

SOUTH ROCK SS KINDERGARTEN

SOUTH ROCK STATE SCHOOL,
YARRABILBA, QLD, 4207

CIVIL COVER SHEET

DRAWING SCHEDULE	
DRG No.	DRAWING NAME
C-0.01	CIVIL COVER SHEET
C-1.01	BULK EARTHWORKS NOTES AND DETAILS SHEET
C-1.11	BULK EARTHWORKS LAYOUT PLAN
C-1.15	BULK EARTHWORKS SECTIONS
C-2.01	EROSION AND SEDIMENT CONTROL NOTES SHEET No. 1
C-2.02	EROSION AND SEDIMENT CONTROL NOTES SHEET No. 2
C-2.03	EROSION AND SEDIMENT CONTROL NOTES SHEET No. 3
C-2.11	PHASE 2 BULK EARTHWORKS AND CIVIL CONSTRUCTION ESC PLAN
C-3.01	RETAINING WALL NOTES AND DETAILS SHEET No. 1 OF 2
C-3.02	RETAINING WALL NOTES AND DETAILS SHEET No. 2 OF 2
C-3.11	RETAINING WALL LAYOUT PLAN
C-4.01	ROADWORKS NOTES AND DETAILS SHEET
C-4.11	CAR PARK LAYOUT PLAN
C-4.15	EXTERNAL ROADWORKS CROSSOVER PLAN
C-4.21	ROADWORKS SIGNS AND LINEMARKING PLAN
C-7.01	STORMWATER NOTES AND DETAILS SHEET
C-7.11	STORMWATER LAYOUT PLAN
C-7.21	STORMWATER CATCHMENT PLAN
C-7.25	STORMWATER QUALITY MANAGEMENT PLAN
C-7.31	STORMWATER LONG SECTIONS
C-7.41	STORMWATER CALCULATION TABLE
C-9.99	SAFETY IN DESIGN HAZARD REGISTER

REFERENCE DOCUMENTATION
1. DRAWING TO BE READ IN CONJUNCTION WITH CURRENT ARCHITECTURAL, LANDSCAPE AND SURVEY CONSULTANT DOCUMENTATION. NOTIFY MRC CONSULTING ENGINEERS OF ANY VARIATION IN DOCUMENTATION IMMEDIATELY PRIOR TO COMMENCEMENT OF WORK.



SITE LOCALITY PLAN

SCALE 1:2500

REAL PROPERTY DESCRIPTION

LOTS 5080SP327799
LOCAL GOVERNMENT AREA : LOGAN CITY COUNCIL

SURVEY LEVEL DATUM

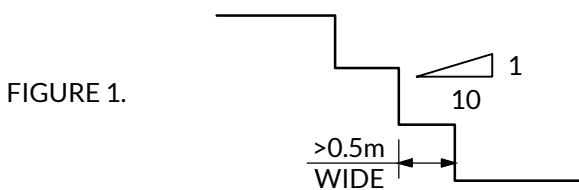
AHD DATUM BASED UPON CORS GPS
MGA ZONE 56 MERIDIAN

ALL SERVICES SHOWN ARE APPROXIMATE LOCATIONS ONLY AND ARE TO BE CONFIRMED ON SITE PRIOR TO ANY WORKS TAKING PLACE. EXISTING SERVICES TAKEN FROM :
• PRO SURVEYING SERVICES PTY LTD. REFER TO DRAWING No. A401 DATED 27th APRIL, 2026 FOR DETAILS.

No.		DATE	AMENDMENT	BY	0 25 50 75 100 125 175 Scale 1:2500 @ A1 Scale 1:5000 @ A3		CLIENT :	MRC CONSULTING ENGINEERS MRC Consulting Engineers PO Box 778, Ashgrove West, Brisbane, QLD 4060 e : admin@mrceng.com.au, www.mrceng.com.au	PROJECT :	SOUTH ROCK SS KINDERGARTEN 185 GRAMPIANS CIRCUIT YARRABILBA, QLD, 4207		Drawn : C.R.P.	Date : JUNE 2026	DRAWING TITLE : CIVIL COVER SHEET		
A		09.06.26	PRELIMINARY ISSUE	C.R.P.						Designed : M.H.	Checked : R.A.	Approved : MARK HARRISON	Status : PRELIMINARY			
NOT FOR CONSTRUCTION					RP DESCRIPTION : LOT : 5080 ON SP327799 LGA : LOGAN CITY COUNCIL											

BULK EARTHWORKS NOTES

1. THE CONTRACTOR IS TO FENCE THE LIMIT OF WORKS PRIOR TO THE PRE-START MEETING WITH COUNCIL.
2. EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE INSTALLED PRIOR TO COMMENCEMENT OF CLEARING AND GRUBBING WORKS.
3. EXCAVATION AND FILLING IS TO BE CARRIED OUT TO THE PLAN LEVELS, DIMENSIONS AND BATTERS AS DRAWN. WORKS ARE TO BE GENERALLY IN ACCORDANCE WITH AS 3798 'GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS' & THE PROJECT GEOTECHNICAL REPORT, AS WELL AS THE LOCAL AUTHORITY STANDARDS.
4. ANY CLEARING REQUIRED TO BE UNDERTAKEN BY THE CONTRACTOR IS TO BE STRICTLY IN ACCORDANCE WITH THE COUNCIL APPROVED VEGETATION MANAGEMENT PLAN.
5. ALL SOILS CONTAINING ORGANIC AND DELETERIOUS MATTER IN THE TOPSOIL ZONE OF SOILS SHALL BE STRIPPED FROM THE CONSTRUCTION AREA. THIS MATERIAL IS NOT CONSIDERED SUITABLE FOR REUSE AS STRUCTURAL FILL. SOFT WET SOILS AND EXISTING FILL IS TO BE REMOVED PRIOR TO THE PLACEMENT OF STRUCTURAL FILL.
6. TREES ARE TO BE MULCHED & STOCKPILED ON SITE FOR USE WITH LANDSCAPING. WHERE PARTS OF TREES CANNOT BE MULCHED, THEY ARE TO BE REMOVED FROM SITE IN ACCORDANCE WITH LOCAL AUTHORITY REQUIREMENTS.
7. SLOPING GROUND SHOULD BE BENCHED TO 'KEY IN' FILL MATERIAL AND OPTIMIZE COMPACTION. THE BENCHES SHOULD SLOPE BACK AT 1V:10H AND BE AT LEAST 0.5m WIDE. WIDER BENCHES TO ACCOMMODATE THE WIDTH OF THE ROLLER MAY NEED TO BE ADAPTED IN SOME SITUATIONS. REFER FIGURE 1.
8. TOPSOIL APPROVED BY THE ENGINEER WHICH IS SUITABLE FOR REUSE IS TO BE CORRECTLY STOCKPILED ON SITE.
9. ALL OF THE SITE SHALL BE FREE DRAINING DURING ALL PHASES OF THE PROJECT. IT IS THE CONTRACTORS RESPONSIBILITY TO PROTECT THE SITE AND SURROUNDING AREAS FROM DAMAGE RESULTING FROM STORMWATER RUNOFF DURING CONSTRUCTION. DRAINAGE CONTROL DEVICES SUCH AS TEMPORARY DIVERSION DRAINS ARE TO BE IMPLEMENTED DURING CONSTRUCTION TO MINIMISE THE EFFECTS OF WEATHER.
10. UNLESS DIRECTED OTHERWISE BY THE SUPERINTENDANT ALL FILL SHALL BE PLACED AT BETWEEN +2% & -2% OF OPTIMUM MOISTURE CONTENT.



11. IN CONSTRUCTION AREAS, THE CLEARED AND STRIPPED GROUND SURFACE SHOULD BE PROOF ROLLED TO DETECT ANY SOFT OR LOOSE MATERIAL. LOOSE SOILS, SHOULD BE COMPACTED TO THE APPROPRIATE REQUIREMENTS. SOFT, WET CLAYS SHOULD PREFERABLY BE REMOVED. IN AREAS OF CUT, PROOF ROLLING MAY BE DEFERRED UNTIL AFTER THE CUT OPERATION. TEST ROLLING SHALL BE DONE WITH A SMOOTH DRUM ROLLER WITH MINIMUM STATIC WEIGHT OF 12 TONNE. THE TYPED NATURAL FOUNDATION SOIL SHALL BE COMPACTED TO A MINIMUM DENSITY INDEX OF 65% (SANDS) OR MINIMUM DENSITY RATIO OF 75% STANDARD (CLAYS).
12. ANY IMPORTED FILL, IF NEEDED TO MAKE UP EARTHWORK DEFICIENCIES, SHOULD BE OF FAIR TO GOOD QUALITY PLACED IN 200 THICK MAXIMUM LOOSE LAYERS AND CONFORM TO THE FOLLOWING GENERAL SPECIFICATION :
- SOAKED CBR

MINIMUM 10%

LIQUID LIMIT

MAXIMUM 40%

MAXIMUM AGGREGATE SIZE

75mm

SHRINK/SWELL INDEX

MAXIMUM OF 1.0%
13. GUIDELINES FOR MINIMUM RELATIVE COMPACTION VALUES FOR INSITU SOILS AND IMPORTED FILL FOR THE BUILDING AND PAVEMENTS ARE PRESENTED IN THE FOLLOWING TABLE :

MINIMUM RELATIVE COMPACTION	
LOCATION	MINIMUM DRY DENSITY RATIO (%)
BUILDING AREA	98
PAVEMENT AREA:	
BASE COURSE	98
SUB BASE COURSE	98
a) >0.3m BELOW PAVEMENT SUBGRADE	95
b) <0.3m BELOW PAVEMENT SUBGRADE	100

- NOTES :
1. THE RECOMMENDED COMPACTIONS ARE PERCENTAGES OF THE MAXIMUM DRY DENSITY DETERMINED BY AS 1289 5.1.1, (STANDARD COMPACTION).
2. FOR PROCESSED PAVEMENT GRAVELS, MINIMUM DENSITY REQUIREMENTS SHOULD BE A PERCENTAGE OF MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS 1289 5.2.1, (MODIFIED COMPACTION).
14. PRIOR TO THE USE OF ANY IMPORTED ENGINEERED FILL MATERIAL, THE CONTRACTOR SHALL NOMINATE SOURCE MATERIALS TO BE USED & PROVIDE TEST RESULTS OF ITS PROPERTIES FOR ITEMS SUCH AS PARTICLE SIZE DISTRIBUTION GRADINGS, LIQUID LIMIT, PLASTICITY INDEX etc. WHICH WOULD NORMALLY BE PERFORMED BY AN AUTHORIZED TESTING LABORATORY IN SATISFYING THIS REQUIREMENT. RESULTS SHALL BE SUBMITTED TO THE SUPERINTENDENT FOR APPROVAL PRIOR TO COMMENCING ANY WORKS.
15. STOCKPILED TOPSOIL IS TO BE RESPREAD TO AN EVEN 100mm THICKNESS OVER ALL BATTERS AND SURROUNDING EXPOSED AREAS. ANY EXCESS TOPSOIL IS TO BE DISPOSED OF BY THE CONTRACTOR OFF SITE (IF DIRECTED BY THE SUPERINTENDANT).
16. ANY EXCESS SPOIL MATERIAL GENERATED DURING CONSTRUCTION IS TO BE DISPOSED OF AS DIRECTED BY THE SUPERINTENDENT.

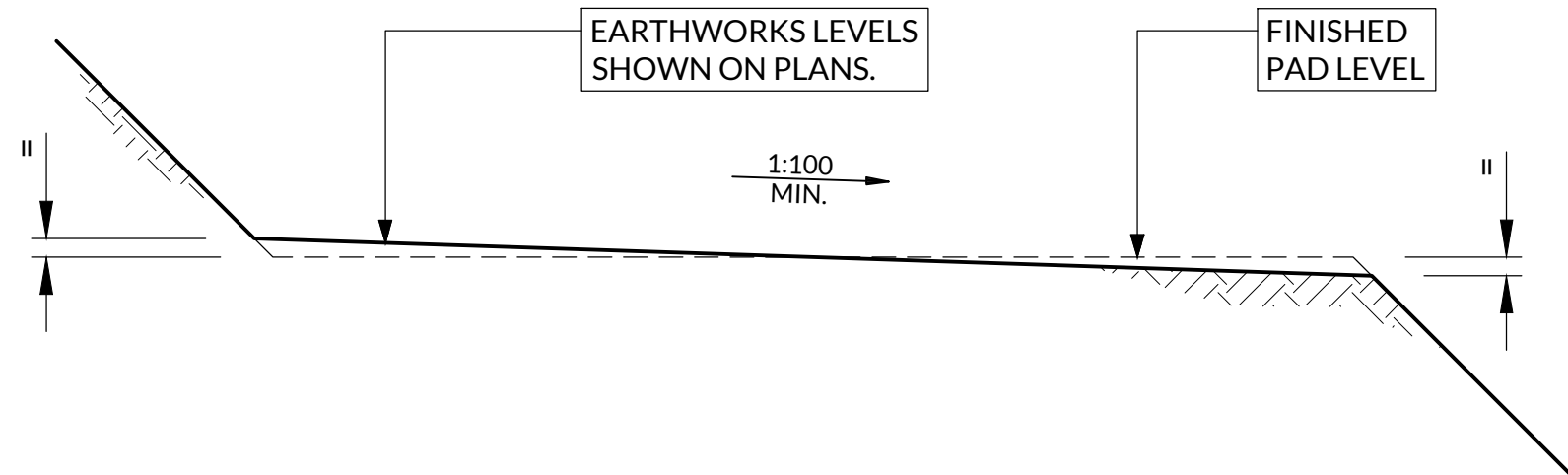
BULK EARTHWORKS NOTES

- (CONT.)
17. THE MOVEMENT OF MATERIAL TO AND FROM THE SITE SHALL BE IN ACCORDANCE WITH THE RELEVANT EPA GUIDELINES AND BIO-SECURITY REQUIREMENTS.
18. FOR FURTHER SITE INFORMATION REFER TO THE PROJECT GEOTECHNICAL CONSULTANT.
19. ALTERNATIVE METHODS OF CONSTRUCTION OTHER THAN THAT DESCRIBED ABOVE SHALL ONLY BE ALLOWED IF APPROVAL IS GIVEN BY THE SUPERINTENDENT.
20. DESIGN LEVELS PROVIDED ARE FINISHED SURFACE LEVELS (U.N.O)
21. ALL EARTHWORKS SHALL BE PERFORMED UNDER THE SUPERVISION OF A RECOGNIZED GEOTECHNICAL CONSULTANT TO LEVEL 1 STANDARDS SPECIFIED IN AS 3798 UNLESS DIRECTED OTHERWISE BY THE SUPERINTENDENT. ALL WORKS SHALL BE CERTIFIED BY A REGISTERED PROFESSIONAL ENGINEER OF QUEENSLAND (RPEQ). THE MINIMUM CERTIFICATION TO BE PROVIDED BY THE CONTRACTOR TO THE SUPERVISING ENGINEER SHALL BE:
- (i) CERTIFICATION THAT ALL GENERAL EARTHWORKS OPERATIONS - (i.e. STRIPPING PROOF ROLLING OF SUBGRADE, ETC.) HAVE BEEN CARRIED OUT IN ACCORDANCE WITH THE EARTHWORKS SPECIFICATION.

(ii) CERTIFICATION THAT FILL HAS BEEN PLACED AND COMPACTED TO REQUIRED MINIMUM DENSITY IN ACCORDANCE WITH THE EARTHWORKS SPECIFICATION.

(iii) CERTIFICATION THAT THE CONTROLLED FILL IS SUITABLE FOR SUPPORT OF CONVENTIONAL HIGH LEVEL FOOTINGS AND HAS A MINIMUM BEARING CAPACITY OF 150kPa.

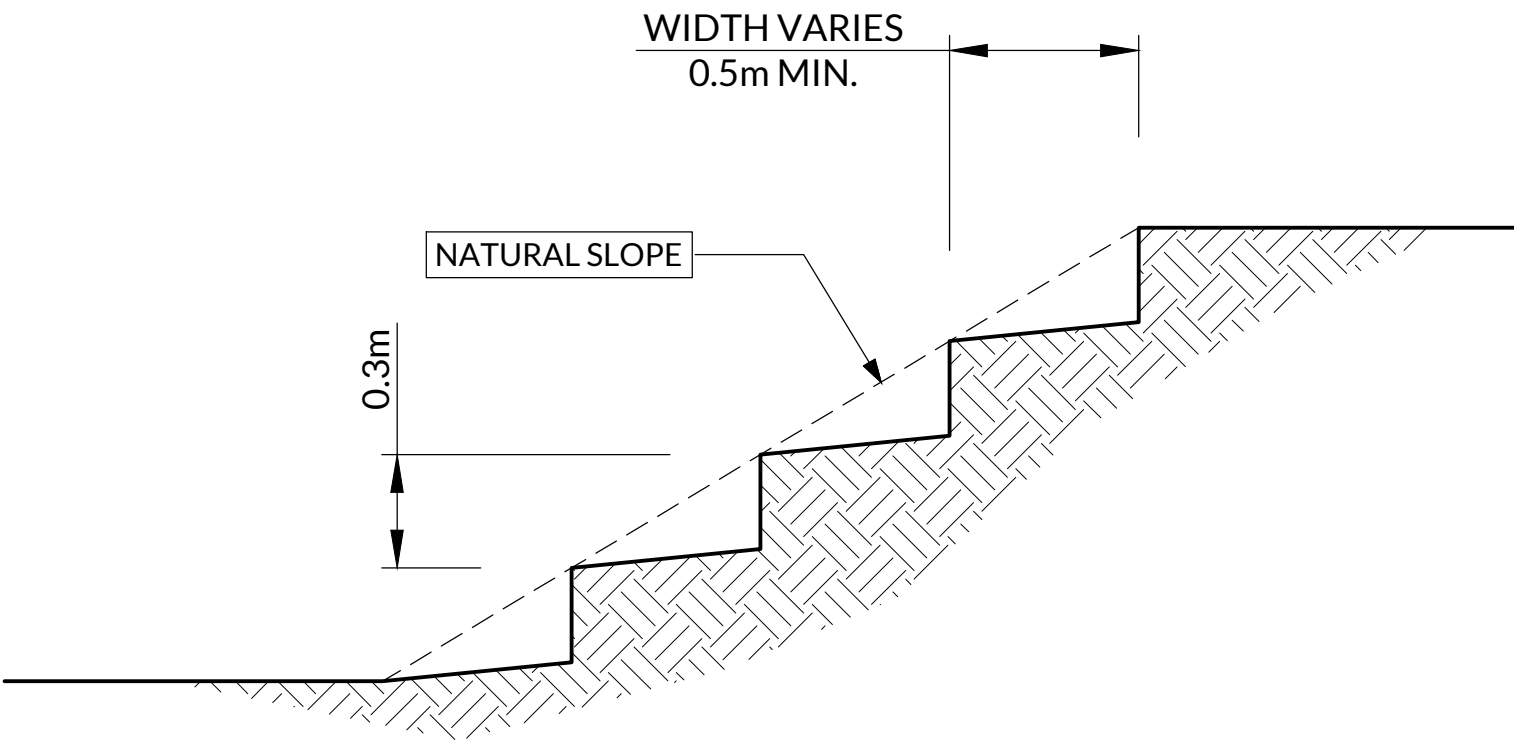
(iv) CERTIFICATION THAT THE QUALITY OF ANY IMPORTED FILL COMPLIES WITH THE EARTHWORKS SPECIFICATION REQUIREMENTS.
22. FIELD DENSITY TESTING SHOULD BE CARRIED OUT TO CHECK THE STANDARD COMPACTION ACHIEVED AND THE PLACEMENT MOISTURE CONTENT. THE FREQUENCY AND EXTENT OF TESTING SHOULD BE AS PER GUIDELINES IN AS 3798
23. DEPRESSIONS FORMED BY THE REMOVAL OF VEGETATION, UNDERGROUND ELEMENTS ETC. SHOULD HAVE ALL DISTURBED WEAKENED SOIL CLEANED OUT AND BE BACKFILLED WITH COMPACTED SELECT MATERIAL.
24. ALL NEW WORKS TO MATCH NEATLY WITH EXISTING. THE CONTRACTOR IS TO CONFIRM THE LOCATION OF ALL EXISTING SERVICES AND PROTECT THESE SERVICES DURING CONSTRUCTION. DAMAGED SERVICES SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.



TYPICAL BULK EARTHWORKS PAD CONSTRUCTION DETAIL

SCALE N.T.S.

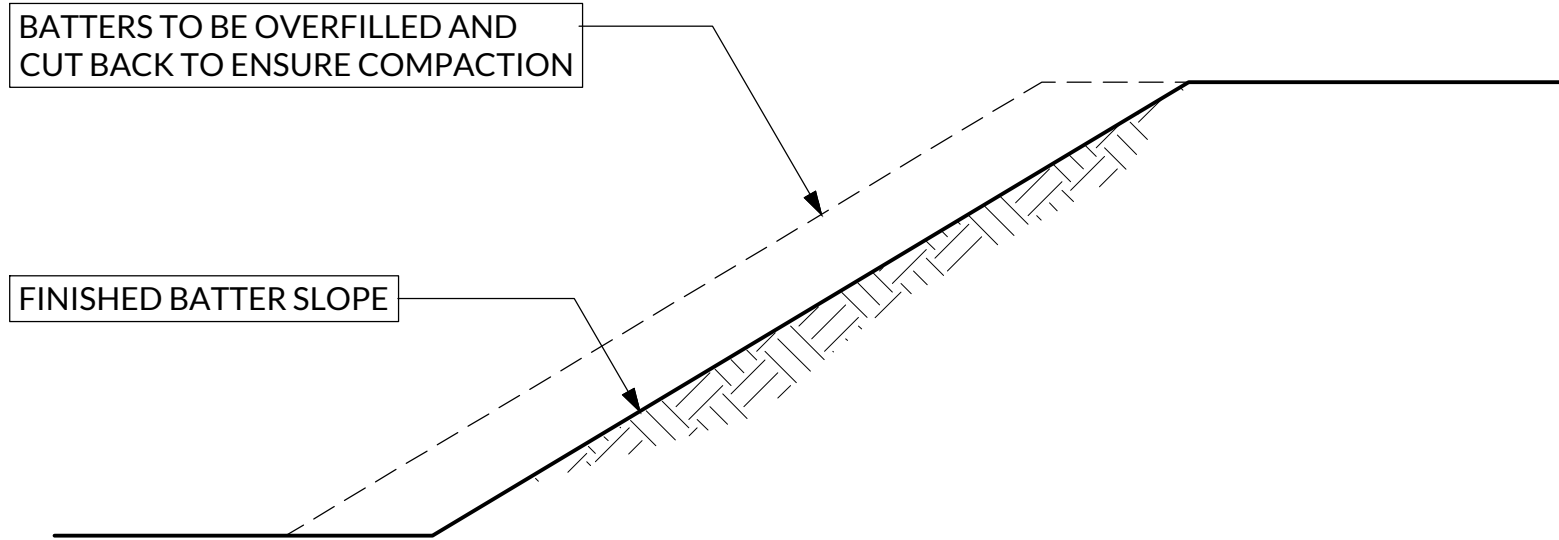
NOTE : EARTHWORKS PLATFORMS ARE TO BE FORMED WITH MIN. 1:100 FALL ACROSS PAD DURING THE BULK EARTHWORKS PHASE. PLATFORMS TO BE TRIMMED TO FINISHED PAD LEVELS DURING DETAILED EARTHWORKS.



COMPACTION ON SLOPES DETAIL

SCALE N.T.S.

NOTE : COMPACTION ON SLOPES GREATER THAN 1 IN 10 TO BE KEYED AS SHOWN UNLESS DIRECTED OTHERWISE BY THE GEOTECHNICAL ENGINEER.



BATTER CUTBACK DETAIL

SCALE N.T.S.

NOTE :

NO WORKS TO BE UNDERTAKEN OUTSIDE THE DESIGNATED SITE BOUNDARY UNLESS DIRECTED OTHERWISE BY THE MANAGING CONTRACTOR.

No.	DATE	AMENDMENT	BY	CLIENT :	PROJECT :	Drawn : C.R.P. Designed : M.H. Approved : MARK HARRISON	Date : JUNE 2026 Checked : R.A.	DRAWING TITLE : BULK EARTHWORKS NOTES AND DETAILS SHEET		
A	09.06.26	PRELIMINARY ISSUE	C.R.P.							
NOT FOR CONSTRUCTION				RP DESCRIPTION : LOT : 5080 ON SP327799 LGA : LOGAN CITY COUNCIL	MRC CONSULTING ENGINEERS 185 GRAMPIANS CIRCUIT YARRABILBA, QLD, 4207	Status : PRELIMINARY		Project No. J26135	Drawing No. C-1.01	Revision A

LEGEND

- PROPERTY BOUNDARY
--- INTERNAL PROPERTY BOUNDARY
--- EXTERNAL PROPERTY BOUNDARY
--- EXISTING BUILDING
--- EXISTING NEIGHBOURING BUILDING
--- 42.00 --- EXISTING MAJOR CONTOUR @ 1.00m
--- EXISTING MINOR CONTOUR @ 0.25m
--- EW --- EXISTING WATER
--- ESW --- EXISTING STORMWATER
--- ES --- EXISTING SEWER
--- EE --- EXISTING ELECTRICAL
--- --- EXISTING OVERHEAD ELECTRICAL
--- EG --- EXISTING GAS
--- SW --- PROPOSED STORMWATER LINE
--- PROPOSED RETAINING WALL
⊕ (EL 42.000) PROPOSED EARTHWORKS LEVELS
--- 42.00 --- PROPOSED MAJOR CONTOUR @ 1.00m
--- PROPOSED MINOR CONTOUR @ 0.25m
--- EARTHWORK PAD EDGE
--- EXTENT OF CUT
--- EXTENT OF FILL

BULK EARTHWORKS NOTES

NO WORKS ARE TO BE UNDERTAKEN IN ANY NEIGHBOURING PROPERTY. IF THE SUB CONTRACTOR BELIEVES THERE ARE DISCREPANCIES BETWEEN THE EXTENT OF WORKS SHOWN ON THE DRAWINGS AND ON SITE, THE MANAGING CONTRACTOR IS TO BE NOTIFIED IMMEDIATELY AND NO WORKS ARE TO COMMENCE IN THIS AREA UNTIL A SUITABLE SOLUTION IS DETERMINED.

