

CAMP KURRAJONG SCOUT FACILITY

WAGGA WAGGA, NSW
CIVIL WORKS







LOCALITY PLAN
NOT TO SCALE

DRAWING SCHEDULE

DRAWING No.	DRAWING TITLE
CR232133-00-C000	CIVIL WORKS COVER SHEET DRAWING SCHEDULE AND LOCALITY PLAN
CR232133-00-C001	CIVIL WORKS STANDARD NOTES SHEET 1 OF 2
CR232133-00-C002	CIVIL WORKS STANDARD NOTES SHEET 2 OF 2
CR232133-00-C005	CIVIL WORKS STANDARD DETAILS
CR232133-00-C010	CIVIL WORKS CONCEPT STORMWATER DRAINAGE PLAN SHEET 1 OF 2
CR232133-00-C011	CIVIL WORKS CONCEPT STORMWATER DRAINAGE PLAN SHEET 2 OF 2
CR232133-00-C012	CIVIL WORKS CONCEPT STORMWATER DRAINAGE DETAILS
CR232133-00-C020	CIVIL WORKS ROAD AND CARPARK LAYOUT AND DETAIL PLAN SHEET 1 OF 4
CR232133-00-C021	CIVIL WORKS ROAD AND CARPARK LAYOUT AND DETAIL PLAN SHEET 2 OF 4
CR232133-00-C022	CIVIL WORKS ROAD AND CARPARK LAYOUT AND DETAIL PLAN SHEET 3 OF 4
CR232133-00-C023	CIVIL WORKS ROAD AND CARPARK LAYOUT AND DETAIL PLAN SHEET 4 OF 4
CR232133-00-C030	CIVIL WORKS VEHICLE TURNING PATHS SHEET 1 OF 3
CR232133-00-C031	CIVIL WORKS VEHICLE TURNING PATHS SHEET 2 OF 3
CR232133-00-C032	CIVIL WORKS VEHICLE TURNING PATHS SHEET 3 OF 3
CR232133-00-C040	CIVIL WORKS CONCEPT EROSION AND SEDIMENT CONTROL PLAN SHEET 1 OF 2
CR232133-00-C041	CIVIL WORKS CONCEPT EROSION AND SEDIMENT CONTROL PLAN SHEET 2 OF 2
CR232133-00-C042	CIVIL WORKS CONCEPT EROSION AND SEDIMENT CONTROL DETAILS AND NOTES

NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE	CLIENT:	ARCHITECT:		PROJECT	DRAWING TITLE	JOB NUMBER
1	DA SUBMISSION	LMR		JW	29.09.2023		 ARCHITECTURE INTERIORS MASTERPLANNING	 ALL SETOUT TO ARCHITECT'S DRAWINGS. DIMENSIONS TO BE VERIFIED WITH THE ARCHITECT AND ON SITE BEFORE MAKING SHOP DRAWINGS OR COMMENCING WORK. NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY.	 Canberra Level 6, 224 Bunda Street (PO Box 213) Canberra ACT 2608 Ph (02) 6285 1822 Fax (02) 6285 1863 Email canberra@northrop.com.au ABN 81 094 433 100	CIVIL WORKS CAMP KURRAJONG SCOUT FACILITY WAGGA WAGGA NSW	CR232133-00
2	DA SUBMISSION	LMR		JW	19.10.2023						DRAWING NUMBER C000
						DRAWING NOT TO BE USED FOR CONSTRUCTION UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED	THE COPYRIGHT OF THIS DRAWING REMAINS WITH NORTHROP CONSULTING ENGINEERS PTY LTD.		CIVIL WORKS COVER SHEET DRAWING SCHEDULE AND LOCALITY PLAN	DRAWING SHEET SIZE = A1	

NOTE: U.N.O. ALL CIVIL ENGINEERING CONSTRUCTION WORKS TO BE CARRIED OUT IN ACCORDANCE WITH WAGGA WAGGA CITY COUNCIL GUIDELINES WHICH ARE TO BE READ IN CONJUNCTION WITH THE NOTES PROVIDED BELOW.
IF CONFLICT ARISE, CITY OF WAGGA WAGGA COUNCIL GUIDELINES AND SPECIFICATIONS TAKE PRECEDENCE. WHERE CITY OF WAGGA WAGGA COUNCIL GUIDELINES AND SPECIFICATIONS ARE SILENT, THE SPECIFICATION NOTES BELOW TAKE PRECEDENCE

ACCESS AND SAFETY
1. THE CONTRACTOR SHALL COMPLY WITH ALL STATUTORY AND INDUSTRIAL REQUIREMENTS FOR PROVISION OF A SAFE WORKING ENVIRONMENT INCLUDING TRAFFIC CONTROL.
2. <u>THE CONTRACTOR SHALL PROVIDE TRAFFIC MANAGEMENT PLANS FOR THE PROPOSED WORKS COMPLETED BY A SUITABLY QUALIFIED PERSON AND APPROVED BY COUNCIL / REGULATORY AUTHORITY. WORK IS NOT TO COMMENCE ON SITE PRIOR TO APPROVAL OF TRAFFIC MANAGEMENT SCHEME.</u>
3. THE CONTRACTOR SHALL ENSURE THAT AT ALL TIMES ACCESS TO BUILDINGS ADJACENT THE WORKS IS NOT DISRUPTED.
4. WHERE NECESSARY THE CONTRACTOR SHALL PROVIDE SAFE PASSAGE OF VEHICLES AND/OR PEDESTRIANS THROUGH OR BY THE SITE
5. THE CONTRACTOR SHALL ENSURE PUBLIC ACCESS EXTERNAL TO THE SITE IS IN ACCORDANCE WITH COUNCIL'S REQUIREMENTS.

TREE PROTECTION
1. REFER TO LANDSCAPE / ARCHITECT'S PLAN FOR TREES TO BE RETAINED AND PROTECTED.
2. ANY EXISTING TREES WHICH FORM PART OF THE FINAL LANDSCAPING PLAN SHALL BE PROTECTED FROM CONSTRUCTION ACTIVITIES BY; 2.1. PROTECTING THEM WITH BARRIER FENCING OR SIMILAR MATERIALS INSTALLED OUTSIDE THE DRIP LINE. 2.2. ENSURING THAT NOTHING IS NAILED TO ANY PART OF THE TREE. 2.3. CARE IS TAKEN NOT TO CUT ROOTS UNNECESSARILY. COUNCILS AND/OR INDEPENDENT ARBORISTS TO BE CONSULTED WHERE TREE ROOTS ARE TO BE REMOVED AND/OR CUT.

SEDIMENT AND SOIL EROSION
1. THE SEDIMENT & EROSION CONTROL PLAN PRESENTS CONCEPTS ONLY. THE CONTRACTOR SHALL AT ALL TIMES BE RESPONSIBLE FOR THE ESTABLISHMENT & MANAGEMENT OF A DETAILED SCHEME MEETING COUNCILS DESIGN, OTHER REGULATORY AUTHORITY REQUIREMENTS <u>AND MAKE GOOD PAYMENT OF ALL FEES.</u>
2. THE CONTRACTOR SHALL INSTIGATE ALL SEDIMENT AND EROSION CONTROL MEASURES IN ACCORDANCE WITH STATUTORY REQUIREMENTS AND IN PARTICULAR THE 'BLUE BOOK' [MANAGING URBAN STORMWATER SOILS AND CONSTRUCTION], PRODUCED BY THE DEPARTMENT OF HOUSING AND COUNCILS POLICIES. THESE MEASURES ARE TO BE INSPECTED AND <u>MAINTAINED ON A DAILY BASIS.</u>
3. THE SITE SUPERINTENDENT SHALL ENSURE THAT ALL SOIL AND WATER MANAGEMENT WORKS ARE LOCATED AS INSTRUCTED IN THE DRAWINGS AND ADHERE TO ALL REGULATORY AUTHORITY REQUIREMENTS.
4. <u>THE CONTRACTOR SHALL INFORM ALL SUB CONTRACTORS OF THEIR RESPONSIBILITIES IN MINIMISING THE POTENTIAL FOR SOIL EROSION AND POLLUTION TO DOWNSLOPE LANDS AND WATERWAYS.</u>
5. WHERE PRACTICAL, THE SOIL EROSION HAZARD ON THE SITE SHALL BE KEPT AS LOW AS POSSIBLE. (THIS END, WORKS SHOULD BE UNDERTAKEN IN THE FOLLOWING SEQUENCE; 5.1. <u>CONSTRUCT TEMPORARY STABILISED SITE ACCESS INCLUSIVE OF SHAKE DOWN / WASH PAD.</u> 5.2. <u>INSTALL ALL TEMPORARY SEDIMENT FENCES AND BARRIER FENCES. WHERE FENCES ADJACENT EACH OTHER, THE SEDIMENT FENCE CAN BE INCORPORATED INTO THE BARRIER FENCE.</u> 5.3. <u>INSTALL SEDIMENT CONTROL MEASURES AS OUTLINED ON THE APPROVED PLANS.</u>
6. UNDERTAKE SITE DEVELOPMENT WORKS SO THAT LAND DISTURBANCE IS CONFINED TO AREAS OF MINIMUM WORKABLE SIZE.
7. AT ALL TIMES AND IN PARTICULAR DURING WINDY AND DRY WEATHER, LARGE UNPROTECTED AREAS WILL BE KEPT MOIST (NOT WET) BY SPRINKLING WITH WATER TO KEEP DUST UNDER CONTROL <u>ENSURING CONFORMITY TO REGULATORY AUTHORITY REQUIREMENTS.</u>
8. ANY SAND USED IN THE CONCRETE CURING PROCESS (SPREAD OVER THE SURFACE) SHALL BE REMOVED AS SOON AS POSSIBLE AND WITHIN 10 WORKING DAYS FROM PLACEMENT.
9. WATER SHALL BE PREVENTED FROM ENTERING THE PERMANENT DRAINAGE SYSTEM UNLESS THE CATCHMENT AREA HAS BEEN STABILISED AND/OR ANY LIKELY SEDIMENT BEEN FILTERED OUT.
10. TEMPORARY SOIL AND WATER MANAGEMENT STRUCTURES SHALL BE REMOVED ONLY AFTER THE LANDS THEY ARE PROTECTING ARE STABILISED / REHABILITATED.
11. ALLOW FOR GRASS STABILISATION OF EXPOSED AREAS, OPEN CHANNELS AND ROCK BATTERS DURING ALL PHASES OF CONSTRUCTION.
12. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED TO ENSURE THAT THEY OPERATE EFFECTIVELY. REPAIRS AND/OR MAINTENANCE SHALL BE UNDERTAKEN REGULARLY AND AS REQUIRED, PARTICULARLY FOLLOWING RAIN EVENTS.
13. RECEPTORS FOR CONCRETE AND MORTAR SLURRIES, PAINTS, ACID WASHINGS, LIGHT-WEIGHT WASTE MATERIALS AND LITTER SHALL BE DISPOSED OF IN ACCORDANCE WITH REGULATORY AUTHORITY REQUIREMENTS. CONTRACTOR TO PAY ALL FEES AND PROVIDE EVIDENCE OF SAFE DISPOSAL.
14. IF A TEMPORARY SEDIMENT BASIN IS REQUIRED, ENSURE SAFE BATTER SLOPES IN ACCORDANCE WITH THE GEOTECHNICAL REPORT. MAINTAIN ADEQUATE STORAGE VOLUME IN ACCORDANCE WITH PLANS. TEMPORARY PUMP 'CLEAN FLOCCULATED' WATER TO COUNCILS STORMWATER SYSTEM. ENSURE WHOLE SITE RUN-OFF IS DIRECTED TO TEMPORARY SEDIMENT BASIN.

EXISTING SERVICES
1. ALL UTILITY SERVICES INDICATED ON THE DRAWINGS ORIGINATE FROM SUPPLIED DATA OR DIAL BEFORE YOU DIG SEARCHES. THEREFORE THEIR ACCURACY AND COMPLETENESS IS NOT GUARANTEED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE AND CONFIRM THE LOCATION AND LEVEL OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY WORK. ANY DISCREPANCIES SHALL BE REPORTED TO THE SUPERINTENDENT. CLEARANCES SHALL BE OBTAINED FROM THE RELEVANT SERVICE AUTHORITY. <u>NOTE SERVICE AUTHORITY REQUIREMENTS FOR LOCATING OF SERVICES PRIOR TO COMMENCEMENT OF WORKS.</u>
2. CARE TO BE TAKEN WHEN EXCAVATING NEAR EXISTING SERVICES. NO MECHANICAL EXCAVATIONS AREA TO BE UNDERTAKEN OVER COMMUNICATION, GAS OR ELECTRICAL SERVICES. HAND EXCAVATION ONLY IN THESE AREAS.
3. THE CONTRACTOR SHALL PROTECT AND MAINTAIN ALL EXISTING SERVICES THAT ARE TO BE RETAINED IN THE VICINITY OF THE PROPOSED WORKS. ANY AND ALL DAMAGE TO THESE SERVICES AS A RESULT OF THESE WORKS SHALL BE REPAIRED BY THE CONTRACTOR UNDER THE DIRECTION OF THE SUPERINTENDENT <u>AT THE CONTRACTORS EXPENSE.</u>
4. THE CONTRACTOR SHALL ALLOW IN THE PROGRAM FOR THE ADJUSTMENT (IF REQUIRED) OF EXISTING SERVICES IN AREAS AFFECTED BY WORKS.
5. THE CONTRACTOR SHALL ALLOW IN THE PROGRAM FOR THE CAPPING OFF, EXCAVATION AND REMOVAL (IF REQUIRED) OF EXISTING SERVICES IN AREAS AFFECTED BY WORKS UNLESS DIRECTED OTHERWISE ON THE DRAWINGS OR BY THE SUPERINTENDENT.
6. THE CONTRACTOR SHALL ENSURE THAT AT ALL TIMES SERVICES TO ALL BUILDINGS NOT AFFECTED BY THE WORKS ARE NOT DISRUPTED AND MAINTAINED.
7. PRIOR TO COMMENCEMENT OF ANY WORKS THE CONTRACTOR SHALL GAIN APPROVAL OF THE PROGRAM FOR THE RELOCATION AND/OR CONSTRUCTION OF TEMPORARY SERVICES AND FOR ANY ASSOCIATED INTERRUPTION OF SUPPLY.
8. THE 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 COMPLETE AND COMMISSIONED THE CONTRACTOR SHALL REMOVE ALL SUCH TEMPORARY SERVICES AND MAKE GOOD TO THE SATISFACTION OF THE SUPERINTENDENT.

