHEET 1

DRAWING: GRDC86-ACR-00-XX-DR-SSDA-C-2310

PAPER SIZE:	SCALE:		REV:
ISO A0	AS SHOWN		A

PRINT IN COLOUR



NOTES

N

KEYNOTES

1. REFER TO STRUCTURAL DOCUMENTATION FOR STRUCTURAL DOCUMENTATION FOR STRUCTURAL SLAB AND PLINTH DETAILS.
2. REFER TO STRUCTURAL DOCUMENTATION FOR STRUCTURAL DOCUMENTATION FOR PAVEMENT DETAILS FOR ELEVATED WALKWAYS AND INTERNAL BUILDING COURTYARD SLABS.
3. FINAL PAVEMENT DETAILS OVER THE UNDERGROUND BULK FUEL STORAGE TANKS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS.
4. THE GENERAL CONTRACTOR SHALL ALLOW FOR CONCRETE PADS, FOOTINGS AND OR PAVEMENTS FOR BOLLARDS, PEDESTALS, PILLARS AND THE LIKE AS REQUIRED BY THE MANUFACTURER
5. THE GENERAL CONTRACTOR SHALL ALLOW TO CONSTRUCT A MINIMUM 1.2m WIDTH CONCRETE FOOTPATH ALONG THE INSIDE OF THE PRIMARY OUTER PERIMETER FENCE. WHERE THIS CANNOT BE ACCOMMODATED DUE TO SPATIAL CONSTRAINTS, THE CONTRACTOR SHALL ALLOW TO CONSTRUCT A MINIMUM 305mm WIDE BY 457mm DEEP MASS CONCRETE ANTI-DIG BARRIER ALONG THE BASE OF THE PRIMARY OUTER PERIMETER FENCE.
6. THE GENERAL CONTRACTOR SHALL CONSTRUCT TRIMMER BARS AT ALL RE-ENTRANT CORNERS AND TO ALL CORNERS OF PITS, VAULTS, MANHOLES AND THE LIKE.
7. FINAL LOCATION OF RIGID PAVEMENT JOINTS SHALL BE COORDINATED BY THE GENERAL CONTRACTOR WITH THE AS-CONSTRUCTED PIT, VAULT AND CHAMBER LOCATIONS. THE ENGINEER OF RECORD SHALL REVIEW AND APPROVE THE PROPOSED JOINT LOCATIONS PRIOR TO SETOUT AND CONSTRUCTION OF RIGID PAVEMENTS.
8. UNDERGROUND FUEL STORAGE TANK INSTALLATION, BACKFILL AND PAVEMENT FINISH REQUIREMENTS SHALL BE IN ACCORDANCE WITH TD_IM_004 INSTALLATION MANUAL BY TANK SOLUTIONS. THE BULK FUEL STORAGE TANKS SHALL BE INSTALLED WITH MINIMUM 1000mm BACKFILL DEPTH TO ACHIEVE TRAFFICABLE INSTALLATION REQUIREMENTS.
9. PROVIDE ISOLATION JOINTS BETWEEN CONCRETE PAVEMENTS AND ALL BUILDINGS, WALLS, FOOTINGS, COLUMNS, PLINTHS, KERBS, DISH DRAINS, GRATED DRAINS, BOLLARD FOOTINGS AND THE LIKE. ISOLATION JOINTS NOT SHOWN ON PLAN.

LEGEND

- PAVEMENT TYPE F1 — FULL DEPTH ASPHALT ENTRY PAVEMENT
- PAVEMENT TYPE F2 — CIRCULATION ROAD ASPHALT PAVEMENT
- PAVEMENT TYPE F4 — CARPARK ASPHALT PAVEMENT
- PAVEMENT TYPE R1 — LOADING DOCK CONCRETE PAVEMENT
- PAVEMENT TYPE R2 — FOOTPATH AND VERGE HARDSTAND PAVEMENT
- PAVEMENT TYPE R3 — INDUSTRIAL DRIVEWAY CROSSING IN ACCORDANCE WITH BLACKTOWN CITY COUNCIL STANDARD A(BS)103S
- STRUCTURAL SLAB OR PLINTH
- UNDERGROUND BULK FUEL STORAGE TANK — REFER TO NOTE 8

REV	DATE	DESCRIPTION	DRN	ENG	CHK	APP
P1	13NOV2024	DRAFT SSDA ISSUE	DW	JF	MB	MB
A	20NOV2024	SSDA ISSUE	DW	JF	MB	MB

MECHANICAL/ ELECTRICAL ENGINEER:
LCI CONSULTANTS
02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

HYDRAULIC/ FIRE ENGINEER:
LCI CONSULTANTS
02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

CIVIL ENGINEER:
ACOR CONSULTANTS PTY LTD
02 9438 5098
SUITE 2, LEVEL 1, 33 HERBERT STREET,
ST LEONARDS NSW 2065

STRUCTURAL ENGINEER:
VAN DER MEER CONSULTING
02 94380433
LEVEL 6, 39 CHANDOS ST,
ST LEONARDS NSW 2065

ARCHITECT:
GREENBOX ARCHITECTURE PTY LTD
02 8068 8509
LEVEL 22, 08 PITT STREET,
SYDNEY NSW 2000

LANDSCAPE:
GEOSCAPES
02 9411 1488
SUITE 3.03, 8 HELP STREET,
CHATSWOOD, NSW 2067

PROJECT: GLENDENNING ROAD DATA CENTRE

TITLE: CIVIL SERVICES PAVEMENT PLAN

DRAWING: GRDC86-ACR-00-XX-DR-SSDA-C-2500

PAPER SIZE:	SCALE:		REV:
ISO A0	1:500		A

PRINT IN COLOUR

DC03 BUILDING
FFL 35.75

DC01 BUILDING
FFL 35.05

DC02 BUILDING
FFL 36.05

19.0m

GRDC86-ACR-00-XX-DR-SSDA-C-2702 INSET H

GRDC86-ACR-00-XX-DR-SSDA-C-2702 INSET G

GRDC86-ACR-00-XX-DR-SSDA-C-2704 INSET R
GRDC86-ACR-00-XX-DR-SSDA-C-2704 INSET Q

GRDC86-ACR-00-XX-DR-SSDA-C-2701 INSET C
GRDC86-ACR-00-XX-DR-SSDA-C-2701 INSET D

GRDC86-ACR-00-XX-DR-SSDA-C-2702 INSET F

GRDC86-ACR-00-XX-DR-SSDA-C-2703 INSET P

GRDC86-ACR-00-XX-DR-SSDA-C-2703 INSET N

GRDC86-ACR-00-XX-DR-SSDA-C-2701 INSET E

GRDC86-ACR-00-XX-DR-SSDA-C-2702 INSET J

GRDC86-ACR-00-XX-DR-SSDA-C-2702 INSET K

GRDC86-ACR-00-XX-DR-SSDA-C-2701 INSET B

GRDC86-ACR-00-XX-DR-SSDA-C-2701 INSET A

GRDC86-ACR-00-XX-DR-SSDA-C-2702 INSET L
GRDC86-ACR-00-XX-DR-SSDA-C-2703 INSET M

GLENDENNING ROAD

EXIT SALLY PORT

GUARD HOUSE

ENTRY SALLY PORT

EASTERN CREEK

EXISTING WAREHOUSE AND HARDSTAND TO BE DEMOLISHED

TERRESTRIAL BIODIVERSITY AREA TO BE PROTECTED AND RETAINED

WOODSTOCK AVENUE

SURVEYED BY REMOTE SENSING AND ACCESS HEAVILY OVERGROWN

SCALE 1:500 @ A0 0 5 10 20 30 40 50 metres

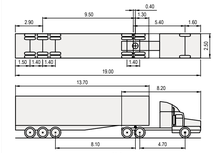
LEGEND

VEHICLE BODY SWEPT PATH ENVELOPE - FORWARD MOVEMENT

0.5m VEHICLE SWEPT PATH CLEARANCE ENVELOPE

VEHICLE BODY SWEPT PATH ENVELOPE - REVERSE MOVEMENT

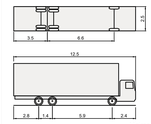
0.5m VEHICLE SWEPT PATH CLEARANCE ENVELOPE



	Metres
Overall Length	19.000m
Overall Width	2.500m
Overall Body Height	4.301m
Min Body Ground Clearance	0.418
Track Width	2.500m
Lock-to-lock time	6.00s
Kerb to Kerb Turning Radius	12.500m

AV - ARTICULATED VEHICLE (AV 19.0m).

NTS



	Metres
Overall Length	12.500m
Overall Width	2.500m
Overall Body Height	4.300m
Min Body Ground Clearance	0.417m
Track Width	2.500m
Lock-to-lock time	6.00s
Kerb to Kerb Turning Radius	12.500m

HRV - HEAVY RIGID VEHICLE (HRV 12.5m)

REV	DATE	DESCRIPTION	DRN	ENG	CHK	APP
P1	13NOV2024	DRAFT SSDA ISSUE	DW	JF	MB	MB
A	20NOV2024	SSDA ISSUE	DW	JF	MB	MB

MECHANICAL/ ELECTRICAL ENGINEER:
LCI CONSULTANTS
02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

HYDRAULIC/ FIRE ENGINEER:
LCI CONSULTANTS
02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

CIVIL ENGINEER:
ACOR CONSULTANTS PTY LTD
02 9438 5098
SUITE 2, LEVEL 1, 33 HERBERT STREET,
ST LEONARDS NSW 2065

STRUCTURAL ENGINEER:
VAN DER MEER CONSULTING
02 94360433
LEVEL 6, 39 CHANDOS ST,
ST LEONARDS NSW 2065

ARCHITECT:
GREENBOX ARCHITECTURE PTY LTD
02 8069 8939
LEVEL 22, 66 PITT STREET,
SYDNEY NSW 2000

LANDSCAPE:
GEOSCAPES
02 9411 1485
SUITE 3.03, 8 HELP STREET,
CHATSWOOD, NSW 2067

PROJECT: GLENDENNING ROAD DATA CENTRE

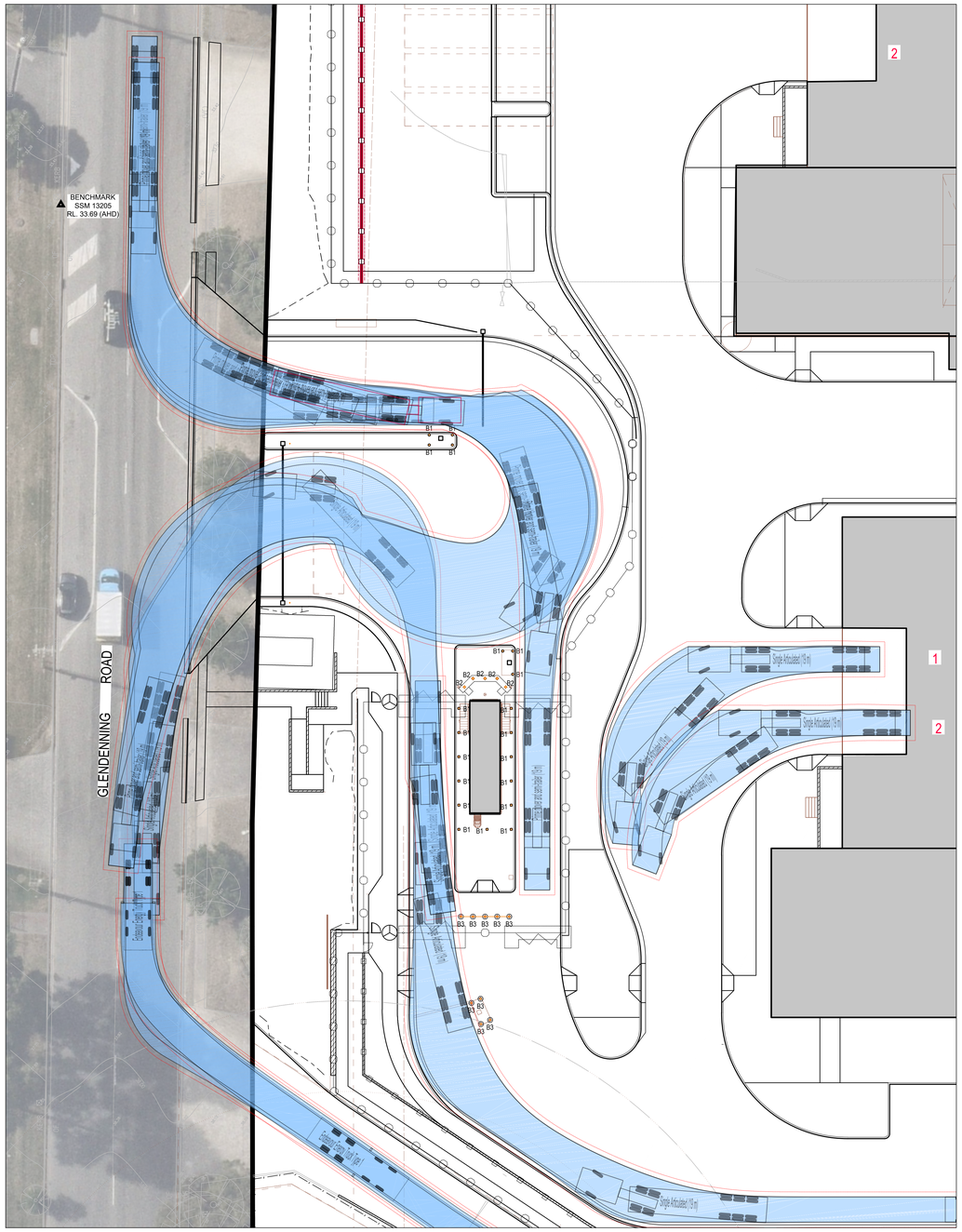
TITLE: CIVIL SERVICES
VEHICLE SWEPT PATHS PLAN -OVERALL SITE

DRAWING: GRDC86-ACR-00-XX-DR-SSDA-C-2700

PAPER SIZE:	SCALE:	REV:
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PRINT IN COLOUR

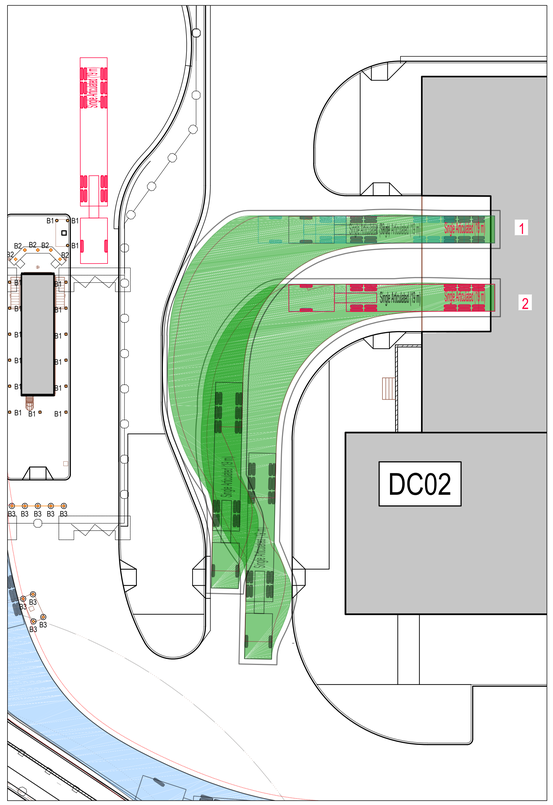
C-0000



INSET A - SITE ENTRY AND EXIT SWEPT PATHS - 19m ARTICULATED VEHICLE

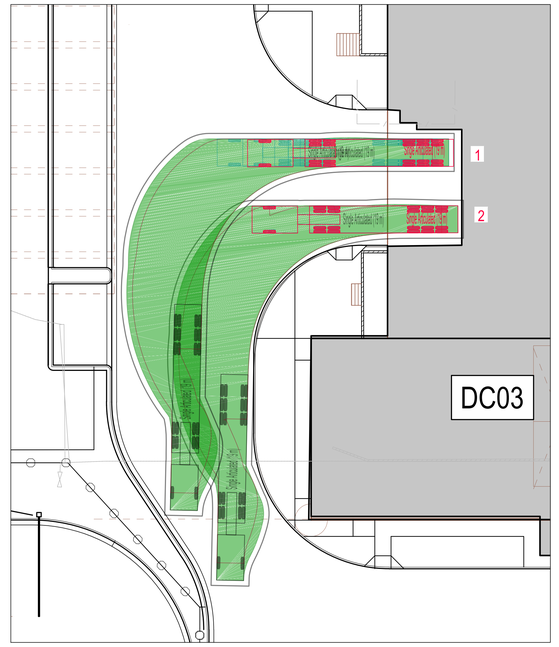
SCALE 1:200

SCALE 1:200 @ A0 0 2 4 8 12 16 20 metres



INSET B - DC02 LOADING DOCK REVERSE ENTRY - 19m ARTICULATED VEHICLE

SCALE 1:200



INSET D - DC03 LOADING DOCK REVERSE ENTRY- OPTION 2 - 19m ARTICULATED VEHICLE

SCALE 1:200



INSET C - DC03 LOADING DOCK REVERSE ENTRY- OPTION 1 - 19m ARTICULATED VEHICLE

SCALE 1:200

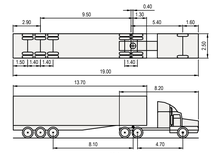
LEGEND

VEHICLE BODY SWEPT PATH ENVELOPE - FORWARD MOVEMENT

0.5m VEHICLE SWEPT PATH CLEARANCE ENVELOPE

VEHICLE BODY SWEPT PATH ENVELOPE - REVERSE MOVEMENT

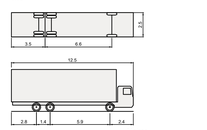
0.5m VEHICLE SWEPT PATH CLEARANCE ENVELOPE



	Metres
Overall Length	19.000m
Overall Width	2.500m
Overall Body Height	4.301m
Min Body Ground Clearance	0.418
Track Width	2.500m
Lock-to-lock time	6.00s
Kerb to Kerb Turning Radius	12.500m

AV - ARTICULATED VEHICLE (AV 19.0m)

NTS



	Metres
Overall Length	12.500m
Overall Width	2.500m
Overall Body Height	4.300m
Min Body Ground Clearance	0.417m
Track Width	2.500m
Lock-to-lock time	6.00s
Kerb to Kerb Turning Radius	12.500m

HRV - HEAVY RIGID VEHICLE (HRV 12.5m)

REV.	DATE	DESCRIPTION	DRN	ENG	CHK	APP
P1	13NOV2024	DRAFT SSDA ISSUE	DW	JF	MB	MB
A	20NOV2024	SSDA ISSUE	DW	JF	MB	MB

MECHANICAL/ ELECTRICAL ENGINEER:
LCI CONSULTANTS
02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

HYDRAULIC/ FIRE ENGINEER:
LCI CONSULTANTS
02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