EXCAVATION LEVELS DO NOT ALLOW FOR ANY ADDITIONAL REQUIREMENTS TO SUIT SITE TRAFFICABILITY FOR HEAVY CONSTRUCTION VEHICLES.

BULK EARTHWORKS VOLUMES

CUT : 797m³
FILL : 14m³
EXPORT : 783m³

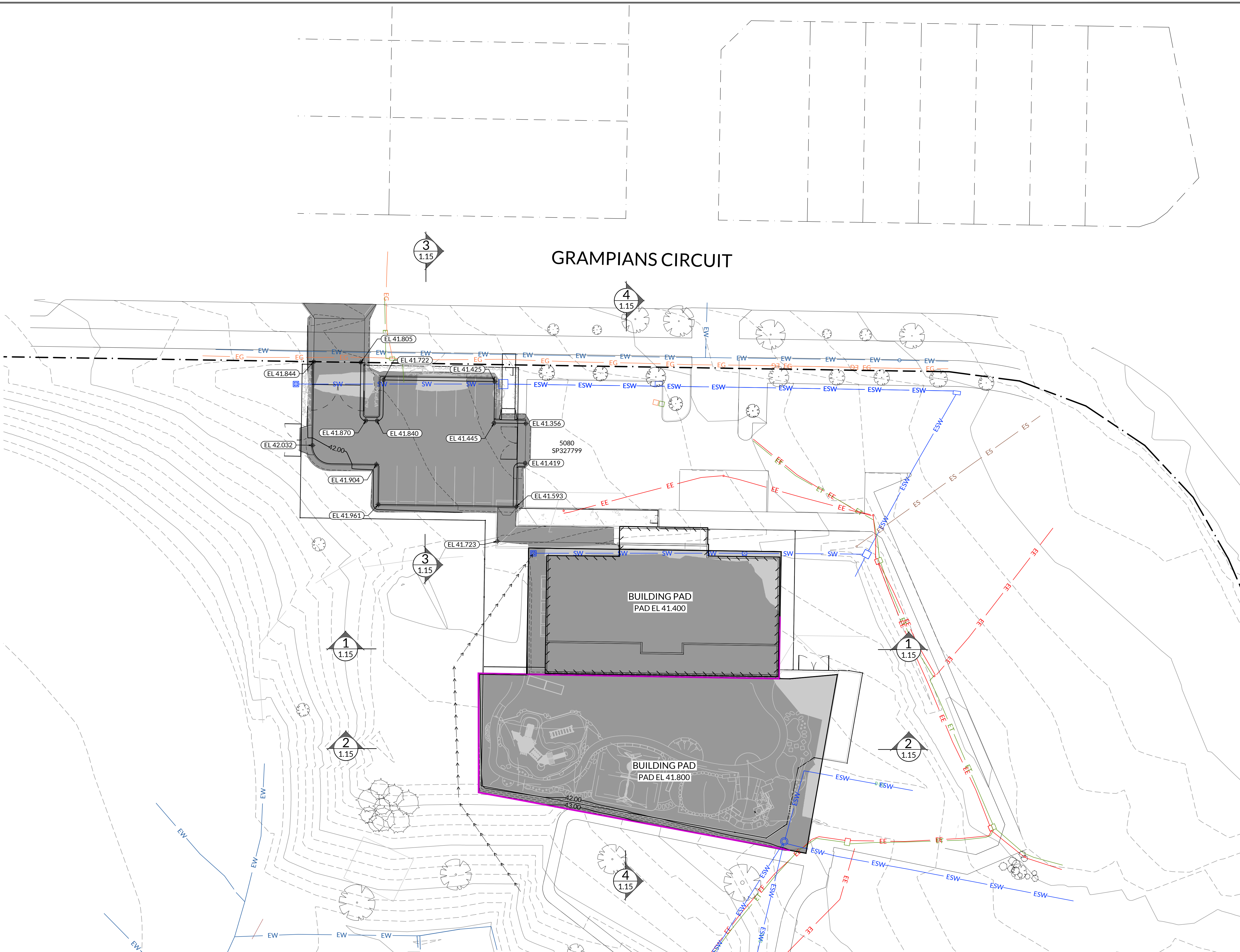
ALL VOLUMES ARE COMPLETE IN PLACE (TIGHT)
NO ALLOWANCE FOR FOUNDATIONS
NO ALLOWANCE FOR SERVICE TRENCHES
NO ALLOWANCE FOR COMPACTION
NO ALLOWANCE FOR BULKING
CONTRACTOR TO CONFIRM ALL QUANTITIES
QUANTITIES ARE NOT GUARANTEED

BULK EARTHWORKS NOTES

REFER DRAWING No. J26135-C-1.15 FOR BULK EARTHWORKS SECTION SHEET

NO WORKS ARE TO BE UNDERTAKEN IN ANY NEIGHBOURING PROPERTY. IF THE SUB CONTRACTOR BELIEVES THERE ARE DISCREPANCIES BETWEEN THE EXTENT OF WORKS SHOWN ON THE DRAWINGS AND ON SITE, THE MANAGING CONTRACTOR IS TO BE NOTIFIED IMMEDIATELY AND NO WORKS ARE TO COMMENCE IN THIS AREA UNTIL A SUITABLE SOLUTION IS DETERMINED.

EXCAVATION LEVELS DO NOT ALLOW FOR ANY ADDITIONAL REQUIREMENTS TO SUIT SITE TRAFFICABILITY FOR HEAVY CONSTRUCTION VEHICLES OR PILING PLATFORMS. IF THERE IS A REQUIREMENT FOR THIS BULK EARTHWORKS LEVELS SHOWN MAY NEED TO BE ADJUSTED TO SUIT.



No.	DATE	AMENDMENT	BY
A	09.06.26	PRELIMINARY ISSUE	C.R.P.
B	21.07.26	PRELIMINARY ISSUE	C.R.P.
C	22.07.26	PRELIMINARY ISSUE	C.R.P.

NOT FOR CONSTRUCTION

02.57.1012.517.5

Scale 1:250 @ A1 Scale 1:500 @ A3

RP DESCRIPTION:
LOT : 5080 ON SP327799
LGA : LOGAN CITY COUNCIL

CLIENT:

FLEETWOOD

MRC
CONSULTING ENGINEERS

MRC Consulting Engineers
PO Box 778, Ashgrove West, Brisbane, QLD 4060
e : admin@mrceng.com.au, www.mrceng.com.au

PROJECT:

SOUTH ROCK SS
KINDERGARTEN
185 GRAMPIANS CIRCUIT
YARRABILBA, QLD, 4207

Drawn: C.R.P.
Designed: M.H.
Approved: MARK HARRISON
Status: PRELIMINARY

Date: JUNE 2026
Checked: R.A.
MIEAust NER RPEQ 18458

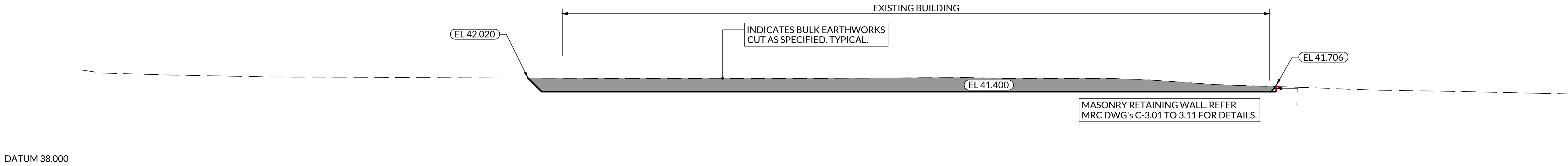
DRAWING TITLE:

BULK EARTHWORKS
LAYOUT PLAN

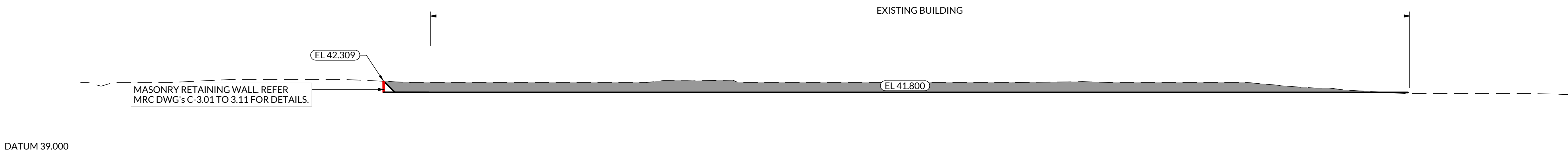
Project No.
J26135

Drawing No.
C-1.11

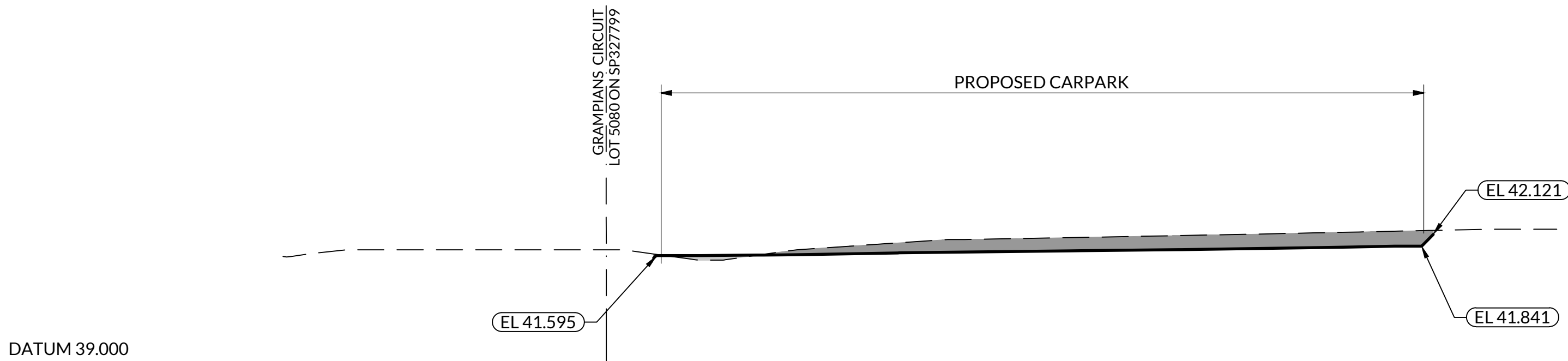
Revision
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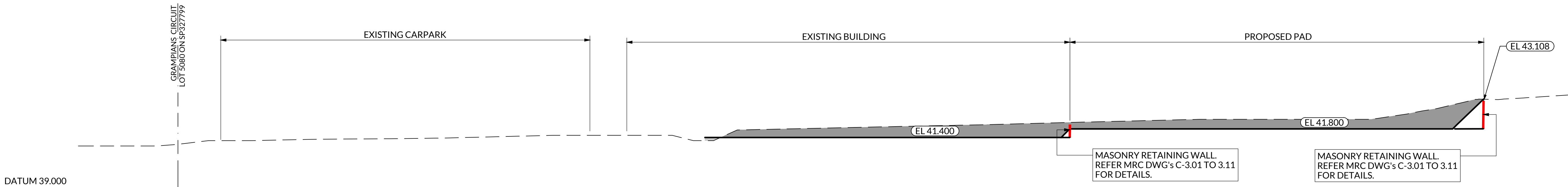
SECTION 1
SCALE 1:100



SECTION 2
SCALE 1:100



SECTION 3
SCALE 1:100



SECTION 4
SCALE 1:100

LEGEND

SITE BOUNDARY

BULK EARTHWORKS SURFACE

EXISTING SURVEY SURFACE

(EL 42.000)

PROPOSED EARTHWORKS LEVEL

EXTENT OF CUT

EXTENT OF FILL

NO WORKS ARE TO BE UNDERTAKEN IN ANY NEIGHBORING PROPERTY. IF THE SUB CONTRACTOR BELIEVES THERE ARE DISCREPANCIES BETWEEN THE EXTENT OF WORKS SHOWN ON THE DRAWINGS AND ON SITE, THE MANAGING CONTRACTOR IS TO BE NOTIFIED IMMEDIATELY AND NO WORKS ARE TO COMMENCE IN THIS AREA UNTIL A SUITABLE SOLUTION IS DETERMINED.

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NOT FOR CONSTRUCTION

0123457.5

Scale 1:100 @ A1 Scale 1:200 @ A3

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LGA : LOGAN CITY COUNCIL

CLIENT :

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PROJECT :

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Designed : M.H. Checked : R.A.

Approved : MARK HARRISON

Status : PRELIMINARY

DRAWING TITLE :

BULK EARTHWORKS
SECTIONS

Project No.
J26135

Drawing No.
C-1.15

Revision
C

RECOMMENDED IMPLEMENTATION SEQUENCE

- ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AND FUNCTIONAL PRIOR TO WORKS COMMENCING AND IN THE FOLLOWING SEQUENCE:
 - CONSTRUCT TEMPORARY STABILISED SITE ACCESS;
 - PROVIDE INLET PROTECTION TO STORMWATER INLETS AND GULLIES ON ALL ROADS ADJOINING THE SITE;
 - CONSTRUCT BARRIER FENCING AROUND RESTRICTED 'NO-GO' ZONES OF THE RETAINED VEGETATION AND AREAS NOT TO BE DISTURBED AND AREAS WHICH REMAIN UN-WORKED;
 - INSTALL ALL TEMPORARY SEDIMENT FENCES;
 - CONSTRUCT DIVERSION BANKS AS NECESSARY (PARALLEL TO CONTOURS) TO DIVERT RUNOFF FROM DISTURBED AREAS INTO THE SEDIMENT PONDS/BASINS;
 - WORK AREAS TO BE DELINEATED BY BARRIER FENCING AND DIVERSION CHANNEL UPSLOPE AND SEDIMENT FENCING DOWNSLOPE;
 - MAINTAIN EXISTING SEDIMENT PONDS/BASINS AS LONG AS PRACTICALLY POSSIBLE;
 - STABILISE ALL DISTURBED AREAS ASAP AND PROGRESSIVELY AS WORKS ARE COMPLETED;
 - TEMPORARY STABILISATION TO BE DONE USING MULCHING, HYDROMULCHING, HYDROSEEDING OR DIRECT SEEDING TO GIVE A 70% COVERAGE OF GROUND SURFACE WITHIN 14 DAYS OF WORKS COMPLETING (EVEN IF WORKS MAY CONTINUE LATER).
- EROSION AND SEDIMENT CONTROL PROTECTION MEASURES MAY NEED TO BE REVISED AND UPDATED TO REFLECT THE SITE CONDITIONS AND PROGRESSION OF THE WORKS, I.E. MEASURES INCLUDING SEDIMENT FENCES SHOULD BE MOVED AND REINSTATED AS WORKS PROGRESS.

GENERAL NOTES

- ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES MUST BE IMPLEMENTED AND A REVISED EROSION AND SEDIMENT CONTROL PLAN (ESCP) MUST BE SUBMITTED FOR APPROVAL IN THE EVENT THAT SITE CONDITIONS CHANGE SIGNIFICANTLY FROM THOSE CONSIDERED WITHIN THE ESCP.
- WHERE THERE IS A HIGH PROBABILITY THAT SERIOUS OR MATERIAL ENVIRONMENTAL HARM MAY OCCUR AS A RESULT OF SEDIMENT LEAVING THE SITE, APPROPRIATE ADDITIONAL SEDIMENT AND EROSION CONTROL MEASURES MUST BE IMPLEMENTED SUCH THAT ALL REASONABLE AND PRACTICAL MEASURES ARE BEING TAKEN TO PREVENT OR MINIMISE SUCH HARM. ONLY THOSE WORKS NECESSARY TO MINIMISE OR PREVENT ENVIRONMENTAL HARM SHALL BE CONDUCTED ON SITE PRIOR TO APPROVAL OF THE AMENDED EROSION AND SEDIMENT CONTROL PLAN (ESCP)
- FOR DETAILED NOTES ON CONSTRUCTION OF SEDIMENT BASINS REFER TO APPENDIX B OF IECA 2008 'BEST PRACTICE EROSION AND SEDIMENT CONTROL' DOCUMENT.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE INSPECTION, MAINTENANCE AND TESTING OF ALL DRAINAGE, EROSION AND SEDIMENT CONTROL MEASURES ARE UNDERTAKEN ON SITE.
- ALL DRAINAGE, EROSION AND SEDIMENT CONTROL MEASURES MUST BE APPLIED AND MAINTAINED IN ACCORDANCE WITH THE LATEST INTERNATIONAL EROSION CONTROL ASSOCIATION (IECA) AUSTRALASIA BEST PRACTICE EROSION AND SEDIMENT (BPESC) DOCUMENT.
- REFER TO APPROVED PLANS FOR LOCATION, EXTENT, AND CONSTRUCTION DETAILS. IF THERE ARE QUESTIONS OR PROBLEMS WITH THE LOCATION, EXTENT, OR METHOD OF INSTALLATION, CONTACT THE ENGINEER OR RESPONSIBLE ON-SITE OFFICER FOR ASSISTANCE.
- AT ALL TIMES THE CONTRACTOR SHALL MONITOR THE PREVAILING WEATHER CONDITIONS AND PROTECT ANY DOWNSTREAM CONSTRUCTION OR RECEIVING ENVIRONMENTS.

LAND CLEARING

- CLEARING MUST BE DELAYED AS LONG AS PRACTICABLE AND MUST BE UNDERTAKEN IN CONJUNCTION WITH DEVELOPMENT OF EACH STAGE OF WORKS.
- PRIOR TO LAND CLEARING AREAS OF PROTECTED VEGETATION AND SIGNIFICANT AREAS OF RETAINED VEGETATION MUST BE CLEARLY IDENTIFIED (E.G. WITH HIGH VISIBILITY TAPE, OR LIGHT FENCING FOR THE PURPOSES OF MINIMISING RISK OF UNNECESSARY LAND CLEARING AS PER BCC APPROVED ARBORIST REPORT.
- NO CLEARING SHALL BE UNDERTAKEN UNLESS PRECEDED BY THE INSTALLATION OF ADEQUATE DRAINAGE AND SEDIMENT CONTROL MEASURES, UNLESS SUCH CLEARING IS REQUIRED FOR THE PURPOSES OF INSTALLING SUCH MEASURES, IN WHICH CASE, ONLY THE MINIMUM CLEARING REQUIRED TO INSTALL SUCH MEASURES SHALL OCCUR.
- ALL LAND CLEARING MUST BE IN ACCORDANCE WITH THE FEDERAL, STATE AND LOCAL GOVERNMENT VEGETATION PROTECTION/PRESERVATION REQUIREMENTS AND/OR POLICIES.
- LAND CLEARING IS LIMITED TO THE MINIMUM PRACTICABLE DURING THOSE PERIODS WHEN SOIL EROSION DUE TO WIND, RAIN OR SURFACE WATER IS POSSIBLE.
- DISTURBANCE TO NATURAL WATERCOURSES (INCLUDING BED AND BANKS) AND THEIR ASSOCIATED RIPARIAN ZONES MUST BE LIMITED TO THE MINIMUM AMOUNT REQUIRED TO COMPLETE THE ASSOCIATED WORKS.
- LAND CLEARING MUST NOT EXTEND BEYOND THAT NECESSARY TO PROVIDE UP TO EIGHT (8) WEEKS OF SITE ACTIVITY DURING THOSE MONTHS WHEN THE ACTUAL OR AVERAGE RAINFALL IS LESS THAN 45mm, SIX (6) IF BETWEEN 45 AND 100mm, FOUR (4) WEEKS IF BETWEEN 100 AND 225mm, AND TWO (2) WEEKS IF GREATER THAN 225mm.
- NATIVE SITE VEGETATION REQUIRED AND APPROVED FOR CLEARING SHOULD BE MULCHED AND STOCKPILED FOR LATER USE IN LANDSCAPING, STABILISATION AND/OR SITE REHABILITATION WORKS.

SOIL AND STOCKPILE MANAGEMENT

- ALL REASONABLE AND PRACTICAL MEASURES MUST BE TAKEN TO OBTAIN THE MAXIMUM BENEFIT FROM EXISTING TOPSOIL, INCLUDING:
 - WHERE THE PROPOSED AREA OF SOIL DISTURBANCE DOES NOT EXCEED 2500m², AND THE TOPSOIL DOES NOT CONTAIN UNDESIRABLE WEED SEED, THE TOP 100mm OF SOIL LOCATED WITHIN AREAS OF PROPOSED SOIL DISTURBANCE (INCLUDING STOCKPILE AREAS) MUST BE STRIPPED AND STOCKPILED SEPARATELY FROM THE REMAINING SOIL.
 - IN AREAS WHERE THE TOPSOIL CONTAINS UNDESIRABLE WEED SEED, THE AFFECTED SOIL MUST BE SUITABLY BURIED OR REMOVED FROM SITE.
- A SUITABLE FLOW DIVERSION SYSTEM MUST BE ESTABLISHED IMMEDIATELY UP-SLOPE OF A STOCKPILE OF ERODABLE MATERIAL THAT HAS POTENTIAL TO CAUSE ENVIRONMENTAL HARM IF DISPLACED, IF THE UP-SLOPE CATCHMENT AREA DRAINING TO THE STOCKPILE EXCEEDS 1500m²
- STOCKPILES OF ERODABLE MATERIAL THAT HAS THE POTENTIAL TO CAUSE ENVIRONMENTAL HARM IF DISPLACED, MUST BE:
 - APPROPRIATELY PROTECTED FROM WIND, RAIN, CONCENTRATED SURFACE FLOW AND EXCESSIVE UP-SLOPE STORMWATER SURFACE FLOWS.
 - LOCATED AT LEAST 2m (PREFERABLY 5m) FROM ANY HAZARDOUS AREA, RETAINED VEGETATION, ROADS AND CONCENTRATED WATER FLOW.
 - LOCATED UP-SLOPE OF AN APPROPRIATE SEDIMENT CONTROL SYSTEM.
 - PROVIDED WITH AN APPROPRIATE PROTECTIVE COVER (SYNTHETIC, MULCH OR VEGETATIVE) IF THE MATERIALS ARE LIKELY TO BE STOCKPILED FOR MORE THAN 28 DAYS.
 - PROVIDED WITH AN APPROPRIATE PROTECTIVE COVER (SYNTHETIC, MULCH OR VEGETATIVE) IF THE MATERIALS ARE LIKELY TO BE STOCKPILED FOR MORE THAN 10 DAYS DURING THOSE MONTHS THAT HAVE A HIGH EROSION RISK.
 - PROVIDED WITH AN APPROPRIATE PROTECTIVE COVER (SYNTHETIC, MULCH OR VEGETATIVE) IF THE MATERIALS ARE LIKELY TO BE STOCKPILED FOR MORE THAN 5 DAYS DURING THOSE MONTHS THAT HAVE AN EXTREME EROSION RISK.
- TOPSOIL SHALL BE STRIPPED AND STOCKPILED FOR LATER USE ONSITE.

EROSION CONTROL

- ALL EROSION AND SEDIMENT CONTROL MEASURES MUST BE APPLIED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED ESCP.
- THE CONSTRUCTION AND STABILISATION OF EARTH BATTERS STEEPER THAN 6:1 (H:V) MUST BE STAGED SUCH THAT NO MORE THAN 3 VERTICAL METRES OF ANY BATTER IS EXPOSED TO RAINFALL AT ANY INSTANT.
- SYNTHETIC REINFORCED EROSION CONTROL MATS AND BLANKETS MUST NOT BE PLACED WITHIN, OR ADJACENT TO, RIPARIAN ZONES AND WATERCOURSES IF SUCH MATERIALS ARE LIKELY TO CAUSE ENVIRONMENTAL HARM TO WILDLIFE OR WILDLIFE HABITATS.
- THE APPLICATION OF LIQUID-BASED DUST SUPPRESSION MEASURES MUST ENSURE THAT SEDIMENT LADEN RUNOFF RESULTING FROM SUCH MEASURES DOES NOT CREATE A TRAFFIC OR ENVIRONMENTAL HAZARD.
- ALL TEMPORARY EARTH BANKS, FLOW DIVERSION SYSTEMS, AND EMBANKMENTS ASSOCIATED WITH CONSTRUCTED SEDIMENT BASINS MUST BE MACHINE-COMPACTED, SEEDED AND MULCHED FOR THE PURPOSE OF ESTABLISHING A TEMPORARY VEGETATIVE COVER WITHIN 10 BUSINESS DAYS AFTER GRADING.

