



Preliminary Civil Design Report

Risby Street, Ulverstone, TAS 7315



JOB NUMBER:	S67588 - 289337
CLIENT:	Central Coast Council
SITE:	Risby Street, ULVERSTONE, TAS 7315
DATE:	18/06/2024
REVISION:	0



Client:
Central Coast Council
Site:
Risby Street, ULVERSTONE, TAS 7315

© Koukourou Pty Ltd trading as FMG Engineering

The work carried out in the preparation of this report has been performed in accordance with the requirements of FMG Engineering's Quality Management System which is certified by a third party accredited auditor to comply with the requirements of ISO9001.

This document is and shall remain the property of FMG Engineering. The document is specific to the client and site detailed in the report. Use of the document must be in accordance with the Terms of Engagement for the commission and any unauthorised use of this document in any form whatsoever is prohibited. No part of this report including the whole of same shall be used for any other purpose nor by any third party without prior written consent of FMG Engineering.

FMG Engineering provides this document in either printed format, electronic format or both. FMG Engineering considers the printed version to be binding. The electronic format is provided for the client's convenience and FMG Engineering requests that the client ensures the integrity of this electronic information is maintained. Storage of this electronic information should at a minimum comply with the requirements of the Electronic Transactions Act 2000 (Cth).

Document Status – Author and Reviewer

REV NO.	STATUS	AUTHOR	APPROVER		
			NAME	SIGNATURE	DATE
0	PRELIMINARY	Kurt Chamberlain BEng (Civil) (Hons) BBus (Finance) MIEAust IPWEA Civil Team Leader (VIC)	Kurt Chamberlain BEng (Civil) (Hons) BBus (Finance) MIEAust IPWEA Civil Team Leader (VIC)		18/06/2024

Contents

Introduction and scope	4
Existing Conditions	4
Existing Site Drainage.....	4
Existing Road Profile.....	4
Existing Vegetation Constraints.....	5
Existing Pavement Condition	5
Existing Overall Aesthetics	6
Design Brief	7
Objective	7
Limit of Works	7
Concept Layout for Options Analysis	7
Road Width	8
Road Pavement.....	8
Pavement Design Details	8
Conventional Flexible Pavement.....	8
Subgrade Preparation.....	11
Reuse of Existing Pavement Material.....	11
Drainage.....	12
Roadside Hazards.....	13
Trees.....	13
Line Marking, Guideposts & RRPMS	13
Horizontal Alignment Rational	13
Vertical Alignment Rational	13
Design Speed & Warning Signs.....	13
Sight Distance	14
Community Consultation	14
Tree Removal and Replacement:.....	14
Road Safety and Traffic Concerns:	14
Construction Impact:	14
Driveway and Parking Issues:.....	15
Nature Strip and Landscaping:.....	15
Summary:.....	15
Appendix A.....	16
FMG Engineering Preliminary Design Drawings (vB).....	16
Appendix B.....	17
Community Consultation Flyer	17
Appendix C.....	18
Community Consultation Presentation	18
Appendix D.....	19
Community Consultation Feedback	19

Introduction and scope

This report describes the design basis of the civil design works to complete the proposed Road and Drainage Reconstruction Works at Risby Street, Ulverstone. Appendix A contains the Preliminary Design (vA) drawings that reflect the design basis presented in this report.

Existing Conditions

Existing Site Drainage

Information on the existing site drainage conditions were uncovered through an Engineering Feature and Level Survey completed by a Registered Surveyor in Tasmania (Land Dimensions) and through a Underground Drainage CCTV Investigation completed by a licensed plumber (AJ Water).

A review of the aforementioned information identified an array of drainage infrastructure present within the extent of works. Grated side entry pits, grated pits and side entry pits are throughout the site utilised as drainage inlets. Underground drainage pipes ranging from 150mm diameter uPVC property connections up to 600mm diameter reinforced concrete pipes.

The overland flows from the southern section of Risby Street are captured in the drainage inlet structures and travels through longitudinal drainage on the west (300mm diameter pipe network) and east (600mm diameter pipe network). For the purposes of this proposed upgrade works, the discharge of drainage for this component of the road is through the 300mm diameter drainage pipe within No. 32 of Risby Street, and the 600mm diameter drainage pipe down Vincent Street.

The overland flows from the northern section of Risby Street are captured in the drainage inlet structures and travels through longitudinal drainage on the south (225mm and 300mm diameter pipe network). For the purposes of this proposed upgrade works, the discharge of drainage for this component of the road is through the 300mm diameter drainage pipe down John Street.

A detailed review of the CCTV drainage information identified a number of 225mm underground drainage pipes that have been penetrated by tree roots and have significant blockages. The larger 375mm and 600mm underground drainage pipes are in good condition considering the estimated age of these assets.

Existing Road Profile

Information on the existing road profile were uncovered through an Engineering Feature and Level Survey completed by a Registered Surveyor in Tasmania (Land Dimensions) and through a site inspection by a Senior Civil Engineer from FMG Engineering.

A review of the aforementioned information identified the existing road profile consists of a 9.60m driveable road width. An existing sealed flexible pavement exists between concrete barrier kerb and channels that run the length of the street.

No parking restrictions are present on the road, therefore when cars park on both sides of the road (assumed to require 2.0m – 2.3m in accordance with Australian Standards for on-street parking) only 5.00m – 5.60m is remaining for through traffic.

Existing Vegetation Constraints

Information on the existing vegetation were uncovered through an Engineering Feature and Level Survey completed by a Registered Surveyor in Tasmania (Land Dimensions) and through a site inspection by a Senior Civil Engineer from FMG Engineering.

A review of the aforementioned information identified the existing vegetation consists of eleven (11) mature trees within the eastern nature strip and thirteen (13) mature trees within the western nature strip. It should be noted that the trees on the western alignment are abutting the existing kerb causing the road to raise in several locations.

Existing Pavement Condition

Information on the existing vegetation were uncovered through an Engineering Feature and Level Survey completed by a Registered Surveyor in Tasmania (Land Dimensions), a site inspection by a Senior Civil Engineer from FMG Engineering and a Geotechnical Investigation completed by FMG Engineering.

A review of the aforementioned information identified the existing road seal and pavement base are in very poor condition.

A wide array of pavement defects were identified when inspecting the existing pavement seal, these included:

- Deformations:
 - Shoving;
 - Depressions; and
 - Corrugation.
- Cracking:
 - Meandering;
 - Transverse;
 - Longitudinal;
 - Diagonal;
 - Block; and
 - Crocodile.
- Surface Distress:
 - Polishing; and
 - Raveling.

The above pavement defects identified on-site could have been caused by the following items:

- **Structural:** Pavement Structural Integrity causes could be:
 - Structural overloading of the pavement and/or inadequate pavement thickness;
 - Pavement at terminal condition;
 - Inadequate pavement thickness;
 - Local failure of pavement;
 - Ageing and hardening of bituminous surfacing;
 - Fatigue-induced structural cracking;
 - Poor bond between wearing course and underlying layers;
 - Low binder content; and
 - Age hardening (oxidation) or adsorption of binder.
- **Environmental:** Road Environmental causes could be:

- Ingress of water through the pavement surfacing or road edges into base, subbase, and subgrade;
 - Moisture in pavement and/or subgrade;
 - Moisture movement, especially in expansive subgrades;
 - Inadequate drainage;
 - Settlement of trench backfill due to poor compaction or softening caused by leakage from services;
 - Intrusion of tree roots into the subgrade or pavement layers;
 - High horizontal shear forces associated with turning and acceleration movements;
 - Volume change of expansive clay subgrade;
 - Differential settlement between cut and fill;
 - Erosion of shoulder by wind or water;
 - Growth of vegetation at the edge of the surface seal;
 - Loss of surface material due to ravelling, stripping, cracking and/or delamination; and
 - Moisture entry into a granular base through cracked surface course, resulting in localised softening.
- **Construction Quality:** Construction Quality causes could be:
 - Inadequate quality of pavement materials;
 - Poor quality construction control, particularly in compaction and drainage;
 - Inadequate compaction of surfacing or base material;
 - Lack of bond between pavement layers;
 - Low modulus base layer; and
 - Expedient patch of wearing course through the repair of surfacing deficiencies (deformation or rutting, cracking, stripping, edge break etc.) without prior removal of the affected material.

Laboratory testing was carried out on the existing base course material to determine its particle size distribution and Atterberg limit (refer Geotechnical Report Section 4.1).

The result shows that the existing basecourse is predominantly sand with a relatively high proportion of fines and is classified as Gravelly Silty Sand (SM).

The Tasmania Municipal Standard Specification (March 2020) provides a table for suitable basecourse material. The sample that was tested has 65% passing the 2.36mm sieve (sand grains or finer) and 22% passing the 0.075mm sieve (silt).

Based on this result and field logs, the existing pavement material is **not** suitable for use as a base course in the proposed pavement.

Existing Overall Aesthetics

Information on the existing overall aesthetics were uncovered through a review of Council's brief and a site inspection by a Senior Civil Engineer from FMG Engineering.

A review of the aforementioned information identified that the overall aesthetics of the existing road reserve was relatively poor due to pavement defects, large tree overgrowth and poor condition of concrete kerb and channel and footpath panels.

Design Brief

The following design brief was provided by Central Coast Council for these works:

Objective

The Client's project objectives are:

- Improve the street for residents and road users;
- Improve the aesthetics of the street by means of street lighting, treescape, footpath and kerb renewal;
- Remove the safety risk associated with limited width between parked vehicles by means of designated footpath parking;
- Improved stormwater drainage; and
- Provision of a full-strength sealed road pavement with minimal future maintenance requirements.

Limit of Works

The limit of work extends from Reibey Street to and including the southern extent of the roundabout in Leven Street. It includes from property boundary to property boundary and sections of side streets.

Concept Layout for Options Analysis

The Client had developed and reviewed several options analysis layouts for the upgrade of Risby Street.

The Client had determined that the preferred upgrade concept shall be Option 1A, modified in accordance with the requirements for cyclists described in Section 8. The Consultant shall adopt the modified Option 1A concept and is not expected to develop alternative options.

The concept options are summarised as follows:

- A. Existing RISBY STREET
 - a. Existing width 9.6m;
 - b. No marked centre line;
 - c. roadside parking both sides; and
 - d. (complaints re unsafe travel width).
- B. Option 1A: Off Road Parking 7.0m Road
 - a. Reduce road width from 9.6m to 7.0m;
 - b. No marked centre line;
 - c. Off road parking bays both sides; and
 - d. Existing trees retained where possible.
- C. Option 1B: Off Road Parking 7.0m Road
 - a. Reduce road width from 9.6m to 7.0m;
 - b. No marked centre line;
 - c. Off road parking bays both sides; and
 - d. Existing trees removed and replaced.
- D. Option 2: Parking On Road
 - a. Increase road width from 9.6m to 12.0m;
 - b. No marked centre line;
 - c. On road parking both sides; and
 - d. Existing trees replaced.

- E. Option 3: Off Road Parking Narrow 6.2m Road;
- a. Reduce road width from 9.6m to 6.2m (this is narrower than the minimum 6.9m width nominated in TSD-R06-v3);
 - b. No marked centre line;
 - c. Off road parking bays both sides; and
 - d. Existing trees retained.

Road Width

Between Stoney Creek Road and Burton Road, 2 x 3.50m lanes with a Type KC (Kerb and Channel) on both sides of the road (3.50m lane taken to the invert of kerb) are provided. This type KC kerb and channel changes to a VEE Channel (Vehicle Crossing) profile at the proposed parking bays and vehicle crossings. Concrete kerb was elected for the entire length of the road in accordance with the design brief. The proposed road width was widened at the northern extent of the subject road to include an on-street parking lane outside No. 3 and No. 5 of Risby Street to better align with the existing site conditions and constraints.

Road Pavement

Pavement Design Details

Traffic count data was provided by the Council, heavy vehicle axle group volumes and other important parameters required for the pavement design were referenced from Tasmanian Municipal Standards Specifications and Standard Drawings, Table 12.2 (Indicative Heavy Vehicle Axle Group Volumes for Lightly Trafficked Urban Streets) of Austroads (2019) *Guide to Pavement Technology Part 2: Pavement Structural Design*. Also, the requirements of T3 – Road Design Guidelines & Standards and *VicRoads Code of Practice RC500.22 – Selection and Design of Pavements and Surfacing's* was considered during the pavement design.

The following parameters have been adopted as a basis of pavement design:

- Project reliability: Austroads 90%;
- Pavement design life 20-years minimum;
- Traffic Growth Rate of 1.5%;
- Number of heavy vehicle axle groups per HV of 2.2;
- Number of vehicles per day: 2358 with HV of 3.0%;
- Design subgrade CBR adopted of 4.5%;
- Traffic Load Distribution: Urban Arterial – Highways & Other Arterial Roads:
 - Table B5.08 RC500.22;
 - (ESA/HVAG 0.588);

The calculated design traffic loading is as follows:

- NDT (cumulative heavy vehicle axle groups over design period) = 6.57×10^5 ;
- DESA (Design number of Equivalent Standard Axles) = 3.94×10^5 ; and
- Direction factor: 0.5.

Conventional Flexible Pavement

Table 1 and Figure 2 show the results of conventional flexible pavement design using Empirical Design (Figure 8.4: Design chart for granular pavements with thin bituminous surfacing) in AustRoads GTPT Part 2 (refer to Figure 2).

Table 1: Pavement design outcome - Conventional flexible pavement

Layer	
Asphalt (Wearing Course)	40mm thick, Size 14mm, Type H, Binder class C320
Crushed Rock Base	200mm thick (compacted in one layer), 20mm Class 2 Crushed Rock Compacted to a mean density of 98% (modified) maximum dry density AS 1289,5.2.1
Crushed Rock Subbase	120mm thick (compacted in one layer), 20mm Class 3 Crushed Rock Compacted to a mean density of 97% (modified) maximum dry density AS 1289,5.2.1
Natural Subgrade	CBR 4.5% Compacted to a mean density of 98% (standard) maximum dry density AS 1289,5.2.1
DESA	3.94×10^5
Thickness	360mm

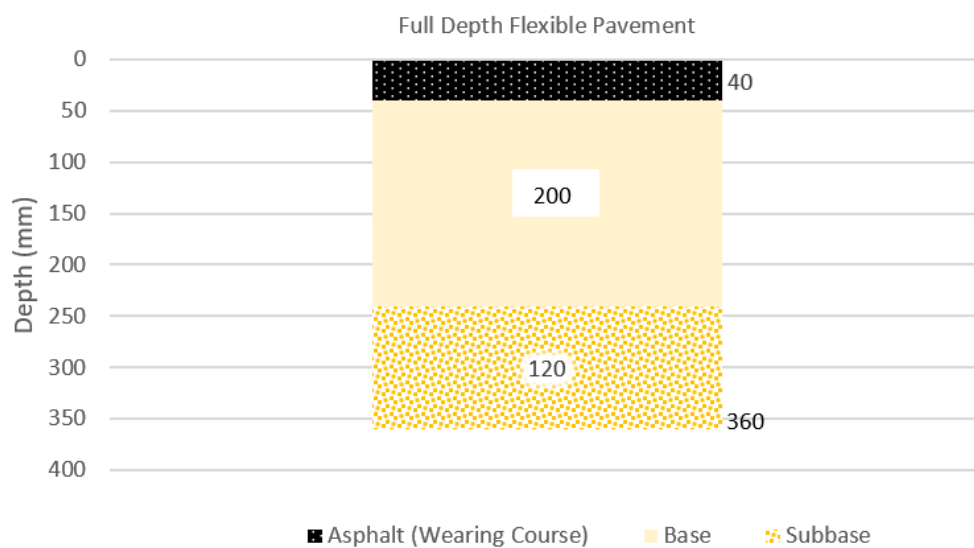


Figure 1: Conventional flexible pavement design

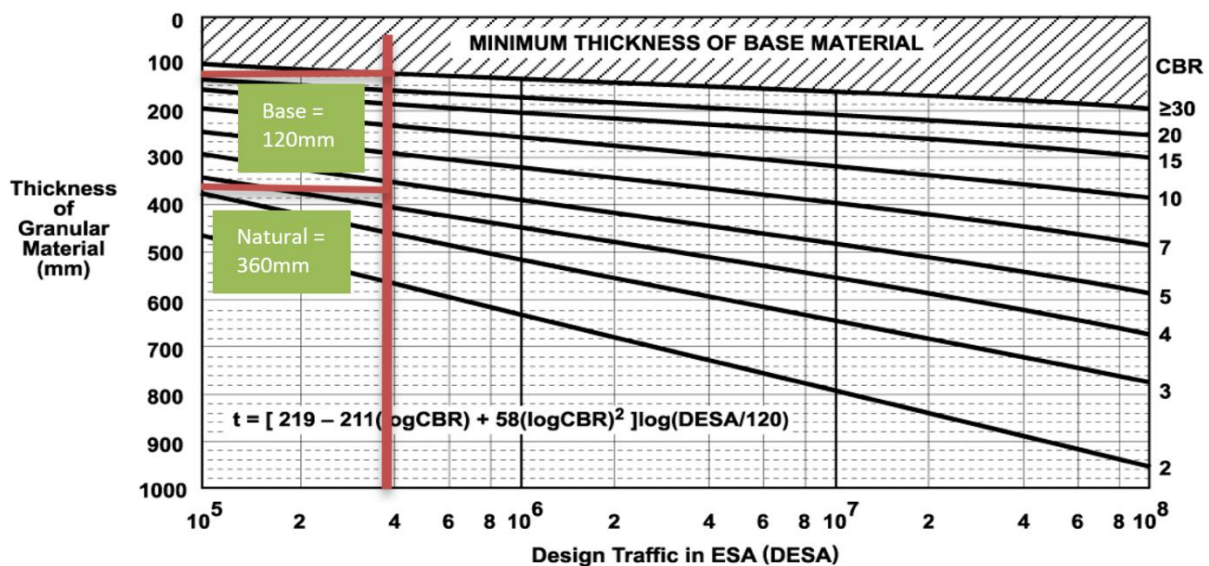


Figure 8.4: Design chart for granular pavements with thin bituminous surfacing

Figure 2: Design chart for granular pavements with thin bituminous surfacing.

Proof rolling must be undertaken prior to the placement of subbase material.

Compaction testing of the subgrade will be required when imported or site-won material is used to raise the existing surface to finished subgrade level and/or when approved subgrade treatments (including the additional of granular material) extend more than 200mm below the finished subgrade level. When such testing is required, the subgrade material must be compacted to 100% of the standard dry density (STDDD) or in accordance with the Construction Specification and/or AS 3798.

Subgrade Preparation

It is recommended that any site filling for pavements is placed under 'Level 1' supervision (controlled fill). Exposed natural soil is typically expected to comprise CLAY and SILT. The designer assumed a CBR value of 4.5% for any underlying natural soil, when compacted and tested based on the following site preparation:

- Excavate any existing organic matter, asphalt, topsoil and crush rock layers down to firm natural or fill surface, about 0.4m;
- Existing crushed rock cannot be used as it contained high percentage of SILT (refer Section 5.3 for further details;
- All stumps and roots must be grubbed to a depth of at least 300 mm below finished subgrade level under pavements and at least 150 mm below the finished surface level elsewhere. Grub holes must be backfilled and well compacted with approved material;
- The subgrade must be finished true to alignment dimensions and levels, compacted, tested and approved by the Superintendent before any pavement material is placed. Trimming must extend for a sufficient width to include the kerb and channel and/or shoulders. The subgrade should be proof rolled with a loaded water truck or equivalent, to identify any soft spots which may require remedial work. The subgrade must be compacted to produce a minimum of 100% standard compaction as specified in Australian Standard AS 1289; and
- If work is to be undertaken following prolonged rainfall periods, it is likely that the subgrade soil may be in a condition wet of optimum moisture content. If such conditions are encountered, an engineering assessment should be made at the time on suitable rectification plans.

Reuse of Existing Pavement Material

Laboratory testing was carried out on the existing base course material to determine its particle size distribution and Atterberg limit (refer Section 4.1).

The result shows that the existing basecourse is predominantly sand with a relatively high proportion of fines and is classified as Gravelly Silty Sand (SM).

The Tasmania Municipal Standard Specification (March 2020) provides a table for suitable basecourse material. An extract is shown in Figure 3. The sample that was tested has 65% passing the 2.36mm sieve (sand grains or finer) and 22% passing the 0.075mm sieve (silt).

Based on this result and field logs, the existing pavement material is **not** suitable for use as a base course in the proposed pavement.

Table 6.4.1 Base Course Material Classification

Sieve Size (mm)	Class of Material	
	Sub-base Course	Base Course
53	100	
37.5	90 - 100	
26.5	80 - 87	100
19	-	93 - 100
9.5	47 - 62	64 - 85
4.75	32 - 48	44 - 64
2.36	22 - 38	32 - 47
0.425	8 - 11	13 - 22
0.075	3 - 11	3 - 11

Figure 3: Base course material classification (Tasmania Municipal Standard Specification, 2020)

Drainage

The entire the extents of Risby Street captures runoff and flows within the proposed Type KC Kerb and Channel and VEE Channel. These channelised flows are generally captured with drainage pits and directed through underground drainage pipes that discharge to existing drainage pipes and drainage infrastructure in accordance with the design brief.

VEE Grated Pit's in accordance with Tasmanian Standard Drawing TSD-SW14, Side Entry Pit's in accordance with Tasmanian Standard Drawing TSD-SW05 are proposed throughout the extents area along Risby Street.

300mm dia. drainage pipes have been proposed as a minimum pipe size throughout the project in line with Council's brief.

The six (6) proposed drainage outfall locations on Risby Street, and the proposed and existing drainage network that discharges to these locations include:

- The existing stormwater drainage pit at the boundary of No. 35 (at the top of the existing 600mm dia. barrel drain) is proposed to act as an outfall location for the proposed channelised flow in the proposed Type KC Kerb and Channel and VEE channel from the Leven Street intersection to No. 35 of Risby Street;
- The existing stormwater drainage pit at the boundary of No. 33 is proposed to act as an outfall location for the proposed channelised flow in the proposed Type KC Kerb and Channel and VEE channel from No. 35 of Risby Street to No. 33 of Risby Street;
- The existing stormwater drainage pit at the boundary of No. 31 is proposed to act as an outfall location for the proposed channelised flow in the proposed Type KC Kerb and Channel and VEE channel from No. 33 of Risby Street to No. 31 of Risby Street.
- The existing stormwater drainage pit at the boundary of No. 30 is proposed to act as an outfall location for the proposed channelised flow in the proposed Type KC Kerb and Channel and VEE channel on the northbound lane from No. 31 of Risby Street to No. 14 of Risby Street. FMG note that the proposed design is proposing connecting a 300mm dia. inlet pipe to a 225mm dia. outlet, it is assumed the outlet will be placed on Council's asset register for upsizing in the future.

- The existing stormwater drainage pit at the boundary of No. 27 is proposed to act as an outfall location for the proposed channelised flow in the proposed Type KC Kerb and Channel and VEE channel on the southbound lane from No. 31 of Risby Street to No. 15 of Risby Street.
- The existing stormwater drainage pit at the boundary of No. 13 is proposed to act as an outfall location for the proposed channelised flow in the proposed Type KC Kerb and Channel and VEE channel on the southbound lane from No. 15 of Risby Street to the Alexandra Road intersection.

Roadside Hazards

In accordance with AGRD Part 3, all trees greater than 100mm in diameter are considered to be classed as significant trees. Other roadside hazards (e.g. utility poles) have been noted on the plans with approximate horizontal offsets as determined during the design process and in accordance with the design brief. Overall, the horizontal alignment of Risby Street was designed considering roadside hazards in accordance with the design brief.

Trees

Trees were considered by FMG Engineering that may be negatively impacted by excavation requirements through structural root zones and tree protection zones for the proposed road levels. A full assessment of tree impacts is to be conducted through an arboricultural assessment by others (engaged in separate contract). Please refer to FMG's produced Existing Conditions and Demolition Plans for identified trees.