EARTHWORKS

1. AT THE COMMENCEMENT OF FILLING OPERATIONS FOR BULK EARTHWORKS A GEOTECHNICAL ENGINEER IS TO VISIT THE SITE & CONFIRM THE SUITABILITY OF THE METHODOLOGY OF ACHIEVING THE REQUIRED COMPACTION REQUIREMENTS.
2. STRIP TOPSOIL, VEGETABLE MATTER AND RUBBLE TO EXPOSE NATURALLY OCCURRING MATERIAL AND STOCKPILE ON SITE AS DIRECTED BY THE SUPERINTENDENT.
3. WHERE FILLING IS REQUIRED TO ACHIEVE DESIGN SUBGRADE, PROOF ROLL EXPOSED NATURAL SURFACE WITH A MINIMUM OF TEN PASSES OF A VIBRATING ROLLER (MINIMUM STATIC WEIGHT OF 10 TONNES) IN THE PRESENCE OF THE SUPERINTENDENT.
4. THE CONTRACTOR IS TO ALLOW FOR A SUITABLY QUALIFIED GEOTECHNICAL ENGINEER TO PROVIDE ADVICE AND CERTIFICATION OF ANY WORKS ASSOCIATED WITH TREATING OR MANAGING UNSUITABLE GROUND CONDITIONS THROUGHOUT THE CONTRACT (e.g. STABILITY OF EXCAVATIONS, POOR SUBGRADE, etc).
5. ALL SOFT, WET OR UNSUITABLE MATERIAL IS TO BE REMOVED AS DIRECTED BY THE SUPERINTENDENT AND REPLACED WITH APPROVED MATERIAL SATISFYING THE REQUIREMENTS BELOW.
6. PROVIDE CERTIFICATES VERIFYING THE QUALITY OF IMPORTED MATERIAL FOR THE SUPERINTENDENTS APPROVAL.
7. ALL FILL MATERIAL SHALL BE PLACED IN MAXIMUM 200mm THICK LAYERS (LOOSE) AND COMPACTED AT OPTIMUM MOISTURE CONTENT (+ OR -2%) TO ACHIEVE A DRY DENSITY DETERMINED IN ACCORDANCE WITH AS1289 2.11, AS1289 5.7.1 AND AS1289 5.8.8 OF NOT LESS THAN THE FOLLOWING STANDARD MINIMUM DRY DENSITY.

LOCATION	COMPACTION REQUIREMENT
LANDSCAPED AREAS	98% SMDD
ROADS	100% SMDD (IN ACCORDANCE WITH COUNCIL SPECIFICATIONS)
PAVED AREAS	100% SMDD (IN ACCORDANCE WITH COUNCIL SPECIFICATIONS)
8. TESTING OF THE SUBGRADE FOR BUILDINGS SHALL BE CARRIED OUT BY AN APPROVED N.A.T.A. REGISTERED LABORATORY.
9. ALLOW THE FOLLOWING COMPACTION TESTING BY N.A.T.A. REGISTERED LABORATORY FOR PLATFORMS AND FILL LAYERS IN ACCORDANCE WITH THE LATEST VERSION OF AS3798. (MINIMUM 3 TESTS PER LAYER) OR 1 TEST PER MATERIAL TYPE PER 2500sqm OR 1 TEST.
10. WHERE TEST RESULTS ARE BELOW THE SPECIFIED COMPACTION, RECOMPACT AND RETEST UNTIL SPECIFIED COMPACTION STANDARDS ARE ACHIEVED. OTHERWISE SUBGRADE REPLACEMENT IS REQUIRED IF COMPACTION STANDARDS ARE NOT ACHIEVED.
11. ALLOW FOR EXCAVATION IN ALL MATERIALS AS FOUND U.N.O. NO ADDITIONAL PAYMENTS WILL BE MADE FOR EXCAVATION IN WET OR HARD GROUND.
12. WHERE THERE IS INSUFFICIENT EXCAVATED MATERIAL SUITABLE FOR FILLING OR SUBGRADE REPLACEMENT, THE CONTRACTOR IS TO ALLOW TO IMPORT FILL. IMPORTED FILL SHALL COMPLY WITH THE FOLLOWING;
 - 12.1. BE OF VIRGIN EXCAVATED NATURAL MATERIAL OR
 - 12.2. CONTRACTOR TO PROVIDE EVIDENCE IMPORT IS SUITABLE USE
 - 12.3. PLASTICITY INDEX BETWEEN 15% AND CBR > 8
 - 12.4. FREE FROM ORGANIC AND PERISHABLE MATTER
 - 12.5. MAXIMUM SIZE 50mm, PASSING 75 MICRON SIEVE (<25%)

EARTHWORKS (cont)
13. 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, ROLLERS 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 AT THEIR COST.
14. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE AND MAINTAIN THE INTEGRITY OF ALL SERVICES, CONDUITS AND PIPES DURING CONSTRUCTION, SPECIFICALLY DURING THE BACKFILLING AND COMPACTION PROCEDURE. ANY AND ALL DAMAGE TO NEW OR EXISTING SERVICES AS A RESULT OF THESE WORKS SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST.
15. TESTING OF THE SUBGRADE SHALL BE CARRIED OUT BY AN APPROVED N.A.T.A. REGISTERED LABORATORY AT THE CONTRACTORS EXPENSE.
<u>DEEP EXCAVATIONS</u>
16. <u>PRIOR TO THE COMMENCEMENT OF EXCAVATION WORKS GREATER THAN 15m IN DEPTH, THE CONTRACTOR SHALL OBTAIN THE SERVICES OF A SUITABLY QUALIFIED GEOTECHNICAL ENGINEER TO DETERMINE THE STABILITY OF A NATURAL MATERIAL AND BENCHING REQUIREMENTS.</u>
17. <u>THE CONTRACTOR MUST PROVIDE THE SUPERINTENDENT AND OR THE DESIGN ENGINEER WITH A COPY OF THE GEOTECHNICAL ENGINEERS REPORT.</u>
18. THE CONTRACTOR IS TO PROVIDE SAFETY BARRIERS / FENCING IN ACCORDANCE WITH OH&S AND REGULATORY AUTHORITY REQUIREMENTS.
<u>SERVICE TRENCHES</u>
19. SAWCUT EXISTING SURFACES PRIOR TO EXCAVATION. BACKFILL ALL TRENCHES UNDER EXISTING ROADS, PAVEMENTS AND PATHS WITH STABILISED SAND 5% CEMENT OR DGS40 MATERIAL (5% CEMENT) COMPACTED IN 200mm THICK LAYERS TO 98% MDD TO UNDERSIDE OF PAVEMENT.
20. BACKFILL ALL TRENCHES NOT UNDER ROADS, PAVEMENTS, PATHS AND BUILDINGS WITH APPROVED EXCAVATED OR IMPORTED MATERIAL COMPACTED TO 95% SMDD.

SITEWORKS
1. ALL WORKS TO BE IN ACCORDANCE WITH RELEVANT LOCAL COUNCIL / REGULATORY AUTHORITIES REQUIREMENTS. ALL SPECIFICATIONS AND AUSTRALIAN STANDARDS. <u>CONFLICTS BETWEEN SAID DOCUMENTS SHALL BE REFERRED TO THE SUPERINTENDENT FOR DIRECTION.</u>
2. THE CONTRACTOR IS TO DESIGN, OBTAIN APPROVALS AND CARRY OUT REQUIRED TEMPORARY TRAFFIC CONTROL PROCEDURES DURING CONSTRUCTION IN ACCORDANCE WITH ALL REGULATORY AUTHORITIES, INCLUSIVE OF LOCAL COUNCIL REGULATIONS AND REQUIREMENTS.
3. THE CONTRACTOR IS TO OBTAIN ALL AUTHORITY APPROVALS AS REQUIRED <u>PRIOR TO COMMENCEMENT OF WORKS.</u>
4. RESTORE ALL PAVED, COVERED, GRASSED AND LANDSCAPED AREAS TO THEIR ORIGINAL CONDITION OR AS DIRECTED BY THE SITE SUPERINTENDENT ON COMPLETION OF WORKS. WHERE PLANTING OF NEW GRASS IS NECESSARY REFER TO LANDSCAPE ARCHITECT AND / OR ARCHITECT DOCUMENTATION.
5. ON COMPLETION OF ANY TRENCHING WORKS, ALL DISTURBED AREAS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION OR AS DIRECTED BY THE SITE SUPERINTENDENT, INCLUDING KERBS, FOOTPATHS, CONCRETE AREAS, GRAVEL, GRASSED AREAS AND ROAD PAVEMENTS.
6. THE CONTRACTOR SHALL ARRANGE ALL SURVEY SETOUT TO BE CARRIED OUT BY A REGISTERED SURVEYOR <u>PRIOR TO COMMENCEMENT OF WORKS.</u>
7. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING LEVELS ONSITE PRIOR TO LODGMENT OF TENDER AND ONSITE WORKS. THE PRICE AS TENDERED SHALL BE INCLUSIVE OF ALL WORKS SHOWN ON THE TENDER PROJECT DRAWINGS. ADDITIONAL PAYMENTS FOR WORKS SHOWN ON THE TENDER PROJECT DRAWINGS WILL NOT BE APPROVED.
8. DO NOT OBTAIN DIMENSIONS BY SCALING DRAWINGS.
9. IN CASE OF DOUBT OR DISCREPANCY REFER TO SUPERINTENDENT FOR CLARIFICATION OR CONFIRMATION PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
10. WHERE NEW WORKS ABUT EXISTING THE CONTRACTOR SHALL ENSURE THAT A SMOOTH EVEN PROFILE, FREE FROM ABRUPT CHANGES IS OBTAINED. MAKE SMOOTH TRANSITION TO EXISTING FEATURES AND MAKE GOOD WHERE JOINED.
11. TRENCHES THROUGH EXISTING ROAD AND CONCRETE PAVEMENTS SHALL BE SAWCUT TO FULL DEPTH OF CONCRETE AND A MIN 50mm IN BITUMINOUS PAVING.
12. ALL CIVIL ENGINEERING DESIGN HAS BEEN DOCUMENTED UNDER THE ASSUMPTION THAT ALL NECESSARY SITE CONTAMINATION REMEDIATION WORKS HAVE BEEN SATISFACTORILY COMPLETED (IF APPLICABLE) AND THAT THE SITE IS NOT AFFECTED BY ANY SOIL STRATA OR GROUNDWATER TABLE CONTAMINATION.

STORMWATER DRAINAGE
1. ALL PIPES SHALL BE CLASS 2 RUBBER-RING JOINTED RCP U.N.O. WHERE uPVC PIPES HAVE BEEN SPECIFIED. THE FOLLOWING CLASS PIPEWORK IS TO BE ADOPED U.N.O. #100mm OR LESS TO BE CLASS 'SN10' AND ABOVE #100mm TO BE CLASS 'SN8'.
2. uPVC STORMWATER LINES PASSING UNDER FLOOR SLABS TO BE CONCRETE ENCASED.
3. FRC PIPES EQUAL TO THAT OF THE STEEL REINFORCED CONCRETE PIPE CLASS SPECIFIED ON THE DRAWINGS MAY BE USED SUBJECT TO APPROVAL FROM THE SUPERINTENDENT.
4. ALL PIPE ARE TO BE LAID AT 10% MIN GRADE U.N.O.
5. <u>COVERS</u> 5.1. USE HOT DIPPED GALVANISED COVERS AND GRATES COMPLYING WITH RELEVANT COUNCIL AND AUSTRALIAN STANDARDS. 5.2. ALL COVERS AND GRATES TO BE POSITION IN A FRAME AND MANUFACTURED AS A UNIT. 5.3. ALL COVERS AND GRATES TO BE FITTED WITH POSITIVE COVER LIFTING KEYS 5.4. OBTAIN SUPERINTENDENTS APPROVAL FOR THE USE OF CAST IRON SOLID COVERS AND GRATES. CAST IRON SOLID COVERS (IF APPROVED) TO CONSIST OF CROSS-WEBBED, CELLULAR CONSTRUCTION WITH THE RIBS UPPOREST TO ALLOW INFILLING WITH CONCRETE. INSTALL POSITIVE COVER LIFTING KEYS AND PLASTIC PLUGS. 5.5. UNLESS DETAILED OR SPECIFIED OTHERWISE, COVERS AND GRATES TO BE CLASS 'D' IN VEHICULAR PAVEMENTS AND CLASS 'B' ELSEWHERE. 5.6. ALL GRATED TRENCH DRAINS SHOULD BE 'CLASS D' CAST IRON WITHIN VEHICULAR PAVEMENTS AND CLASS 'B' HEEL SAFE WITHIN PEDESTRIAN PAVEMENTS.
6. ALL PIPE BENDS, JUNCTIONS, ETC ARE TO BE PROVIDED USING PURPOSE MADE FITTINGS OR STORMWATER PITS.
7. ALL CONNECTIONS TO EXISTING DRAINAGE STRUCTURES SHALL BE MADE IN A TRADESMAN-LIKE MANNER AND CEMENT RENDERED TO ENSURE A SMOOTH FINISH.
8. STORMWATER PIPEWORK TO FINISH FLUSH WITH INTERNAL PIT WALLS AND MUST NOT PROTRUDE. CONNECTION TO BE NEATLY RENDER AND MADE NEAT.
9. THE CONTRACTOR SHALL SUPPLY AND INSTALL ALL FITTINGS AND SPECIALS INCLUDING VARIOUS PIPE ADAPTORS TO ENSURE PROPER CONNECTION BETWEEN DISSIMILAR PIPEWORK.
10. U.N.O. MATERIAL USED FOR BEDDING OF PIPES SHALL BE APPROVED NON-COHESIVE GRANULAR MATERIAL HAVING HIGH PERMEABILITY AND HIGH STABILITY WHEN SATURATED AND FREE OF ORGANIC AND CLAY MATERIAL.
11. 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.
12. BEDDING SHALL BE U.N.O TYPE HS2 UNDER ROADS AND H2 UNDER GENERAL AREAS IN ACCORDANCE WITH CURRENT RELEVANT INDUSTRY STANDARDS AND GUIDELINES.
13. THE CONTRACTOR SHALL ENSURE AND PROTECT THE INTEGRITY OF ALL STORMWATER PIPES DURING CONSTRUCTION. ANY AND ALL DAMAGE TO THESE PIPES AS A RESULT OF THESE WORKS SHALL BE REPAIRED BY THE CONTRACTOR UNDER THE DIRECTION OF THE SUPERINTENDENT AND AT NO EXTRA COST.
14. NOTE THAT THE PIT COVER LEVEL NOMINATED IN GUTTERS ARE TO THE INVERT OF THE GUTTER WHICH ARE 40mm LOWER THAN THE PAVEMENT LEVEL AT LIP OF GUTTER. REFER KERB DETAILS FOR CONFIRMATION.
<u>SUBSOIL DRAINAGE</u>
15. #100mm SUBSOIL DRAINAGE LINES WITH NON-WOVEN GEOTEXTILE FILTER SOCK SURROUND SHALL BE CONNECTED TO A STORMWATER DRAINAGE PIT (AT MIN 1% LONGITUDINAL GRADE) AND PROVIDED IN THE FOLLOWING LOCATIONS: 15.1. THE HIGH SIDE OF PROPOSED TRAFFICKED PAVEMENT AREAS. 15.2. ALL PLANTER AND TREE BEDS PROPOSED ADJACENT TO PAVEMENT AREAS. 15.3. BEHIND RETAINING WALLS (IN ACCORDANCE WITH RETAINING WALL DETAILS). 15.4. ALL OTHER AREAS SHOWN ON DRAWINGS. 15.5. CONTRACTOR IS TO MAKE ALLOWANCE IN BOTH TENDER AND CONSTRUCTION COSTING TO ALLOW FOR SUBSURFACE DRAINAGE BEHIND ALL RETAINING WALLS / ABOVE LOCATIONS AND TO MAKE CONNECTION TO STORMWATER SYSTEM.
16. WHERE SUBSOIL DRAINAGE PASSES BENEATH BUILDINGS / PAVED AREAS AND/OR PAVEMENTS. CONTRACTOR TO ENSURE #100mm CLASS 'SN10' uPVC DRAINAGE LINE IS USED AND THAT PROPRIETARY FITTINGS ARE USED TO RECONNECT SUBSOIL DRAINAGE LINE.
17. THE CONTRACTOR SHALL INSTALL INSPECTION OPENINGS / CLEAROUTS TO ALL SUBSOIL DRAINAGE LINES AND DOWNPIPE LINES AS SPECIFIED ON DRAWINGS AND IN ACCORDANCE WITH COUNCIL SPECIFICATIONS AT MAXIMUM 30m CENTRE AND AT ALL UPSTREAM ENDPOINTS.
18. PROVIDE 3.0m LENGTH OF #100 SUBSOIL DRAINAGE LINE WRAPPED IN NON-WOVEN GEOTEXTILE FILTER FABRIC TO THE UPSTREAM SIDE OF STORMWATER PITS. LAID IN STORMWATER PIPE TRENCHES AND CONNECTED TO DRAINAGE PIT.
19. IN AREAS WHERE DUMPED / HAND PLACED ROCK IS USED AS A MEANS OF SCOUR PROTECTION, CONTRACTOR IS TO EXCAVATE A MINIMUM OF 100mm FROM PROPOSED SURFACE, LEVEL AND COMPACT SUBGRADE AS SPECIFIED. ROCK TO THEN BE PLACED ON GEOTEXTILE FILTER FABRIC.