SITE MAINTENANCE

- ALL EROSION AND SEDIMENT CONTROL MEASURES, INCLUDING DRAINAGE CONTROL MEASURES, MUST BE MAINTAINED IN PROPER WORKING ORDER AT ALL TIMES DURING THEIR OPERATIONAL LIFETIME.
- ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES, INCLUDING DRAINAGE CONTROL MEASURES, MUST BE FULLY OPERATIONAL AND MAINTAINED IN PROPER WORKING ORDER AT ALL TIMES DURING THE MAINTENANCE PERIOD.
- ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES, INCLUDING DRAINAGE CONTROL MEASURES, MUST BE REMOVED AFTER ACHIEVING A SATISFACTORY 'OFF MAINTENANCE' INSPECTION.
- ALL DRAINAGE, EROSION AND SEDIMENT CONTROL MEASURES MUST BE INSPECTED:
 - AT LEAST DAILY (WHEN WORK IS OCCURRING ON-SITE);
 - AT LEAST WEEKLY (WHEN WORK IS NOT OCCURRING ON-SITE);
 - WITHIN 24 HOURS OF EXPECTED RAINFALL; AND
 - WITHIN 18 HOURS OF A RAINFALL EVENT OF SUFFICIENT INTENSITY AND DURATION TO CAUSE RUNOFF ON-SITE.
- INSPECTION SHALL BE CONDUCTED IN LINE WITH THE FOLLOWING AS A MINIMUM:
 - RECORD TYPE OF DEVICE/CONTROL MEASURE BEING INSPECTED AND ITS LOCATION;
 - RECORD THE CONDITION OF EACH DEVICE/CONTROL MEASURE BEING INSPECTED;
 - RECORD MAINTENANCE REQUIREMENTS FOR DEVICE/CONTROL MEASURE BEING INSPECTED;
 - RECORD SEDIMENT VOLUMES REMOVED FROM DEVICE/CONTROL MEASURE BEING INSPECTED;
 - RECORD DETAILS OF SEDIMENT BASIN TREATMENT, FLOCCULENT DOSAGE AND CLEANOUTS;
 - RECORD SEDIMENT DISPOSAL PROCEDURES AND LOCATION.
- SEDIMENT CONTROL DEVICES MUST BE DE-SILTED AND MADE FULLY OPERATIONAL AS SOON AS REASONABLE AND PRACTICABLE AFTER A SEDIMENT-PRODUCING EVENT, WHETHER NATURAL OR ARTIFICIAL, IF THE DEVICE'S SEDIMENT RETENTION CAPACITY FALLS BELOW 75% OF ITS DESIGN RETENTION CAPACITY. DE-SILT SEDIMENT TRAP IF THE SEDIMENT LEVEL EXCEEDS 1/3 OF THE CREST HEIGHT.
- MATERIALS, WHETHER LIQUID OR SOLID, REMOVED FROM SEDIMENT CONTROL DEVICES DURING MAINTENANCE OR DECOMMISSIONING, MUST BE DISPOSED OF IN A MANNER THAT DOES NOT CAUSE ONGOING SOIL EROSION OR ENVIRONMENTAL HARM.
- ALL SEEDING, HYDROSEEDING AND TURFING REQUIRES REGULAR WATERING UNTIL EFFECTIVE COVER IS ESTABLISHED AND PLANTS ARE GROWING VIGOROUSLY. WATERING SHOULD DEPEND ON WEATHER AND SOIL CONDITIONS. WATERING SHOULD START IMMEDIATELY AFTER PLANTING AND SHOULD COMPLY WITH THE FOLLOWING AS A MINIMUM:
 - WEEK 1 3 WATERINGS PER WEEK
 - WEEK 2-6 2 WATERINGS PER WEEK
 - WEEK 7-12 1 WATERING PER WEEK
- WASHING/FLUSHING OF SEALED ROADWAYS MUST ONLY OCCUR WHERE SWEEPING HAS FAILED TO REMOVE SUFFICIENT SEDIMENT AND THERE IS COMPELLING NEED TO REMOVE THE REMAINING SEDIMENT (E.G. FOR SAFETY REASONS). IN SUCH CIRCUMSTANCES, ALL REASONABLE AND PRACTICAL SEDIMENT CONTROL MEASURES MUST BE USED TO PREVENT, OR AT LEAST MINIMISE, THE RELEASE OF SEDIMENT INTO RECEIVING WATERS. ONLY THOSE MEASURES THAT WILL NOT CAUSE SAFETY AND PROPERTY FLOODING ISSUES SHALL BE EMPLOYED. SEDIMENT REMOVAL FROM ROADWAYS MUST BE DISPOSED OF IN A LAWFUL MANNER THAT DOES NOT CAUSE ONGOING SOIL EROSION OR ENVIRONMENTAL HARM.
- ALL WATER QUALITY DATA, INCLUDING DATES OF RAINFALL, DATES OF TESTING, TESTING RESULTS AND DATES OF WATER RELEASE, MUST BE KEPT IN AN ON-SITE REGISTER. THE REGISTER IS TO BE MAINTAINED UP TO DATE FOR THE DURATION OF THE APPROVED WORKS AND BE AVAILABLE ON-SITE FOR INSPECTION BY THE RELEVANT REGULATORY AUTHORITY ON REQUEST.
- AT NOMINATED INSTREAM WATER MONITORING SITES, A MINIMUM OF 3 WATER SAMPLES MUST BE TAKEN AND ANALYSED, AND THE AVERAGE RESULT USED TO DETERMINE QUALITY.
- ALL ENVIRONMENTALLY RELEVANT INCIDENTS MUST BE RECORDED IN A FIELD LOG THAT MUST REMAIN ACCESSIBLE TO ALL RELEVANT REGULATORY AUTHORITIES.

SEDIMENT CONTROL

- ALL SEDIMENT CONTROL MEASURES MUST BE APPLIED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED ESCP.
- OPTIMUM BENEFIT MUST BE MADE OF EVERY OPPORTUNITY TO TRAP SEDIMENT WITHIN THE WORK SITE, AND AS CLOSE AS PRACTICABLE TO ITS SOURCE.
- SEDIMENT TRAPS MUST BE INSTALLED AND OPERATED TO BOTH COLLECT AND RETAIN SEDIMENT.
- SUITABLE ALL-WEATHER MAINTENANCE ACCESS MUST BE PROVIDED TO ALL SEDIMENT CONTROL DEVICES.
- SEDIMENT CONTROL DEVICES MUST BE DE-SILTED AND MADE FULLY OPERATIONAL AS SOON AS REASONABLE AND PRACTICABLE AFTER A SEDIMENT-PRODUCING EVENT, WHETHER NATURAL OR ARTIFICIAL, IF THE DEVICE'S SEDIMENT RETENTION CAPACITY FALLS BELOW 75% OF ITS DESIGN RETENTION CAPACITY.
- THE POTENTIAL SAFETY RISK OF A PROPOSED SEDIMENT TRAP TO SITE WORKERS AND THE PUBLIC MUST BE GIVEN APPROPRIATE CONSIDERATION, ESPECIALLY THOSE DEVICES LOCATED WITHIN PUBLICLY ACCESSIBLE AREAS.
- ALL REASONABLE AND PRACTICABLE MEASURES MUST BE TAKEN TO PREVENT, OR AT LEAST MINIMISE, THE RELEASE OF SEDIMENT FROM THE SITE
- CONSTRUCTED SEDIMENT BASINS MUST BE MAINTAINED AND FULLY OPERATIONAL THROUGHOUT THE CONSTRUCTION PERIOD AND UNTIL EACH BASIN'S CATCHMENT AREA ACHIEVES 80% GROUND COVER ON ALL SOIL SURFACES.
- SETTLED SEDIMENT MUST BE REMOVED FROM SEDIMENT BASINS WHEN THE VOLUME OF THE SEDIMENT EXCEEDS THE DESIGNATED STORAGE VOLUME, OR THE DESIGN MAXIMUM SEDIMENT STORAGE ELEVATION.
- AS-CONSTRUCTED PLANS MUST BE PREPARED FOR ALL FOR CONSTRUCTED SEDIMENT BASINS AND ASSOCIATED EMERGENCY SPILLWAYS. SUCH PLANS MUST APPROPRIATELY VERIFY THE BASIN'S DIMENSIONS, LEVELS AND VOLUMES, AND MUST BE SUBMITTED TO THE SUPERINTENDENT WITHIN 14 CALENDAR DAYS OF THE CONSTRUCTION OF EACH BASIN.

SITE REHABILITATION

- THE TYPE OF GROUND COVER APPLIED TO COMPLETED EARTHWORKS SHOULD BE COMPATIBLE WITH THE ANTICIPATED LONG-TERM LAND USE, ENVIRONMENTAL RISK AND SITE REHABILITATION MEASURES.
- THE PH LEVEL (SOIL:WATER 1:5) OF TOPSOIL MUST BE ADEQUATE TO ENABLE ESTABLISHMENT AND GROWTH OF THE SPECIFIED VEGETATION.
- SOIL AMELIORANTS MUST BE ADDED TO THE SOIL IN ACCORDANCE WITH THE APPROVED LANDSCAPE/REVEGETATION PLANS AND/OR SOIL ANALYSIS.
- ALL TEMPORARY DRAINAGE, EROSION AND SEDIMENT CONTROL MEASURES MUST BE REMOVED AFTER ACHIEVING A SATISFACTORY 'OFF-MAINTENANCE INSPECTION' BY THE RELEVANT REGULATORY AUTHORITY.
- SOIL DENSITY/COMPACTION MUST BE ADJUSTED PRIOR TO SEEDING/PLANTING IN ACCORDANCE WITH THE RELEVANT SPECIFICATIONS, SOIL REPORT AND/OR APPROPRIATE REFERENCE PLANS.
- ALL UNSTABLE OR DISTURBED SOIL SURFACES MUST BE ADEQUATELY STABILISED AGAINST EROSION (MINIMUM 80%) PRIOR TO COMMENCEMENT OF USE, OR SURVEY PLAN ENDORSEMENT.
- ALL DISTURBED AREAS IDENTIFIED AS VERY LOW, LOW, MEDIUM, HIGH, OR EXTREME EROSION RISK MUST BE SUITABLE STABILISED WITHIN 60, 30, 20, 10 OR 5 DAYS RESPECTIVELY, OR PRIOR TO ANTICIPATED RAINFALL, WHICHEVER IS THE GREATER, FROM THE DAY THAT SOIL DISTURBANCES ON THE AREA HAVE BEEN FINALISED.
- ENSURE ALL NECESSARY SOIL TESTING (E.G. SOIL PH, NUTRIENT LEVELS) AND ANALYSIS HAS BEEN COMPLETED, AND REQUIRED SOIL ADJUSTMENTS PERFORMED PRIOR TO PLANTING.
- APPLY SOIL CONDITIONERS AND FERTILISER AS SPECIFIED ON THE APPROVED PLANS. RIP THE SOIL 100 TO 150MM TO MIX THE COMPONENTS INTO THE SOIL AND TO LOOSEN AND ROUGHEN THE SOIL SURFACE BEFORE SEEDING.
- REFER TO APPROVED PLANS FOR LOCATION, EXTENT, AND APPLICATION DETAILS. IF THERE ARE QUESTIONS OR PROBLEMS WITH THE LOCATION, EXTENT, OR METHOD OF APPLICATION CONTACT THE ENGINEER, LANDSCAPE ARCHITECT OR RESPONSIBLE ON-SITE OFFICER FOR ASSISTANCE.
- APPLY SEED UNIFORMLY BY HAND OR WITH A CYCLONE SEEDER, DROP-TYPE SPREADER, DRILL, HYDROSEEDER, HYDROMULCHER, OR OTHER SUITABLE EQUIPMENT AS SPECIFIED.
- WHEN USING BROADCAST-SEEDING METHODS, SUBDIVIDE THE AREA INTO WORKABLE SECTIONS AND APPLY ONE-HALF THE SPECIFIED QUANTITY OF SEED WHILE MOVING BACK AND FORTH ACROSS THE AREA, MAKING A UNIFORM PATTERN. THEN APPLY THE SECOND HALF IN THE SAME WAY, BUT MOVING AT RIGHT ANGLES TO THE FIRST PASS. COVER BROADCAST SEED BY RAKING OR CHAIN DRAGGING, THEN FIRM THE SURFACE WITH A ROLLER TO PROVIDE GOOD SEED CONTACT.
- APPLY SEED AT THE RECOMMENDED RATE, AND DISC OR OTHERWISE MECHANICALLY TREAT THE SURFACE TO BRING THE SEED INTO CONTACT WITH THE SOIL.

SEDIMENT FENCE

- SEDIMENT FENCE TO BE INSTALLED ALONG A LINE OF CONSTANT GROUND ELEVATION WHEREVER PRACTICAL.
- BOTH ENDS OF THE SEDIMENT FENCE TO EXTEND UP THE SLOPE AT LEAST 1m.
- SUPPORT POSTS TO BE SPACED A MAXIMUM 2m UNLESS THE FENCE IS SUPPORTED BY A TOP WIRE OR MESH BACKING, IN WHICH CASE 3m MAXIMUM SPACING.
- FENCE 'RETURNS' SHALL BE INSTALLED AT MAXIMUM 20m SPACING IF FENCE IS INSTALLED ALONG THE CONTOUR, OTHERWISE 5 TO 10m MAXIMUM SPACING DEPENDING ON SLOPE.
- MINIMUM 4 STAPLES OR TIE WIRES PER STAKE.

MATERIALS

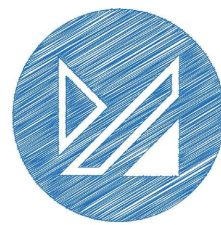
- FABRIC: POLYPROPYLENE, POLYAMIDE, NYLON, POLYESTER, OR POLYETHYLENE WOVEN OR NON-WOVEN FABRIC, AT LEAST 700mm IN WIDTH AND A MINIMUM UNIT WEIGHT OF 140GSM. ALL FABRICS TO CONTAIN ULTRAVIOLET INHIBITORS AND STABILISERS TO PROVIDE A MINIMUM OF 6 MONTHS OF USEABLE CONSTRUCTION LIFE (ULTRAVIOLET STABILITY EXCEEDING 70%).
- FABRIC REINFORCEMENTS: WIRE OR STEEL MESH MINIMUM 14-GAUGE WITH A MAXIMUM MESH SPACING OF 200mm.
- SUPPORT POSTS/STAKES: 1500mm² (MIN.) HARDWOOD, 2500mm² (MIN.) SOFTWOOD, OR 1.5kg/m (MIN.) STEEL STAR PICKETS SUITABLE FOR ATTACHING FABRIC.

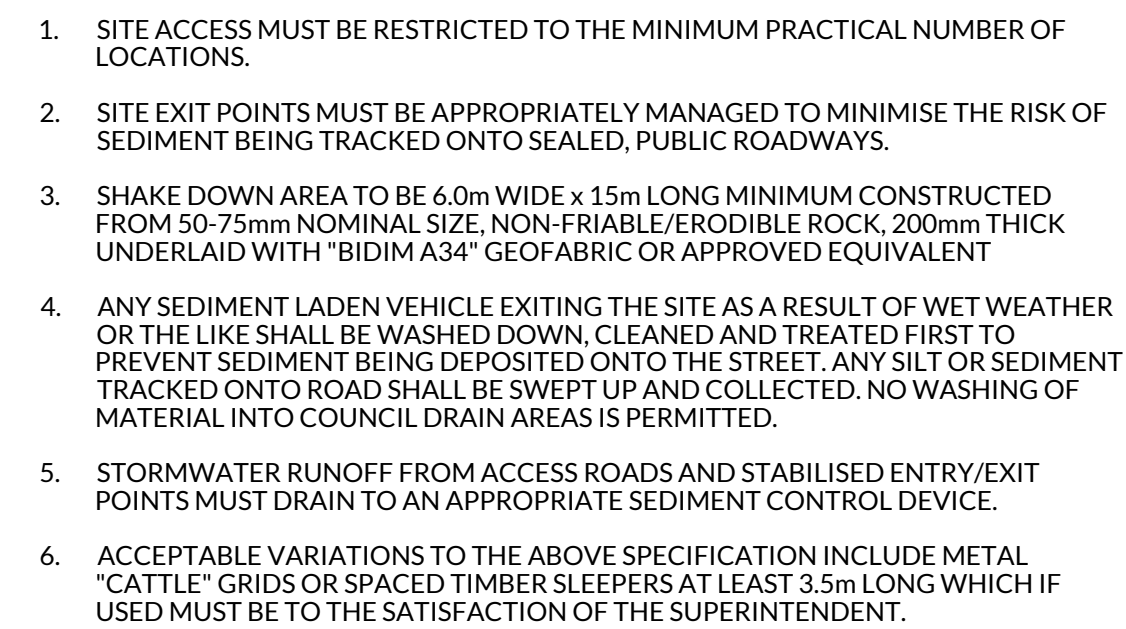
INSTALLATION OF SPILL-THROUGH WEIR:

- LOCATE THE SPILL-THROUGH WEIR SUCH THAT THE WEIR CREST WILL BE LOWER THAN THE GROUND LEVEL AT EACH END OF THE FENCE.
- ENSURE THE CREST OF THE SPILL-THROUGH WEIR IS AT LEAST 300mm ABOVE THE GROUND ELEVATION.
- SECURELY TIE A HORIZONTAL CROSS MEMBER (WEIR) TO THE SUPPORT POSTS/STAKES EACH SIDE OF THE WEIR. CUT THE FABRIC DOWN THE SIDE OF EACH POST AND FOLD THE FABRIC OVER THE CROSS MEMBER AND APPROPRIATELY SECURE THE FABRIC.
- INSTALL A SUITABLE SPLASH PAD AND/OR CHUTE IMMEDIATELY DOWN-SLOPE OF THE SPILL-THROUGH WEIR TO CONTROL SOIL EROSION AND APPROPRIATELY DISCHARGE THE CONCENTRATED FLOW PASSING OVER THE WEIR.

INSTALLATION FABRIC DROP INLET PROTECTION:

- ENSURE THAT THE INSTALLATION OF THE SEDIMENT TRAP WILL NOT CAUSE UNDESIRABLE SAFETY OR FLOODING ISSUES.
- WHERE POSSIBLE, EXCAVATE A 200X200mm TRENCH AROUND THE INLET STRUCTURE.
- SPACE STAKES EVENLY AROUND THE PERIMETER OF THE STORMWATER INLET AT A MAXIMUM 1m SPACING AND SECURELY DRIVE THEM INTO THE GROUND.
- WHERE NECESSARY, INSTALL A HORIZONTAL SPILL-THROUGH WEIR TO LIMIT THE MAXIMUM HEIGHT WATER PONDING AROUND THE STRUCTURE.
- ENSURE THE MAXIMUM POND HEIGHT WILL NOT CAUSE A SAFETY HAZARD, INCLUDING UNDESIRABLE FLOODING OF AN ADJACENT PROPERTY OR ROADWAY. WHEREVER PRACTICAL, THE SPILL-THROUGH WEIR SHOULD BE AT LEAST 300mm ABOVE GROUND LEVEL.
- IF A SPILL-THROUGH WEIR IS NOT INSTALLED, THEN FRAME THE TOP OF THE STAKES WITH HORIZONTAL CROSS MEMBERS.
- CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS.
- PLACE THE BOTTOM 300mm OF FABRIC IN THE EXCAVATED TRENCH.
- SECURELY FASTEN THE FABRIC TO THE STAKES AND CROSS MEMBERS AT THE FABRIC JOINT, OVERLAP THE FABRIC TO THE NEXT STAKE.
- BACKFILL THE TRENCH WITH AT LEAST 200mm OF AGGREGATE OR COMPACTED SOIL. IF A TRENCH CANNOT BE EXCAVATED, LAY THE BOTTOM 300mm OF FABRIC EVENLY ON THE GROUND SURFACE AND COVER WITH A 300mm LAYER OF AGGREGATE, NOT EARTH OR SOIL.
- WHERE REQUIRED, INSTALL A FLOW CONTROL BUND TO MAINTAIN THE SPECIFIED POOL DEPTH AND CONTROL THE MOVEMENT OF WATER.
- TAKE ALL NECESSARY MEASURES TO MINIMISE THE SAFETY RISK CAUSED BY THE STRUCTURE AND TO PREVENT UNSAFE ENTRY INTO THE STORMWATER INLET.

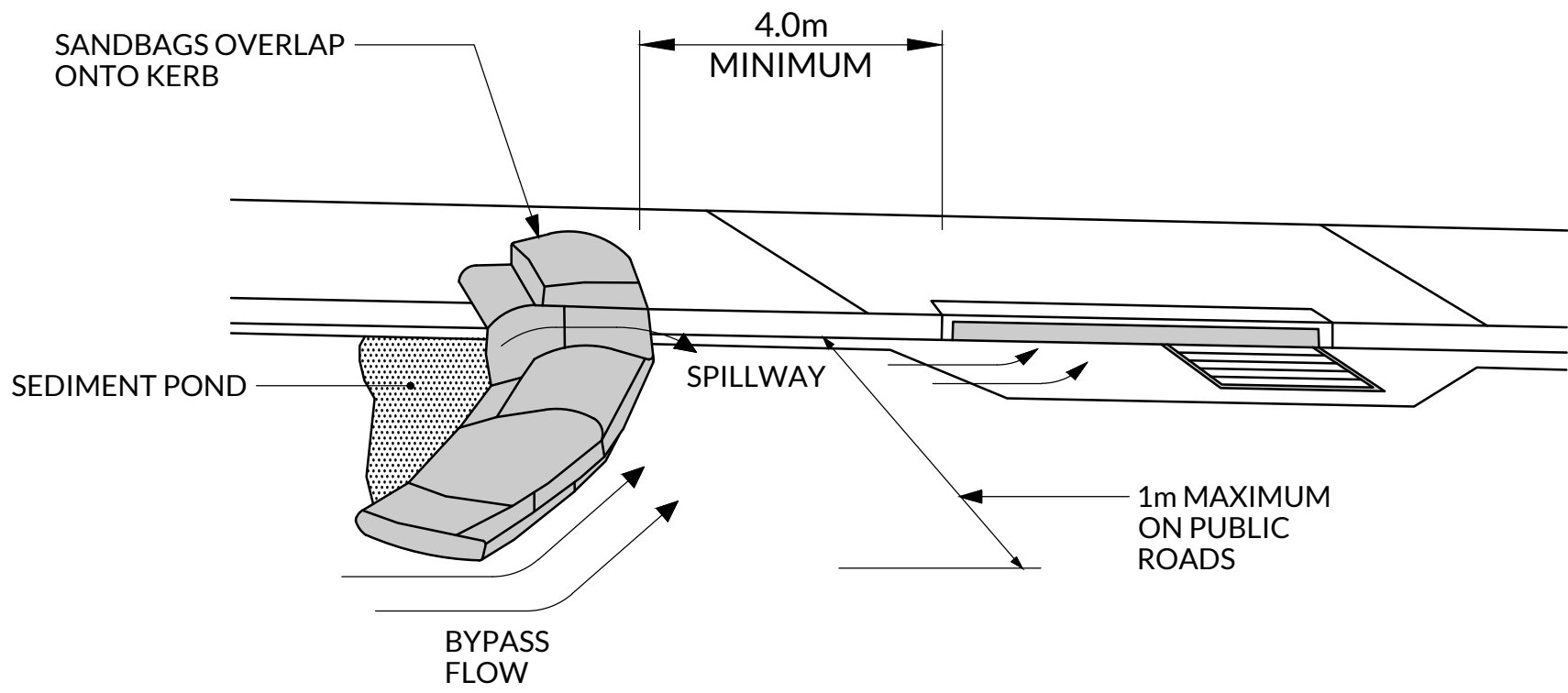
No.	DATE	AMENDMENT	BY	RP DESCRIPTION : LOT : 5080 ON SP327799 LGA : LOGAN CITY COUNCIL	CLIENT : FLEETWOOD	 MRC CONSULTING ENGINEERS MRC Consulting Engineers PO Box 778, Ashgrove West, Brisbane, QLD 4060 e : admin@mrceng.com.au, www.mrceng.com.au	PROJECT : SOUTH ROCK SS KINDERGARTEN 185 GRAMPIANS CIRCUIT YARRABILBA, QLD, 4207	Drawn :	C.R.P.	Date :	JUNE 2026	DRAWING TITLE : EROSION AND SEDIMENT CONTROL NOTES SHEET No. 1		
A	09.06.26	PRELIMINARY ISSUE	C.R.P. <th>Designed :</th> <th>M.H.</th> <th>Checked :</th> <th>R.A.</th> <th>Approved :</th> <th colspan="2">MARK HARRISON</th>					Designed :	M.H.	Checked :	R.A.			
								Status :	PRELIMINARY			Project No. J26135	Drawing No. C-2.01	Revision A
NOT FOR CONSTRUCTION														