Line Marking, Guideposts & RRPMs

All line marking, guidepost and RRPM requirements will be identified in a future revision of the drawing set.

Horizontal Alignment Rational

The road alignment was proposed to generally follow the existing road centreline geometry, to effectively maintain offsets from existing hazards and provide the existing road pavement as a subbase for the proposed pavement.

Intersections were proposed to be sealed to their existing alignment & widths unless specified otherwise by Council. Intersections were generally provided with standard radius approach/departure kerb returns to permit the successful movement of specific vehicle movements in accordance with the design brief.

Vertical Alignment Rational

The vertical alignment was proposed to generally follow the existing road centreline geometry in accordance with the design brief.

The vertical alignment was altered from existing in a number of locations to provide localised low points at each intersection to assist produce an appropriate overland flow path in large storm events.

Design Speed & Warning Signs

In accordance with AGRD Part 3, it can be assumed that Risby Street are residential streets and therefore have a posted speed of 50km/h.

All existing advisory speed signs have been retained and a review of additional advisory speed and warning signs will be reviewed in a future revision of the drawing set.

Sight Distance

In accordance with the design brief and Austroads sight distance guidelines, all intersections will be reviewed to determine if 'Give Way' or 'Stop' intersections are required in a future revision of the drawing set.

Community Consultation

A community consultation event was held on 22nd May 2024 to present the proposed road and drainage upgrade works planned to occur at Risby Street. The consultation event presented the design process, existing conditions, preferred concept, design objectives, typical parking bays, vegetation removal and an overview of the plans. Feedback was requested from the stakeholders present with the consultation event yielding several key findings and concerns raised by the community regarding the road and drainage upgrade project. The following is a discussion based on the comments provided:

Tree Removal and Replacement:

One of the main concerns is the removal (or lack of removal) of existing trees, with multiple comments referencing a desire to replace the existing trees with native trees that would better fit under power lines. There was also an expressed interest in replacing current trees with species that have less intrusive root systems and better fit the local environment. While some are eager to see trees replaced for safety or aesthetic reasons, others prefer retaining trees (~15% of the respondents).

The community seems divided on the issue of tree removal, with some concerned about the impact on solar arrays due to shading from larger trees. Overall, the consensus is to replace the old or unhealthy trees with smaller, native species that are less likely to interfere with power lines or infrastructure.

FMG have recommended Central Coast Council engage a qualified arborist to provide further comment for the community.

Road Safety and Traffic Concerns:

Another significant theme is concern over road safety and traffic, particularly with a concern that the 'new smooth road surfaces' potentially encourages speeding by local drivers. There is a call for measures such as line marking and traffic calming devices to reduce the likelihood of the road becoming a race track for local drivers.

FMG recommend Central Coast Council considers a review of a local area traffic management (LATM) solution to slow down traffic and address increased traffic volumes as these are clearly high priorities for the community.

Construction Impact:

Stakeholders have voiced concerns about the impact of construction on access, especially for those with limited mobility or who rely on services like ambulances. There is a request to consider these aspects during the project to ensure that disruptions are minimized, particularly for patients visiting clinics or elderly residents.

Driveway and Parking Issues:

Several comments reference difficulties with parking and driveway access. The straightening of driveways and combining driveway areas without landscaping are mentioned as preferences by some residents. Additionally, there are concerns about adequate space for placing garbage bins and the angle of driveways, which may complicate access.

FMG recommend Central Coast Council accept the requested vehicle crossing modifications to resolve the requests from the community. FMG also recommend Council reviews the current garbage bin strategy on Hobbs Parade to determine if any issues are being faced there.

Nature Strip and Landscaping:

There is a recurring desire for native gardens to be provided instead of traditional grass in the nature strips. This reflects a broader interest in sustainable and low-maintenance landscaping that fits with the natural environment.

Summary:

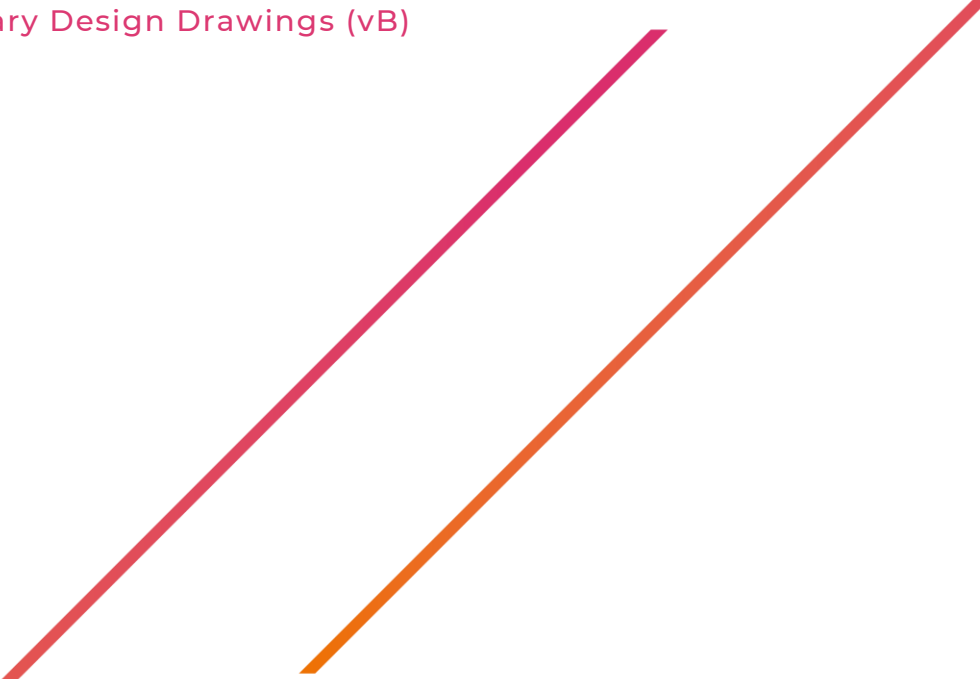
The consultation reveals the community is extremely supportive of the road and drainage upgrade but has specific concerns about tree removal, traffic safety, construction impacts, and access. The feedback suggests that ongoing communication and adjustments to address these concerns will be critical in maintaining community support and ensuring the project meets the needs of the community. Addressing these concerns, particularly around tree replacement, traffic calming, and construction disruption, will be essential as the project moves forward.

A copy of the community consultation presentation and responses is included in the Appendix of this report.



Appendix A

FMG Engineering Preliminary Design Drawings (vB)



**BEFORE
YOU DIG**
www.byda.com.au

WARNING
BEWARE UNDERGROUND SERVICES
THE LOCATIONS OF SERVICES ARE
APPROXIMATE ONLY AND THEIR EXACT
POSITION SHOULD BE PROVEN ON SITE. NO
GUARANTEE IS GIVEN THAT ALL EXISTING
SERVICES ARE SHOWN

2. DO NOT SCALE FROM THESE DRAWINGS, USE WRITTEN DIMENSIONS ONLY.
3. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH:
 - a. SITE DEFEND INFORMATION.
 - b. ANY ADDITIONAL INSTRUCTIONS/INFORMATION SUPPLIED DURING THE COURSE OF CONSTRUCTION.
 - c. RELEVANT GEOTECHNICAL REPORT.
4. ALL LEVELS ARE TO AUSTRALIAN HEIGHT DATUM (A.H.D.). T.B.M's ARE SHOWN ON THE PLANS, ALL LEVELS SHALL BE RELATED TO THESE.
5. THE CONTRACTOR IS TO ENSURE THAT ALL FOOTPATHS, KERBS, ROAD PAVEMENT, NATURE STRIPS, STREET FURNITURE AND SERVICES DAMAGED DURING CONSTRUCTION ACTIVITIES ARE MADE GOOD TO THE SATISFACTION OF THE COUNCIL REPRESENTATIVE.
6. THE CONTRACTOR IS TO COMPLY WITH THE EPA AND COUNCIL REGULATIONS FOR NOISE AND AIRBORNE POLLUTION.
7. PRIOR TO THE COMMENCEMENT OF WORKS THE CONTRACTOR IS TO ENSURE THAT ALL REQUIRED PERMITS ARE ISSUED BY THE RELEVANT AUTHORITIES.
8. ALL WORKS ARE TO BE CARRIED OUT IN ACCORDANCE WITH THE RELEVANT AUSTRALIAN STANDARDS, AND IN COMPLIANCE WITH THE BUILDING CODE OF AUSTRALIA, COUNCIL STANDARDS AND LOCAL LAWS.
9. THE CONTRACTOR IS TO ENSURE THAT A LICENSED SURVEYOR IS ENGAGED TO POSITION WORKS AND PROVIDE AS CONSTRUCTED PLANS.
10. NO CONTAMINATED FILL IS TO BE IMPORTED UNTO THIS SITE.
11. THE CONTRACTOR IS TO ENSURE THAT POLLUTION CONTROL MEASURES ARE IN PLACE DURING CONSTRUCTION AND THAT THEY COMPLY WITH EPA BEST PRACTICE GUIDELINES.
12. STRUCTURAL FILL MUST BE PLACED IN ACCORDANCE WITH NOTES AND AS3798:2007.
13. THE CONTRACTOR IS TO NOTIFY THE COORDINATOR OF ENGINEERING AT COUNCIL OF HAULAGE ROUTES AND SEEK APPROVALS AS REQUIRED.
14. THE CONTRACTOR IS TO ENSURE THAT ALL MAINTENANCE DEPOSITS AND BONDS ARE PAID TO THE RELEVANT AUTHORITIES AS REQUIRED.
15. ALL CONSTRUCTION WORKS IS TO BE LIMITED TO AUTHORITY APPROVED WORKING HOURS.
16. ANY ROAD/PART ROAD CLOSURES ARE TO BE APPROVED BY COUNCIL PRIOR TO WORKS COMMENCING. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SUPPLY COUNCIL, WITH ANY DOCUMENTATION, SUCH AS TRAFFIC MANAGEMENT PLANS, AS REQUIRED.
17. ALL TESTS TO BE AS DIRECTED TO BE CARRIED OUT BY THE GEOTECHNICAL ENGINEER AND COSTS TO BE INCLUDED IN TENDER, INCLUDING THE SERVICE OF AN APPROVED GEOTECHNICAL ENGINEER. THE GEOTECHNICAL ENGINEER WILL BE REQUIRED TO ISSUE A COMPLIANCE CERTIFICATE CONFIRMING THAT THE WORKS HAVE BEEN COMPACTED TO THE STANDARD SPECIFIED.
18. ALLOW FOR THE FOLLOWING COMPACTION TESTS IN TENDER (AS A MINIMUM):
 - i. SUBGRADE (CUT OR FILL) - 1 TEST PER 600 SQ M PER LAYER.
 - ii. CRUSHED ROCK COURSES - 1 TEST PER 400 SQ M PER LAYER.
 - iii. ASPHALT - AS PER VIRO ROAD STANDARD REQUIREMENTS.
 - iv. TRENCH BEDDING AND BACKFILL - 1 TEST PER 30 M PER LAYER.
19. PROVIDE CLAY 'PLUG' TO ALL SERVICE TRENCHES WHERE ANY PIPE, DUCT OR CABLE ENTERS THE BUILDING TO PREVENT INGRESS OF WATER UNDER BUILDING

1. ALL DRAINAGE PITS ARE TO BE OF R.C. CLASS "2", F.R.C. OR U.P.V.C. S88 UNLESS NOTED OTHERWISE ON PLAN. ALL R.C. AND F.R.C. PIPES ARE TO BE RUBBER RING JOINTED (R.R.J.).
2. ALL PITS ARE TO BE CONSTRUCTED TO TFSMANNED STANDARDS AND ALL COVERS ARE TO BE IN ACCORDANCE WITH AS3996-2006. PITS IN EXCESS OF 10m DEPTH ARE TO BE FITTED WITH STEP IRONS. CONCRETE FOR ALL PITS TO BE AT LEAST GRADE PC = 20MPa. U.N.O.
3. ALL LEVELS AND DIMENSIONS ARE TO BE VERIFIED ON SITE PRIOR TO THE COMMENCEMENT OF WORKS AND ANY DISCREPANCIES ARE TO BE REFERRED TO THE ENGINEER FOR A DECISION.
4. THE CONTRACTOR IS TO VERIFY THE LOCATION AND LEVEL OF SERVICES PRIOR TO ANY EXCAVATION WORKS IN THE VICINITY OF THESE SERVICES. ALL CLEARANCES BETWEEN SERVICES ARE TO BE IN ACCORDANCE WITH AS3500.3:2018 SECTION 7.1.7.
5. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF ALL SERVICES PRIOR TO COMMENCEMENT OF WORKS. THE CONTRACTOR IS TO CONTACT ALL RELEVANT AUTHORITIES 48 HOURS PRIOR TO ANY EXCAVATION WORKS IN THE VICINITY OF THE IDENTIFIED SERVICES.
6. ANY EXCAVATED TRENCHES IN EXCESS OF 15M IN DEPTH ARE TO BE ADEQUATELY SHORED TO PREVENT COLLAPSE DURING WORKS.
7. ALL WORKS ARE TO BE CARRIED OUT IN ACCORDANCE WITH COUNCIL APPROVED PLANS AND STANDARD DRAWINGS.
8. THE CONTRACTOR IS TO OBTAIN ALL NECESSARY INSPECTIONS AND APPROVALS FROM THE COUNCIL ENGINEER AND ALL OTHER RELEVANT AUTHORITIES.
9. U.N.O. TRENCH BACKFILL SHOULD BE COMPACTED TO NOT LESS THAN 95% OF THE DRY DENSITY RATIO FOR STANDARD COMPACTION (MEASURED USING SOILS OR 70% OF THE MINIMUM DENSITY INDEX FOR STANDARD COMPACTION (COHESIONLESS SOIL), IN ACCORDANCE WITH AS3798-2007. PRIOR TO SECTION DETAILS FOR DRAINAGE TRENCHES BACKFILL DETAILS.
10. WHEN USING PRECAST OR PREFABRICATED UNITS, THE CONTRACTOR IS TO SEEK THE ENGINEERS APPROVAL BEFORE INSTALLATION. WHEN REMOVING ANY REDUNDANT PIPES AND PITS, THE CONTRACTOR MUST BACKFILL IN ACCORDANCE WITH TRENCH BACKFILL NOTES ABOVE.
11. CONTRACTOR IS TO PROVIDE A SAMPLE OF GRATES TO BE PLACED ON OR ADJACENT TO PATHS FOR APPROVAL BY THE COUNCIL PRIOR TO INSTALLATION.
12. COUNCIL IS TO BE GIVEN 24 HOUR NOTICE PRIOR TO INSPECTIONS OF THE FOLLOWING ITEMS:
 - a. A BREAK IN AND PIPE TO PIT CONNECTION, PRIOR TO BACKFILL.
13. COMPLETION OF WORKS.
14. ALL PLYING AND DRAINAGE WORK IS TO BE COMPLETED IN ACCORDANCE WITH AS3550.0:2018 AND ANY OTHER RELEVANT CODES OF PRACTICE FOR SERVICES AND ASSOCIATED WORKS.
15. ALL STEEL MEMBERS INCLUDING GRATES AND LINTELS ARE TO BE HOT DIPPED GALVANISED.
16. ALL MINIMUM PIPE GRADAGES ARE TO BE IN ACCORDANCE WITH AS3500.
17. GRASS DRAINAGE PITS ARE TO BE LOCATED IN SAG POINTS (LOW POINTS); THE CONTRACTOR IS TO ENSURE EVEN FALLS ARE PROVIDED TO PREVENT STANDING WATER AND TO AVOID THE FORMATION OF DEAD-DRAINAGE SPOTS.
18. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING LOCATION AND LEVEL OF ALL EXISTING DISCHARGE POINTS PRIOR TO CONSTRUCTION.

1. AG-DRAINS (SUBSOL DRAINS) ARE TO BE INSTALLED IN ACCORDANCE WITH TASMANIAN STANDARD DRAWING TSD-R12, TSD-R13 AND AUSTRALIAN STANDARD AS3590.
2. MIN GRADE OF AG-DRAINS IS TO BE 1:200.
3. AG-DRAINS ARE TO BE FITTED WITH 150 DIA INSPECTION OPENINGS (I.O.) AT THEIR TOPMOST ENDS, AT CHANGES OF FLOW DIRECTIONS AND AT A MAXIMUM HORIZONTAL DISTANCE OF 45m.
4. INSPECTION OPENINGS ARE TO EXTEND VERTICALLY TO THE TOP OF A PAVED AREA OR WITHIN 300mm FROM THE SURFACE IN UNPAVED AREAS AND TERMINATED WITH A COVER AND LEAD TO A SLOPE OF 1:50. ADEQUATE CAST PROTECTION COVERS ARE TO BE USED WHEN POSITIONED WITHIN TRAFFIC LANES OR PAVEMENT WITH VEHICLE ACCESS.
5. THE CONTRACTOR IS TO ALLOW FOR ALL AG-DRAINS AS REQUIRED AT THE RIVER OR RETAINING WALLS AND EDGE OF FLEXIBLE PAVEMENT.
6. ALL AG-DRAINS ARE TO BE WRAPPED IN GEOTEKILE MATERIAL OR THE ENTIRE BEDDING MATERIAL IS TO BE WRAPPED WITH GEOTEKILE FABRIC OVERLAPPING NOT LESS THAN 300mm.

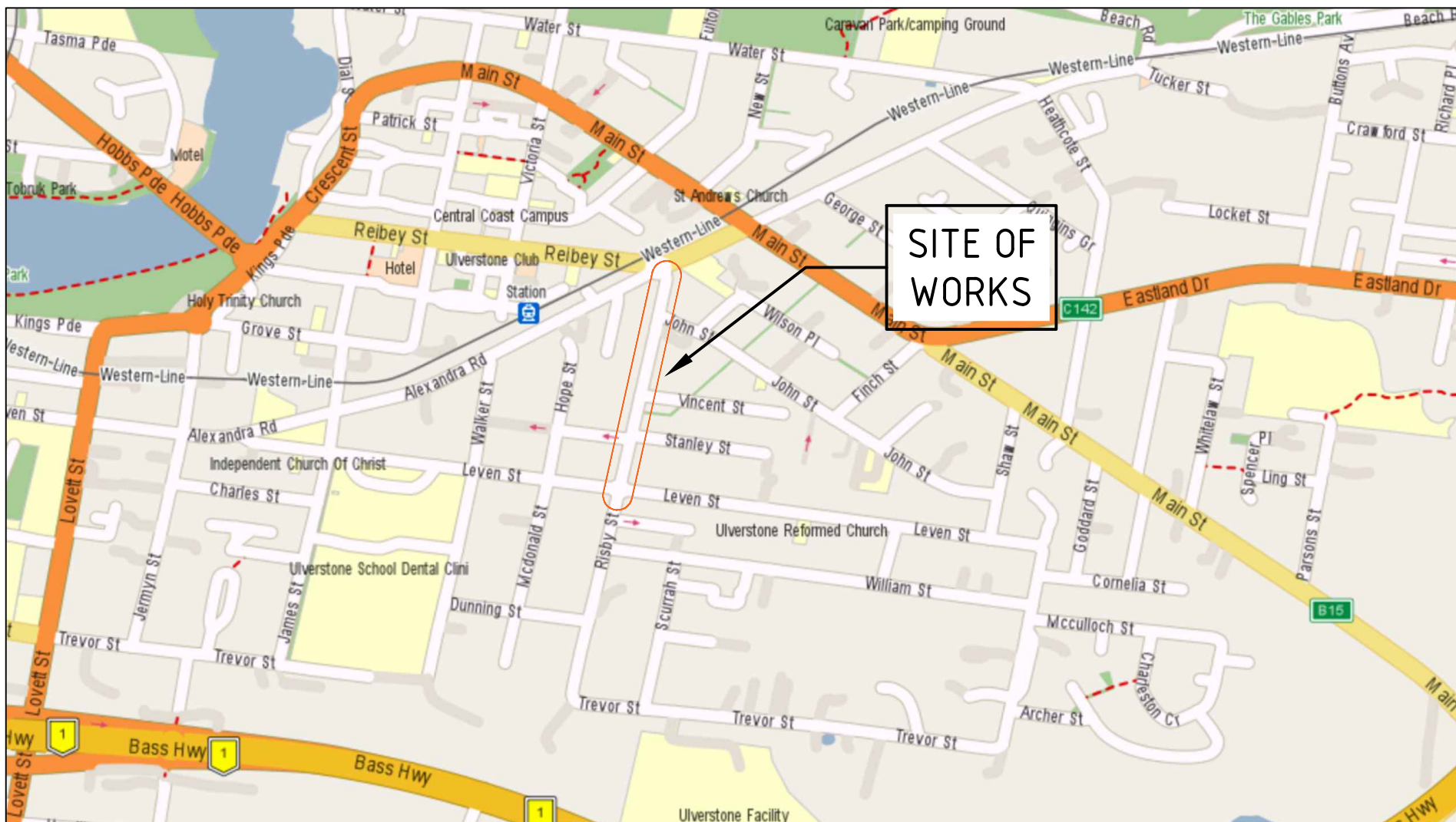
UNLESS OTHERWISE SPECIFIED, THE PROPOSED MATERIALS ARE TO BE 10mm NON DUST CLEAN SPECIFICATIONS FOR THE FULL DEPTH OF THE EMBEDED TRENCH EXCEPT FOR TOPSOIL REQUIREMENTS AS FOR LANDSCAPING SPECIFICATIONS.

1. UNLESS NOTED OTHERWISE CONCRETE CRUSHING STRENGTH AT 28 DAYS SHALL BE AT LEAST:
 - a. DRAINAGE WORKS: 20MPa
 - b. PAVING WORKS: 32MPa

1. REFER TO PLAN HATCHING AND A LEGEND FOR NOMINATION OF PAVEMENT TYPES.
2. LOT TESTING SHALL BE CARRIED OUT WITH A MINIMUM OF SIX SITES WITH CHARACTERISTIC RELATIVE COMPACTION ACHIEVING THE STANDARDS OUTLINED ON PLAN AND DETAILS.
3. WHERE THE LOT TO BE TESTED IS LESS THAN 500m² THEN THREE TESTS MAY BE USED BUT THE MEAN OF THE RESULTS MUST BE 2% HIGHER THAN THE REQUIRED STANDARDS.
4. EACH PAVEMENT LAYER SHALL BE INSPECTED AND APPROVED BY THE RELEVANT AUTHORITY PRIOR TO COMMENCING THE NEXT.
5. COPIES OF ALL TEST RESULTS ARE TO BE PROVIDED TO THE SUPERVISING AUTHORITY FOR DOCUMENTATION PURPOSES.

1. THE CONTRACTOR IS TO SEEK COUNCIL REQUIREMENTS FOR 'NOTICES OF WORKS' WITHIN A PUBLIC ROAD RESERVE.
2. NO ROADWORKS ARE TO COMMENCE UNTIL ALL TEMPORARY SIGNS AND ASSOCIATED ITEMS ARE IN PLACE AS APPROVED.
3. ALL DISTURBED AREAS ARE TO BE REINSTATED AND SHAPED AS DIRECTED. ALL GRASSED AREAS SHALL BE TOP DRESSED WITH A MINIMUM DEPTH OF 100mm OF APPROVED TOPSOIL, RAKED AND SEEDED.
4. ALL ROADSIDE AREAS SHALL BE MAINTAINED FOR A MINIMUM OF THREE MONTHS OR UNTIL THEY ARE RE-ESTABLISHED TO COUNCIL SATISFACTION.
5. MAINTENANCE WORKS SHALL INCLUDE BUT NOT BE LIMITED TO:
 - a. TOPPING UP WITH SOIL WHERE SUBSIDED.
 - b. RE-SEEDING AS REQUIRED.
 - c. MOWING AND GENERAL LANDSCAPE MAINTENANCE.
 - d. ALL LINESMARKING TO BE IN ACCORDANCE WITH COUNCIL GUIDELINES.
6. REINSTATE ANY PATHS, KERBS, PAVEMENTS, BATTERS AND RETAINING WALLS DAMAGED DURING THE COURSE OF THE WORKS TO THE SATISFACTION OF THE CLIENT REPRESENTATIVE.