SIGNAGE AND LINEMARKING
1. ALL SIGNAGE TO BE INSTALLED IN ACCORDANCE WITH AUSTRALIAN STANDARDS 1742 / RMS STANDARDS AND SPECIFICATIONS.
2. LINE MARKING AND PAINT SHALL BE IN ACCORDANCE WITH AS1742.3 AND RMS STANDARDS.
3. PAINT SHALL BE TYPE 3 CLASS 'A' AND THE COLOUR SHALL BE WHITE AND NOT SUBJECT TO DISCOLOURATION BY BITUMEN FROM ROAD SURFACE. ALL PAINT TO 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 AND 0.40mm.
6. CARPARK LINEMARKING TO BE 80mm WIDE.

LANDSCAPING
1. REFER TO DRAWINGS BY OTHERS FOR DETAILS OF PROPOSED LANDSCAPING TREATMENT.
2. ALL DISTURBED SURFACE TO BE TEMPORARILY STABILISED WITH HYDROMULCH UPON COMPLETION OF WORKS. A 500mm STRIP OF TURF (CT2 COUGH) IS TO BE PLACED BEHIND ALL NEW KERB AND GUTTER / ROLL KERB.

PAVEMENTS
1. ALL PAVEMENT MATERIALS SHALL COMPLY WITH CURRENT RMS SPECIFICATIONS. PROVIDE MECHANICAL ANALYSIS FOR EACH BATCH OF PAVEMENT MATERIAL TO ENSURE CONFORMITY.
2. <u>COMPACTION STANDARDS</u> BASE 98% MODIFIED MAXIMUM DRY DENSITY SUBBASE 98% MODIFIED MAXIMUM DRY DENSITY SUBGRADE 100% STANDARD MAXIMUM DRY DENSITY
3. <u>THE CONTRACTOR SHALL CONFIRM THE DESIGN CBR WITH A MINIMUM OF 3 TESTS TAKEN AT SUBGRADE LEVEL. WHERE DISCREPANCY IS FOUND, CONTACT THE DESIGN ENGINEER.</u>
4. ALLOW FOR COMPACTION TESTING BY A N.A.T.A. REGISTERED LABORATORY FOR BASE LAYER, SUBBASE LAYER AND SUBGRADE LAYER IN ACCORDANCE WITH THE LATEST VERSION OF AS3798 FOR PAVEMENTS (MINIMUM 2 TESTS PER LAYER). ALLOW FOR AT LEAST TWO SUCCESSFUL COMPACTION TESTS IN EACH LAYER.
5. MATCH NEW PAVEMENTS NEATLY AND FLUSH WITH EXISTING
6. AFTER BASE IS APPROVED, SWEEP CLEAN AND PRIME AT NOMINAL RATE OF 1.0L PER 1.0 sq.m
7. <u>PAVEMENT HOLD POINTS</u> 7.1. SUB-GRADE PROOF ROLL PRIOR TO SET-UP AND FORM FOR CONCRETE POUR. 7.2. INSPECTION OF FORMWORK / STEEL PRIOR TO CONCRETE POUR. 7.3. SUBMISSION OF SUB-GRADE AND BASE DENSITY TESTS.

ASPHALTIC CONCRETE
1. <u>GENERAL</u> 1.1. ALL ASPHALTIC CONCRETE (AC) WORK TO BE PREPARED AND CARRIED OUT IN ACCORDANCE WITH GOOD ASPHALTIC PAVING PRACTICE AS DESCRIBED IN AS2150-2005 "ASPHALT (HOT-MIXED) PAVING - GUIDE TO GOOD PRACTICE" AND CURRENT RMS SPECIFICATIONS.
2. <u>PAVEMENT PREPARATION</u> 2.1. THE FINISHED PAVEMENT SURFACE TO BE SEALED SHALL BE WITHIN +/- 2% OF THE ORTUMUM AND BROOMED BEFORE COMMENCEMENT OF WORK TO ENSURE COMPLETE REMOVAL OF ALL SUPERFICIAL FOREIGN MATTER. 2.2. PRIME ALL SURFACES TO BE SEALED. ALLOW PRIME TO SETTLE FOR A MINIMUM OF 3 DAYS BEFORE APPLYING TACK COAT AND ASPHALT. 2.3. SWEEP PRIMED SURFACES BEFORE APPLYING TACK COAT. 2.4. 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. 2.5. ALL DEFECTS IN THE BASE COURSE INCLUDING CRACKS, SURFACE DEFORMATION AND THE LIKE SHALL BE REPAIRED AS DIRECTED BY THE SUPERINTENDENT PRIOR TO PLACEMENT OF TACK COAT AND/OR AC COURSES.
3. <u>PLACEMENTS</u> 3.1. ALL ASPHALT SHALL BE PLACED UTILISING APPROVED MECHANICAL PAVING MACHINES. DO NOT HAND PLACE ASPHALT WITHOUT PRIOR APPROVAL FROM ENGINEER.
4. <u>JOINTS</u> 4.1. THE NUMBER OF JOINTS BOTH LONGITUDINAL AND TRANSVERSE SHALL BE KEPT TO A MINIMUM. 4.2. THE DENSITY AND SURFACE FINISH AT JOINTS SHALL BE SIMILAR TO THOSE OF THE REMAINDER OF THE LAYER.
5. <u>COMPACTION</u> 5.1. ALL COMPACTION SHALL BE UNDERTAKEN USING SELF PROPELLED ROLLERS. 5.2. INITIAL ROLLING SHALL BE COMPLETED BEFORE THE MIX TEMPERATURE FALLS BELOW 105°C USING A STEEL DRUM ROLLER HAVING A MINIMUM WEIGHT OF 8 TONNES AND A MAXIMUM UNIT LOAD ON THE REAR DRUM EQUIVALENT TO 55kN/m WIDTH OF DRUM. 5.3. SECONDARY ROLLING SHALL BE COMPLETED BEFORE THE MIX TEMPERATURE FALLS BELOW 80°C USING A PNEUMATIC TYRED ROLLER OF AT LEAST 10 TONNES MASS. A MINIMUM TYRE PRESSURE OF 550kPa AND A MINIMUM TOTAL LOAD OF 1 TONNE ON EACH TYRE. 5.4. <u>ROLLED SURFACES SHALL BE SMOOTH AND FREE OF UNDULATIONS. BONY AND/OR UNEVEN SURFACES WILL BE REJECTED.</u> 5.5. PROVIDE 2 No. MINIMUM COMPACTION TESTS.
6. <u>FINISHED SURFACE PROPERTIES</u> 6.1. FINISHED SURFACES SHALL BE SMOOTH, DENSE AND TRUE OF SHAPE AND SHALL NOT VARY MORE THAN; 6.1.1. 3mm FROM THE SPECIFIED PLAN LEVEL AT ANY POINT. 6.1.2. 3mm FROM THE BOTTOM OF A STRAIGHT EDGE LAID TRANSVERSELY. 6.1.3. 5mm FROM THE BOTTOM OF A STRAIGHT EDGE LAID LONGITUIONALLY. 6.1.4. MINUS 0 TO PLUS 2mm ADJACENT TO OTHER ELEMENTS SUCH AS KERBS AND THE LIKE TO AVOID POOLING OF SURFACE WATER. 6.1.5. MINUS 0 FROM THE SPECIFIED THICKNESS.
7. DO NOT STORE PLANT EQUIPMENT OR TRAFFIC NEWLY LAID ASPHALTIC CONCRETE PAVEMENTS WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
8. DO NOT APPLY MARKING PAINTS UNTIL ASPHALT HAS CURED IN ACCORDANCE WITH PAINT MANUFACTURERS SPECIFICATIONS.

NOT FOR CONSTRUCTION

VERIFIER:


JOB MANAGER: J. WILTSHIRE

DESIGNED: L. RUECKER

DRAWN: L. RUECKER

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
1	DA SUBMISSION	LMR		JW	29.09.2023
2	DA SUBMISSION	LMR		JW	19.10.2023

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 ARCHITECTURE INTERIORS MASTERPLANNING
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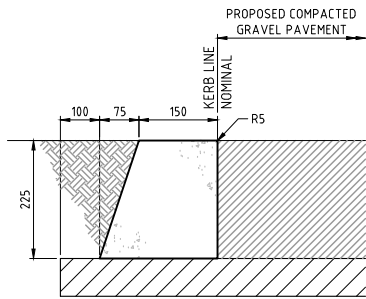
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--

PROJECT CIVIL WORKS CAMP KURRAJONG SCOUT FACILITY WAGGA WAGGA NSW

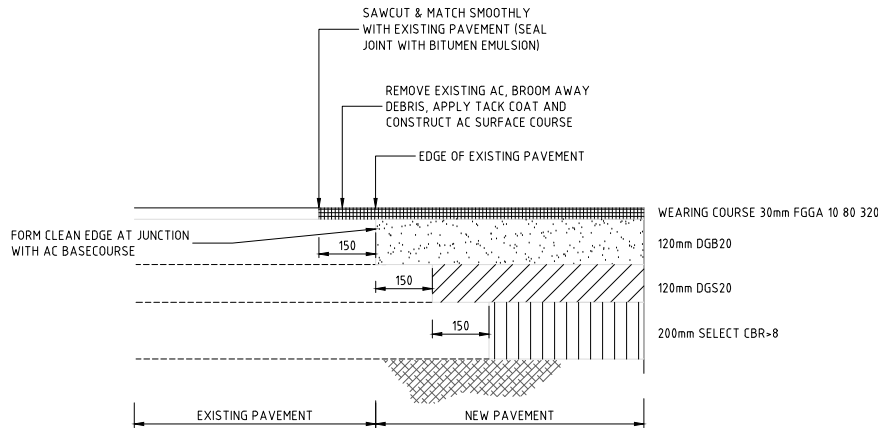
DRAWING TITLE CIVIL WORKS STANDARD NOTES SHEET 1 OF 2
--

JOB NUMBER CR232133-00	REVISION 2
DRAWING NUMBER C001	DRAWING SHEET SIZE = A1



- N32 CONCRETE KERB
- MIN 100mm DGB20 BASE
- WEAKENED PLANE JOINTS @ 3.0m CTRS
- EXPANSION JOINTS @ 12m CTRS

FLUSH KERB (FK)
NTS



PAVEMENT TIE IN DETAIL
SCALE 1:10 @ A1

VERIFIER:

JOB MANAGER: J. WILTSHIRE

DESIGNED: L. RUECKER

DRAWN: L. RUECKER


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ARCHITECTURE
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0 100 200 300 400 500mm

PLAN

SCALE 1:10 @ A1



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Canberra

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PROJECT

CIVIL WORKS
CAMP KURRAJONG
SCOUT FACILITY
WAGGA WAGGA NSW

DRAWING TITLE

CIVIL WORKS
STANDARD DETAILS

JOB NUMBER

CR232133-00

DRAWING NUMBER

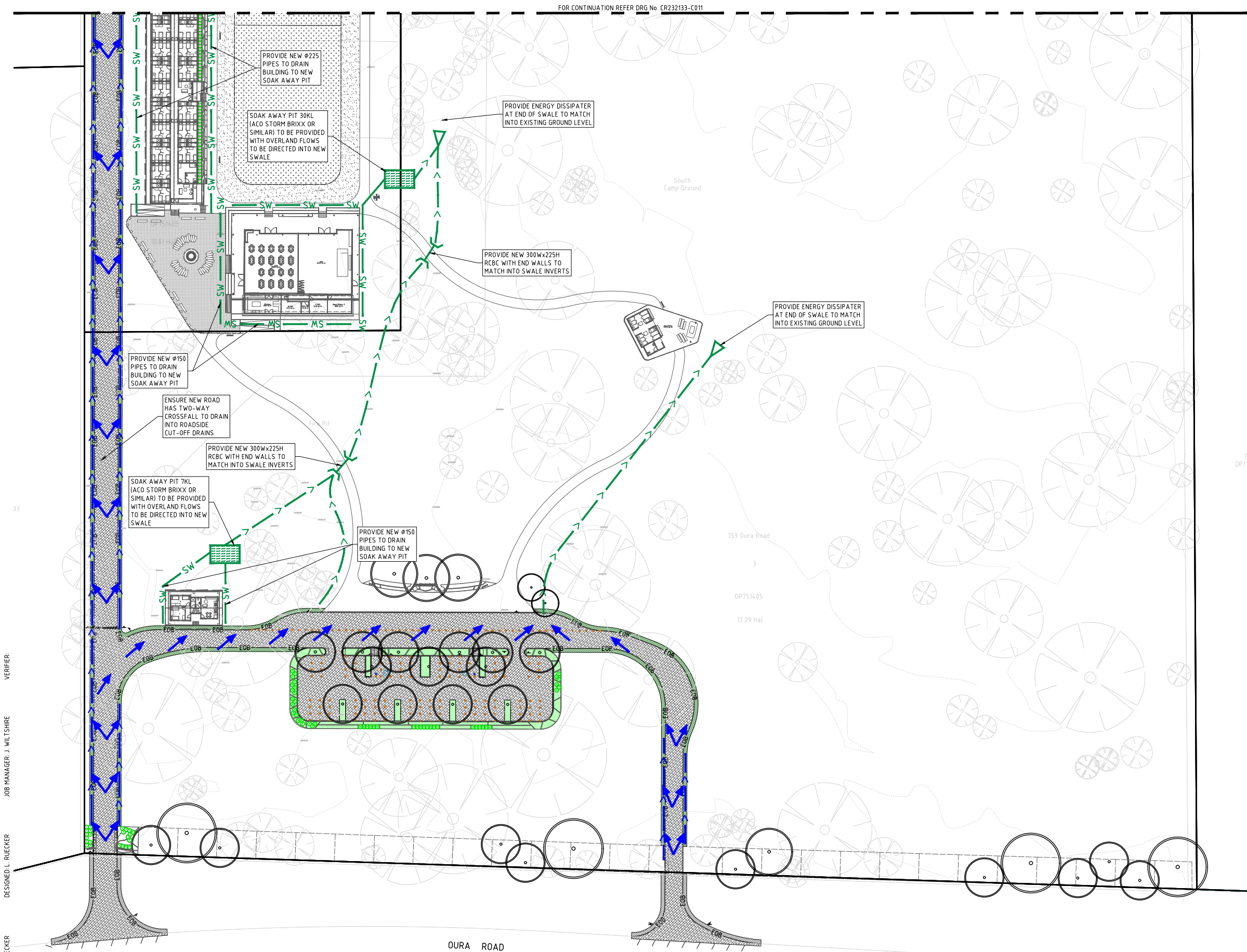
C005

REVISION

2

DRAWING SHEET SIZE = A1

NOT FOR CONSTRUCTION



LEGEND

PROPOSED SERVICES

SW

STORMWATER PIPE

RCBC END WALL

GRADED PIT

> >

SWALE NOMINALLY 15m WIDE, 100mm DEEP, MINIMUM FALL 1.0% REFER TO C012 FOR DETAILS

ENERGY DISSIPATER REFER TO C012 FOR DETAILS

SOAK AWAY PIT (ACO STORM BRIXX OR SIMILAR)

> >

CUT-OFF DRAIN NOMINALLY 1.1m WIDE, 100mm DEEP, MINIMUM FALL 1.0% REFER TO C012 FOR DETAILS

PAVEMENT FALL DIRECTION. ALLOW TO ADJUST SURFACE LEVELS TO ACHIEVE THIS

STORMWATER NOTES

- FLEXIBLE JOINTS, BEDDING AND BACKFILL SHALL BE IN ACCORDANCE WITH STANDARD DETAILS.
- ALL PIPES SHALL BE RUBBER RING JOINTED, EXCEPT FOR 100mm UPVC PIPES WHICH SHALL BE SOLVENT WELDED.
- ALL SUMPS AND MAINTENANCE HOLES OF GREATER DEPTH THAN 900mm SHALL BE FITTED WITH GALVANISED STEP IRONS.
- ALL STORMWATER PIPES DIAMETER AS SHOWN AND LAID AT 1% GRADE U.N.O.
- MATERIALS:
STORMWATER PIPES EQUAL TO AND GREATER THAN 225 - RCP
STORMWATER PIPES LESS THAN 225 - PVC.
- MINIMUM STORMWATER PIPE COVERS:
- 300mm IN AREAS NOT SUBJECT TO VEHICULAR LOADING.
- 450mm IN PAVED AREAS SUBJECT TO VEHICULAR LOADING.
- 750mm IN UNPAVED AREAS SUBJECT TO VEHICULAR LOADING.
- ANY DAMAGE CAUSED TO INSTALLED OR EXISTING PIPES SHALL BE MADE GOOD AT THE CONTRACTORS EXPENSE.

