

### Land Use Planning and Approvals Act 1993

APPLICATION NO.

DA2023/149

LOCATION OF AFFECTED AREA

76 COVE HILL ROAD & 1 PARKHOLME DRIVE, BRIDGEWATER

DESCRIPTION OF DEVELOPMENT PROPOSAL

ADDITIONS & ALTERATIONS TO BRIDGEWATER BRIDGE OFFSITE FACILITY

A COPY OF THE DEVELOPMENT APPLICATION MAY BE VIEWED AT <a href="https://www.brighton.tas.gov.au">www.brighton.tas.gov.au</a> AND AT THE COUNCIL OFFICES, 1 TIVOLI ROAD, OLD BEACH, BETWEEN 8:15 A.M. AND 4:45 P.M., MONDAY TO FRIDAY OR VIA THE QR CODE BELOW. ANY PERSON MAY MAKE WRITTEN REPRESENTATIONS CONCERNING AN APPLICATION UNTIL 4:45 P.M. ON 31/10/2023. ADDRESSED TO THE GENERAL MANAGER AT 1 TIVOLI ROAD, OLD BEACH, 7017 OR BY EMAIL AT <a href="mailto:development@brighton.tas.gov.au">development@brighton.tas.gov.au</a>.

REPRESENTATIONS SHOULD INCLUDE A DAYTIME TELEPHONE NUMBER TO ALLOW COUNCIL OFFICERS TO DISCUSS, IF NECESSARY, ANY MATTERS RAISED.

JAMES DRYBURGH General Manager

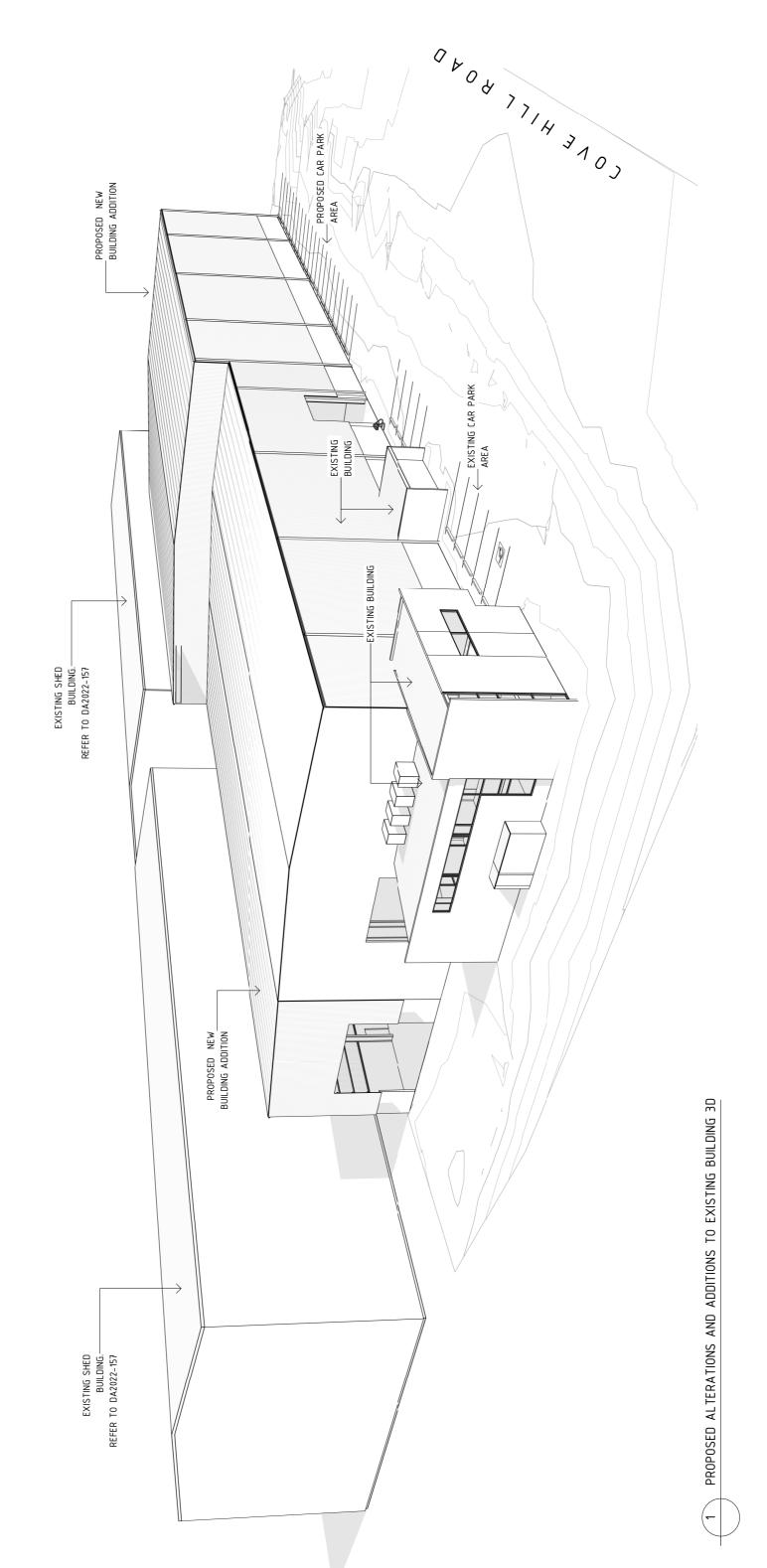


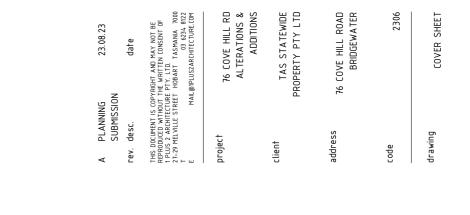


# 76 COVE HILL ROAD - BRIDGEWATER TASMANIA - PROPOSED ALTERATIONS AND ADDITIONS - DEVELOPMENT APPLICATION SUBMISSION 23.08.2023

DRAWING LIST ARCHITECTURAL

GENERAL NOTES  THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE ENGINEERS DRAWINGS.  ANY DISCREPANCIES SHALL BE REFERRED TO THE OWNER/PROJECT MANAGER.  ALL CONSTRUCTION SHALL BE IN STRICT ACCORDANCE WITH THE CURRENT  REQUIREMENTS OF THE NATIONAL CONSTRUCTION CODE, ALL CURRENT AUSTRALIAN  STANDARDS REFERENCED THERE IN AND THE PARTICULAR REQUIREMENTS AND BY-  LAWS OF ALL AUTHORITIES HAVING JURISDICTION OVER THE SITE.	WORKMANSHIP AND MATERIALS TO ALL TRADES SHALL BE BEST QUALITY TO STANDARDS ACCEPTED BY THE ROYAL AUSTRALIAN INSTITUTE OF ARCHITECTS AND THE MASTER BUILDERS ASSOCIATION OF AUSTRALIA. WHERE AUSTRALIAN STANDARDS ARE APPLICABLE TO MATERIALS, NO LESS STANDARD WILL BE ALLOWED.  ALL MATERIALS SHALL BE NEW UNLESS OTHERWISE SPECIFIED.	WORKMANSHIP SHALL BE PERFORMED BY SKILLED TRADESPEOPLE AND MUST COMPLY WITH CURRENT APPLICABLE AUSTRALIAN AND OTHER STANDARDS REQUIRED BY THE REGULATIONS AND LOCAL AUTHORITIES.  ALL PROPRETARY MATERIALS & FINISHES ARE TO BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS AND WARRANTED METHODS. WRITTEN WARRANTIES AND MAINTENANCE MANUALS FOR ALL PROPRIETARY	AND WARRANTED CONSTRUCTIONS, INSTALLATIONS, SYSTEMS, SERVICES AND APPLIANCES ARE TO BE SUPPLIED TO THE OWNER AT PRACTICAL COMPLETION.  THE CONTRACTOR SHALL ENSURE THAT ALL PROTECTIVE COATING SYSTEMS INCLUDING PAINTS, RENDERS, WEATHER AND WATER-PROOFING MEMBRANES AND THE LIKE ARE FIT FOR PURPOSE AND INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND WARRANTED METHODS. SYSTEMS INSTALLED TO	WARRANTED SUBSTRATES SUCH AS CLADDING SYSTEMS SHALL BE SELECTED IN ACCORDANCE WITH THE SUBSTRATE MANUFACTURER'S REQUIREMENTS AND WARRANTIES.	THE BUILDER SHALL CHECK AND VERIFY ALL DIMENSIONS, BOTH FIGURED AND ON SITE. THE BUILDER SHALL BE RESPONSIBLE FOR CONFIRMATION OF SITE BOUNDARIES, SETTING OUT AND FOR THE ACCURACY OF THE WORKS THROUGHOUT CONSTRUCTION.	THE GLAZIER SHALL DISCUSS & CONFIRM ALL DETAILS WITH THE BUILDER PRIOR TO ANY WORKS ON OR OFF SITE TO ENSURE CO-ORDINATED, WEATHER TIGHT AND WARRANTED CERTIFIED CONSTRUCTION.  EQUIVALENTS TO SPECIFIED ITEMS WILL NOT BE ACCEPTED UNLESS APPROVED IN ANAMES OF INSTALLATION BY THE OWINED A DESIGNATION BY THE OWINED ANAMES OF INSTALLATION BY THE OWINED ANAMES.	HAZARDOUS MATERIALS: GIVE NOTICE IMMEDIATELY HAZARDOUS MATERIALS OR CONDITIONS ARE FOUND.	BEFORE HAND-OVER, THE BUILDER SHALL ENSURE: THAT THE BUILDING & ALL SURROUNDINGS ARE CLEAN, ALL GLASS IS CLEANED INSIDE AND OUT, AND ALL RUBBISH & DEBRIS IS REMOVED FROM SITE. ALL DOORS, CUPBOARDS AND OPENING WINDOWS ARE IN WORKING CONDITION WITHOUT DEFECTS AND FULLY SEALED WHEN SHUT.	ALL SERVICES ARE CONNECTED, TESTED, AND IN WORKING CONDITION. GLAZING: GLASS THICKNESS TO MEET THE REQUIREMENTS OF AS1288 & AS 1735.2 & THE NATIONAL CONSTRUCTION CODE.	ALL DIMENSIONS ARE NOMINAL & TO BE CONFIRMED ON SITE BY THE GLAZIER PRIOR TO INSTALLATION.
PROJECT TEAM  ARCHITECT: 1 PLUS 2 ARCHITECTURE PTY. LTD. FRED WARD ACCREDITATION NUMBER: CC4065F 27 MELVILLE STREET, HOBART TAS 7000  BUILDING SURVEYOR: LEF TYERS BUILDING SURVEYORS	LEE TYERS LEE TYERS PO BOX 364 KINGSTON TAS 7051  STRUCTURAL/CIVIL ENGINEER: BROGUE CONSULTING ENGINEERS 128 RUPERT ST COLLINGWOOD VIC 3066	ELECTRICAL/HYDRAULIC ENGINEER OMNISYSTEMS ENGINEERING CONSULTANTS UNIT 51,6-14 WELLS RD OAKLEIGH 3166 TRAFFIC ENGINEER:	HUBBLE TRAFFIC CONSULTING 25 MERINDAH ST ROSNY TAS 7018  LANDSCAPE ARCHITECT: INSPIRING PLACE LANDSCAPE ARCHITECTS 210 COLLINS ST HOBART TAS 7000	<u>LAND SURVEYOR:</u> ROGERSON & BIRCH SURVEYORS UNIT 1, 2 KENNEDY DRIVE, CAMBRIDGE PARK TAS 7170	NOTE: EXISTING CONTOUR AND LEVEL INFORMATION HAS BEEN PROVIDED BY ROGERSON & BIRCH SURVEYORS WITH SURVEY INFORMATION POSITION ON THE AUSTRALIAN HEIGHT DATUM.	EXISTING BUILDING GROUND FLOOR AREA: 1,546 <sup>M</sup> 2 UPPER FLOOR AREA: 99.5M <sup>2</sup> EXISTING TOTAL: 1645,5 M <sup>2</sup>	PROPOSED BUILDING	UPPER LEVEL: 99.5M²  TOTAL PROPOSED: 4,615M²  NOTE: FLOOR AREAS RELATE ONLY TO THE SHED WHERE WORKS	WERE APPROVED UNDER DA2022-157	

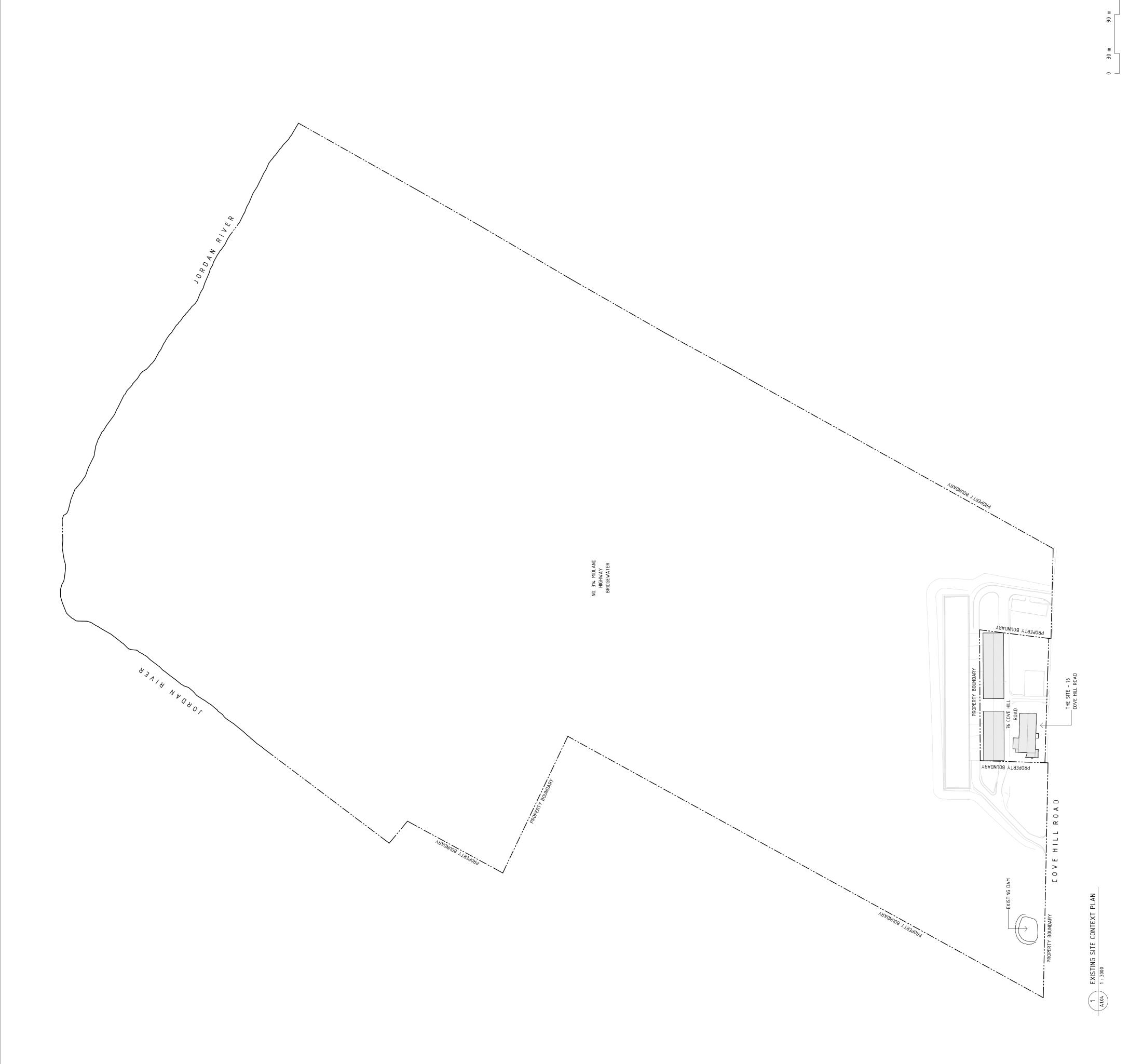


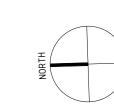


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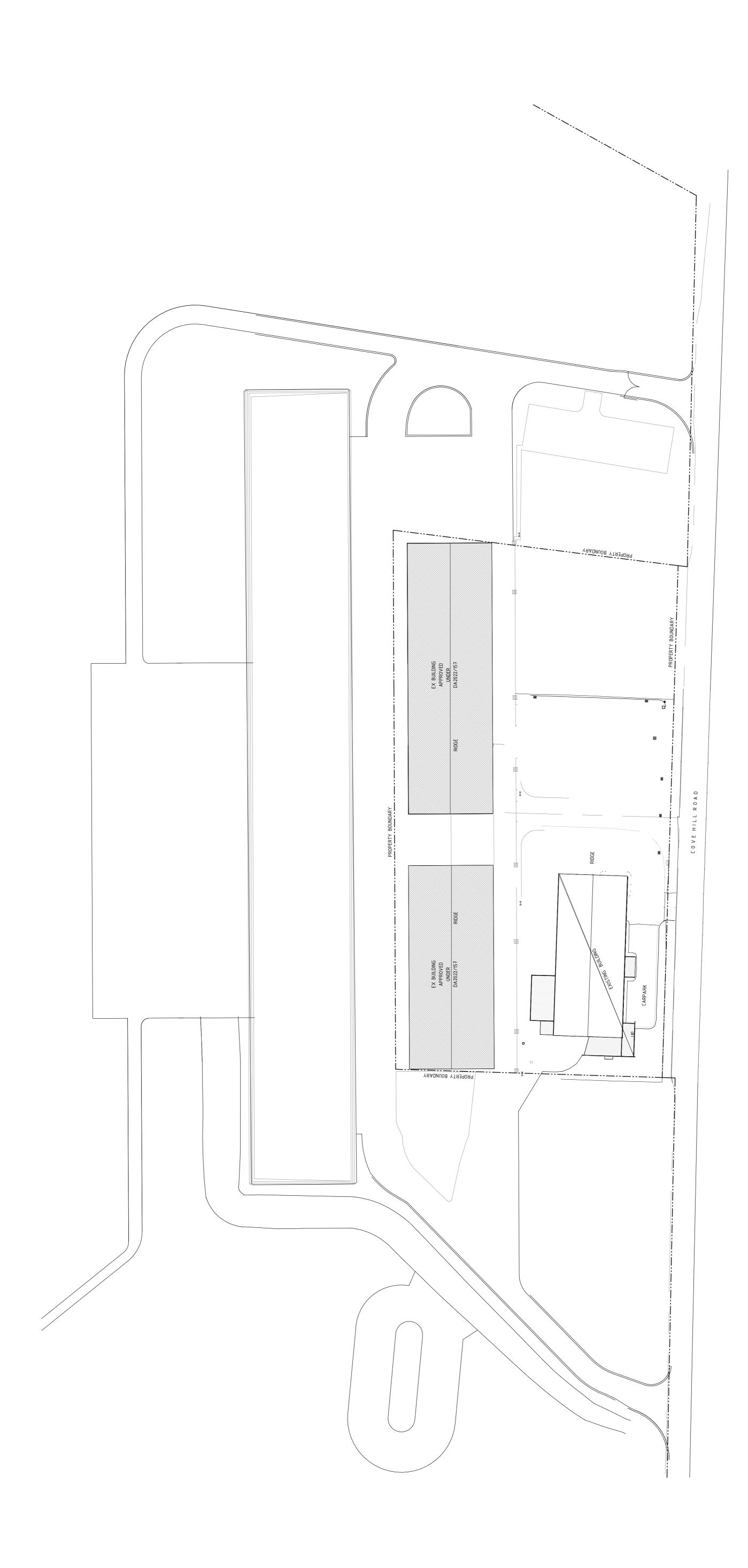
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76 COVE HILL RD ALTERATIONS & ADDITIONS

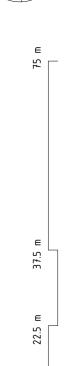
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drawing EXISTING CONTEXT PLAN scale 1:3000 @ A1



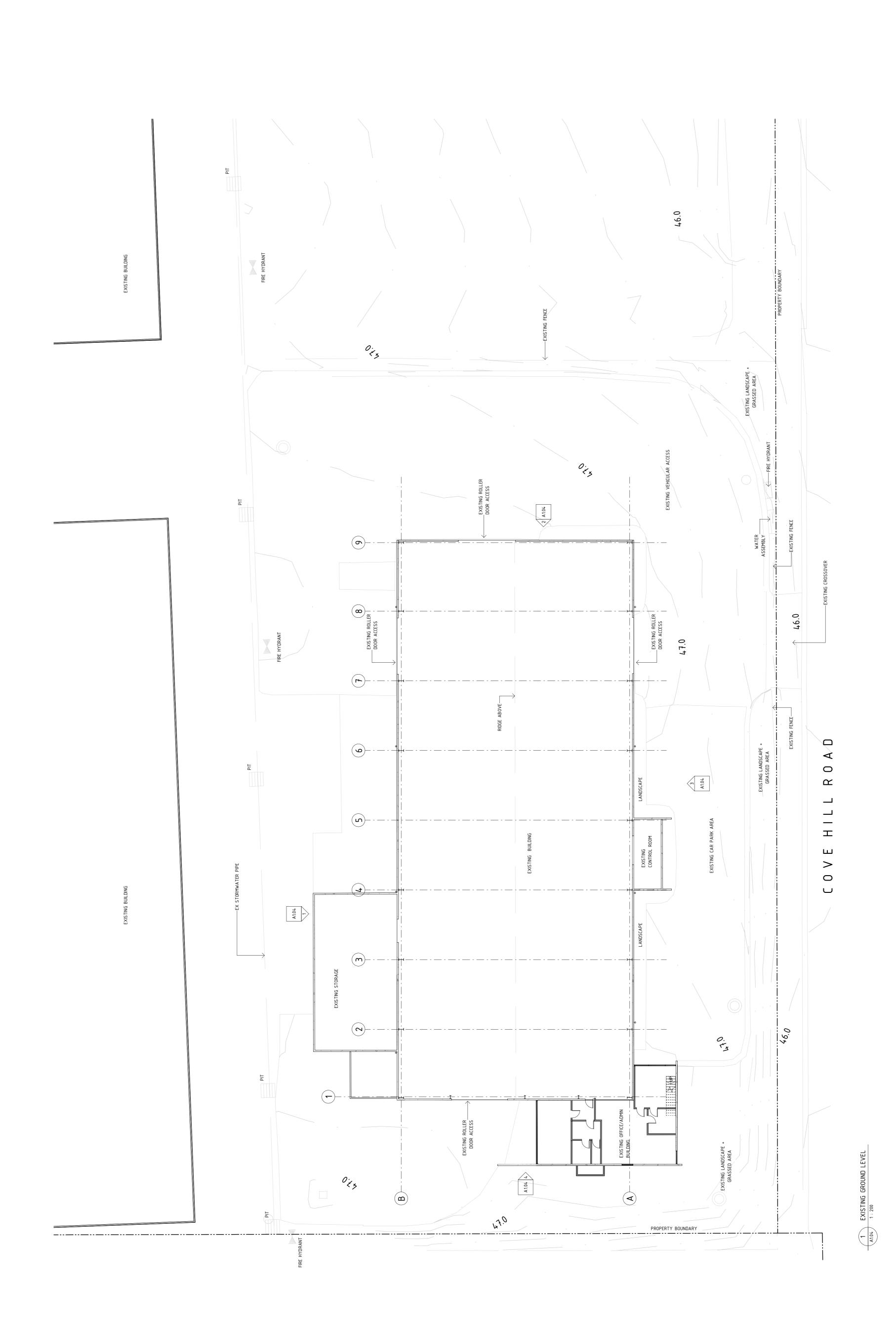


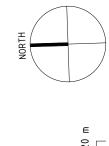
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EXISTING SITE PLAN







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EXISTING FLOOR PLAN

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rev. desc.