CIVIL ENGINEER:
ACOR CONSULTANTS PTY LTD
02 9438 5098
SUITE 2, LEVEL 1, 33 HERBERT STREET,
ST LEONARDS NSW 2065

STRUCTURAL ENGINEER:
VAN DER MEER CONSULTING
02 94393433
LEVEL 6, 39 CHANDOS ST,
ST LEONARDS NSW 2065

ARCHITECT:
GREENBOX ARCHITECTURE PTY LTD
02 8069 8539
LEVEL 22, 68 PITT STREET,
SYDNEY NSW 2000

LANDSCAPE:
GEOSCAPES
02 9411 1485
SUITE 3.03, 8 HELP STREET,
CHATSWOOD, NSW 2067

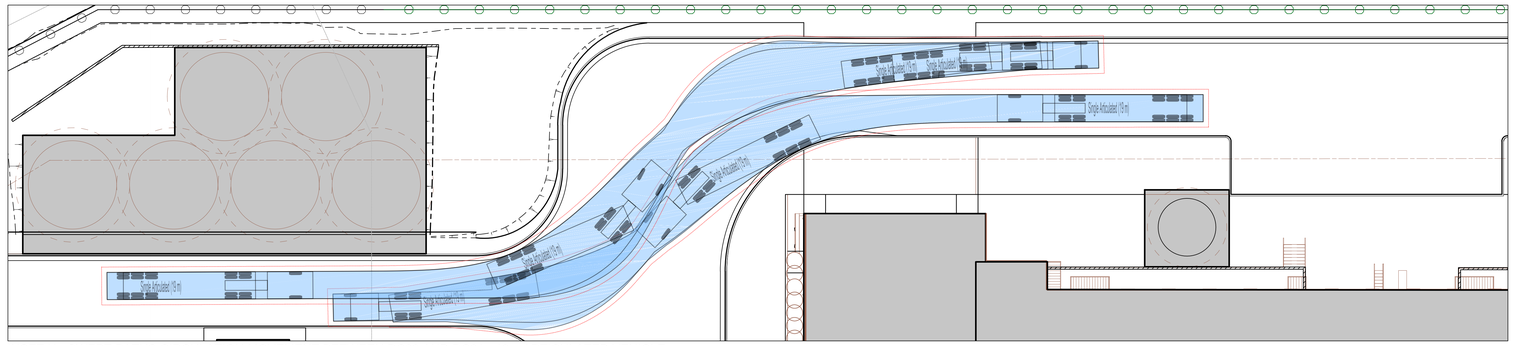
PROJECT: GLENDENNING ROAD DATA CENTRE

TITLE: CIVIL SERVICES
VEHICLE SWEPT PATHS PLAN - SHEET 1

DRAWING: GRDC86-ACR-00-XX-DR-SSDA-C-2701

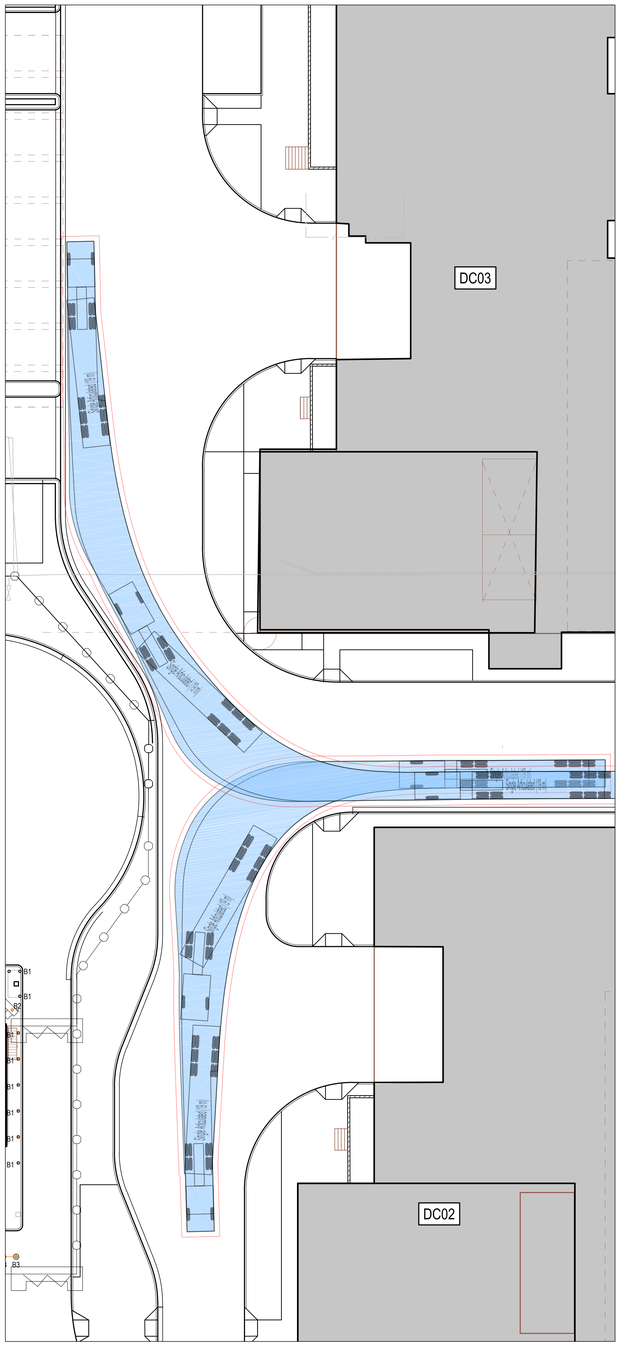
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ISO A0	1:200		A

PRINT IN COLOUR



INSET H - SWEPT PATHS CIRCULATION MOVEMENT BETWEEN DC02 AND DC01 - 19m ARTICULATED VEHICLE

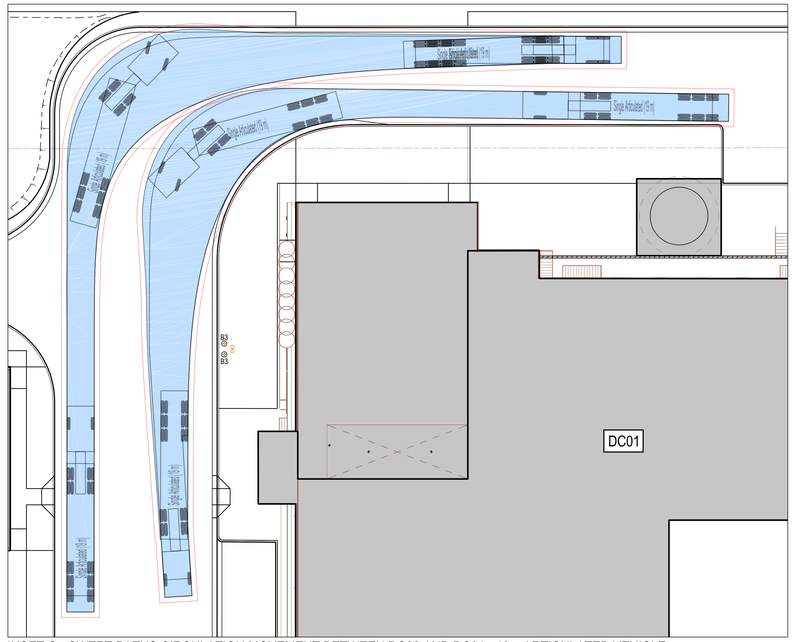
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INSET E - SWEPT PATHS CIRCULATION MOVEMENT BETWEEN DC02 AND DC03 - 19m ARTICULATED VEHICLE

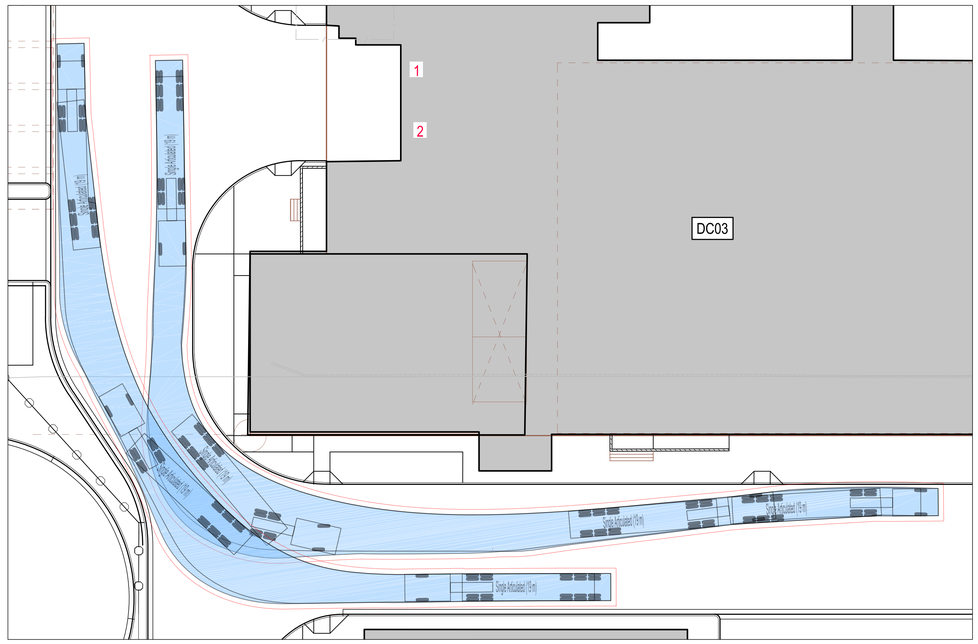
SCALE 1:200

SCALE 1:200 @ A0 0 2 4 8 12 16 20 metres



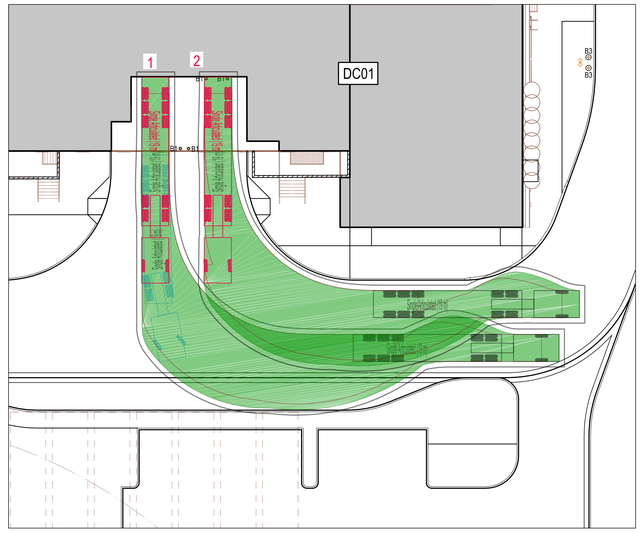
INSET G - SWEPT PATHS CIRCULATION MOVEMENT BETWEEN DC02 AND DC01 - 19m ARTICULATED VEHICLE

SCALE 1:200



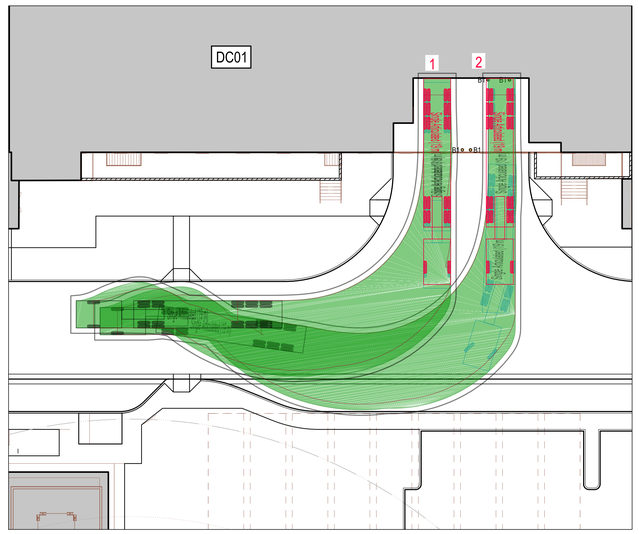
INSET F - SWEPT PATHS CIRCULATION MOVEMENT DC03 - 19m ARTICULATED VEHICLE

SCALE 1:200



INSET K - DC01 LOADING DOCK REVERSE ENTRY- ENTRY FROM EAST- 19m ARTICULATED VEHICLE

SCALE 1:200

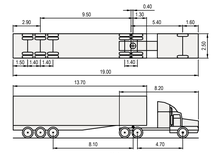


INSET J - DC01 LOADING DOCK REVERSE ENTRY- ENTRY FROM WEST - 19m ARTICULATED VEHICLE

SCALE 1:200

LEGEND

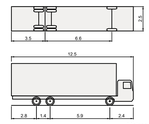
- VEHICLE BODY SWEPT PATH ENVELOPE - FORWARD MOVEMENT
- 0.5m VEHICLE SWEPT PATH CLEARANCE ENVELOPE
- VEHICLE BODY SWEPT PATH ENVELOPE - REVERSE MOVEMENT
- 0.5m VEHICLE SWEPT PATH CLEARANCE ENVELOPE



	Metres
Overall Length	19.000m
Overall Width	2.500m
Overall Body Height	4.301m
Min Body Ground Clearance	0.418
Track Width	2.500m
Lock-to-lock time	6.00s
Kerb to Kerb Turning Radius	12.500m

AV - ARTICULATED VEHICLE (AV 19.0m)

NTS



	Metres
Overall Length	12.500m
Overall Width	2.500m
Overall Body Height	4.300m
Min Body Ground Clearance	0.417m
Track Width	2.500m
Lock-to-lock time	6.00s
Kerb to Kerb Turning Radius	12.500m

HRV - HEAVY RIGID VEHICLE (HRV 12.5m)

REV	DATE	DESCRIPTION	DRN	ENG	CHK	APP
P1	13NOV2024	DRAFT SSDA ISSUE	DW	JF	MB	MB
A	26NOV2024	SSDA ISSUE	DW	JF	MB	MB

MECHANICAL/ ELECTRICAL ENGINEER:
LCI CONSULTANTS
02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

HYDRAULIC/ FIRE ENGINEER:
LCI CONSULTANTS
02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