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE ALL WORKS ARE CARRIED OUT IN A SAFE MANNER. THE WORKS SHALL COMPLY WITH APPLICABLE HEALTH AND SAFETY LEGISLATION INCLUDING CODES OF PRACTICE, AUSTRALIAN STANDARDS, GUIDANCE NOTES AND WORKSAFE REQUIREMENTS.
2. THE CONTRACTOR SHALL ENSURE A RISK ASSESSMENT HAS BEEN CARRIED OUT AND DOCUMENTED FOR ALL ACTIVITIES PERFORMED ON SITE. THESE WORKS DOCUMENTS MUST BE DOCUMENTED AS REQUIRED BY LEGISLATION AND RELEVANT AUTHORITY. THE BUILDING MAY NEED TO ENGAGE SUITABLE EXPERIENCED CONSULTANTS TO PREPARE A SAFETY WORK PROCEDURE IF THE BUILDER IS NOT EXPERIENCED IN THIS FIELD OR IF THEY ARE NOT SATISFIED WITH THE METHOD PROVIDED BY THE CONTRACTOR.
3. THE WORKS SHALL BE CARRIED OUT IN A MANNER THAT ENSURES THE SAFETY OF THE PUBLIC AT ALL TIMES. SITE SAFETY REQUIREMENTS AND ARRANGEMENTS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS SPECIFIED BY COUNCIL.



LOCALITY PLAN

THE CONTRACTOR IS TO ENGAGE THE GEOTECHNICAL ENGINEER TO APPROVE ALL FILL MATERIALS PRIOR TO PLACEMENT, SUBGRADE PRIOR TO PLACEMENT OF FILL, COMPACTION OF FILL

1. REFER SOIL REPORT FOR: FINE ENGINEERING
2. UNDER ALL PAVEMENT AREAS, STRIP ALL TOPSOIL AND REPLACE FOR PAVEMENT AS PER DETAIL.
3. CUT AND FILL AS REQUIRED TO PRODUCE FINISHED SURFACE LEVEL AS SPECIFIED LESS PAVEMENT THICKNESS AS SHOWN ON DRAWINGS.
4. COMPACT CUT SURFACE TO 98% STANDARD MAXIMUM DRY DENSITY (SMDM).
5. THE MOISTURE CONTENT OF THE SUBGRADE OR FILL SHOULD BE WITHIN 85%-115% OF THE STANDARD OPTIMUM MOISTURE CONTENT AT THE TIME OF COMPACTION.
6. PROVIDE 10% PLACEMENT OF FILL OR PAVEMENT REMOVE AND REPLACE SOFT OR UNSTABLE SUBGRADE WITH CLEAN WELL GRADED APPROVED MATERIAL TO 98% SMDM. PROOF ROLL SUBGRADE SURFACE WITH A DUAL WHEELED PNEUMATIC TYRE VEHICLE (MIN 9.4 TONNE LOADED AXLE) AND MAKE GOOD TO ANY SOFT SPOTS.
7. EXCAVATED AND PREPARED SURFACES UNDER ALL PAVEMENTS SHALL BE SPRAYED WITH AN APPROVED WEED KILLER. CARE MUST BE TAKEN TO AVOID CONTAMINATING GRASS AND OTHER AREAS.
8. FILLING SHALL BE CLEAN WELL GRADED GRANULAR MATERIAL COMPACTED TO 95% MDD IN APPROX 200mm LAYER THICKNESS LAYERS, OR APPROVED IMPORTED CLAY FILL COMPACTED TO 98% SMDM IN 150mm LAYERS.
9. CUT OR BACKFILL AREA BEHIND KERBING TO TOP OF KERB AND GRADE TO 1 IN 4 MAX SLOPE TO MATCH EXISTING SURFACE LEVELS.
10. CONTRACTOR IS TO SUPPLY A RATE TO DEAL WITH, WITH SOFT SPOTS. THE RATE IS TO INCLUDE EXCAVATION AND REMOVAL OF SOFT OFF SITE. RATE IS TO BE CALCULATED PER CUBIC METRE OF BACKFILL.
11. 98% SMDM IS APPROXIMATELY EQUIVALENT TO 95% SMDM OR 75% MINIMUM DENSITY INDEX AS NOTED IN TABLE 5.1 OF AS3798-2007.

1. **SILT CONTROL MEASURES MUST BE ADDED AT ALL TIMES TO THE SATISFACTION OF COUNCIL'S DESIGN ENGINEER AND THE FACILITIES MANAGER DURING THE DURATION OF THE CONTRACT. SITE CONTROLS AND EROSION MINIMISATION TECHNIQUES ARE TO BE IN ACCORDANCE WITH THE INSTITUTE OF ENGINEERS' AUSTRALIA PUBLICATION 'SOIL EROSION AND SEDIMENT CONTROL', EPA GUIDELINES AND OTHER CONTRACT DOCUMENTATION INCLUDING THIS PLAN.**
2. **SITE ESTABLISHMENT AND STRIPPING TOSPOIL:**
 - a. STOCKPILE SOIL IN ALLOCATED LOCATION AND PROVIDE SILT CONTROL BARRIERS IF STOCKPILE IS LEFT OVERNIGHT.
 - b. WASH DOWN ANY VEHICLES LEAVING SITE AFTER TREADING ON SOIL.
 - c. PLACE CRUSHED ROCK TO A DEPTH OF 150mm MINIMUM TO ALL VEHICLE ACCESS AREAS OVER AN APPROVED WOVEN GEOTEXTILE FABRIC (DOW WISS OR EQUIVALENT).
 - d. GRADE ALL SOIL AREAS AWAY FROM MAIN CONSTRUCTION AREA AND TOWARDS DRAINAGE POINTS.
 - e. PLACE FILTER MATERIAL, SUCH AS HAY BALES OR SILT FENCES AROUND DRAINAGE POINTS.
 - f. INSTALL ON-SITE WASTE RECEPTORS (e.g. MINI-SKIPS, BINS, WIND PROOF LITTER RECEPTORS).
3. **CONSTRUCTION OF DRAINAGE SYSTEM:**
 - a. CARRY OUT WORKS IN DRY WEATHER.
 - b. DO NOT LEAVE TRENCHES OPEN FOR A LONG PERIOD OF TIME.
 - c. BUILD DRAINAGE SYSTEM COMMENCING FROM DOWN STREAM.
 - d. PLACE FILTER MATERIAL IN EXISTING PIT DOWN STREAM, UNTIL ALL DRAINAGE IS IN PLACE AND THEN INSTALL SILT CONTROL DEVICES AT EACH NEW PIT.
4. **CONSTRUCTION OF MAIN WORKS:**
 - a. ENSURE THAT SOIL IS KEPT MOIST TO MINIMISE AIR POLLUTION.
 - b. DO NOT LEAVE SOIL EXPOSED FOR LONG PERIODS OF TIME.
 - c. ENSURE FALLS OR CUT OR FILL ARE AWAY FROM MAIN WORKING AREA.
 - d. INSTALL ROOF DRAINPIPES AS SOON AS PRACTICABLE – IF NECESSARY USE TEMPORARY CONNECTIONS TO ENSURE STORMWATER DOES NOT DISCHARGE OVER LOOSE SOIL.
5. **LANDSCAPING**
 - a. PLACE VEGETATION SUITABLE TO MINIMISE LOOSE SOIL CONDITIONS, REFER TO THE APPROVED LANDSCAPING PLAN FOR ADDITIONAL INFORMATION.

1. SEDIMENT FENCES; SEDIMENT FENCES ARE TO BE PLACED AS REQUIRED. THEY CONSIST OF GEOTEXTILE FILTER FABRIC STAPLED INTO 40mm HARDWOOD STAKES OR WIRE TIED TO STEEL POSTS. THE FILTER FABRIC MUST BE BURIED 100mm INTO THE GROUND AND THE SEDIMENT FENCE MUST BE 100mm INTO THE GROUND. THE SEDIMENT FENCE MUST BE 2.0m HEIGHTS AND DRIVEN 100mm INTO THE GROUND. IN SOME STOCKING GRASSLAND MATERIALS INCLUDING TOP SOILS, A SEDIMENT FENCE SHOULD BE ERRECTED AT THE PERIMETER OF THE STOCKPILE IF OVER 70%.
2. PROTECTION OF DRAINAGE POINTS; ALL DRAINAGE POINTS, WHETHER TEMPORARY OR PERMANENT, SHALL BE PROTECTED FROM POLLUTED WATERS. THE PRINCIPAL CONTRACTOR MAY USE STRAW BALES HELD IN PLACE BY AT LEAST TWO DRIVEN PICKETS. OR OTHER MEANS TO PROTECT DRAINAGE POINTS.
3. GENERAL BUILDING OPERATIONS; BUILDING OPERATIONS SUCH AS WASHING OF TOOLS AND PAINTING EQUIPMENT, CUTTING MASONRY OR THE USE OF ANY OTHER WATER COOLED CUTTING EQUIPMENT SHOULD BE CARRIED OUT IN A CONTROLLED AREA, WHERE POSSIBLE ON A NATURAL FILTERED AREA SUCH AS A GRASSED TRENCH, OR IN THE VICINITY OF A SEDIMENT SETTLING TANK.
4. ALL VEHICLE ENTRY/EXIT POINTS ARE TO BE TREATED WITH CRUSHED ROCK OR APPROVED WOVEN GEOTEXTILE FABRIC (D8 W55 OR EQUIVALENT), WELL COMPACTED AND ADJACENT TO THE EXIT DRIVE THE PRINCIPAL CONTRACTOR IS TO PROVIDE SUITABLE WASHING FACILITIES FOR CLEANING OF ALL VEHICLES PRIOR TO THEM EXITING THE SITE SO AS TO PREVENT ANY GREASE, OIL, MUD, LOAM OR OTHER SUBSTANCES FALLING OR RUNNING OFF THE VEHICLE ONTO THE ROAD PAVEMENT OR INTO DRAINAGE. IN THE EVENT OF A RAINFALL, THE CONTRACTOR IS TO CONTINUE TO MONITOR AND CLEANED DOWN AS NECESSARY DURING THE COURSE OF THE CONTRACT TO MAINTAIN CLEAN FOOTPATHS AND ROADWAYS.

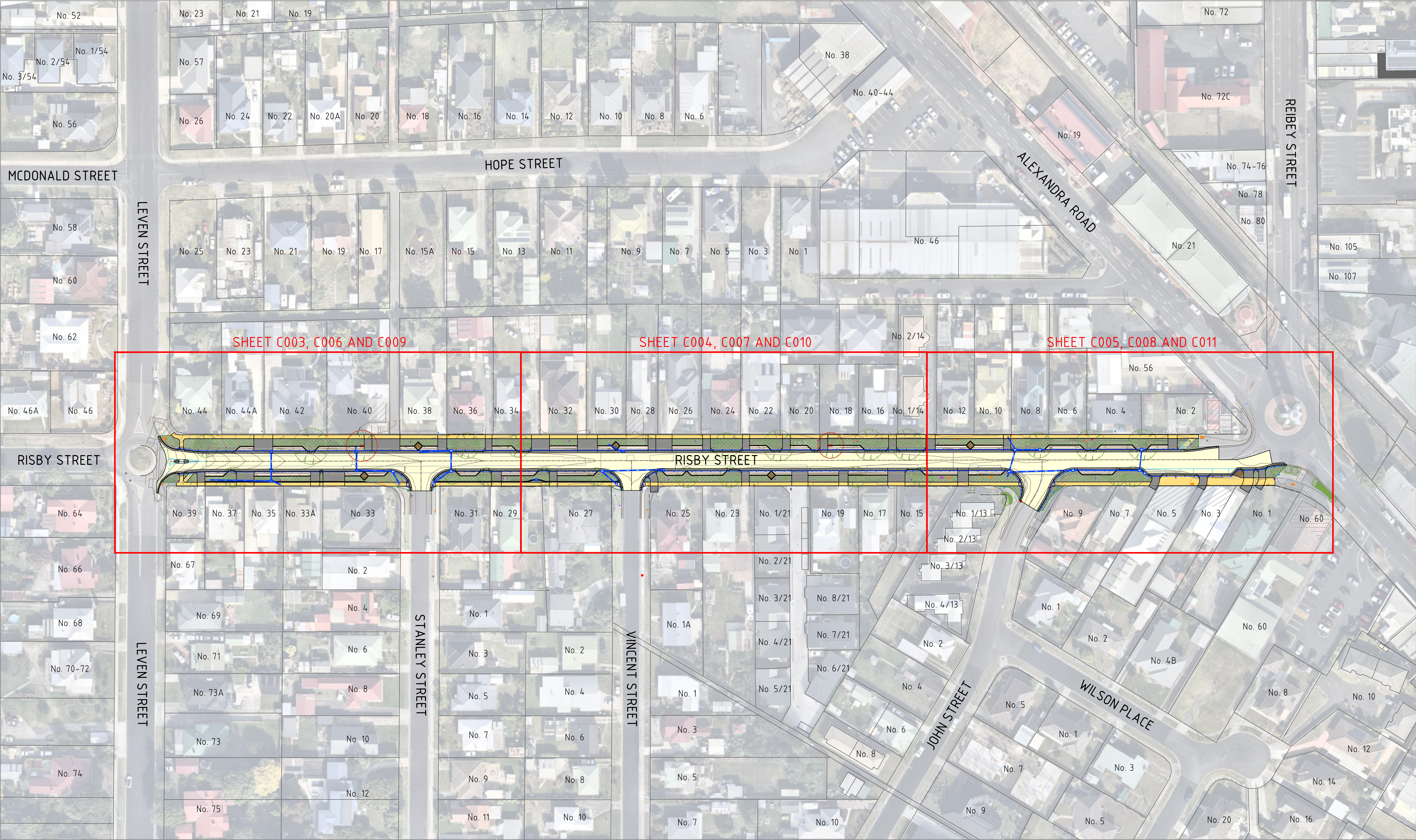
1. THE CONTRACTOR IS RESPONSIBLE FOR THE ESTABLISHMENT AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES TO SUCH TIME THAT THE PROJECT IS COMPLETED AND OFFICIALLY HANDOVERD OVER TO THE CLIENT. THIS MAY INCLUDE THE PROVISION OF TEMPORARY DRAINAGE AND WATER VESSELS.
2. NO STOP OR EXCAVATE SITE UNTIL BUILDING WORKS ARE READY TO PROCEED.
3. OBTAIN ALL NECESSARY PERMITS, LICENCES AND APPROVALS. REFER TO COUNCIL APPROVED DRAWINGS AND DOCUMENTATION.
4. ESTABLISH ALL REQUIRED ENTRY/EXIT POINTS AND TREAT THESE AREAS AS DESCRIBED ABOVE.
5. MAINTAIN ALL EXISTING EROSION CONTROL AREAS. WORK TO BE COMPLETED WITHIN THE EROSION CONTROL AREAS.
6. ACCIDENTAL SPILLS OF SOIL OR OTHER MATERIALS ONTO THE ROAD OR INTO THE GUTTER OR DRAINS SHOULD BE REMOVED PRIOR TO STORMS AND AT LEAST UPON COMPLETION OF THE DAY'S WORK. MATERIALS SHOULD BE SWEEP OFF THE ROAD AND NOT WASHED DOWN THE GUTTER.
7. EROSION CONTROL DEVICES SHOULD BE INSPECTED REGULARLY AND AFTER EVERY STORM EVENT.
8. CONCRETE WASTE WASHED FROM TRUCKS AND MIXERS SHOULD BE CONTAINED ON-SITE AND NOT DISPOSED OF, DOWN A DRAIN OR IN ANY OTHER WAY WHICH MAY BE CONSIDERED HARMFUL TO THE ENVIRONMENT.

1. AN EROSION CONTROL PLAN IS TO BE IMPLEMENTED ON SITE DURING CONSTRUCTION TO PREVENT SEDIMENT FROM LEAVING THE SITE AND ENTERING THE DRAINAGE SYSTEMS, eg. HAY BALES WITH GEOFABRIC MATERIAL TO THE SATISFACTION OF THE RELEVANT AUTHORITY.

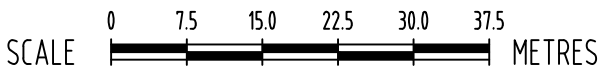
THIS DRAWING IS COPYRIGHT TO FMS ENGINEERING. NO PART OF THIS DRAWING, INCLUDING THE WHOLE OF SAME, SHALL BE USED FOR ANY PURPOSE OR SITE OTHER THAN WHICH IT WAS PREPARED, NOR BY ANY THIRD PARTY, WITHOUT THE PRIOR WRITTEN CONSENT OF FMS ENGINEERING. CONTRACTORS MUST SET OUT ALL WORK AND VERIFY ALL CONDITIONS, LEVELS AND DIMENSIONS ON SITE PRIOR TO COMMENCEMENT OF ANY WORK OR MAKING OF ANY SUDP DRAWINGS WHICH MUST BE SUBMITTED AND APPROVED PRIOR TO ANY MANUFACTURE. ALL WORK MUST BE EXECUTED IN ACCORDANCE WITH THE RULES, REGULATIONS, BY LAWS AND REQUIREMENTS OF ALL AUTHORITIES HAVING JURISDICTION OVER ANY PART OF THE WORK. ELECTRONIC COPIES OF THIS DRAWING ARE NOT TO BE USED FOR DIMENSIONAL SETOUT.										CLIENT  CENTRAL COAST COUNCIL										ORIENTATION  OR AS SHOWN										HEIGHT DATUM AHD COORDINATE DATUM MGA 20 ZONE 55 SURVEY DATE 05-04-2024 AERIAL IMAGE DATE 07-02-2024										Engineering your success. ADELAIDE MELBOURNE SYDNEY fmgengineering.com.au P 03 9815 7600 2 Dornville Ave, Hawthorn VIC 3122 ABN 58 083 071 185 Quality Management Systems ISO 9001 Certified  ENGINEERING										CLIENT CENTRAL COAST COUNCIL PROJECT TITLE ROAD AND DRAINAGE RECONSTRUCTION WORKS SITE ADDRESS RISBY STREET ULVERSTONE, TAS, 7315 DRAWING TITLE TITLE SHEET										DESIGNED KC CHECKED CC SCALE - SITE ID & JOB No. S67588-289337 DRAWING No. C001										DRAWN KC No. OF SHEETS 13 DATE STARTED 11-04-2024 REV B									
---	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	---	--	--	--	--	--	--	--	--	--	---	--	--	--	--	--	--	--	--	--	---	--	--	--	--	--	--	--	--	--	---	--	--	--	--	--	--	--	--	--



WARNING
BEWARE UNDERGROUND SERVICES
THE LOCATIONS OF SERVICES ARE
APPROXIMATE ONLY AND THEIR EXACT
POSITION SHOULD BE PROVEN ON SITE. NO
GUARANTEE IS GIVEN THAT ALL EXISTING
SERVICES ARE SHOWN

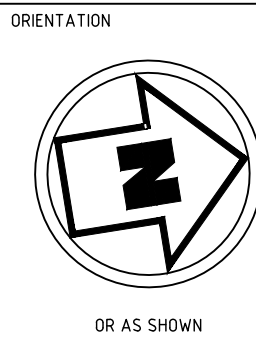


OVERALL PLAN



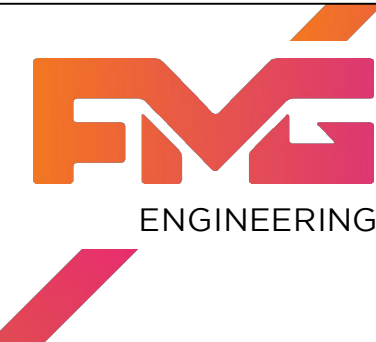
									THIS DRAWING IS COPYRIGHT TO FMG ENGINEERING. NO PART OF THIS DRAWING, INCLUDING THE WHOLE OF SAME, SHALL BE USED FOR ANY PURPOSE OR SITE OTHER THAN WHICH IT WAS PREPARED, NOR BY ANY THIRD PARTY, WITHOUT THE PRIOR WRITTEN CONSENT OF FMG ENGINEERING.		
									CONTRACTORS MUST SET OUT ALL WORK AND VERIFY ALL CONDITIONS, LEVELS AND DIMENSIONS ON SITE PRIOR TO COMMENCEMENT OF ANY WORK OR MAKING OF ANY SHOP DRAWINGS WHICH MUST BE SUBMITTED AND APPROVED PRIOR TO ANY MANUFACTURE.		
B	PRELIMINARY DESIGN	ISSUED FOR REVIEW	13	05	2024	KC	KC		ALL WORK MUST BE EXECUTED IN ACCORDANCE WITH THE RULES, REGULATIONS, BY LAWS AND REQUIREMENTS OF ALL AUTHORITIES HAVING JURISDICTION OVER ANY PART OF THE WORK.		
A	PRELIMINARY DESIGN	ISSUED FOR REVIEW	29	04	2024	KC	KC				
REV	DESCRIPTION		DATE	INIT	APP	ELECTRONIC COPIES OF THIS DRAWING ARE NOT TO BE USED FOR DIMENSIONAL SETOUT.					

