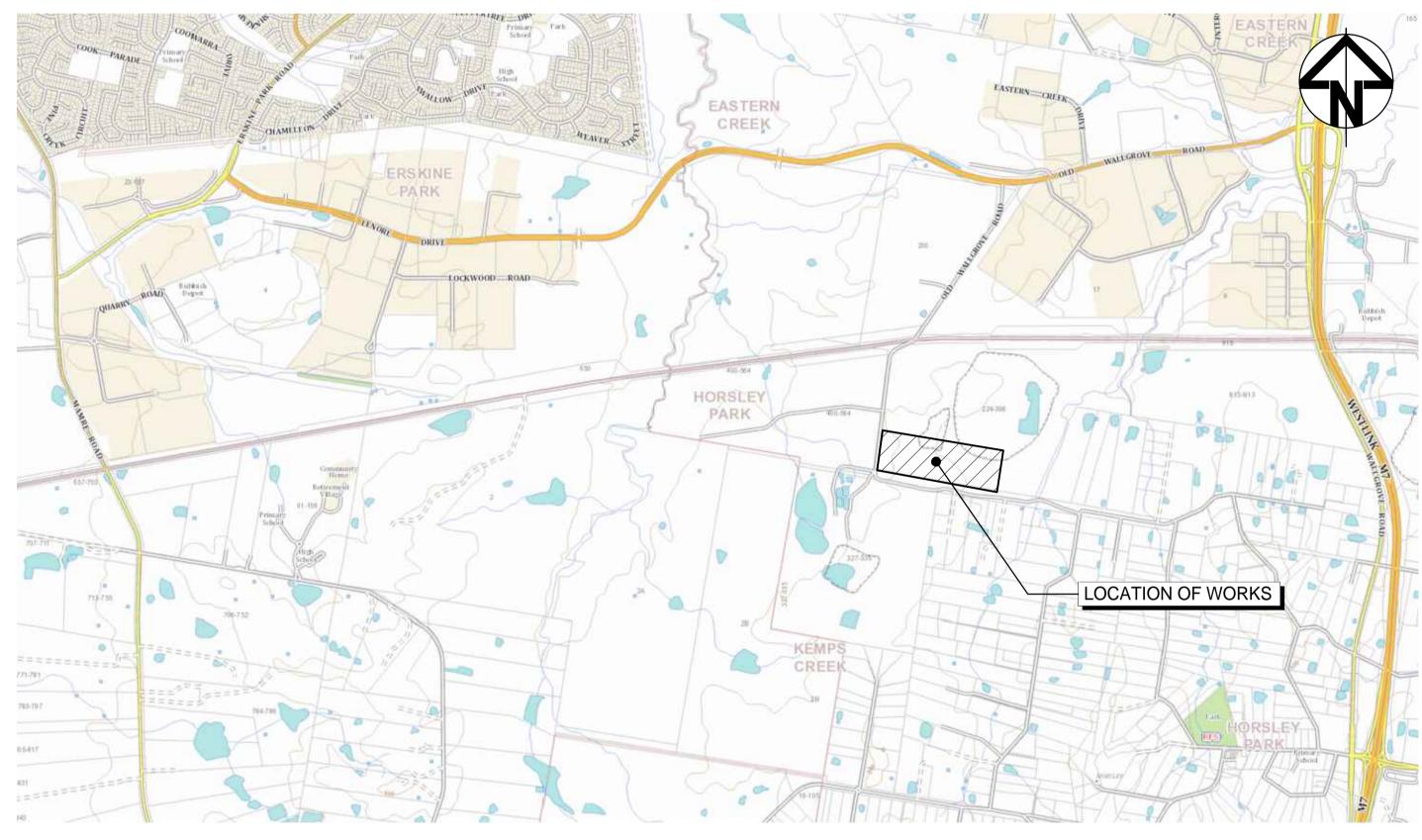
# OAKDALE EAST

# DEVELOPMENT APPROVAL

DRAWING No.	DRAWING TITLE					
18-563-C1000	COVER SHEET DRAWING LIST AND LOCALITY PLAN					
18-563-C1001	GENERAL NOTES					
18-563-C1002	TYPICAL ROAD SECTIONS					
18-563-C1003	TYPICAL SERVICES TRENCH SECTIONS					
18-563-C1004	GENERAL ARRANGEMENT PLAN					
18-563-C1005	TYPICAL SECTIONS SHEET 1					
18-563-C1006	TYPICAL SECTIONS SHEET 2					
18-563-C1007	TYPICAL SECTIONS SHEET 3					
18-563-C1008	TYPICAL SECTIONS SHEET 4					
18-563-C1011	SITEWORKS AND STORMWATER PLAN SHEET 1					
18-563-C1012	SITEWORKS AND STORMWATER PLAN SHEET 2					
18-563-C1013	SITEWORKS AND STORMWATER PLAN SHEET 3					
18-563-C1014	SITEWORKS AND STORMWATER PLAN SHEET 4					
18-563-C1015	SITEWORKS AND STORMWATER PLAN SHEET 5					
18-563-C1016	SITEWORKS AND STORMWATER PLAN SHEET 6					
18-563-C1017	SITEWORKS AND STORMWATER PLAN SHEET 7					
18-563-C1018	SITEWORKS AND STORMWATER PLAN SHEET 8					
18-563-C1019	SITEWORKS AND STORMWATER PLAN SHEET 9					
18-563-C1020	SITEWORKS AND STORMWATER PLAN SHEET 10					
18-563-C1025	ONSITE DETENTION BASIN PLAN AND DETAILS					
18-563-C1030	PAVEMENT PLAN SHEET 1					
18-563-C1031	PAVEMENT PLAN SHEET 2					
18-563-C1032	PAVEMENT PLAN SHEET 3					
18-563-C1033	PAVEMENT PLAN SHEET 4					
18-563-C1035	EROSION AND SEDIMENT CONTROL PLAN SHEET 1					
18-563-C1036	EROSION AND SEDIMENT CONTROL PLAN SHEET 2					
18-563-C1037	EROSION AND SEDIMENT CONTROL PLAN SHEET 3					
18-563-C1038	EROSION AND SEDIMENT CONTROL PLAN SHEET 4					
18-563-C1039	EROSION AND SEDIMENT CONTROL DETAILS					
18-563-C1040	ESTATE ROAD (CL01) LONGITUDINAL SECTIONS					
18-563-C1045	ESTATE ROAD (CL01) CROSS SECTIONS SHEET 1					
18-563-C1046	ESTATE ROAD (CL01) CROSS SECTIONS SHEET 2					
18-563-C1050	SERVICES AND UTILITIES COORDINATION PLAN SHEET 1					
18-563-C1051	SERVICES AND UTILITIES COORDINATION PLAN SHEET 2					
18-563-C1052	SERVICES AND UTILITIES COORDINATION PLAN SHEET 3					
18-563-C1055	EXISTING STORMWATER CATCHMENT PLAN					
18-563-C1056	PROPOSED STORMWATER CATCHMENT PLAN					
18-563-C1060	STORMWATER LONGITUDINAL SECTION SHEET 1					
18-563-C1061	STORMWATER LONGITUDINAL SECTION SHEET 2					
18-563-C1062	STORMWATER LONGITUDINAL SECTION SHEET 3					
18-563-C1063	STORMWATER LONGITUDINAL SECTION SHEET 4					
18-563-C1064	STORMWATER LONGITUDINAL SECTION SHEET 5					
18-563-C1065	STORMWATER LONGITUDINAL SECTION SHEET 6					
18-563-C1066	STORMWATER LONGITUDINAL SECTION SHEET 7					
18-563-C1067	STORMWATER LONGITUDINAL SECTION SHEET 8					
18-563-C1068	STORMWATER LONGITUDINAL SECTION SHEET 9					
18-563-C1069	STORMWATER LONGITUDINAL SECTION SHEET 10					
18-563-C1070	STORMWATER LONGITUDINAL SECTION SHEET 11					
18-563-C1090	TURNPATH PLAN - SHEET 1					
18-563-C1091	TURNPATH PLAN - SHEET 2					
18-563-C1092	TURNPATH PLAN - SHEET 3					
18-563-C1093	TURNPATH PLAN - SHEET 4					
18-563-C1094	TURNPATH PLAN - SHEET 5					

Description

DRAWING LIST					
DRAWING No.	DRAWING TITLE				
18-563-C1100	OWR UPGRADE - GENERAL ARRANGEMENT PLAN				
18-563-C1101	OWR UPGRADE - TYPICAL ROAD SECTIONS SHEET 1				
18-563-C1102	OWR UPGRADE - TYPICAL ROAD SECTIONS SHEET 2				
18-563-C1105	OWR UPGRADE - ROADWORKS AND STORMWATER PLAN SHEET 1				
18-563-C1106	OWR UPGRADE - ROADWORKS AND STORMWATER PLAN SHEET 2				
18-563-C1110	OWR UPGRADE - PAVEMENT PLAN				
18-563-C1111	OWR UPGRADE - PAVEMENT MARKING AND SIGNPOSTING PLAN				
18-563-C1112	OWR UPGRADE - STORMWATER CATCHMENT PLAN				
18-563-C1113	OWR UPGRADE - EROSION AND SEDIMENT CONTROL PLAN				
18-563-C1114	OWR UPGRADE - EROSION AND SEDIMENT CONTROL DETAILS				
18-563-C1120	OWR UPGRADE - ROADWORKS LONGITUDINAL SECTION				
18-563-C1130	OWR UPGRADE - SERVICES AND UTILITIES COORDINATION PLAN SHEET 1				
18-563-C1131	OWR UPGRADE - SERVICES AND UTILITIES COORDINATION PLAN SHEET 2				
18-563-C1140	OWR UPGRADE - STORMWATER LONGITUDINAL SECTION SHEET 1				
18-563-C1141	OWR UPGRADE - STORMWATER LONGITUDINAL SECTION SHEET 2				
18-563-C1150	OWR UPGRADE - TURNING PATH PLAN				



**LOCALITY PLAN** 

	Bar Scales	
		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
FOR APPROVAL 08-0	1–18	

Date

Goodman

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Scales		Drawn	FX	Project
NTS	Designed	FX	PROPOSED INDUSTR	
Grid	MGA	Checked	AM	DEVELOPMENT OAKDALE EAST
Height Datum	AHD	Approved	AM	
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COVER SHEET DRAWING LIST

AND LOCALITY PLAN

Civil Engineers and Project Managers

FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION Project No. - Drawing No. 18-563-C1000

#### SITEWORKS NOTES

- 1. ORIGIN OF LEVELS:- REFER SURVEY NOTES
- 2. CONTRACTOR MUST VERIFY ALL DIMENSIONS AND EXISTING LEVELS ON SITE PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES TO BE REPORTED TO AT & L.
- 3. MAKE SMOOTH CONNECTION WITH EXISTING WORKS.
- 4. ALL TRENCH BACKFILL MATERIAL SHALL BE COMPACTED TO THE SAME DENSITY AS THE ADJACENT MATERIAL
- 5. 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 COMAPACTED 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)
- 6. PROVIDE 10mm WIDE EXPANSION JOINTS BETWEEN BUILDINGS AND ALL CONCRETE OR UNIT PAVEMENTS.
- 7. ASPHALTIC CONCRETE SHALL CONFORM TO R.M.S SPECIFICATION R116.
- 8. ALL BASECOURSE MATERIAL SHALL BE IGNEOUS ROCK QUARRIED MATERIAL TO COMPLY WITH R.M.S FORM 3051 (UNBOUND), R.M.S 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<sup>3</sup> OF BASECOURSE MATERIAL PLACED.
- 9. ALL SUB-BASE COURSE MATERIAL SHALL BE IGNEOUS ROCK QUARRIED MATERIAL TO COMPLY WITH R.M.S FORM 3051, 3051.1 AND COMPACTED TO MINIMUM 95% MODIFIED DENSITY IN ACCORDANCE WITH A.S 1289 5.2 FREQUENCY OF COMPACTION TESTING SHALL NOT BE LESS THAN 1 TEST PER 50m<sup>3</sup>OF SUB-BASE COURSE MATERIAL PLACED.
- 10. AS AN ALTERNATIVE TO THE USE OF IGNEOUS ROCK AS A SUB-BASE MATERIAL IN (9) A CERTIFIED RECYCLED CONCRETE MATERIAL COMPLYING WITH R.M.S FORM 3051 AND 3051.1 WILL BE CONSIDERED. SUBJECT TO MATERIAL SAMPLES AND APPROPRIATE CERTIFICATIONS BEING PROVIDED TO THE SATISFACTION OF AT & L.
- 11. 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.
- 12. WHERE NOTED ON THE DRAWINGS THAT WORKS ARE TO BE CARRIED BY OTHERS, (eq. ADJUSTMENT OF SERVICES), THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CO-ORDINATION OF THESE WORKS.

#### SURVEY NOTES

THE EXISTING SITE CONDITIONS SHOWN ON THE FOLLOWING DRAWINGS HAVE BEEN INVESTIGATED BY CARDNO HARD & FORESTER PTY LTD, 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.

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

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

#### IMPORTANT NOTE:

THIS PLAN IS PREPARED FROM A COMBINATION OF FIELD SURVEY AND EXISTING RECORDS FOR THE PURPOSE OF DESIGNING NEW CONSTRUCTIONS ON THE LAND AND SHOULD NOT BE USED FOR ANY OTHER PURPOSE. THE TITLE BOUNDARIES SHOWN HEREON WERE NOT MARKED BY THE AUTHOR AT THE TIME OF SURVEY AND HAVE BEEN DETERMINED BY PLAN DIMENSIONS ONLY AND NOT BY FIELD MEASUREMENT.

A SERVICES SEARCH OF THE AREA SURVEYED ABOVE HAS NOT BEEN UNDERTAKEN. VISIBLE SERVICES SHOWN HEREON HAVE BEEN LOCATED WHERE POSSIBLE BY FIELD SURVEY. 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. THIS NOTE IS AN INTEGRAL PART OF THIS PLAN.

## EXISTING UNDERGROUND SERVICES NOTES

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.

Description

#### CONCRETE NOTES

- 1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3600 CURRENT EDITION WITH AMENDMENTS, EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.
- 2. 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 F'c MPa AT 28 DAYS	SPECIFIED SLUMP	NOMINAL AGG. SIZE
VEHICULAR BASE	32	60	20
KERBS, PATHS, AND PITS	25	80	20

- CEMENT TYPE SHALL BE (ACSE SPECIFICATION) TYPE SL
- PROJECT CONTROL TESTING SHALL BE CARRIED OUT IN ACCORDANCE WITH AS 1379.
- 3. NO ADMIXTURES SHALL BE USED IN CONCRETE UNLESS APPROVED IN WRITING BY AT & L.
- 4. CLEAR CONCRETE COVER TO ALL REINFORCEMENT FOR DURABILITY SHALL BE 40mm TOP AND 70mm FOR EXTERNAL EDGES UNLESS NOTED OTHERWISE.
- 5. 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.
- 6. 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 R.M.S SPECIFICATION R83.
- 7. 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

17 N 20 250 NOMINAL BAR SIZE IN mm — SPACING IN mm

THE FIGURE FOLLOWING THE FABRIC SYMBOL SL IS THE REFERANCE NUMBER FOR FABRIC TO AS 1304.

8. FABRIC SHALL BE LAPPED IN ACCORDANCE WITH THE FOLLOWING DETAIL:

LAP TWO WIRES

#### KERBING NOTES

- 1. ALL CONCRETE TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF N32 U.N.O IN REINFORCED CONCRETE NOTES
- 2. 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).
- 3. EXPANSION JOINTS (E.J) TO BE FORMED FROM 10mm COMPRESSIBLE 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.
- 4. 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.
- 5. BROOMED FINISH TO ALL RAMPED AND VEHICULAR CROSSINGS. ALL OTHER KERBING OR DISH DRAINS TO BE STEEL FLOAT FINISHED.
- 6. IN THE REPLACEMENT OF KERB AND GUTTER :-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.

# TREE PROTECTION NOTES

Bar Scales

Date

TREES TO BE RETAINED ARE TO BE PROTECTED PRIOR TO AND DURING CONSTRUCTION ACTIVITIES ON THE SITE.

IDENTIFY AND MARK TREES AND SHRUBS TO BE RETAINED USING A SUITABLE NON-INJURIOUS, EASILY VISIBLE AND REMOVABLE MEANS OF IDENTIFICATION.

TREES TO BE RETAINED SHALL BE PROTECTED IN ACCORDANCE WITH THE LATEST EDITION OF AS 4970. GENERALLY, THIS INCLUDES, BUT IS NOT LIMITED TO, THE INSTALLATION OF TREE PROTECTION FENCING AT THE PERIMETER OF THE TREE PROTECTION ZONE.

### STORMWATER DRAINAGE NOTES

1. STORMWATER DESIGN CRITERIA (A) AVERAGE RECURRENCE INTERVAL: 1:100 YEARS ROOFED AREAS TO SURCHARGE PIT 1:5 YEARS EXTERNAL PAVEMENTS

(B) RAINFALL INTENSITIES: TIME OF CONCENTRATION: 5 MINUTES 1:100 YEARS= 220 mm/hr 1:5 YEARS= 134 mm/hr

(C) RUNOFF COEFFICIENTS: ROOF AREAS: C100 EXTERNAL PAVEMENTS: C100 ROOF AREAS:

- 2. PIPES 300 DIA. AND LARGER TO BE REINFORCED CONCRETE CLASS '2' APPROVED SPIGOT AND SOCKET WITH RUBBER RING JOINTS. U.N.O.
- 3. PIPES UP TO 300 DIA SHALL BE SEWER GRADE uPVC WITH SOLVENT WELDED JOINTS.
- 4. EQUIVALENT STRENGTH VCP OR FRC PIPES MAY BE USED, SUBJECT TO THE APPROVAL OF THE SUPERINTENDENT.
- 5. 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
- 5. PIPES TO BE INSTALLED TO TYPE HS1 SUPPORT IN ACCORDANCE WITH AS 3725 (1989) 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 AS/NZS 3500 3.2
- 8. PRECAST PITS MAY BE USED EXTERNAL TO THE BUILDING SUBJECT TO APPROVAL BY AT & L.
- 9. 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. 11. CARE IS TO BE TAKEN WITH LEVELS OF STORMWATER LINES. GRADES
- SHOWN ARE NOT TO BE REDUCED WITHOUT APPROVAL. 2. GRATES AND COVERS SHALL CONFORM TO AS 3996.
- 3. AT ALL TIMES DURING CONSTRUCTION OF STORMWATER PITS, ADEQUATE SAFETY PROCEDURES SHALL BE TAKEN TO ENSURE AGAINST THE POSSIBILITY OF PERSONNEL FALLING DOWN PITS.
- 4. 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.

# EMBANKMENT CONSTRUCTION

#### SEQUENCE

- 1. STRIP VEGETATION AND TOPSOIL FROM EMBANKMENT AREA AND STOCKPILE TOPSOIL FOR LATER USE. CUT BACK AREA TO FIRM GROUND.
- 2. CONSTRUCT EMBANKMENT IN PRESENCE OF QUALIFIED AND EXPERIENCED GEOTECHNICAL ENGINEER IF NOT ROCK.
- 3. IN THE CASE WHERE THE EMBANKMENT AREAS SLUSH, GROUTING AND DENTAL CONCRETE MAY BE REQUIRED, AS DIRECTED BY A QUALIFIED AND EXPERIENCED GEOTECHNICAL ENGINEER.
- 4. COMPACT CLAY STABILIZED 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 LOOSE 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.
- 5. GYPSUM STABILIZED 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.
- 6. 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.
- 7. OVERFILL THE EMBANKMENT AND TRIM OFF, SO THAT THE ENTIRE BODY OF THE EMBANKMENT IS COMPACTED.
- 8. TRIM THE EMBANKMENTS BATTERS TO THE OVERFILLED MATERIAL, STABILIZE THE UPSTREAM CLAY BATTERS WITH WELL MIXED GYPSUM (3% BY DRY MASS, MINIMUM) AND COMPACT TO MIN. 98% STD -2% TO +2% OMC.
- 9. PLACE ROCK RIP-RAP AS SHOWN.
- 10. 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.
- 11. WATER AND FERTILIZE LANDSCAPE AS REQUIRED BY CLIMACTIC CONDITIONS TO ENSURE THE LANDSCAPE IS SUCCESSFUL.
- 12. AT THE COMPLETION OF WORK WRITTEN CONFIRMATION & CERTIFICATION IS TO BE PROVIDED FROM A QUALIFIED & EXPERIENCED GEOTECHNICAL ENGINEER THAT THE EMBANKMENTS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THESE DRAWINGS.

# EROSION AND SEDIMENT CONTROL NOTES

#### GENERAL INSTRUCTIONS

- 1. THE SITE SUPERINTENDENT/ENGINEER WILL ENSURE THAT ALL SOIL
- AND WATER MANAGEMENT WORKS ARE LOCATED AS DOCUMENTED. 2. ALL WORK SHALL BE GENERALLY CARRIED OUT IN ACCORDANCE WITH
- a. LOCAL AUTHORITY REQUIREMENTS b. EPA REQUIREMENTS C. NSW DEPARTMENT OF HOUSING MANUAL "MANAGING URBAN
- STORMWATER, SOILS AND CONSTRUCTION", 4th EDITION, MARCH
- B. MAINTAIN THE EROSION CONTROL DEVICES TO THE SATISFACTION OF THE SUPERINTENDENT AND THE LOCAL AUTHORITY.
- 4. WHEN STORMWATER PITS ARE CONSTRUCTED, PREVENT SITE RUNOFF ENTERING UNLESS SEDIMENT FENCES ARE ERECTED AROUND PITS.
- 5. 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

- 6. WHERE PRACTICAL, THE SOIL EROSION HAZARD ON THE SITE WILL BE KEPT AS LOW AS POSSIBLE. TO THIS END. WORKS SHOULD BE UNDERTAKEN IN THE FOLLOWING SEQUENCE:
- (A) INSTALL A WIND FENCE ALONG THE BOUNDARIES AS SHOWN ON PLAN. REFER DETAIL.
- (B) INSTALL A SEDIMENT FENCE ALONG THE BOUNDARIES AS SHOWN ON PLAN. REFER DETAIL.
- (C) CONSTRUCT STABILISED CONSTRUCTION ENTRANCE TO LOCATION AS DETERMINED BY SUPERINTENDENT/ENGINEER. REFER
- (D) INSTALL SEDIMENT BASIN AS SHOWN ON PLAN
- (E) INSTALL SEDIMENT TRAPS AS SHOWN ON PLAN.
- (F) UNDERTAKE SITE DEVELOPMENT WORKS IN ACCORDANCE WITH THE ENGINEERING PLANS. WHERE POSSIBLE, PHASE DEVELOPMENT SO THAT LAND DISTURBANCE IS CONFINED TO AREAS OF WORKABLE SIZE.

#### **EROSION CONTROL**

- 7. DURING WINDY WEATHER, LARGE, UNPROTECTED AREAS WILL BE KEPT MOIST (NOT WET) BY SPRINKLING WITH WATER TO KEEP DUST UNDER CONTROL.
- 8. FINAL SITE LANDSCAPING WILL BE UNDERTAKEN AS SOON AS POSSIBLE AND WITHIN 20 WORKING DAYS FROM COMPLETION OF CONSTRUCTION ACTIVITIES.

#### SEDIMENT CONTROL

- 9. 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.
- 10. 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 11. 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.
- 12. TEMPORARY SOIL AND WATER MANAGEMENT STRUCTURES WILL BE REMOVED ONLY AFTER THE LANDS THEY ARE PROTECTING ARE REHABILITATED.

#### OTHER MATTERS

- 13. ACCEPTABLE RECEPTORS WILL BE PROVIDED FOR CONCRETE AND MORTAR SLURRIES, PAINTS, ACID WASHINGS, LIGHT-WEIGHT WASTE MATERIALS AND LITTER.
- 14. 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.

# SITEWORKS LEGEND

#### **EXISTING**

**PROPOSED** 

EXISTING EASEMENT \_ \_ \_ \_ \_

EXISTING BOUNDARY

EXISTING 10m RIPARIAN ZONE

EXISTING 15m RIPARIAN ZONE — · · — · · — EXISTING 30m RIPARIAN ZONE

— ·· — ·· — EXISTING 100yr FLOOD EXTENT

#### EXISTING CONTOUR

#### PROPOSED BOUNDARY LANDSCAPE SETBACK — · · −65.0− · · · PROPOSED CONTOUR

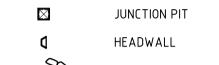
• F75.00 PROPOSED LEVEL RETAINING WALL

# STORMWATER PIPE WITH SIZE

KERB INLET PIT SURFACE INLET PIT

GROSS POLLUTANT TRAPS

GRATED DRAINS



CREEK OUTLET

PIT NUMBER



PROPOSED STORMWATER

PROPOSED GUARD RAIL

PROPOSED PRAM RAMP

PROPOSED WATER HYDRANT

PROPOSED FILL RETAINING WALL PROPOSED CUT RETAINING WALL

SERVICES

PROPOSED SEWER MAIN PROPOSED SEWER MANHOLE NUMBER

PROPOSED SEWER MANHOLE PROPOSED WATERMAIN

PROPOSED WATER STOP VALVE PROPOSED TELSTRA PROPOSED SPARE Ø150

CONDUIT FOR FUTURE GAS PROPOSED ELECTRICAL

# BULK EARTHWORKS NOTES

THE EXISTING STOCKPILES LOCATED WITHIN THE OAKDALE EAST DEVELOPMENT SITE ARE PROPOSED TO BE RELOCATED FOR STORAGE AND USE TO OTHER LOCATIONS ON THE PLANT 3 SITE. THIS RELOCATION IS TO BE UNDERTAKEN PURSUANT TO THE EXISTING MINING DA APPROVAL (PERMIT NO.1340, DATED 12 JULY 1971), AND DOES NOT THEREFORE FORM PART OF PROPOSED WORKS UNDER THIS DA. PADS OF APPROXIMATELY RL79.0 WILL BE HANDED OVER FOR COMMENCEMENT OF WORKS PROPOSED UNDER THIS OAKDALE EAST DA

PROPOSED LIGHT POLE

APPROVAL. THE EXISTING CONTOURS SHOWN WITHIN OAKDALE EAST INCLUDE THE EXISTING STOCKPILES. AN UPDATED SURVEY WILL BE REQUIRED PRIOR TO DETAILED DESIGN

Project

Title

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



www.atl.net.au

info@atl.net.au

Level 7, 153 Walker Street

Issue

FOR APPROVAL 08-03-1

100mm on Original

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Client

FX Designed FX Checked MGA AM Height Approved AM AHD Datum

Scales

PROPOSED INDUSTRIAL DEVELOPMENT OAKDALE EAST

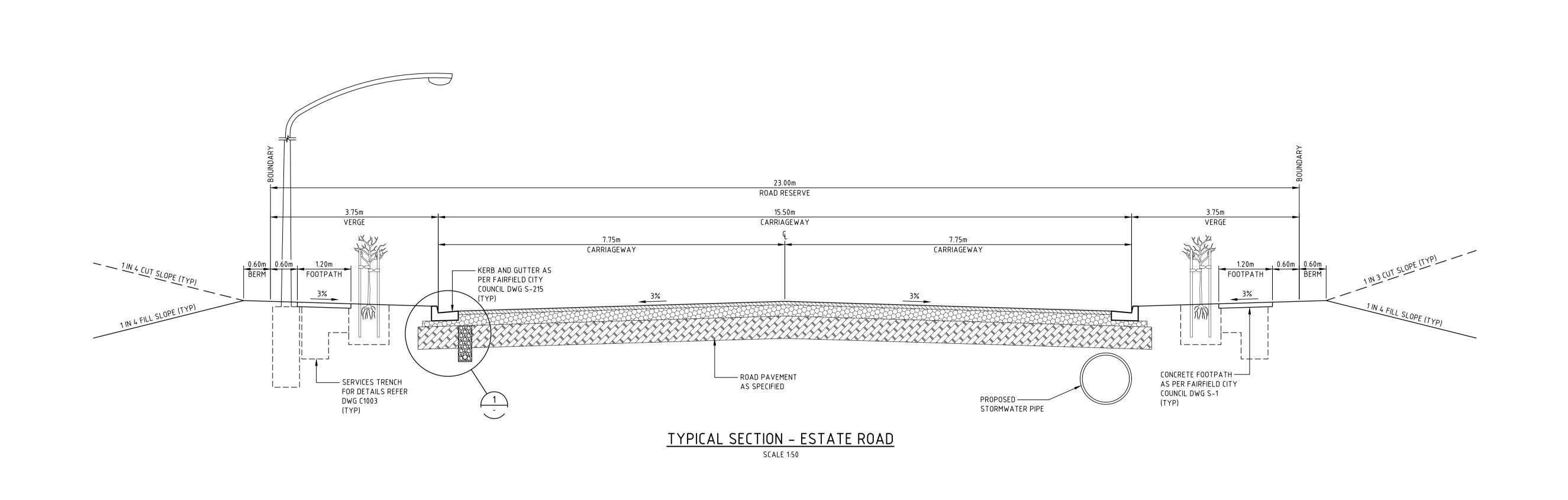
> GENERAL NOTES

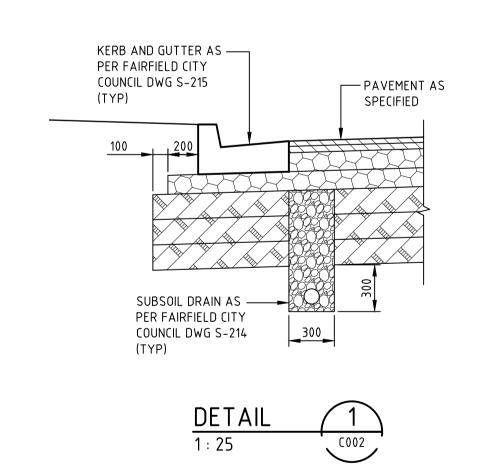
North Sydney NSW 2060 ABN 96 130 882 405 Tel: 02 9439 1777 Fax: 02 9923 1055

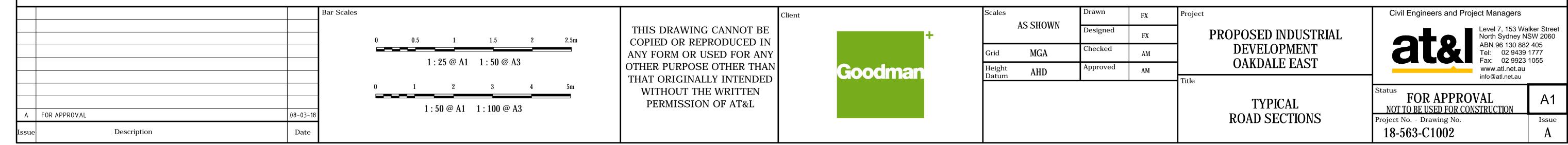
FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION Project No. - Drawing No. 18-563-C1001