CIVIL ENGINEER:
ACOR CONSULTANTS PTY LTD
02 9438 5098
SUITE 2, LEVEL 1, 33 HERBERT STREET,
ST LEONARDS NSW 2065

STRUCTURAL ENGINEER:
VAN DER MEER CONSULTING
02 94360433
LEVEL 6, 39 CHANDOS ST,
ST LEONARDS NSW 2065

ARCHITECT:
GREENBOX ARCHITECTURE PTY LTD
02 8069 8539
LEVEL 22, 68 PITT STREET,
SYDNEY NSW 2000

LANDSCAPE:
GEOSCAPES
02 9411 1485
SUITE 3.03, 8 HELP STREET,
CHATSWOOD, NSW 2067

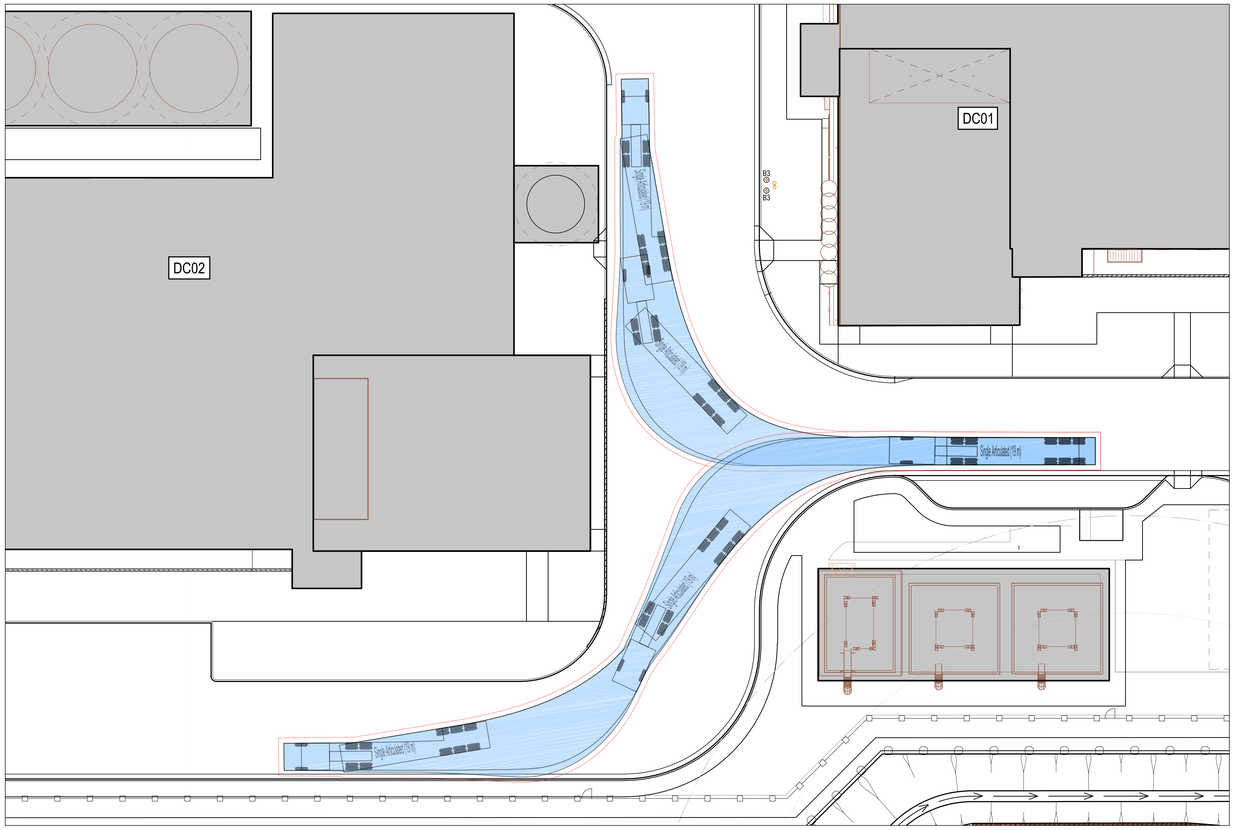
PROJECT: GLENDENNING ROAD DATA CENTRE

TITLE: CIVIL SERVICES
VEHICLE SWEPT PATHS PLAN - SHEET 2

DRAWING: GRDC86-ACR-00-XX-DR-SSDA-C-2702

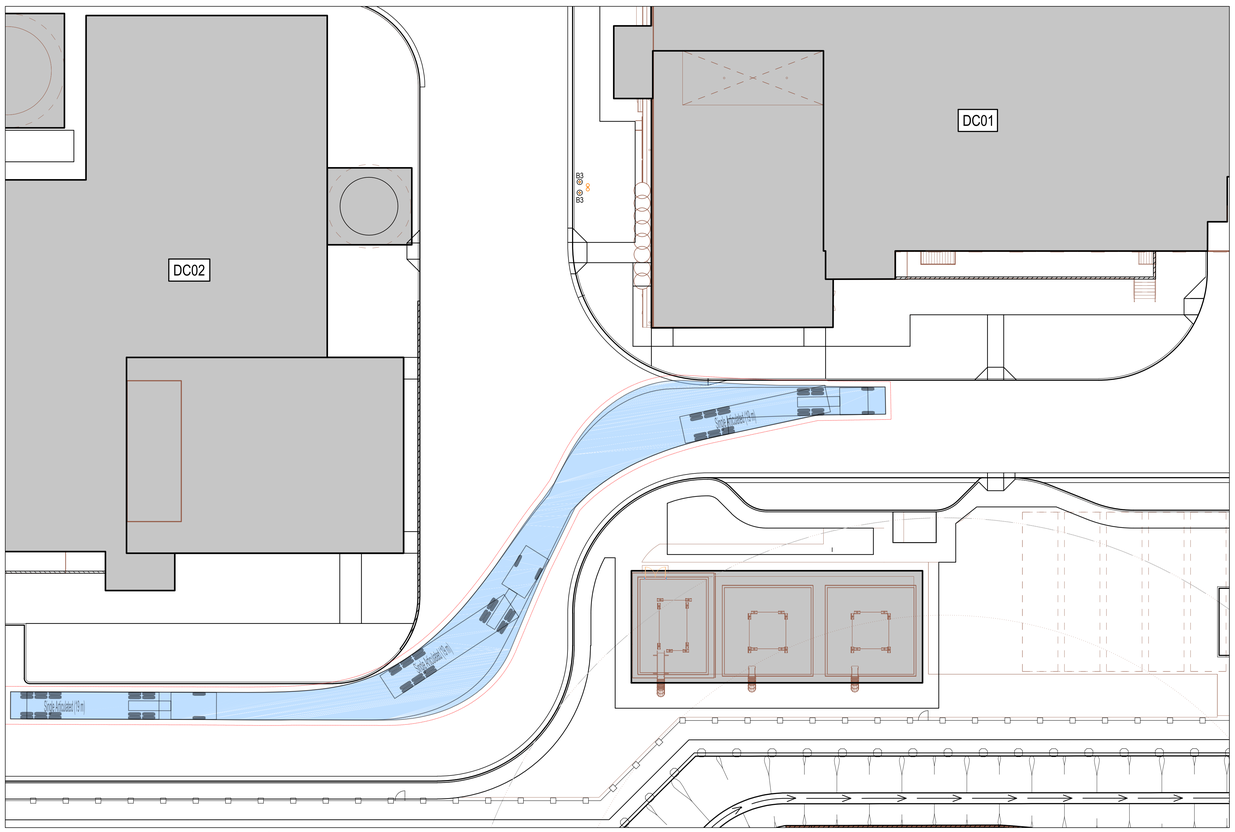
PAPER SIZE:	SCALE:	REV:
ISO A0	1:200	A

PRINT IN COLOUR



INSET M - SWEPT PATHS CIRCULATION MOVEMENT BETWEEN DC02 AND DC01 - 19m ARTICULATED VEHICLE

SCALE 1:200

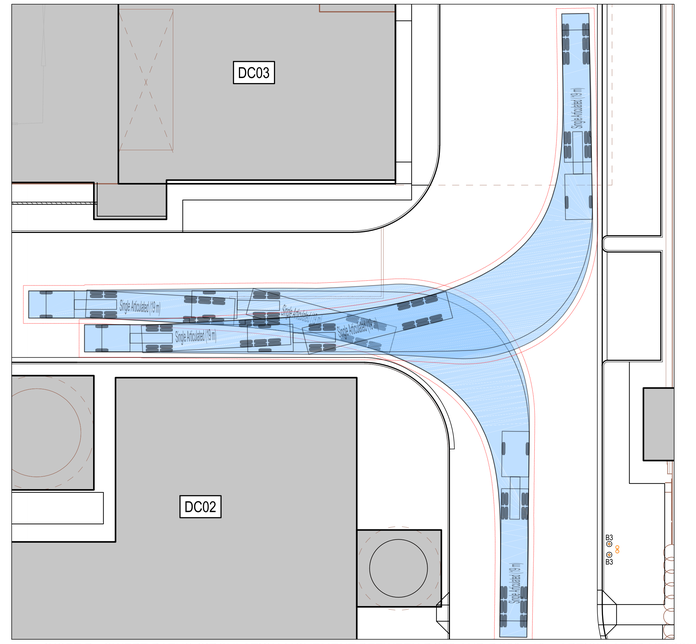


INSET L - SWEPT PATHS CIRCULATION MOVEMENT BETWEEN DC02 AND DC01 - 19m ARTICULATED VEHICLE

SCALE 1:200

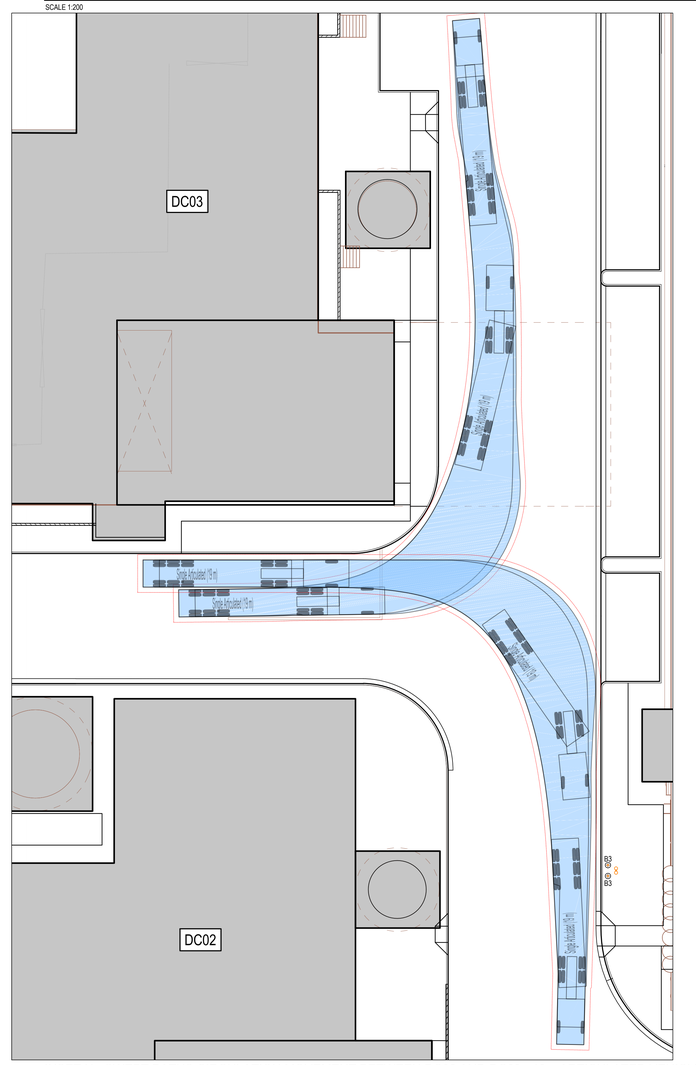
SCALE 1:200 @ A0

0 2 4 8 12 16 20 metres



INSET P - SWEPT PATHS CIRCULATION MOVEMENT BETWEEN DC02 AND DC03 - 19m ARTICULATED VEHICLE

SCALE 1:200



INSET N - SWEPT PATHS CIRCULATION MOVEMENT BETWEEN DC02 AND DC03 - 19m ARTICULATED VEHICLE

SCALE 1:200

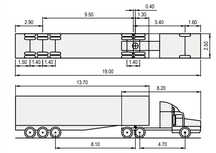
LEGEND

VEHICLE BODY SWEPT PATH ENVELOPE - FORWARD MOVEMENT

0.5m VEHICLE SWEPT PATH CLEARANCE ENVELOPE

VEHICLE BODY SWEPT PATH ENVELOPE - REVERSE MOVEMENT

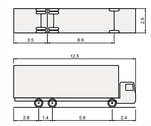
0.5m VEHICLE SWEPT PATH CLEARANCE ENVELOPE



	Metres
Overall Length	19.000m
Overall Width	2.500m
Overall Body Height	4.301m
Min Body Ground Clearance	0.418
Track Width	2.500m
Lock-to-lock time	6.00s
Kerb to Kerb Turning Radius	12.500m

AV - ARTICULATED VEHICLE (AV 19.0m).

NTS



	Metres
Overall Length	12.500m
Overall Width	2.500m
Overall Body Height	4.300m
Min Body Ground Clearance	0.417m
Track Width	2.500m
Lock-to-lock time	6.00s
Kerb to Kerb Turning Radius	12.500m

HRV - HEAVY RIGID VEHICLE (HRV 12.5m)

REV	DATE	DESCRIPTION	DRN	ENG	CHK	APP
P1	13NOV2024	DRAFT SSDA ISSUE	DW	JF	MB	MB
A	20NOV2024	SSDA ISSUE	DW	JF	MB	MB

MECHANICAL/ ELECTRICAL ENGINEER:
LCI CONSULTANTS
02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

HYDRAULIC/ FIRE ENGINEER:
LCI CONSULTANTS
02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

CIVIL ENGINEER:
ACOR CONSULTANTS PTY LTD
02 9438 5098
SUITE 2, LEVEL 1, 33 HERBERT STREET,
ST LEONARDS NSW 2065

STRUCTURAL ENGINEER:
VAN DER MEER CONSULTING
02 94360433
LEVEL 6, 39 CHANDOS ST,
ST LEONARDS NSW 2065

ARCHITECT:
GREENBOX ARCHITECTURE PTY LTD
02 8069 8939
LEVEL 22, 68 PITT STREET,
SYDNEY NSW 2000

LANDSCAPE:
GEOSCAPES
02 9411 1485
SUITE 3.03, 8 HELP STREET,
CHATSWOOD, NSW 2067

PROJECT: GLENDENNING ROAD DATA CENTRE

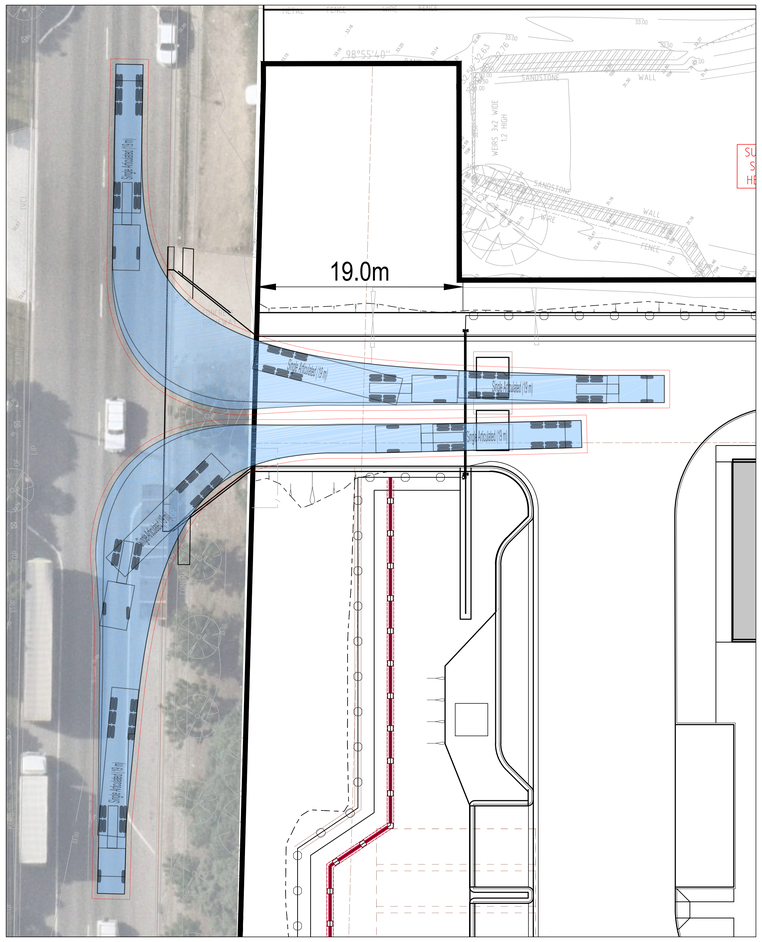
TITLE: CIVIL SERVICES
VEHICLE SWEPT PATHS PLAN - SHEET 3

DRAWING: GRDC86-ACR-00-XX-DR-SSDA-C-2703

PAPER SIZE:	SCALE:		REV:
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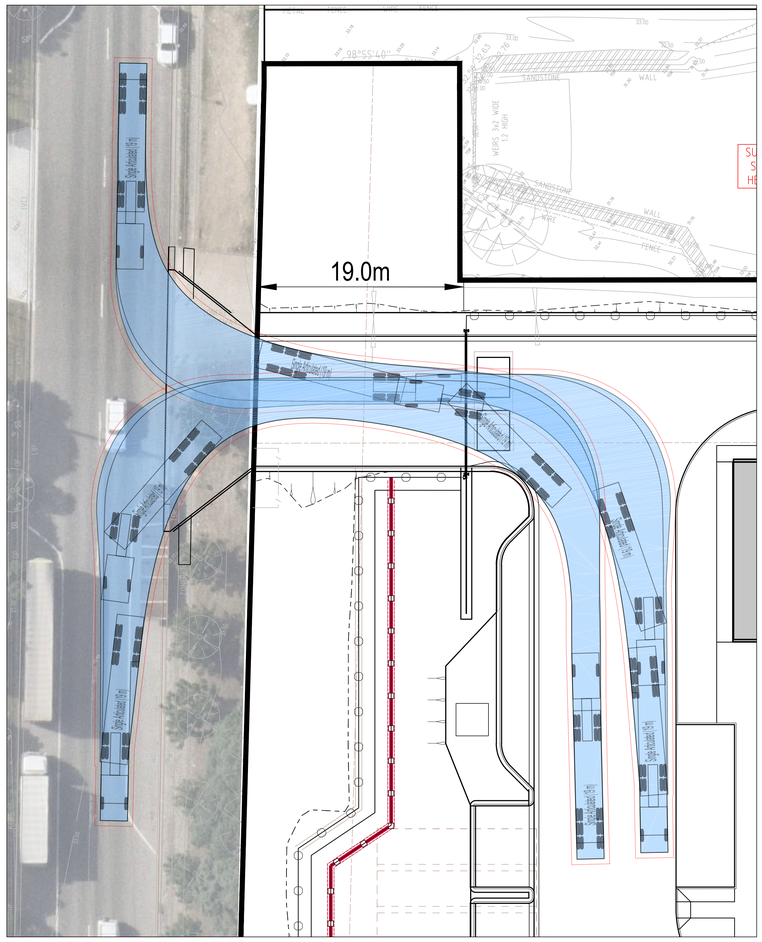
PRINT IN COLOUR

C-0000



INSET Q - SWEPT PATHS ENTRY AND EXIT SECONDARY GATE - 19m ARTICULATED VEHICLE

SCALE 1:200



INSET R - SWEPT PATHS ENTRY AND EXIT SECONDARY GATE - 19m ARTICULATED VEHICLE

SCALE 1:200

SCALE 1:200 @ A0 0 2 4 8 12 16 20 metres

LEGEND

VEHICLE BODY SWEPT PATH ENVELOPE - FORWARD MOVEMENT

0.5m VEHICLE SWEPT PATH CLEARANCE ENVELOPE

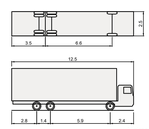
VEHICLE BODY SWEPT PATH ENVELOPE - REVERSE MOVEMENT

0.5m VEHICLE SWEPT PATH CLEARANCE ENVELOPE

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AV - ARTICULATED VEHICLE (AV 19.0m).

NTS



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NORTH SYDNEY NSW 2060

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LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

CIVIL ENGINEER:
ACOR CONSULTANTS PTY LTD
02 9438 5288
SUITE 2, LEVEL 1, 33 HERBERT ST,
ST LEONARDS NSW 2065

STRUCTURAL ENGINEER:
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02 94360433
LEVEL 6, 39 CHANDOS ST,
ST LEONARDS NSW 2065

ARCHITECT:
GREENBOX ARCHITECTURE PTY LTD
02 8069 8939
LEVEL 22, 68 PITT STREET,
SYDNEY NSW 2000

LANDSCAPE:
GEOSCAPES
02 9411 1485
SUITE 3.03, 6 HELP STREET,
CHATSWOOD, NSW 2067

PROJECT: GLENDENNING ROAD DATA CENTRE

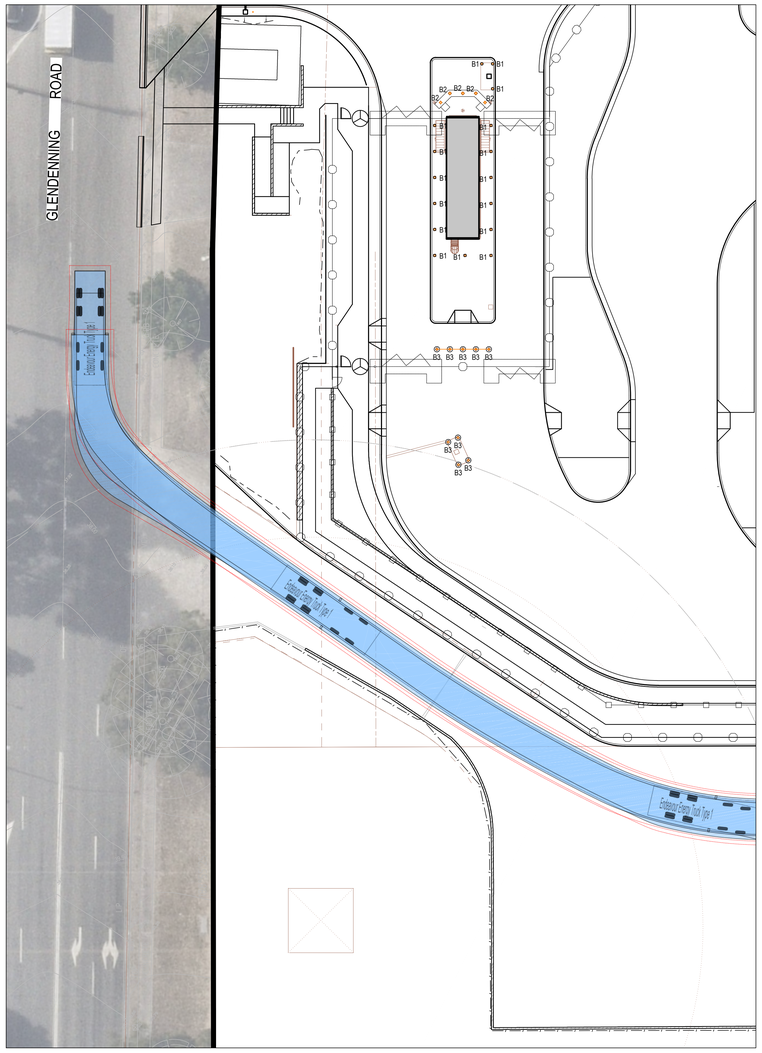
TITLE: CIVIL SERVICES
VEHICLE SWEPT PATHS PLAN - SHEET 4

DRAWING: GRDC86-ACR-00-XX-DR-SSDA-C-2704

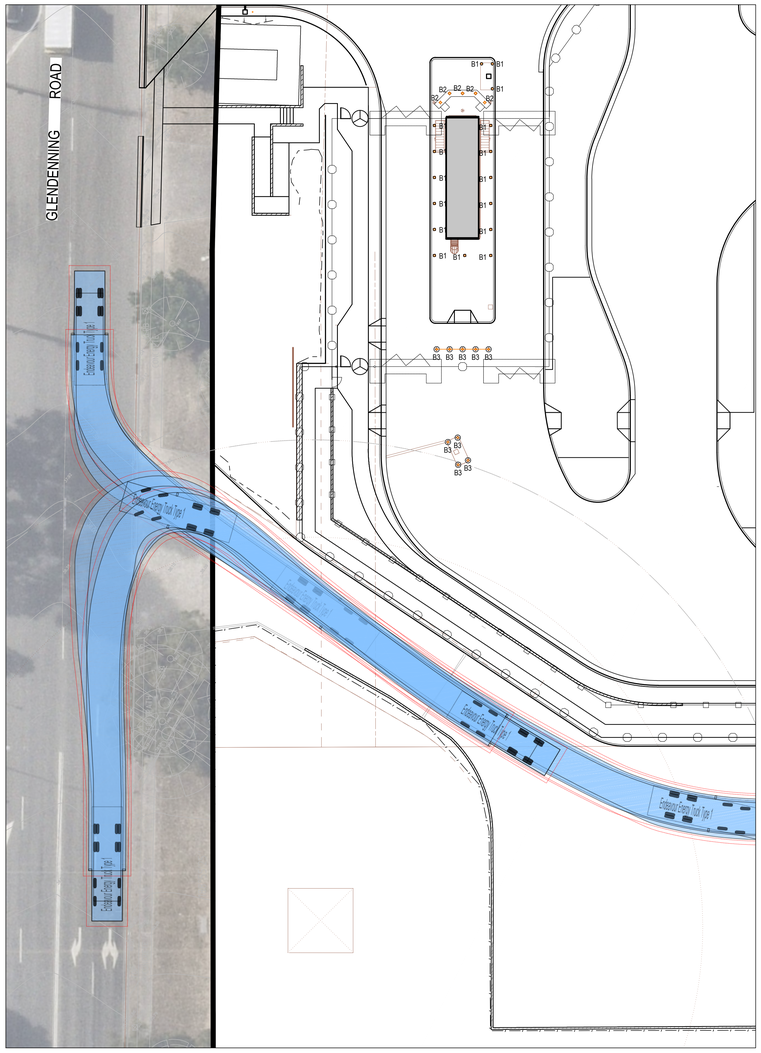
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ISO A0	1:200		A