SCALE NTS

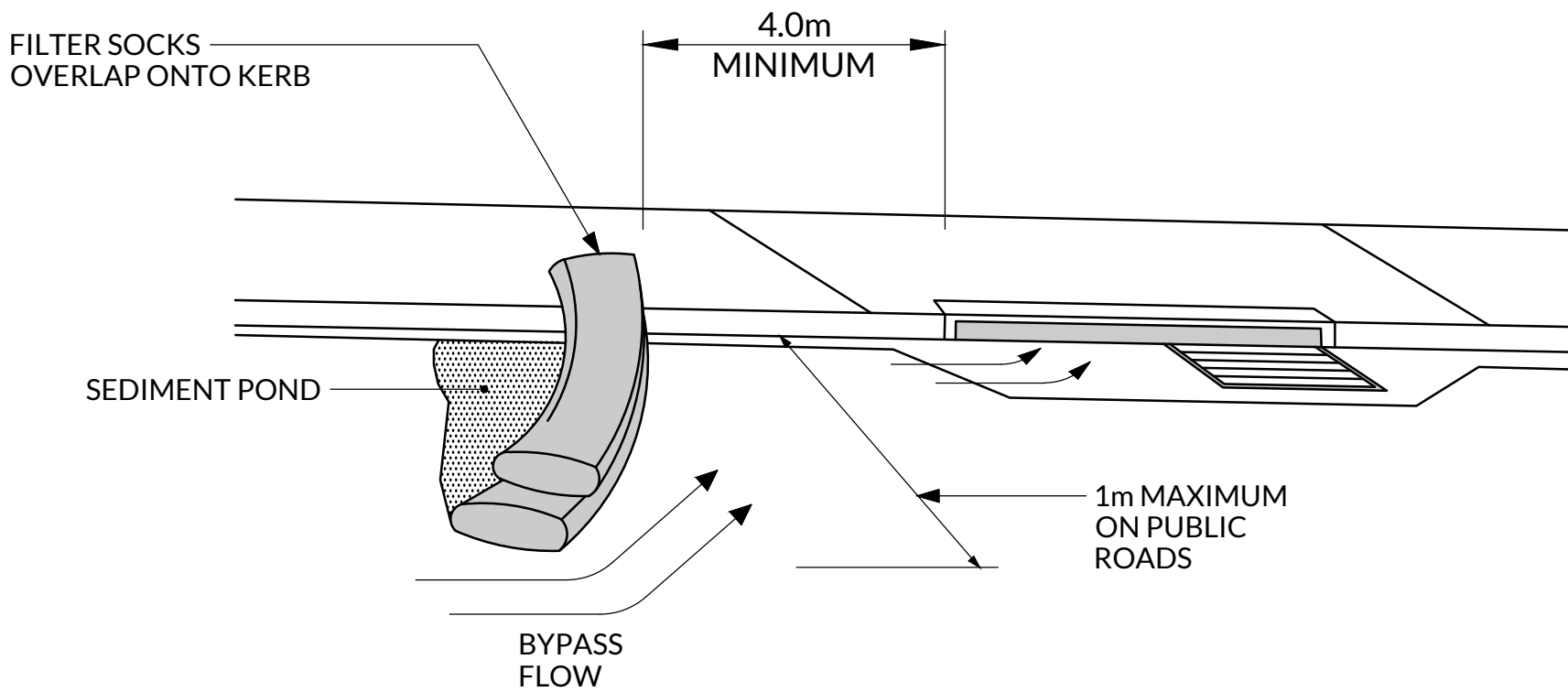


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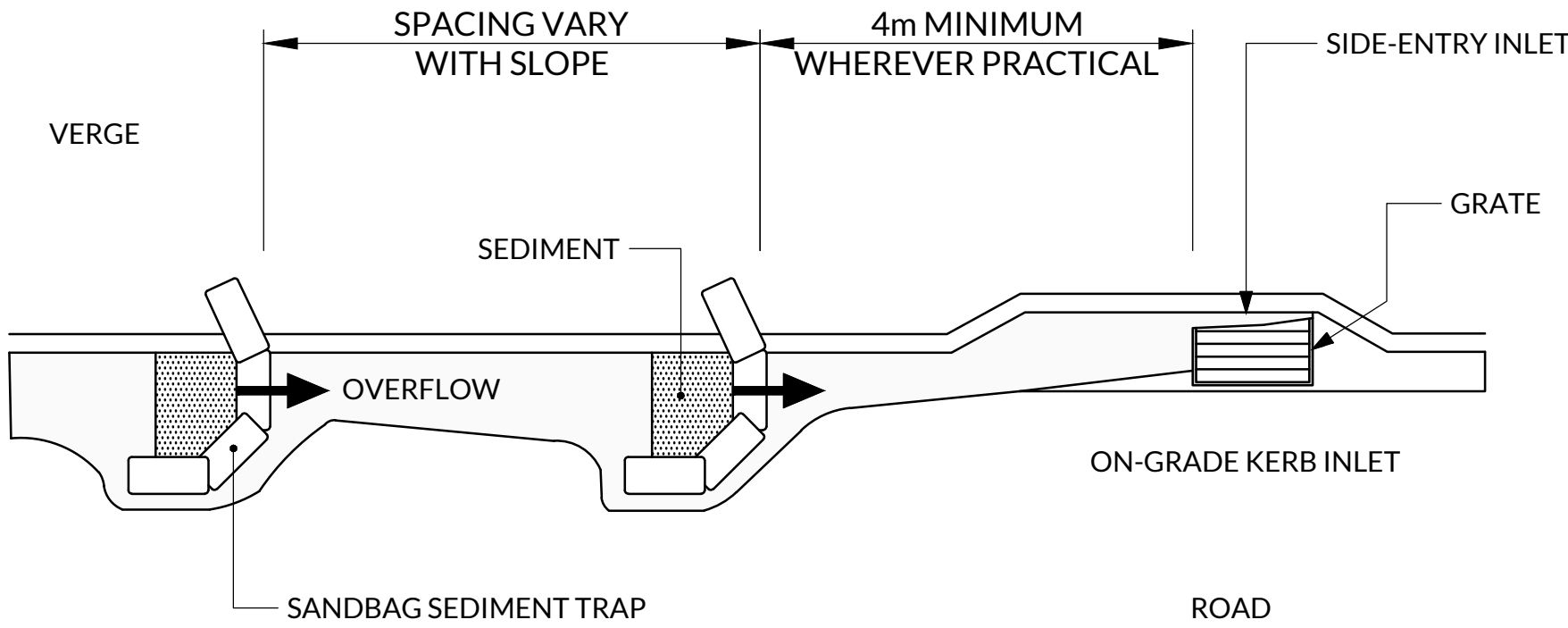
ON-GRADE KERB INLET SEDIMENT COLLECTION DAM DETAIL

SCALE NTS



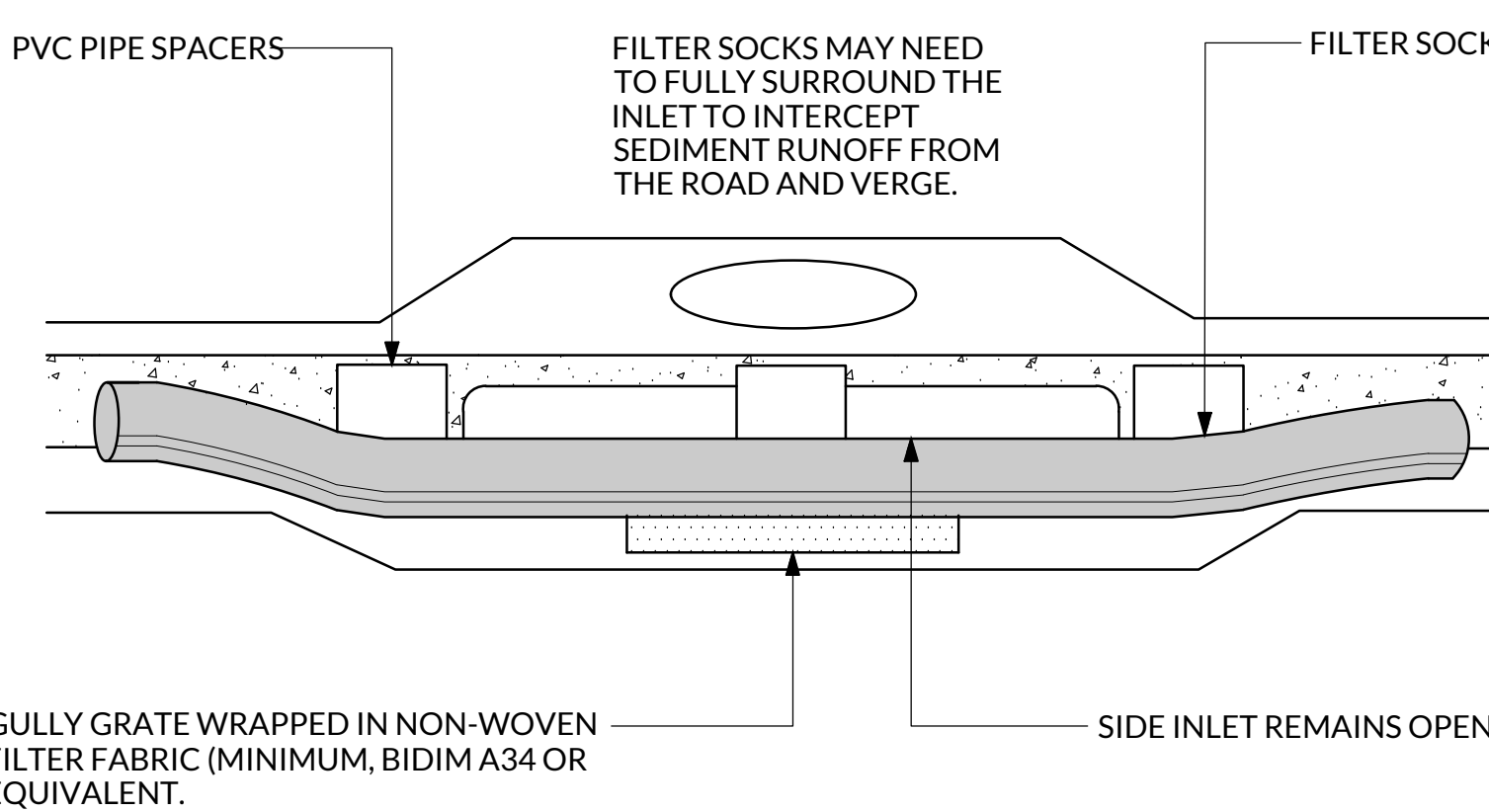
ON-GRADE KERB INLET SEDIMENT TRAP DETAIL

SCALE NTS



ON-GRADE INLET SEDIMENT TRAPS DETAIL

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SAG INLET SEDIMENT TRAP DETAIL

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FILTER SOCKS - CONCENTRATED FLOW

MATERIALS

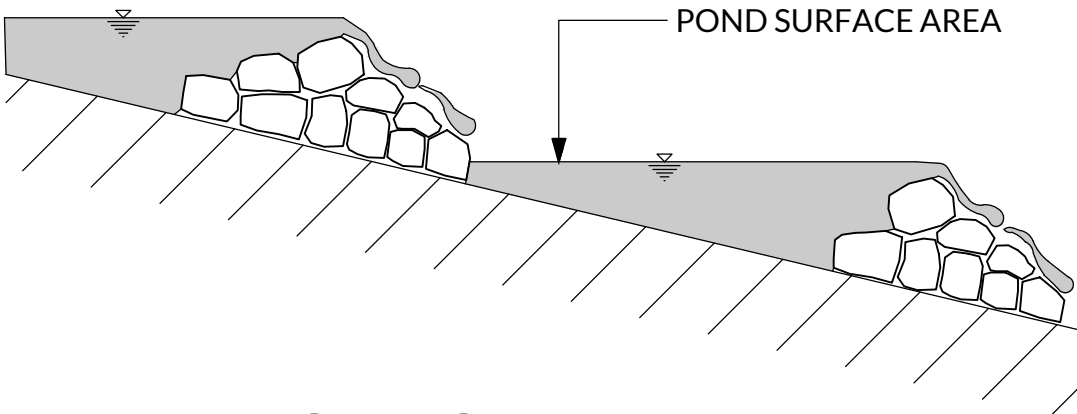
- 1. SOCKS : MINIMUM 200mm DIAMETER SYNTHETIC OR BIODEGRADABLE TUBES MANUFACTURED FROM NON-WOVEN OR COMPOSITE FABRIC SUITABLE FOR THE 'FILTRATION' OF COARSE SEDIMENTS.
- 2. FILL MATERIAL : STRAW, CANE MULCH, COMPOSITE MATERIAL (AS4454), COARSE SAND, OR CLEAN AGGREGATE.
- 3. STAKES : MINIMUM 25 x25mm TIMBER.

INSTALLATION

- 1. ENSURE THE SOCKS ARE PLACED INDIVIDUALLY OR COLLECTIVELY (AS A SINGLE SEDIMENT TRAP) SUCH THAT :
 - (i) LEAKAGE AROUND OR UNDER THE SOCKS IS MINIMISED;
 - (ii) ADJOINING SOCKS ARE TIGHTLY BUTTED OR OVERLAPPED AT LEAST 450mm;
 - (iii) THE SURFACE AREA OF POTENTIAL WATER PONDING UP-SLOPE OF EACH SEDIMENT TRAP IS MAXIMISED;
 - (iv) TO THE MAXIMUM DEGREE PRACTICAL, ALL SEDIMENT-LADEN WATER WILL PASS THROUGH THE FORMED POND BEFORE FLOWING OVER THE DOWN-SLOPE END OF THE SEDIMENT TRAP.

DRAINAGE CONTROL

- 1. ALL DRAINAGE CONTROL MEASURES MUST BE APPLIED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED ESCP.
- 2. TO THE MAXIMUM DEGREE REASONABLE AND PRACTICABLE, ALL WATERS DISCHARGED DURING THE CONSTRUCTION PHASE MUST DISCHARGE ONTO STABLE LAND, IN A NON-EROSIVE MANNER, AND AT A LEGAL POINT OF DISCHARGE.
- 3. DURING THE CONSTRUCTION PERIOD, ROOF WATER MUST BE MANAGED IN A MANNER THAT MINIMISES SOIL EROSION THROUGHOUT THE SITE, AND SITE WETNESS WITHIN ACTIVE WORK AREAS.
- 4. WHEREVER REASONABLE AND PRACTICABLE, STORMWATER RUNOFF ENTERING THE SITE FROM EXTERNAL AREAS, AND NON-SEDIMENT LADEN (CLEAN) STORMWATER RUNOFF ENTERING A WORK AREA OR AREA OF SOIL DISTURBANCE, MUST BE DIVERTED AROUND OR THROUGH THAT AREA IN A MANNER THAT MINIMISES SOIL EROSION AND THE CONTAMINATION OF THAT WATER FOR ALL DISCHARGES UP TO THE SPECIFIED DESIGN STORM DISCHARGE.



CHECK DAM

SCALE NTS

CHECK DAMS

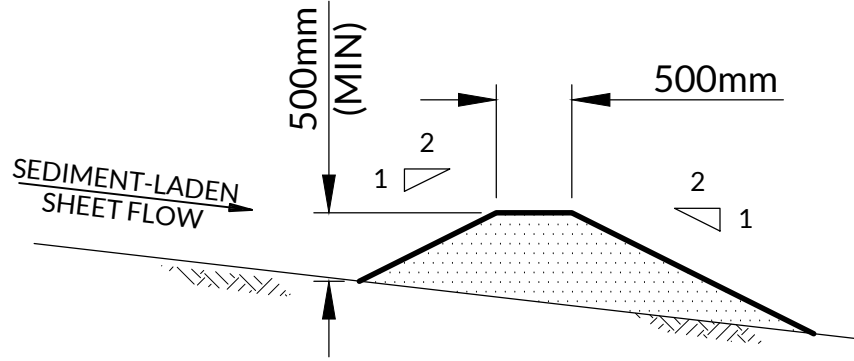
- 1. CHECK DAMS CAN BE BUILT WITH VARIOUS MATERIALS INCLUDING ROCKS AND SANDBAGS

MATERIALS

- 1. ROCK : 150 TO 300mm EQUIVALENT DIAMETER HARD EROSION RESISTANT ROCK.
- 2. RECYCLED CONCRETE : 150 TO 300mm EQUIVALENT DIAMETER FREE FROM FINES AND CEMENT DUST.
- 3. SANDBAGS : GEOTEXTILE BAGS (WOVEN SYNTHETIC, OR NON-WOVEN BIODEGRADABLE) FILLED WITH CLEAN COARSE SAND, CLEAN AGGREGATE, OR COMPOST.

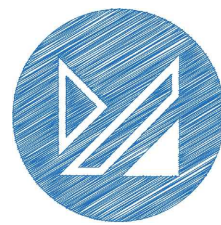
INSTALLATION

- 1. PRIOR TO PLACEMENT OF THE SEDIMENT TRAP, ENSURE THE DRAINAGE CHANNEL IS DEEP ENOUGH TO PREVENT WATER BEING UNSAFELY DIVERTED OUT OF DRAIN ONCE CHECK DAMS ARE INSTALLED.
- 2. LOCATE EACH CHECK DAM SEDIMENT TRAP AS DIRECTED WITHIN APPROVED PLANS, OR OTHERWISE AT SUCH A SPACING TO ACHIEVE THE REQUIRED SEDIMENT TRAPPING OUTCOMES, REFER DETAIL.
- 3. PLACE EACH CHECK DAM SEDIMENT TRAP TO THE LINES AND PROFILE SHOWN IN APPROVED PLAN OR AS DIRECTED BY THE SITE SUPERVISOR.



TYPICAL MULCH BERM

SCALE NTS

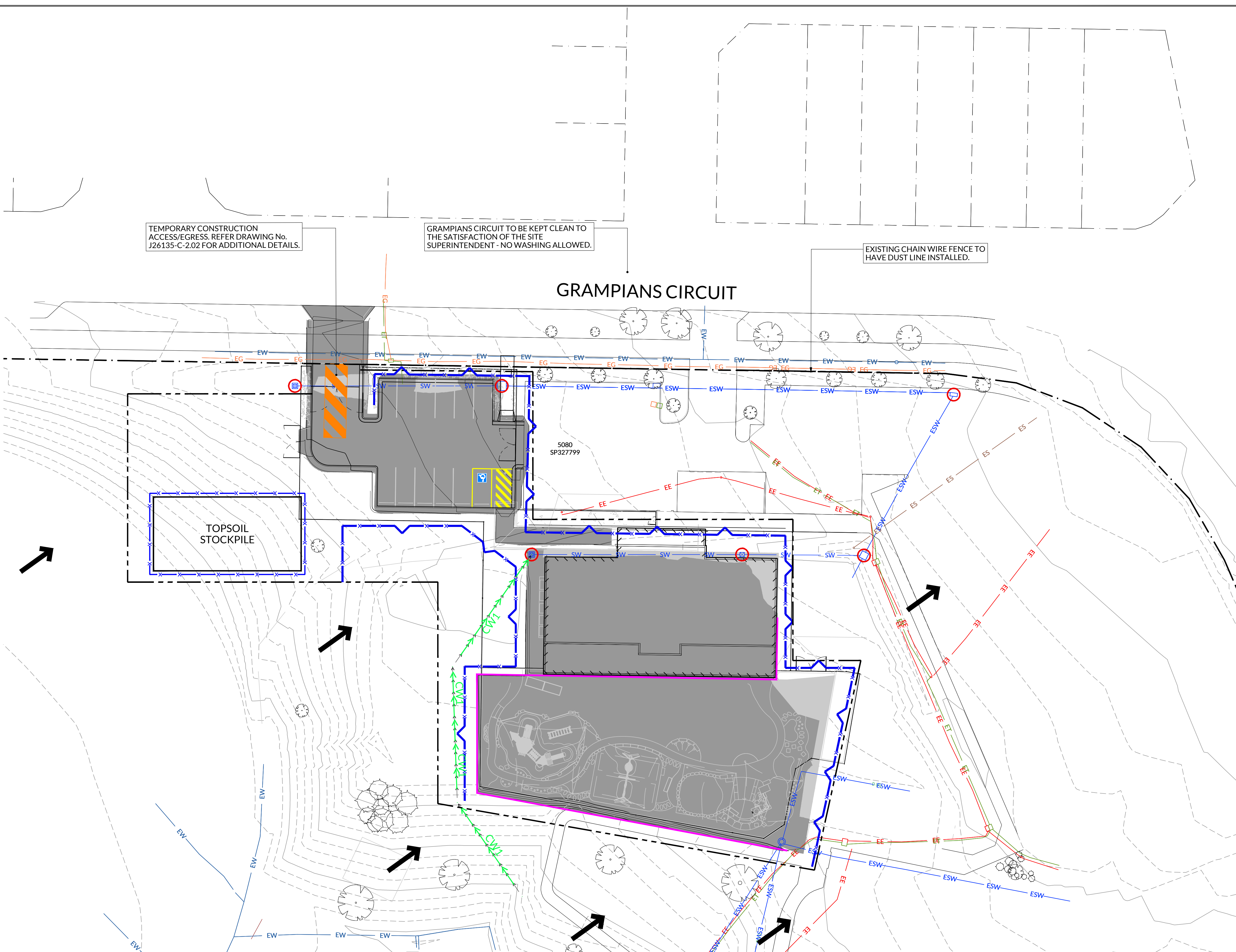
No.	DATE	AMENDMENT	BY	RP DESCRIPTION : LOT : 5080 ON SP327799 LGA : LOGAN CITY COUNCIL	CLIENT : FLEETWOOD	 MRC CONSULTING ENGINEERS MRC Consulting Engineers PO Box 778, Ashgrove West, Brisbane, QLD 4060 e : admin@mrceng.com.au, www.mrceng.com.au	PROJECT : SOUTH ROCK SS KINDERGARTEN 185 GRAMPIANS CIRCUIT YARRABILBA, QLD, 4207	Drawn : C.R.P.	Date : JUNE 2026	DRAWING TITLE : EROSION AND SEDIMENT CONTROL NOTES SHEET No. 3			
A	09.06.26	PRELIMINARY ISSUE	C.R.P.					Designed : M.H.	Checked : R.A.				
NOT FOR CONSTRUCTION								Approved : MARK HARRISON					
								Status : PRELIMINARY		Project No. J26135	Drawing No. C-2.03	Revision A	

LEGEND

- PROPERTY BOUNDARY
- INTERNAL PROPERTY BOUNDARY
- EXTERNAL PROPERTY BOUNDARY
- EXISTING BUILDING
- EXISTING NEIGHBOURING BUILDING
- EXISTING MAJOR CONTOUR @ 1.00m
- EXISTING MINOR CONTOUR @ 0.25m
- EW EXISTING WATER
- ESW EXISTING STORMWATER
- ES EXISTING SEWER
- EE EXISTING ELECTRICAL
- EE EXISTING OVERHEAD ELECTRICAL
- EG EXISTING GAS
- PROPOSED RETAINING WALL
- SW PROPOSED STORMWATER LINE
- EXTENT OF CUT
- EXTENT OF FILL
- FABRIC DROP INLET PROTECTION
- KERB INLET SEDIMENT TRAP (SAG)
- KERB INLET SEDIMENT TRAP
- SEDIMENT FENCE
- 1800 HIGH TEMPORARY FENCING WITH DUST CONTROL LINING
- DD1 CATCH DRAIN
- CW1 CATCH DRAIN
- DIVERSION BUND (MULCH)
- ROCK CHECK DAM
- CONSTRUCTION DRAINAGE CATCHMENTS
- DIRECTION OF SURFACE FLOW
- UNDISTURBED AREA

PHASE 2 NOTES

REFER DRAWING No.s J26135-C-2.01, C-2.02 AND C-2.03 FOR EROSION SEDIMENT CONTROL NOTES AND DETAILS SHEETS



No.	DATE	AMENDMENT	BY
A	09.06.26	PRELIMINARY ISSUE	C.R.P.
B	21.07.26	PRELIMINARY ISSUE	C.R.P.
C	22.07.26	PRELIMINARY ISSUE	C.R.P.

NOT FOR CONSTRUCTION

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Scale 1:250 @ A1 Scale 1:500 @ A3						
RP DESCRIPTION:						
LOT: 5080 ON SP327799						
LGA: LOGAN CITY COUNCIL						

CLIENT:
FLEETWOOD

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PROJECT:
SOUTH ROCK SS KINDERGARTEN
185 GRAMPIANS CIRCUIT
YARRABILBA, QLD, 4207

Drawn: C.R.P.	Date: JUNE 2026
Designed: M.H.	Checked: R.A.
Approved: MARK HARRISON	
Status: PRELIMINARY	

DRAWING TITLE:

PHASE 2 BULK EARTHWORKS
AND CIVIL CONSTRUCTION
ESC PLAN

Project No. J26135	Drawing No. C-2.11	Revision c
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MASONRY NOTES

1.

ALL MASONRY, WORKMANSHIP & MATERIALS SHALL BE IN ACCORDANCE WITH:
 - AS 3700: Masonry structures
 - AS/NZS 4455.1: Masonry units, pavers, flags and segmental retaining wall units - Masonry units.
2.

THE MINIMUM CHARACTERISTIC UNCONFINED COMPRESSIVE STRENGTH f_{uc} REQUIRED FOR MASONRY UNITS SHALL BE AS FOLLOWS:

CONCRETE MASONRY

$f_{uc} \geq 15 \text{ MPa}$

CLAY MASONRY

$f_{uc} \geq 25 \text{ MPa}$

THE CHARACTERISTIC LATERAL MODULUS OF RUPTURE OF MASONRY UNITS SHALL NOT EXCEED 0.8 MPa. THE USE OF ALL OTHER MASONRY TYPES SHALL BE APPROVED BY MRC CONSULTING ENGINEERS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
3.

ALL MASONRY SHALL BE LAID IN STRETCHER BOND PATTERN UNLESS APPROVED BY MRC CONSULTING ENGINEERS. ALL MORTAR SHALL BE OF CLASS M3 WITH THE FOLLOWING MIX PROPORTIONS - 1 : 1 : 6 (CEMENT (GP) : BUILDING LIME : WELL GRADED CLEAN SAND).
4.

MORTAR BED JOINTS INCLUDING PERPENDS SHALL BE FULLY BEDDED AND SHALL MAINTAIN A THICKNESS OF 10mm MAXIMUM. IRONED AND FLUSHED MORTAR JOINTING IS PERMITTED. RAKING OF MORTAR JOINTS IS NOT PERMITTED UNLESS APPROVED BY MRC CONSULTING ENGINEERS.
5.

MASONRY UNITS TO BE RESISTANT TO SALT ATTACK IN ACCORDANCE WITH AS/NZS 4455.1 & AS/NZS 4456.10.
6.

STABILITY OF MASONRY WALLS DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE BUILDER. PROVIDE ADEQUATE TEMPORARY SUPPORT TO WALLS DURING CONSTRUCTION.
7.

UNLESS NOTED OTHERWISE ON DRAWINGS NO CHASES OR RECESSES SHALL BE CUT INTO LOAD-BEARING BLOCKWORK WITHOUT APPROVAL OF THE CONSULTING ENGINEER. NO PENETRATIONS ARE TO BE LOCATED IN REINFORCED CORES.
8.

ALL VERTICAL AND HORIZONTAL EXPANSION &/OR CONTROL JOINTS SHALL BE AS DENOTED AND LOCATED ON THE PROJECT DRAWINGS. ARTICULATION JOINTING SHALL BE INCORPORATED IN ALL MASONRY WALLS DESIGNED IN ACCORDANCE WITH AS 2870 FOR UNREINFORCED CAVITY, SINGLE LEAF AND MASONRY VENEER WALLS. SPACING AND DETAILING REQUIREMENTS SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 4.8 OF AS 3700.

