

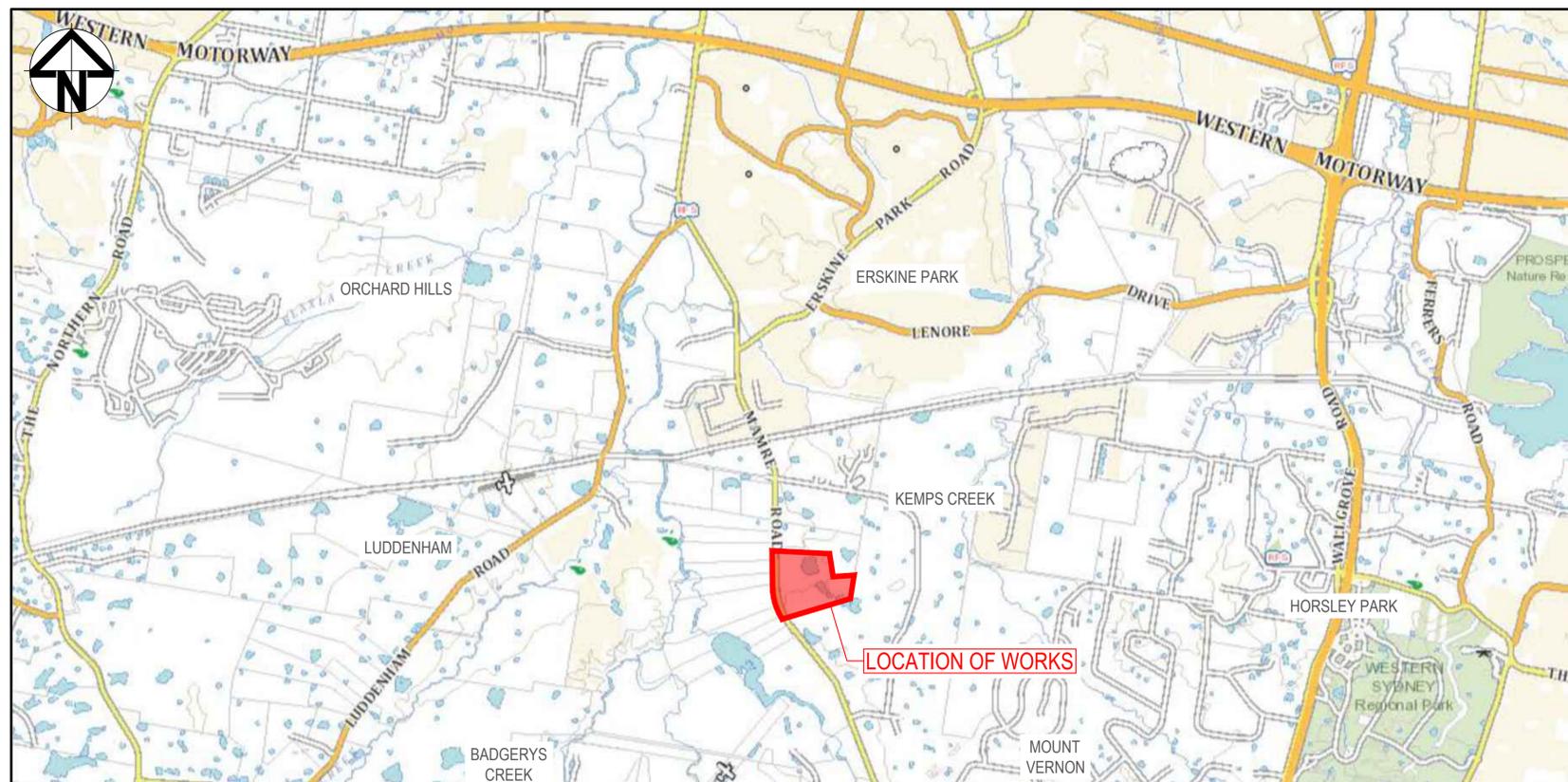
ASPECT INDUSTRIAL ESTATE

STAGE 1B CIVIL WORKS PACKAGE

SUBDIVISION WORKS CERTIFICATE

788-882 MAMRE ROAD, KEMPS CREEK

SSD-10448



THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE ITT & RELEVANT COUNCIL CONSTRUCTION SPECIFICATIONS, AUSTRALIAN STANDARDS & AUTHORITY GUIDELINES

LOCALITY PLAN
NOT TO SCALE

Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22
A	ISSUED FOR SWC APPROVAL	20-10-22

Bar Scales

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Client



Scales

Grid	GDA2020	Drawn	JB/MH
Height Datum	AHD	Designed	JB/MH
		Checked	DS
		Approved	DS



Project

**ASPECT INDUSTRIAL ESTATE
MAMRE ROAD,
KEMPS CREEK
STAGE 1B**

Title

**COVER SHEET AND
LOCALITY PLAN**

Civil Engineers and Project Managers



Level 7, 153 Walker Street
North Sydney NSW 2060
ABN 96 130 882 405
Tel: 02 9439 1777
Fax: 02 9923 1055
www.atl.net.au
info@atl.net.au

Status	FOR CONSTRUCTION	A1
Project - Drawing No.	18-596-C8000	Issue
		1

DRAWING LIST	
DRAWING No.	DRAWING TITLE
18-596-C8000	COVER SHEET AND LOCALITY PLAN
18-596-C8001	DRAWING LIST
18-596-C8002	NOTES AND LEGENDS SHEET SHEET 1
18-596-C8003	NOTES AND LEGENDS SHEET SHEET 2
18-596-C8005	GENERAL ARRANGEMENT PLAN
18-596-C8010	TYPICAL SECTIONS
18-596-C8012	TYPICAL ROAD SECTIONS
18-596-C8015	TYPICAL DETAILS SHEET 1
18-596-C8016	TYPICAL DETAILS SHEET 2
18-596-C8017	TYPICAL DETAILS SHEET 3
18-596-C8050	CONTROL LINE SETOUT PLAN
18-596-C8101	ROADWORKS AND STORMWATER DRAINAGE SHEET 1
18-596-C8102	ROADWORKS AND STORMWATER DRAINAGE SHEET 2
18-596-C8103	ROADWORKS AND STORMWATER DRAINAGE SHEET 3
18-596-C8104	ROADWORKS AND STORMWATER DRAINAGE SHEET 4
18-596-C8105	ROADWORKS AND STORMWATER DRAINAGE SHEET 5
18-596-C8106	ROADWORKS AND STORMWATER DRAINAGE SHEET 6
18-596-C8107	ROADWORKS AND STORMWATER DRAINAGE SHEET 7
18-596-C8121	INTERSECTION PLAN SHEET 1
18-596-C8122	INTERSECTION PLAN SHEET 2
18-596-C8123	INTERSECTION PLAN SHEET 3
18-596-C8124	INTERSECTION PLAN SHEET 4
18-596-C8125	INTERSECTION PLAN SHEET 5
18-596-C8126	INTERSECTION PLAN SHEET 6
18-596-C8131	ROAD LONGITUDINAL SECTION SHEET 1
18-596-C8132	ROAD LONGITUDINAL SECTION SHEET 2
18-596-C8201	BULK EARTHWORKS CUT/FILL PLAN
18-596-C8301	PAVEMENT MARKING AND SIGNPOSTING
18-596-C8321	PAVEMENT PLAN
18-596-C8401	STORMWATER DRAINAGE LONGITUDINAL SECTION SHEET 1
18-596-C8402	STORMWATER DRAINAGE LONGITUDINAL SECTION SHEET 2
18-596-C8403	STORMWATER DRAINAGE LONGITUDINAL SECTION SHEET 3
18-596-C8404	STORMWATER DRAINAGE LONGITUDINAL SECTION SHEET 4
18-596-C8405	STORMWATER DRAINAGE LONGITUDINAL SECTION SHEET 5
18-596-C8406	STORMWATER DRAINAGE LONGITUDINAL SECTION SHEET 6
18-596-C8412	STORMWATER DRAINAGE CATCHMENT PLAN (POST-DEVELOPED)
18-596-C8421	STORMWATER DRAINAGE DETAILS SHEET 1
18-596-C8422	STORMWATER DRAINAGE DETAILS SHEET 2
18-596-C8431	STRUCTURE SETOUT DETAILS SHEET 1
18-596-C8432	STRUCTURE SETOUT DETAILS SHEET 2
18-596-C8433	STRUCTURE SETOUT DETAILS SHEET 3
18-596-C8441	DETENTION BASIN DETAIL PLAN SHEET 1
18-596-C8442	DETENTION BASIN DETAIL PLAN SHEET 2
18-596-C8443	DETENTION BASIN DETAIL PLAN SHEET 3
18-596-C8501	ROAD CROSS SECTIONS ROAD 01 SHEET 1
18-596-C8511	ROAD CROSS SECTIONS ROAD 03 SHEET 1
18-596-C8512	ROAD CROSS SECTIONS ROAD 03 SHEET 2
18-596-C8631	EROSION AND SEDIMENT CONTROL PLAN
18-596-C8633	EROSION AND SEDIMENT CONTROL DETAILS
18-596-C8701	PROPOSED FENCING PLAN
18-596-C8711	PROPOSED FENCING DETAILS SHEET 1
18-596-C8712	PROPOSED FENCING DETAILS SHEET 2
18-596-C8801	VEHICLE TURN PATH PLAN SHEET 1
18-596-C8802	VEHICLE TURN PATH PLAN SHEET 2
18-596-C8803	VEHICLE TURN PATH PLAN SHEET 3
18-596-C8804	VEHICLE TURN PATH PLAN SHEET 4

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Project: **ASPECT INDUSTRIAL ESTATE MAMRE ROAD, KEMPS CREEK STAGE 1B**

Title: **DRAWING LIST**

Civil Engineers and Project Managers

Level 7, 153 Walker Street
 North Sydney NSW 2060
 ABN 96 130 882 405
 Tel: 02 9439 1777
 Fax: 02 9923 1055
 www.atl.net.au
 info@atl.net.au

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Project - Drawing No.	18-596-C8001	Issue
		1

SITWORKS NOTES

- ORIGIN OF LEVELS- REFER SURVEY NOTES.
- CONTRACTOR MUST VERIFY ALL DIMENSIONS AND EXISTING LEVELS ON SITE PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES TO BE REPORTED TO AT & L.
- MAKE SMOOTH CONNECTION WITH EXISTING WORKS.
- ALL TRENCH BACKFILL MATERIAL SHALL BE COMPACTED TO THE SAME DENSITY AS THE ADJACENT MATERIAL.
- ALL SERVICE TRENCHES UNDER VEHICULAR PAVEMENTS SHALL BE BACKFILLED WITH SAND TO 300mm ABOVE PIPE. WHERE PIPE IS UNDER PAVEMENTS BACKFILL, REMAINDER OF TRENCH TO UNDERSIDE OF PAVEMENT WITH SAND OR APPROVED GRANULAR MATERIAL COMPACTED IN 150mm LAYERS TO MINIMUM 98% MODIFIED MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS 1289 5.2.1. (OR A DENSITY INDEX OF NOT LESS THAN 75)
- PROVIDE 10mm WIDE EXPANSION JOINTS BETWEEN BUILDINGS AND ALL CONCRETE OR UNIT PAVEMENTS.
- ASPHALTIC CONCRETE SHALL CONFORM TO TNSW SPECIFICATION R116.
- ALL BASECOURSE MATERIAL SHALL BE IGNEOUS ROCK QUARRIED MATERIAL TO COMPLY WITH TNSW FORM 3051 (UNBOUND), TNSW FORM 3052 (BOUND) COMPACTED TO MINIMUM 98% MODIFIED DENSITY IN ACCORDANCE WITH AS 1289 5.2.1 FREQUENCY OF COMPACTION TESTING SHALL NOT BE LESS THAN 1 TEST PER 50m OF BASECOURSE MATERIAL PLACED.
- ALL SUB-BASE COURSE MATERIAL SHALL BE IGNEOUS ROCK QUARRIED MATERIAL TO COMPLY WITH TNSW FORM 3051, 3051.1 AND COMPACTED TO MINIMUM 95% MODIFIED DENSITY IN ACCORDANCE WITH AS 1289 5.2.1 FREQUENCY OF COMPACTION TESTING SHALL NOT BE LESS THAN 1 TEST PER 50m² OF SUB-BASE COURSE MATERIAL PLACED.
- AS AN ALTERNATIVE TO THE USE OF IGNEOUS ROCK AS A SUB-BASE MATERIAL IN (9) A CERTIFIED RECYCLED CONCRETE MATERIAL COMPLYING WITH TNSW FORM 3051 AND 3051.1 WILL BE CONSIDERED. SUBJECT TO MATERIAL SAMPLES AND APPROPRIATE CERTIFICATIONS BEING PROVIDED TO THE SATISFACTION OF AT & L.
- SHOULD THE CONTRACTOR WISH TO USE A RECYCLED PRODUCT THE CONTRACTOR IS TO SEEK ACCEPTANCE OF THE PRODUCT FROM AT&L. THE PRICE DIFFERENCE BETWEEN AN IGNEOUS PRODUCT AND A RECYCLED PRODUCT SHALL BE CLEARLY INDICATED.
- WHERE NOTED ON THE DRAWINGS THAT WORKS ARE TO BE CARRIED BY OTHERS, (eg. ADJUSTMENT OF SERVICES), THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CO-ORDINATION OF THESE WORKS.
- ALL WORKS CARRIED OUT ADJACENT TO AND WITHIN TRANSGRID'S EASEMENTS TO COMPLY WITH TRANSGRID'S GUIDELINES AND REQUIREMENTS.
- ALL WORKS TO BE CONSTRUCTED IN ACCORDANCE WITH PENRITH CITY COUNCIL'S ENGINEERING CONSTRUCTION SPECIFICATION FOR CIVIL WORKS

SURVEY NOTES

THE EXISTING SITE CONDITIONS SHOWN ON THE FOLLOWING DRAWINGS HAVE BEEN INVESTIGATED BY LAND PARTNERS PTY LTD & L.TS LOCKLEY, BEING REGISTERED SURVEYORS. THE INFORMATION IS SHOWN TO PROVIDE A BASIS FOR DESIGN. AT & L DOES NOT GUARANTEE THE ACCURACY OR COMPLETENESS OF THE SURVEY BASE OR ITS SUITABILITY AS A BASIS FOR CONSTRUCTION DRAWINGS.

PRIOR TO THE COMMENCEMENT OF THE WORKS, THE CONTRACTOR SHALL UNDERTAKE A DETAILED BOUNDARY SURVEY AND COMPARE AGAINST THE DESIGN FOR DISCREPANCIES.

SHOULD DISCREPANCIES BE ENCOUNTERED DURING CONSTRUCTION BETWEEN THE SURVEY DATA, DESIGN DATA AND ACTUAL FIELD DATA, CONTACT AT & L IMMEDIATELY.

THE FOLLOWING NOTES HAVE BEEN TAKEN DIRECTLY FROM THE ORIGINAL SURVEY DOCUMENTS.

THE TITLE BOUNDARIES SHOWN HEREON WERE NOT MARKED AT THE TIME OF SURVEY AND HAVE BEEN DETERMINED BY PLAN DIMENSIONS ONLY AND NOT BY FIELD SURVEY.

SERVICES SHOWN HEREON HAVE BEEN LOCATED WHERE POSSIBLE BY FIELD SURVEY. IF NOT ABLE TO BE SO LOCATED, SERVICES HAVE BEEN PLOTTED FROM THE RECORDS OF RELEVANT AUTHORITIES WHERE AVAILABLE AND HAVE BEEN NOTED ACCORDINGLY ON THE PLAN. WHERE SUCH RECORDS DO NOT EXIST OR ARE INADEQUATE A NOTATION HAS BEEN MADE HEREON.

PRIOR TO ANY DEMOLITION, EXCAVATION OR CONSTRUCTION ON THE SITE, THE RELEVANT AUTHORITY SHOULD BE CONTACTED FOR POSSIBLE LOCATION OF FURTHER UNDERGROUND SERVICES AND DETAILED LOCATIONS OF ALL SERVICES.

DEWATERING

- IF REQUIRED ANY DEWATERING WORKS TO BE AS PER THE DEWATERING PROCEDURE AS CONTAINED WITHIN THE CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN (CEMP).

EXISTING UNDERGROUND SERVICES

- THE LOCATIONS OF UNDERGROUND SERVICES SHOWN IN THIS SET OF DRAWINGS HAVE BEEN PLOTTED FROM SURVEY INFORMATION AND SERVICE AUTHORITY INFORMATION. THE SERVICE INFORMATION HAS BEEN PREPARED ONLY TO SHOW THE APPROXIMATE POSITIONS OF ANY KNOWN SERVICES AND MAY NOT BE AS CONSTRUCTED OR ACCURATE.
- AT & L CAN NOT GUARANTEE THAT THE SERVICES INFORMATION SHOWN ON THESE DRAWINGS ACCURATELY INDICATES THE PRESENCE OR ABSENCE OF SERVICES OR THEIR LOCATION AND WILL ACCEPT NO LIABILITY FOR INACCURACIES IN THE SERVICES INFORMATION SHOWN FROM ANY CAUSE WHATSOEVER.
- CONTRACTORS SHALL TAKE DUE CARE WHEN EXCAVATING ONSITE INCLUDING HAND EXCAVATION WHERE NECESSARY.
- CONTRACTORS ARE TO CONTACT THE RELEVANT SERVICE AUTHORITY PRIOR TO COMMENCEMENT OF EXCAVATION WORKS.
- CONTRACTORS ARE TO UNDERTAKE A SERVICES SEARCH, PRIOR TO COMMENCEMENT OF WORKS ON SITE. SEARCH RESULTS ARE TO BE KEPT ON SITE AT ALL TIMES.
- PRIOR TO COMMENCEMENT OF WORKS, THE CONTRACTOR IS TO CONFIRM THE ALIGNMENT AND LEVELS OF ALL EXISTING SERVICES AT ALL LOCATIONS WHERE THE PROPOSED SERVICES ARE TO CROSS, CONNECT TO, OR ARE LOCATED IN CLOSE PROXIMITY TO THE EXISTING SERVICES.

CONCRETE NOTES

- ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3600 CURRENT EDITION WITH AMENDMENTS, EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.
- CONCRETE QUALITY
ALL REQUIREMENTS OF THE CURRENT ACSE CONCRETE SPECIFICATION DOCUMENT 1 SHALL APPLY TO THE FORMWORK, REINFORCEMENT AND CONCRETE UNLESS NOTED OTHERWISE.

ELEMENT	AS 3600 Fc MPa AT 28 DAYS	SPECIFIED SLUMP	NOMINAL AGG. SIZE
VEHICULAR BASE KERBS, PATHS, AND PITS	32	60	20
	25	80	20

- CEMENT TYPE SHALL BE (ACSE SPECIFICATION) TYPE SL
 - PROJECT CONTROL TESTING SHALL BE CARRIED OUT IN ACCORDANCE WITH AS 1379.
 - NO ADMIXTURES SHALL BE USED IN CONCRETE UNLESS APPROVED IN WRITING BY AT & L.
 - CLEAR CONCRETE COVER TO ALL REINFORCEMENT FOR DURABILITY SHALL BE 40mm TOP AND 70mm FOR EXTERNAL EDGES UNLESS NOTED OTHERWISE.
 - ALL REINFORCEMENT SHALL BE FIRMLY SUPPORTED ON MILD STEEL PLASTIC TIPPED CHAIRS, PLASTIC CHAIRS OR CONCRETE CHAIRS AT NOT GREATER THAN 1m CENTRES BOTH WAYS. BARS SHALL BE TIED AT ALTERNATE INTERSECTIONS.
 - THE FINISHED CONCRETE SHALL BE A DENSE HOMOGENEOUS MASS, COMPLETELY FILLING THE FORMWORK, THOROUGHLY EMBEDDING THE REINFORCEMENT AND FREE OF STONE POCKETS. ALL CONCRETE INCLUDING SLABS ON GROUND AND FOOTINGS SHALL BE COMPACTED AND CURED IN ACCORDANCE WITH TNSW SPECIFICATION R83.
 - REINFORCEMENT SYMBOLS:
N DENOTES GRADE 450 N BARS TO AS 1302 GRADE N
R DENOTES 230 R HOT ROLLED PLAIN BARS TO AS 1302
SL DENOTES HARD-DRAWN WIRE REINFORCING FABRIC TO AS 1304
- NUMBER OF BARS IN GROUP: BAR GRADE AND TYPE
- NOMINAL BAR SIZE IN mm: SPACING IN mm
- THE FIGURE FOLLOWING THE FABRIC SYMBOL SL IS THE REFERENCE NUMBER FOR FABRIC TO AS 1304.
- FABRIC SHALL BE LAPPED IN ACCORDANCE WITH THE FOLLOWING DETAIL:

DECOMMISSIONING / DEMOLITION

- DEMOLITION OF EXISTING DWELLING TO BE CONDUCTED IN ACCORDANCE WITH THE PROVISIONS OF AS2601-2001 - DEMOLITION OF STRUCTURES BY CONTRACTORS EXPERIENCED IN THIS CLASS OF WORK AND HOLDING REQUIRED CURRENT PERMITS AND LICENSES AS REQUIRED.
- EXISTING INTERNALS FENCING, CATTLE YARDS, UTILITIES AND OTHER REDUNDANT STRUCTURES TO BE DEMOLISHED AND REMOVED TO AN APPROVED WASTE MANAGEMENT FACILITY.
- DAM DECOMMISSIONING TO BE COMPLETED AS PER THE DAM DECOMMISSIONING PROCEDURE AS CONTAINED WITHIN THE CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN (CEMP).
- ALL EXISTING SERVICES (INCLUDING SEPTIC TANKS) SHALL BE REMOVED FROM SITE.
- ALL UNDERGROUND CABLES AND PIPES SHALL BE GRUBBED OUT AND CAPPED AT THE BOUNDARY OF THE SITE.

CONTINUED ABOVE

DECOMMISSIONING / DEMOLITION

CONTINUED FROM BELOW

- ALL OVERHEAD SERVICES SHALL BE REMOVED FROM WITHIN THE SITE BOUNDARY AND MADE SAFE TO THE TERMINATION LOCATION. ANY POLES SHALL BE REMOVED FROM THE SITE.
- ALL EXISTING SERVICES TO BE CONSIDERED AS LIVE UNTIL THE CONTRACTOR HAS TESTED AND CONFIRMED TO THE SUPERINTENDENT THAT THE SERVICES ARE DEAD / REDUNDANT.

KERBING NOTES

- ALL CONCRETE TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 25 MPa U.N.O IN REINFORCED CONCRETE NOTES.
- ALL KERBS, GUTTERS, DISH DRAINS AND CROSSINGS TO BE CONSTRUCTED ON MIN. 100mm GRANULAR BASECOURSE COMPACTED TO MINIMUM 95% MODIFIED DRY DENSITY (AS 1289 5.2.1).
- EXPANSION JOINTS (E.J.) TO BE FORMED FROM 10mm COMPRESSIBLE CORK FILLER BOARD FOR THE FULL DEPTH OF THE SECTION AND CUT TO PROFILE. EXPANSION JOINTS TO BE LOCATED AT DRAINAGE PITS, ON TANGENT POINTS OF CURVES AND ELSEWHERE AT MAX 12m CENTRES EXCEPT FOR INTEGRAL KERBS WHERE THE EXPANSION JOINTS ARE TO MATCH THE JOINT LOCATIONS IN THE SLABS.
- WEAKENED PLANE JOINTS TO BE MIN 3mm WIDE AND LOCATED AT 3m CENTRES EXCEPT FOR INTEGRAL KERBS WHERE THE WEAKENED PLANE JOINTS ARE TO MATCH THE JOINT LOCATIONS IN THE SLABS.
- BROOM FINISH TO ALL RAMPED AND VEHICULAR CROSSINGS, ALL OTHER KERBING OR DISH DRAINS TO BE STEEL FLOAT FINISHED.
- IN THE REPLACEMENT OF KERB AND GUTTER - IF REQUIRED EXISTING ROAD PAVEMENT IS TO BE SAWCUT 900mm U.N.O FROM THE LIP OF GUTTER. UPON COMPLETION OF THE NEW KERB AND GUTTER NEW BASECOURSE AND SURFACE TO BE LAID 900mm WIDE U.N.O.

STORMWATER DRAINAGE NOTES

- STORMWATER DESIGN CRITERIA:
(A) AVERAGE REQUIREMENT INTERVAL:
1:100 YEARS MAJOR STORM (OVERLAND FLOW)
1:20 YEARS MINOR STORM (PIPED NETWORK)
(B) RAINFALL INTENSITIES:
TIME OF CONCENTRATION: 5 MINUTES
1:100 YEARS= 219 mm/hr
1:20 YEARS= 167 mm/hr
(C) RUNOFF COEFFICIENTS:
ROOF AREA: C 100 =1.0
EXTERNAL PAVEMENTS: C 100 =1.0
- PIPES 300 DIA. AND LARGER ARE TO BE REINFORCED CONCRETE (RCP) OR FIBRE-REINFORCED CONCRETE (FRC) CLASS 3' APPROVED SPIGOT AND SOCKET WITH RUBBER RING JOINTS. U.N.O. ALL ROAD CROSSINGS TO BE CLASS 4' U.N.O.
- PIPES UP TO 300 DIA SHALL BE SEWER GRADE uPVC WITH SOLVENT WELDED JOINTS.
- EQUIVALENT STRENGTH VCP OR FRC PIPES MAY BE USED, SUBJECT TO THE APPROVAL OF PENRITH CITY COUNCIL.
- ALL STORMWATER DRAINAGE LINES UNDER PROPOSED BUILDING SLABS TO BE uPVC PRESSURE PIPE GRADE 6. ENSURE ALL VERTICALS AND DOWNPIPES ARE uPVC PRESSURE PIPE, GRADE 6 FOR A MIN OF 3.0m IN HEIGHT.
- PIPES TO BE INSTALLED TO TYPE H52 SUPPORT IN ACCORDANCE WITH AS 3725 IN ALL CASES BACKFILL TRENCH WITH SAND TO 300mm ABOVE PIPE. WHERE PIPE IS UNDER PAVEMENTS BACKFILL REMAINDER OF TRENCH TO UNDERSIDE OF PAVEMENT WITH SAND OR APPROVED GRANULAR MATERIAL COMPACTED IN 150mm LAYERS TO MINIMUM 98% STANDARD MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS 1289 5.2.1. (OR A DENSITY INDEX OF NOT LESS THAN 75)
- ALL INTERNAL WORKS WITHIN PROPERTY BOUNDARIES ARE TO COMPLY WITH THE REQUIREMENTS OF AS 3500 3.1 (1998) AND ASINZS 3500 3.2 (1998).
- ENLARGERS, CONNECTIONS AND JUNCTIONS TO BE PREFABRICATED FITTINGS WHERE PIPES ARE LESS THAN 300 DIA.
- WHERE SUBSOIL DRAINS PASS UNDER FLOOR SLABS AND VEHICULAR PAVEMENTS UNSLOTTED uPVC SEWER GRADE PIPE IS TO BE USED.
- CARE IS TO BE TAKEN WITH LEVELS OF STORMWATER LINES. GRADES SHOWN ARE NOT TO BE REDUCED WITHOUT APPROVAL.
- GRATES AND COVERS SHALL CONFORM TO AS 3996 AND PENRITH CITY COUNCIL CONSTRUCTION SPECIFICATIONS.
- AT ALL TIMES DURING CONSTRUCTION OF STORMWATER PITS, ADEQUATE SAFETY PROCEDURES SHALL BE TAKEN TO ENSURE AGAINST THE POSSIBILITY OF PERSONNEL FALLING DOWN PITS.
- ALL EXISTING STORMWATER DRAINAGE LINES AND PITS THAT ARE TO REMAIN ARE TO BE INSPECTED AND CLEANED. DURING THIS PROCESS ANY PART OF THE STORMWATER DRAINAGE SYSTEM THAT WARRANTS REPAIR SHALL BE REPORTED TO THE SUPERINTENDENT/ENGINEER FOR FURTHER DIRECTIONS.
- ALL STORMWATER PITS ARE TO BE CAST IN-SITU IN ACCORDANCE WITH THE STORMWATER DETAILS AND SPECIFICATIONS, UNLESS APPROVED BY THE SUPERINTENDENT / PENRITH CITY COUNCIL. IF APPROVED AND IN ADDITION TO THE SPECIFICATION,
A. ALL PRE-CAST PITS ARE TO BE STRUCTURALLY CERTIFIED TO MEET RELEVANT AUSTRALIAN STANDARDS (AS3600, AS3996).
B. ALL PRECAST PITS TO BE FOUNDED ON CONCRETE BLINDING LAYER WITH A MINIMUM ALLOWABLE BEARING CAPACITY OF 100KPA UP TO 3.0M DEPTH TO INVERT AND 150KPA FROM 3.0M TO 6.0M DEPTH TO INVERT (MINIMUM 100MM THICK 25MPa OR DEEPER TO ENSURE MINIMUM SPECIFIED BEARING CAPACITY IS ACHIEVED).
C. PRE-CAST STORMWATER PITS ARE TO BE CUSTOM MADE WITH OPENINGS WITHIN +50MM OD OF PIPE, HEIGHTS AND PIPE PENETRATIONS DURING MANUFACTURE. ANY ADDITIONAL PENETRATIONS SHALL BE CORE DRILLED AND STEEL BLOWN OUT TO MANUFACTURERS REQUIREMENTS, IF REQUIRED.
D. DEMOLITION SAWS ARE NOT TO BE USED IN ANY CIRCUMSTANCES.
E. SINGLE UNITS PREFERRED BUT IF REQUIRED MINIMUM RISER DEPTH 600MM PIT INSTALLATION AND JOINTING PIPES TO PITS SHALL BE UNDERTAKEN IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.

CONTINUED ABOVE

STORMWATER DRAINAGE NOTES

CONTINUED FROM BELOW

- ANY DAMAGE TO THE STRUCTURAL INTEGRITY OF THE PRE-CAST PIT WILL BE REPAIRED AND STRUCTURALLY CERTIFIED TO THE SATISFACTION OF THE SUPERINTENDENT / PENRITH CITY COUNCIL.
- ALL PRE-CAST PIT PENETRATIONS SHALL BE CUT SO THAT IT IS FLUSH WITH THE INTERNAL WALL.
- PIPE JOINTING/SEALING OF PIPE PENETRATION TO BE WITH A NON-SHRINK MORTAR MIX, E.G. LANKO 702 DURABED OR SIMILAR APPROVED.
- SUBSOIL DRAINAGE FLUSHING AND/OR INTERMEDIATE RISERS TO BE INSTALLED AT 40m CENTRES, AND AT ALL UPSTREAM ENDPOINTS
- ANY ADDITIONAL PENETRATIONS TO ANY STRUCTURAL CONCRETE (E.G. STORMWATER PITS, CULVERTS, HEADWALLS ETC.) SHALL BE CORE DRILLED AND STEEL BLOWN OUT TO MANUFACTURERS REQUIREMENTS, IF REQUIRED.

EMBANKMENT CONSTRUCTION SEQUENCE

- STRIP VEGETATION AND TOPSOIL FROM EMBANKMENT AREA AND STOCKPILE TOPSOIL FOR LATER USE. CUT BACK AREA TO FIRM GROUND.
- CONSTRUCT EMBANKMENT IN PRESENCE OF QUALIFIED AND EXPERIENCED GEOTECHNICAL ENGINEER IF NOT ROCK.
- IN THE CASE WHERE THE EMBANKMENT AREAS SHOW ANY FAILURE, THE CONTRACTOR IS TO ENGAGE A QUALIFIED AND EXPERIENCED GEOTECHNICAL ENGINEER TO DETERMINE THE CAUSE AND METHOD OF RECTIFICATION
- COMPACT CLAY STABILISED WITH GYPSUM (3% BY DRY MASS, MINIMUM) AS APPROVED BY A QUALIFIED AND EXPERIENCED GEOTECHNICAL ENGINEER INTO THE CUT-OFF TRENCH OF LAYERS NOT EXCEEDING 150mm THICKNESS TO A DRY DENSITY EQUIVALENT TO 98% OF THAT DETERMINED BY STANDARD COMPACTION (AS 1289 5.1.1) AND AT A MOISTURE CONTENT OF -2% TO +2% OF OPTIMUM MOISTURE CONTENT.
- GYPSUM STABILISED NATURAL SOILS EXPOSED IN EMBANKMENT AREA WITH MINIMUM 3% GYPSUM BY DRY MASS AND COMPACT AS FOR #4. ALL TO THE APPROVAL OF A QUALIFIED AND EXPERIENCED GEOTECHNICAL ENGINEER.
- CONSTRUCT BODY OF EMBANKMENT WITH CLAYEY MATERIAL WON FROM SITE. COMPACT THE CLAYEY MATERIAL APPROVED BY A QUALIFIED AND EXPERIENCED GEOTECHNICAL ENGINEER IN LAYERS NOT EXCEEDING 150mm THICKNESS TO A DRY DENSITY EQUIVALENT TO 98% OF THAT DETERMINED BY STANDARD COMPACTION (AS 1289 5.1.1) AND AT A MOISTURE CONTENT OF -2% TO +2% OF OPTIMUM MOISTURE CONTENT. MOST IMPORTANTLY, IF SHRINKAGE CRACKS OCCUR, AS DIRECTED BY A QUALIFIED AND EXPERIENCED GEOTECHNICAL ENGINEER.
- OVERFILL THE EMBANKMENT AND TRIM OFF, SO THAT THE ENTIRE BODY OF THE EMBANKMENT IS COMPACTED.
- TRIM THE EMBANKMENTS BATTERS TO THE OVERFILLED MATERIAL, STABILISE THE UPSTREAM CLAY BATTERS WITH WELL MIXED GYPSUM (3% BY DRY MASS, MINIMUM) AND COMPACT TO MIN. 98% STD -2% TO +2% OMC.
- PLACE ROCK RIP-RAP AS SHOWN.
- RECOVER TOPSOIL FROM STOCKPILE AND SPREAD OVER EMBANKMENT AND CUT BATTERS (A THIN COVER OF TOPSOIL ONLY HAS BEEN NOMINATED), ONLY LIGHTLY TRACK-ROLL THE TOPSOIL AND THEN LANDSCAPE IN ACCORDANCE WITH THE LANDSCAPE AREA DRAWINGS.
- WATER AND FERTILISE LANDSCAPE AS REQUIRED BY CLIMATIC CONDITIONS TO ENSURE THE LANDSCAPE IS SUCCESSFUL.
- AT THE COMPLETION OF WORK WRITTEN CONFIRMATION AND CERTIFICATION IS TO BE PROVIDED FROM A QUALIFIED AND EXPERIENCED GEOTECHNICAL ENGINEER THAT THE EMBANKMENTS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THESE DRAWINGS.

EROSION AND SEDIMENT CONTROL NOTES

GENERAL INSTRUCTIONS

- THE CONTRACTOR IS RESPONSIBLE FOR ENGAGING A SUITABLY QUALIFIED EROSION AND SEDIMENT CONSULTANT FOR THE DURATION OF THE CONTRACT WITH THE EXPERTISE IN DESIGNING AND DOCUMENTING THE CONTROLS TO ALLOW THE INSTALLATION AND MAINTENANCE OF THE EROSION AND SEDIMENT CONTROLS. SUITABLE EROSION AND SEDIMENT CONTROLS SHALL BE PROVIDED AND MAINTAINED BY THE CONTRACTOR REQUIRED TO SUIT THE CONSTRUCTION STAGING
- ALL WORK SHALL BE GENERALLY CARRIED OUT IN ACCORDANCE WITH
a. NSW DEPARTMENT OF HOUSING MANUAL "MANAGING URBAN STORMWATER, SOILS AND CONSTRUCTION", 4th EDITION, MARCH 2004.
b. LOCAL AUTHORITY REQUIREMENTS
c. EPA REQUIREMENTS
- MAINTAIN THE EROSION CONTROL DEVICES TO THE SATISFACTION OF THE SUPERINTENDENT AND THE LOCAL AUTHORITY.
- WHEN STORMWATER PITS ARE CONSTRUCTED, PREVENT SITE RUNOFF ENTERING UNLESS SEDIMENT FENCES ARE ERECTED AROUND PITS.
- CONTRACTOR IS TO ENSURE ALL EROSION & SEDIMENT CONTROL DEVICES ARE MAINTAINED IN GOOD WORKING ORDER AND OPERATE EFFECTIVELY. REPAIRS AND OR MAINTENANCE SHALL BE UNDERTAKEN AS REQUIRED, PARTICULARLY FOLLOWING STORM EVENTS.

LAND DISTURBANCE

- WHERE PRACTICAL, THE SOIL EROSION HAZARD ON THE SITE WILL BE KEPT AS LOW AS POSSIBLE. TO THIS END, WORKS SHOULD BE UNDERTAKEN / INSTALLED AS DIRECTED BY THE CONTRACTORS EROSION AND SEDIMENT CONTROL CONSULTANT.

CONTINUED ABOVE

EROSION AND SEDIMENT CONTROL NOTES

SEDIMENT CONTROL

- DURING WINDY WEATHER, LARGE, UNPROTECTED AREAS WILL BE KEPT MOIST (NOT WET) BY SPRINKLING WITH WATER TO KEEP DUST UNDER CONTROL.
 - FINAL SITE LANDSCAPING WILL BE UNDERTAKEN AS SOON AS POSSIBLE AND WITHIN 20 WORKING DAYS FROM COMPLETION OF CONSTRUCTION ACTIVITIES.
 - STOCKPILES WILL NOT BE LOCATED WITHIN 2 METRES OF HAZARD AREAS, INCLUDING LIKELY AREAS OF CONCENTRATED OR HIGH VELOCITY FLOWS SUCH AS WATERWAYS. WHERE THEY ARE BETWEEN 2 AND 5 METRES FROM SUCH AREAS, SPECIAL SEDIMENT CONTROL MEASURES SHOULD BE TAKEN TO MINIMISE POSSIBLE POLLUTION TO DOWNSLOPE WATERS, E.G. THROUGH INSTALLATION OF SEDIMENT FENCING.
 - ANY SAND USED IN THE CONCRETE CURING PROCESS (SPREAD OVER THE SURFACE) WILL BE REMOVED AS SOON AS POSSIBLE AND WITHIN 10 WORKING DAYS FROM PLACEMENT.
 - WATER WILL BE PREVENTED FROM ENTERING THE PERMANENT DRAINAGE SYSTEM UNLESS IT IS RELATIVELY SEDIMENT FREE. I.E. THE CATCHMENT AREA HAS BEEN PERMANENTLY LANDSCAPED AND/OR ANY LIKELY SEDIMENT HAS BEEN FILTERED THROUGH AN APPROVED STRUCTURE.
 - TEMPORARY SOIL AND WATER MANAGEMENT STRUCTURES WILL BE REMOVED ONLY AFTER THE LANDS THEY ARE PROTECTING ARE REHABILITATED.
- #### OTHER MATTERS
- ACCEPTABLE RECEPTORS WILL BE PROVIDED FOR CONCRETE AND MORTAR SLURRIES, PAINTS, ACID WASHINGS, LIGHT-WEIGHT WASTE MATERIALS AND LITTER.
 - ANY EXISTING TREES WHICH FORM PART OF THE FINAL LANDSCAPING PLAN WILL BE PROTECTED FROM CONSTRUCTION ACTIVITIES BY:
(A) PROTECTING THEM WITH BARRIER FENCING OR SIMILAR MATERIALS INSTALLED OUTSIDE THE DRIP LINE
(B) ENSURING THAT NOTHING IS NAILED TO THEM
(C) PROHIBITING PAVING, GRADING, SEDIMENT WASH OR PLACING OF STOCKPILES WITHIN THE DRIP LINE EXCEPT UNDER THE FOLLOWING CONDITIONS.
(i) ENCROACHMENT ONLY OCCURS ON ONE SIDE AND NO CLOSER TO THE TRUNK THAN EITHER 1.5 METRES OR HALF THE DISTANCE BETWEEN THE OUTER EDGE OF THE DRIP LINE AND THE TRUNK, WHICH EVER IS THE GREATER
(ii) A DRAINAGE SYSTEM THAT ALLOWS AIR AND WATER TO CIRCULATE THROUGH THE ROOT ZONE (E.G. A GRAVEL BED) IS PLACED UNDER ALL FILL LAYERS OF MORE THAN 300 MILLIMETRES DEPTH
(iii) CARE IS TAKEN NOT TO CUT ROOTS UNNECESSARILY NOR TO COMPACT THE SOIL AROUND THEM.

STAGING

SUITABLE EROSION AND SEDIMENT CONTROLS SHALL BE PROVIDED AND MAINTAINED BY THE CONTRACTOR THROUGHOUT ALL STAGES OF WORKS, THROUGHOUT THE FULL TERM OF THE CONTRACT WHERE SHOWN ON AT&L DRAWINGS OR WHERE DIRECTED BY THE SUPERINTENDENT OR PENRITH CITY COUNCIL'S ENGINEERS. THE CONTRACTOR IS RESPONSIBLE FOR DESIGNING, DOCUMENTING, INSTALLING AND MAINTAINING THE SEDIMENT AND EROSION CONTROLS REQUIRED TO SUIT THE SELECTED CONSTRUCTION STAGING. THIS IS TO BE DOCUMENTED IN THE FORM OF A SOIL AND WATER MANAGEMENT PLAN TO BE DEVELOPED BY THE CONTRACTOR AND THEIR EROSION ND SEDIMENT CONSULTANT AND PROVIDED BY THE SUPERINTENDENT PRIOR TO CONSTRUCTION COMMENCEMENT.

SUCH CONTROLS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE PROTECTION OF THE ENVIRONMENT OPERATIONS ACT, PENRITH CITY COUNCIL'S SPECIFICATIONS AND THE OFFICE OF ENVIRONMENT AND HERITAGE'S 'MANAGING URBAN STORMWATER: SOILS AND CONSTRUCTION', LANDCOM, (4TH EDITION) MARCH 2004 (REPRINTED 2006) (THE "BLUE BOOK"), VOLUME 1 AND VOLUME 2.

EARTHWORKS NOTES

- WHERE EARTHWORKS ARE TO BE CONSTRUCTED ON OR AGAINST ANY EMBANKMENTS OR AGAINST ANY SLOPES AND THE EMBANKMENTS/SLOPE IS STEEPER THAN 10(H):1(V) IN ANY DIRECTION, THE CONTRACTOR SHALL CUT TERRACES INTO THE SLOPE TO A MINIMUM DEPTH OF 300mm, EXCEPT WHERE SLOPES ARE STEEPER THAN 4(H):1(V) WHERE, MINIMUM DEPTH SHALL BE 600mm, TO ALLOW ADEQUATE KEY AND COMPACTION OF MATERIAL.
- CONTRACTOR SHALL PRODUCE A MATERIAL TRACKING REGISTER FOR ALL IMPORT AND EXPORT MATERIAL INCLUDING DEMOLITION WASTE. FOR INSTANCES WHERE CONTAMINATED MATERIAL IS EXPORTED FROM THE SITE, THE CONTRACTOR SHALL ENSURE A CHAIN OF CUSTODY REPORT AND CERTIFICATES ARE PROVIDED FOR THE CONTAMINATED MATERIAL.

DESIGN & CERTIFICATION REQUIREMENTS

- THE CONTRACTOR IS TO PROVIDE STRUCTURAL CERTIFICATION ON ALL STRUCTURAL ELEMENTS, INCLUDING DESIGN CERTIFICATION AND FINAL CONSTRUCTION CERTIFICATION. THIS INCLUDES:
• ALL RETAINING WALLS
• CULVERTS EXCLUDING BASE SLABS
• HEADWALLS
• STORMWATER STRUCTURES
ALL STRUCTURAL CERTIFICATES MUST BE PREPARED BY A SUITABLY QUALIFIED STRUCTURAL ENGINEER.

CONSTRUCTION SPECIFICATION

- THESE DRAWINGS SHOULD BE READ IN CONJUNCTION WITH PENRITH CITY COUNCIL'S LATEST REVISION OF THE 'ENGINEERING CONSTRUCTION SPECIFICATION FOR CIVIL WORKS'
- WHERE THERE IS A CONFLICT THE FOLLOWING IS TO OCCUR
2.1. NOTIFY THE DESIGN ENGINEER AND/OR SUPERINTENDENT
2.2. THE PENRITH CITY COUNCIL'S SPECIFICATION TAKES PRECEDENCE
- REFER PELL'S SULLIVAN MEYNINK REPORT PSM3739-006S REV 6 (DATED 13 OCT 2020) FOR BULK EARTHWORKS SPECIFICATIONS.
- REFER SITE IMAGE LANDSCAPE SPECIFICATION (CURRENT REVISION) FOR LANDSCAPE SPECIFICATION.

PENRITH CITY COUNCIL
This plan / document relates to
Development Consent: **SSD-10448-MOD-1**
Subdivision Works Certificate: **Ea2220045**
Subject to the conditions outlined in the consent

COUNCIL DOES NOT ATTEST TO THE ACCURACY OF DETAILS IN PLANS



CONTRACTOR SHALL CALL:
DIAL BEFORE YOU DIG 1100
PRIOR TO COMMENCEMENT OF WORK TO OBTAIN ALL CURRENT SERVICE AUTHORITY PLANS

Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22
A	ISSUED FOR SWC APPROVAL	20-10-22

Bar Scales

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Client

Scales	Grid	GDA2020	Height Datum	AHD	Drawn	Project
					Designed	ASPECT INDUSTRIAL ESTATE
					Checked	MAMRE ROAD,
					Approved	KEMPS CREEK
						STAGE 1B
						NOTES AND LEGENDS
						SHEET
						SHEET 1

Civil Engineers and Project Managers

Level 7, 153 Walker Street
North Sydney NSW 2060
ABN 96 130 882 405
Tel: 02 9439 1777
Fax: 02 9923 1055
www.atl.net.au
info@atl.net.au

Status: **FOR CONSTRUCTION**

Project - Drawing No. **18-596-C8002**

Status	Issue
FOR CONSTRUCTION	A1
Project - Drawing No. 18-596-C8002	Issue 1

**OVERALL SITeworks
LEGEND - COMBINED**

	EXISTING BOUNDARY
	EXISTING CONTOUR
	PROPOSED BOUNDARY
	PROPOSED EASEMENT
	FUTURE BOUNDARY
	BATTER
	F 48.81 ● PROPOSED SURFACE LEVE
	48.00 - - PROPOSED MAJOR CONTOUR (1.0m INTERVAL)
	48.20 - - PROPOSED MINOR CONTOUR (0.20m INTERVAL)
	K&G KERB AND GUTTER (REFER PCC DWG. SD1003/1)
	K&T KERB AND TOE (REFER DWG. C8016)
	MK MOUNTABLE KERB (REFER PCC DWG. SD1003/2)
	MK(B) MOUNTABLE KERB WITH EXTENDED BACK (REFER PCC DWG. SD1003/2)
	MK(C) MOUNTABLE KERB WITH EXTENDED BACK (REFER PCC DWG. SD1003/2)
	DD CONCRETE DISH DRAIN (REFER DETAIL A DWG. C8017)
	PR PRAM RAMP (REFER PCC DWG. SD1002)
	VC VEHICLE CROSSOVER (REFER PCC DWG. SD1004)
	STORMWATER BOX CULVERT WITH NUMBER OF SECTION
	UPSTREAM STORMWATER DIVERSION BOX CULVERT WITH NUMBER OF SECTION
	SPECIAL STORMWATER CULVERT SECTION
	STORMWATER PIPE
	UPSTREAM STORMWATER DIVERSION PIPE
	KERB INLET PIT (REFER PCC DWG. SD2001 U.N.O.)
	SURFACE INLET PIT (REFER PCC DWG. SD2002 U.N.O.)
	JUNCTION PIT (REFER PCC DWG. SD2002 U.N.O.)
	LIMIT OF WORKS
	SUBSOIL DRAINS WITH FLUSHING POINTS SUBSOIL DRAINAGE FLUSHING AND/OR INTERMEDIATE RISERS TO BE INSTALLED AT 40m CENTRES, AND AT ALL UPSTREAM END POINTS PER PCC SD2004
	SUBSOIL DRAINS BENEATH PAVEMENT REFER DETAIL DWG. C8017
	GRASS LINED CATCH DRAIN REFER DWG C8016
	PROPOSED GRAVITY SEWER REFER QALCHEK DRAWINGS FOR DETAILS
	PROPOSED GRAVITY SEWER MANHOLE REFER QALCHEK DRAWINGS FOR DETAILS
	PROPOSED GRAVITY SEWER MAINTENANCE SHAFT REFER QALCHEK DRAWINGS FOR DETAILS
	PROPOSED STREET LIGHT REFER EDGEWATER DRAWINGS FOR DETAILS
	SERVICE / ITEM TO BE REMOVED
	PROPOSED RIP RAP SCOUR PROTECTION

CONSTRUCTION TOLERANCES

BULK EARTHWORKS			PAVEMENT / ACCESS TRACKS		
EARTHWORKS	-50mm / +0mm	OF FINISHED SURFACE LEVEL (AFTER COMPACTION AND TRIMMING)	CONCRETE		
			KERB	-5mm / +5mm	ALONG THE TOP OF KERB OVER A LENGTH OF 5 METRES
			KERB	-5mm / +5mm	ALONG THE FACE OF KERB OVER A LENGTH OF 5 METRES
			PATH	-0mm / +10mm	OF FOOTPATH/SHARED PATH FINISHED SURFACE LEVEL
			PATH		SURFACE OF THE PATH, INCLUDING JOINTS, MUST NOT POND WATER.
STORMWATER			VERGE		
PIPES/CULVERTS	WITHIN 20mm	OF THE DESIGN INVERT LEVEL AT ANY POINT	TURF	-10mm / +0mm	OF PAVEMENT FINISHED SURFACE LEVEL (AFTER COMPACTION) TO THE ADJOINING MATERIAL (FOOTPATHS, KERBS, ETC)
PIPES/CULVERTS	WITHIN 100mm	OF THE PLAN POSITION SHOWN ON THE DRAWINGS OR SPECIFIED AT ANY POINT	MULCH	-10mm / +0mm	OF PAVEMENT FINISHED SURFACE LEVEL (AFTER COMPACTION) TO THE ADJOINING MATERIAL (FOOTPATHS, KERBS, ETC)
HEADWALLS	WITHIN 20mm	OF THE DESIGN INVERT LEVEL AT ANY POINT			
HEADWALLS	WITHIN 100mm	OF THE PLAN POSITION SHOWN ON THE DRAWINGS OR SPECIFIED AT ANY POINT			
CHAMBERS	WITHIN 20mm	OF THE INVERT LEVEL SHOWN ON THE DRAWINGS			
CHAMBERS	WITHIN 200mm	LONGITUDINALLY OF THE PLAN POSITION, WITH REFERENCE TO THE CONTROL LINE FOR THE ROAD SHOWN ON THE DRAWINGS			
LINTELS	AS PER THE TOLERANCES SPECIFIED FOR THE ADJOINING MATERIAL				
COVERS	AS PER THE TOLERANCES SPECIFIED FOR THE ADJOINING MATERIAL		RETAINING / NOISE WALLS		
			WALL	-20mm / +20mm	FROM ANY POINT ON THE WALL THE LEVEL MUST NOT DEVIATE FROM THAT SPECIFIED
			WALL	-10mm / +10mm	INCLINATION OF THE FACE OF THE COMPLETED WALL MUST NOT DEVIATE FROM THE SPECIFIED INCLINATION PER METER HEIGHT (BLOCK WALL)
			WALL	-5mm / +0mm	INCLINATION OF THE FACE OF THE COMPLETED WALL MUST NOT DEVIATE FROM THE SPECIFIED INCLINATION PER METER HEIGHT (PANEL WALL)
			WALL	-20mm / +20mm	FLATNESS OF THE FACE OF THE WALL MUST BE SUCH THAT THE MAXIMUM DEVIATION FROM A 4.5 M STRAIGHT EDGE
GRATES	AS PER THE TOLERANCES SPECIFIED FOR THE ADJOINING MATERIAL		TOLERANCE FOR EMBANKMENT BATTERS		
OPEN DRAINS	WITHIN 50mm	OF THE DESIGN LEVEL AT ANY POINT PROVIDED THAT THERE IS A CONTINUOUS DOWNGRADE (WITHOUT PONDING) IN THE DIRECTION OF FLOW NOT LESS THAN 0.5% AT ANY POINT	TOLERANCE (mm)		
			LOCATION		
			SLOPE 1H:1V OR FLATTER		
			SLOPE STEEPER THAN 1H:1V		
			AT LEVEL OF TOP OF FORMATION/ UNDERSIDE OF PAVEMENT	+0/-150	+0/-150
			BETWEEN TOP OF FORMATION AND 1m BELOW TOP OF FORMATION	+150/-150	+150/-150
			BEYOND 1m BELOW TOP OF FORMATION	+300/-300	+300/-300
			REFER TO TfNSW R44 SPECIFICATION		
PAVEMENT / ACCESS TRACKS					
SUBBASE	-10mm / +10mm	OF PAVEMENT COURSE THICKNESS (AFTER COMPACTION & TRIMMING)			
SUBBASE	-10mm / +0mm	OF FINISHED SURFACE LEVEL (AFTER COMPACTION AND TRIMMING)			
SUBBASE	-5mm / +5mm	ALONG THE FINISHED SURFACE (LAID IN ANY DIRECTION) OVER A LENGTH OF 3 METRES			
BASECOURSE	-0mm / +20mm	OF PAVEMENT COURSE THICKNESS (AFTER COMPACTION & TRIMMING)			
BASECOURSE	-0mm / +10mm	OF FINISHED SURFACE LEVEL (AFTER COMPACTION AND TRIMMING)			
BASECOURSE	-5mm / +5mm	ALONG THE FINISHED SURFACE (LAID IN ANY DIRECTION) OVER A LENGTH OF 3 METRES			
SEAL	-0mm / +10mm	OF PAVEMENT FINISHED SURFACE LEVEL (AFTER ROLLING AGGREGATE)			
SEAL	-5mm / +10mm	ALONG THE FINISHED SURFACE OVER THE CARRIAGEWAY WIDTH AT THE DATE OF PRACTICAL COMPLETION			
SEAL		SURFACE OF THE COURSE, INCLUDING LONGITUDINAL AND TRANSVERSE JOINTS, MUST NOT POND WATER.			
ASPHALT	-0mm / +10mm	OF PAVEMENT FINISHED SURFACE LEVEL (AFTER COMPACTION)			
ASPHALT	-5mm / +5mm	ALONG THE FINISHED SURFACE OVER THE CARRIAGEWAY WIDTH AT THE DATE OF PRACTICAL COMPLETION			
ASPHALT	-8mm / +8mm	ALONG THE FINISHED SURFACE OVER THE CARRIAGEWAY WIDTH AT THE COMPLETION OF THE DEFECT LIABILITY PERIOD			
ASPHALT		SURFACE OF THE COURSE, INCLUDING LONGITUDINAL AND TRANSVERSE JOINTS, MUST NOT POND WATER.			