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Project 76 COVE HILL RD

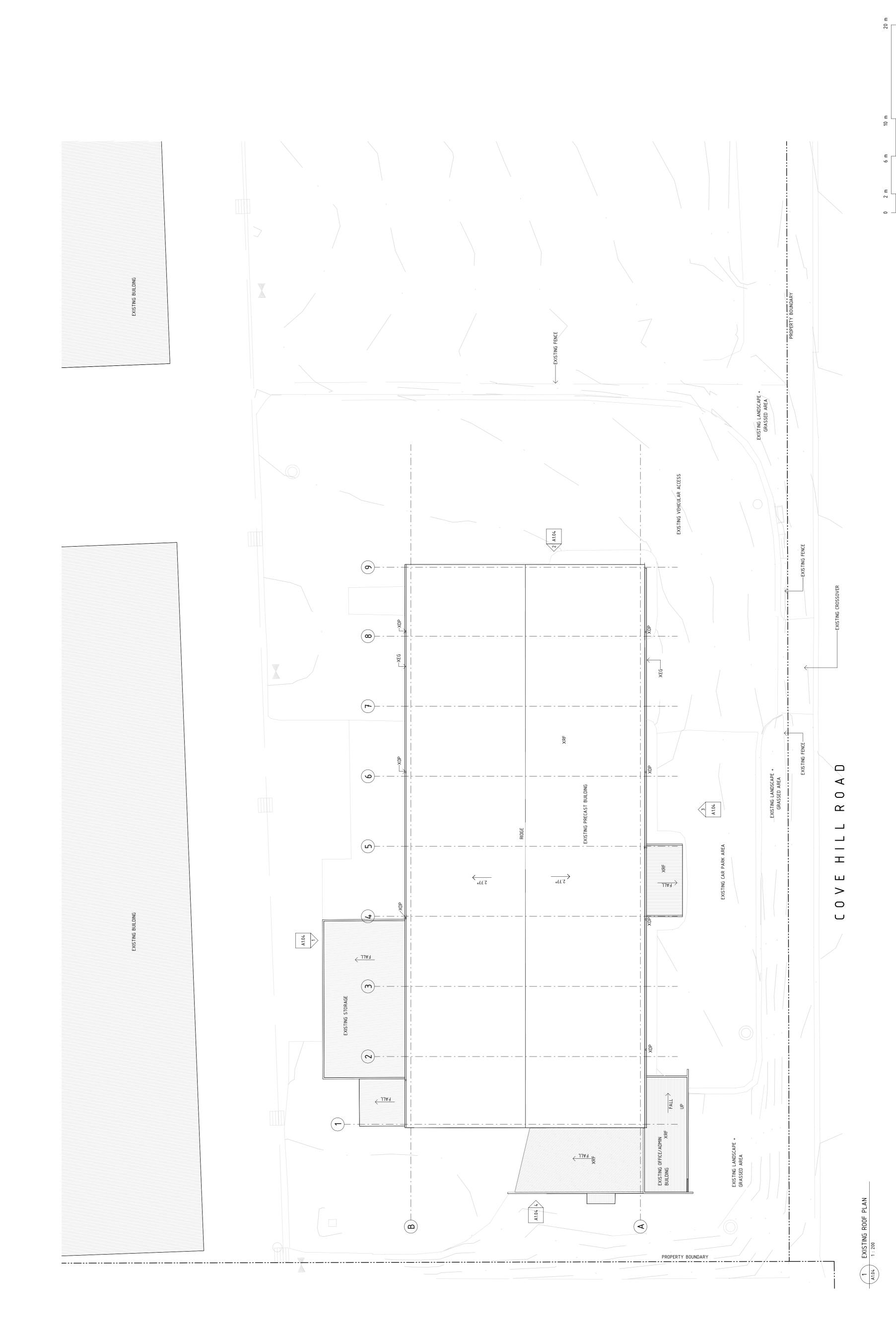
ALTERATIONS & ADDITIONS

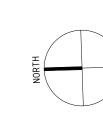
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BRIDGEWATER

BRIDGEWATER







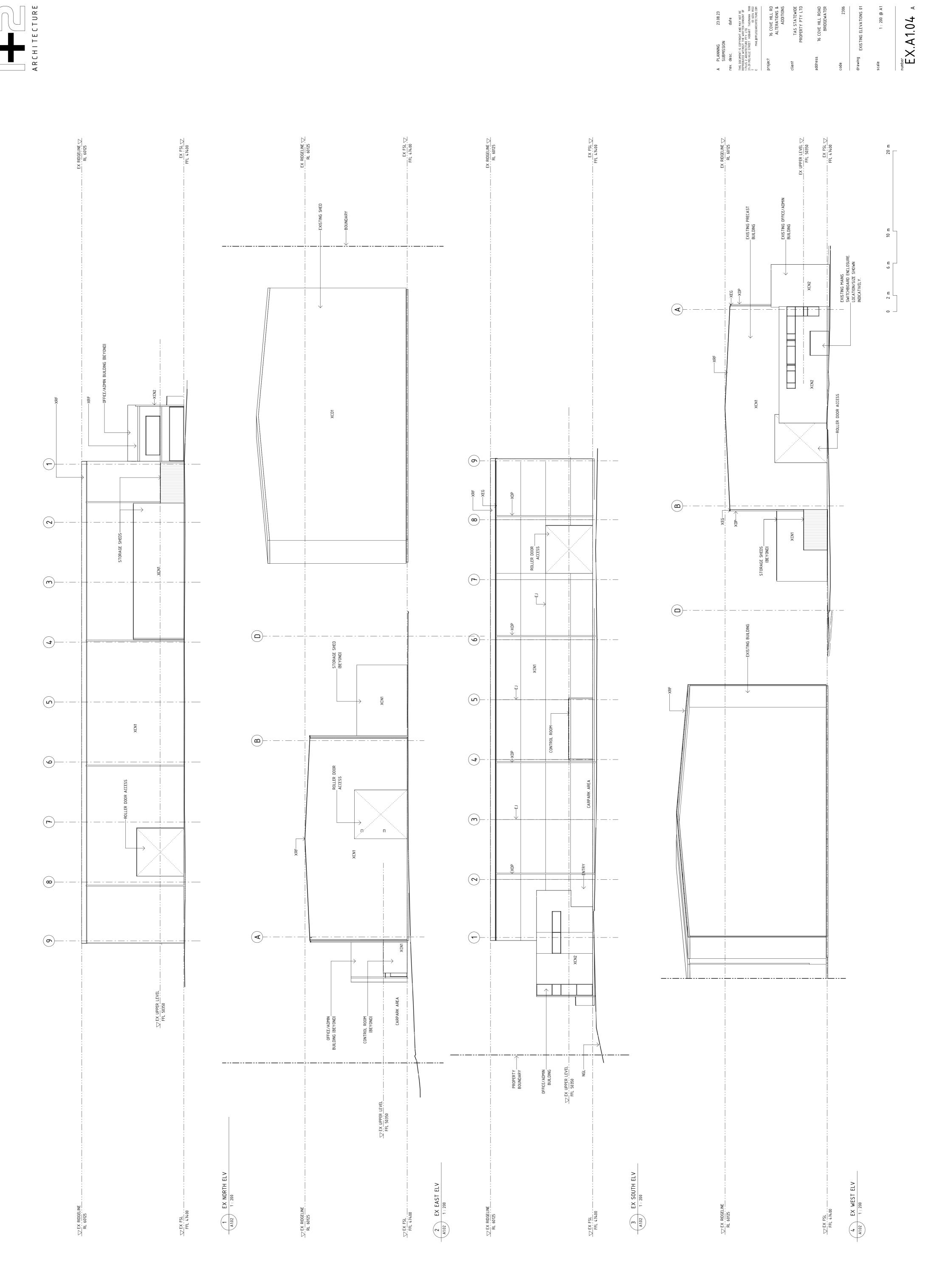
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EXISTING ROOF PLAN

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Project 76 COVE HILL RD
ALTERATIONS &
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BRIDGEWATER

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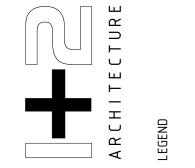
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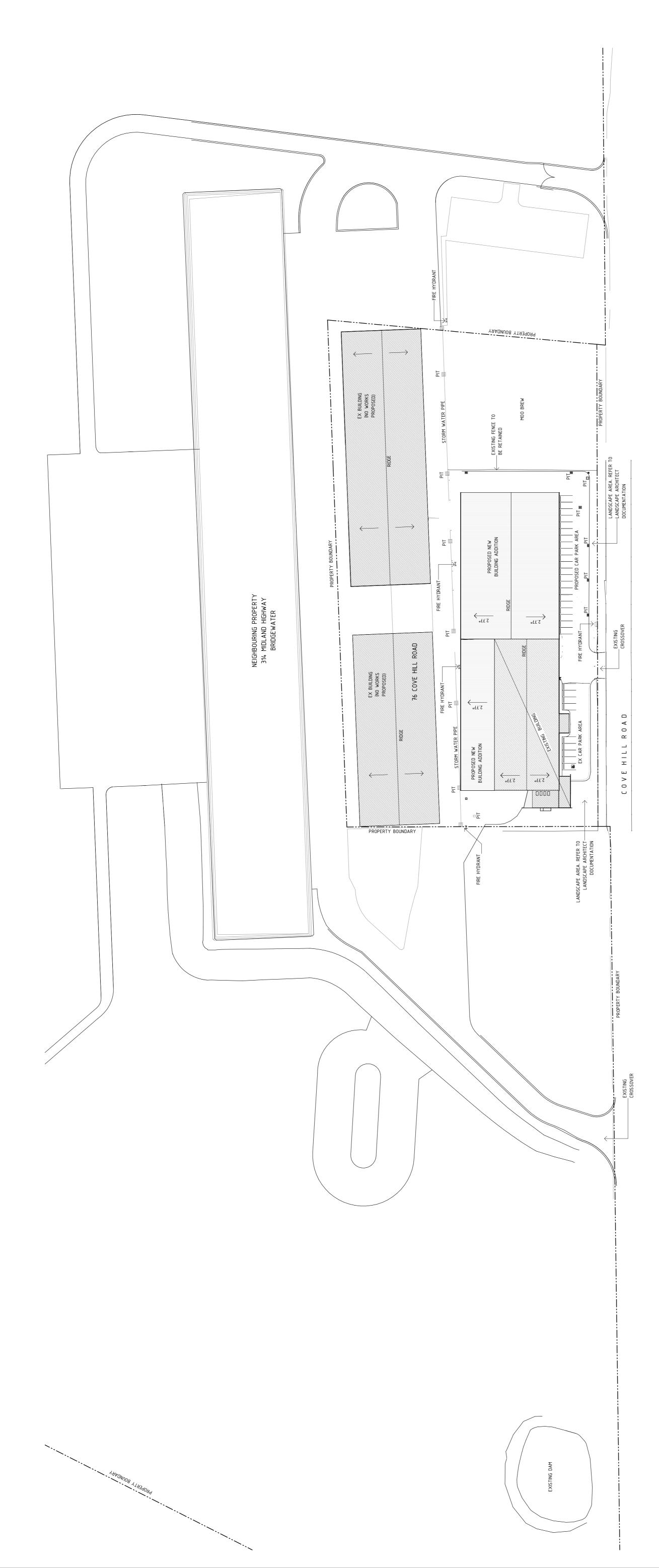
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76 COVE HILL RD ALTERATIONS & ADDITIONS





PROPOSED SITE PLAN
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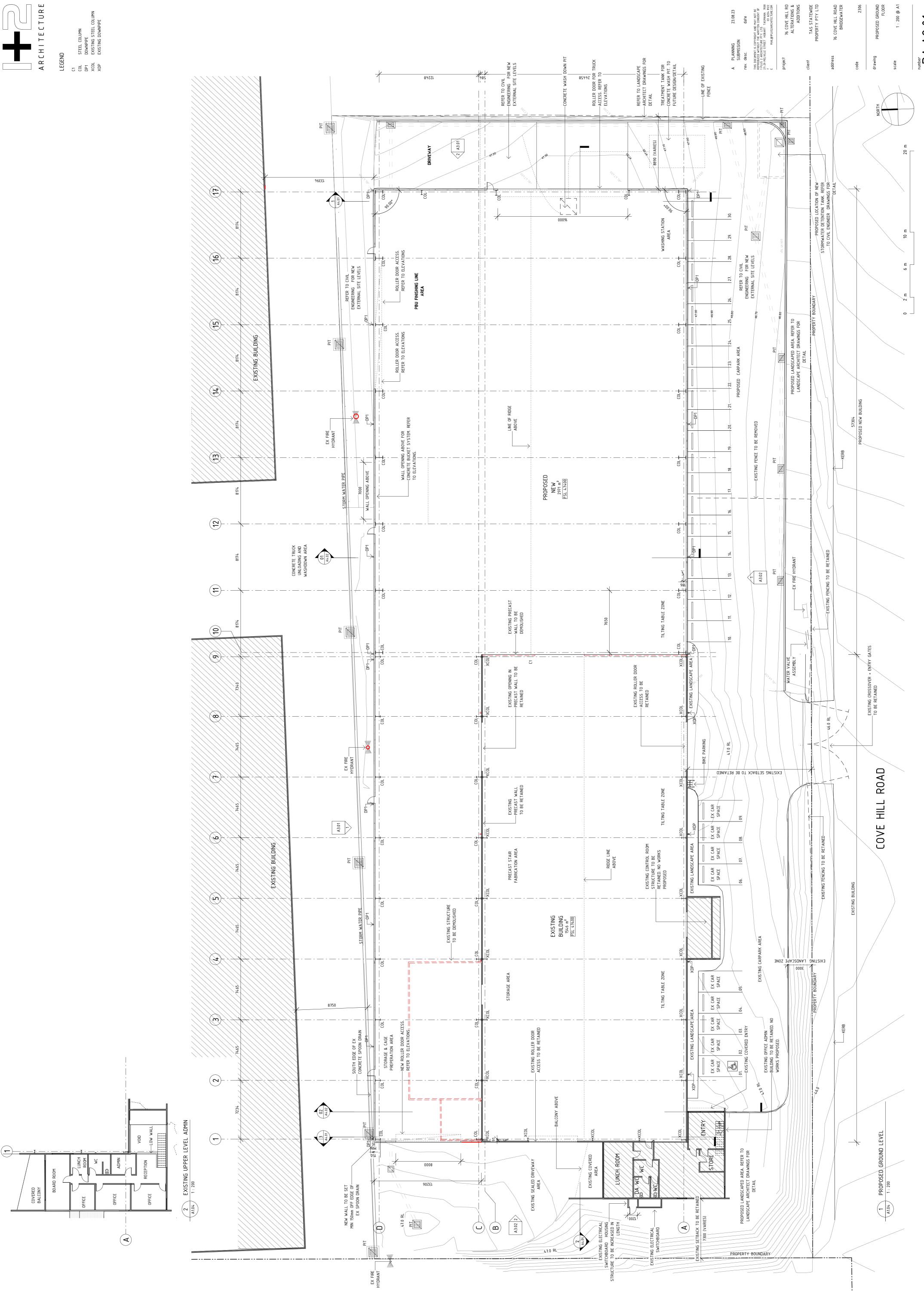
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m 37.5 m

PROPOSED SITE PLAN

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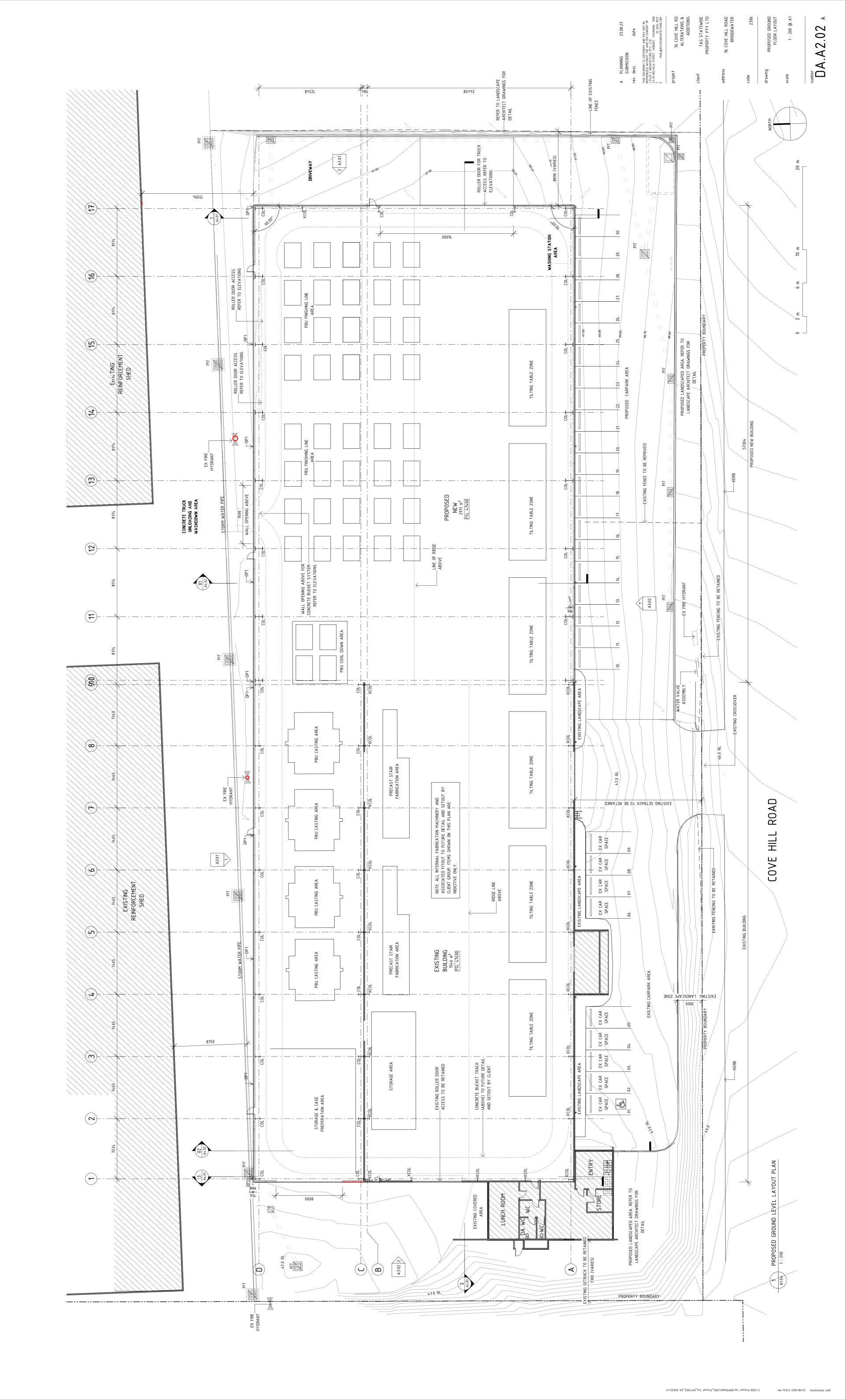
76 COVE HILL RD ALTERATIONS & ADDITIONS

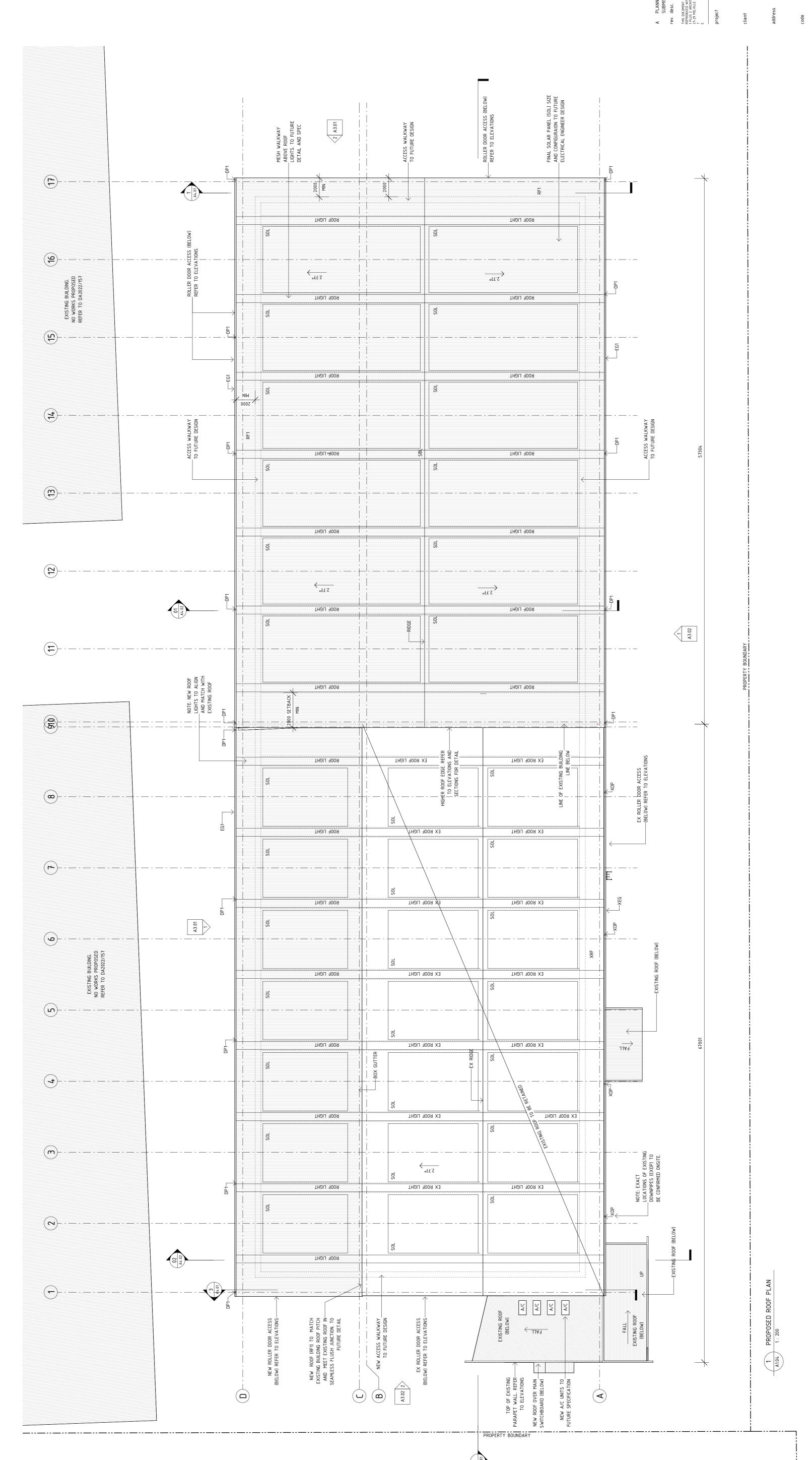


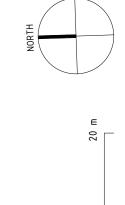
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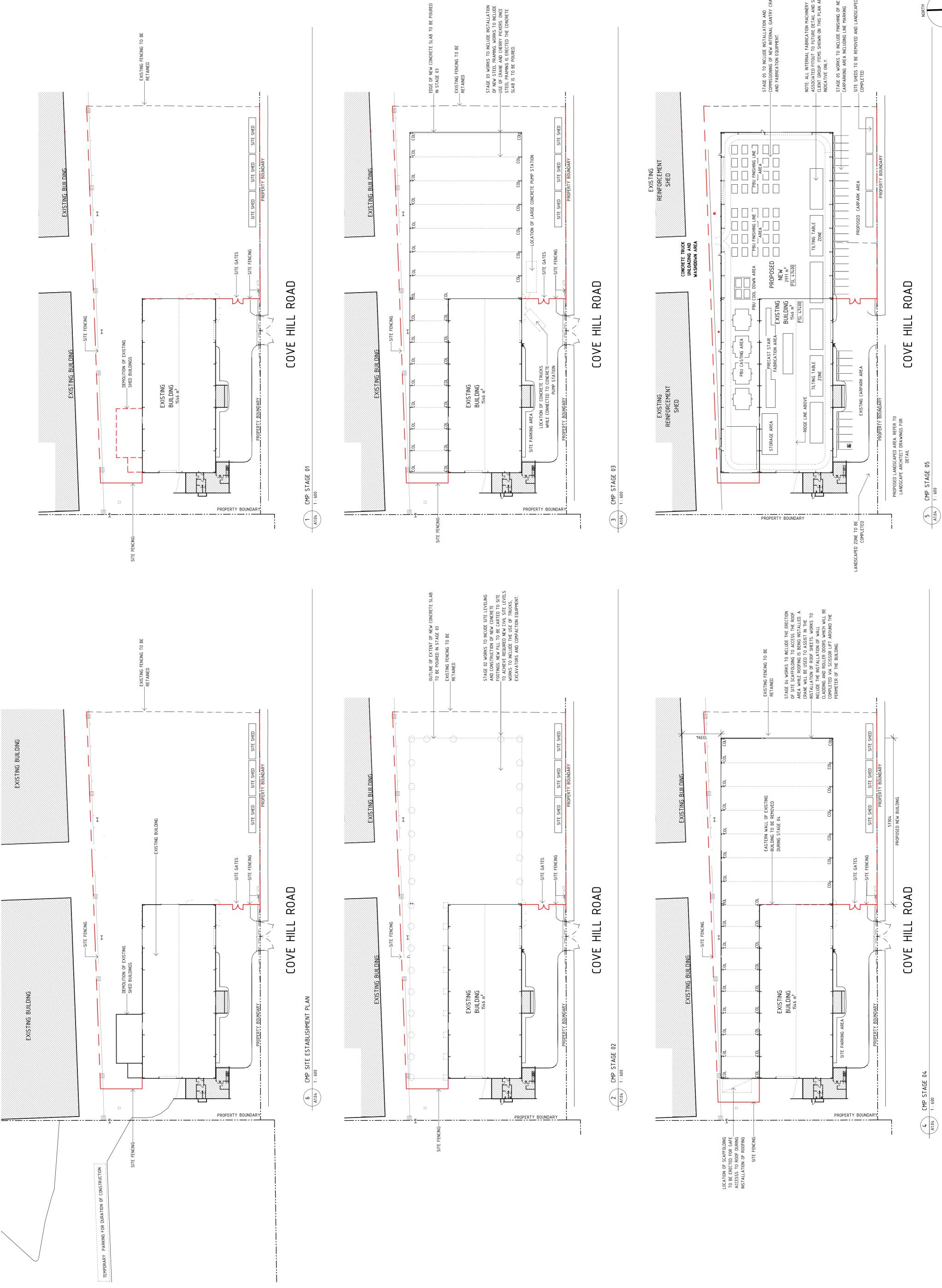




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76 COVE HILL RI ALTERATIONS 8 ADDITION



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ARCHITECTURE

LEGEND

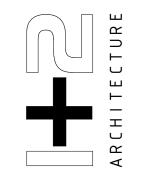
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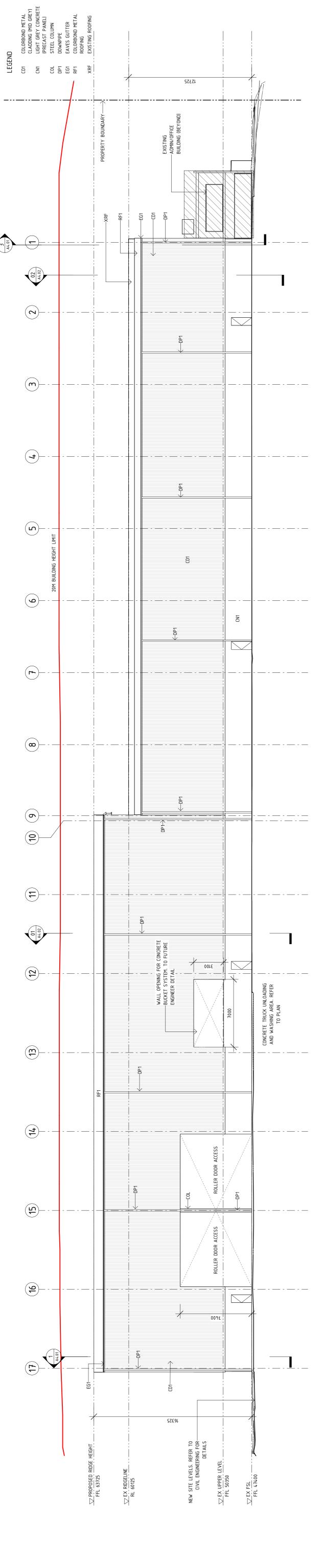
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76 COVE HILL RD ALTERATIONS & ADDITIONS