PRINT IN COLOUR

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INSET R - SWEPT PATHS ENTRY EXISTING DRIVEWAY - ENDEAVOUR ENERGY VEHICLE



INSET R - SWEPT PATHS EXIT EXISTING DRIVEWAY - ENDEAVOUR ENERGY VEHICLE

SCALE 1:200 @ A0

0 2 4 8 12 16 20 metres

LEGEND

VEHICLE BODY SWEPT PATH ENVELOPE - FORWARD MOVEMENT

0.5m VEHICLE SWEPT PATH CLEARANCE ENVELOPE

VEHICLE BODY SWEPT PATH ENVELOPE - REVERSE MOVEMENT

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SUITE 3.03, 8 HELP STREET,
CHATSWOOD, NSW 2067

PROJECT: GLENDENNING ROAD DATA CENTRE

TITLE: CIVIL SERVICES
VEHICLE SWEPT PATHS PLAN - SHEET 5

DRAWING: GRDC86-ACR-00-XX-DR-SSDA-C-2705

PAPER SIZE:	SCALE:		REV:
ISO A0	1:200		A

PRINT IN COLOUR

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EROSION AND SEDIMENT CONTROL NOTES

GENERAL INSTRUCTIONS

1. THIS SOIL AND WATER MANAGEMENT PLAN IS TO BE READ IN CONJUNCTION WITH OTHER ENGINEERING PLANS RELATING TO THIS DEVELOPMENT.
2. CONTRACTORS WILL ENSURE THAT ALL SOIL AND WATER MANAGEMENT WORKS ARE UNDERTAKEN AS INSTRUCTED IN THIS SPECIFICATION AND CONSTRUCTED FOLLOWING THE GUIDELINES OF "MANAGING URBAN STORMWATER SOILS AND CONSTRUCTION", DEPT OF HOUSING, 2004 (BLUE BOOK).
3. ALL SUBCONTRACTORS WILL BE INFORMED OF THEIR RESPONSIBILITIES IN REDUCING THE POTENTIAL FOR SOIL EROSION AND POLLUTION TO DOWNSLOPE AREAS.

LAND DISTURBANCE INSTRUCTIONS

1. DISTURBANCE TO BE NO FURTHER THAN 5 (PREFERABLY 2) METRES FROM THE EDGE OF ANY ESSENTIAL ENGINEERING ACTIVITY AS SHOWN ON APPROVED PLANS. ALL SITE WORKERS WILL CLEARLY RECOGNISE THESE ZONES THAT, WHERE APPROPRIATE, ARE IDENTIFIED WITH BARRIER FENCING (UPSLOPE) AND SEDIMENT FENCING (DOWNSLOPE) OR SIMILAR MATERIALS.
2. ACCESS AREAS ARE TO BE LIMITED TO A MAXIMUM WIDTH OF 10 METRES THE SITE MANAGER WILL DETERMINE AND MARK THE LOCATION OF THESE ZONES ON-SITE. ALL SITE WORKERS WILL CLEARLY RECOGNISE THESE BOUNDARIES THAT, WHERE APPROPRIATE, ARE IDENTIFIED WITH BARRIER FENCING (UPSLOPE) AND SEDIMENT FENCING (DOWNSLOPE) OR SIMILAR MATERIALS.
3. ENTRY TO LANDS NOT REQUIRED FOR CONSTRUCTION OR ACCESS IS PROHIBITED EXCEPT FOR ESSENTIAL THINNING OF PLANT GROWTH.
4. WORKS ARE TO PROCEED IN THE FOLLOWING SEQUENCE:
   a. INSTALL ALL BARRIER AND SEDIMENT FENCING WHERE SHOWN ON THE PLAN.
   b. CONSTRUCT THE STABILISED SITE ACCESS.
   c. CONSTRUCT DIVERSION DRAINS AS REQUIRED.
   d. INSTALL MESH AND GRAVEL INLETS FOR ANY ADJACENT KERB INLETS.
   e. INSTALL GEOTEXTILE INLET FILTERS AROUND ANY ON-SITE DROP INLET PITS.
   f. CLEAR SITE AND STRIP AND STOCKPILE TOPSOIL IN LOCATIONS SHOWN ON THE PLAN.
   g. UNDERTAKE ALL ESSENTIAL CONSTRUCTION WORKS ENSURING THAT ROOF AND/OR PAVED AREA STORMWATER SYSTEMS ARE CONNECTED TO PERMANENT DRAINAGE AS SOON AS PRACTICABLE.
   h. GRADE LOT AREAS TO FINAL GRADES AND APPLY PERMANENT STABILISATION (LANDSCAPING) WITHIN 20 DAYS OF COMPLETION OF CONSTRUCTION WORKS.
   i. REMOVE TEMPORARY EROSION CONTROL MEASURES AFTER THE PERMANENT LANDSCAPING HAS BEEN COMPLETED.
5. ENSURE THAT SLOPE LENGTHS DO NOT EXCEED 80 METRES WHERE PRACTICABLE. SLOPE LENGTHS ARE DETERMINED BY SILTATION FENCING AND CATCH DRAIN SPACING. 6. ON COMPLETION OF MAJOR WORKS LEAVE DISTURBED LANDS WITH A SCARIFIED SURFACE TO ENCOURAGE WATER INFILTRATION AND ASSIST WITH KEYING TOPSOIL LATER.

SITE INSPECTION AND MAINTENANCE INSTRUCTIONS

1. THE SITE PRINCIPAL'S REPRESENTATIVE WILL INSPECT THE SITE AT LEAST WEEKLY AND AT THE CONCLUSION OF EVERY STORM EVENT TO:
   a. ENSURE THAT DRAINS OPERATE PROPERLY AND TO EFFECT ANY NECESSARY REPAIRS.
   b. REMOVE SPILLED SAND OR OTHER MATERIALS FROM HAZARD AREAS, INCLUDING LANDS CLOSER THAN 5 METRES FROM AREAS OF LIKELY CONCENTRATED OR HIGH VELOCITY FLOWS ESPECIALLY WATERWAYS AND PAVED AREAS.
   c. REMOVE TRAPPED SEDIMENT WHENEVER THE DESIGN CAPACITY OF THAT STRUCTURE HAS BEEN EXCEEDED.
   d. ENSURE REHABILITATED LANDS HAVE EFFECTIVELY REDUCED THE EROSION HAZARD AND TO INITIATE UPGRADING OR REPAIR AS NECESSARY.
   e. CONSTRUCT ADDITIONAL EROSION AND/OR SEDIMENT CONTROL WORKS AS MIGHT BECOME NECESSARY TO ENSURE THE DESIRED PROTECTION IS GIVEN TO DOWNSLOPE LANDS AND WATERWAYS. MAKE ONGOING CHANGES TO THE PLAN WHERE IT PROVES INADEQUATE IN PRACTICE OR IS SUBJECTED TO CHANGES IN CONDITIONS ON THE WORK-SITE OR ELSEWHERE IN THE CATCHMENT.
   f. MAINTAIN EROSION AND SEDIMENT CONTROL STRUCTURES IN A FULLY FUNCTIONING CONDITION UNTIL ALL EARTHWORK ACTIVITIES ARE COMPLETED AND THE SITE IS REHABILITATED.
2. THE PRINCIPAL'S REPRESENTATIVE WILL KEEP A LOGBOOK MAKING ENTRIES AT LEAST WEEKLY, IMMEDIATELY BEFORE FORECAST RAIN AND AFTER RAINFALL. ENTRIES WILL INCLUDE:
   a. THE VOLUME AND INTENSITY OF ANY RAINFALL EVENTS.
   b. THE CONDITION OF ANY SOIL AND WATER MANAGEMENT WORKS.
   c. THE CONDITION OF VEGETATION AND ANY NEED TO IRRIGATE.
   d. THE NEED FOR DUST PREVENTION STRATEGIES.
   e. ANY REMEDIAL WORKS TO BE UNDERTAKEN. THE LOGBOOK WILL BE KEPT ON-SITE AND MADE AVAILABLE TO ANY AUTHORISED PERSON UPON REQUEST. IT WILL BE GIVEN TO THE PROJECT MANAGER AT THE CONCLUSION OF THE WORKS.

SEDIMENT CONTROL INSTRUCTIONS

1. SEDIMENT FENCES WILL BE INSTALLED AS SHOWN ON THE PLAN AND ELSEWHERE AT THE DISCRETION OF THE PRINCIPAL'S REPRESENTATIVE TO CONTAIN SOIL AS NEAR AS POSSIBLE TO THEIR SOURCE.
2. SEDIMENT FENCES WILL NOT HAVE CATCHMENT AREAS EXCEEDING 900 SQUARE METRES AND HAVE A STORAGE DEPTH OF AT LEAST 0.6 METRES.
3. SEDIMENT REMOVED FROM ANY TRAPPING DEVICES WILL BE RELOCATED WHERE FURTHER POLLUTION TO DOWNSLOPE LANDS AND WATERWAYS CAN NOT OCCUR.
4. STOCKPILES ARE NOT TO BE LOCATED WITHIN 5 METRES OF HAZARD AREAS INCLUDING AREAS OF HIGH VELOCITY FLOWS SUCH AS WATERWAYS, PAVED AREAS AND DRIVEWAYS.
5. WATER WILL BE PREVENTED FROM DIRECTLY ENTERING THE PERMANENT DRAINAGE SYSTEM UNLESS THE CATCHMENT AREA HAS BEEN PERMANENTLY LANDSCAPED AND/OR WATER HAS BEEN TREATED BY AN APPROVED DEVICE.
6. TEMPORARY SEDIMENT TRAPS WILL REMAIN IN PLACE UNTIL AFTER THE LANDS THEY ARE PROTECTING ARE COMPLETELY REHABILITATED.
7. ACCESS TO SITES SHOULD BE STABILISED TO REDUCE THE LIKELIHOOD OF VEHICLES TRACKING SOIL MATERIALS ONTO PUBLIC ROADS AND ENSURE ALL-WEATHER ENTRY/EXIT.

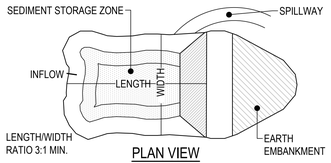
EROSION AND SEDIMENT CONTROL NOTES Cont.

SOIL EROSION CONTROL INSTRUCTIONS

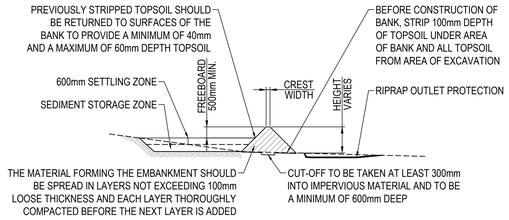
1. EARTH BATTERS WILL BE CONSTRUCTED WITH AS LOW A GRADIENT AS PRACTICABLE BUT NO STEEPER, UNLESS OTHERWISE NOTED, THAN:
   a. 2(H):1(V) WHERE SLOPE LENGTH LESS THAN 12 METRES
   b. 2.5(H):1(V) WHERE SLOPE LENGTH BETWEEN 12 AND 16 METRES.
   c. 3(H):1(V) WHERE SLOPE LENGTH BETWEEN 16 AND 20 METRES.
   d. 4(H):1(V) WHERE SLOPE LENGTH GREATER THAN 20 METRES.
2. ALL WATERWAYS, DRAINS, SPILLWAYS AND THEIR OUTLETS WILL BE CONSTRUCTED TO BE STABLE IN AT LEAST THE 1:20 YEAR ARI, TIME OF CONCENTRATION STORM EVENT.
3. WATERWAYS AND OTHER AREAS SUBJECT TO CONCENTRATED FLOWS AFTER CONSTRUCTION ARE TO HAVE A MAXIMUM GROUNDCOVER C-FACTOR OF 0.05 (70% GROUND COVER) WITHIN 10 WORKING DAYS FROM COMPLETION OF FORMATION. FLOW VELOCITIES ARE TO BE LIMITED TO THOSE SHOWN IN TABLE 5-1 OF "MANAGING URBAN STORMWATER -SOILS AND CONSTRUCTION", DEPT OF HOUSING 2004 (BLUE BOOK). FOOT AND VEHICULAR TRAFFIC WILL BE PROHIBITED IN THESE AREAS.
4. STOCKPILES AFTER CONSTRUCTION ARE TO HAVE A MAXIMUM GROUND-COVER C-FACTOR OF 0.1 (60% GROUND-COVER) WITHIN 10 WORKING DAYS FROM COMPLETION OF FORMATION.
5. ALL LANDS, INCLUDING WATERWAYS AND STOCKPILES, DURING CONSTRUCTION ARE TO HAVE A MAXIMUM GROUND-COVER C-FACTOR OF 0.15 (50% GROUND COVER) WITHIN 20 WORKING DAYS FROM INACTIVITY EVEN THOUGH WORKS MAY CONTINUE LATER.
6. FOR AREAS OF SHEET FLOW USE THE FOLLOWING GROUND COVER PLANT SPECIES FOR TEMPORARY COVER: JAPANESE MILLET 20 KG/HA AND OATS 20 KG/HA.
7. PERMANENT REHABILITATION OF LANDS AFTER CONSTRUCTION WILL ACHIEVE A GROUND-COVER C-FACTOR OF LESS THAN 0.1 AND LESS THAN 0.05 WITHIN 60 DAYS. NEWLY PLANTED LANDS WILL BE WATERED REGULARLY UNTIL AN EFFECTIVE COVER IS ESTABLISHED AND PLANTS ARE GROWING VIGOROUSLY. FOLLOW-UP SEED AND FERTILISER WILL BE APPLIED AS NECESSARY.
8. RE-VEGETATION SHOULD BE AIMED AT RE-ESTABLISHING NATURAL SPECIES. NATURAL SURFACE SOILS SHOULD BE REPLACED AND NON-PERSISTANT ANNUAL COVER CROPS SHOULD BE USED.

WASTE CONTROL INSTRUCTIONS

1. ACCEPTABLE BINS WILL BE PROVIDED FOR ANY CONCRETE AND MORTAR SLURRIES, PAINTS, ACID WASHING, LIGHTWEIGHT WASTE MATERIALS AND LITTER. CLEARANCE SERVICES WILL BE PROVIDED AT LEAST WEEKLY. DISPOSAL OF WASTE WILL BE IN A MANNER APPROVED BY THE PRINCIPAL'S REPRESENTATIVE.
2. ALL POSSIBLE POLLUTANT MATERIALS ARE TO BE STORED WELL CLEAR OF ANY POORLY DRAINED AREAS, FLOOD PRONE AREAS, STREAMBANKS, CHANNELS AND STORMWATER DRAINAGE AREAS. STORE SUCH MATERIALS IN A DESIGNATED AREA UNDER COVER WHERE POSSIBLE AND WITHIN CONTAINMENT BUNDS.
3. ALL SITE STAFF AND SUB-CONTRACTORS ARE TO BE INFORMED OF THEIR OBLIGATION TO USE WASTE CONTROL FACILITIES PROVIDED.
4. ANY DE-WATERING ACTIVITIES ARE TO BE CLOSELY MONITORED TO ENSURE THAT WATER IS NOT POLLUTED BY SEDIMENT, TOXIC MATERIALS OR PETROLEUM PRODUCTS.
5. PROVIDE DESIGNATED VEHICULAR WASHDOWN AND MAINTENANCE AREAS WHICH ARE TO HAVE CONTAINMENT BUNDS.



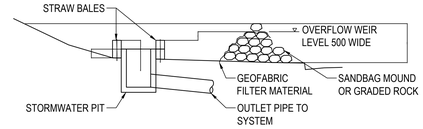
PLAN VIEW



SECTION

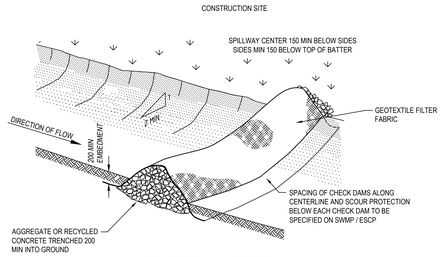
SEDIMENT BASIN (TYPICAL) CROSS SECTION

N.T.S.

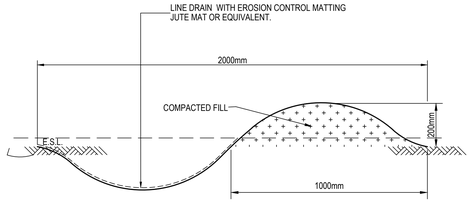


SEDIMENT BASIN DISCHARGE CONTROL PIT

N.T.S.

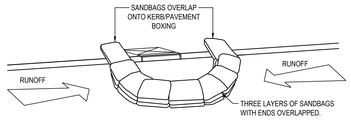


CHECK DAM - ROCK

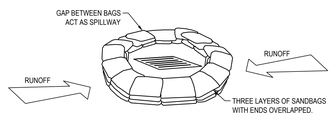


CUT-OFF DRAIN - 2.0m WIDE

N.T.S.



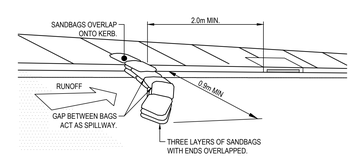
SANDBAG SEDIMENT TRAP - AT KERB SAG PIT



SANDBAG SEDIMENT TRAP - AT OTHER THAN KERB SAG PIT

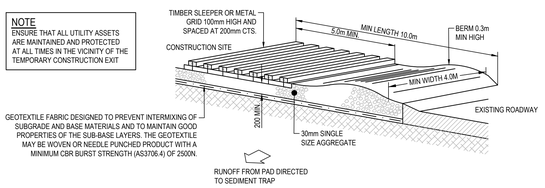
SANDBAG SEDIMENT TRAP DETAILS

NTS



SANDBAG KERB INLET SEDIMENT TRAP

N.T.S.



CONSTRUCTION NOTES

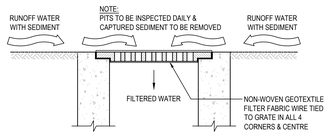
1. STRIP TOPSOIL AND LEVEL SITE.
2. COMPACT SUBGRADE.
3. COVER AREA WITH NEEDLE-PUNCHED GEOTEXTILE.
4. CONSTRUCT 200mm THICK PAD OVER GEOTEXTILE USING 30mm SINGLE SIZE AGGREGATE.
5. CONSTRUCT HUMP IMMEDIATELY WITHIN BOUNDARY TO DIVERT WATER TO A SEDIMENT FENCE OR OTHER SEDIMENT TRAP WHERE THE SEDIMENT IS COLLECTED AND REMOVED.