PENRITH CITY COUNCIL
 This plan / document relates to
 Development Consent: **SSD-10448-MOD-1**
 Subdivision Works Certificate: **EA22/0045**
 Subject to the conditions outlined in the consent

Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22
A	ISSUED FOR SWC APPROVAL	20-10-22

Bar Scales	
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Client

Scales

Drawn	JB/MH
Designed	JB/MH
Checked	DS
Approved	DS

Grid GDA2020
 Height Datum AHD

Project

**ASPECT INDUSTRIAL ESTATE
MAMRE ROAD,
KEMPS CREEK
STAGE 1B**

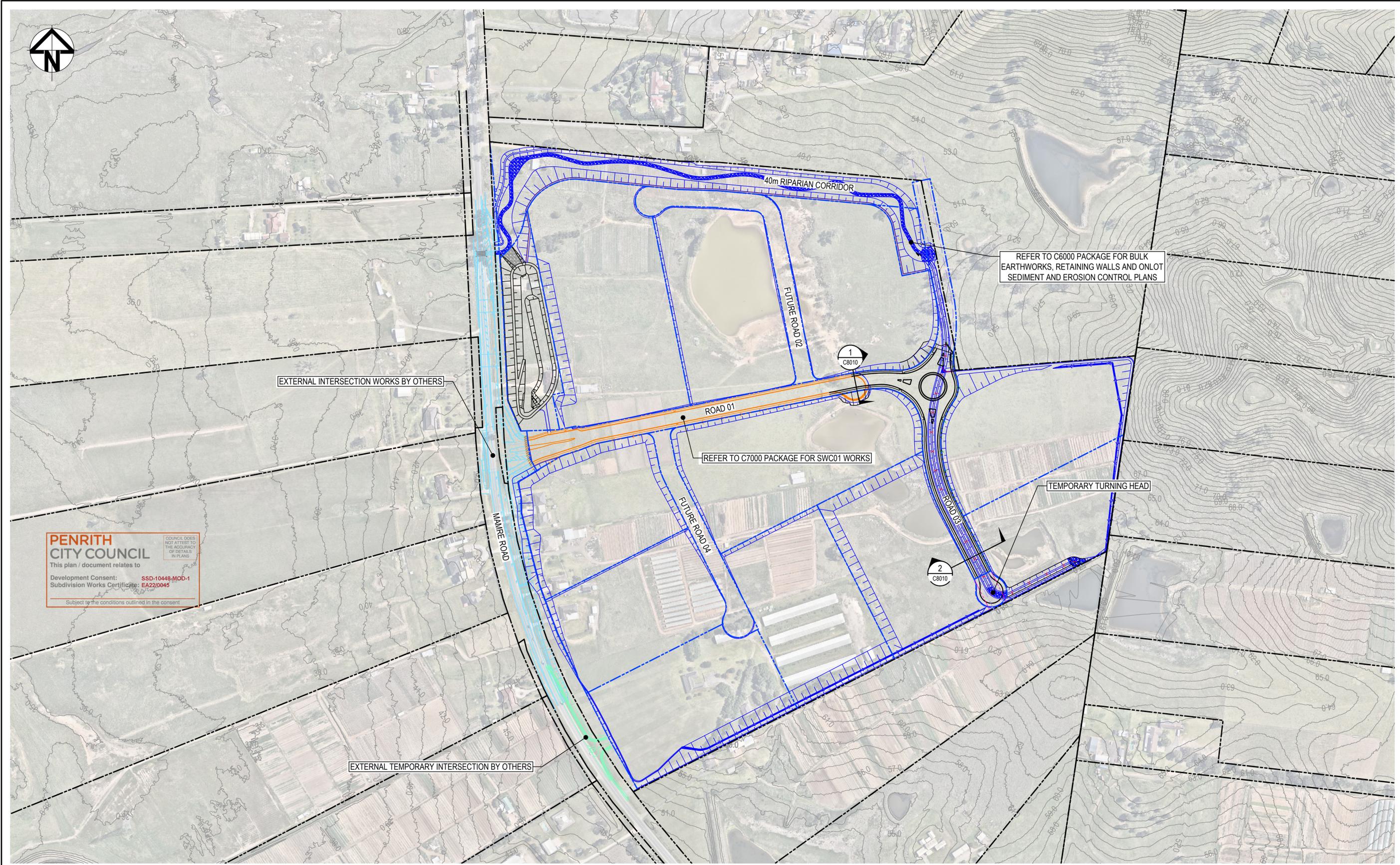
Title

**NOTES AND LEGENDS
SHEET
SHEET 2**

Civil Engineers and Project Managers

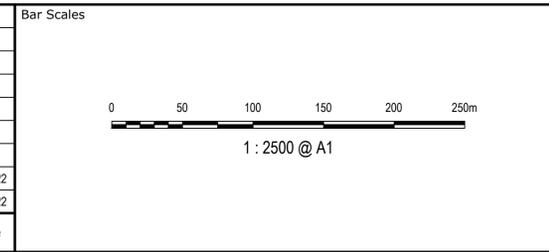
Level 7, 153 Walker Street
 North Sydney NSW 2060
 ABN 96 130 882 405
 Tel: 02 9439 1777
 Fax: 02 9923 1055
 www.atl.net.au
 info@atl.net.au

Status	FOR CONSTRUCTION	A1
Project - Drawing No.	18-596-C8003	Issue
		1



PENRITH CITY COUNCIL
 This plan / document relates to
 Development Consent: **SSD-10448-MOD-1**
 Subdivision Works Certificate: **EA22/0045**
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Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22
A	ISSUED FOR SWC APPROVAL	20-10-22



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Grid	GDA2020	Designed	JB/MH
Height Datum	AHD	Checked	DS
		Approved	DS

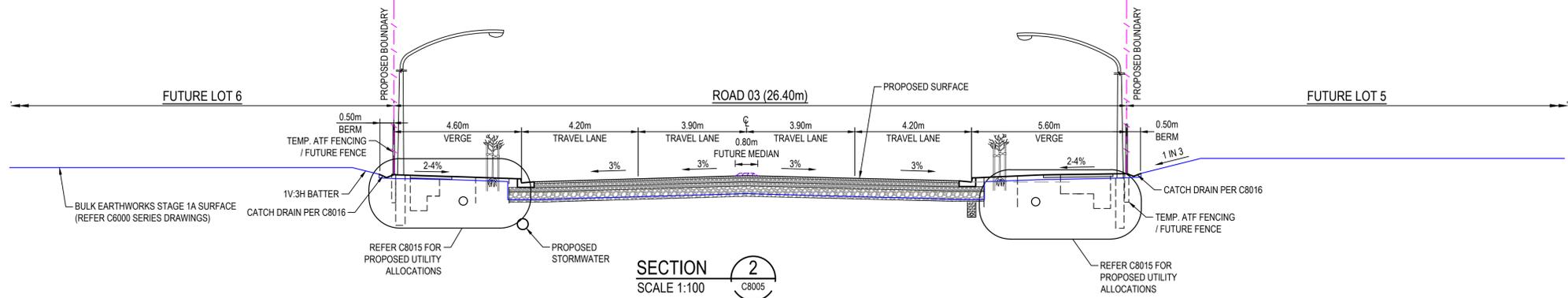
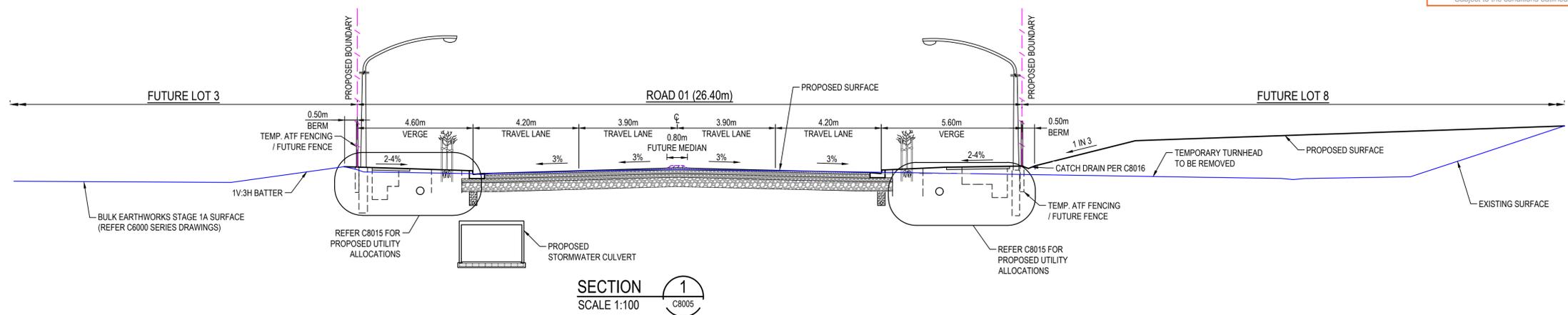
Project
**ASPECT INDUSTRIAL ESTATE
 MAMRE ROAD,
 KEMPS CREEK
 STAGE 1B**

Title
**GENERAL ARRANGEMENT
 PLAN**

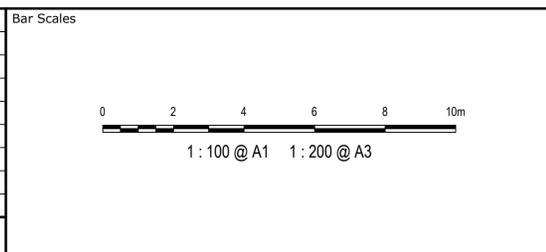
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 North Sydney NSW 2060
 ABN 96 130 882 405
 Tel: 02 9439 1777
 Fax: 02 9923 1055
 www.atl.net.au
 info@atl.net.au

Status	FOR CONSTRUCTION	A1
Project - Drawing No.	18-596-C8005	Issue
		1



Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22
A	ISSUED FOR SWC APPROVAL	20-10-22



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Designed	JB/MH
Checked	DS
Approved	DS

Scales: 1:100

Grid: GDA2020

Height Datum: AHD

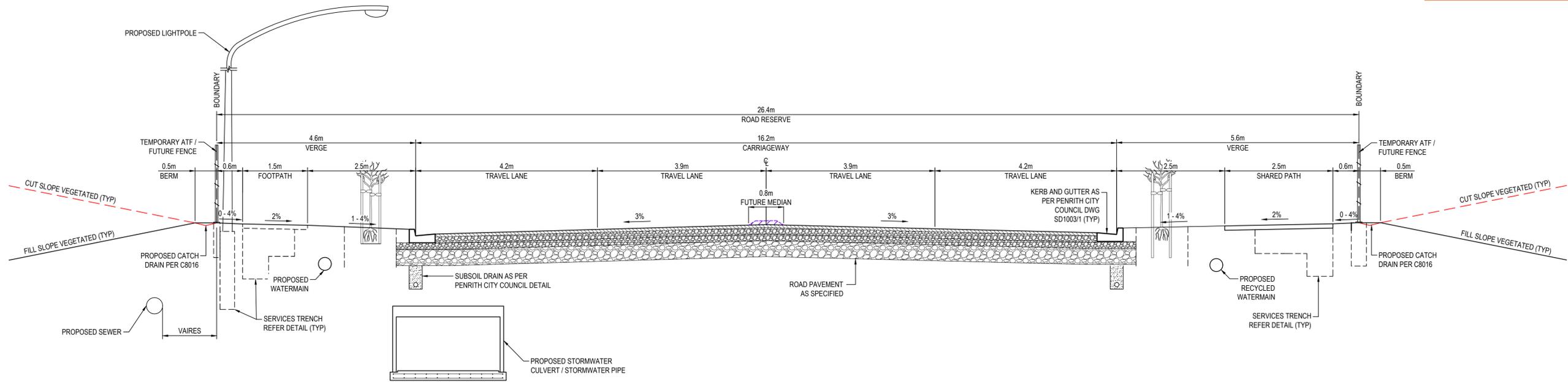
Project: **ASPECT INDUSTRIAL ESTATE
MAMRE ROAD,
KEMPS CREEK
STAGE 1B**

Title: **TYPICAL SECTIONS**

Civil Engineers and Project Managers

Level 7, 153 Walker Street
North Sydney NSW 2060
ABN 96 130 882 405
Tel: 02 9439 1777
Fax: 02 9923 1055
www.atl.net.au
info@atl.net.au

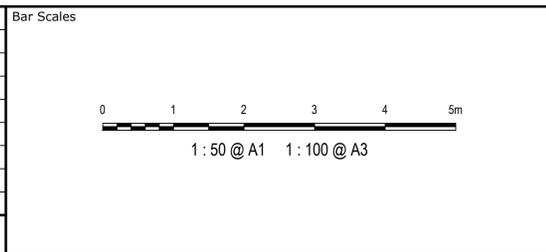
Status	FOR CONSTRUCTION	A1
Project - Drawing No.	18-596-C8010	Issue
		1



TYPICAL SECTION - ESTATE ROAD 01 / ROAD 03

SCALE 1:50

Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22
A	ISSUED FOR SWC APPROVAL	20-10-22



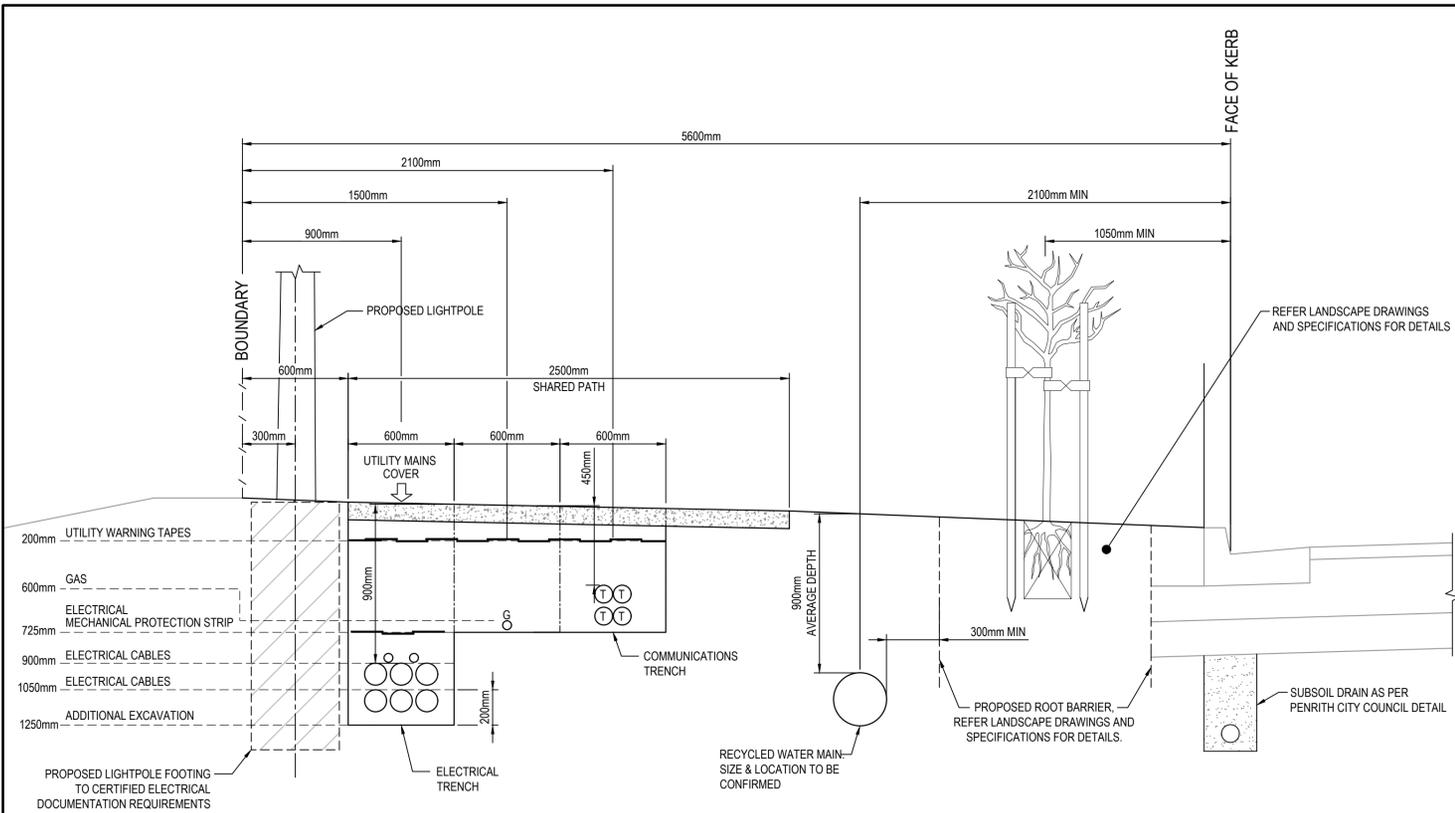
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Scales	1:50	Drawn	JB/MH
Grid	GDA2020	Designed	JB/MH
Height Datum	AHD	Checked	DS
		Approved	DS

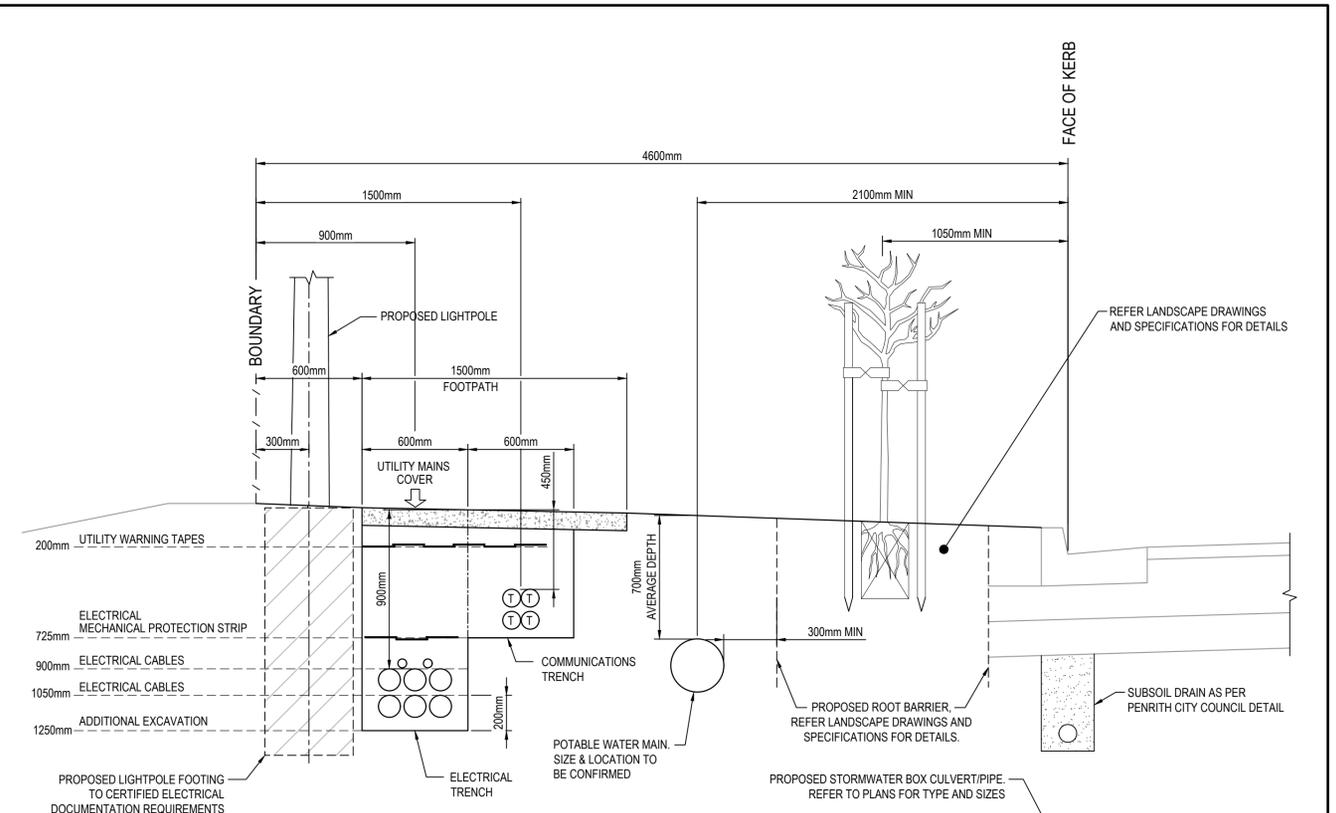
Project	ASPECT INDUSTRIAL ESTATE MAMRE ROAD, KEMPS CREEK STAGE 1B
Title	TYPICAL ROAD SECTIONS

Civil Engineers and Project Managers	
at&l	
Level 7, 153 Walker Street North Sydney NSW 2060 ABN 96 130 882 405 Tel: 02 9439 1777 Fax: 02 9923 1055 www.atl.net.au info@atl.net.au	
Status	FOR CONSTRUCTION
Project - Drawing No.	18-596-C8012
Issue	1



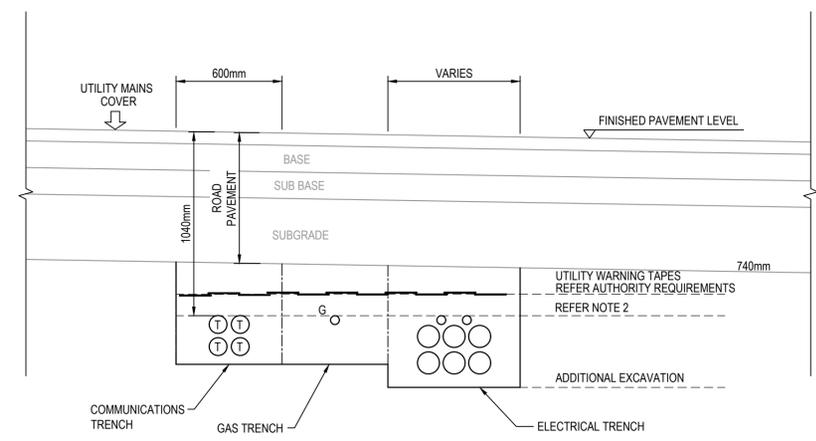
**TYPICAL SERVICES TRENCH DETAIL
ROAD 01 & ROAD 03 (SHARED PATH VERGE)**

SCALE 1:20
NOTE: FINAL NUMBER, SIZING AND SPACING OF CONDUITS AND PROTECTION STRIPS SUBJECT TO CERTIFIED ELECTRICAL AND COMMUNICATIONS AUTHORITY DOCUMENTATION.



**TYPICAL SERVICES TRENCH DETAIL
ROAD 01 & ROAD 03 (FOOTPATH VERGE)**

SCALE 1:20
NOTE: FINAL NUMBER, SIZING AND SPACING OF CONDUITS AND PROTECTION STRIPS SUBJECT TO CERTIFIED ELECTRICAL AND COMMUNICATIONS AUTHORITY DOCUMENTATION.

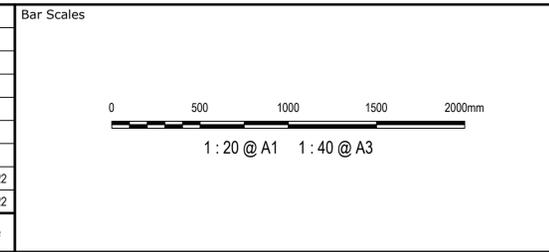


TYPICAL SERVICES TRENCH DETAIL (ROAD CROSSING)

NOTES
1: FINAL NUMBER, SIZING AND SPACING OF CONDUITS AND PROTECTION STRIPS SUBJECT TO CERTIFIED ELECTRICAL AND COMMUNICATIONS AUTHORITY DOCUMENTATION.
2: UTILITY DEPTHS TO BE INSTALLED IN ACCORDANCE WITH AUTHORITY REQUIREMENTS OR MINIMUM 300mm BELOW SUBGRADE, WHICHEVER IS THE MORE ONEROUS.

PENRITH CITY COUNCIL
This plan / document relates to
Development Consent: **SSD-10448-MOD-1**
Subdivision Works Certificate: **EA22/0045**
Subject to the conditions outlined in the consent

Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22
A	ISSUED FOR SWC APPROVAL	20-10-22



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Scales: 1:20
Grid: GDA2020
Height Datum: AHD

Drawn	JB/MH
Designed	JB/MH
Checked	DS
Approved	DS

GDA2020

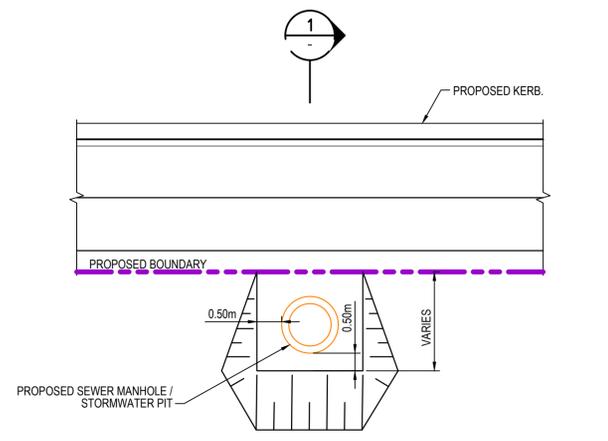
Project: **ASPECT INDUSTRIAL ESTATE
MAMRE ROAD,
KEMPS CREEK
STAGE 1B**

Title: **TYPICAL DETAILS
SHEET 1**

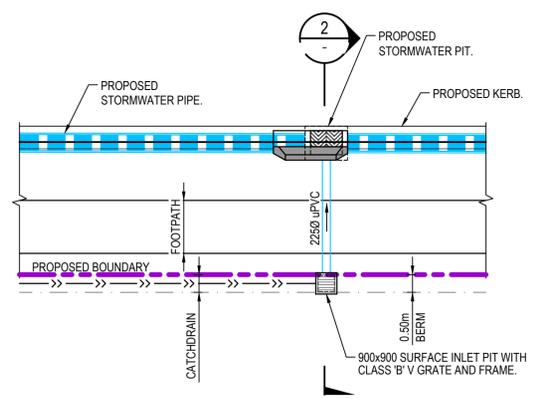
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North Sydney NSW 2060
ABN 96 130 882 405
Tel: 02 9439 1777
Fax: 02 9923 1055
www.atl.net.au
info@atl.net.au

Status	FOR CONSTRUCTION	A1
Project - Drawing No.	18-596-C8015	Issue
		1



SEWER MANHOLE AND STORMWATER PIT IN BATTER DETAIL



TYPICAL BATTER CATCH DRAIN PIT DETAIL

THICKENED EDGE DETAIL (TE)

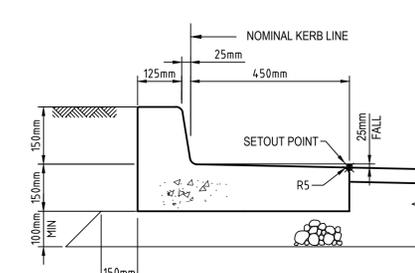
SCALE 1:20

EDGE BEAM DETAIL 1 (EB)

SCALE 1:20

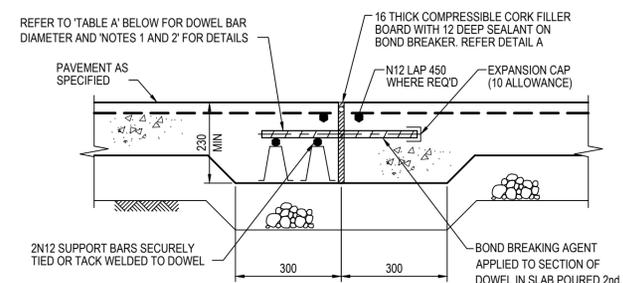
EDGE BEAM DETAIL 2 (EB)

SCALE 1:20



KERB AND TOE (K&T)

SCALE 1:10



DOWELLED EXPANSION JOINT (DEJ)

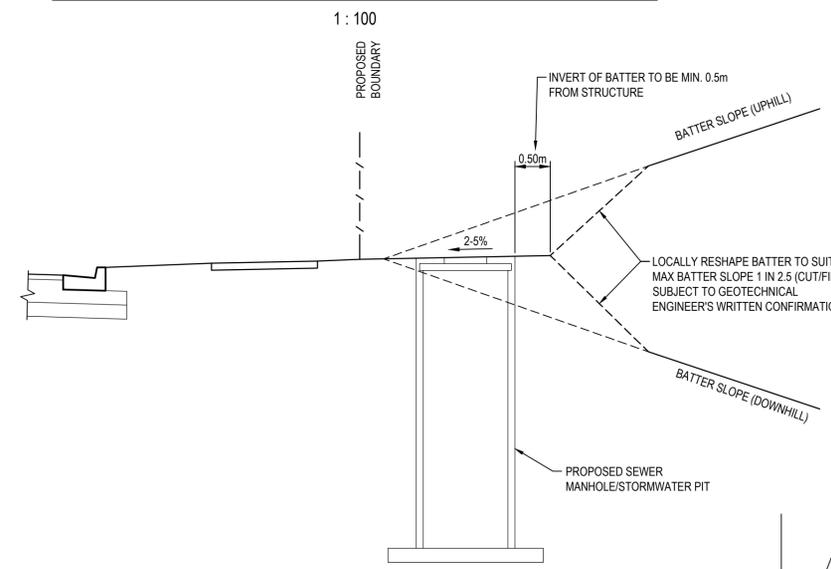
SCALE 1:10

NOTE

- DOWEL BARS ARE TO BE PLAIN ROUND STEEL BARS OF GRADE 250N AND 450mm LONG PLACED AT 300mm CENTRES.
- MORE THAN HALF OF THE DOWEL SHOULD BE COATED WITH DEBONDING AGENT TO ENSURE EFFECTIVE DEBONDING FROM THE CONCRETE ON THAT SIDE OF THE JOINT.

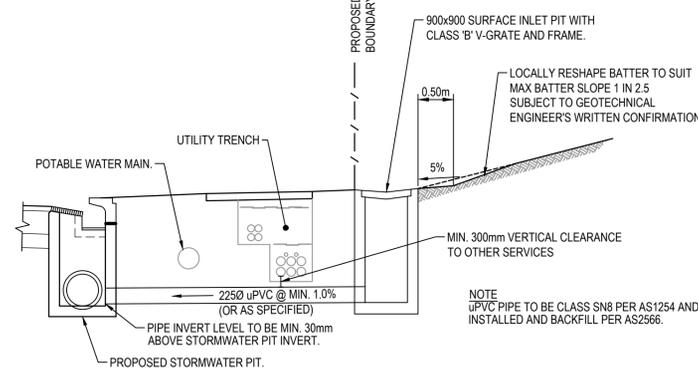
TABLE A

SLAB THICKNESS	DOWEL DIA.
125<D≤160	24
160<D≤200	28
200<D≤250	32
D>250	36



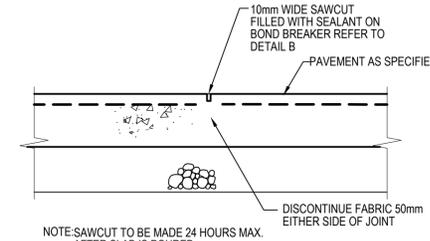
SECTION 1

SCALE 1:50



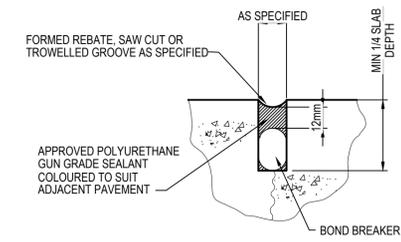
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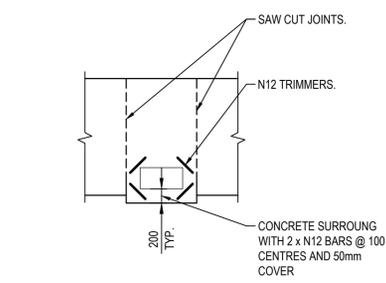
SAWN JOINT (SJ)

SCALE 1:10



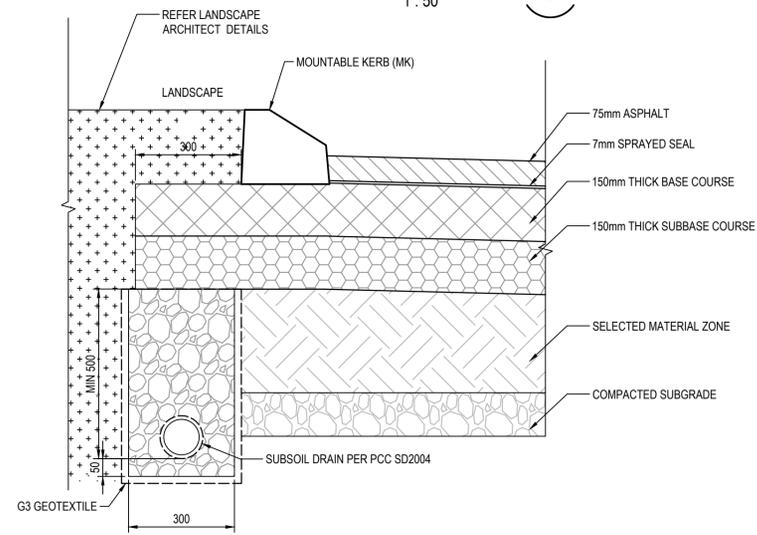
DETAIL B

N.T.S.



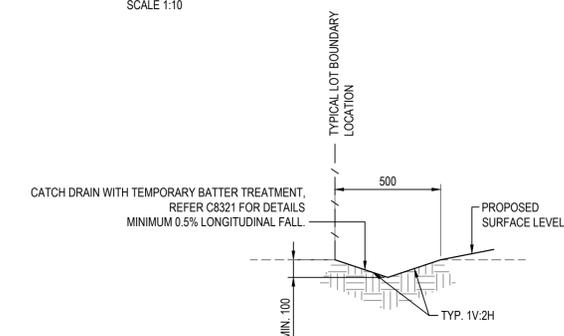
SERVICE COVER IN FOOTPATH TYPICAL DETAIL

SCALE 1:50



TYPICAL SECTION THROUGH RAISED TRAFFIC ISLAND WITH LANDSCAPE

SCALE 1:10

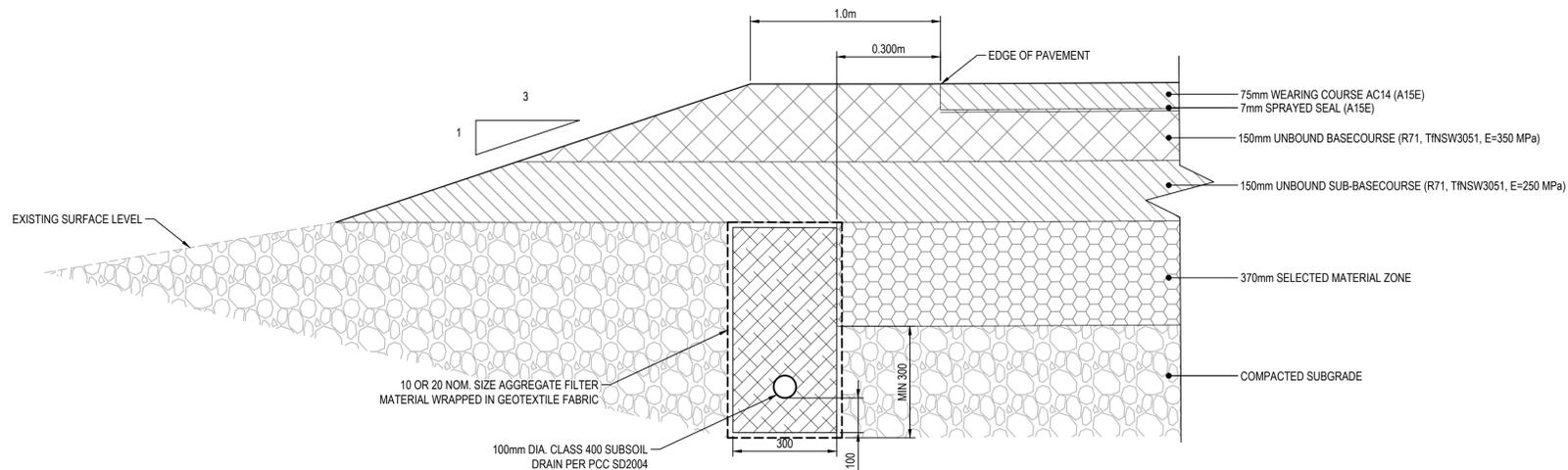


TYPICAL CATCH DRAIN DETAIL

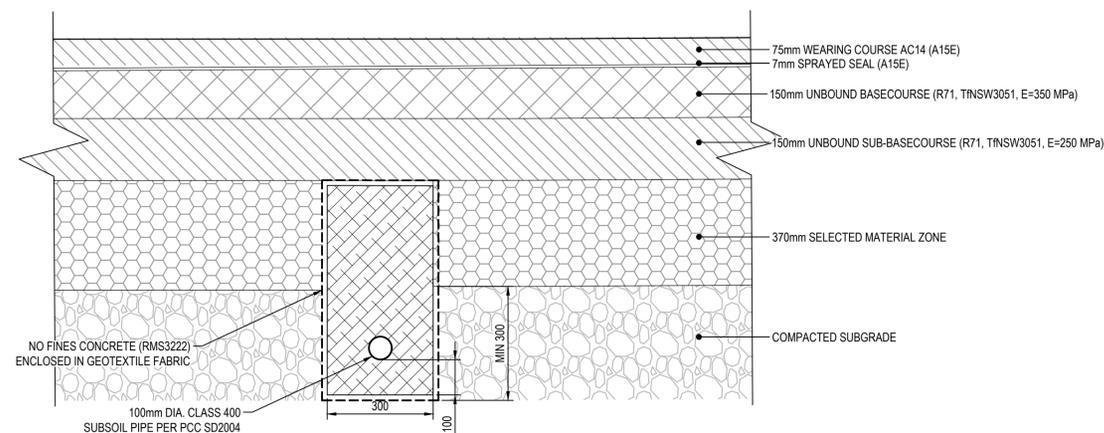
SCALE 1:20

PENRITH CITY COUNCIL
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 Development Consent: **SSD-10448-MOD-1**
 Subdivision Works Certificate: **EA22/0045**
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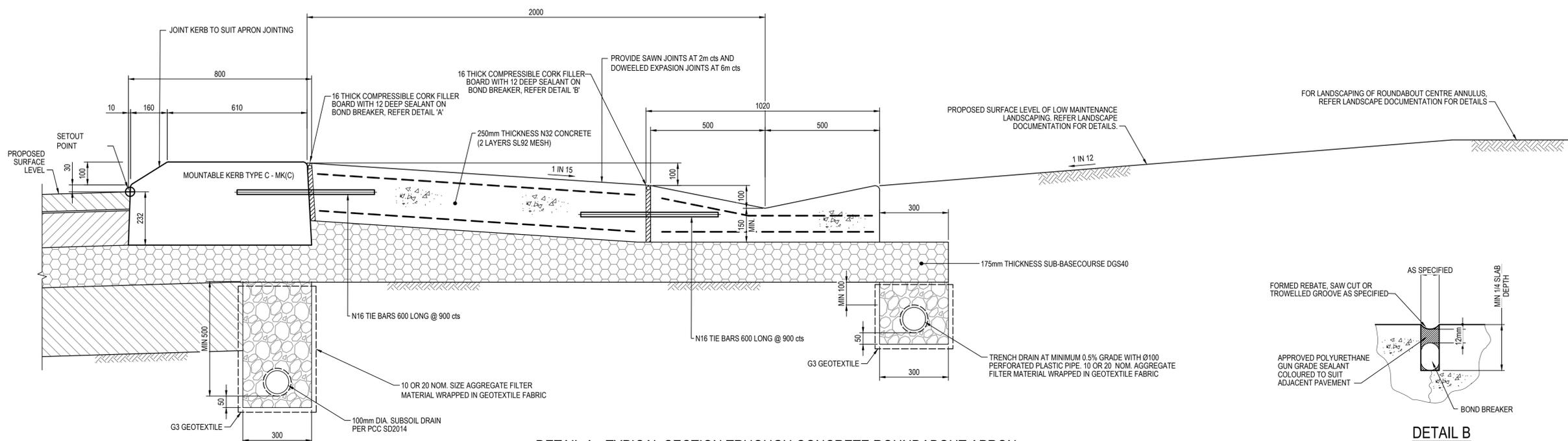
<p>Bar Scales</p> <p>0 100 200 400 600 800 1000mm</p> <p>0 500 1000 1500 2000mm</p> <p>0 1 2 3 4 5m</p> <p>0 2 4 6 8 10m</p> <p>1 : 10 @ A1 1 : 20 @ A3</p> <p>1 : 20 @ A1 1 : 40 @ A3</p> <p>1 : 50 @ A1 1 : 100 @ A3</p> <p>1 : 100 @ A1 1 : 200 @ A3</p>		<p>THIS DRAWING CANNOT BE COPIED OR REPRODUCED IN ANY FORM OR USED FOR ANY OTHER PURPOSE OTHER THAN THAT ORIGINALLY INTENDED WITHOUT THE WRITTEN PERMISSION OF AT&L</p>	<p>Client</p>	<p>Scales</p> <p>AS SHOWN</p> <p>Grid GDA2020</p> <p>Height Datum AHD</p>	<p>Drawn</p> <p>Designed</p> <p>Checked</p> <p>Approved</p>	<p>Project</p> <p>ASPECT INDUSTRIAL ESTATE MAMRE ROAD, KEMPS CREEK STAGE 1B</p> <p>Title</p> <p>TYPICAL DETAILS SHEET 2</p>	<p>Civil Engineers and Project Managers</p> <p>Level 7, 153 Walker Street North Sydney NSW 2060 ABN 96 130 882 405 Tel: 02 9439 1777 Fax: 02 9923 1055 www.atl.net.au info@atl.net.au</p>
<p>1 ISSUED FOR CONSTRUCTION 17-11-22</p> <p>A ISSUED FOR SWC APPROVAL 20-10-22</p> <p>Issue Description Date</p>	<p>Status</p> <p>FOR CONSTRUCTION</p>	<p>Project - Drawing No.</p> <p>18-596-C8016</p>	<p>Issue</p> <p>1</p>				



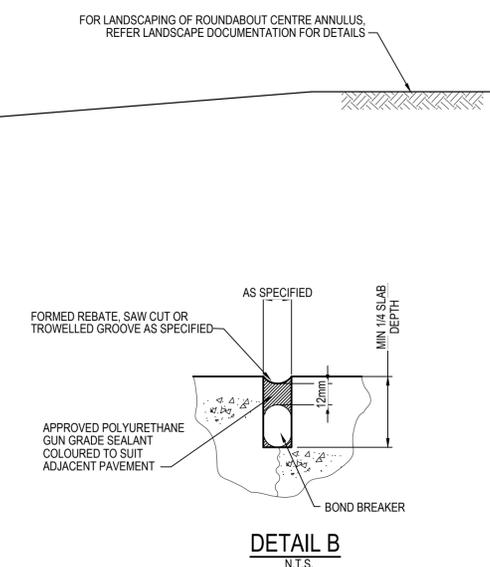
END OF ROAD PAVEMENT INTERFACE DETAIL
 SCALE 1:10



SUBSOIL DRAIN IN PAVEMENT DETAIL
 SCALE 1:10



DETAIL A - TYPICAL SECTION THROUGH CONCRETE ROUNDABOUT APRON
 SCALE 1:10



DETAIL B
 N.T.S.

Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22
A	ISSUED FOR SWC APPROVAL	20-10-22

Bar Scales

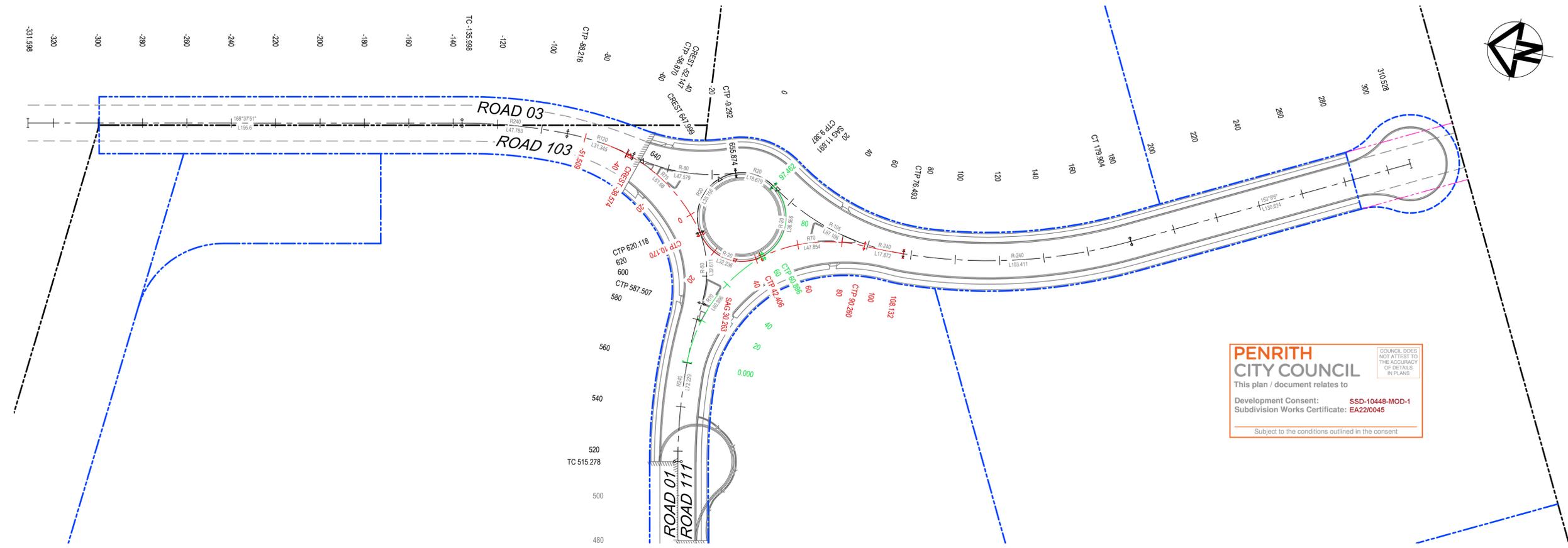
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Scales	Drawn	Checked	Approved
1:10	JB/MH	DS	DS
Grid	GDA2020		
Height Datum	AHD		

Project	Title
ASPECT INDUSTRIAL ESTATE MAMRE ROAD, KEMPS CREEK STAGE 1B	TYPICAL DETAILS SHEET 3

Civil Engineers and Project Managers	
Level 7, 153 Walker Street North Sydney NSW 2060 ABN 96 130 882 405 Tel: 02 9439 1777 Fax: 02 9923 1055 www.atl.net.au info@atl.net.au	
Status	A1
Project - Drawing No.	Issue
18-596-C8017	1



PENRITH CITY COUNCIL
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 Development Consent: **SSD-10448-MOD-1**
 Subdivision Works Certificate: **EA22/0045**
 Subject to the conditions outlined in the consent

PLAN
1 : 1000

CONTROL ROAD - ROAD 01 HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH	DEFLANGLE
IP 1	0.000	294705.871	6253037.413	82°59'28.38"			
TC	48.971	294754.476	6253043.389	82°59'28.38"			
IP 2	75.676	294780.995	6253046.649		R = -700.000	53.411	4°22'18.19"
CT	102.382	294807.188	6253051.921	78°37'10.18"			
TC	515.278	295211.966	6253133.395	78°37'10.18"			
IP 3	551.392	295247.640	6253140.576		R = 240.000	72.229	17°14'35.96"
CC	587.507	295283.839	6253136.859	95°51'46.15"			
IP 4	603.812	295300.659	6253135.131		R = -50.000	32.611	37°22'10.52"
CC	620.118	295315.076	6253143.968	58°29'35.62"			
IP 5	637.996	295336.297	6253156.976		R = 20.000	35.756	102°26'01.17"
IP 6	655.874	295344.430	6253133.452	160°55'36.79"			

CONTROL ROAD - ROAD 111 HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH	DEFLANGLE
IP 1	0.000	295256.611	6253138.100	89°21'06.19"			
IP 2	30.448	295289.134	6253138.468		R = 70.000	60.896	49°50'37.46"
CC	60.896	295310.389	6253113.848	139°11'43.65"			
IP 3	79.179	295327.346	6253094.206		R = -20.000	36.566	104°45'14.70"
IP 4	97.462	295342.022	6253115.606	34°26'28.95"			

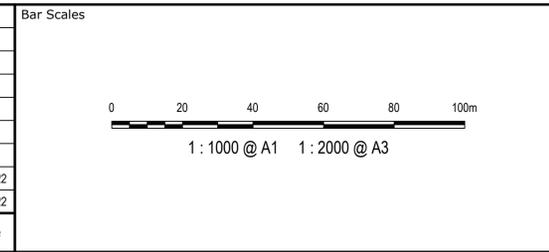
CONTROL ROAD - ROAD 03 HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH	DEFLANGLE
IP 1	-331.598	2953450.590	6253450.523	168°37'51.08"			
TC	-135.998	295342.149	6253258.761	168°37'51.08"			
IP 2	-112.107	295346.874	6253235.261		R = 240.000	47.783	11°24'26.08"
CC	-88.216	295346.858	6253211.290	180°02'17.16"			
IP 3	-72.543	295346.847	6253195.528		R = 120.000	31.345	14°57'58.48"
CC	-56.870	295342.767	6253180.303	195°00'15.64"			
IP 4	-33.081	295336.420	6253156.623		R = -80.000	47.579	34°04'32.52"
CC	-9.292	295344.430	6253133.452	160°55'43.13"			
IP 5	0.048	295347.725	6253123.922		R = 20.000	18.679	53°30'41.97"
CC	9.387	295342.022	6253115.606	214°26'25.10"			
IP 6	42.940	295322.373	6253086.953		R = -105.000	67.106	36°37'04.15"
CC	76.493	295323.693	6253052.234	177°49'20.95"			
IP 7	128.198	295325.689	6252999.752		R = -240.000	103.411	24°41'14.86"
CT	179.904	295349.422	6252952.900	153°08'06.09"			
IP 8	310.528	295408.450	6252836.373	153°08'06.09"			

CONTROL ROAD - ROAD 103 HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH	DEFLANGLE
IP 1	-51.509	295345.647	6253194.360	188°08'56.43"			
IP 2	-20.669	295341.011	6253161.986		R = 75.000	61.680	47°07'11.09"
CC	10.170	295314.134	6253143.353	235°16'07.53"			
IP 3	26.288	295297.009	6253131.482		R = -20.000	32.236	92°20'53.11"
CC	42.406	295309.572	6253114.858	142°55'14.42"			
IP 4	66.333	295324.588	6253094.989		R = 70.000	47.854	39°10'08.82"
CC	90.260	295323.679	6253070.101	182°05'23.23"			
IP 5	99.196	295323.353	6253061.167		R = -240.000	17.872	4°15'59.46"
IP 6	108.132	295323.693	6253052.234	177°49'23.77"			

Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22
A	ISSUED FOR SWC APPROVAL	20-10-22



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Scales: 1:1000

Grid: GDA2020

Height Datum: AHD

Drawn: JB/MH

Designed: JB/MH

Checked: DS

Approved: DS

GDA2020 logo

Project: **ASPECT INDUSTRIAL ESTATE MAMRE ROAD, KEMPS CREEK STAGE 1B**

Title: **CONTROL LINE SETOUT PLAN**

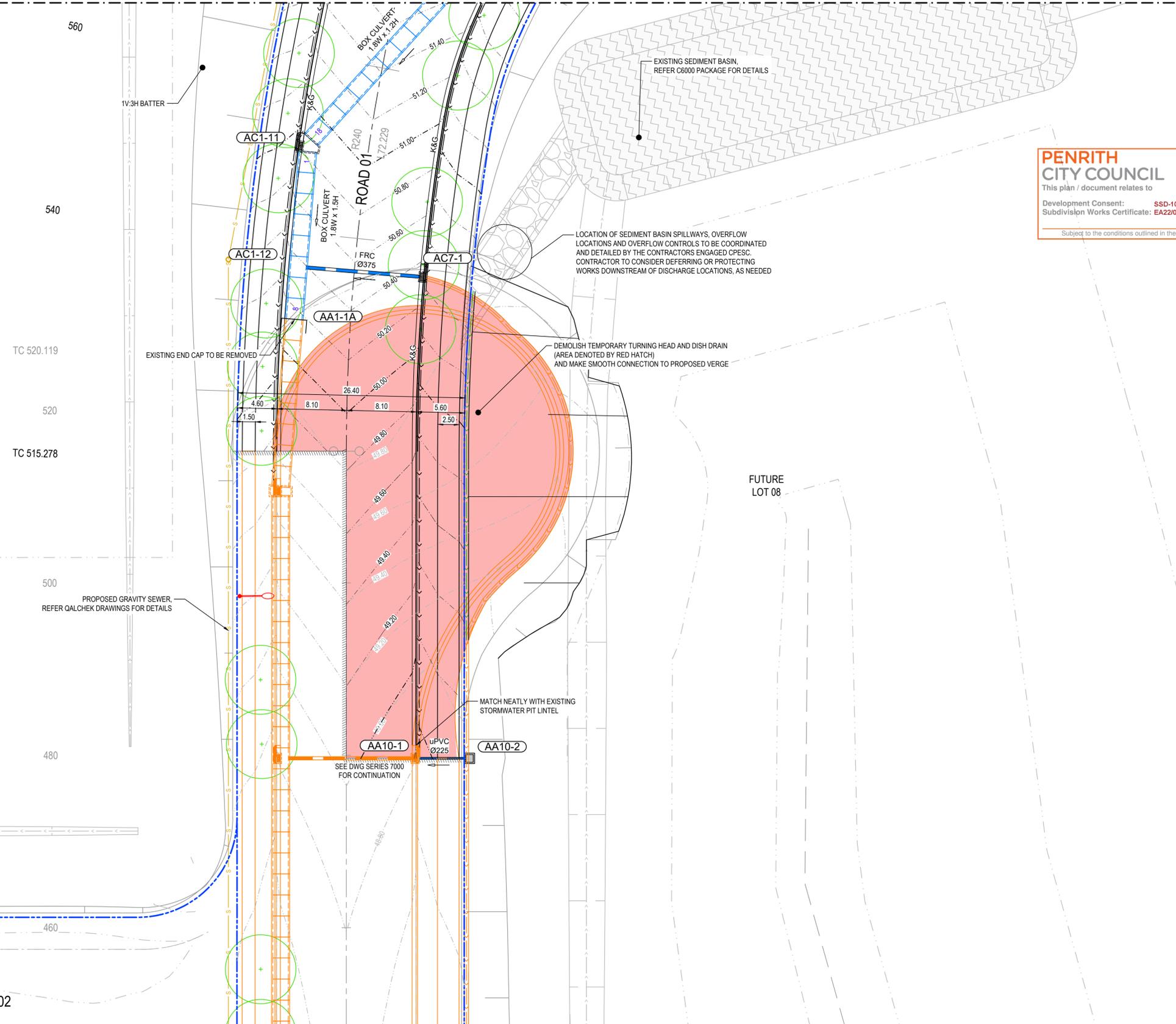
Civil Engineers and Project Managers

Level 7, 153 Walker Street
North Sydney NSW 2060
ABN 96 130 882 405
Tel: 02 9439 1777
Fax: 02 9923 1055
www.atl.net.au
info@atl.net.au

Status: **FOR CONSTRUCTION**

Project - Drawing No. **18-596-C8050**

Issue: **1**



PENRITH CITY COUNCIL
 This plan / document relates to
 Development Consent: **SSD-10448-MOD-1**
 Subdivision Works Certificate: **EAZ2/0045**
 Subject to the conditions outlined in the consent

REFER C6000 PACKAGE FOR BULK EARTHWORKS LEVELS AND EXISTING EROSION AND SEDIMENT CONTROL

PROPOSED GRAVITY SEWER, REFER QALCHEK DRAWINGS FOR DETAILS

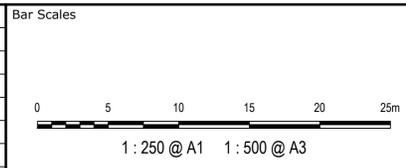
LOCATION OF SEDIMENT BASIN SPILLWAYS, OVERFLOW LOCATIONS AND OVERFLOW CONTROLS TO BE COORDINATED AND DETAILED BY THE CONTRACTORS ENGAGED CPESC. CONTRACTOR TO CONSIDER DEFERRING OR PROTECTING WORKS DOWNSTREAM OF DISCHARGE LOCATIONS, AS NEEDED

DEMOLISH TEMPORARY TURNING HEAD AND DISH DRAIN (AREA DENOTED BY RED HATCH) AND MAKE SMOOTH CONNECTION TO PROPOSED VERGE

MATCH NEATLY WITH EXISTING STORMWATER PIT LINTEL

SEE DWG SERIES 7000 FOR CONTINUATION

Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22
A	ISSUED FOR SWC APPROVAL	20-10-22



Scales	1:250	Drawn	JB/MH
		Designed	JB/MH
Grid	GDA2020	Checked	DS
Height Datum	AHD	Approved	DS

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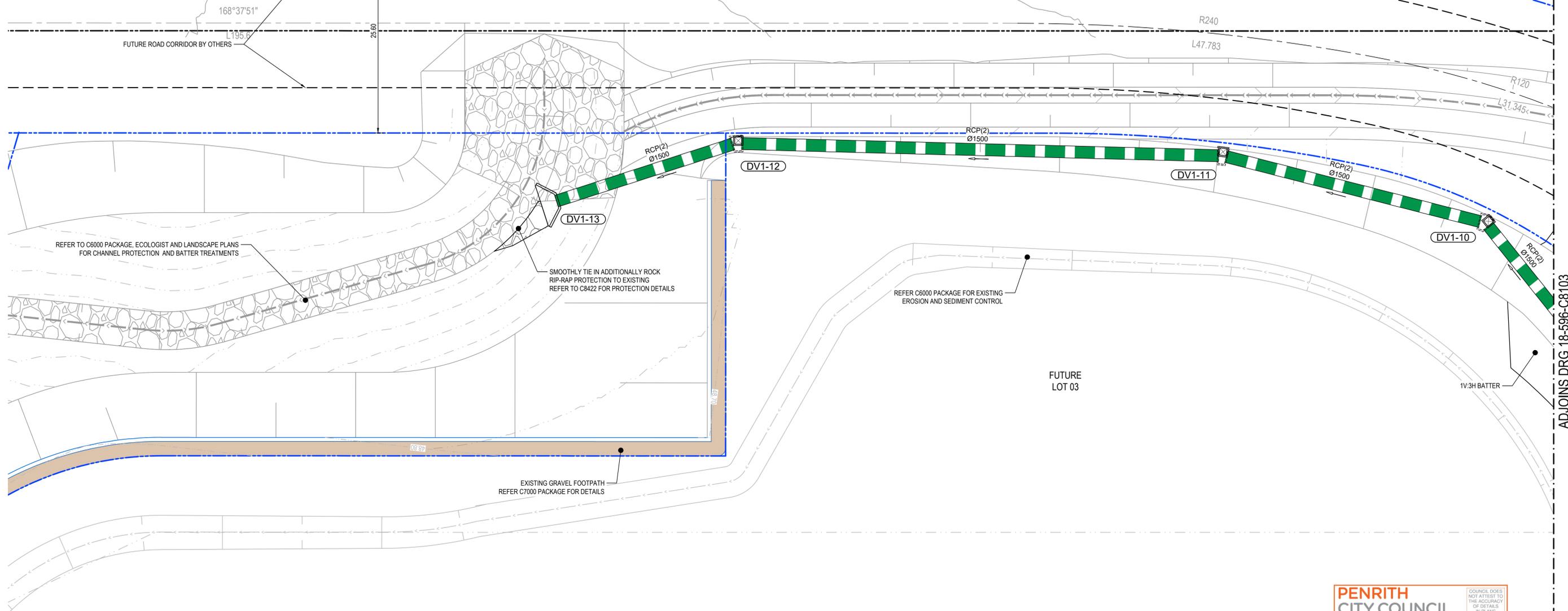
Project
**ASPECT INDUSTRIAL ESTATE
 MAMRE ROAD,
 KEMPS CREEK
 STAGE 1B**

Title
**ROADWORKS
 AND STORMWATER DRAINAGE
 SHEET 1**

Civil Engineers and Project Managers

Level 7, 153 Walker Street
 North Sydney NSW 2060
 ABN 96 130 882 405
 Tel: 02 9439 1777
 Fax: 02 9923 1055
 www.atl.net.au
 info@atl.net.au

Status	FOR CONSTRUCTION	A1
Project - Drawing No.	18-596-C8101	Issue
		1



PENRITH CITY COUNCIL

This plan / document relates to

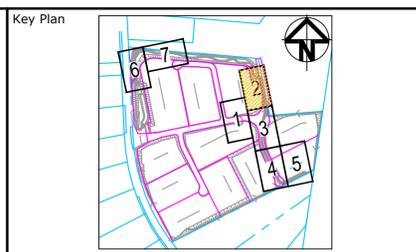
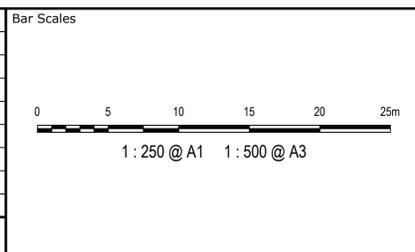
Development Consent: **SSD-10448-MOD-1**

Subdivision Works Certificate: **EA220045**

COUNCIL DOES NOT ATTEST TO THE ACCURACY OF DETAILS IN PLANS

Subject to the conditions outlined in the consent.

Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22
A	ISSUED FOR SWC APPROVAL	20-10-22



Client

Scales	1:250	Drawn	JB/MH
Grid	GDA2020	Designed	JB/MH
Height Datum	AHD	Checked	DS
		Approved	DS

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Project

**ASPECT INDUSTRIAL ESTATE
MAMRE ROAD,
KEMPS CREEK
STAGE 1B**

Title

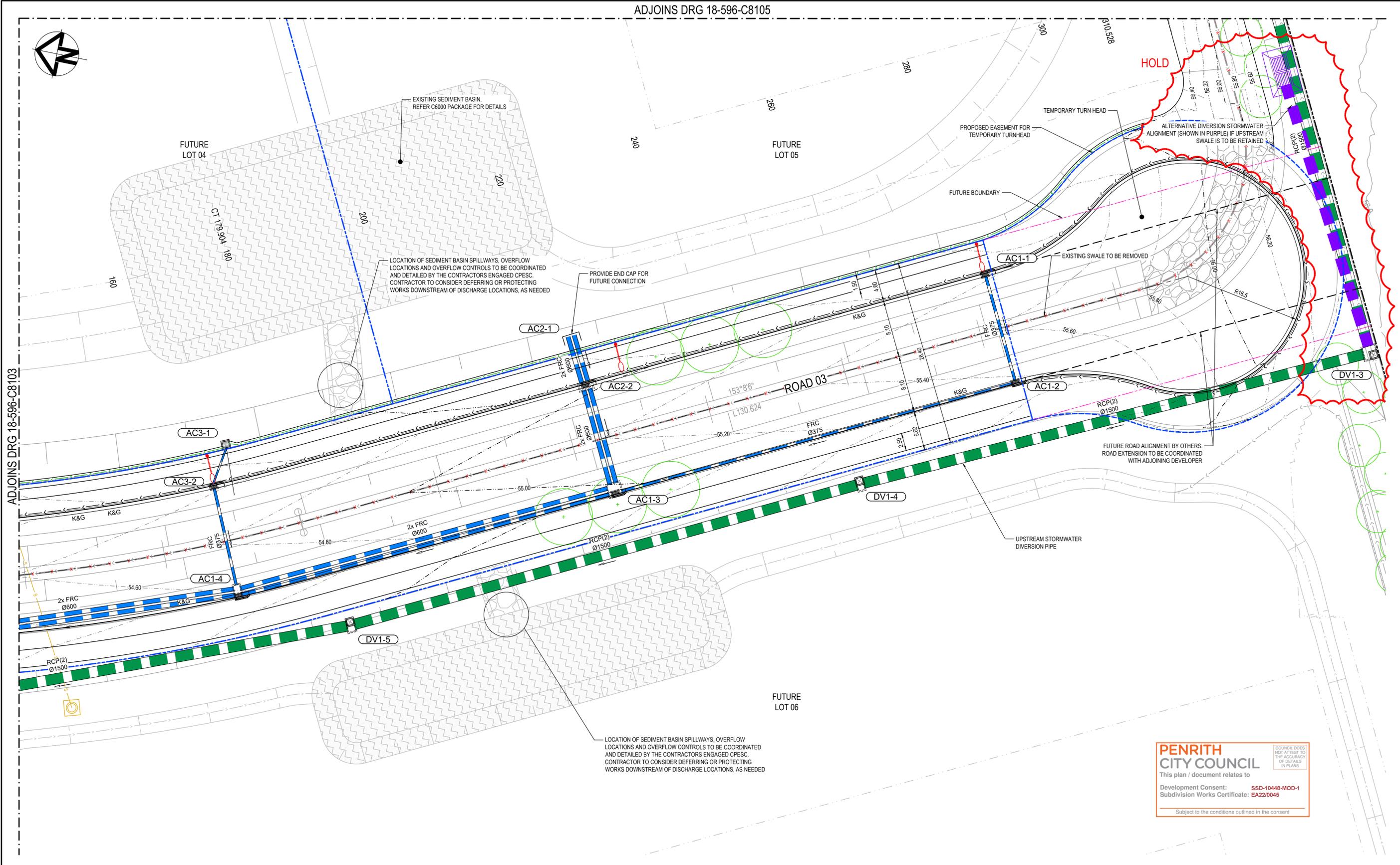
**ROADWORKS
AND STORMWATER DRAINAGE
SHEET 2**

Civil Engineers and Project Managers

Level 7, 153 Walker Street
North Sydney NSW 2060
ABN 96 130 882 405
Tel: 02 9439 1777
Fax: 02 9923 1055
www.atl.net.au
info@atl.net.au

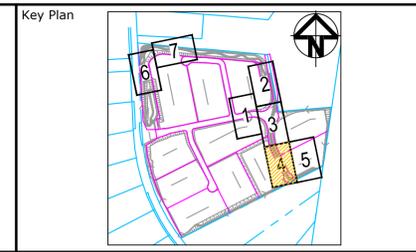
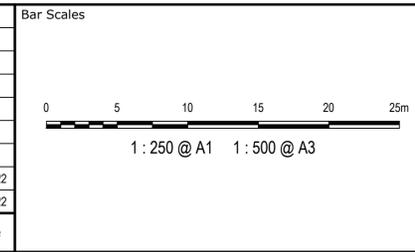
Status	FOR CONSTRUCTION	A1
Project - Drawing No.	18-596-C8102	Issue
		1

ADJOINS DRG 18-596-C8105



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 Subdivision Works Certificate: **EA22/0045**
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Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22
A	ISSUED FOR SWC APPROVAL	20-10-22



Client

Scales	1:250	Drawn	JB/MH
Grid	GDA2020	Designed	JB/MH
Height Datum	AHD	Checked	DS
		Approved	DS

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Project
**ASPECT INDUSTRIAL ESTATE
 MAMRE ROAD,
 KEMPS CREEK
 STAGE 1B**

Title
**ROADWORKS
 AND STORMWATER DRAINAGE
 SHEET 4**

Civil Engineers and Project Managers

Level 7, 153 Walker Street
 North Sydney NSW 2060
 ABN 96 130 882 405
 Tel: 02 9439 1777
 Fax: 02 9923 1055
 www.atl.net.au
 info@atl.net.au

Status	FOR CONSTRUCTION	A1
Project - Drawing No.	18-596-C8104	Issue
	1	



PENRITH CITY COUNCIL
COUNCIL DOES NOT ATTEST TO THE ACCURACY OF DETAILS IN PLANS

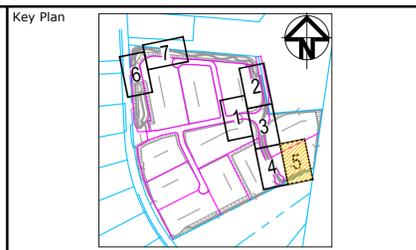
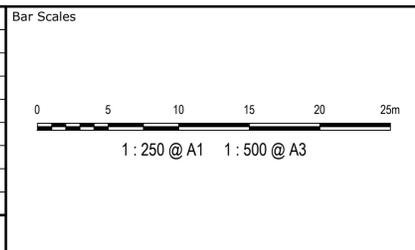
This plan / document relates to
 Development Consent: **SSD-10448-MOD-1**
 Subdivision Works Certificate: **EA220045**

Subject to the conditions outlined in the consent



ADJOINS DRG 18-596-C8104

Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22
A	ISSUED FOR SWC APPROVAL	20-10-22



Client

Scales	1:250	Drawn	JB/MH
		Designed	JB/MH
Grid	GDA2020	Checked	DS
Height Datum	AHD	Approved	DS

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Project
**ASPECT INDUSTRIAL ESTATE
 MAMRE ROAD,
 KEMPS CREEK
 STAGE 1B**

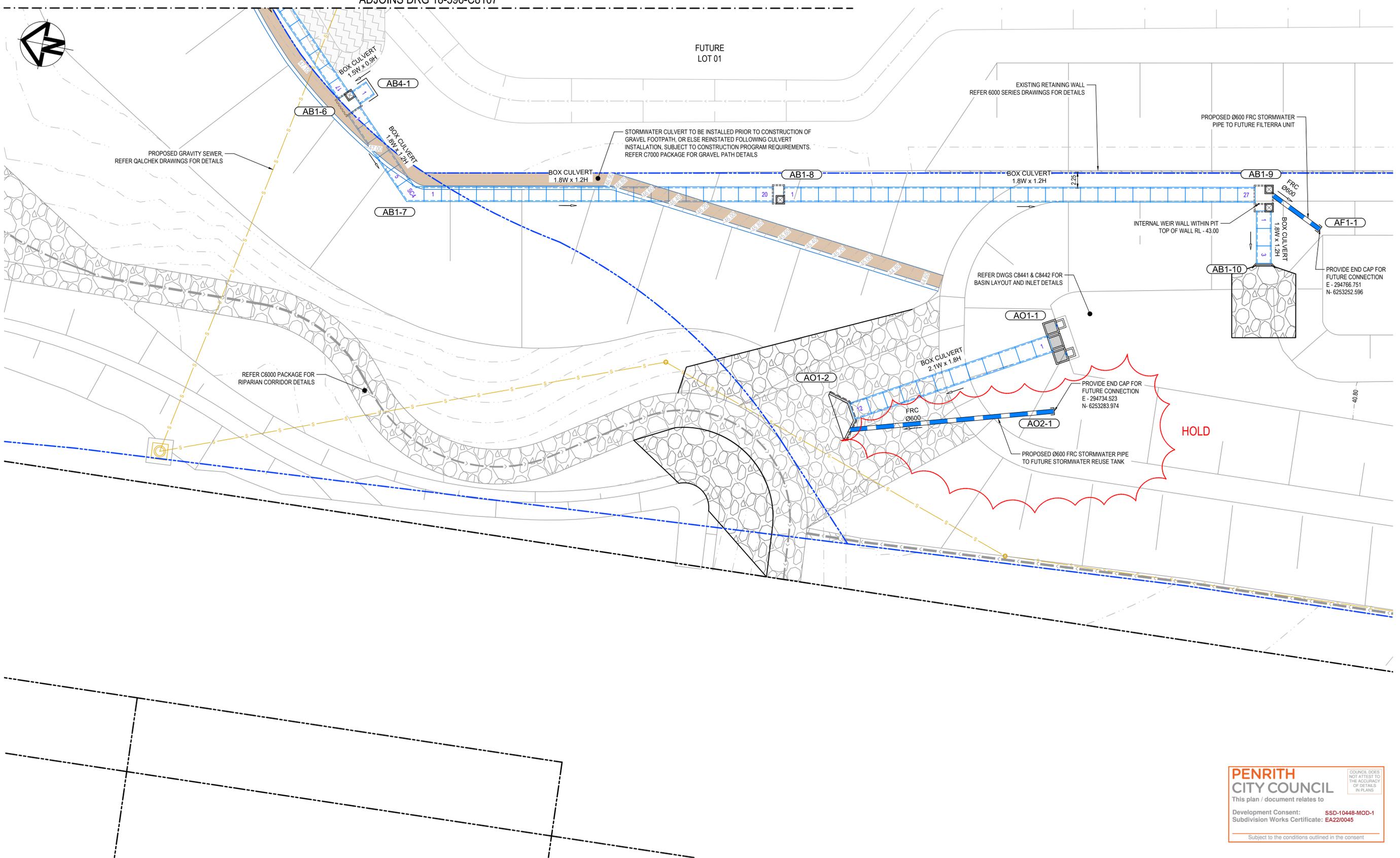
Title
**ROADWORKS
 AND STORMWATER DRAINAGE
 SHEET 5**

Civil Engineers and Project Managers

Level 7, 153 Walker Street
 North Sydney NSW 2060
 ABN 96 130 882 405
 Tel: 02 9439 1777
 Fax: 02 9923 1055
 www.atl.net.au
 info@atl.net.au

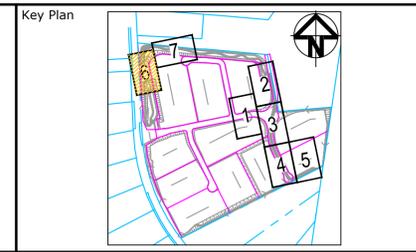
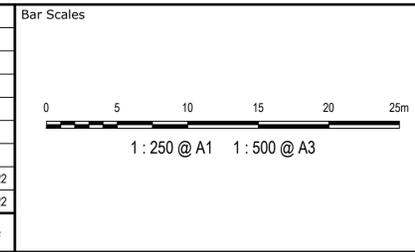
Status	FOR CONSTRUCTION	A1
Project - Drawing No.	18-596-C8105	Issue
		1

FUTURE LOT 01



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 Subdivision Works Certificate: **EA22/0045**
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Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22
A	ISSUED FOR SWC APPROVAL	20-10-22



Client

Scales	1:250	Drawn	JB/MH
		Designed	JB/MH
Grid	GDA2020	Checked	DS
Height Datum	AHD	Approved	DS

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Project
**ASPECT INDUSTRIAL ESTATE
 MAMRE ROAD,
 KEMPS CREEK
 STAGE 1B**

Title
**ROADWORKS
 AND STORMWATER DRAINAGE
 SHEET 6**

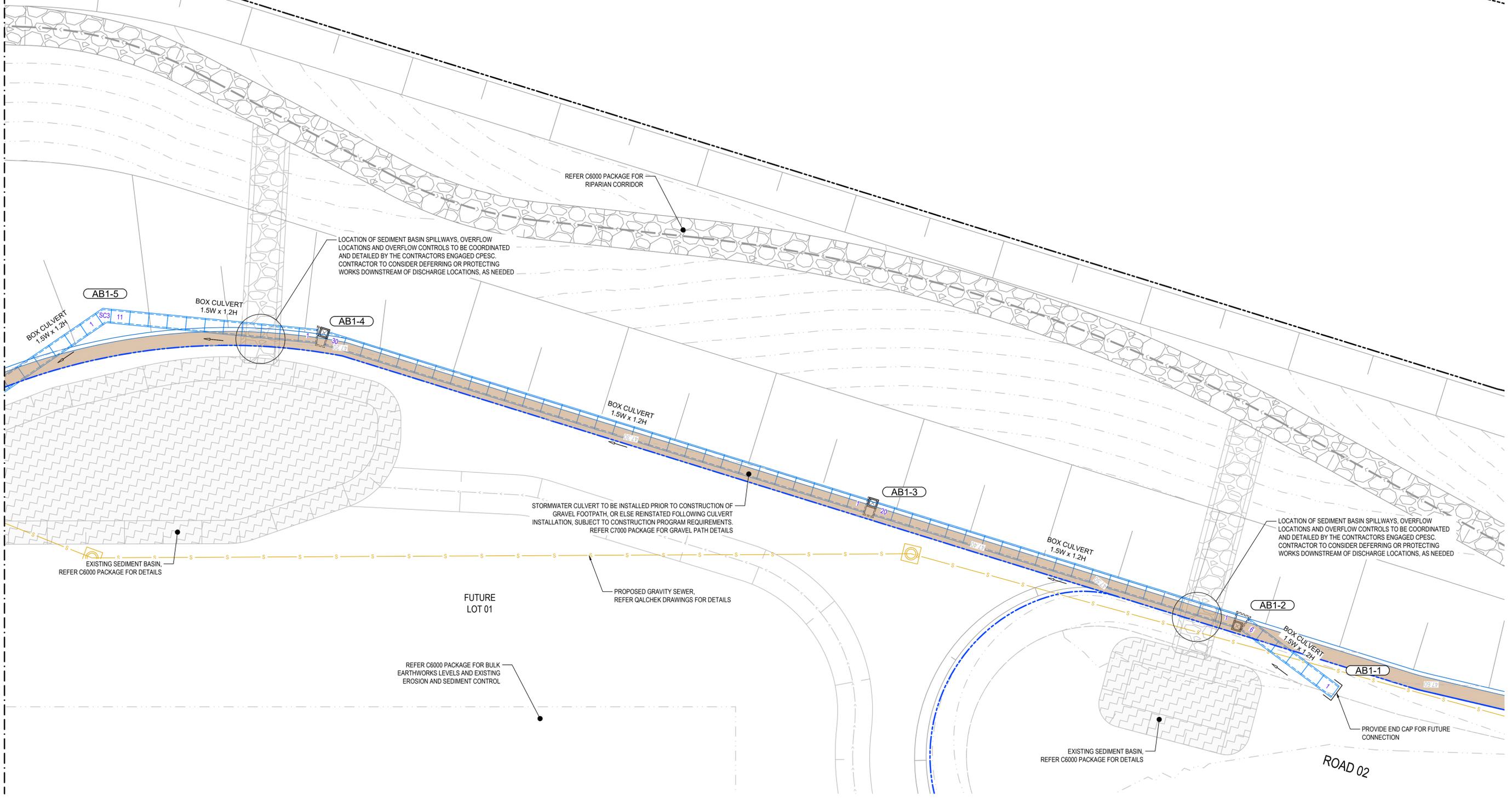
Civil Engineers and Project Managers

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 ABN 96 130 882 405
 Tel: 02 9439 1777
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 info@atl.net.au

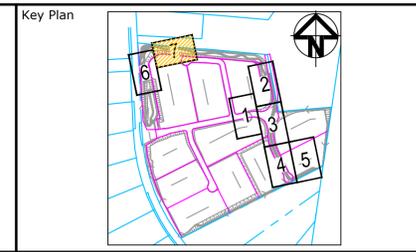
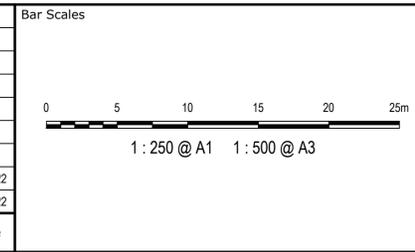
Status	FOR CONSTRUCTION	A1
Project - Drawing No.	18-596-C8106	Issue
		1



ADJOINS DRG 18-596-C8106



Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22
A	ISSUED FOR SWC APPROVAL	20-10-22



Scale	1:250	Drawn	JB/MH
Grid	GDA2020	Designed	JB/MH
Height Datum	AHD	Checked	DS
		Approved	DS

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Project
**ASPECT INDUSTRIAL ESTATE
 MAMRE ROAD,
 KEMPS CREEK
 STAGE 1B**

Title
**ROADWORKS
 AND STORMWATER DRAINAGE
 SHEET 7**

Civil Engineers and Project Managers

Level 7, 153 Walker Street
 North Sydney NSW 2060
 ABN 96 130 882 405
 Tel: 02 9439 1777
 Fax: 02 9923 1055
 www.atl.net.au
 info@atl.net.au

Status	FOR CONSTRUCTION	A1
Project - Drawing No.	18-596-C8107	Issue
		1



LIP OF KERB - (KR12) HORIZONTAL POINTS							
PT	CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH	DEFLANGLE
IP 1	0.000	295349.771	6253174.031	185°41'09.93"			
IP 2	18.434	295347.912	6253155.360		R = -80.451	36.868	26°15'23.89"
CC	36.868	295354.505	6253137.793	159°25'46.04"			
IP 3	51.929	295360.258	6253122.463		R = 30.950	30.122	55°45'44.51"
CC	66.989	295350.821	6253109.081	215°11'30.55"			
IP 4	86.332	295339.547	6253093.094		R = -105.450	38.686	21°01'10.89"
CC	105.675	295334.757	6253074.127	194°10'19.66"			
IP 5	122.605	295330.573	6253057.555		R = -100.450	33.860	19°18'47.37"
IP 6	139.535	295332.104	6253040.532	174°51'32.29"			

LIP OF KERB - (KR15) HORIZONTAL POINTS							
PT	CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH	DEFLANGLE
IP 1	0.000	295253.692	6253145.700	88°41'47.10"			
IP 2	12.059	295265.757	6253145.974		R = 247.650	24.118	5°34'47.28"
CC	24.118	295277.792	6253145.075	94°16'34.38"			
IP 3	38.620	295292.666	6253143.962		R = -50.443	29.004	32°56'39.72"
CC	53.121	295305.752	6253151.118	61°19'54.66"			
IP 4	55.402	295307.757	6253152.214		R = -30.259	4.562	8°38'15.57"
IP 5	57.683	295309.575	6253153.599				
IP 6	74.922	295323.536	6253164.227		R = -75.432	34.478	26°11'19.82"
IP 7	92.162	295331.373	6253179.925	26°31'49.55"			

INVERT OF KERB - (KR14) HORIZONTAL POINTS (CLOSED)							
PT	CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH	DEFLANGLE
IP 1	0.000	295305.528	6253126.917				
IP 2	15.708	295305.528	6253146.917		R = 20.000	31.416	90°00'00.00"
CC	31.416	295325.528	6253146.917	90°00'00.00"			
IP 3	47.124	295345.528	6253146.917		R = 20.000	31.416	90°00'00.00"
CC	62.832	295345.528	6253126.917	180°00'00.00"			
IP 4	78.540	295345.528	6253106.917		R = 20.000	31.416	90°00'00.00"
CC	94.248	295325.528	6253106.917	270°00'00.00"			
IP 5	109.956	295305.528	6253106.917		R = 20.000	31.416	90°00'00.00"

LIP OF KERB - (KR13) HORIZONTAL POINTS							
PT	CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH	DEFL. ANGLE
IP 1	0.000	295316.182	6253048.924	357°07'30.51"			
IP 2	4.250	295315.969	6253053.174		R = 73.550	8.501	6°37'19.86"
CC	8.501	295316.247	6253057.420	3°44'50.37"			
IP 3	33.890	295317.972	6253083.756		R = -75.450	50.778	38°33'37.99"
CC	59.279	295302.904	6253105.426	325°11'12.38"			
IP 4	61.658	295301.543	6253107.383		R = -30.450	4.758	8°57'10.34"
CC	64.037	295299.894	6253109.104	316°14'02.03"			
IP 5	84.899	295285.026	6253124.626		R = -70.450	41.723	33°55'58.77"
CC	105.761	295264.026	6253129.206	282°18'03.26"			
IP 6	112.015	295257.884	6253130.545		R = -50.450	12.507	14°12'16.51"
IP 7	118.268	295251.602	6253130.336	268°05'46.75"			

PENRITH CITY COUNCIL
COUNCIL DOES NOT ATTEST TO THE ACCURACY OF DETAILS IN PLANS

This plan / document relates to
 Development Consent: **SSD-10448-MOD-1**
 Subdivision Works Certificate: **EA22/0045**

Subject to the conditions outlined in the consent

Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22
A	ISSUED FOR SWC APPROVAL	20-10-22

Bar Scales

1 : 250 @ A1 1 : 500 @ A3

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Client

Scales: 1:250

Grid: GDA2020

Height Datum: AHD

Drawn: JB/MH
 Designed: JB/MH
 Checked: DS
 Approved: DS

Project: **ASPECT INDUSTRIAL ESTATE MAMRE ROAD, KEMPS CREEK STAGE 1B**

Title: **INTERSECTION PLAN SHEET 1**

Civil Engineers and Project Managers

Level 7, 153 Walker Street
 North Sydney NSW 2060
 ABN 96 130 882 405
 Tel: 02 9439 1777
 Fax: 02 9923 1055
 www.atl.net.au
 info@atl.net.au

Status: FOR CONSTRUCTION	A1
Project - Drawing No. 18-596-C8121	Issue 1



INVERT OF KERB - (MM06) HORIZONTAL POINTS (CLOSED)							
PT	CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A LENGTH	DEFL ANGLE
IP 1	0.000	295336.989	6253156.687				
IP 2	1.231	295338.139	6253156.244		R = 31.900	2.461	4°25'15.50"
CC	2.461	295339.250	6253155.715	115°28'40.29"			
IP 3	3.078	295340.149	6253155.286		R = -0.600	1.234	117°50'57.76"
CC	3.696	295340.108	6253156.281	357°37'42.53"			
IP 4	7.580	295339.947	6253160.166		R = 80.000	7.770	5°33'52.69"
CT	11.465	295340.163	6253164.048	3°11'35.22"			
TC	14.378	295340.326	6253166.955	3°11'35.22"			
IP 5	14.574	295340.338	6253167.186		R = -0.300	0.393	75°03'11.18"
CT	14.771	295340.120	6253167.257	288°08'24.04"			
TC	17.962	295337.086	6253168.251	288°08'24.04"			
IP 6	18.172	295336.847	6253168.329		R = -0.300	0.419	79°56'37.72"
CT	18.381	295336.729	6253168.108	208°11'46.32"			
TC	27.668	295332.340	6253159.922	208°11'46.32"			
IP 7	28.685	295331.698	6253158.724		R = -1.200	2.034	97°08'21.54"
CT	29.703	295332.967	6253158.236	111°03'24.79"			

INVERT OF KERB - (MM05) HORIZONTAL POINTS (CLOSED)							
PT	CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A LENGTH	DEFL ANGLE
IP 1	0.000	295340.140	6253170.407	108°08'24.04"			
IP 2	0.275	295340.511	6253170.286	108°08'24.04"	R = -0.300	0.550	104°56'48.82"
CT	0.550	295340.533	6253170.676	3°11'35.22"			
TC	3.769	295340.713	6253173.890	3°11'35.22"			
IP 3	4.116	295340.736	6253174.305		R = -0.500	0.693	79°26'42.19"
CC	4.462	295340.332	6253174.404	283°44'53.03"			
IP 4	4.809	295339.929	6253174.502		R = -0.500	0.693	79°26'42.19"
CC	5.156	295339.758	6253174.124	204°18'10.83"			
IP 5	6.702	295338.121	6253172.714		R = 75.000	3.094	2°21'48.39"
CC	8.249	295338.427	6253171.331	206°39'59.22"			
IP 6	8.507	295338.270	6253171.020		R = -0.300	0.516	98°31'35.18"
CT	8.765	295338.601	6253170.912	108°08'24.04"			
IP 7	10.385	295340.140	6253170.407	108°08'24.04"			

INVERT OF KERB - (MM01) HORIZONTAL POINTS (CLOSED)							
PT	CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A LENGTH	DEFL ANGLE
IP 1	0.000	295280.163	6253136.714				
IP 2	4.008	295276.156	6253136.770				
IP 3	4.441	295275.628	6253136.778		R = -0.600	0.866	82°42'01.24"
CC	4.874	295275.553	6253136.255	188°05'49.27"			
IP 4	5.307	295275.479	6253135.732		R = -0.600	0.866	82°42'01.24"
IP 5	5.740	295275.988	6253135.592				
IP 6	7.710	295277.888	6253135.069		R = 70.000	3.940	3°13'29.08"
CC	9.680	295279.755	6253134.439	108°37'17.12"			
IP 7	9.937	295280.084	6253134.329		R = -0.300	0.515	98°17'03.32"
CT	10.194	295280.146	6253134.670	10°20'13.80"			
TC	11.613	295280.454	6253136.361	10°20'13.80"			
IP 8	12.174	295280.518	6253136.709		R = -0.300	0.521	99°32'23.32"
CT	12.434	295280.163	6253136.714	270°47'50.47"			

INVERT OF KERB - (MM02) HORIZONTAL POINTS (CLOSED)							
PT	CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A LENGTH	DEFL ANGLE
IP 1	0.000	295288.250	6253136.602	270°47'50.47"			
TC	4.437	295283.813	6253136.664	270°47'50.47"			
IP 2	4.648	295283.560	6253136.667		R = -0.300	0.421	80°27'36.68"
CT	4.858	295283.514	6253136.417	190°20'13.80"			
TC	7.793	295282.988	6253133.531	190°20'13.80"			
IP 3	8.001	295282.943	6253133.285		R = -0.300	0.417	79°39'55.80"
CT	8.210	295283.177	6253133.196	110°40'17.99"			
TC	17.624	295291.985	6253129.873	110°40'17.99"			
IP 4	18.625	295293.224	6253129.406		R = -1.200	2.003	95°38'19.93"
CT	19.627	295293.567	6253130.685	15°01'58.07"			
TC	25.278	295295.033	6253136.142	15°01'58.07"			
IP 5	25.860	295295.261	6253136.990		R = -0.600	1.165	111°16'52.91"
CC	26.443	295294.388	6253136.894	263°45'05.16"			
IP 6	29.518	295291.328	6253136.559		R = 50.000	6.149	7°02'46.03"
IP 7	32.592	295288.250	6253136.602	270°47'51.19"			

INVERT OF KERB - (MM03) HORIZONTAL POINTS (CLOSED)							
PT	CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A LENGTH	DEFL ANGLE
IP 1	0.000	295326.384	6253080.166				
IP 2	0.269	295326.469	6253080.531		R = -0.300	0.538	102°41'13.26"
CT	0.538	295326.094	6253080.534	270°29'36.92"			
TC	2.954	295323.678	6253080.555	270°29'36.92"			
IP 3	3.214	295323.326	6253080.558		R = -0.300	0.519	99°04'36.76"
CT	3.473	295323.378	6253080.210	171°25'00.16"			
TC	8.616	295324.146	6253075.125	171°25'00.16"			
IP 4	9.037	295324.222	6253074.623		R = -0.600	0.843	80°31'41.36"
CC	9.459	295324.730	6253074.615	90°53'18.81"			
IP 5	9.881	295325.238	6253074.607		R = -0.600	0.843	80°31'41.36"
CC	10.302	295325.299	6253075.107	10°21'37.45"			
IP 6	12.887	295325.794	6253077.649		R = 105.000	5.168	2°49'12.73"

INVERT OF KERB - (MM04) HORIZONTAL POINTS (CLOSED)							
PT	CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A LENGTH	DEFL ANGLE
IP 1	0.000	295327.249	6253083.785				
TC	9.791	295329.530	6253093.307	13°28'20.18"			
IP 2	10.876	295329.885	6253094.788		R = -1.200	2.168	103°31'31.90"
CC	11.960	295328.362	6253094.787	269°56'48.28"			
IP 3	15.723	295324.592	6253094.783		R = 48.841	7.526	8°48'43.27"
CC	19.486	295320.866	6253095.358	278°46'31.55"			
IP 4	20.098	295319.897	6253095.508		R = -0.600	1.226	117°01'37.99"
CC	20.711	295320.204	6253094.578	161°44'53.56"			
IP 5	26.243	295321.941	6253089.313		R = 70.000	11.064	9°03'22.92"
CC	31.776	295322.826	6253083.840	170°48'16.47"			
IP 6	31.986	295322.867	6253083.590		R = -0.300	0.421	80°18'38.03"
CT	32.196	295323.120	6253083.588	90°29'38.44"			
TC	36.031	295326.955	6253083.555	90°29'38.44"			
IP 7	36.233	295327.194	6253083.553		R = -0.300	0.403	77°01'18.27"
CT	36.434	295327.249	6253083.785	13°28'20.18"			

PENRITH CITY COUNCIL
 This plan / document relates to
 Development Consent: **SSD-10448-MOD-1**
 Subdivision Works Certificate: **EA22/0045**
 Subject to the conditions outlined in the consent

Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22
A	ISSUED FOR SWC APPROVAL	20-10-22

Bar Scales

1 : 250 @ A1 1 : 500 @ A3

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Client

Scales: 1:250

Grid: GDA2020

Height Datum: AHD

Drawn: JB/MH

Designed: JB/MH

Checked: DS

Approved: DS

Project: **ASPECT INDUSTRIAL ESTATE MAMRE ROAD, KEMPS CREEK STAGE 1B**

Title: **INTERSECTION SHEET 2**

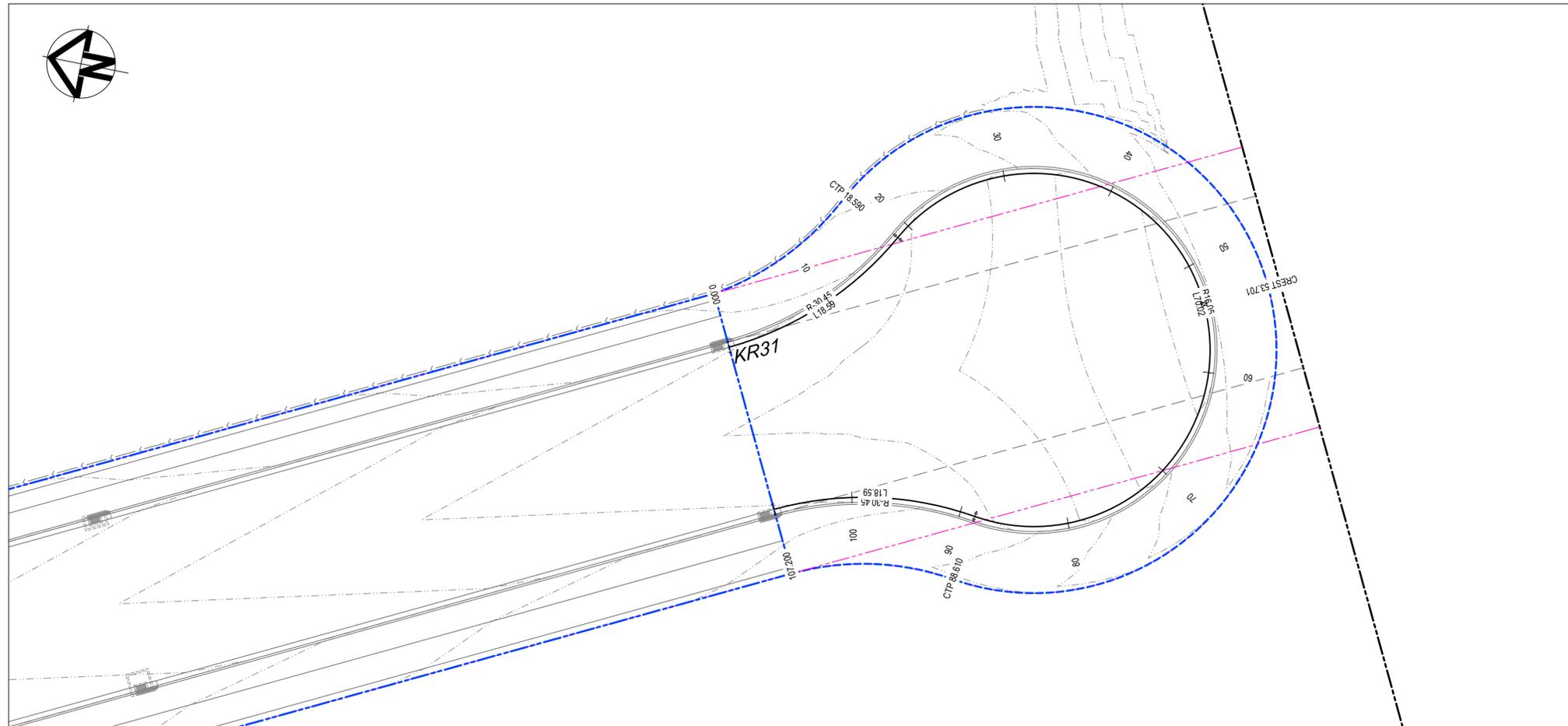
Civil Engineers and Project Managers

Level 7, 153 Walker Street
 North Sydney NSW 2060
 ABN 96 130 882 405
 Tel: 02 9439 1777
 Fax: 02 9923 1055
 www.atl.net.au
 info@atl.net.au

Status: **FOR CONSTRUCTION**

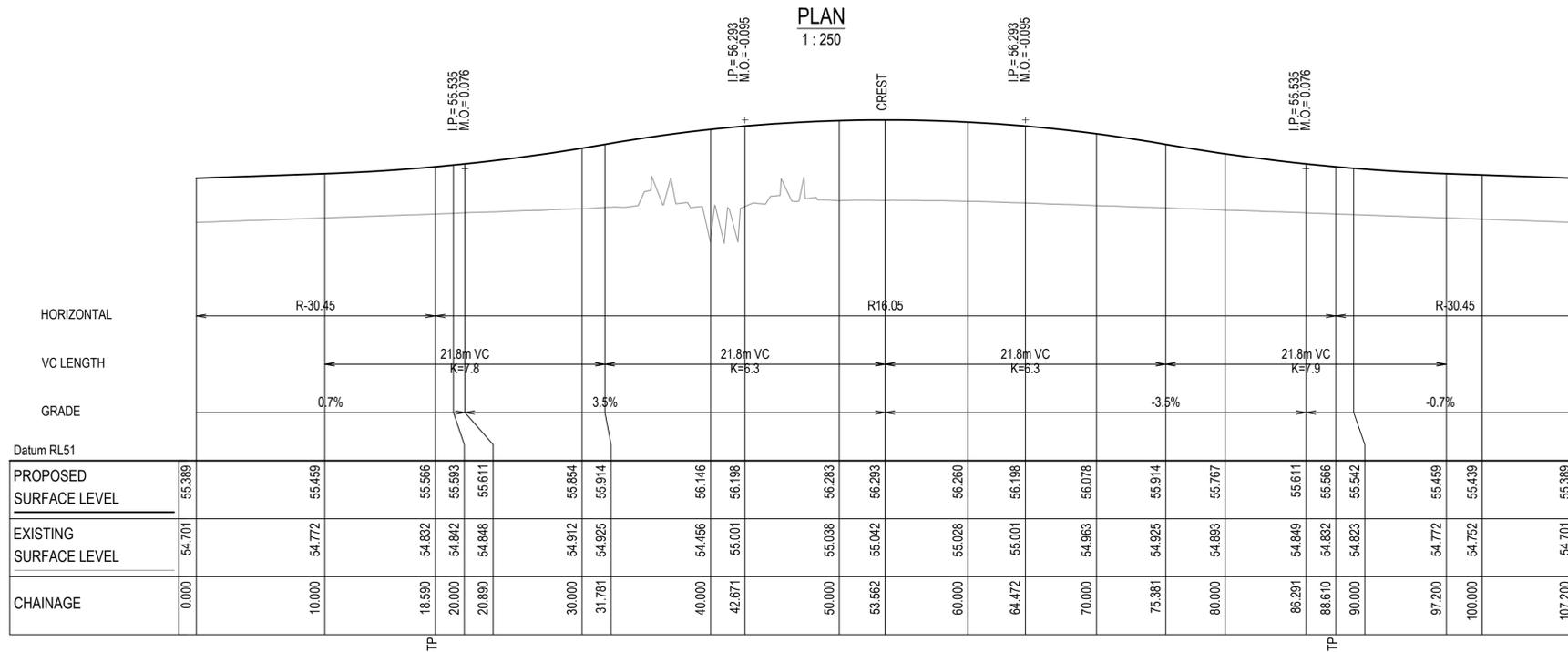
Project - Drawing No. **18-596-C8122**

Issue: **1**



LIP OF KERB - (KR31) HORIZONTAL POINTS							
PT	CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A LENGTH	DEFL ANGLE
IP 1	0.000	295403.228	6252863.610	153°08'05.72"			
IP 2	9.295	295407.564	6252855.051		R = -30.450	18.590	34°58'47.05"
CC	18.590	295416.023	6252850.523	118°09'18.67"			
IP 3	30.260	295428.614	6252843.785		R = 16.050	23.340	83°19'11.37"
CC	41.930	295423.386	6252830.497	201°28'30.04"			
IP 4	53.600	295418.158	6252817.208		R = 16.050	23.340	83°19'11.37"
CC	65.270	295404.352	6252820.855	284°47'41.41"			
IP 5	76.940	295390.545	6252824.501		R = 16.050	23.340	83°19'11.37"
CC	88.610	295392.561	6252838.638	8°06'52.78"			
IP 6	97.905	295393.915	6252848.137		R = -30.450	18.590	34°58'47.05"
IP 7	107.200	295389.579	6252856.696	333°08'05.72"			

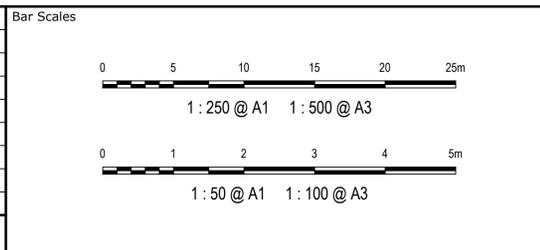
PLAN
1 : 250



KR31 LONGITUDINAL SECTION
SCALE 1:250 HORI.
1:50 VERT.