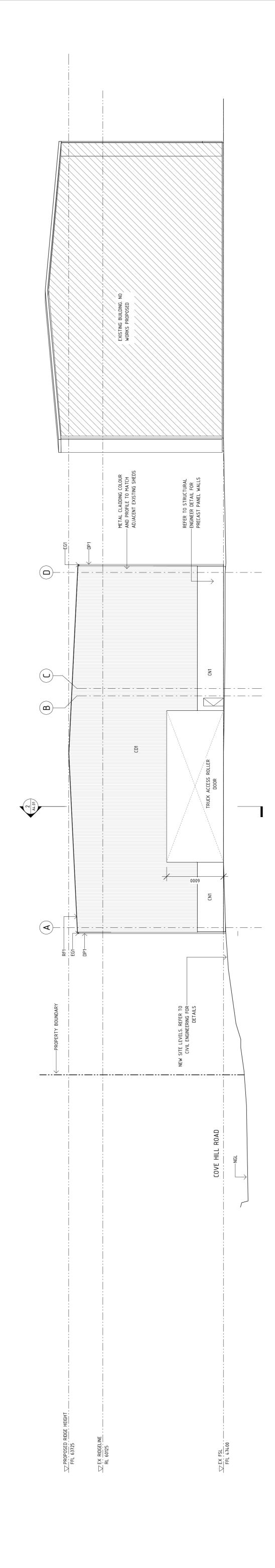
TAS STATEWIDE PROPERTY PTY LTD

PROPOSED STAGING CMP PLAN





PROPOSED NORTH ELV
(A2.01) 1:200



PROPOSED EAST ELV
(A2.01) 1: 200

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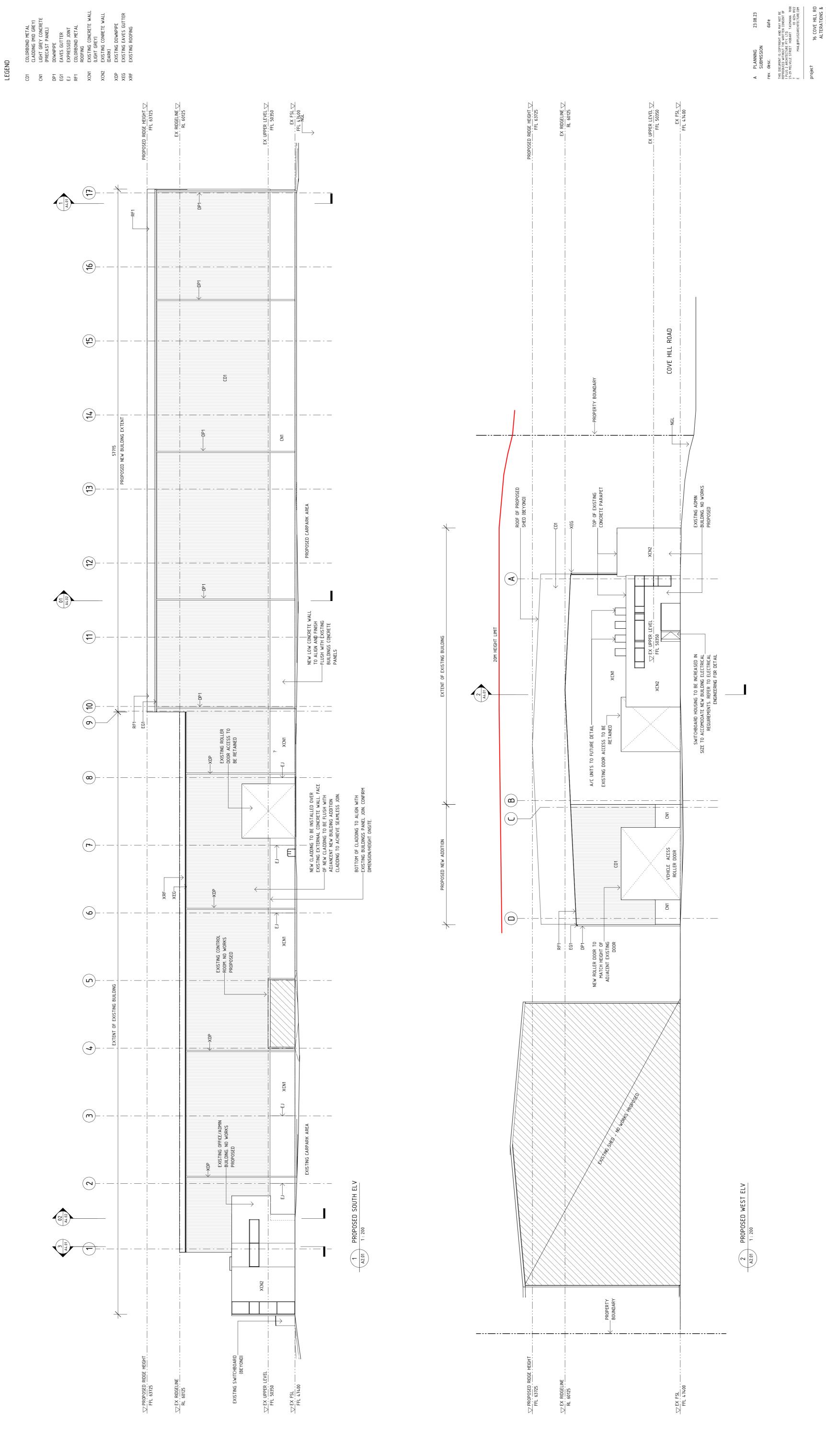
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PROPOSED ELEVATION

TAS STATEWIDE PROPERTY PTY LTD

76 COVE HILL RD ALTERATIONS & ADDITIONS





76 COVE HILL RD ALTERATIONS & ADDITIONS

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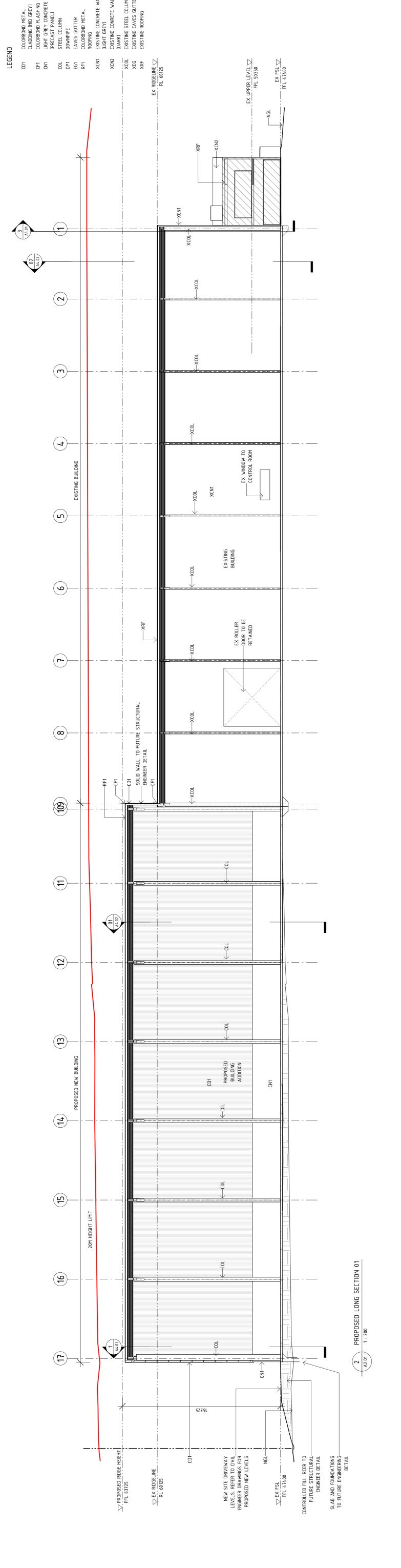
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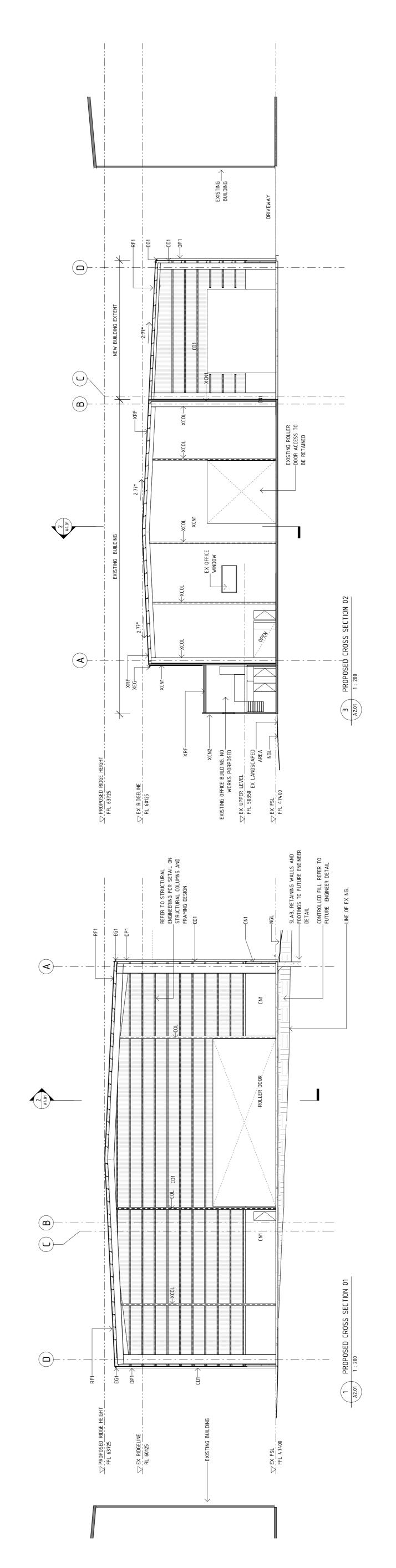
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76 COVE HILL ROAD BRIDGEWATER

drawing PROPOSED ELEVATIONS 2







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76 COVE HILL R ALTERATIONS ADDITION

DESCRIPTION

DATE

NOT FOR CONSTRUCTION

# STING BUILDING AT RATIONS AND ADDITIONS TO EX BRIDGEWATER, DRIVE, PROPOSED ALTE COVEHILL 9/

# **CIVIL ENGINEERING DRAWINGS INDEX**

### GENERAL

PROJECT NOTES & SPECIFICATIONS **COVER SHEET & DRAWING LIST** C.001 C.002

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CUT-FILL PLAN AND QUANTITIES - T.B.C/ WORK IN PROGRESS C.115

SITE LEVELS PLAN - T.B.C/ WORK IN PROGRESS SITE SECTIONS - T.B.C/ WORK IN PROGRESS C.116 C.121

# STORMWATER DRAINAGE & LEVELS

STORMWATER DRAINAGE

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# **PAVEMENT & RETAINING WALLS**

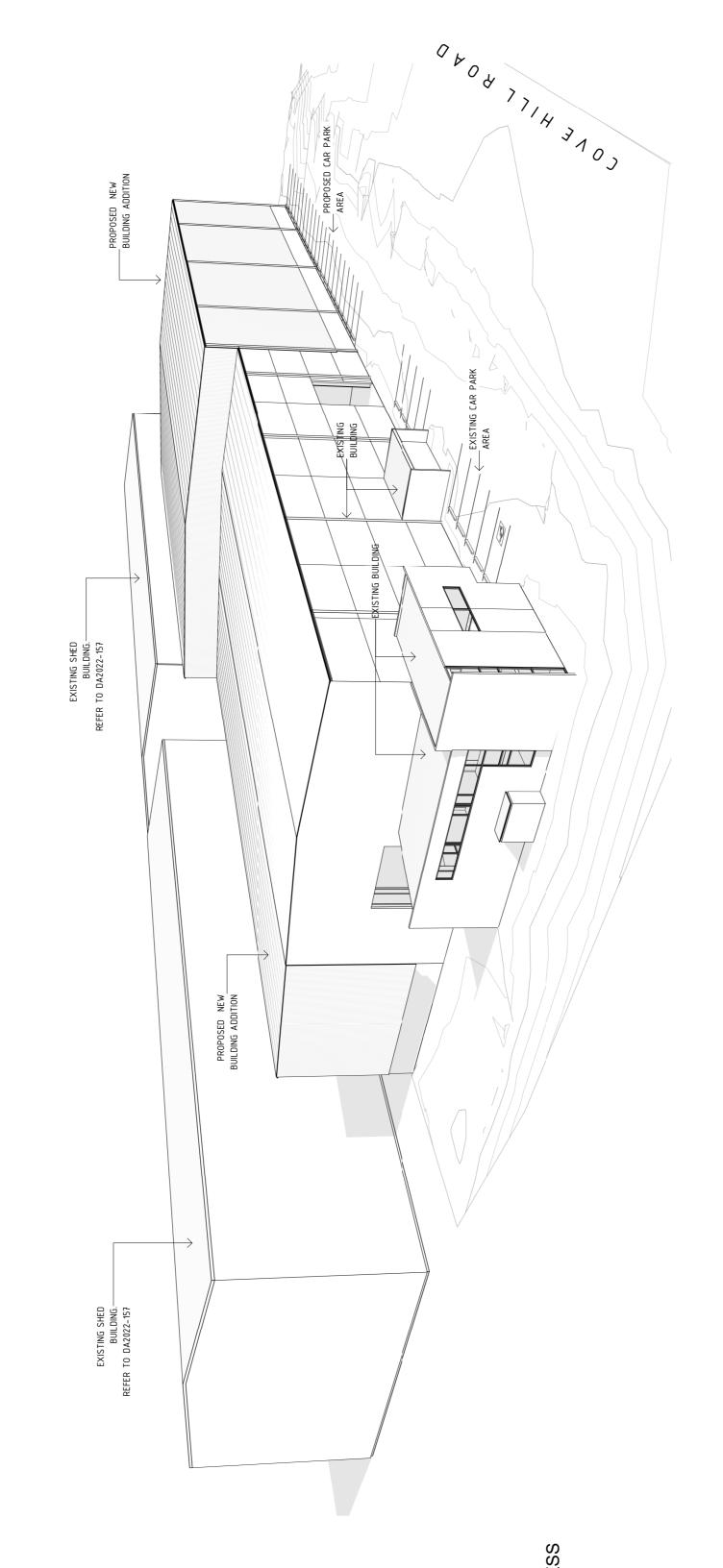
PAVEMENT & RETAINING WALL ARRANGEMENT C.301

PAVEMENT DETAILS - T.B.C/ WORK IN PROGRESS

RETAINING WALL DETAILS - T.B.C/ WORK IN PROGRESS C.411

# LOCAL GOVERNMENT AUTHORITY

BRIGHTON CITY COUNCIL 1 TIVOLI ROAD, OLD BEACH, TAS, 7017



PROGRESS GROUP

CLIENT PROGRESS GROUP

1+2 ARCHITECTURE 27-29 MELVILLE STREEI HOBART, TAS, 7000

ARCHITECTURE

FOR DEVELOPMENT APPLICATION SU

# PROJECT NOTES

### GENERAL

d. HYDRAULICS (SERVICES); e. LANDSCAPE PLANS; AND PROJECT SPECIFICATIONS, ALONG WITH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT. THESE CIVIL DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE RELEVANT: a. SURVEY; b. ARCHITECTURAL; c. STRUCTURAL;

THE EXISTING FEATURES AND LEVELS SURVEY HAS BEEN PREPARED BY **PEAK SURVEYORS** DATED **07 OCTOBER 2021** REFERENCE **J21211.** ALL LEVELS SHALL BE OBTAINED FROM ESTABLISHED BENCH MARKS.

ALL DIMENSIONS RELEVANT TO THE SETOUT WILL BE VERIFIED BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF WORKS. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES TO THE SUPERINTENDENT.

DO NOT SCALE DRAWINGS.

THE CONTRACTOR SHALL OBTAIN ALL RELEVANT AUTHORITIES' APPROVALS PRIOR TO COMMENCEMENT OF WORKS AND UPON COMPLETION. ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT AUSTRALIAN STANDARDS AND OF ALL RELEVANT AUTHORITIES, EXCEPT WHERE VARIED BY THE PROJECT DOCUMENTATION.

THE CIVIL DRAWINGS DO NOT SHOW ALL DETAILS OF TRENCHES, FIXTURES, INSERTS, SLEEVES, OPENINGS, ETC. FOR ALL SERVICES AND THE LIKE THAT MAY BE PRESENT OR REQUIRED FOR THE WORKS, THE CONTRACTOR SHALL REFER TO ALL DRAWINGS AND SPECIFICATIONS FOR THE INCORPORATION OF SUCH ITEMS. FURTHERMORE, THE CONTRACTOR SHALL SUBMIT DETAILS OF ANY SUCH ITEMS THAT MAY CONFLICT WITH THE PROPOSED DESIGN TO THE ENGINEER FOR APPROVAL.

ALL NEW AND EXHUMED SERVICES THAT CROSS EXISTING AND FUTURE ROADS/PAVEMENT WITHIN THE SITE MUST BE BACKFILLED WITH CLASS 2 FINE CRUSHED ROCK TO SUBGRADE LEVEL AND COMPACTED TO 100% STANDARD DENSITY RATIO, SUBJECT TO APPROVAL FROM THE RELEVANT AUTHORITY.

ON COMPLETION OF SERVICES INSTALLATION, ALL DISTURBED AREAS SHALL BE RESTORED TO THE ORIGINAL CONDITIONS INCLUDING KERBS, FOOTPATHS, HARDSTANDS, ROADS, AND NATURE STRIP.

THE LOCAL GOVERNMENT AUTHORITY IS THE CITY OF WODONGA, CONTACTABLE AT 104 HOVELL STREET, WODONGA, VIC, 3690.

THE CONTRACTOR'S ATTENTION IS DRAWN TO THE REQUIREMENTS OF LOCAL COUNCIL. WHERE WORK IS LOCATED IN THE ROAD RESERVE OR CROSSES THE PAVEMENT OF A PUBLIC ROADWAY/FOOTPATH, THE CONTRACTOR SHALL OBTAIN A PERMIT COVERING THE NECESSARY OPENINGS AND COMPLY WITH THE CONDITIONS COVERING THE ISSUE OF SUCH PERMIT. THE CONTRACTOR SHALL OBTAIN DETAILS FROM THE LOCAL COUNCIL OR AUTHORITY AND CARRY OUT LIASING AT NO EXTRA COST. PAVEMENT SURFACING INCLUDING

## SITE MANAGEMENT

THE CONTRACTOR SHALL MAINTAIN ALL WORK SITES IN A SAFE, STABLE AND TRAFFICABLE CONDITION AT ALL TIMES.

THE CONTRACTOR SHALL RESTRICT ACTIVITIES TO THOSE AREAS DESIGNATED AS WORK AREAS UNDER THIS CONTRACT. AT NO TIME SHALL THE CONTRACTOR ENTER ADJOINING PROPERTIES OR CONTRACT AREAS ON THE SITE WITHOUT WRITTEN PERMISSION BY THE SITE SUPERINTENDENT.

THE CONTRACTOR SHALL ERECT AND MAINTAIN ALL SHORING, PLANKING, AND STRUTTING, DE-WATERING DEVICES, BARRICADES, SIGNS, LIGHTS, ETC.
NECESSARY TO KEEP WORKS IN A SAFE AND STABLE CONDITION AND FOR THE PROTECTION OF THE PUBLIC.

AS/NZ 4801 AND THE REQUIREMENTS OF THE RELEVANT AUTHORITIES SHALL BE COMPLIED WITH

THE CONTRACTOR WILL ADJUST ALL AFFECTED SERVICES COVERS TO MATCH NEW PAVEMENT LEVELS .

THE CONTRACTOR SHALL TRANSFER TBMs OUT OF THE CONSTRUCTION AREA PRIOR TO THE COMMENCEMENT OF WORKS.

AT THE COMPLETION OF THE WORKS, THE SITE IS TO BE LEFT IN A CLEAN AND TIDY CONDITION TO THE SATISFACTION OF THE SUPERINTENDENT. ALL ADJOINING DISTURBED AREAS ARE TO BE REINSTATED TO "AS FOUND" CONDITIONS. THE CONTRACTOR WILL COORDINATE WORKS WITH THE RELEVANT PUBLIC TRANSPORT AUTHORITY PRIOR AND DURING THE CONSTRUCTION WORKS.

### SITE CLEARING

THE SITE OF THE WORKS SHALL BE PREPARED BY STRIPPING ALL EXISTING TOPSOIL, FILL AND VEGETATION.

CLEAR THE SITE NECESSARY FOR THE CONSTRUCTION WORKS. CLEARING WILL INCLUDE BUT IS NOT LIMITED TO:

a. VEGETATION SUCH AS WEEDS, ROOTS, BRUSH, STUMPS, AND OTHER MATERIALS;

b. TREES AND OTHER FLORA;

c. ROCKS, FLOATERS AND OTHER SURFACE BOULDERS;

d. REFUSE AND OTHER MATERIALS; AND

e. OBSTRUCTIONS, BUT NOT EXISTING OPERATIONAL SERVICES WHICH WILL BE REMOVED BY A LICENSED DEMOLITIONS CONTRACTOR.

CLEARING WILL INCLUDE SURFACES COVERED BY THE WORKS AREA, STOCKPILE AREAS AND AREAS USED FOR PERMANENT AND TEMPORARY ROADS OR HARDSTAND/LAYDOWN AREAS. CLEARING WILL INCLUDE HARD OR FOREIGN OBJECTS ARISING FROM THE EXCAVATIONS WHICH ARE LOCATED WITHIN 1m OF ANY PART OF THE WORKS.

SETTING OUT

ALL LEVELS ARE EXPRESSED IN METRES, DIMENSIONS IN MILLIMETRES AND RADII IN METRES (U.N.O.). ALL LEVELS ARE TO AUSTRALIAN HEIGHT DATUM (U.N.O.).

THE CONTRACTOR SHALL ARRANGE ALL SURVEY SETOUT BY A REGISTERED SURVEYOR AND CONFIRM THE SETOUT.

EARTHWORKS

ALL GROUND WORKS AND EXCAVATION SHALL BE IN ACCORDANCE TO THE CIVIL TEST PTY LTD REPORT DATED 28 NOVEMBER 2022.

EARTHWORKS WILL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING:

a. SITE CLEARING AND DEMOLITION

b. REMOVAL AND STOCKPILING OF TOPSOIL ON SITE

c. FORMATIONS AND CONSTRUCTION OF ACCESS ROAD AND DRAINAGE

d. EXCAVATION OF MATERIALS

e. PLACEMENT AND COMPACTION OF EXCAVATED OR IMPORTED FILL

MATERIALS

f. PROTECTION OF COMPLETED EARTHWORKS

g. EXCAVATION, TRANSPORT AND DISPOSAL OF CONTAMINATED SOILS

THE COMMENCEMENT OF WORKS, THE CONTRACTOR SHALL BE BLE FOR THE PREPARATION AND IMPLEMENTATION OF A EROSION AND ATION CONTROL PLAN IN ACCORDANCE TO THE EPA VICTORIA S AND RELEVANT LOCAL GOVERNMENT AUTHORITY REQUIREMENTS. PRIOR TO RESPONSIE SEDIMENTA

THE WORKS WILL BE UNDERTAKEN IN SUCH A MANNER THAT WILL NOT DESTABILISE THE UNDERLYING GROUND, SURROUNDING AREAS,OR PREVENT THE PLACEMENT OF FILL.

NO STORMWATER IS TO POND AGAINST ADJOINING PROPERTIES. THE SITE SHALL BE GRADED AND DRAINED SO THAT STORMWATER WILL BE DIRECTED AWAY FROM THE BUILDING PLATFORM. EFFECTIVE STORMWATER DRAINAGE SHALL BE PROVIDED AND MAINTAINED THROUGHOUT THE COURSE OF THE CONSTRUCTION. ALL STORMWATER RUNOFF SHALL BE GRADED AWAY FROM THE PROPOSED DEVELOPMENT AND DISPOSED OF VIA SURFACE CATCH DRAINS OR STORMWATER PITS.

SHOULD ANY NATURAL GROUND OR FILL BE DAMAGED, DISTURBED OR ALLOWED TO DETERIORATE DUE TO WEATHERING OR OTHER CAUSES BY THE WORKS TO THE EXTENT THAT IT DOES NOT PROVIDE A SOUND FORMATION FOR THE OVERLYING WORKS, THE DAMAGED OR DISTURBED AREAS WILL BE REMOVED TO THE EXTENT NECESSARY TO EXPOSE A SOUND FOUNDATION AND REPLACE IT IN ACCORDANCE WITH THE REQUIREMENTS OF THIS SPECIFICATION.

THE CONTRACTOR SHALL TAKE MEASURES TO ENSURE DUST IS KEPT TO A MINIMUM.

EXISTING SERVICES WHERE SHOWN, HAVE BEEN PLOTTED FROM SUPPLIED DATA, THE ACCURACY IS NOT GUARANTEED AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING THE LOCATION AND DEPTHS OF EXISTING SERVICES PRIOR TO COMMENCING WORK CLEARANCES.

CARE SHALL BE TAKEN WHEN EXCAVATING IN THE VICINITY OF SERVICES.

EXCAVATION WITHIN 4.5m RADIUS OF TREES WILL BE CARRIED OUT WITH HAND HELD EQUIPMENT. CUTTING OF TREE ROOTS GREATER THAN 25mm¢ WILL BE CARRIED OUT UNDER THE SUPERVISION OF AN ARBORIST.

THE CONTRACTOR WILL UNDERTAKE WORKS IN ACCORDANCE WITH THE RELEVANT CONFINED SPACE STANDARDS AND REGULATIONS WHERE APPROPRIATE.

EQUIVALENT PRODUCTS PROPOSED BY THE CONTRACTOR WILL BE SUBMITTED IN WRITING TO THE SUPERINTENDENT. THE CONTRACTOR WILL NOT INCORPORATE EQUIVALENT PRODUCTS INTO THE WORKS UNTIL WRITTEN APPROVAL HAS BEEN RECEIVED. THE CONTRACTOR WILL TAKE CAUTION WHEN EXCAVATING NEAR FOOTINGS.

ANY DEFECT OR DEVIATION FROM THE CONTRACT DOCUMENTS THAT REQUIRES ASSESSMENT AND DETERMINATION OF CORRECTIVE MEASURES SHALL BE UNDERTAKEN AT THE CONTRACTOR'S EXPENSE.