VERIFIER: J. WILTSHIRE
JOB MANAGER: J. WILTSHIRE
DESIGNED: L. RUECKER
DRAWN: L. RUECKER

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1	DA SUBMISSION	LMR		JW	29.09.2023
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CLIENT:

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0 5 10 15 20 25m

PLAN
SCALE 1:500 @ A1

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PROJECT

CIVIL WORKS
CAMP KURRAJONG
SCOUT FACILITY
WAGGA WAGGA NSW

DRAWING TITLE

CIVIL WORKS
CONCEPT STORMWATER
DRAINAGE PLAN
SHEET 1 OF 2

JOB NUMBER

CR232133-00

DRAWING NUMBER

C010

REVISION

2

DRAWING SHEET SIZE = A1

NOT FOR CONSTRUCTION

VERIFIER: J. WILTSHIRE
JOB MANAGER: J. WILTSHIRE
DESIGNED: L. RUECKER
DRAWN: L. RUECKER

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0 5 10 15 20 25m
SCALE 1:500 @ A1



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PROJECT

**CIVIL WORKS
CAMP KURRAJONG
SCOUT FACILITY
WAGGA WAGGA NSW**

DRAWING TITLE

**CIVIL WORKS
CONCEPT STORMWATER
DRAINAGE PLAN
SHEET 2 OF 2**

JOB NUMBER
CR232133-00

DRAWING NUMBER
C011

REVISION
2

DRAWING SHEET SIZE = A1

NOT FOR CONSTRUCTION

LEGEND

PROPOSED SERVICES

SW

STORMWATER PIPE

RCBC END WALL

GRADED PIT

SWALE NOMINALLY 15m WIDE, 100mm DEEP,
MINIMUM FALL 1.0%
REFER TO C012 FOR DETAILS

ENERGY DISSIPATER
REFER TO C012 FOR DETAILS

SOAK AWAY PIT
(ACO STORM BRIXX OR SIMILAR)

CUT-OFF DRAIN NOMINALLY 1.1m WIDE,
100mm DEEP, MINIMUM FALL 1.0%
REFER TO C012 FOR DETAILS

PAVEMENT FALL DIRECTION. ALLOW TO
ADJUST SURFACE LEVELS TO ACHIEVE THIS

STORMWATER NOTES

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STORMWATER PIPES EQUAL TO AND GREATER THAN Ø225 - RCP
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Email canberra@northrop.com.au ABN 81 094 433 100

PROJECT

**CIVIL WORKS
CAMP KURRAJONG
SCOUT FACILITY
WAGGA WAGGA NSW**

DRAWING TITLE

**CIVIL WORKS
CONCEPT STORMWATER
DRAINAGE DETAILS**

JOB NUMBER

CR232133-00

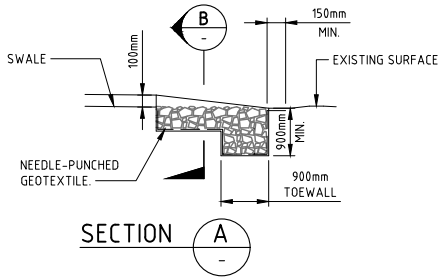
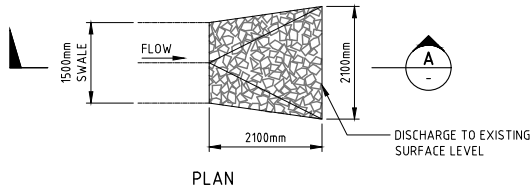
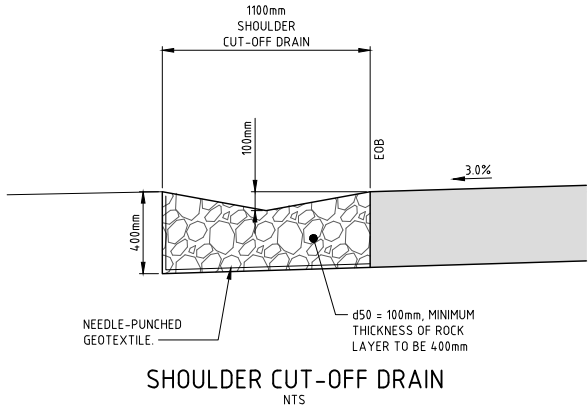
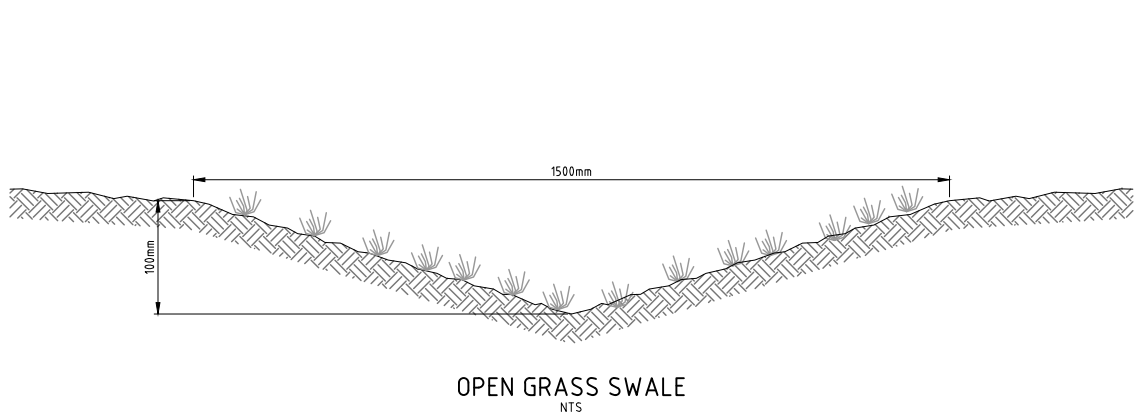
DRAWING NUMBER

C012

REVISION

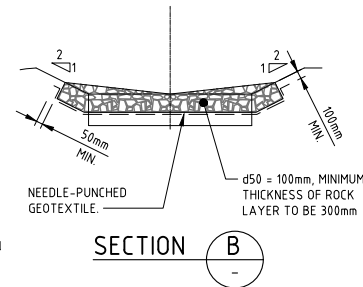
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DRAWING SHEET SIZE = A1



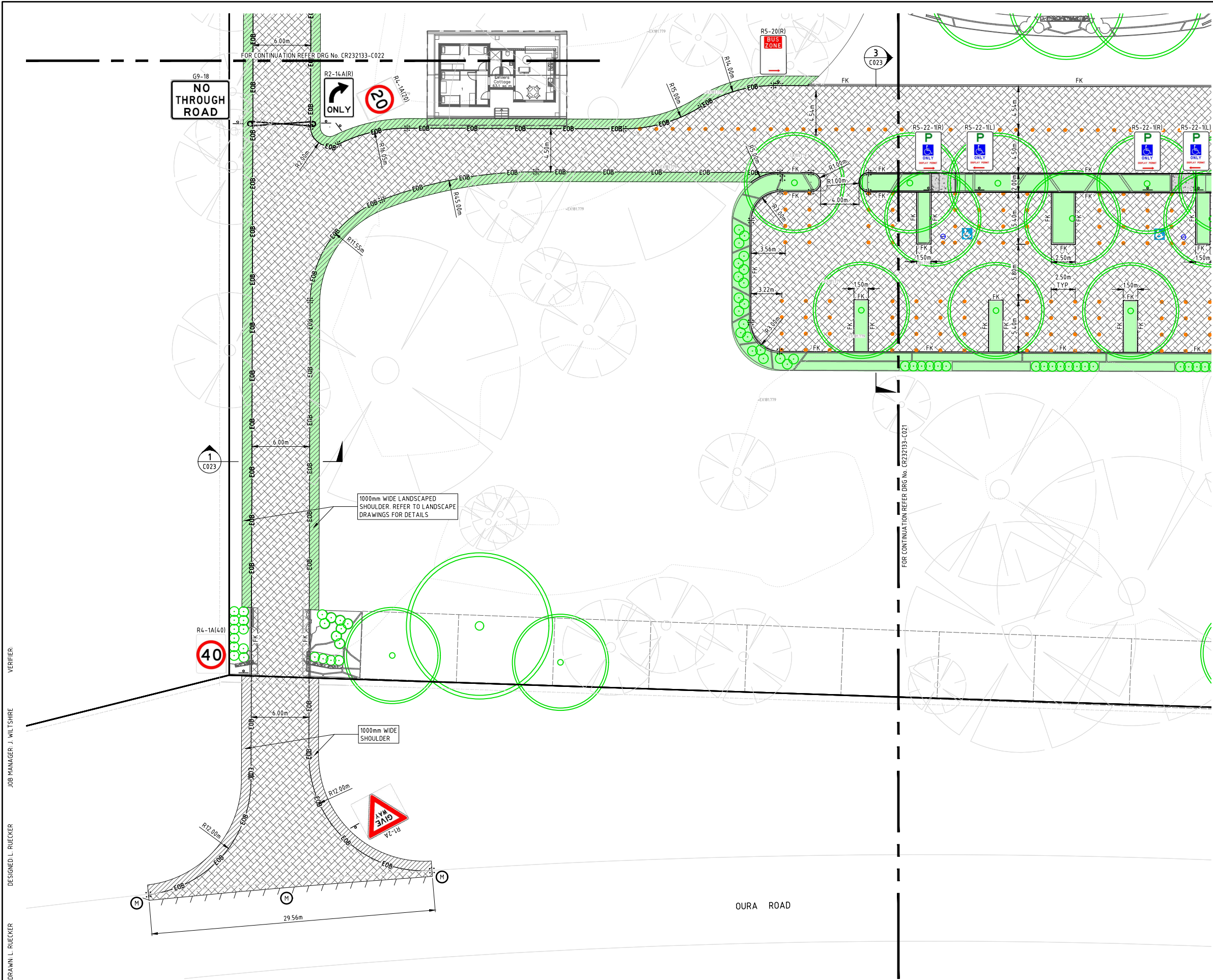
CONSTRUCTION NOTES

1. COMPACT THE SUBGRADE FILL TO THE DENSITY OF THE SURROUNDING UNDISTURBED MATERIAL.
2. PREPARE A SMOOTH, EVEN FOUNDATION FOR THE STRUCTURE THAT WILL ENSURE THAT THE NEEDLE-PUNCHED GEOTEXTILE DOES NOT SUSTAIN SERIOUS DAMAGE WHEN COVERED WITH ROCK.
3. SHOULD ANY MINOR DAMAGE TO THE GEOTEXTILE OCCUR, REPAIR IT BEFORE SPREADING ANY AGGREGATE. FOR REPAIRS, PATCH ONE PIECE OF FABRIC OVER THE DAMAGE, MAKING SURE THAT ALL JOINTS AND PATCHES OVERLAP MORE THAN 300mm.
4. LAY ROCK FOLLOWING THE DRAWING, ACCORDING TO TABLE 5.2 OF LANDCOM (2004) AND WITH A MINIMUM DIAMETER OF 75mm.
5. ENSURE THAT ANY CONCRETE OR RIPRAP USED FOR THE ENERGY DISSIPATER OR THE OUTLET PROTECTION CONFORMS TO THE GRADING LIMITS SPECIFIED ON THE SWMP.