PENRITH CITY COUNCIL
This plan / document relates to
Development Consent: **SSD-10448-MOD-1**
Subdivision Works Certificate: **EA22/0045**
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Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22
A	ISSUED FOR SWC APPROVAL	20-10-22



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Scales: 1:250 (H), 1:50 (V)
Grid: GDA2020
Height Datum: AHD

Drawn	JB/MH
Designed	JB/MH
Checked	DS
Approved	DS

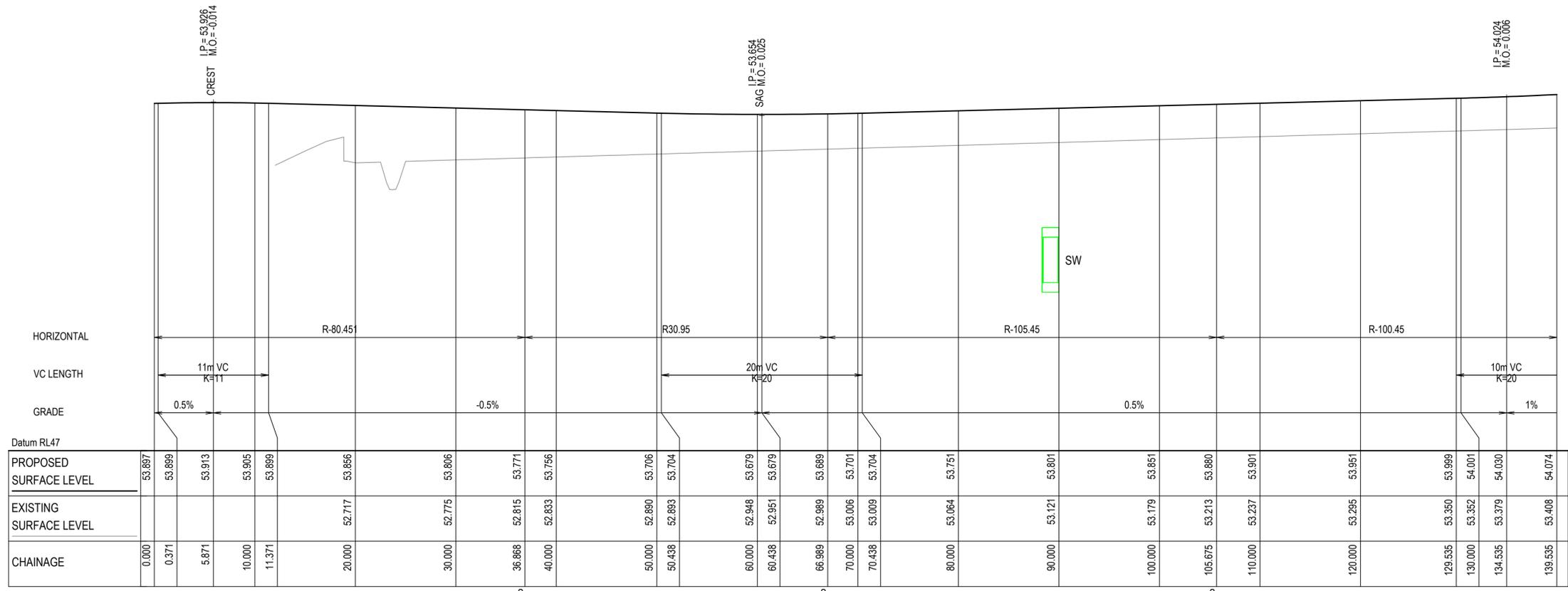
Project: **ASPECT INDUSTRIAL ESTATE MAMRE ROAD, KEMPS CREEK STAGE 1B**

Title: **INTERSECTION PLAN SHEET 3**

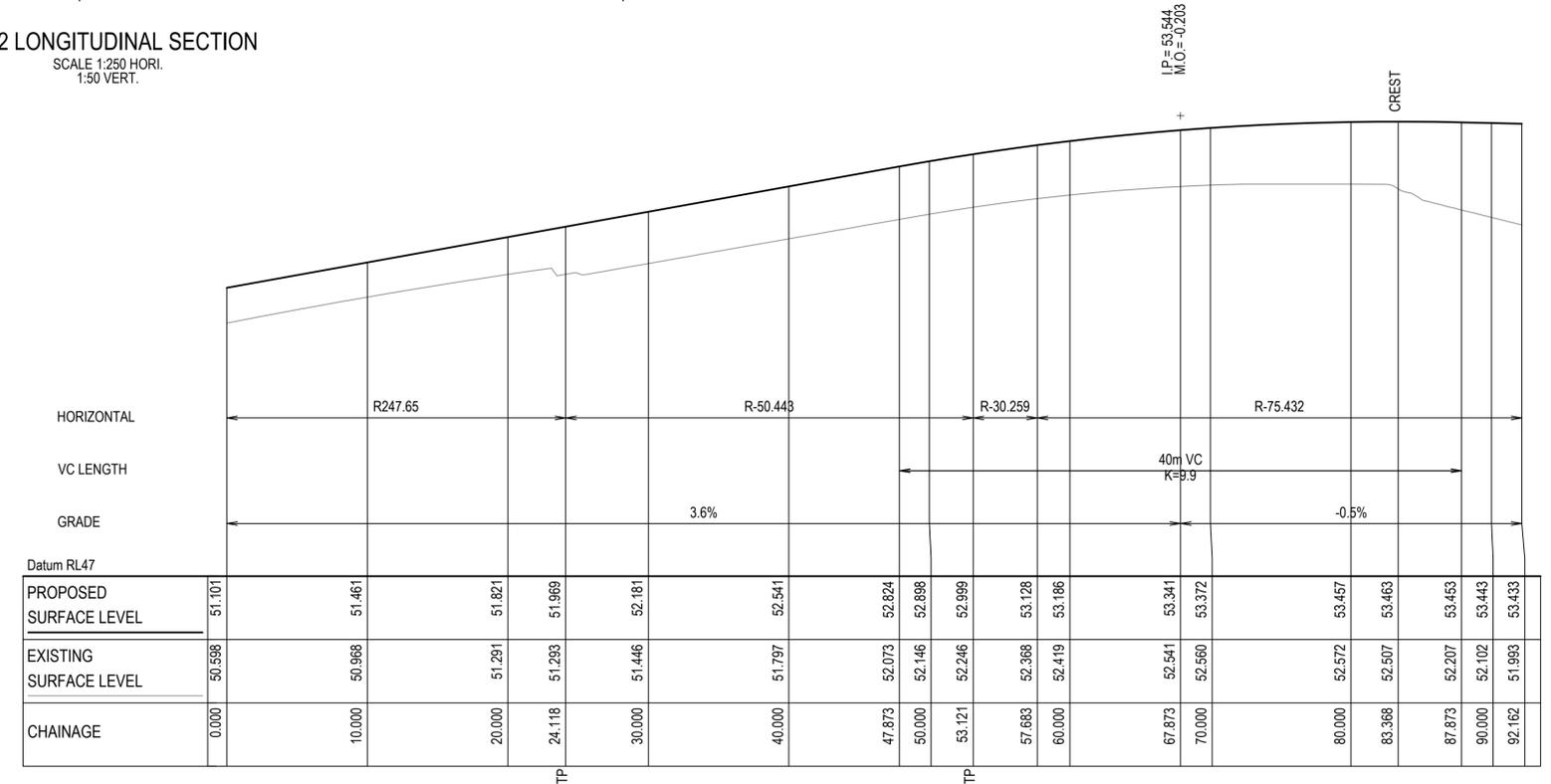
Civil Engineers and Project Managers

Level 7, 153 Walker Street
North Sydney NSW 2060
ABN 96 130 882 405
Tel: 02 9439 1777
Fax: 02 9923 1055
www.atl.net.au
info@atl.net.au

Status	FOR CONSTRUCTION	A1
Project - Drawing No.	18-596-C8123	Issue
		1



KR12 LONGITUDINAL SECTION
 SCALE 1:250 HORI.
 1:50 VERT.

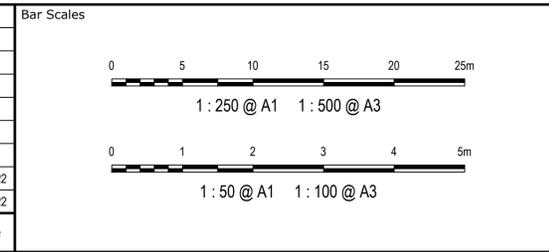


KR15 LONGITUDINAL SECTION
 SCALE 1:250 HORI.
 1:50 VERT.

Datum RL47																										
PROPOSED SURFACE LEVEL	53.897	53.889	53.913	53.905	53.889	53.856	53.806	53.771	53.756	53.706	53.704	53.679	53.679	53.689	53.701	53.704	53.751	53.801	53.851	53.880	53.901	53.951	53.999	54.001	54.030	54.074
EXISTING SURFACE LEVEL					52.717	52.775	52.815	52.833	52.890	52.883	52.948	52.951	52.989	53.006	53.009	53.064	53.121	53.179	53.213	53.237	53.295	53.350	53.352	53.379	53.408	
CHAINAGE	0.000	0.371	5.871	10.000	11.371	20.000	30.000	36.868	40.000	50.000	50.438	60.000	60.438	66.989	70.000	70.438	80.000	90.000	100.000	105.675	110.000	120.000	129.535	130.000	134.535	139.535

Datum RL47																		
PROPOSED SURFACE LEVEL	51.101	51.461	51.821	51.969	52.181	52.541	52.824	52.898	52.999	53.128	53.186	53.341	53.372	53.457	53.463	53.453	53.443	53.433
EXISTING SURFACE LEVEL	50.598	50.968	51.291	51.293	51.446	51.797	52.073	52.146	52.246	52.368	52.419	52.541	52.560	52.572	52.507	52.207	52.102	51.983
CHAINAGE	0.000	10.000	20.000	24.118	30.000	40.000	47.873	50.000	53.121	57.683	60.000	67.873	70.000	80.000	83.368	87.873	90.000	92.162

Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22
A	ISSUED FOR SWC APPROVAL	20-10-22



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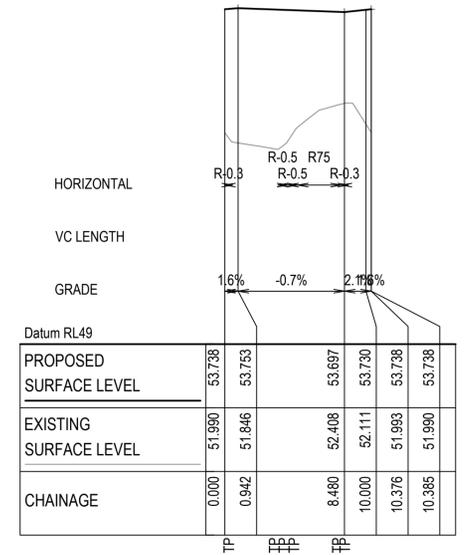
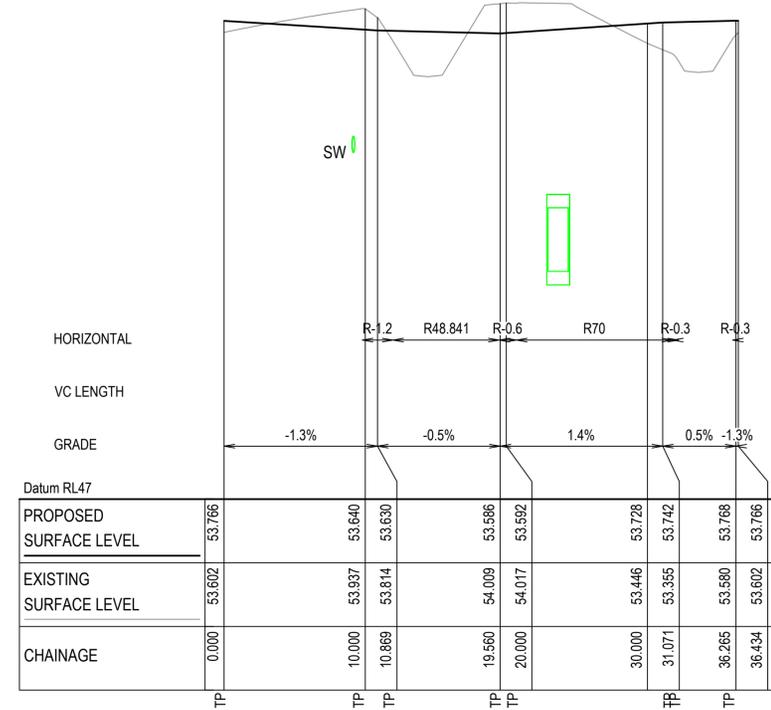
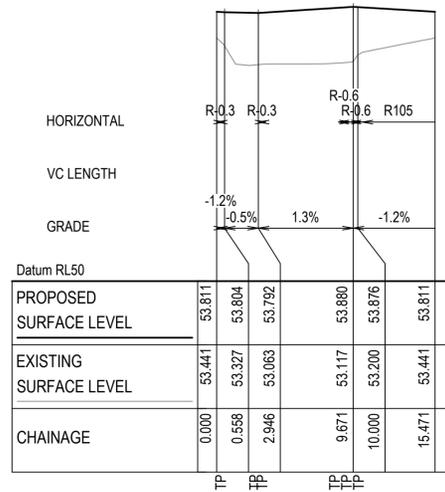
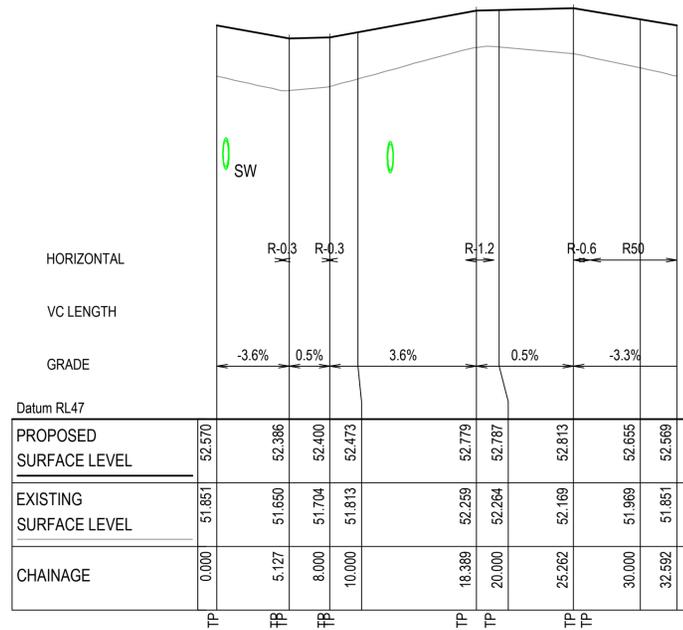
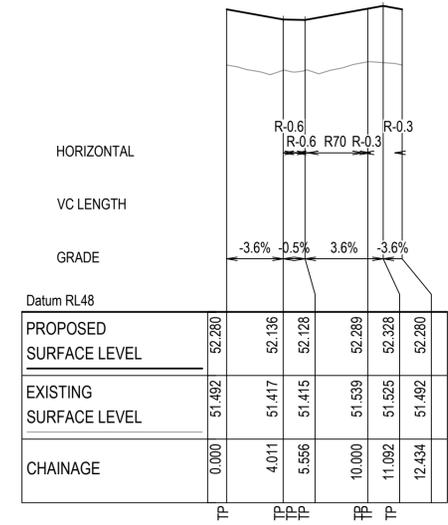
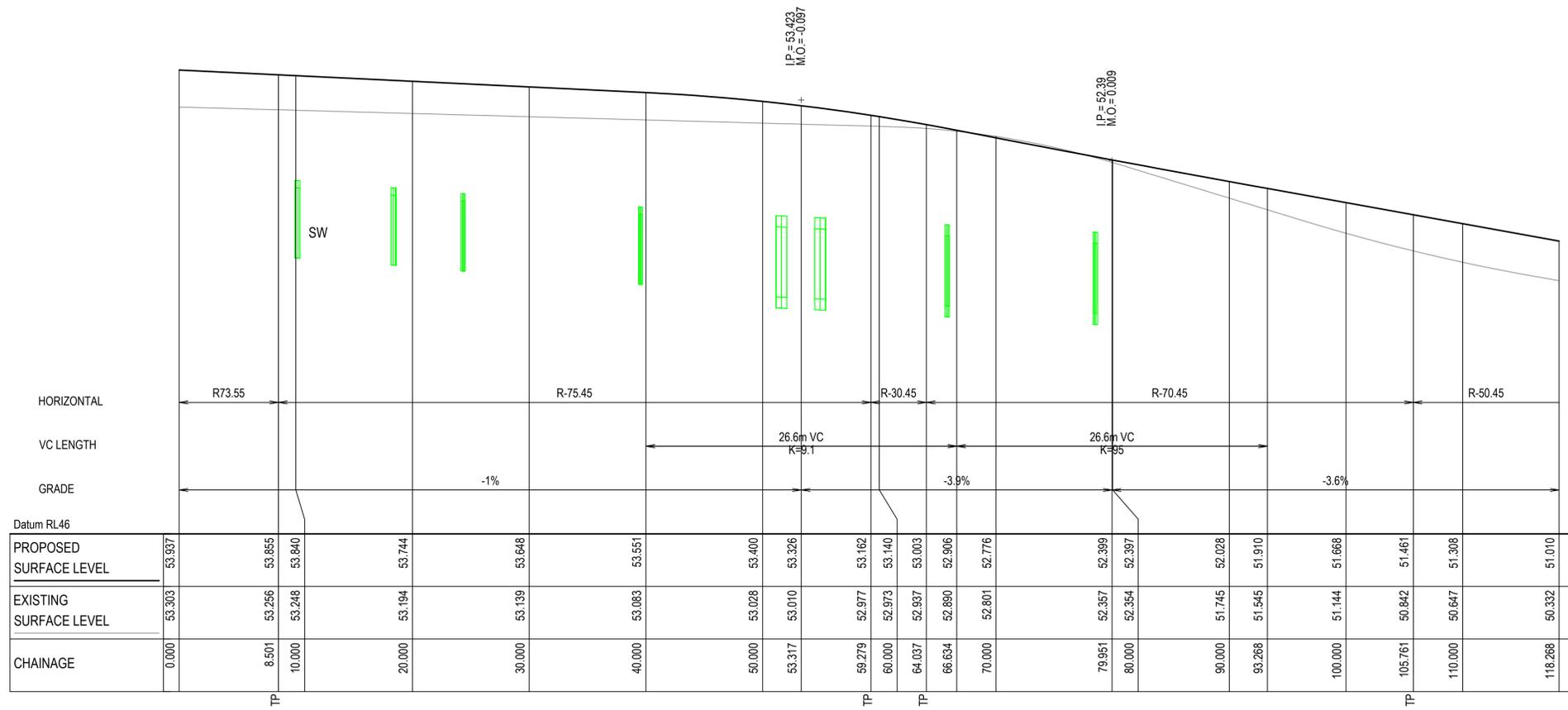


Scales: 1:250 (H), 1:50 (V)
 Grid: GDA2020
 Height Datum: AHD

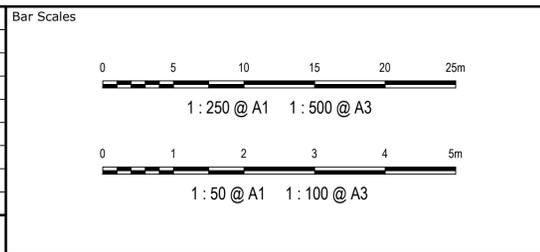
Project: ASPECT INDUSTRIAL ESTATE
 MAMRE ROAD,
 KEMPS CREEK
 STAGE 1B
 Title: INTERSECTION PLAN
 SHEET 4

Civil Engineers and Project Managers

 Level 7, 153 Walker Street
 North Sydney NSW 2060
 ABN 96 130 882 405
 Tel: 02 9439 1777
 Fax: 02 9923 1055
 www.atl.net.au
 info@atl.net.au
 Status: FOR CONSTRUCTION
 Project - Drawing No. 18-596-C8124
 Issue 1



Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22
A	ISSUED FOR SWC APPROVAL	20-10-22



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Scales	1:250 (H) 1:50 (V)	Drawn	JB/MH
Grid	GDA2020	Designed	JB/MH
Height Datum	AHD	Checked	DS
		Approved	DS

Project: **ASPECT INDUSTRIAL ESTATE MAMRE ROAD, KEMPS CREEK STAGE 1B**

Title: **INTERSECTION PLAN SHEET 5**

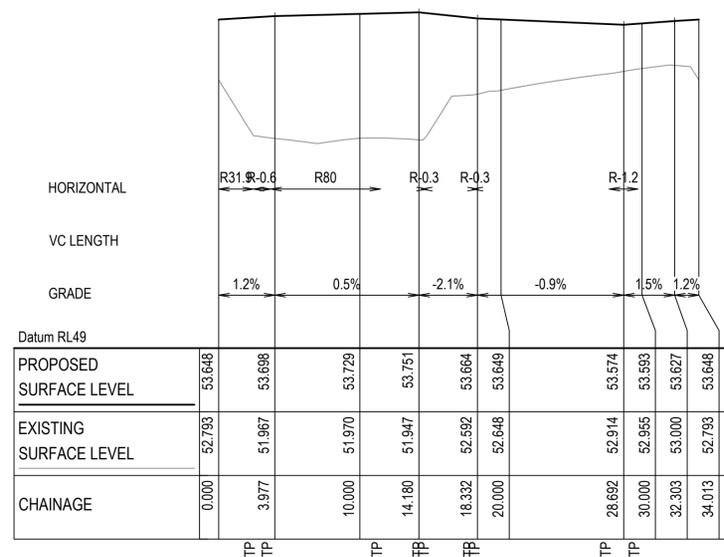
Civil Engineers and Project Managers

Level 7, 153 Walker Street
 North Sydney NSW 2060
 ABN 96 130 882 405
 Tel: 02 9439 1777
 Fax: 02 9923 1055
 www.atl.net.au
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Status	FOR CONSTRUCTION	A1
Project - Drawing No.	18-596-C8125	Issue
		1

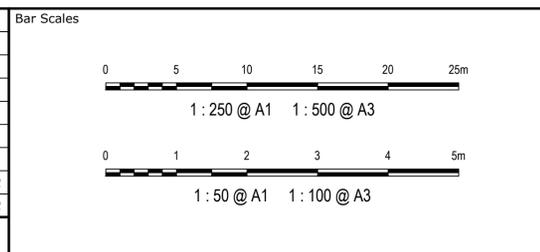


KR14 LONGITUDINAL SECTION
 SCALE 1:250 HORI.
 1:50 VERT.



MM06 LONGITUDINAL SECTION
 SCALE 1:250 HORI.
 1:50 VERT.

Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22
A	ISSUED FOR SWC APPROVAL	20-10-22



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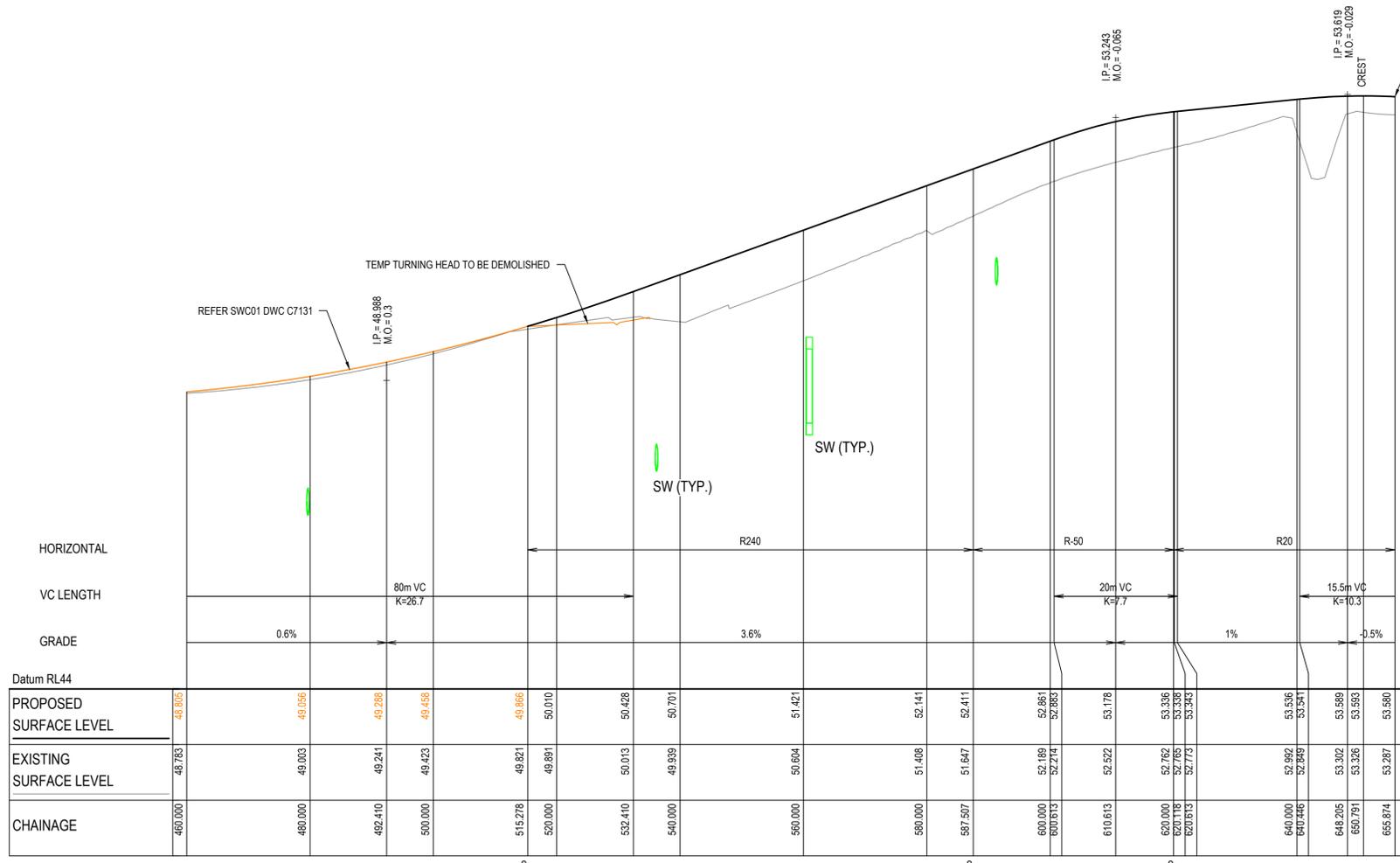
Project: **ASPECT INDUSTRIAL ESTATE MAMRE ROAD, KEMPS CREEK STAGE 1B**

Title: **INTERSECTION PLAN SHEET 6**

Civil Engineers and Project Managers

Level 7, 153 Walker Street
 North Sydney NSW 2060
 ABN 96 130 882 405
 Tel: 02 9439 1777
 Fax: 02 9923 1055
 www.atl.net.au
 info@atl.net.au

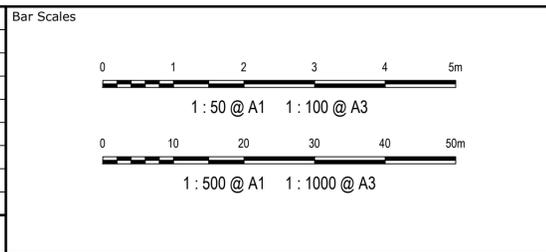
Status	FOR CONSTRUCTION	A1
Project - Drawing No.	18-596-C8126	Issue
		1



Datum RL44		460.000	480.000	482.410	500.000	515.278	520.000	532.410	540.000	560.000	587.507	600.000	600.013	610.613	620.000	620.118	620.613	640.000	640.446	648.205	650.791	655.874
PROPOSED SURFACE LEVEL		48.805	49.056	49.288	49.458	49.896	50.010	50.428	50.701	51.421	52.141	52.861	52.883	53.178	53.336	53.338	53.343	53.536	53.541	53.589	53.593	53.580
EXISTING SURFACE LEVEL		48.783	49.003	49.241	49.423	49.821	49.891	50.013	49.939	50.604	51.408	51.647	52.114	52.522	52.762	52.765	52.773	52.992	52.849	53.302	53.326	53.287
CHAINAGE		460.000	480.000	482.410	500.000	515.278	520.000	532.410	540.000	560.000	587.507	600.000	600.013	610.613	620.000	620.118	620.613	640.000	640.446	648.205	650.791	655.874

ROAD 01 LONGITUDINAL SECTION
 SCALE 1:500 HORI.
 1:50 VERT.

Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22
A	ISSUED FOR SWC APPROVAL	20-10-22



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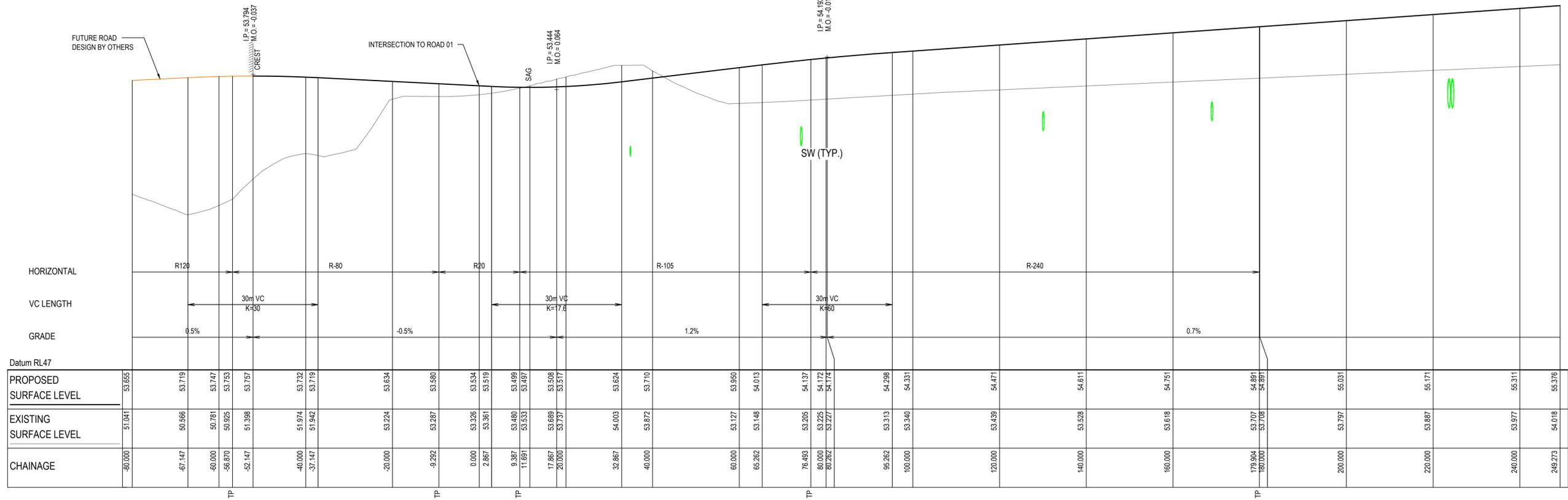


Drawn	JB/MH
Designed	JB/MH
Checked	DS
Approved	DS

Project
**ASPECT INDUSTRIAL ESTATE
 MAMRE ROAD,
 KEMPS CREEK
 STAGE 1B**

Title
**ROAD
 LONGITUDINAL SECTION
 SHEET 1**

Civil Engineers and Project Managers	
at&l	
Level 7, 153 Walker Street North Sydney NSW 2060 ABN 96 130 882 405 Tel: 02 9439 1777 Fax: 02 9923 1055 www.atl.net.au info@atl.net.au	
Status FOR CONSTRUCTION	A1
Project - Drawing No. 18-596-C8131	Issue 1



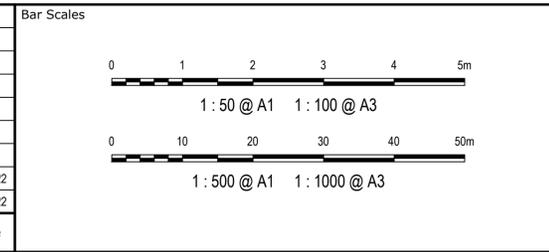
ROAD 03 LONGITUDINAL SECTION
SCALE 1:500 HORI.
1:50 VERT.



ROAD 03 LONGITUDINAL SECTION
SCALE 1:500 HORI.
1:50 VERT.

PENRITH CITY COUNCIL
This plan / document relates to
Development Consent: **SSD-10448-MOD-1**
Subdivision Works Certificate: **EA22/0045**
Subject to the conditions outlined in the consent

Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22
A	ISSUED FOR SWC APPROVAL	20-10-22



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Scales: 1:500 (H), 1:50 (V)
Grid: GDA2020
Height Datum: AHD

Drawn	JB/MH
Designed	JB/MH
Checked	AT
Approved	DS

GDA2020

Project: **ASPECT INDUSTRIAL ESTATE MAMRE ROAD, KEMPS CREEK STAGE 1B**

Title: **ROAD LONGITUDINAL SECTION SHEET 2**

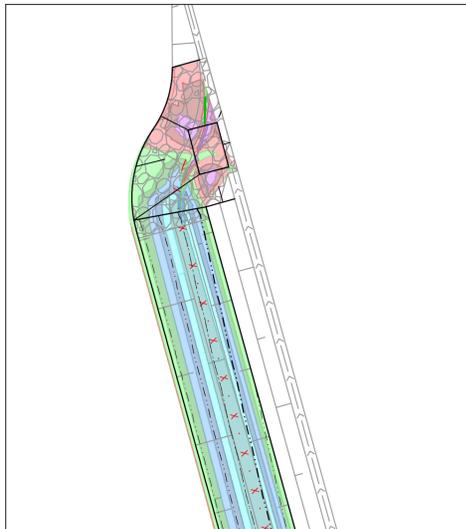
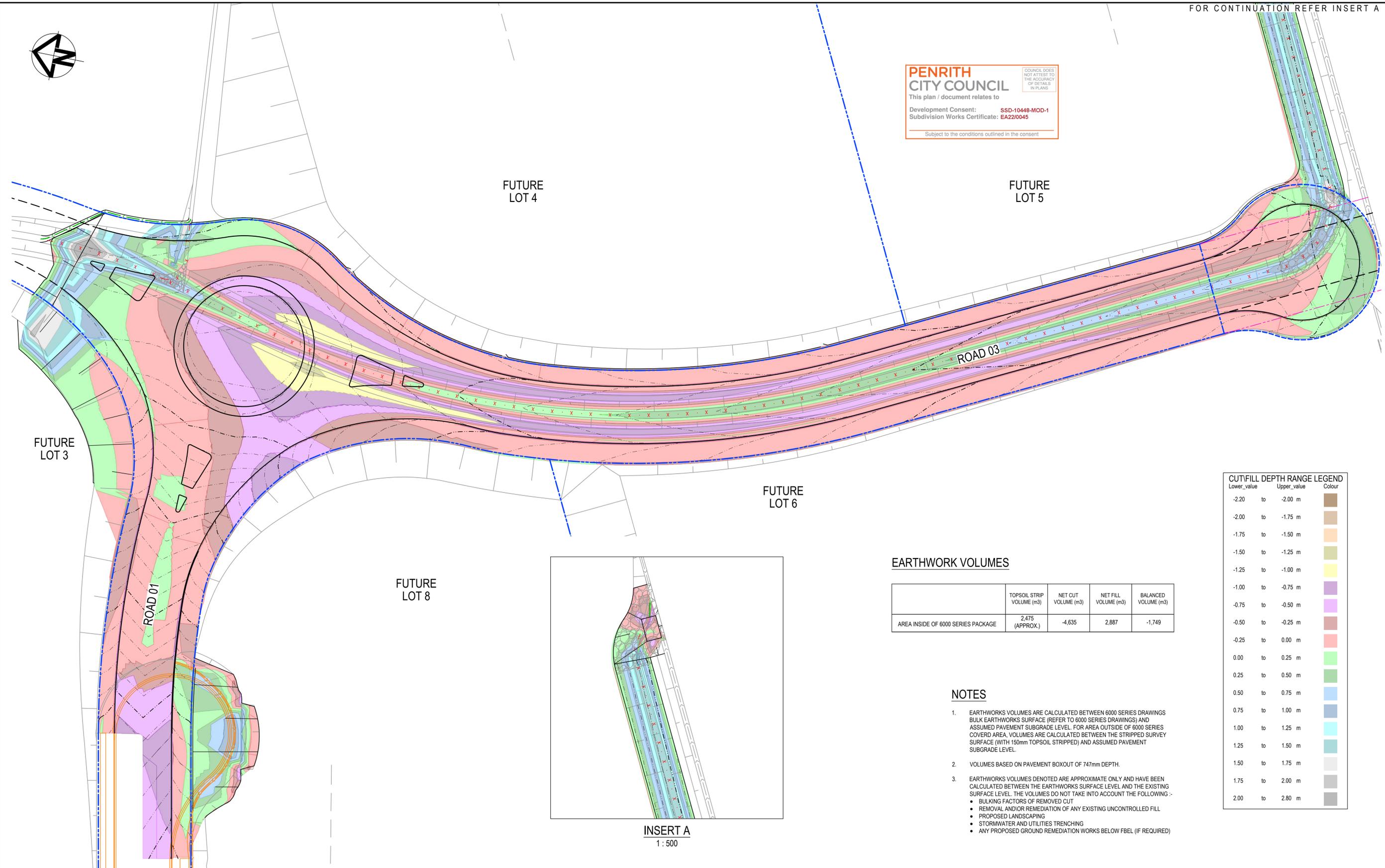
Civil Engineers and Project Managers

Level 7, 153 Walker Street
North Sydney NSW 2060
ABN 96 130 882 405
Tel: 02 9439 1777
Fax: 02 9923 1055
www.atl.net.au
info@atl.net.au

Status	FOR CONSTRUCTION	A1
Project - Drawing No.	18-596-C8132	Issue
		1



PENRITH CITY COUNCIL
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 Development Consent: **SSD-10448-MOD-1**
 Subdivision Works Certificate: **EA22/0045**
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INSERT A
1: 500

EARTHWORK VOLUMES

	TOPSOIL STRIP VOLUME (m ³)	NET CUT VOLUME (m ³)	NET FILL VOLUME (m ³)	BALANCED VOLUME (m ³)
AREA INSIDE OF 6000 SERIES PACKAGE	2,475 (APPROX.)	-4,635	2,887	-1,749

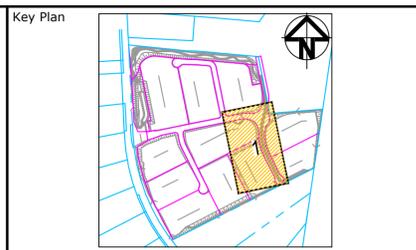
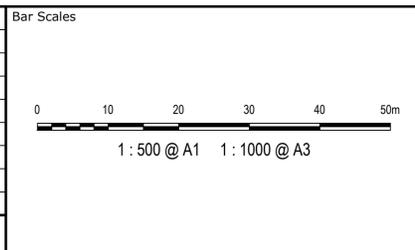
NOTES

- EARTHWORKS VOLUMES ARE CALCULATED BETWEEN 6000 SERIES DRAWINGS BULK EARTHWORKS SURFACE (REFER TO 6000 SERIES DRAWINGS) AND ASSUMED PAVEMENT SUBGRADE LEVEL. FOR AREA OUTSIDE OF 6000 SERIES COVERED AREA, VOLUMES ARE CALCULATED BETWEEN THE STRIPPED SURFACE (WITH 150mm TOPSOIL STRIPPED) AND ASSUMED PAVEMENT SUBGRADE LEVEL.
- VOLUMES BASED ON PAVEMENT BOXOUT OF 747mm DEPTH.
- EARTHWORKS VOLUMES DENOTED ARE APPROXIMATE ONLY AND HAVE BEEN CALCULATED BETWEEN THE EARTHWORKS SURFACE LEVEL AND THE EXISTING SURFACE LEVEL. THE VOLUMES DO NOT TAKE INTO ACCOUNT THE FOLLOWING:
 - BULKING FACTORS OF REMOVED CUT
 - REMOVAL AND/OR REMEDIATION OF ANY EXISTING UNCONTROLLED FILL
 - PROPOSED LANDSCAPING
 - STORMWATER AND UTILITIES TRENCHING
 - ANY PROPOSED GROUND REMEDIATION WORKS BELOW FBEL (IF REQUIRED)

CUT/FILL DEPTH RANGE LEGEND

Lower_value	Upper_value	Colour
-2.20	to -2.00 m	Dark Brown
-2.00	to -1.75 m	Light Brown
-1.75	to -1.50 m	Orange
-1.50	to -1.25 m	Yellow-Green
-1.25	to -1.00 m	Yellow
-1.00	to -0.75 m	Purple
-0.75	to -0.50 m	Pink
-0.50	to -0.25 m	Red
-0.25	to 0.00 m	Light Green
0.00	to 0.25 m	Green
0.25	to 0.50 m	Dark Green
0.50	to 0.75 m	Blue
0.75	to 1.00 m	Light Blue
1.00	to 1.25 m	Cyan
1.25	to 1.50 m	Teal
1.50	to 1.75 m	Light Grey
1.75	to 2.00 m	Dark Grey
2.00	to 2.80 m	Black

Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22
A	ISSUED FOR SWC APPROVAL	20-10-22



Scales: 1:500

Drawn	JB/MH
Designed	JB/MH
Checked	DS
Approved	DS

Grid: GDA2020
 Height Datum: AHD

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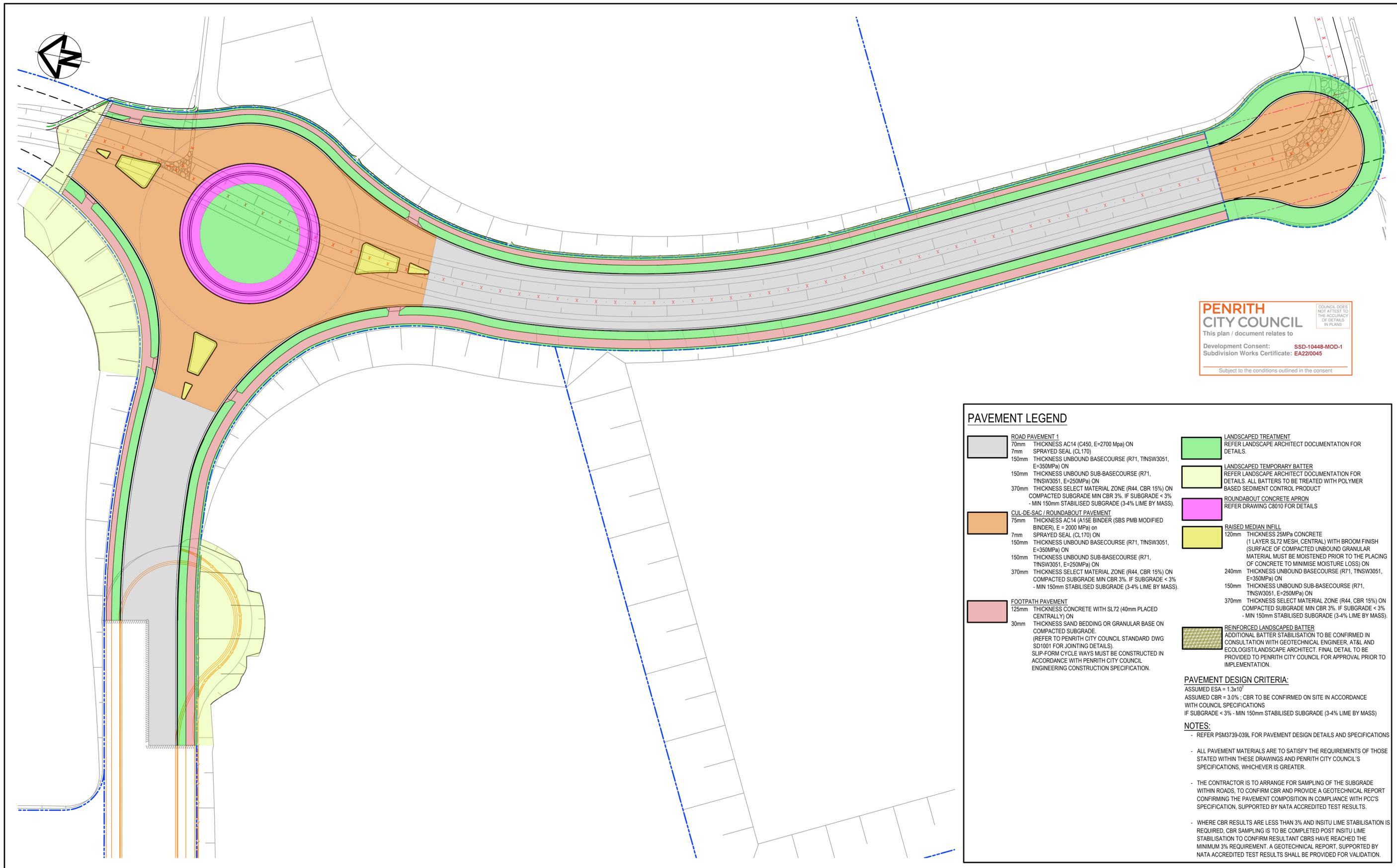
Project: **ASPECT INDUSTRIAL ESTATE
 MAMRE ROAD,
 KEMPS CREEK
 STAGE 1B**

Title: **BULK EARTHWORKS
 CUT/FILL PLAN**

Civil Engineers and Project Managers

Level 7, 153 Walker Street
 North Sydney NSW 2060
 ABN 96 130 882 405
 Tel: 02 9439 1777
 Fax: 02 9923 1055
 www.atl.net.au
 info@atl.net.au

Status: FOR CONSTRUCTION	A1
Project - Drawing No. 18-596-C8201	Issue 1



PENRITH CITY COUNCIL
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 Development Consent: **SSD-10448-MOD-1**
 Subdivision Works Certificate: **EA22/0045**
 Subject to the conditions outlined in the consent

PAVEMENT LEGEND

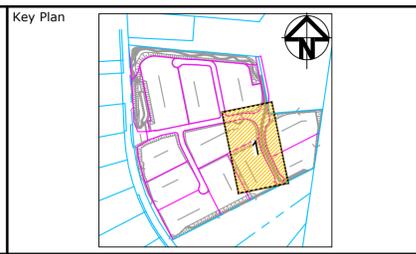
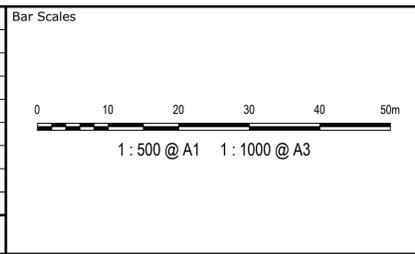
<p>ROAD PAVEMENT 1</p> <p>70mm THICKNESS AC14 (C450, E=2700 Mpa) ON 7mm SPRAYED SEAL (CL170) 150mm THICKNESS UNBOUND BASECOURSE (R71, TINSW3051, E=350MPa) ON 150mm THICKNESS UNBOUND SUB-BASECOURSE (R71, TINSW3051, E=250MPa) ON 370mm THICKNESS SELECT MATERIAL ZONE (R44, CBR 15%) ON COMPACTED SUBGRADE MIN CBR 3%. IF SUBGRADE < 3% - MIN 150mm STABILISED SUBGRADE (3-4% LIME BY MASS).</p> <p>CUL-DE-SAC / ROUNDABOUT PAVEMENT</p> <p>75mm THICKNESS AC14 (A15E BINDER (SBS PMB MODIFIED BINDER), E = 2000 MPa) on 7mm SPRAYED SEAL (CL170) ON 150mm THICKNESS UNBOUND BASECOURSE (R71, TINSW3051, E=350MPa) ON 150mm THICKNESS UNBOUND SUB-BASECOURSE (R71, TINSW3051, E=250MPa) ON 370mm THICKNESS SELECT MATERIAL ZONE (R44, CBR 15%) ON COMPACTED SUBGRADE MIN CBR 3%. IF SUBGRADE < 3% - MIN 150mm STABILISED SUBGRADE (3-4% LIME BY MASS).</p> <p>FOOTPATH PAVEMENT</p> <p>125mm THICKNESS CONCRETE WITH SL72 (40mm PLACED CENTRALLY) ON 30mm THICKNESS SAND BEDDING OR GRANULAR BASE ON COMPACTED SUBGRADE. (REFER TO PENRITH CITY COUNCIL STANDARD DWG SD1001 FOR JOINTING DETAILS). SLIP-FORM CYCLE WAYS MUST BE CONSTRUCTED IN ACCORDANCE WITH PENRITH CITY COUNCIL ENGINEERING CONSTRUCTION SPECIFICATION.</p>	<p>LANDSCAPED TREATMENT</p> <p>REFER LANDSCAPE ARCHITECT DOCUMENTATION FOR DETAILS.</p> <p>LANDSCAPED TEMPORARY BATTER</p> <p>REFER LANDSCAPE ARCHITECT DOCUMENTATION FOR DETAILS. ALL BATTERS TO BE TREATED WITH POLYMER BASED SEDIMENT CONTROL PRODUCT</p> <p>ROUNDABOUT CONCRETE APRON</p> <p>REFER DRAWING C8010 FOR DETAILS</p> <p>RAISED MEDIAN INFILL</p> <p>120mm THICKNESS 25MPa CONCRETE (1 LAYER SL72 MESH, CENTRAL) WITH BROOM FINISH (SURFACE OF COMPACTED UNBOUND GRANULAR MATERIAL MUST BE MOISTENED PRIOR TO THE PLACING OF CONCRETE TO MINIMISE MOISTURE LOSS) ON THICKNESS UNBOUND BASECOURSE (R71, TINSW3051, E=350MPa) ON 150mm THICKNESS UNBOUND SUB-BASECOURSE (R71, TINSW3051, E=250MPa) ON 370mm THICKNESS SELECT MATERIAL ZONE (R44, CBR 15%) ON COMPACTED SUBGRADE MIN CBR 3%. IF SUBGRADE < 3% - MIN 150mm STABILISED SUBGRADE (3-4% LIME BY MASS).</p> <p>REINFORCED LANDSCAPED BATTER</p> <p>ADDITIONAL BATTER STABILISATION TO BE CONFIRMED IN CONSULTATION WITH GEOTECHNICAL ENGINEER, AT&L AND ECOLOGIST/LANDSCAPE ARCHITECT. FINAL DETAIL TO BE PROVIDED TO PENRITH CITY COUNCIL FOR APPROVAL PRIOR TO IMPLEMENTATION.</p>
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PAVEMENT DESIGN CRITERIA:
 ASSUMED ESA = 1.3x10⁷
 ASSUMED CBR = 3.0% ; CBR TO BE CONFIRMED ON SITE IN ACCORDANCE WITH COUNCIL SPECIFICATIONS
 IF SUBGRADE < 3% - MIN 150mm STABILISED SUBGRADE (3-4% LIME BY MASS)

NOTES:

- REFER PSM3739-039L FOR PAVEMENT DESIGN DETAILS AND SPECIFICATIONS
- ALL PAVEMENT MATERIALS ARE TO SATISFY THE REQUIREMENTS OF THOSE STATED WITHIN THESE DRAWINGS AND PENRITH CITY COUNCIL'S SPECIFICATIONS, WHICHEVER IS GREATER.
- THE CONTRACTOR IS TO ARRANGE FOR SAMPLING OF THE SUBGRADE WITHIN ROADS, TO CONFIRM CBR AND PROVIDE A GEOTECHNICAL REPORT CONFIRMING THE PAVEMENT COMPOSITION IN COMPLIANCE WITH PCC'S SPECIFICATION, SUPPORTED BY NATA ACCREDITED TEST RESULTS.
- WHERE CBR RESULTS ARE LESS THAN 3% AND INSITU LIME STABILISATION IS REQUIRED, CBR SAMPLING IS TO BE COMPLETED POST INSITU LIME STABILISATION TO CONFIRM RESULTANT CBR'S HAVE REACHED THE MINIMUM 3% REQUIREMENT. A GEOTECHNICAL REPORT, SUPPORTED BY NATA ACCREDITED TEST RESULTS SHALL BE PROVIDED FOR VALIDATION.

Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22
A	ISSUED FOR SWC APPROVAL	20-10-22



Scales

1:500	Drawn	JB/MH
	Designed	JB/MH
Grid GDA2020	Checked	DS
Height Datum AHD	Approved	DS

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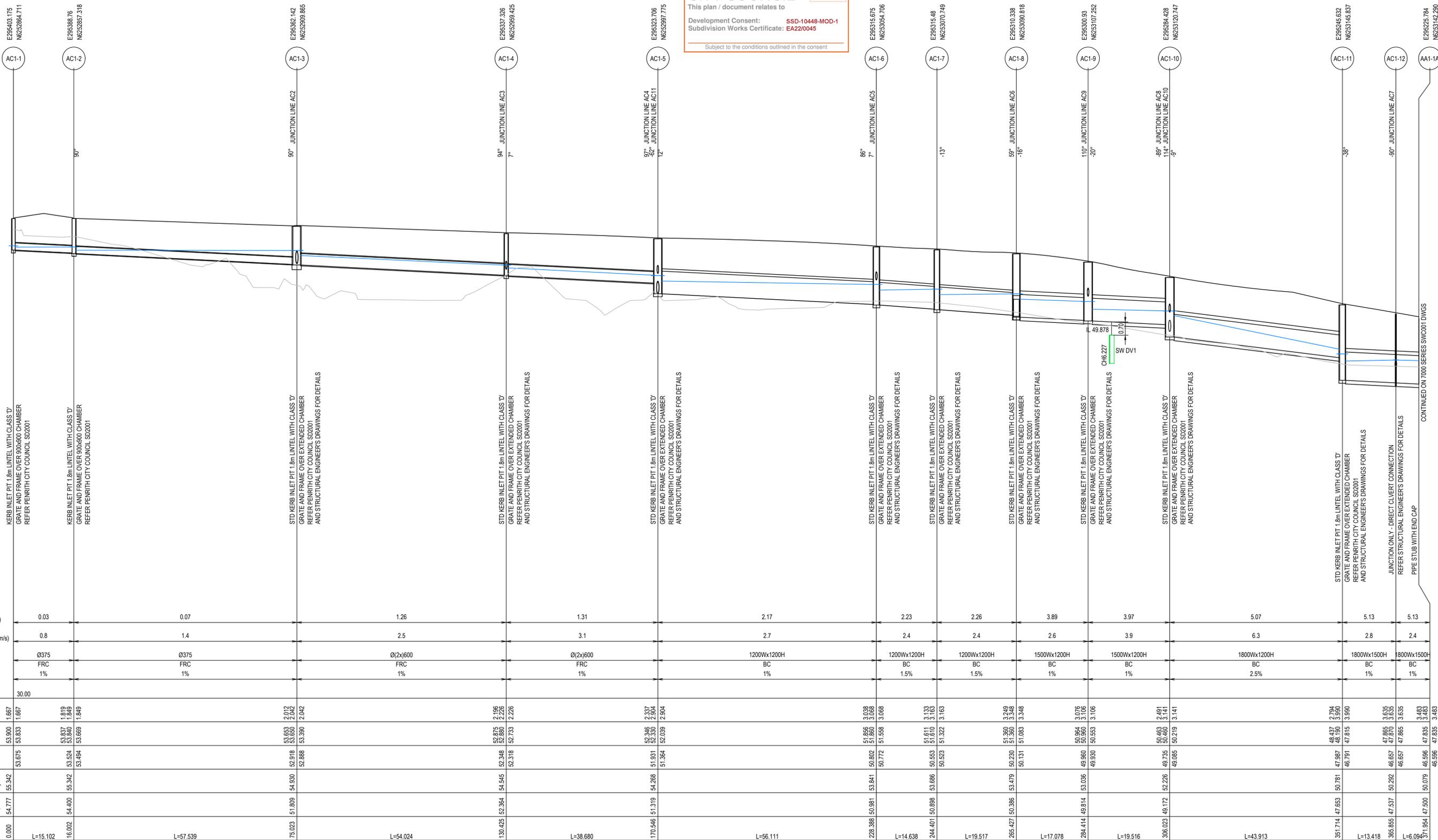
Project
**ASPECT INDUSTRIAL ESTATE
 MAMRE ROAD,
 KEMPS CREEK
 STAGE 1B**

Title
PAVEMENT PLAN

Civil Engineers and Project Managers

Level 7, 153 Walker Street
 North Sydney NSW 2060
 ABN 96 130 882 405
 Tel: 02 9439 1777
 Fax: 02 9923 1055
 www.atl.net.au
 info@atl.net.au

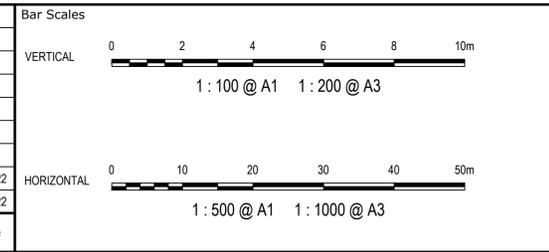
Status	FOR CONSTRUCTION	A1
Project - Drawing No.	18-596-C8321	Issue
		1



REFER GENERAL NOTES FOR PIPE CLASS REQUIREMENTS

LINE AC1

Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22
A	ISSUED FOR SWC APPROVAL	20-10-22



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Scales	1:500 (H) 1:100 (V)	Drawn	JB/MH
Grid	GDA2020	Checked	DS
Height Datum	AHD	Approved	DS

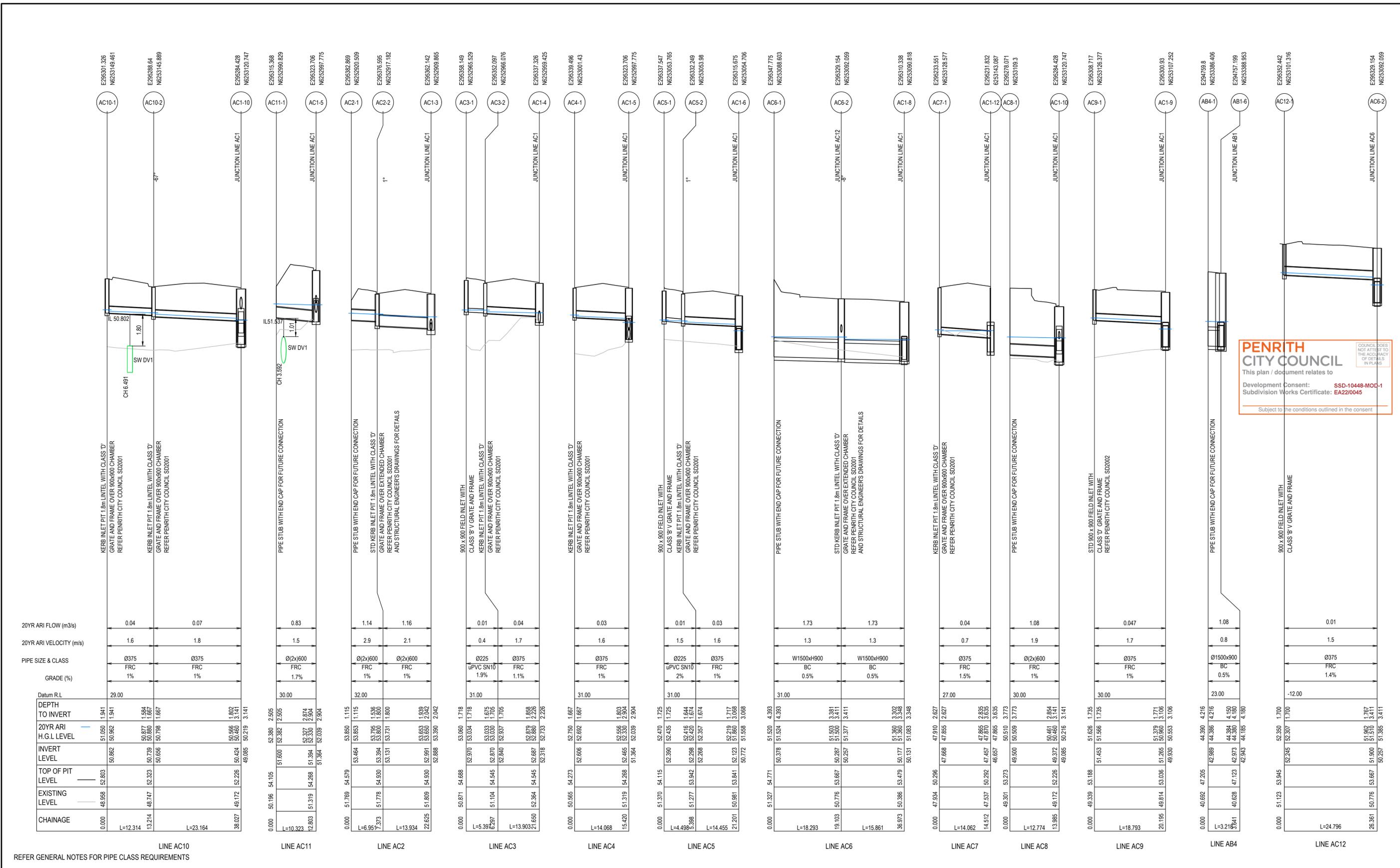
Project: **ASPECT INDUSTRIAL ESTATE MAMRE ROAD, KEMPS CREEK STAGE 1B**

Title: **STORMWATER DRAINAGE LONGITUDINAL SECTION SHEET 1**

Civil Engineers and Project Managers

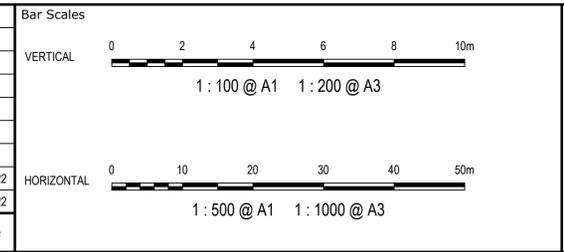
Level 7, 153 Walker Street
 North Sydney NSW 2060
 ABN 96 130 882 405
 Tel: 02 9439 1777
 Fax: 02 9923 1055
 www.atl.net.au
 info@atl.net.au

Status	FOR CONSTRUCTION	A1
Project - Drawing No.	18-596-C8401	Issue
		1



PENRITH CITY COUNCIL
 This plan / document relates to
 Development Consent: **SSD-10448-MOC-1**
 Subdivision Works Certificate: **EA22/0045**
 Subject to the conditions outlined in the consent

Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22
A	ISSUED FOR SWC APPROVAL	20-10-22



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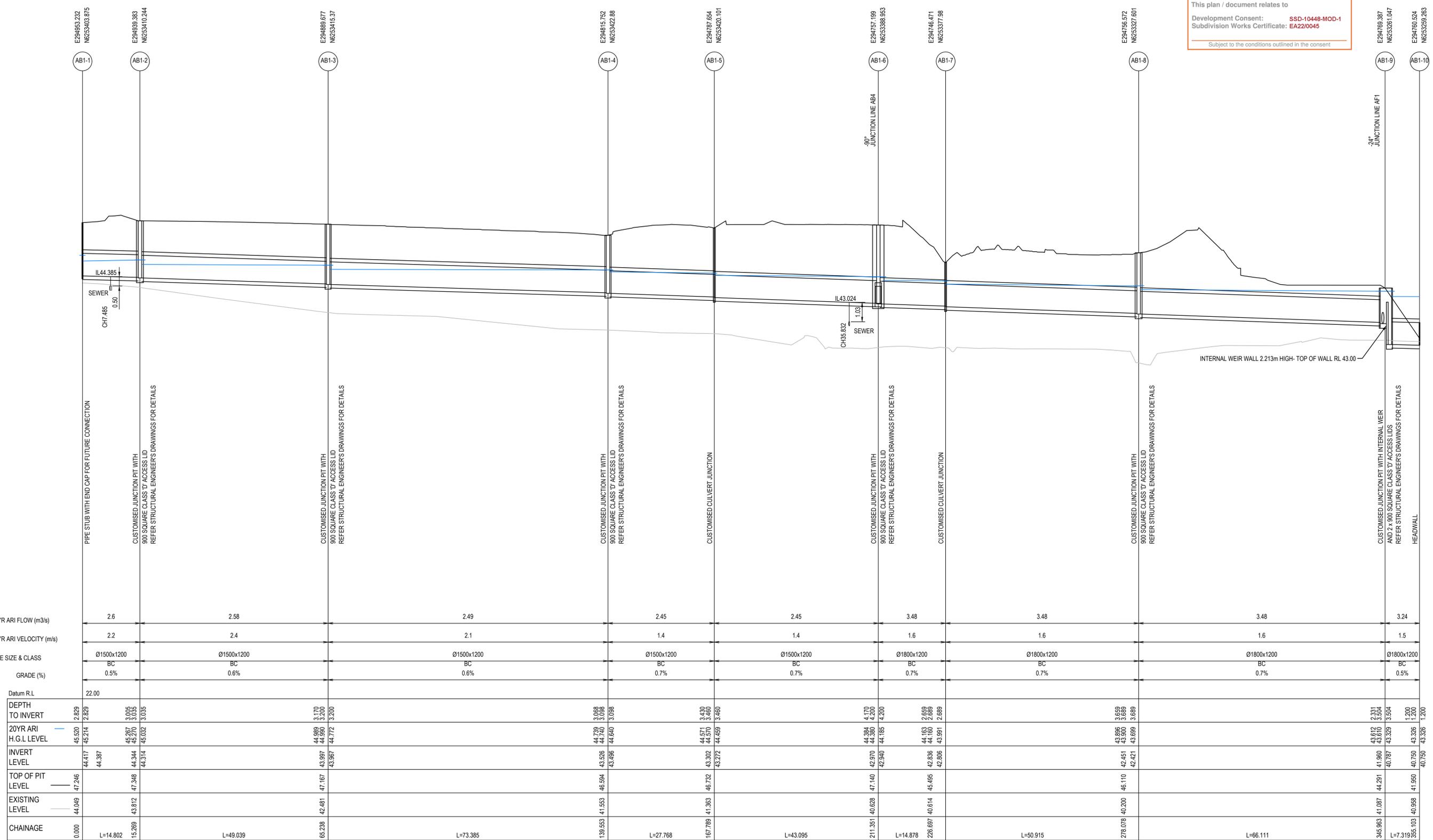


Scales	1:500 (H) 1:100 (V)	Drawn	JB/MH
Grid	GDA2020	Checked	DS
Height Datum	AHD	Approved	DS

Client: **ASPECT INDUSTRIAL ESTATE**
 MAMRE ROAD,
 KEMPS CREEK
 STAGE 1B

Project Title: **STORMWATER DRAINAGE LONGITUDINAL SECTION SHEET 2**

Civil Engineers and Project Managers	
at&l	
Level 7, 153 Walker Street North Sydney NSW 2060 ABN 96 130 882 405 Tel: 02 9439 1777 Fax: 02 9923 1055 www.atl.net.au info@atl.net.au	
Status	FOR CONSTRUCTION
Project - Drawing No.	18-596-C8402
Issue	1

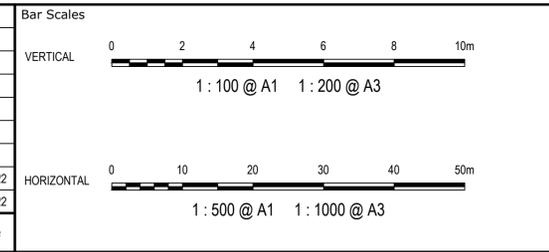


20YR ARI FLOW (m3/s)	2.6	2.58	2.49	2.45	2.45	3.48	3.48	3.24
20YR ARI VELOCITY (m/s)	2.2	2.4	2.1	1.4	1.4	1.6	1.6	1.5
PIPE SIZE & CLASS	Ø1500x1200 BC	Ø1500x1200 BC	Ø1500x1200 BC	Ø1500x1200 BC	Ø1500x1200 BC	Ø1800x1200 BC	Ø1800x1200 BC	Ø1800x1200 BC
GRADE (%)	0.5%	0.6%	0.6%	0.7%	0.7%	0.7%	0.7%	0.5%
Datum R.L.	22.00							
DEPTH TO INVERT	2.629	2.829	3.170	3.658	3.430	4.170	3.659	2.331
20YR ARI H.G.L. LEVEL	45.520	45.214	44.589	44.739	44.571	44.384	43.896	43.612
INVERT LEVEL	44.417	44.387	43.897	43.506	43.302	42.970	42.451	41.960
TOP OF PIT LEVEL	47.246	47.348	47.167	46.594	46.732	47.140	46.110	44.291
EXISTING LEVEL	44.049	43.812	42.481	41.553	41.363	40.628	40.200	41.057
CHAINAGE	0.000	L=14.802	L=49.039	L=73.385	L=27.768	L=43.095	L=50.915	L=66.111

LINE AB1

REFER GENERAL NOTES FOR PIPE CLASS REQUIREMENTS

Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22
A	ISSUED FOR SWC APPROVAL	20-10-22



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Scales: 1:500 (H), 1:100 (V)
 Grid: GDA2020
 Height Datum: AHD

Drawn	JB/MH
Designed	JB/MH
Checked	DS
Approved	DS

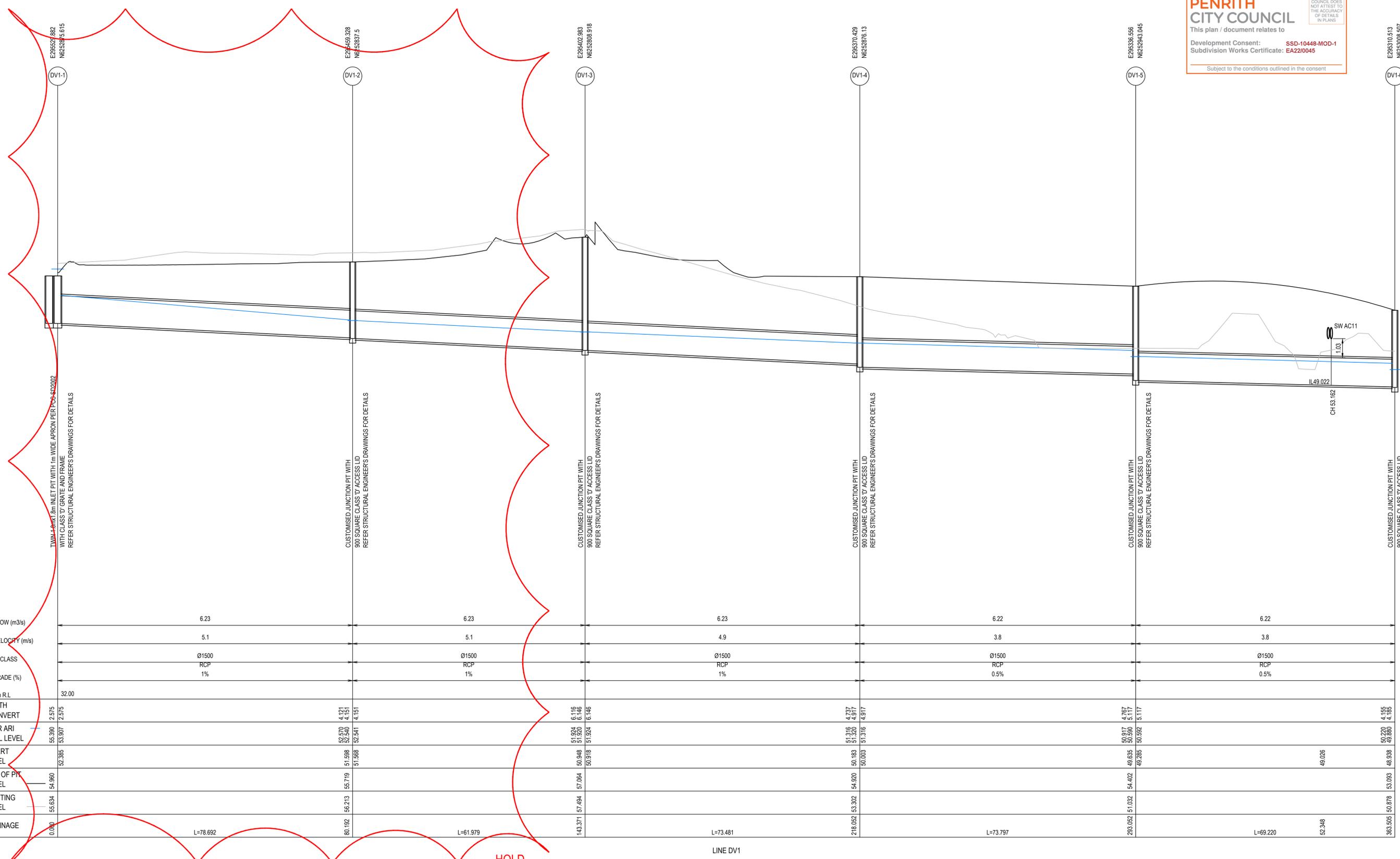
Project: **ASPECT INDUSTRIAL ESTATE MAMRE ROAD, KEMPS CREEK STAGE 1B**

Title: **STORMWATER DRAINAGE LONGITUDINAL SECTION SHEET 3**

Civil Engineers and Project Managers

Level 7, 153 Walker Street
 North Sydney NSW 2060
 ABN 96 130 882 405
 Tel: 02 9439 1777
 Fax: 02 9923 1055
 www.atl.net.au
 info@atl.net.au

Status	FOR CONSTRUCTION	A1
Project - Drawing No.	18-596-C8403	Issue
		1

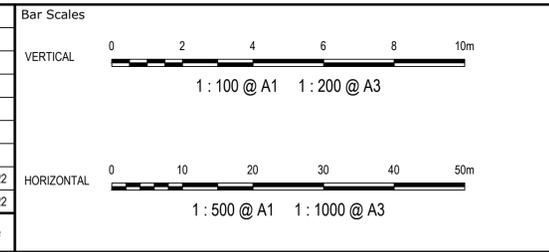


REFER GENERAL NOTES FOR PIPE CLASS REQUIREMENTS

HOLD

LINE DV1

1	ISSUED FOR CONSTRUCTION	17-11-22
A	ISSUED FOR SWC APPROVAL	20-10-22
Issue	Description	Date



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Scales: 1:500 (H), 1:100 (V)
 Grid: GDA2020
 Height Datum: AHD

Drawn	JB/MH
Designed	JB/MH
Checked	DS
Approved	DS

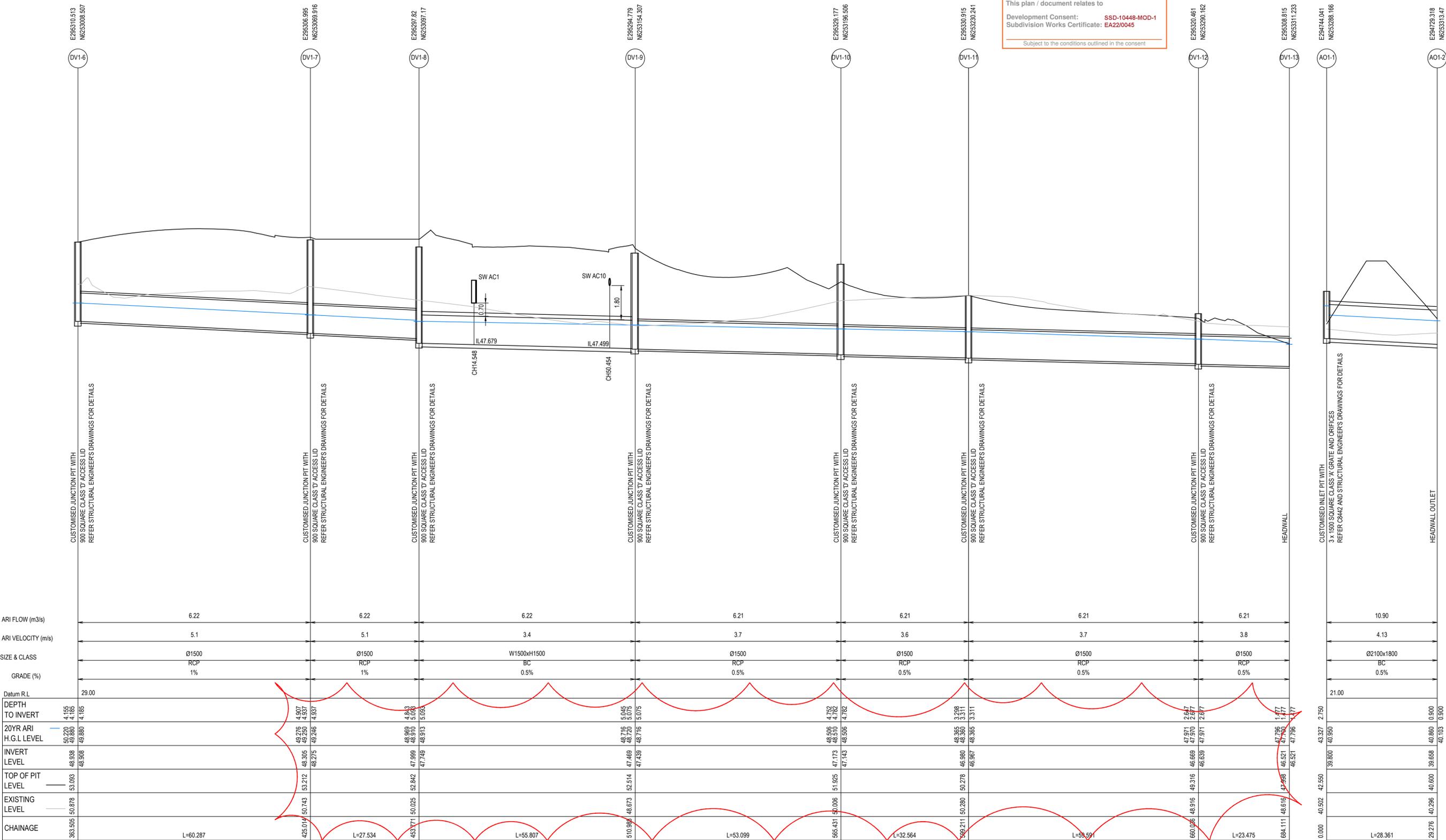
Project: **ASPECT INDUSTRIAL ESTATE MAMRE ROAD, KEMPS CREEK STAGE 1B**

Title: **STORMWATER DRAINAGE LONGITUDINAL SECTION SHEET 4**

Civil Engineers and Project Managers

Level 7, 153 Walker Street
 North Sydney NSW 2060
 ABN 96 130 882 405
 Tel: 02 9439 1777
 Fax: 02 9923 1055
 www.atl.net.au
 info@atl.net.au

Status	FOR CONSTRUCTION	A1
Project - Drawing No.	18-596-C8404	Issue
		1

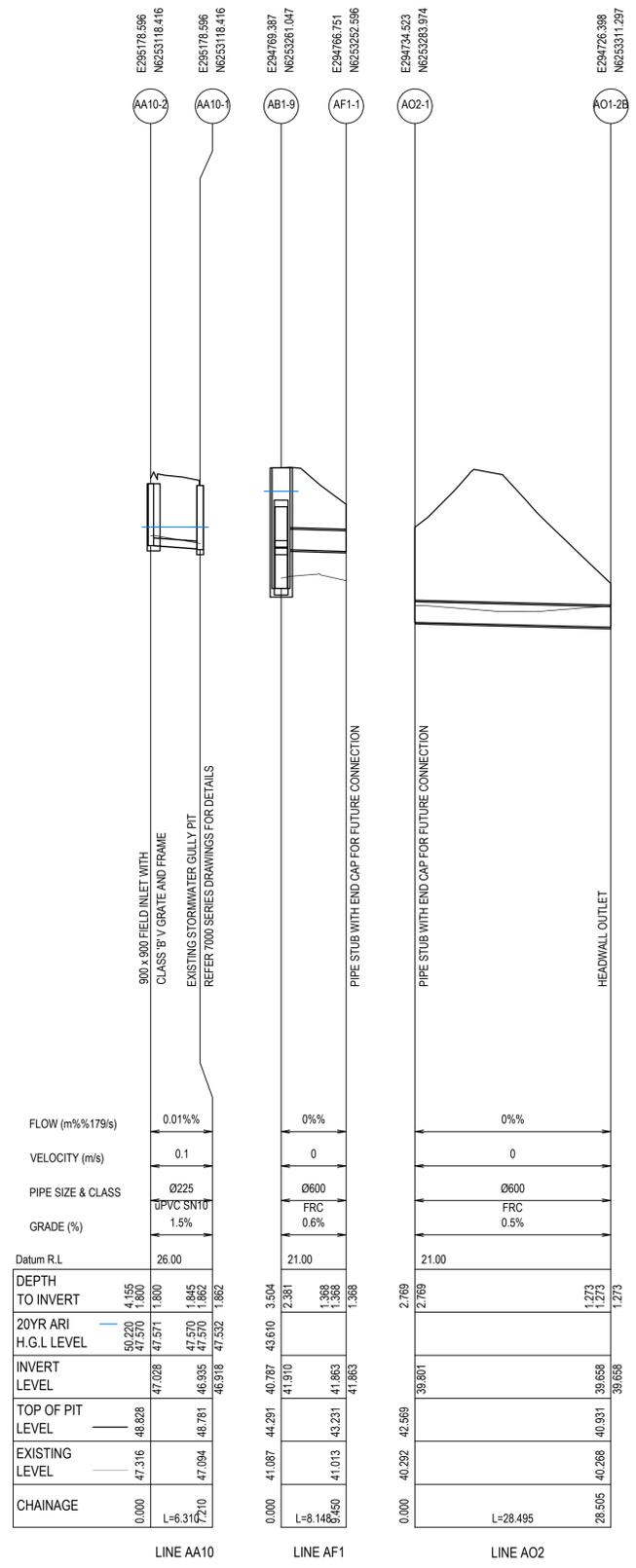


REFER GENERAL NOTES FOR PIPE CLASS REQUIREMENTS

HOLD - DIVERSION PITS TOP OF PIT LEVELS TO MATCH FUTURE MOD 3 FINISHED SURFACE LEVELS

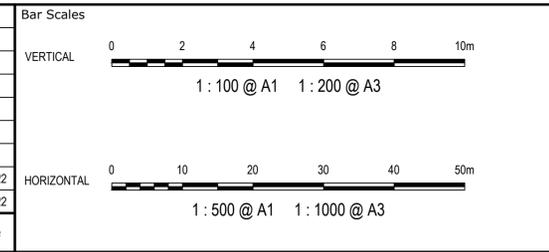
<p>1 ISSUED FOR CONSTRUCTION 17-11-22</p> <p>A ISSUED FOR SWC APPROVAL 20-10-22</p> <p>Issue Description Date</p>	<p>Bar Scales</p> <p>VERTICAL 0 2 4 6 8 10m 1:100 @ A1 1:200 @ A3</p> <p>HORIZONTAL 0 10 20 30 40 50m 1:500 @ A1 1:1000 @ A3</p>	<p>THIS DRAWING CANNOT BE COPIED OR REPRODUCED IN ANY FORM OR USED FOR ANY OTHER PURPOSE OTHER THAN THAT ORIGINALLY INTENDED WITHOUT THE WRITTEN PERMISSION OF AT&L</p>	<p>Client</p>	<p>Scales 1:500 (H) 1:100 (V)</p> <p>Grid GDA2020</p> <p>Height Datum AHD</p>	<p>Drawn JB/MH Designed JB/MH Checked DS Approved DS</p>	<p>Project ASPECT INDUSTRIAL ESTATE MAMRE ROAD, KEMPS CREEK STAGE 1B</p>	<p>Civil Engineers and Project Managers</p> <p>Level 7, 153 Walker Street North Sydney NSW 2060 ABN 96 130 882 405 Tel: 02 9439 1777 Fax: 02 9923 1055 www.atl.net.au info@atl.net.au</p>	<p>Status FOR CONSTRUCTION</p>	<p>Project - Drawing No. 18-596-C8405</p>	<p>Issue 1</p>

COUNCIL DOES NOT ATTEST TO THE ACCURACY OF DETAILS IN PLANS



REFER GENERAL NOTES FOR PIPE CLASS REQUIREMENTS

Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22
A	ISSUED FOR SWC APPROVAL	20-10-22



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Scales: 1:500 (H), 1:100 (V)
 Grid: GDA2020
 Height Datum: AHD

Drawn	JB/MH
Designed	JB/MH
Checked	DS
Approved	DS

GDA2020

Project: ASPECT INDUSTRIAL ESTATE
 MAMRE ROAD,
 KEMPS CREEK
 STAGE 1B

Title: STORMWATER DRAINAGE
 LONGITUDINAL SECTION
 SHEET 6

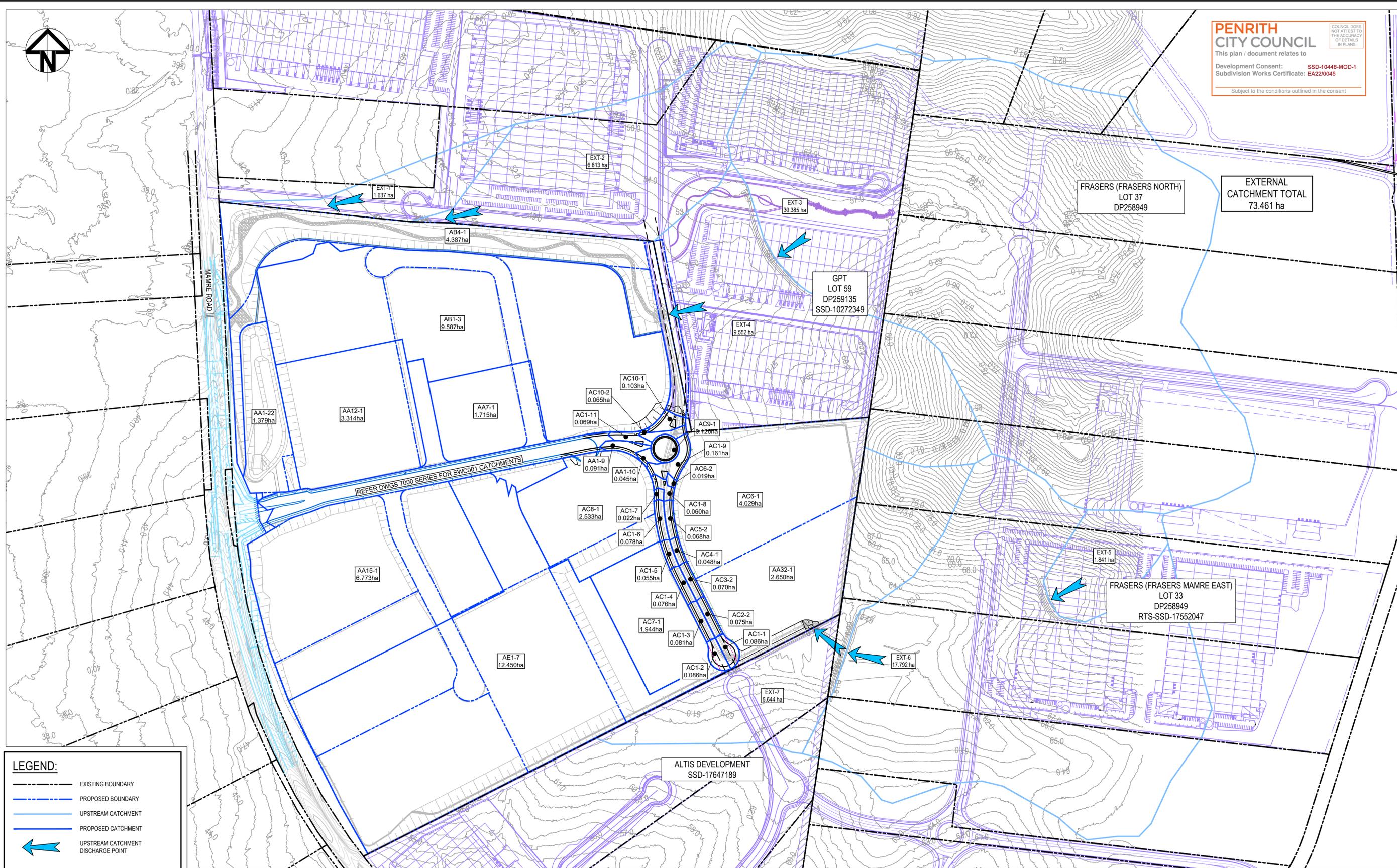
Civil Engineers and Project Managers

Level 7, 153 Walker Street
 North Sydney NSW 2060
 ABN 96 130 882 405
 Tel: 02 9439 1777
 Fax: 02 9923 1055
 www.atl.net.au
 info@atl.net.au

Status	FOR CONSTRUCTION	A1
Project - Drawing No.	18-596-C8406	Issue
		1



PENRITH CITY COUNCIL
 This plan / document relates to
 Development Consent: **SSD-10448-MOD-1**
 Subdivision Works Certificate: **EA22/0045**
 Subject to the conditions outlined in the consent



LEGEND:

- EXISTING BOUNDARY
- PROPOSED BOUNDARY
- UPSTREAM CATCHMENT
- PROPOSED CATCHMENT
- UPSTREAM CATCHMENT DISCHARGE POINT

Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22
A	ISSUED FOR SWC APPROVAL	20-10-22

Bar Scales

1 : 2500 @ A1

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Client

Scales: 1:2500

Grid: GDA2020

Height Datum: AHD

Drawn: JB/MH
 Designed: JB/MH
 Checked: DS
 Approved: DS

Project: **ASPECT INDUSTRIAL ESTATE
 MAMRE ROAD,
 KEMPS CREEK
 STAGE 1B**

Title: **STORMWATER DRAINAGE
 CATCHMENT
 PLAN
 (POST-DEVELOPED)**

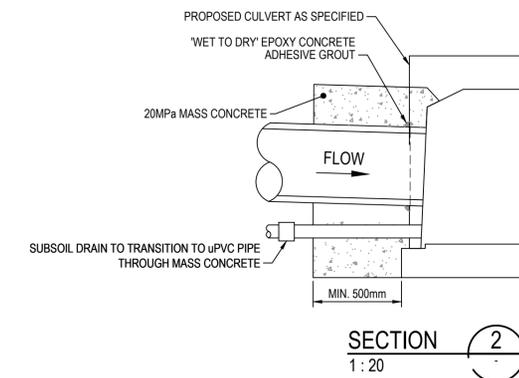
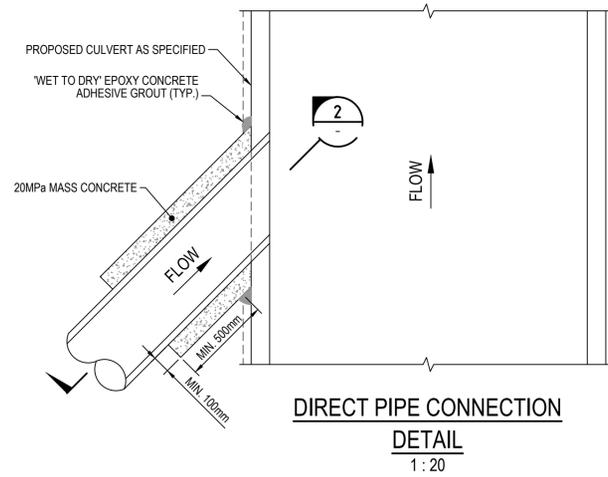
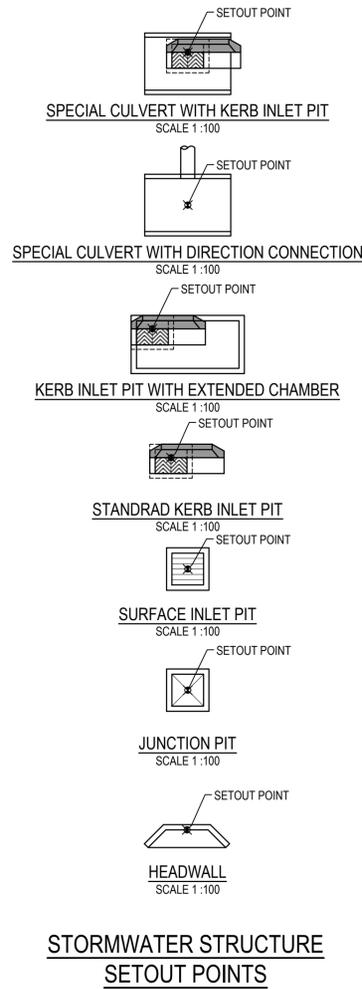
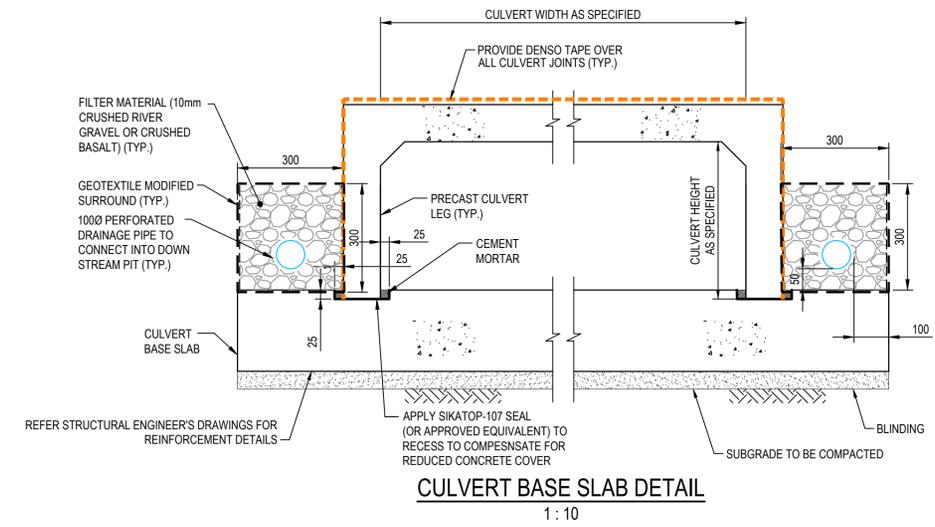
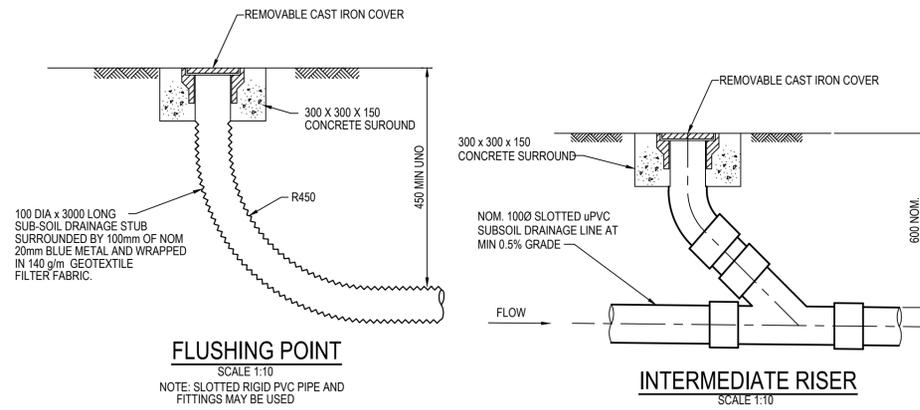
Civil Engineers and Project Managers

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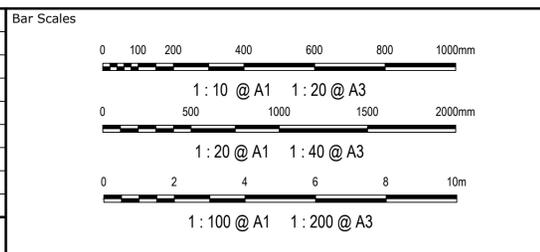
Status: **FOR CONSTRUCTION**

Project - Drawing No. **18-596-C8412**

Issue **1**



Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22
A	ISSUED FOR SWC APPROVAL	20-10-22



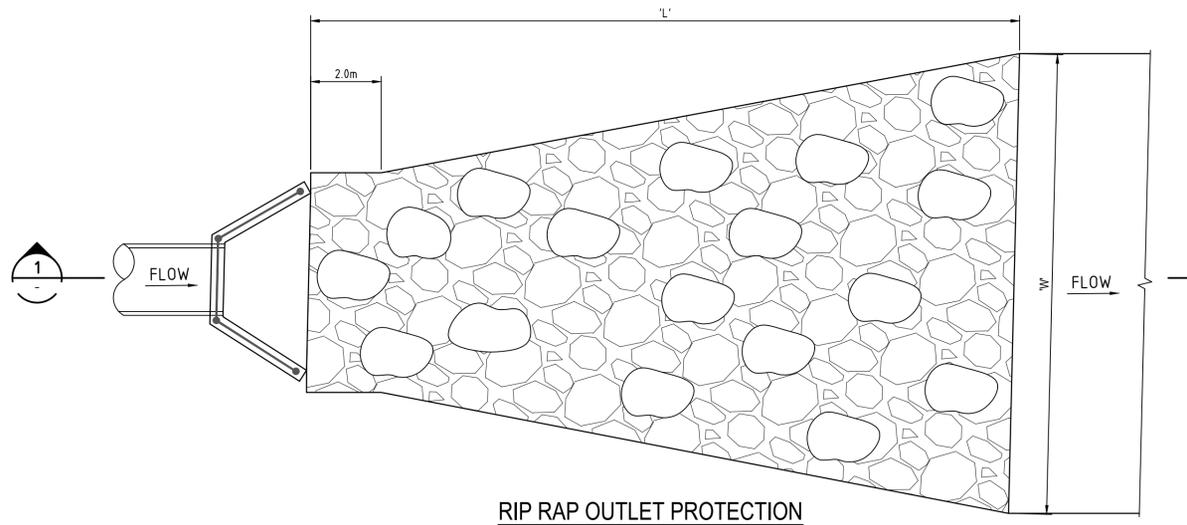
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Client	Scales	Drawn	Checked	Approved
mirvac	AS SHOWN	JB/MH	JB/MH	
	Grid GDA2020		DS	
	Height Datum AHD		DS	

Project	Title
ASPECT INDUSTRIAL ESTATE MAMRE ROAD, KEMPS CREEK STAGE 1B	STORMWATER DRAINAGE DETAILS SHEET 1

Civil Engineers and Project Managers	
 Level 7, 153 Walker Street North Sydney NSW 2060 ABN 96 130 882 405 Tel: 02 9439 1777 Fax: 02 9923 1055 www.atl.net.au info@atl.net.au	
Status FOR CONSTRUCTION	A1
Project - Drawing No. 18-596-C8421	Issue 1