REINFORCED BLOCKWORK

9.

ALL REINFORCED MASONRY SHALL BE IN ACCORDANCE WITH:
 - AS 3700: Masonry structures
 - AS/NZS 4455.1: Masonry units, pavers, flags and segmental retaining wall units - Masonry units.
10.

ALL BLOCKWORK CORES SHALL BE CLEAN AND FREE FROM PROJECTING MORTAR. REMOVE MORTAR DROPPINGS FROM BASE OF WALL BY USE OF CLEANOUT BLOCKS BEFORE FILLING WITH CONCRETE.
11.

UNLESS NOTED OTHERWISE ON DRAWINGS, ALL CONCRETE CORE FILLING (GROUT) SHALL HAVE A CHARACTERISTIC COMPRESSIVE STRENGTH ($f_{c'}$) OF 20MPa IN ACCORDANCE WITH THE REQUIREMENTS FOR CONCRETE IN AS 3600, SPECIFIED SLUMP - 230mm AND A MAXIMUM AGGREGATE SIZE OF 10mm.
12.

CONCRETE FILL ALL BLOCKWORK CORES. ENSURE CONCRETE CORE FILLING IS THOROUGHLY COMPACTED BY MECHANICAL VIBRATOR &/OR RODDING WITH A PLAIN ROUND BAR.
13.

ALL WALLS SHALL BE FULLY BONDED OR TIED AT THEIR INTERSECTIONS UNLESS DETAILED OTHERWISE.
14.

WHERE THE LIFT IS MORE THAN 2.4 METRES THE CONCRETE CORE FILLING OPERATION SHALL BE UNDERTAKEN IN TWO STAGES WITH A MINIMUM OF 30 MINUTES APART. MAXIMUM 2.4 METRE HIGH FREE DROP IN ANY ONE POUR UNLESS NOTED OTHERWISE.
15.

ALL VERTICAL CONTROL JOINTS SHALL BE AS DENOTED AND LOCATED ON THE PROJECT DRAWINGS. UNLESS OTHERWISE SHOWN, PROVIDE JOINTS AT ALL SLAB EXPANSION TYPE LOCATIONS AND AT 8.0 METRES MAXIMUM CENTRES.
16.

ALL REINFORCEMENT SHALL BE CORRECTLY POSITIONED AS SHOWN ON PROJECT DRAWINGS.
17.

RETAINING WALLS SHALL NOT BE BACKFILLED UNTIL A MINIMUM OF 14 DAYS AFTER THE COMPLETION OF CONCRETE CORE FILLING OPERATIONS.
18.

CONTACT MRC CONSULTING ENGINEERS FOR ALL INSPECTION REQUIREMENTS PRIOR TO UNDERTAKING ANY CONCRETE CORE FILLING.

RETAINING WALL NOTES

NOTE:

1.

REFER PROJECT GEOTECHNICAL REPORT FOR TEMPORARY BATTER DETAILS. ALL BATTERS SHALL BE CONFIRMED BY A RECOGNISED GEOTECHNICAL CONSULTANT.
2.

LONGITUDINAL DRAIN/S SHALL BE A MINIMUM OF 100mm DIAMETER UPVC SLOTTED 'AGI' PIPE ENCASED WITH AN APPROVED GEOFABRIC/FILTER SOCK. DRAIN OUTLETS SHALL BE COORDINATED WITH LOCATIONS SPECIFIED BY THE PROJECT HYDRAULIC CONSULTANT AND/OR LOCATIONS APPROVED BY THE LOCAL AUTHORITIES. DISCHARGE POINTS SHALL BE AT NO MORE THAN 25m MAXIMUM INTERVALS WITH PIPES LAID AT A GRADE OF NO MORE THAN 1 IN 250.
3.

WHERE OUTLETS NOTED ABOVE ARE NOT ACHIEVABLE, WEEPHOLES SHALL BE PROVIDED. ENSURE INVERT LEVELS OF DRAINS AND WEEPHOLES ARE MATCHING TO PROVIDE DIRECT DISCHARGE VIA THE WEEPHOLE. WEEPHOLES SHALL BE A VERTICAL JOINT VOID OF MORTAR APPROXIMATELY 200mm HIGH AND SPACED AT 1500mm MAXIMUM CENTERS IF SUCH OUTLETS ARE NOT ACHIEVABLE WEEPHOLES SHALL BE PROVIDED AT A CONSTANT HEIGHT OF 200mm ABOVE FINISHED GROUND LEVEL.
4.

MAINTENANCE PROVISIONS ARE TO BE MADE TO ENSURE THE REMOVAL OF DISCHARGE FROM THE WEEPHOLE ON THE FACE OF WALLS.

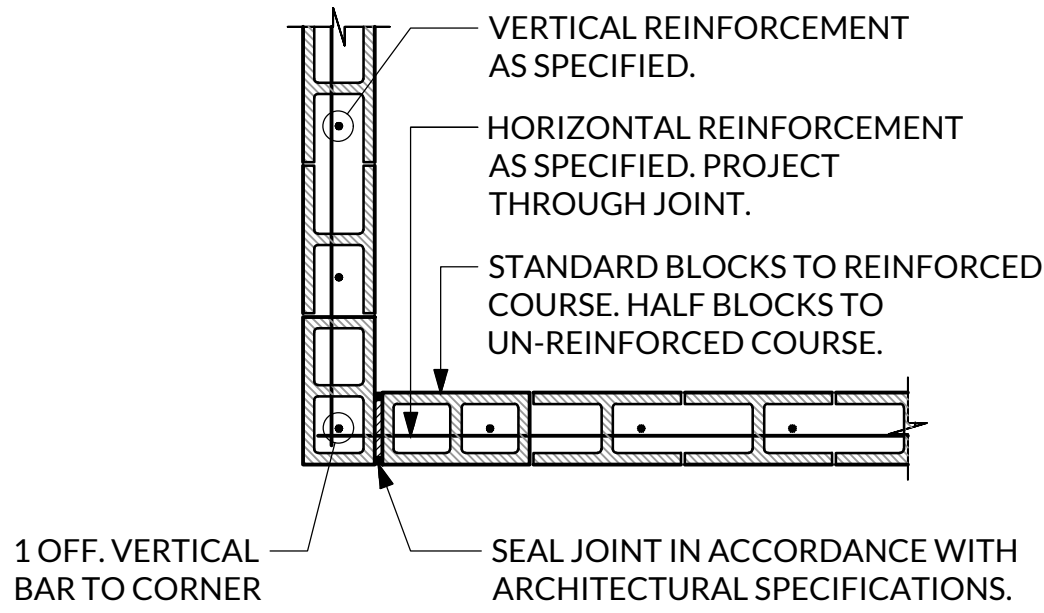
VERTICAL DRAINAGE/BACKFILL

5.

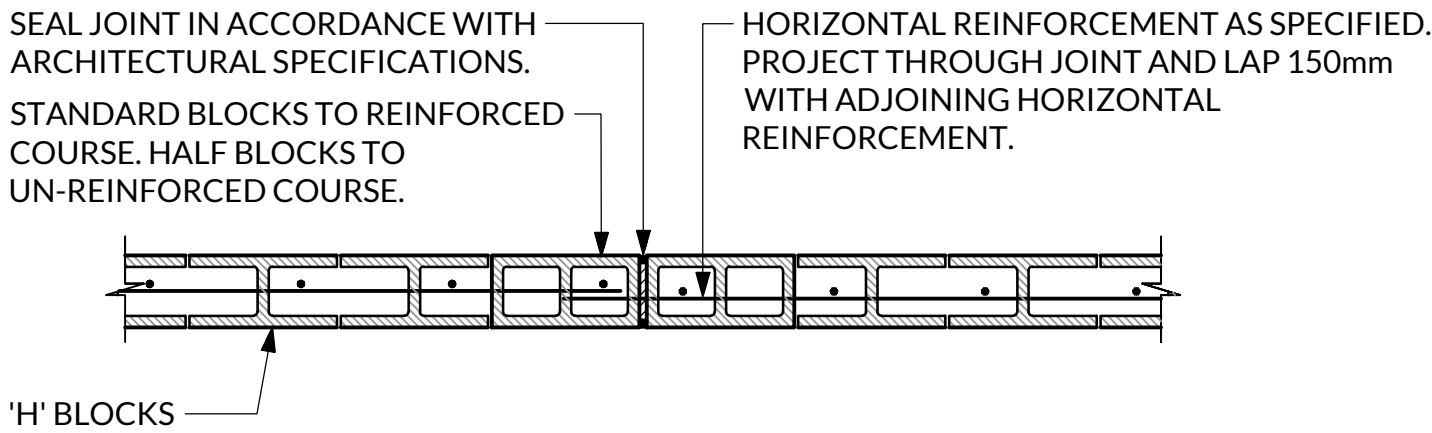
A FILTER DRAINAGE LAYER SHALL BE PROVIDED FOR THE FULL RETAINED HEIGHT AND LENGTH OF WALLS AND SHALL BE EITHER:
 - 300mm WIDE FREE DRAINING ZONE OF CLEAN GRAVEL SEPARATED FROM BACKFILL MATERIAL WITH AN APPROVED GEOFABRIC
 - A CELLULAR DRAINAGE SYSTEM WITH AN APPROVED GEOFABRIC FIXED TO SIDE ADJACENT BACKFILL MATERIAL.
6.

BACKFILL MATERIAL SHALL BE FREE DRAINING, NON-PLASTIC, PREDOMINANTLY GRANULAR MATERIAL SEPARATED FROM THE FILTER DRAINAGE LAYER BY AN APPROVED GEOFABRIC AS NOTED. BACKFILL IS NOT TO BE PLACED BEHIND WALLS UNTIL AT LEAST 10 DAYS AFTER WALL CONSTRUCTION AND GROUTING.
7.

GEOFABRIC SHALL BE SPECIFIED BY THE SUPERVISING ENGINEER PRIOR TO THE CONSTRUCTION OF ANY WORKS. THE MINIMUM SPECIFICATION FOR GEOFABRIC SHALL BE 'BIDM A29'



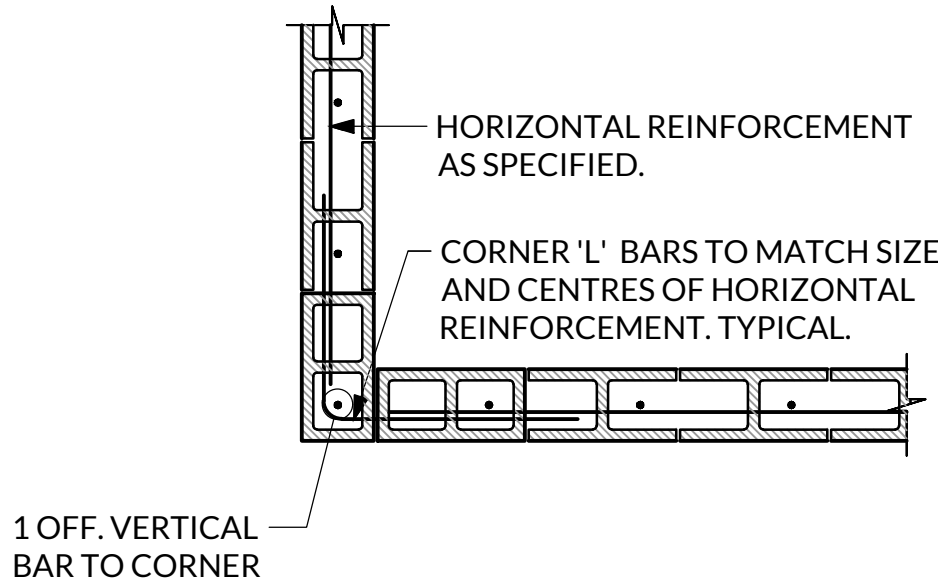
CORNER DETAIL - REINFORCED COURSE



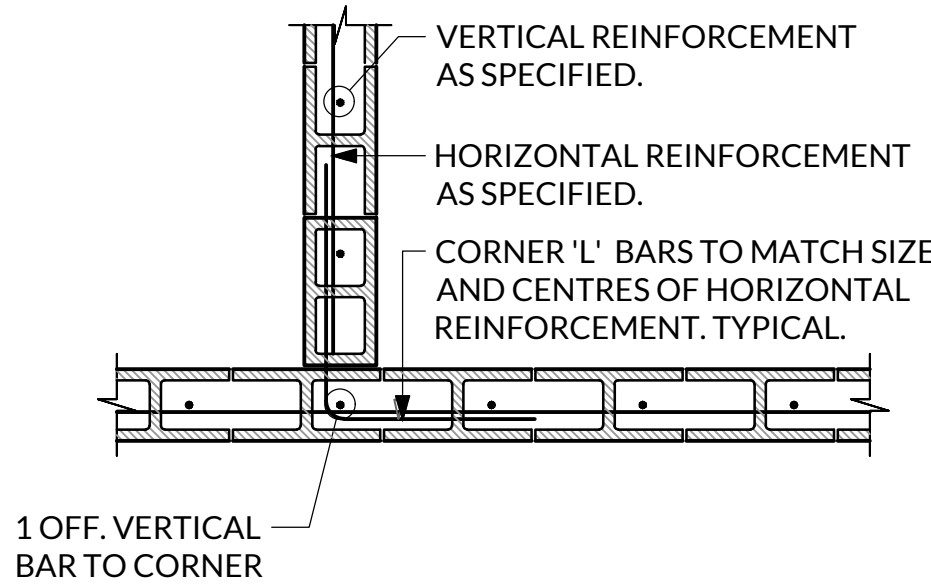
STRAIGHT WALL - REINFORCED COURSE

WALL CONSTRUCTION/CONTROL JOINT

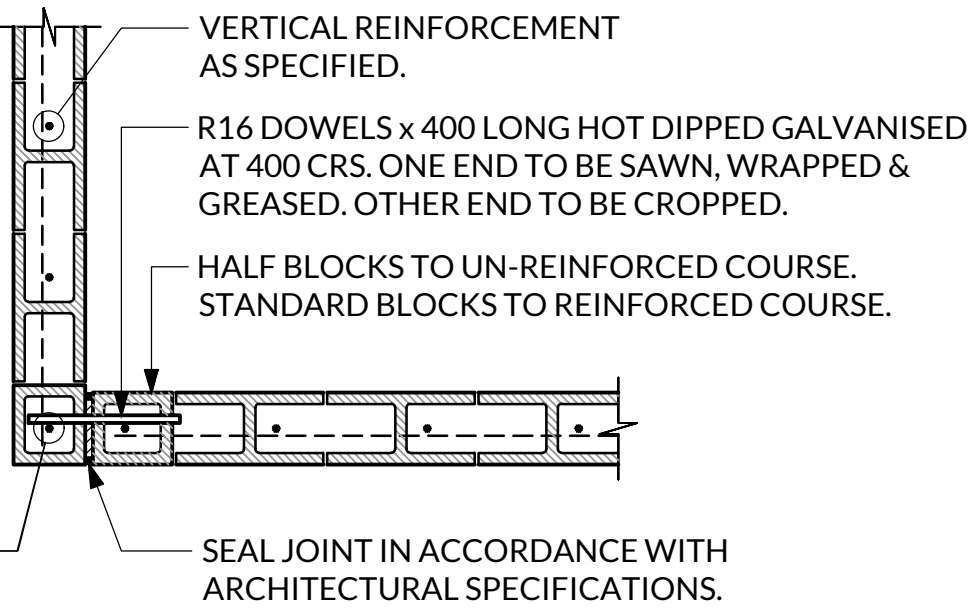
DENOTED W.C.J. ON PLAN
SCALE 1:20



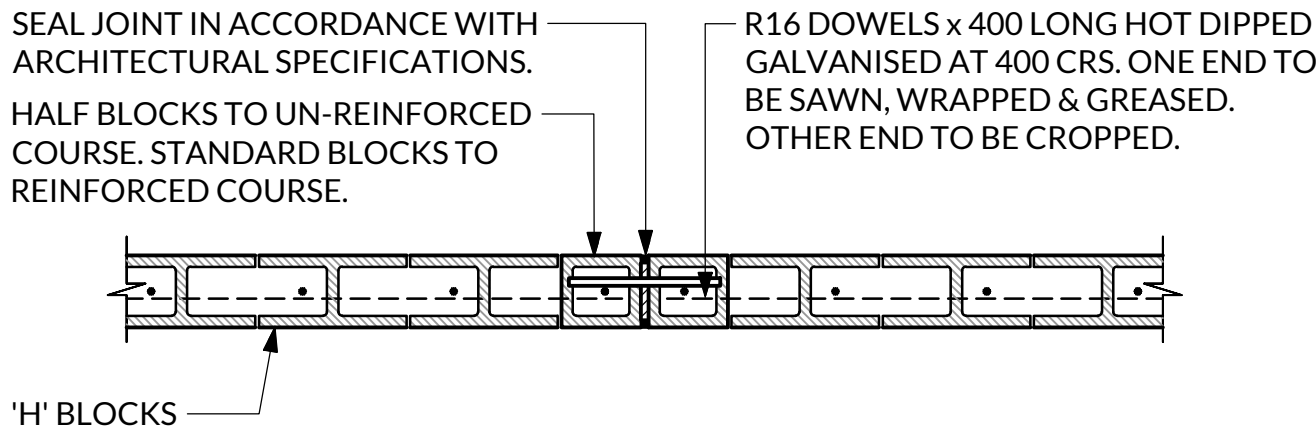
CORNER DETAIL



INTERSECTION DETAIL



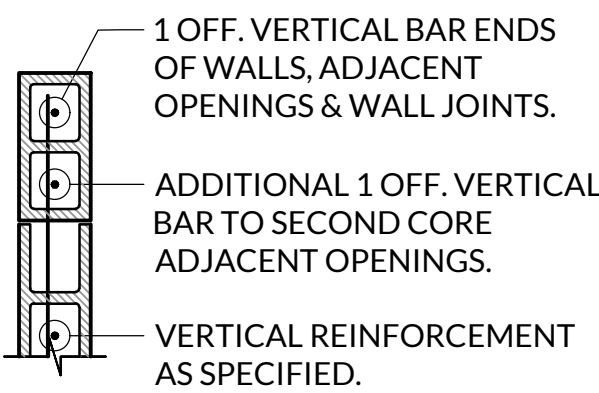
CORNER DETAIL - UN-REINFORCED COURSE



UN-REINFORCED COURSE

WALL EXPANSION JOINT

DENOTED W.E.J. ON PLAN
SCALE 1:20



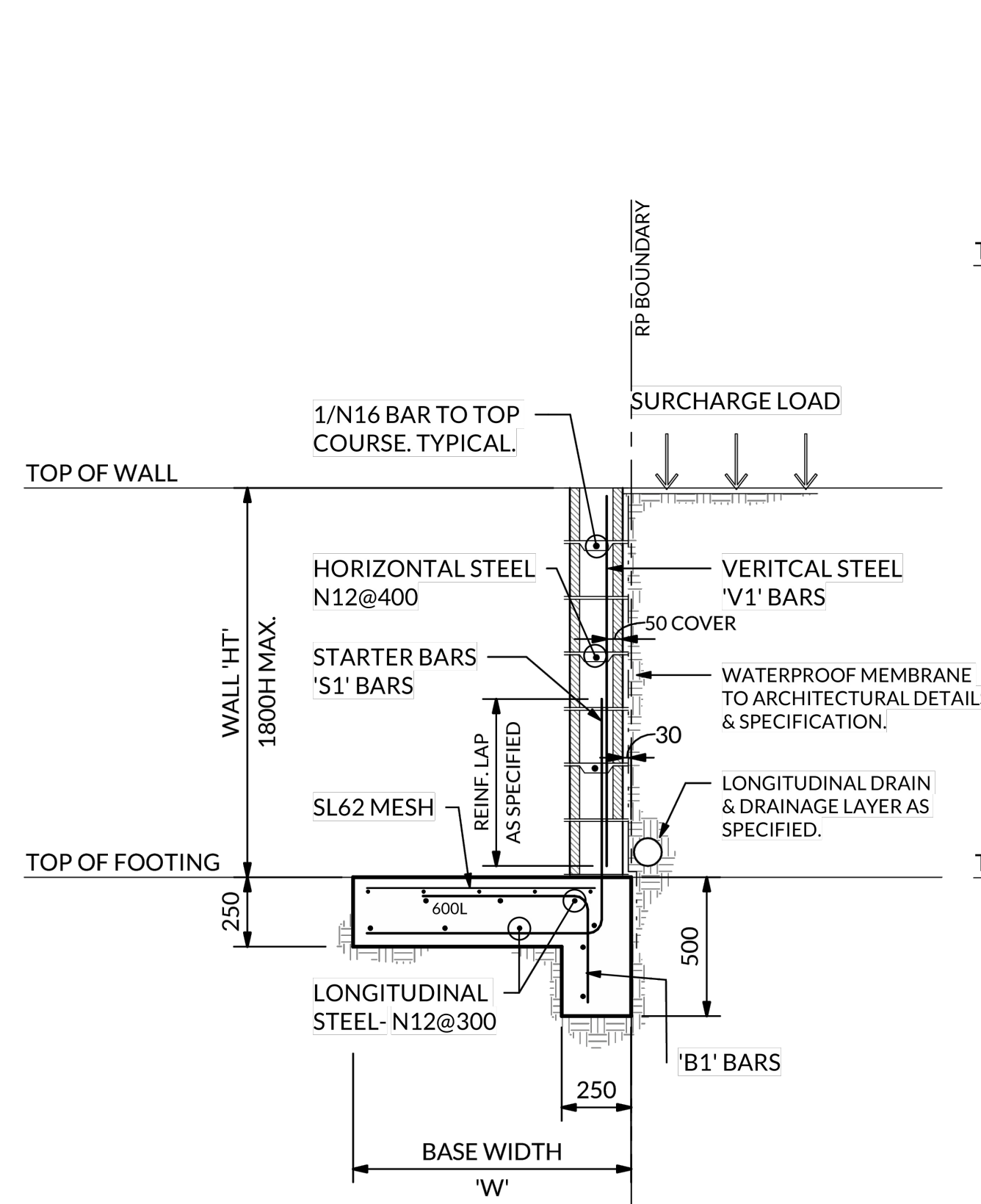
WALL END DETAIL

TYPICAL BLOCKWORK WALL PLAN DETAILS

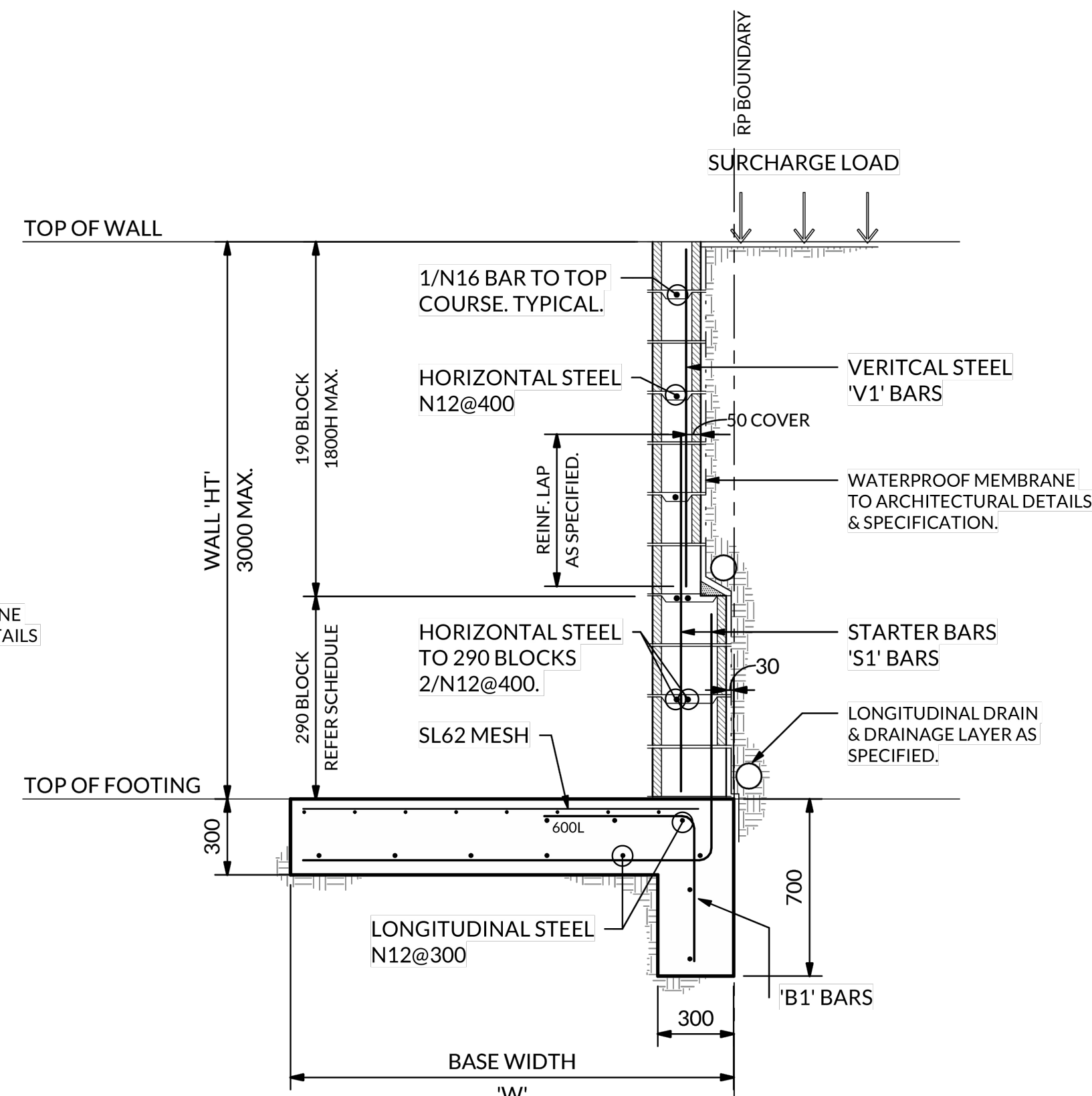
SCALE 1:20

No.	DATE	AMENDMENT	BY
A	09.06.26	PRELIMINARY ISSUE	C.R.P.
NOT FOR CONSTRUCTION			
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00.51.0 Scale 1:20 @ A1 Scale 1:40 @ A3 RP DESCRIPTION :	CLIENT : FLEETWOOD	MRC CONSULTING ENGINEERS MRC Consulting Engineers PO Box 778, Ashgrove West, Brisbane, QLD 4060 e : admin@mrceng.com.au, www.mrceng.com.au	PROJECT : SOUTH ROCK SS KINDERGARTEN 185 GRAMPIANS CIRCUIT YARRABILBA, QLD, 4207	Drawn : C.R.P. Designed : M.H. Approved : MARK HARRISON Status : PRELIMINARY Date : JUNE 2026 Checked : R.A. Project No. J26135 Drawing No. C-3.01 Revision A	DRAWING TITLE : RETAINING WALL NOTES AND DETAILS SHEET No. 1 OF 2
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RETAINING WALL - TYPE '1'
1000 to 1800 HIGH
SCALE 1:20



RETAINING WALL - TYPE '1'
1801 to 3000 HIGH MAX.
SCALE 1:20

RETAINING WALL - TYPE 1 (WITH 5.0kPa SURCHARGE)						
WALL HEIGHT 'HT'	BLOCKWORK		BASE WIDTH 'W'	BASE/STARTER REINFORCEMENT		TYPICAL WALL STEEL 'V1' BARS
	BLOCK SERIES	290 SERIES HEIGHT		BASE STEEL 'B1' BARS	WALL STARTERS 'S1' BARS	
0 to 1000	140	N/A	850	N16@400	N12@400	N16@400
1001 to 1400	190	N/A	1150	N16@400	N16@400	
1401 to 1800	190	N/A	1550	N16@400	N20@400	
1801 to 2200	190/290	800	1750	N16@400	N20@400	
2201 to 2600	190/290	1000	2050	N16@400	N20@400	

NOTE : 50 COVER TO BASE REINFORCEMENT.