ENERGY DISSIPATER
NTS

NOT FOR CONSTRUCTION



LEGEND

PROPOSED COMPACTED GRAVEL PAVEMENT

PROPOSED SHOULDER
REFER TO C012 FOR DETAILS

PROPOSED LANDSCAPED SHOULDER
REFER TO LANDSCAPE DRAWINGS FOR DETAILS

PROPOSED LANDSCAPE TREATMENT
REFER TO LANDSCAPE DRAWINGS FOR DETAILS

PROPOSED CONCRETE PAVEMENT
AS PER LANDSCAPE ARCHITECTS SPECIFICATIONS UNLESS NOTED OTHERWISE:
100mm N25 CONCRETE
25 QUARRY SCALPINGS
SUBGRADE COMPACTED TO 95% MDD

FK
PROPOSED FLUSH KERB EDGE (REFER TO C005 FOR DETAILS)

PROPOSED BOLLARD (FOR ACCESSIBLE PARKING)

PROPOSED SIGNAGE

PROPOSED PAVEMENT MARKING
(SPIKE DOWN RAISED CERAMIC PAVEMENT MARKERS - 1.7m CTS)

EOB
PROPOSED EDGE OF TRAFFICABLE PAVEMENT

M
MATCH TO EXISTING PAVEMENT - TIE IN
(REFER TO C005 FOR DETAILS)

PROPOSED TREES
(REFER TO LANDSCAPE DRAWINGS FOR DETAILS)

EXISTING TREES

NEW CARPARK PARKING SCHEDULE
TO AS2890.1

USER CLASS	2
AISLE WIDTH	5.8m
OPERATIONAL (GENERAL)	33 SPACES 2.5m x 5.4m
ACCESSIBLE (ONSITE)	2 SPACES 2.5m x 5.4m
TOTAL SPACES	35

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CLIENT:

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0 2 4 6 8 10m
SCALE 1:200 @ A1
PLAN

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Level 6, 224 Bunda Street (PO Box 213) Canberra ACT 2608
Ph (02) 6285 1822 Fax (02) 6285 1863
Email canberra@northrop.com.au ABN 81 094 433 100

PROJECT

CIVIL WORKS
CAMP KURRAJONG
SCOUT FACILITY
WAGGA WAGGA NSW

DRAWING TITLE

CIVIL WORKS
ROAD AND CARPARK LAYOUT
AND DETAIL PLAN
SHEET 1 OF 4

DRAWING NUMBER

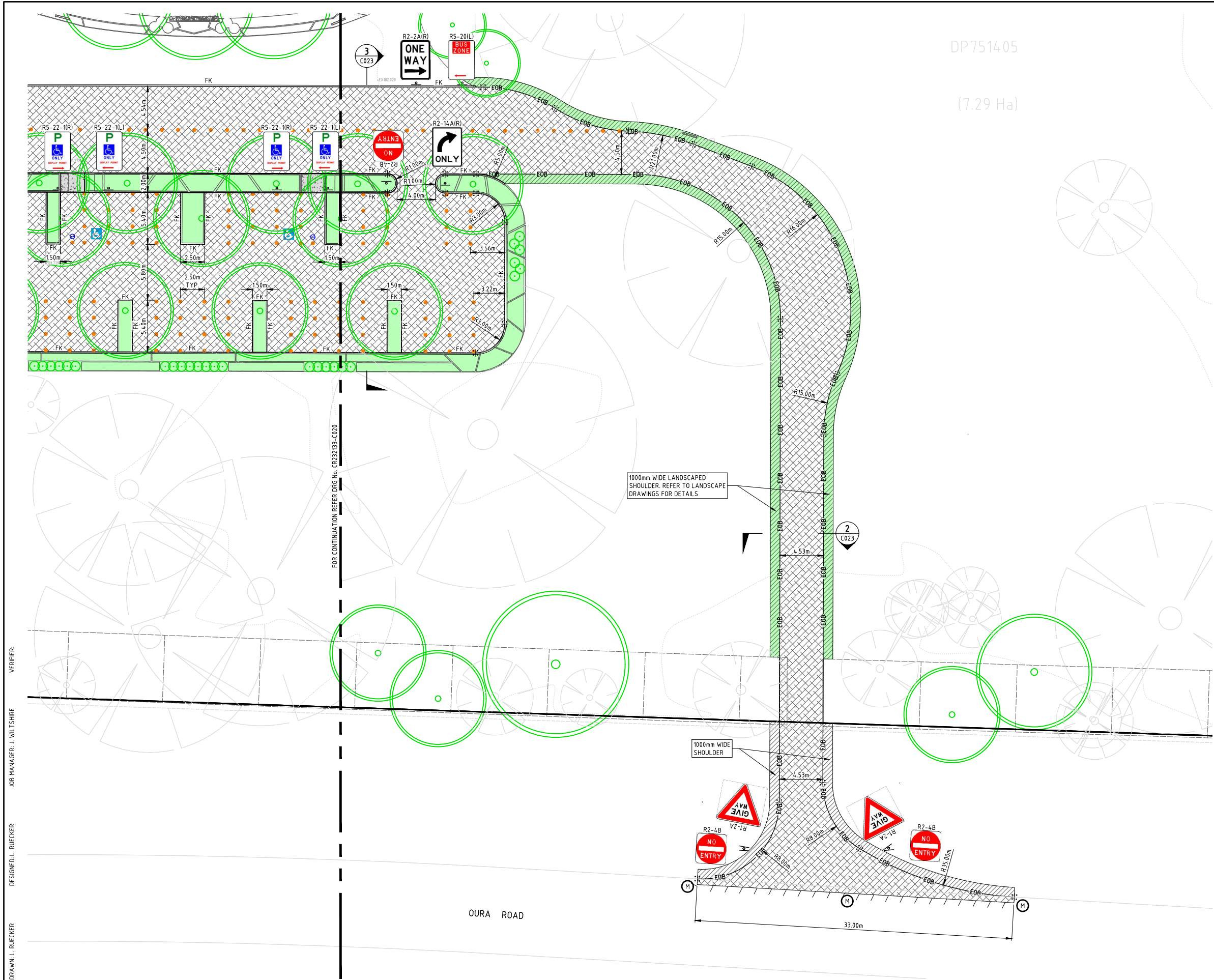
CR232133-00

REVISION

C020

2

DRAWING SHEET SIZE = A1



LEGEND

PROPOSED COMPACTED GRAVEL PAVEMENT

PROPOSED SHOULDER
REFER TO C012 FOR DETAILS

PROPOSED LANDSCAPED SHOULDER
REFER TO LANDSCAPE DRAWINGS FOR DETAILS

PROPOSED LANDSCAPE TREATMENT
REFER TO LANDSCAPE DRAWINGS FOR DETAILS

PROPOSED CONCRETE PAVEMENT
AS PER LANDSCAPE ARCHITECTS SPECIFICATIONS UNLESS NOTED OTHERWISE:
100mm N25 CONCRETE
25 QUARRY SCALPINGS
SUBGRADE COMPACTED TO 95% MMDD

FK
PROPOSED FLUSH KERB EDGE (REFER TO C005 FOR DETAILS)

PROPOSED BOLLARD (FOR ACCESSIBLE PARKING)

PROPOSED SIGNAGE

PROPOSED PAVEMENT MARKING
(SPIKE DOWN RAISED CERAMIC PAVEMENT MARKERS - 1.7m CTS)

EOB
PROPOSED EDGE OF TRAFFICABLE PAVEMENT

M
MATCH TO EXISTING PAVEMENT - TIE IN
(REFER TO C005 FOR DETAILS)

PROPOSED TREES
(REFER TO LANDSCAPE DRAWINGS FOR DETAILS)

EXISTING TREES

NEW CARPARK PARKING SCHEDULE
TO AS2890.1

USER CLASS	2
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SCALE 1:200 @ A1

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PROJECT

CIVIL WORKS
CAMP KURRAJONG
SCOUT FACILITY
WAGGA WAGGA NSW

DRAWING TITLE

CIVIL WORKS
ROAD AND CARPARK LAYOUT
AND DETAIL PLAN
SHEET 2 OF 4

DRAWING NUMBER

CR232133-00

REVISION

C021

DRAWING SHEET SIZE = A1

2

VERIFIER: J. WILTSHIRE
JOB MANAGER: J. WILTSHIRE
DESIGNED: L. RUECKER
DRAWN: L. RUECKER



LEGEND

PROPOSED COMPACTED GRAVEL PAVEMENT

PROPOSED SHOULDER
REFER TO C012 FOR DETAILS

PROPOSED LANDSCAPED SHOULDER
REFER TO LANDSCAPE DRAWINGS FOR DETAILS

PROPOSED LANDSCAPE TREATMENT
REFER TO LANDSCAPE DRAWINGS FOR DETAILS

PROPOSED CONCRETE PAVEMENT
AS PER LANDSCAPE ARCHITECTS SPECIFICATIONS UNLESS NOTED OTHERWISE:
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25 QUARRY SCALPINGS
SUBGRADE COMPACTED TO 95% MMD

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PROPOSED FLUSH KERB EDGE (REFER TO C005 FOR DETAILS)

PROPOSED BOLLARD (FOR ACCESSIBLE PARKING)

PROPOSED SIGNAGE

PROPOSED PAVEMENT MARKING
(SPIKE DOWN RAISED CERAMIC PAVEMENT MARKERS - 1.7m CTS)

EOB
PROPOSED EDGE OF TRAFFICABLE PAVEMENT

M
MATCH TO EXISTING PAVEMENT - TIE IN
(REFER TO C005 FOR DETAILS)

PROPOSED TREES
(REFER TO LANDSCAPE DRAWINGS FOR DETAILS)

EXISTING TREES

NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
1	DA SUBMISSION	LMR		JW	29.09.2023
2	DA SUBMISSION	LMR		JW	19.10.2023

CLIENT:

Adapt PM
DESIGN | BUILD | GROW

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ARCHITECT:

PMDL
ARCHITECTURE
INTERIORS
MASTERPLANNING

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0 2 4 6 8 10m
PLAN
SCALE 1:200 @ A1

Canberra
Level 6, 224 Bunda Street (PO Box 213) Canberra ACT 2608
Ph (02) 6285 1822 Fax (02) 6285 1863
Email canberra@northrop.com.au ABN 81 094 433 100

PROJECT

CIVIL WORKS
CAMP KURRAJONG
SCOUT FACILITY
WAGGA WAGGA NSW

DRAWING TITLE

CIVIL WORKS
ROAD AND CARPARK LAYOUT
AND DETAIL PLAN
SHEET 3 OF 4

JOB NUMBER

CR232133-00

DRAWING NUMBER

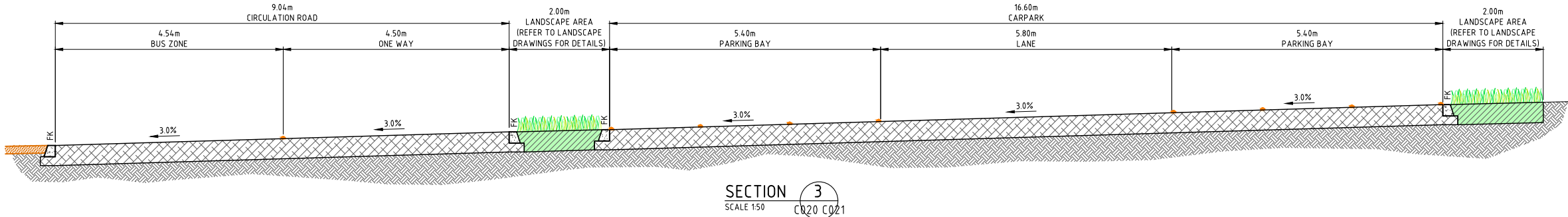
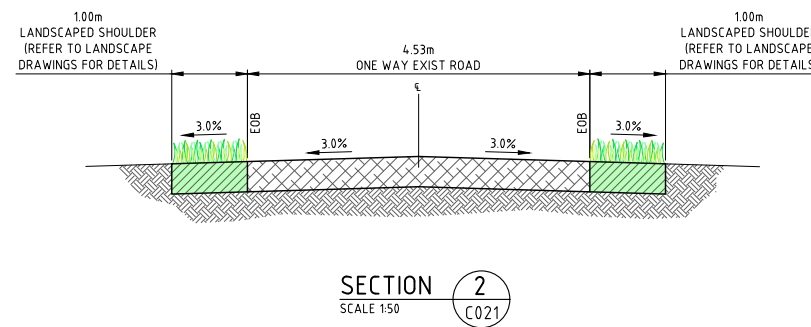
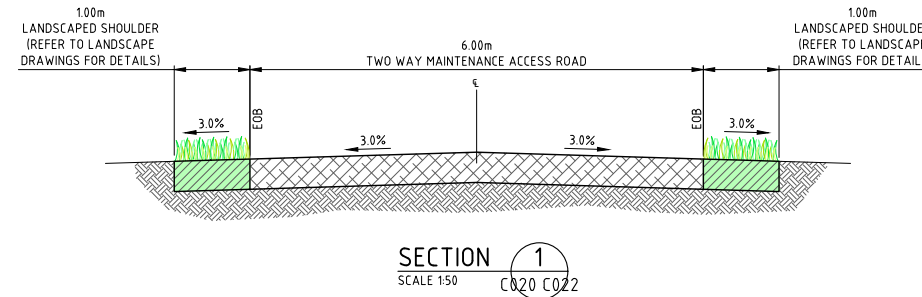
C022

REVISION

2

DRAWING SHEET SIZE = A1

VERIFIER: JOB MANAGER J. WILTSHIRE
DESIGNED L. RUECKER
DRAWN L. RUECKER



LEGEND	
	PROPOSED COMPACTED GRAVEL PAVEMENT
	PROPOSED SHOULDER REFER TO C012 FOR DETAILS
	PROPOSED LANDSCAPED SHOULDER REFER TO LANDSCAPE DRAWINGS FOR DETAILS
	PROPOSED LANDSCAPE TREATMENT REFER TO LANDSCAPE DRAWINGS FOR DETAILS
	PROPOSED CONCRETE PAVEMENT AS PER LANDSCAPE ARCHITECTS SPECIFICATIONS UNLESS NOTED OTHERWISE: 100mm N25 CONCRETE 25 QUARRY SCALPINGS SUBGRADE COMPACTED TO 95% MMD
	PROPOSED FLUSH KERB EDGE (REFER TO C005 FOR DETAILS)
	PROPOSED BOLLARD (FOR ACCESSIBLE PARKING)
	PROPOSED SIGNAGE
	PROPOSED PAVEMENT MARKING (SPIKE DOWN RAISED CERAMIC PAVEMENT MARKERS - 1.7m CTS)
	PROPOSED EDGE OF TRAFFICABLE PAVEMENT
	MATCH TO EXISTING PAVEMENT - TIE IN (REFER TO C005 FOR DETAILS)
	PROPOSED TREES (REFER TO LANDSCAPE DRAWINGS FOR DETAILS)
	EXISTING TREES

NEW CARPARK PARKING SCHEDULE TO AS2890.1	
USER CLASS	2
AISLE WIDTH	5.8m MINIMUM
OPERATIONAL (STAFF PARKING)	4 SPACES 2.5m x 5.4m
TOTAL SPACES	4



NOT FOR CONSTRUCTION

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CLIENT: **Adapt PM**
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0 2 4 6 8 10m PLAN
SCALE 1:200 @ A1

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Email canberra@northrop.com.au ABN 81 094 433 100

PROJECT
**CIVIL WORKS
CAMP KURRAJONG
SCOUT FACILITY
WAGGA WAGGA NSW**

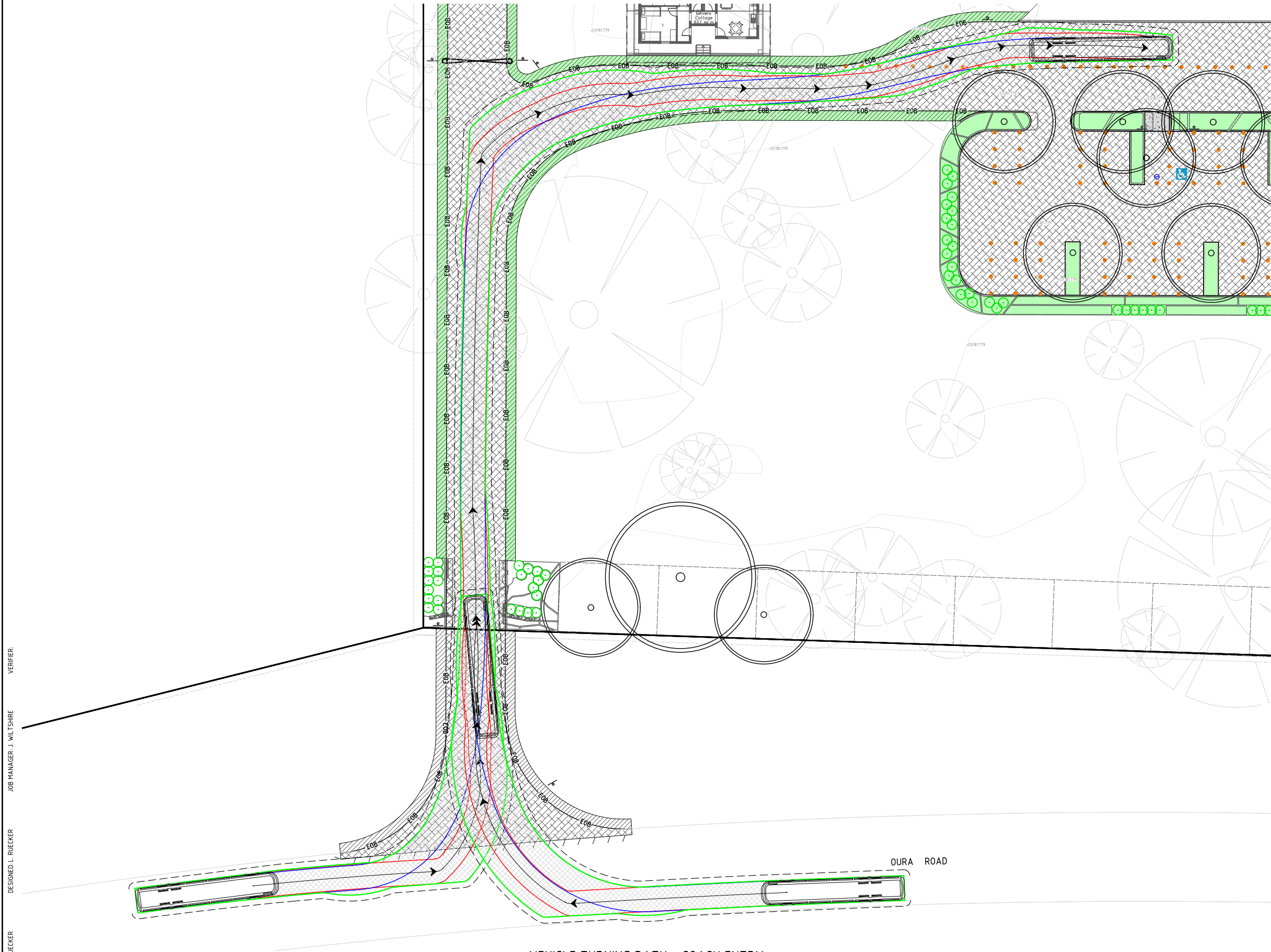
DRAWING TITLE
**CIVIL WORKS
ROAD AND CARPARK LAYOUT
AND DETAIL PLAN
SHEET 4 OF 4**