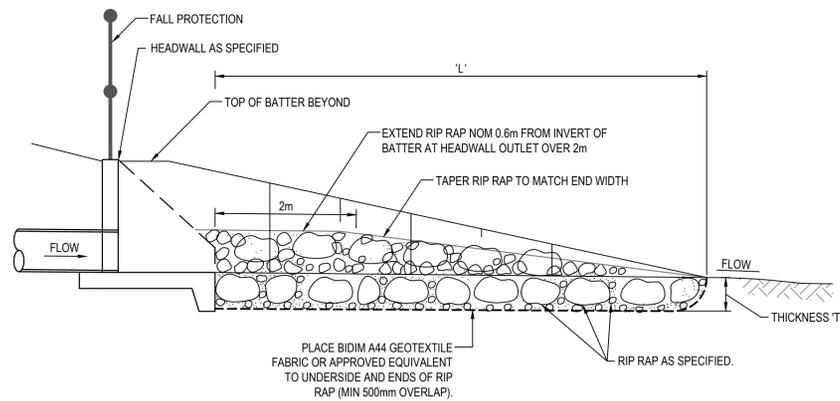


RIP RAP OUTLET PROTECTION
TYPE 1 DETAIL
 1 : 100

SCOUR PROTECTION SCHEDULE

OUTLET HEADWALL No.	PIPE Ø (mm)	LENGTH OF PROTECTION (m)	WIDTH OF PROTECTION (m)	NOMINAL ROCK SIZE (mm)	THICKNESS OF PROTECTION (mm)
	'D'	'L'	'W'	'd50'	'T'
AO1-2	2.1 x 1.8	VARIES	VARIES	500	750
AB1-10	1.8 x 1.2	10.000	9.000	300	450
DV1-13	1800	VARIES	VARIES	300	600

- NOTE:
1. MINIMUM NOMINAL ROCK SIZE 'd50' IS 300mm.
 2. MINIMUM THICKNESS 'T' IS 1.5 x NOMINAL ROCK SIZE
 3. ROCK IS NOT TO BE SITE WON SHALE OR OTHER WEATHERABLE ROCK
 4. REFER TO LAYOUT PLANS FOR ACTUAL EXTENT OF PROTECTION



SECTION 1
 NTS

ROCK GRADATION TABLE

ROCK SIZE (mm)	d50					ROCK DISTRIBUTION BY %
	200mm	300mm	400mm	500mm	600mm	
400	600	750	850	900		15-25%
300	400	525	600	750		20%
200	300	400	500	600		50%
75	100	150	150	200		15-25%

Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22
A	ISSUED FOR SWC APPROVAL	20-10-22

Bar Scales

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Scales: AS SHOWN

Grid: GDA2020

Height Datum: AHD

Drawn: JB/MH

Checked: DS

Approved: DS

Project: **ASPECT INDUSTRIAL ESTATE MAMRE ROAD, KEMPS CREEK STAGE 1B**

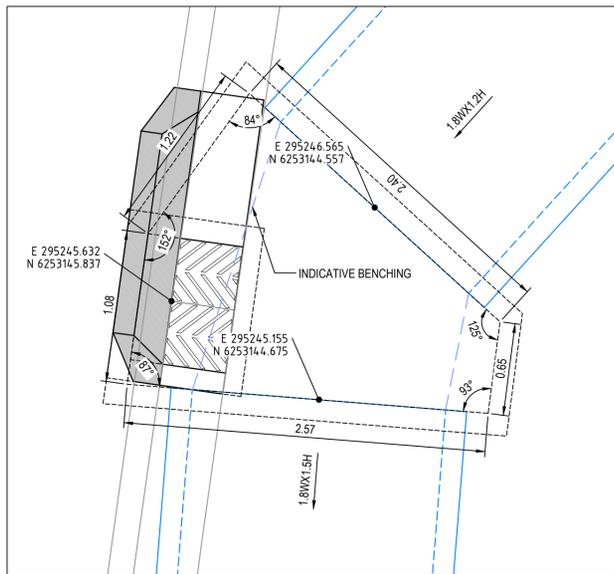
Title: **STORMWATER DRAINAGE DETAILS SHEET 2**

Civil Engineers and Project Managers

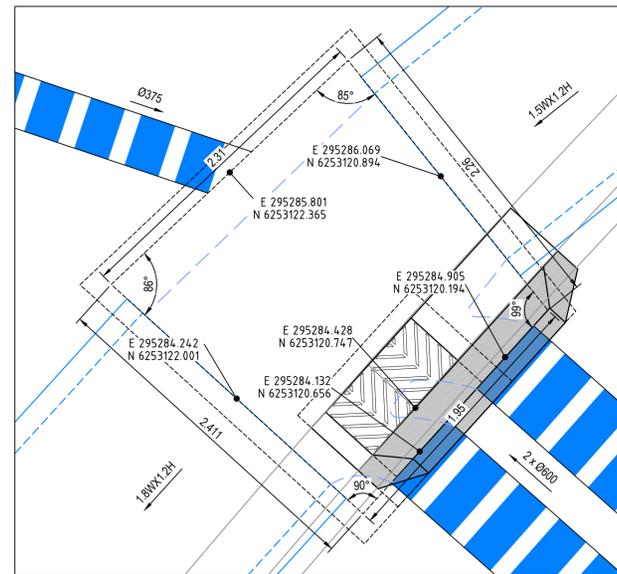
Status: **FOR CONSTRUCTION**

Project - Drawing No. **18-596-C8422**

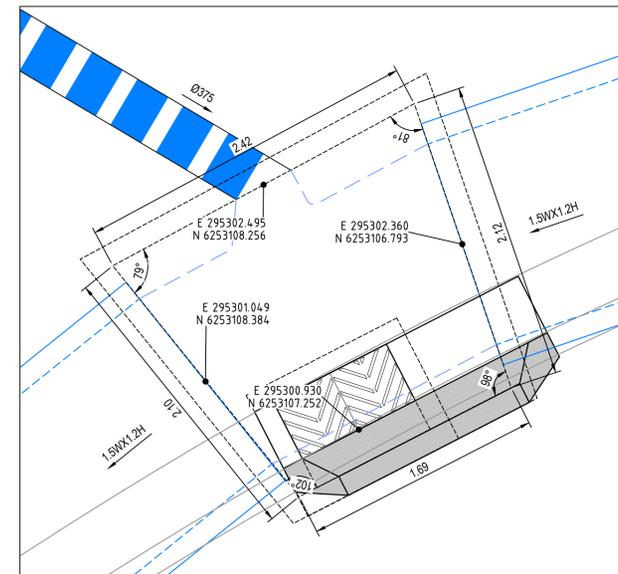
Issue: **1**



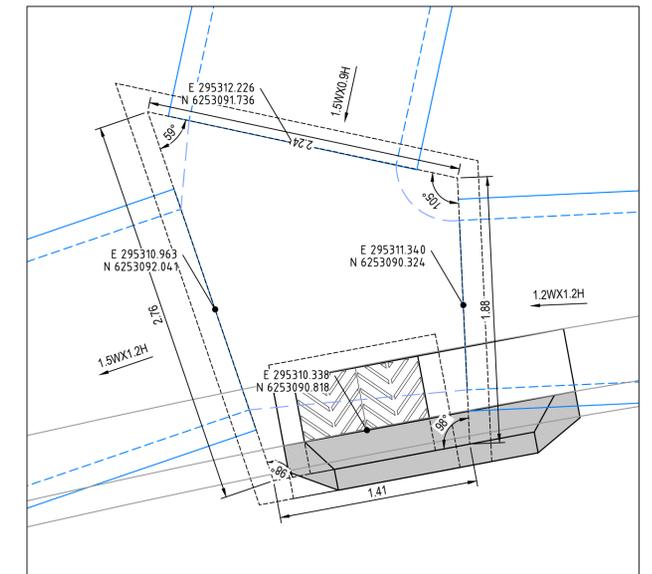
PIT AC1-11



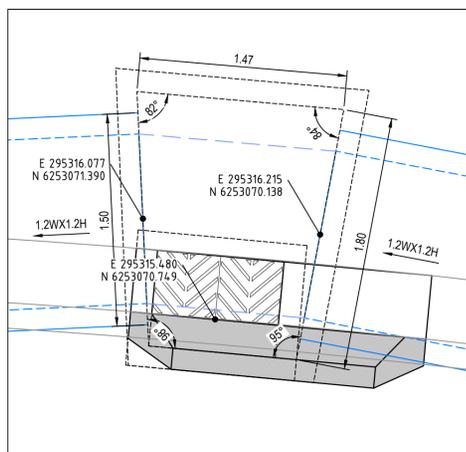
PIT AC1-10



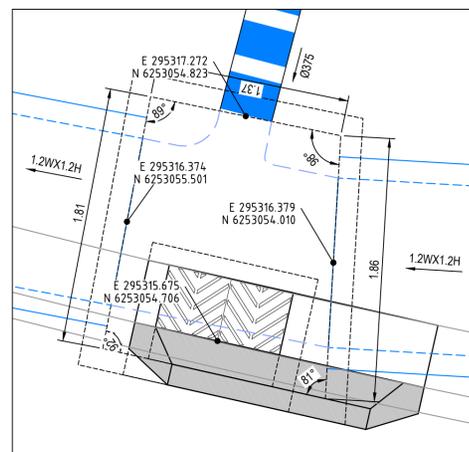
PIT AC1-9



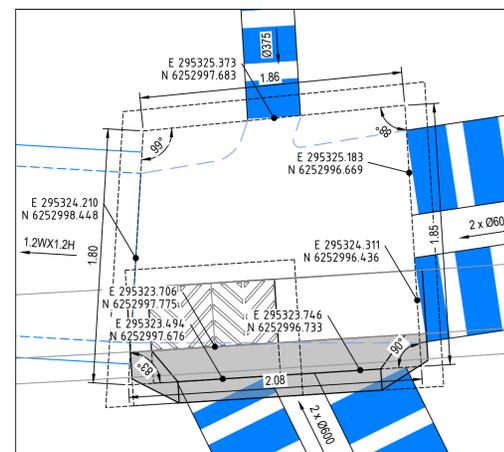
PIT AC1-8



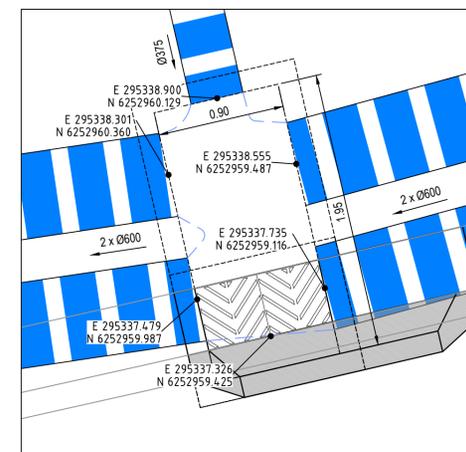
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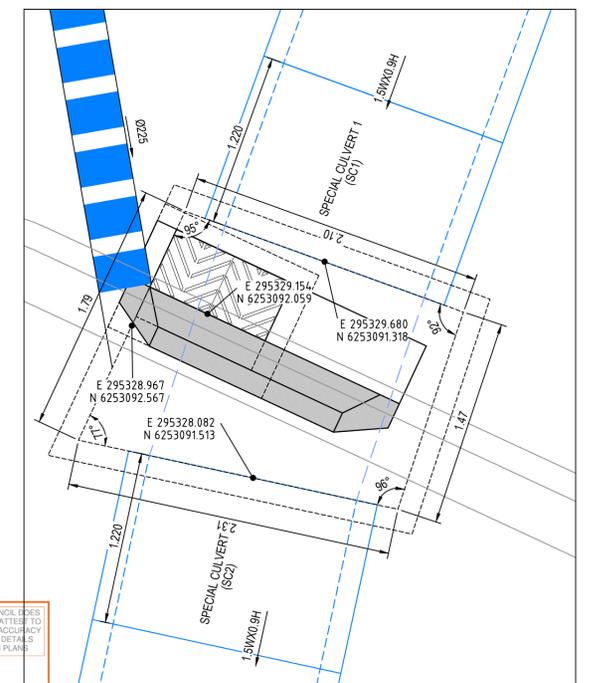
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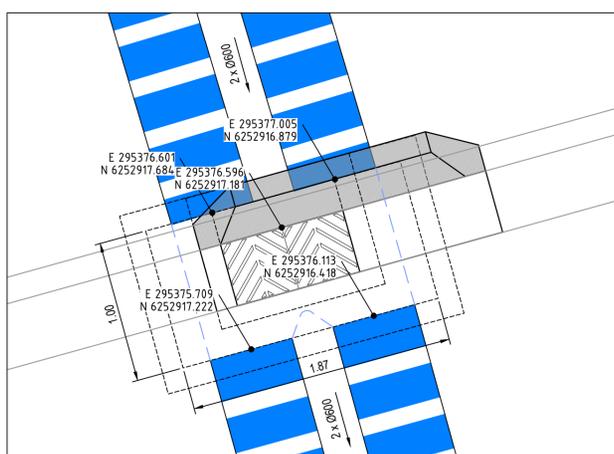
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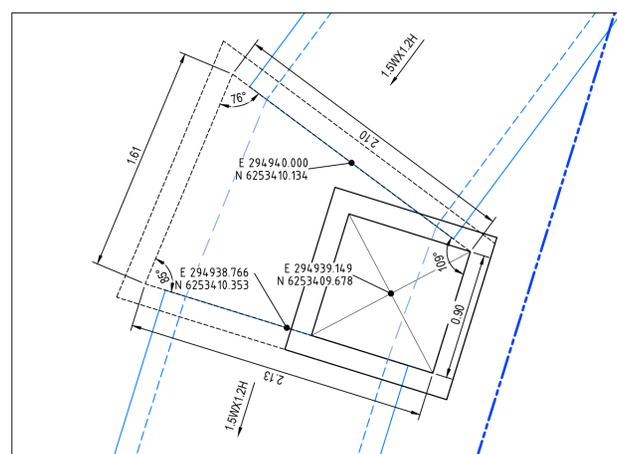
PIT AC1-4



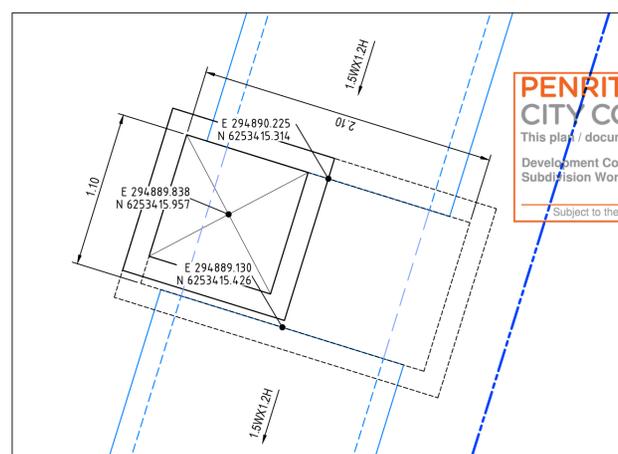
PIT AC6-2, SC1 & SC2



PIT AC2-2



PIT AB1-2

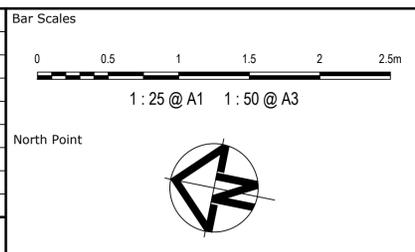


PIT AB1-3

PENRITH CITY COUNCIL
 This plan / document relates to
 Development Consent: **SSD-10448-MOD-1**
 Subdivision Works Certificate: **EA22/0045**
 Subject to the conditions outlined in the consent.

- STORMWATER NOTES:**
1. STORMWATER PIT CHAMBER DIMENSIONS SHOWN ON THIS PLAN ARE SHOWN AS A GUIDE ONLY. CONTRACTOR TO CONFIRM CHAMBER DIMENSIONS ON SITE WITH SITE SUPERINTENDENT
 2. ALL PITS TO HAVE MASS CONCRETE (N20) BENCHING TO ENSURE SMOOTH FLOW & SMOOTH TRANSITION FROM ENTRY PIPES TO EXIT PIPES.
 3. BENCHING MUST BE PLACED TO ENSURE SURFACE IS SMOOTH & FREE FROM VOIDS AND CRACKS.
 4. BENCHING MUST BE A MIN. HEIGHT EQUAL TO HALF THE BARREL OF THE PIPE.
 5. ENSURE ALL STEP IRONS ARE LOCATED ON THE CLOSEST FACE TO THE OPENING TO ALLOW FREE ACCESS TO THE CHAMBER.
 6. WHERE SUBSOIL IS INSTALLED INTO THE PIT, EXTEND SUBSOIL THROUGH BENCHING TO DISCHARGE FREELY INTO CHAMBER.
 7. PIT WIDTHS ARE TO ALLOW FOR PIPE DIAMETER + 150mm TO PIT WALL MIN.
 8. IF IN DOUBT, SEEK CLARIFICATION FROM THE SUPERINTENDENT.

Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22
A	ISSUED FOR SWC APPROVAL	20-10-22



Scales	1:25	Drawn	JB/MH
Grid	GDA2020	Designed	JB/MH
Height Datum	AHD	Checked	DS
		Approved	DS

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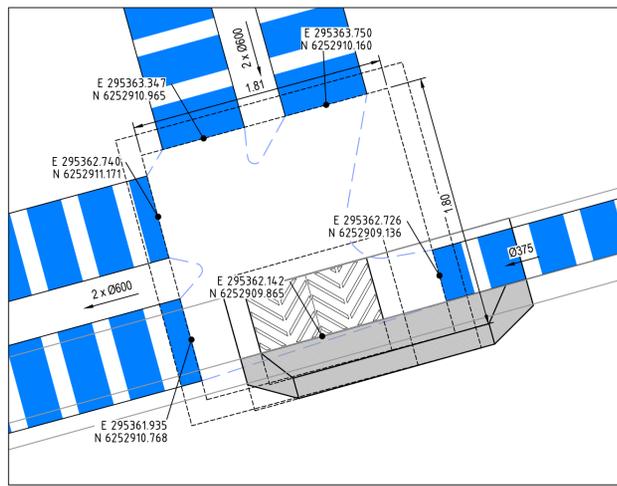
Project
**ASPECT INDUSTRIAL ESTATE
 MAMRE ROAD,
 KEMPS CREEK
 STAGE 1B**

Title
**STRUCTURE SETOUT DETAILS
 SHEET 1**

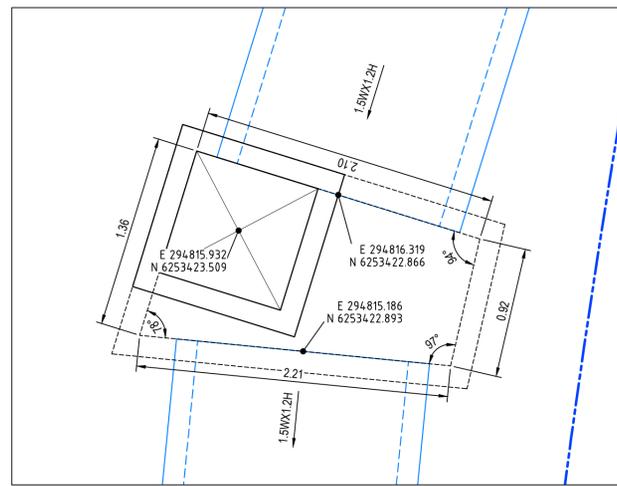
Civil Engineers and Project Managers

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 ABN 96 130 882 405
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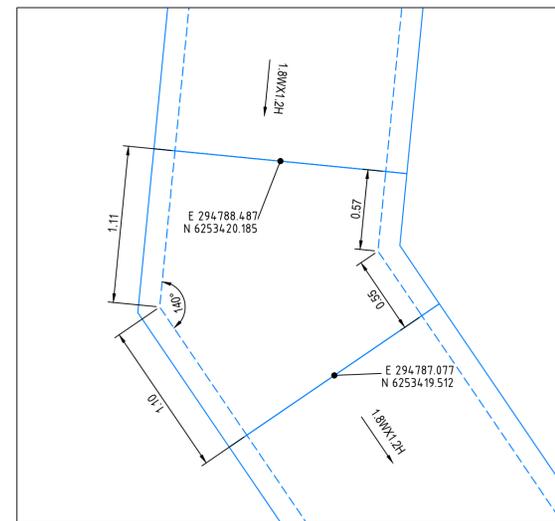
Status	FOR CONSTRUCTION	A1
Project - Drawing No.	18-596-C8431	Issue
		1



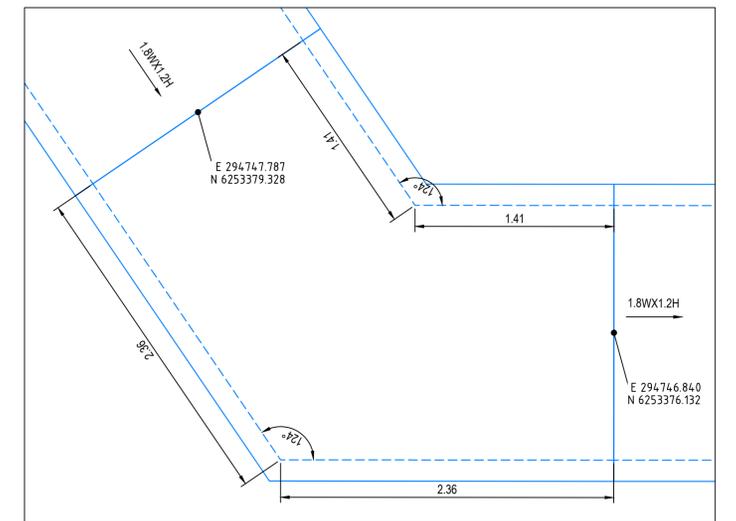
PIT AC1-3



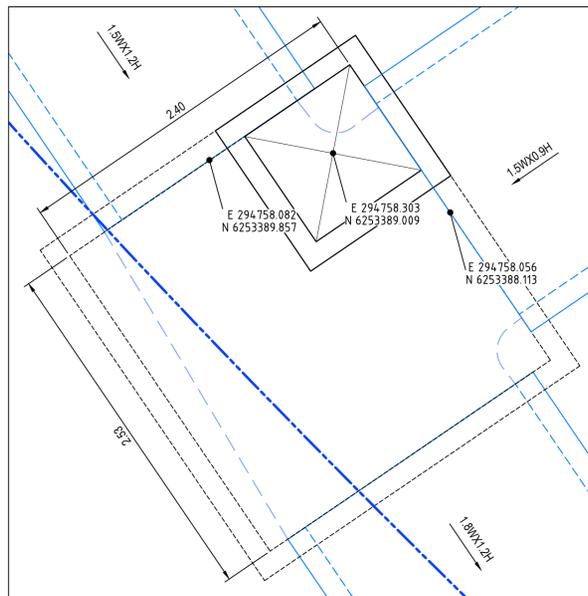
PIT AB1-4



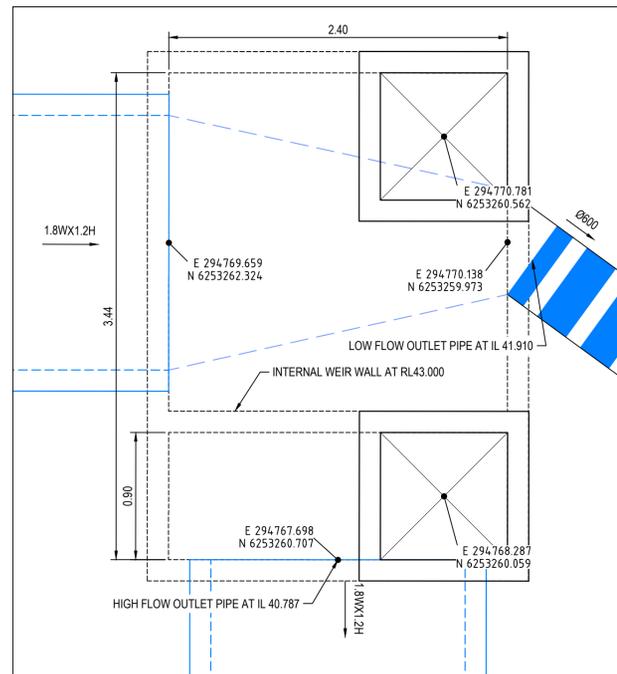
PIT AB1-5 (SC3)



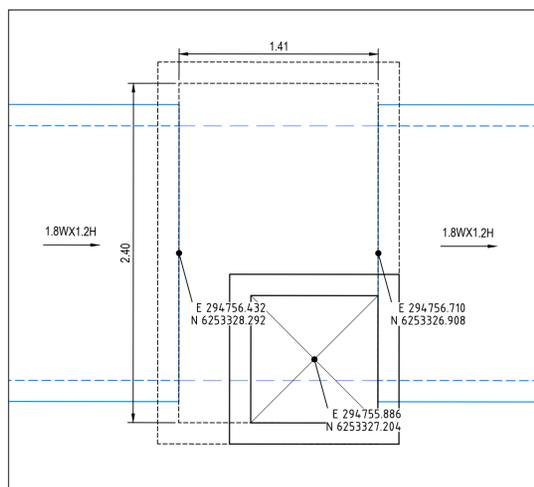
PIT AB1-7 (SC4)



PIT AB1-6

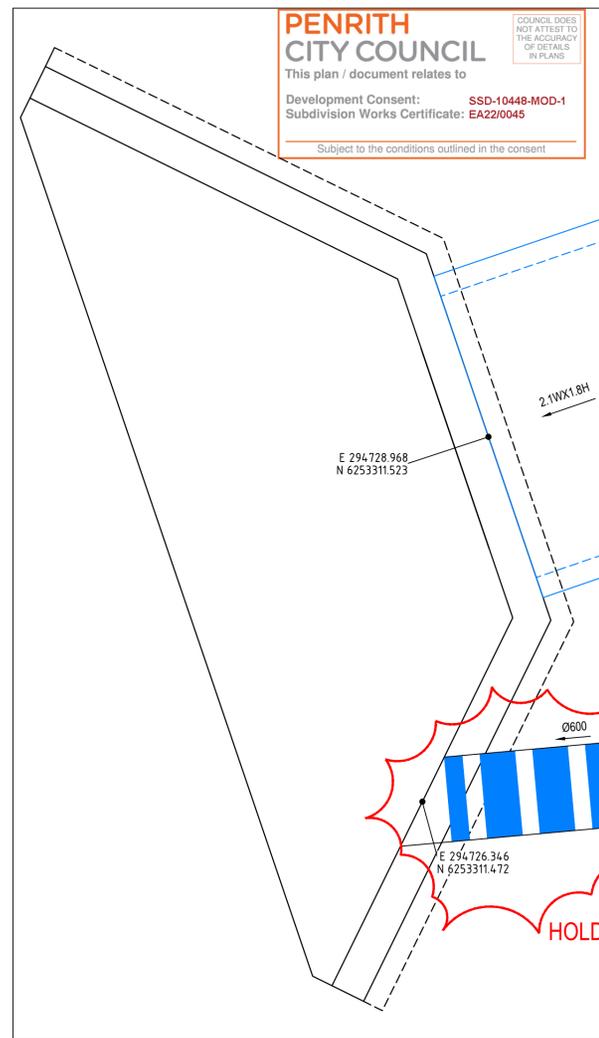


PIT AB1-9

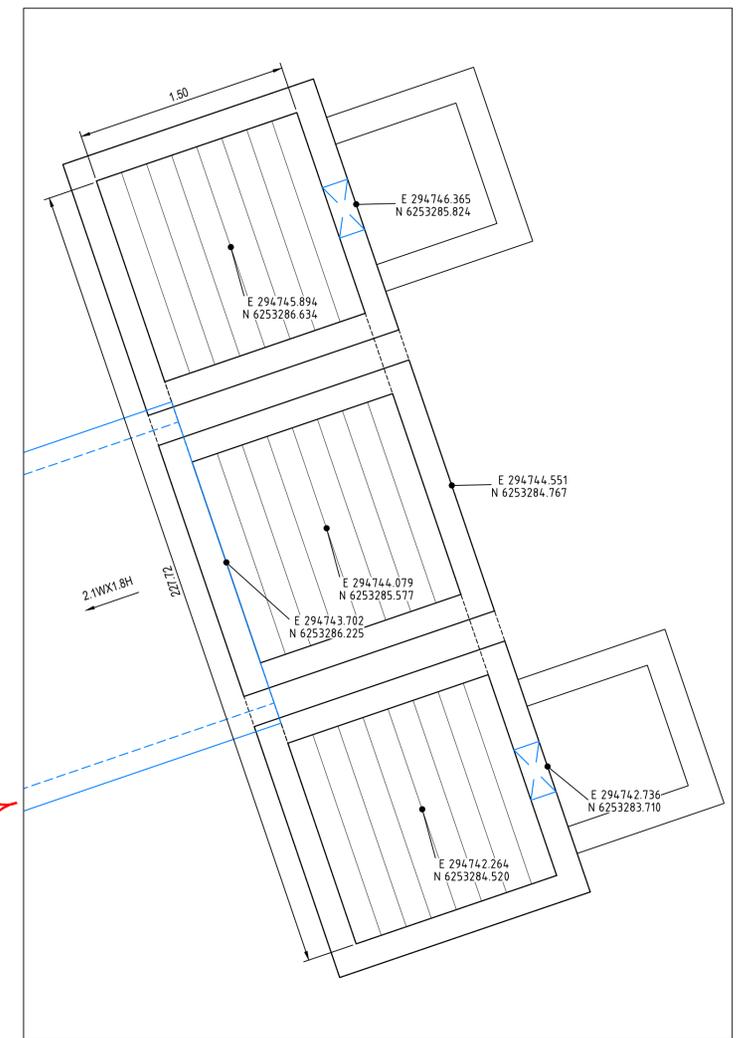


PIT AB1-8

- STORMWATER NOTES:**
1. STORMWATER PIT CHAMBER DIMENSIONS SHOWN ON THIS PLAN ARE SHOWN AS A GUIDE ONLY. CONTRACTOR TO CONFIRM CHAMBER DIMENSIONS ON SITE WITH SITE SUPERINTENDENT
 2. ALL PITS TO HAVE MASS CONCRETE (N20) BENCHING TO ENSURE SMOOTH FLOW & SMOOTH TRANSITION FROM ENTRY PIPES TO EXIT PIPES.
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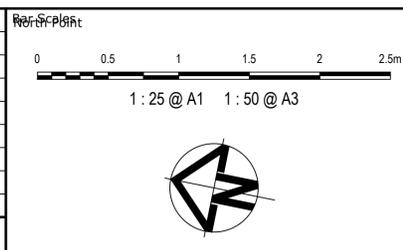


PIT AO1-2



PIT AO1-1

PENRITH CITY COUNCIL
 This plan / document relates to
 Development Consent: **SSD-10448-MOD-1**
 Subdivision Works Certificate: **EA220045**
 Subject to the conditions outlined in the consent.



Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22
A	ISSUED FOR SWC APPROVAL	20-10-22

Client: **mirvac**

Scales: 1:25

Grid: GDA2020

Height Datum: AHD

Drawn: JB/MH

Designed: JB/MH

Checked: DS

Approved: DS

Project: **ASPECT INDUSTRIAL ESTATE MAMRE ROAD, KEMPS CREEK STAGE 1B**

Title: **STRUCTURE SETOUT DETAILS SHEET 2**

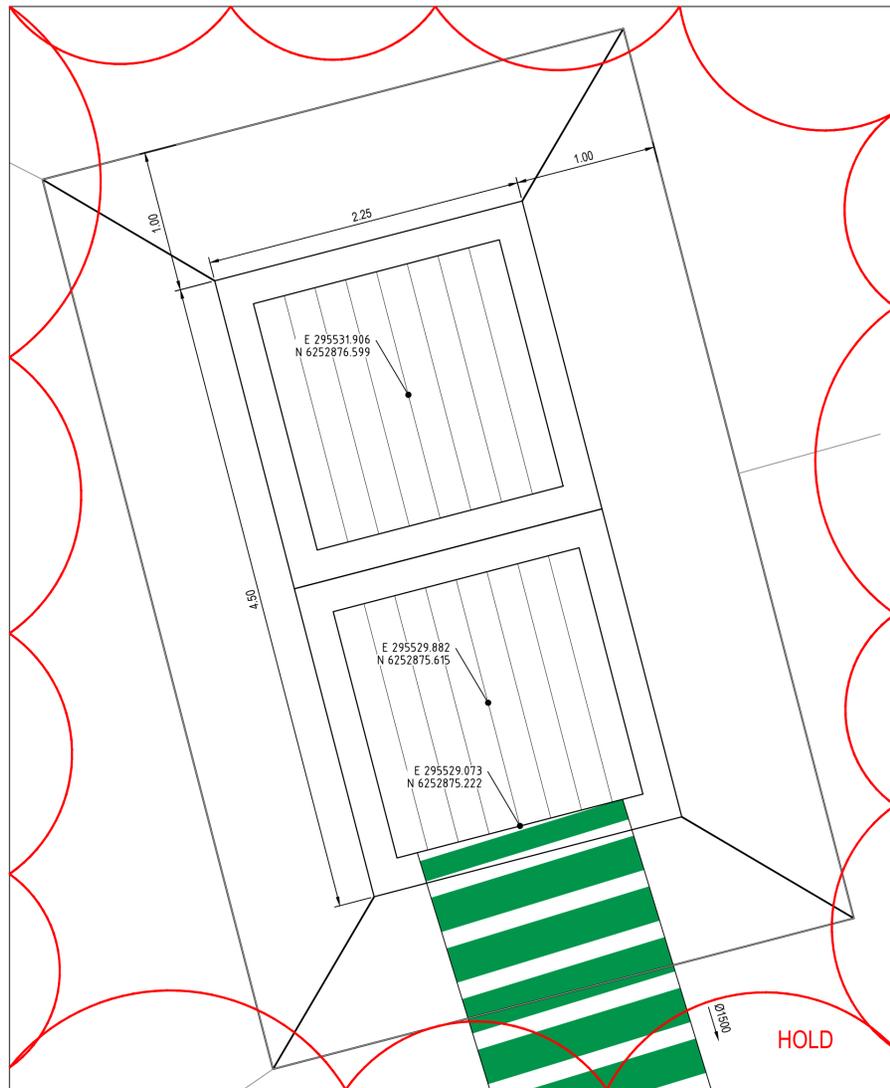
Civil Engineers and Project Managers: **at&l**

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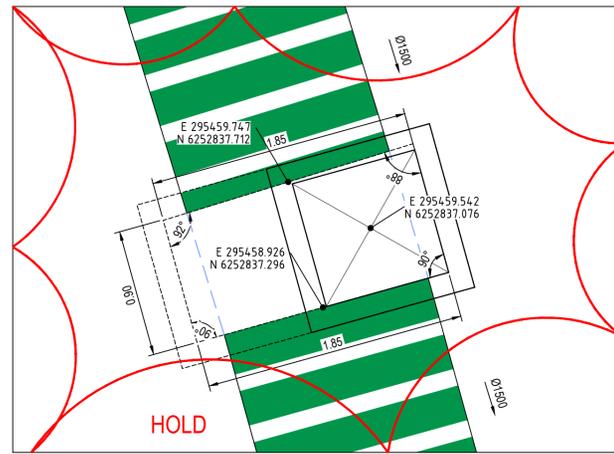
Status: **FOR CONSTRUCTION**

Project - Drawing No. **18-596-C8432**

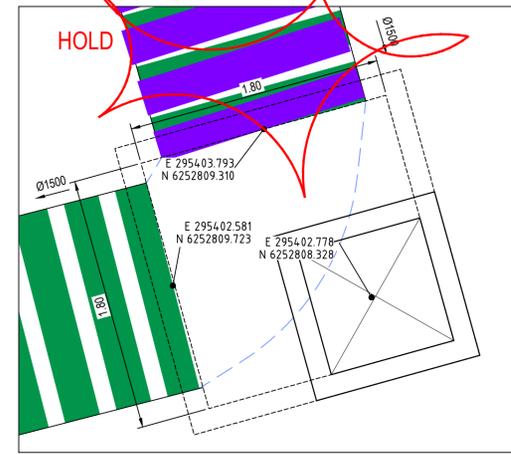
Issue: **1**



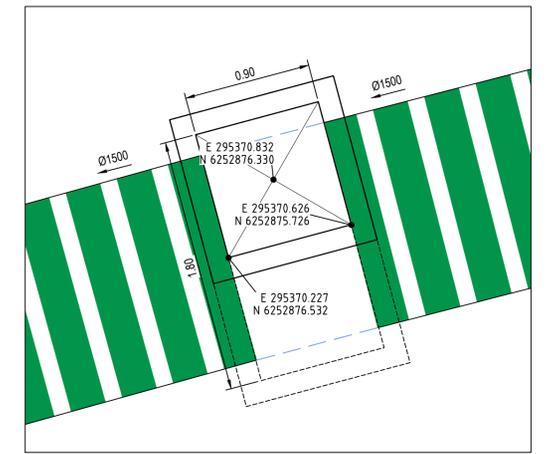
PIT DV1-1



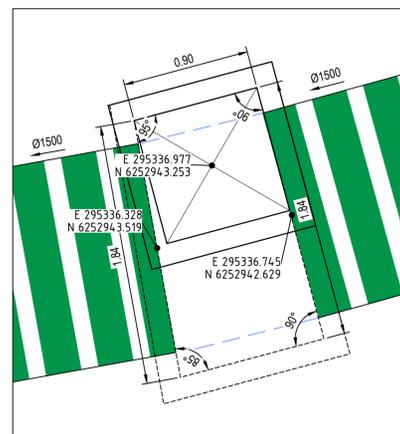
PIT DV1-2



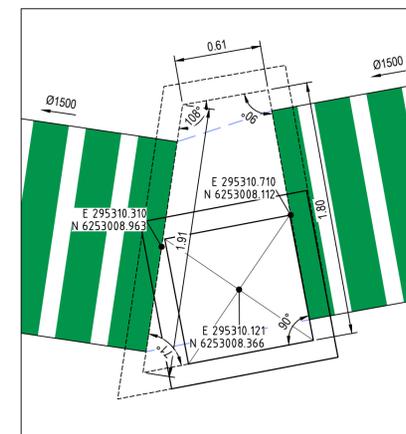
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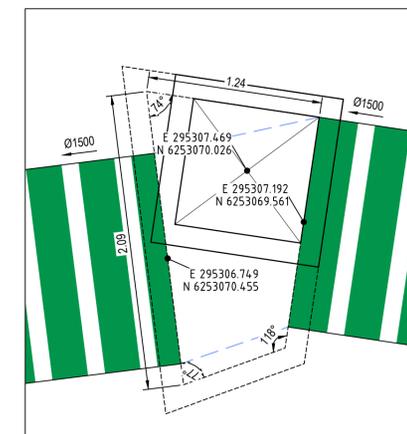
PIT DV1-4



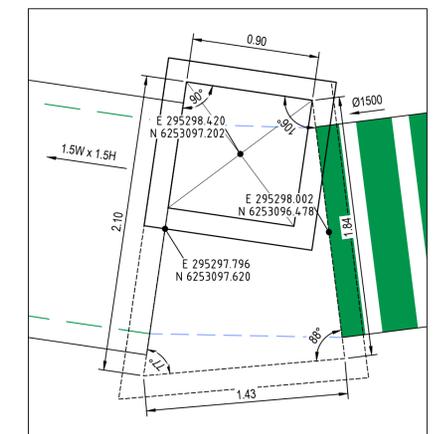
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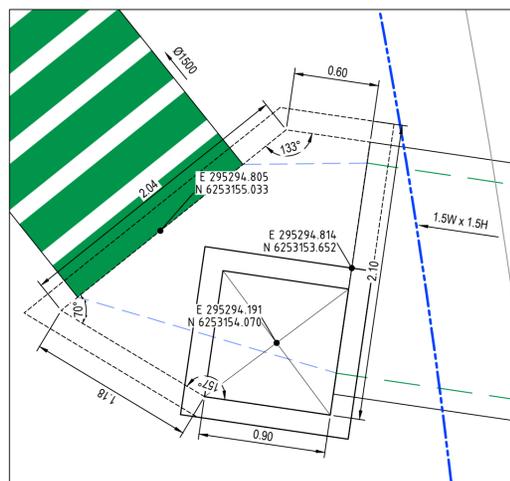
PIT DV1-6



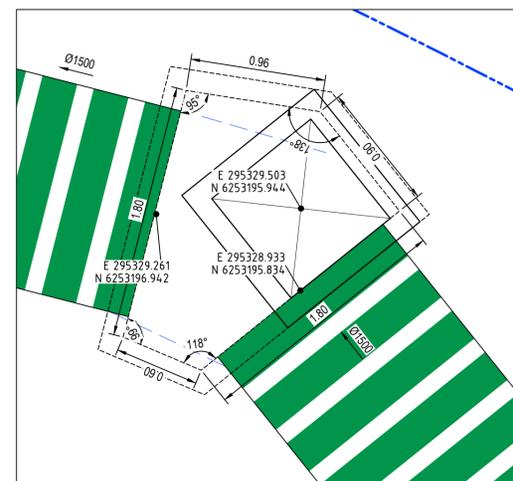
PIT DV1-7



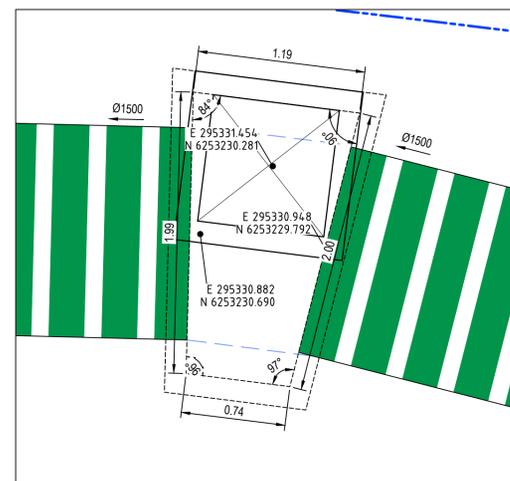
PIT DV1-8



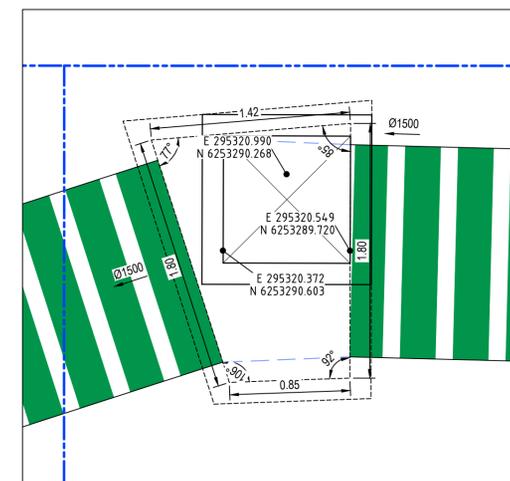
PIT DV1-9



PIT DV1-10



PIT DV1-11



PIT DV1-12

PENRITH CITY COUNCIL
 This plan / document relates to
 Development Consent: **SSD-10448-MOD-1**
 Subdivision Works Certificate: **EA220045**
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- STORMWATER NOTES:**
1. STORMWATER PIT CHAMBER DIMENSIONS SHOWN ON THIS PLAN ARE SHOWN AS A GUIDE ONLY. CONTRACTOR TO CONFIRM CHAMBER DIMENSIONS ON SITE WITH SITE SUPERINTENDENT
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Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22
A	ISSUED FOR SWC APPROVAL	20-10-22

Bar Scales
 0 0.5 1 1.5 2 2.5m
 1:25 @ A1 1:50 @ A3

North Point

Key Plan

Client

Scales 1:25
 Grid GDA2020
 Height Datum AHD
 Drawn JB/MH
 Designed JB/MH
 Checked DS
 Approved DS
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Project
**ASPECT INDUSTRIAL ESTATE
 MAMRE ROAD,
 KEMPS CREEK
 STAGE 1B**

Title
**STRUCTURE SETOUT DETAILS
 SHEET 3**

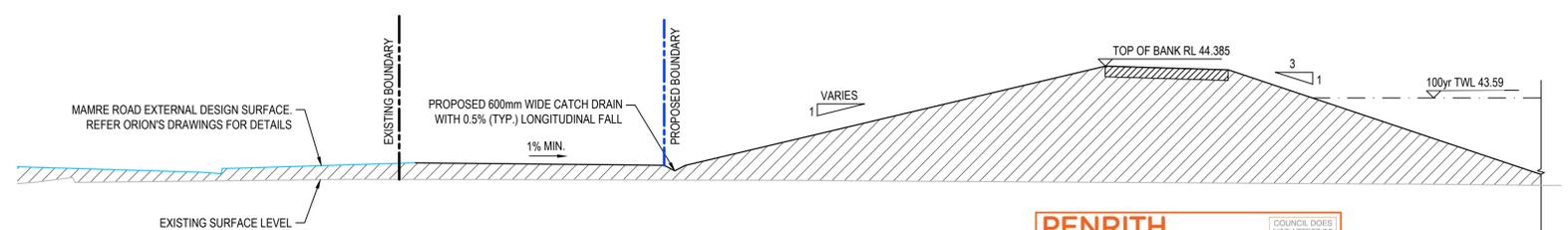
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 www.atl.net.au
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Status
FOR CONSTRUCTION

Project - Drawing No.
18-596-C8433

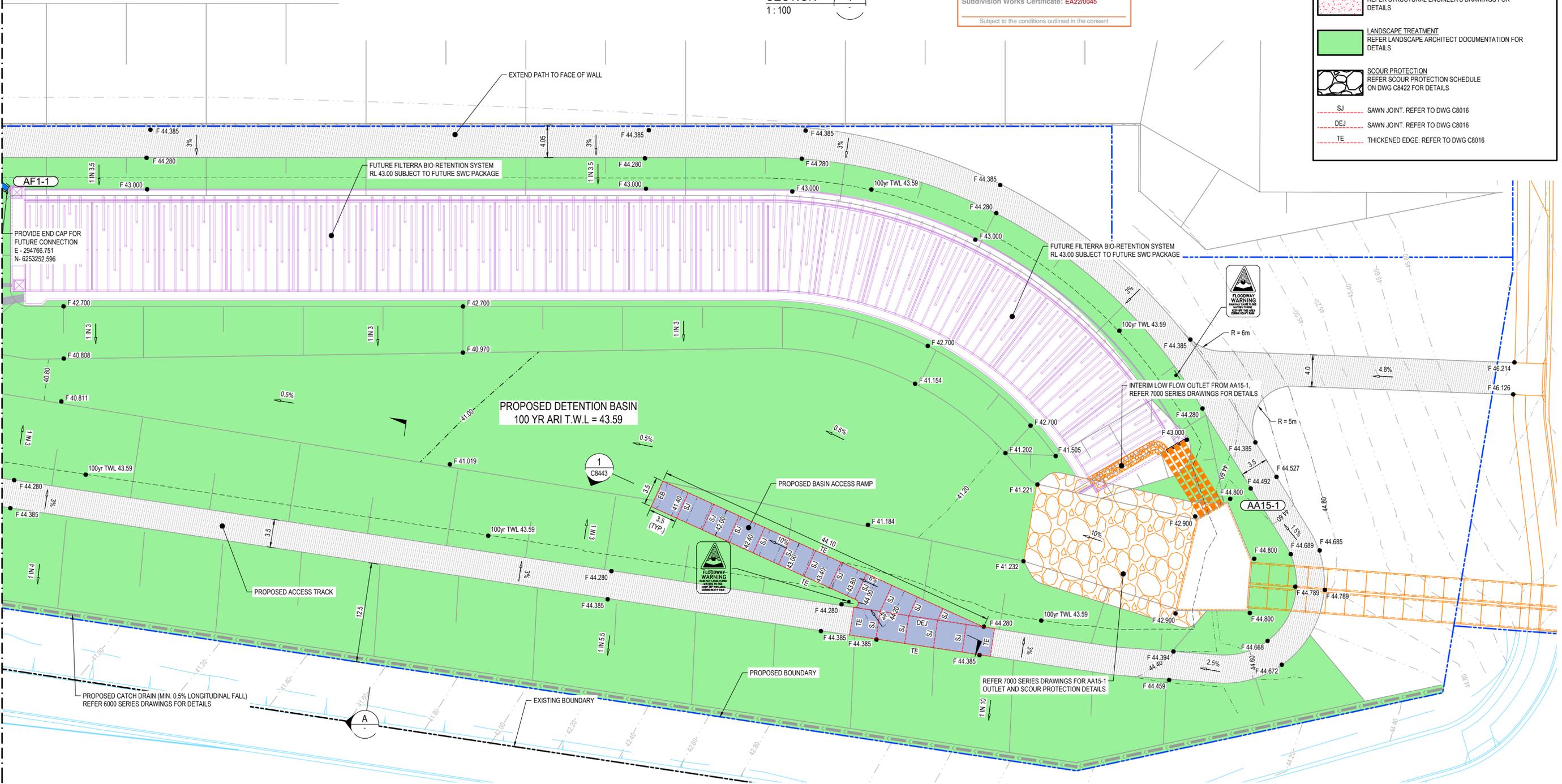
Issue
1



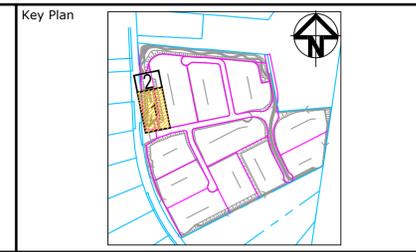
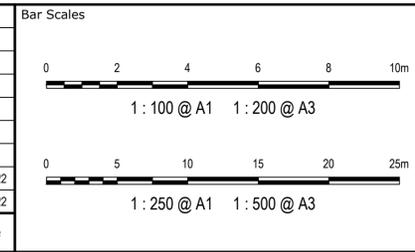
PENRITH CITY COUNCIL
 This plan / document relates to
 Development Consent: **SSD-10448-MOD-1**
 Subdivision Works Certificate: **EA22/0045**
 Subject to the conditions outlined in the consent

LEGEND	
	BASIN ACCESS TRACK 2 COAT SEAL ON 200mm THICK COMPACTED DGB20 ON COMPACTED FILL
	REINFORCED CONCRETE WEIR 250mm THICK N32 CONCRETE WITH 1 LAYER OF SL82 MESH WITH 50mm COVER ON 150mm THICK COMPACTED DGB20 ON COMPACTED FILL
	CONCRETE RAMP WITH TOOLED GROOVES 175mm THICK N32 CONCRETE WITH 1 LAYER SL82 MESH WITH MIN 50mm COVER ON 150mm THICK COMPACTED DGB20 ON COMPACTED FILL WITH 20mm (W) x 10mm (D) TOOLED GROOVES AT 100mm CENTRES AND 20° ANGLE
	REINFORCED CONCRETE SLAB REFER STRUCTURAL ENGINEER'S DRAWINGS FOR DETAILS
	LANDSCAPE TREATMENT REFER LANDSCAPE ARCHITECT DOCUMENTATION FOR DETAILS
	SCOUR PROTECTION REFER SCOUR PROTECTION SCHEDULE ON DWG C8422 FOR DETAILS
	SJ SAWN JOINT. REFER TO DWG C8016
	DEJ SAWN JOINT. REFER TO DWG C8016
	TE THICKENED EDGE. REFER TO DWG C8016

ADJOINS DRG 18-596-C8442



Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22
A	ISSUED FOR SWC APPROVAL	20-10-22



AS SHOWN	Drawn	JB/MH
Grid	GDA2020	Checked
Height Datum	AHD	Approved

THIS DRAWING CANNOT BE COPIED OR REPRODUCED IN ANY FORM OR USED FOR ANY OTHER PURPOSE OTHER THAN THAT ORIGINALLY INTENDED WITHOUT THE WRITTEN PERMISSION OF AT&I.