CLIENT



HEIGHT DATUM
AHD
COORDINATE DATUM
MGA 20 ZONE 55
SURVEY DATE
05-04-2024
AERIAL IMAGE DATE
07-02-2024

Engineering
your success.
fmgengineering.com.au
P 03 9815 7600 | 2 Domville Ave, Hawthorn VIC 3122
ABN 58 083 071 185
Quality Management Systems ISO 9001 Certified



SIGNATURE

CLIENT
CENTRAL COAST COUNCIL
PROJECT TITLE
ROAD AND DRAINAGE RECONSTRUCTION WORKS
SITE ADDRESS
RISBY STREET
ULVERSTONE, TAS, 7315
DRAWING TITLE
OVERALL PLAN

PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

DESIGNED	KC	DRAWN	KC
CHECKED	CC	NO. OF SHEETS	13
SCALE	1:750@A1	DATE STARTED	11-04-2024
SITE ID & JOB NO.	S67588-289337	REV.	
DRAWING NO.	C002		B

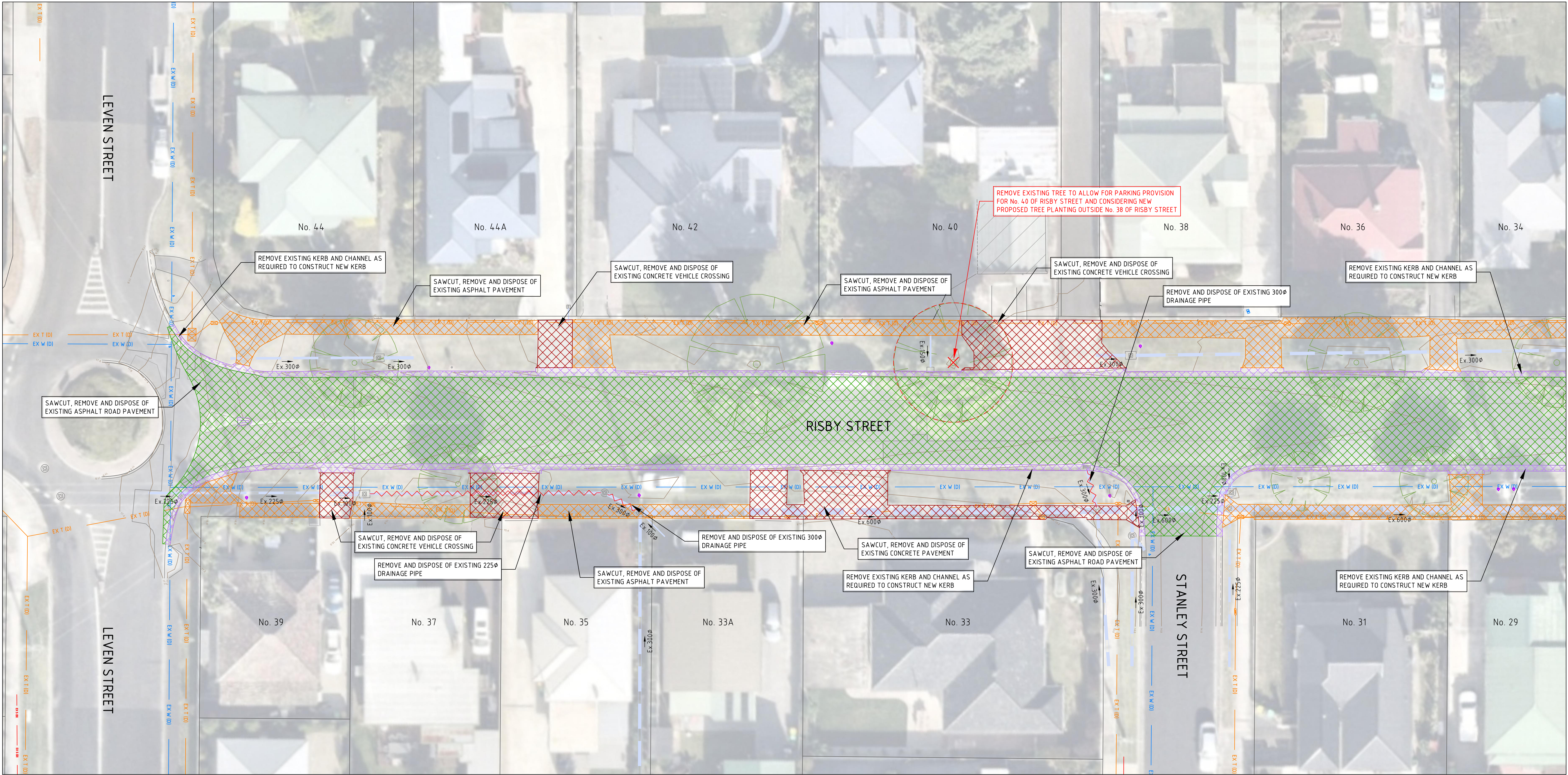
LEGEND

- EXISTING ASPHALT ROAD PAVEMENT TO BE SAW CUT, REMOVED AND DISPOSED
- EXISTING ASPHALT PAVEMENT TO BE PROFILED, REMOVED AND DISPOSED
- EXISTING CONCRETE KERB TO BE SAW CUT, REMOVED AND DISPOSED
- EXISTING CONCRETE PAVEMENT TO BE SAW CUT, REMOVED AND DISPOSED
- EXISTING WATER WITH QUALITY LEVEL
- EXISTING GAS WITH QUALITY LEVEL
- EXISTING SEWER WITH QUALITY LEVEL
- EXISTING TELECOMMUNICATIONS WITH QUALITY LEVEL
- EXISTING ELECTRICITY WITH QUALITY LEVEL
- EXISTING OVERHEAD CABLE
- EXISTING CONTOUR MAJOR (10m)
- EXISTING CONTOUR MINOR (0.2m)
- EXISTING DRAINAGE PIPE
- REMOVE/DECOMMISSION EXISTING DRAINAGE PIPE



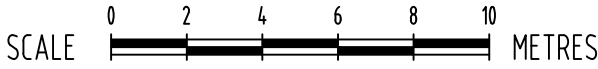
WARNING
BEWARE UNDERGROUND SERVICES
THE LOCATIONS OF SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN

EXISTING DRAINAGE PIPES (INCLUDING REDUNDANT PIPES TO BE REMOVED) ARE TO BE CONFIRMED DURING DETAILED DESIGN WITH CCTV DRAINAGE INVESTIGATION RESULTS



CONTINUED ON SHEET C004

EXISTING CONDITIONS AND DEMOLITION PLAN

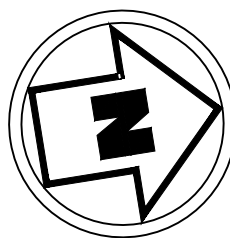


THIS DRAWING IS COPYRIGHT © FMG ENGINEERING. NO PART OF THIS DRAWING, INCLUDING THE WHOLE OR PART, SHALL BE USED FOR ANY PURPOSE OR SITE OTHER THAN WHICH IT WAS PREPARED, NOR BY ANY THIRD PARTY, WITHOUT THE PRIOR WRITTEN CONSENT OF FMG ENGINEERING.			
CONTRACTORS MUST SET OUT ALL WORK AND VERIFY ALL CONDITIONS, LEVELS AND DIMENSIONS ON SITE PRIOR TO COMMENCEMENT OF ANY WORK OR MAKING OF ANY SHOP DRAWINGS WHICH MUST BE SUBMITTED AND APPROVED PRIOR TO ANY MANUFACTURE.			
ALL WORK MUST BE EXECUTED IN ACCORDANCE WITH THE RULES, REGULATIONS, BY LAWS AND REQUIREMENTS OF ALL AUTHORITIES HAVING JURISDICTION OVER ANY PART OF THE WORK.			
ELECTRONIC COPIES OF THIS DRAWING ARE NOT TO BE USED FOR DIMENSIONAL SETOUT.			
REV	DESCRIPTION	DATE	INIT APP
B	PRELIMINARY DESIGN ISSUED FOR REVIEW	13-05-2024	KC KC
A	PRELIMINARY DESIGN ISSUED FOR REVIEW	29-04-2024	KC KC

CLIENT



ORIENTATION



HEIGHT DATUM

AHD

COORDINATE DATUM

MGA 20 ZONE 55

SURVEY DATE

05-04-2024

AERIAL IMAGE DATE

07-02-2024

Engineering
your success.

ADELAIDE
MELBOURNE
SYDNEY

fmgengineering.com.au

P 03 9815 7600 | 2 Domville Ave, Hawthorn VIC 3122

ABN 58 083 071 185

Quality Management Systems ISO 9001 Certified

CLIENT

CENTRAL COAST COUNCIL

PROJECT TITLE

ROAD AND DRAINAGE RECONSTRUCTION WORKS

SITE ADDRESS

RISBY STREET
ULVERSTONE, TAS, 7315

DRAWING TITLE

EXISTING CONDITIONS AND DEMOLITION PLAN

PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

DESIGNED

KC

CHECKED

CC

SCALE

1:200@A1

SITE ID & JOB No.

S67588-289337

DRAWING No.

C003

DRAWN

KC

No. OF SHEETS

13

DATE STARTED

11-04-2024

REV.

B

LEGEND

- EXISTING ASPHALT ROAD PAVEMENT TO BE SAW CUT, REMOVED AND DISPOSED
- EXISTING ASPHALT PAVEMENT TO BE PROFILED, REMOVED AND DISPOSED
- EXISTING CONCRETE KERB TO BE SAW CUT, REMOVED AND DISPOSED
- EXISTING CONCRETE PAVEMENT TO BE SAW CUT, REMOVED AND DISPOSED
- EX W (D) -

EXISTING WATER WITH QUALITY LEVEL
- EX G (D) -

EXISTING GAS WITH QUALITY LEVEL
- EX S (D) -

EXISTING SEWER WITH QUALITY LEVEL
- EX T (D) -

EXISTING TELECOMMUNICATIONS WITH QUALITY LEVEL
- EX E (D) -

EXISTING ELECTRICITY WITH QUALITY LEVEL
- E O/H -

EXISTING OVERHEAD CABLE
- 10m

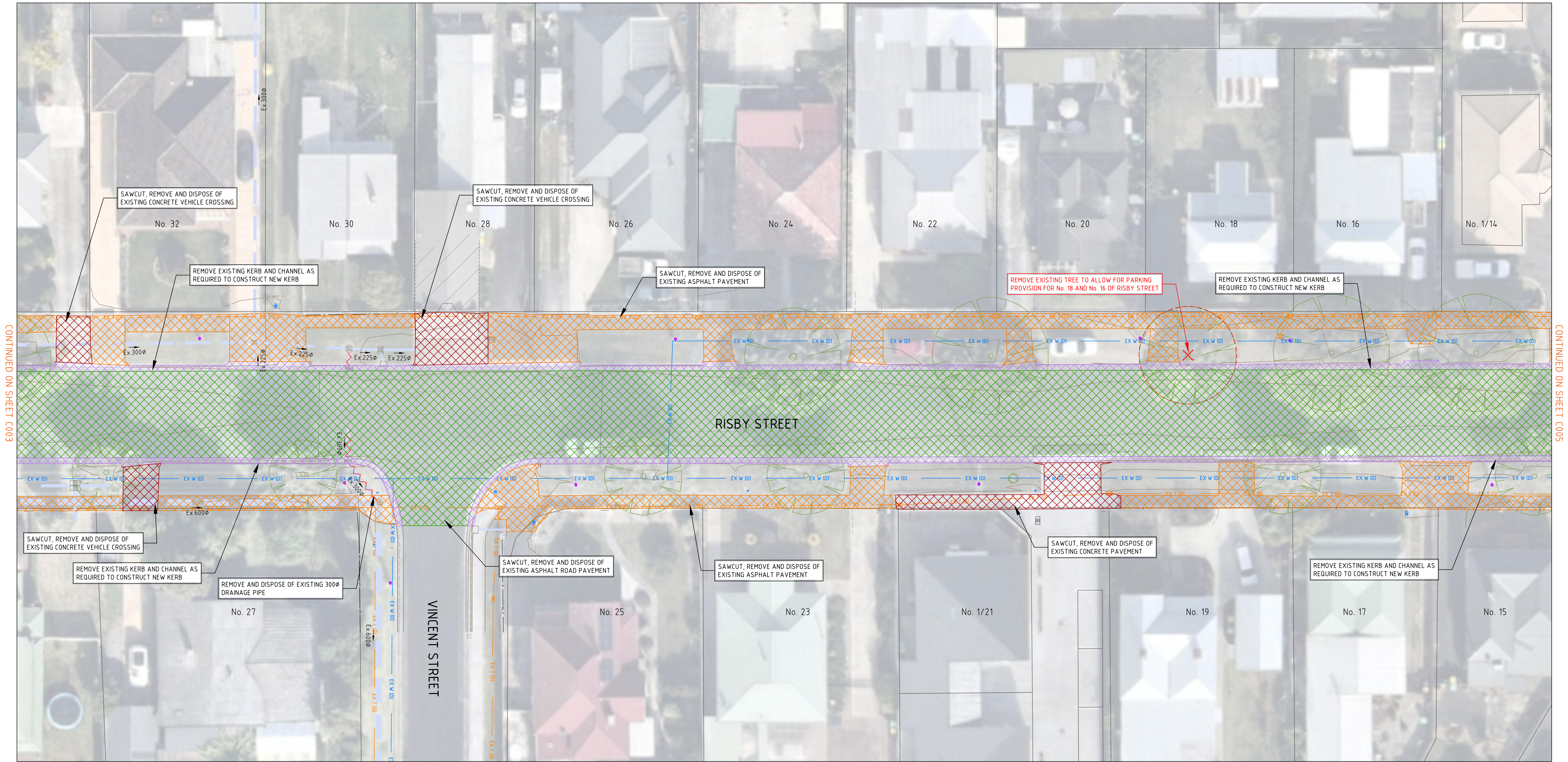
EXISTING CONTOUR MAJOR (10m)
- 0.2m

EXISTING CONTOUR MINOR (0.2m)
- EXISTING DRAINAGE PIPE
- REMOVE/DECOMMISSION EXISTING DRAINAGE PIPE

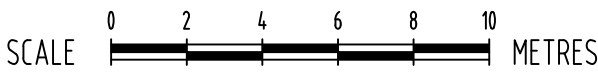


WARNING
BEWARE UNDERGROUND SERVICES
THE LOCATIONS OF SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN

EXISTING DRAINAGE PIPES (INCLUDING REDUNDANT PIPES TO BE REMOVED) ARE TO BE CONFIRMED DURING DETAILED DESIGN WITH CCTV DRAINAGE INVESTIGATION RESULTS



EXISTING CONDITIONS AND DEMOLITION PLAN



THIS DRAWING IS COPYRIGHT TO FMG ENGINEERING. NO PART OF THIS DRAWING, INCLUDING THE WHOLE OR PART, SHALL BE USED FOR ANY PURPOSE OR SITE OTHER THAN WHICH IT WAS PREPARED, NOR BY ANY THIRD PARTY, WITHOUT THE PRIOR WRITTEN CONSENT OF FMG ENGINEERING.				CLIENT			
CONTRACTORS MUST SET OUT ALL WORK AND VERIFY ALL CONDITIONS, LEVELS AND DIMENSIONS ON SITE PRIOR TO COMMENCEMENT OF ANY WORK OR MAKING OF ANY SHOP DRAWINGS WHICH MUST BE SUBMITTED AND APPROVED PRIOR TO ANY MANUFACTURE.				ORIENTATION			
ALL WORK MUST BE EXECUTED IN ACCORDANCE WITH THE RULES, REGULATIONS, BY LAWS AND REQUIREMENTS OF ALL AUTHORITIES HAVING JURISDICTION OVER ANY PART OF THE WORK.				HEIGHT DATUM			
ELECTRONIC COPIES OF THIS DRAWING ARE NOT TO BE USED FOR DIMENSIONAL SETOUT.				AHD			
				COORDINATE DATUM			
				MGA 20 ZONE 55			
				SURVEY DATE			
				05-04-2024			
				AERIAL IMAGE DATE			
				07-02-2024			
				Engineering your success.			
				ADELAIDE MELBOURNE SYDNEY			
				fmgengineering.com.au			
				P 03 9815 7600 2 Domville Ave, Hawthorn VIC 3122			
				ABN 58 083 071 185			
				Quality Management Systems ISO 9001 Certified			
				CLIENT			
				CENTRAL COAST COUNCIL			
				PROJECT TITLE			
				ROAD AND DRAINAGE RECONSTRUCTION WORKS			
				SITE ADDRESS			
				RISBY STREET			
				ULVERSTONE, TAS, 7315			
				DRAWING TITLE			
				EXISTING CONDITIONS AND DEMOLITION PLAN			
				DESIGNED			
				KC			
				CHECKED			
				CC			
				SCALE			
				1:200@A1			
				DATE STARTED			
				11-04-2024			
				SITE ID & JOB No.			
				S67588-289337			
				DRAWING No.			
				C004			
				REV.			
				B			

LEGEND

- EXISTING ASPHALT ROAD PAVEMENT TO BE SAW CUT, REMOVED AND DISPOSED
- EXISTING ASPHALT PAVEMENT TO BE PROFILED, REMOVED AND DISPOSED
- EXISTING CONCRETE KERB TO BE SAW CUT, REMOVED AND DISPOSED
- EXISTING CONCRETE PAVEMENT TO BE SAW CUT, REMOVED AND DISPOSED
- EX W (D) -

EXISTING WATER WITH QUALITY LEVEL
- EX G (D) -

EXISTING GAS WITH QUALITY LEVEL
- EX S (D) -

EXISTING SEWER WITH QUALITY LEVEL
- EX T (D) -

EXISTING TELECOMMUNICATIONS WITH QUALITY LEVEL
- EX E (D) -

EXISTING ELECTRICITY WITH QUALITY LEVEL
- E O/H -

EXISTING OVERHEAD CABLE
- 10m

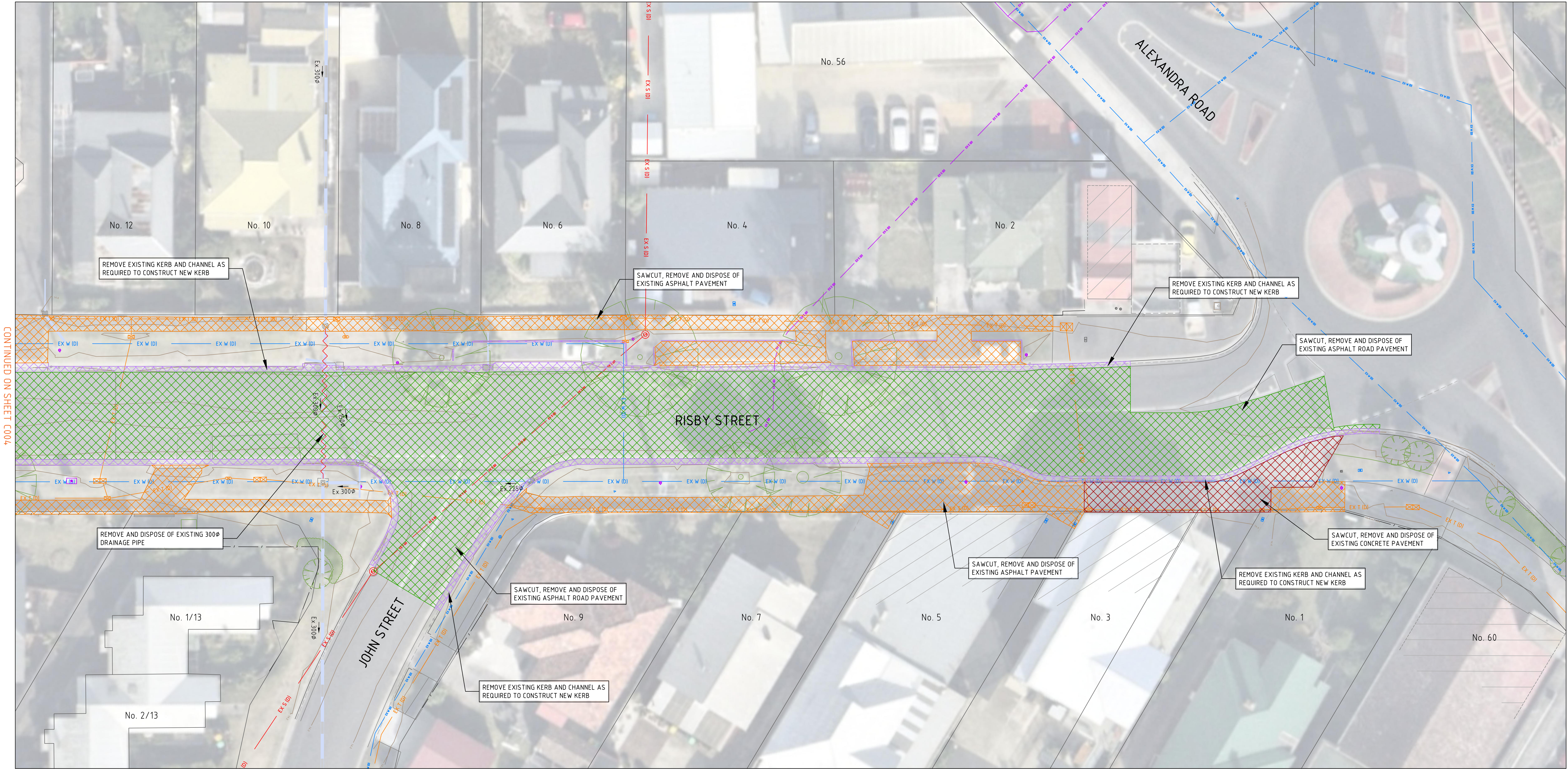
EXISTING CONTOUR MAJOR (1.0m)
- 0.2m

EXISTING CONTOUR MINOR (0.2m)
- EXISTING DRAINAGE PIPE
- REMOVE/DECOMMISSION EXISTING DRAINAGE PIPE



WARNING
BEWARE UNDERGROUND SERVICES
THE LOCATIONS OF SERVICES ARE
APPROXIMATE ONLY AND THEIR EXACT
POSITION SHOULD BE PROVEN ON SITE. NO
GUARANTEE IS GIVEN THAT ALL EXISTING
SERVICES ARE SHOWN

EXISTING DRAINAGE PIPES (INCLUDING REDUNDANT PIPES
TO BE REMOVED) ARE TO BE CONFIRMED DURING DETAILED
DESIGN WITH CCTV DRAINAGE INVESTIGATION RESULTS



EXISTING CONDITIONS AND DEMOLITION PLAN

SCALE 0 2 4 6 8 10 METRES

PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

THIS DRAWING IS COPYRIGHT TO FMG ENGINEERING. NO PART OF THIS DRAWING, INCLUDING THE WHOLE OR PART, SHALL BE USED FOR ANY PURPOSE OR SITE OTHER THAN WHICH IT WAS PREPARED, NOR BY ANY THIRD PARTY, WITHOUT THE PRIOR WRITTEN CONSENT OF FMG ENGINEERING.				CLIENT			
CONTRACTORS MUST SET OUT ALL WORK AND VERIFY ALL CONDITIONS, LEVELS AND DIMENSIONS ON SITE PRIOR TO COMMENCEMENT OF ANY WORK OR MAKING OF ANY SHOP DRAWINGS WHICH MUST BE SUBMITTED AND APPROVED PRIOR TO ANY MANUFACTURE.				ORIENTATION			
ALL WORK MUST BE EXECUTED IN ACCORDANCE WITH THE RULES, REGULATIONS, BY LAWS AND REQUIREMENTS OF ALL AUTHORITIES HAVING JURISDICTION OVER ANY PART OF THE WORK.				HEIGHT DATUM			
ELECTRONIC COPIES OF THIS DRAWING ARE NOT TO BE USED FOR DIMENSIONAL SETOUT.				COORDINATE DATUM			
				SURVEY DATE			
				AERIAL IMAGE DATE			
				Engineering your success.			
				ADELAIDE MELBOURNE SYDNEY			
				fmgengineering.com.au			
				P 03 9815 7600 2 Domville Ave, Hawthorn VIC 3122			
				ABN 58 083 071 185			
				Quality Management Systems ISO 9001 Certified			
				CLIENT			
				CENTRAL COAST COUNCIL			
				PROJECT TITLE			
				ROAD AND DRAINAGE RECONSTRUCTION WORKS			
				SITE ADDRESS			
				RISBY STREET			
				ULVERSTONE, TAS, 7315			
				DRAWING TITLE			
				EXISTING CONDITIONS AND DEMOLITION PLAN			
				DESIGNED			
				KC			
				DRAWN			
				KC			
				CHECKED			
				CC			
				NO. OF SHEETS			
				13			
				SCALE			
				1:200@A1			
				DATE STARTED			
				11-04-2024			
				SITE ID & JOB NO.			
				S67588-289337			
				REV.			
				DRAWING NO.			
				C005			
				B			

LEGEND

- 340mm (TBC) COMPACTED DEPTH FULL DEPTH ASPHALT PAVEMENT - CONSTRUCTED IN ACCORDANCE WITH DETAIL ON SHEET 01
- 240mm (TBC) COMPACTED DEPTH FULL DEPTH ASPHALT PAVEMENT - CONSTRUCTED IN ACCORDANCE WITH DETAIL ON SHEET 01
- 150mm THICK CONCRETE VEHICLE CROSSING - CONSTRUCTED IN ACCORDANCE WITH TASMANIAN STANDARD DRAWING TSD-R09
- 130mm COMPACTED DEPTH ASPHALT VEHICLE CROSSING - CONSTRUCTED IN ACCORDANCE WITH TASMANIAN STANDARD DRAWING TSD-R09
- 100mm THICK CONCRETE FOOTPATH - CONSTRUCTED IN ACCORDANCE WITH TASMANIAN STANDARD DRAWING TSD-R11