JOB NUMBER
CR232133-00

DRAWING NUMBER C023	REVISION 2
-------------------------------	----------------------

DRAWING SHEET SIZE = A1

VERIFIER:
JOB MANAGER: J. WILTSHIRE
DESIGNED: L. RUECKER
DRAWN: L. RUECKER



VEHICLE TURNING PATH - COACH ENTRY
SCALE 1:200 @ A1

LEGEND

- DENOTES FRONT WHEEL PATH
- DENOTES REAR WHEEL PATH
- DENOTES VEHICLE BODY OVER HANG
- DENOTES 600mm VEHICLE BODY OFFSET

14.50m

2.60m 8.20m 2.50m

COACH
NOT TO SCALE

WIDTH	2.50m
TRACK	2.50m
LOCK TO LOCK TIME	6.0s
STEERING ANGLE	44.3°

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
1	DA SUBMISSION	LMR		JW	29.09.2023
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ARCHITECT:

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0 2 4 6 8 10m

PLAN
SCALE 1:200 @ A1

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PROJECT

**CIVIL WORKS
CAMP KURRAJONG
SCOUT FACILITY
WAGGA WAGGA NSW**

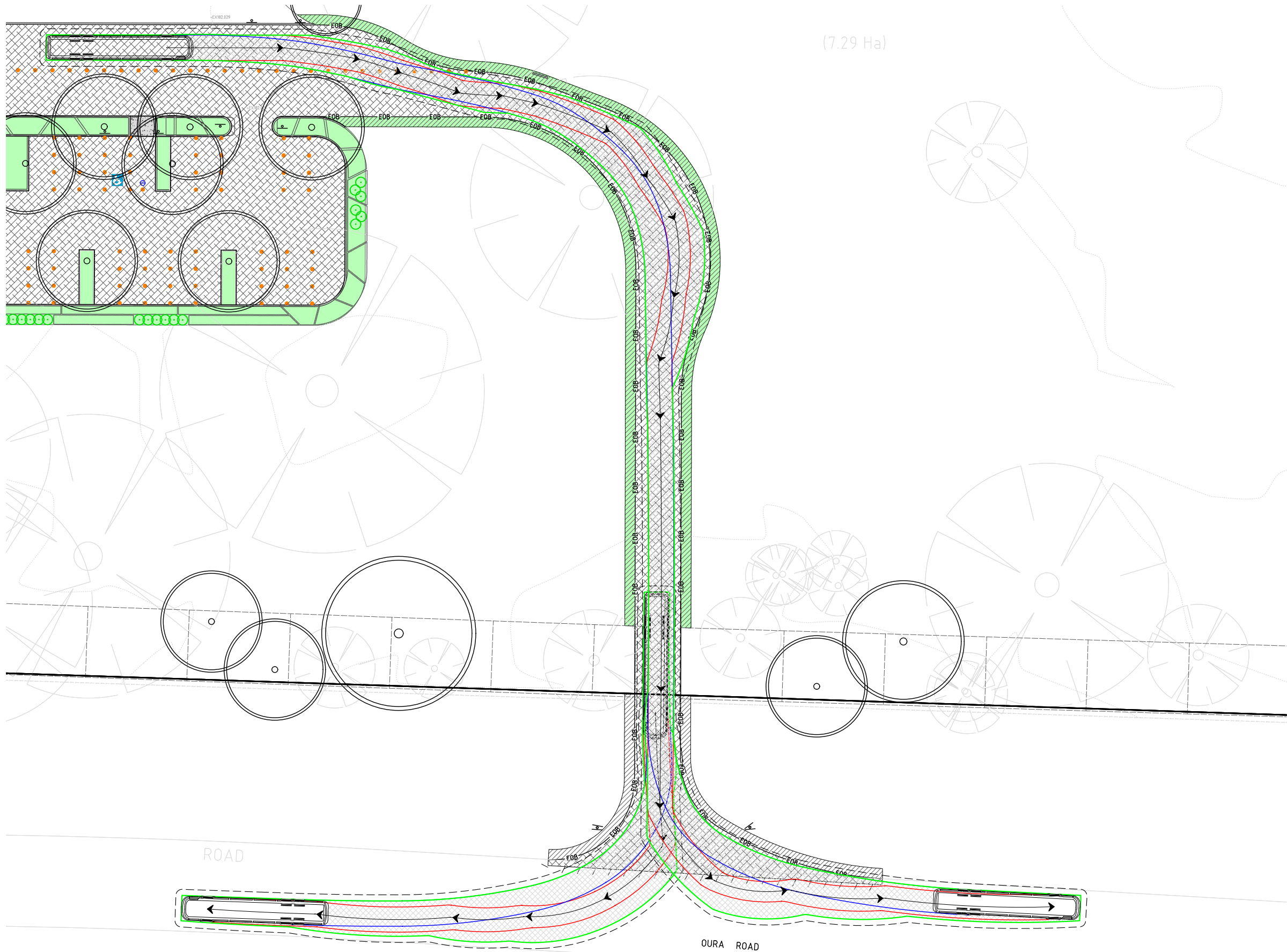
DRAWING TITLE

**CIVIL WORKS
VEHICLE TURNING PATHS
SHEET 1 OF 3**

JOB NUMBER
CR232133-00

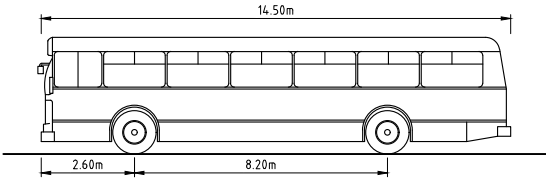
DRAWING NUMBER C030	REVISION 2
-------------------------------	----------------------

DRAWING SHEET SIZE = A1



LEGEND

DENOTES FRONT WHEEL PATH

DENOTES REAR WHEEL PATH

COACH
NOT TO SCALE

WIDTH	2.50m
TRACK	2.50m
LOCK TO LOCK TIME	6.0s
STEERING ANGLE	44.3°

VEHICLE TURNING PATH - COACH EXIT
SCALE 1:200 @ A1

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1	DA SUBMISSION	LMR		JW	29.09.2023
2	DA SUBMISSION	LMR		JW	19.10.2023

CLIENT:

Adapt PM

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0 2 4 6 8 10m

PLAN
SCALE 1:200 @ A1

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PROJECT

CIVIL WORKS
CAMP KURRAJONG
SCOUT FACILITY
WAGGA WAGGA NSW

DRAWING TITLE

CIVIL WORKS
VEHICLE TURNING PATHS
SHEET 2 OF 3

JOB NUMBER

CR232133-00

DRAWING NUMBER

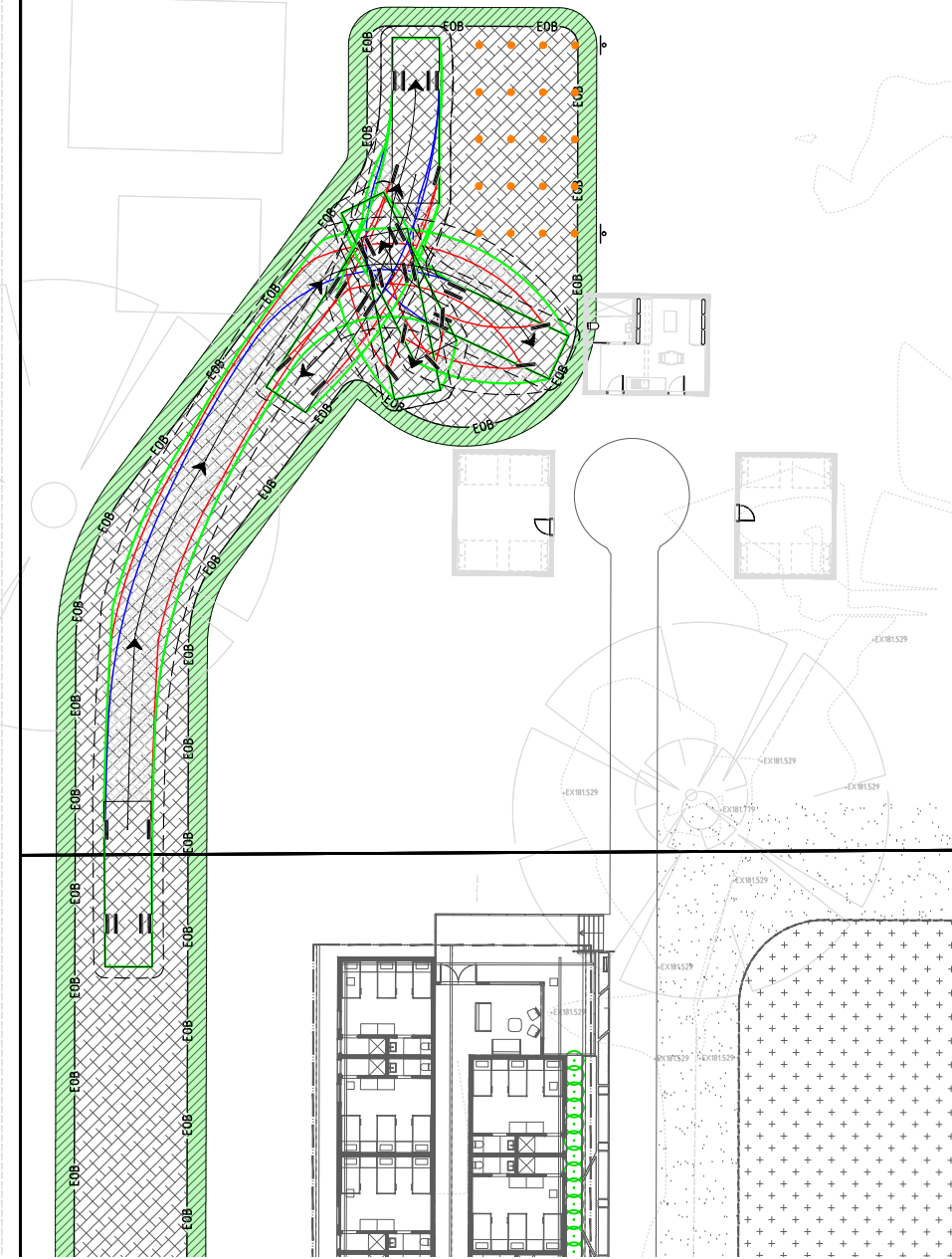
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REVISION

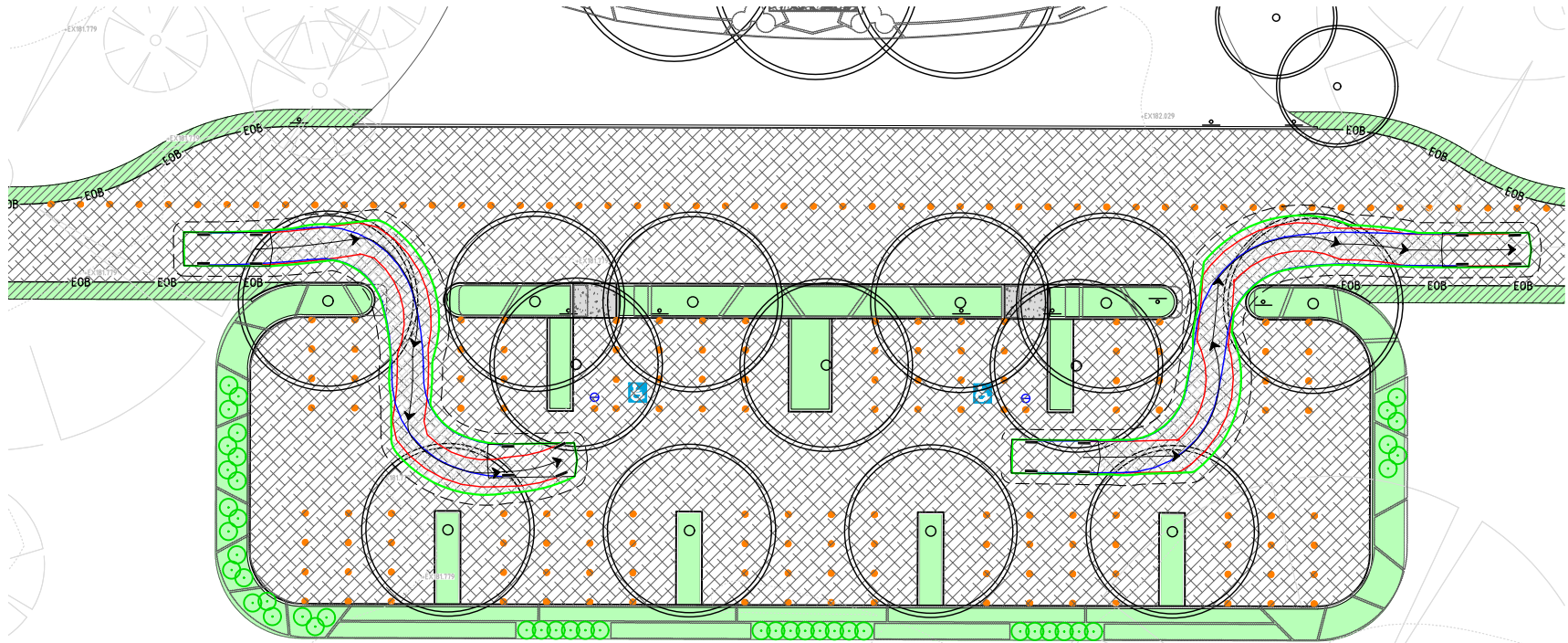
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DRAWING SHEET SIZE = A1