MAINTENANCE NOTES

THE EXIT SHALL BE MAINTAINED IN A CONDITION WHICH PREVENTS TRACKING OR FLOWING OF SEDIMENT OFF THE CONSTRUCTION SITE. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL GRAVEL AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED OFF THE CONSTRUCTION SITE MUST BE REMOVED IMMEDIATELY.

TEMPORARY STABILISED CONSTRUCTION EXIT

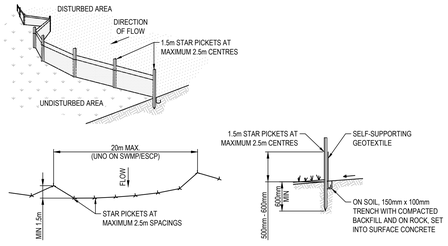
N.T.S.



INLET TRAP

N.T.S.

NOTE
TO BE USED IN PAVED AREAS WHERE TRAFFIC ACCESS IS REQUIRED



PLAN

SECTION DETAIL

CONSTRUCTION NOTES

1. CONSTRUCT SEDIMENT FENCE AS CLOSE AS POSSIBLE TO PARALLEL TO THE CONTOURS OF THE SITE.
2. DRIVE 1.5m LONG STAR PICKETS INTO GROUND, 2.5 METRES APART (MAX). ENSURE STAR PICKETS ARE FITTED WITH SAFETY CAPS.
3. DIG A 150mm DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE FOR THE BOTTOM OF THE FABRIC TO BE ENTRENCHED.
4. BACKFILL TRENCH OVER BASE OF FABRIC.
5. FIX SELF-SUPPORTING GEOTEXTILE TO UPSLOPE SIDE OF POSTS WITH WIRE TIES OR AS RECOMMENDED BY GEOTEXTILE MANUFACTURER.
6. JOIN SECTIONS OF FABRIC AT A SUPPORT POST WITH A 150mm OVERLAP.

SEDIMENT CONTROL FENCE

N.T.S.

NOTES

KEYNOTES

LEGEND

REV	DATE	DESCRIPTION	DRN	ENG	CHK	APP
P1	13NOV2024	DRAFT SSDA ISSUE	DW	JF	MB	MB
A	20NOV2024	SSDA ISSUE	DW	JF	MB	MB

MECHANICAL/ ELECTRICAL ENGINEER:
LCI CONSULTANTS
02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

HYDRAULIC/ FIRE ENGINEER:
LCI CONSULTANTS
02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

CIVIL ENGINEER:
ACOR CONSULTANTS PTY LTD
02 9438 0288
SUITE 2, LEVEL 1, 33 HERBERT STREET,
ST LEONARDS NSW 2065

STRUCTURAL ENGINEER:
VAN DER MEER CONSULTING
02 94066433
LEVEL 6, 39 CHANDOS ST.
ST LEONARDS NSW 2065

ARCHITECT:
GREENDOX ARCHITECTURE PTY LTD
02 8069 8939
LEVEL 22, 68 PITT STREET,
SYDNEY NSW 2000

LANDSCAPE:
GEOSCAPES
02 9411 1485
SUITE 3.03, 8 HELP STREET,
CHATSWOOD, NSW 2067

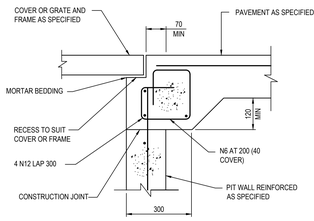
PROJECT: GLENDENNING ROAD DATA CENTRE

TITLE: CIVIL SERVICES
EROSION AND SEDIMENT CONTROL DETAILS

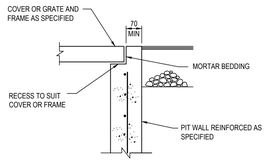
DRAWING: GRDC86-ACR-00-XX-DR-SSDA-C-3051

PAPER SIZE:	SCALE:	REV:
ISO A0	AS SHOWN	A

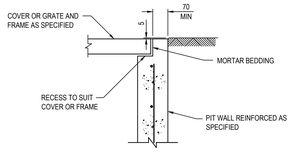
PRINT IN COLOUR



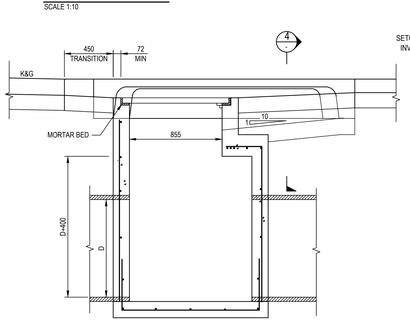
PIT EDGE DETAIL "A"
SCALE 1:10



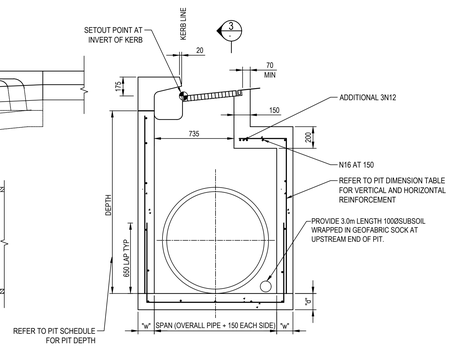
PIT EDGE DETAIL "B"
SCALE 1:10



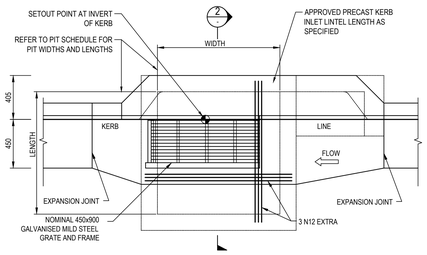
PIT EDGE DETAIL "C"
SCALE 1:10



SECTION 3
SCALE 1:20

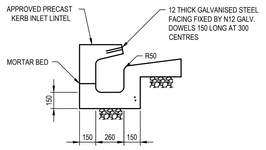


SECTION 2
SCALE 1:20

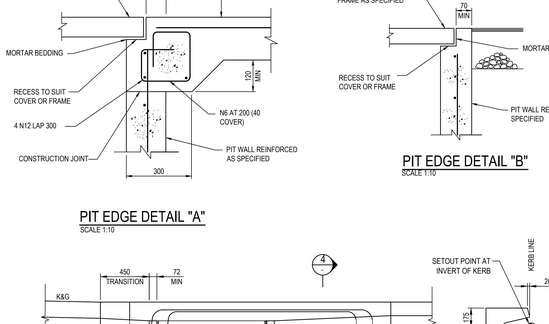


PLAN

KERB INLET PIT TYPE "C"
SCALE 1:20



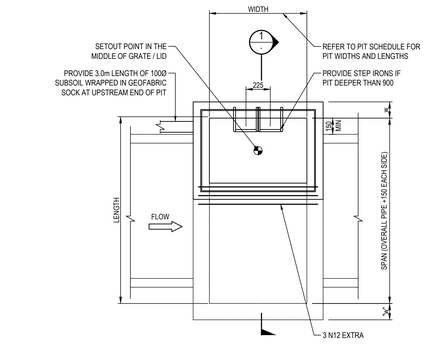
SECTION 4
SCALE 1:20



MINIMUM INTERNAL PIT DIMENSIONS		
"D"	"X"	"Y"
D ≤600	450	450*
D ≤900	600	600*
D ≤1200	600	900
D >1200	900	900

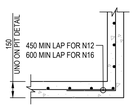
NOTE
PITS DENOTED * SHALL BE USED ONLY WHERE SPECIFIED IN DRAINAGE SCHEDULE OR ON PLAN.

SECTION 1
SCALE 1:20



PLAN

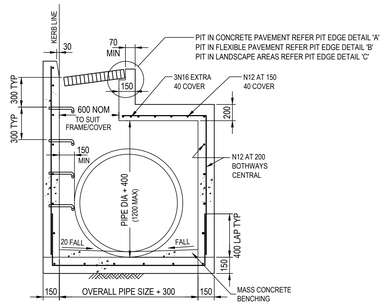
SURFACE INLET/JUNCTION PIT - TYPE A
SCALE 1:20



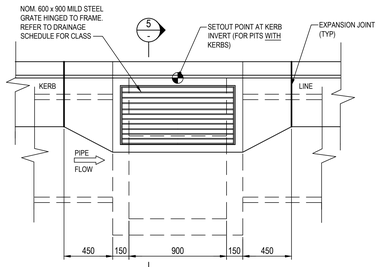
TYPICAL PIT CORNER DETAIL
SCALE 1:20

Span <= 1.5m	Wall Dimensions (mm)				
Depth "h"	Base thickness "d"	Wall thickness "w"	Vertical reinf.	Hor.reinf.	Base Reinf. BW
up to 2m	150.0	150.0	N12@200	N12@200	N12@200
up to 4m	200.0	175.0	N12@200	N12@200	N12@200
up to 6m	200.0	200.0	N12@200	N12@200	N12@200
up to 8m	230.0	230.0	N16@200	N16@200	N16@200
Span 1.5 to 2.5m	Wall Dimensions (mm)				
Depth "h"	Base thickness "d"	Wall thickness "w"	Vertical reinf.	Hor.reinf.	Base Reinf. BW
up to 2m	150.0	200.0	N12@200	N12@200	N12@200
up to 4m	200.0	200.0	N16@200	N16@200	N16@200
up to 6m	230.0	230.0	N16@200	N16@200	N16@200
up to 8m	250.0	250.0	N16@200	N16@200	N16@200
Span 2.5 to 2.8m	Wall Dimensions (mm)				
Depth "h"	Base thickness "d"	Wall thickness "w"	Vertical reinf.	Hor.reinf.	Base Reinf. BW
up to 3m	200	200	N16@200	N16@200	N16@200

PIT DIMENSION TABLE
NOTE: FOR PIT DIMENSIONS AND REINFORCEMENT REFER TABLE ABOVE

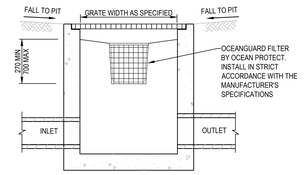


SECTION 5
NTS

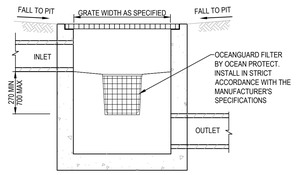


PLAN
NTS

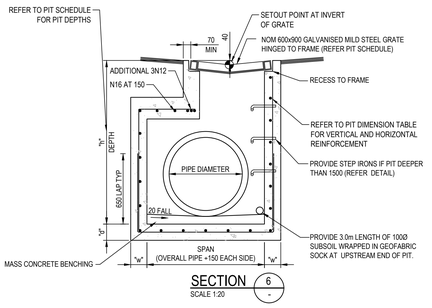
GRATED GULLY PIT TYPE "K"
NTS



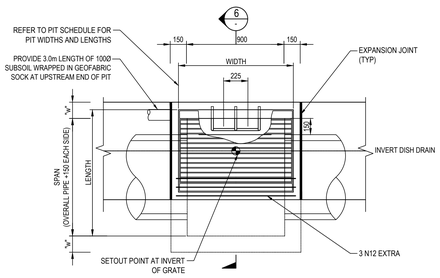
TYPICAL OCEANGUARD ARRANGEMENT DETAIL - SURFACE INLET TREATMENT
NOT TO SCALE
NOTE:
REFER TO MANUFACTURER'S DRAWINGS FOR OCEANGUARD FILTER ARRANGEMENT AND COMPONENTS DETAILS



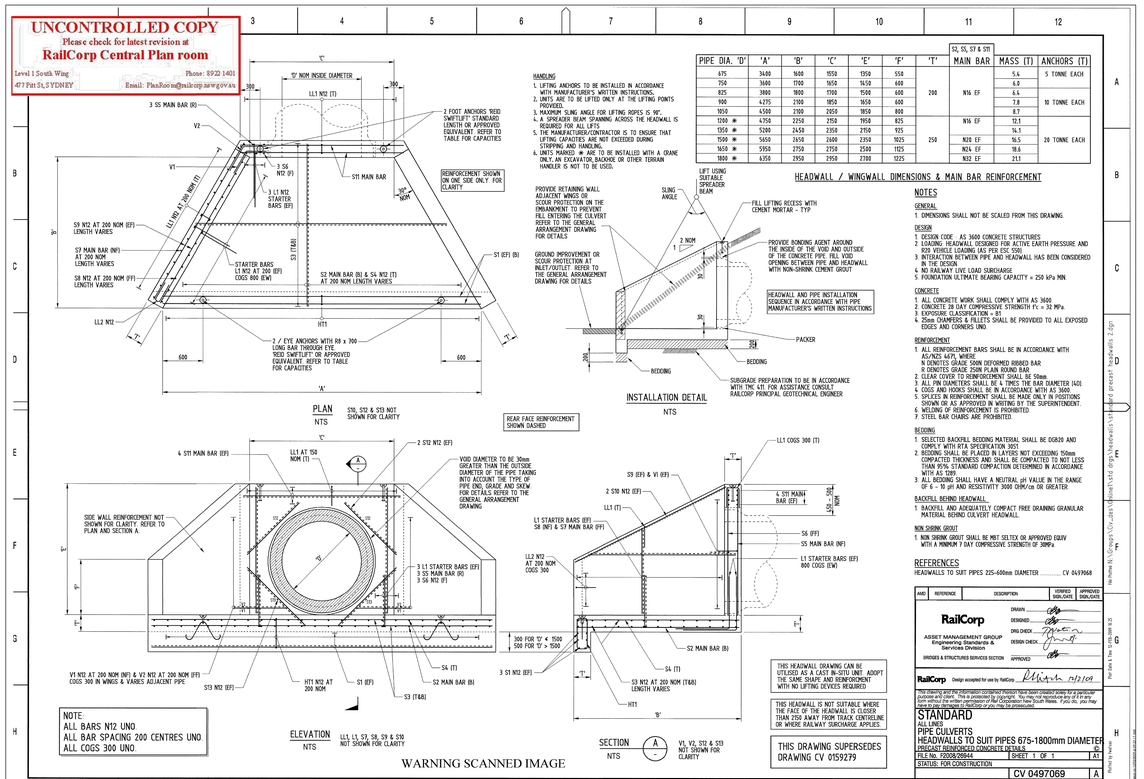
TYPICAL OCEANGUARD ARRANGEMENT DETAIL - DOWNPIPE CONNECTION / DROP PIT
NOT TO SCALE
NOTE:
REFER TO MANUFACTURER'S DRAWINGS FOR OCEANGUARD FILTER ARRANGEMENT AND COMPONENTS DETAILS



SECTION 6
SCALE 1:20



DISH DRAIN PIT TYPE 'E'
SCALE 1:20



PIPE DIA. "D"	"A"	"B"	"C"	"E"	"F"	"T"	S2, S5, S7 & S11 MAIN BAR	MASS (T)	ANCHORS (T)
675	3400	1600	1550	1350	550			5.4	5 TONNE EACH
750	3600	1700	1650	1450	600			6.8	
825	3800	1800	1700	1500	600	200	N16 EF	6.4	
900	4225	2100	1850	1650	600			7.8	10 TONNE EACH
1050	4500	2300	2050	1850	800			8.7	
1200 *	4750	2250	2150	1950	825		N16 EF	12.1	
1350 *	5200	2450	2350	2150	925			14.1	
1500 *	5650	2650	2600	2350	1025	250	N20 EF	16.5	20 TONNE EACH
1650 *	5950	2750	2750	2500	1125		N24 EF	18.6	
1800 *	6350	2950	2950	2700	1225		N32 EF	21.1	

HEADWALL / WINGWALL DIMENSIONS & MAIN BAR REINFORCEMENT

HANDLING
1. LIFTING ANCHORS TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.
2. UNITS ARE TO BE LIFTED ONLY AT THE LIFTING POINTS PROVIDED.
3. MAXIMUM LIFTING ANGLE FOR LIFTING ROPES IS 90°.
4. A SPREADER BEAM SPANNING ACROSS THE HEADWALL IS REQUIRED FOR ALL LIFTS.
5. THE MANUFACTURER/CONTRACTOR IS TO ENSURE THAT LIFTING CAPACITIES ARE NOT EXCEEDED DURING STRIPPING AND HANDLING.
6. UNITS MARKED * ARE TO BE INSTALLED WITH A CRANE ONLY. AN EXCAVATOR, BACKHOE OR OTHER TERRAIN HANDLER IS NOT TO BE USED.

NOTES
GENERAL
1. DIMENSIONS SHALL NOT BE SCALED FROM THIS DRAWING.

DESIGN
1. DESIGN CODE : AS 3600 CONCRETE STRUCTURES
2. LOADING: HEADWALL DESIGNED FOR ACTIVE EARTH PRESSURE AND M1600 LOADING (AS PER ESC 550)
3. INTERACTION BETWEEN PIPE AND HEADWALL HAS BEEN CONSIDERED IN THE DESIGN
4. NO RAILWAY LIVE LOAD SURCHARGE
5. FOUNDATION ULTIMATE BEARING CAPACITY = 250 kPa MIN.

CONCRETE
1. ALL CONCRETE WORK SHALL COMPLY WITH AS 3600
2. CONCRETE 28 DAY COMPRESSIVE STRENGTH f'c = 32 MPa
3. EXPOSURE CLASSIFICATION = B1
4. 25mm CHAMFERS & FILLETS SHALL BE PROVIDED TO ALL EXPOSED EDGES AND CORNERS UNO.

REINFORCEMENT
1. ALL REINFORCEMENT BARS SHALL BE IN ACCORDANCE WITH AS/NZS 4671, WHERE
N DENOTES GRADE 500N DEFORMED RIBBED BAR
R DENOTES GRADE 250R PLAIN ROUND BAR.
2. CLEAR COVER TO REINFORCEMENT SHALL BE 50mm
3. ALL PIN DIAMETERS SHALL BE 4 TIMES THE BAR DIAMETER (4D).
4. COGS AND HOOKS SHALL BE IN ACCORDANCE WITH AS 3600
5. SPLICES IN REINFORCEMENT SHALL BE MADE ONLY IN POSITIONS SHOWN OR AS APPROVED IN WRITING BY THE SUPERINTENDENT.
6. WELDING OF REINFORCEMENT IS PROHIBITED.
7. STEEL BAR CHAIRS ARE PROHIBITED.

BEDDING
1. SELECTED BACKFILL BEDDING MATERIAL SHALL BE DGB20 AND COMPLY WITH RTA SPECIFICATION 3051
2. BEDDING SHALL BE PLACED IN LAYERS NOT EXCEEDING 150mm COMPACTED THICKNESS AND SHALL BE COMPACTED TO NOT LESS THAN 95% STANDARD COMPACTION DETERMINED IN ACCORDANCE WITH AS 1289
3. ALL BEDDING SHALL HAVE A NEUTRAL pH VALUE IN THE RANGE OF 6 – 10 pH AND RESISTIVITY 3000 OHM/cm OR GREATER

BACKFILL BEHIND HEADWALL
1. BACKFILL AND ADEQUATELY COMPACT FREE DRAINING GRANULAR MATERIAL BEHIND CULVERT HEADWALL.