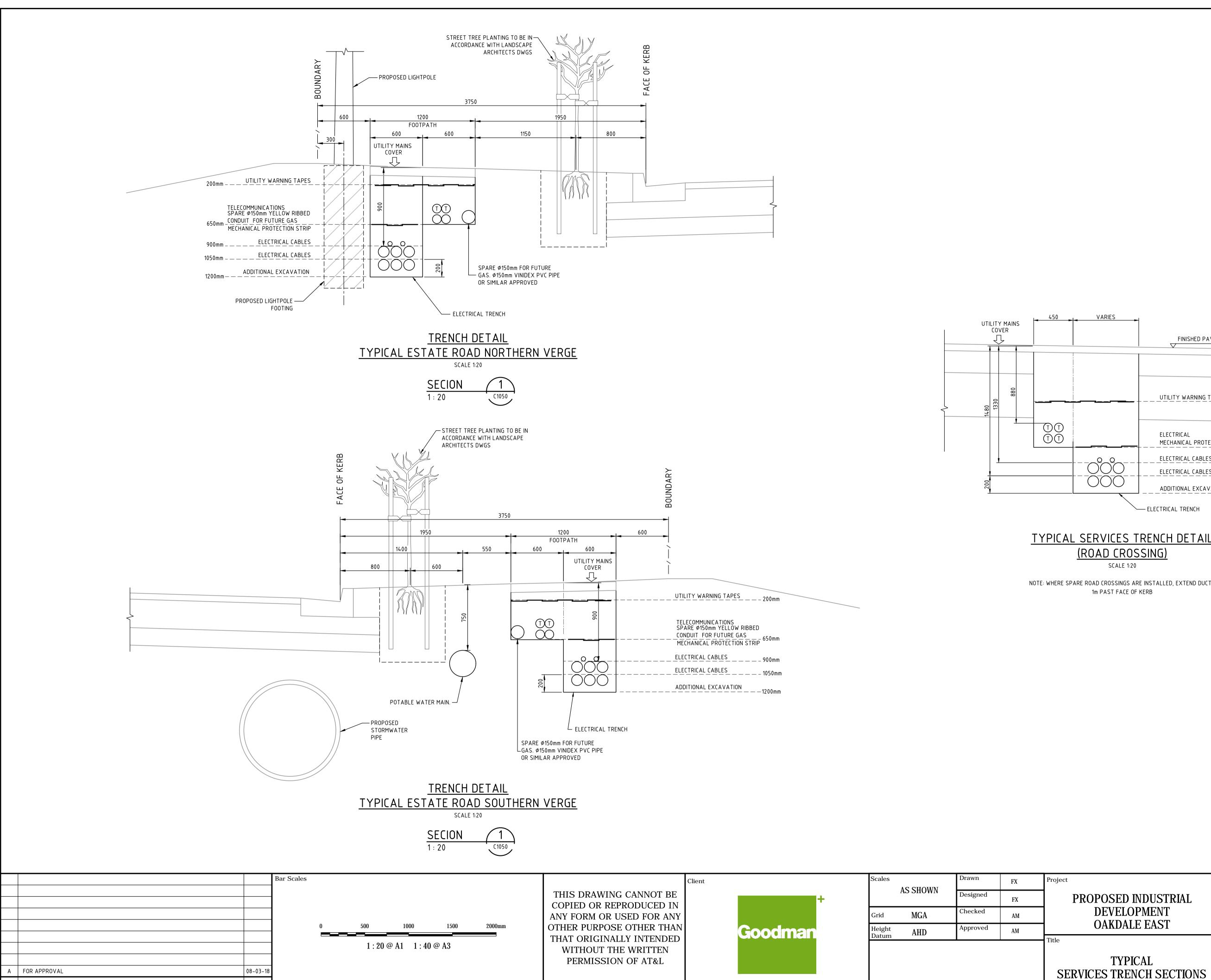
Civil Engineers and Project Managers

F:\18-563 Oakdale East\Drgs\Civil\Final\1000\_DA Package\18-563-C1001.dwg





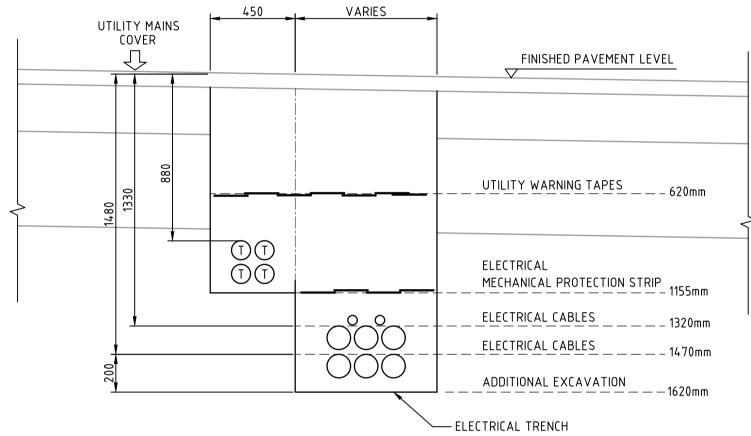




Date

Description

100mm on Original



# TYPICAL SERVICES TRENCH DETAIL (ROAD CROSSING)

SCALE 1:20

NOTE: WHERE SPARE ROAD CROSSINGS ARE INSTALLED, EXTEND DUCTS

1m PAST FACE OF KERB

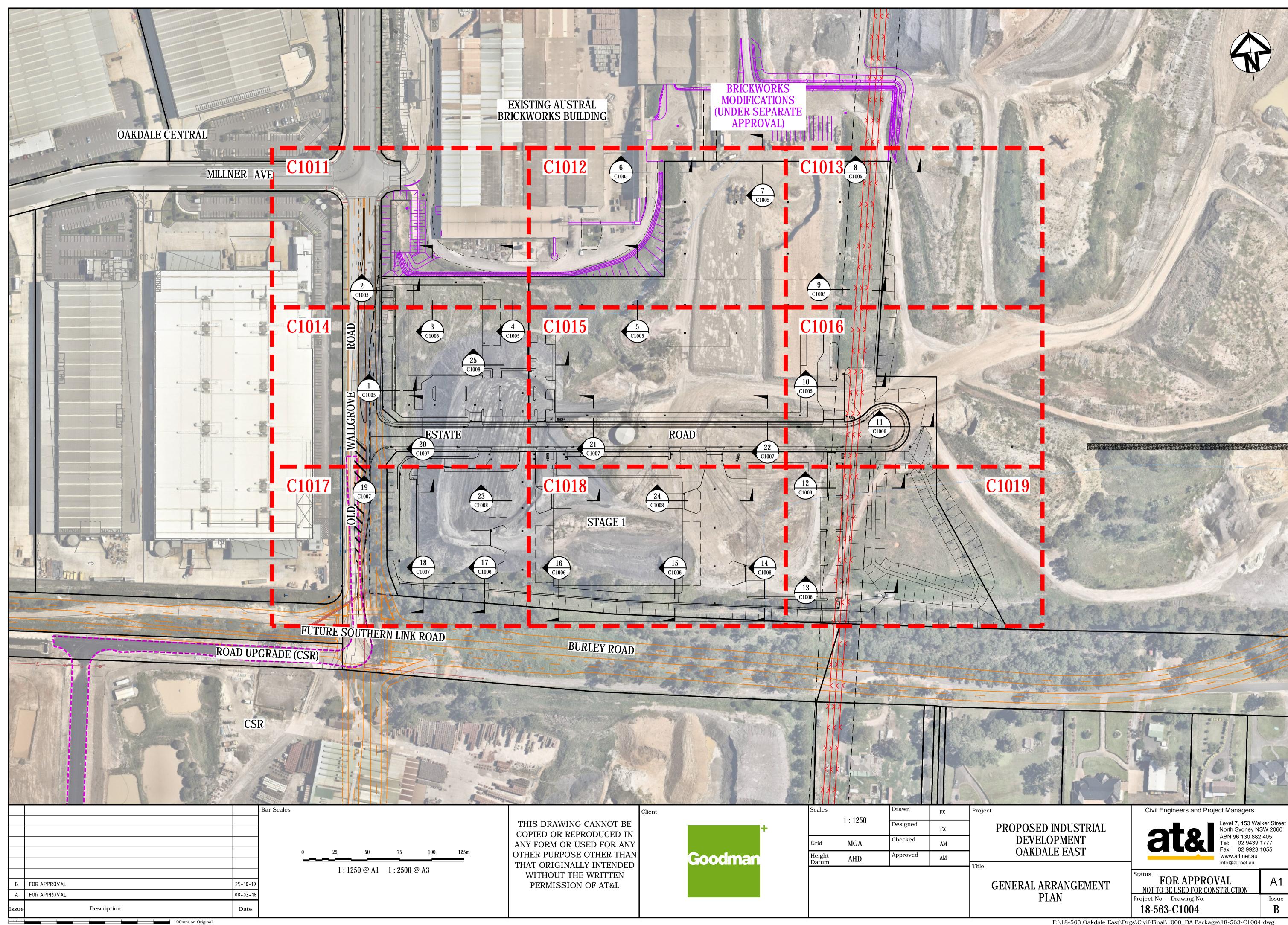
**TYPICAL** 

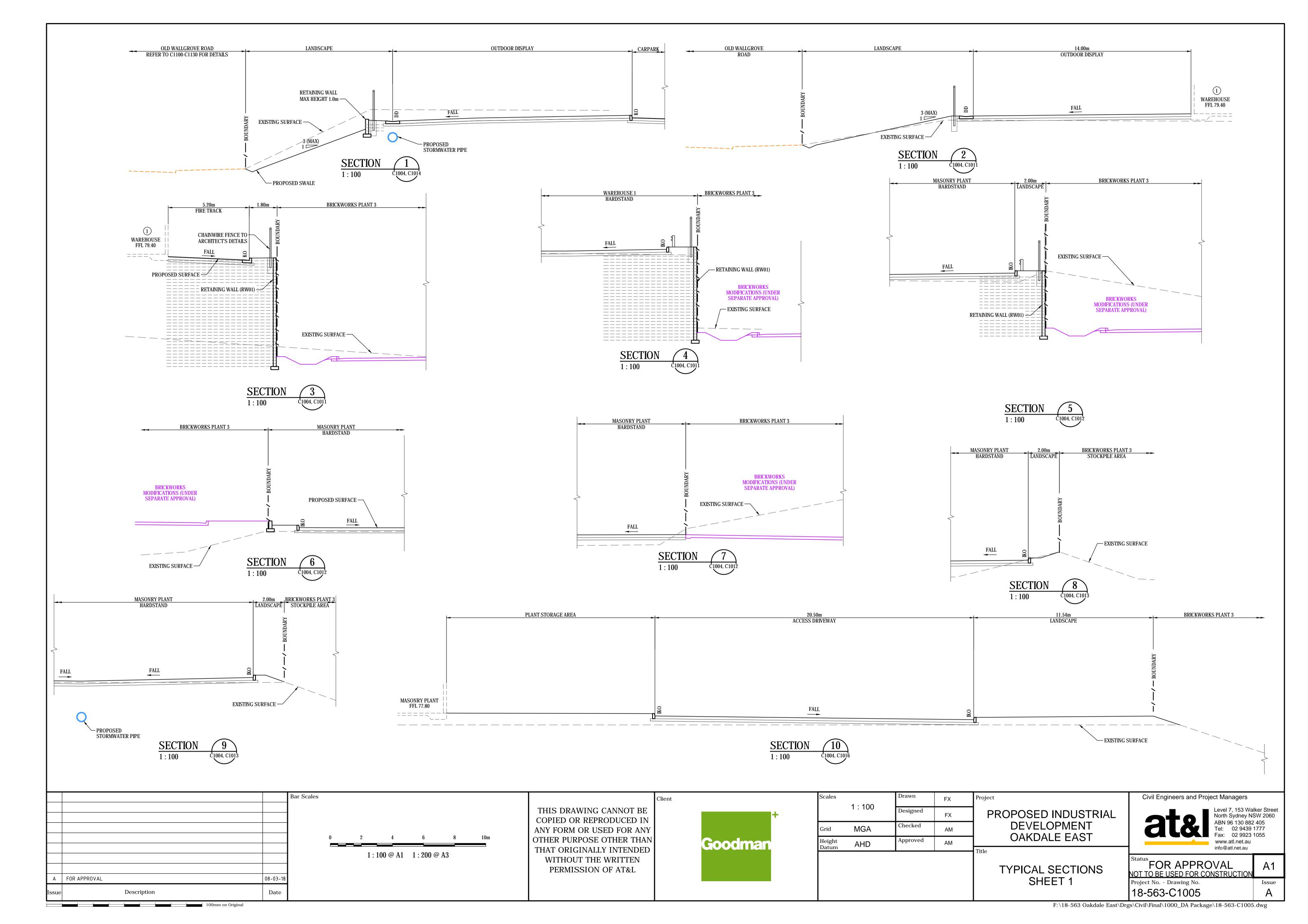
PROPOSED INDUSTRIAL **DEVELOPMENT** OAKDALE EAST

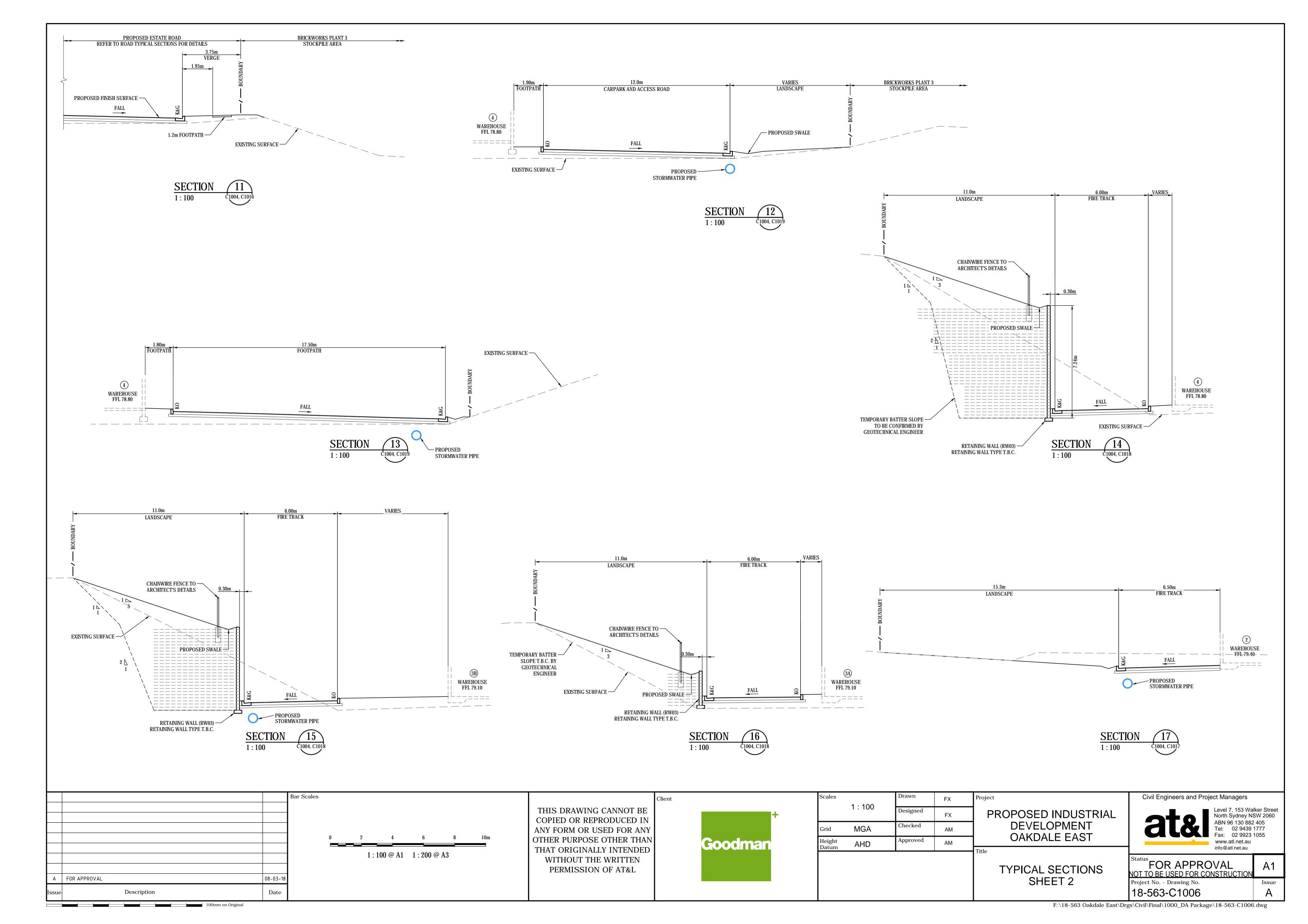
Level 7, 153 Walker Street North Sydney NSW 2060 ABN 96 130 882 405 Tel: 02 9439 1777.
Fax: 02 9923 1055 www.atl.net.au info@atl.net.au

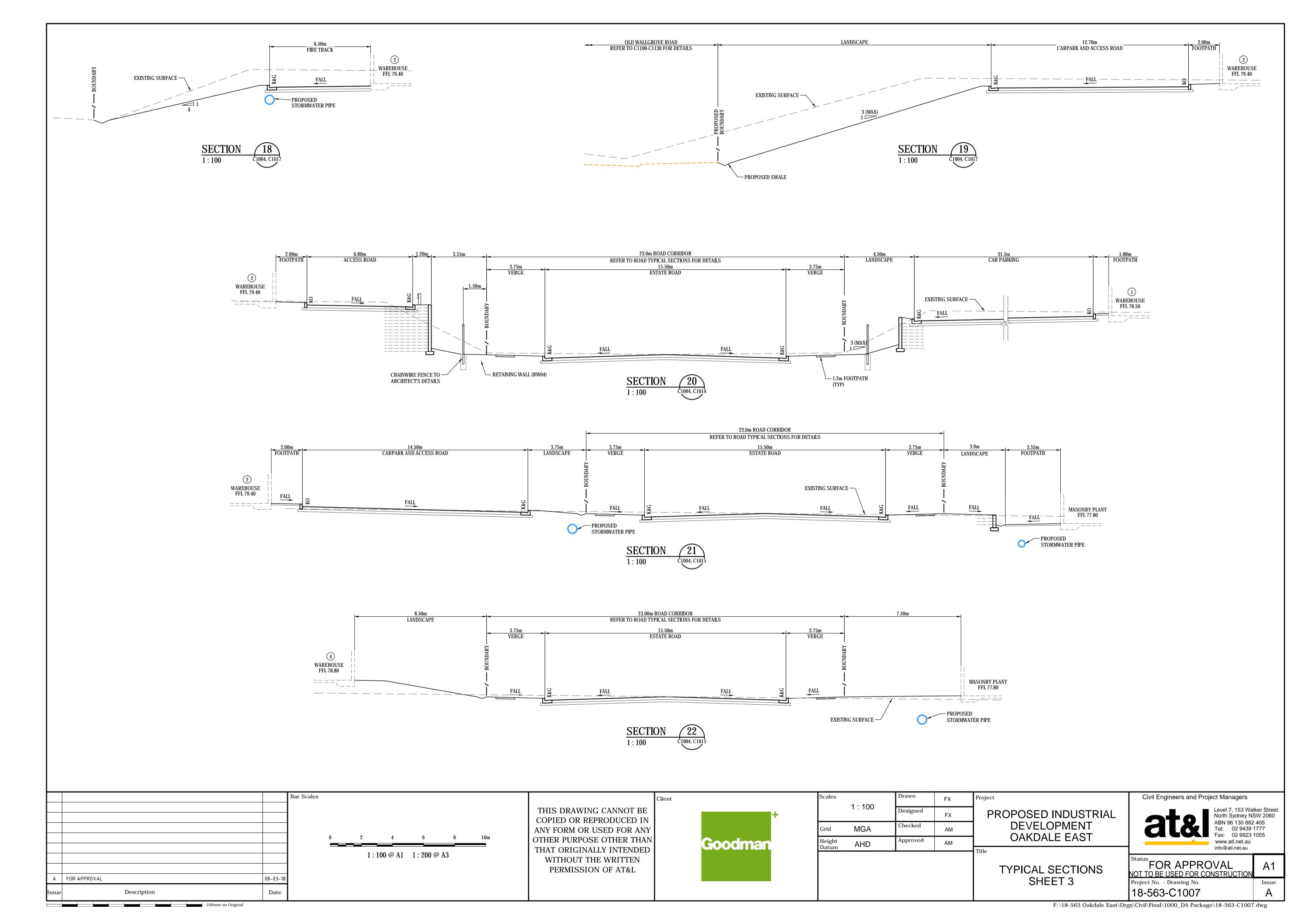
Civil Engineers and Project Managers

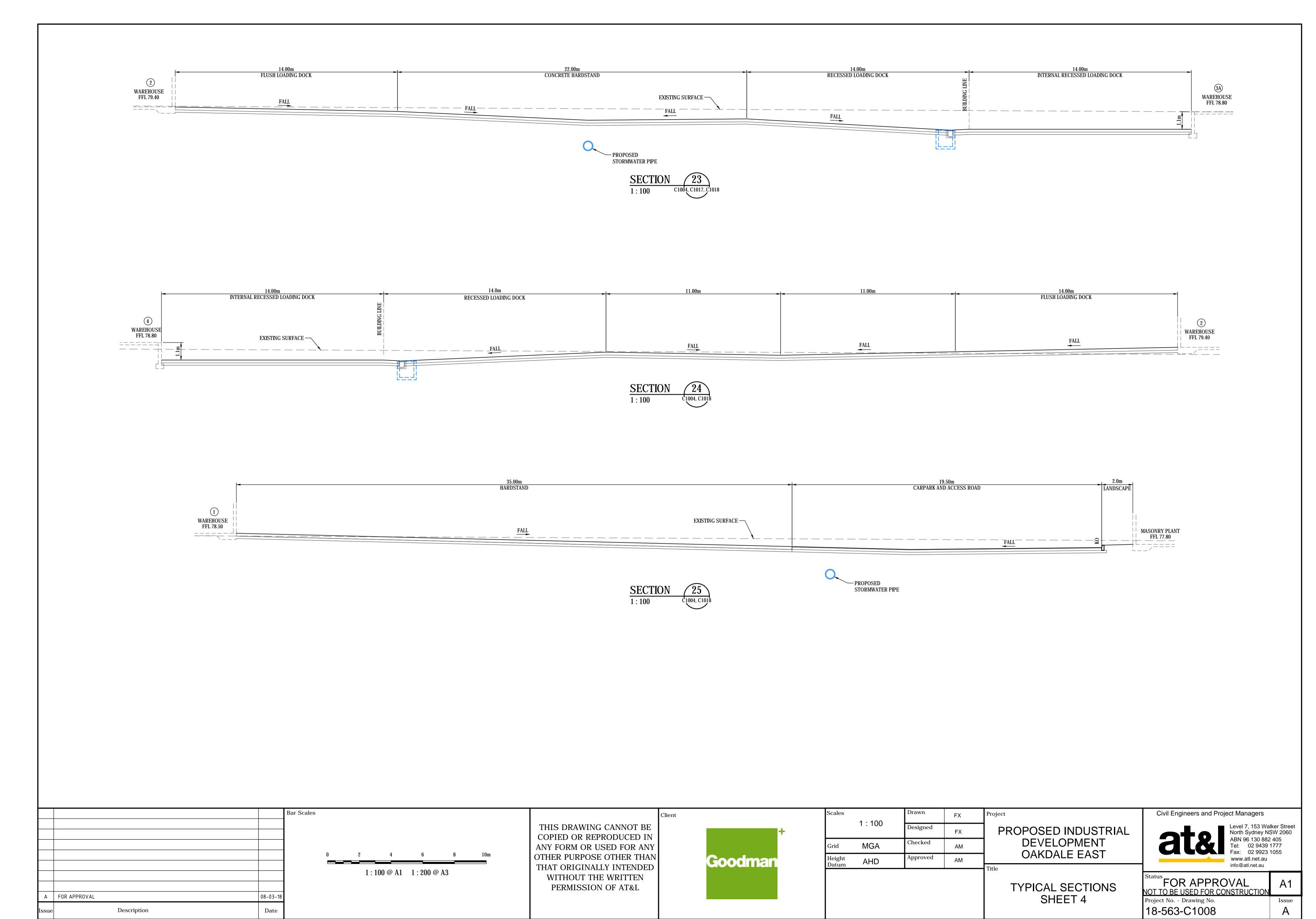
FOR APPROVAL Α1 NOT TO BE USED FOR CONSTRUCTION Project No. - Drawing No. Issue 18-563-C1003