# FILL & COMPACTION NOTES

FOUNDATION MATERIALS DEEMED AS UNSUITABLE BY THE SUPERINTENDENT SHALL BE REMOVED AND REPLACED WITH APPROVED MATERIAL SATISFYING THE REQUIREMENTS LISTED BELOW.

COMPACT THE SUBGRADE TO 98% MDD AS PER AS/NZ1289-1993. THE EXPOSED SUBGRADE SHOULD BE PROOF ROLLED WHERE POSSIBLE TO DETECT ANY SOFT OR WET AREAS WHICH SHOULD BE LOCALLY EXCAVATED AND BACKFILLED WITH SELECTED MATERIAL.

SELECT ENGINEERED FILL SHALL BE TO THE GEOTECHNICAL REPORT'S RECOMMENDATIONS AND PLACED IN A CONTINUOUS MANNER, APPROXIMATELY 200mm LOOSE THICKNESS, AND SHALL BE COMPACTED TO ACHIEVE NOT LESS THAN 98% MDD. THE TOP 300mm LAYER SHALL ACHIEVE A COMPACTION NOT LESS THAN 98% MDD.

CONTENT OF SUBGRADE SHOULD BE **85-115%** OF STANDARD OPTIMUM CONTENT MOISTURE MOISTURE

BUILDINGS, PLANT AND ROAD COMPACTION REQUIREMENTS
NOT LESS THAN 98% MDD

# FOOTPATHS, SERVICE TRENCHES COMPACTION REQUIREMENTS NOT LESS THAN 95% MDD

WHERE POSSIBLE, SUBGRADE PREPARATION SHOULD BE CONDUCTED DURING DRY WEATHER CONDITIONS. THE CONTRACTOR SHALL PROGRAM THE EARTHWORKS SUCH THAT ALL WORKING AREAS ARE ADEQUATELY DRAINED DURING THE <u>IMPORTANT</u> THE TOP 300mm LAYER OF THE PAVEMENTS SHALL ACHIEVE A COMPACTION NOT LESS THAN 98% SMDD.

PERIOD OF CONSTRUCTION. THE SURFACE SHALL BE GRADED AND SEALED OFF TO REMOVE DEPRESSIONS, ROLLER MARKS, AND SIMILAR WHICH WOULD ALLOW WATER TO POND AND PENETRATE THE UNDERLYING MATERIAL.

WHERE REQUIRED, ENGINEERED FILL MATERIAL SHALL BE SAMPLED, TESTED, AND APPROVED BY A QUALIFIED GEOTECHNICAL ENGINEER PRIOR TO USE. ALL TESTING SHALL BE CARRIED OUT BY AN APPROVED N.AT.A. TESTING AUTHORITY IN ACCORDANCE WITH THE PROJECT SPECIFICATION.

ALL FILL MATERIAL TO HAVE PARTICLE SIZE **NOM. 40mm** OR LESS OR THROUGH THE FOLLOWING GUIDE: ALL IMPORTED STRUCTURAL FILL MATERIAL SHALL BE EITHER:

1. RIPPED SILTSTONE OR SANDSTONE (SEDIMENTARY ROCK)

2. TYPE A FILL AS DEFINED BY VICROADS

3. CLASS 4 CRUSHED ROCK AS DEFINED BY VICROADS

REFER TO THE APPLICABLE GEOTECHNICAL REPORT FOR FURTHER DETAILS ON FOUNDATION AND SUBGRADE PREPARATION INSTRUCTIONS/RECOMMENDATIONS

THE PROPOSED **STORMWATER LEGAL POINT OF DISCHARGE** HAS BEEN NOMINATED BY LOCAL COUNCIL. THE CONTRACTOR SHALL ALLOW FOR THE NECESSARY SURVEY WORKS TO CONFIRM THE LOCATION AND LEVELS OF THE EXISTING DRAINAGE SYSTEM PRIOR TO THE COMMENCEMENT OF WORKS, AND SATISFY THEMSELVES THAT THE PROPOSED DRAINAGE SYSTEM WILL FUNCTION AS INTENDED.

NO WORKS SHALL CAUSE PONDING OF STORMWATER ON UPSTREAM PROPERTIES OR CONCENTRATE RUNOFF ONTO DOWNSTREAM PROPERTIES.

ALL 300mmø DRAINAGE PIPES AND LARGER SHALL BE MINIMUM CLASS 2 REINFORCED CONCRETE (FRC OR SRC) PIPES OF APPROVED SPIGOT AND SOCKET TYPE WITH RUBBER RING JOINTS (RRJ) <u>UNLESS NOTED OTHERWISE</u>. ALL DRAINAGE PIPES UP TO AND INCLUDING 225mmø TO BE MIN. SEWER CLASS uPVC WITH RUBBER RING JOINTS <u>UNLESS NOTED OTHERWISE</u>.

ALL PIPE JUNCTIONS UP TO AND INCLUDING 450mm¢ AND TAPERS SHALL BE VIA PURPOSE MADE FITTINGS.

THE MINIMUM GRADE TO STORMWATER DRAINS SHALL BE 1.0% (U.N.O.)

THE CONTRACTOR TO SUPPLY AND INSTALL ALL FITTINGS AND SPECIALS INCLUDING VARIOUS PIPE ADAPTORS TO ENSURE PROPER CONNECTION TO DISSIMILAR WORK.

PIPE BEDDING (TYP) TO BE H2 TYPE (U.N.O.) IN ACCORDANCE WITH THE CURRENT AUSTRALIAN STANDARDS.

STORMWATER PITS SHALL BE INSTALLED TO THE DIMENSIONS AS NOTED ON THE CIVIL DRAINAGE SCHEDULE OR PER AS3500.3.2015 TABLE 7.5.2.1, WHICHEVER IS THE GREATER.

## UTILITY SERVICES

THE CONTRACTOR SHALL ALLOW FOR THE NECESSARY BURIED SERVICES DETECTION WORKS AND CONTACT THE RELEVANT SERVICE AUTHORITY PRIOR TO THE COMMENCEMENT OF EXCAVATION WORKS ON SITE.

WHERE COVER (TO THE TOP OF SERVICE UTILITY) IS BELOW 0.50m FROM EXCAVATED SURFACE, PROVIDE MIN 20mm STEEL PLATE OR APPROVED EQUIVALENT PROTECTION

RIGID PAVEMENT: CONCRETE

(PLASTICITY INDEX) x (% PASSING 0.425mm) < 1000

STORMWATER DRAINAGE

THE PROPOSED STORMWATER DRAINAGE SYSTEM IS DEEMED TO BE PROVISIONAL BASED ON THE AVAILABLE SURVEY INFORMATION. THE CONTRACTOR SHALL VERIFY ALL STORMWATER PIT LEVELS AND INVERTS PRIOR TO THE COMMENCEMENT OF WORKS.

ALL CONNECTIONS TO EXISTING DRAINAGE SHALL BE MADE IN A PROFESSIONAL TRADESMAN-LIKE MANNER AND THE INTERNAL WALL OF THE PIT AT THE POINT OF ENTRY SHALL BE CEMENT RENDERED TO ENSURE A SMOOTH FINISH.

WHERE SUBSOIL DRAINS PASS UNDER FLOOR SLABS AND PAVEMENTS, UNSLOTTED uPVC SEWER CLASS PIPES SHALL BE USED.

AT CONNECTION TO PITS, THE SUBSOIL DRAIN INVERTS SHALL BE ABOVE THE OBVERT OF THE MAIN STORMWATER PIPE.

PIT DEPTHS GREATER THAN 0.9m IN DEPTH TO BE FITTED WITH APPROPRIATE STEP IRONS.

STORMWATER QUALITY TREATMENT UNITS AND SYSTEMS (WHERE SPECIFIED) SHALL BE INSTALLED STRICTLY IN ACCORDANCE TO THE MANUFACTURER'S INSTRUCTIONS.

AT THE COMPLETION OF THE CONSTRUCTION WORKS, THE CONTRACTOR SHALL INSPECT AND CLEAN THE PROPOSED ROOF DOWNPIPES, SUBSURFACE PIPES AN STORMWATER PITS. ALL DEBRIS AND TRASH SHALL BE REMOVED FROM PIPES, PITS AND RELATED STRUCTURES PRIOR TO THE HANDOVER OF WORKS.

THE LANDOWNER AND CONTRACTOR SHALL ENSURE THAT WRITTEN CONSENT IS REQUESTED FROM DEPARTMENT OF TRANSPORT/VICROADS BEFORE ANY CONSTRUCTION BEGINS WITHIN THE ROAD RESERVE. THE METHOD OF CONNECTION OF THE STORMWATER PIPE FROM THE PROPERTY TO THE STORMWATER PIPE IN STATION STREET MUST BE APPROVED BY DEPARTMENT OF TRANSPORT/VICROADS PRIOR TO CONSTRUCTION COMMENCING, THE CONTRACTOR SHALL NOT COMMENCE ANY CONSTRUCTION ACTIVITIES PRIOR TO THE RECEIPT OF THE ABOVE CONSENT.

THE LOCATIONS OF ALL UNDERGROUND SERVICES MAY NOT HAVE BEEN SHOWN ON THE CIVIL DRAWINGS. BROGUE CONSULTING ENGINEERS CANNOT GUARANTEE THE PRESENCE, ABSENCE OR THEIR LOCATIONS OF SERVICES, AND CANNOT ACCEPT RESPONSIBILITY OR LIABILITY FOR INACCURACIES IN THE SERVICES INFORMATION SHOWN ARISING FROM ANY CAUSE WHATSOVER.

THE CONTRACTOR SHALL ALLOW FOR THE NECESSARY AND APPROPRIATE SERVICES PROTECTION WORKS AND MEASURES TO BE IN PLACE PRIOR TO THE COMMENCEMENT OF WORKS.

ANY DISCREPANCIES SHALL BE REPORTED TO THE SUPERINTENDENT AND CLEARANCES TO BE OBTAINED FROM THE RELEVANT SERVICES AUTHORITY.

LEGEND THE CONTRACTOR SHALL VERIFY ALL SETOUT AND DIMENSIONS PRIOR TO THE COMMENCEMENT OF WORKS. CARRY OUT CONCRETE WORK IN ACCORDANCE WITH AS/NZ 3600 AND THE PROJECT SPECIFICATIONS.

PREPARE THE SUBGRADE AS PER THE EARTHWORKS NOTES KERBS, PITS, ETC.

a. COMPRESSIVE STRENGTH = 25MPa (MIN.)
b. SLUMP = 80mm
c. MAX AGGREGATE SIZE = 20mm
FOOTPATH
a. COMPRESSIVE STRENGTH = 25MPa (MIN.)
b. SLUMP = 80mm
c. MAX AGGREGATE SIZE = 20mm
LOADING BAYS
a. COMPRESSIVE STRENGTH = 32MPa (MIN.)
b. SLUMP = 65mm
c. MAX AGGREGATE SIZE = 20mm CONCRETE CHARACTERISTICS KERBS, PITS, ETC.

NO "BRECCIA" TYPE AGGREGATE SHALL BE USED. CEMENT TO BE TYPE SL TO AS/NZ3972 (U.N.O.).

MAXIMUM CONCRETE SHRINKAGE TO BE®600m AS PER AS/NZ1012.

NO ADMIXTURES SHALL BE USED WITHOUT PRIOR APPROVAL FROM THE CIVIL ENGINEER.

A VIBRATOR SHALL BE USED FOR ALL COMPACTION OF CONCRETE.

CONCRETE SHALL BE CURED USING AN APPROVED METHOD. CURING COMPOUNDS SHALL COMPLY WITH AS/NZ 3799.

ALL CONCRETE USED ON SITE SHALL BE SUBJECT TO PROJECT CONTROLS, SAMPLE, AND TESTING TO AS/NZ 3600.
THE CONCRETE SHALL BE SCREEDED TO THE REQUIRED CROSS SECTION PROFILE, FREE OF DEPRESSIONS AND HIGH AREAS TO SATISFY THE REQUIREMENTS OF THE INITIAL FINISH. CONSTRUCTION JOINTS WHERE NOT SHOWN SHALL BE LOCATED TO THE APPROVAL OF THE CIVIL ENGINEER.

FINAL FINISHING SHALL INCLUDE THE FLOATING AND TEXTURING OF THE PAVEMENT AND SHALL COMMENCE ONLY AS SOON AS THE WATER SHEEN HAS LEFT THE PAVEMENT SURFACE AND NOT IN ANY AREA WHERE THERE IS FREE SURFACE WATER.

THE COVER TO REINIFORCEMENT FOR CORROSION PROTECTION SHALL BE AS DETAILED OR AS A MINIMUM, 40mm TO TOP, AND 50mm TO BOTTOM. PIPES OR CONDUITS SHALL NOT BE PLACED WITHIN THE COVER TO THE REINFORCEMENT.

THE REINFORCEMENT SHOWN IN THE DRAWINGS ARE REPRESENTED DIAGRAMATICALLY AND IS NOT NECESSARILY SHOWN IN TRUE PROJECTION.

SPLICES IN REINFORCEMENT SHALL BE MADE ONLY IN THE POSITION SHOWN. THE WRITTEN APPROVAL OF THE CIVIL ENGINEER SHALL BE OBTAINED FOR ANY OTHER SPLICE.

WELDING OF REINFORCEMENT SHALL BE PERMITTED ONLY AFTER APPROVAL BY THE CIVIL ENGINEER. SITE BENDING OF Y OR N-BARS SHALL BE DONE COLD WITH POWER OR MECHANICAL BENDING TOOLS.

FABRIC SHALL BE EXTENDED TO 70mm WITH A CROSSWIRE ONTO WALLS (U.N.O.). JOINTS SHALL BE SAWN AS SOON AS THE CONCRETE HAS HARDENED SUFFICIENTLY THAT IT WILL NOT BE DAMAGEED BY SAWING. IF AN UNPLANNED CRACK OCCURS, THE CONTRACTOR SHALL REPLACE THE WHOLE SLAB EITHER SIDE OF THE PAVEMENT UNLESS DIRECTED OTHERWISE BY THE CIVIL ENGINEER.

DOWELS AND TIE BARS SHALL BE AS THE FOLLOWING:

a. STRAIGHT
b. TP THE LENGTH SPECIFIED
c. CLEAR AND FREE FROM MILL SCALE, RUST AND OIL
d. SAWN TO LENGTH NOT CROPPED DOWELS ONLY
e. HOT DIP GALVANISED AFTER SAWING TO LENGTH

PROVIDE ISOLATION JOINTS AROUND ALL STORMWATER PITS AND STRUCTURES LONGITUDINAL, ISOLATION AND CONSTRUCTION JOINTS SHALL BE LOCATED AS SPECIFIED. THE DIMENSIONS OF THE SEALANT RESERVOIR WILL BE DEPENDENT OF THE SEALANT TYPE ADOPTED.

PROVIDE RE-ENTRANT BARS ARRANGEMENT AROUND ALL STORMWATER PITS WITHIN CONCRETE PAVEMENTS WHERE NOMINATED (U.N.O.). SERVICES FOOTINGS &

WHEREVER A NEW FOOTING IS LOCATED CLOSE TO AN EXCAVATION OR BATTER, EXISTING FOOTING, IN GROUND SERVICES WHICH IS DEEPER THAN THE NEW FOOTING, THE EXCAVATION FOR THE NEW FOOTING SHALL BE DEEPENED AND BACKFILLED WITH BLINDING CONCRETE AS INDICATED BELOW.

U/S FOOTING DISTURBED GROUND/SERVICE TRENCH 30° FOR SAND; 45° FOR CLAY;
TBC WITH THE GEOTECH REPORT
NO DRAIN OR SERVICE TRENCHES—
TO BE LOCATED WITHIN THIS LINE FOOTING BLINDING AS REQUIRED BY STR ENGR

GROUND SUBSOIL DRAIN MIN. 1000 SLOTTED UPVC WITH PERFORATIONS U.N.O. SUSPENDED NON-PRESSURE STORMWATER PIPE FLOOR WASTE / PLANTER OUTLET (FW / PO) BURIED PRESSURISED STORMWATER PIPE BURIED NON-PRESSURE STORMWATER PIPE/CHANNEL STORMWATER JUNCTION PIT (JP) DOWNPIPE TO RAINWATER TANK STORMWATER GRATED PIT (GP) PUMPSTATION (PUMP WELL) FINISHED FLOOR LEVEL (FFL) DOWNPIPE TO RAINGARDEN GRATED TRENCH DRAIN TREE PROTECTION ZONE TERRACE OUTLET (TO) SPOT LEVEL (RL) RETAINING WALL INVERT LEVEL SPOON DRAIN +RL14.90 11.2.48 

brogue.com.au (03) 9416 2092

progue

ABBREVIATIONS

FROM BELOW FROM ABOVE TO ABOVE TO BELOW T/A T/B F/B

PROGRESS GROUP

CLIENT PROGRESS GROUP

1+2 ARCHITECTURE 27-29 MELVILLE STREET HOBART, TAS, 7000

ARCHITECTURE

FINE CRUSHED ROCK FLOOR WASTE HIGH POINT HIGH LEVEL  $\mathbb{F}/\mathbb{W}$ H/P FCR H/L

UNPLASTICISED POLYVINYL CHLORIDE FIBRE REINFORCED CONCRETE REINFORCED CONCRETE PIPE uPVC

INVERT LEVEL OF SPOON DRAIN INVERT LEVEL OF PIPE

TREE PROTECTION ZONE PLANTER OUTLET DOWN PIPE

DESCRIPTION

DATE

PRELIMINARY ISSUE

18/08/23 PRELIMINARY ISSUE 28/07/23 PRELIMINARY ISSUE

NOT FOR CONSTRUCTION

PRECAST TASMANIA 76 COVEHILL ROAD BRIDGEWATER, TAS, 7030

Job No. Drawing No. Rev. 23165 C.002 P2 DESIGNED: AM
CHECKED: JL
SIZE: A1 PROJECT NOTES & SPECIFICATIONS

**PROGRESS** 

WORK IN



CLIENT
PROGRESS GROUP

ARCHITECT

1+2 ARCHITECT

1+2 ARCHITECT

1+2 ARCHITECT

T-29 MEVILLE STREET
HOBARI, TAS, 7000

ARCHITECT URE

PROJECT NORTH

FROJECT NORTH

ISSUE DATE DESCRIPTION

PROJECT NORTH

SSUE DATE DESCRIPTION

PROJECT NORTH

P

0.0 47.0 45.0 **EXISTING SHED** EXISTING TEMPORARY RD 46.0 O. PRIVATE ROAD 0. 46.0 47.0 **COVEHILL ROAD EXISTING CARPARK EXISTING SHED** 

2.50 5.00

WORK IN PROGRESS

EXISTING FEATURE & LEVELS SURVEY

DATE: JULY 2023 DESIGNED: AM

DRAWN: AM CHECKED: JL

SCALE: 1:250 SIZE: A1

Job No. Drawing No. Rev.

23165 C.101 P1

PRELIMINARY ISSUE

NOT FOR CONSTRUCTION

PRECAST TASMANIA 76 COVEHILI ROAD BRIDGEWATER, TAS, 7030

FOR DEVELOPMENT APPLICATION SUBMISSION

DISCLAIMER ALL INFORMATION IN THIS DRAWING HAS BEEN SOURCED FROM THE FEATURE AND LEVELS SURVEY BY BEVERIDGE WILLIAMS, REF. 2300120 DATED MARCH 2023. ALL LEVELS SHALL BE PROVEN ON SITE PRIOR TO CONSTRUCTION.

DENOTES DIRECTION OF RUNOFF

=

PROVIDE OCEANGUARD BASKET WITH MESH BAGS (OG-200) TO ALL PROPOSED GRATED PITS IN THE PAVEMENT.

PROPOSED NEW Not Enclosed

RL.+47.400

2150 UPVC @ C

(<del>2</del>)

(H)

(P)-

**∞** 

THE CONTRACTOR SHALL VERIFY ALL THE EXISTING
SERVICE CONNECTION LEVELS PRIOR TO THE
CONSTRUCTION WORKS. REPORT TO THE
SUPERINTENDENT AND THIS OFFICE IMMEDIATELY UPON
THE IDENTIFICATION OF ANY DISCREPANCIES PRIOR TO
PROCEEDING WITH THE WORKS BEWARE OF UNDERGROUND SERVICES
THE LOCATION OF UNDERGROUND SERVICES ARE
INDICATIVE ONLY AND THEIR EXACT POSITION SHOULD BI
PROVEN ON SITE PRIOR TO THE COMMENCEMENT OF
WORKS. NO GUARANTEE IS GIVEN THAT ALL EXISTING
SERVICES ARE SHOWN HERE EXISTING PIT DEPTH TBC PRIOR TO CONSTRUCTION. 40kL ONSITE DETENTION SYSTEM WITH TREATMENT SYSTEM. REFER TO DETAIL.

PEAK FLOW (L/s)

116.8

136.0

PEAK FLOW (L/s)

116.0

133.0

DATE

## STORMWATER DRAINAGE NOTES

- MENCEMENT OF ANY BUILDING WORKS OR STORMWATER CONNECTION TO THE DRAINAGE CIVIL DOCUMENTATION TO BE READ IN CONJUNCTION WITH BUILDING SERVICES PLAN FOR THE ABOVE GROUND DRAIN DRAINAGE PIPES UNDER INTERNAL SLABS SHALL BE PROFESSIONALLY LAGGED REFER TO THE GENERAL NOTES UNDER "STORMWATER DRAINAGE" FOR ALL WORKS RELATING TO THE SITE ALL SITE AND SERVICES LEVELS (INCLUDING INVERTS) SHALL BE PROVED PRIOR TO THE COMMENCEMENT OF WORK ASSET PROTECTION PERMIT MUST BE OBTAINED FROM COUNCIL ENGINEERING SERVICES DEPARTMENT PRIOR TO COINEEVANT ENGINEERING PERMITS MUST BE OBTAINED PRIOR TO ANY WORKS WITHIN THE ROAD RESERVE AND NETWORK ALL PITS IN PEDESTRIAN AREAS TO BE MIN CLASS B ANTI SLIP HEEL SAFE COVER (U.N.O)

FOR DEVELOPMENT

**PROGRESS** Z

Rev. **D** C.201 SCALE: Job No. 23165 ( DATE: JULY 2023 DRAWN: AM

STORMWATER DRAINAGE

NOT FOR CONSTRUCTION

PRECAST TASMANIA 76 COVEHILL ROAD BRIDGEWATER, TAS, 7030

**PRELIMINARY ISSUE** 18/08/23 PRELIMINARY ISSUE 28/07/23 PRELIMINARY ISSUE ARCHITECTURE DESCRIPTION PROJECT NORTH

PRIVATE ROAD COEFFICIENT COEFFICIENT 0.60 0.60 0.80 0.80 POST-DEVELOPMENT STORMWATER RUNOFF SUMMARY PRE-DEVELOPMENT STORMWATER RUNOFF SUMMARY **COVEHILL ROAD** Tc (min) Tc (min) 10.0 10.0 7.0 7.0 AREA (Ha) AREA (Ha) MATCH LEVELS NEATLY EXISTING CONCRETE 0.792 0.792 0.792 0.792 (XOX MAJOR (1.0 % AEP) MAJOR (1.0 % AEP) MINOR (2.0% AEP) MINOR (2.0% AEP) EXISTING CARPARK

⋖

<del>%</del>0°S

%0.2

<del>7.</del>9 %7.9

100ø SUBSOIL (AGI) DRAIN @ MIN 0.5% TO STORMWATER SYSTEM

EXISTING DRAINAGE PIPE TO BE RE-DIRECTED TO PIT A04.

# STORMWATER DRAINAGE ANALYSIS SUMMARY

THE RAINFALL INTENSITY FREQUENCTY DURATION (IFD) DATA THAT WAS ADOPTED FOR THIS DESIGN WAS OBTAINED FROM THE BUREAU OF METEROLOGY IN COORDINATES -42.733810216995145, 147.2470369811829 AND SITUATED IN 76 COVEHILL ROAD IN BRIDGEWATER, TASMAINA.

THE STORMWATER HYDROLOGICAL AND HYDRAULIC ANALYSIS WAS PREPARED BASED ON PARAMETERS FROM THE ARR DATA HUB WITH METHODOLOGIES OUTLINED IN THE ARR 2019 USING THE INITIAL LOSS-CONTINUING LOSS MODEL.