NON SHRINK GROUT
1. NON SHRINK GROUT SHALL BE NOT SILTEX OR APPROVED EQUIV WITH A MINIMUM 7 DAY COMPRESSIVE STRENGTH OF 30MPa

REFERENCES
HEADWALLS TO SUIT PIPES 225-600mm DIAMETER ..... CV 0459568

AMD	REFERENCE	DESCRIPTION	VERIFIED SIGN./DATE	APPROVED SIGN./DATE

RailCorp
ASSET MANAGEMENT GROUP
Engineering Standards & Services Division
BRIDGES & STRUCTURES SERVICES SECTION

DRAWN
DESIGNED
DRG CHECK
DESIGN CHECK
APPROVED

RailCorp Design accepted for use by RailCorp

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STANDARD
ALL LINES
PIPE CULVERTS
HEADWALLS TO SUIT PIPES 675-1800mm DIAMETER
PRECAST REINFORCED CONCRETE DETAILS
FILE No. 03026/29844
STATUS: FOR CONSTRUCTION

SHEET 1 OF 1 A1
CV 0497069 A
SF 0040424

THIS HEADWALL DRAWING CAN BE UTILISED AS A CAST IN-SITU UNIT. ADOPT THE SAME SHAPE AND REINFORCEMENT WITH NO LIFTING DEVICES REQUIRED

THIS HEADWALL IS NOT SUITABLE WHERE THE FACE OF THE HEADWALL IS CLOSER THAN 2150 AWAY FROM TRACK CENTRELINE OR WHERE RAILWAY SURCHARGE APPLIES

THIS DRAWING SUPERSEDES DRAWING CV 0159229

NOTES

KEYNOTES

LEGEND

REV	DATE	DESCRIPTION	DRN	ENG	CHK	APP
P1	13NOV2024	DRAFT SSDA ISSUE	DW	JF	MB	MB
A	20NOV2024	SSDA ISSUE	DW	JF	MB	MB
B	08OCT2025	RE-ISSUE SSDA ISSUE	JK	JF	MB	MB

MECHANICAL/ ELECTRICAL ENGINEER:	HYDRAULIC/ FIRE ENGINEER:
LCI CONSULTANTS 02 9157 0570 LEVEL 5, 73 MILLER STREET, NORTH SYDNEY NSW 2060	LCI CONSULTANTS 02 9157 0570 LEVEL 5, 73 MILLER STREET, NORTH SYDNEY NSW 2060
CIVIL ENGINEER:	STRUCTURAL ENGINEER:
ACOR CONSULTANTS PTY LTD 02 9438 5098 SUITE 2, LEVEL 1, 33 HERBERT STREET, ST LEONARDS NSW 2065	VAN DER MEER CONSULTING 02 94360433 LEVEL 6, 39 CHANDOS ST, ST LEONARDS NSW 2065
ARCHITECT:	LANDSCAPE:
GREENBOX ARCHITECTURE PTY LTD 02 8069 8939 LEVEL 22, 68 PITT STREET, SYDNEY NSW 2000	GEOSCAPES 02 9411 1485 SUITE 3.03, 6 HELP STREET, CHATSWOOD, NSW 2067

PROJECT: GLENDENNING ROAD DATA CENTRE

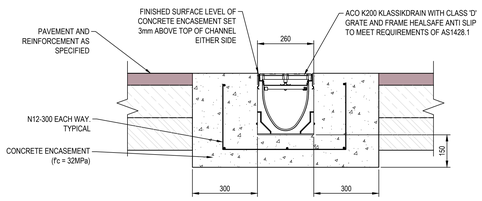
TITLE: CIVIL SERVICES
STORMWATER DRAINAGE DETAILS - SHEET 1

DRAWING: GRDC86-ACR-00-XX-DR-SSDA-C-3101

PAPER SIZE: ISO A0 | SCALE: AS SHOWN | REV: B

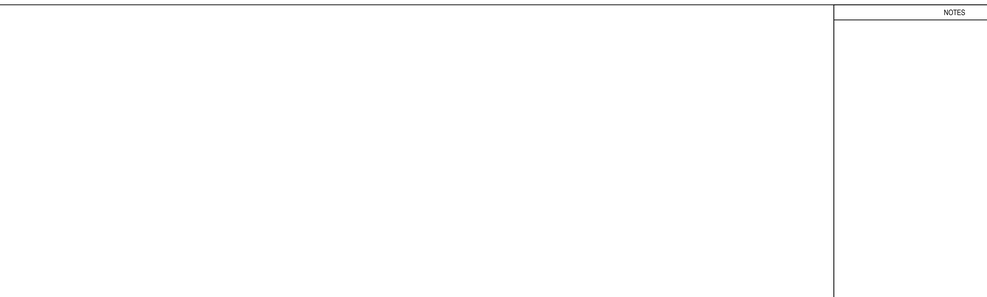
PRINT IN COLOUR

File Name: N:\Groups\Graphics\Projects\Glendenning Road\Drawings\Stormwater\GRDC86-ACR-00-XX-DR-SSDA-C-3101.dwg Xrefs: Plotted: 13 Nov 2024 - 08:35 By: Plotted by: Per Date & Time Stamp



HEAVY DUTY GRATED DRAIN (GD2) IN AC PAVEMENT

SCALE 1:10



ROCK SIZE DISTRIBUTION TABLE

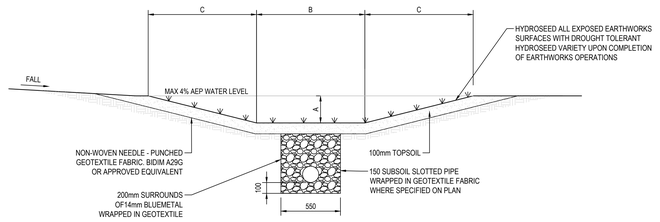
D100/D50	- 2.0	D33/D50	- 0.50
D90/D50	- 1.8	D25/D50	- 0.45
D75/D50	- 1.5	D10/D50	- 0.20
D65/D50	- 1.3		
D40 /D50	- 0.65		

D_x = NOMINAL ROCK DIAMETER OF WHICH x% OF THE ROCKS IS SMALLER

SECTION A
NTS

SCOUR PROTECTION DETAIL AT HEADWALL

1. d50 = 300m RIP-RAP

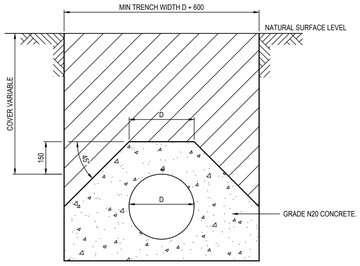


TYPICAL SWALE DETAILS

SCALE 1:20

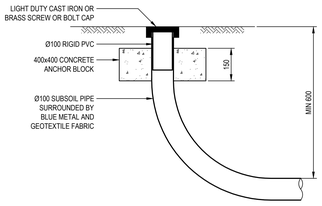
NOTE:
1. SWALES HAVE BEEN SIZED FOR THE 1% AEP STORM.
2. SWALE TYPE 1 TO PROVIDE 1:6 BATTER SLOPES WITHIN ENDEAVOUR ENERGY EASEMENT. BATTER SLOPES BEYOND EASEMENT TO BE MAX 1:3

SWALE TYPE	A	B	C	BANK SLOPE
TYPE 1	500	1000	3000	1:6
TYPE 2	250	1000	1000	1:4
TYPE 3	100	500	600	1:6



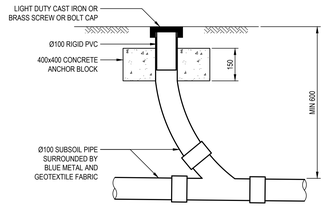
CONCRETE ENCASEMENT TRENCH DETAIL

SCALE 1:10



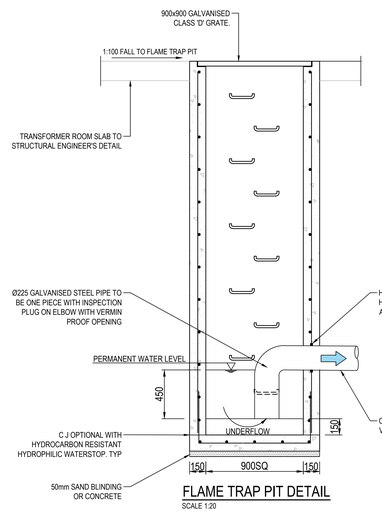
HIGH END RISER

SCALE 1:10



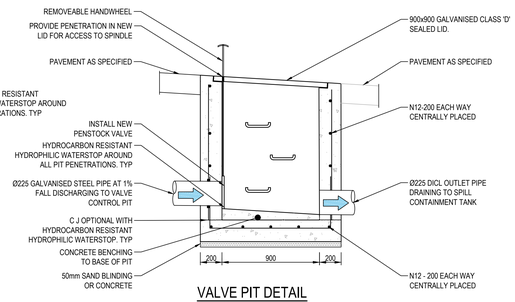
INTERMEDIATE RISER

SCALE 1:10



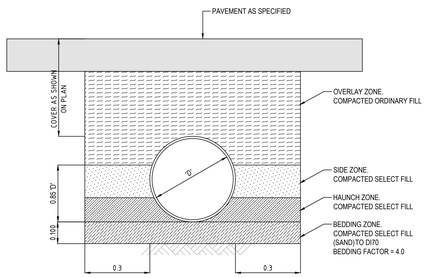
FLAME TRAP PIT DETAIL

SCALE 1:20



VALVE PIT DETAIL

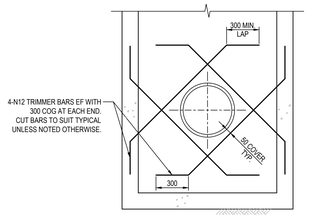
SCALE 1:20



TYPICAL STORMWATER TRENCH DETAIL

SCALE 1:10

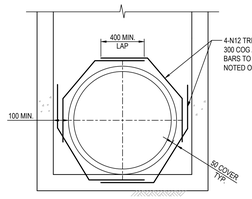
NOTE
STORMWATER PIPE INSTALLATION TO BE IN ACCORDANCE WITH CPAA INSTALLATION SPECIFICATIONS, AS 3500.3 AND ALL OTHER RELEVANT STANDARDS



PIPE PENETRATION TRIMMER BAR DETAIL FOR SMALL PIPE

SCALE 1:20

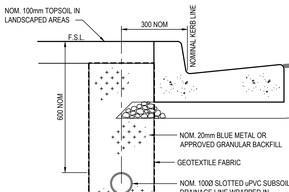
NOTE: FOR PIPES WITH O.D. LESS THAN 0.5x CLEAR INTERNAL WIDTH OF STORMWATER PIT.



PIPE PENETRATION TRIMMER BAR DETAIL FOR LARGE PIPE

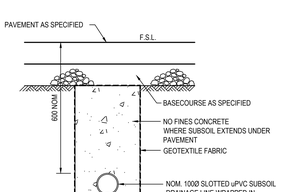
SCALE 1:20

NOTE: FOR PIPES WITH O.D. GREATER THAN 0.5x CLEAR INTERNAL WIDTH OF STORMWATER PIT.



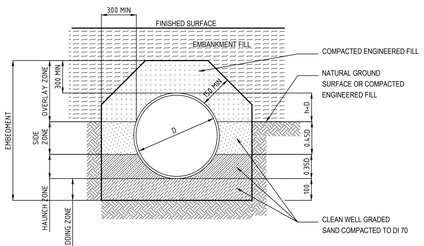
SUBSOIL BEHIND KERBS

SCALE 1:10



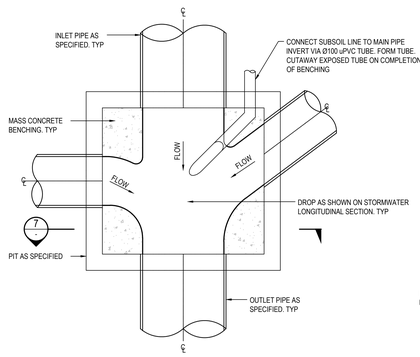
SUBSOIL UNDER PAVEMENTS

SCALE 1:10



TYPICAL STORMWATER PIPE - EMBANKMENT SUPPORT - TYPE HS2

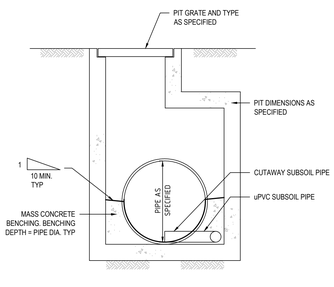
NTS



TYPICAL PIT BENCHING DETAIL

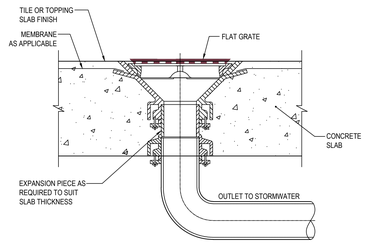
NTS

NOTE: BENCHING CONCRETE CLASS D



SECTION 7

NTS



RAINWATER OUTLET DETAIL

N.T.S.

NOTES

KEYNOTES

LEGEND

REV	DATE	DESCRIPTION	DRN	ENG	CHK	APP
P1	13NOV2024	DRAFT SSDA ISSUE	DW	JF	MB	MB
A	20NOV2024	SSDA ISSUE	DW	JF	MB	MB
B	08OCT2025	RE-ISSUE SSDA ISSUE	JK	JF	MB	MB

MECHANICAL/ ELECTRICAL ENGINEER:
LCI CONSULTANTS
02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

HYDRAULIC/ FIRE ENGINEER:
LCI CONSULTANTS
02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

CIVIL ENGINEER:
ACOR CONSULTANTS PTY LTD
02 9436 5098
SUITE 2, LEVEL 1, 33 HERBERT STREET,
ST LEONARDS NSW 2065

STRUCTURAL ENGINEER:
VAN DER MEER CONSULTING
02 94360433
LEVEL 6, 39 CHANDOS ST,
ST LEONARDS NSW 2065

ARCHITECT:
GREENWICH ARCHITECTURE PTY LTD
02 8069 8939
LEVEL 22, 68 PITT STREET,
SYDNEY NSW 2000

LANDSCAPE:
GEOSCAPES
02 9411 1485
SUITE 3.03, 8 HELP STREET,
CHATSWOOD, NSW 2067

PROJECT: GLENDENNING ROAD DATA CENTRE

TITLE: CIVIL SERVICES
STORMWATER DRAINAGE DETAILS - SHEET 2

DRAWING: GRDC86-ACR-00-XX-DR-SSDA-C-3102

PAPER SIZE:	SCALE:	REV:
ISO A0	AS SHOWN	B

PRINT IN COLOUR

PIT NAME	PIT TYPE	EASTING	NORTHING	SETOUT RL	PIT DEPTH	OCEANGUARD Y/N
A1 A	PRECAST CONCRETE HEADWALL TO SUIT OUTLET PIPE	301343.84	6262506.70	31.75	1.55	N
A1	JUNCTION PIT WITH 900 x 900 DUCTILE IRON CLASS 'D' SEALED LID	301339.89	6262504.26	33.16	2.92	N
A2	JUNCTION PIT WITH 900 x 900 DUCTILE IRON CLASS 'D' SEALED LID	301322.31	6262493.17	33.03	2.67	N
A3	SPLITTER PIT - REFER DETAIL ON DRAWING C-3104	301314.65	6262493.79	33.02	2.45	N
A4	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 1.8m LINTEL	301307.12	6262495.78	32.81	2.21	Y
A5	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 1.8m LINTEL	301304.30	6262478.01	32.99	2.23	Y
A6	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 1.8m SAG LINTEL	301301.16	6262458.19	32.99	2.10	Y
A7	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 1.8m SAG LINTEL	301298.13	6262438.42	33.01	2.00	Y
A8	DISH DRAIN PIT WITH 900 x 900 CLASS 'D' V-GRATE AND FRAME	301295.23	6262418.71	32.86	1.73	Y
A9	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 1.8m SAG LINTEL	301291.89	6262398.98	33.05	1.79	Y
A10	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 1.8m SAG LINTEL	301288.76	6262379.22	33.07	1.68	Y
A11	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 1.8m SAG LINTEL	301286.01	6262361.87	33.13	1.63	Y
A12	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 1.8m LINTEL	301281.93	6262349.98	33.06	1.47	Y
A13	JUNCTION PIT WITH 900 x 900 DUCTILE IRON CLASS 'D' SEALED LID	301271.82	6262334.27	33.10	1.39	N
A14	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 1.8m LINTEL	301263.28	6262335.72	33.31	1.53	Y
A15	DISH DRAIN PIT WITH 900 x 900 CLASS 'D' V-GRATE AND FRAME	301241.23	6262338.99	33.43	1.53	Y
A16	DISH DRAIN PIT WITH 900 x 900 CLASS 'D' V-GRATE AND FRAME	301219.22	6262342.48	33.46	1.42	Y
A17	DISH DRAIN PIT WITH 900 x 900 CLASS 'D' V-GRATE AND FRAME	301198.07	6262345.78	33.67	1.50	Y
A18	DISH DRAIN PIT WITH 900 x 900 CLASS 'D' V-GRATE AND FRAME	301188.75	6262347.25	33.91	1.67	Y
A19	JUNCTION PIT WITH 900 x 900 DUCTILE IRON CLASS 'D' SEALED LID	301170.83	6262350.09	34.03	1.67	N
A20	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 1.8m LINTEL	301168.58	6262336.88	34.23	1.77	Y
A21	JUNCTION PIT WITH 900 x 900 DUCTILE IRON CLASS 'D' SEALED LID	301166.48	6262322.63	34.26	1.71	N
A22	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 1.8m LINTEL	301153.48	6262324.60	34.41	1.76	Y
A23	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 1.8m SAG LINTEL	301125.11	6262329.10	34.49	1.68	Y
A24	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 1.8m SAG LINTEL	301105.36	6262332.22	34.51	1.58	Y
A25	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 1.8m SAG LINTEL	301085.61	6262335.35	34.53	1.47	Y
A26	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 1.8m SAG LINTEL	301065.85	6262338.43	34.55	1.36	Y
A27	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 1.8m SAG LINTEL	301046.09	6262341.56	34.57	1.26	Y
A28	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 1.8m SAG LINTEL	301026.32	6262344.58	34.58	1.14	Y
A29	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 1.8m SAG LINTEL	301006.57	6262347.71	34.60	1.04	Y
A30	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 1.8m LINTEL	300993.23	6262349.93	34.75	1.06	Y
A31	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 1.8m LINTEL	300984.38	6262353.92	34.85	1.04	Y
A32	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 1.8m LINTEL	300974.74	6262362.64	34.95	1.01	Y
B1	JUNCTION PIT WITH 900 x 900 DUCTILE IRON CLASS 'D' SEALED LID	301309.92	6262511.25	32.81	2.16	N
B2	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 2.4m SAG LINTEL	301299.46	6262512.55	32.61	1.93	Y
B3	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 1.8m LINTEL	301287.31	6262514.47	32.77	2.05	Y
B4	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 1.8m SAG LINTEL	301261.73	6262518.52	32.91	2.11	Y
B5	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 1.8m SAG LINTEL	301241.97	6262521.65	32.93	2.07	Y
B6	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 2.4m SAG LINTEL	301222.22	6262524.78	32.95	2.01	Y
B7	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 1.8m LINTEL	301198.74	6262528.50	33.18	2.10	Y
B8	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 1.8m LINTEL	301195.23	6262507.10	33.36	2.14	Y
B9	DISH DRAIN PIT WITH 900 x 900 CLASS 'D' V-GRATE AND FRAME	301191.39	6262481.44	33.46	1.62	Y
B10	DISH DRAIN PIT WITH 900 x 900 CLASS 'D' V-GRATE AND FRAME	301189.78	6262470.62	33.56	1.50	Y
B11	DISH DRAIN PIT WITH 900 x 900 CLASS 'D' V-GRATE AND FRAME	301188.05	6262459.71	33.67	1.52	Y
B12	DISH DRAIN PIT WITH 900 x 900 CLASS 'D' V-GRATE AND FRAME	301186.32	6262448.81	33.78	1.55	Y
B13	DISH DRAIN PIT WITH 900 x 900 CLASS 'D' V-GRATE AND FRAME	301184.63	6262437.89	33.89	1.58	Y
B14	DISH DRAIN PIT WITH 900 x 900 CLASS 'D' V-GRATE AND FRAME	301182.92	6262426.99	34.00	1.60	Y
B15	DISH DRAIN PIT WITH 900 x 900 CLASS 'D' V-GRATE AND FRAME	301181.19	6262416.08	34.11	1.63	Y
B16	DISH DRAIN PIT WITH 900 x 900 CLASS 'D' V-GRATE AND FRAME	301179.53	6262405.63	34.21	1.66	Y
B17	DISH DRAIN PIT WITH 900 x 900 CLASS 'D' V-GRATE AND FRAME	301177.77	6262394.46	34.31	1.68	Y
B18	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 1.8m LINTEL	301155.46	6262397.37	34.65	1.88	Y
B19	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 1.8m SAG LINTEL	301138.58	6262400.04	34.61	1.74	Y
B20	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 1.8m SAG LINTEL	301118.78	6262402.91	34.61	1.61	Y
B21	DISH DRAIN PIT WITH 900 x 900 CLASS 'D' V-GRATE AND FRAME	301099.03	6262406.04	34.63	1.50	Y
B22	DISH DRAIN PIT WITH 900 x 900 CLASS 'D' V-GRATE AND FRAME	301079.28	6262409.17	34.65	1.40	Y
B23	DISH DRAIN PIT WITH 900 x 900 CLASS 'D' V-GRATE AND FRAME	301059.52	6262412.30	34.67	1.29	Y
B24	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 1.8m SAG LINTEL	301039.77	6262415.43	34.69	1.17	Y
B25	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 1.8m SAG LINTEL	301020.01	6262418.56	34.71	1.06	Y
B26	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 1.8m LINTEL	301000.37	6262421.67	34.81	1.04	Y
B27	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 1.8m LINTEL	300998.82	6262411.90	34.91	1.01	Y
B28	JUNCTION PIT WITH 900 x 900 DUCTILE IRON CLASS 'D' SEALED LID	300999.77	6262408.79	34.99	0.89	N
C1	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 1.8m LINTEL	301186.12	6262356.26	34.14	1.67	Y
C2	JUNCTION PIT WITH 900 x 900 DUCTILE IRON CLASS 'D' SEALED LID	301171.99	6262358.49	34.21	1.49	N
C3	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 1.8m LINTEL	301174.44	6262373.97	34.30	1.63	Y
C4	900 x 900 SURFACE INLET PIT WITH CLASS 'D' GRATE AND FRAME	301159.85	6262377.04	34.77	1.85	Y