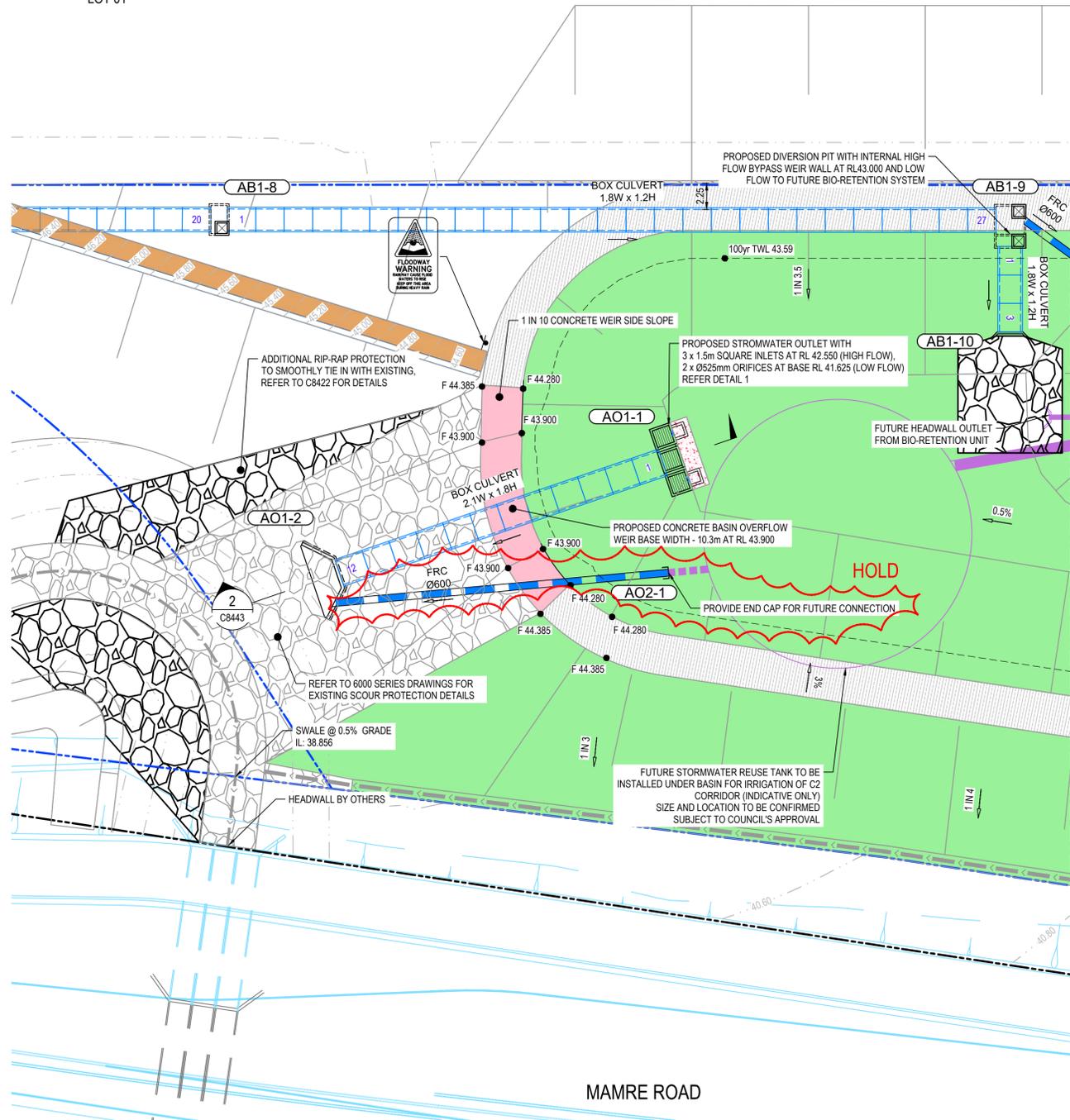
Project: **ASPECT INDUSTRIAL ESTATE MAMRE ROAD, KEMPS CREEK STAGE 1B**

Title: **DETENTION BASIN DETAIL PLAN SHEET 1**

Civil Engineers and Project Managers	
at&i	
Level 7, 153 Walker Street North Sydney NSW 2060 ABN 96 130 882 405 Tel: 02 9439 1777 Fax: 02 9923 1055 www.atl.net.au info@atl.net.au	
Status: FOR CONSTRUCTION	A1
Project - Drawing No. 18-596-C8441	Issue 1

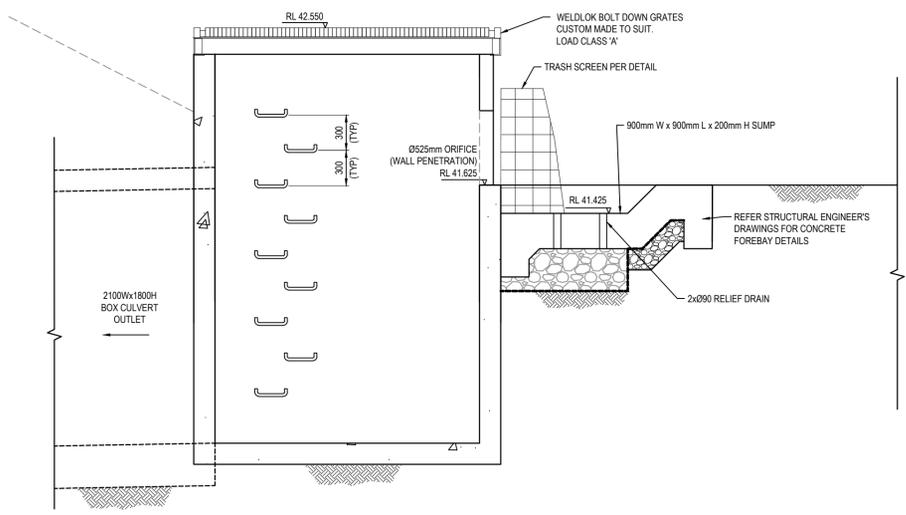


FUTURE LOT 01

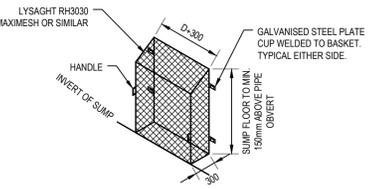
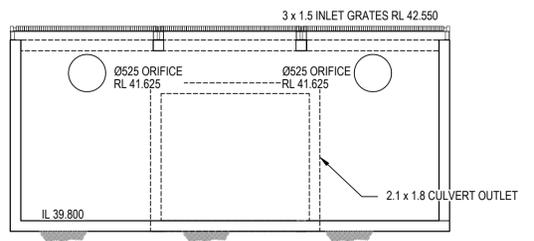
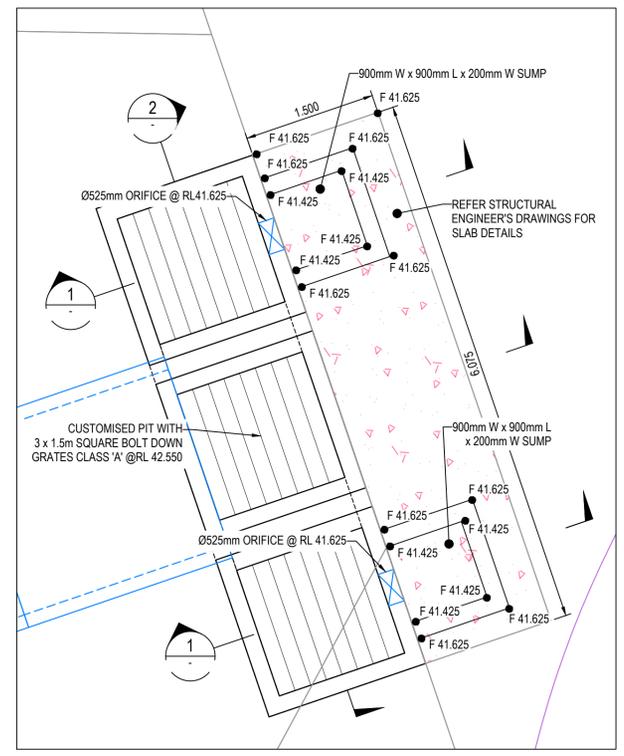


LEGEND

- BASIN ACCESS TRACK
2 COAT SEAL ON 200mm THICK COMPACTED DGB20 ON COMPACTED FILL
- REINFORCED CONCRETE WEIR
250mm THICK N32 CONCRETE WITH 1 LAYER OF SL82 MESH WITH 50mm COVER ON 150mm THICK COMPACTED DGB20 ON COMPACTED FILL
- CONCRETE RAMP WITH TOOLED GROOVES
225mm THICK N32 CONCRETE WITH 2 LAYERS SL82 MESH WITH MIN 50mm COVER ON 150mm THICK COMPACTED DGB20 ON COMPACTED FILL WITH 20mm (W) x 10mm (D) TOOLED GROOVES AT 100mm CENTRES AND 20° ANGLE
- REINFORCED CONCRETE SLAB
REFER STRUCTURAL ENGINEER'S DRAWINGS FOR DETAILS
- LANDSCAPE TREATMENT
REFER LANDSCAPE ARCHITECT DOCUMENTATION FOR DETAILS
- SCOUR PROTECTION
REFER SCOUR PROTECTION SCHEDULE ON DWG C8422 FOR DETAILS
- SJ SAWN JOINT. REFER TO DWG C8016
- DEJ SAWN JOINT. REFER TO DWG C8016
- TE THICKENED EDGE. REFER TO DWG C8016

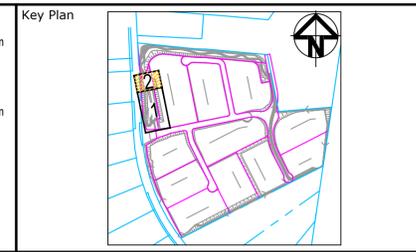


PENRITH CITY COUNCIL
This plan / document relates to
Development Consent: **SSD-10448-MOD-1**
Subdivision Works Certificate: **EA22/0045**
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Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22
A	ISSUED FOR SWC APPROVAL	20-10-22

Bar Scales	
0 500 1000 1500 2000mm	1:20 @ A1 1:40 @ A3
0 1000 2000 3000 4000mm	1:40 @ A1 1:80 @ A3
0 5 10 15 20 25m	1:250 @ A1 1:500 @ A3



Client

Scales	Drawn	Checked	Approved
AS SHOWN	JB/MH	DS	DS
Grid	GDA2020		
Height Datum	AHD		

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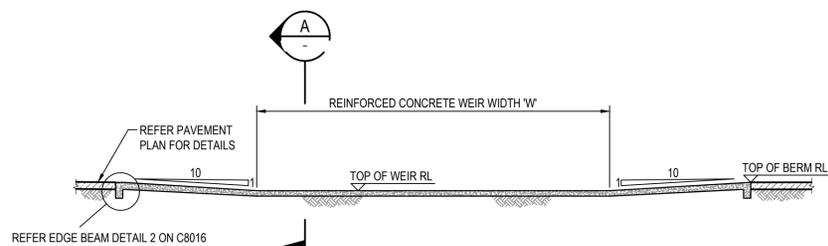
Project
**ASPECT INDUSTRIAL ESTATE
MAMRE ROAD,
KEMPS CREEK
STAGE 1B**

Title
**DETENTION BASIN
DETAIL PLAN
SHEET 2**

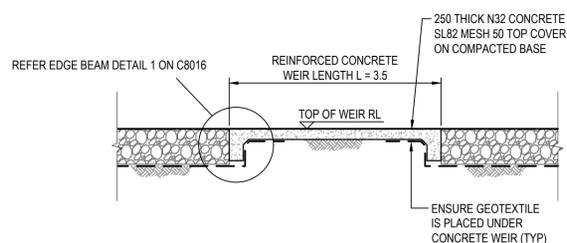
Civil Engineers and Project Managers

Level 7, 153 Walker Street
North Sydney NSW 2060
ABN 96 130 882 405
Tel: 02 9439 1777
Fax: 02 9923 1055
www.atl.net.au
info@atl.net.au

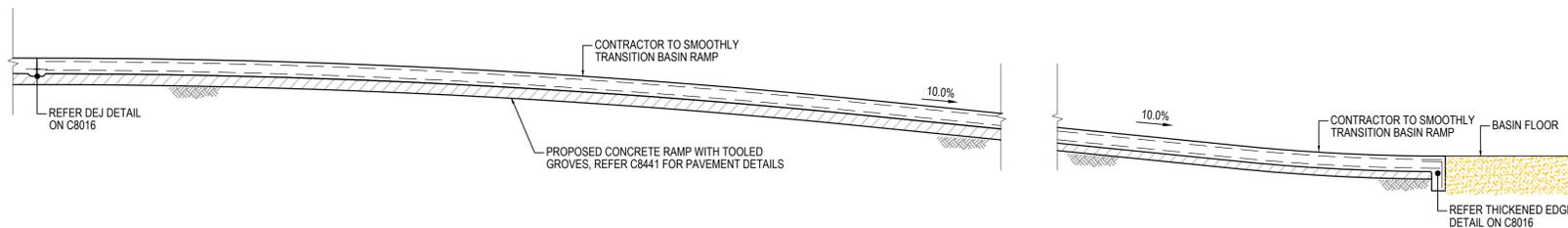
Status FOR CONSTRUCTION	A1
Project - Drawing No. 18-596-C8442	Issue 1



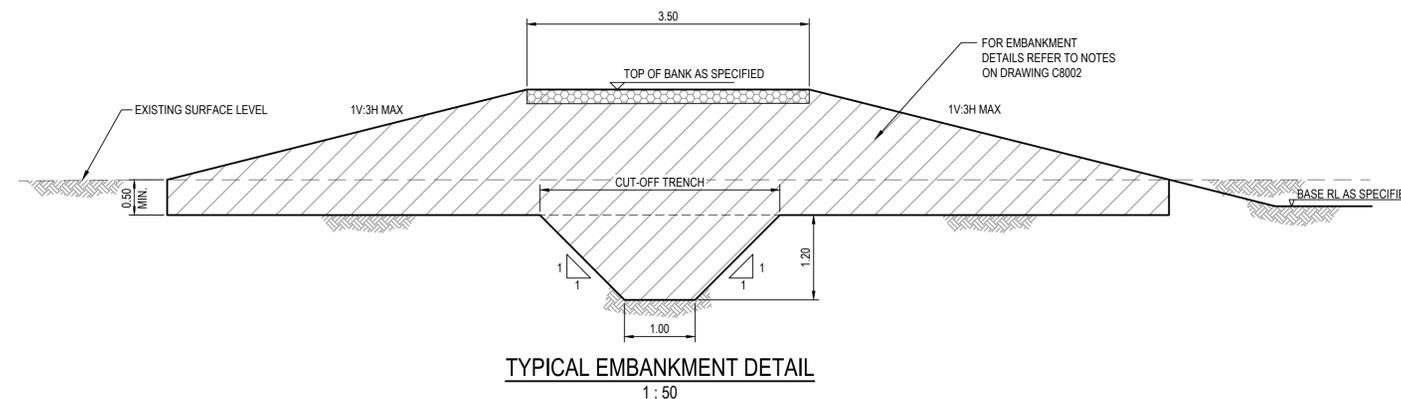
CONCRETE WEIR DETAILS
NTS



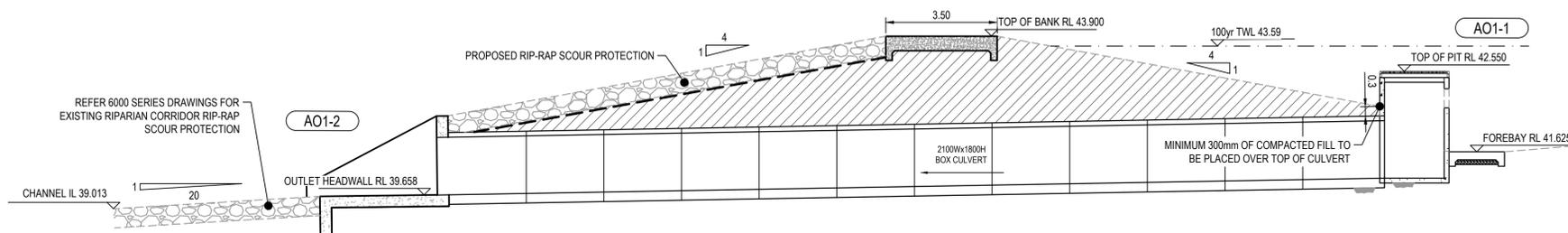
SECTION A
NTS



SECTION 1
1:50



TYPICAL EMBANKMENT DETAIL
1:50



SECTION 2
1:100

PENRITH CITY COUNCIL
This plan / document relates to
Development Consent: **SSD-10448-MOD-1**
Subdivision Works Certificate: **EA22/0045**
Subject to the conditions outlined in the consent

Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22
A	ISSUED FOR SWC APPROVAL	20-10-22

Bar Scales

0 1 2 3 4 5m
1:50 @ A1 1:100 @ A3

0 2 4 6 8 10m
1:100 @ A1 1:200 @ A3

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Client

Scales AS SHOWN

Grid	GDA2020
Height Datum	AHD

Drawn: JB/MH
Checked: DS
Approved: DS

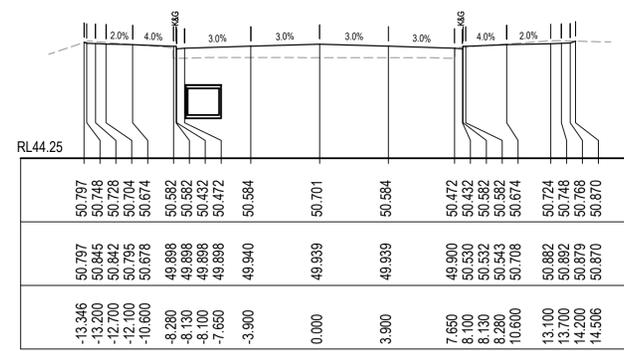
Project: **ASPECT INDUSTRIAL ESTATE MAMRE ROAD, KEMPS CREEK STAGE 1B**

Title: **DETENTION BASIN DETAIL PLAN SHEET 3**

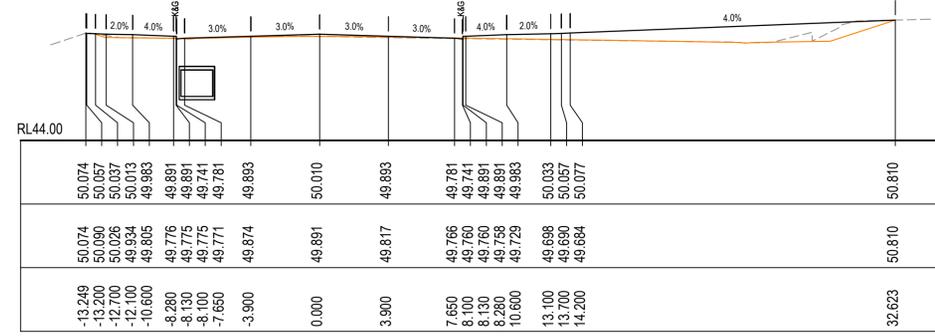
Civil Engineers and Project Managers

Level 7, 153 Walker Street
North Sydney NSW 2060
ABN 96 130 882 405
Tel: 02 9439 1777
Fax: 02 9923 1055
www.atl.net.au
info@atl.net.au

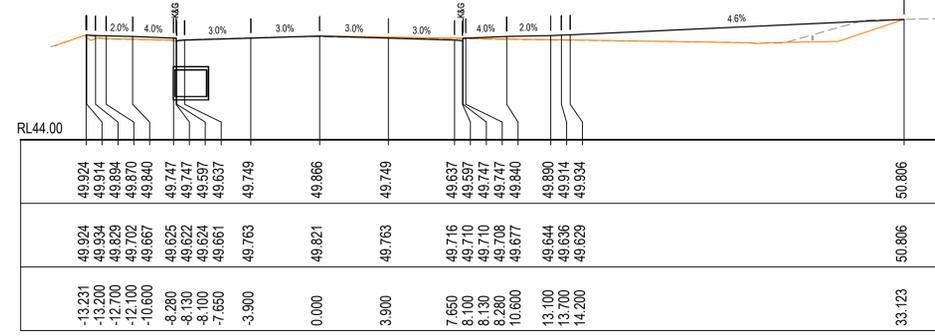
Status	FOR CONSTRUCTION	A1
Project - Drawing No.	18-596-C8443	Issue
		1



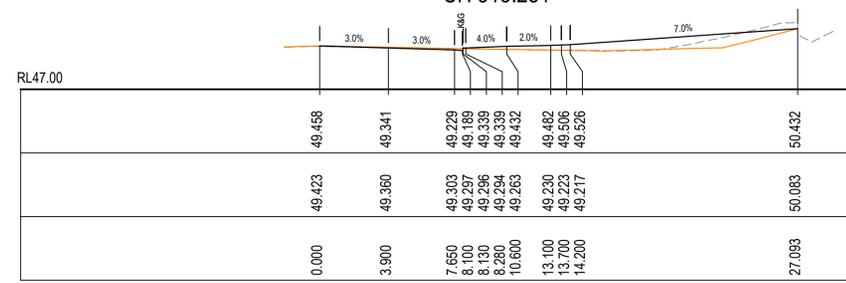
CH 540



CH 520



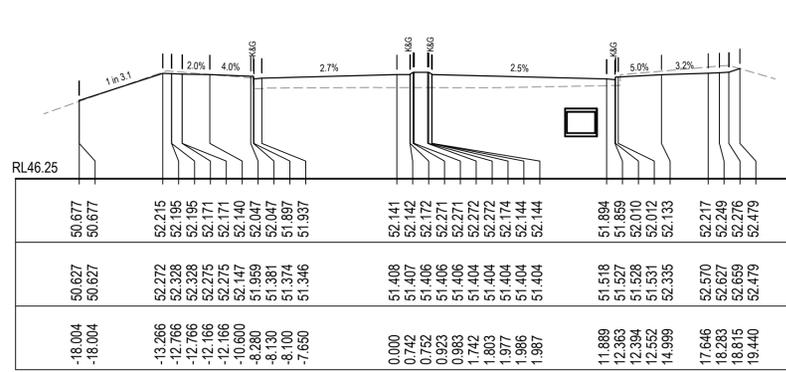
CH 515.281



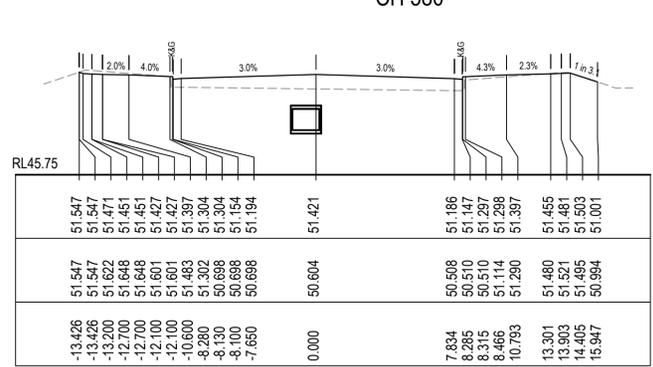
CH 500

PROPOSED SURFACE LEVEL	EXISTING SURFACE LEVEL	CENTRELINE OFFSET
49.056	49.003	0.000
48.939	48.893	3.900
48.827	48.774	7.650
48.787	48.792	8.100
48.937	48.783	8.130
48.937	48.789	8.280
49.030	48.864	10.600
49.080	48.932	13.100
49.104	49.081	13.700
49.124	49.258	14.200

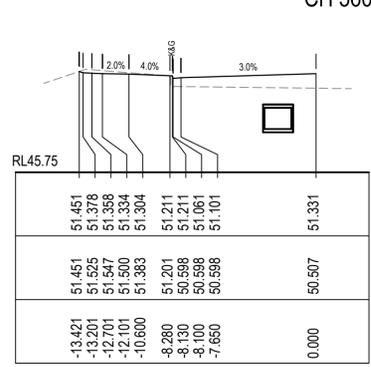
CH 480



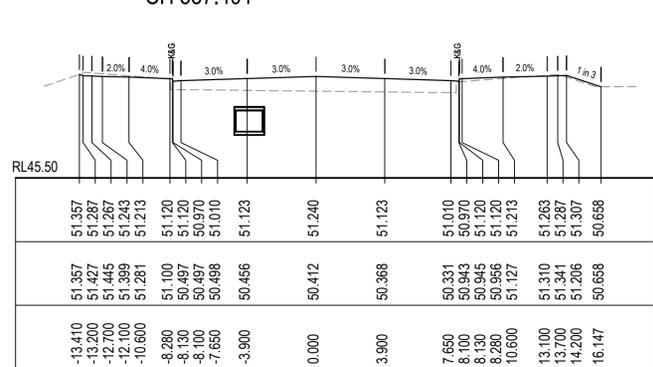
CH 580



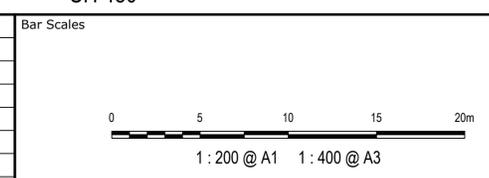
CH 560



CH 557.491



CH 554.971



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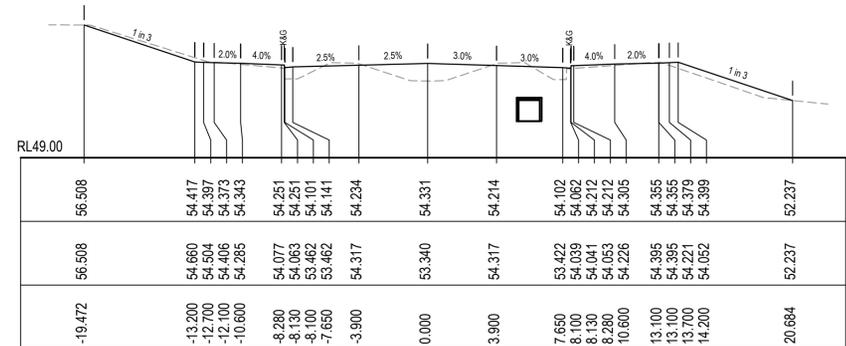
Scales: 1:200
 Grid: GDA2020
 Height Datum: AHD
 Drawn: JB/MH
 Designed: JB/MH
 Checked: DS
 Approved: DS

Project: **ASPECT INDUSTRIAL ESTATE MAMRE ROAD, KEMPS CREEK STAGE 1B**
 Title: **ROAD CROSS SECTIONS ROAD 01 SHEET 1**

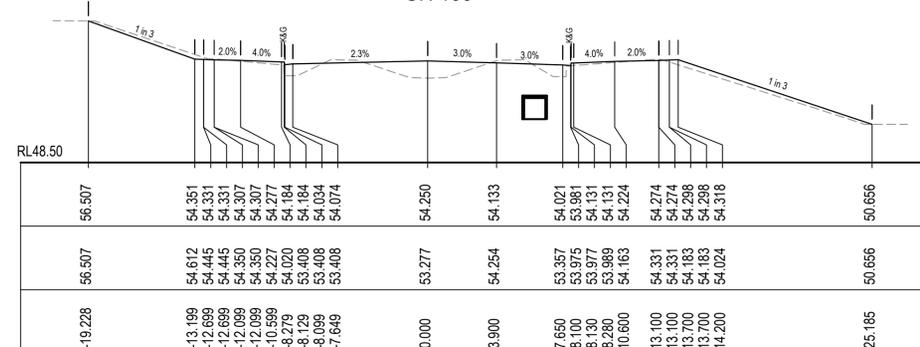
Civil Engineers and Project Managers

 Level 7, 153 Walker Street North Sydney NSW 2060
 ABN 96 130 882 405
 Tel: 02 9439 1777
 Fax: 02 9923 1055
 www.atl.net.au
 info@atl.net.au
 Status: **FOR CONSTRUCTION**
 Project - Drawing No. **18-596-C8501**
 Issue: **1**

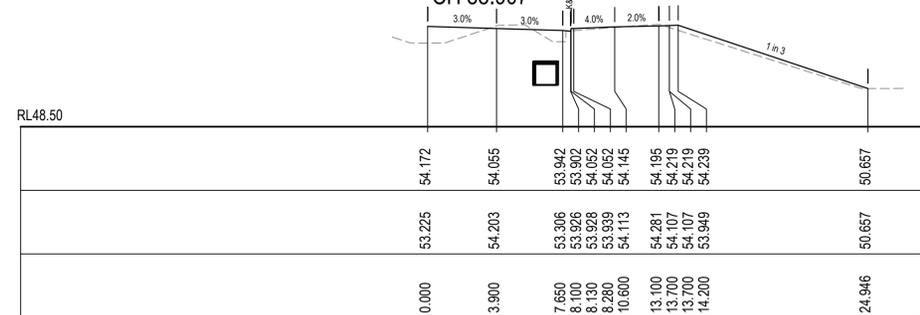
Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22
A	ISSUED FOR SWC APPROVAL	20-10-22



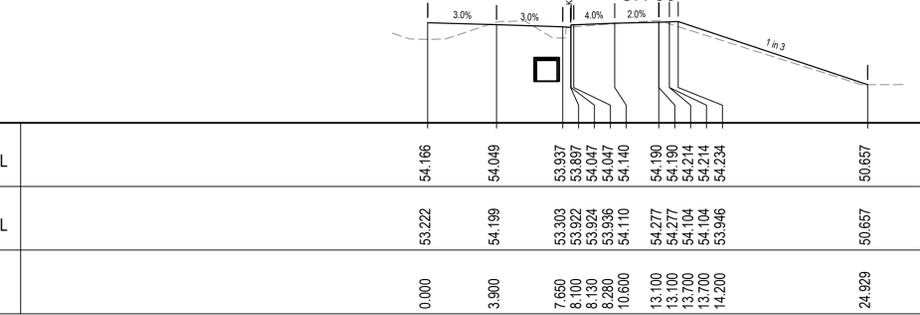
CH 100



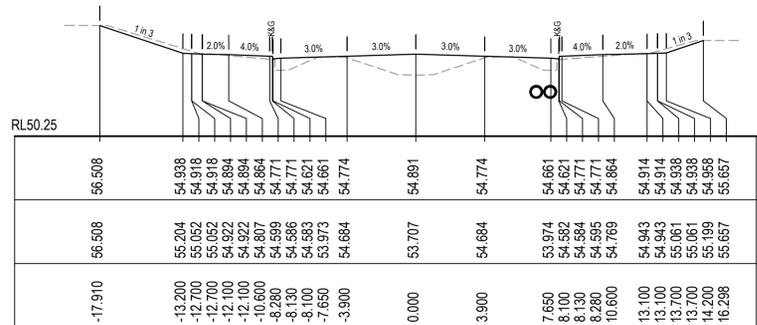
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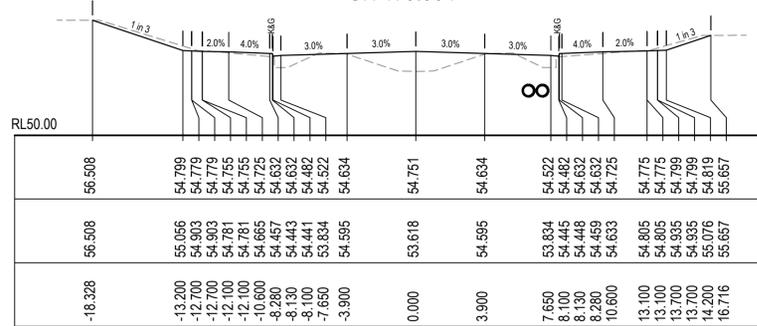
CH 80



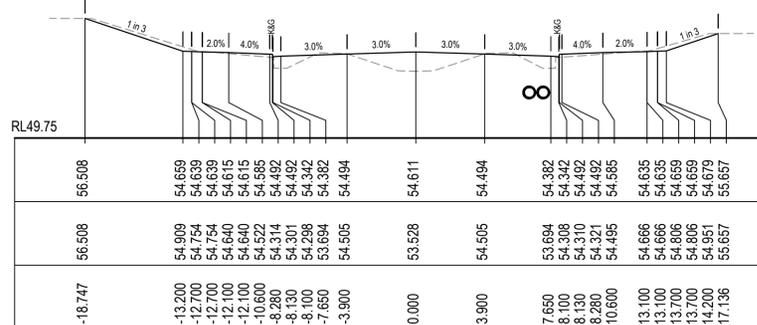
CH 79.422



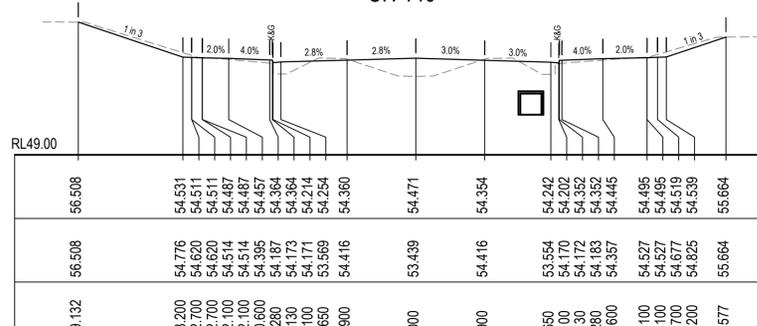
CH 179.904



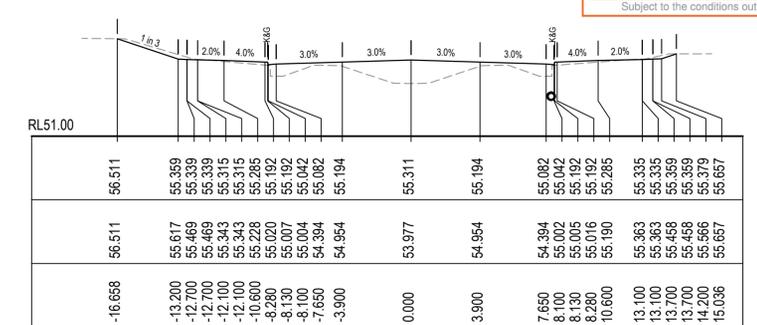
CH 160



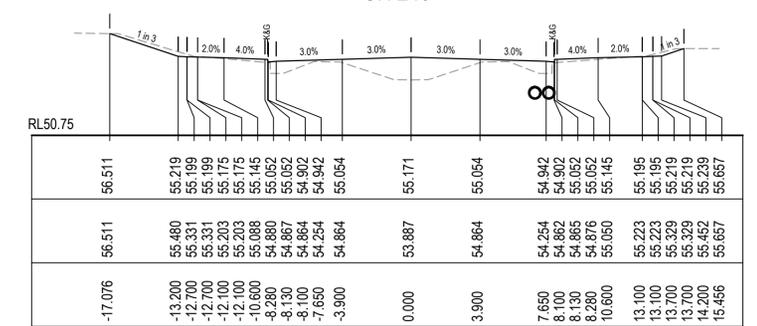
CH 140



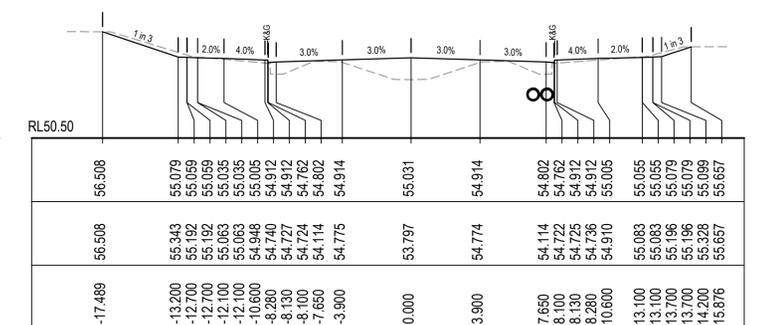
CH 120



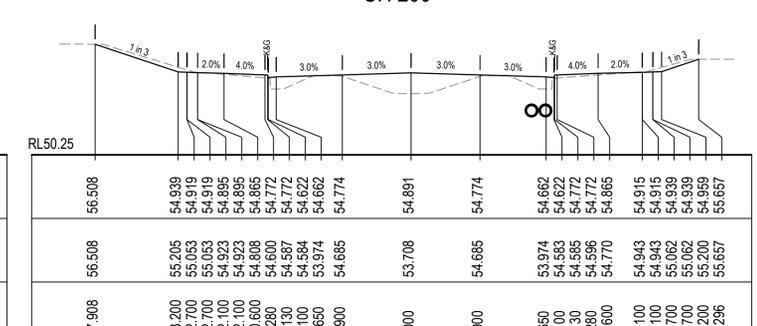
CH 240



CH 220

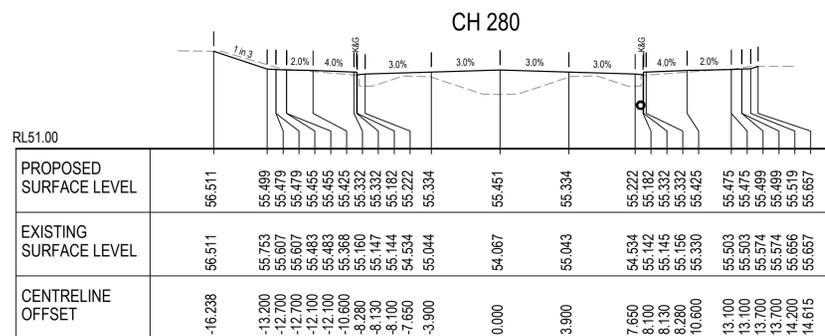
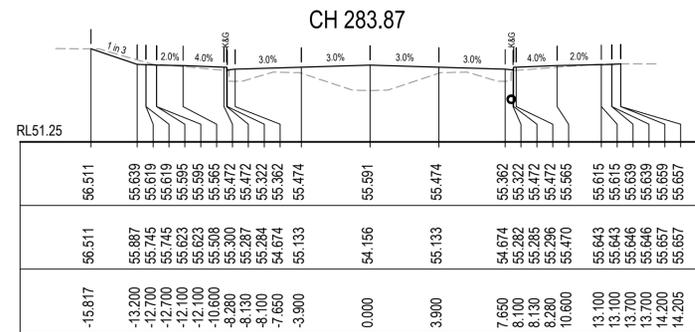
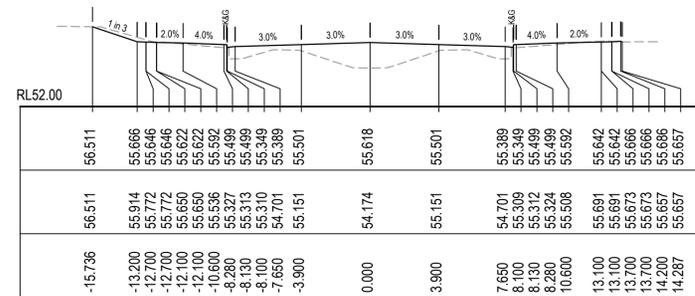


CH 200



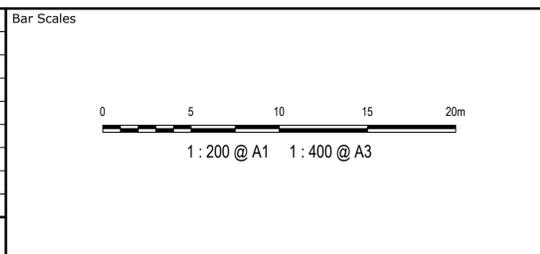
CH 180

PROPOSED SURFACE LEVEL	54.166	54.049	53.937	53.902	54.047	54.047	54.140	54.190	54.190
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CH 260

Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22
A	ISSUED FOR SWC APPROVAL	20-10-22

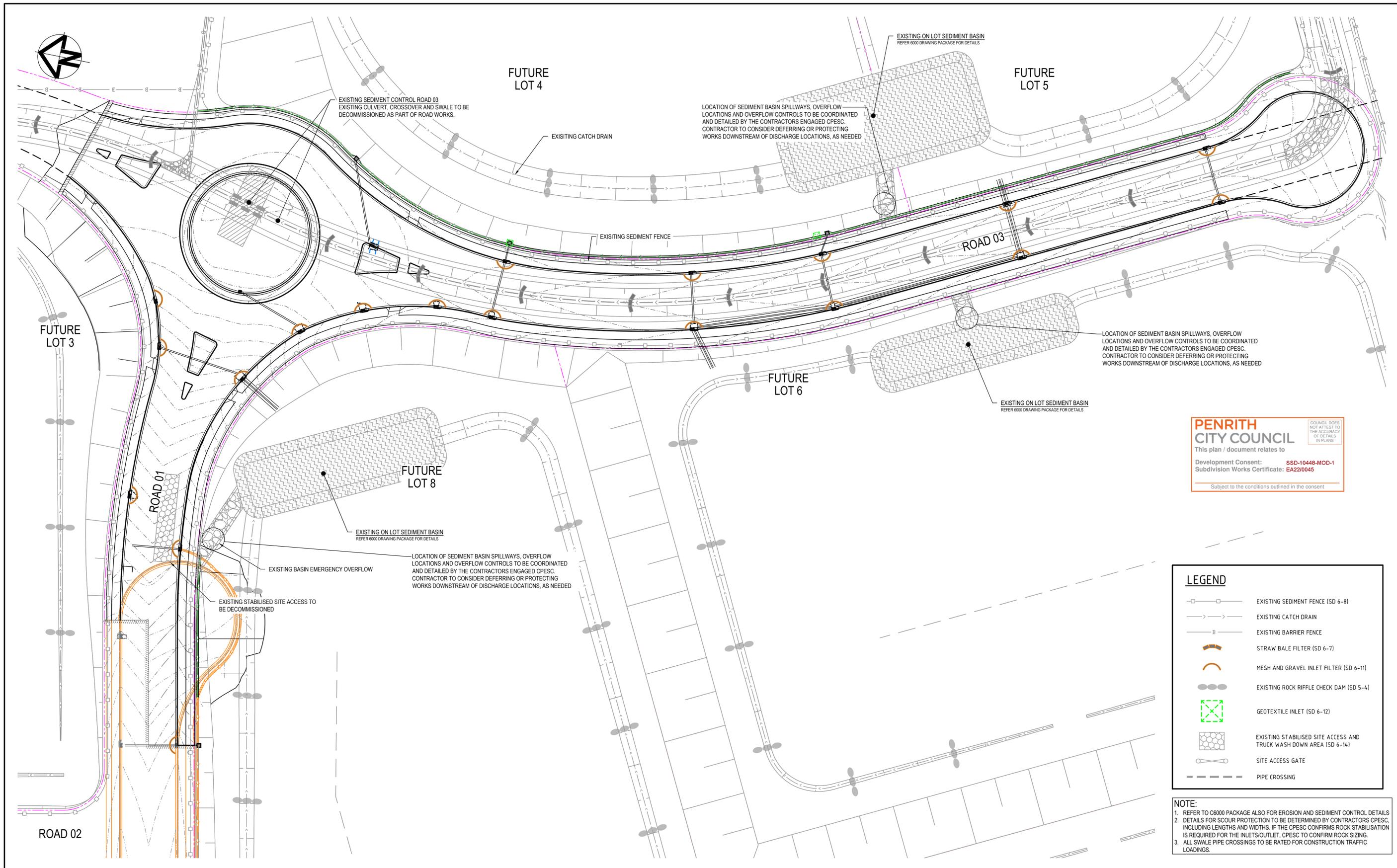


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Project: **ASPECT INDUSTRIAL ESTATE MAMRE ROAD, KEMPS CREEK STAGE 1B**
 Title: **ROAD CROSS SECTIONS ROAD 03 SHEET 2**

Civil Engineers and Project Managers	
at&l	
Level 7, 153 Walker Street North Sydney NSW 2060 ABN 96 130 882 405 Tel: 02 9439 1777 Fax: 02 9923 1055 www.atl.net.au info@atl.net.au	
Status: FOR CONSTRUCTION	A1
Project - Drawing No. 18-596-C8512	Issue 1

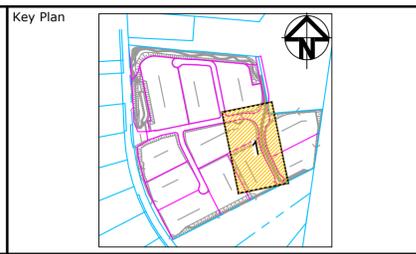
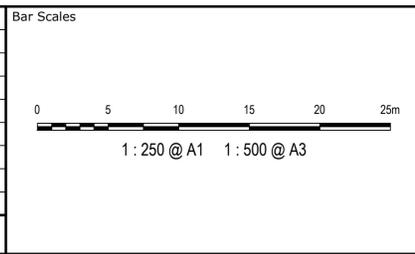


PENRITH CITY COUNCIL
This plan / document relates to
Development Consent: **SSD-10448-MOD-1**
Subdivision Works Certificate: **EA22/0045**
Subject to the conditions outlined in the consent

LEGEND	
	EXISTING SEDIMENT FENCE (SD 6-8)
	EXISTING CATCH DRAIN
	EXISTING BARRIER FENCE
	STRAW BALE FILTER (SD 6-7)
	MESH AND GRAVEL INLET FILTER (SD 6-11)
	EXISTING ROCK RIFFLE CHECK DAM (SD 5-4)
	GEOTEXTILE INLET (SD 6-12)
	EXISTING STABILISED SITE ACCESS AND TRUCK WASH DOWN AREA (SD 6-14)
	SITE ACCESS GATE
	PIPE CROSSING

NOTE:
1. REFER TO C6000 PACKAGE ALSO FOR EROSION AND SEDIMENT CONTROL DETAILS
2. DETAILS FOR SCOUR PROTECTION TO BE DETERMINED BY CONTRACTORS CPESC, INCLUDING LENGTHS AND WIDTHS. IF THE CPESC CONFIRMS ROCK STABILISATION IS REQUIRED FOR THE INLETS/OUTLET, CPESC TO CONFIRM ROCK SIZING.
3. ALL SWALE PIPE CROSSINGS TO BE RATED FOR CONSTRUCTION TRAFFIC LOADINGS.

Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22
A	ISSUED FOR SWC APPROVAL	20-10-22



Client

Scales	1:500	Drawn	JB/MH
		Designed	JB/MH
Grid	GDA2020	Checked	DS
Height Datum	AHD	Approved	DS

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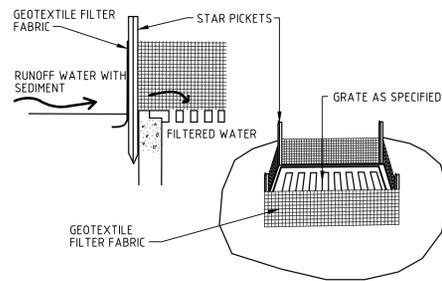
Project
**ASPECT INDUSTRIAL ESTATE
MAMRE ROAD,
KEMPS CREEK
STAGE 1B**

Title
**EROSION AND
SEDIMENT CONTROL
PLAN**

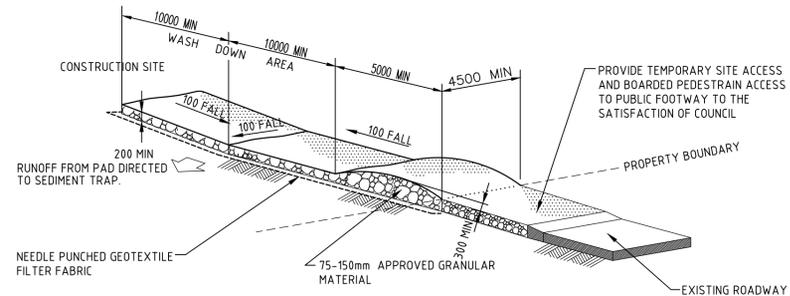
Civil Engineers and Project Managers

Level 7, 153 Walker Street
North Sydney NSW 2060
ABN 96 130 882 405
Tel: 02 9439 1777
Fax: 02 9923 1055
www.atl.net.au
info@atl.net.au

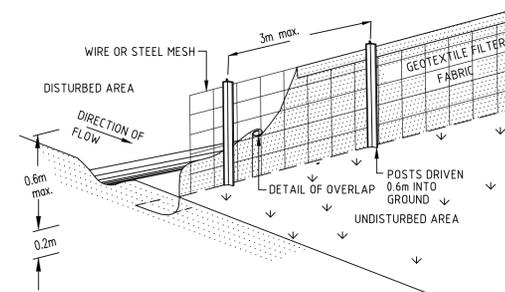
Status	FOR CONSTRUCTION	A1
Project - Drawing No.	18-596-C8631	Issue
		1



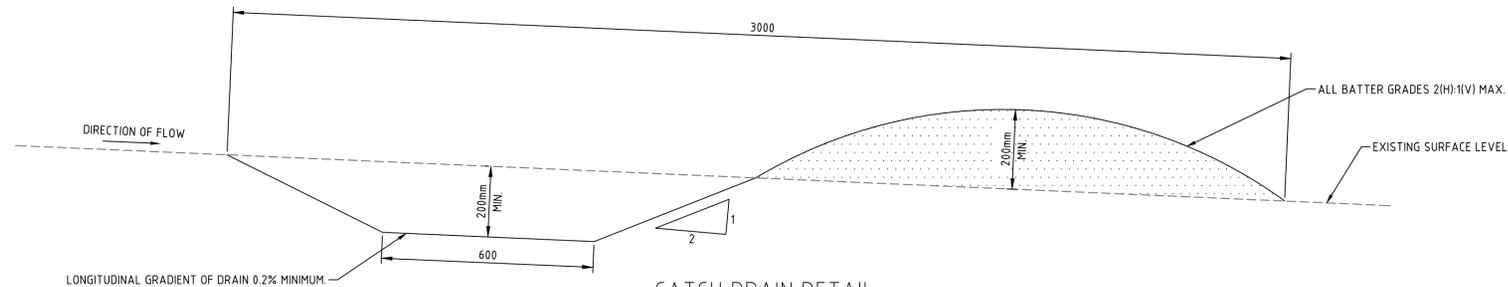
GEOTEXTILE FILTER PIT SURROUND
NTS



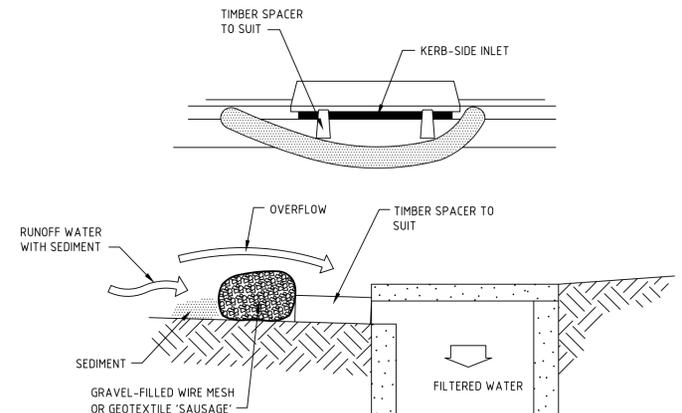
STABILISED SITE ACCESS AND TRUCK WASH DOWN AREA
NTS



SEDIMENT FENCE
NTS



CATCH DRAIN DETAIL
SCALE 1:10



MESH AND GRAVEL INLET FILTER
NTS

Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22
A	ISSUED FOR SWC APPROVAL	20-10-22

Bar Scales

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Client	Scales	Drawn	Checked	Approved
mirvac	AS SHOWN	JB/MH	JB/MH	DS
	Grid GDA2020	Checked	DS	
	Height Datum AHD	Approved	DS	

Project: **ASPECT INDUSTRIAL ESTATE MAMRE ROAD, KEMPS CREEK STAGE 1B**

Title: **EROSION AND SEDIMENT CONTROL DETAILS**

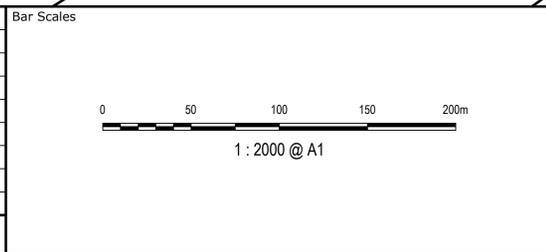
Civil Engineers and Project Managers	
Level 7, 153 Walker Street North Sydney NSW 2060 ABN 96 130 882 405 Tel: 02 9439 1777 Fax: 02 9923 1055 www.atl.net.au info@atl.net.au	
Status: FOR CONSTRUCTION	A1
Project - Drawing No. 18-596-C8633	Issue 1



FENCING LEGEND	
	FENCE TYPE 1 TEMPORARY ATF (OR SIMILAR APPROVED) FENCE
	FENCE TYPE 2 TEMPORARY CHAIN WIRE WITH HAMMERED POSTS.
	FENCE TYPE 3 1800 HIGH CHAIN WIRE BLACK WITH 3 STRANDS BARBED WIRE POWDER COATED GALVANISED FENCE. REFER C8711 FOR DETAILS
	FENCE TYPE 4 1800 HIGH CHAIN WIRE BLACK WITH 3 STRANDS BARBED WIRE POWDER COATED GALVANISED FENCE WITH SNAKE MESH. REFER C8711 FOR DETAILS
	FENCE TYPE 5 1350 HIGH ALUMINIUM POOL STYLE FENCE. REFER DRAWING C8711 FOR DETAILS.
	FENCE TYPE 10 2100 HIGH PALISADE PRESS FORM SPEAR TOP FENCE & SNAKE MESH, BLACK POWDER COAT.