**BMISSION** SU **APPLICATION** 

WORK

(E)-

6

**®** 

PRIVATE ROAD

PROGRESS GROUP

1+2 ARCHITECTURE 27-29 MELVILLE STREET HOBART, TAS, 7000

ARCHITECTURE

EXISTING PIT DEPTH TBC PRIOR —

**COVEHILL ROAD** 

DESCRIPTION DATE

18/08/23 PRELIMINARY ISSUE 28/07/23 PRELIMINARY ISSUE

**PRELIMINARY ISSUE** NOT FOR CONSTRUCTION

PRECAST TASMANIA 76 COVEHILL ROAD BRIDGEWATER, TAS, 7030

STORMWATER LEVELS & CONTOURS
TE: JULY 2023 DESIGNED: AWN: AM CHECKED: JL

THE CONTRACTOR SHALL VERIFY ALL THE EXISTING
SERVICE CONNECTION LEVELS PRIOR TO THE
CONSTRUCTION WORKS. REPORT TO THE
SUPERINTENDENT AND THIS OFFICE IMMEDIATELY UPON
THE IDENTIFICATION OF ANY DISCREPANCIES PRIOR TO
PROCEEDING WITH THE WORKS

SCALE: SIZE: A1
Job No. Drawing No. Rev.
23165 C.202 P2

**PROGRESS** 

**APPLICATION SU** FOR DEVELOPMENT

BEWARE OF UNDERGROUND SERVICES
THE LOCATION OF UNDERGROUND SERVICES ARE
INDICATIVE ONLY AND THEIR EXACT POSITION SHOULD BE
PROVEN ON SITE PRIOR TO THE COMMENCEMENT OF
WORKS. NO GUARANTEE IS GIVEN THAT ALL EXISTING
SERVICES ARE SHOWN HERE WORK **BMISSION** 

12.50m 2.50 0

%0°\$

%0°\$

%0°S

%0.2

%Z.8

MATCH LEVELS NEATLY TO EXISTING CONCRETE

X 0 X

A03

B2 INDUSTRIAL TYPE KERB AND CHANNEL. B02 B01 1.0% AEP OVERLAND FLOW PATH 9 (5) 30kL ONSITE DETENTION SYSTEM WITH TREATMENT SYSTEM. REFER TO DETAIL. ₹ 96.9#

PROPOSED
NEW
Not Enclosed

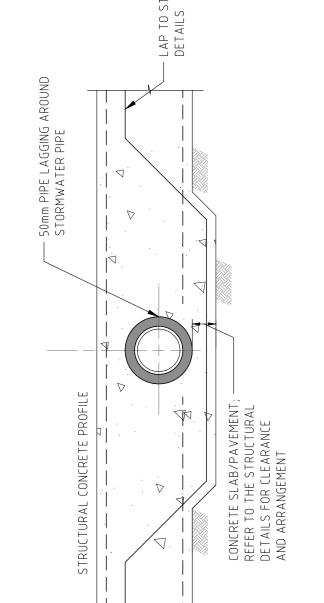
RL.+47.400

47.20-

CIVIL DOCUMENTATION TO BE READ IN CONJUNCTION WITH BUILDING SERVICES PLAN FOR THE ABOVE GROUND DRAIN DRAINAGE PIPES UNDER INTERNAL SLABS SHALL BE PROFESSIONALLY LAGGED

REFER TO THE GENERAL NOTES UNDER "STORMWATER DRAINAGE" FOR ALL WORKS RELATING TO THE SITE ALL SITE AND SERVICES LEVELS (INCLUDING INVERTS) SHALL BE PROVED PRIOR TO THE COMMENCEMENT OF WORK; ASSET PROTECTION PERMIT MUST BE OBTAINED FROM COUNCIL ENGINEERING SERVICES DEPARTMENT PRIOR TO CONAL RELEVANT ENGINEERING PERMITS MUST BE OBTAINED PRIOR TO ANY WORKS WITHIN THE ROAD RESERVE AND NETWORK

ALL PITS IN PEDESTRIAN AREAS TO BE MIN CLASS B ANTI SLIP HEEL SAFE COVER (U.N.O)



SIDE ELEVATION NOT TO SCALE

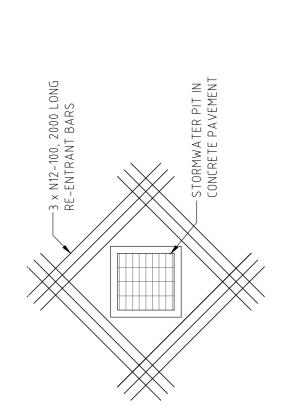
FRONT ELEVATION NOT TO SCALE

 $\triangleleft$ 

 $\triangleleft$ 

-IFTING LUGS

PIPE LAGGING DETAIL (TYP.)
NOT TO SCALE



ALL STEP IRONS TO BE HOT DIPPED GALVANISED 20¢ MILD STEEL OR EQUIVALENT ALL BENDS TO BE FORMED AROUND 12mm¢ PIN

STEPS ARRANGEMENT (TYP.)
NOT TO SCALE

STORMWATER PIT

UNDER LANDSCAPE PIPE BEDDING NOT TO SCALE

STORMWATER PIT (TYP.)
NOT TO SCALE

SECTION A-A

0/51-1-

N12-200 450 AT CORNERS TYPICAL

CONCRETE (32MPa) WITH SL92 MESH

ACCORDANCE TO AS2566.1 OR AS3725

PIPE TRENCH WIDTH WHERE APPLICABLE

₩-MIN. 0D+300

ALL PIT STEPS & LADDERS TO COMPLY WITH AS4198 & AS1657

75 MIN COMPACTED BEDDING MATERIAL (APPROVED SAND CLASS 2 FINE CRUSHED ROCK)

LOCATION OF STEP IRONS AT BOTTOM OF PIT

300

300

COMPACTED CLASS 2 FINE CRUSHED ROCK

PIT SCHEDULE

REFER TO

FORM 1000 HOLES FOR SUBSOIL DRAIN CONNECTION AS SPECIFIED

WITH MIN 300 TOPSO

SETOUT POINT

REFER TO PIT SCHEDULE FOR COVER CLASS AND TYPE

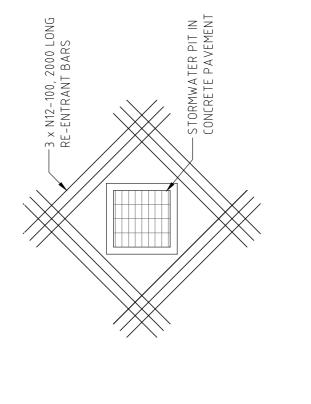
GRATE OR COVER LEVEL

0SL

JUNCTION PIT COVER NOT TO SCALE

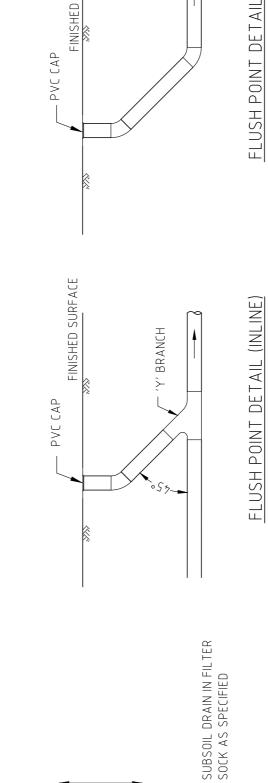
GRATED PIT COVER NOT TO SCALE

TS BEYOND 900mm DEPTH FROM SURFACE SHALL E STEP IRONS



RE-ENTRANT BARS AROUND PITS (TYP.)
NOT TO SCALE

### 300 TYP. NOTE: WHERE SUBSOIL DRAINS PASS BENEATH SLABS, PIPES SHALL BE UPVC SEWER CLASS NON-PERFORATED 25mm MIN SAND BEDDING 14mm DRAINAGE SCREENINGS

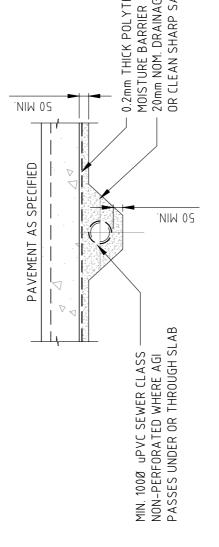


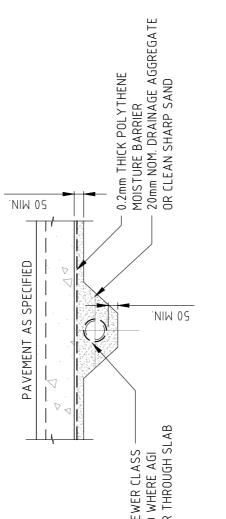
SUBSOIL DRAIN FLUSH OUT (F/O)

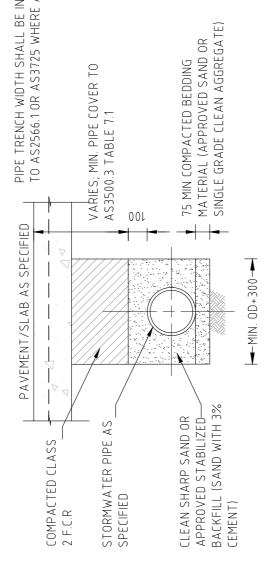
SUBSOIL DRAIN ARRANGEMENT NOT TO SCALE

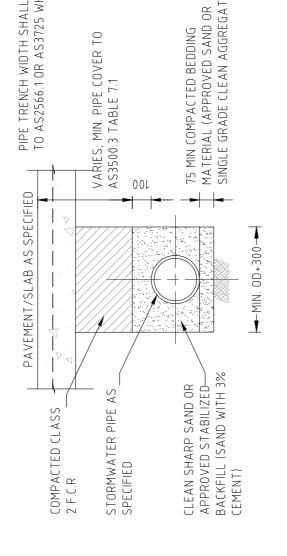
SUBSOIL DRAIN IN TRENCH (TYP.)
NOT TO SCALE

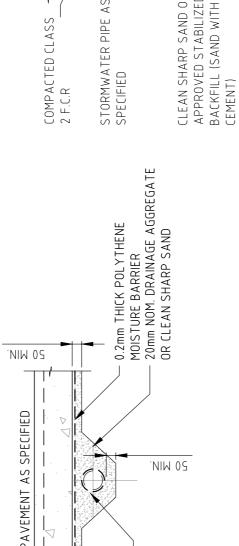
SUBSOIL DRAIN FLUSH POINTS (TYP.)
NOT TO SCALE

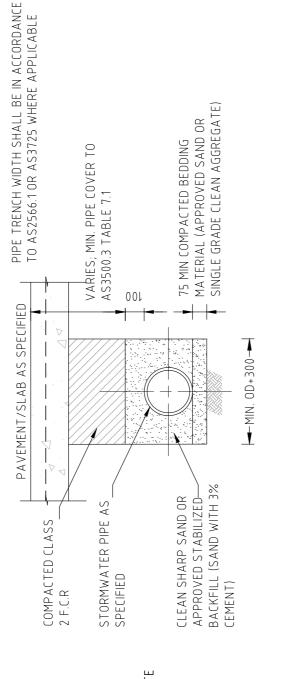












PROGRESS GROUP

SCALE 1:20

0.20

1+2 ARCHITECTURE 27-29 MELVILLE STREET HOBART, TAS, 7000

PIPE BEDDING DETAIL UNDER PAVEMENT NOT TO SCALE

SUBSOIL DRAIN UNDER SLAB
NOT TO SCALE

ARCHITECTURE

HTG30 DA8	
	`

CONSTRUCT NEW JUNCTION PIT, REFFER C.211 FOR DETAIL

CONSTRUCT NEW GRATED PIT, REFFER C.211 FOR DETAIL

300

45.52 TBC

300 TBC

1.05

009

A03

A02

009

GP

A04

1.36

CLASS D

46.58

CLASS D

46.67

TBC

TBC

OSD & TREATMENT

A01

0.75

CLASS D

300

45.50

300

CLASS D

46.19

009

스

B01

300

1.20

CLASS D

46.91

009

GP

B02

B03

0.79

47.19

1.20

EX GP

EX03

CONSTRUCT NEW GRATED PIT, REFFER C.211 FOR DETAIL

REFER TO DETAIL

44.92

300

COMMENTS

OUTLET I.L.

OUTLET DIA

INLET I.L.

INLET DIA

PIT DEPTH

CLASS AS (3996)

PIT COVER LEVEL

LENGTH

WIDTH

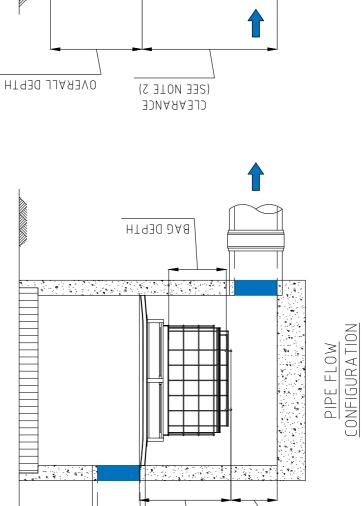
TYPE

PIT No

PIT SCHEDU

CONSTRUCT NEW GRATED PIT, REFFER C.211 FOR DETAIL

EXISTING SIDE ENTRY PIT



OCEANG/

CLEARANCE (SEE NOTE 2)

Z 0	
IGURAT	
E FLOW	
RFAC 	

SURFACE FLOW CONFIGURATION		
<i>ι</i>		

**PRELIMINARY ISSUE** 

REFER PRODUCT

VARIES TO SUIT

STORMWATER OUTLET PIPE

REFER SCHEDULE

REFER TO PIT SCHEDULE FOR COVER CLASS

HT930 DA8

18/08/23 PRELIMINARY ISSUE 28/07/23 PRELIMINARY ISSUE

DESCRIPTION

DATE

GRATED TRENCH DRAIN INSTALLED AS PER MANUFACTURER'S SPECIFICATIONS

NOT FOR CONSTRUCTION

PRECAST TASMANIA 76 COVEHILL ROAD BRIDGEWATER, TAS, 7030

GRATED TRENCH DRAIN (TYP.)
NOT TO SCALE

DRAINAGE DETAILS & SCHEDULE

) PIT
IN GRATED
BAG
) MESH
AURD

**APPLICATION** FOR DEVELOPMENT

SCALE: AS SHOWN SIZE:
Job No. Drawing No.
23165 C.211

STORMWATER PIT & PIPE SCHEDULE NOTES

THE INVERT AS NOMINATED HERE IN THE SCHEDULE REFERS TO THE CORESPONDING OUTGOING PIPE INVERT LEVEL

THE DEPTH AS NOMINATED HERE IN THE SCHEDULE REFERS TO THE DEPTH BETWEEN THE PIT COVER LEVEL (RL) TO THE INVERT OF THE DEPTH AS NOMINATED HERE IN THE SCHEDULE REFERS TO THE DEPTH BETWEEN THE PIT COVER LEVEL (RL) TO THE INVERTOR SHALL BE MINIMUM SEWER CLASS (U.N.O.).

ALL STORMWATER PITS SHALL BE TO THE STANDARDS AND SATISFACTION OF THE RESPONSIBLE AUTHORITY.

ALL STORMWATER PITS GREATER THAN 900mm IN DEPTH SHALL BE FITTED WITH STEP IRONS.

ALL STORMWATER PITS IN PEDESTRIAN TRAFFICABLE AREAS SHALL HAVE HEEL-SAFE LIDS.

ALL STORMWATER PITS IN VEHICULAR TRAFFICABLE AREAS SHALL HAVE BIKE-SAFE LIDS.

A1

PRECAST TASMANIA 76 COVEHILL ROAD BRIDGEWATER, TAS, 7030

NOT FOR CONSTRUCTION

 $\mathbf{M}$ 

SECTION

**PRELIMINARY ISSUE** 

DESCRIPTION DATE

TRASH GRATE

40m³ OSD STORAGE

40m³ OSD STORAGE

WEIR HEIGHT [H]

INLET IL MINIMUM – 150mm ABOVE BASE OF TANK

SECTION

FALSE FLOOR POURED -BY OCEAN PROTECT AFTER UNDERDRAIN INSTALLATION

N N

1+2 ARCHITECTURE 27-29 MELVILLE STREET HOBART, TAS, 7000

18/08/23 PRELIMINARY ISSUE 28/07/23 PRELIMINARY ISSUE

OUTLET

DISCHARGE CONTROL ORIFICE PLATE.

**PROGRESS** 

**WORK IN** 

**BMISSION** 

SU

**APPLICATION** 

FOR DEVELOPMENT

CONCRETE ON-SITE DETENTION TANK

brogue.com.au (03) 9416 2092 progue

40m³ OSD STORAGE

- PENETRATIONS TO BE LEFT IN WALL FOR UNDERDRAIN INSTALLATION

6 X 690MM PSORB — STORMFILTER SYSTEM

STORMFILTER WALL CAST IN-SITU

- 600 SQUARE GRATED COVER REQUIRED FOR OVER-FLOW.

900 SQUARE SOLID ACCESS COVER.

OUTLET

- 900 SQUARE GRATED ACCESS COVER REQUIRED OVER CARTRIDGE BAY.

0.80 0.40 0.20 SCALE 1:20 0.20

CLIENT PROGRESS GROUP

PROGRESS GROUP

ARCHITECTURE

CLASS D 900 SQUARE SOLID COVER FOR ACCESS.

CLASS D DETENTION TANK LID

CLASS D 600 SQUARE GRATED COVER

- 900 SQUARE SOLID ACCESS COVER.

900 SQUARE GRATED ACCESS COVER REQUIRED OVER CARTRIDGE BAY

STORMFILTER WALL CAST IN-SITU.

A1

(E)-

6

**®** 

PRIVATE ROAD

PROGRESS GROUP

1+2 ARCHITECTURE 27-29 MELVILLE STREET HOBART, TAS, 7000

ARCHITECTURE

EXISTING PIT DEPTH TBC PRIOR —

**COVEHILL ROAD** 

DESCRIPTION DATE

18/08/23 PRELIMINARY ISSUE 28/07/23 PRELIMINARY ISSUE

**PRELIMINARY ISSUE** NOT FOR CONSTRUCTION

PRECAST TASMANIA 76 COVEHILL ROAD BRIDGEWATER, TAS, 7030

STORMWATER LEVELS & CONTOURS
TE: JULY 2023 DESIGNED: AWN: AM CHECKED: JL

THE CONTRACTOR SHALL VERIFY ALL THE EXISTING
SERVICE CONNECTION LEVELS PRIOR TO THE
CONSTRUCTION WORKS. REPORT TO THE
SUPERINTENDENT AND THIS OFFICE IMMEDIATELY UPON
THE IDENTIFICATION OF ANY DISCREPANCIES PRIOR TO
PROCEEDING WITH THE WORKS

SCALE: SIZE: A1
Job No. Drawing No. Rev.
23165 C.202 P2

**PROGRESS** 

**APPLICATION SU** FOR DEVELOPMENT

BEWARE OF UNDERGROUND SERVICES
THE LOCATION OF UNDERGROUND SERVICES ARE
INDICATIVE ONLY AND THEIR EXACT POSITION SHOULD BE
PROVEN ON SITE PRIOR TO THE COMMENCEMENT OF
WORKS. NO GUARANTEE IS GIVEN THAT ALL EXISTING
SERVICES ARE SHOWN HERE WORK **BMISSION** 

12.50m 2.50 0

%0°\$

%0°\$

%0°S

%0.2

%Z.8

MATCH LEVELS NEATLY TO EXISTING CONCRETE

X 0 X

A03

B2 INDUSTRIAL TYPE KERB AND CHANNEL. B02 B01 1.0% AEP OVERLAND FLOW PATH 9 (5) 30kL ONSITE DETENTION SYSTEM WITH TREATMENT SYSTEM. REFER TO DETAIL. ₹ 96.9#

PROPOSED
NEW
Not Enclosed

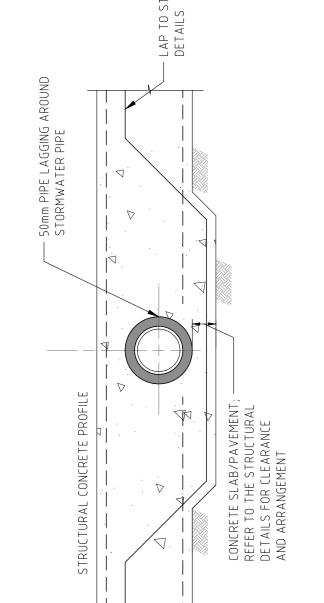
RL.+47.400

47.20-

CIVIL DOCUMENTATION TO BE READ IN CONJUNCTION WITH BUILDING SERVICES PLAN FOR THE ABOVE GROUND DRAIN DRAINAGE PIPES UNDER INTERNAL SLABS SHALL BE PROFESSIONALLY LAGGED

REFER TO THE GENERAL NOTES UNDER "STORMWATER DRAINAGE" FOR ALL WORKS RELATING TO THE SITE ALL SITE AND SERVICES LEVELS (INCLUDING INVERTS) SHALL BE PROVED PRIOR TO THE COMMENCEMENT OF WORK; ASSET PROTECTION PERMIT MUST BE OBTAINED FROM COUNCIL ENGINEERING SERVICES DEPARTMENT PRIOR TO CONAL RELEVANT ENGINEERING PERMITS MUST BE OBTAINED PRIOR TO ANY WORKS WITHIN THE ROAD RESERVE AND NETWORK

ALL PITS IN PEDESTRIAN AREAS TO BE MIN CLASS B ANTI SLIP HEEL SAFE COVER (U.N.O)



SIDE ELEVATION NOT TO SCALE

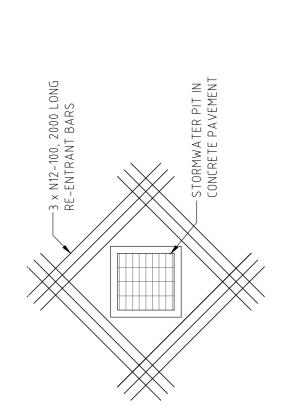
FRONT ELEVATION NOT TO SCALE

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-IFTING LUGS

PIPE LAGGING DETAIL (TYP.)
NOT TO SCALE



ALL STEP IRONS TO BE HOT DIPPED GALVANISED 20¢ MILD STEEL OR EQUIVALENT ALL BENDS TO BE FORMED AROUND 12mm¢ PIN

STEPS ARRANGEMENT (TYP.)
NOT TO SCALE

STORMWATER PIT

UNDER LANDSCAPE PIPE BEDDING NOT TO SCALE

STORMWATER PIT (TYP.)
NOT TO SCALE

SECTION A-A

0/51-1-

N12-200 450 AT CORNERS TYPICAL

CONCRETE (32MPa) WITH SL92 MESH

ACCORDANCE TO AS2566.1 OR AS3725

PIPE TRENCH WIDTH WHERE APPLICABLE

₩-MIN. 0D+300

ALL PIT STEPS & LADDERS TO COMPLY WITH AS4198 & AS1657

75 MIN COMPACTED BEDDING MATERIAL (APPROVED SAND CLASS 2 FINE CRUSHED ROCK)

LOCATION OF STEP IRONS AT BOTTOM OF PIT

300

300

COMPACTED CLASS 2 FINE CRUSHED ROCK

PIT SCHEDULE

REFER TO

FORM 1000 HOLES FOR SUBSOIL DRAIN CONNECTION AS SPECIFIED

WITH MIN 300 TOPSO

SETOUT POINT

REFER TO PIT SCHEDULE FOR COVER CLASS AND TYPE

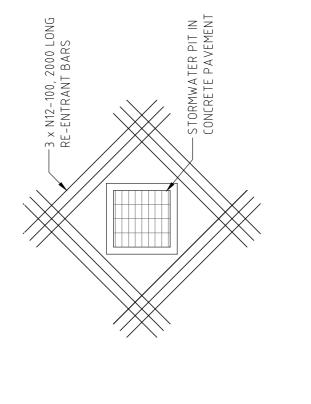
GRATE OR COVER LEVEL

0SL

JUNCTION PIT COVER NOT TO SCALE

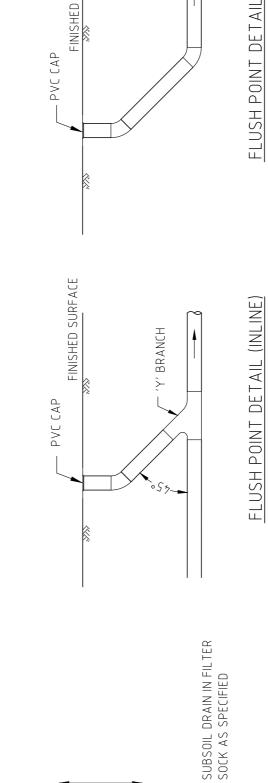
GRATED PIT COVER NOT TO SCALE

TS BEYOND 900mm DEPTH FROM SURFACE SHALL E STEP IRONS



RE-ENTRANT BARS AROUND PITS (TYP.)
NOT TO SCALE

### 300 TYP. NOTE: WHERE SUBSOIL DRAINS PASS BENEATH SLABS, PIPES SHALL BE UPVC SEWER CLASS NON-PERFORATED 25mm MIN SAND BEDDING 14mm DRAINAGE SCREENINGS

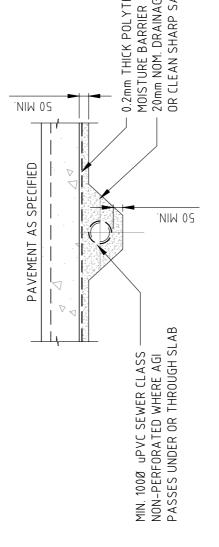


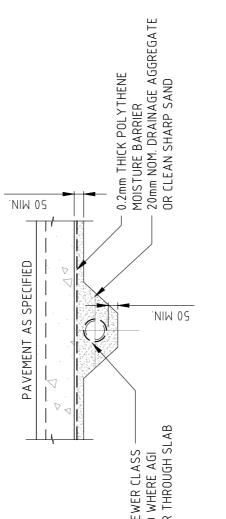
SUBSOIL DRAIN FLUSH OUT (F/O)

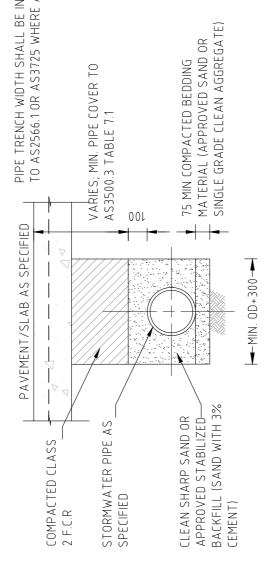
SUBSOIL DRAIN ARRANGEMENT NOT TO SCALE

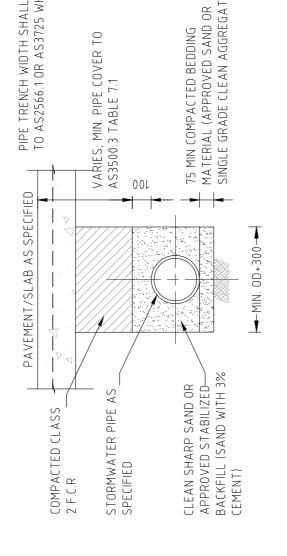
SUBSOIL DRAIN IN TRENCH (TYP.)
NOT TO SCALE

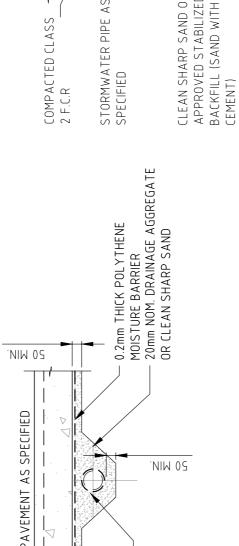
SUBSOIL DRAIN FLUSH POINTS (TYP.)
NOT TO SCALE

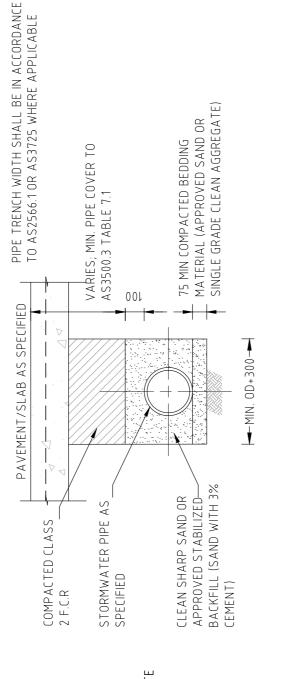












PROGRESS GROUP

SCALE 1:20

0.20

1+2 ARCHITECTURE 27-29 MELVILLE STREET HOBART, TAS, 7000

PIPE BEDDING DETAIL UNDER PAVEMENT NOT TO SCALE

SUBSOIL DRAIN UNDER SLAB
NOT TO SCALE

ARCHITECTURE

HTG30 DA8	
	`

CONSTRUCT NEW JUNCTION PIT, REFFER C.211 FOR DETAIL

CONSTRUCT NEW GRATED PIT, REFFER C.211 FOR DETAIL

300

45.52 TBC

300 TBC

1.05

009

A03

A02

009

GP

A04

1.36

CLASS D

46.58

CLASS D

46.67

TBC

TBC

OSD & TREATMENT

A01

0.75

CLASS D

300

45.50

300

CLASS D

46.19

009

스

B01

300

1.20

CLASS D

46.91

009

GP

B02

B03

0.79

47.19

1.20

EX GP

EX03

CONSTRUCT NEW GRATED PIT, REFFER C.211 FOR DETAIL

REFER TO DETAIL

44.92

300

COMMENTS

OUTLET I.L.