PIT NAME	PIT TYPE	EASTING	NORTHING	SETOUT RL	PIT DEPTH	
D1	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 2.4m LINTEL	301172.12	6262512.61	33.45	2.09	Y
D2	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 1.8m SAG LINTEL	301148.47	6262516.35	33.49	1.98	Y
D3	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 1.8m SAG LINTEL	301128.76	6262519.74	33.49	1.86	Y
D4	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 1.8m SAG LINTEL	301109.01	6262522.87	33.51	1.75	Y
D5	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 1.8m SAG LINTEL	301089.25	6262526.00	33.53	1.64	Y
D6	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 1.8m SAG LINTEL	301069.50	6262529.13	33.55	1.54	Y
D7	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 1.8m SAG LINTEL	301049.75	6262532.25	33.57	1.43	Y
D8	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 1.8m SAG LINTEL	301029.99	6262535.38	33.59	1.33	Y
D9	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 2.4m SAG LINTEL	301009.71	6262538.59	33.61	1.21	Y
D10	DISH DRAIN PIT WITH 900 x 900 CLASS 'D' V-GRATE AND FRAME	301005.48	6262511.26	33.70	1.15	Y
D11	DISH DRAIN PIT WITH 900 x 900 CLASS 'D' V-GRATE AND FRAME	301002.35	6262491.51	33.72	1.04	Y
D12	DISH DRAIN PIT WITH 900 x 900 CLASS 'D' V-GRATE AND FRAME	300999.64	6262474.41	34.03	1.04	Y
D13	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 1.8m LINTEL	300996.11	6262452.15	34.39	1.05	Y
D14	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 1.8m LINTEL	300999.45	6262437.07	34.56	1.03	Y
E1	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 1.8m SAG LINTEL	300992.38	6262371.24	34.96	1.01	Y
F1	900 x 900 SURFACE INLET PIT WITH CLASS 'D' GRATE AND FRAME	301278.73	6262401.15	33.48	0.73	Y
F2	900 x 900 SURFACE INLET PIT WITH CLASS 'B' GRATE AND FRAME	301239.82	6262407.32	34.65	1.29	Y
F3	900 x 900 SURFACE INLET PIT WITH CLASS 'B' GRATE AND FRAME	301232.71	6262408.44	34.50	0.75	Y
F4	900 x 900 SURFACE INLET PIT WITH CLASS 'B' GRATE AND FRAME	301234.31	6262418.53	34.50	0.63	Y
G1	900 x 900 SURFACE INLET PIT WITH CLASS 'B' GRATE AND FRAME	301231.15	6262398.56	34.50	0.78	Y
H1	900 x 900 SURFACE INLET PIT WITH CLASS 'D' GRATE AND FRAME	301281.85	6262420.83	33.30	0.71	Y
H2	900 x 900 SURFACE INLET PIT WITH CLASS 'B' GRATE AND FRAME	301242.93	6262426.99	34.64	1.35	Y
H3	900 x 900 SURFACE INLET PIT WITH CLASS 'B' GRATE AND FRAME	301235.83	6262428.12	34.50	1.11	Y
H4	900 x 900 SURFACE INLET PIT WITH CLASS 'B' GRATE AND FRAME	301237.41	6262438.07	34.50	0.99	Y
H5	900 x 900 SURFACE INLET PIT WITH CLASS 'B' GRATE AND FRAME	301238.97	6262447.95	34.50	0.87	Y
H6	900 x 900 SURFACE INLET PIT WITH CLASS 'B' GRATE AND FRAME	301240.54	6262457.82	34.50	0.75	Y
H7	900 x 900 SURFACE INLET PIT WITH CLASS 'B' GRATE AND FRAME	301242.10	6262467.70	34.50	0.63	Y
K1	900 x 900 SURFACE INLET PIT WITH CLASS 'D' GRATE AND FRAME	301239.22	6262508.63	33.54	1.16	Y
L1	900 x 900 SURFACE INLET PIT WITH CLASS 'D' GRATE AND FRAME	301168.78	6262439.22	34.63	1.27	Y
N1	900 x 900 SURFACE INLET PIT WITH CLASS 'D' GRATE AND FRAME	301061.50	6262424.78	35.10	1.64	Y
N2	900 x 900 SURFACE INLET PIT WITH CLASS 'B' GRATE AND FRAME	301068.06	6262465.82	35.33	1.43	Y
N3	900 x 900 SURFACE INLET PIT WITH CLASS 'B' GRATE AND FRAME	301069.13	6262472.57	35.20	0.90	Y
N4	900 x 900 SURFACE INLET PIT WITH CLASS 'B' GRATE AND FRAME	301079.01	6262471.01	35.20	0.78	Y
P1	900 x 900 SURFACE INLET PIT WITH CLASS 'B' GRATE AND FRAME	301059.26	6262474.13	35.20	0.78	Y
Q1	900 x 900 SURFACE INLET PIT WITH CLASS 'D' GRATE AND FRAME	301081.25	6262421.66	35.07	1.66	Y
Q2	900 x 900 SURFACE INLET PIT WITH CLASS 'B' GRATE AND FRAME	301087.84	6262462.68	35.33	1.48	Y
Q3	900 x 900 SURFACE INLET PIT WITH CLASS 'B' GRATE AND FRAME	301088.91	6262469.44	35.20	1.26	Y
Q4	900 x 900 SURFACE INLET PIT WITH CLASS 'B' GRATE AND FRAME	301098.93	6262467.85	35.20	1.14	Y
Q5	900 x 900 SURFACE INLET PIT WITH CLASS 'B' GRATE AND FRAME	301108.64	6262466.31	35.20	1.02	Y
Q6	900 x 900 SURFACE INLET PIT WITH CLASS 'B' GRATE AND FRAME	301118.52	6262464.75	35.20	0.90	Y
Q7	900 x 900 SURFACE INLET PIT WITH CLASS 'B' GRATE AND FRAME	301128.39	6262463.18	35.20	0.78	Y
R1	PROTECT AND RETAIN EXISTING PIT	300960.55	6262454.03	33.55	1.15	N
R2	JUNCTION PIT WITH 900 x 900 DUCTILE IRON CLASS 'D' SEALED LID	300968.72	6262450.71	34.08	1.45	N
R3	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 2.4m SAG LINTEL	300969.53	6262443.03	34.33	1.13	Y
R4	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 1.8m SAG LINTEL	300974.94	6262430.81	34.75	1.13	Y
R5	JUNCTION PIT WITH 900 x 900 DUCTILE IRON CLASS 'D' SEALED LID	300975.54	6262411.79	35.02	1.04	N
R6	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 2.4m SAG LINTEL	300974.10	6262402.74	34.94	1.00	Y
R7	600 x 600 SURFACE INLET PIT WITH CLASS 'B' GRATE AND FRAME	300967.78	6262403.74	35.21	0.94	Y
R8	600 x 600 SURFACE INLET PIT WITH CLASS 'B' GRATE AND FRAME	300964.88	6262385.41	35.54	0.85	Y
S1	900 x 900 SURFACE INLET PIT WITH CLASS 'D' GRATE AND FRAME	300995.29	6262512.88	33.57	0.72	Y
S2	900 x 900 SURFACE INLET PIT WITH CLASS 'D' GRATE AND FRAME	300992.95	6262498.05	33.63	0.68	Y
T1	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 2.4m LINTEL	301000.75	6262540.01	33.50	1.00	Y
U1	900 x 900 SURFACE INLET PIT WITH CLASS 'D' GRATE AND FRAME	301173.56	6262531.66	33.44	1.01	Y
V1	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 2.4m LINTEL	301271.06	6262326.55	33.27	1.16	Y
V2	900 x 900 SURFACE INLET PIT WITH CLASS 'D' GRATE AND FRAME	301257.98	6262322.67	33.22	0.95	Y
V3	900 x 900 SURFACE INLET PIT WITH CLASS 'D' GRATE AND FRAME	301247.12	6262324.39	33.28	0.88	Y
W1	DISH DRAIN PIT WITH 900 x 900 CLASS 'D' V-GRATE AND FRAME	300975.34	6262537.20	32.55	1.18	Y
W2	450 x 900 CLASS 'D' GALVANISED STEEL GRATE HINGED TO FRAME WITH 2.4m LINTEL	300973.22	6262524.98	32.61	1.01	Y
X1	900 x 900 SURFACE INLET PIT WITH CLASS 'D' GRATE AND FRAME	301187.26	6262338.04	34.35	0.96	Y
X2	900 x 900 SURFACE INLET PIT WITH CLASS 'D' GRATE AND FRAME	301196.64	6262336.55	34.35	0.68	Y
					TOTAL	112

NOTES

KEYNOTES

LEGEND

REV	DATE	DESCRIPTION	DRN	ENG	CHK	APP
P1	13NOV2024	DRAFT SSDA ISSUE	DW	JF	MB	MB
A	20NOV2024	SSDA ISSUE	DW	JF	MB	MB
B	08OCT2025	RE-ISSUE SSDA ISSUE	JK	JF	MB	MB

MECHANICAL/ ELECTRICAL ENGINEER:
LCI CONSULTANTS
02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

HYDRAULIC/ FIRE ENGINEER:
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02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

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ACOR CONSULTANTS PTY LTD
02 9438 5098
SUITE 2, LEVEL 1, 33 HERBERT STREET,
ST LEONARDS NSW 2065

STRUCTURAL ENGINEER:
VAN DER MEER CONSULTING
02 94360433
LEVEL 6, 39 CHANDOS ST.,
ST LEONARDS NSW 2065

ARCHITECT:
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02 8069 8939
LEVEL 22, 68 PITT STREET,
SYDNEY NSW 2000

LANDSCAPE:
GEOSCAPES
02 9411 1485
SUITE 3.03, 8 HELP STREET,
CHATSWOOD, NSW 2067

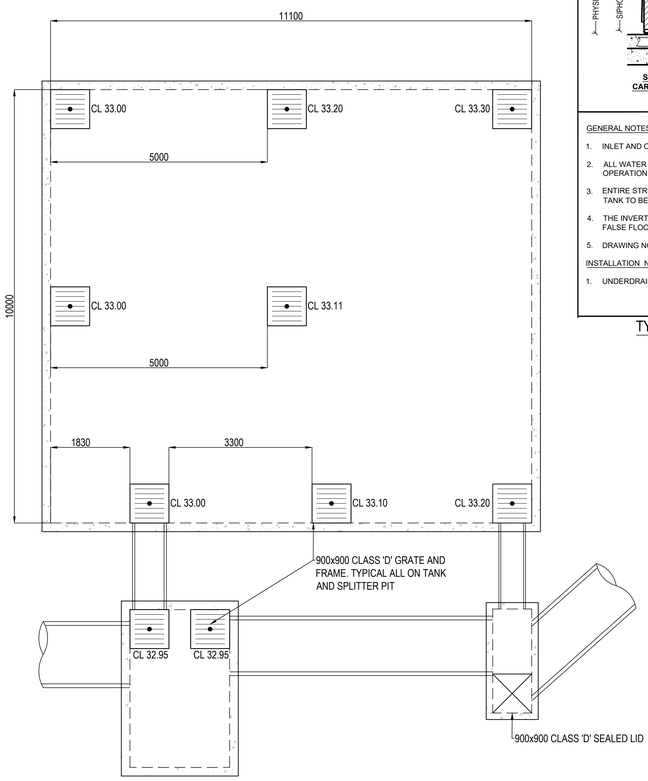
PROJECT: GLENDENNING ROAD DATA CENTRE

TITLE: CIVIL SERVICES
STORMWATER DRAINAGE DETAILS - SHEET 3

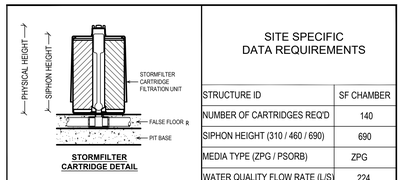
DRAWING: GRDC86-ACR-00-XX-DR-SSDA-C-3103

PAPER SIZE:	SCALE:		REV:
ISO A0	AS SHOWN		B

PRINT IN COLOUR



WATER QUALITY TANK AND SPLITTER PIT - LID PLAN



STORMFILTER CARTRIDGE DETAIL

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID	SF CHAMBER
NUMBER OF CARTRIDGES REQ'D	140
SIPHON HEIGHT (310 / 460 / 690)	690
MEDIA TYPE (ZPG / PSORB)	ZPG
WATER QUALITY FLOW RATE (L/S)	224

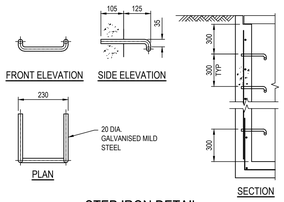
GENERAL NOTES

1. INLET AND OUTLET PIPES TO BE IN ACCORDANCE WITH APPROVED PLANS.
2. ALL WATER QUALITY TREATMENT DEVICES REQUIRE PERIODIC MAINTENANCE. REFER TO OPERATION AND MAINTENANCE MANUAL FOR GUIDELINES AND ACCESS REQUIREMENTS.
3. ENTIRE STRUCTURE INCLUDING THE CARTRIDGE CHAMBER, ACCESS, AND SURROUNDING TANK TO BE DESIGNED AND CONSTRUCTED BY OTHERS. REFER TO CIVIL DRAWINGS.
4. THE INVERT LEVEL OF THE INLET PIPE MUST BE GREATER THAN THE RL OF THE FINISHED FALSE FLOOR WITHIN THE CARTRIDGE CHAMBER.
5. DRAWING NOT TO SCALE.

INSTALLATION NOTES

1. UNDERDRAIN AND FALSE FLOOR INSTALLED BY OCEAN PROTECT.

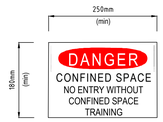
TYPICAL STORMWATER FILTER CARTRIDGE



STEP IRON DETAIL

N.T.S.

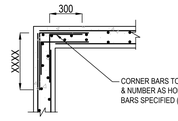
NOTE: WHERE STEP IRONS WILL BE FULLY SUBMERGED, 306 STAINLESS STEEL STEP IRONS SHALL BE USED OR OTHER APPROVED STEP IRON



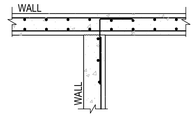
CONFINED SPACE DANGER SIGN

NOTES

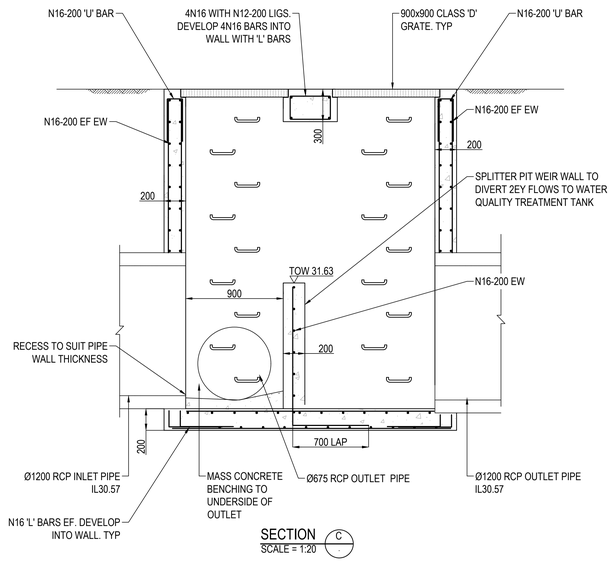
1. A CONFINED SPACE SIGN SHALL BE PLACED NEXT TO EACH AND EVERY ACCESS POINT THEY ARE VISIBLE TO PERSON ENTERING ANY BELOW GROUND TANK OR PIT.
2. COLOURS :
   - "DANGER" AND BACKGROUND - WHITE
   - ELLIPTICAL AREA - RED
   - LETTERING AND BORDER - BLACK
3. MINIMUM OF THE SIGN:
   - LARGE ENTRIES - 300mm x 450mm
   - SMALL ENTRIES - 250 mm x 180mm
4. SIGN TO BE MADE FROM COLOUR BONDED ALUMINIMUM OR POLYPROPYLENE
5. SIGN FIXED USING HILTI CHEMSETS OR EPOXY



REINFORCEMENT EACH FACE (PLAN VIEW)



REINFORCEMENT CENTRAL (PLAN VIEW)