VERIFIER: J. WILTSHIRE
JOB MANAGER: J. WILTSHIRE
DESIGNED: L. RUECKER
DRAWN: L. RUECKER

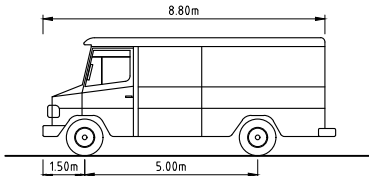


VEHICLE TURNING PATH - MAINTENANCE VEHICLE ACCESS (MEDIUM RIGID VEHICLE)
SCALE 1:200 @ A1



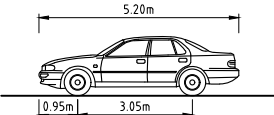
VEHICLE TURNING PATH - CARPARK ACCESS AND EXIT (B99)
SCALE 1:200 @ A1

LEGEND	
	DENOTES FRONT WHEEL PATH
	DENOTES REAR WHEEL PATH
	DENOTES VEHICLE BODY OVER HANG
	DENOTES 600mm VEHICLE BODY OFFSET



AS2890.2 - MEDIUM RIGID VEHICLE
NOT TO SCALE

WIDTH	2.50m
TRACK	2.50m
LOCK TO LOCK TIME	6.0s
STEERING ANGLE	26.2°



AS2890.1 - B99 CAR
NOT TO SCALE

WIDTH	1.94m
TRACK	1.84m
LOCK TO LOCK TIME	6.0s
STEERING ANGLE	33.9°

NOT FOR CONSTRUCTION

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1	DA SUBMISSION	LMR		JW	29.09.2023
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ARCHITECT: **PM DL** ARCHITECTURE INTERIORS MASTERPLANNING

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0 2 4 6 8 10m PLAN SCALE 1:200 @ A1

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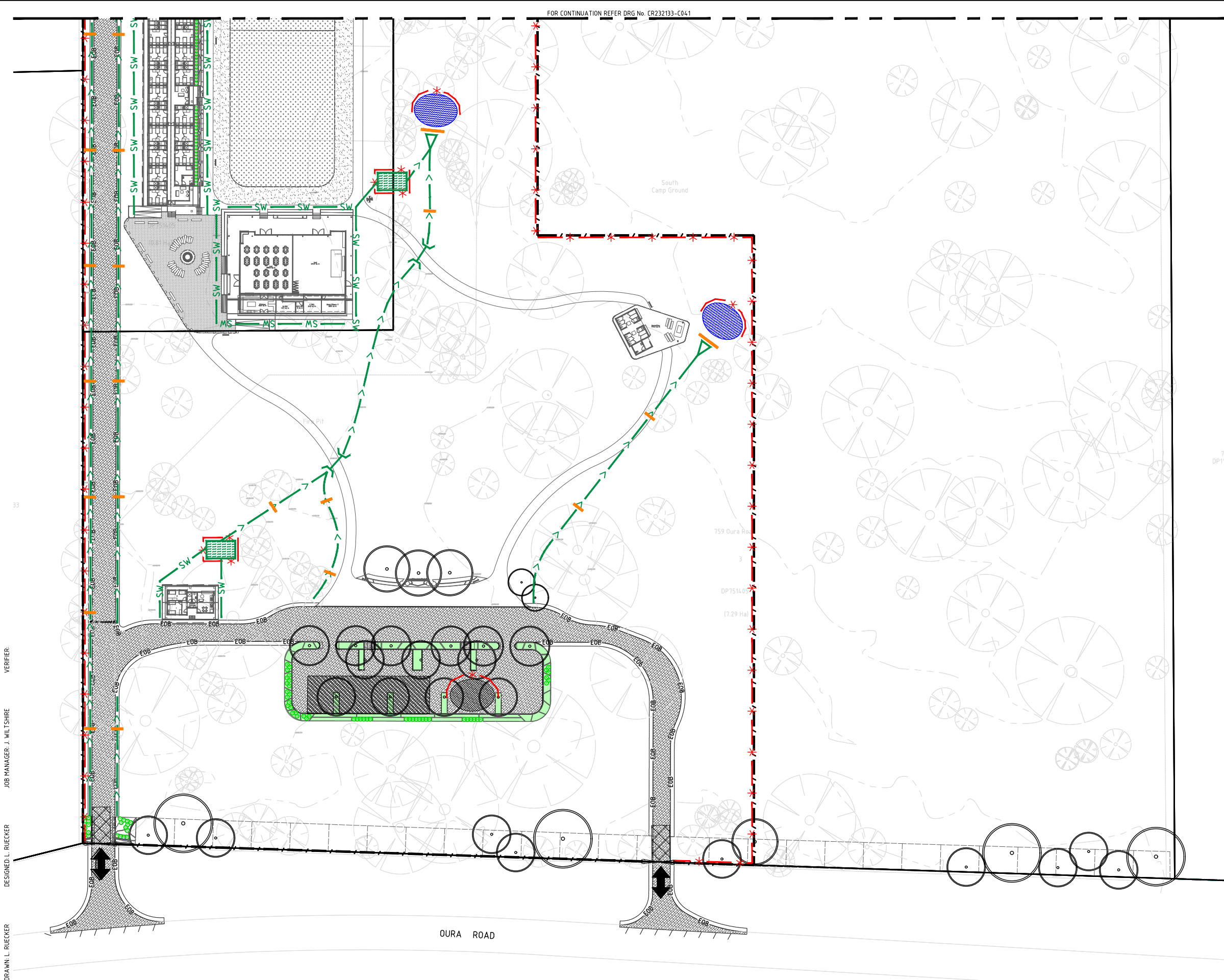
PROJECT: **CIVIL WORKS
CAMP KURRAJONG
SCOUT FACILITY
WAGGA WAGGA NSW**

DRAWING TITLE: **CIVIL WORKS
VEHICLE TURNING PATHS
SHEET 3 OF 3**

JOB NUMBER: **CR232133-00**

DRAWING NUMBER: C032	REVISION: 2
-----------------------------	--------------------

DRAWING SHEET SIZE = A1



LEGEND

EXISTING MINOR CONTOUR (0.25m INTERVAL)

SITE FENCING (1.8m HIGH STEEL MESH
TEMPORARY FENCE)

⋈

GATE

SEDIMENT FENCE

SW

STORMWATER PIPE

REBC END WALL

⌘

GRATED PIT

SWALE NOMINALLY 1.6m WIDE, 40mm DEEP,
MINIMUM FALL 1.0%

▽

SWALE SPREADER

⌘

SOAK AWAY PIT

▨

SITE COMPOUND

⌘

STABILISED ACCESS

↔

SITE ACCESS

○

GEOTEXTILE INLET FILTER TRAPS

●

NOMINAL STOCKPILE LOCATION

●

NOMINAL SEDIMENT POND LOCATION
(TO BE CONFIRMED ONSITE)

STRAW / HAY BALES

DRAWN L. RUECKER
DESIGNED L. RUECKER
JOB MANAGER J. WILTSHIRE
VERIFIER:

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
1	DA SUBMISSION	LMR		JW	29.09.2023
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CLIENT:

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ARCHITECT:

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PLAN
SCALE 1:500 @ A1

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PROJECT

CIVIL WORKS
CAMP KURRAJONG
SCOUT FACILITY
WAGGA WAGGA NSW

DRAWING TITLE

CIVIL WORKS
CONCEPT EROSION AND
SEDIMENT CONTROL PLAN
SHEET 1 OF 2

DRAWING NUMBER

REVISION

CR232133-00

C040

2

DRAWING SHEET SIZE = A1

NOT FOR CONSTRUCTION

7003
DP1069230North
Camp Ground
7004
DP1069230
(5.91 Ha)

FOR CONTINUATION REFER DRG No. CR232133-C040

LEGEND

	EXISTING MINOR CONTOUR (0.25m INTERVAL)
	SITE FENCING (1.8m HIGH STEEL MESH TEMPORARY FENCE)
	GATE
	SEDIMENT FENCE
	STORMWATER PIPE
	REBC END WALL
	GRATED PIT
	SWALE NOMINALLY 1.6m WIDE, 40mm DEEP, MINIMUM FALL 1.0%
	SWALE SPREADER
	SOAK AWAY PIT
	SITE COMPOUND
	STABILISED ACCESS
	SITE ACCESS
	GEOTEXTILE INLET FILTER TRAPS
	NOMINAL STOCKPILE LOCATION
	NOMINAL SEDIMENT POND LOCATION (TO BE CONFIRMED ONSITE)
	STRAW / HAY BALES

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REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
1	DA SUBMISSION	LMR		JW	29.09.2023
2	DA SUBMISSION	LMR		JW	19.10.2023

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	PLAN SCALE 1:500 @ A1

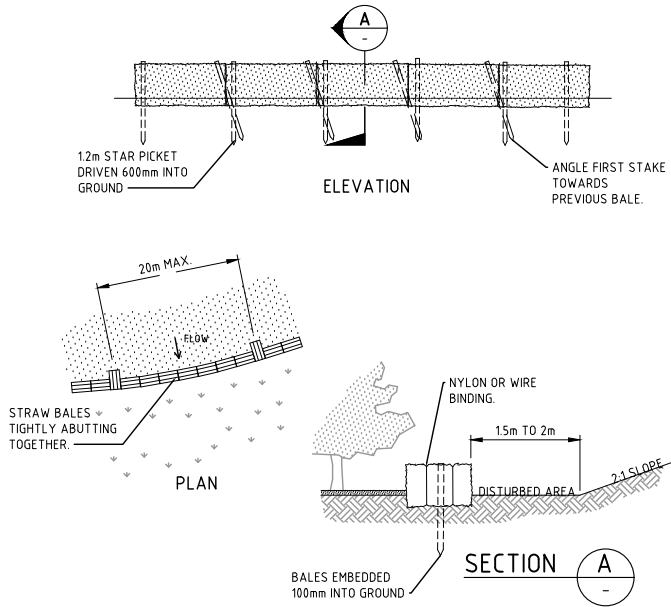
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PROJECT CIVIL WORKS CAMP KURRAJONG SCOUT FACILITY WAGGA WAGGA NSW

DRAWING TITLE CIVIL WORKS CONCEPT EROSION AND SEDIMENT CONTROL PLAN SHEET 2 OF 2
--

JOB NUMBER CR232133-00
DRAWING NUMBER C041
REVISION 2
DRAWING SHEET SIZE = A1

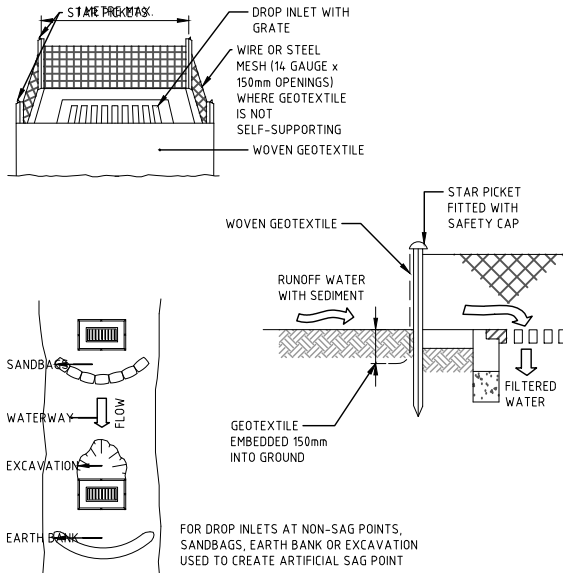
VERIFIER: J. WILTSHIRE
JOB MANAGER: J. WILTSHIRE
DESIGNED: L. RUECKER
DRAWN: L. RUECKER



CONSTRUCTION NOTES

1. CONSTRUCT THE STRAW BALE FILTER AS CLOSE AS POSSIBLE TO BEING PARALLEL TO THE CONTOURS OF THE SITE.
2. PLACE BALES LENGTHWISE IN A ROW WITH ENDS TIGHTLY ABUTTING. USE STRAW TO FILL ANY GAPS BETWEEN BALES. STRAWS ARE TO BE PLACED PARALLEL TO GROUND.
3. ENSURE THAT THE MAXIMUM HEIGHT OF THE FILTER IS ONE BALE.
4. EMBED EACH BALE IN THE GROUND 75mm TO 100mm AND ANCHOR WITH TWO 12 METRE STAR PICKETS OR STAKES. ANGLE THE FIRST STAR PICKET OR STAKE IN EACH BALE TOWARDS THE PREVIOUSLY LAID BALE. DRIVE THEM 600mm INTO THE GROUND AND, IF POSSIBLE, FLUSH WITH THE TOP OF THE BALES. WHERE STAR PICKETS ARE USED AND THEY PROTRUDE ABOVE THE BALES, ENSURE THEY ARE FITTED WITH SAFETY CAPS.
5. WHERE A STRAW BALE FILTER IS CONSTRUCTED DOWNSLOPE FROM A DISTURBED BATTER, ENSURE THE BALES ARE PLACED 1 TO 2 METRES DOWNSLOPE FROM THE TOE.
6. ESTABLISH A MAINTENANCE PROGRAM THAT ENSURES THE INTEGRITY OF THE BALES IS RETAINED - THEY COULD REQUIRE REPLACEMENT EACH TWO TO FOUR MONTHS.

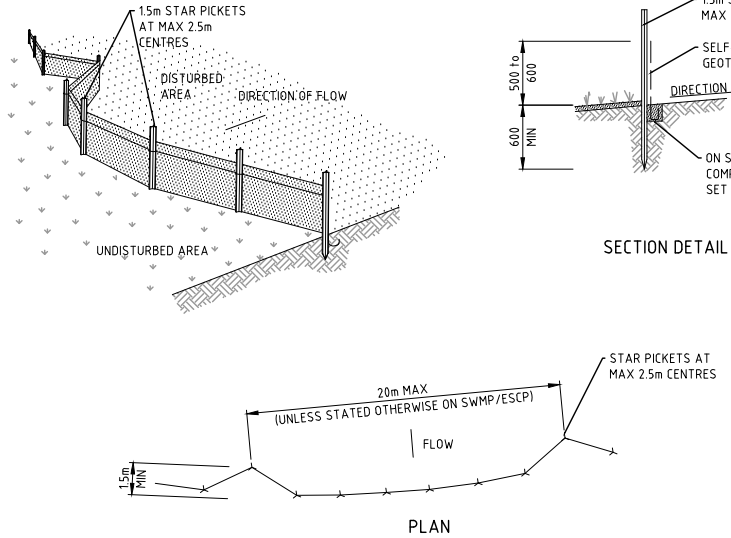
STRAW BALE FILTER



CONSTRUCTION NOTES

1. FABRICATE A SEDIMENT BARRIER MADE FROM GEOTEXTILE OR STRAW BALES.
2. FOLLOW STANDARD DRAWING 6-7 AND STANDARD DRAWING 6-8 FOR INSTALLATION PROCEDURES FOR THE STRAW BALES OR GEOTEXTILE. REDUCE THE PICKET SPACING TO 1 METRE CENTRES.
3. IN WATERWAYS, ARTIFICIAL SAG POINTS CAN BE CREATED WITH SANDBAGS OR EARTH BANKS AS SHOWN IN THE DRAWING.
4. DO NOT COVER THE INLET WITH GEOTEXTILE UNLESS THE DESIGN IS ADEQUATE TO ALLOW FOR ALL WATERS TO BYPASS IT.