OUTLET DIA

INLET I.L.

INLET DIA

PIT DEPTH

CLASS AS (3996)

PIT COVER LEVEL

LENGTH

WIDTH

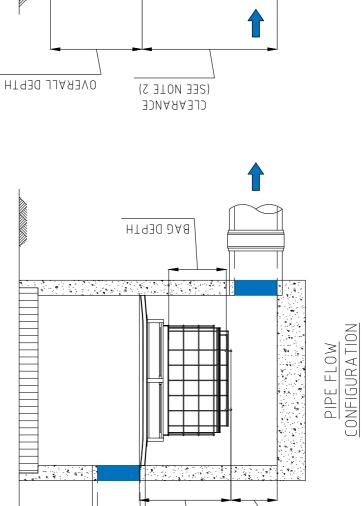
TYPE

PIT No

PIT SCHEDU

CONSTRUCT NEW GRATED PIT, REFFER C.211 FOR DETAIL

EXISTING SIDE ENTRY PIT



OCEANG/

CLEARANCE (SEE NOTE 2)

Z 0	
IGURAT	
E FLOW	
RFAC 	

SURFACE FLOW CONFIGURATION		
<i>ι</i>		

**PRELIMINARY ISSUE** 

REFER PRODUCT

VARIES TO SUIT

STORMWATER OUTLET PIPE

REFER SCHEDULE

REFER TO PIT SCHEDULE FOR COVER CLASS

HT930 DA8

18/08/23 PRELIMINARY ISSUE 28/07/23 PRELIMINARY ISSUE

DESCRIPTION

DATE

GRATED TRENCH DRAIN INSTALLED AS PER MANUFACTURER'S SPECIFICATIONS

NOT FOR CONSTRUCTION

PRECAST TASMANIA 76 COVEHILL ROAD BRIDGEWATER, TAS, 7030

GRATED TRENCH DRAIN (TYP.)
NOT TO SCALE

DRAINAGE DETAILS & SCHEDULE

) PIT
IN GRATED
BAG
) MESH
AURD

**APPLICATION** FOR DEVELOPMENT

SCALE: AS SHOWN SIZE:
Job No. Drawing No.
23165 C.211

STORMWATER PIT & PIPE SCHEDULE NOTES

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A1

PRECAST TASMANIA 76 COVEHILL ROAD BRIDGEWATER, TAS, 7030

 $\mathbf{M}$ 

SECTION

DESCRIPTION DATE

TRASH GRATE

40m³ OSD STORAGE

40m³ OSD STORAGE

WEIR HEIGHT [H]

INLET IL MINIMUM – 150mm ABOVE BASE OF TANK

SECTION

FALSE FLOOR POURED -BY OCEAN PROTECT AFTER UNDERDRAIN INSTALLATION

N N

1+2 ARCHITECTURE 27-29 MELVILLE STREET HOBART, TAS, 7000

PROGRESS GROUP

CLIENT PROGRESS GROUP

0.40

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40m³ OSD STORAGE

- PENETRATIONS TO BE LEFT IN WALL FOR UNDERDRAIN INSTALLATION

6 X 690MM PSORB — STORMFILTER SYSTEM

STORMFILTER WALL CAST IN-SITU

- 600 SQUARE GRATED COVER REQUIRED FOR OVER-FLOW.

900 SQUARE SOLID ACCESS COVER.

OUTLET

- 900 SQUARE GRATED ACCESS COVER REQUIRED OVER CARTRIDGE BAY.

0.80 0.20 SCALE 1:20 0.20

ARCHITECTURE

CLASS D 900 SQUARE SOLID COVER FOR ACCESS.

CLASS D DETENTION TANK LID

CLASS D 600 SQUARE GRATED COVER

- 900 SQUARE SOLID ACCESS COVER.

900 SQUARE GRATED ACCESS COVER REQUIRED OVER CARTRIDGE BAY

STORMFILTER WALL CAST IN-SITU.

18/08/23 PRELIMINARY ISSUE 28/07/23 PRELIMINARY ISSUE

OUTLET

**PRELIMINARY ISSUE** NOT FOR CONSTRUCTION

DISCHARGE CONTROL ORIFICE PLATE.

**PROGRESS** 

**WORK IN** 

**BMISSION** SU **APPLICATION** 

FOR DEVELOPMENT

CONCRETE ON-SITE DETENTION TANK

A1



PRECAST TASMANIA
EXTENSION, 76 COVE HILL
ROAD, BRIDGEWATER

### TRAFFIC IMPACT ASSESSMENT

Hubble Traffic August 2023

Disclaimer: This report has been prepared based on and in reliance upon the information provided to Hubble Traffic Consulting by the client and gathered by Hubble Traffic Consulting during the preparation of the report. Whilst all reasonable skill, care and diligence has been used in preparation of the report, Hubble Traffic Consulting take no responsibility for errors or omissions arising from misstatements by third parties.

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Version	Date	Reason for Issue
Draft	July 2023	Draft issued for client feedback
Final	August 2023	Final issued

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### Precast Tasmania Extension, 76 Cove Hill Road, Bridgewater

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### 1. Introduction

Tom Fagan of TAG Development Solutions has engaged Hubble Traffic to prepare an independent Traffic Impact Assessment, to consider the traffic impacts from the provision of an extension to Precast Tasmania, located at 76 Cove Hill Road, Bridgewater.

This assessment has considered the functional requirements of the proposed business including the size and position of the lot, surrounding road network, requirement for semi-trailer deliveries, provision of adequate on-site employee parking, and a safe and efficient access.

This development has been assessed against the Tasmanian Planning Scheme C2 Parking and Sustainable Transport Code, C3 Road and Railway Assets Code and the Australian Standard 2890.1:2004.

This report has been prepared to satisfy the requirements of Austroads, Guide to Traffic Management Part 12: Traffic Impacts of Developments, 2019, and has referred to the following information and resources:

- Tasmanian Planning Scheme (Brighton Council)
- Road Traffic Authority NSW (RTA) Guide to Traffic Generating Developments
- Australian Standards AS2890 parts 1, 2 and 6
- Austroads series of Traffic Management and Road Design
  - Part 4: Intersection and crossings, General
  - o Part 4a: Unsignalised and Signalised Intersections
  - o Part 12: Traffic Impacts of Development
- Autoturn Online vehicle turning software
- LIST Land Information Database



### 2. Site Description

The development site is located at 76 Cove Hill Road, Bridgewater; situated along the northern side of Cove Hill Road. According to the LIST Land Information Database, the property contains two operations, Precast Tasmania on the western side of the site, and Moo Brew Brewery on the eastern side. The two operations are separated by a fence, with both operating with a separate vehicular access to Cove Hill Road.

Council recently approved a new Precast Tasmania manufacturing and processing plant, located at 314 Midland Highway, Bridgewater; behind the existing operations at the rear of the property, which included the construction of a new heavy vehicle property access arrangement, with the entry located to the west and exit to the east. This arrangements operates with a one-way traffic flow, which is connected by internal roadway. The development sites access relies on the new heavy vehicle accesses associated with the new plant.

According to LIST Land Information Database, the site is located within an established industrial and light industrial zone and connected to the nearest arterial road (East Derwent Highway) via Cove Hill Road.

Diagram 2.0 – Extract from LIST Land Information Database



### 3. Development proposal

Precast Tasmania manufacture concrete panels, with the development proposal to automate the manufacturing process, increasing manufacturing volumes. This requires the size of the existing building to be increased to accommodate the automated processing equipment and additional storage area for the finished panels.

The manufacturing process will continue to use premix concrete delivered to the site using standard concrete trucks.

The newly constructed heavy vehicle access will be used for both the raw material and finished panel deliveries, using a 19 metre long semi-trailer (maximum vehicle size).

On-site car parking spaces for employees and visitors will be increased, with the existing vehicular access to Cove Hill Road retained to provide car park access.

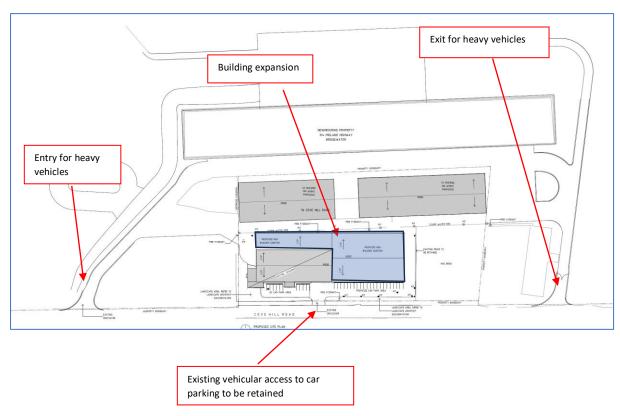


Diagram 3.0 – Proposed development layout



### 4. Trip generation by this development

A trip in this report is defined as a one way vehicular movement from one point to another excluding the return journey. Therefore, a return trip to and from a land use is counted as two trips.

To determine the number of trips likely to be generated by this development, reference has been taken from the RTA Guide to Traffic Generating Developments, section 3.10 Industry.

The guide indicates peak traffic generation for industrial land use is generally determined by three key factors; employee density, travel mode, and peak period travel distribution.

### 4.1 Existing trip generation

The developer has provided the following information on the existing operations of the business:

- The facility operates between 5:00am to 6:00pm Monday to Saturday, with a maximum of 10 employees on-site at any one time. Most employees are expected to travel outside of the commuter traffic periods, to consider a worst-case scenario this assessment assumes 50 percent of the employees will travel during the morning and evening peak periods.
- Deliveries of raw materials and finished product occurs seven times per day each, with a
  maximum of two deliveries occurring in any one hour period. As a worst-case scenario, this
  assessment will assume that a maximum of two raw material deliveries occur during the
  morning peak period and two finished product deliveries occur during the evening peak
  period.
- The site receives a maximum of one visitor to site per day, with this visit occurring outside
  of the peak periods.

Based on the above information, this development generates 50 daily vehicle movements, with nine of these trips occurring in the morning and peak hour periods.

Table 4.1 – Estimated existing trip generation

Trip generator	Number per weekday	Number of trips during the morning peak	Number of trips during the evening peak	Number of trips between peaks	Total weekday trips
Staff	10	5	5	10	20
Deliveries raw materials	7	4	0	10	14
Transport finished product	7	0	4	10	14
Visitors	1	0	0	2	2
Total		9	9	32	50

T: 0416 064 755

 $\hbox{E: } Hubble traffic @outlook.com\\$ 

W: Hubbletraffic.com.au

### 4.2 Prediction in trips generated from production increase

The developer has provided the following information on how the development will operate with the increased operations:

- The facility is expected to increase to a maximum of 16 employees on-site at any one time, with the facility continuing to operate between 5:00am to 6:00pm Monday to Saturday. As a worst-case scenario, this assessment will assume that 50 percent of the employee vehicles travel during the morning and evening peak periods.
- Delivery of raw materials and delivery of finished product will each increase to nine times
  per day, with a maximum of two deliveries occurring in an hour. As a worst-case scenario,
  this assessment will assume that the maximum two deliveries of raw materials occur during
  the morning peak period and two deliveries of finished product occurs during the evening
  peak period.
- The site is not expected to have an increase in visitors, with a maximum of one visitor to site per day expected, occurring outside the peak periods.

Table 4.2 – Predicted increase in trip generation

Trip generator	Number per weekday	Number of trips during the morning peak	Number of trips during the evening peak	Number of trips between peaks	Total weekday trips
Staff	16	8	8	16	32
Deliveries raw materials	9	4	0	14	18
Transport finished product	9	0	4	14	18
Visitors	1	0	0	2	2
Total		12	12	46	70

### 4.3 Summary of increase in vehicular trips

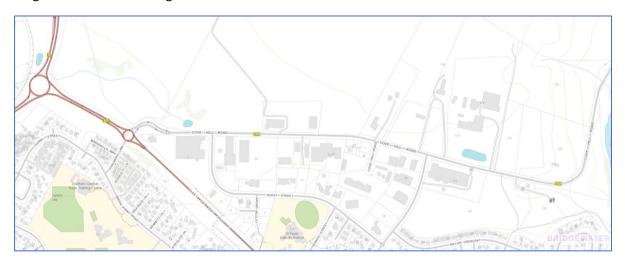
This assessment predicts the facility's increase in operations has the potential to generate an additional 20 daily vehicle trips, with three of these trips occurring during the morning and evening peak periods.



### 5. Existing surrounding road network

The development site is located along the northern side of Cove Hill Road, east of Hurst Street, approximately 450 metres east of the nearest arterial road (Highway). The highway connects with the Midland Highway, providing a high-quality road connection to the development site. A roundabout operates at the Cove Hill Road intersection with the highway, to provide motorists with a safe and efficient way to connect with the State Road network.

Diagram 5.0 – Surrounding Road network



### 5.1 Cove Hill Road characteristics

Cove Hill Road would function as an industrial road, suitable for the movement of heavy vehicles. The road is managed by the local council and extends east from the highway, with light industrial land-use along the northern side of the road for the first 1.4 kilometres. The road width adjacent to the development site is 11 metres wide between kerb faces, supporting the light industrial road function.

Photograph 5.1A – Typical cross section adjacent to the development site



The council waste and recycling centre is located approximately 1.4 kilometres from the highway roundabout, and further east of this site the road characteristics substantially change to a rural access road, with the road width reducing to six metres and traffic flow reducing.

Photograph 5.1B – Road standard adjacent to waste and recycling centre



Along the southern side, the land use is commercial and retail for the first 350 metres from the highway roundabout, including the Cove Hill Shopping Centre and a take-away food outlet. These commercial facilities are serviced by Hurst Street, with the take-away food outlet having a direct two-way driveway, which operates as a drive-thru facility. While these retail and commercial facilities are a significant traffic generator, they do not generate any significant traffic past the development site.

### 5.2 East Derwent Highway

The highway is part of the State Road network, and under the Tasmanian State Road Hierarchy is classified as a Category 3 Regional Access Road, with its primary purpose to connect passenger and freight vehicles between the Category 1 and 2 road networks.

### 5.3 East Derwent Highway and Cove Hill Road roundabout

Traffic generated by the development site will connect onto the arterial road network using the highway roundabout, which has been designed to cater for large vehicles turning into and out of Cove Hill Road. The roundabout has a 28-metre diameter central island, with a three-metre-wide mountable section to be used by large turning vehicles, and eight-metre-wide circulating lane width. Overall, the roundabout is of a reasonable size to cater for light industrial traffic movements.



## 5.4 Road classification

According to the Department of State Growth (Network Access Team), both the highway and Cove Hill Road (highway to waste transfer and recycling facility) are gazetted as B-Double routes with Higher Mass Limits.

This means the routes have been assessed as being suitable for heavy vehicles up to 26 metres in length, operating with a gross mass of 68.5 tonnes.

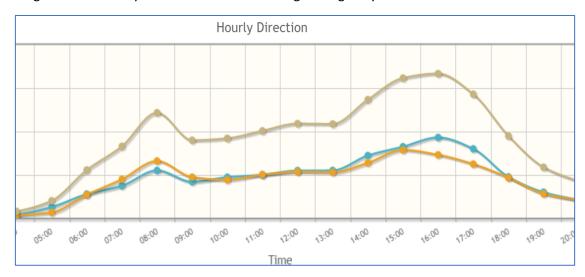
#### 5.5 Additional traffic

A recent Traffic Impact Assessment was conducted for the manufacturing plant at the rear of Precast Tasmania, which will be constructed and operational by the time this development is completed. Consequently, this traffic assessment has assumed the manufacturing plant is generating additional vehicle movements on the surrounding road network.

### 5.6 Traffic flow on the highway

The best method to determine the traffic efficiency, is to evaluate the existing traffic flows along the highway and Cove Hill Road. For the State Road network, the Department of State Growth maintains a traffic database, with the nearest traffic station to the development site located on the highway, between the roundabout and Midland Highway. An extract from this database shows a morning commuter peak between 7:30am to 8:30am, with evening peak occurring between 3:00pm and 5:00pm, with the evening peak traffic flow being slightly higher. Hourly directional lane flows are available in table 5.6.

Diagram 5.6 – Hourly direction traffic flow along the highway





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Table 5.6 – Directional hourly traffic flow along the highway

Direction	6 to	7 to	8 to	9 to	10 to	11 to	12 to	1 to	2 to	3 to	4 to	5 to	6 to
	7am	8am	9am	10am	11am	noon	1pm	2pm	3pm	4pm	5pm	6pm	7pm
Westbound	378	554	424	476	503	552	554	725	826	932	802	480	304
Eastbound	452	662	477	446	506	539	533	641	789	733	627	471	287
Total	830	1216	900	992	1009	1091	1087	1366	1614	1665	1429	950	591

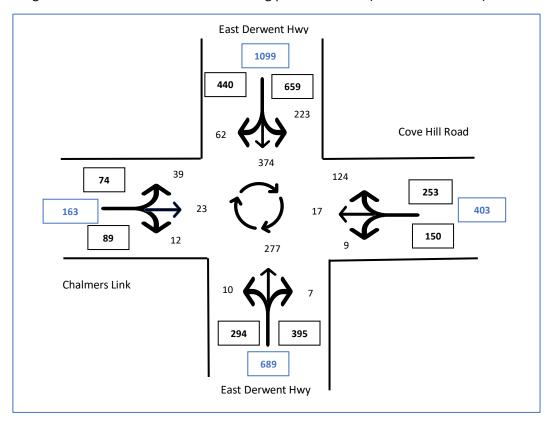
## 5.7 Cove Hill Road roundabout - traffic flow with manufacturing plant operating

To coincide with the morning and evening peak highway flows, manual traffic surveys were undertaken at the highway roundabout with Cove Hill Road.

As discussed earlier, a new manufacturing plant at the rear of the property will soon commence operations, and this traffic assessment will analyse the traffic impact based on the manufacturing plant operating, with all traffic generated by the plant travelling through the roundabout.

Consequently, the manual traffic surveys in the following two diagrams have been adjusted to represent the traffic conditions at the roundabout with manufacturing plant operating.

Diagram 5.7A – Traffic flow for the morning peak hour flow (7:30am to 8:30am)





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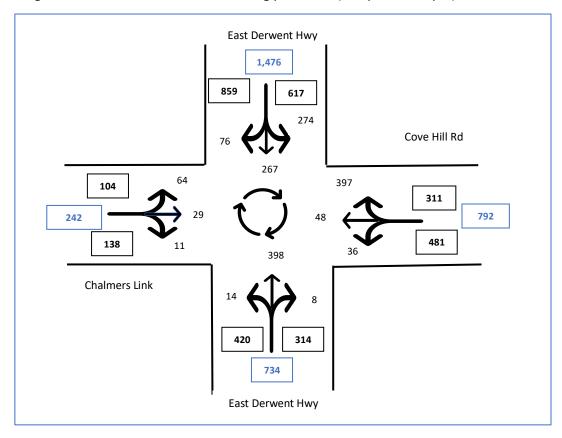


Diagram 5.7B – Traffic flow for the evening peak hour (4:30pm to 5:30pm)

# 5.8 Traffic performance at the Cove Hill Road roundabout

The simplest method to determine the traffic performance at a roundabout is to use SIDRA Intersection traffic modelling software, which uses gap acceptance theory to determine the average delay, queue lengths and degree of saturation, which are all measures of traffic congestion and level of service.

Level of Service (LOS) is a quantifiable assessment of the factors that contribute to the traffic performance, which includes traffic density, gaps in traffic streams, expected delays and queues. For roundabouts, there are six levels from A to F, with A providing the highest level for roundabouts, meaning motorists are not incurring delays, with ample gaps in the traffic stream for vehicles to turn freely and safely without disrupting other users.

The table below provides a reference to the level of service for the various traffic controls and is based on Austroads Guide to Traffic Management Part 3: Transport Study and Analysis Methods dated 2020.

Table 5.8 Level of service for intersections and roundabouts

Level of	Average delay per vehicle (secs/vehicle)	Traffic Signals and Roundabouts	Give Way and Stop controls
Α	<10	Good operation	Good operation
В	10 to <20	Good with acceptable	Acceptable delays and spare
		delays and spare capacity	capacity
С	20 to <35	Satisfactory	Satisfactory, but crash study
			required
D	35 to <50	Operating near capacity,	Near capacity and crash study
		acceptable for State Roads	required
E	50 to <70	At capacity for signals, will	
		cause excessive delays.	
		Roundabouts require other	At capacity, requires other
		control mode	control modes
F	>70	Saturated flows – at	
		signals, consider additional	
		lanes	

A traffic model replicating the roundabout was developed within the software, using the recent peak hour traffic flows adjusted to include the new manufacturing plant.

During the morning period, 1,177 vehicles are predicted to travelled through the roundabout, with the degree of saturation estimated at 0.435, which represents the roundabout operating at 44 percent of its traffic capacity. Overall, the roundabout is operating at a good level of service LOS B, with a maximum average delay of 11.6 seconds, and maximum queue length of 26.7 metres.

Although during the evening peak hour, the predicted traffic flow is 40 percent higher, motorists are expected to receive a good level of service at LOS B, with the maximum average delay extending to 14.3 seconds, and maximum queue length of 29.3 metres.

The modelling indicates there is spare traffic capacity at the roundabout to accommodate additional traffic flows. A printout of the traffic modelling is available in appendix A.



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#### 5.9 Traffic lane efficiency along Cove Hill Road and the highway

The directional lane flow data for Cove Hill Road and the highway, have been adjusted to represent the manufacturing plant as operating. Based on information from the RTA Guide (extract below), the expected level of service for the peak hours can be determined.

Extract 5.9 - RTA Guide for level of service

Urban road peak hour flows per direction					
Level of Service	One Lane (veh/hr)	Two Lanes (veh/hr)			
А	200	900			
В	380	1400			
С	600	1800			
D	900	2200			
E	1400	2800			

With both the highway and Cove Hill Road users having priority over the side streets, the midblock directional traffic flows are uninterrupted until they reach the highway roundabout. The mid-block traffic flows can be quantified using the RTA Guide, which provides a level of service based around directional peak hour traffic lane flows.

The table below provides the peak hour directional lane flows for the highway either side of the roundabout, and the level of service motorists are receiving. For a State Road, LOS D in the peak hour periods is normal and acceptable, as it is not possible to provide road infrastructure to meet short intense peak hour periods. The level of service indicates that although the traffic lanes are busy, they are providing an appropriate level of service for the road classification.

Table 5.9A – Directional Lane flows along the highway

	Morning peak hour				Evening peak hour			
Direction	West of roundabout		East of roundabout		West of roundabout		East of roundabout	
	Flow	LOS	Flow	LOS	Flow	LOS	Flow	LOS
Westbound	440	С	294	В	859	D	420	С
Eastbound	659	D	395	С	617	С	314	В

As discussed earlier, the Cove Hill Shopping Centre and take-away food outlet are significant traffic generators, for traffic assessment purposes the Cove Hill Road have been split into two sections. The first section being between the roundabout and Hurst Street, with the second section between Hurst Street and the development site. The table demonstrates motorists are receiving a good, to high level of service.

Table 5.9B Directional Lane flows along Cove Hill Road

	Morning peak hour				Evening peak hour			
Direction	Round	dabout to	Hurst to		Roundabout		Hurst to	
	Hurst		development site		to Hurst		development site	
	Flow	LOS	Flow	LOS	Flow	LOS	Flow	LOS
Towards roundabout	150	Α	90	Α	481	С	173	Α
Away roundabout	253	В	184	Α	311	В	78	Α

# 5.10 Speed limits on the surrounding roads

Along Cove Hill Road there are 60 km/h speed limit signs posted along the road, between the highway roundabout to east of the waste and recycling centre.

The highway is posted with 80 km/h speed limit signs.

# 6. Impact from traffic generated by this development

As estimated in section 4, the development is estimated to generate an additional ten daily vehicle trips, with three of these trips likely to occur during the morning and evening peak periods. Based on the surrounding road network, all the vehicle trips are expected to use the highway roundabout. This assessment considers that three trips could coincide with the morning and evening peak periods operating along the highway.

These additional trips have been assigned to the highway roundabout based on the current trip distribution for Cove Hill Road, as shown in table 6.0A.

Table 6.0A – Existing trip distributions for Cove Hill Road at the highway roundabout

Period		Highway (Western approach)	Highway (Eastern approach)	Chalmers Link	Total
	Traffic flow	223	7	23	253
Morning peak	Percentage	88%	3%	9%	
	Traffic flow	397	36	48	481
Evening peak	Percentage	83%	7%	10%	

The traffic modelling indicates the additional trips will not cause any deterioration in the level of service motorists are receiving at the roundabout, with the roundabout continuing to operate at a good level of traffic efficiency, with minimal delays and queues. A comparison of the traffic modelling between the existing traffic conditions, and additional development trips are shown in table 6.0B.