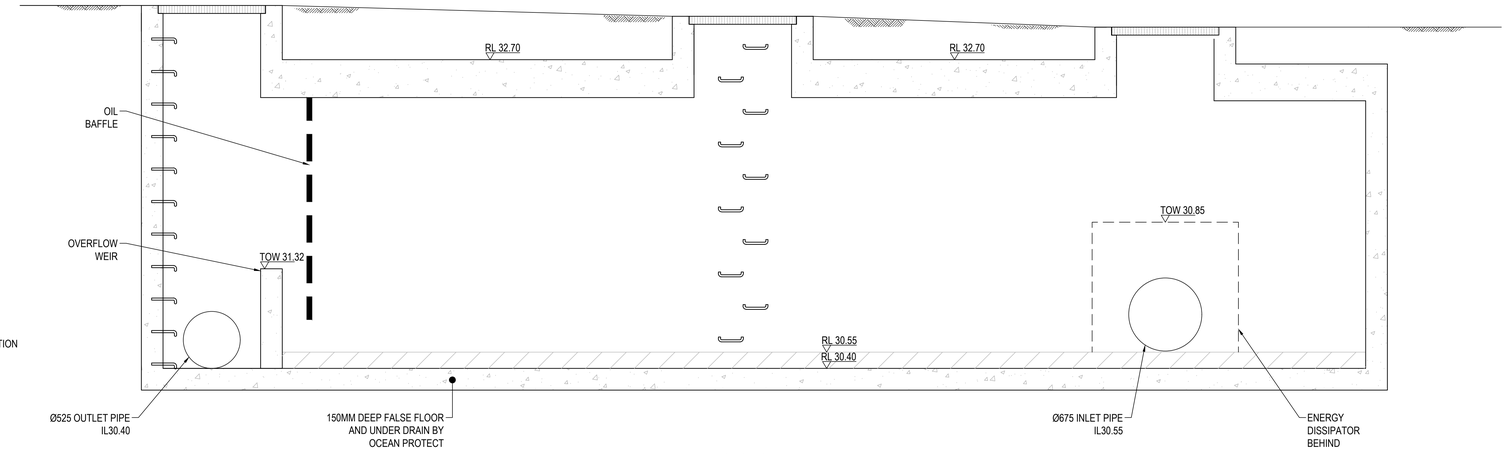


SECTION C

SCALE = 1:20

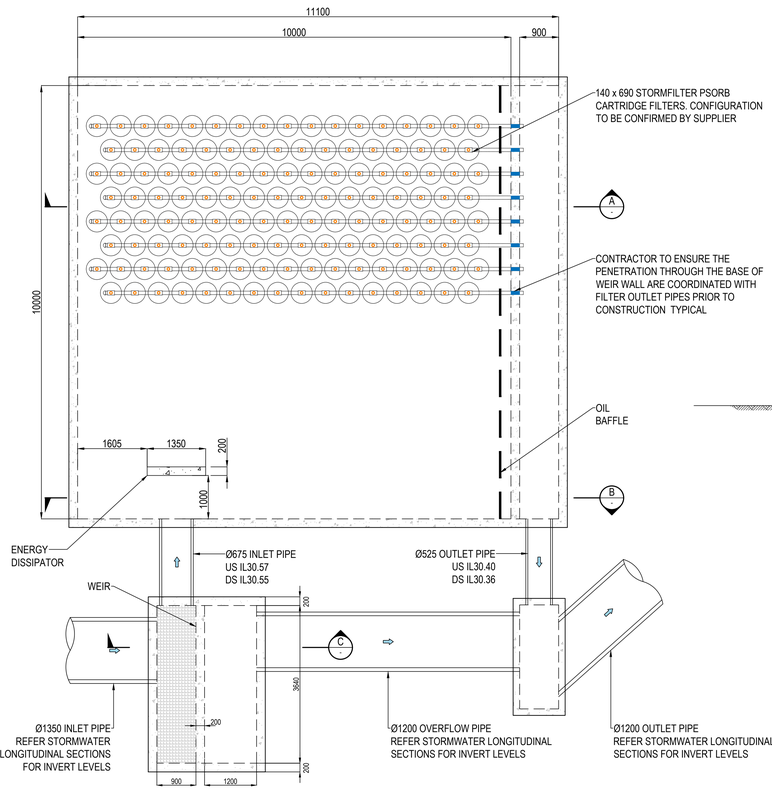
SPLITTER PIT CORNER REINFORCEMENT DETAILS

SCALE 1:20



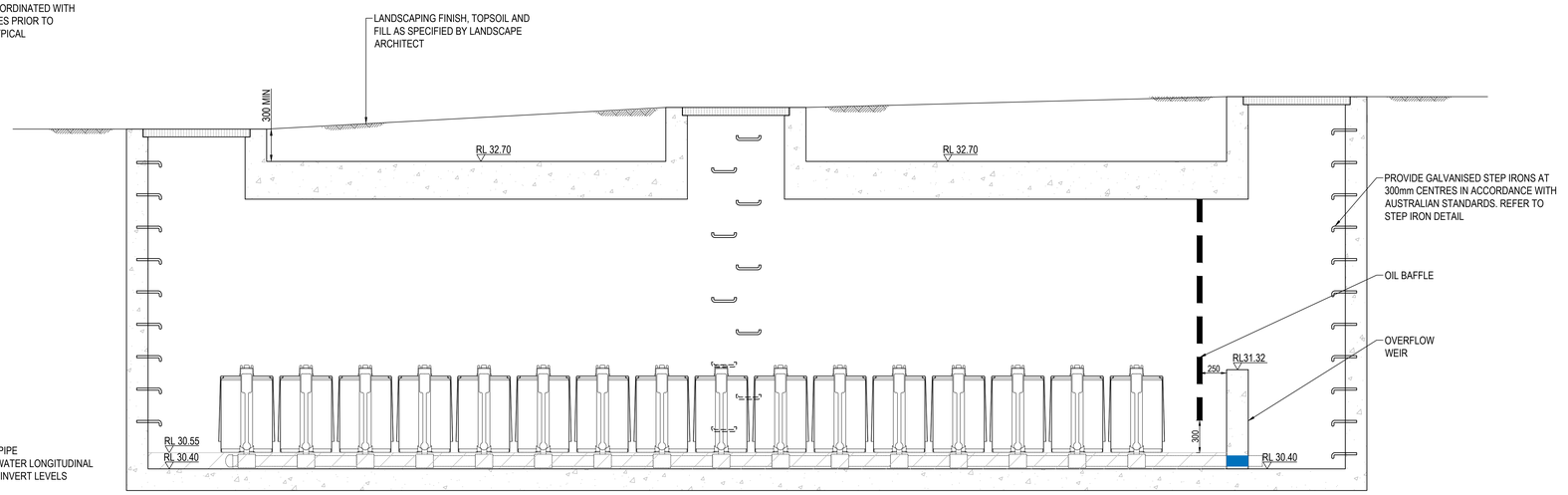
SECTION B

SCALE = 1:20



WATER QUALITY TANK AND SPLITTER PIT - PLAN VIEW

SCALE 1:50



SECTION A

SCALE = 1:20

NOTES

KEYNOTES

LEGEND

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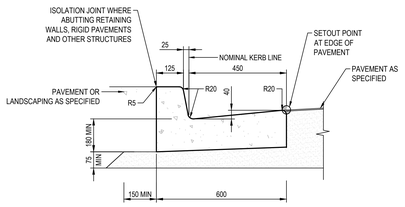
PROJECT: GLENDENNING ROAD DATA CENTRE

TITLE: CIVIL SERVICES STORMWATER DRAINAGE DETAILS - SHEET 4

DRAWING: GRDC86-ACR-00-XX-DR-SSDA-C-3104

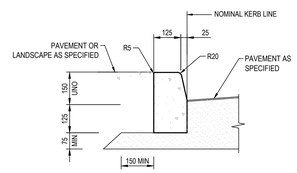
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PRINT IN COLOUR



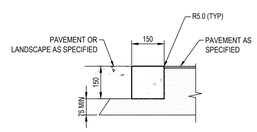
KERB & GUTTER (K&G)

SCALE 1:10



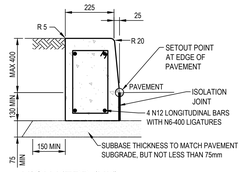
KERB ONLY (KO)

SCALE 1:10



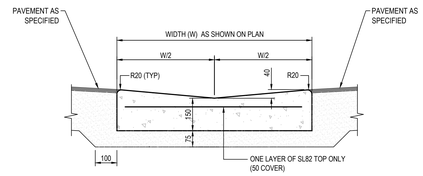
FLUSH KERB (FK)

SCALE 1:10



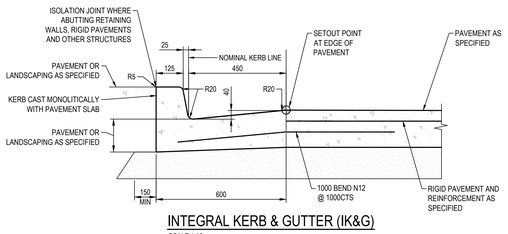
HIGH KERB (HK)

SCALE 1:10



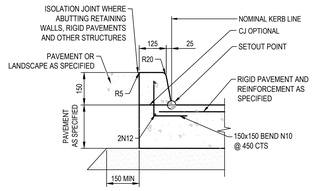
DISH DRAIN (DD)

SCALE 1:10



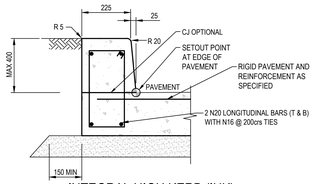
INTEGRAL KERB & GUTTER (IK&G)

SCALE 1:10



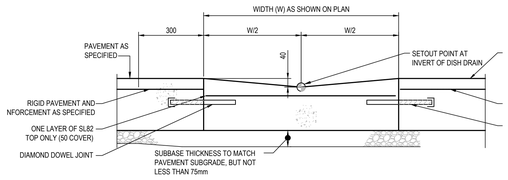
INTEGRAL KERB (IK)

SCALE 1:10



INTEGRAL HIGH KERB (IHK)

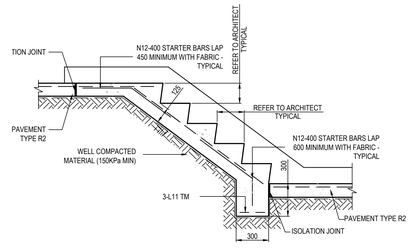
SCALE 1:10



INTEGRAL DISH DRAIN (DD - WIDTH AS SPECIFIED ON PLAN)

SCALE 1:10

NOTE: CONTRACTION AND CONSTRUCTION JOINTS TO MATCH ADJACENT PAVEMENT JOINTS.

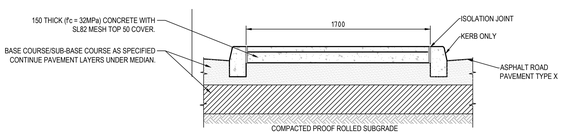


TYPICAL EXTERNAL STAIR ON GROUND

SCALE 1:20

NOTES:

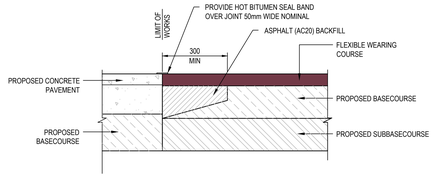
1. STAIR TO BE 125mm THICK UNLESS NOTED OTHERWISE REINFORCED WITH SL82 MESH PLACED 40mm TOP COVER. STAIR TO BE POURED ON A 300um WATERPROOF MEMBRANE
2. REFER TO ARCHITECTURAL DRAWINGS FOR HANDRAIL DETAILS.



ENTRY CONCRETE MEDIAN

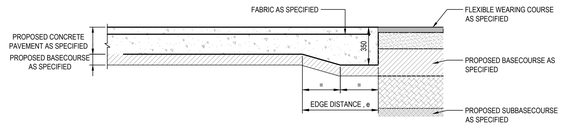
SCALE 1:20

NOTE: CONSTRUCT SAWCUT JOINTS IN CONCRETE MEDIAN AT MAXIMUM 2.0m CENTRES AND EXPANSION JOINTS AT MAXIMUM 8.0m CENTRES



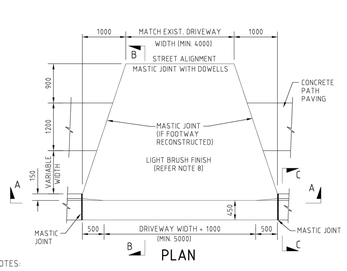
RIGID PAVEMENT TO FLEXIBLE PAVEMENT CONNECTION

SCALE 1:10



RIGID PAVEMENT TO FLEXIBLE PAVEMENT CONNECTION

SCALE 1:20



PLAN

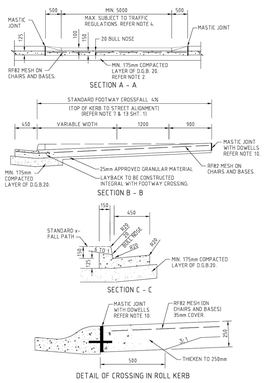
NOTES:

1. COMMERCIAL AND INDUSTRIAL VEHICULAR FOOTWAY CROSSINGS SHALL BE 150mm THICK CONCRETE, REINFORCED WITH RF82 MESH ON CHAIRS, 35mm COVER.
2. THE CONCRETE SHALL BE PLACED ON A 25mm LAYER OF APPROVED FINE, GRANULAR MATERIAL, EXCEPT AT THE KERB AND GUTTER LINE WHERE THIS SECTION SHALL BE PLACED ON A MINIMUM 175mm COMPACTED LAYER OF D.G.B. 20 OR THE DEPTH OF THE EXISTING PAVEMENT WHICHEVER IS GREATER.
3. MINIMUM WIDTH OF ENTRY IN INDUSTRIAL AREA AT KERB LINE SHALL BE 5m PLUS WINGS.
4. MAXIMUM WIDTH OF ENTRY IN INDUSTRIAL AREA AT KERB LINE IS SUBJECT TO TRAFFIC REGULATIONS, POLICY AND STANDARDS FOR TRAFFIC GENERATING DEVELOPMENTS.
5. EXISTING CONCRETE FOOTPATH SHALL BE SAW CUT AT APPROX. 1m EITHER SIDE OF THE CROSSING AND RECONSTRUCTED IN CONJUNCTION WITH THE CROSSING.
6. CONCRETE SHALL HAVE A 28 DAY STRENGTH (F'c) OF 20MPa AND A SLUMP OF 80mm.
7. ANY VARIATIONS TO STANDARD CROSSFALL 4% ON FOOTWAY SHALL HAVE THE PRIOR APPROVAL OF COUNCIL.
8. CONCRETE SHALL HAVE A LIGHT BRUSHED FINISH.
9. FOOTWAY CROSSING TO BE DOWELLED TO INTERNAL DRIVEWAY AND TO ROLL KERB USING GALVANISED 20%% C DOWELLS PLACED 500mm IN FROM EDGES OF CROSSING AND AT 900mm SPACING WITH SUITABLE MATERIAL TO ENSURE SLIP JOINT.
10. ALL DOWELS TO BE 300mm LONG WITH 150mm PENETRATION INTO EACH SLAB.
11. STANDARD LAYBACK TO BE DEMOLISHED AND RE CONSTRUCTED AS AN INTEGRAL PART OF THE PROPOSED CROSSING. IN CASE OF ROLL TOP KERB, IT IS AN OPTION TO RETAIN IT OR RE CONSTRUCT IT AS AN INTEGRAL PART OF THE CROSSING.
12. ALL DIMENSIONS ARE SHOWN IN MILLIMETRES.
13. THE SECTION OF THE CROSSING ADJACENT TO CONCRETE FOOTPATH IS TO HAVE 2.5% FALL UNLESS MATCHING THE CROSSFALL OF EXISTING FOOTPATH.

STANDARD INDUSTRIAL COMMERCIAL FOOTWAY CROSSING

NOT TO SCALE

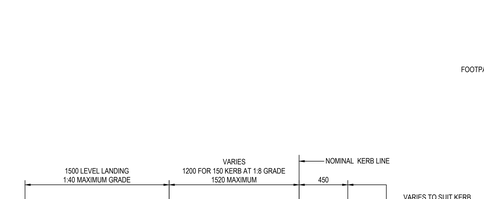
BLACKTOWN CITY COUNCIL STANDARD DRAWING A(BS) 103S REVS SHEET 1 OF 2



STANDARD INDUSTRIAL COMMERCIAL FOOTWAY CROSSING

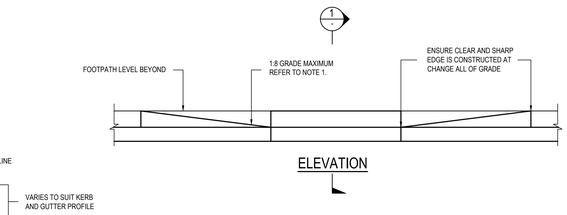
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BLACKTOWN CITY COUNCIL STANDARD DRAWING A(BS) 103S REVS SHEET 2 OF 2



SECTION

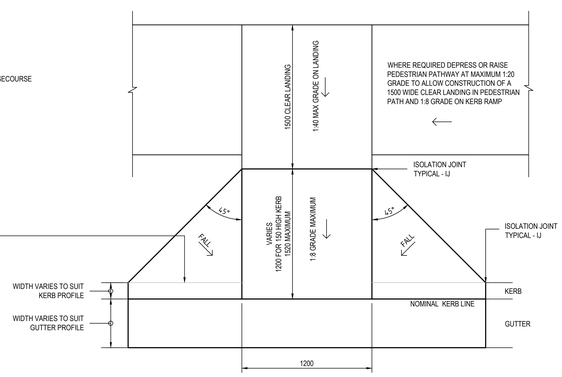
SCALE 1:20



ELEVATION

NOTE 1: GRADE AT 1:8 UP TO A MAXIMUM OF 1:4 GRADE IF REQUIRED TO ALLOW CONSTRUCTION OF FOOTPATH CLEAR LANDING IN CONSTRAINED AREAS. GREATER THAN 1:8 GRADE ONLY ALLOWABLE WHERE RAMP DOES NOT FORM PART OF THE PEDESTRIAN PATHWAY. 1:4 GRADE ON RAMP SPLAY REQUIRES HANDRAIL TO AS/NZS 1428.1

NOTE 2: REFER TO AS/NZS 1428.4 FOR TACTILE INDICATOR REQUIREMENTS



KERB RAMP DETAIL

SCALE 1:20

PLAN

NOTES

KEYNOTES

LEGEND

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P1	13NOV2024	DRAFT SSDA ISSUE	DW	JF	MB	MB
A	20NOV2024	SSDA ISSUE	DW	JF	MB	MB

MECHANICAL/ ELECTRICAL ENGINEER:
LCI CONSULTANTS
02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

HYDRAULIC/ FIRE ENGINEER:
LCI CONSULTANTS
02 9157 0570
LEVEL 5, 73 MILLER STREET,
NORTH SYDNEY NSW 2060

CIVIL ENGINEER:
ACOR CONSULTANTS PTY LTD
02 9438 5098
SUITE 2, LEVEL 1, 33 HERBERT STREET,
ST LEONARDS NSW 2065

STRUCTURAL ENGINEER:
VAN DER MEER CONSULTING
02 94306433
LEVEL 6, 39 CHANDOS ST.
ST LEONARDS NSW 2065

ARCHITECT:
GREENBOX ARCHITECTURE PTY LTD
02 8069 8939
LEVEL 22, 68 PITT STREET,
SYDNEY NSW 2000

LANDSCAPE:
GEOSCAPES
02 9411 1485
SUITE 3.03, 6 HELP STREET,
CHATSWOOD, NSW 2067

PROJECT: GLENDENNING ROAD DATA CENTRE

TITLE: CIVIL SERVICES ROAD DETAILS - SHEET 1

DRAWING: GRDC86-ACR-00-XX-DR-SSDA-C-3201

PAPER SIZE:	SCALE:		REV:
ISO A0	AS SHOWN		A

PRINT IN COLOUR