No.	DATE	AMENDMENT	BY
A	09.06.26	PRELIMINARY ISSUE	C.R.P.
NOT FOR CONSTRUCTION			

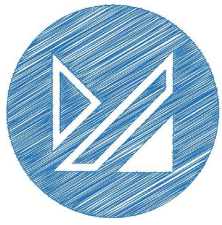
00.51.0

Scale 1:20 @ A1 Scale 1:40 @ A3

RP DESCRIPTION :

CLIENT :

FLEETWOOD



MRC

CONSULTING ENGINEERS

MRC Consulting Engineers

PO Box 778, Ashgrove West, Brisbane, QLD 4060

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PROJECT :

SOUTH ROCK SS

KINDERGARTEN

185 GRAMPIANS CIRCUIT

YARRABILBA, QLD, 4207

Drawn : C.R.P.	Date : JUNE 2026
Designed : M.H.	Checked : R.A.
Approved : MARK HARRISON	
Status : PRELIMINARY	

DRAWING TITLE :			
RETAINING WALL NOTES AND DETAILS SHEET No. 2 OF 2			
Project No. J26135	Drawing No. C-3.02	Revision A	

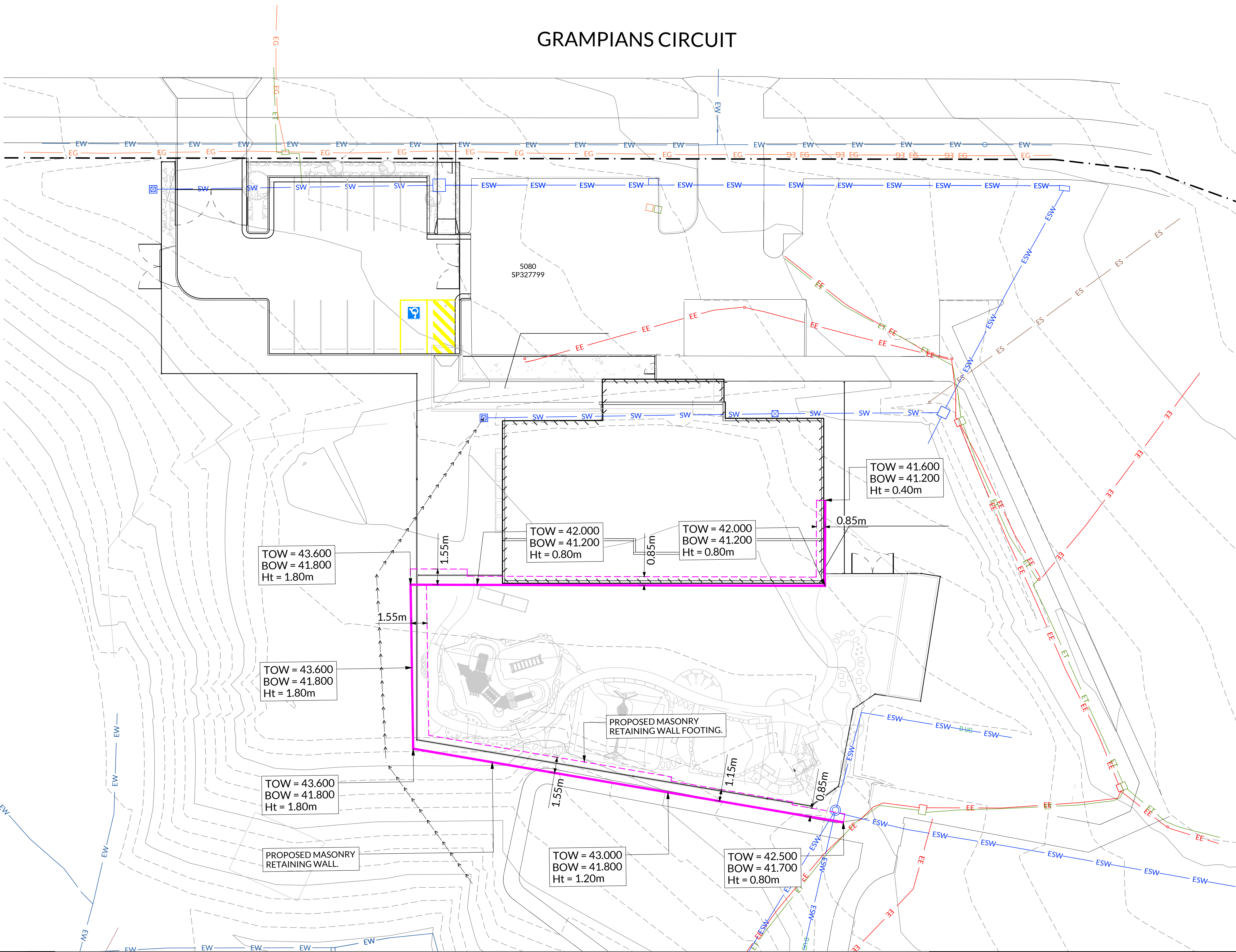
LEGEND

- PROPERTY BOUNDARY
- INTERNAL PROPERTY BOUNDARY
- EXTERNAL PROPERTY BOUNDARY
- EXISTING BUILDING
- EXISTING NEIGHBOURING BUILDING
- EXISTING MAJOR CONTOUR @ 1.00m
- EXISTING MINOR CONTOUR @ 0.25m
- EW EXISTING WATER
- ESW EXISTING STORMWATER
- ES EXISTING SEWER
- EE EXISTING ELECTRICAL
- EE EXISTING OVERHEAD ELECTRICAL
- EG EXISTING GAS
- PROPOSED RETAINING WALL
- SW PROPOSED STORMWATER LINE

RETAINING WALL NOTES

REFER DRAWING No. J26135-C-3.01 & 3.02 FOR
RETAINING WALL NOTES AND DETAILS SHEETS

GRAMPIANS CIRCUIT



No.	DATE	AMENDMENT	BY
A	09.06.26	PRELIMINARY ISSUE	C.R.P.
B	21.07.26	PRELIMINARY ISSUE	C.R.P.
C	22.07.26	PRELIMINARY ISSUE	C.R.P.

NOT FOR CONSTRUCTION

Scale 1:200 @ A1 Scale 1:400 @ A3

RP DESCRIPTION:
LOT: 5080 ON SP327799
LGA: LOGAN CITY COUNCIL

CLIENT:

FLEETWOOD

MRC
CONSULTING ENGINEERS

MRC Consulting Engineers
PO Box 778, Ashgrove West, Brisbane, QLD 4060
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PROJECT:

**SOUTH ROCK SS
KINDERGARTEN**
185 GRAMPIANS CIRCUIT
YARRABILBA, QLD, 4207

Drawn: C.R.P. Date: JUNE 2026
Designed: M.H. Checked: R.A.
Approved: MARK HARRISON

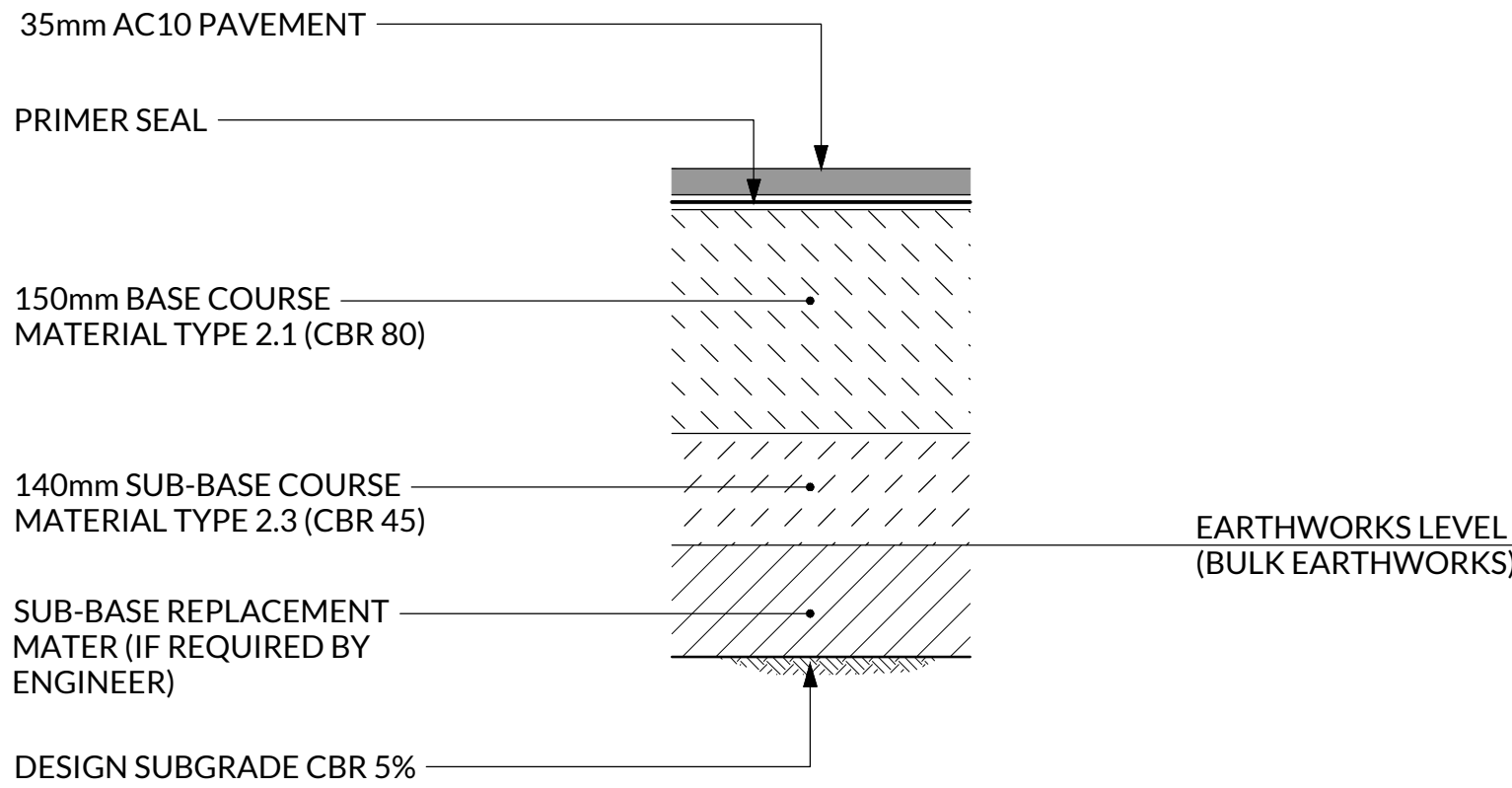
Status: **PRELIMINARY**

DRAWING TITLE:
**RETAINING WALL
LAYOUT PLAN**

Project No. **J26135** Drawing No. **C-3.11** Revision **C**

ROADWORKS NOTES

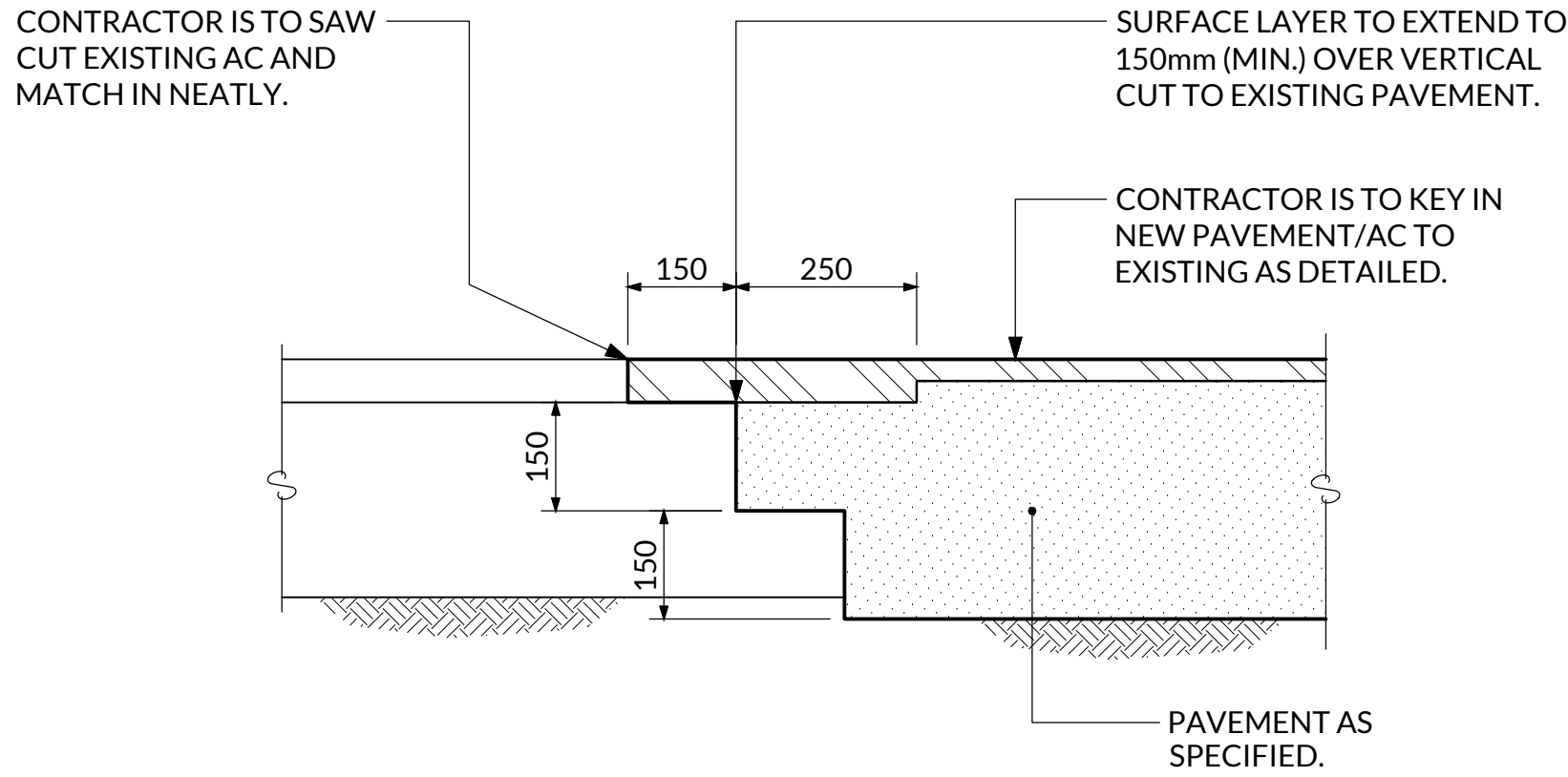
- ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT COUNCIL STANDARDS AND STANDARD DRAWINGS UNLESS DIRECTED OTHERWISE.
- ALL DIMENSIONS ARE TO BE NOMINAL SETOUT LINE OF KERBS UNLESS NOTED OTHERWISE.
- FOOTPATHS AND BATTERS TO HAVE A MINIMUM OF 75mm OF TOPSOIL.
- SUB-BASE GRAVEL (IF REQUIRED) SHALL EXTEND UNDER KERB AND CHANNEL TO 150mm BEHIND REAR OF KERBING WITH 100mm DEPTH UNDER KERBING UNLESS NOTED OTHERWISE.
- THE DRAWINGS SHALL BE READ IN CONJUNCTION WITH OTHER CONSULTANTS PLANS AND SPECIFICATIONS AND ANY OTHER WRITTEN INSTRUCTIONS PROVIDED BY THE SUPERINTENDENT.
- SIDE DRAINS SHALL BE PROVIDED UNDER ALL KERBS AS PER LOCAL COUNCIL STANDARDS. THE CONTRACTOR IS TO ENSURE THAT ALL SUBSOIL AND SIDE DRAINS ARE FREE DRAINING AND CONNECTED TO A SUITABLE OUTLET STRUCTURE.
- FINAL PAVEMENT DEPTHS SHALL BE DETERMINED BY THE SUPERINTENDENT AFTER SUITABLE SUBGRADE TESTING.
- THE CONTRACTOR SHALL ERECT ANY REQUIRED TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE APPROVED TRAFFIC MANAGEMENT PLAN.
- ALL PAVEMENT TESTING IS TO BE CARRIED OUT IN ACCORDANCE WITH LOCAL AUTHORITY STANDARDS AND GUIDELINES, AND ASSOCIATED AUSTRALIAN STANDARDS.
- WORKS ARE TO BE PROGRAMMED SO AS NOT TO DISTURB NEARBY HOUSEHOLDERS EITHER BY NOISE OR DUST.



GRANULAR : CAR PARK DETAIL

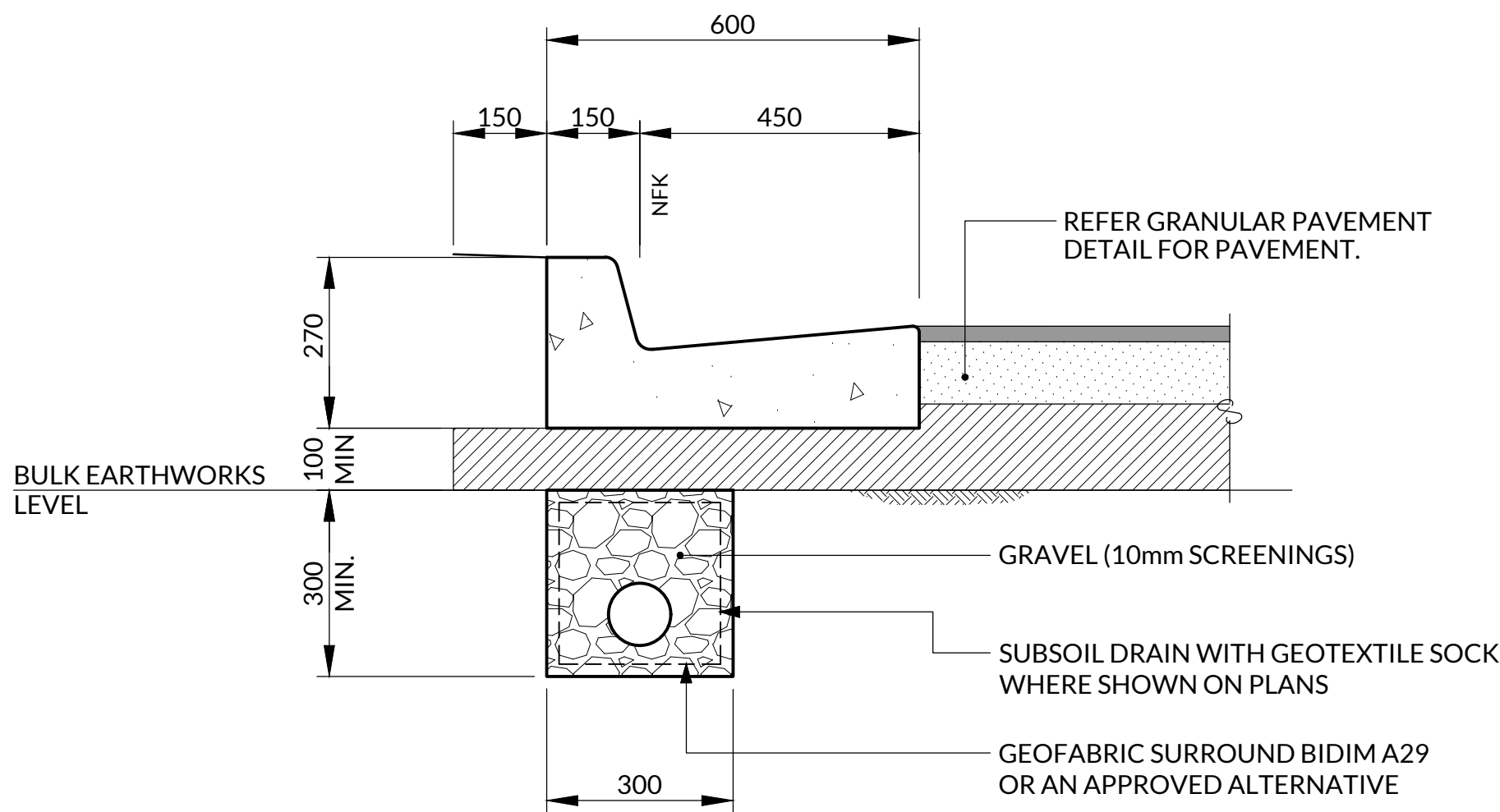
SCALE NTS
DESIGN TRAFFIC = 1.1x10⁵ ESA AS PER LOGAN CITY COUNCIL PLANNING SCHEME - TABLE 3.4.8.2.1
REFER TMR - "MRTS 30" SPECIFICATION FOR AC

NOTE: DESIGN SUBGRADE TESTING IS TO BE COMPLETED, AND RESULTS FORWARDED TO THE SUPERINTENDENT. THE SUPERINTENDENT WILL THEN CONFIRM FINAL PAVEMENT THICKNESS FOR CAR PARK BEING EXCISED BACK TO COUNCIL, THE SUPERINTENDENT WILL NEED COUNCIL TO PROVIDE FINAL APPROVAL OF PAVEMENT DESIGN.