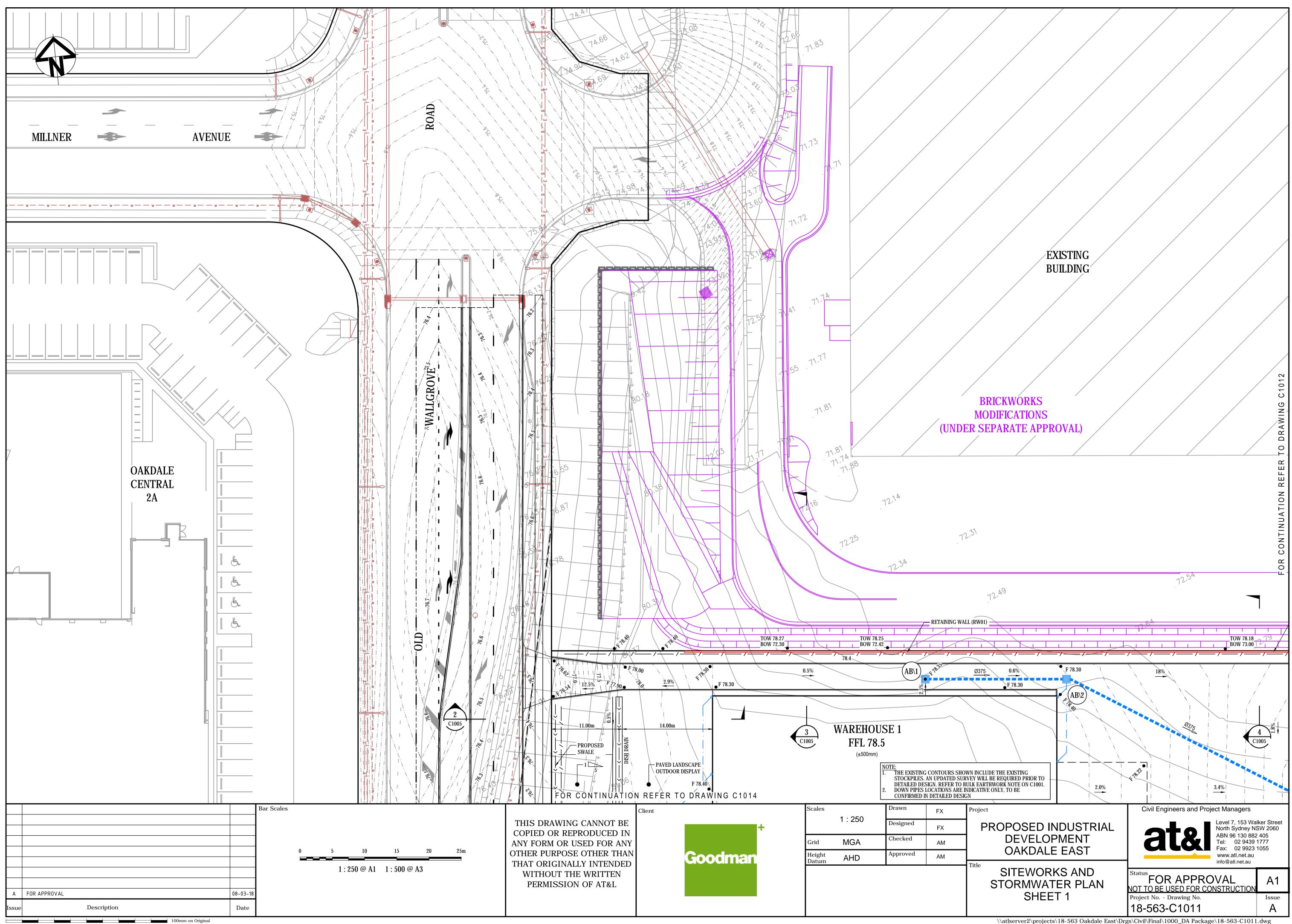


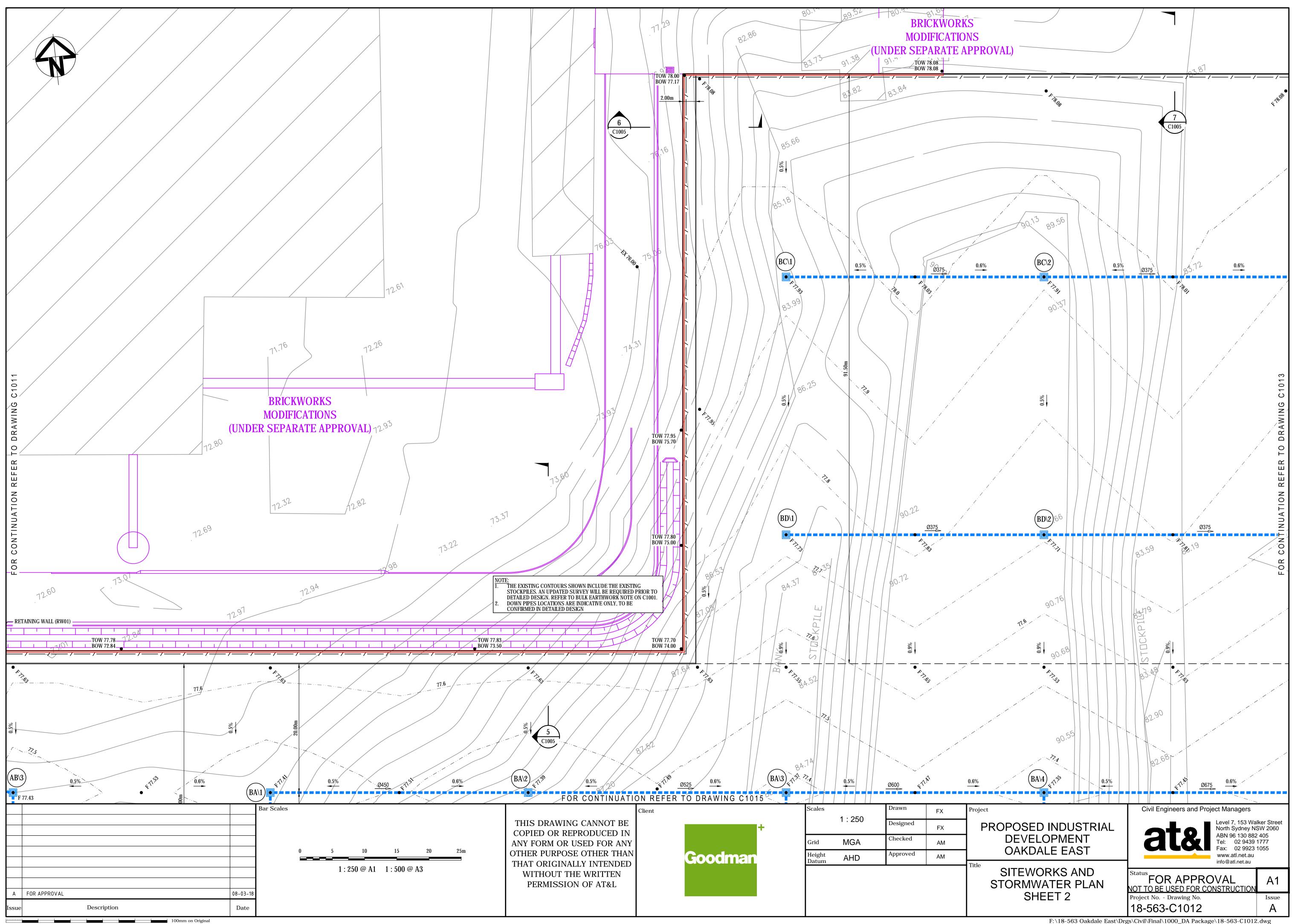


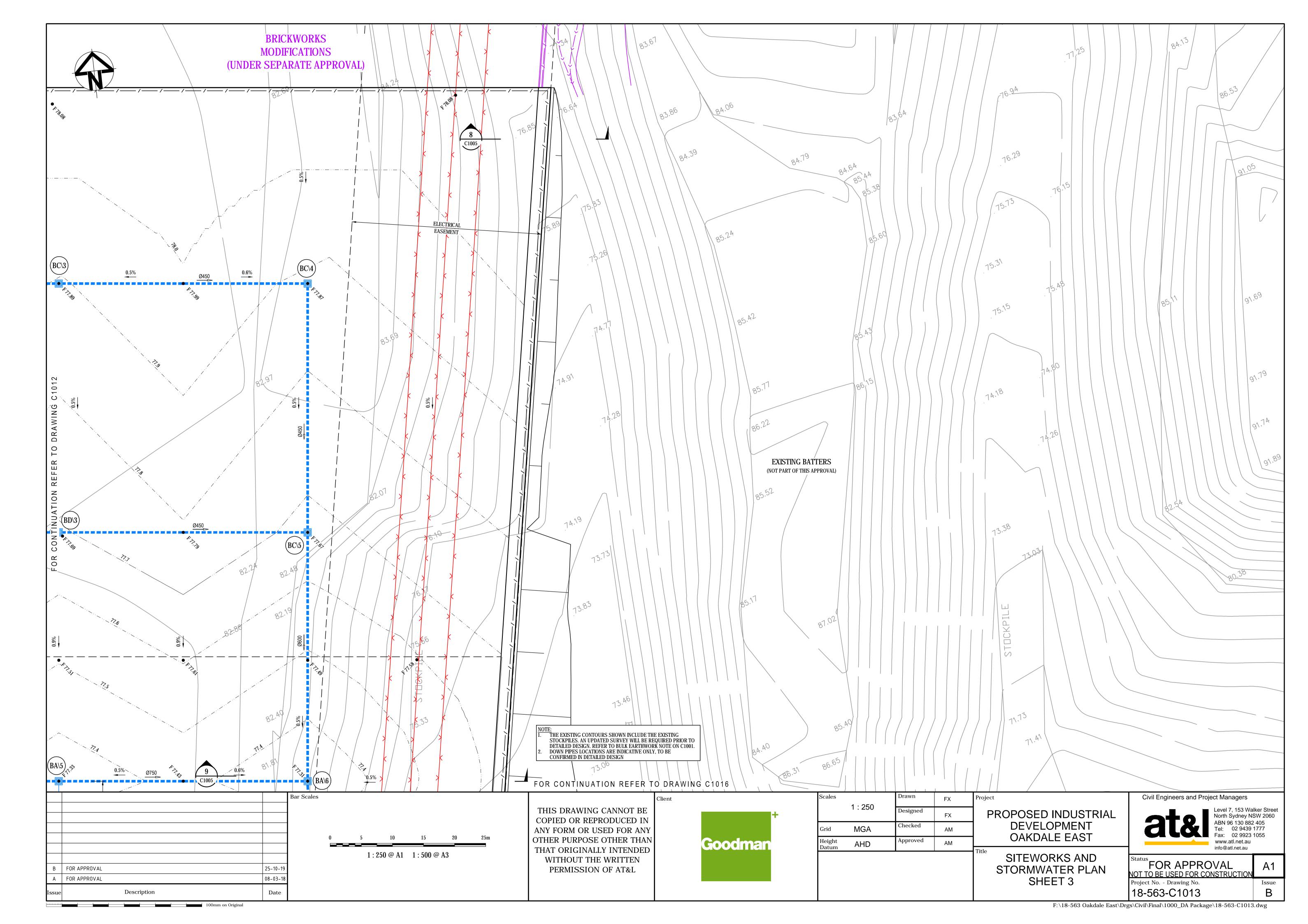


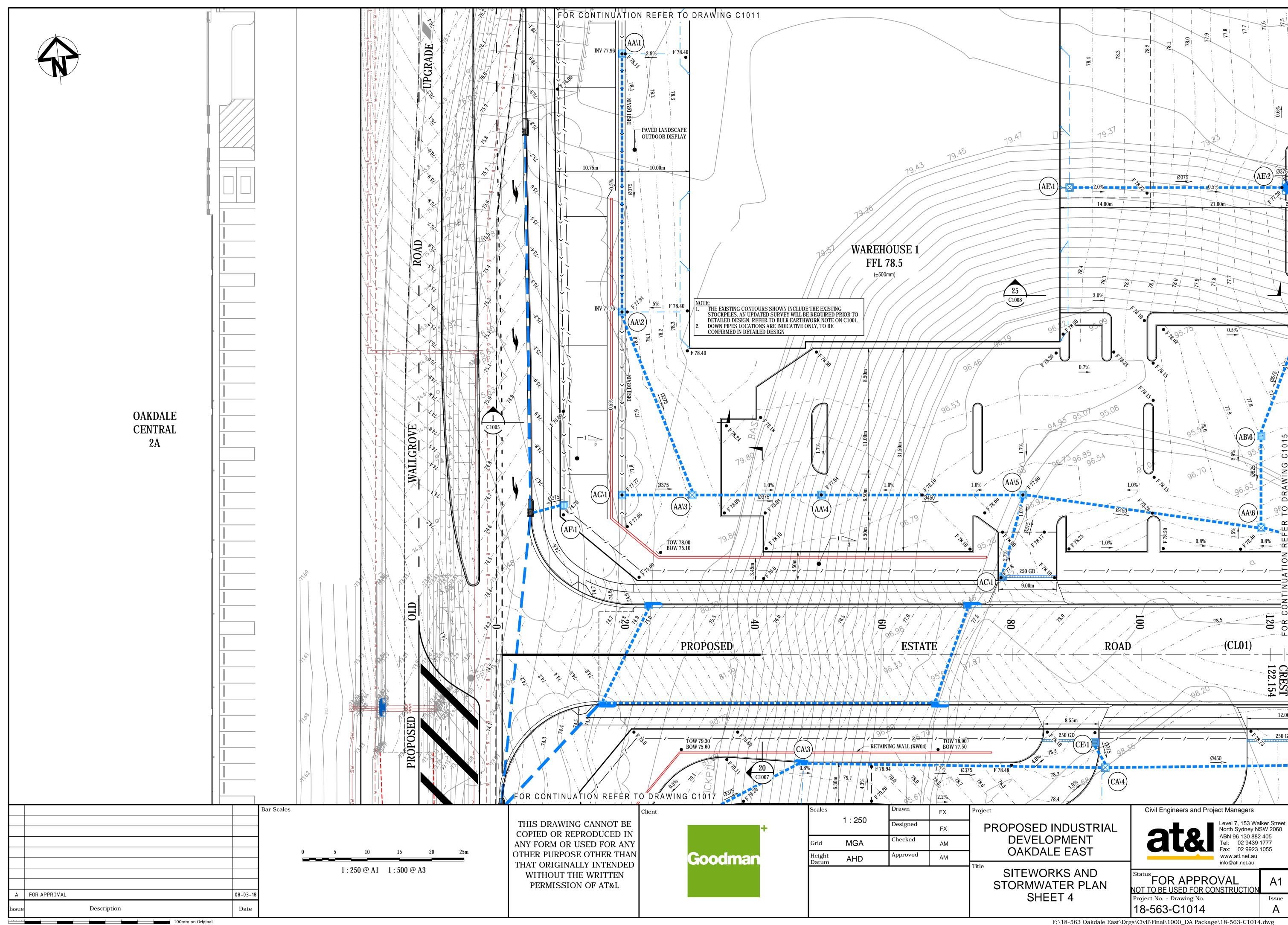


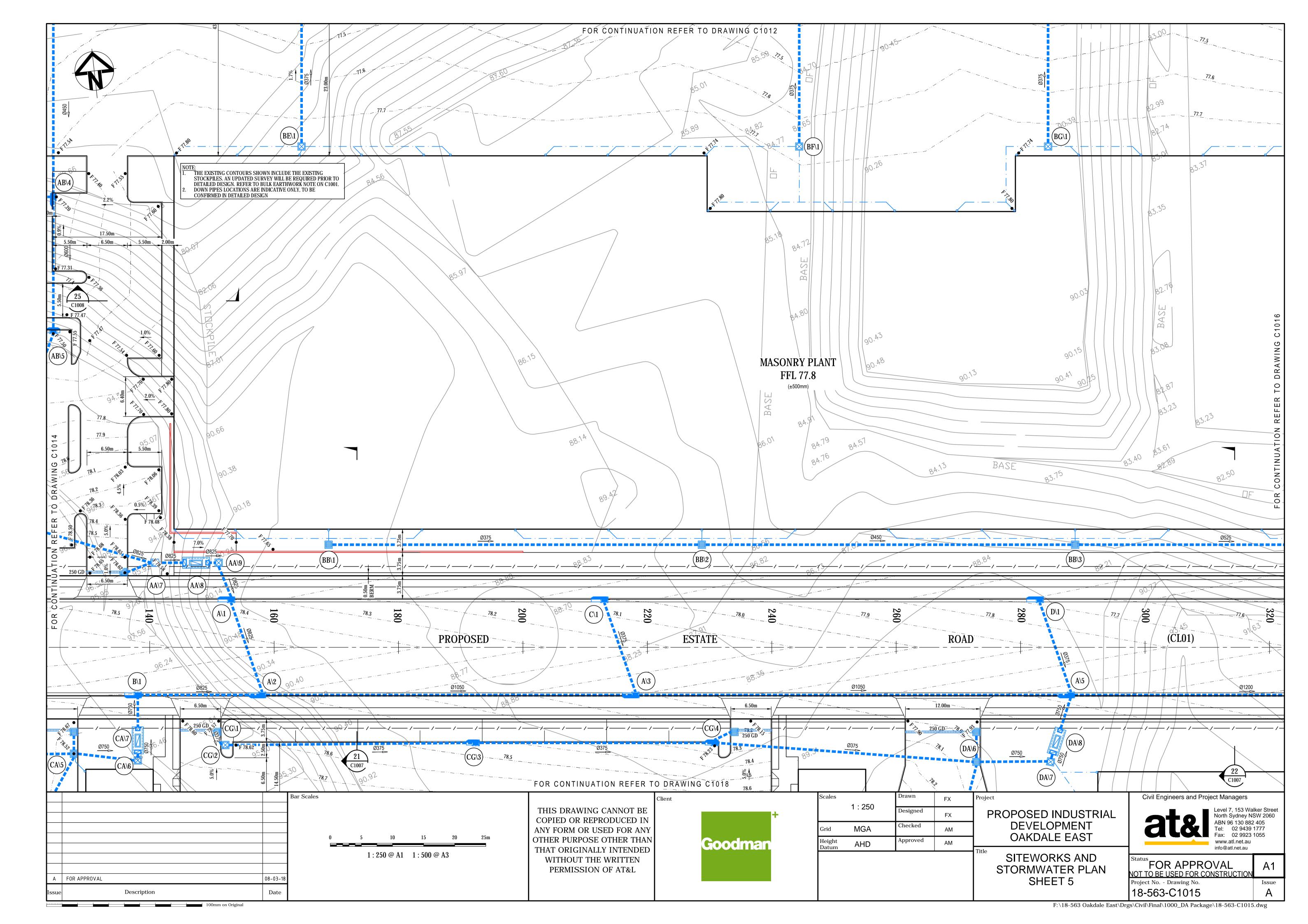


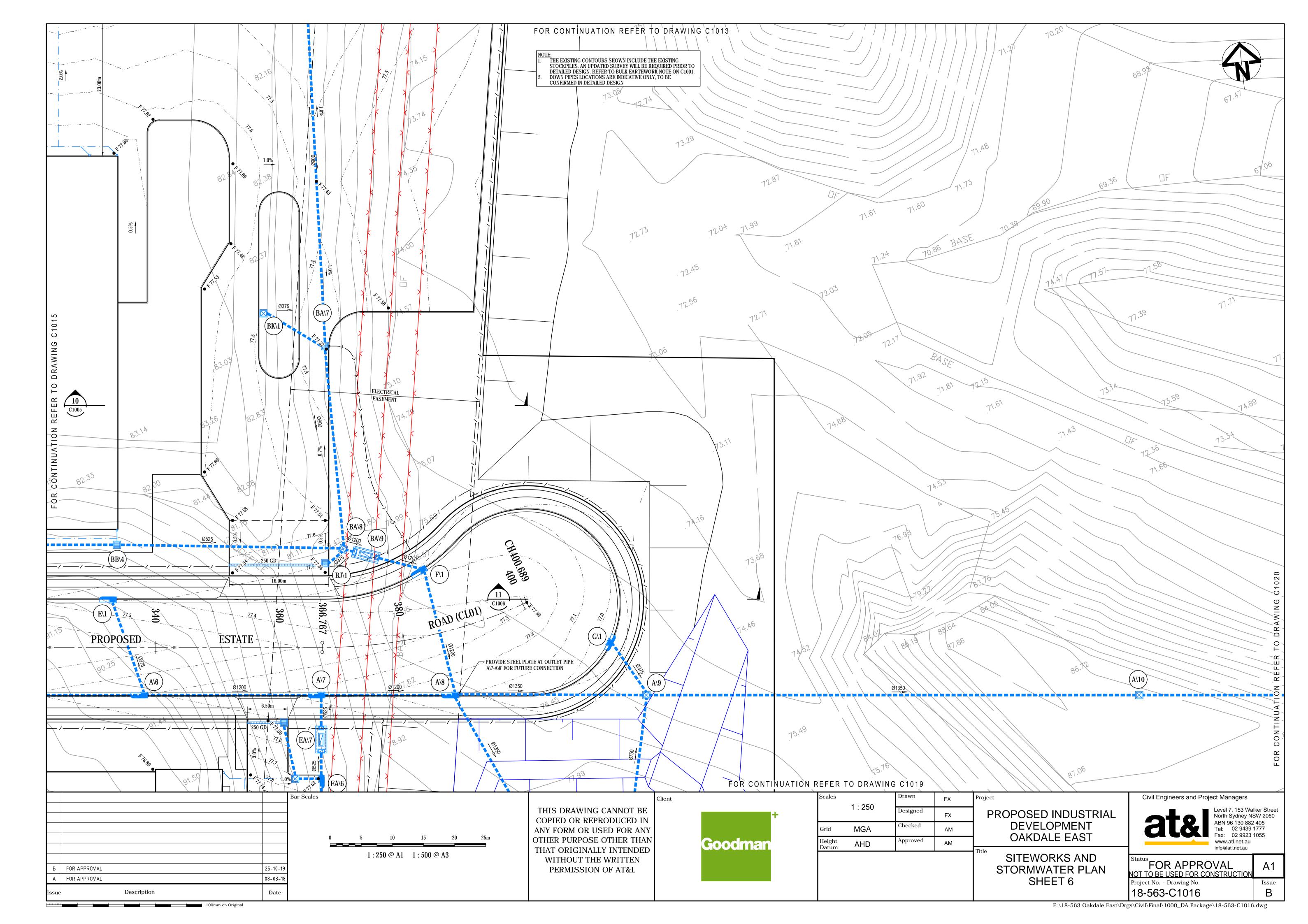


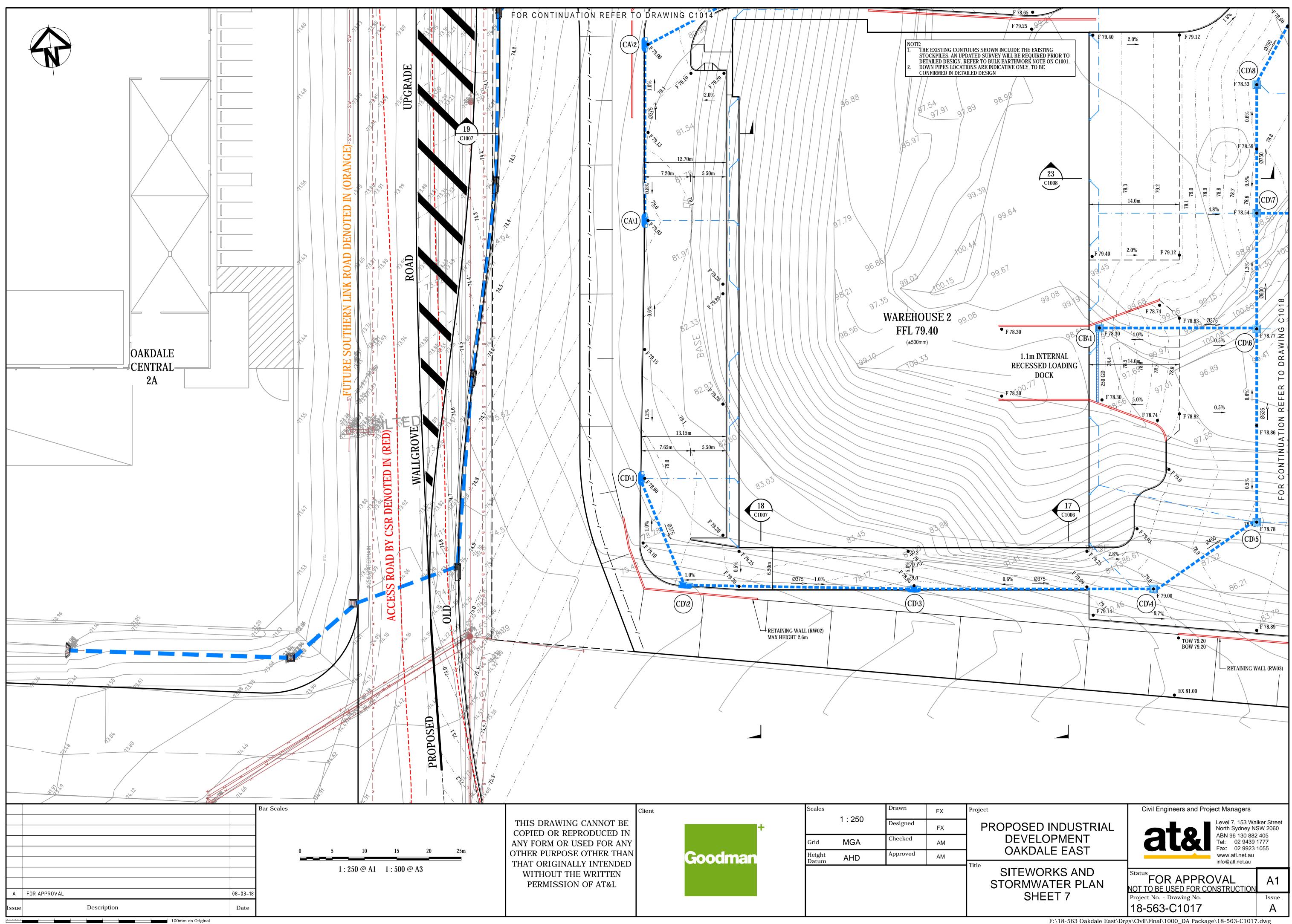


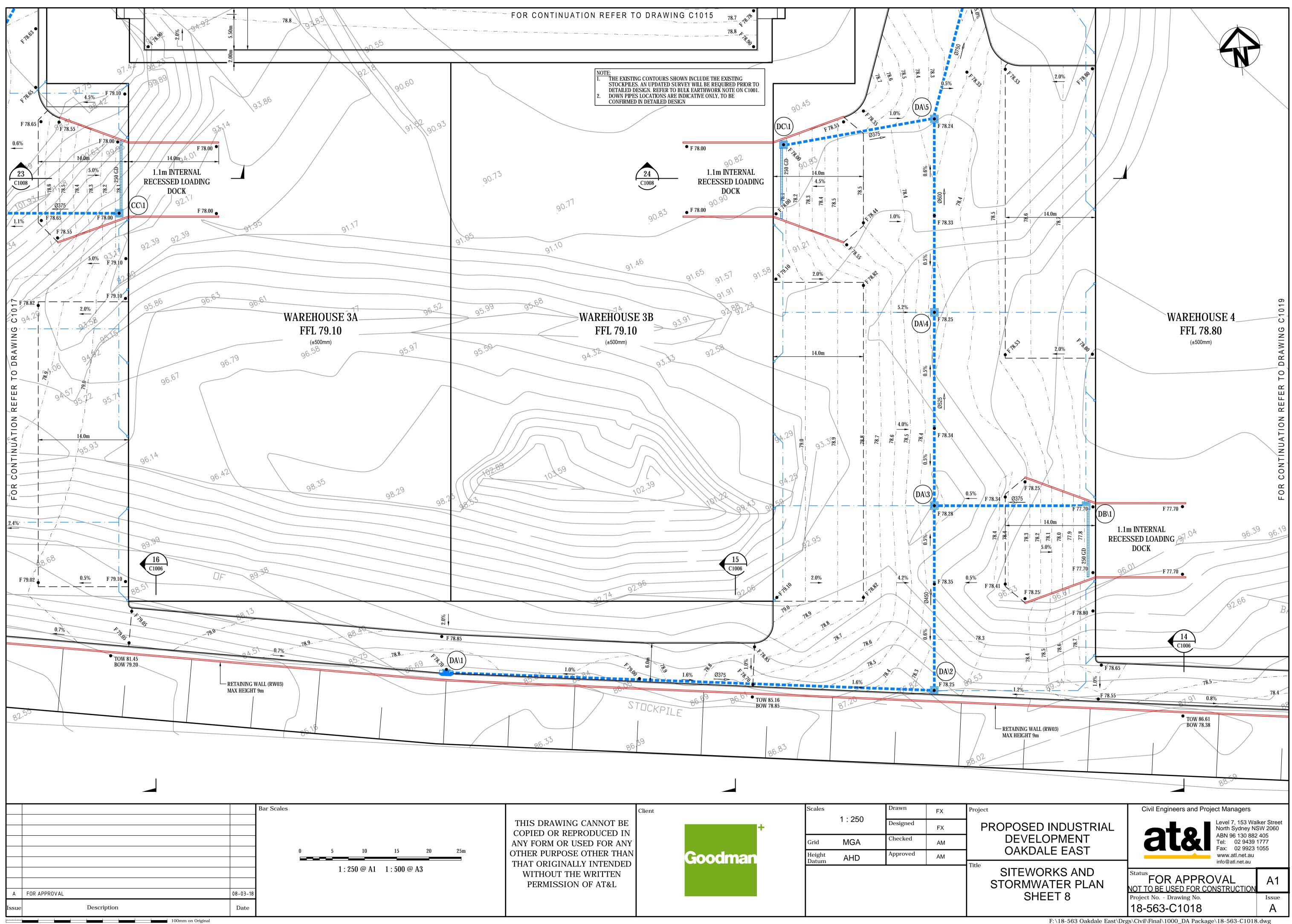


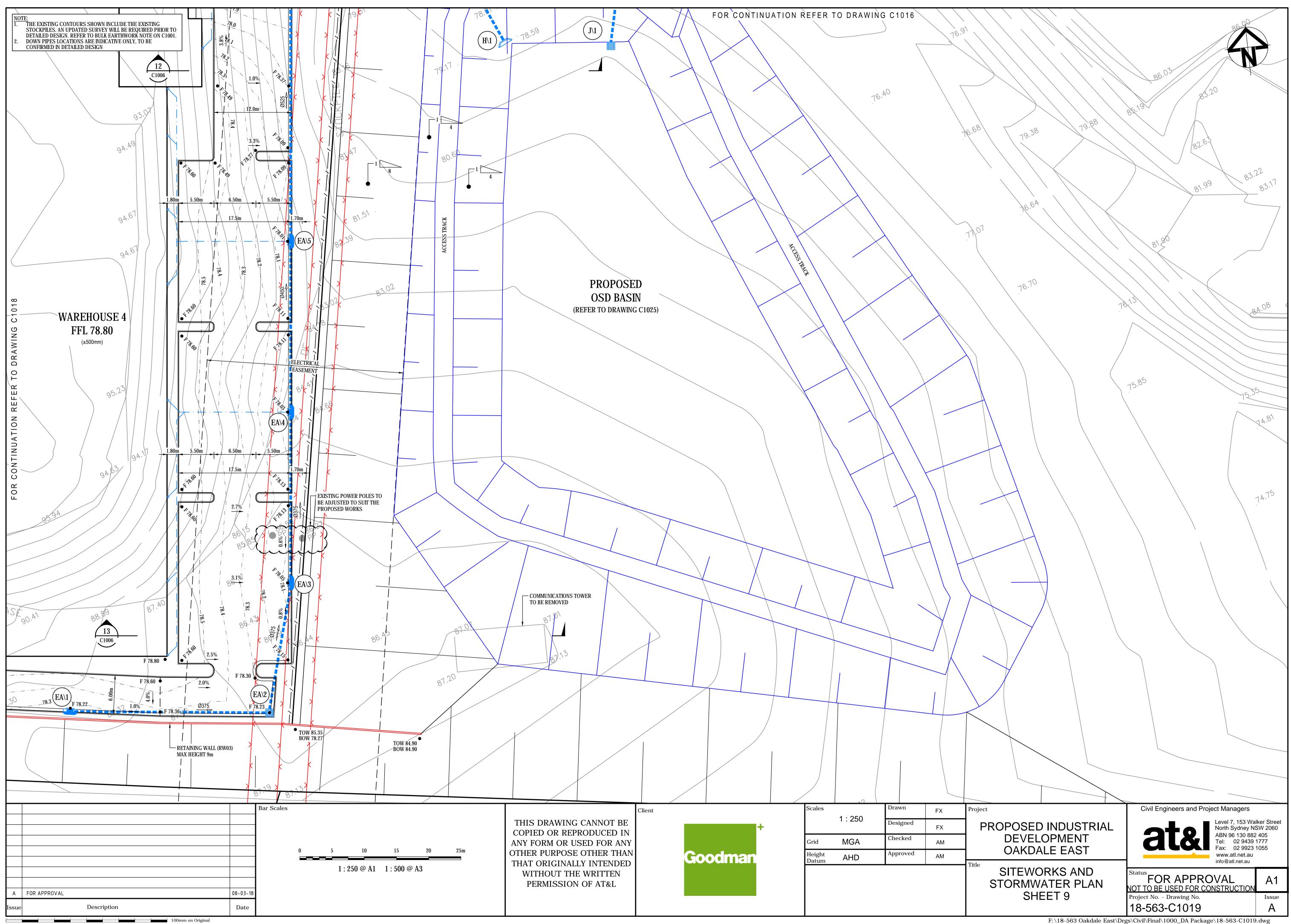


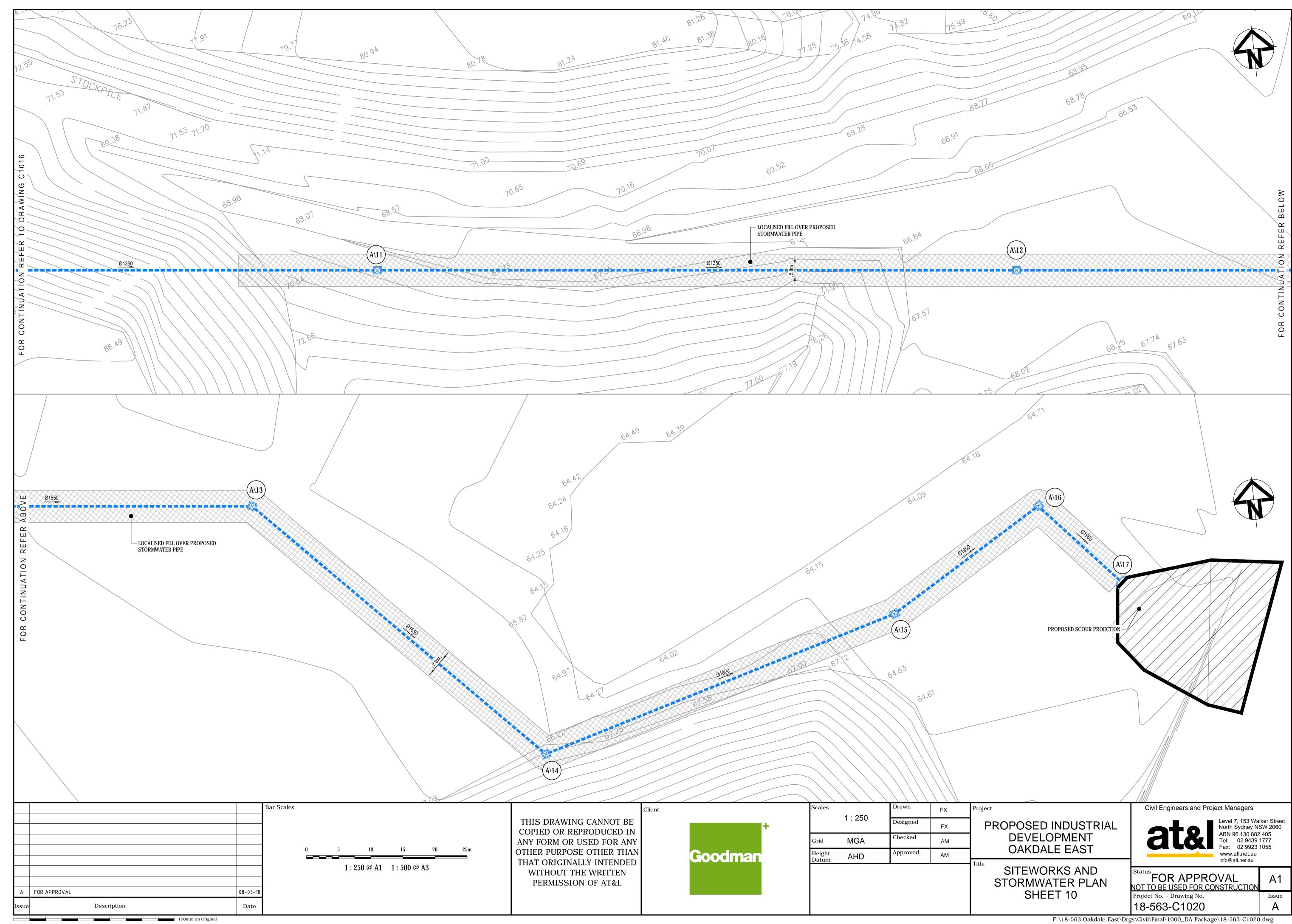


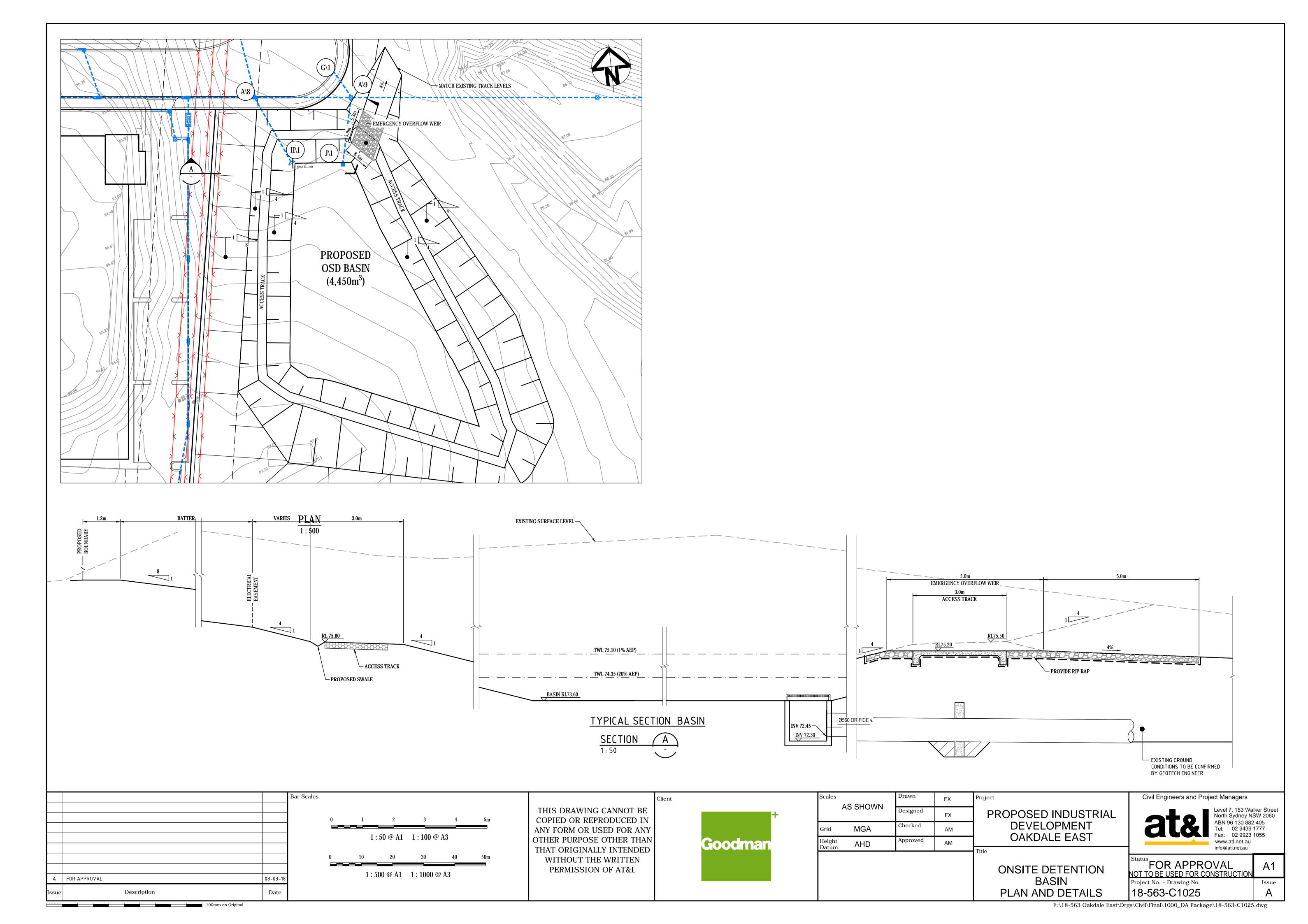


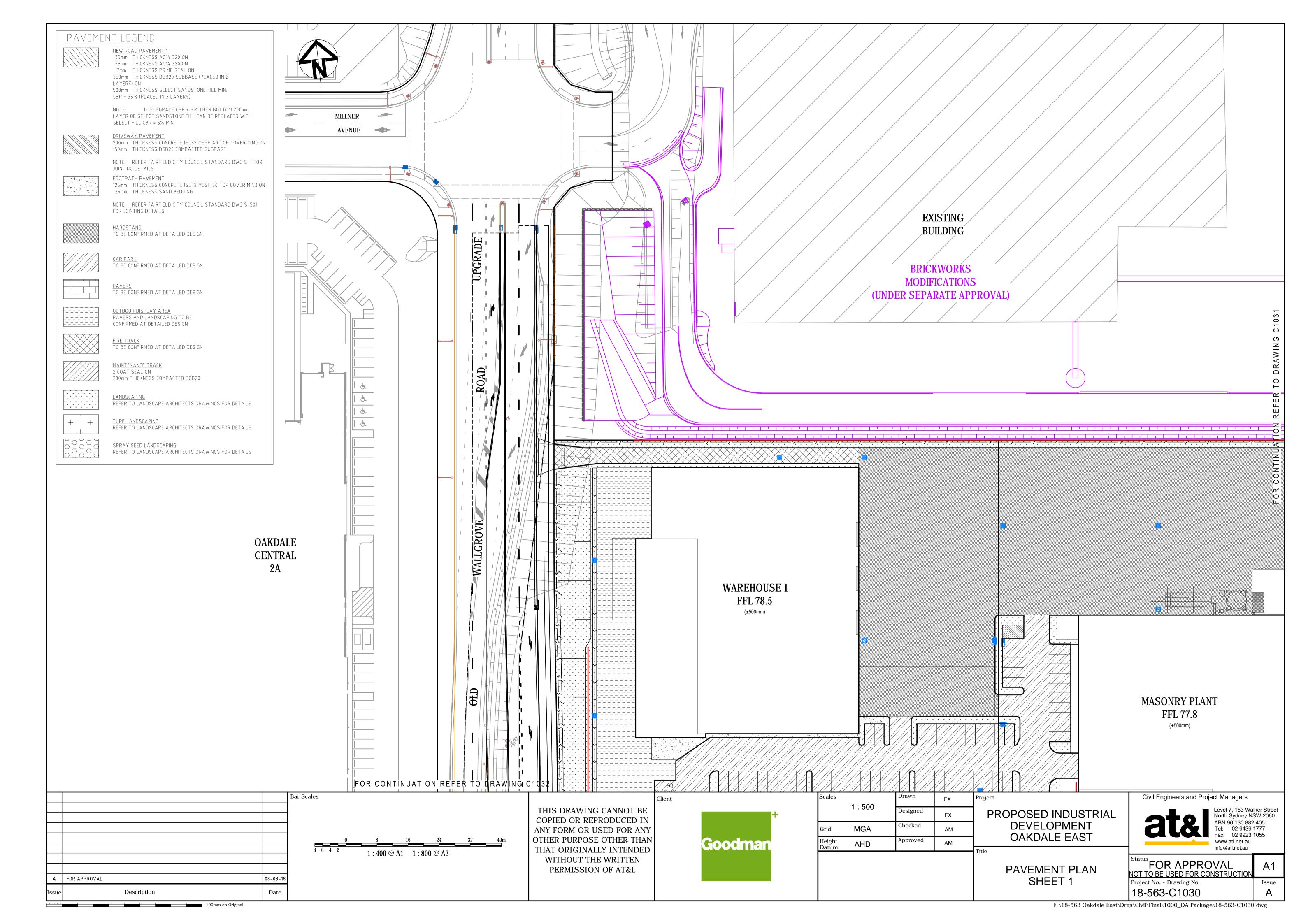


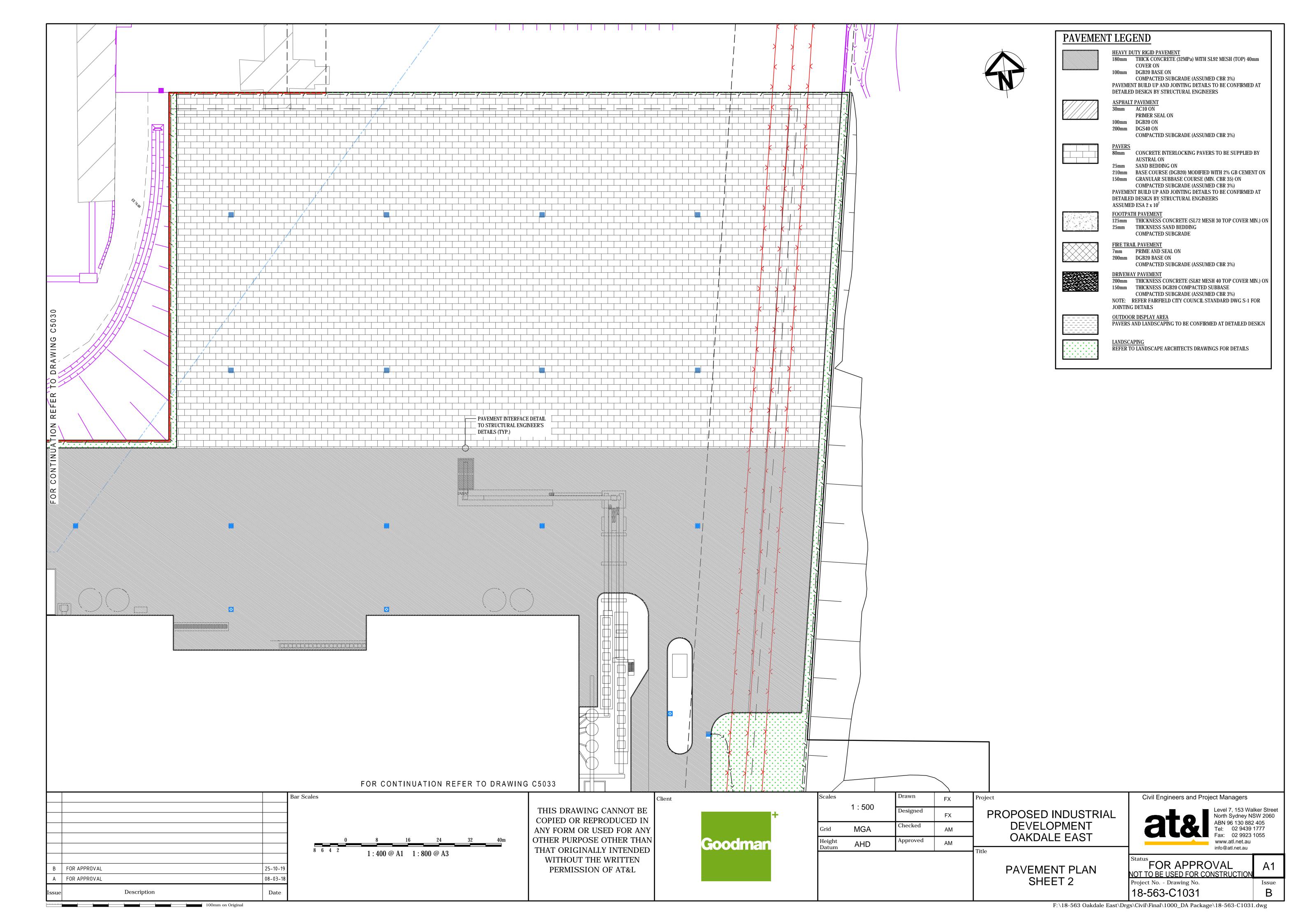


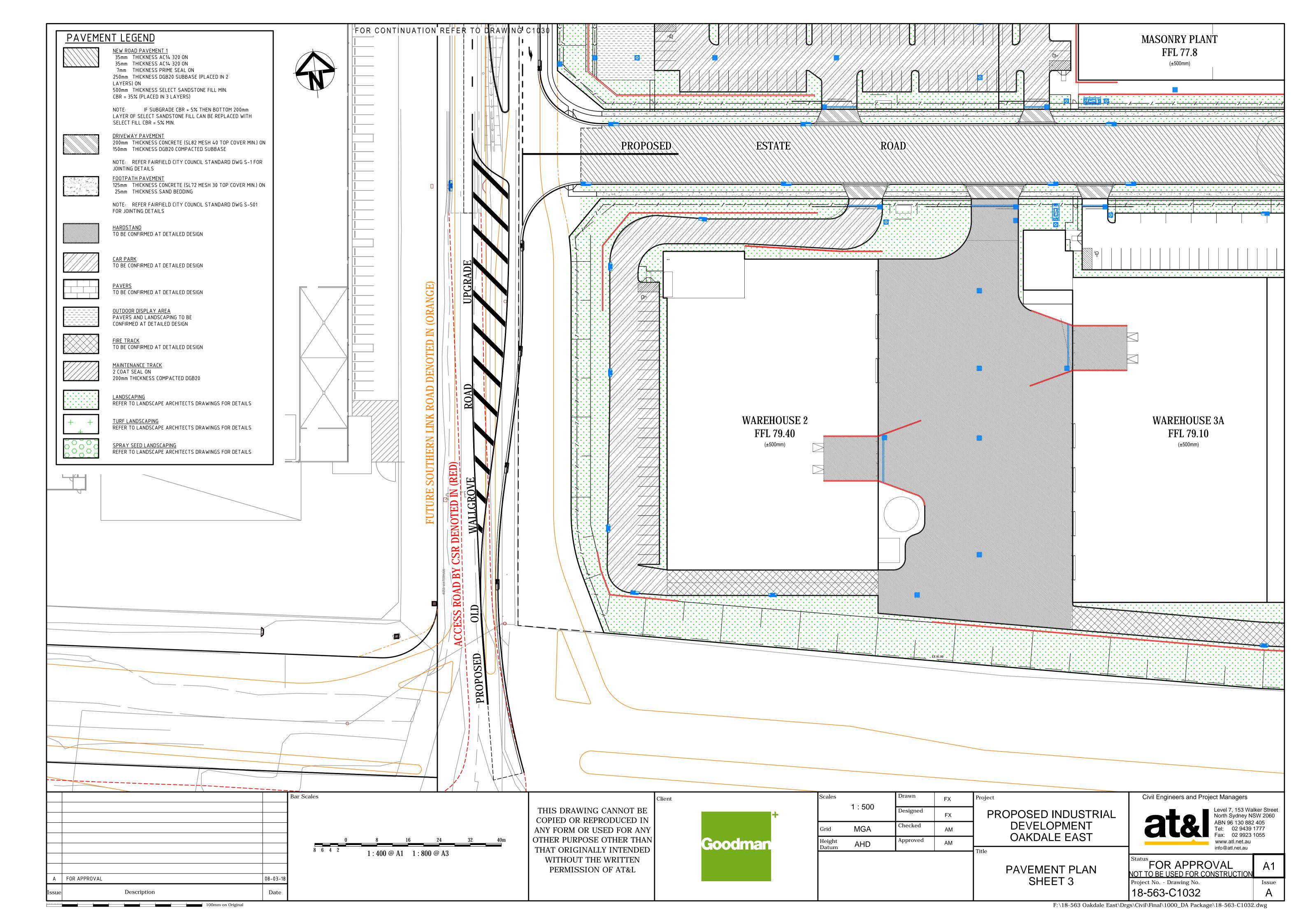


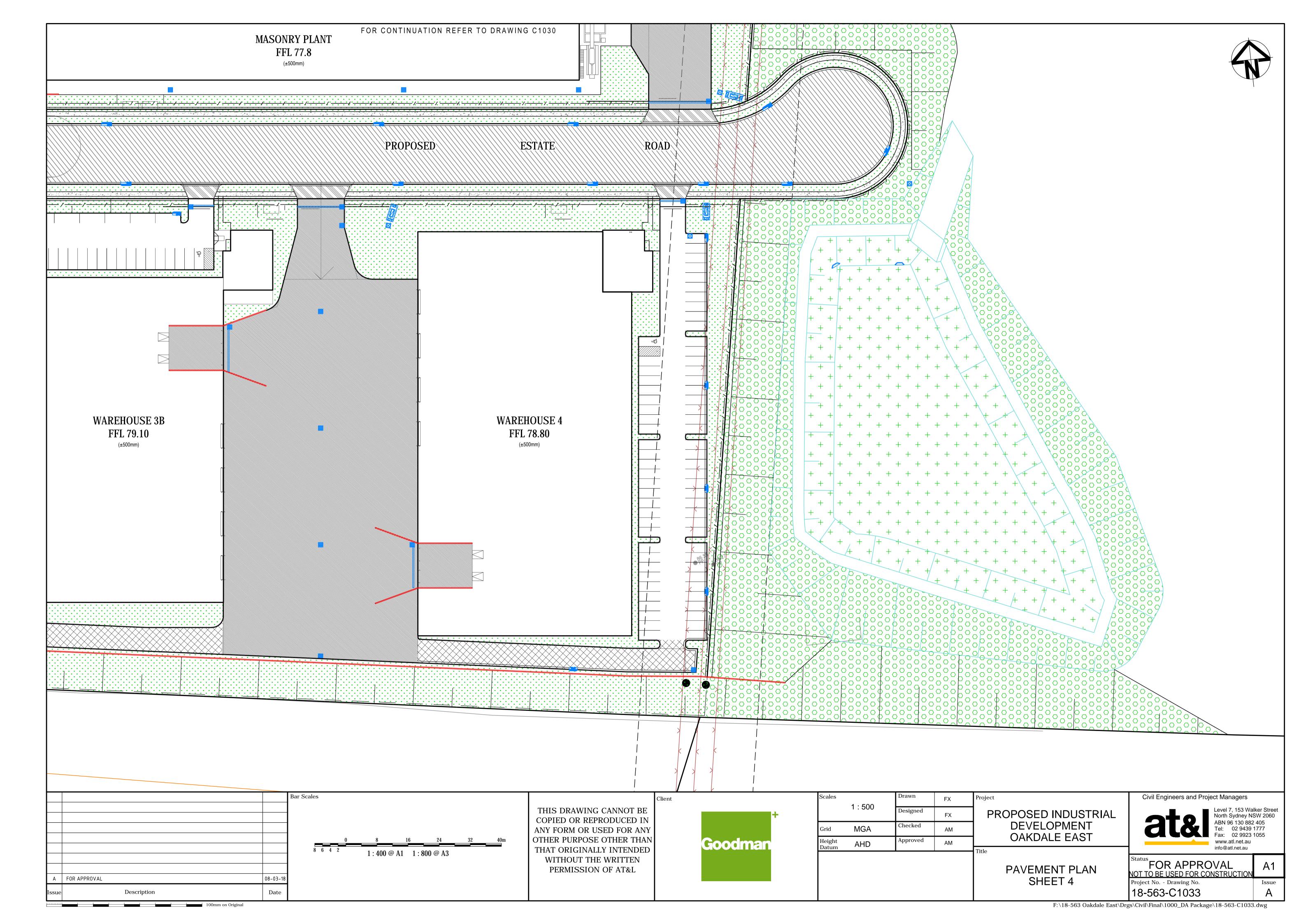


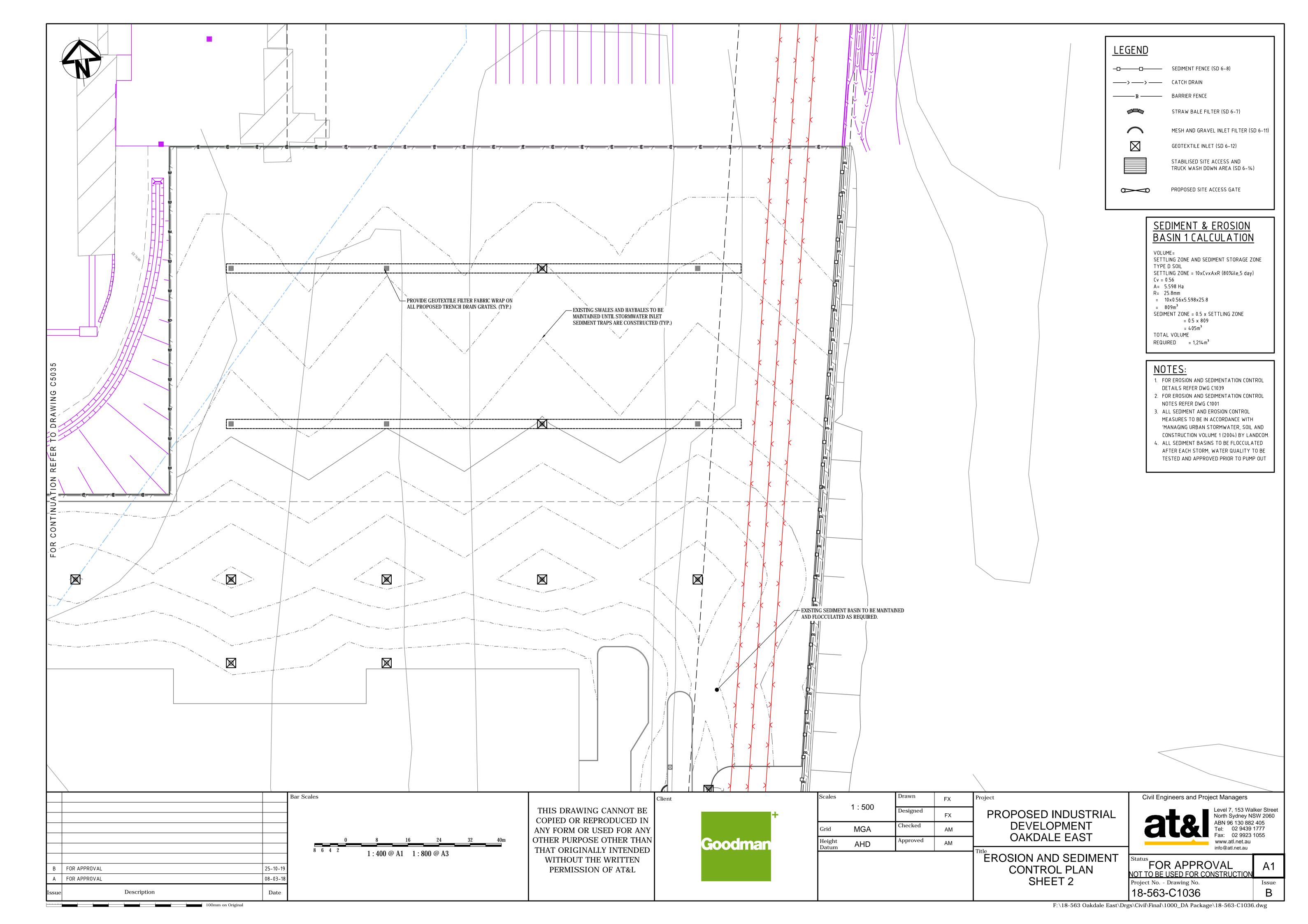


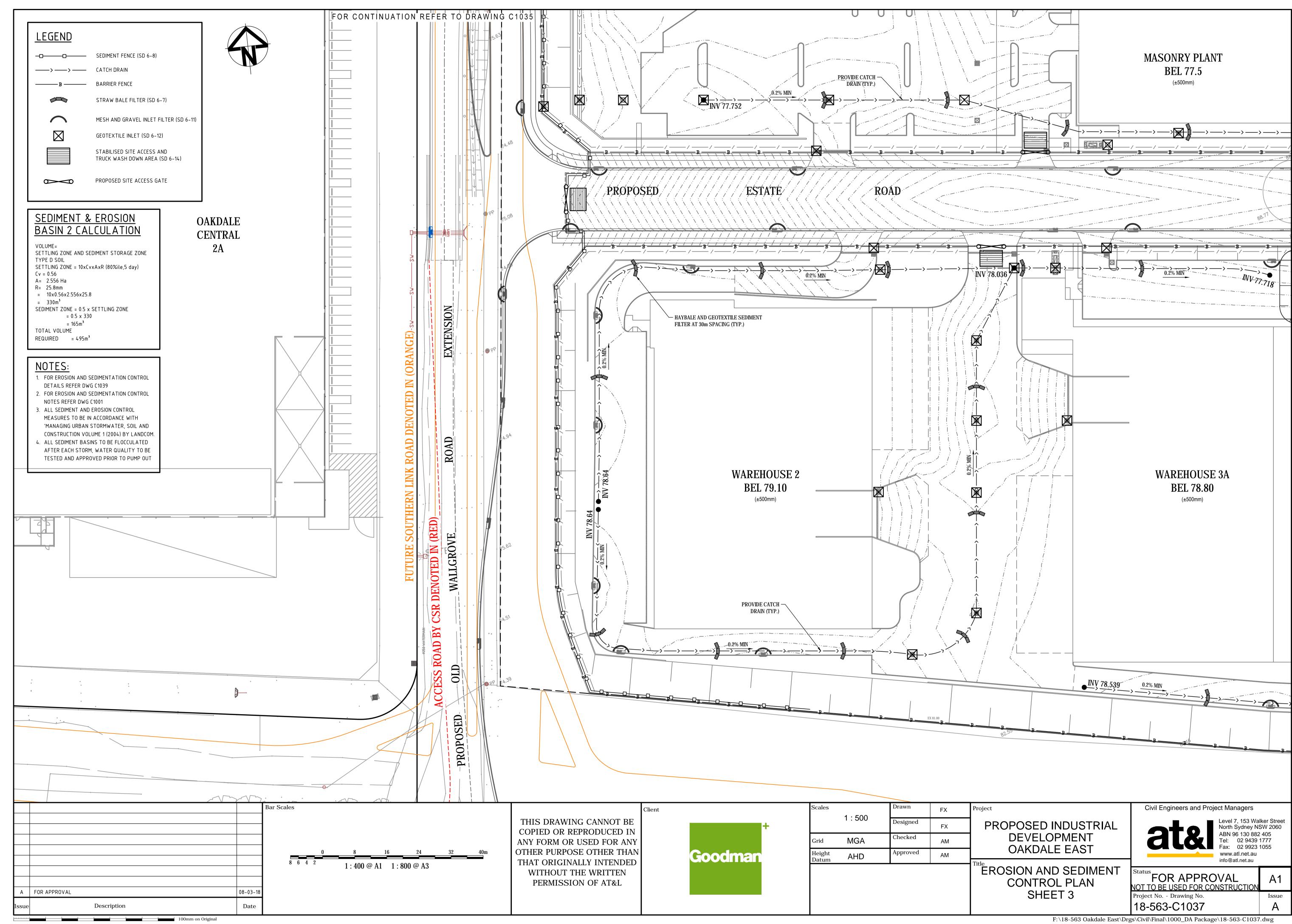


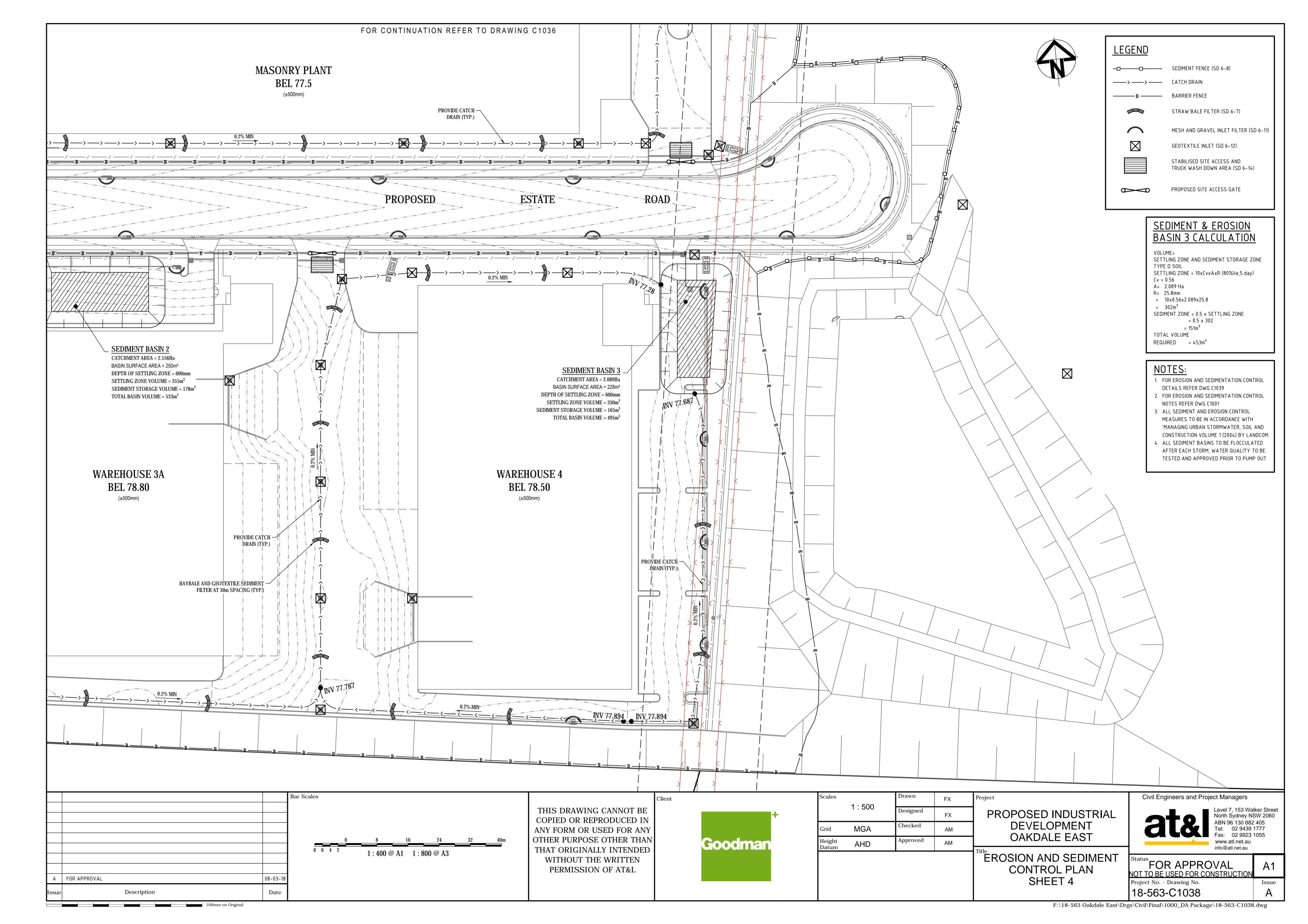