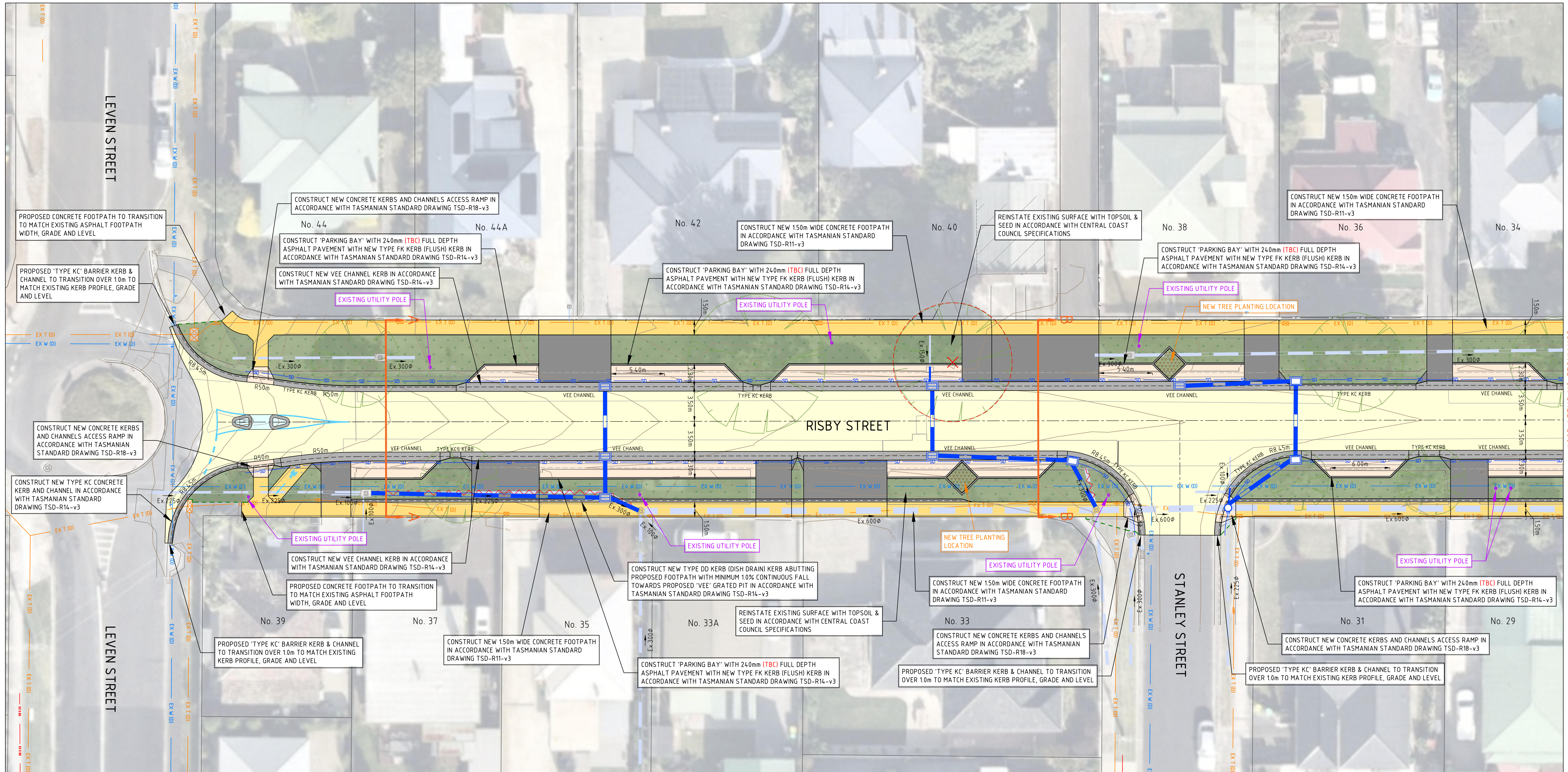
- TOPSOIL & SEED (CENTRAL COAST COUNCIL APPROVED) REINSTATEMENT - REINSTATED IN ACCORDANCE WITH CENTRAL COAST COUNCIL SPECIFICATIONS
- CONCRETE KERB AND CHANNEL - CONSTRUCTED IN ACCORDANCE WITH TASMANIAN STANDARD DRAWING TSD-R14
- EXISTING DRAINAGE PIPE
- REMOVE/DECOMMISSION EXISTING DRAINAGE PIPE
- NEW DRAINAGE PIPE
- NEW DRAINAGE PIT
- SUBSURFACE DRAINAGE - INSTALLED IN ACCORDANCE WITH TASMANIAN STANDARD DRAWING TSD-R12 AND TSD-R13
- DIRECTION OF CHANNEL FLOW
- DIRECTION OF PAVEMENT SHEET FLOW

- FILL BATTER EXTENT
- CUT BATTER EXTENT
- EXISTING CONTOUR MAJOR (1.0m)
- EXISTING CONTOUR MINOR (0.20m)
- FINISHED SURFACE CONTOUR MAJOR (1.0m)
- FINISHED SURFACE CONTOUR MINOR (0.20m)
- EXISTING WATER WITH QUALITY LEVEL
- EXISTING GAS WITH QUALITY LEVEL
- EXISTING SEWER WITH QUALITY LEVEL
- EXISTING TELECOMMUNICATIONS WITH QUALITY LEVEL
- EXISTING ELECTRICITY WITH QUALITY LEVEL
- EXISTING OVERHEAD CABLE

POTENTIAL UTILITY CLASHES TO BE IDENTIFIED DURING DETAILED DESIGN



WARNING
BEWARE UNDERGROUND SERVICES
THE LOCATIONS OF SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN

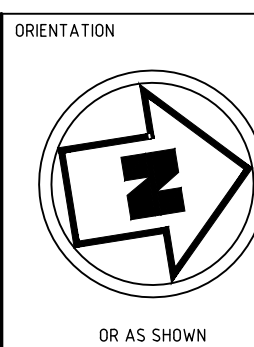


GENERAL LAYOUT PLAN

SCALE 0 2 4 6 8 10 METRES

THIS DRAWING IS COPYRIGHT TO FMG ENGINEERING. NO PART OF THIS DRAWING, INCLUDING THE WHOLE OR PART, SHALL BE USED FOR ANY PURPOSE OR SITE OTHER THAN WHICH IT WAS PREPARED, NOR BY ANY THIRD PARTY, WITHOUT THE PRIOR WRITTEN CONSENT OF FMG ENGINEERING.			
CONTRACTORS MUST SET OUT ALL WORK AND VERIFY ALL CONDITIONS, LEVELS AND DIMENSIONS ON SITE PRIOR TO COMMENCEMENT OF ANY WORK OR MAKING OF ANY SHOP DRAWINGS WHICH MUST BE SUBMITTED AND APPROVED PRIOR TO ANY MANUFACTURE.			
ALL WORK MUST BE EXECUTED IN ACCORDANCE WITH THE RULES, REGULATIONS, BY LAWS AND REQUIREMENTS OF ALL AUTHORITIES HAVING JURISDICTION OVER ANY PART OF THE WORK.			
REV	DESCRIPTION	DATE	INIT APP
B	PRELIMINARY DESIGN ISSUED FOR REVIEW	13-05-2024	KC KC
A	PRELIMINARY DESIGN ISSUED FOR REVIEW	29-04-2024	KC KC

CLIENT

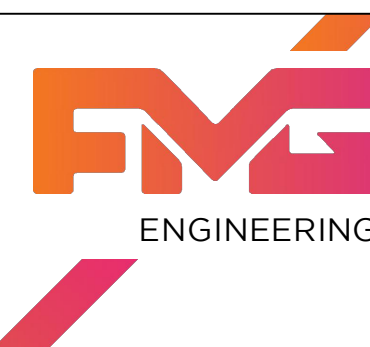


HEIGHT DATUM
AHD
COORDINATE DATUM
MGA 20 ZONE 55
SURVEY DATE
05-04-2024
AERIAL IMAGE DATE
07-02-2024

Engineering
your success.

fmgengineering.com.au
P 03 9815 7600 | 2 Domville Ave, Hawthorn VIC 3122

ABN 58 083 071 185
Quality Management Systems ISO 9001 Certified



CLIENT
CENTRAL COAST COUNCIL
PROJECT TITLE
ROAD AND DRAINAGE RECONSTRUCTION WORKS
SITE ADDRESS
RISBY STREET
ULVERSTONE, TAS, 7315
DRAWING TITLE
GENERAL LAYOUT PLAN

PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

DESIGNED	KC	DRAWN	KC
CHECKED	CC	NO. OF SHEETS	13
SCALE	1:200@A1	DATE STARTED	11-04-2024
SITE ID & JOB NO.	S67588-289337	REV.	
DRAWING NO.	C006		B

LEGEND

- 340mm (TBC) COMPACTED DEPTH FULL DEPTH ASPHALT PAVEMENT - CONSTRUCTED IN ACCORDANCE WITH DETAIL ON SHEET 01
- 240mm (TBC) COMPACTED DEPTH FULL DEPTH ASPHALT PAVEMENT - CONSTRUCTED IN ACCORDANCE WITH DETAIL ON SHEET 01
- 150mm THICK CONCRETE VEHICLE CROSSING - CONSTRUCTED IN ACCORDANCE WITH TASMANIAN STANDARD DRAWING TSD-R09
- 130mm COMPACTED DEPTH ASPHALT VEHICLE CROSSING - CONSTRUCTED IN ACCORDANCE WITH TASMANIAN STANDARD DRAWING TSD-R09
- 100mm THICK CONCRETE FOOTPATH - CONSTRUCTED IN ACCORDANCE WITH TASMANIAN STANDARD DRAWING TSD-R11

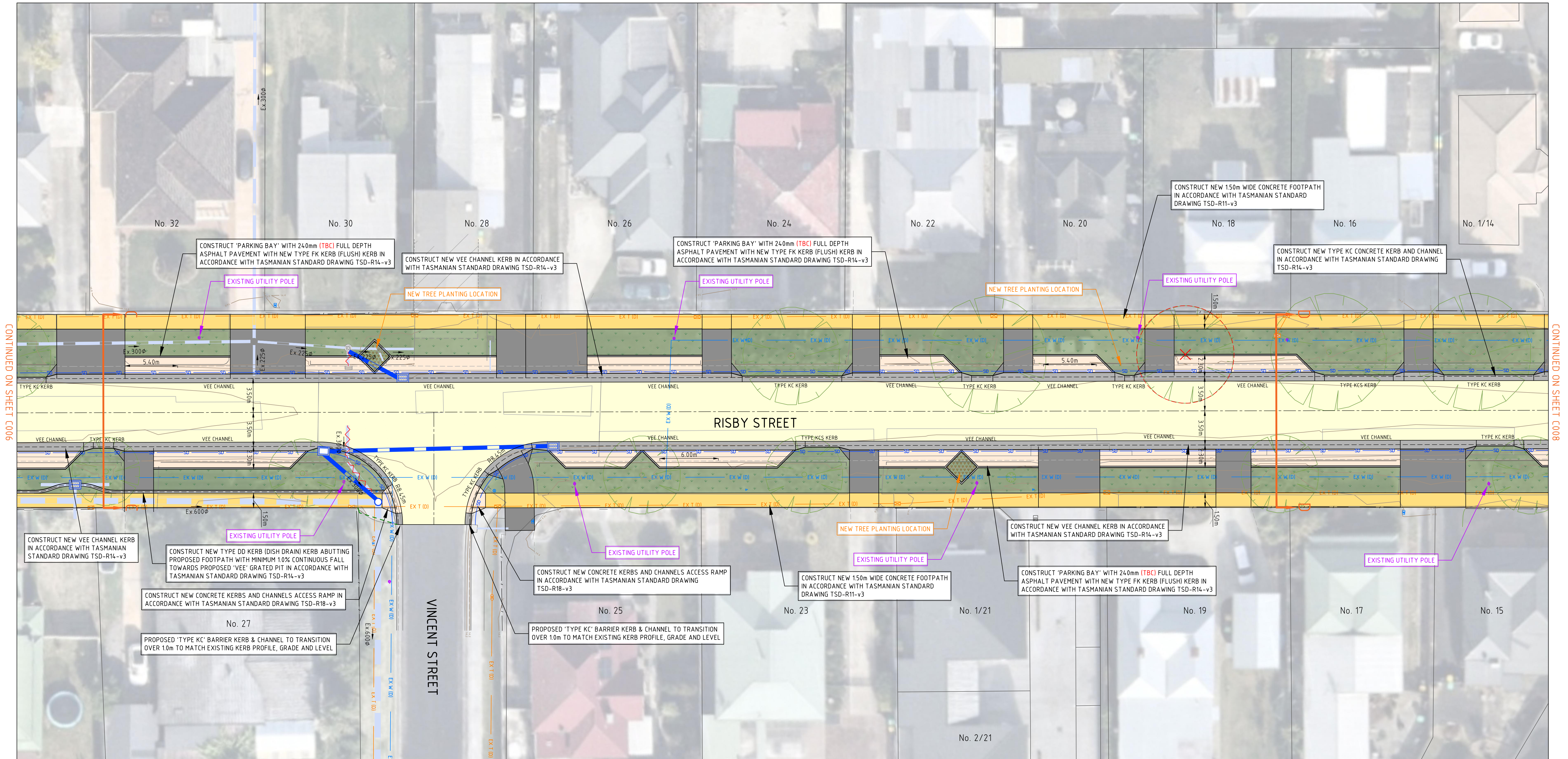
- TOPSOIL & SEED (CENTRAL COAST COUNCIL APPROVED) REINSTATEMENT - REINSTATED IN ACCORDANCE WITH CENTRAL COAST COUNCIL SPECIFICATIONS
- CONCRETE KERB AND CHANNEL - CONSTRUCTED IN ACCORDANCE WITH TASMANIAN STANDARD DRAWING TSD-R14
- EXISTING DRAINAGE PIPE
- REMOVE/DECOMMISSION EXISTING DRAINAGE PIPE
- NEW DRAINAGE PIPE
- NEW DRAINAGE PIT
- SUBSURFACE DRAINAGE - INSTALLED IN ACCORDANCE WITH TASMANIAN STANDARD DRAWING TSD-R12 AND TSD-R13
- DIRECTION OF CHANNEL FLOW
- DIRECTION OF PAVEMENT SHEET FLOW

- FILL BATTER EXTENT
- CUT BATTER EXTENT
- EXISTING CONTOUR MAJOR (1.0m)
- EXISTING CONTOUR MINOR (0.20m)
- FINISHED SURFACE CONTOUR MAJOR (1.0m)
- FINISHED SURFACE CONTOUR MINOR (0.20m)
- EXISTING WATER WITH QUALITY LEVEL
- EXISTING GAS WITH QUALITY LEVEL
- EXISTING SEWER WITH QUALITY LEVEL
- EXISTING TELECOMMUNICATIONS WITH QUALITY LEVEL
- EXISTING ELECTRICITY WITH QUALITY LEVEL
- EXISTING OVERHEAD CABLE

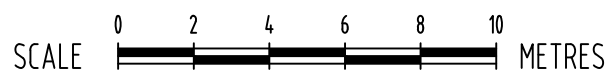


WARNING
BEWARE UNDERGROUND SERVICES
THE LOCATIONS OF SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN

POTENTIAL UTILITY CLASHES TO BE IDENTIFIED DURING DETAILED DESIGN



GENERAL LAYOUT PLAN

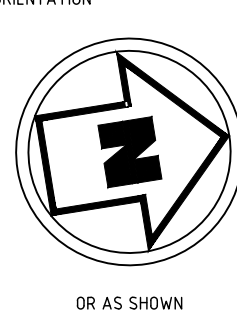


THIS DRAWING IS COPYRIGHT TO FMG ENGINEERING. NO PART OF THIS DRAWING, INCLUDING THE WHOLE OR PART, SHALL BE USED FOR ANY PURPOSE OR SITE OTHER THAN WHICH IT WAS PREPARED, NOR BY ANY THIRD PARTY, WITHOUT THE PRIOR WRITTEN CONSENT OF FMG ENGINEERING.			
CONTRACTORS MUST SET OUT ALL WORK AND VERIFY ALL CONDITIONS, LEVELS AND DIMENSIONS ON SITE PRIOR TO COMMENCEMENT OF ANY WORK OR MAKING OF ANY SHOP DRAWINGS WHICH MUST BE SUBMITTED AND APPROVED PRIOR TO ANY MANUFACTURE.			
ALL WORK MUST BE EXECUTED IN ACCORDANCE WITH THE RULES, REGULATIONS, BY LAWS AND REQUIREMENTS OF ALL AUTHORITIES HAVING JURISDICTION OVER ANY PART OF THE WORK.			
ELECTRONIC COPIES OF THIS DRAWING ARE NOT TO BE USED FOR DIMENSIONAL SETOUT.			
REV	DESCRIPTION	DATE	INIT
B	PRELIMINARY DESIGN ISSUED FOR REVIEW	13-05-2024	KC
A	PRELIMINARY DESIGN ISSUED FOR REVIEW	29-04-2024	KC

CLIENT



ORIENTATION

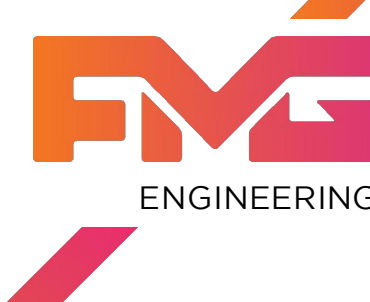


HEIGHT DATUM

AHD
COORDINATE DATUM
MGA 20 ZONE 55
SURVEY DATE
05-04-2024
AERIAL IMAGE DATE
07-02-2024

Engineering
your success.

fmgengineering.com.au
P 03 9815 7600 | 2 Domville Ave, Hawthorn VIC 3122
ABN 58 083 071 185
Quality Management Systems ISO 9001 Certified



CLIENT

CENTRAL COAST COUNCIL
PROJECT TITLE
ROAD AND DRAINAGE RECONSTRUCTION WORKS
SITE ADDRESS
RISBY STREET
ULVERSTONE, TAS, 7315
DRAWING TITLE
GENERAL LAYOUT PLAN

PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

DESIGNED	KC	DRAWN	KC
CHECKED	CC	NO. OF SHEETS	13
SCALE	1:200@A1	DATE STARTED	11-04-2024
SITE ID & JOB NO.	S67588-289337	REV.	
DRAWING NO.	C007		B

LEGEND

- 340mm (TBC) COMPACTED DEPTH FULL DEPTH ASPHALT PAVEMENT - CONSTRUCTED IN ACCORDANCE WITH DETAIL ON SHEET 01
- 240mm (TBC) COMPACTED DEPTH FULL DEPTH ASPHALT PAVEMENT - CONSTRUCTED IN ACCORDANCE WITH DETAIL ON SHEET 01
- 150mm THICK CONCRETE VEHICLE CROSSING - CONSTRUCTED IN ACCORDANCE WITH TASMANIAN STANDARD DRAWING TSD-R09
- 130mm COMPACTED DEPTH ASPHALT VEHICLE CROSSING - CONSTRUCTED IN ACCORDANCE WITH TASMANIAN STANDARD DRAWING TSD-R09
- 100mm THICK CONCRETE FOOTPATH - CONSTRUCTED IN ACCORDANCE WITH TASMANIAN STANDARD DRAWING TSD-R11

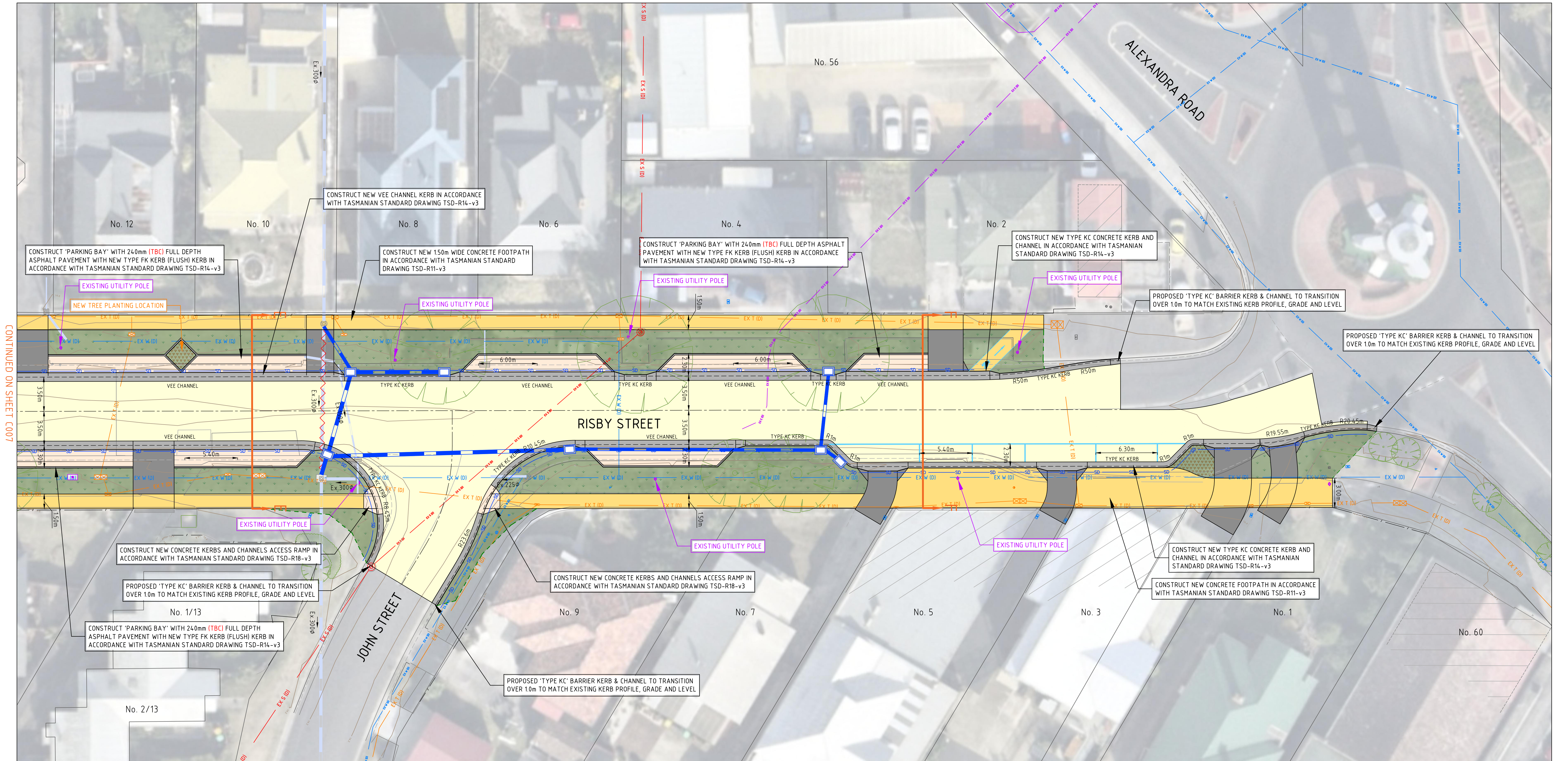
- TOPSOIL & SEED (CENTRAL COAST COUNCIL APPROVED) REINSTATEMENT - REINSTATED IN ACCORDANCE WITH CENTRAL COAST COUNCIL SPECIFICATIONS
- CONCRETE KERB AND CHANNEL - CONSTRUCTED IN ACCORDANCE WITH TASMANIAN STANDARD DRAWING TSD-R14
- EXISTING DRAINAGE PIPE
- REMOVE/DECOMMISSION EXISTING DRAINAGE PIPE
- NEW DRAINAGE PIPE
- NEW DRAINAGE PIT
- SUBSURFACE DRAINAGE - INSTALLED IN ACCORDANCE WITH TASMANIAN STANDARD DRAWING TSD-R12 AND TSD-R13
- DIRECTION OF CHANNEL FLOW
- DIRECTION OF PAVEMENT SHEET FLOW

- FILL BATTER EXTENT
- CUT BATTER EXTENT
- EXISTING CONTOUR MAJOR (1.0m)
- EXISTING CONTOUR MINOR (0.20m)
- FINISHED SURFACE CONTOUR MAJOR (1.0m)
- FINISHED SURFACE CONTOUR MINOR (0.20m)
- EXISTING WATER WITH QUALITY LEVEL
- EXISTING GAS WITH QUALITY LEVEL
- EXISTING SEWER WITH QUALITY LEVEL
- EXISTING TELECOMMUNICATIONS WITH QUALITY LEVEL
- EXISTING ELECTRICITY WITH QUALITY LEVEL
- EXISTING OVERHEAD CABLE



WARNING
BEWARE UNDERGROUND SERVICES
THE LOCATIONS OF SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN

POTENTIAL UTILITY CLASHES TO BE IDENTIFIED DURING DETAILED DESIGN

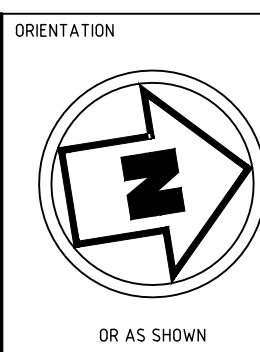


GENERAL LAYOUT PLAN



THIS DRAWING IS COPYRIGHT TO FMG ENGINEERING. NO PART OF THIS DRAWING, INCLUDING THE WHOLE OR PART, SHALL BE USED FOR ANY PURPOSE OR SITE OTHER THAN WHICH IT WAS PREPARED, NOR BY ANY THIRD PARTY, WITHOUT THE PRIOR WRITTEN CONSENT OF FMG ENGINEERING.			
CONTRACTORS MUST SET OUT ALL WORK AND VERIFY ALL CONDITIONS, LEVELS AND DIMENSIONS ON SITE PRIOR TO COMMENCEMENT OF ANY WORK OR MAKING OF ANY SHOP DRAWINGS WHICH MUST BE SUBMITTED AND APPROVED PRIOR TO ANY MANUFACTURE.			
ALL WORK MUST BE EXECUTED IN ACCORDANCE WITH THE RULES, REGULATIONS, BY LAWS AND REQUIREMENTS OF ALL AUTHORITIES HAVING JURISDICTION OVER ANY PART OF THE WORK.			
REV	DESCRIPTION	DATE	INIT APP
B	PRELIMINARY DESIGN ISSUED FOR REVIEW	13 05 2024	KC KC
A	PRELIMINARY DESIGN ISSUED FOR REVIEW	29 04 2024	KC KC

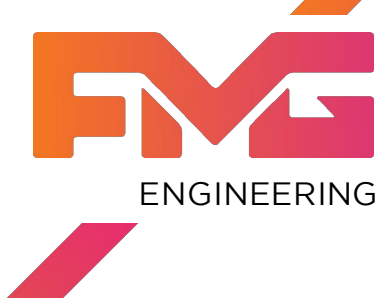
CLIENT



HEIGHT DATUM
AHD
COORDINATE DATUM
MGA 20 ZONE 55
SURVEY DATE
05-04-2024
AERIAL IMAGE DATE
07-02-2024

Engineering
your success.