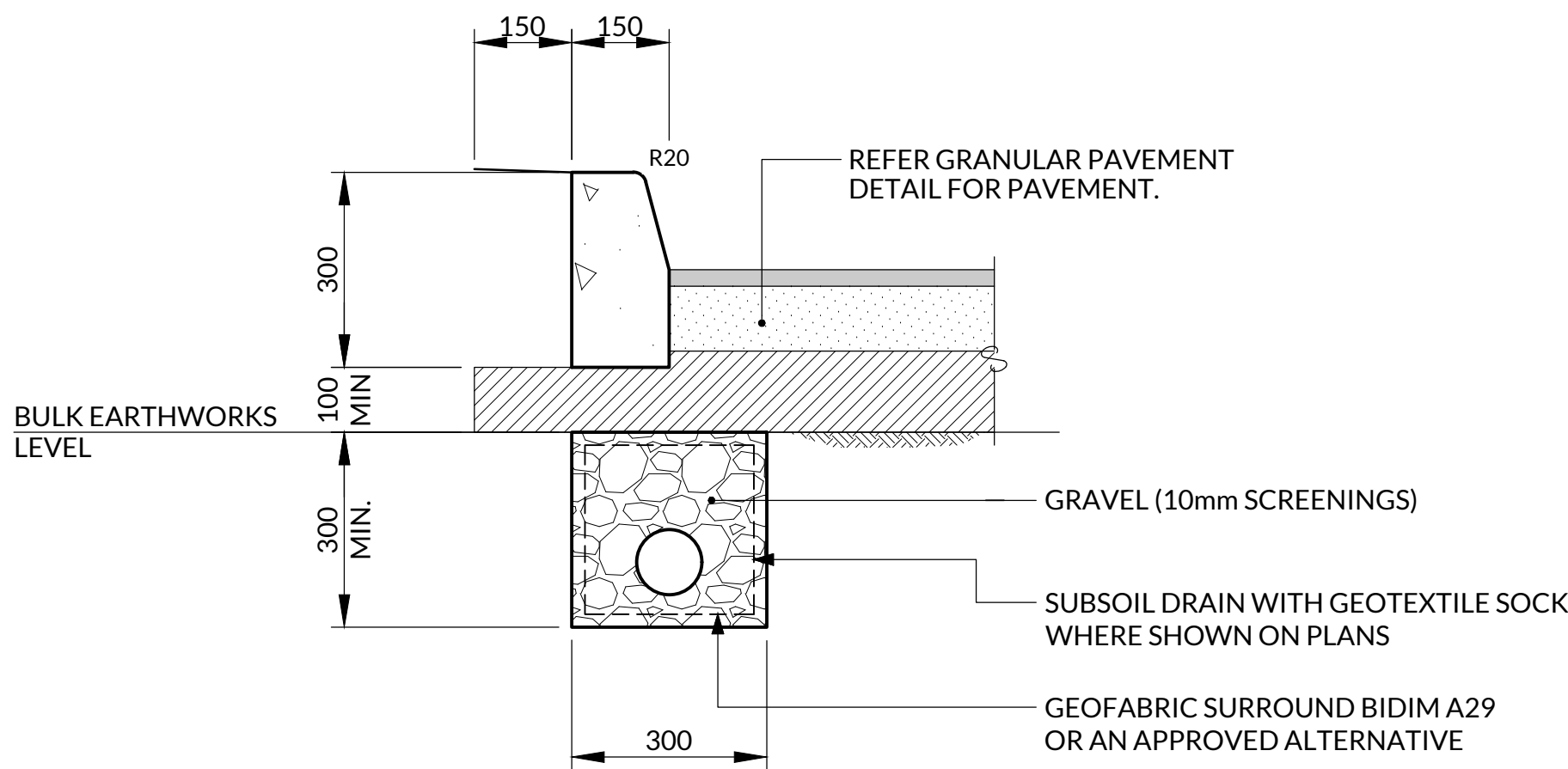
TYPICAL CONNECTION TO EXISTING PAVEMENT

SCALE NTS



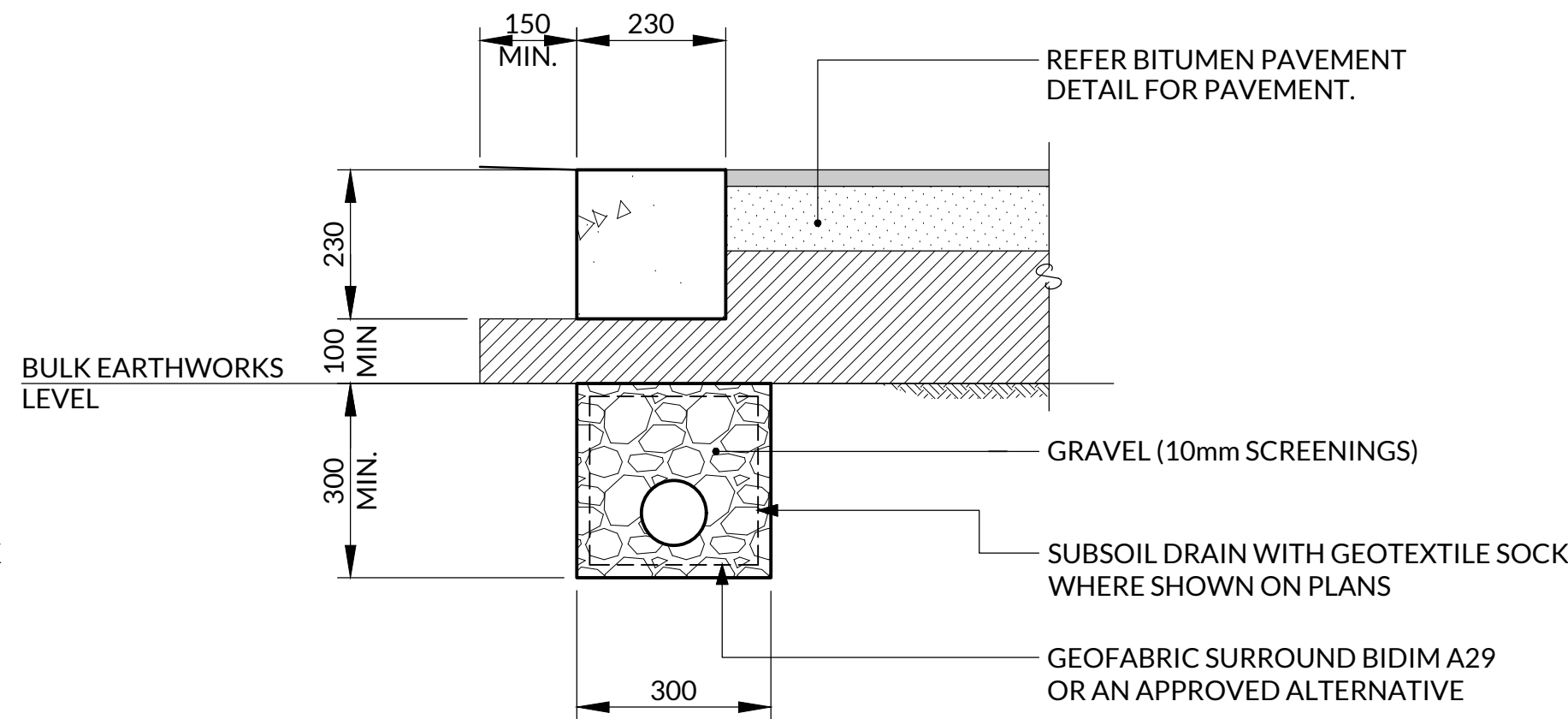
TYPE B1 : BARRIER KERB AND CHANNEL

SCALE NTS
REFER : IPWEAQ STD. DWG. RS-080 FOR TYPE B1 BARRIER KERB AND CHANNEL DETAILS.
IPWEAQ STD. RS-140 FOR SUBSOIL DETAILS.



TYPE B2 : BARRIER KERB

SCALE NTS
REFER : IPWEAQ STD. DWG. SEQ R-080 FOR TYPE B2 BARRIER KERB.
IPWEAQ STD. SEQ R-140 FOR SUBSOIL DETAILS.



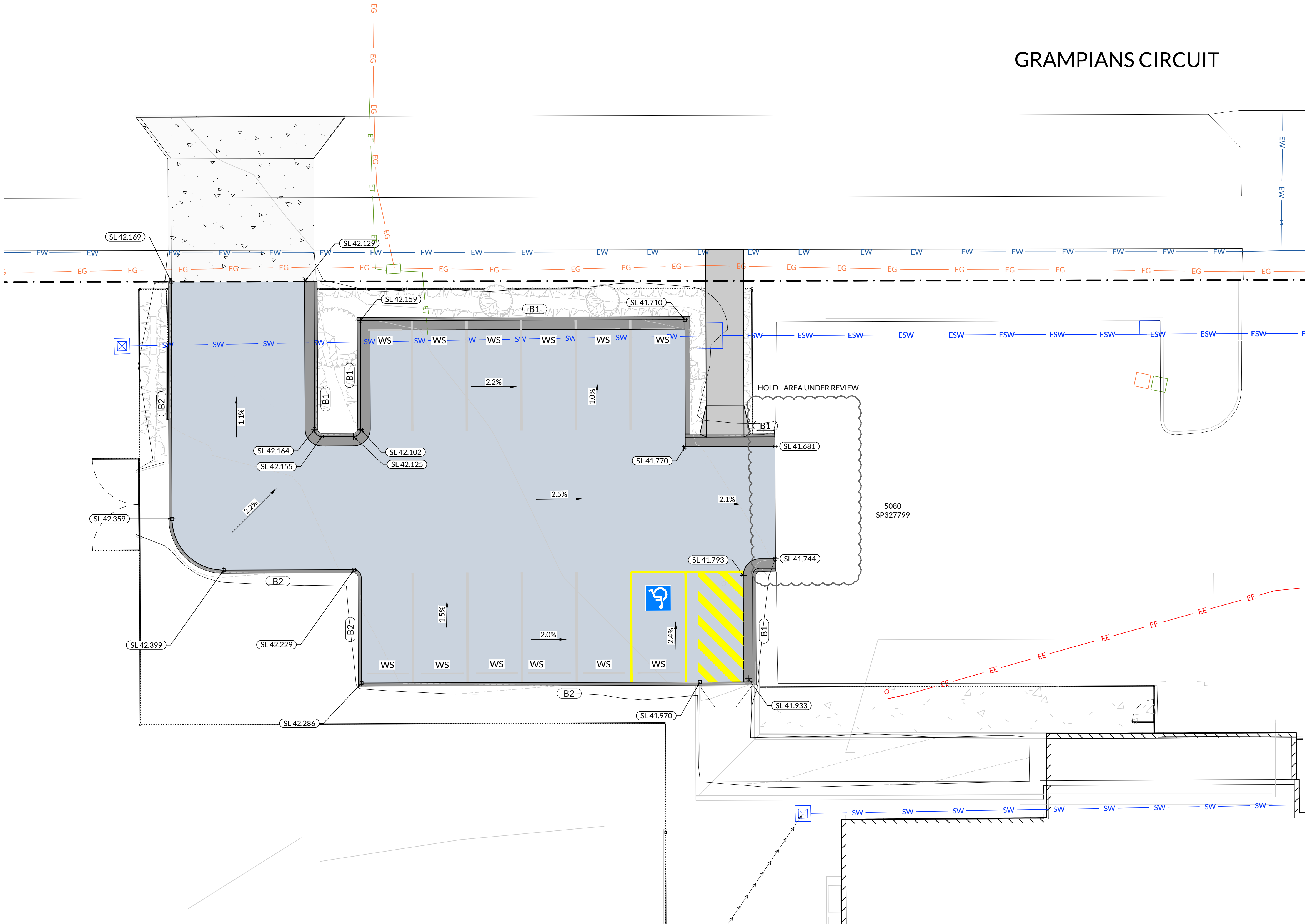
230SQ. KERB EDGE RESTRAINT

SCALE NTS
REFER : IPWEAQ STD. DWG. SEQ R-080 FOR TYPE B2 BARRIER KERB.
IPWEAQ STD. SEQ R-140 FOR SUBSOIL DETAILS.

No.	DATE	AMENDMENT	BY	CLIENT :		PROJECT :	Drawn : C.R.P.		Date : JUNE 2026	DRAWING TITLE : ROADWORKS NOTES AND DETAILS SHEET		
A	09.06.26	PRELIMINARY ISSUE	C.R.P.				Designed : M.H.	Checked : R.A.				
NOT FOR CONSTRUCTION				FLEETWOOD		SOUTH ROCK SS KINDERGARTEN 185 GRAMPIANS CIRCUIT YARRABILBA, QLD, 4207	Approved : MARK HARRISON			Project No. J26135		
							Status : PRELIMINARY				Drawing No. C-4.01	Revision A
RP DESCRIPTION : LOT : 5080 ON SP327799 LGA : LOGAN CITY COUNCIL				MRC CONSULTING ENGINEERS		MRC Consulting Engineers PO Box 778, Ashgrove West, Brisbane, QLD 4060 e : admin@mrceng.com.au, www.mrceng.com.au						

LEGEND

- PROPERTY BOUNDARY
INTERNAL PROPERTY BOUNDARY
EXTERNAL PROPERTY BOUNDARY
EXISTING BUILDING
EXISTING NEIGHBOURING BUILDING
EXISTING MAJOR CONTOUR @ 1.00m
EXISTING MINOR CONTOUR @ 0.25m
EXISTING WATER
EXISTING STORMWATER
EXISTING SEWER
EXISTING ELECTRICAL
EXISTING OVERHEAD ELECTRICAL
EXISTING GAS
PROPOSED STORMWATER LINE
WHEEL STOP
AC - ASPHALTIC CONCRETE ROAD
180mm THICK CONCRETE VEHICLE CROSSOVER
REFER IPWEAQ STD DWG RSD-102 FOR DETAILS
100 THICK CONCRETE FOOTPATH
PROPOSED TYPE B1: BARRIER KERB AND CHANNEL
(REFER DRAWING No. C-4.01 FOR DETAILS)
PROPOSED TYPE B2: BARRIER KERB
(REFER DRAWING No. C-4.01 FOR DETAILS)
PROPOSED MAJOR CONTOUR @ 1.00m
PROPOSED MINOR CONTOUR @ 0.25m



GRAMPIANS CIRCUIT

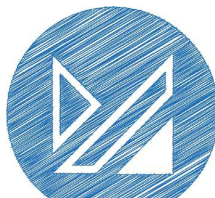
No.	DATE	AMENDMENT	BY
A	09.06.26	PRELIMINARY ISSUE	C.R.P.
B	17.06.26	PRELIMINARY ISSUE	C.R.P.
C	21.07.26	PRELIMINARY ISSUE	C.R.P.
D	22.07.26	PRELIMINARY ISSUE	C.R.P.

NOT FOR CONSTRUCTION

Scale 1:100 @ A1 Scale 1:200 @ A3
RP DESCRIPTION: LOT : 5080 ON SP327799 LGA : LOGAN CITY COUNCIL

CLIENT :

FLEETWOOD



MRC
CONSULTING ENGINEERS

MRC Consulting Engineers
PO Box 778, Ashgrove West, Brisbane, QLD 4060
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PROJECT :

**SOUTH ROCK SS
KINDERGARTEN**
185 GRAMPIANS CIRCUIT
YARRABILBA, QLD, 4207

Drawn: C.R.P.	Date: JUNE 2026
Designed: M.H.	Checked: R.A.
Approved: MARK HARRISON	

Status: **PRELIMINARY**

DRAWING TITLE:
CAR PARK LAYOUT PLAN

Project No. J26135	Drawing No. C-4.11	Revision D
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	PROPERTY BOUNDARY
	INTERNAL PROPERTY BOUNDARY
	EXTERNAL PROPERTY BOUNDARY
	EXISTING BUILDING
	EXISTING NEIGHBOURING BUILDING
	EXISTING MAJOR CONTOUR @ 1.00m
	EXISTING MINOR CONTOUR @ 0.25m
	EXISTING WATER
	EXISTING STORMWATER
	EXISTING SEWER
	EXISTING ELECTRICAL
	EXISTING OVERHEAD ELECTRICAL
	EXISTING GAS

ROADS OTHER THAN FREEWAYS.

TWO LANE ROAD - BROKEN (DL1)

ONE DIRECTION (BL1)

Diagram showing a cross-section of a road with a 3m wide lane and 3m shoulders. The total width is 9m. The pavement thickness is 80mm.

TWO LANE ROAD - UNBROKEN 100

LANE LINES (LI)

UNBROKEN (LL4) 100

LEFT AND RIGHT SIDE AND 150 g

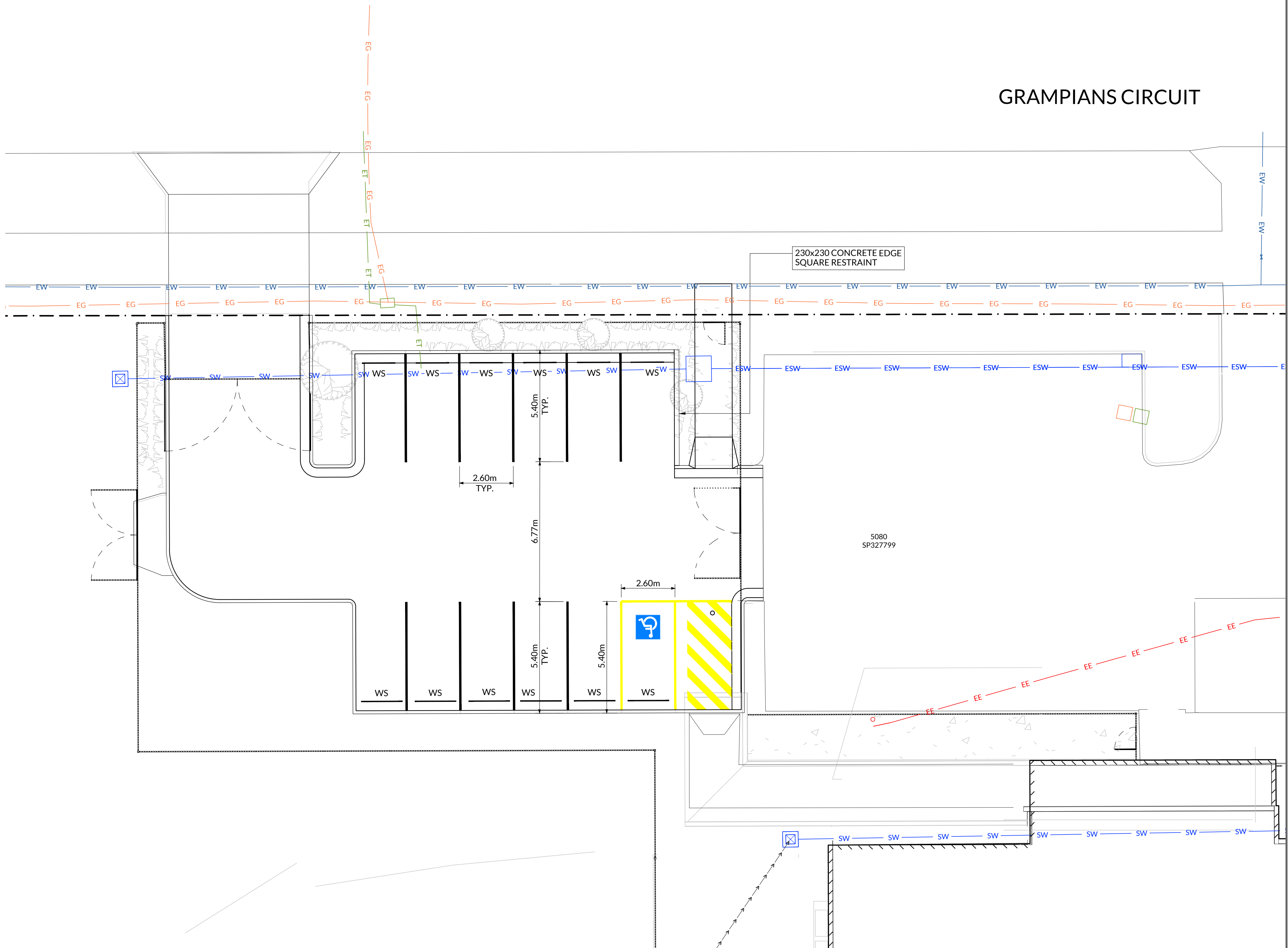
CONTINUITY LINE (CL)

MODIFIED (NARROW
ROADS) (CI 3)

TURN LINE (TL)

Figure 1: Plan view of the test section. The diagram shows a cross-section of a road with a central lane of 0.6m width, flanked by two 0.6m wide shoulders. The total width is 1.8m. The road is bordered by a 'GIVE WAY LINE (GWL)' on the left and a 'HOLDING LINE' on the right. A '200' is marked on the right side, likely indicating a distance or speed limit.

1. ALL LINEMARKING TO BE REFLECTORISED WHITE.
2. ALL SIGNED AND LINEMARKING, AND RPPM: ARE TO BE PREPARED AND INSTALLED IN ACCORDANCE WITH THE CURRENT VERSION OF THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES"
3. SIGN LOCATIONS SHALL BE IN ACCORDANCE WITH THE CURRENT VERSION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)
4. WHERE PAVEMENT MARKINGS SHOWN ON THE DRAWINGS CONFLICT WITH EXISTING PAVEMENT MARKINGS ON SITE, REMOVE OR BLACKOUT EXISTING AND APPLY NEW MARKINGS IN ACCORDANCE WITH THE DRAWINGS.
5. SPACINGS OF ALL REFLECTORISED PAVEMENT MARKERS TO BE IN ACCORDANCE WITH MUTCD TABLE 5.5
6. ALL TRAFFIC SIGNS TO BE SIZE 'B' UNLESS NOTED OTHERWISE
7. ALL SIGN MATERIAL TO BE CLASS 1.



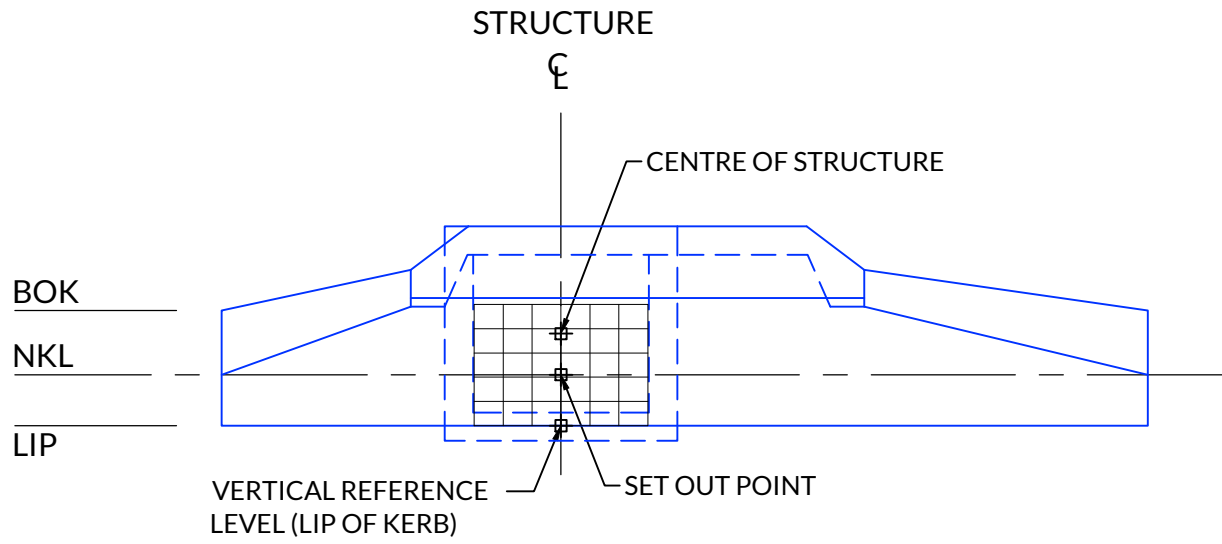
<table><tr><th>No.</th><th>DATE</th><th>AMENDMENT</th><th>BY</th></tr><tr><td>A</td><td>09.06.26</td><td>PRELIMINARY ISSUE</td><td>C.R.P.</td></tr><tr><td>B</td><td>21.07.26</td><td>PRELIMINARY ISSUE</td><td>C.R.P.</td></tr><tr><td>C</td><td>22.07.26</td><td>PRELIMINARY ISSUE</td><td>C.R.P.</td></tr></table>		No.	DATE	AMENDMENT	BY	A	09.06.26	PRELIMINARY ISSUE	C.R.P.	B	21.07.26	PRELIMINARY ISSUE	C.R.P.	C	22.07.26	PRELIMINARY ISSUE	C.R.P.	Scale 1:250 @ A1 Scale 1:500 @ A3		CLIENT: FLEETWOOD		MRC CONSULTING ENGINEERS MRC Consulting Engineers P O Box 778, Ashgrove West, Brisbane, QLD 4060 e : admin@mrceng.com.au, www.mrceng.com.au		PROJECT: SOUTH ROCK SS KINDERGARTEN 185 GRAMPIANS CIRCUIT YARRABILBA, QLD, 4207		<table><tr><td>Drawn: C.R.P.</td><td>Date: JUNE 2026</td></tr><tr><td>Designed: M.H.</td><td>Checked: R.A.</td></tr><tr><td colspan="2">Approved: MARK HARRISON</td></tr><tr><td colspan="2">Status: PRELIMINARY</td></tr></table>		Drawn: C.R.P.	Date: JUNE 2026	Designed: M.H.	Checked: R.A.	Approved: MARK HARRISON		Status: PRELIMINARY		<table><tr><th colspan="3">DRAWING TITLE:</th></tr><tr><td colspan="3">ROADWORKS SIGNS AND LINEMARKING PLAN</td></tr><tr><td>Project No. J26135</td><td>Drawing No. C-4.21</td><td>Revision c</td></tr></table>			DRAWING TITLE:			ROADWORKS SIGNS AND LINEMARKING PLAN			Project No. J26135	Drawing No. C-4.21	Revision c
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STORMWATER DRAINAGE NOTES