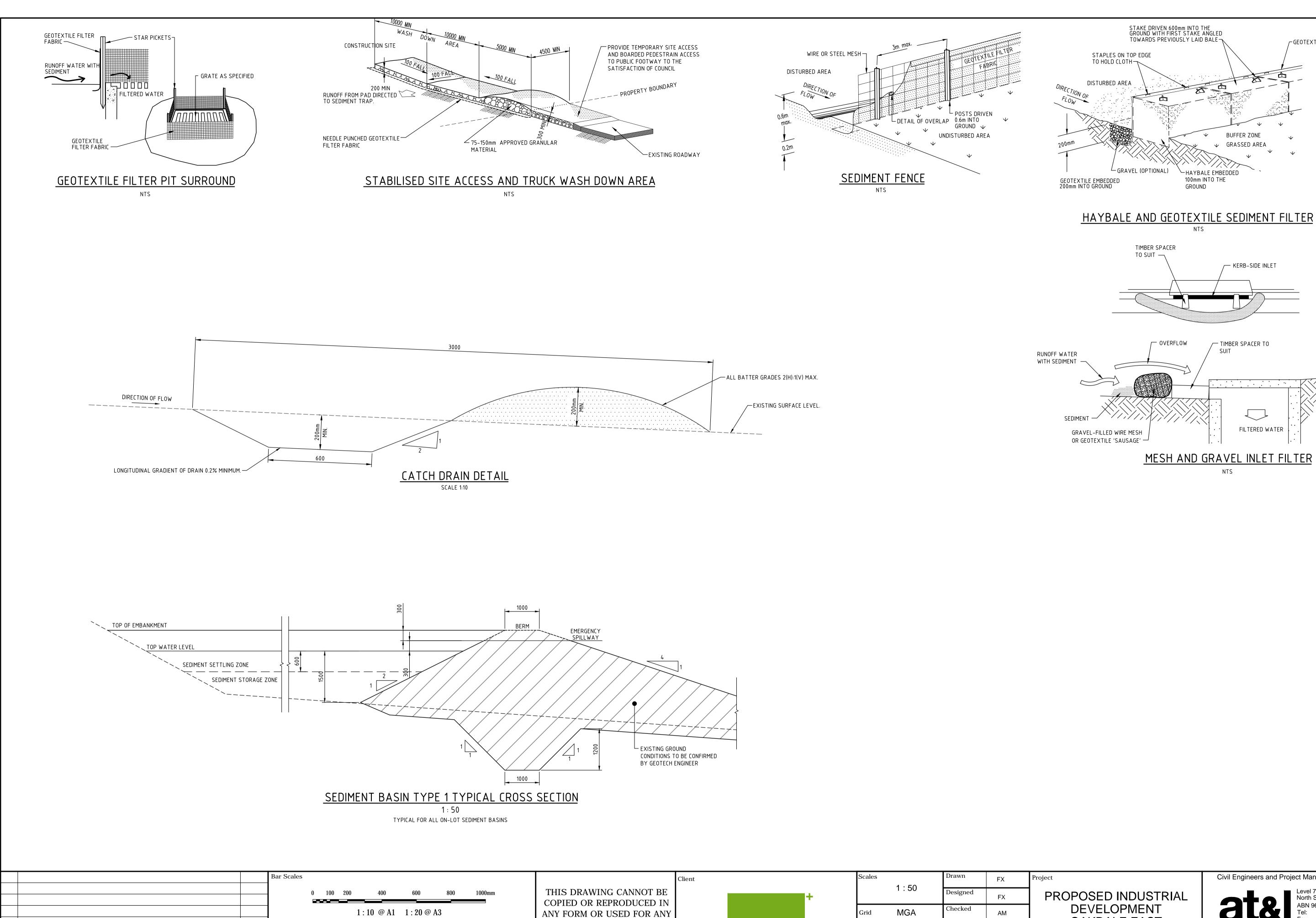












OTHER PURPOSE OTHER THAN

THAT ORIGINALLY INTENDED WITHOUT THE WRITTEN

PERMISSION OF AT&L

1:50 @ A1 1:100 @ A3

08-03-18

Date

FOR APPROVAL

Description

Goodman

Approved

AHD

AM



Civil Engineers and Project Managers

Level 7, 153 Walker Street North Sydney NSW 2060

GEOTEXTILE FILTER FABRIC

BUFFER ZONE

/ KERB-SIDE INLET

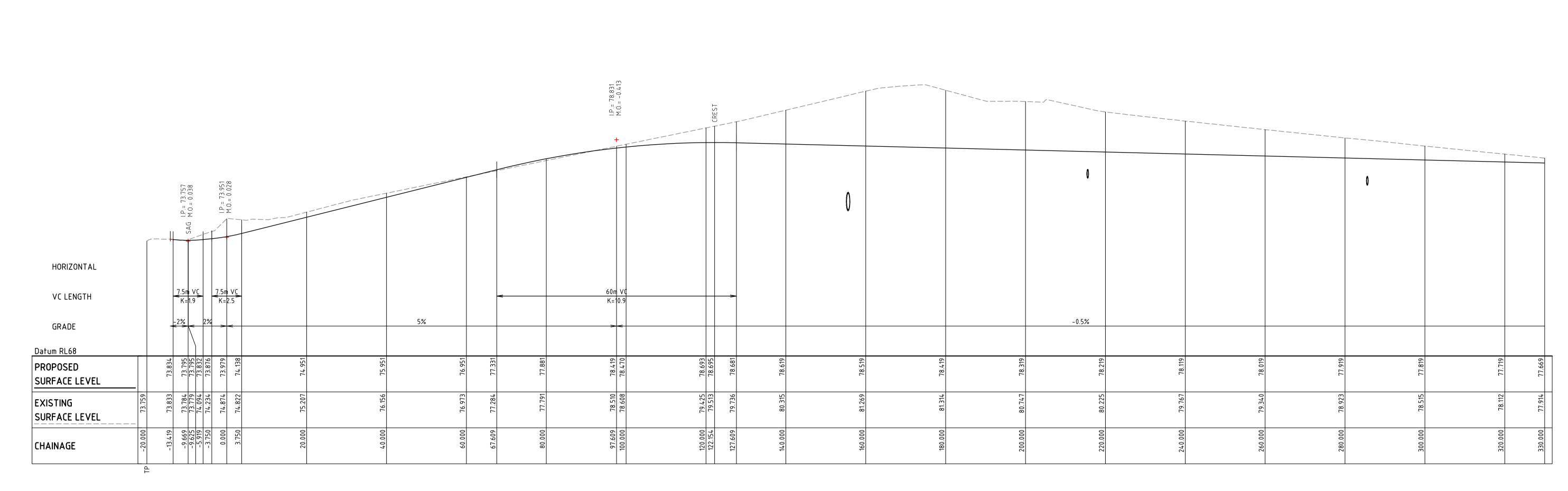
TIMBER SPACER TO

FILTERED WATER

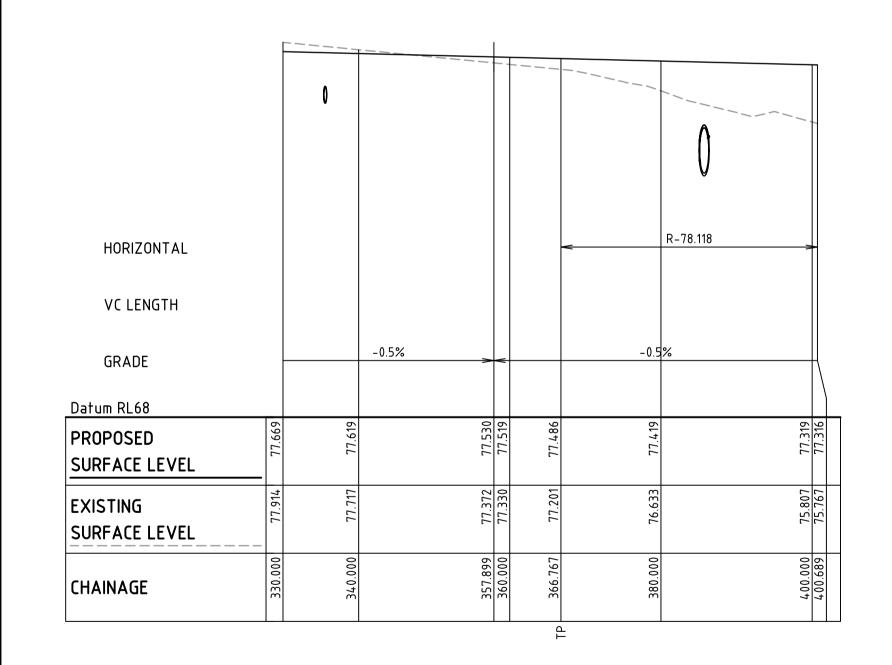
HAYBALE EMBEDDED

100mm INTO THE

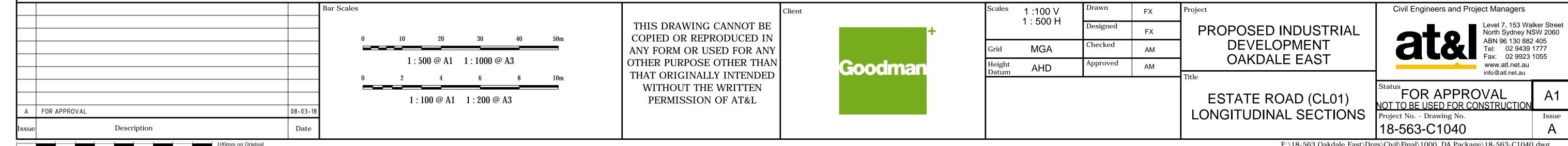
GROUND

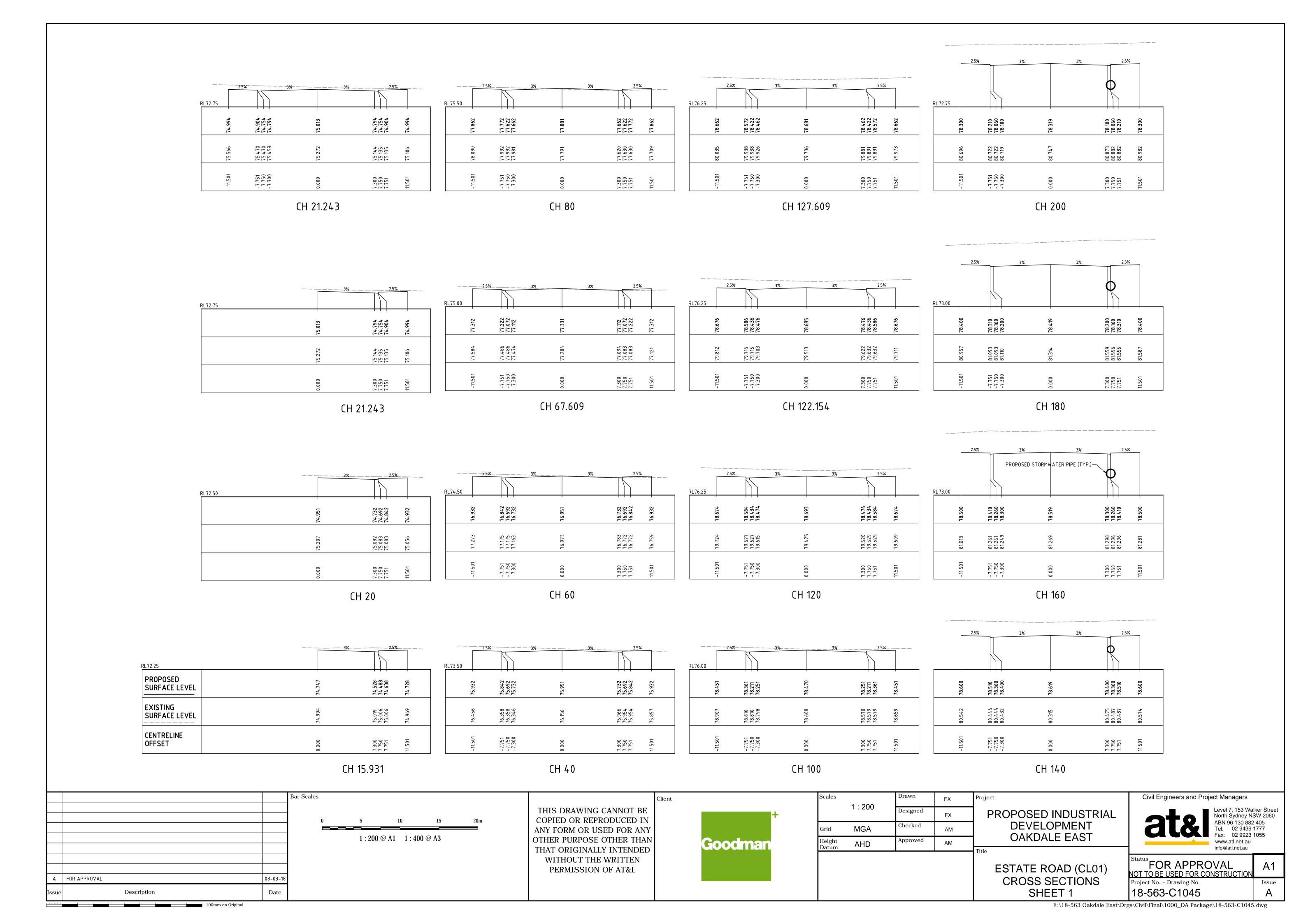


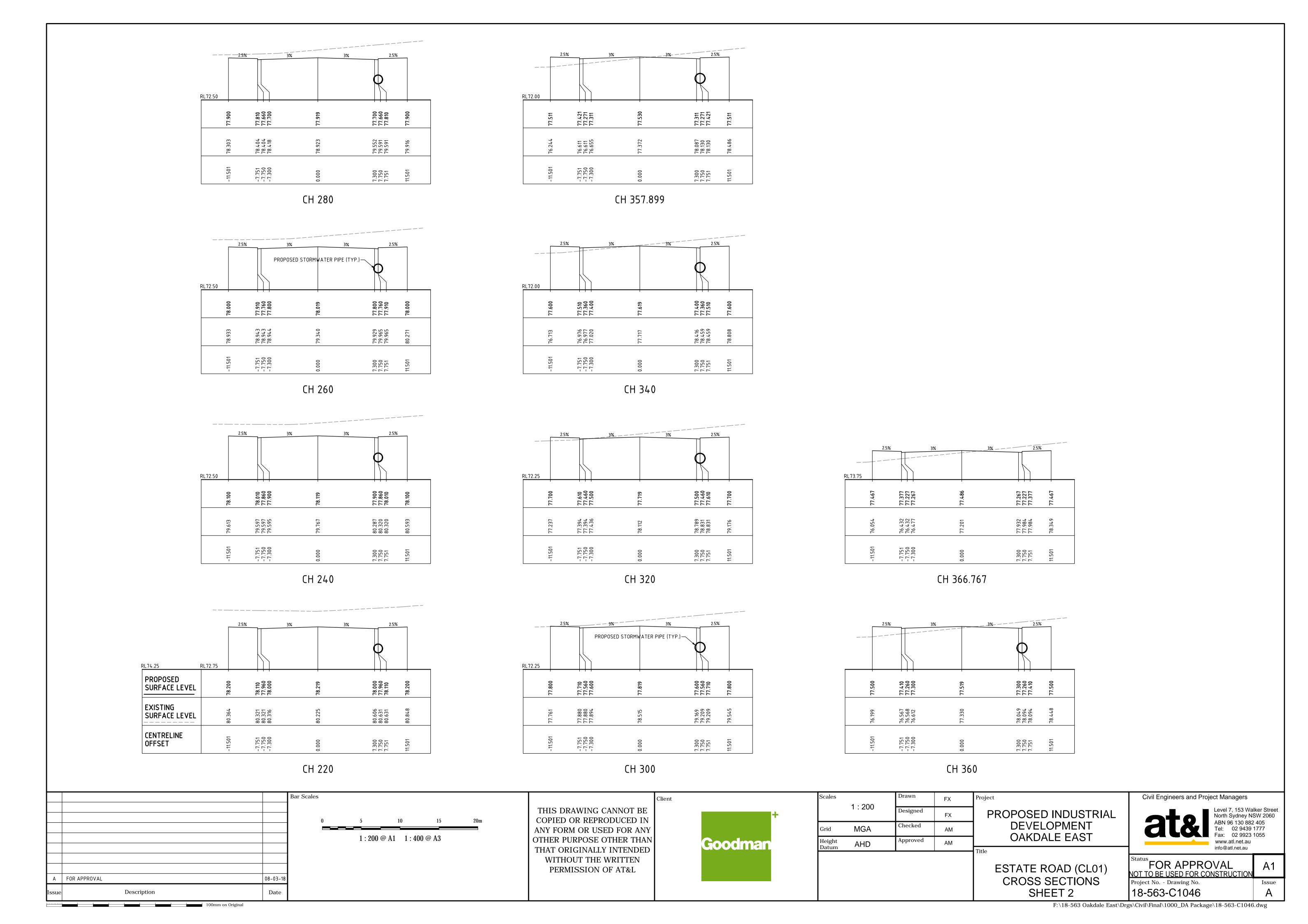
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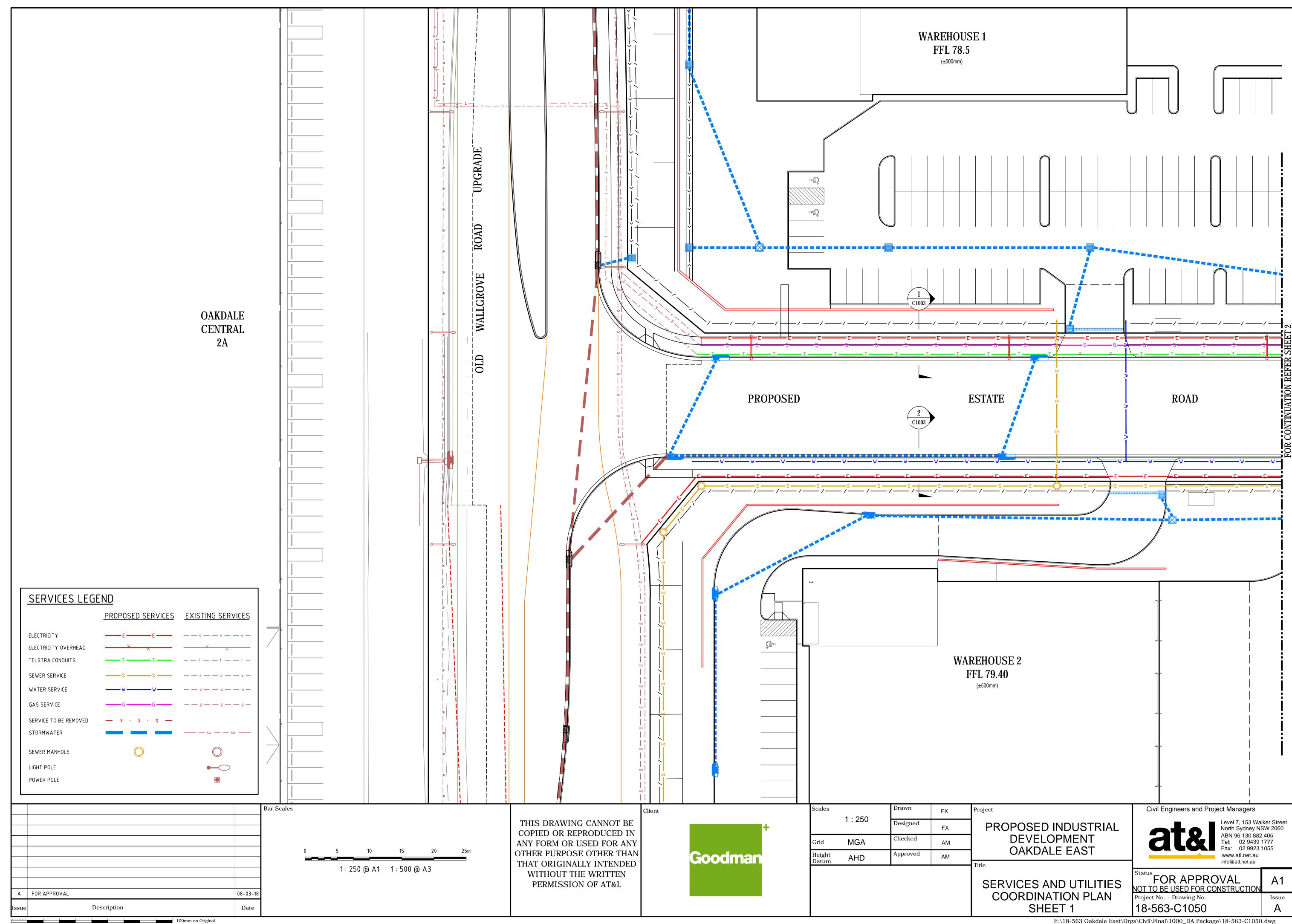