ADELAIDE
MELBOURNE
SYDNEY
fmgengineering.com.au
P 03 9815 7600 | 2 Domville Ave, Hawthorn VIC 3122
ABN 58 083 071 185
Quality Management Systems ISO 9001 Certified



SIGNATURE

CLIENT
CENTRAL COAST COUNCIL
PROJECT TITLE
ROAD AND DRAINAGE RECONSTRUCTION WORKS
SITE ADDRESS
RISBY STREET
ULVERSTONE, TAS, 7315
DRAWING TITLE
GENERAL LAYOUT PLAN

PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

DESIGNED KC	DRAWN KC
CHECKED CC	NO. OF SHEETS 13
SCALE 1:200@A1	DATE STARTED 11-04-2024
SITE ID & JOB NO. S67588-289337	REV. REV.
DRAWING NO. C008	B

LEGEND

- 340mm (TBC) COMPACTED DEPTH FULL DEPTH ASPHALT PAVEMENT - CONSTRUCTED IN ACCORDANCE WITH DETAIL ON SHEET 01
- 240mm (TBC) COMPACTED DEPTH FULL DEPTH ASPHALT PAVEMENT - CONSTRUCTED IN ACCORDANCE WITH DETAIL ON SHEET 01
- 150mm THICK CONCRETE VEHICLE CROSSING - CONSTRUCTED IN ACCORDANCE WITH TASMANIAN STANDARD DRAWING TSD-R09
- 130mm COMPACTED DEPTH ASPHALT VEHICLE CROSSING - CONSTRUCTED IN ACCORDANCE WITH TASMANIAN STANDARD DRAWING TSD-R09
- 100mm THICK CONCRETE FOOTPATH - CONSTRUCTED IN ACCORDANCE WITH TASMANIAN STANDARD DRAWING TSD-R11

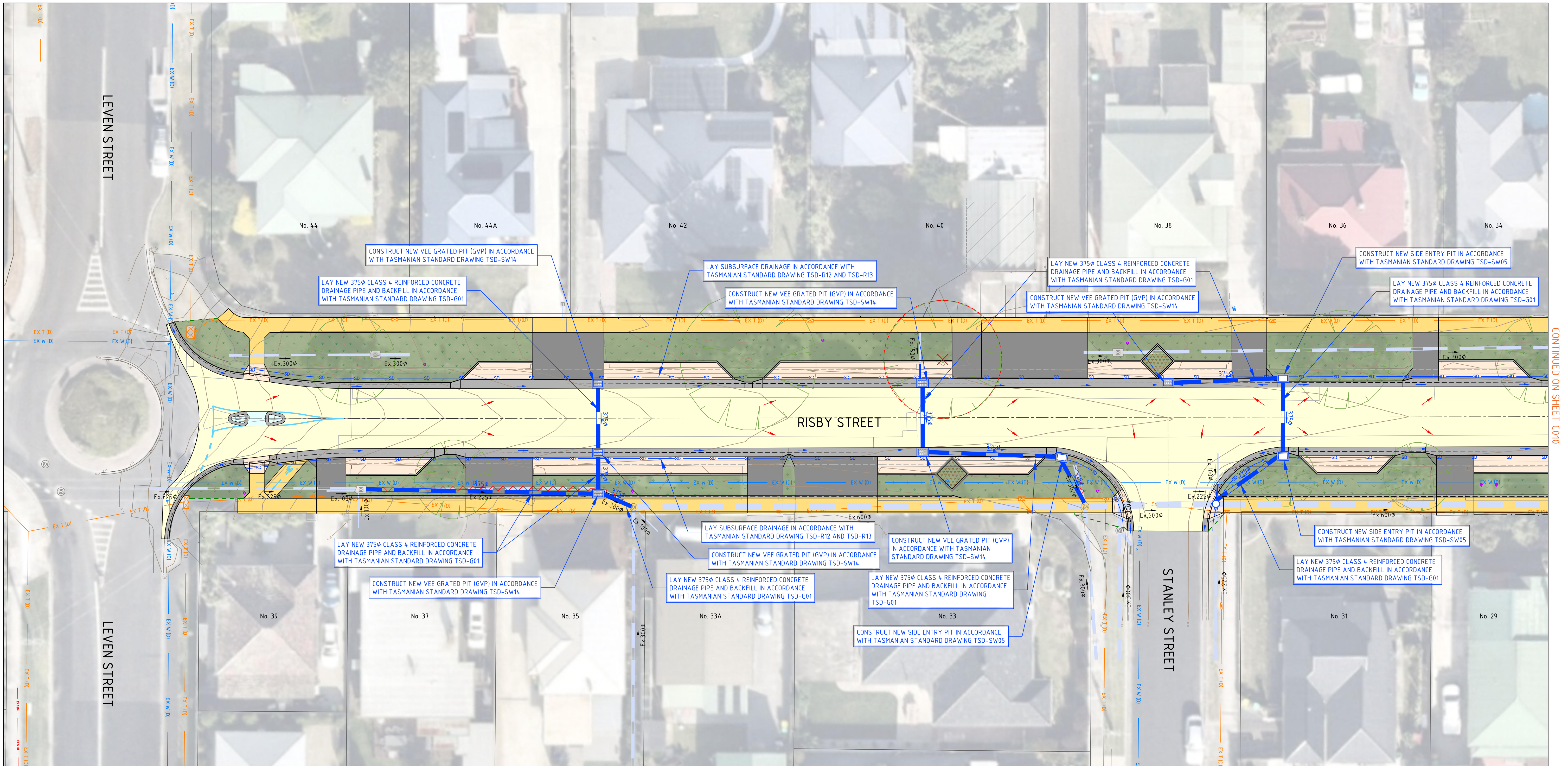
- TOPSOIL & SEED (CENTRAL COAST COUNCIL APPROVED) REINSTATEMENT - REINSTATED IN ACCORDANCE WITH CENTRAL COAST COUNCIL SPECIFICATIONS
- CONCRETE KERB AND CHANNEL - CONSTRUCTED IN ACCORDANCE WITH TASMANIAN STANDARD DRAWING TSD-R14
- EXISTING DRAINAGE PIPE
- REMOVE/DECOMMISSION EXISTING DRAINAGE PIPE
- NEW DRAINAGE PIPE
- NEW DRAINAGE PIT
- SUBSURFACE DRAINAGE - INSTALLED IN ACCORDANCE WITH TASMANIAN STANDARD DRAWING TSD-R12 AND TSD-R13
- DIRECTION OF CHANNEL FLOW
- DIRECTION OF PAVEMENT SHEET FLOW

- FILL BATTER EXTENT
- CUT BATTER EXTENT
- EXISTING CONTOUR MAJOR (1.0m)
- EXISTING CONTOUR MINOR (0.20m)
- FINISHED SURFACE CONTOUR MAJOR (1.0m)
- FINISHED SURFACE CONTOUR MINOR (0.20m)
- EXISTING WATER WITH QUALITY LEVEL
- EXISTING GAS WITH QUALITY LEVEL
- EXISTING SEWER WITH QUALITY LEVEL
- EXISTING TELECOMMUNICATIONS WITH QUALITY LEVEL
- EXISTING ELECTRICITY WITH QUALITY LEVEL
- EXISTING OVERHEAD CABLE



WARNING
BEWARE UNDERGROUND SERVICES
THE LOCATIONS OF SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN

POTENTIAL UTILITY CLASHES TO BE IDENTIFIED DURING DETAILED DESIGN



CONTINUED ON SHEET C010

DRAINAGE LAYOUT PLAN



THIS DRAWING IS COPYRIGHT TO FMG ENGINEERING. NO PART OF THIS DRAWING, INCLUDING THE WHOLE OR PART, SHALL BE USED FOR ANY PURPOSE OR SITE OTHER THAN WHICH IT WAS PREPARED, NOR BY ANY THIRD PARTY, WITHOUT THE PRIOR WRITTEN CONSENT OF FMG ENGINEERING.				CLIENT			
CONTRACTORS MUST SET OUT ALL WORK AND VERIFY ALL CONDITIONS, LEVELS AND DIMENSIONS ON SITE PRIOR TO COMMENCEMENT OF ANY WORK OR MAKING OF ANY SHOP DRAWINGS WHICH MUST BE SUBMITTED AND APPROVED PRIOR TO ANY MANUFACTURE.				CENTRAL COAST COUNCIL			
ALL WORK MUST BE EXECUTED IN ACCORDANCE WITH THE RULES, REGULATIONS, BY LAWS AND REQUIREMENTS OF ALL AUTHORITIES HAVING JURISDICTION OVER ANY PART OF THE WORK.				ORIENTATION			
ELECTRONIC COPIES OF THIS DRAWING ARE NOT TO BE USED FOR DIMENSIONAL SETOUT.				HEIGHT DATUM			
				AHD			
				COORDINATE DATUM			
				MGA 20 ZONE 55			
				SURVEY DATE			
				05-04-2024			
				AERIAL IMAGE DATE			
				07-02-2024			
				Engineering your success.			
				ADELAIDE MELBOURNE SYDNEY			
				fmgengineering.com.au			
				P 03 9815 7600 2 Dromville Ave, Hawthorn VIC 3122			
				ABN 58 083 071 185			
				Quality Management Systems ISO 9001 Certified			
				CLIENT			
				CENTRAL COAST COUNCIL			
				PROJECT TITLE			
				ROAD AND DRAINAGE RECONSTRUCTION WORKS			
				SITE ADDRESS			
				RISBY STREET			
				ULVERSTONE, TAS, 7315			
				DRAWING TITLE			
				DRAINAGE LAYOUT PLAN			
				DESIGNED			
				KC			
				DRAWN			
				KC			
				CHECKED			
				CC			
				SCALE			
				1:200@A1			
				DATE STARTED			
				11-04-2024			
				SITE ID & JOB NO.			
				S67588-289337			
				DRAWING NO.			
				C009			
				REV.			
				B			
				PRELIMINARY DESIGN			
				NOT FOR CONSTRUCTION			
				ISSUED FOR REVIEW			
				13-05-2024			
				ISSUED FOR REVIEW			
				29-04-2024			
				DESCRIPTION			
				DATE			
				INIT			
				APP			

LEGEND

- 340mm (TBC) COMPACTED DEPTH FULL DEPTH ASPHALT PAVEMENT - CONSTRUCTED IN ACCORDANCE WITH DETAIL ON SHEET 01
- 240mm (TBC) COMPACTED DEPTH FULL DEPTH ASPHALT PAVEMENT - CONSTRUCTED IN ACCORDANCE WITH DETAIL ON SHEET 01
- 150mm THICK CONCRETE VEHICLE CROSSING - CONSTRUCTED IN ACCORDANCE WITH TASMANIAN STANDARD DRAWING TSD-R09
- 130mm COMPACTED DEPTH ASPHALT VEHICLE CROSSING - CONSTRUCTED IN ACCORDANCE WITH TASMANIAN STANDARD DRAWING TSD-R09
- 100mm THICK CONCRETE FOOTPATH - CONSTRUCTED IN ACCORDANCE WITH TASMANIAN STANDARD DRAWING TSD-R11

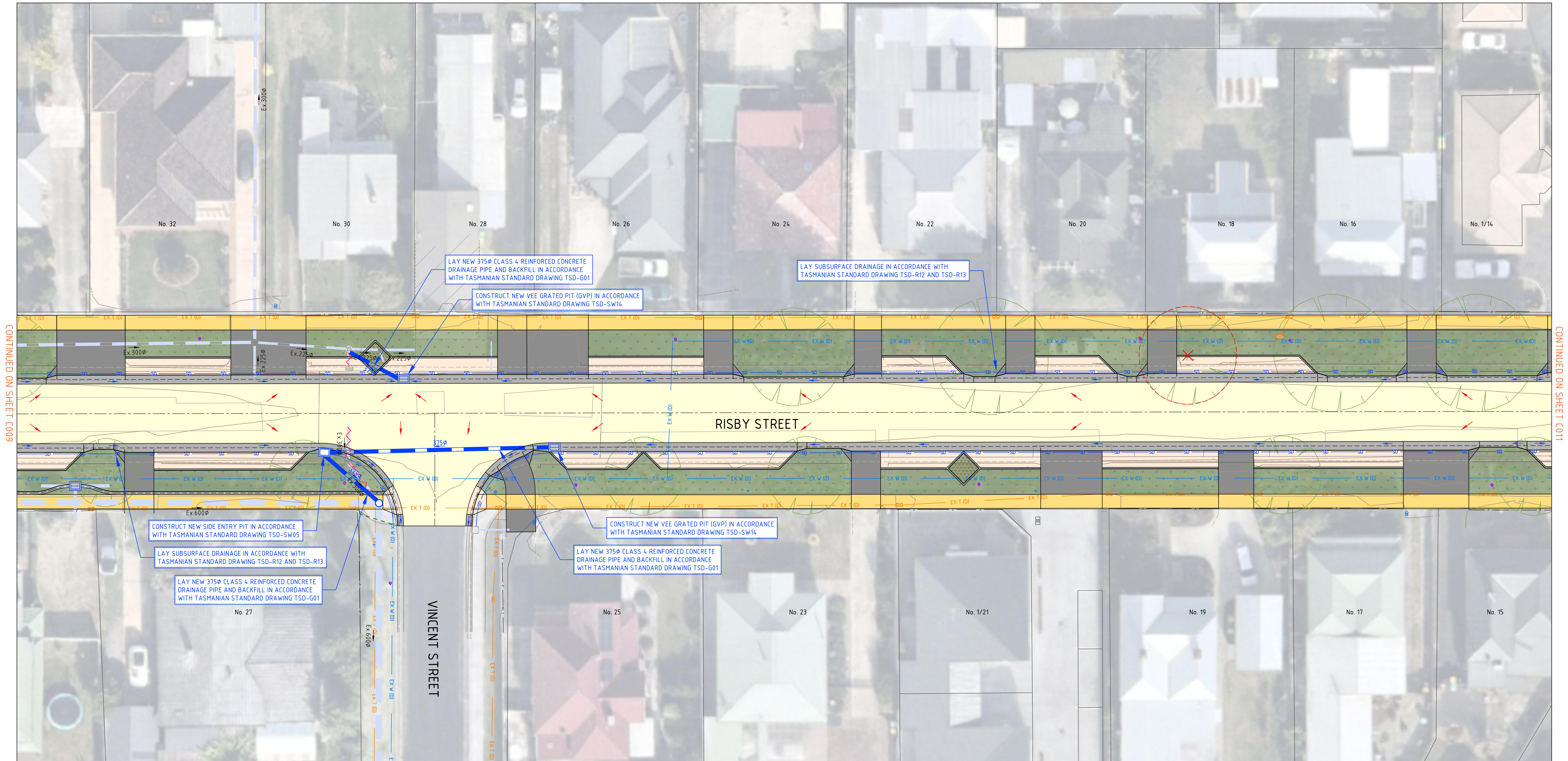
- TOPSOIL & SEED (CENTRAL COAST COUNCIL APPROVED) REINSTATEMENT - REINSTATED IN ACCORDANCE WITH CENTRAL COAST COUNCIL SPECIFICATIONS
- CONCRETE KERB AND CHANNEL - CONSTRUCTED IN ACCORDANCE WITH TASMANIAN STANDARD DRAWING TSD-R14
- EXISTING DRAINAGE PIPE
- REMOVE/DECOMMISSION EXISTING DRAINAGE PIPE
- NEW DRAINAGE PIPE
- NEW DRAINAGE PIT
- SUBSURFACE DRAINAGE - INSTALLED IN ACCORDANCE WITH TASMANIAN STANDARD DRAWING TSD-R12 AND TSD-R13
- DIRECTION OF CHANNEL FLOW
- DIRECTION OF PAVEMENT SHEET FLOW

- FILL BATTER EXTENT
- CUT BATTER EXTENT
- EXISTING CONTOUR MAJOR (1.0m)
- EXISTING CONTOUR MINOR (0.20m)
- FINISHED SURFACE CONTOUR MAJOR (1.0m)
- FINISHED SURFACE CONTOUR MINOR (0.20m)
- EXISTING WATER WITH QUALITY LEVEL
- EXISTING GAS WITH QUALITY LEVEL
- EXISTING SEWER WITH QUALITY LEVEL
- EXISTING TELECOMMUNICATIONS WITH QUALITY LEVEL
- EXISTING ELECTRICITY WITH QUALITY LEVEL
- EXISTING OVERHEAD CABLE



WARNING
BEWARE UNDERGROUND SERVICES
THE LOCATIONS OF SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN

POTENTIAL UTILITY CLASHES TO BE IDENTIFIED DURING DETAILED DESIGN



DRAINAGE LAYOUT PLAN



THIS DRAWING IS COPYRIGHT TO FMG ENGINEERING. NO PART OF THIS DRAWING, INCLUDING THE WHOLE OR PART, SHALL BE USED FOR ANY PURPOSE OR SITE OTHER THAN WHICH IT WAS PREPARED, NOR BY ANY THIRD PARTY, WITHOUT THE PRIOR WRITTEN CONSENT OF FMG ENGINEERING.				CLIENT			
CONTRACTORS MUST SET OUT ALL WORK AND VERIFY ALL CONDITIONS, LEVELS AND DIMENSIONS ON SITE PRIOR TO COMMENCEMENT OF ANY WORK OR MAKING OF ANY SHOP DRAWINGS WHICH MUST BE SUBMITTED AND APPROVED PRIOR TO ANY MANUFACTURE.				ORIENTATION			
ALL WORK MUST BE EXECUTED IN ACCORDANCE WITH THE RULES, REGULATIONS, BY LAWS AND REQUIREMENTS OF ALL AUTHORITIES HAVING JURISDICTION OVER ANY PART OF THE WORK.				HEIGHT DATUM			
ELECTRONIC COPIES OF THIS DRAWING ARE NOT TO BE USED FOR DIMENSIONAL SETOUT.				COORDINATE DATUM			
				SURVEY DATE			
				AERIAL IMAGE DATE			
				Engineering your success.			
				ADELAIDE MELBOURNE SYDNEY			
				fmgengineering.com.au			
				P 03 9815 7600 2 Domville Ave, Hawthorn VIC 3122			
				ABN 58 083 071 185			
				Quality Management Systems ISO 9001 Certified			
				CLIENT			
				CENTRAL COAST COUNCIL			
				PROJECT TITLE			
				ROAD AND DRAINAGE RECONSTRUCTION WORKS			
				SITE ADDRESS			
				RISBY STREET			
				ULVERSTONE, TAS, 7315			
				DRAWING TITLE			
				DRAINAGE LAYOUT PLAN			
				DESIGNED			
				KC			
				DRAWN			
				KC			
				CHECKED			
				CC			
				No. OF SHEETS			
				13			
				SCALE			
				1:200@A1			
				DATE STARTED			
				11-04-2024			
				SITE ID & JOB No.			
				S67588-289337			
				REV.			
				C010			
				B			

LEGEND

- 340mm (TBC) COMPACTED DEPTH FULL DEPTH ASPHALT PAVEMENT - CONSTRUCTED IN ACCORDANCE WITH DETAIL ON SHEET 01
- 240mm (TBC) COMPACTED DEPTH FULL DEPTH ASPHALT PAVEMENT - CONSTRUCTED IN ACCORDANCE WITH DETAIL ON SHEET 01
- 150mm THICK CONCRETE VEHICLE CROSSING - CONSTRUCTED IN ACCORDANCE WITH TASMANIAN STANDARD DRAWING TSD-R09
- 130mm COMPACTED DEPTH ASPHALT VEHICLE CROSSING - CONSTRUCTED IN ACCORDANCE WITH TASMANIAN STANDARD DRAWING TSD-R09
- 100mm THICK CONCRETE FOOTPATH - CONSTRUCTED IN ACCORDANCE WITH TASMANIAN STANDARD DRAWING TSD-R11