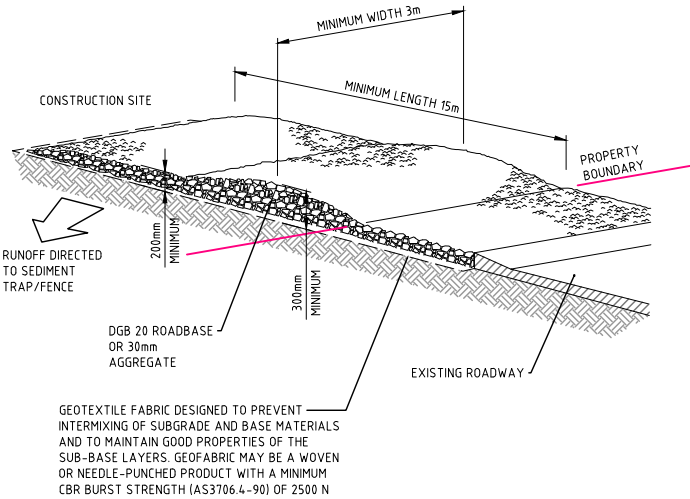
GEOTEXTILE INLET FILTER TRAPS



CONSTRUCTION NOTES

1. CONSTRUCT SEDIMENT FENCES AS CLOSE AS POSSIBLE TO BEING PARALLEL TO THE CONTOURS OF THE SITE, BUT WITH SMALL RETURNS AS SHOWN IN THE DRAWING TO LIMIT THE CATCHMENT AREA OF ANY ONE SECTION. THE CATCHMENT AREA SHOULD BE SMALL ENOUGH TO LIMIT WATER FLOW IF CONCENTRATED AT ONE POINT TO 50 LITRES PER SECOND IN THE DESIGN STORM EVENT, USUALLY THE 10-YEAR EVENT.
2. CUT A 150mm DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE FOR THE BOTTOM OF THE FABRIC TO BE ENTRENCHED.
3. DRIVE 15 METRE LONG STAR PICKETS INTO GROUND AT 2.5 METRE INTERVALS (MAX) AT THE DOWNSLOPE EDGE OF THE TRENCH. ENSURE ANY STAR PICKETS ARE FITTED WITH SAFETY CAPS.
4. FIX SELF-SUPPORTING GEOTEXTILE TO THE UPSLOPE SIDE OF THE POSTS ENSURING IT GOES TO THE BASE OF THE TRENCH. FIX THE GEOTEXTILE WITH WIRE TIES OR AS RECOMMENDED BY THE MANUFACTURER. ONLY USE GEOTEXTILE SPECIFICALLY PRODUCED FOR SEDIMENT FENCING. THE USE OF SHADE CLOTH FOR THIS PURPOSE IS NOT SATISFACTORY.
5. JOIN SECTIONS OF FABRIC AT A SUPPORT POST WITH A 150mm OVERLAP.
6. BACKFILL THE TRENCH OVER THE BASE OF THE FABRIC AND COMPACT IT THOROUGHLY OVER THE GEOTEXTILE.

SEDIMENT FENCE



CONSTRUCTION NOTES

1. STRIP THE TOPSOIL, LEVEL THE SITE AND COMPACT THE SUBGRADE.
2. COVER THE AREA WITH NEEDLE-PUNCHED GEOTEXTILE.
3. CONSTRUCT A 200mm THICK PAD OVER THE GEOTEXTILE USING ROAD BASE OR 30mm AGGREGATE.
4. ENSURE THE STRUCTURE IS AT LEAST 15 METRES LONG OR TO BUILDING ALIGNMENT AND AT LEAST 3 METRES WIDE.
5. WHERE A SEDIMENT FENCE JOINS ONTO THE STABILISED ACCESS, CONSTRUCT A HUMP IN THE STABILISED ACCESS TO DIVERT WATER TO THE SEDIMENT FENCE.

STABILISED SITE ACCESS

CONSTRUCTION SEQUENCE

1. INSTALL STORMWATER FILTER SOCKS
2. CONSTRUCT STABILISED SITE ACCESS
3. INSTALL SEDIMENT FENCING
4. CONSTRUCT STRAW / HAY BALE CONTROLS
5. CONSTRUCT SEDIMENT BASINS
6. INSTALL DIVERSION DRAINS AND OTHER REQUIRED MEASURES TO DIRECT FLOW TO BASINS OR TO BYPASS SITE.
7. STRIP TOPSOIL AS REQUIRED
8. UNDERTAKE BULK EARTHWORKS
9. INSTALL SEDIMENT CONTROLS AS REQUIRED AROUND NEW STORMWATER INFRASTRUCTURE
10. PROGRESSIVELY REHABILITATE SITE
11. REMOVE SEDIMENT CONTROLS ONCE SITE IS STABILISED

SEDIMENT BASIN NOTES

1. PRIOR TO ANY FORECAST WEATHER EVENT, LIKELY TO RESULT IN SEDIMENT LADEN RUNOFF ON THE SITE, ANY EXISTING DETENTION BASINS/TRAPS SHALL BE DEWATERED TO PROVIDE SUFFICIENT CAPACITY TO CAPTURE SEDIMENT LADEN FROM THE SITE.
2. ANY SEDIMENT LADEN WATER CAPTURED ON-SITE MUST BE TREATED TO ENSURE IT WILL ACHIEVE NSW EPS WATER QUALITY OBJECTIVE PRIOR TO ITS RELEASE FROM SITE. A SAMPLE OF THE RELEASED TREATED WATER MUST BE KEPT ON-SITE IN A CLEAR CONTAINER WITH THE SAMPLE DATE RECORDED.
3. NO ALUMINUM BASED PRODUCTS MAY BE USED TO TREAT TURBID WATER (FLOCCULATING/COAGULANTS) ON-SITE WITHOUT THE PRIOR WRITTEN APPROVAL FROM THE APPROPRIATE SNOWY VALLEYS COUNCIL PERSONNEL.
4. THE CHEMICAL/AGENT (FLOCCULATING/COAGULANTS) USED IN TYPE D AND TYPE F BASINS TO TREAT TURBID WATER CAPTURED IN THE BASIN MUST BE APPLIED IN CONCENTRATIONS SUFFICIENT TO ACHIEVE SNOWY VALLEYS COUNCIL WATER QUALITY OBJECTIVES (TSS < 50mg/L, TURBIDITY < 60 NTU, 6.5 < pH < 8.5) WITHIN THE 5 DAY RAINFALL DEPTH USED TO CALCULATE THE CAPACITY OF THE BASIN, AFTER A RAINFALL EVENT.
5. ALL MANUFACTURERS INSTRUCTIONS MUST BE FOLLOWED FOR THE USE OF ANY CHEMICALS/AGENTS USED ON-SITE, EXCEPT WHERE APPROVED BY THE RESPONSIBLE PERSON OR AN APPROPRIATE COUNCIL OFFICER.
6. SUFFICIENT QUANTITIES OF CHEMICALS/AGENTS TO TREAT TURBID WATER (FLOCCULATING/COAGULANTS) MUST BE PLACED SUCH THAT WATER ENTERING THE BASIN/SEDIMENT TRAP MIXES WITH THE CHEMICALS/AGENTS AND IS CARRIED INTO THE BASIN/TRAP.
7. ANY BASIN MUST BE DEWATERED AS SOON AS PRACTICAL, ONCE WATER CAPTURED IN THE BASIN ACHIEVES SNOWY VALLEYS COUNCIL WATER QUALITY OBJECTIVES.
8. INSPECT THE SEDIMENT BASINS AFTER EACH RAINFALL EVENT AND/OR WEEKLY. ENSURE THAT ALL SEDIMENT IS REMOVED ONCE THE SEDIMENT STORAGE ZONE IS FULL. ENSURE THAT OUTLET AND EMERGENCY SPILLWAY WORKS ARE MAINTAINED IN A FULLY OPERATIONAL CONDITION AT ALL TIMES.

POLLUTION, EROSION & SEDIMENT CONTROL

INSPECTIONS AND MAINTENANCE SCHEDULE

- RECORD MAINTENANCE ACTIVITIES AND DETAILS TO PROVIDE TO THE SNOWY VALLEYS COUNCIL.
1. DAILY:
 - CHUTES, BARRELS, WHEELBARROWS AND OTHER EQUIPMENT TO BE RINSED IN THE SITE WASH-DOWN AREA.
 - REMOVE ANY SEDIMENT FROM PUBLIC ROADS ADJACENT TO THE WORK AREA. DO NOT WASH INTO THE STORMWATER SYSTEM.
 - SUPPRESS DUST BY REGULAR SPRAYING OF WATER AND COVERING AND SECURING VEHICLE LOADS ENTERING/EXITING SITE.
 - MAINTAIN AND INSPECT POLLUTION CONTROL MEASURES DURING CONSTRUCTION AND UNTIL FULL STABILISATION. REPAIR AND REINSTATE WORKS AS NEEDED.
 2. MONTHLY:
 - MAINTAIN AND INSPECT STABILISED SITE ACCESS POINTS.
 - MAINTAIN AND INSPECT HAY BALES, REPLACE AS REQUIRED IF DEGRADED OR DAMAGED.

AIR QUALITY

1. SUPPRESS DUST BY THE INCLUDING FOLLOWING METHODS WHERE APPLICABLE:
 - STAGE WORKS TO LIMIT THE EXTENT OF EXPOSED AND UNPROTECTED AREAS.
 - REGULAR SPRAYING OF WATER
 - COVER AND SECURE VEHICLE LOADS ENTERING/EXITING SITE
 - USE AN ENVIRONMENTALLY FRIENDLY CHEMICAL SPRAY TO BIND SOIL TOGETHER THUS STABILISING UNUSED SOIL
 - RESTRICT SPEED OF VEHICLES ONSITE
 - COVER STOCKPILES TO PROTECT FROM THE WIND
2. IMPLEMENT MEASURES TO LIMIT AIR POLLUTION BY VEHICLES AND PLANT WORKING ON OR PASSING THROUGH THE SITE.
3. MAINTAIN POLLUTION CONTROL MEASURES DURING CONSTRUCTION AND UNTIL FULL STABILISATION. ROUTINELY INSPECT EACH WEEK AND AFTER SIGNIFICANT RAINFALL EVENTS. REPAIR AND REINSTATE WORKS AS NEEDED TO MAINTAIN PROTECTION. RECORD MAINTENANCE ACTIVITIES AND DETAILS AND PROVIDE TO EPA FOR INSPECTION WHEN REQUESTED.

FIRE

1. BURNING OF WASTE MATERIALS MUST NOT BE UNDERTAKEN.
2. FIRE MAY BE PERMITTED FOR GENERAL HEATING PURPOSES IF IN A BRAZIER OR CONSTRUCTED FIREPLACE, USING SEASONED, UNTREATED TIMBER.

NOTES

1. ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH RELEVANT ORDINANCES AND REGULATIONS. NOTE IN PARTICULAR THE REQUIREMENTS OF LANDCOMS MANAGING URBAN STORMWATER, SOILS AND CONSTRUCTION (THE 'BLUE BOOK').
2. INSTALL SEDIMENT PROTECTION FILTERS ON ALL NEW AND EXISTING STORMWATER INLET PITS IN ACCORDANCE WITH EITHER THE MESH AND GRAVEL INLET FILTER DETAIL SD6-11 OR THE GEOTEXTILE INLET FILTER DETAIL SD6-12 OF THE 'BLUE BOOK'.
3. ESTABLISH ALL REQUIRED SEDIMENT FENCES IN ACCORDANCE WITH DETAIL SD6-8 OF THE 'BLUE BOOK'.
4. INSTALL SEDIMENT FENCING AROUND INDIVIDUAL BUILDING ZONE/AREAS AS REQUIRED AND AS DIRECTED BY THE SUPERINTENDENT.
5. ALL TRENCHES INCLUDING ALL SERVICE TRENCHES AND SWALE EXCAVATION SHALL BE SIDE-CAST TO THE HIGH SIDE AND CLOSED AT THE END OF EACH DAY WORK.
6. THE CONTRACTOR SHALL ENSURE THAT ALL VEGETATION (TREE, SHRUB AND GROUND COVER) WHICH IS TO BE RETAINED SHALL BE PROTECTED DURING THE DURATION OF CONSTRUCTION. REFER ARCHITECTS PLANS FOR TREES TO BE KEPT.
7. ALL VEGETATION TO BE REMOVED SHALL BE MULCHED ONSITE AND SPREAD/STOCKPILED AS DIRECTED BY THE SUPERINTENDENT.
8. STRIP TOPSOIL IN AREAS DESIGNATED FOR STRIPPING AND STOCKPILE FOR RE-USE AS REQUIRED. ANY SURPLUS MATERIAL SHALL BE REMOVED FROM SITE AND DISPOSED OF IN ACCORDANCE WITH RELEVANT AUTHORITY GUIDELINES.
9. CONSTRUCT AND MAINTAIN ALL MATERIAL STOCKPILES IN ACCORDANCE WITH DETAIL SD4-1 OF THE 'BLUE BOOK' (INCLUDING CUT-OFF SWALES TO THE HIGH SIDE AND SEDIMENT FENCES TO THE LOW SIDE).
10. ENSURE STOCKPILES DO NOT EXCEED 2.0m HIGH. PROVIDE WIND AND RAIN EROSION PROTECTION AS REQUIRED IN ACCORDANCE WITH THE 'BLUE BOOK'.
11. PROVIDE WATER TRUCKS OR SPRINKLER DEVICES DURING CONSTRUCTION AS REQUIRED TO SUPPRESS DUST.
12. ONCE CUT/FILL OPERATIONS HAVE BEEN FINALISED ALL DISTURBED AREAS THAT ARE NOT BEING WORKED ON SHALL BE RE-VEGETATED AS SOON AS PRACTICAL.
13. SITE WON TOPSOIL SHALL BE PLACED ON ALL PERMANENT BATTER SLOPES AND GRASS SEED OR PLANTED AND MULCHED TO LANDSCAPE ARCHITECTS REQUIREMENTS.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING A DETAILED WRITTEN RECORD OF ALL EROSION AND SEDIMENT CONTROLS ON-SITE DURING THE CONSTRUCTION PERIOD. THIS RECORD SHALL BE UPDATED ON A DAILY BASIS AND SHALL CONTAIN DETAILS ON THE CONDITION OF CONTROLS AND ANY/ALL MAINTENANCE, CLEANING AND BREACHES. THIS RECORD SHALL BE KEPT ON-SITE AT ALL TIMES AND SHALL BE MADE AVAILABLE FOR INSPECTION BY THE PRINCIPAL CERTIFYING AUTHORITY AND THE SUPERINTENDENT DURING NORMAL WORKING HOURS.
15. AT THE END OF EACH DAYS WORK, THE CONTRACTOR SHALL TAKE THE APPROPRIATE MEASURES TO STABILISE THE EXPOSED EARTHWORKS, SUCH AS:
 - CLOSING ALL TRENCHES
 - INSTALLING TEMPORARY DIVERSION MULCH BUNDS TO THE HIGH SIDE OF EXPOSED WORKS
 - INSTALLING TEMPORARY SILT FENCES AND/OR STAKED BALES TO DOWN HILL SIDE OF EXPOSED WORKS.

NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
1	DA SUBMISSION	LMR		JW	29.09.2023
2	DA SUBMISSION	LMR		JW	19.10.2023

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PROJECT CIVIL WORKS CAMP KURRAJONG SCOUT FACILITY WAGGA WAGGA NSW

DRAWING TITLE CIVIL WORKS CONCEPT EROSION AND SEDIMENT CONTROL DETAILS AND NOTES
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