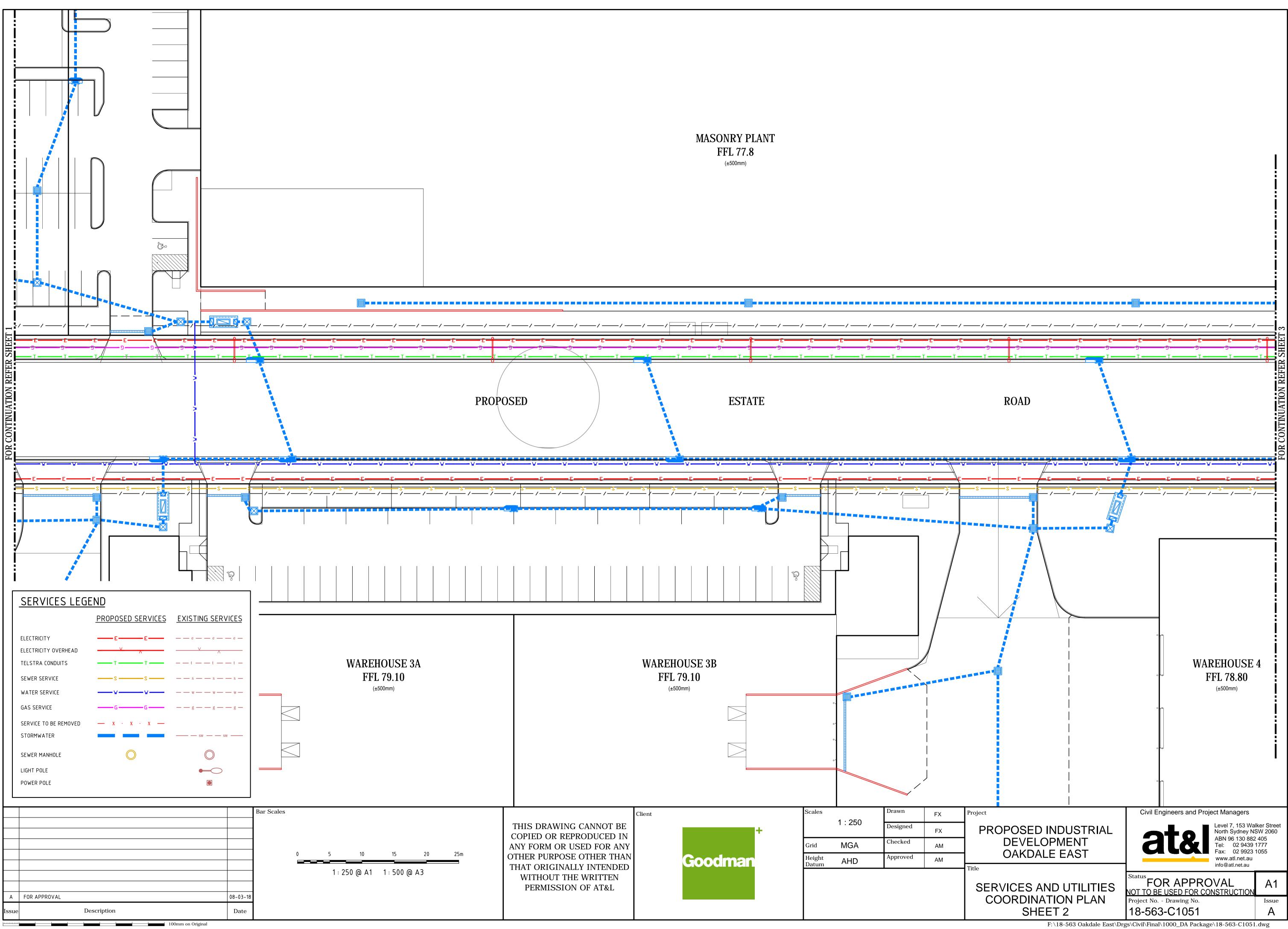
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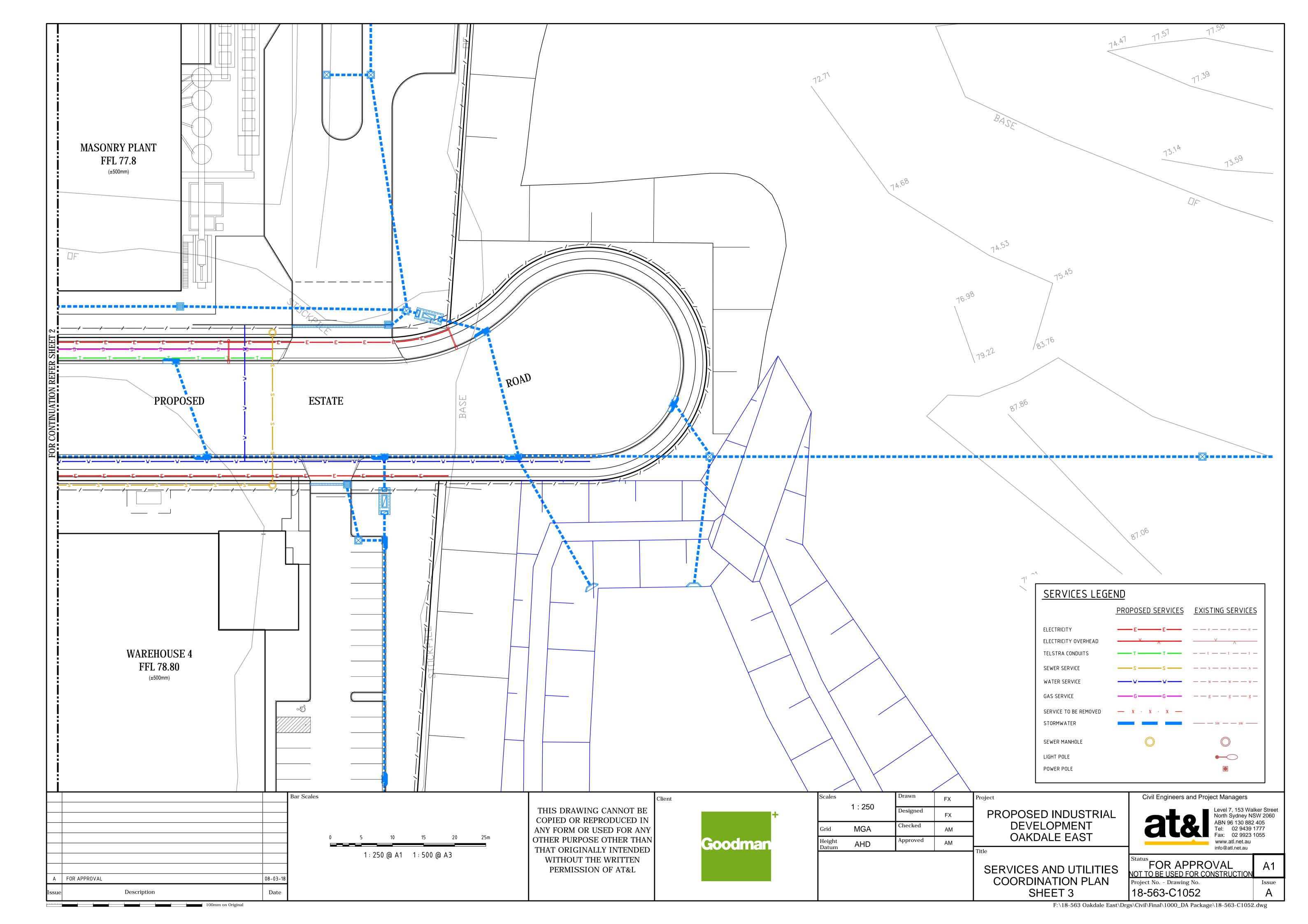