Table 6.0B – Comparison of traffic conditions with additional development trips

Period	Scenario	Total	Degree of	Max average	Lowest	Max queue
		vehicles	Saturation	delay	LOS	length
	Existing	1,177	0.435	11.6 seconds	В	26.7 metres
Morning peak	Additional trips	1,181	0.438	11.6 seconds	В	26.9 metres
	Existing	1,622	0.486	14.3 seconds	В	29.3 metres
Evening peak	Additional trips	1,626	0.487	14.3 seconds	В	29.5 metres

The additional trips from the development site can easily be absorbed within the highway roundabout, with no adverse traffic impact predicted. As demonstrated in section 5.9, there is sufficient capacity within the traffic lanes to absorb additional trips, without causing adverse traffic impacts.

The additional delivery trips to and from the development site will be spread out through the day and are expected to occur between the morning and evening peak periods, which can be easily absorbed by the surrounding road network, without causing any adverse impact.

Overall, the extension of the current facility is not predicted to cause any adverse traffic impact to the surrounding road network, and this assessment includes the additional trips generated by the new manufacturing plant currently under construction.

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# 7. Access arrangement to and from the development site

The development site will retain its current direct vehicular access to Cove Hill Road, this will be used by light vehicles associated with employees and visitors. All heavy vehicle movements into and out of the site will use the newly constructed one-way heavy vehicle access arrangement, located at the rear of the building. This is a desirable traffic outcome, as the existing infrastructure will be used, eliminating the need to create a vehicular access, and heavy and light vehicle movements will be separated.

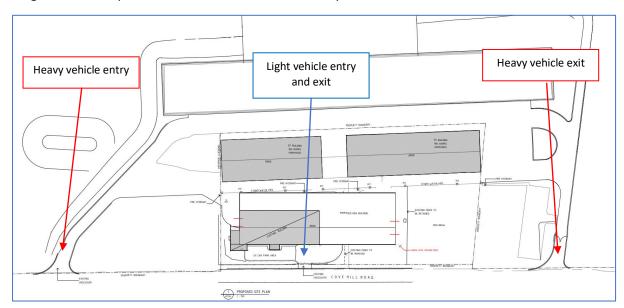


Diagram 7.0 – Proposed vehicular access to the development site

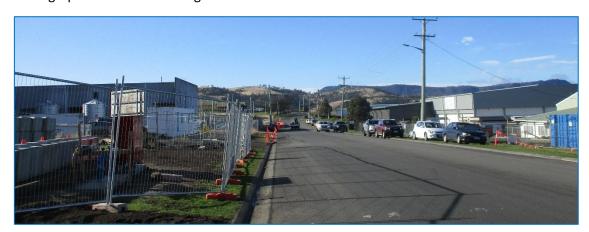
# Location of light vehicle access to Cove Hill Road

The development will retain the existing two-way vehicular access at the front of the building for light vehicle use.

# 7.2 Available sight distance at the existing Cove Hill Road access

On-site measurements determined the available sight distance exceeds 200 metres in each direction, with available sight distance shown in the following photographs.

Photograph 7.2A – Available sight distance to the left



Photograph 7.2B – Available sight distance to the right



# 7.3 Sight distance at the newly constructed heavy vehicle exit

Available sight distance from the existing exit point located on the eastern side was measured on-site, to the left motorists leaving the development site are expected to have 130 metres of sight distance, as shown in photograph 7.3A. While motorists looking right will have available sight distance that exceeds 200 metres, as shown in photograph 7.3B.

Photograph 7.4A – Sight distance to the left from the exit (130 metres)



Photograph 7.4B – Sight distance to the right from the exit (200 metres)



# 7.4 Safe Intersection Sight Distance

It is important that motorists leaving the development site have suitable sight distance and Safe Intersection Sight Distance (SISD), as defined in Austroads Guide to Road Design Part 4a: Signalised and unsignalised intersection. The guide specifies that for a 60 km/h speed limit road, with a driver reaction time of two seconds, the required SISD is 123 metres.

Each of the accesses will have sufficient sight distance to satisfy SISD requirements, which means vehicles will be able to enter and leave the development site in a safe and efficient manner, without impacting current road users.

# 8. On-site parking and internal road layout

### 8.1 Number of car parking spaces

The planning scheme table C2.1 prescribes the number of on-site parking spaces required, based on the type of land use. For manufacturing and processing, the requirement is one space per 200 square metres of floor area, or two spaces per three employees, whichever is greater.

For an existing development that will intensify the use, the number of parking spaces is assessed under A1 (d) (ii), which takes into consideration the current use and number of parking spaces, using the formula; N = A + (C - B).

Where N is the number of on-site car parking spaces required, A is the number of existing on-site car parking spaces, B is the number of on-site car parking spaces required for the existing use or development specified in Table C2.1, and C is the number of on-site car parking spaces required for the proposed use or development specified in Table C2.1. The following table quantifies the values to be used within the formulae.

Table 8.1 – Number of car parking spaces required

Formula symbol	Use	Planning scheme requirements	Floor area / parking spaces	Number of parking spaces
Α	Existing on-site car parking spaces		9	9
В	Manufacturing and processing	1 space per 200m <sup>2</sup> of floor area or 2 spaces per three employees	1,546m²	8
С	Manufacturing and processing	1 space per 200m <sup>2</sup> of floor area or 2 spaces per three employees	2,969m²	15
N	Total spaces required	N = A + (C – B)	11 + (15 – 8)	18

With the current development providing nine marked and two unmarked parking spaces, there is a small surplus of parking spaces, as this use requires eight parking spaces, based on the current floor area being 1,546 square metres. Increasing the floor area by 2,969 square metres, the intensification of the use requires additional 15 parking spaces, based on the floor area requirement. Using the planning scheme formula, this development is required to provide a total of 18 on-site car parking spaces to comply with the acceptable solution A1 (d) (ii).

The development site will provide 30 on-site car parking spaces, exceeding the required number of parking spaces, meeting the reasonable demand. With the development expecting a maximum of 16 employees on-site at any one time, parking overflow is not expected.



# 8.2 Maximum size of heavy vehicle to be used

The developer has indicated the largest heavy vehicle to be used by this facility will be a 19 metre long semi-trailer, with the internal driveway and building openings designed to cater for this size vehicle.

It is noted that the separation between the northern wall of the development building and the newly construction manufacturing building to the rear is limited, and the separation of the eastern wall with the fence to Moo Brew Brewery is constrained. Vehicle swept path software has been used to verify that a semi-trailer vehicle can manoeuvre into and out of the building, with appropriate clearance to physical obstructions. The swept paths are available in appendix B.

During detail design stage, these swept paths will need to be verified based on detailed survey plans.

### 8.3 Heavy vehicle route

Heavy vehicles associated with delivery of raw materials and transporting of finished concrete panels, will arrive to the site using the newly constructed entry access located on the western side. Vehicles will travel between the newly constructed manufacturing plant and building expansion, turning right at the eastern end, and enter the building through a large roller door located on the eastern side.

Unloading of raw materials and collection of finished panels will occur within the building. The vehicle will leave the building though a large roller door on the western side, proceed and turn right onto the internal heavy vehicle driveway, entering Cove Hill Road by the exit.

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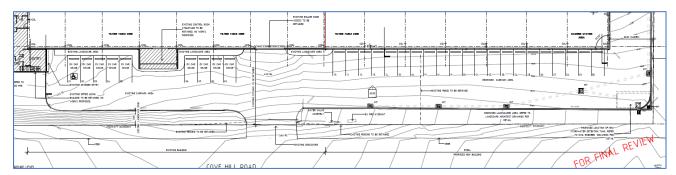
Diagram 8.3 - Heavy vehicle route - swept path of a 19 metre semi-trailer



# 8.4 Layout of on-site parking spaces

The development currently operates with 11 ninety degree car parking spaces located at the front of the building, nine of these spaces are delineated with line markings and supported with wheel stops. An additional 19 car parking spaces will be provided, making a total of 30 on-site car parking spaces. The new spaces will comply with the dimensions specified in the planning scheme of 2.6 metres wide, 5.4 metres long, with a minimum manoeuvring area of 6.4 metres, ensuring a vehicle can enter and leave the spaces in an efficient manner.

The car parking spaces will be located at the front of the building, on a concrete surface, delineated by line markings, with all parking bays supported with wheel stops and located on gradient less than five percent.



### 8.5 Internal pedestrian pathway

A minimum one metre wide marked pedestrian pathway will be provided along the front of the building, connecting the parking spaces to the entrance. The pathway will be separated from the parking spaces with wheel stops.

### 8.6 Other parking requirements

Under the planning scheme table C2.1 Parking Space Requirements, bicycle parking facilities are required to be provided based on land use. For manufacturing and processing, one space is required per five employees. Based on a maximum of 16 employees on site at any one time, three bicycle facilities will be required for employees. The developer has indicated that they have sufficient space inside the warehouse to accommodate bicycle parking, where they can be secured and parked safely within the premises.

The planning scheme table C2.4, prescribes the number of motorcycle parking spaces required, based on the number of car parking spaces required to be provided. With the development required to provide 18 on-site car parking spaces, there is no requirement for a dedicated on-site motorcycle parking space.

# 9. Planning scheme

# 9.1 C2.0 Parking and Sustainable Transport Code

#### C2.5.1 Car parking numbers

The development will provide a total of 30 car parking spaces, meeting the reasonable parking demand, and ensuring no overflow parking onto the street. The number of on-site parking spaces exceeds the required number of the planning scheme, 18 spaces, and complies with the acceptable solution A1 (d) (ii).

# C2.5.2 Bicycle parking numbers

Table C2.1 of the planning scheme prescribes the number of bicycle parking spaces that is required for the use, with the development required to provide three bicycle parking spaces. The development has sufficient space inside the warehouse to accommodate the required three bicycle parking spaces and this complies with the acceptable solution.

#### C2.5.3 Motorcycle parking numbers

Table C2.4 of the planning scheme prescribes the number of motorcycle parking spaces based on the number of car parking spaces required. With the development requiring 18 car parking spaces, it is not required to provide a motorcycle parking space.

#### C2.5.4 Loading bays

The development site is providing a dedicated loading bay, which will be of sufficient size to load and unload heavy vehicles, while continuing to provide an efficient flow of heavy vehicle movements, which meets the acceptable solution.

#### C2.6. Development standards

C2.6.1 Construction of parking areas.	The car parking area will have a concrete surface, with appropriate gradient to direct surface water to an approved stormwater drainage system.
C2.6.2 Design and layout of parking areas.	The parking spaces will be 2.6 metres wide, 5.4 metres long and located adjacent to a 6.4-metre-wide parking aisle, to allow for vehicles to enter and leave in a single turn. The parking spaces will be line marked, and all spaces will be supported with wheel stops to define the parking bays. The parking spaces will be located on gradient less than five percent.



C2.6.3 Number of accesses for vehicles.	The development will operate with the existing number of vehicular accesses, complying with the acceptable solution A1(b).
C2.6.4 Lighting of parking areas within the general business zone and central business zone	The development site will be provided with suitable lighting covering the car parking and loading areas, to ensure vehicles can enter, manoeuvre, and leave in a safe manner, complying with the acceptable solution.
C2.6.5 Pedestrian access.	A minimum one-metre-wide footpath will be provided in front of the building to connect the car parking spaces with the building
C2.6.6 Loading bays.	entrance, complying with the acceptable solution.  The development site has been designed to provide sufficient areas within the building where heavy vehicles can be loaded and unloaded, inside the building.
C2.6.7 Bicycle parking and storage facilities	A bicycle parking area will be provided within the warehouse, allowing bicycles to be parked safely and secured within the premises.
C2.6.8 Siting of parking and turning areas.	Not applicable for a general industrial zone.

# 9.2 C3.5.1 Traffic generation at a vehicle crossing, level crossing or new junction

The development is estimated to increase the use of the existing accesses by more than 20 percent of vehicles up to 5.5 metres long and will need to be assessed against the performance criteria P1, ensuring that it can operate safely and efficiently.

Pe	erformance criteria	Assessment					
Ve	Vehicular traffic to and from the site must minimise any adverse effects on the safety of a						
jui	junction, vehicle crossing or level crossing or safety or efficiency of the road or rail network,						
ha	ving regard to:						
a)	Any increase in traffic caused by the use:	The development site is estimated to generate an additional 20 daily vehicle movements, with three of these movements occurring during the morning and evening peak periods. Of the 20 additional daily vehicle movements, 16 are expected to be light vehicles and four are					
b)	the nature of the traffic generated by the use;	expected to be heavy vehicles.  The development site is expected to generate both light and heavy vehicles, with employees likely to generate light vehicles (less than 5.5 metres in length), and delivery vehicles expected to generate heavy vehicles, with the largest vehicle expected to be a 19 metres semi-trailer.					
c)	The nature of the road;	The development site is located off Cove Hill Road within an established light industrial zone and the road characteristics are suitable to accommodate safe and efficient heavy vehicle movements. The road connects with the East Derwent Highway and both roads have been gazetted as a 26 metre B-Double route suitable					



		for higher mass limits (max gross limit of 68.5 tonnes). This means the road owners have assessed the routes as being suitable to facilitate the safe and efficient movement of large heavy vehicles.
d)	The speed limit and traffic flow of the road;	The speed limit along Cove Hill Road is posted with 60 km/h speed limit signs. Traffic analysis and traffic modelling has determined the additional traffic movements generated by the development is not predicted to cause any adverse traffic impact, current motorists using the surrounding road network are not expected to incur any deterioration in the level of traffic performance. The existing accesses have sufficient sight distance to enable vehicles to enter and leave the development site in a safe and efficient manner, without disrupting other road users.
e)	Any alternative access to a road;	Cove Hill Road is the only access road available.
f)	The need for the use;	Automating the manufacturing process will increase and optimise the number of concrete panels manufactured, while providing further employment opportunities.
g)	Any traffic impact assessment; and	An independent traffic impact assessment has determined the development is not predicted to cause any adverse safety or traffic impacts.
h)	Any advice received from the rail or road authority.	Aware of none.

## 10. Conclusion

The extension of Precast Tasmania's existing manufacturing plant at 76 Cove Hill Road, Bridgewater, is a suitable use for the existing industrial land.

From a traffic engineering and road safety perspective, additional traffic generated from this development is not expected to create any adverse safety, amenity, or traffic efficiency problems, as:

- additional traffic movements predicted to be generated by the expansion is considered low and there if sufficient capacity within the current road network to absorb the extra traffic movements,
- existing accesses to Cove Hill Road will be used, they have sufficient Safe Intersection Sight
  Distance, ensuring vehicles can enter and leave the development site, in a safe and efficient
  manner, without adversely impacting other road users,
- the development will provide sufficient on-site car parking spaces to meet the expected demand and eliminate any overflow parking,
- the internal heavy vehicle access and driveway arrangements have been designed to suit a 19 metre semi-trailer, to provide safe and efficient work flow, and separate light and heavy vehicle movements.

This Traffic Impact Assessment found no reason for this development not to proceed.



# 11. Appendix A – traffic modelling

Cove Hill Road roundabout – Existing morning peak hour traffic flows

# **MOVEMENT SUMMARY**

♥ Site: 101 [Cove Hill Rd and East Derwent -morning peak with additional trips]

New Site

Site Category: (None) Roundabout

Movem	ent Perform	ance - Vehicl	es					
Mov ID	Turn	Deman Total veh/h	d Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Vehicles veh	Queue Distance m
South: E	ast Derwent							
1	L2	10	0.0	0.251	4.5	LOSA	1.5	11.6
2	T1	277	10.0	0.251	4.8	LOSA	1.5	11.6
3	R2	7	0.0	0.251	10.1	LOS B	1.5	11.6
Approac	h	294	9.4	0.251	4.9	LOSA	1.5	11.6
East: Co	ve Hill							
4	L2	9	10.0	0.155	6.0	LOSA	0.9	6.6
5	T1	17	10.0	0.155	6.1	LOSA	0.9	6.6
6	R2	124	10.0	0.155	11.6	LOS B	0.9	6.6
Approac	h	150	10.0	0.155	10.7	LOS B	0.9	6.6
North: E	ast Derwent H	wy						
7	L2	223	10.0	0.435	3.8	LOSA	3.5	26.7
8	T1	374	10.0	0.435	3.9	LOSA	3.5	26.7
9	R2	62	0.0	0.435	9.3	LOSA	3.5	26.7
Approac	h	659	9.1	0.435	4.4	LOSA	3.5	26.7
West: Cl	halmers Link							
10	L2	39	10.0	0.074	5.6	LOSA	0.4	3.0
11	T1	23	10.0	0.074	5.7	LOSA	0.4	3.0
12	R2	12	0.0	0.074	11.0	LOS B	0.4	3.0
Approac	h	74	8.4	0.074	6.5	LOSA	0.4	3.0
All Vehic	eles	1177	9.2	0.435	5.4	LOSA	3.5	26.7



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Cove Hill Road roundabout – Existing evening peak hour traffic flows

# **MOVEMENT SUMMARY**

Site: 101 [Cove Hill Rd and East Derwent - Evening peak with additional trips]

Site Category: (None) Roundabout

Mov	Tum		nd Flows	Deg.	Average	Level of	95% Back o	
ID		Total	HV	Satn	Delay	Service	Vehicles	Distance
Courth: [	East Derwent	veh/h	%	v/c	sec		veh	m
		44	0.0	0.400	7.0	1004	2.0	20.2
1	L2	14	0.0	0.486	7.6	LOSA	3.9	29.3
2	T1	398	10.0	0.486	8.0	LOSA	3.9	29.3
3	R2	8	0.0	0.486	13.1	LOS B	3.9	29.3
Approac	ch	420	9.5	0.486	8.1	LOSA	3.9	29.3
East: Co	ove Hill							
4	L2	36	10.0	0.464	6.1	LOSA	3.3	24.7
5	T1	48	10.0	0.464	6.2	LOSA	3.3	24.7
6	R2	397	10.0	0.464	11.7	LOS B	3.3	24.7
Approac	ch	481	10.0	0.464	10.8	LOS B	3.3	24.7
North: E	ast Derwent H	łwy						
7	L2	274	10.0	0.415	3.9	LOSA	3.5	26.2
8	T1	267	10.0	0.415	3.9	LOSA	3.5	26.2
9	R2	76	0.0	0.415	9.3	LOSA	3.5	26.2
Approac	ch	617	8.8	0.415	4.6	LOSA	3.5	26.2
West: C	halmers Link							
10	L2	64	10.0	0.155	9.2	LOSA	1.0	7.6
11	T1	29	10.0	0.155	9.2	LOSA	1.0	7.6
12	R2	11	0.0	0.155	14.3	LOS B	1.0	7.6
Approac	ch	104	8.9	0.155	9.7	LOSA	1.0	7.6
All Vehic	cles	1622	9.3	0.486	7.6	LOSA	3.9	29.3

Cove Hill Road roundabout – Morning peak hour traffic flows with development traffic

# **MOVEMENT SUMMARY**

₩ Site: 101 [Cove Hill Rd and East Derwent - manufacturing operating with precast expansion]

New Site

Site Category: (None) Roundabout

Movem	ent Perform	ance - Vehicl	es					
Mov ID	Turn	Demar Total veh/h	id Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Vehicles veh	Queue Distance m
South: E	ast Derwent							
1	L2	10	0.0	0.252	4.5	LOSA	1.5	11.6
2	T1	277	10.0	0.252	4.8	LOSA	1.5	11.6
3	R2	8	0.0	0.252	10.1	LOS B	1.5	11.6
Approac	h	295	9.4	0.252	4.9	LOSA	1.5	11.6
East: Co	ve Hill							
4	L2	9	10.0	0.155	6.0	LOSA	0.9	6.6
5	T1	17	10.0	0.155	6.1	LOSA	0.9	6.6
6	R2	124	10.0	0.155	11.6	LOS B	0.9	6.6
Approac	:h	150	10.0	0.155	10.7	LOS B	0.9	6.6
North: E	ast Derwent H	lwy						
7	L2	225	10.0	0.438	3.9	LOSA	3.6	26.9
8	T1	374	10.0	0.438	3.9	LOSA '	3.6	26.9
9	R2	62	0.0	0.438	9.3	LOSA	3.6	26.9
Approac	:h	661	9.1	0.438	4.4	LOSA	3.6	26.9
West: C	halmers Link							
10	L2	39	10.0	0.075	5.6	LOSA	0.4	3.0
11	T1	24	10.0	0.075	5.7	LOSA	0.4	3.0
12	R2	12	0.0	0.075	11.0	LOS B	0.4	3.0
Approac	h	75	8.4	0.075	6.5	LOSA	0.4	3.0
All Vehic	cles	1181	9.2	0.438	5.5	LOSA	3.6	26.9

Cove Hill Road roundabout – Evening peak hour traffic flows with development traffic

# **MOVEMENT SUMMARY**

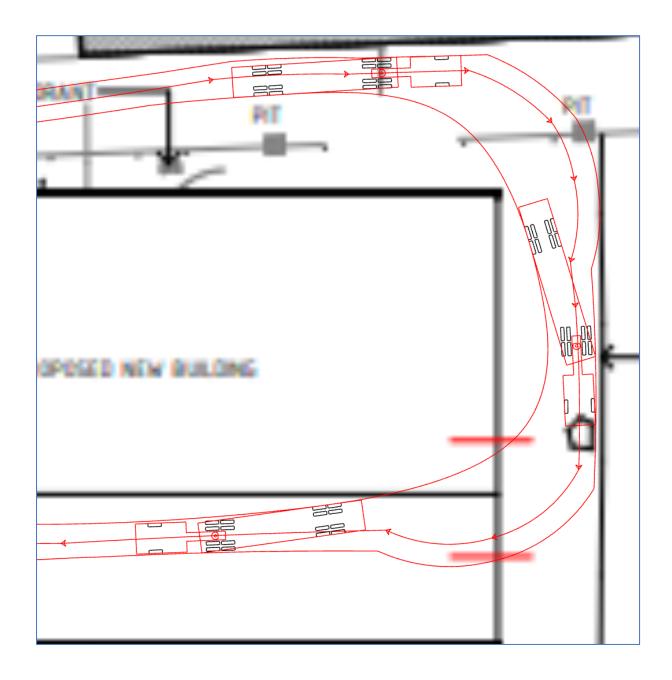
Site: 101 [Cove Hill Rd and East Derwent - manufacturing operating with precast expansion]

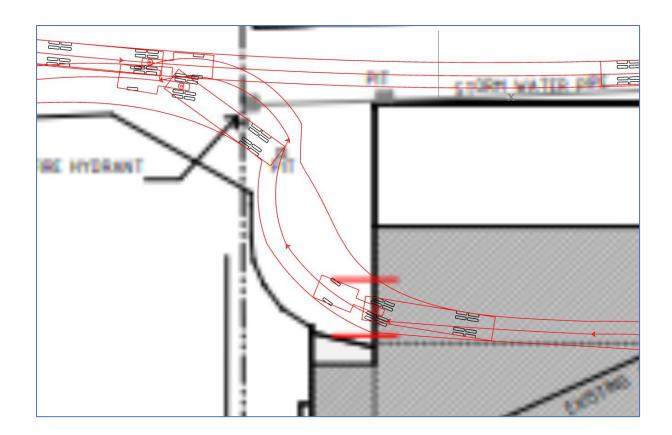
Site Category: (None) Roundabout

Mov Turn		Demand Flows Deg.		Average	Level of	95% Back of	Queue	
ID		Total	HV	Satn	Delay	Service	Vehicles	Distance
		veh/h	%	v/c	sec		veh	m
South: E	ast Derwent							
1	L2	14	0.0	0.487	7.6	LOSA	3.9	29.5
2	T1	398	10.0	0.487	8.0	LOSA	3.9	29.5
3	R2	8	0.0	0.487	13.2	LOS B	3.9	29.5
Approac	h	420	9.5	0.487	8.1	LOSA	3.9	29.5
East: Co	ve Hill							
4	L2	37	10.0	0.468	6.2	LOSA	3.3	25.0
5	T1	49	10.0	0.468	6.2	LOSA	3.3	25.0
6	R2	399	10.0	0.468	11.7	LOS B	3.3	25.0
Approac	h	485	10.0	0.468	10.8	LOS B	3.3	25.0
North: E	ast Derwent H	łwy						
7	L2	274	10.0	0.415	3.9	LOSA	3.5	26.2
8	T1	267	10.0	0.415	3.9	LOSA	3.5	26.2
9	R2	76	0.0	0.415	9.3	LOSA	3.5	26.2
Approac	h	617	8.8	0.415	4.6	LOSA	3.5	26.2
West: Cl	nalmers Link							
10	L2	64	10.0	0.155	9.2	LOSA	1.0	7.6
11	T1	29	10.0	0.155	9.2	LOSA	1.0	7.6
12	R2	11	0.0	0.155	14.3	LOS B	1.0	7.6
Approac	h	104	8.9	0.155	9.7	LOSA	1.0	7.6
All Vehic	eles	1626	9.3	0.487	7.7	LOSA	3.9	29.5



# 12. Appendix B – Swept path of 19 metre semi-trailer







# 76 COVE HILL ROAD BRIDGEWATER

ireneinc & smithstreetstudio
PLANNING & URBAN DESIGN

# 76 COVE HILL RD & 314 MIDLAND HWY, BRIDGEWATER

Extension to factory - Development Application

Tasmanian Planning Scheme- Brighton

Last Updated - 22 August 2023 Author - Poppy Scharkie Reviewed by - Irene Duckett

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#### 1. **INTRODUCTION**

Ireneinc Planning and Urban Design have been engaged by Tas Statewide Property Pty Ltd to prepare a planning report for the extensions of use and development at 76 Cove Hill Road, Bridgewater. This report provides an assessment of the proposal against the provisions of the Tasmanian Planning Scheme - Brighton

#### 1.1 SITE



Figure 1: View of existing precast concrete factory looking east. The dark grey area on the western corner is the location of the administration offices. The brewery building can be seen in the background (Google Street View 2023).



Figure 2: View of existing precast concrete factory looking west (Google Street View 2023)



Figure 3: View looking west of Brewery building, precast concrete factory in background (Google Street View 2023)

#### 1.1.1 SITE AND SURROUNDINGS DESCRIPTION

The site is located with the Brighton Industrial Hub, with the Bridgewater Quarry located directly north of the development area and other industrial uses either side of Cove Hill Road. The nearest residential areas are located a minimum of 130m from the site and approximately 220m from the development area.