NOTE
 1. FENCES TO BE LOCATED ON BOUNDARIES. IF IN DOUBT THE CONTRACTOR SHALL CONTACT THE SUPERINTENDENT FOR CONFIRMATION.

Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22
A	ISSUED FOR SWC APPROVAL	20-10-22



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Client

Scales 1:2000

Drawn	JB/MH
Designed	JB/MH
Checked	DS
Approved	DS

Grid GDA2020

Height Datum AHD

Project

**ASPECT INDUSTRIAL ESTATE
 MAMRE ROAD,
 KEMPS CREEK
 STAGE 1B**

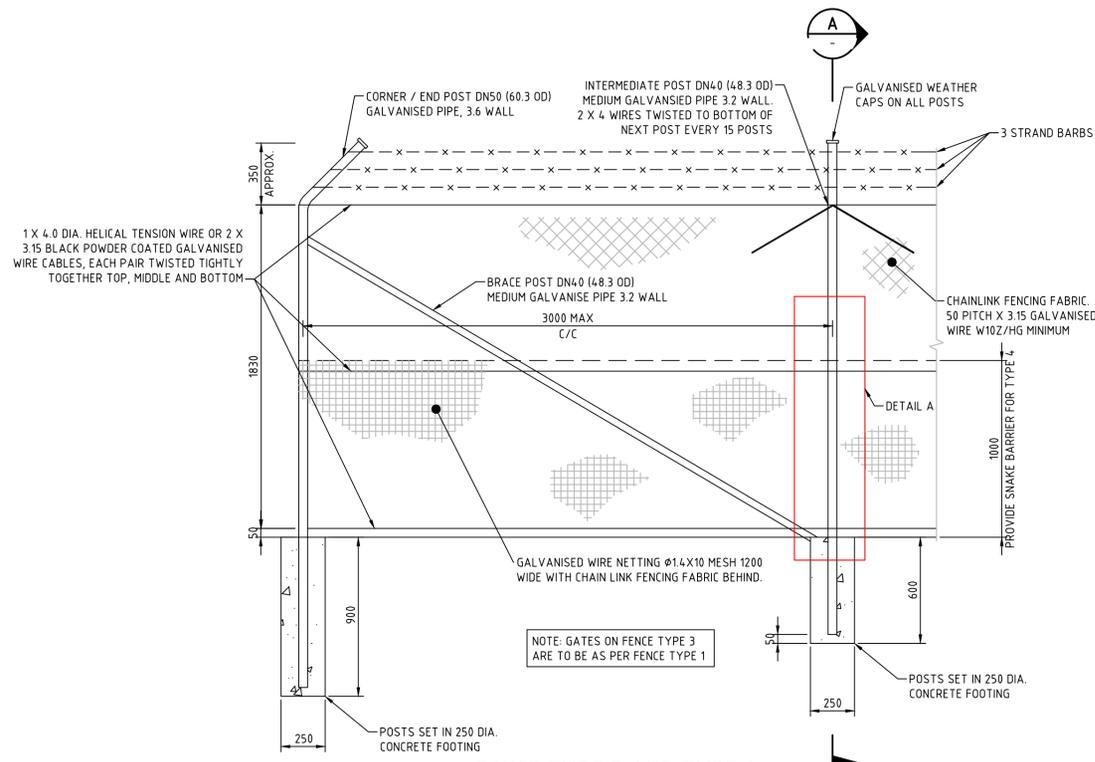
Title

**PROPOSED FENCING
 PLAN**

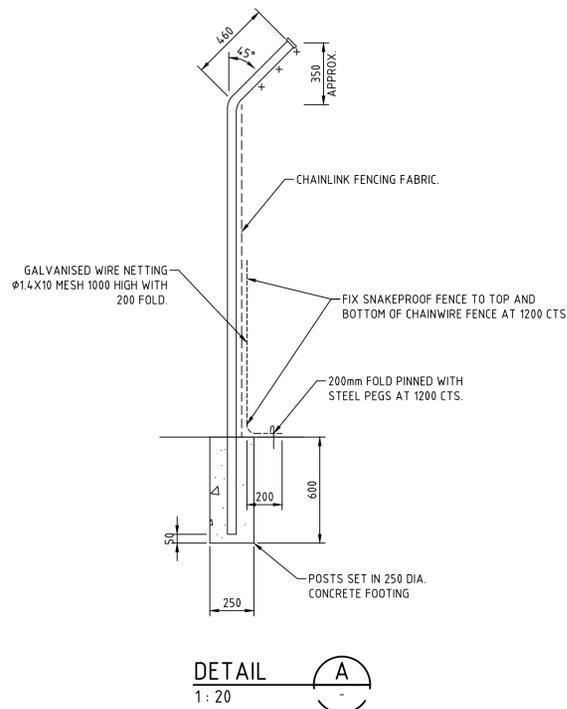
Civil Engineers and Project Managers

Level 7, 153 Walker Street
 North Sydney NSW 2060
 ABN 96 130 882 405
 Tel: 02 9439 1777
 Fax: 02 9923 1055
 www.atl.net.au
 info@atl.net.au

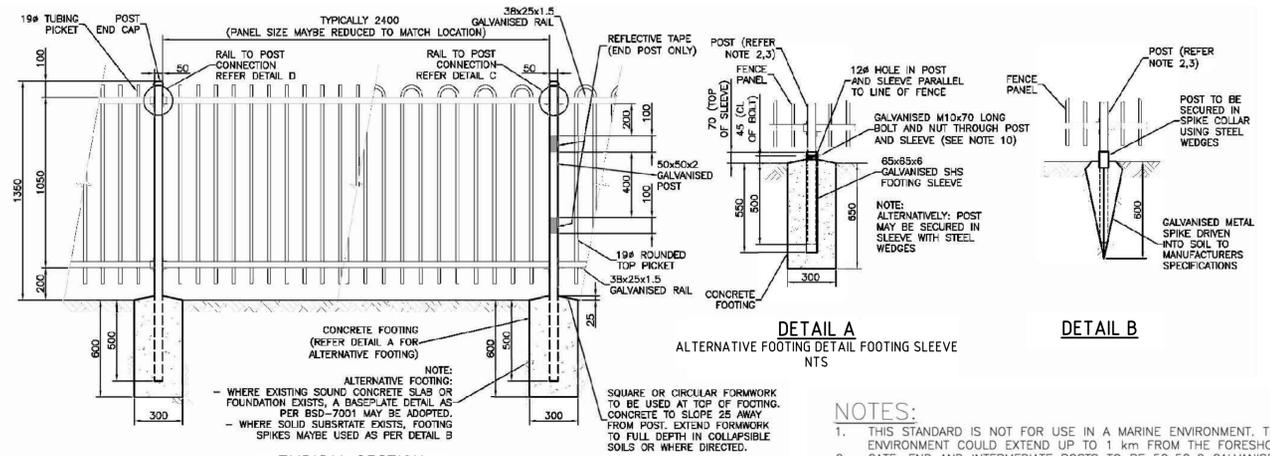
Status	FOR CONSTRUCTION	A1
Project - Drawing No.	18-596-C8701	Issue
		1



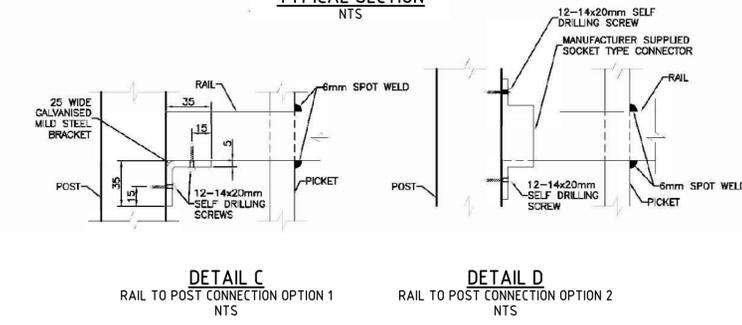
**FENCE TYPE 3 AND TYPE 4
BLACK POWDER COATED CHAINWIRE BOUNDARY FENCE**
1:20



**DETAIL A
1:20**



**TYPICAL SECTION
NTS**

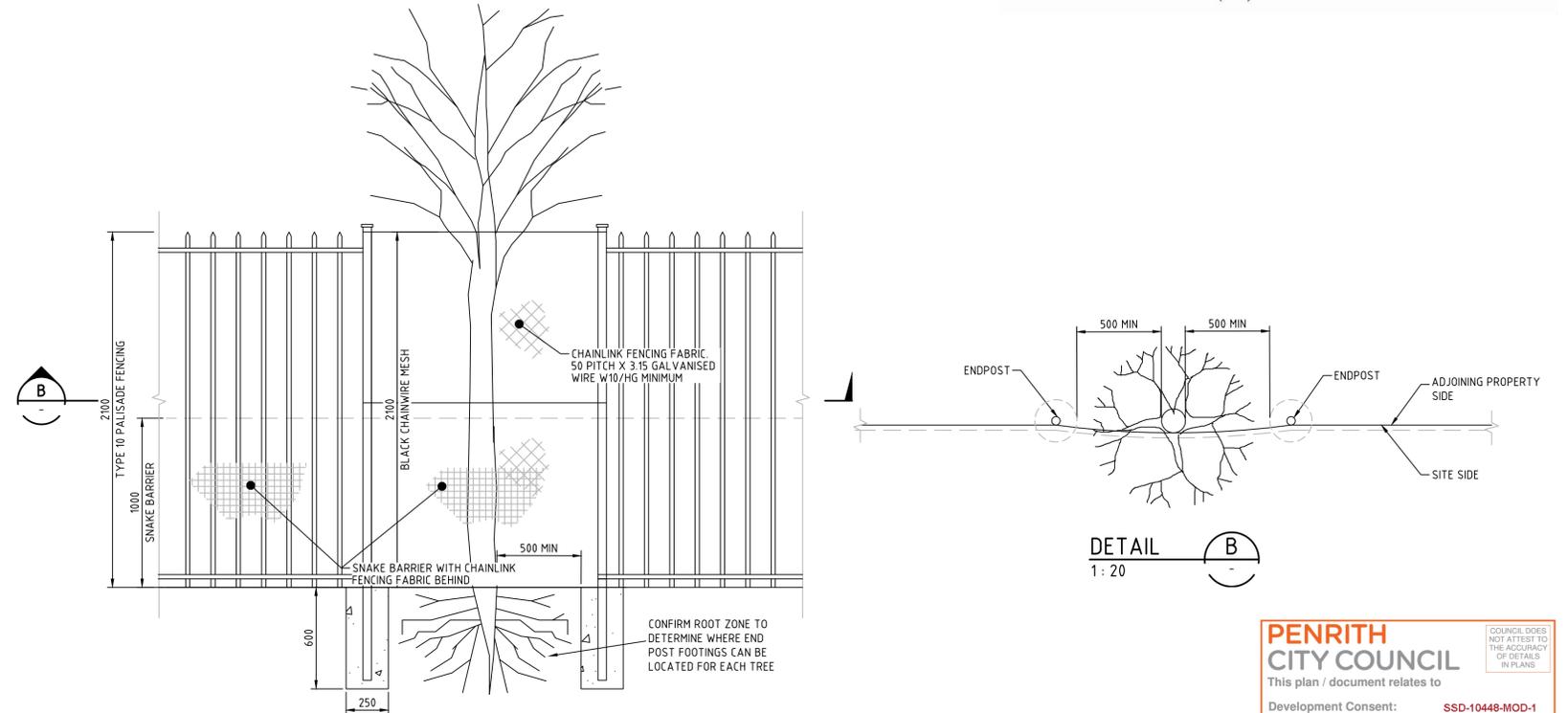


**DETAIL C
RAIL TO POST CONNECTION OPTION 1
NTS**

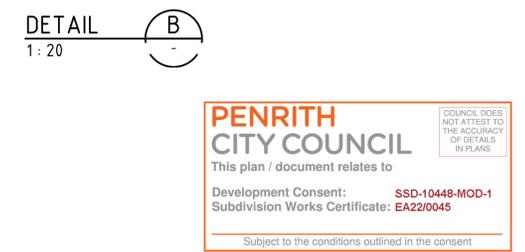
**DETAIL D
RAIL TO POST CONNECTION OPTION 2
NTS**

FENCE TYPE 5 - ALUMINIUM POOL STYLE FENCE DETAIL
SCALE 1:25

- NOTES:**
- THIS STANDARD IS NOT FOR USE IN A MARINE ENVIRONMENT. THE MARINE ENVIRONMENT COULD EXTEND UP TO 1 km FROM THE FORESHORE.
 - GATE, END AND INTERMEDIATE POSTS TO BE 50x50x2 GALVANISED STEEL SECTION TO AS 1163.
 - FENCE RAILS TO BE 38x25x1.5 GALVANISED STEEL SECTION TO AS 1163.
 - PANELS TO BE FIXED TO POSTS USING MANUFACTURER SUPPLIED SOCKET CONNECTORS OR 25 WIDE 35x35x2 GALVANISED MILD STEEL 'L' BRACKETS. BOTH CONNECTORS TO BE ATTACHED WITH GALVANISED 12-14x20mm HEXAGON HEAD SELF DRILLING (TEK) SCREWS.
 - PANELS TO BE 2400x1050 WITH 19 DIAMETER PICKETS, EITHER STRAIGHT TUBULAR OR ROUNDED TOP STYLE.
 - PICKETS TO PASS THROUGH TOP AND BOTTOM RAIL AND BE SECURED TO TOP AND UNDERSIDE OF RAIL WITH 6mm SPOT WELD.
 - HOT DIP GALVANISING: FERROUS OPEN SECTIONS TO AS 4791, FERROUS HOLLOW SECTIONS TO AS 4792.
 - ALL CONCRETE TO BE GRADE N25.
 - POSTS ARE TO BE VERTICAL.
 - POST SPIKES, WHERE USED, ARE TO BE INSTALLED TO MANUFACTURERS SPECIFICATIONS.
 - WHERE SLEEVES OR POST SPIKES ARE USED, POSTS ARE TO BE SECURED WITH BOLTS AS SHOWN OR STEEL WEDGES.
 - NUTS (WHERE USED) TO BE SPOT WELDED TO BOLTS AS AN ANTI-THEFT DETERRENT.
 - RAKED PANELS ARE AVAILABLE FOR SLOPES UP TO 1 IN 5.
 - THESE FENCES ARE INTENDED AS A PEDESTRIAN BARRIER AND ARE NOT TO BE USED IN SITUATIONS WHERE MOTOR VEHICLES REQUIRE RESTRAINT.
 - STEEL WORK TO BE POWDER COATED TO AS 4506 TO MATCH COLOUR TO ORDINATION IN THE AREA. COLOUR FOR TRAFFIC APPLICATIONS TO BE EITHER BCC CORPORATE COLOUR PALETTE "GREY 3" (AS 2700-1996 "N65 GRAPHITE GREY" EQUIV.), "BLUE 3" (AS 2700S-1996 "B62 MIDNIGHT BLUE" EQUIV.), "GREEN 1" (AS 2700-1996 "G12 HOLLY" EQUIV.) OR BLACK (AS 2700-1996 "N61 BLACK" EQUIV.).
 - 100mm WIDE REFLECTIVE TAPE TO BE APPLIED TO END POSTS WHERE VEHICLE TRAFFIC CONFLICT MAY OCCUR.
 - DIMENSIONS IN MILLIMETRES (UNO).



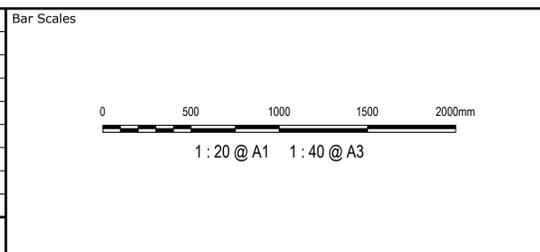
FENCING AROUND TREE ON BOUNDARY DETAIL
1:20



**DETAIL B
1:20**

PENRITH CITY COUNCIL
This plan / document relates to
Development Consent: **SSD-10448-MOD-1**
Subdivision Works Certificate: **EA2210045**
Subject to the conditions outlined in the consent

Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22
A	ISSUED FOR SWC APPROVAL	20-10-22



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Client

Scales

AS SHOWN

Grid GDA2020

Height Datum AHD

Drawn JB/MH

Designed JB/MH

Checked DS

Approved DS

Project

ASPECT INDUSTRIAL ESTATE
MAMRE ROAD,
KEMPS CREEK
STAGE 1B

Title

PROPOSED FENCING
DETAILS
SHEET 1

Civil Engineers and Project Managers

Level 7, 153 Walker Street
North Sydney NSW 2060
ABN 96 130 882 405
Tel: 02 9439 1777
Fax: 02 9923 1055
www.atl.net.au
info@atl.net.au

Status

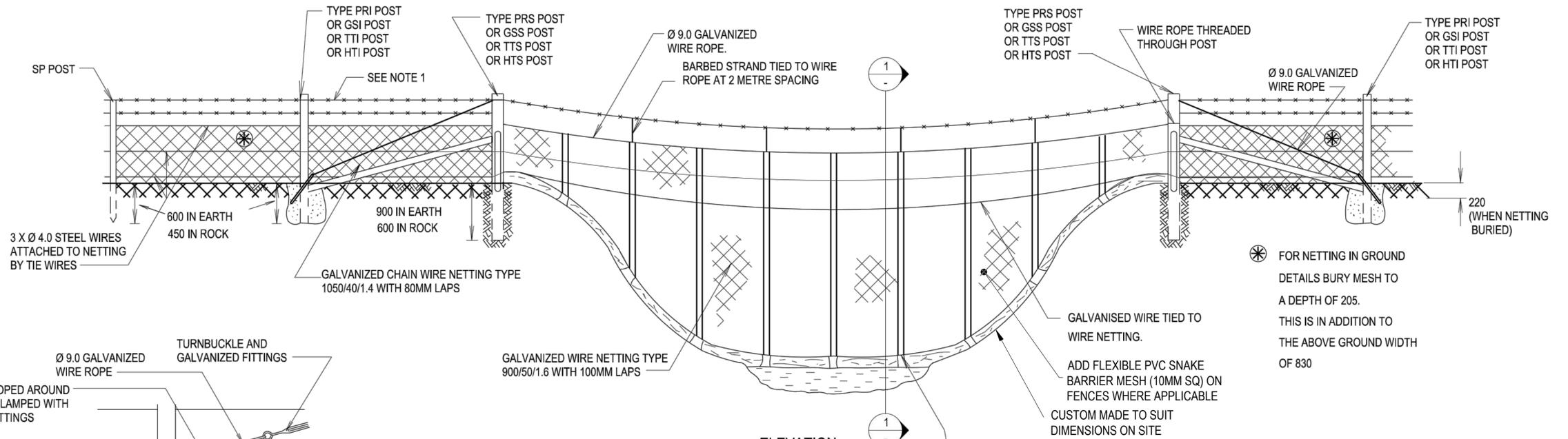
FOR CONSTRUCTION

Project - Drawing No.

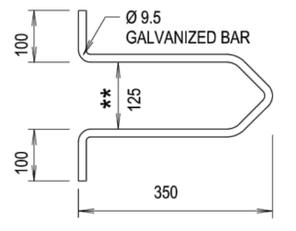
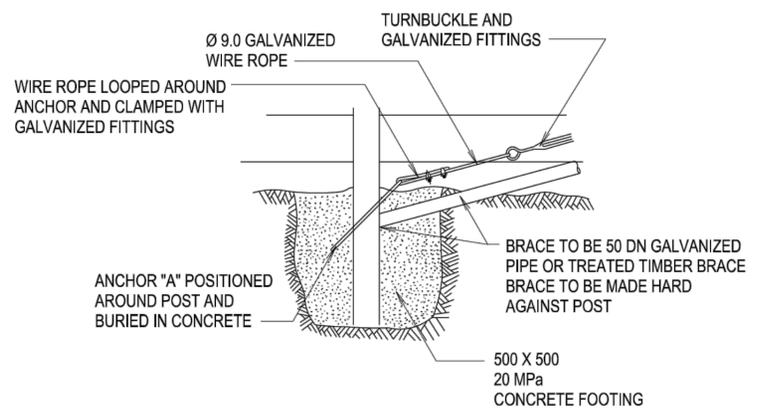
18-596-C8711

Issue

1

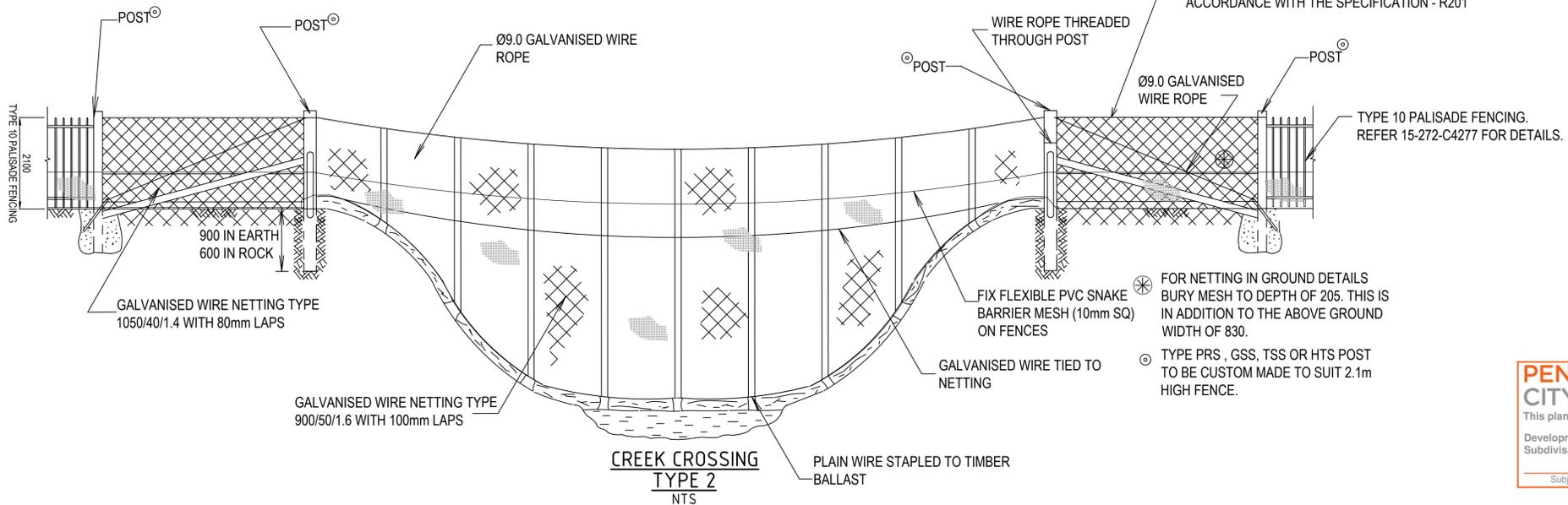
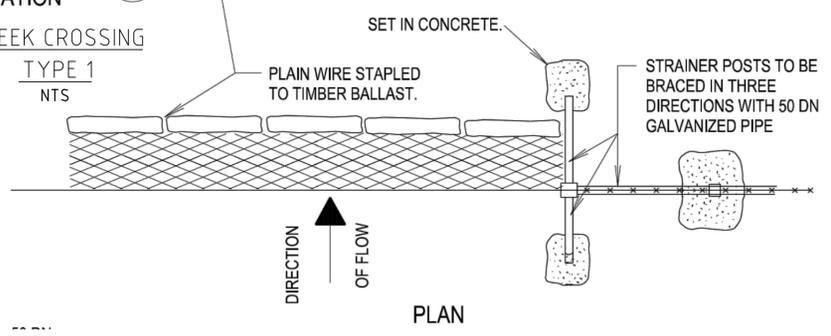


⊗ FOR NETTING IN GROUND DETAILS BURY MESH TO A DEPTH OF 205. THIS IS IN ADDITION TO THE ABOVE GROUND WIDTH OF 830



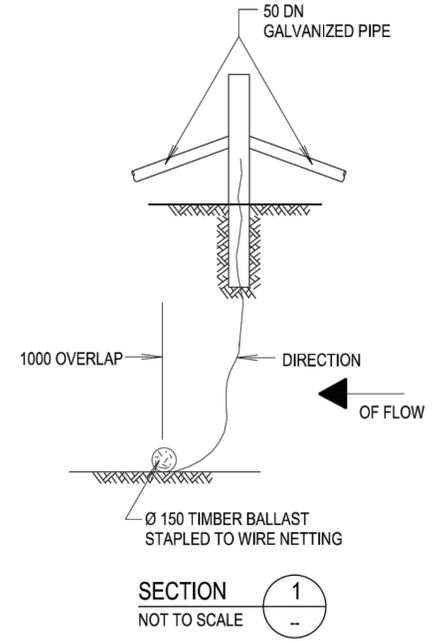
** FOR TTI OR HTI POSTS THIS DIMENSION IS 175

FENCING MATERIALS ARE TO BE IN ACCORDANCE WITH THE SPECIFICATION - R201



⊗ FOR NETTING IN GROUND DETAILS BURY MESH TO DEPTH OF 205. THIS IS IN ADDITION TO THE ABOVE GROUND WIDTH OF 830.

⊙ TYPE PRS, GSS, TSS OR HTS POST TO BE CUSTOM MADE TO SUIT 2.1m HIGH FENCE.



PENRITH CITY COUNCIL
 This plan / document relates to
 Development Consent: SSD-10448-MOD-1
 Subdivision Works Certificate: EA22/0045
 Subject to the conditions outlined in the consent

Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22
A	ISSUED FOR SWC APPROVAL	20-10-22

Bar Scales

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Client

mirvac

Scales

AS SHOWN

Grid GDA2020

Height Datum AHD

Drawn JB/MH

Designed JB/MH

Checked DS

Approved DS

GDA2020

Project

ASPECT INDUSTRIAL ESTATE
 MAMRE ROAD,
 KEMPS CREEK
 STAGE 1B

Title

PROPOSED FENCING
 DETAILS
 SHEET 2

Civil Engineers and Project Managers

at&l

Level 7, 153 Walker Street
 North Sydney NSW 2060
 ABN 96 130 882 405
 Tel: 02 9439 1777
 Fax: 02 9923 1055
 www.atl.net.au
 info@atl.net.au

Status

FOR CONSTRUCTION

Project - Drawing No.

18-596-C8712

Issue

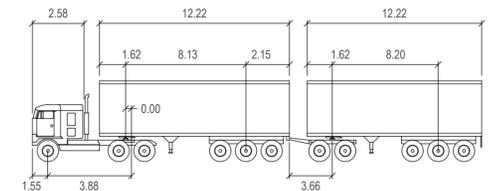
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LEGEND

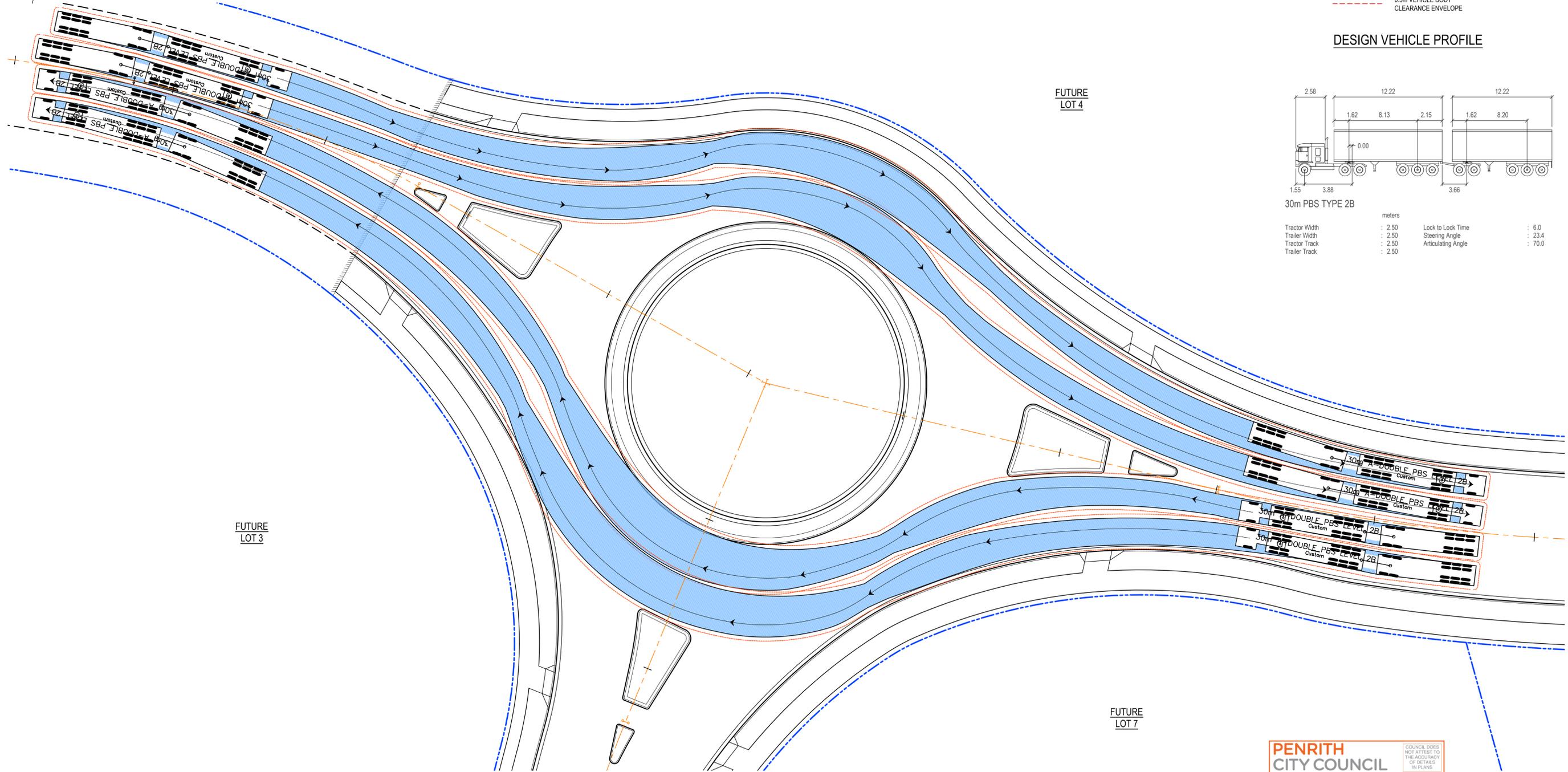
- VEHICLE BODY ENVELOPE
- 0.5m VEHICLE BODY CLEARANCE ENVELOPE

DESIGN VEHICLE PROFILE



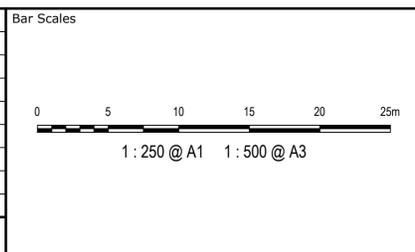
30m PBS TYPE 2B

meters	
Tractor Width	: 2.50
Trailer Width	: 2.50
Tractor Track	: 2.50
Trailer Track	: 2.50
Lock to Lock Time	: 6.0
Steering Angle	: 23.4
Articulating Angle	: 70.0



PENRITH CITY COUNCIL
COUNCIL DOES NOT ATTEST TO THE ACCURACY OF DETAILS IN PLANS
 This plan / document relates to
 Development Consent: **SSD-10448-MOD-1**
 Subdivision Works Certificate: **EA22/0045**
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Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22



Key Plan



Scales	1:500	Drawn	JB/MH
		Designed	JB/MH
Grid	GDA2020	Checked	DS
Height Datum	AHD	Approved	DS

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Project
**ASPECT INDUSTRIAL ESTATE
 MAMRE ROAD,
 KEMPS CREEK
 STAGE 1B**

Title
**VEHICLE TURN
 PATH PLAN
 SHEET 1**

Civil Engineers and Project Managers

Level 7, 153 Walker Street
 North Sydney NSW 2060
 ABN 96 130 882 405
 Tel: 02 9439 1777
 Fax: 02 9923 1055
 www.atl.net.au
 info@atl.net.au

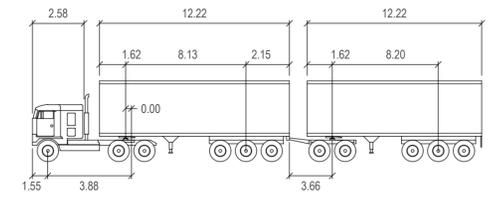
Status	FOR CONSTRUCTION	A1
Project - Drawing No.	18-596-C8801	Issue
		1



LEGEND

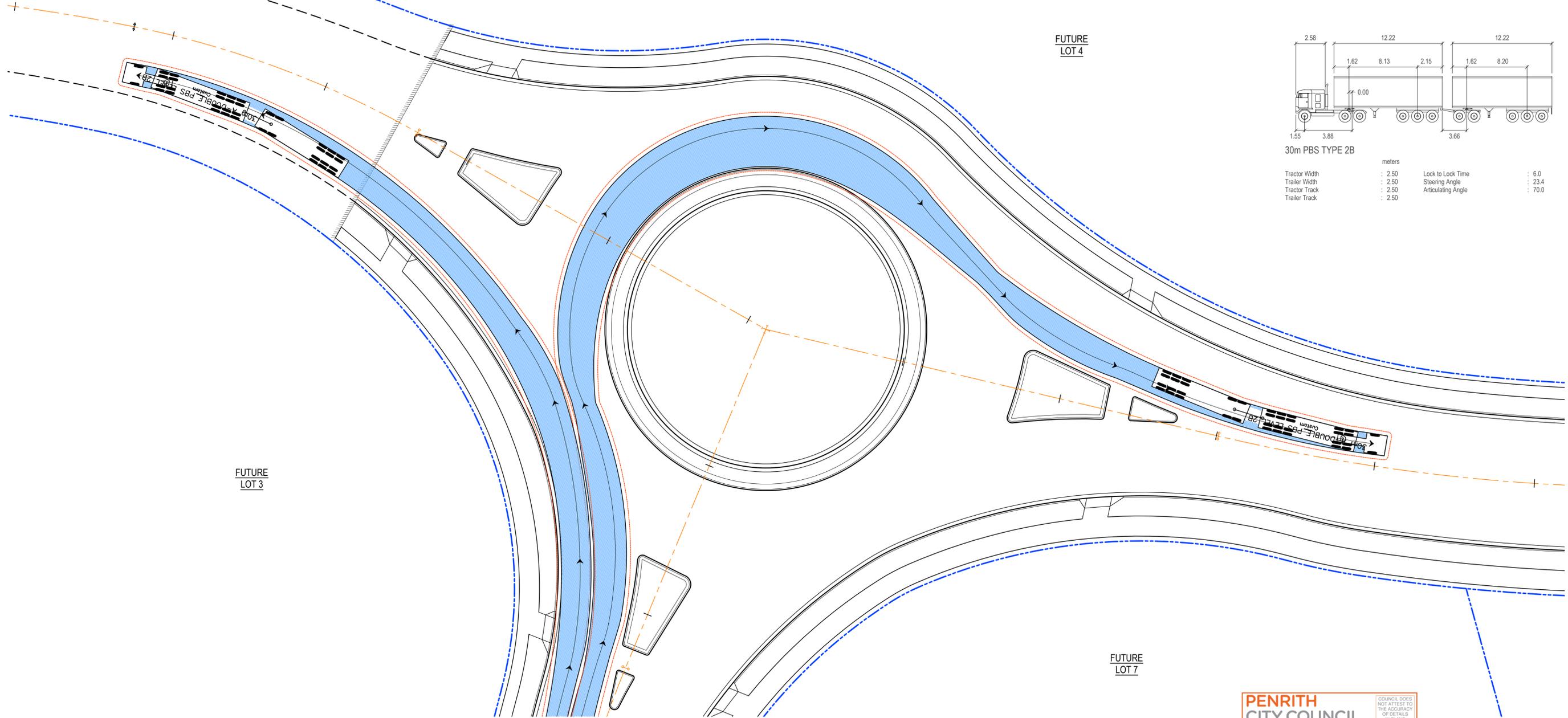
- VEHICLE BODY ENVELOPE
- 0.5m VEHICLE BODY CLEARANCE ENVELOPE

DESIGN VEHICLE PROFILE



30m PBS TYPE 2B

	Tractor Width	: 2.50	Lock to Lock Time	: 6.0
	Trailer Width	: 2.50	Steering Angle	: 23.4
	Tractor Track	: 2.50	Articulating Angle	: 70.0
	Trailer Track	: 2.50		

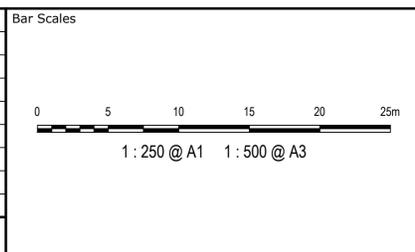


PENRITH CITY COUNCIL
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This plan / document relates to
 Development Consent: **SSD-10448-MOD-1**
 Subdivision Works Certificate: **EA22/0045**

Subject to the conditions outlined in the consent

Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22



Key Plan



Client	mirvac		
Scales	1:500	Drawn	JB/MH
		Designed	JB/MH
Grid	GDA2020	Checked	DS
Height Datum	AHD	Approved	DS
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Project
**ASPECT INDUSTRIAL ESTATE
 MAMRE ROAD,
 KEMPS CREEK
 STAGE 1B**

Title
**VEHICLE TURN
 PATH PLAN
 SHEET 2**

Civil Engineers and Project Managers

Level 7, 153 Walker Street
 North Sydney NSW 2060
 ABN 96 130 882 405
 Tel: 02 9439 1777
 Fax: 02 9923 1055
 www.atl.net.au
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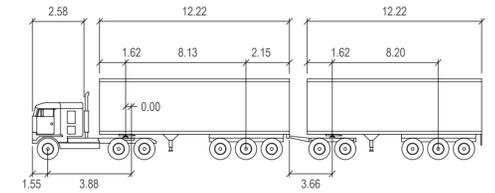
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Project - Drawing No.	18-596-C8802	Issue
		1



LEGEND

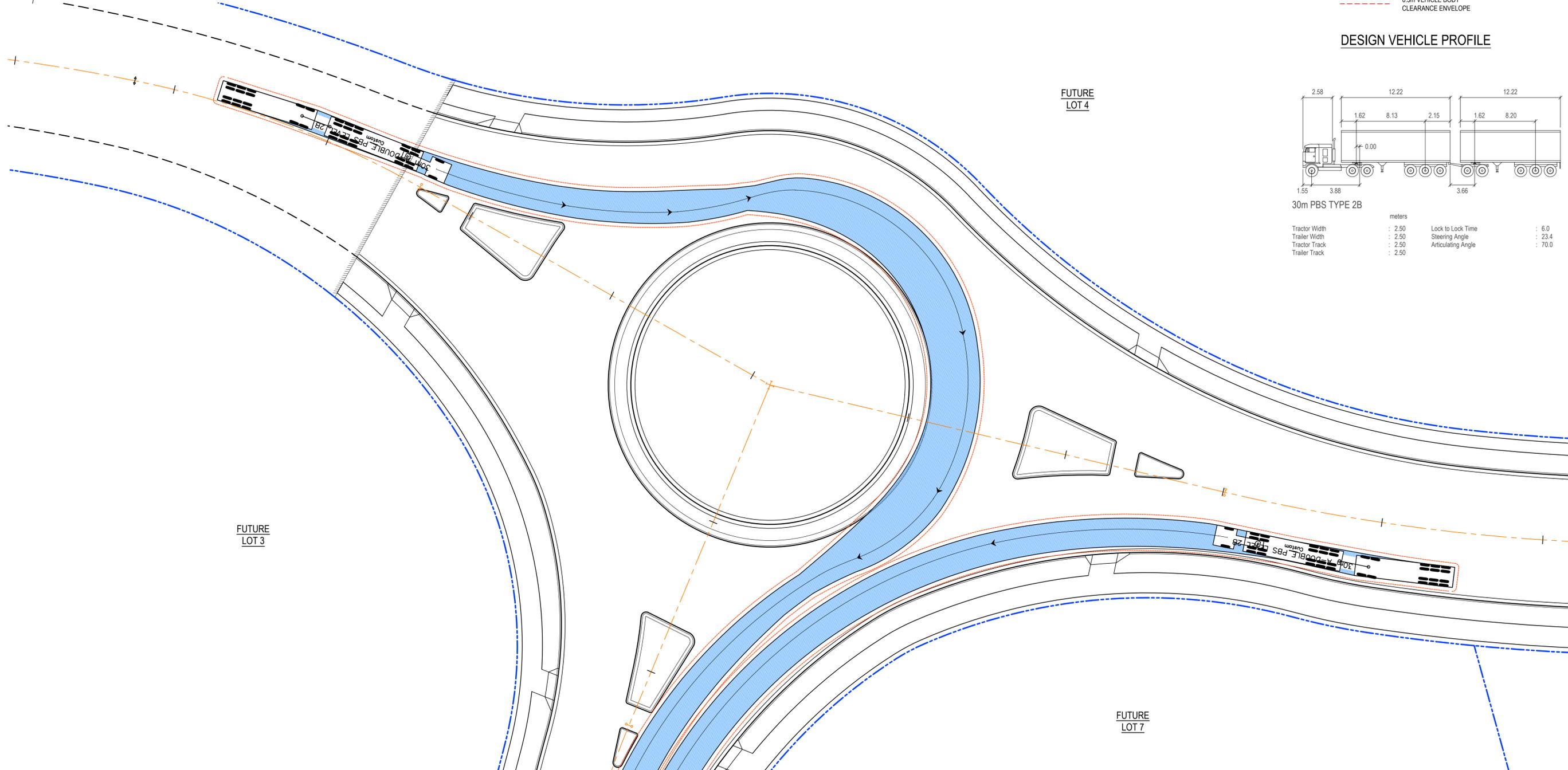
- VEHICLE BODY ENVELOPE
- 0.5m VEHICLE BODY CLEARANCE ENVELOPE

DESIGN VEHICLE PROFILE



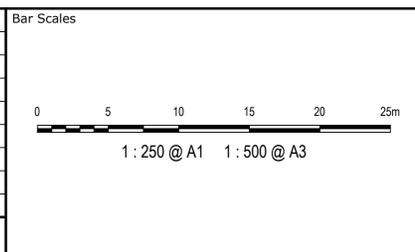
30m PBS TYPE 2B

meters	
Tractor Width	: 2.50
Trailer Width	: 2.50
Tractor Track	: 2.50
Trailer Track	: 2.50
Lock to Lock Time	: 6.0
Steering Angle	: 23.4
Articulating Angle	: 70.0



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 Development Consent: **SSD-10448-MOD-1**
 Subdivision Works Certificate: **EA22/0045**
 Subject to the conditions outlined in the consent

Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22



Key Plan



Client	mirvac		
Scales	1:500	Drawn	JB/MH
Grid	GDA2020	Designed	JB/MH
Height Datum	AHD	Checked	DS
		Approved	DS
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Project
**ASPECT INDUSTRIAL ESTATE
 MAMRE ROAD,
 KEMPS CREEK
 STAGE 1B**

Title
**VEHICLE TURN
 PATH PLAN
 SHEET 3**

Civil Engineers and Project Managers

Level 7, 153 Walker Street
 North Sydney NSW 2060
 ABN 96 130 882 405
 Tel: 02 9439 1777
 Fax: 02 9923 1055
 www.atl.net.au
 info@atl.net.au

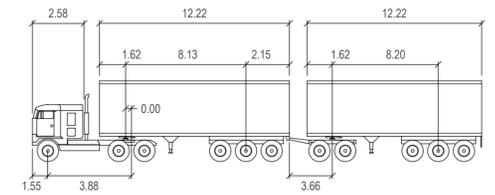
Status	FOR CONSTRUCTION	A1
Project - Drawing No.	18-596-C8803	Issue
		1



LEGEND

- VEHICLE BODY ENVELOPE
- 0.5m VEHICLE BODY CLEARANCE ENVELOPE

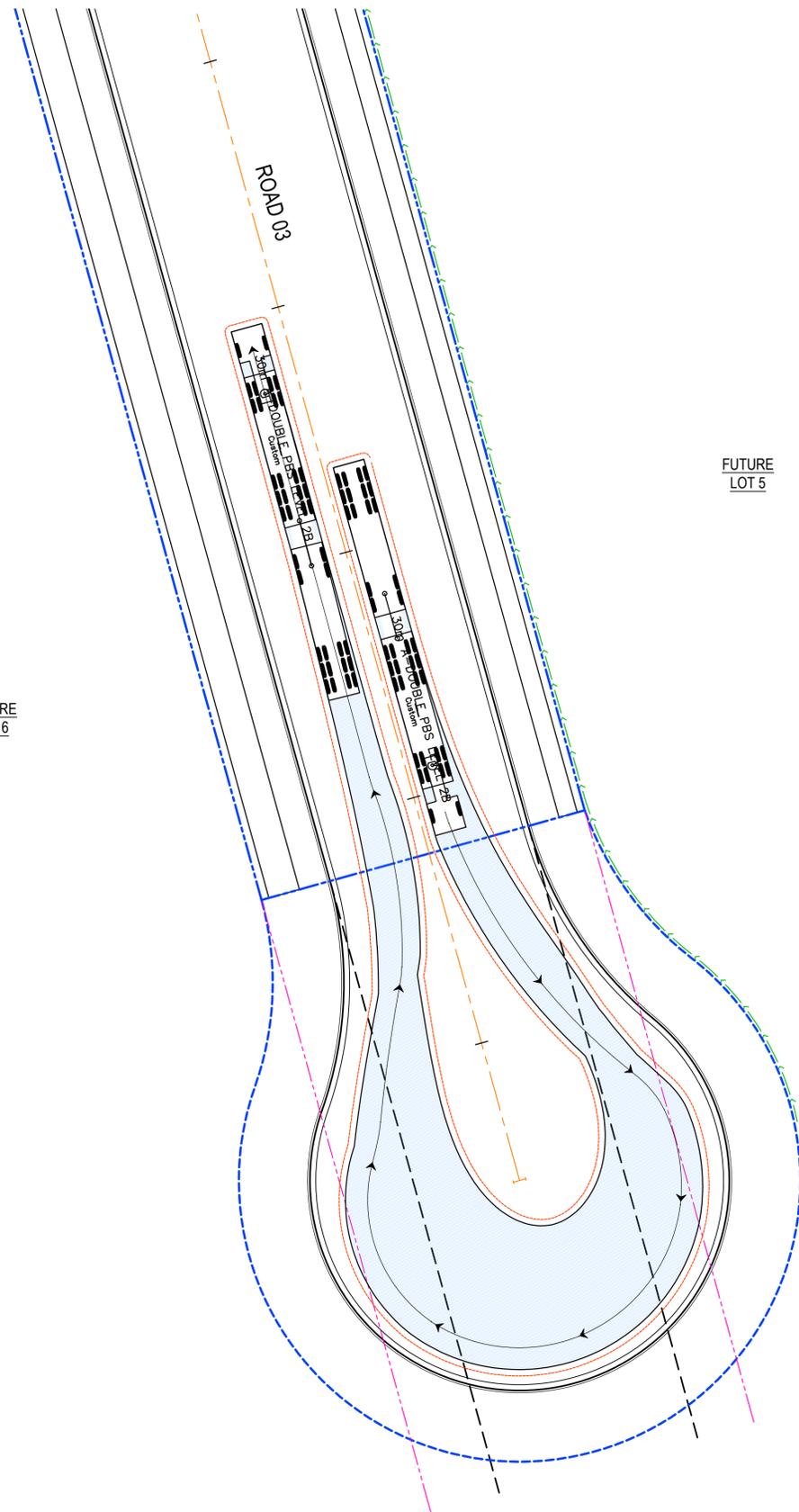
DESIGN VEHICLE PROFILE



30m PBS TYPE 2B

meters			
Tractor Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 2.50	Steering Angle	: 23.4
Tractor Track	: 2.50	Articulating Angle	: 70.0
Trailer Track	: 2.50		

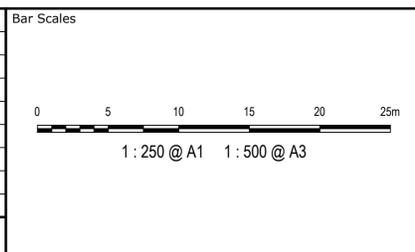
FUTURE LOT 6



FUTURE LOT 5

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Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	17-11-22



Key Plan

Client

Scale	1:500	Drawn	JB/MH
		Designed	JB/MH
Grid	GDA2020	Checked	DS
Height Datum	AHD	Approved	DS

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Project
**ASPECT INDUSTRIAL ESTATE
 MAMRE ROAD,
 KEMPS CREEK
 STAGE 1B**

Title
**VEHICLE TURN
 PATH PLAN
 SHEET 4**

Civil Engineers and Project Managers

Level 7, 153 Walker Street
 North Sydney NSW 2060
 ABN 96 130 882 405
 Tel: 02 9439 1777
 Fax: 02 9923 1055
 www.atl.net.au
 info@atl.net.au

Status	FOR CONSTRUCTION	A1
Project - Drawing No.	18-596-C8804	Issue
		1