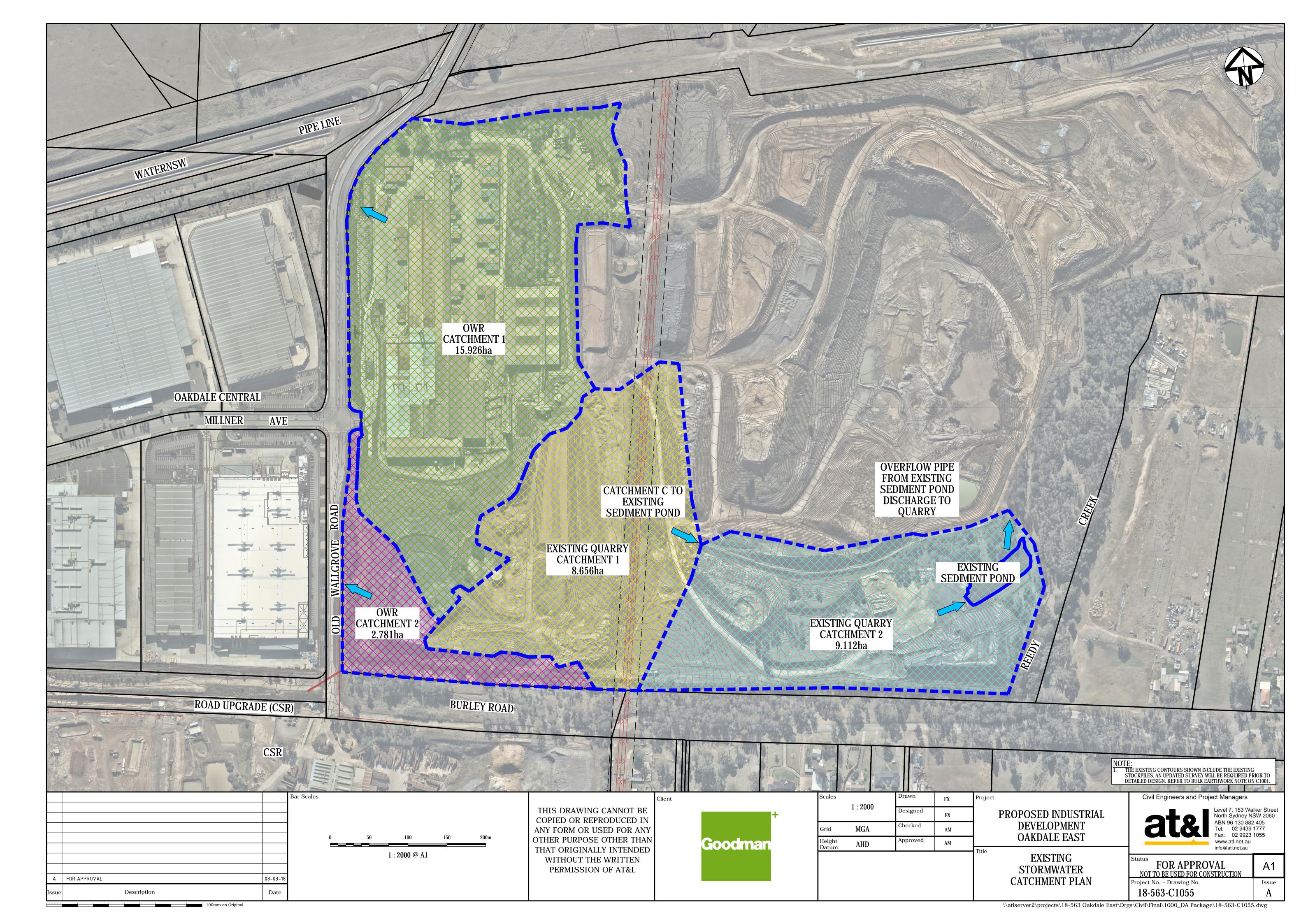


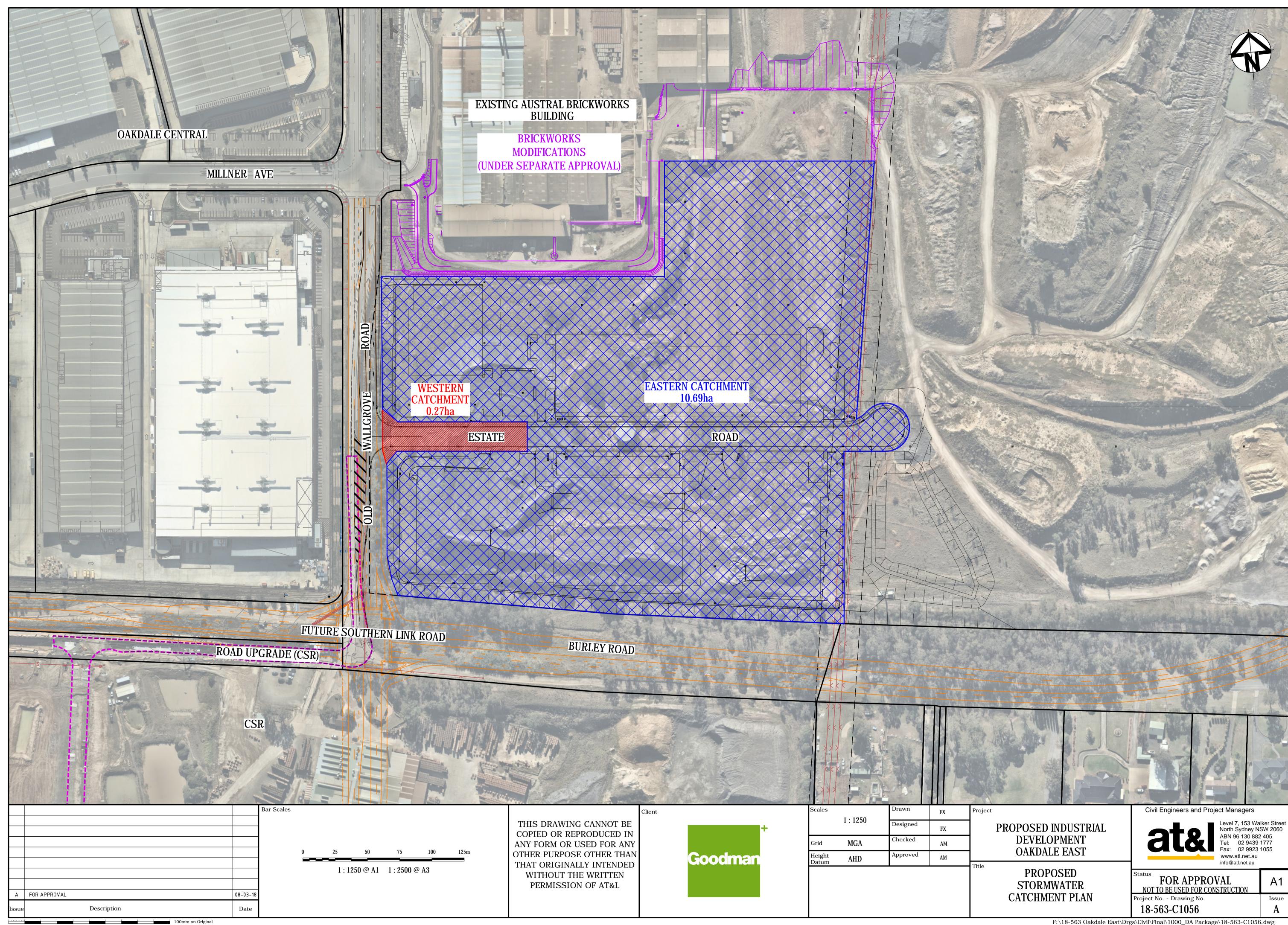


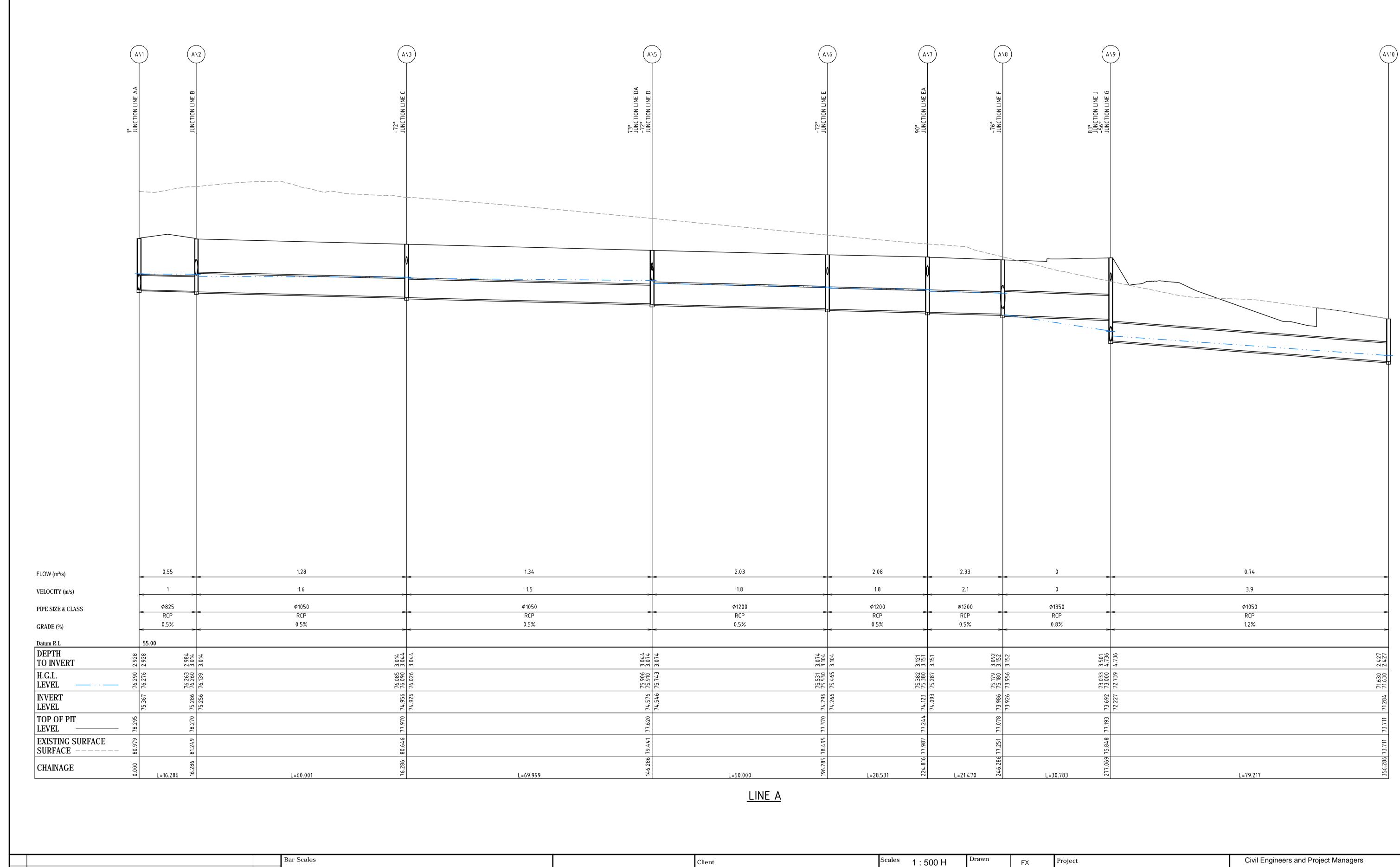


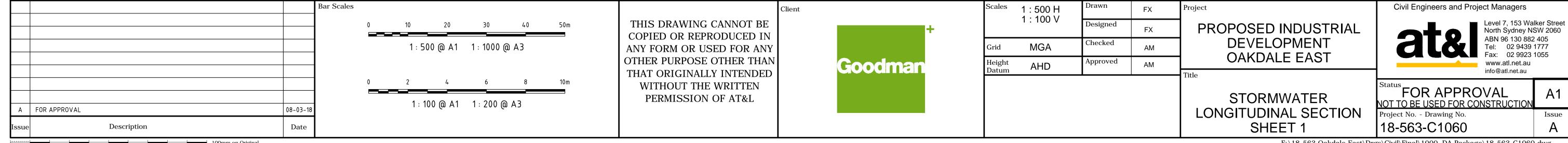


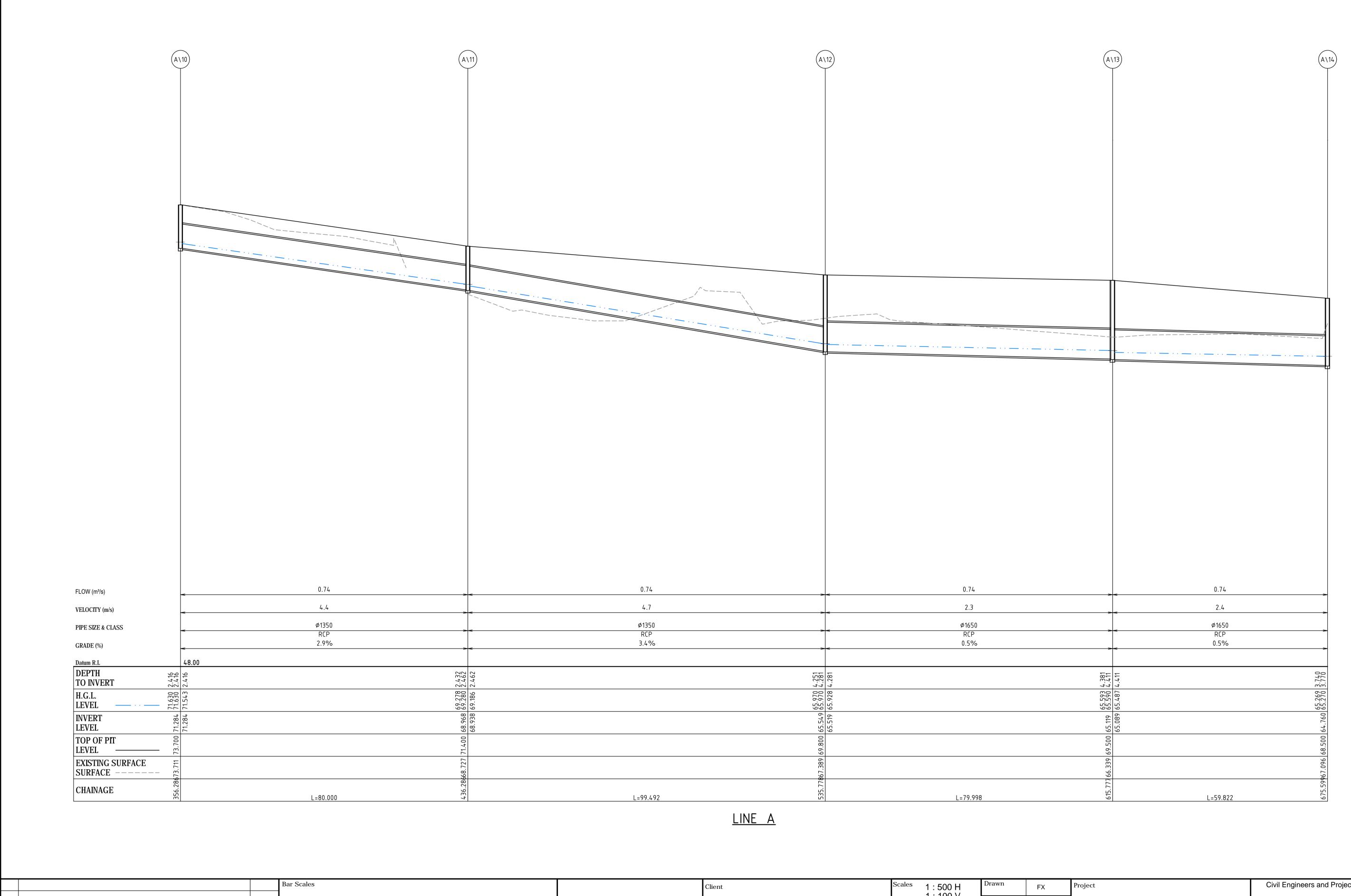


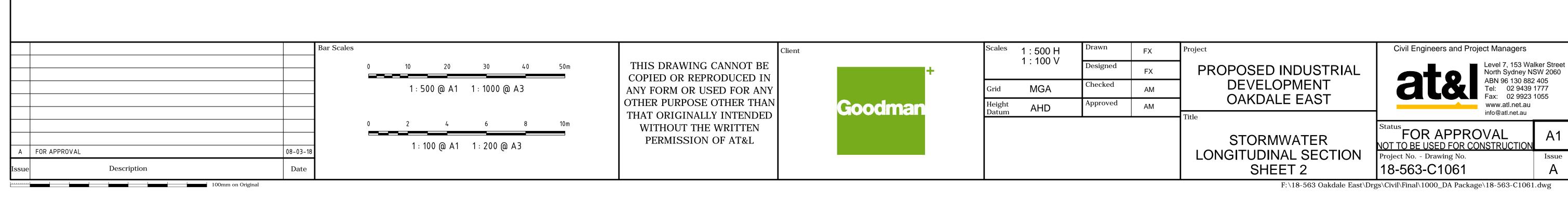


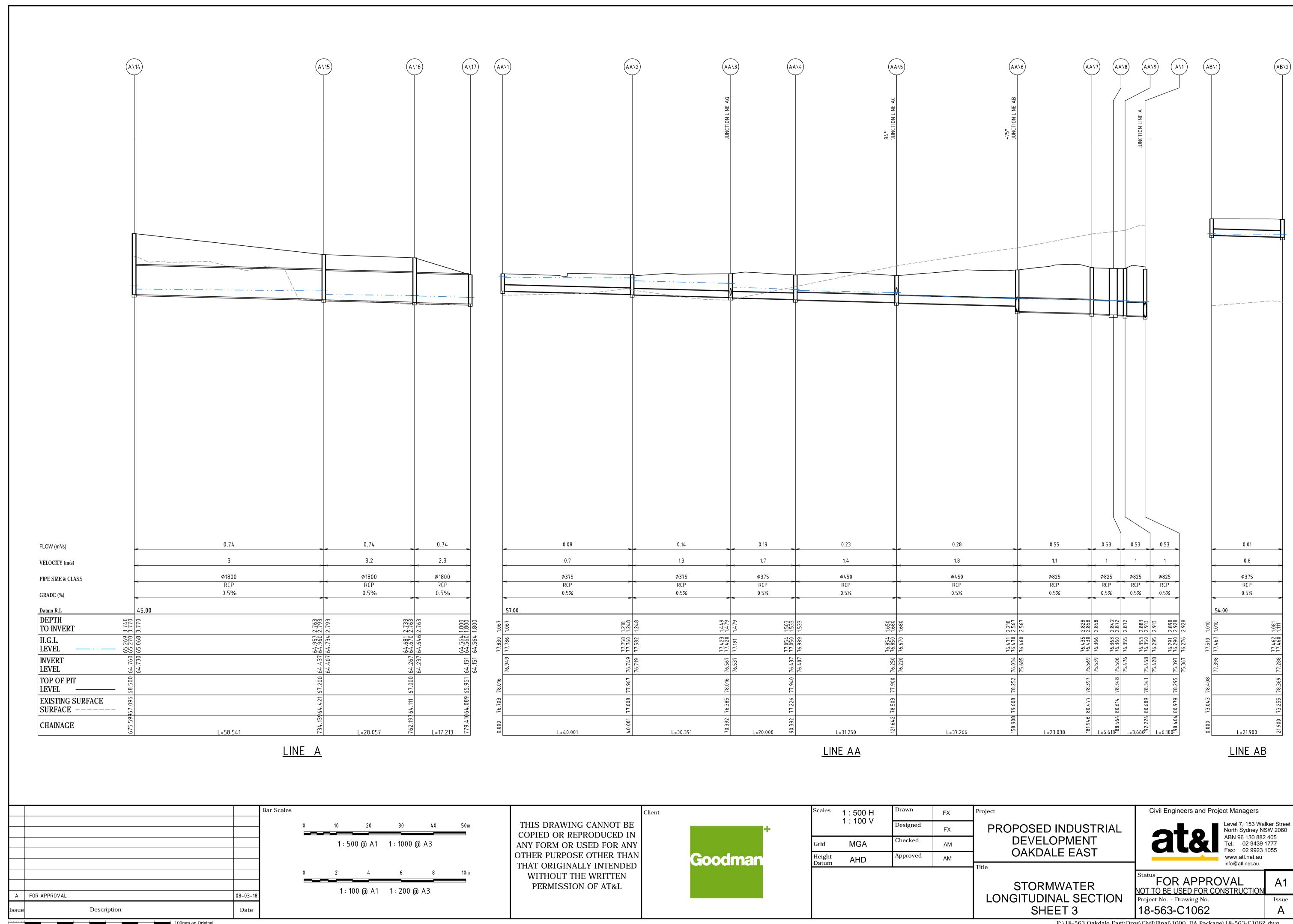


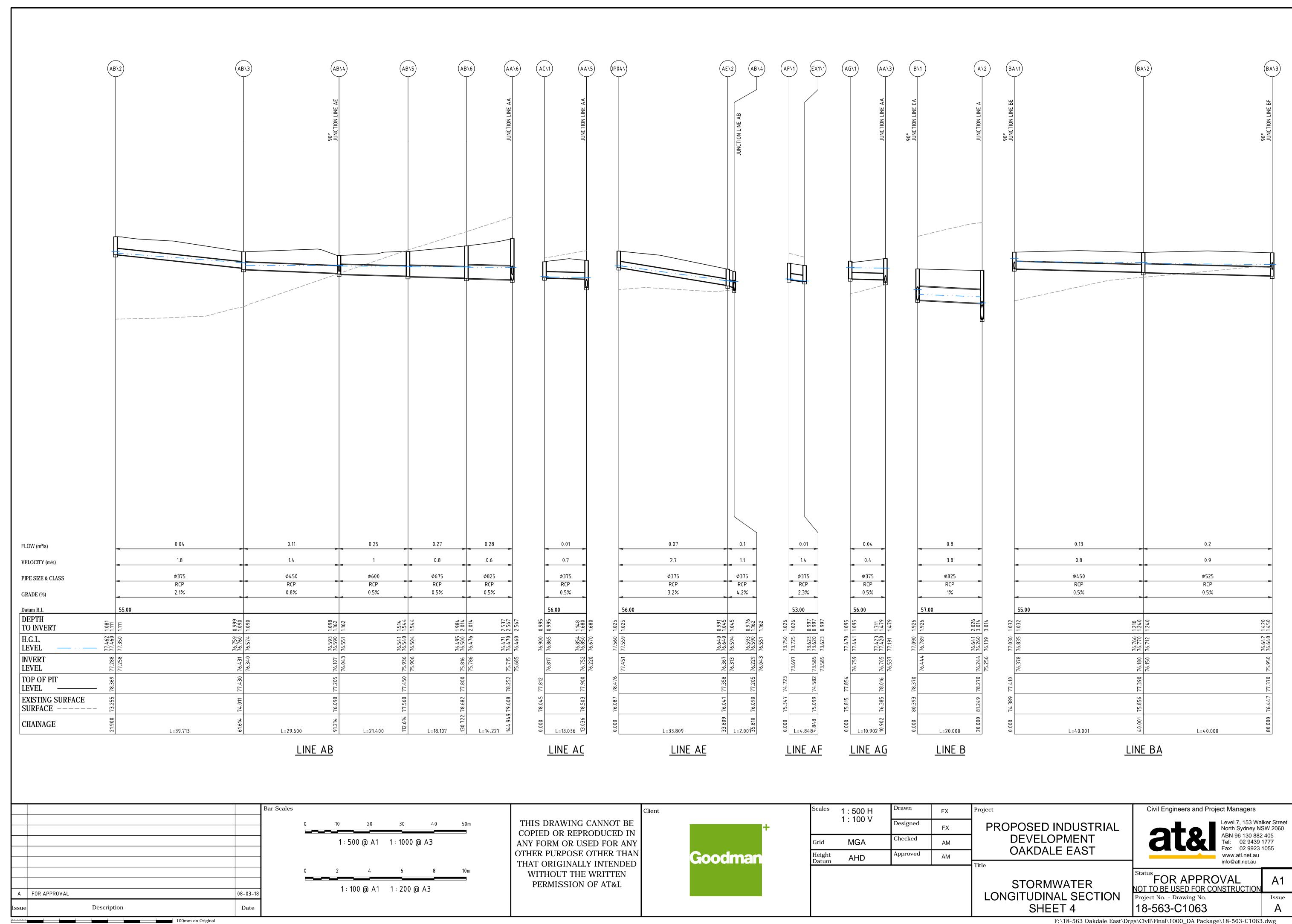


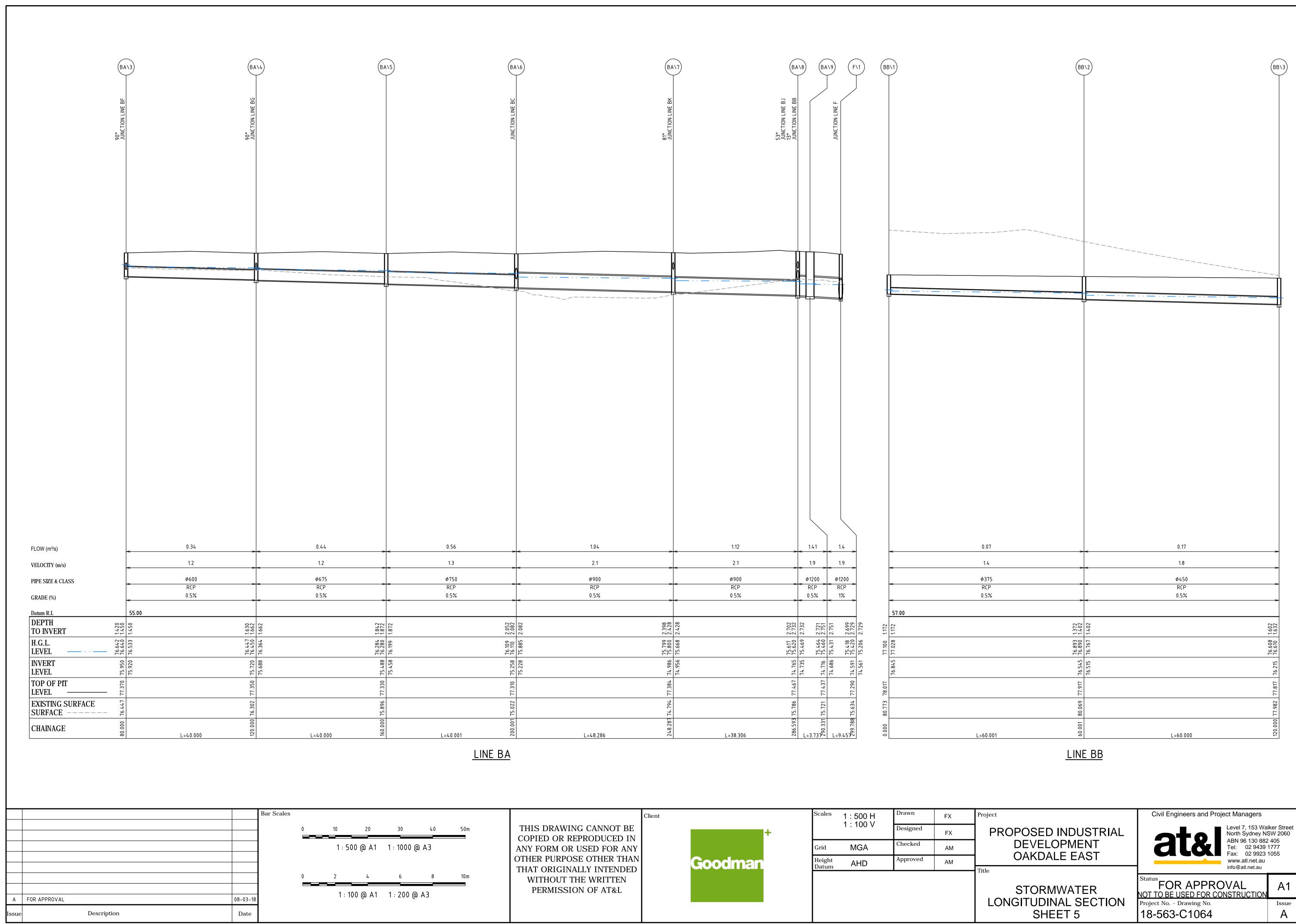


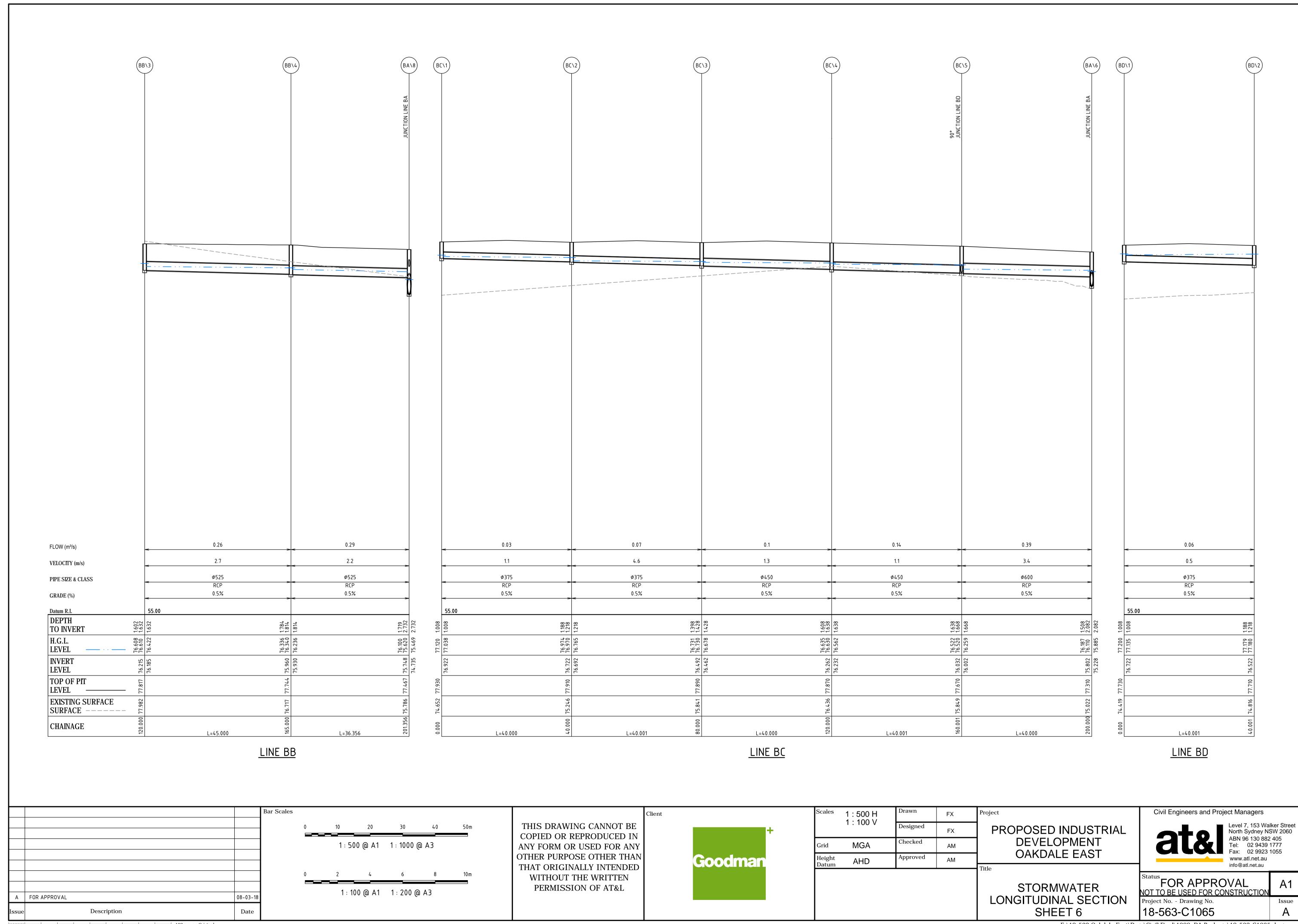


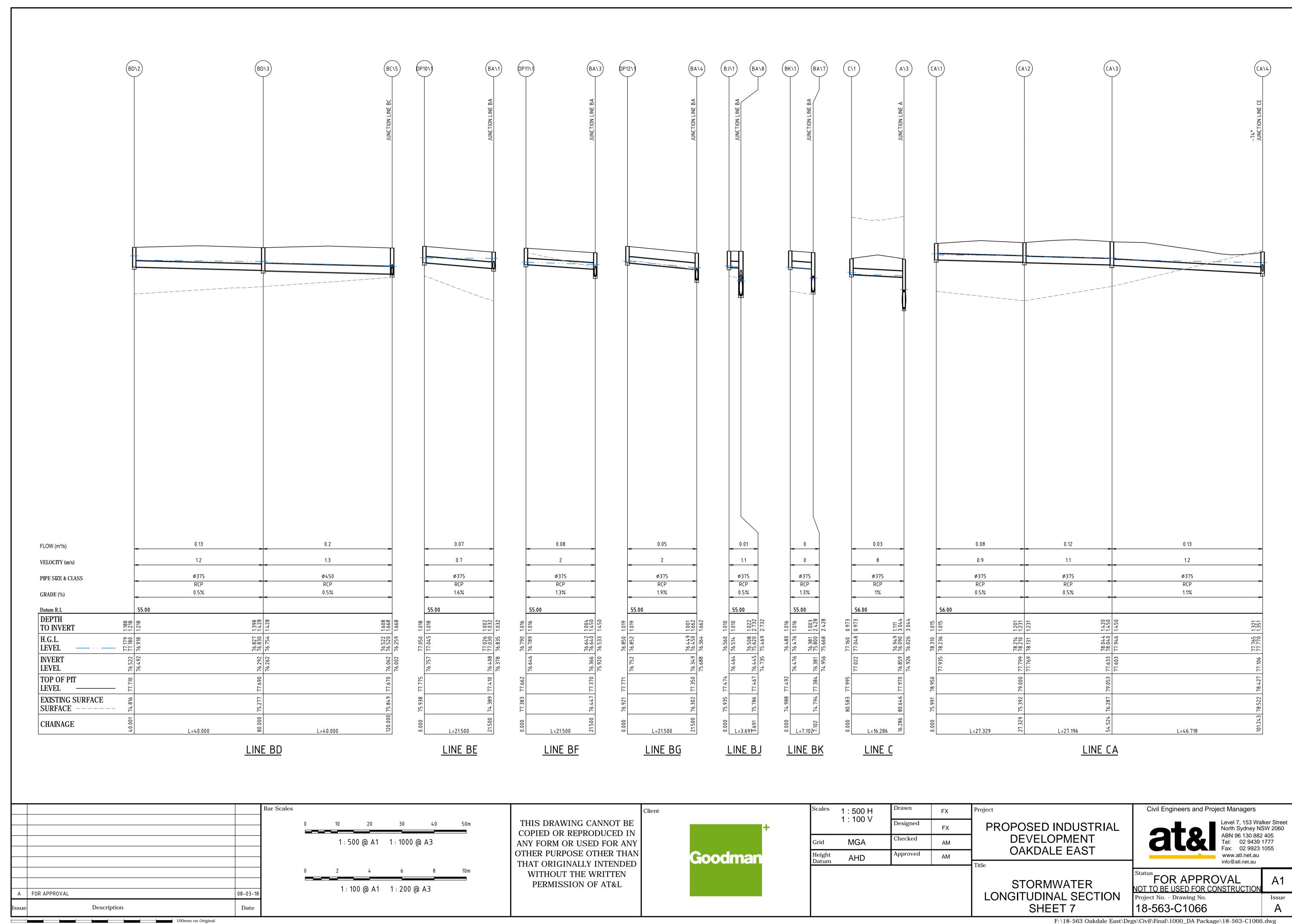


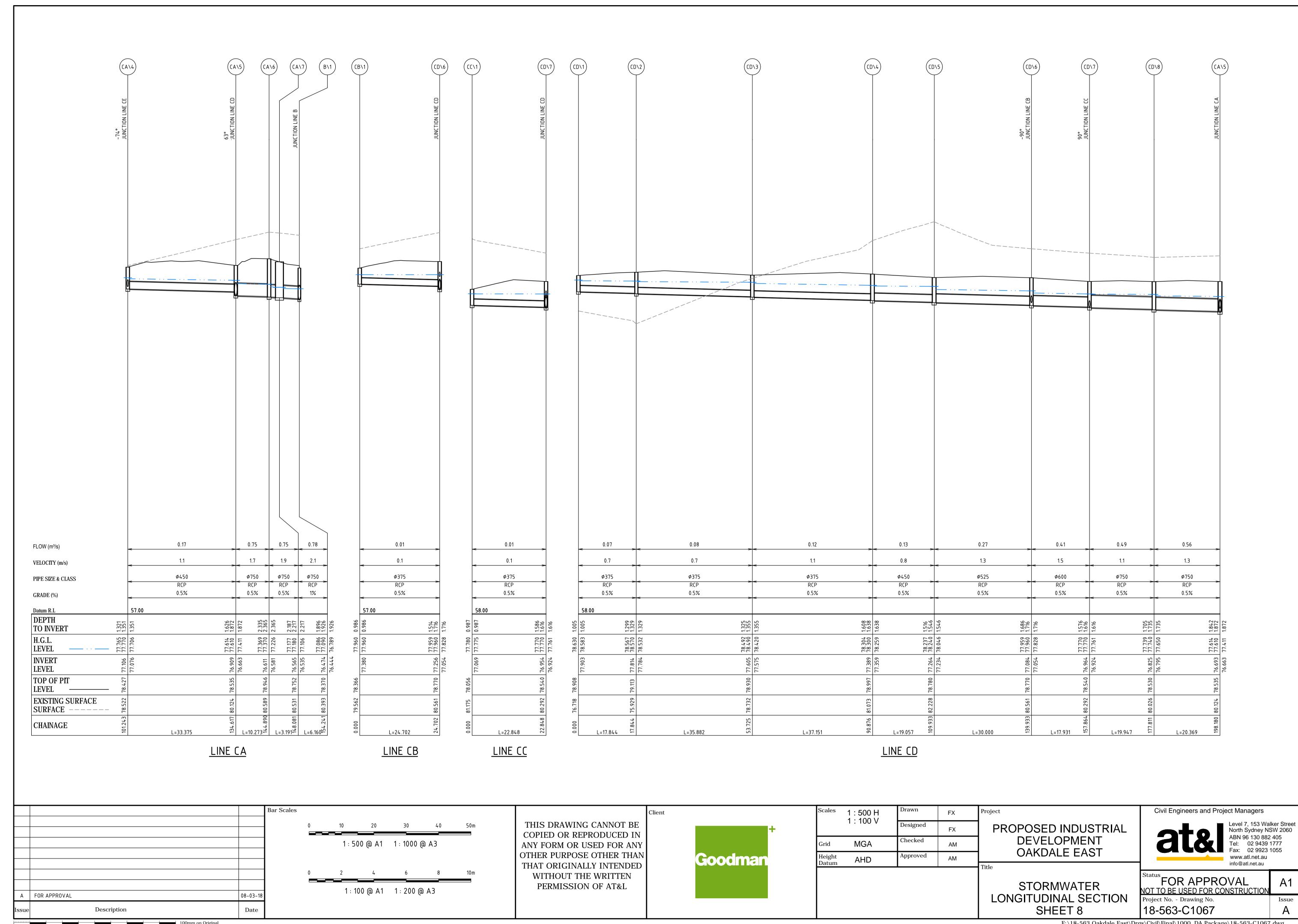


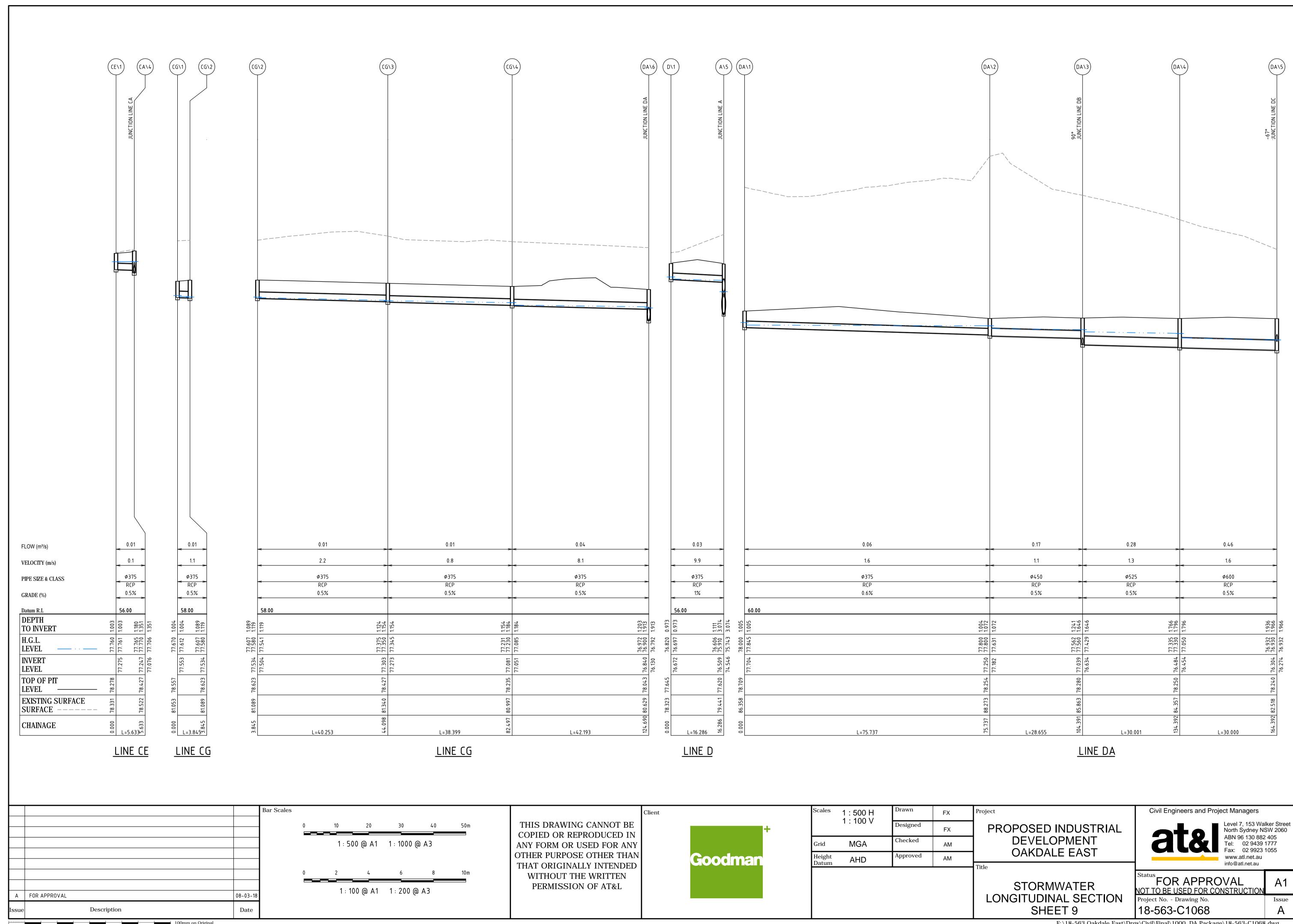


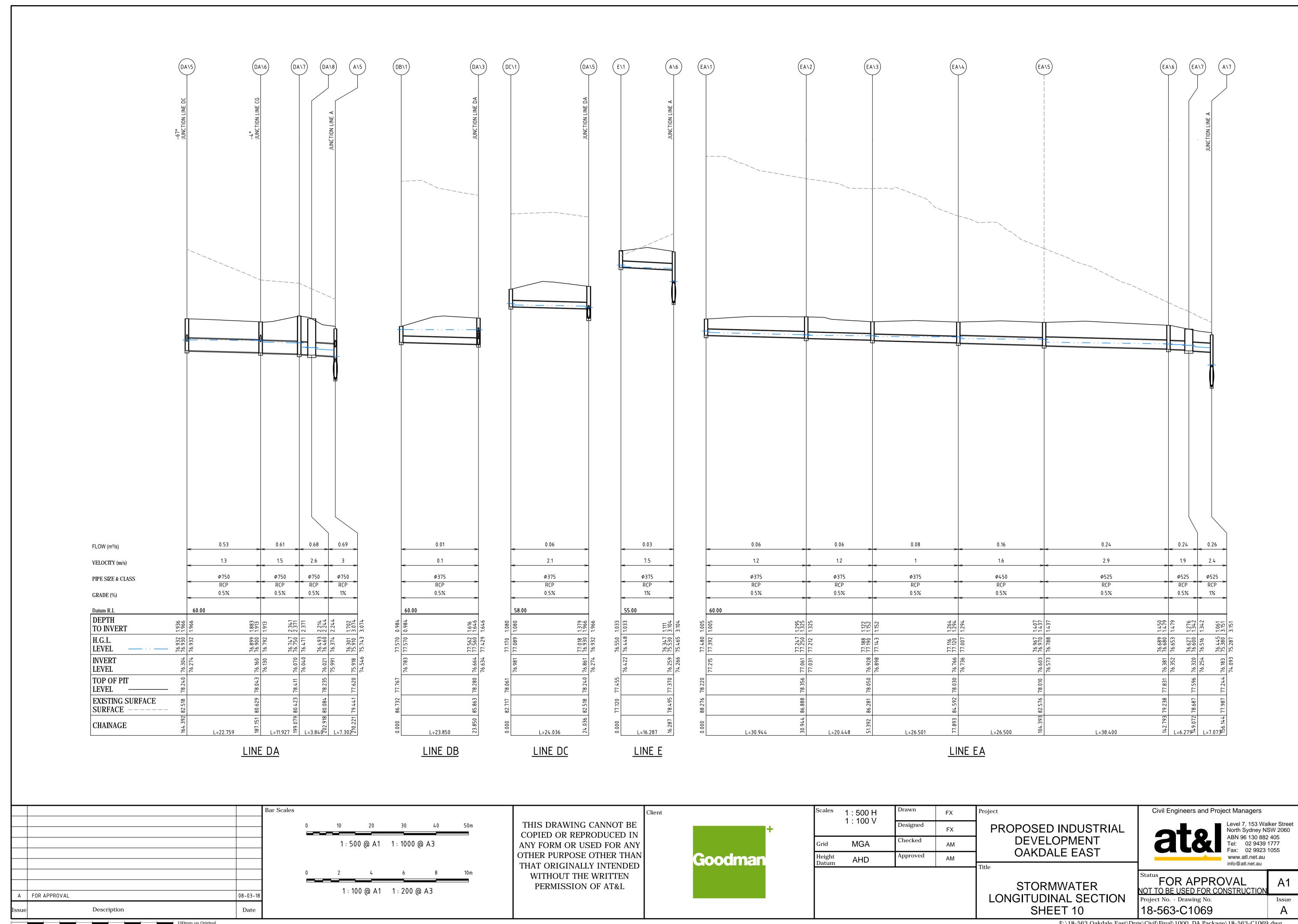


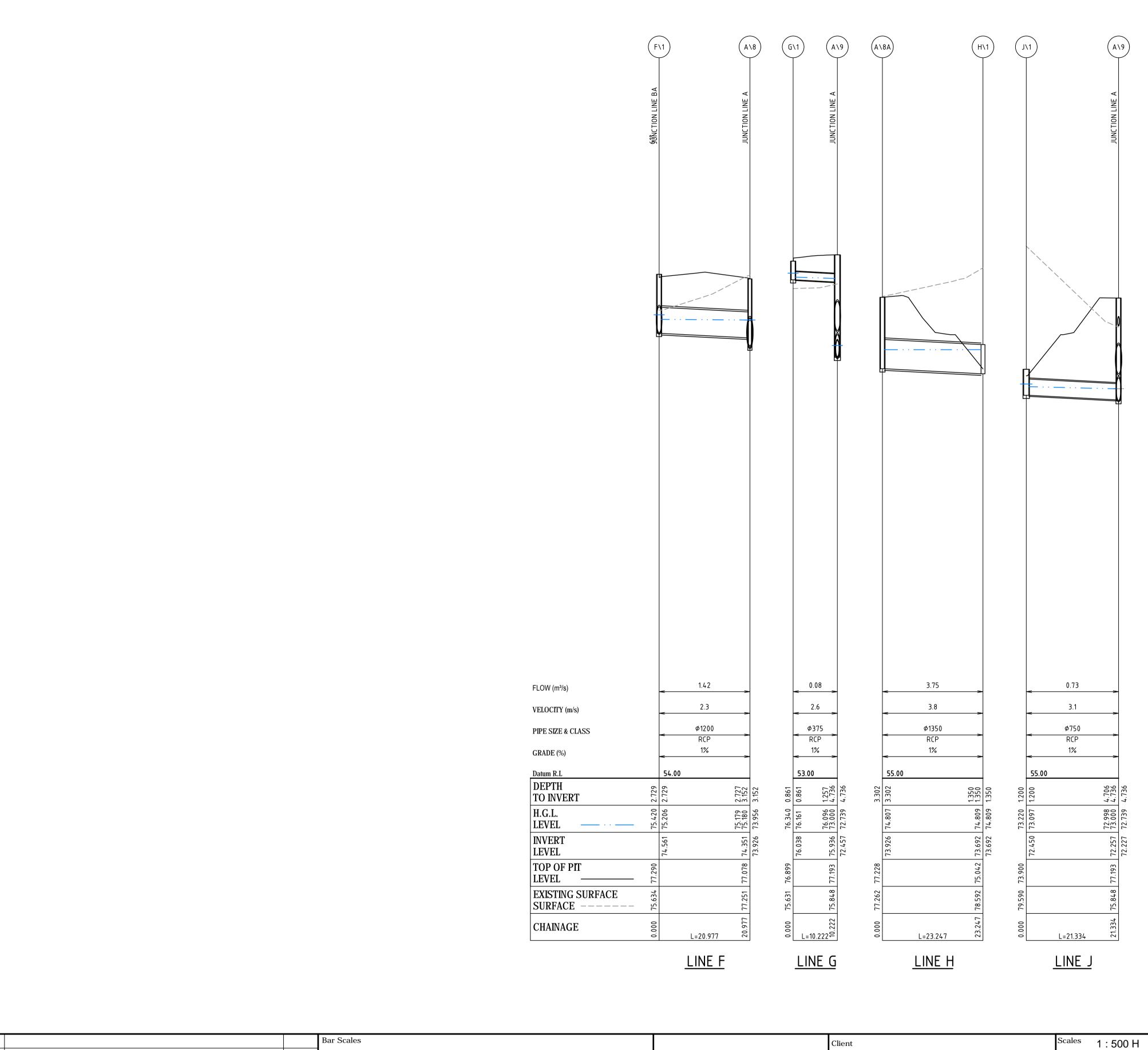


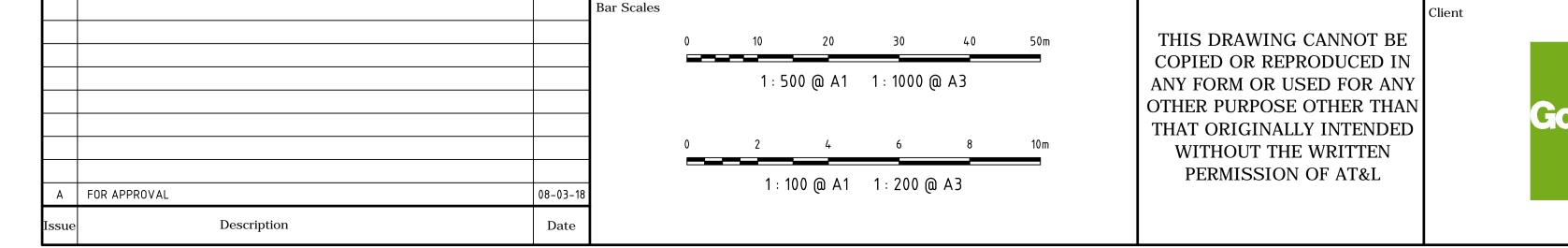














cales	1 : 500 H 1 : 100 V	Drawn	FX	Project
	1.100 V	Designed	FX	PF
irid	MGA	Checked	AM	
leight Oatum	AHD	Approved	AM	
			•	Title

PROPOSED INDUSTRIAL DEVELOPMENT OAKDALE EAST

STORMWATER

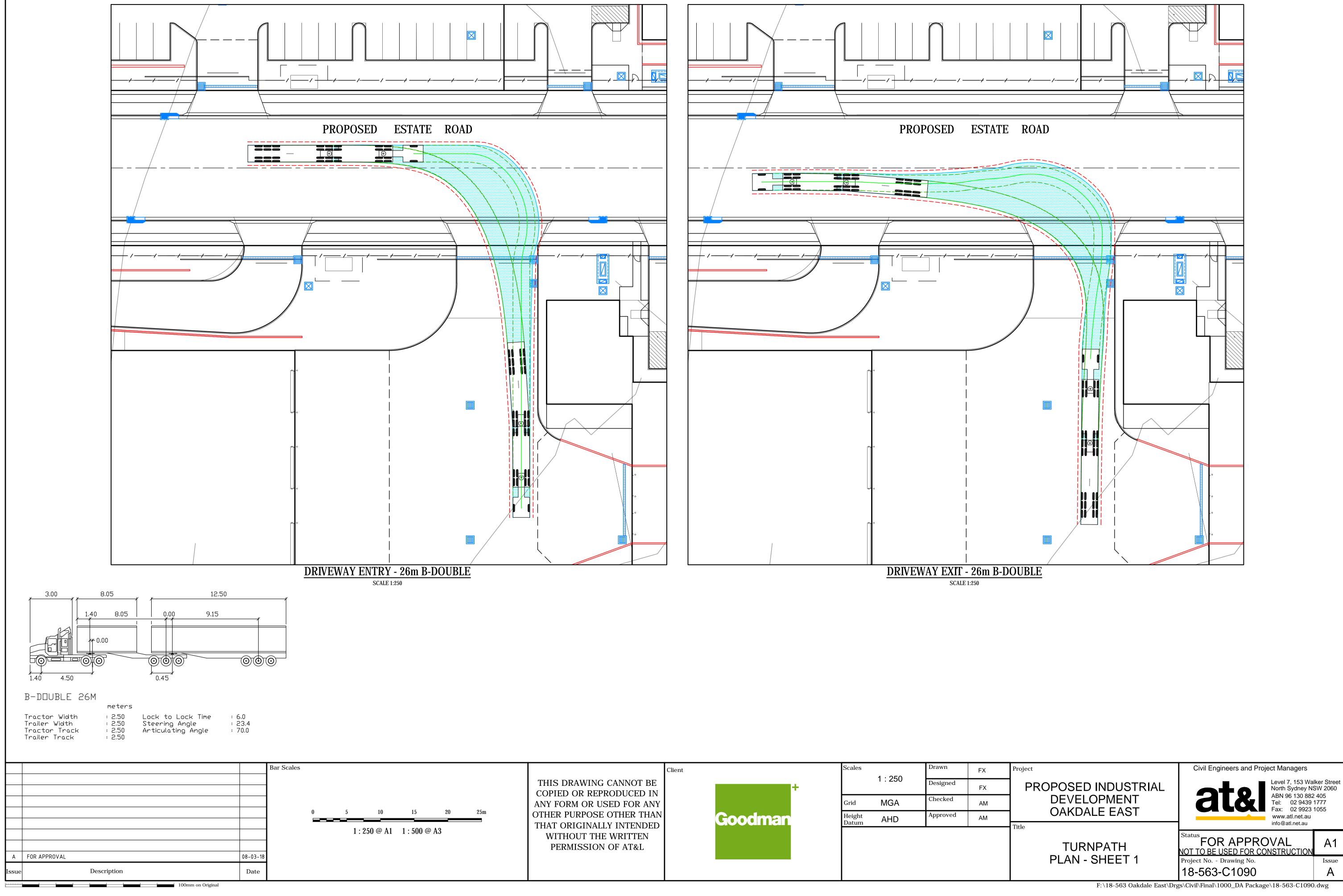
LONGITUDINAL SECTION

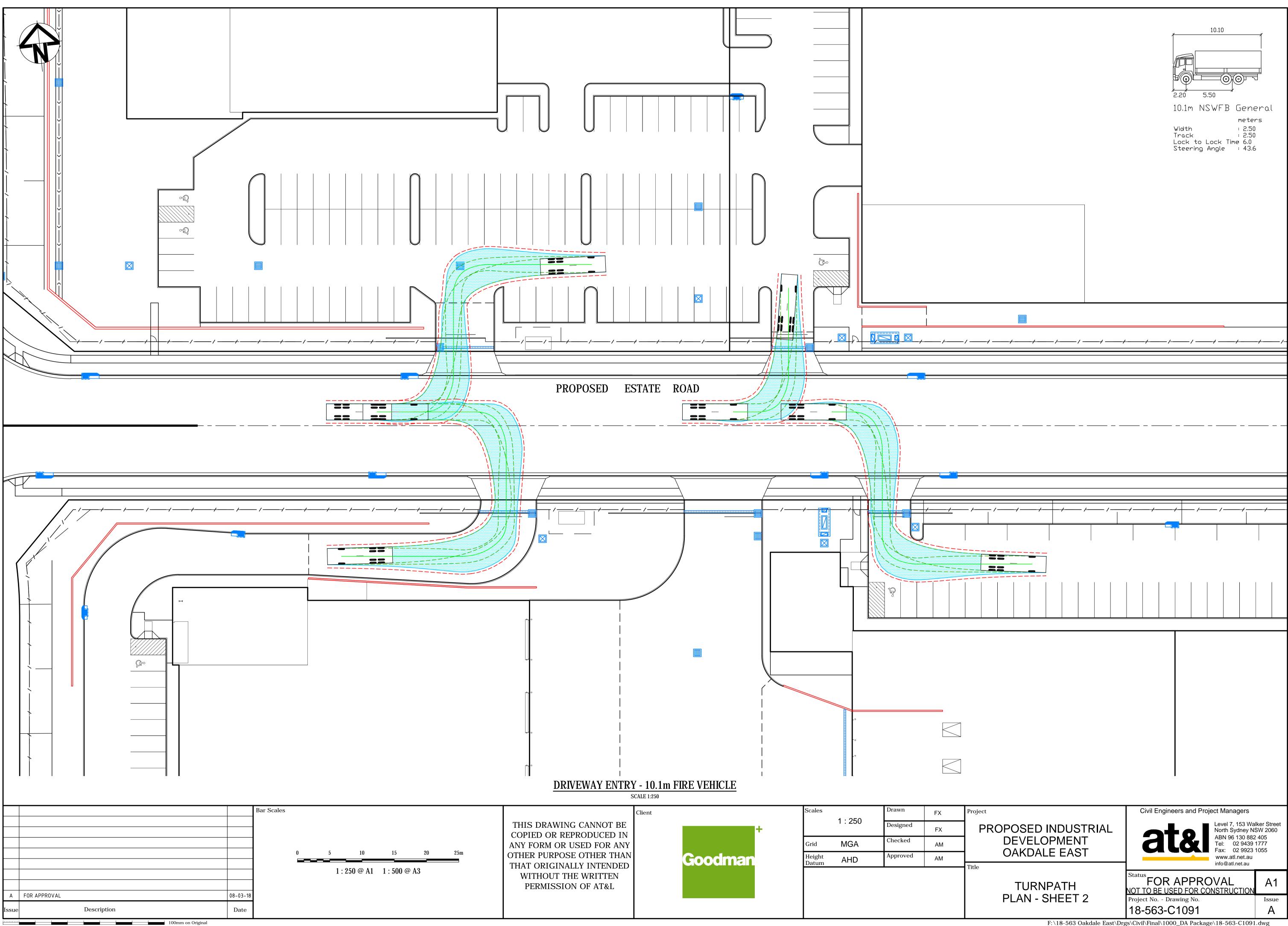
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Fax: 02 9923 1055 www.atl.net.au info@atl.net.au