#### 1.2 **PROPOSAL**

### 1.1.2 USE

The proposal is for an intensification of the existing precast concrete factory located at 76 Cove Hill Road. The factory relies on concrete to be delivered to the site, where it is distributed within the factory through gantry cranes and concrete spreaders. The business produces concrete panelling, and precast bathroom pods. The products are then delivered to the customers, and when immediate delivery does not occur, they are stored in an outdoor storage area. There is a washdown area outside for the washdown of any equipment.

The existing hours of operation are 5am to 6pm Monday through to Saturday and these will be maintained. There are currently 10 FTE employees, and with the intensification of the site this will increase to 16 FTE employees. The existing parking will be retained plus additional 21 parking spaces.

The use relies on commercial vehicles for inward and outward delivery of products. The types of vehicles include:

- Concrete delivery trucks
- Semi-trailers
- Rigid trucks
- Small commercial vans and utility vehicles.

The use is not classified as a hazardous use, and no hazardous chemicals stored on site. Waste generated by the use is removed by waste removal companies. Any concrete waste or excess is cast into a 1 tonne mould and upcycled as a product. The site does not generate any odour, dust or smoke. There is minimal risk of any spill, however, the site has spill kits available.

The redevelopment of 314 Midland Highway has commenced construction under a separate permit. The use will rely on the new access facilities proposed, and therefore this land is included in this application.

#### 1.1.3 DEVELOPMENT

The proposed development is the extension of the existing factory building. The building will increase by 2969m2. The new building will extend to the east by 57m and 13m to the north. The maximum building height is approximately 16.5m above natural ground level.

The east elevations will have 7.4m high and 15.8m (nom) wide openings, and the north elevation will have an opening 76vm wide and 6m in height.

The walls and roof will be clad in Colourbond metal (mid grey) to match adjacent existing sheds.

A small existing extension to the rear of the building will require demolition along with a partial removal of the eastern wall. The existing internal precast walls will be retained.



Figure 4: diagram of demolition (The List Map 2023)

No changes to the existing administration areas or control room are proposed.

Upgrade of the onsite stormwater infrastructure is proposed which will introduce stormwater detention, piping and pits.

#### 1.3 LANDOWNER NOTIFICATION

The landowner of 314 Midland Highway has been notified in accordance with the requirements of Section 52 of the Land Use Planning and Approvals Act 1993.

## 1.4 URBAN DRAINAGE ACT 2013

A new stormwater system is proposed which will see stormwater disposed of via the drainage easement within 66 Channel Highway. Stormwater detention and treatment on site is proposed. Please refer to the accompanying civil plans. Consent is required as per Section 14 of the Urban Drainage Act 2013.

#### PLANNING SCHEME -ZONE PROVISIONS 2.

The following is an assessment of the proposal in response to the provisions of the Tasmanian Planning Scheme- Brighton. The land is within the General Industrial Zone and adjoins the light Industrial and General Business Zone. The development area is more than 200m from a residential zone, however, a portion of the site on the southwest is within 130m on the Inner Residential Zone.

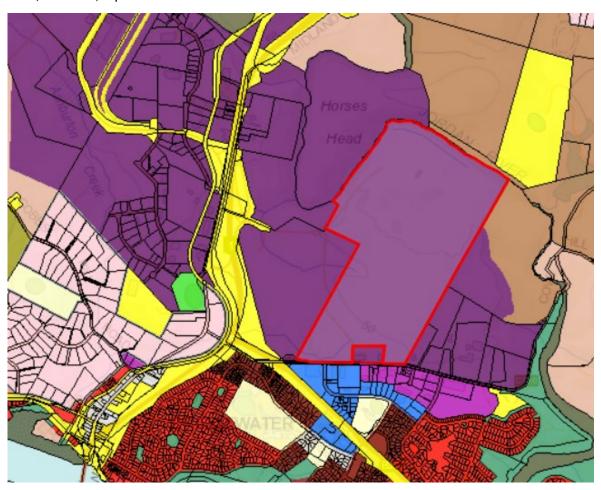


Figure 5: Zone Plan (The List Map 2023)

#### 2.1 GENERAL INDUSTRIAL ZONE

#### 1.1.4 ZONE PURPOSE

The purpose of the General Industrial Zone is:

19.1.1 To provide for manufacturing, processing, repair, storage and distribution of goods and materials where there may be impacts on adjacent uses.

19.1.2 To provide for use or development that supports and does not adversely impact on industrial activity.

The proposal is for the use and development of a precast concrete product factory, which requires considerable land area for the manufacturing, storage and distribution of precast concrete products. Whilst the proposal has no odour, dust or smoke emissions, it is an industrious use and requires separation from sensitive users to allow for the unconstrained use of the land. The proposal is consistent with the General Industrial Zone.

#### 1.1.5 USE

The proposed use is for an extension to the factory which produces precast cement products for building and construction. This use is categorised into the use class Manufacturing and Processing, which is defined as:

use of land for manufacturing, assembling or processing products other than Resource Processing. Examples include boat building, brick making, cement works, furniture making, glass manufacturing, metal and wood fabrication, mineral processing and textile manufacturing.

Manufacturing and Processing is a permitted use class in the zone. There are no relevant use standards that relate to permitted uses.

#### 1.1.6 DEVELOPMENT STANDARDS

19.4.1 Building height					
Objective: To provide for a building height that	::				
(a) is necessary for the operation of the use	e; and				
(b) minimises adverse impacts on adjoining properties.					
ACCEPTABLE SOLUTION PERFORMANCE CRITERION					
A1	P1				
Building height must be not more than 20m.	Building height must be necessary for the operation of the use and not cause an unreasonable impact on adjoining properties, having regard to:				
	(a) the bulk and form of the building;				
	(b) separation from existing use on adjoining properties; and				
	(c) any buffers created by natural or other features.				
RESPONSE					
The extension does not exceed 16.5m, which complies with A1.					
19.4.2 Setback					
Objective: That the building setback is appropr	iate for the site.				

#### **ACCEPTABLE SOLUTION** PERFORMANCE CRITERION **A1** P1 Buildings must have setback from a frontage Buildings must have a setback from a frontage of: that provides adequate space for vehicle access, parking and landscaping, having not less than 10m; (a) regard to: not less than existing buildings on the (b) the topography of the site; (a) site; or (b) the setback of buildings on adjacent not more or less than the maximum (c) properties; and and minimum setbacks of the buildings on adjoining properties. the safety of road users. (c)

#### **RESPONSE**

The extension will be setback from the frontage approximately 17.8m, which complies with A1. This setback is consistent with the existing concrete factory at the site.

#### 19.4.3 Landscaping

Objective: That landscaping enhances the amenity and appearance of the streetscape where buildings are setback from the frontage.

If a building is set back from a road, landscaping treatment must be provided along the frontage of the site:  (a) to a depth of not less than 6m; or  (b) not less than the frontage of an existing building if it is a lesser distance.  P1  If a building is setback from a road, landscaping treatment must be provided along the frontage of the site, having regard to:  (a) the width of the setback;  (b) the width of the frontage;  (c) the topography of the site;	ACCEPTABLE SOLUTION	PERFORMANCE CRITERION
(a) existing vegetation on the site;  (e) the location, type and growth of the proposed vegetation; and  (f) any relevant local area objectives contained within the relevant Local Provisions Schedule.	If a building is set back from a road, landscaping treatment must be provided along the frontage of the site:  (a) to a depth of not less than 6m; or  (b) not less than the frontage of an	If a building is setback from a road, landscaping treatment must be provided along the frontage of the site, having regard to:  (a) the width of the setback;  (b) the width of the frontage;  (c) the topography of the site;  (d) existing vegetation on the site;  (e) the location, type and growth of the proposed vegetation; and  (f) any relevant local area objectives contained within the relevant Local

### **RESPONSE**

The existing building on site has landscaping to a depth of 3m, and this will be maintained adjacent to the extension with some additional landscaped areas. The proposal complies with A1 (b)

#### 3. CODES

#### PARKING AND SUSTAINABLE TRANSPORT CODE

#### 1.1.7 USE STANDARDS

### C2.5.1 Car parking numbers

**Objective**: That an appropriate level of car parking spaces are provided to meet the needs of the use.

#### ACCEPTABLE SOLUTION

#### A1

The number of on-site car parking spaces must be no less than the number specified in Table 2.1, less the number of car parking spaces that cannot be provided due to the site including container refund scheme space, excluding if:

- it relates to an intensification of an (d) existing use or development or a change of use where:
- ii) the number of on-site car parking spaces for the existing use or development specified in Table C2.1 is less than the number of car parking spaces specified in Table C2.1 for the proposed use or development, in which case on-site car parking must be calculated as follows:

N = A + (C - B)

- N = Number of on-site car parking spaces required
- A = Number of existing on site car parking spaces
- B = Number of on-site car parking spaces required for the existing use or development specified in Table C2.1

### PERFORMANCE CRITERION

#### P1.1

The number of on-site car parking spaces for uses, excluding dwellings, must meet the reasonable needs of the use, having regard to: (a) the availability of off-street public car parking spaces within reasonable walking distance of the site;

- (b) the ability of multiple users to share spaces because of:
- (i) variations in car parking demand over time; or
- (ii) efficiencies gained by consolidation of car parking spaces;
- (c) the availability and frequency of public transport within reasonable walking distance of the site;
- (d) the availability and frequency of other transport alternatives;
- (e) any site constraints such as existing buildings, slope, drainage, vegetation and landscaping;
- (f) the availability, accessibility and safety of on-street parking, having regard to the nature of the roads, traffic management and other uses in the vicinity;
- (g) the effect on streetscape; and

C= Number of on-site car parking spaces required for the proposed use or development **specified** in Table C2.1.

(h) any assessment by a suitably qualified person of the actual car parking demand determined having regard to the scale and nature of the use and development.

#### P1.2

The number of car parking spaces for dwellings must meet the reasonable needs of the use, having regard to:

- (a) the nature and intensity of the use and car parking required;
- (b) the size of the dwelling and the number of bedrooms; and
- (c) the pattern of parking in the surrounding area

#### **RESPONSE**

Table C2.1 requires the following rate of parking for Manufacturing and Processing:

1 space per 200m<sup>2</sup> of floor area or 2 spaces per 3 employees, whichever is greater

The existing floor area is 1546m<sup>2</sup> and there are 10 FTE employees. The site has 11 existing car parking spaces.

The proposed total floor area is 2950m<sup>2</sup> and there will be 6 additional FTE employees required.

A = Number of existing on site car parking spaces

### **A= 11**

B = Number of on-site car parking spaces required for the existing use or development specified in Table C2.1

B = 1546/200 = 8 (7.73) or 10/3 = 3.3, 8 is greater.

#### B= 8

C= Number of on-site car parking spaces required for the proposed use or development specified in Table C2.1.

C= 2969/200= 15 (14.84) or 2, 15 is greater.

#### C = 15

N = Number of on-site car parking spaces required (A + (C-B))

N = 11 + (15 - 8)

N=11 + 7

### N=18

18 parking spaces are required to satisfy the acceptable solution and 30 are proposed, the proposal complies with A1.

### C2.5.2 Bicycle parking numbers

**Objective**: That an appropriate level of bicycle parking spaces are provided to meet the needs of the use.

ACCEPTABLE SOLUTION	PERFORMANCE CRITERION
A1	P1
Bicycle parking spaces must:  (a) be provided on the site or within 50m	Bicycle parking spaces must be provided to meet the
of the site; and	reasonable needs of the use, having regard to:
<ul><li>(b) be no less than the number specified in Table C2.1.s</li></ul>	(a) the likely number of users of the site and their
	opportunities and likely need to travel by bicycle;
	and
	(b) the availability and accessibility of existing and
	any planned parking facilities for bicycles in the
	surrounding area.

#### **RESPONSE**

Table C2.1 requires the following bicycle parking rate for Manufacturing and Processing 1 space per 5 employees

There are 6 additional staff proposed, which requires 1 bicycle space. Sufficient area is available within the indoor staff areas to accommodate this space. The proposal complies with A1.

### C2.5.3 Motorcycle parking numbers

Objective: That the appropriate level of motorcycle parking is provided to meet the needs of the use.

ACCEPTABLE SOLUTION	PERFORMANCE CRITERION
A1	P1
The number of on-site motorcycle parking spaces for all uses must:  (a) be no less than the number specified in Table C2.4; and  (b) if an existing use or development is extended or intensified, the number of onsite motorcycle parking spaces must be based on the proposed extension or intensification, provided the existing number of motorcycle parking spaces is maintained.	Motorcycle parking spaces for all uses must be provided to meet the reasonable needs of the use, having regard to:  (a) the nature of the proposed use and development;  (b) the topography of the site;  (c) the location of existing buildings on the site;  (d) any constraints imposed by existing development; and  (e) the availability and accessibility of motorcycle

parking spaces on the street or in the
surrounding area.

#### **RESPONSE**

Table C2.4 requires no motorcycle parking spaces if there are less than 20 car spaces required on site. As only 18 parking spaces are required on site, no motorcycle parking is required.

#### C2.5.4 Loading bays

Objective: That adequate access for goods delivery and collection is provided, and to avoid unreasonable loss of amenity and adverse impacts on traffic flows.

ACCEPTABLE SOLUTION	PERFORMANCE CRITERION
A1	P1
A loading bay must be provided for uses with a floor area of more than 1000m <sup>2</sup> in a single occupancy.	Loading bays must have an area and dimensions suitable for the use, having regard to: (a) the types of vehicles likely to use the site; (b) the nature of the use; (c) the frequency of loading and unloading; (d) the area and dimensions of the site; (e) the topography of the site; (f) the location of existing buildings on the site; and (g) any constraints imposed by existing development.

### **RESPONSE**

A loading bay is provided, as demonstrated within the plan set. The proposal satisfies A1.

#### 1.1.8 DEVELOPMENT STANDARDS

A traffic impact assessment by Hubble Traffic accompanies this report and responds to all relevant development standards in this Code.

#### 3.2 ROAD AND RAILWAY ASSET CODE

### C3.5.1 Traffic generation at a vehicle crossing, level crossing or new junction

Objective: To minimise any adverse effects on the safety and efficiency of the road or rail network from vehicular traffic generated from the site at an existing or new vehicle crossing or level crossing or new junction.

ACCEPTABLE SOLUTION	PERFORMANCE CRITERION
A1.2	P1
For a road, excluding a category 1 road or a limited access road, written consent for a new junction, vehicle crossing, or level crossing to serve the use and development has been issued by the road authority.	Vehicular traffic to and from the site must minimise any adverse effects on the safety of a junction, vehicle crossing or level crossing or safety or efficiency of the road or rail network, having regard to:
	(a) any increase in traffic caused by the use;

#### A1.4

Vehicular traffic to and from the site, using an existing vehicle crossing or private level crossing, will not increase by more than:

- (a) the amounts in Table C3.1; or
- allowed by a licence issued under (b) Part IVA of the Roads and Jetties Act 1935 in respect to a limited access road.
- (b) the nature of the traffic generated by the use;
- (c) the nature of the road;
- (d) the speed limit and traffic flow of the road;
- (e) any alternative access to a road;
- (f) the need for the use;
- (g) any traffic impact assessment; and
- (h) any advice received from the rail or road authority

#### **RESPONSE**

Table C3.1 provides for the following permitted increase in annual average daily traffic to and from a site:

Vehicle crossings on other roads-

Vehicles up to 5.5m long 20% or 40 vehicle movements per day, whichever is the greater

Vehicles longer than 5.5m 20% or 5 vehicle movements per day, whichever is the greater

The proposal does not comply with Table C3.1. The Traffic Impact Assessment has found the proposal satisfies the performance criterion which is detailed on page 23 and 24 of the TIA.

#### 1.1.9 DEVELOPMENT STANDARDS

There are no relevant development standards.

#### 3.3 ELECTRICITY TRANSMISSION INFRASTRUCTURE PROTECTION CODE

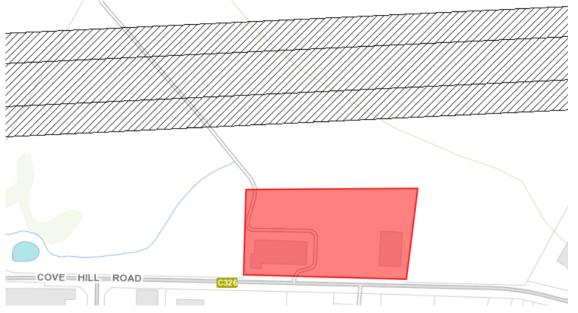


Figure 6: Development area described in red with Electricity Transmission Infrastructure Protection Overlay (electricity transmission corridor) in black hatch, with topographic map (The List Map 2023)

As per C4.2.1, this code applies to use and development within the electricity transmission corridor. The development area where the use and development will occur within the site is not mapped within the electricity transmission corridor. This code does not apply to the proposal.

#### 3.4 ATTENUATION CODE

The site is within the Bridgewater Quarry Attenuation Zone however in accordance with C9.2.2 the attenuation areas do not apply between listed uses within an industrial zone.

The use is listed in Tabel C9.1 as concrete product manufacture.

#### C9.5.1 Activities with potential to cause emissions

Objective: That an activity with potential to cause emissions is located so that it does not cause an unreasonable impact on an existing sensitive use.

#### ACCEPTABLE SOLUTION

#### Α1

The attenuation area of an activity listed in Tables C9.1 or C9.2 must not include:

- a site used for a sensitive use which is (a) existing;
- (b) a site that has a planning permit for a sensitive use; or
- land within the General Residential (c) Zone, Inner Residential Zone, Low Density Residential Zone, Rural Living Zone A, Rural Living Zone B, Village Zone or Urban Mixed Use Zone.
- (vi) existing emissions such as noise, odour, gases, dust, particulates, radiation, vibrations or waste; and
- measures to eliminate, mitigate or manage emissions from the activity.

### PERFORMANCE CRITERION

An activity listed in Tables C9.1 or C9.2 must not cause:

- (a) an unreasonable loss of amenity or unreasonable impacts on health and safety of a sensitive use which is existing, or has a planning permit; or
- (b) unreasonable impacts on land within the relevant attenuation area that is in the General Residential Zone, Inner Residential Zone, Low Density Residential Zone, Rural Living Zone A, Rural Living Zone B, Village Zone or Urban Mixed Use Zone, having regard to:
- (i) operational characteristics of the activity;
- (ii) scale and intensity of the activity;
- (iii) degree of hazard or pollution that may be emitted from the activity;
- (iv) hours of operation of the activity;
- (v) nature of likely emissions such as noise, odour, gases, dust, particulates, radiation, vibrations or waste;
- (vi) existing emissions such as noise, odour, gases, dust, particulates, radiation, vibrations or waste; and
- (vii) measures to eliminate, mitigate or manage emissions from the activity.

#### **RESPONSE**

#### Α1

For concrete product manufacture, the attenuation distance is 300m measured from the site boundaries. This attenuation distance includes residential lands at Hurst Street and Green Point Road and therefore cannot comply with A1.

The proposal must rely on the performance criterion:

P1 b)

- i) The development area, locate at 76 Cove Hill Road and smaller than the site area, only has three properties within a residential zone located within 300m of it. This is where the activity is concentrated. The site is used for casting concrete products, with concrete being delivered wet up to seven times per day.
- ii) Whilst the proposal is of a large scale, it is anticipated to only have local effects contained within the site.
- iii) & v)The proposal is largely enclosed in a way that will contain and mitigate any noise emissions, which are not anticipated to be significant as the main activity is casting with no requirement for cutting. The concrete arrives in a wet condition which minimises dust. There are washdown procedures to minimise any dust following casting to ensure it is contained in the property boundaries. No odour is anticipated to be generated from the use.
- iv) The operation hours are 5am to 6pm Monday through to Saturday
- vi) As the proposal is for an intensification of the existing use, there may be some emissions but these are largely contained on site and relate to noise and dust. No other kinds of emissions are anticipated.
- vii) No mitigation is considered necessary.

#### 3.5 BUSHFIRE PRONE AREAS CODE

The use is not a vulnerable or hazardous use, and subdivision is not proposed. This code does not apply.

#### **BRIGHTON LOCAL PROVISIONS - GENERAL OVERLAYS** 4.

#### 4.1 BRIGHTON QUARRY SPECIFIC AREA PLAN

The purpose of this SAP is to protect the operations of the Bridgewater Quarry from incompatible or conflicting use or development.

This SAP is in substitution for and addition to the Attenuation Code.

#### 1.1.10 USE STANDARDS

The proposal is not for a sensitive use and therefore there are no relevant use standards.

#### 1.1.11 DEVELOPMENT STANDARDS

This clause is in addition to the Atter	nuation Code.
<b>Objective:</b> That development is com	npatible with the operations of the Bridgewater Quarry
ACCEPTABLE SOLUTION	PERFORMANCE CRITERION
A1 No Acceptable Solution.	P1
	Buildings and works must not result in potential to interfere or conflict with quarry operations having regard to:
	(a) the nature of the quarry; including:
	(i) operational characteristics;
	(ii) scale and intensity;
	(iii) degree of hazard or pollution that may be emitted from the activity;
	(b) the degree of encroachment of development or use into the Bridgewater Quarry Attenuation Area; and
	(c) measures in the design, layout and construction of the development to eliminated, mitigate or manage effects of the quarry; and
	(d) any advice from the Bridgewater Quarry operator.

#### **RESPONSE**

The proposal will not interfere or conflict with the quarry operations. The proposal is an existing use and development that will be intensified that has operated compatibly with the quarry for some time.

a) The Boral Quarry is a large operating opencut basalt quarry located 450mm from the development area.

- b) The proposal is located at the outer edge of the quarry attenuation area.
- c) The proposal is for an industrial use and therefore no measures are required to manage the effects of the quarry. The uses are compatible.
- d) no advice has been received.

#### BRIGHTON INDUSTRIAL HUB SPECIFIC AREA PLAN 4.2

The purpose of this SAP is to protect the Brighton Industrial Hub from sensitive use establishing in the area.

This SAP is in substitution for and addition to the Attenuation Code.

#### 1.1.12 USE STANDARDS

BRI-S10.6.1 Sensitive Use				
This clause is in substitution for Attenuation Code - clause C9.5.2 Sensitive use within an attenuation area.				
Objective: That development is compatible with the operations of the Bridgewater Quarry				
ACCEPTABLE SOLUTION	PERFORMANCE CRITERION			
A1	P1			
Use or development is not for sensitive use.	No performance criterion.			
RESPONSE				

The proposed use and development is not for a sensitive use, the proposal complies with A1.

#### 5. **SUMMARY**

- Manufacturing and Processing is a permitted use class in the zone.
- The proposed development complies with the development standards of the General Industrial Zone.
- The proposal complies with the permitted use standards of the Parking and Sustainable Transport Code. 30 car spaces are proposed and provision for bicycle parking is available in staff areas.

The proposal triggers discretion concerning:

- C3.5.1 Traffic generation at a vehicle crossing, level crossing or new junction
- C9.5.1 Activities with potential to cause emissions; and
- BRI-S4.7.1 Buildings and works within Bridgewater Quarry Specific Area Plan



# **Submission to Planning Authority Notice**

Council Planning Permit No.	DA 2023 / 00149		Council notice date	31/08/2023
TasWater details				
TasWater Reference No.	TWDA 2023/01194-BTN		Date of response	11/10/2023
TasWater Contact	Rachael Towns Phone No.		0436 615 228	
Response issued to				
Council name	BRIGHTON COUNCIL			
Contact details	development@brighton.tas.gov.au			
Development details				
Address	76 COVE HILL RD, BRIDGEWATER		Property ID (PID)	2797391
Description of development	T Alterations & Additions			

### Schedule of drawings/documents

Prepared by	Drawing/document No.	Revision No.	Date of Issue
1+2 Architecture	DA.02.01 a		23.08.2023

#### **Conditions**

Pursuant to the *Water and Sewerage Industry Act* 2008 (TAS) Section 56P(1) TasWater imposes the following conditions on the permit for this application:

### **CONNECTIONS, METERING & BACKFLOW**

- 1. A suitably sized water supply with metered connection(s) and sewerage system and connection to the development must be designed and constructed to TasWater's satisfaction and be in accordance with any other conditions in this permit.
- 2. Any removal/supply and installation of water meters and/or the removal of redundant and/or installation of new and modified property service connections must be carried out by TasWater at the developer's cost.
- 3. Prior to commencing construction /use of the development, any water connection utilised for the development must have a backflow prevention device and water meter installed, to the satisfaction of TasWater.

#### **DEVELOPMENT ASSESSMENT FEES**

4. The applicant or landowner as the case may be, must pay a development assessment fee of \$389.86 to TasWater, as approved by the Economic Regulator and the fees will be indexed, until the date paid to TasWater.

The payment is required within 30 days of the issue of an invoice by TasWater.

### **Advice**

#### General

For information on TasWater development standards, please visit <a href="https://www.taswater.com.au/building-and-development/technical-standards">https://www.taswater.com.au/building-and-development/technical-standards</a>

For application forms please visit <a href="https://www.taswater.com.au/building-and-development/development-application-form">https://www.taswater.com.au/building-and-development/development-application-form</a>

#### **Service Locations**

Please note that the developer is responsible for arranging to locate the existing TasWater infrastructure



and clearly showing it on the drawings. Existing TasWater infrastructure may be located by a surveyor and/or a private contractor engaged at the developers cost to locate the infrastructure.

- (a) A permit is required to work within TasWater's easements or in the vicinity of its infrastructure. Further information can be obtained from TasWater.
- (b) TasWater has listed a number of service providers who can provide asset detection and location services should you require it. Visit <a href="https://www.taswater.com.au/building-and-development/service-locations">https://www.taswater.com.au/building-and-development/service-locations</a> for a list of companies.
- (c) Sewer drainage plans or Inspection Openings (IO) for residential properties are available from your local council.

 $\underline{\text{NOTE:}}$  In accordance with the WATER AND SEWERAGE INDUSTRY ACT 2008 - SECT 56ZB A regulated entity may charge a person for the reasonable cost of –

- (a) a meter; and
- (b) installing a meter.

#### **Declaration**

The drawings/documents and conditions stated above constitute TasWater's Submission to Planning Authority Notice.

# **TasWater Contact Details**

Taswater Contact Details					
Phone	13 6992	Email	development@taswater.com.au		
Mail	GPO Box 1393 Hobart TAS 7001	Web	www.taswater.com.au		