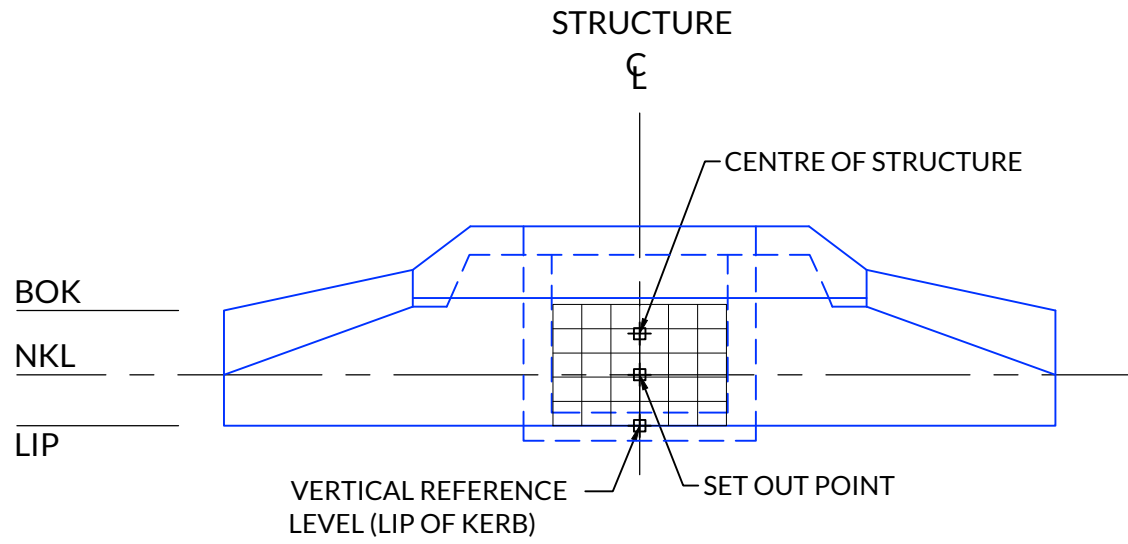
- ALL WORKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE RELEVANT LOCAL AUTHORITY SPECIFICATIONS AND STANDARD DRAWINGS AS WELL AS MRC PROJECT SPECIFICATIONS AND DRAWINGS.
- ALL STORMWATER DRAINAGE PIPES ARE TO BE A MINIMUM R.C.P. CLASS "2" OR F.R.C. CLASS "2" UNLESS SHOWN OTHERWISE ON PLAN. ALL UPVC PIPES SHALL BE CLASS SN8. ALL PIPES TO BE RUBBER RING JOINT UP TO AND INCLUDING 600 DIA. 675 DIA AND ABOVE TO BE FLUSH JOINTED WITH EXTERNAL BANDS.
- THE CONTRACTOR IS TO VERIFY ALL FINISHED SURFACE LEVELS OF PROPOSED ROOFWATER PITS BEFORE CONSTRUCTING TO FINISHED LEVELS.
- EXCAVATION AND BEDDING OF STORMWATER DRAINAGE PIPES IS TO BE CARRIED OUT IN ACCORDANCE WITH IPWEA STD DWG D5-030. PIPE CLASSES INDICATED HAVE BEEN DESIGNED FOR A MINIMUM CONSTRUCTION TRENCH TYPE HS2. PIPE SUPPORT SHALL BE HS3 WITHIN ROAD RESERVE AND H2 ELSEWHERE IN ACCORDANCE WITH IPWEA STD DWG D5-030 UNLESS NOTED OTHERWISE.
- ALL MANHOLES DENOTED 'MH' ON PLAN SHALL BE 1050 DIA. WITH CIRCULAR COVER & FRAME (U.N.O.) ALL GULLIES ARE TO BE LIP IN LINE (U.N.O.) IN ACCORDANCE WITH LOCAL AUTHORITY STANDARDS.
- TWIN KERB ADAPTORS ARE TO BE PROVIDED FOR ALL ALLOTMENTS DRAINING TOWARDS THE STREET. WHERE KERB ADAPTORS ARE LOCATED ON THE SAME SIDE OF THE ROAD AS CONCRETE FOOTPATHS, TWIN 100X75 RHS (GALVANISED) ARE TO BE INSTALLED FROM THE KERB ADAPTORS TO THE PROPERTY BOUNDARY.
- THE CONTRACTOR SHALL VERIFY LOCATIONS OF EXISTING SERVICES WITH ALL RELEVANT AUTHORITIES BEFORE COMMENCING CONSTRUCTION. (PROVIDE A COPY OF THE INFORMATION TO THE SITE SUPERINTENDENT). IN PARTICULAR PROPOSED SERVICE CROSSINGS.
- ALL STORMWATER OUTLET LOCATIONS TO EXISTING INFRASTRUCTURE SHALL BE CONFIRMED ON SITE BY THE CONTRACTOR PRIOR TO COMMENCING ANY CONSTRUCTION ON SITE. ANY DISCREPANCIES ARE TO BE REPORTED TO THE SUPERVISING ENGINEER.
- ALL WORKS ARE TO JOINT NEATLY TO EXISTING CONSTRUCTION.
- ALL CONSTRUCTION UNDERTAKEN BY THE CONTRACTOR IS TO COMPLY WITH THE REQUIREMENTS OF THE WORKPLACE HEALTH AND SAFETY ACT.
- COMPACTION TESTING IS TO BE CARRIED OUT AT THE REQUIRED FREQUENCY BY A N.A.T.A. APPROVED TESTING FACILITY AT THE CONTRACTORS COST. THE CONTRACTOR IS TO PROVIDE COPIES OF ALL TEST RESULTS AT REGULAR INTERVALS DURING THE WORKS. ANY NON-CONFORMANCES ARE TO BE RECTIFIED BY THE CONTRACTOR AT THE CONTRACTORS EXPENSE.
- SPOIL MATERIAL GENERATED FROM TRENCH EXCAVATIONS SHALL BE DISPOSED OF AS DIRECTED BY THE SUPERINTENDENT.
- BACKFILLING OF STORMWATER PIPE IN OPEN SPACE AREAS IS TO CONSIST OF SELECT FILL FROM EXCAVATIONS AND SHALL BE PLACED IN LAYERS NOT EXCEEDING 250mm LOOSE IN DEPTH AND SHALL BE COMPACTED TO A MINIMUM OF 95% STANDARD COMPACTION.
- ALL PIPE STUBS ARE TO BE SEALED OFF AT ENDS WITH HARDBOARD PLANKS PRIOR TO BACKFILLING.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PIPES DURING CONSTRUCTION AND SHALL ADOPT CONSTRUCTION PRACTICES TO PREVENT CRACKING OF PIPES.
- BACKFILL UNDER PAVEMENTS TO CONSIST OF APPROVED SUBGRADE REPLACEMENT MATERIAL WITH A MINIMUM CALIFORNIA BEARING RATIO OF 15. PLACED IN LAYERS NOT EXCEEDING 250mm LOOSE IN DEPTH AND SHALL BE COMPACTED TO A MINIMUM OF 95% MODIFIED MAXIMUM DRY DENSITY.
- OVERLAND FLOW PATH ZONES ARE TO BE GRADED EVENLY BETWEEN THE SURFACE/INVERT LEVELS PROVIDED ON THE DESIGN DRAWINGS UNLESS DIRECTED OTHERWISE.
- CLASS OF STORMWATER PIPES HAVE BEEN DESIGNED IN ACCORDANCE WITH CONCRETE PIPE ASSOCIATION OF AUSTRALASIA FOR IN SERVICE CONDITIONS ONLY. CONTRACTOR IS TO ENSURE CONSTRUCTION METHODS USED ON SITE DO NOT COMPROMISE THE INTEGRITY OF THE SPECIFIED PIPE.

STONE PITCHING NOTES

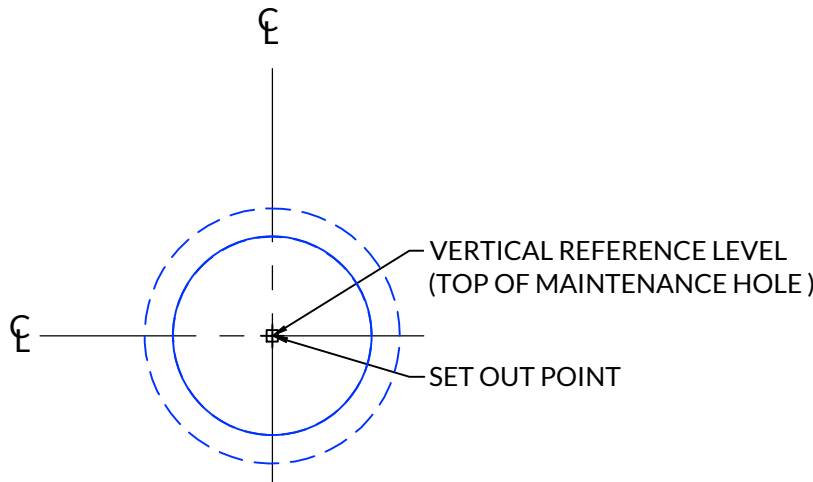
- STONE PITCHING TO BOTH INLETS & OUTLETS SHALL BE PLACED AS DIRECTED & SHALL BE SOUND ROCK WHICH WILL NOT DISINTEGRATE IN WATER. THE STONES SHALL BE NOT LESS THAN 0.01 CUBIC METRES GENERALLY, BUT WITH AVERAGE FILLING STONE DIAMETER BEING 200mm, UNLESS A DIFFERENT NOMINAL SIZE d₅₀ IS SPECIFIED. STONES SHALL BE SET & INTERLOCKED IN A MANNER THAT NO SINGLE STONE CAN BE DISLODGED BY WATER FLOW & SO PRESENT A ROUGH SURFACE.
- PROVIDE 300W x 600D STONE PITCHED CUT-OFF WALL TO UNDERSIDE OF PRECAST HEADWALL BASE AT JUNCTION WITH STONE PITCHED CHANNEL.
- STONE PITCHING DEPTH SHALL BE 300mm MINIMUM. PROVIDE BIDIM A34 GEOFABRIC, OR APPROVED ALTERNATIVE, TO UNDERSIDE OF PITCHING AS PER DETAILS.
- REFER STORMWATER OUTLET SCHEDULE FOR DIMENSIONS OF STONE PITCHING.



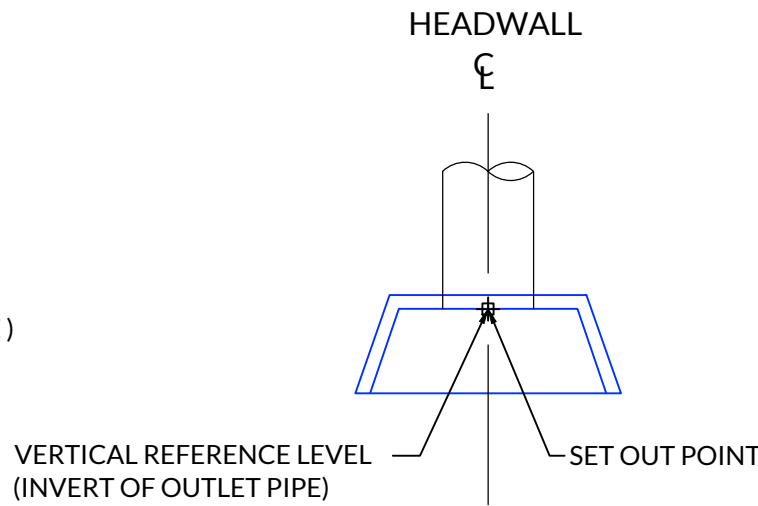
LIP IN LINE GULLY (ON GRADE)



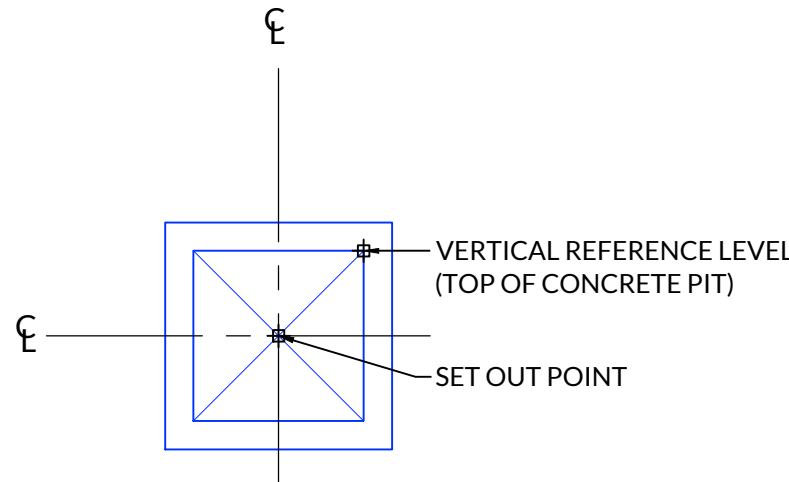
LIP IN LINE GULLY (SAG)



MAINTENANCE HOLE



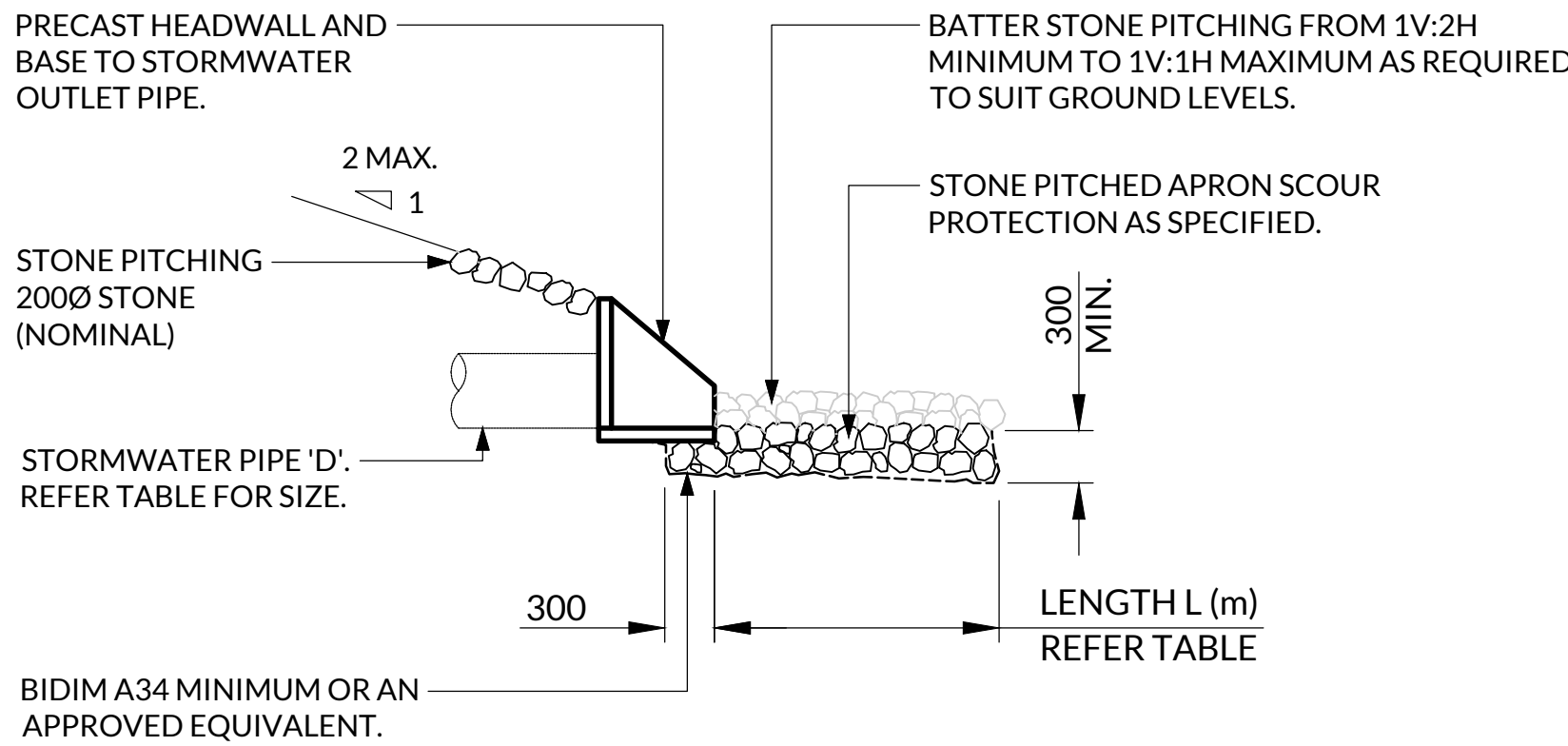
HEADWALL



FIELD INLET PIT

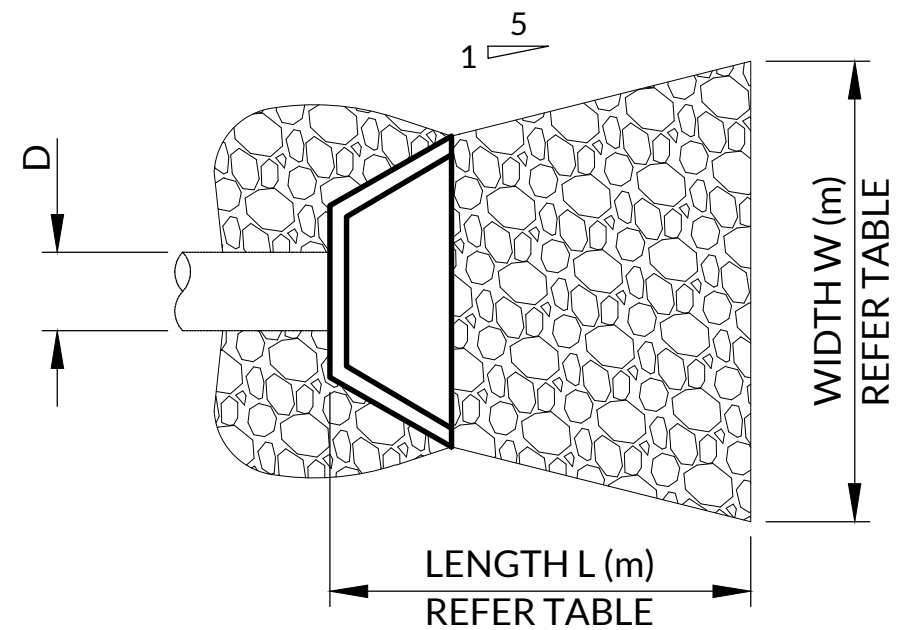
STANDARD SET-OUT DETAILS

SCALE NTS



SCHEMATIC OUTLET DETAIL

SCALE N.T.S.



SCHEMATIC OUTLET PLAN

SCALE N.T.S.

STORMWATER OUTLET SCHEDULE

NAME	PIPE SIZE (D)	LENGTH (L)	WIDTH (W)	NORMAL ROCK SIZE d ₅₀	THICKNESS OF PROTECTION
		TBC			

ROCK GRADATION TABLE					
SMALLEST DIMENSIONS IN (mm)					% OF ROCK SMALLER THAN SIZE SHOWN
200d ₅₀	300d ₅₀	400d ₅₀	500d ₅₀	600d ₅₀	
380	525	630	750	850	100
300	450	550	650	750	50-70
200	300	400	500	600	35-50
75	100	130	150	175	2-10

NOTE : ROCK SHOULD NOT BE PLACED DIRECTLY ON DISPERSIVE SOILS. IF SUBSOILS ARE FOUND TO BE DISPERSIVE, THE SWALE SHOULD BE OVER EXCAVATED THEN TOPPED WITH A 200mm (MIN.) THICK LAYER OF NON-DISPERSIVE SOIL, THEN COVERED WITH A LAYER OF GEOFABRIC PRIOR TO PLACEMENT OF ROCK.

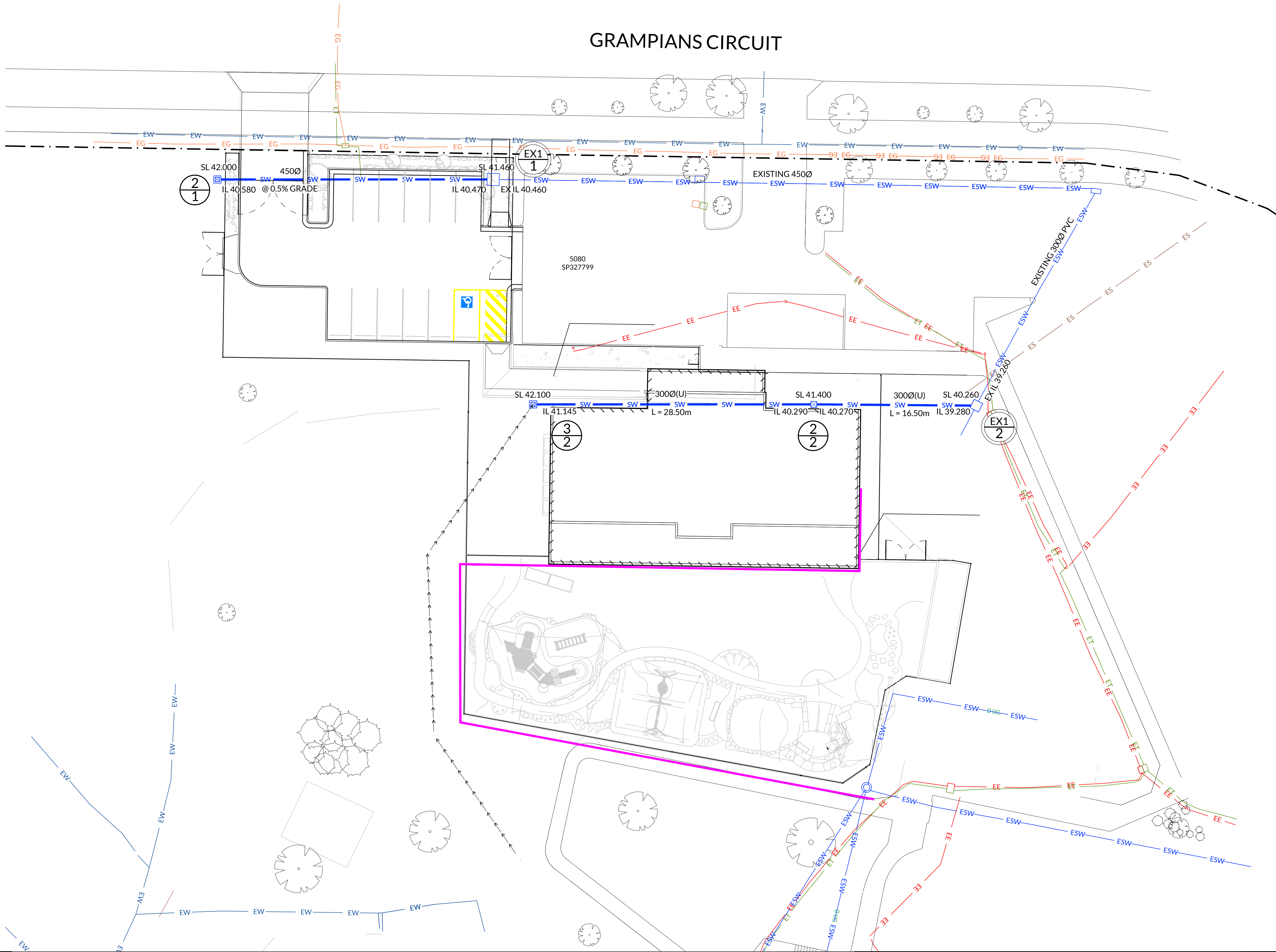
STONE PITCHING NOTES

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A	09.06.26	PRELIMINARY ISSUE	C.R.P.			FLEETWOOD	Designed :	M.H.	Checked :	R.A. <th>Approved :</th> <td colspan="2">MARK HARRISON</td>			
NOT FOR CONSTRUCTION				RP DESCRIPTION : LOT : 5080 ON SP327799 LGA : LOGAN CITY COUNCIL		SOUTH ROCK SS KINDERGARTEN 185 GRAMPIANS CIRCUIT YARRABILBA, QLD, 4207		Status : PRELIMINARY		Project No.		Drawing No.	Revision
										J26135		C-7.01	A

LEGEND

- PROPERTY BOUNDARY
- INTERNAL PROPERTY BOUNDARY
- EXTERNAL PROPERTY BOUNDARY
- EXISTING BUILDING
- EXISTING NEIGHBOURING BUILDING
- EXISTING MAJOR CONTOUR @ 1.00m
- EXISTING MINOR CONTOUR @ 0.25m
- EW EXISTING WATER
- ESW EXISTING STORMWATER
- ES EXISTING SEWER
- EE EXISTING ELECTRICAL
- EE EXISTING OVERHEAD ELECTRICAL
- EG EXISTING GAS
- PROPOSED TEMPORARY SWALE
- SW PROPOSED STORMWATER LINE
- PROPOSED 900x900 STORMWATER FIELD INLET PIT (WITH MEDIUM DUTY GRATE)
- PROPOSED 600x600 STORMWATER FIELD INLET PIT (WITH LIGHT DUTY GRATE)
- PROPOSED RETAINING WALL

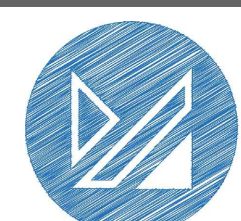


No.	DATE	AMENDMENT	BY
A	17.06.26	PRELIMINARY ISSUE	C.R.P.
B	21.07.26	PRELIMINARY ISSUE	C.R.P.
C	22.07.26	PRELIMINARY ISSUE	C.R.P.

NOT FOR CONSTRUCTION

0 1 2 3 4 5 10 15
Scale 1:200 @ A1 Scale 1:400 @ A3
RP DESCRIPTION: LOT: 5080 ON SP327799 LGA: LOGAN CITY COUNCIL

CLIENT:
FLEETWOOD

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PROJECT:
SOUTH ROCK SS KINDERGARTEN 185 GRAMPIANS CIRCUIT YARRABILBA, QLD, 4207

Drawn: C.R.P.	Date: JUNE 2026
Designed: M.H.	Checked: R.A.
Approved: MARK HARRISON	
Status: PRELIMINARY	

DRAWING TITLE:

STORMWATER LAYOUT
PLAN

Project No. J26135	Drawing No. C-7.11	Revision C
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PROJECT	SOUTH ROCK SS KINDERGARTEN
PROJECT No.	J26135
PROJECT DESCRIPTION	MODULAR KINDERGARTEN
PROJECT LOCATION	GRAMPIANS CIRCUIT, YARRABILBA, QLD, 4207

A HAZARD is something with the potential to cause harm.
RISK is a combination of the likelihood of the harm occurring and the severity of the harm should it occur.
CONTROLS are measures to eliminate or reduce risk to an acceptable level.
ABNORMAL RISKS are aspects of our project, structure or materials as identified by our design which may prevent significant hazards that are unusual, not obvious or difficult to manage.

LIKELIHOOD		SCORE
VERY LIKELY, COULD OCCUR MANY TIMES		5
OCCURRENCE NOT SURPRISING, MIGHT OCCUR MORE THAN ONCE		4
IT IS LIKELY TO OCCUR SOMETIMES		3
UNLIKELY TO OCCUR, THOUGH CONCEIVABLE		2
VERY UNLIKELY TO OCCUR		1

RISK RATING RESULTS		
1 - 2	LOW	NO FURTHER ACTION REQUIRED
3 - 6	MEDIUM	CONTROL MEASURES REQUIRED TO BE PUT IN PLACE TO REDUCE THIS RISK
8 - 12	HIGH	ALL REASONABLY PRACTICABLE CONTROL MEASURES ARE TO BE PUT IN PLACE BEFORE THESE WORKS MAY PROCEED
15 - 25	VERY HIGH	THIS ACTIVITY MUST IS NOT BE UNDERTAKEN, UNTIL ADDITIONAL MEASURES HAVE BEEN PUT IN PLACE TO REDUCE THE RISK

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