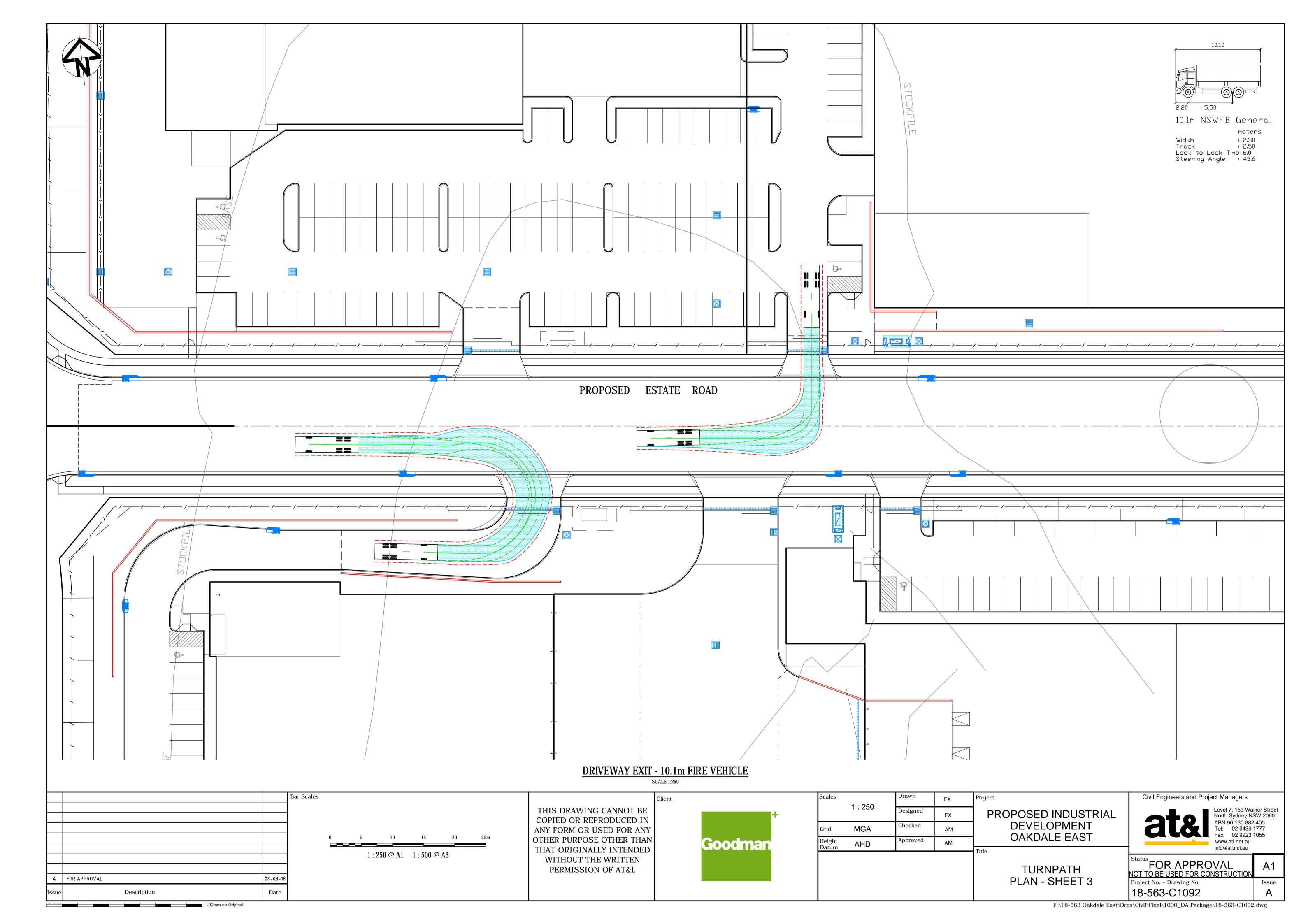
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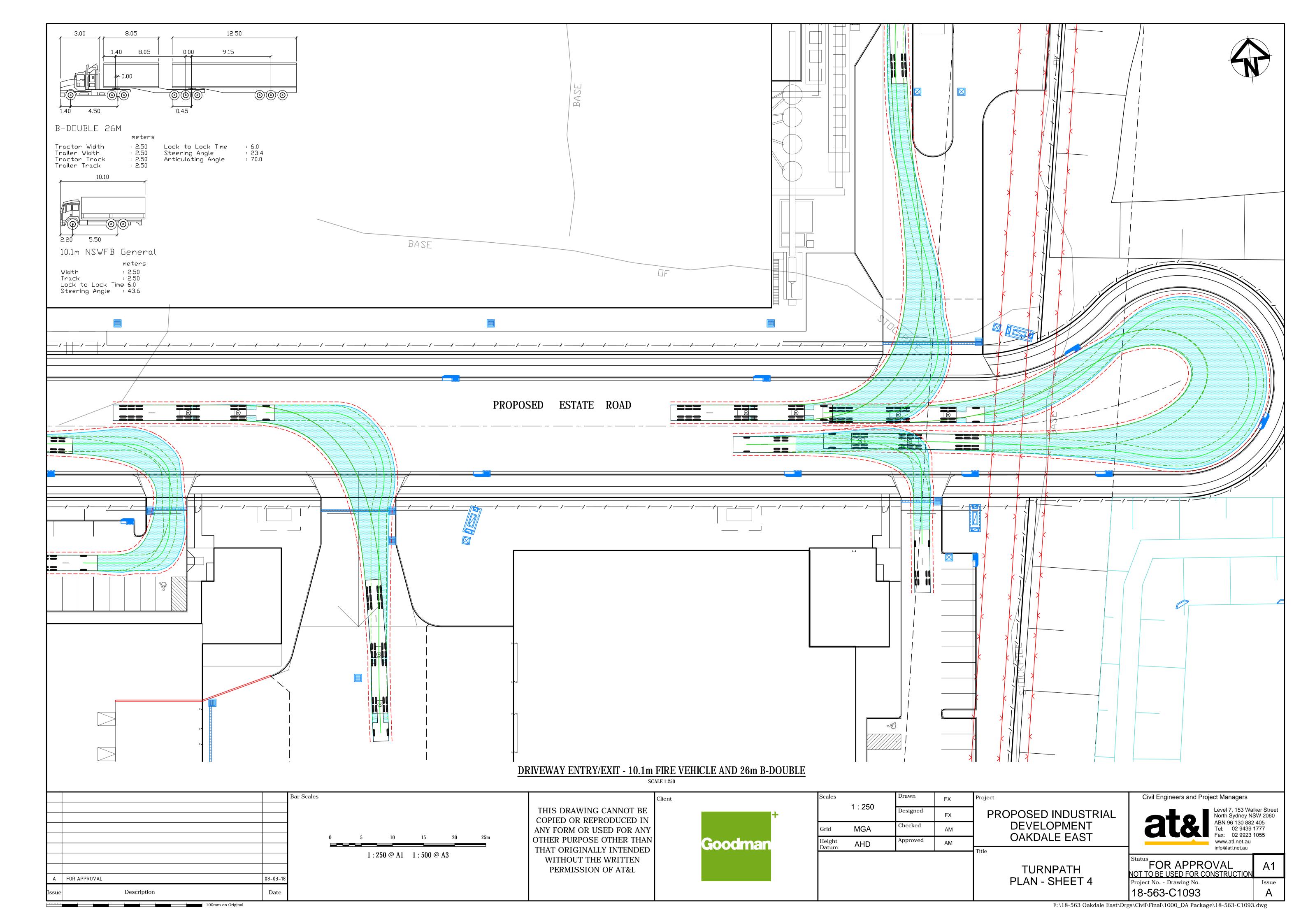
Civil Engineers and Project Managers

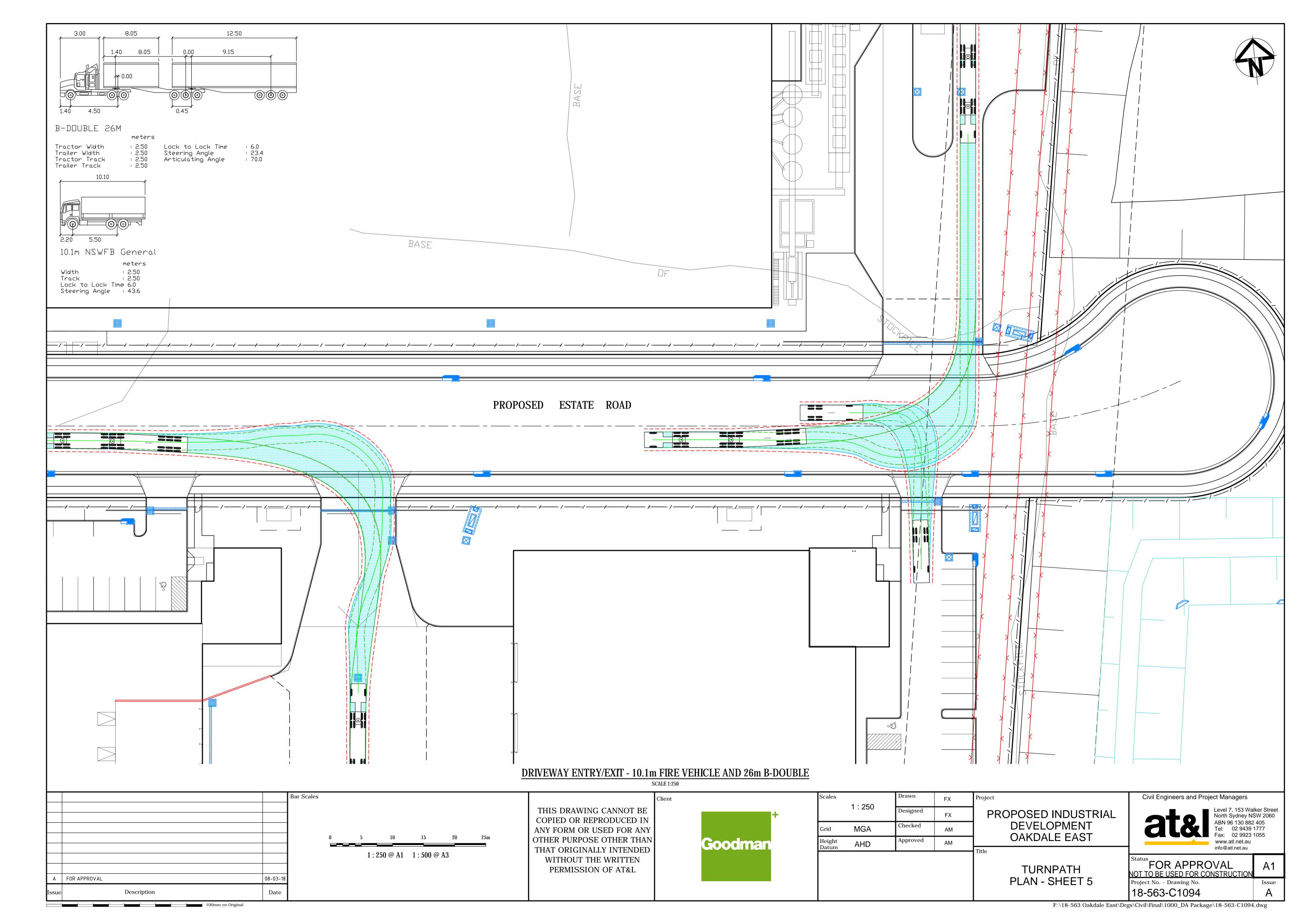


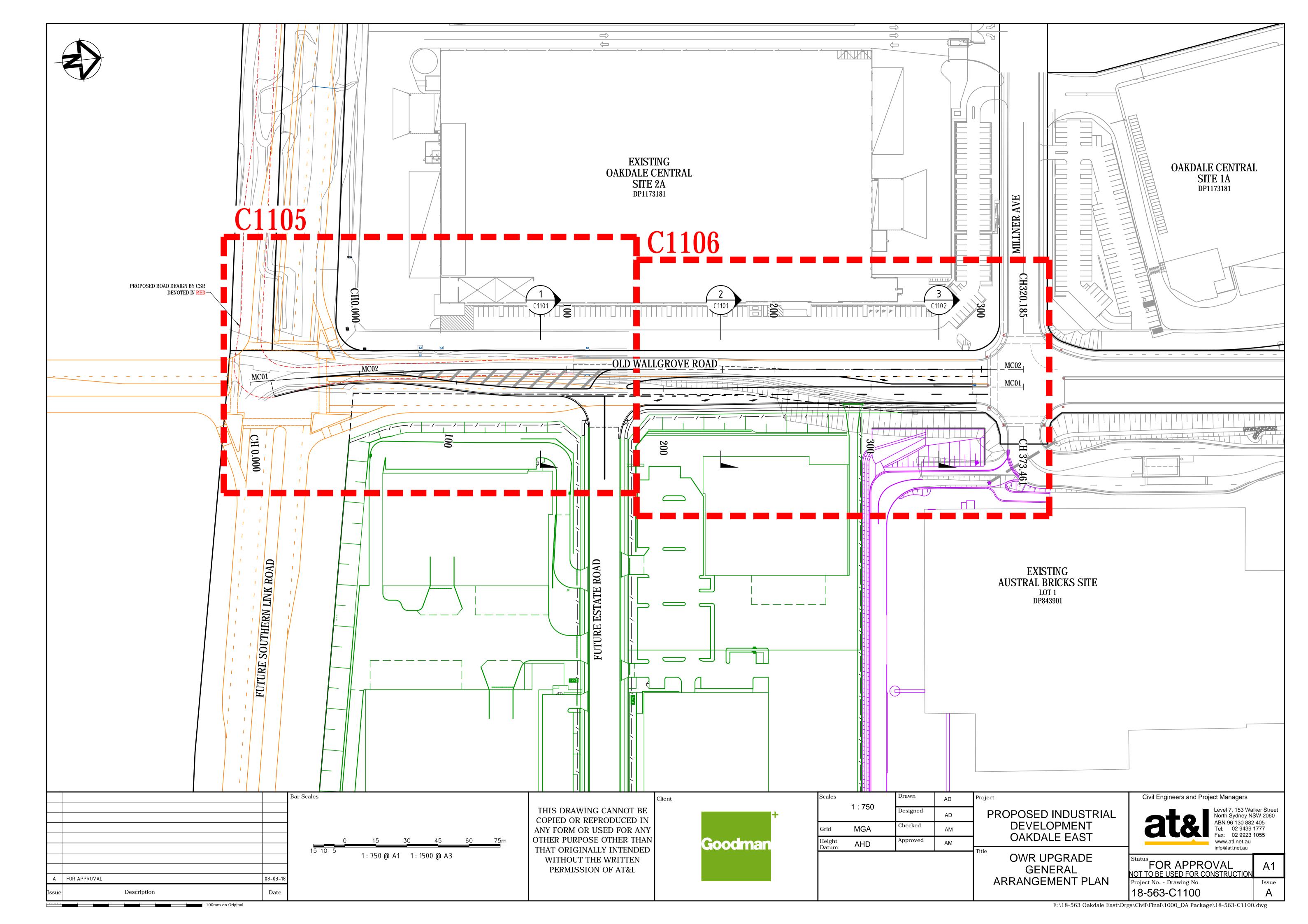


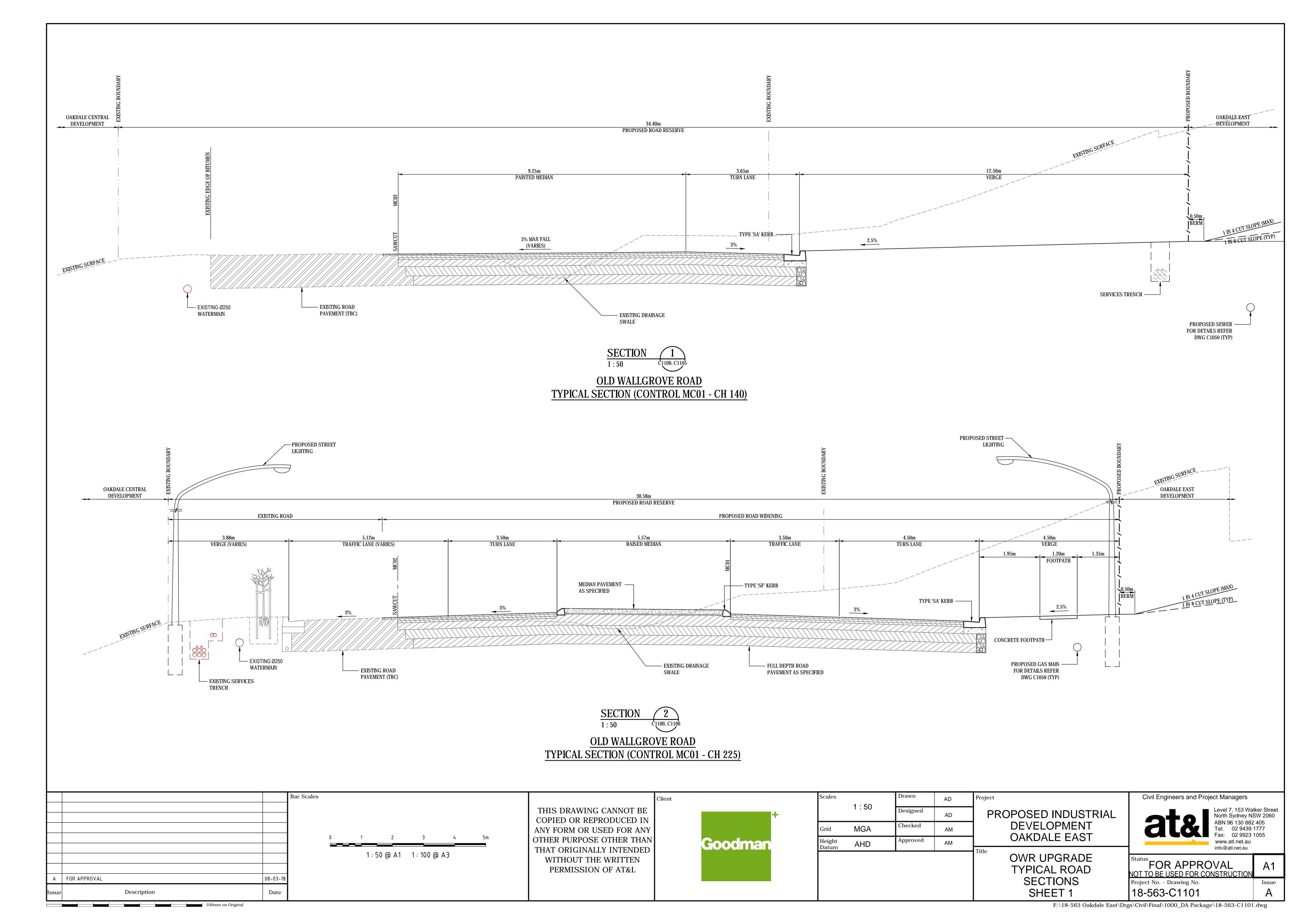


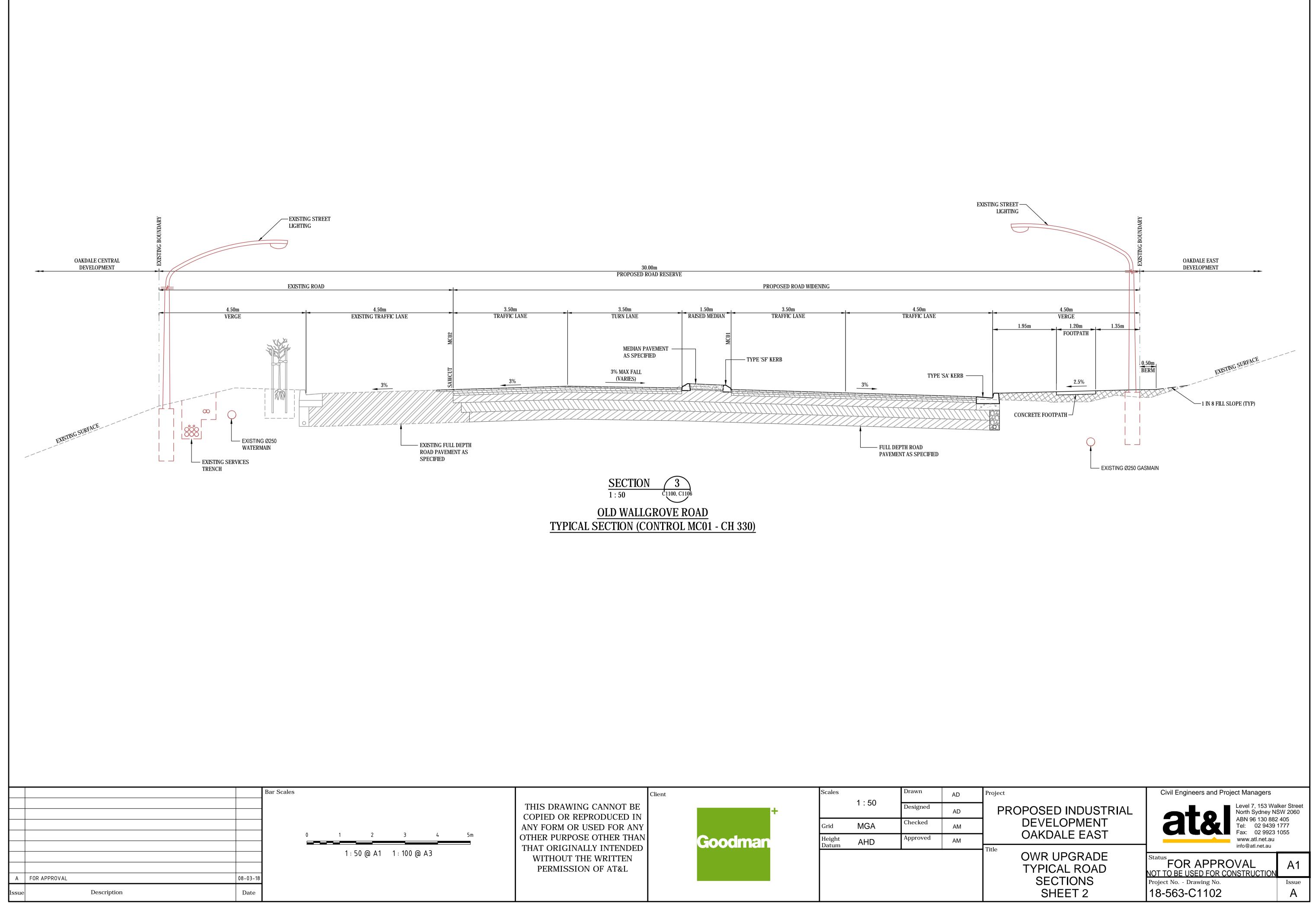


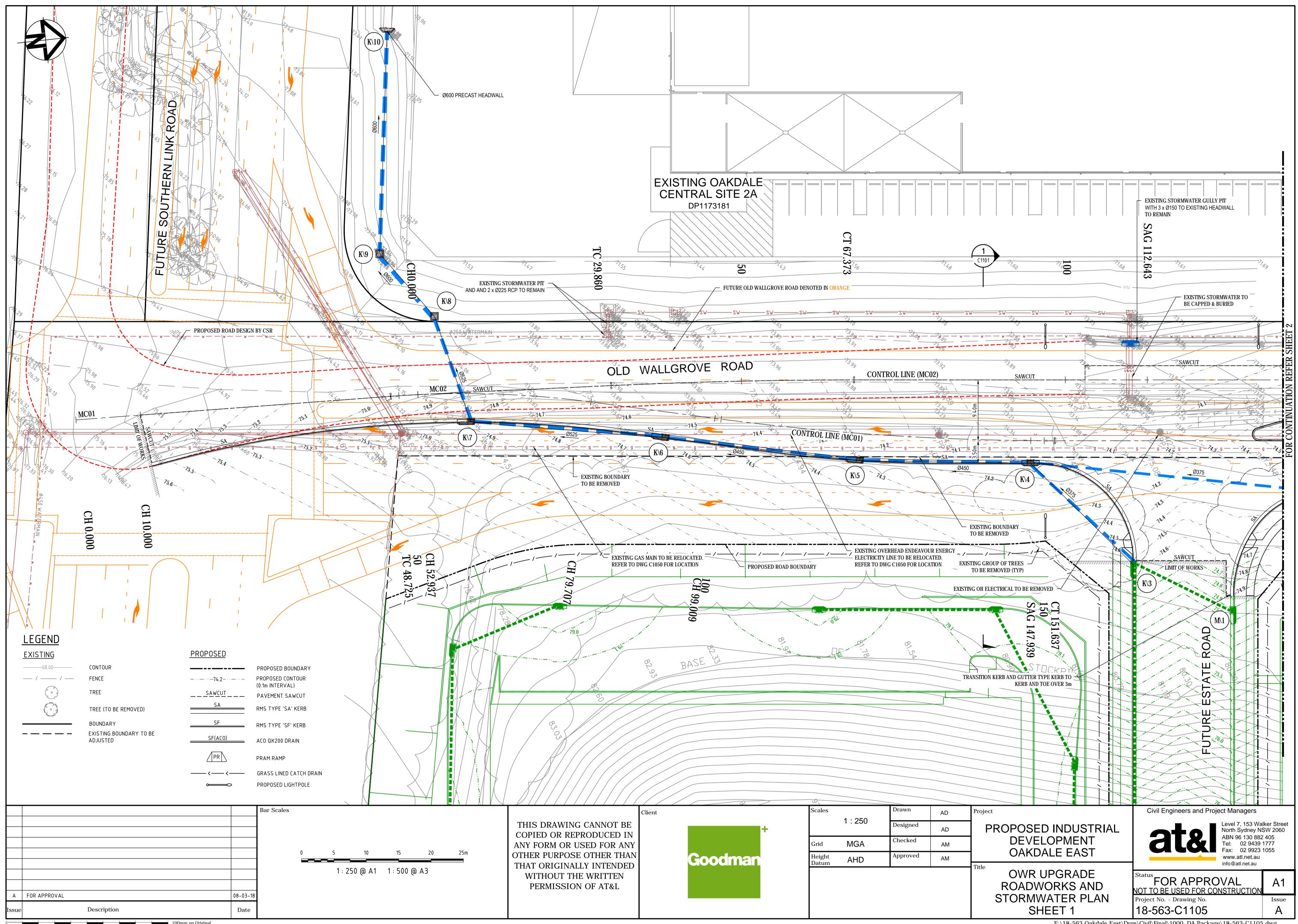


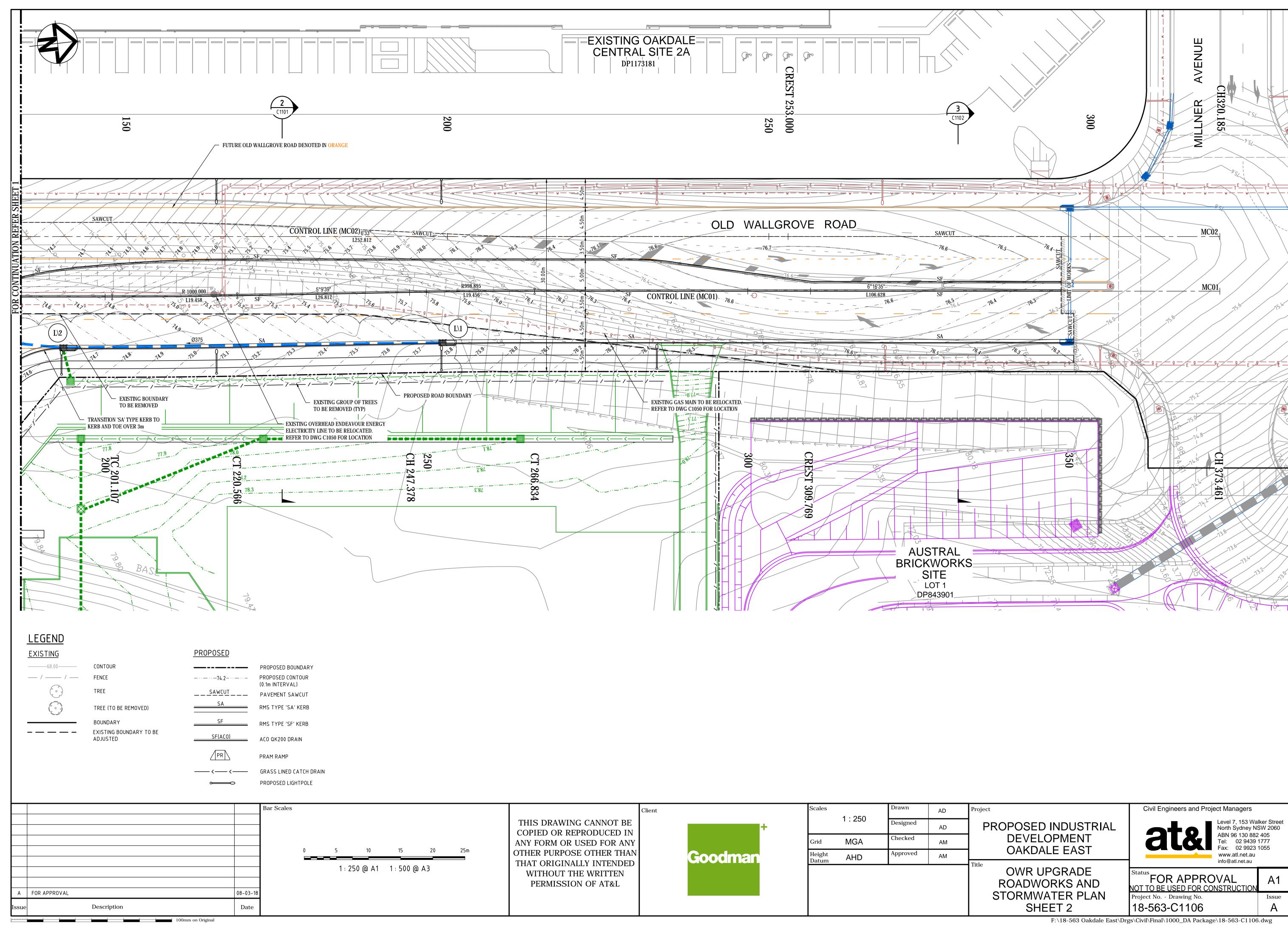


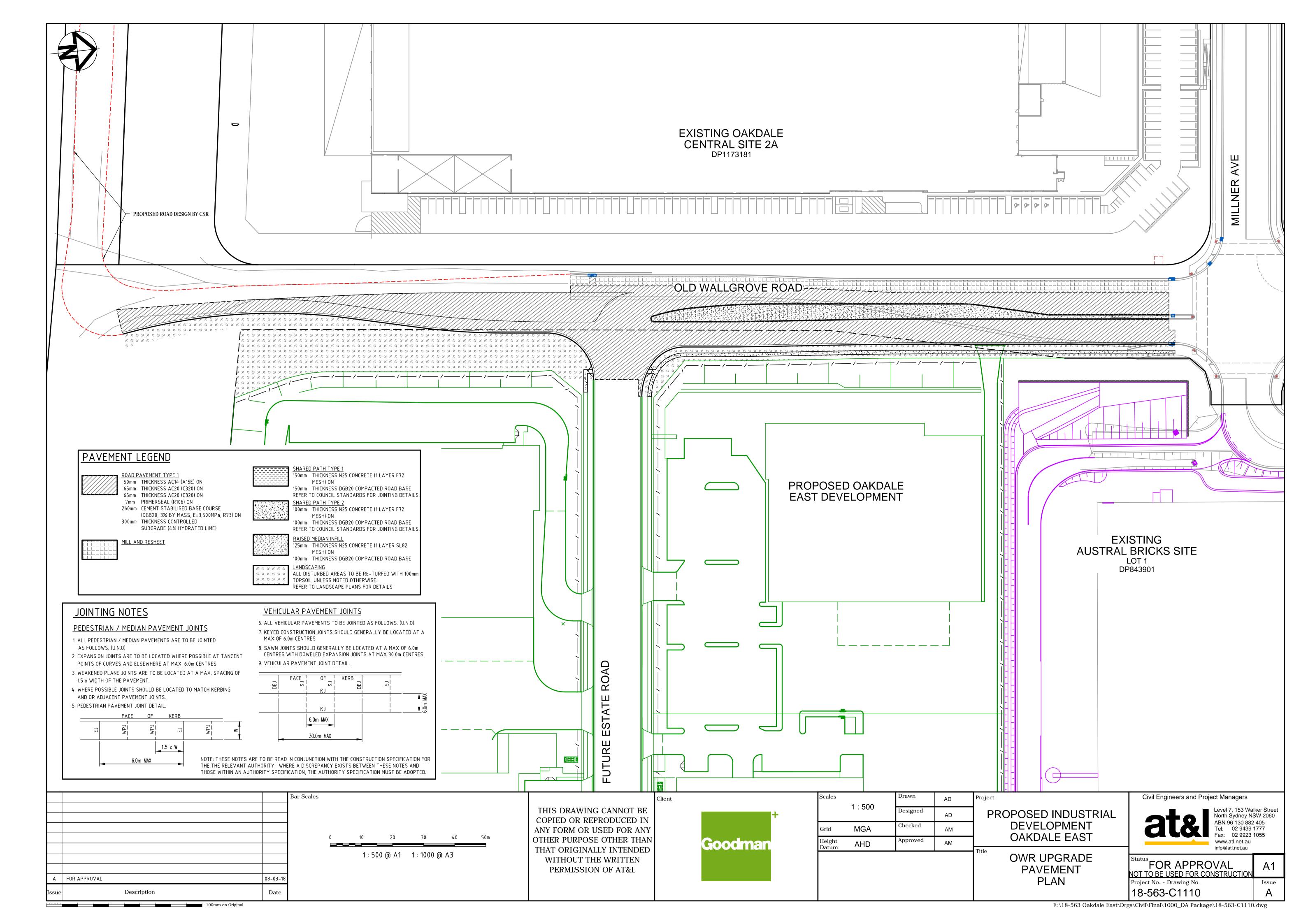


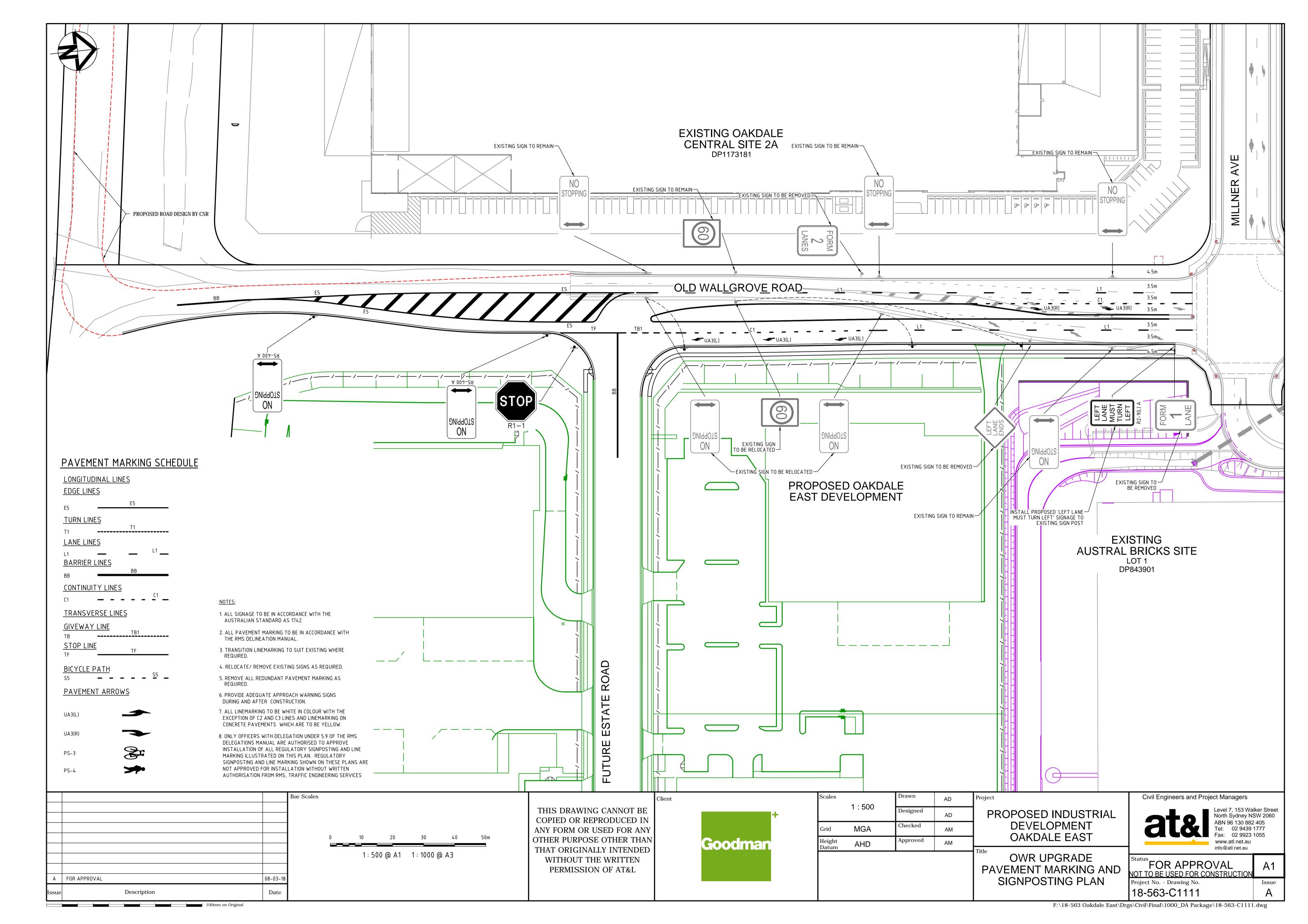


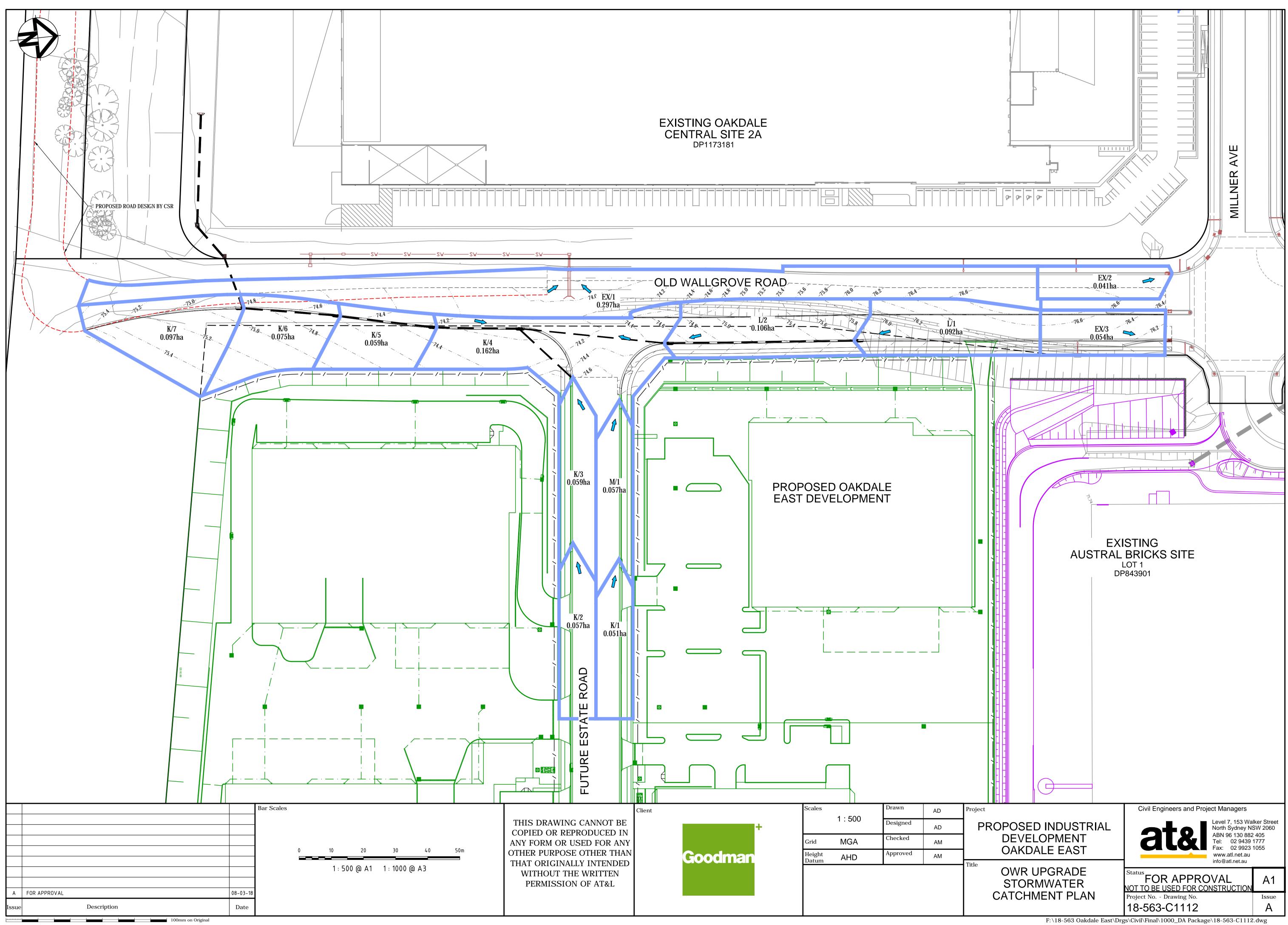


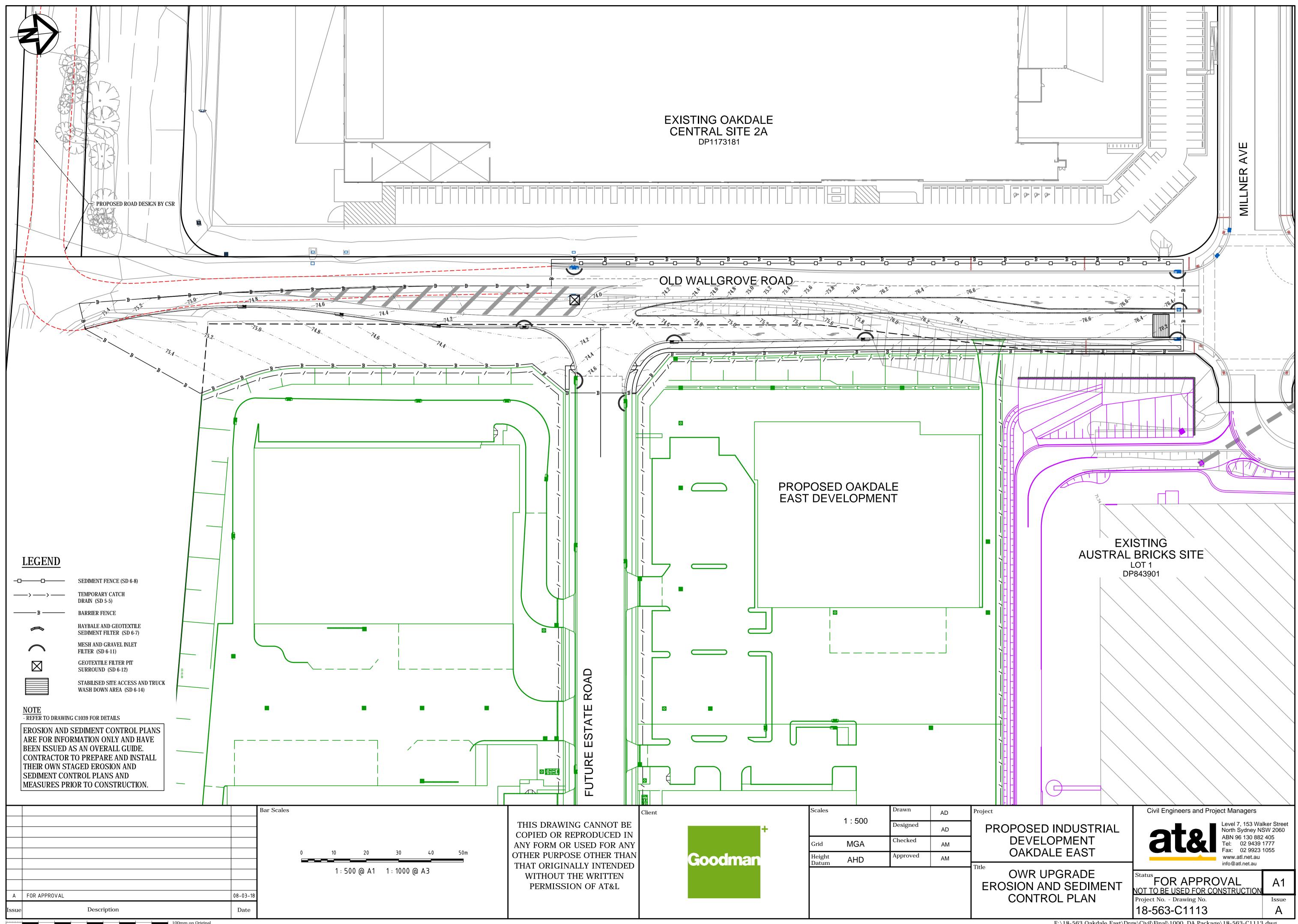


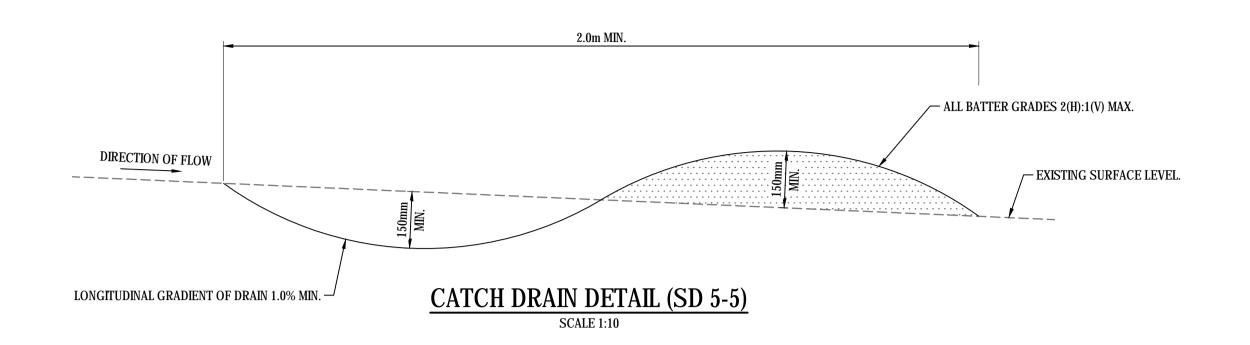


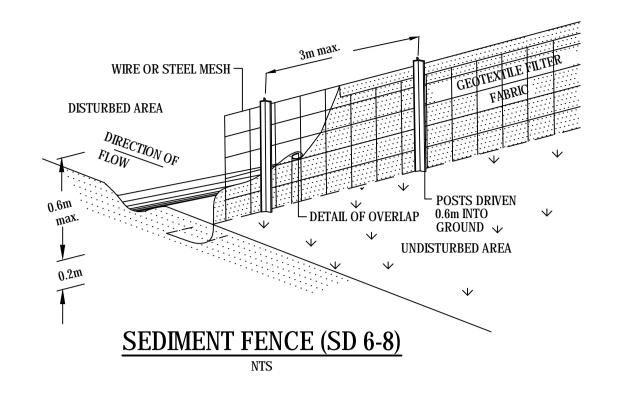


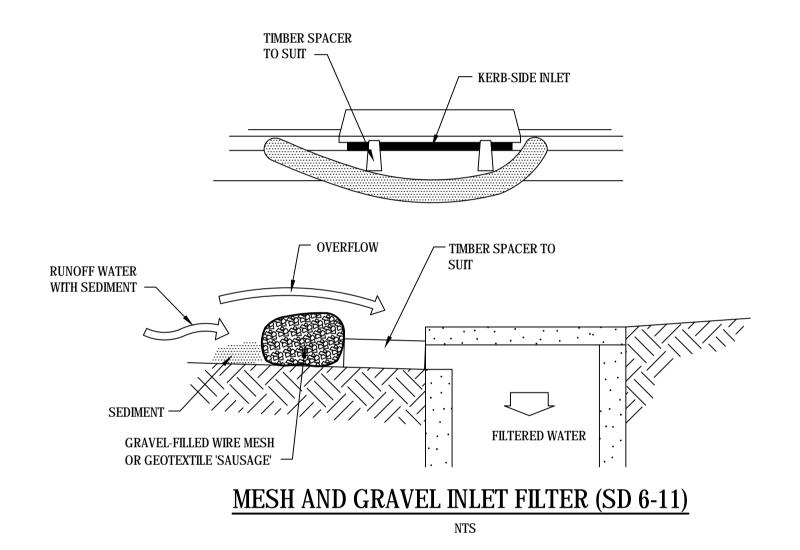


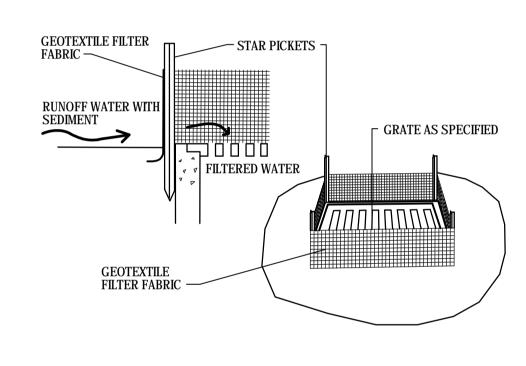






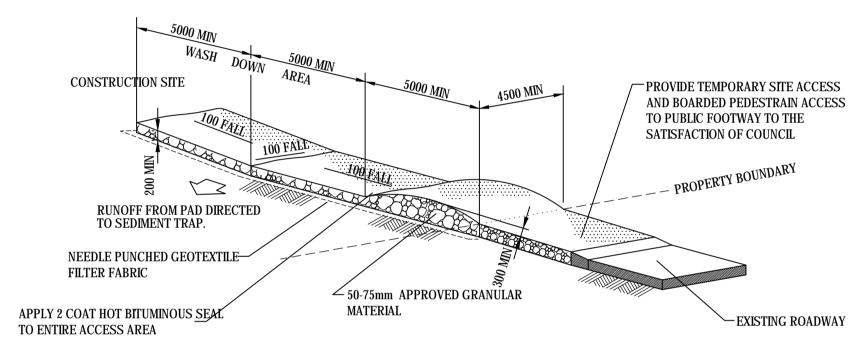






GEOTEXTILE FILTER PIT SURROUND (SD 6-12)

Client



STABILISED SITE ACCESS AND TRUCK WASH DOWN AREA (SD 6-14)

			Bar Scales
Α	FOR APPROVAL	08-03-18	
Issue	Description	Date	

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ANY FORM OR USED FOR ANY
OTHER PURPOSE OTHER THAN
THAT ORIGINALLY INTENDED
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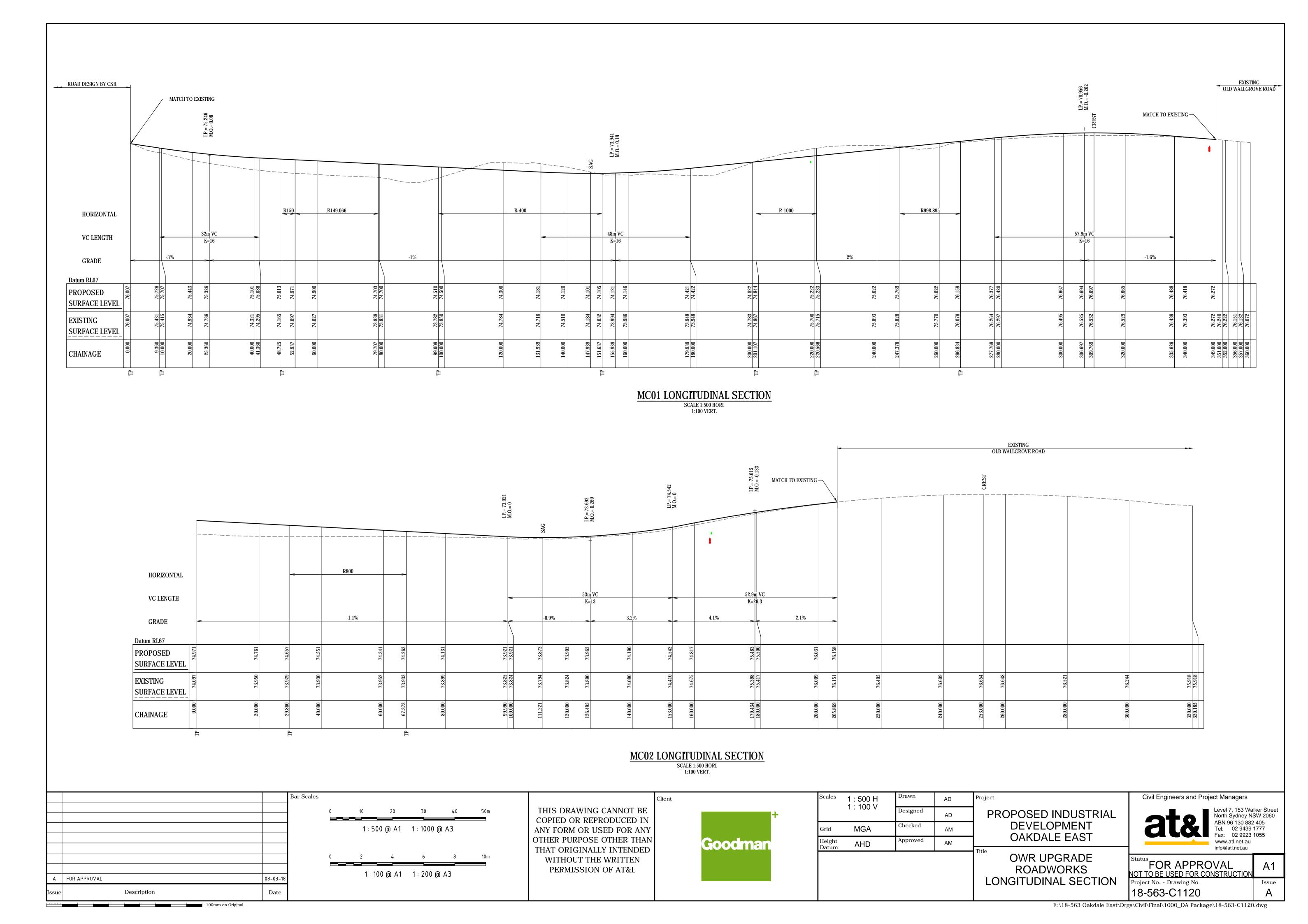
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Grid	MGA	Checked	AM		
Height	AHD	Approved	AM		

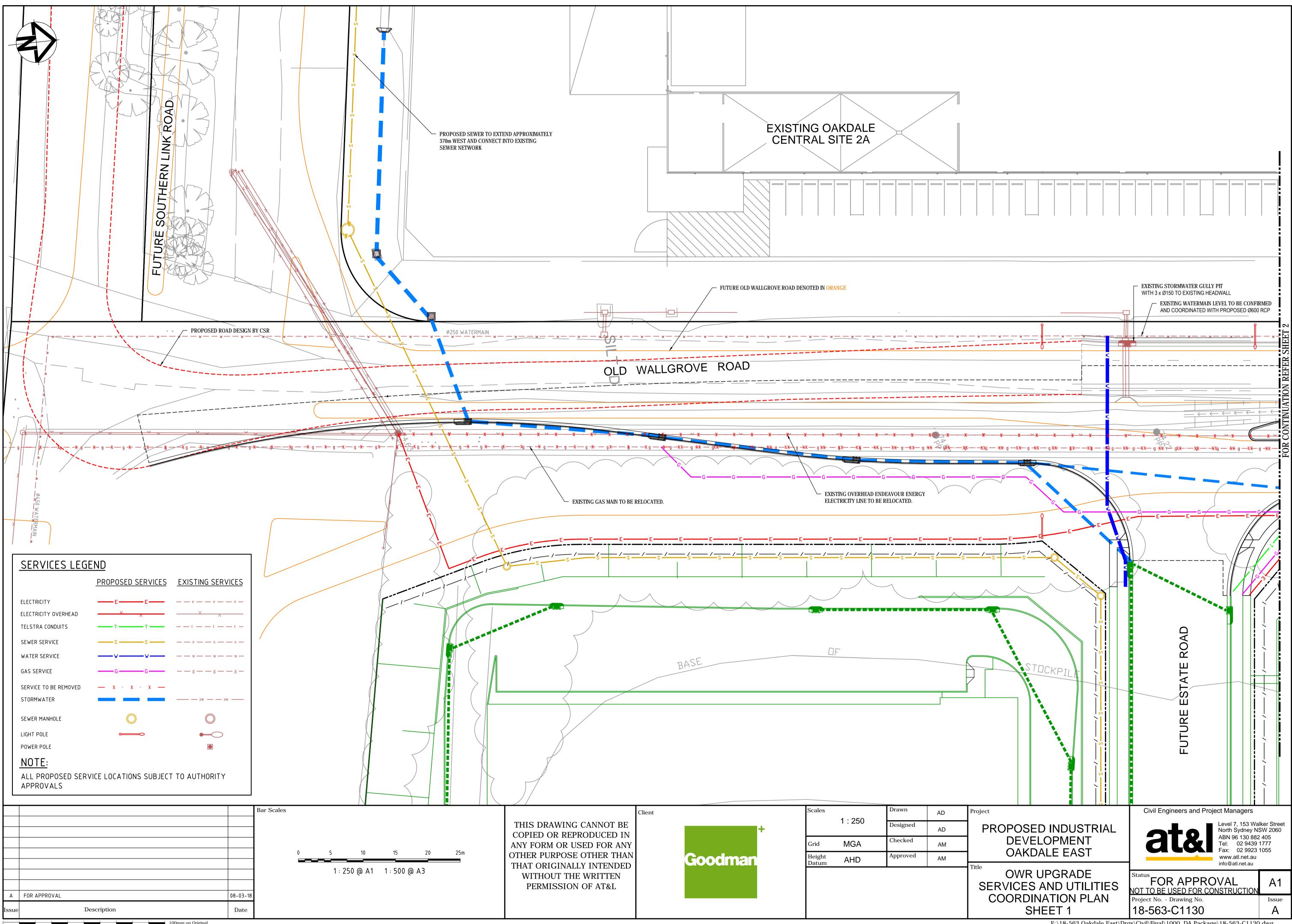
PROPOSED INDUSTRIAL
DEVELOPMENT
OAKDALE EAST

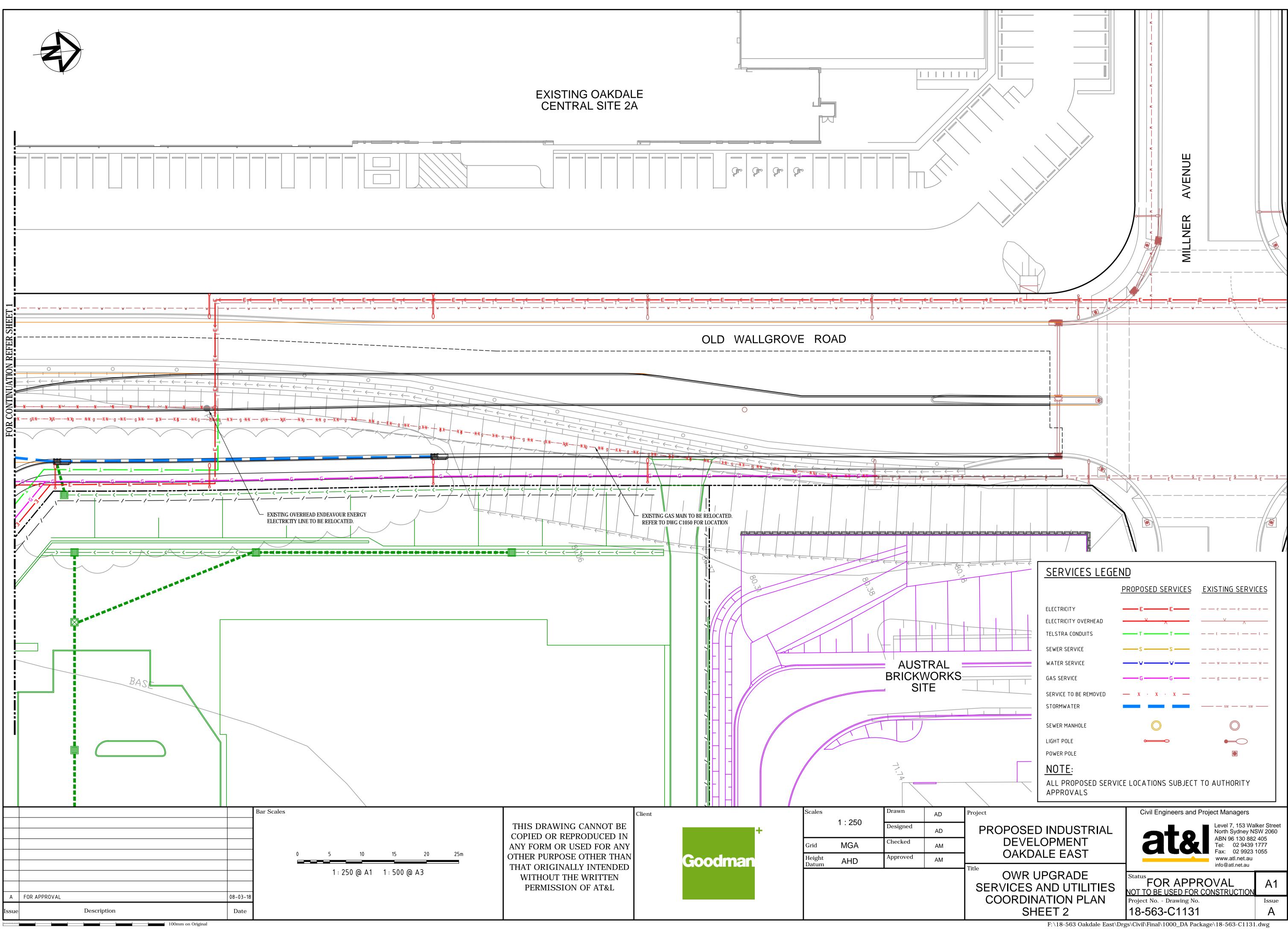
OWR UPGRADE
EROSION AND SEDIMENT
CONTROL DETAILS

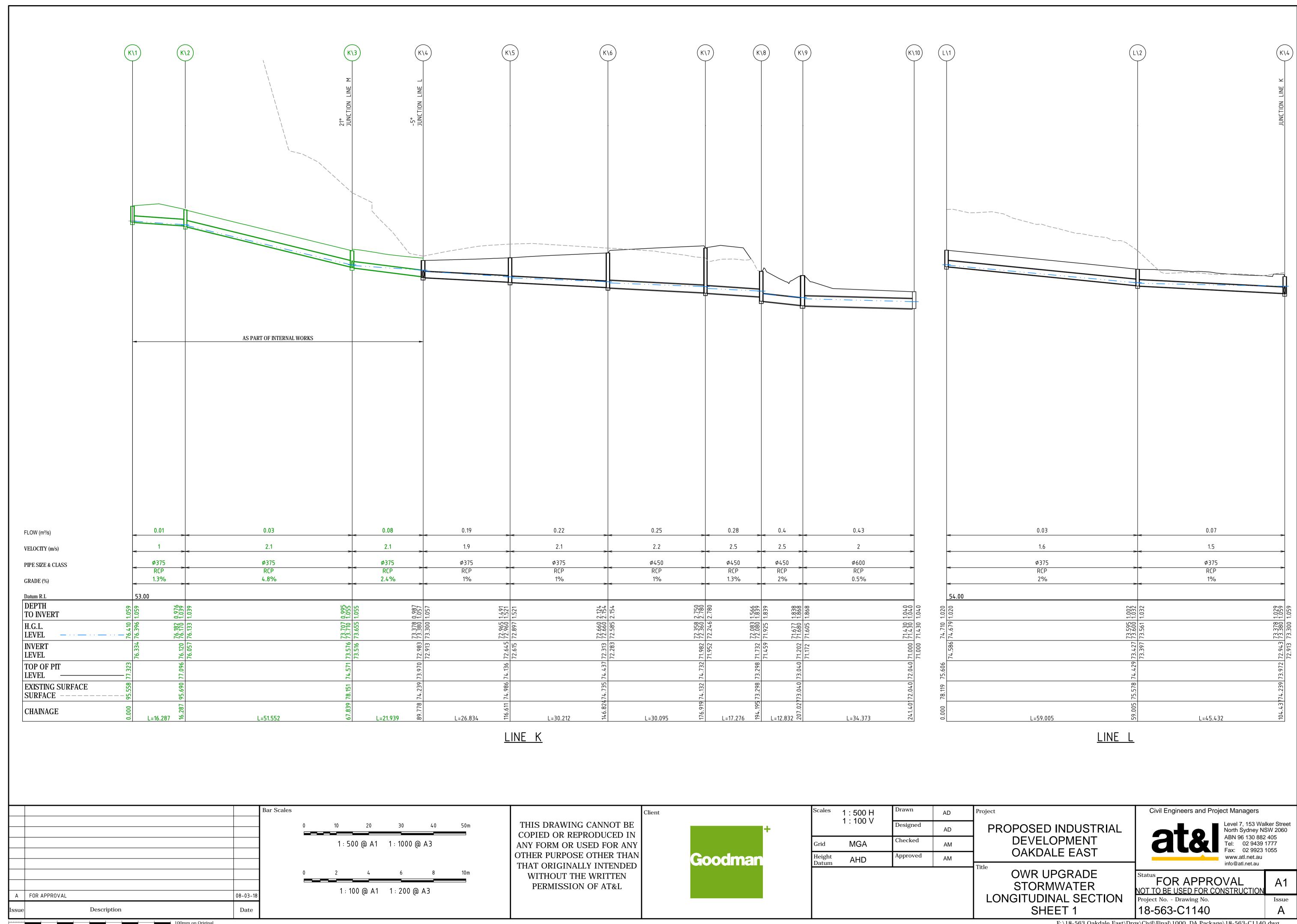
Civil Engineers and Project Managers							
at&I	Level 7, 153 Walker Street North Sydney NSW 2060 ABN 96 130 882 405 Tel: 02 9439 1777 Fax: 02 9923 1055 www.atl.net.au info@atl.net.au						

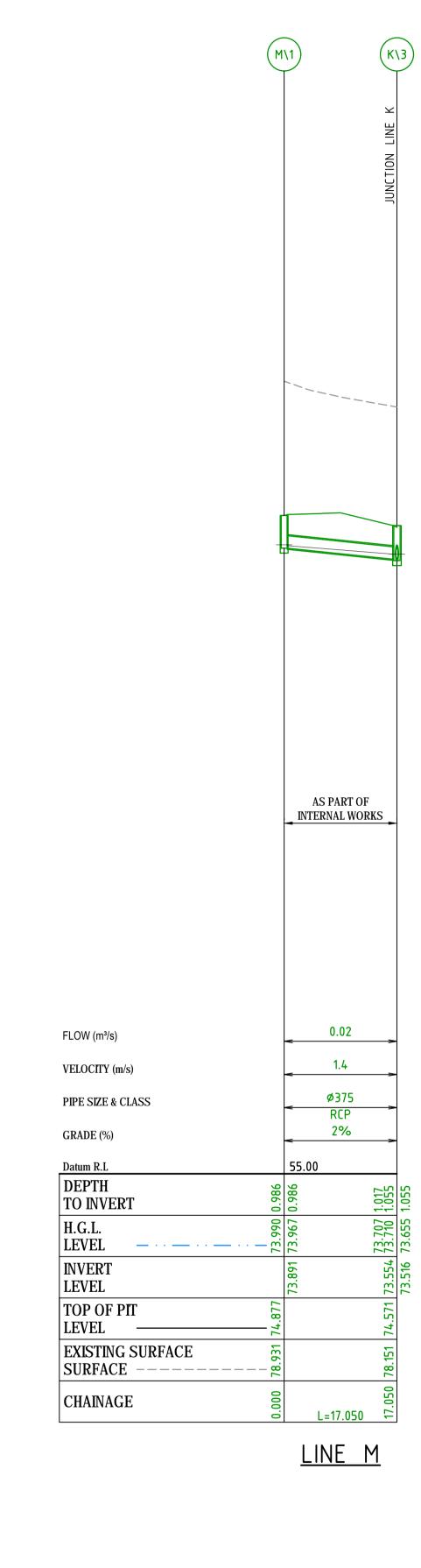
FOR APPROVAL A1
NOT TO BE USED FOR CONSTRUCTION
Project No. - Drawing No. Issue
18-563-C1114 A











		Bar Scales			Client	Scales	1 : 500 H	Drawn	AD	Project	Civil Engineers and Project Managers
			0 10 20 30 40 50m	THIS DRAWING CANNOT BE COPIED OR REPRODUCED IN	+	1	1 : 100 V	Designed	AD	PROPOSED INDUSTRIAL	Level 7, 153 Walker Stree North Sydney NSW 2060
				ANY FORM OR USED FOR ANY		Grid	MGA	Checked	АМ	DEVELOPMENT	ABN 96 130 882 405 Tel: 02 9439 1777 Fax: 02 9923 1055
		_		OTHER PURPOSE OTHER THAN THAT ORIGINALLY INTENDED		Height Datum	AHD	Approved	АМ	OAKDALE EAST	www.atl.net.au info@atl.net.au
			1: 100 @ A1 1: 200 @ A3	WITHOUT THE WRITTEN PERMISSION OF AT&L						OWR UPGRADE STORMWATER	FOR APPROVAL A1
A FOR APPROV	DVAL 08-03	3–18	1.100 (4 71 1.200 (4 75							LONGITUDINAL SECTION	Project No Drawing No. Issue
Issue	Description	te								SHEET 2	18-563-C1141 A

100mm on Original