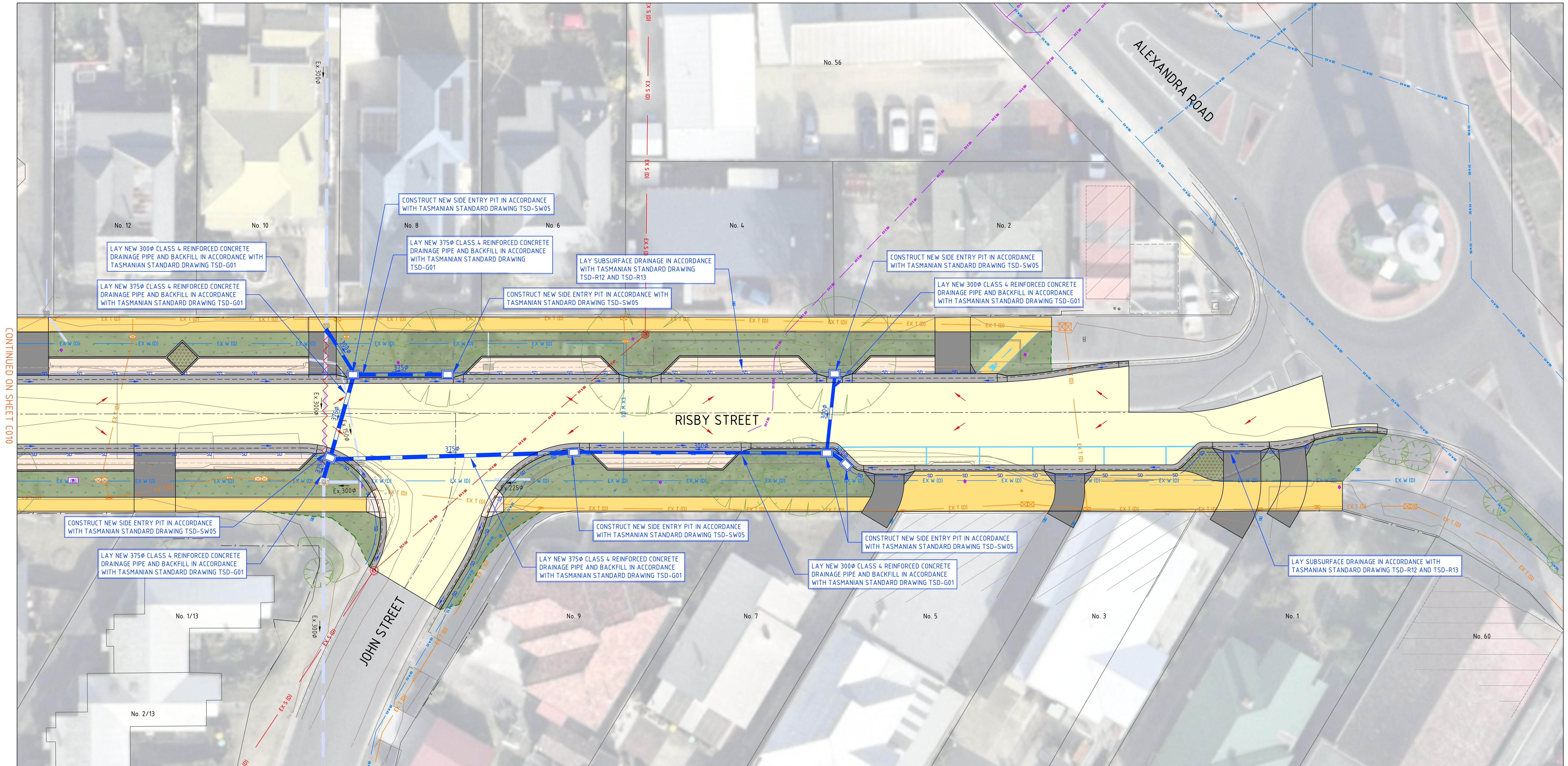
- TOPSOIL & SEED (CENTRAL COAST COUNCIL APPROVED) REINSTATEMENT - REINSTATED IN ACCORDANCE WITH CENTRAL COAST COUNCIL SPECIFICATIONS
- CONCRETE KERB AND CHANNEL - CONSTRUCTED IN ACCORDANCE WITH TASMANIAN STANDARD DRAWING TSD-R14
- EXISTING DRAINAGE PIPE
- REMOVE/DECOMMISSION EXISTING DRAINAGE PIPE
- NEW DRAINAGE PIPE
- NEW DRAINAGE PIT
- SUBSURFACE DRAINAGE - INSTALLED IN ACCORDANCE WITH TASMANIAN STANDARD DRAWING TSD-R12 AND TSD-R13
- DIRECTION OF CHANNEL FLOW
- DIRECTION OF PAVEMENT SHEET FLOW

- FILL BATTER EXTENT
- CUT BATTER EXTENT
- EXISTING CONTOUR MAJOR (1.0m)
- EXISTING CONTOUR MINOR (0.20m)
- FINISHED SURFACE CONTOUR MAJOR (1.0m)
- FINISHED SURFACE CONTOUR MINOR (0.20m)
- EXISTING WATER WITH QUALITY LEVEL
- EXISTING GAS WITH QUALITY LEVEL
- EXISTING SEWER WITH QUALITY LEVEL
- EXISTING TELECOMMUNICATIONS WITH QUALITY LEVEL
- EXISTING ELECTRICITY WITH QUALITY LEVEL
- EXISTING OVERHEAD CABLE



WARNING
BEWARE UNDERGROUND SERVICES
THE LOCATIONS OF SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN

POTENTIAL UTILITY CLASHES TO BE IDENTIFIED DURING DETAILED DESIGN

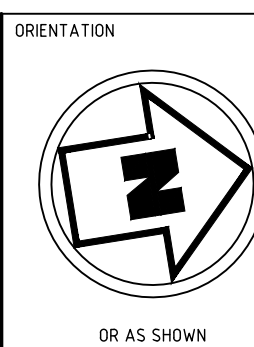


DRAINAGE LAYOUT PLAN

SCALE 0 2 4 6 8 10 METRES

THIS DRAWING IS COPYRIGHT © FMC ENGINEERING. NO PART OF THIS DRAWING, INCLUDING THE WHOLE OR PART, SHALL BE USED FOR ANY PURPOSE OR SITE OTHER THAN WHICH IT WAS PREPARED, NOR BY ANY THIRD PARTY, WITHOUT THE PRIOR WRITTEN CONSENT OF FMC ENGINEERING.			
CONTRACTORS MUST SET OUT ALL WORK AND VERIFY ALL CONDITIONS, LEVELS AND DIMENSIONS ON SITE PRIOR TO COMMENCEMENT OF ANY WORK OR MAKING OF ANY SHOP DRAWINGS WHICH MUST BE SUBMITTED AND APPROVED PRIOR TO ANY MANUFACTURE.			
ALL WORK MUST BE EXECUTED IN ACCORDANCE WITH THE RULES, REGULATIONS, BY LAWS AND REQUIREMENTS OF ALL AUTHORITIES HAVING JURISDICTION OVER ANY PART OF THE WORK.			
ELECTRONIC COPIES OF THIS DRAWING ARE NOT TO BE USED FOR DIMENSIONAL SETOUT.			
REV	DESCRIPTION	DATE	INIT APP
B	PRELIMINARY DESIGN ISSUED FOR REVIEW	13 05 2024	KC KC
A	PRELIMINARY DESIGN ISSUED FOR REVIEW	29 04 2024	KC KC

CLIENT



HEIGHT DATUM
AHD

COORDINATE DATUM
MGA 20 ZONE 55

SURVEY DATE
05-04-2024

AERIAL IMAGE DATE
07-02-2024

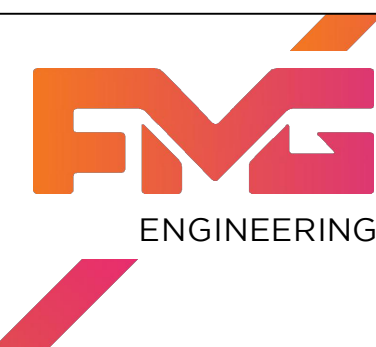
Engineering your success.

fmgengineering.com.au

P 03 9815 7600 | 2 Domville Ave, Hawthorn VIC 3122

ABN 58 083 071 185

Quality Management Systems ISO 9001 Certified



SIGNATURE

CLIENT
CENTRAL COAST COUNCIL

PROJECT TITLE
ROAD AND DRAINAGE RECONSTRUCTION WORKS

SITE ADDRESS
RISBY STREET
ULVERSTONE, TAS, 7315

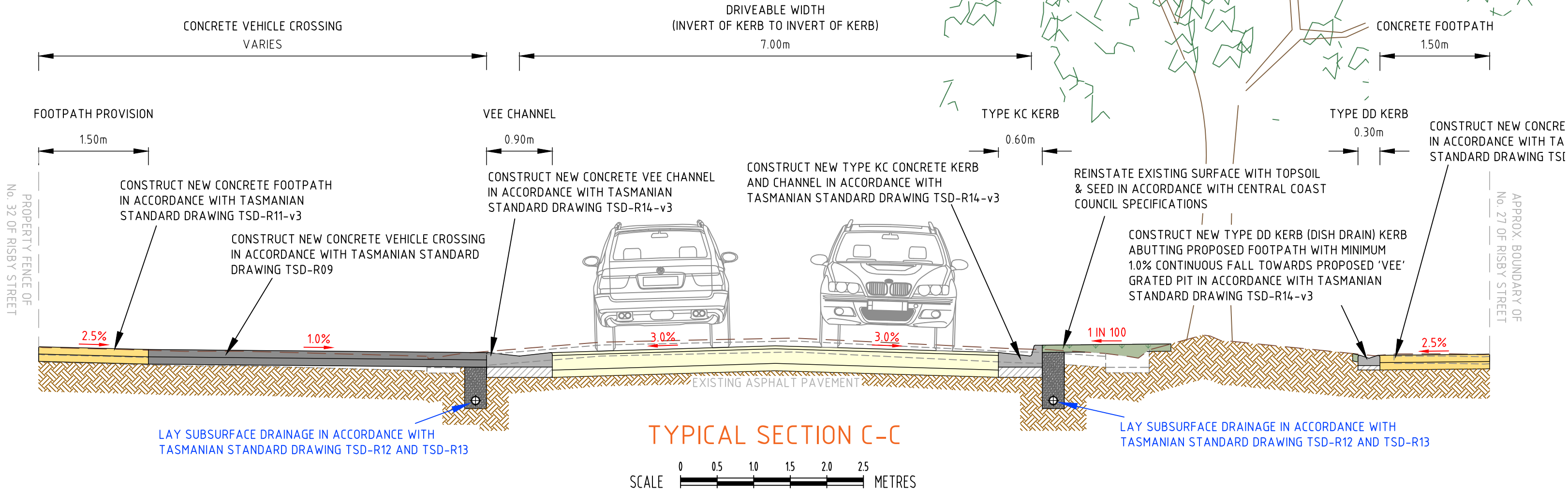
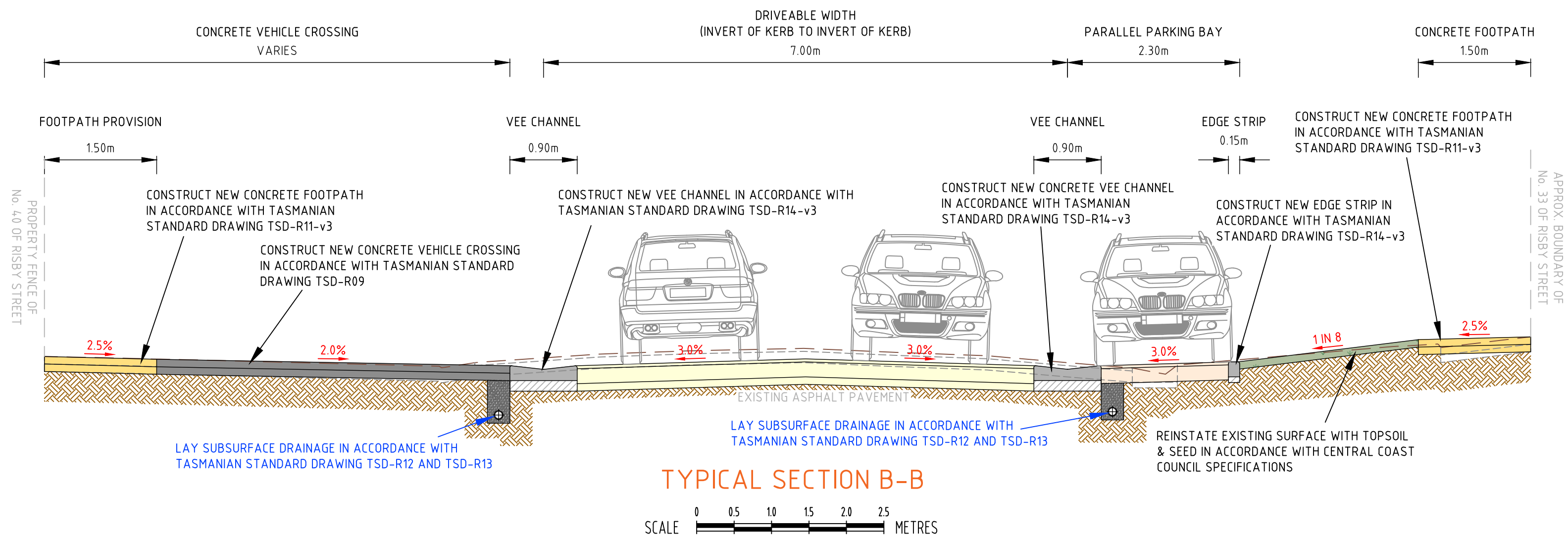
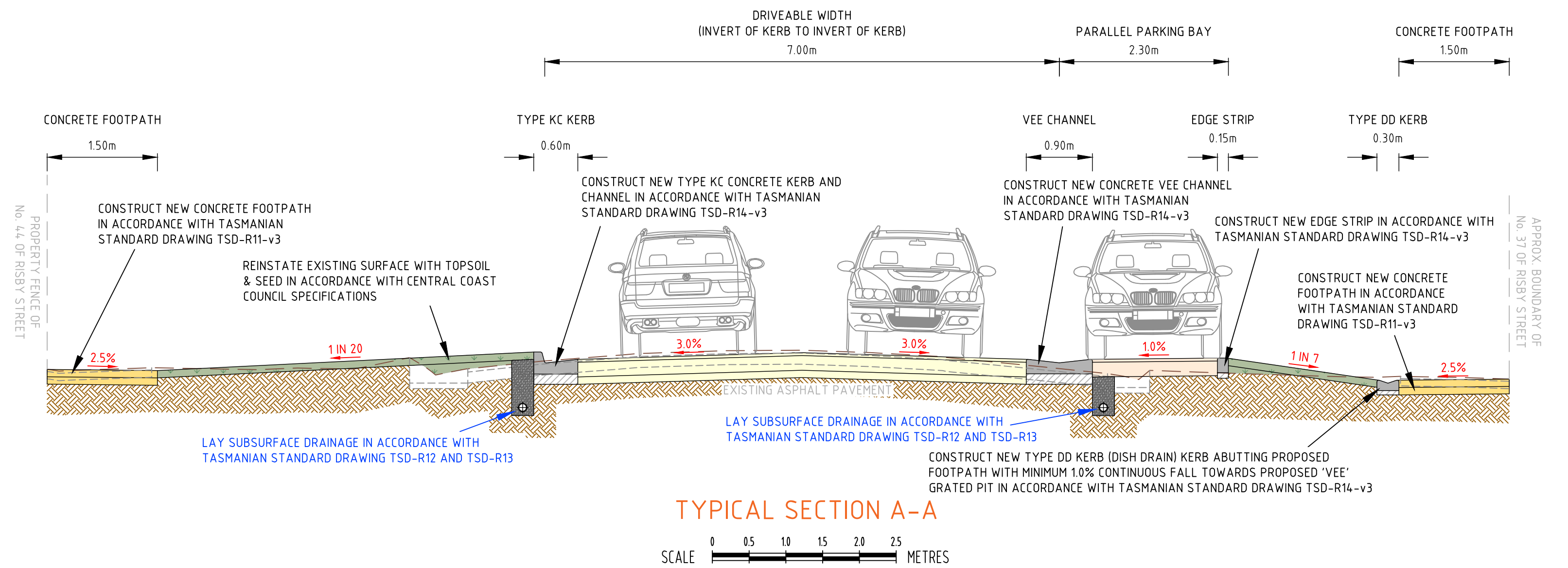
DRAWING TITLE
DRAINAGE LAYOUT PLAN

PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

DESIGNED KC	DRAWN KC
CHECKED CC	NO. OF SHEETS 13
SCALE 1:200@A1	DATE STARTED 11-04-2024
SITE ID & JOB NO. S67588-289337	REV. B
DRAWING NO. C011	



WARNING
BEWARE UNDERGROUND SERVICES
THE LOCATIONS OF SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN

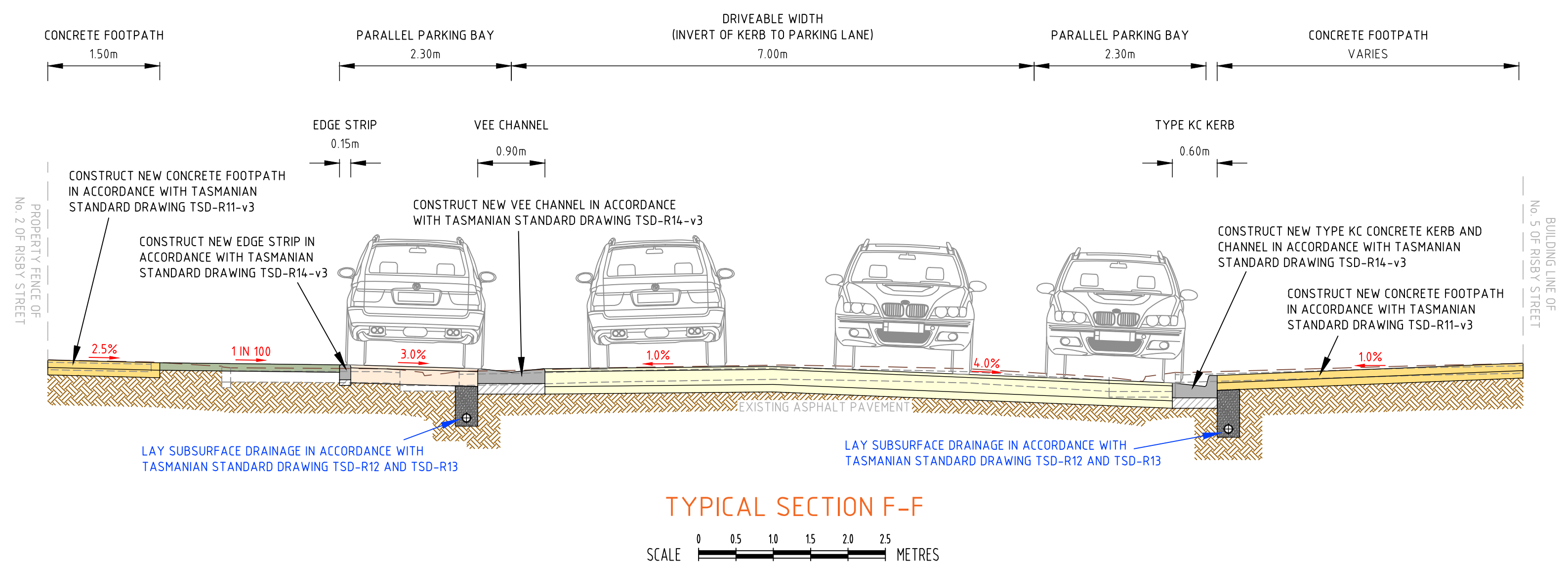
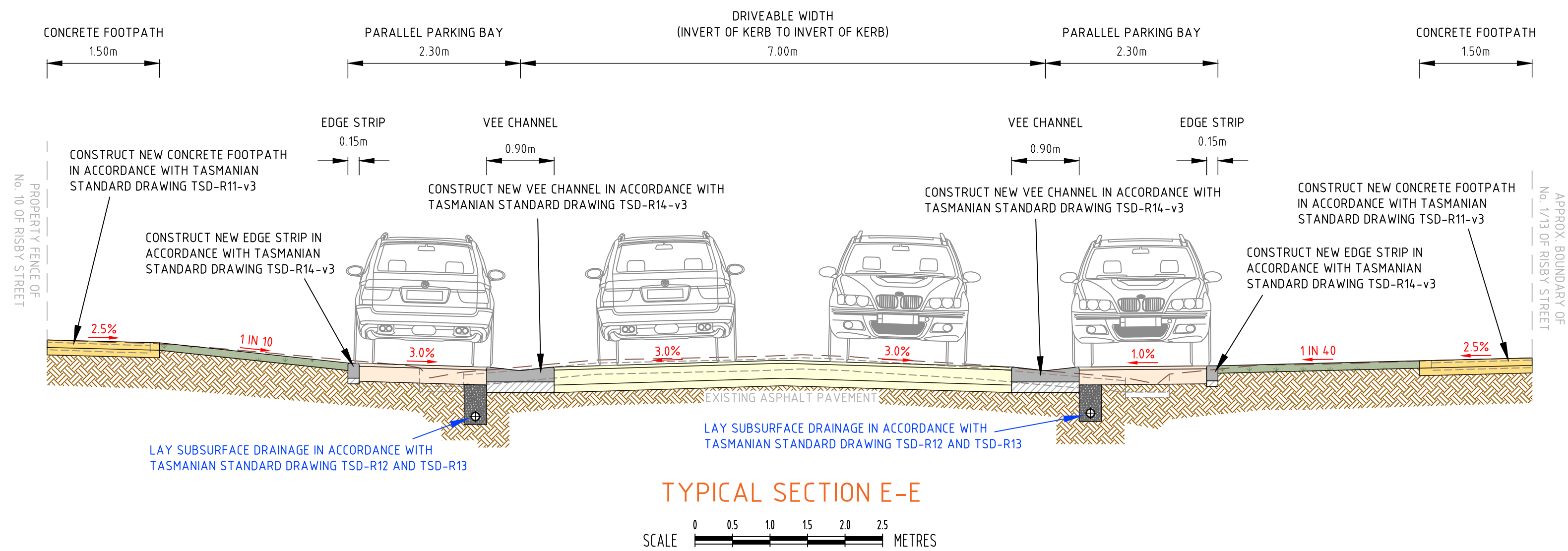
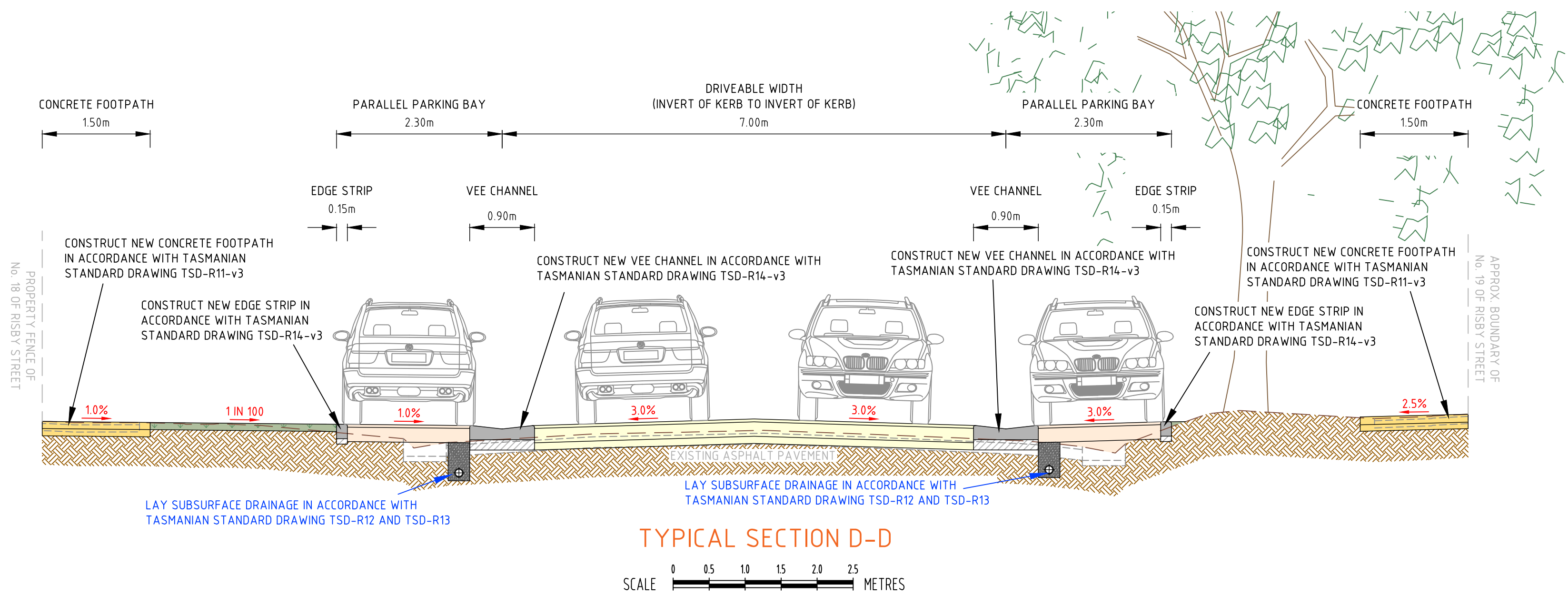


PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

THIS DRAWING IS COPYRIGHT TO FMG ENGINEERING. NO PART OF THIS DRAWING, INCLUDING THE WHOLE OR PART, SHALL BE USED FOR ANY PURPOSE OR SITE OTHER THAN WHICH IT WAS PREPARED, NOR BY ANY THIRD PARTY, WITHOUT THE PRIOR WRITTEN CONSENT OF FMG ENGINEERING.				CLIENT		ORIENTATION		HEIGHT DATUM		Engineering your success.		CLIENT		DESIGNED		DRAWN	
CONTRACTORS MUST SET OUT ALL WORK AND VERIFY ALL CONDITIONS, LEVELS AND DIMENSIONS ON SITE PRIOR TO COMMENCEMENT OF ANY WORK OR MAKING OF ANY SHOP DRAWINGS WHICH MUST BE SUBMITTED AND APPROVED PRIOR TO ANY MANUFACTURE.				CENTRAL COAST COUNCIL		OR AS SHOWN		AHD		ADELAIDE MELBOURNE SYDNEY		CENTRAL COAST COUNCIL		KC		KC	
ALL WORK MUST BE EXECUTED IN ACCORDANCE WITH THE RULES, REGULATIONS, BY LAWS AND REQUIREMENTS OF ALL AUTHORITIES HAVING JURISDICTION OVER ANY PART OF THE WORK.								COORDINATE DATUM MGA 20 ZONE 55		fmgengineering.com.au		PROJECT TITLE		CHECKED		No. OF SHEETS	
ELECTRONIC COPIES OF THIS DRAWING ARE NOT TO BE USED FOR DIMENSIONAL SETOUT.								SURVEY DATE 05-04-2024		P 03 9815 7600 2 Donville Ave, Hawthorn VIC 3122		ROAD AND DRAINAGE RECONSTRUCTION WORKS		SCALE		DATE STARTED	
								AERIAL IMAGE DATE 07-02-2024		ABN 58 083 071 185 Quality Management Systems ISO 9001 Certified		SITE ADDRESS RISBY STREET ULVERSTONE, TAS, 7315		1:50@A1		11-04-2024	
												DRAWING TITLE		SITE ID & JOB No. S67588-289337		REV.	
												TYPICAL SECTIONS A-A, B-B AND C-C		DRAWING No.		C012	
																B	

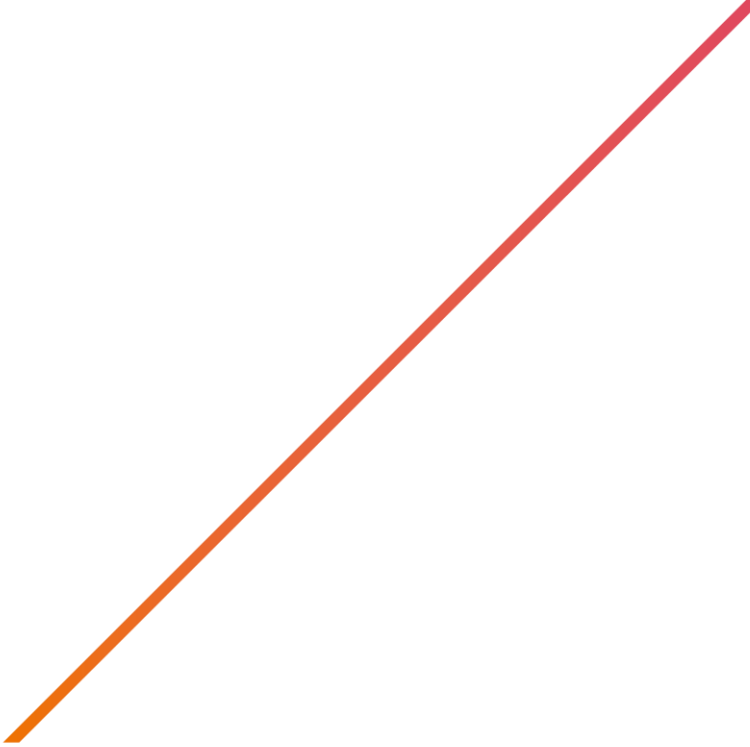


WARNING
BEWARE UNDERGROUND SERVICES
THE LOCATIONS OF SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN



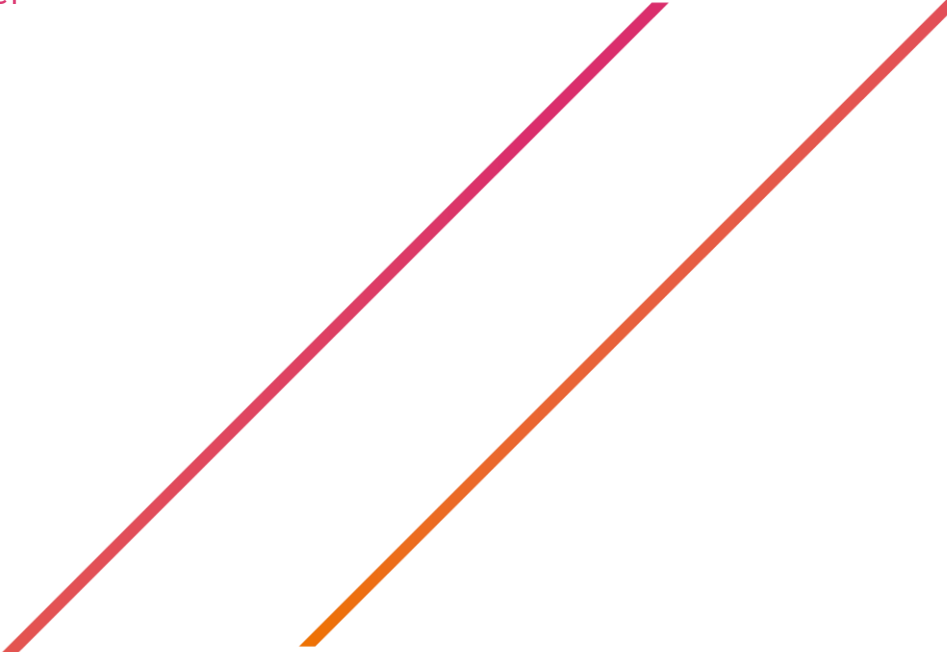
PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

THIS DRAWING IS COPYRIGHT TO FMG ENGINEERING. NO PART OF THIS DRAWING, INCLUDING THE WHOLE OR PART, SHALL BE USED FOR ANY PURPOSE OR SITE OTHER THAN WHICH IT WAS PREPARED, NOR BY ANY THIRD PARTY, WITHOUT THE PRIOR WRITTEN CONSENT OF FMG ENGINEERING.				CLIENT		ORIENTATION		HEIGHT DATUM		Engineering your success.		CLIENT		DESIGNED		DRAWN	
CONTRACTORS MUST SET OUT ALL WORK AND VERIFY ALL CONDITIONS, LEVELS AND DIMENSIONS ON SITE PRIOR TO COMMENCEMENT OF ANY WORK OR MAKING OF ANY SHOP DRAWINGS WHICH MUST BE SUBMITTED AND APPROVED PRIOR TO ANY MANUFACTURE.				CENTRAL COAST COUNCIL		OR AS SHOWN		AHD		ADELAIDE MELBOURNE SYDNEY		CENTRAL COAST COUNCIL		KC		KC	
ALL WORK MUST BE EXECUTED IN ACCORDANCE WITH THE RULES, REGULATIONS, BY LAWS AND REQUIREMENTS OF ALL AUTHORITIES HAVING JURISDICTION OVER ANY PART OF THE WORK.								COORDINATE DATUM		fmgengineering.com.au		PROJECT TITLE		CC		No. OF SHEETS	
ELECTRONIC COPIES OF THIS DRAWING ARE NOT TO BE USED FOR DIMENSIONAL SETOUT.								SURVEY DATE		P 03 9815 7600 2 Domville Ave, Hawthorn VIC 3122		ROAD AND DRAINAGE RECONSTRUCTION WORKS		1:50@A1		DATE STARTED	
								AERIAL IMAGE DATE		ABN 58 083 071 185		RISBY STREET		S67588-289337		REV.	
										Quality Management Systems ISO 9001 Certified		ULVERSTONE, TAS, 7315		C013		B	
												DRAWING TITLE					
												TYPICAL SECTIONS D-D, E-E AND F-F					



Appendix B

Community Consultation Flyer



Ref: S67588 / 289337

Wednesday 15th May 2024

Dear Resident or Business Owner,

**Upcoming Consultation Event - Design of Road and Drainage
Reconstruction Works at Risby Street, ULVERSTONE, TAS 7315**

As you may be aware, Central Coast Council has engaged FMG Engineering to undertake the design and documentation of the Road and Drainage Reconstruction Works at Risby Street, Ulverstone.

Central Coast Council and FMG Engineering will soon release the Community Consultation Plans for community review and comment. These plans include the following design proposals including:

- Improving the street for residents and road users;
- Improving the aesthetics of the street by means of treescape, footpath and kerb renewals;
- Removing the safety risk associated with limited width between parked vehicles by means of designated indented parallel parking;
- Improved stormwater drainage; and
- Improved full-strength sealed road pavement to improve existing conditions and minimise future maintenance requirements.

A **community information session** will be held on **Wednesday 22nd May 2024**, at **Hive's Studio 1 Room** (see back of letter for event details). At this session a representative from FMG Engineering and Central Coast Council will be in attendance to present the proposed upgrade works. These representatives will also be available to record any feedback for the project team's consideration and answer any design related queries.

We encourage you to come along to this community information session and have your say. It's a great chance to help shape a vital infrastructure upgrade within your community.

Please contact Central Coast Council on 03 6429 8900 if you have any concerns.

Yours sincerely

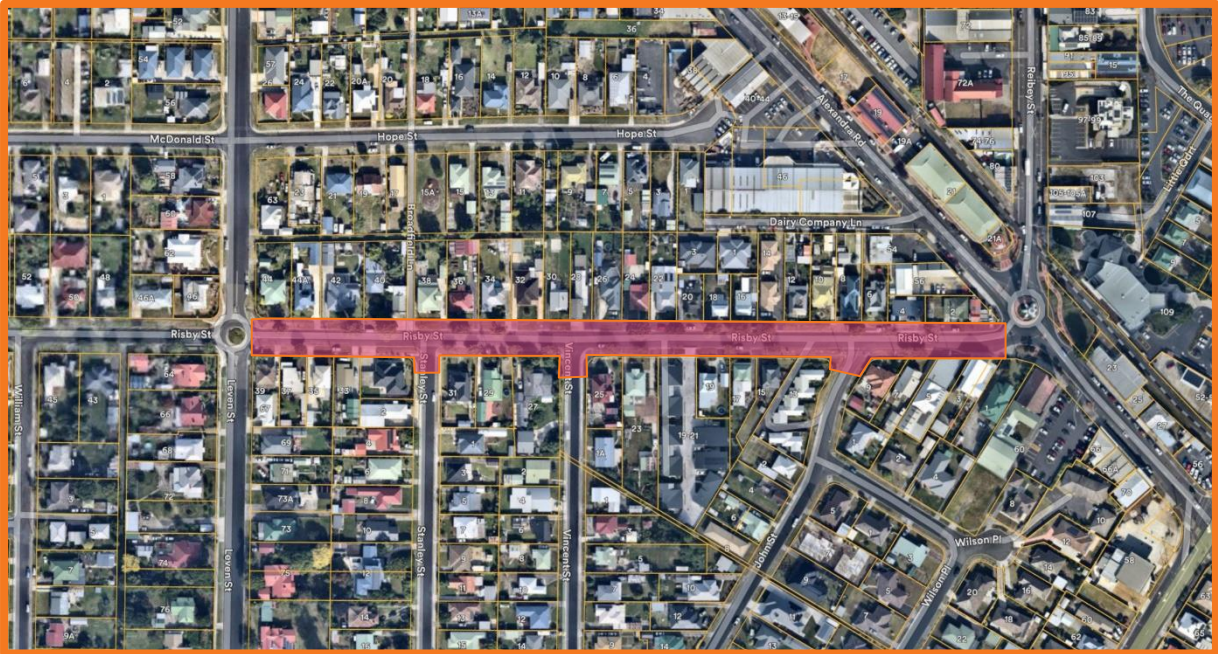


Kurt Chamberlain
Civil Team Leader (VIC/TAS)
FMG Engineering

On behalf of

Gary Lovell
Central Coast Council

Extent of Works:



Community Consultation Drawing Set:

Community consultation plans will be presented at the community information session. For those in the community who would like to review these drawings prior to the event, they will be available on the following link after Thursday 16th May 2024.

Website URL: fmgengineering.com.au/risby-street-ulverstone

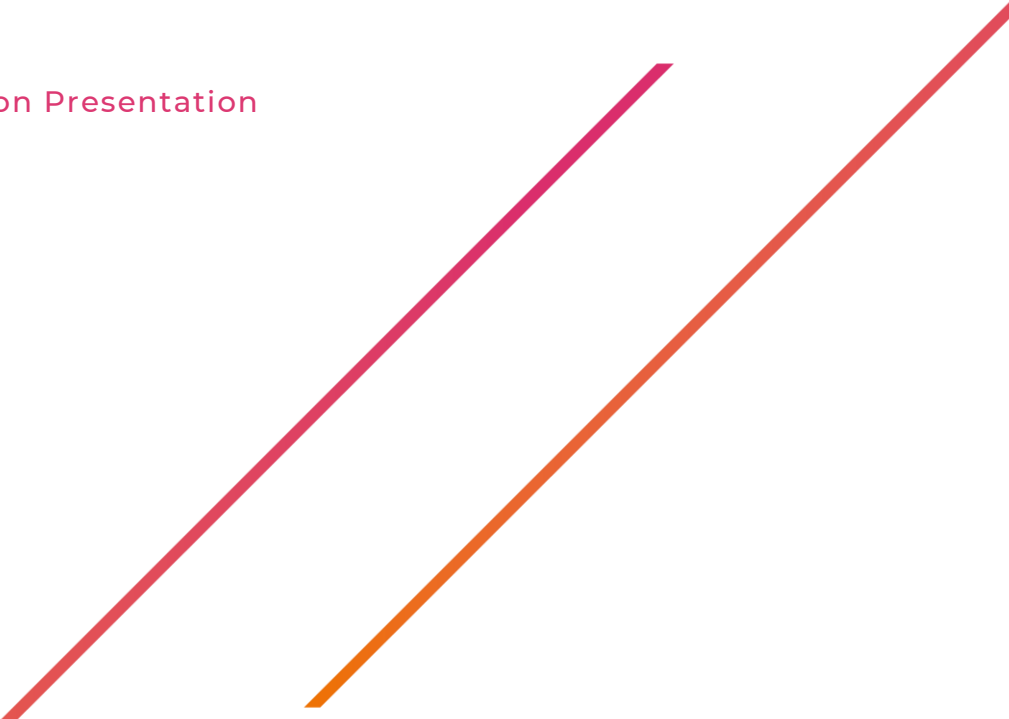
Community Information Session Details:

Community Information Session Details		
Wednesday 22 nd May 2024	Hive – Studio 1 50 Main Street, Ulverstone, TAS 7315	5:30pm – 8:00pm



Appendix C

Community Consultation Presentation



Community Consultation

Risby Street, Ulverstone

Road and Drainage Reconstruction Works



Risby Street, Ulverstone

Design Process



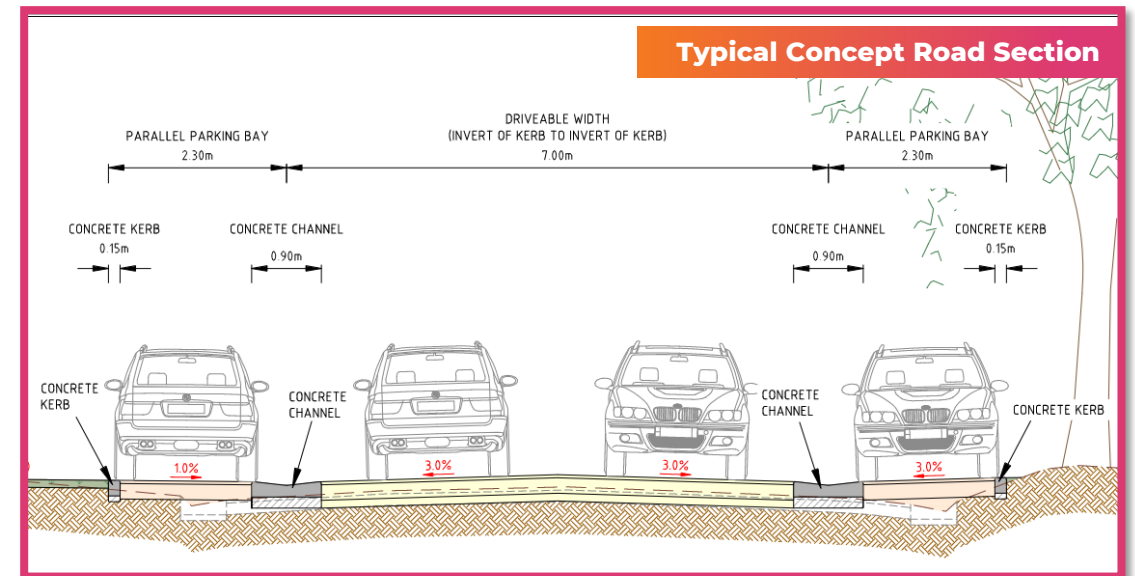
Existing Conditions of Risby Street

- 450m Section (Reibey Street to Leven Street)
- Current road width does not allow for parking on both sides of Risby Street
- Existing large trees damaging existing road infrastructure (Pavement, Drainage, Footpaths etc.)
- Drainage upgrade opportunities
- Pavement upgrade opportunities
- Opportunity to improve overall street aesthetics



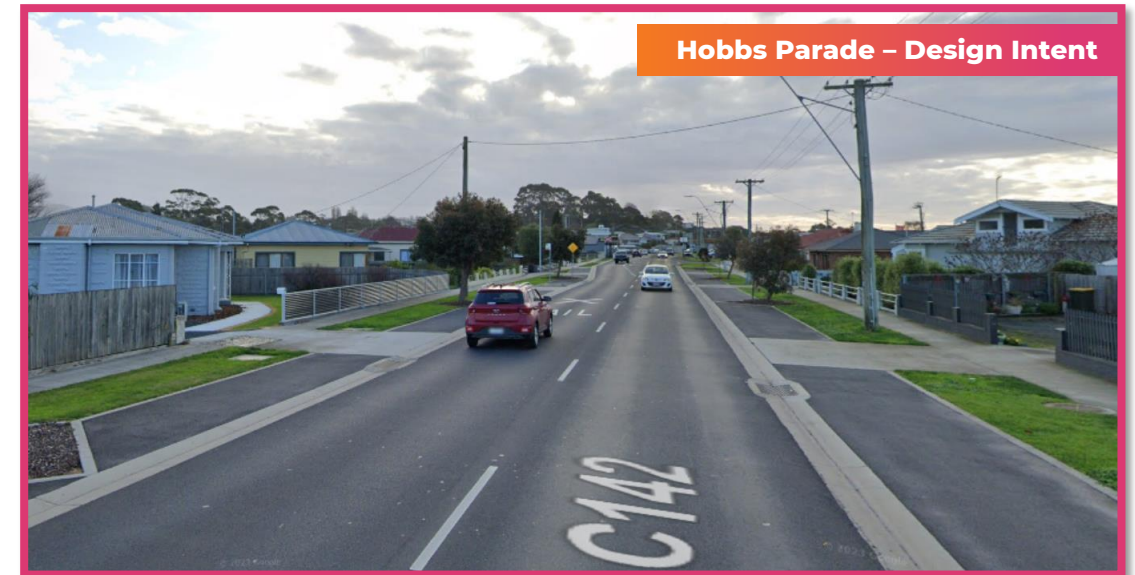
Preferred Concept Option

- Reducing the road width from 9.6m to 7.0m
- Provide off road parallel parking along street
- Restrict parking to off road bays
- Retain existing trees where possible
- Provide new locations for additional vegetation
- Opportunity to improve overall street aesthetics



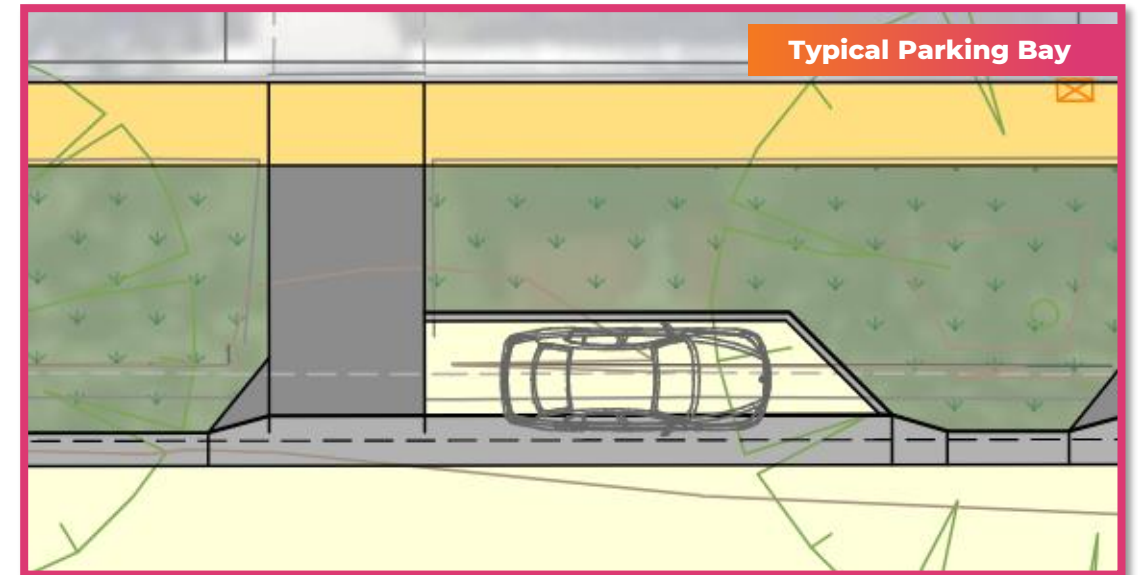
Design Objectives

- Improve the street for residents and road users
- Improve the aesthetics of the street by means of treescape, footpath and kerb renewals
- Removing the safety risk associated with limited width between parked vehicles by means of designated indented parallel parking
- Improved stormwater drainage
- Improved full-strength sealed road pavement to improve existing conditions and minimize future maintenance requirements



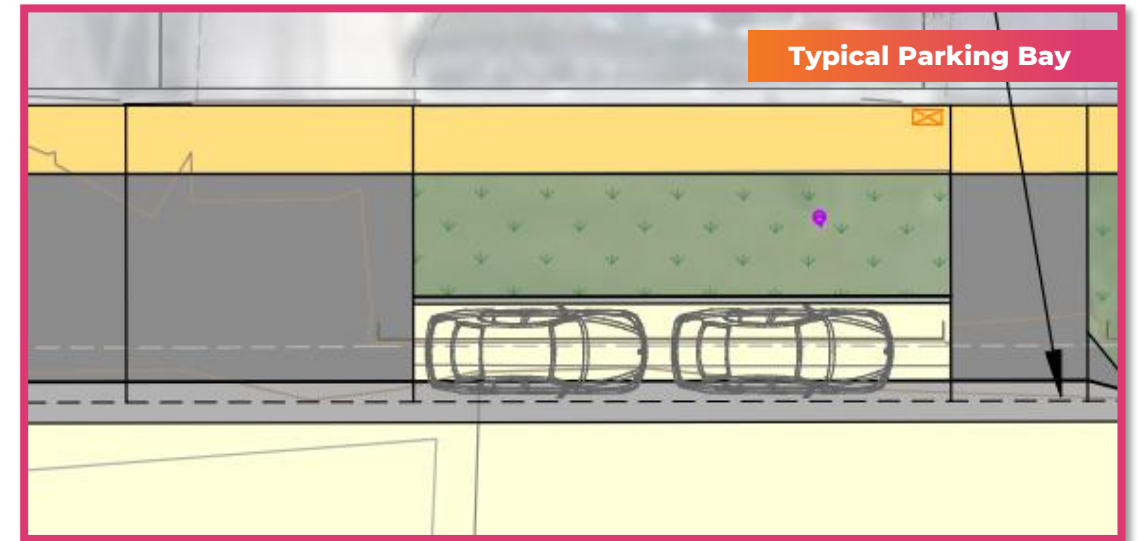
Typical Indented Parking Bay

- Provide one (1) parking bay per property street frontage (where feasible)
- Concrete spoon drain/kerb divides road and parking bay
- Proposed parking bay widths and lengths exceed Australian Standards
- Additional length provided in parking bays that abut 'single width' vehicle crossings
- Dual width vehicle crossing do not include additional length



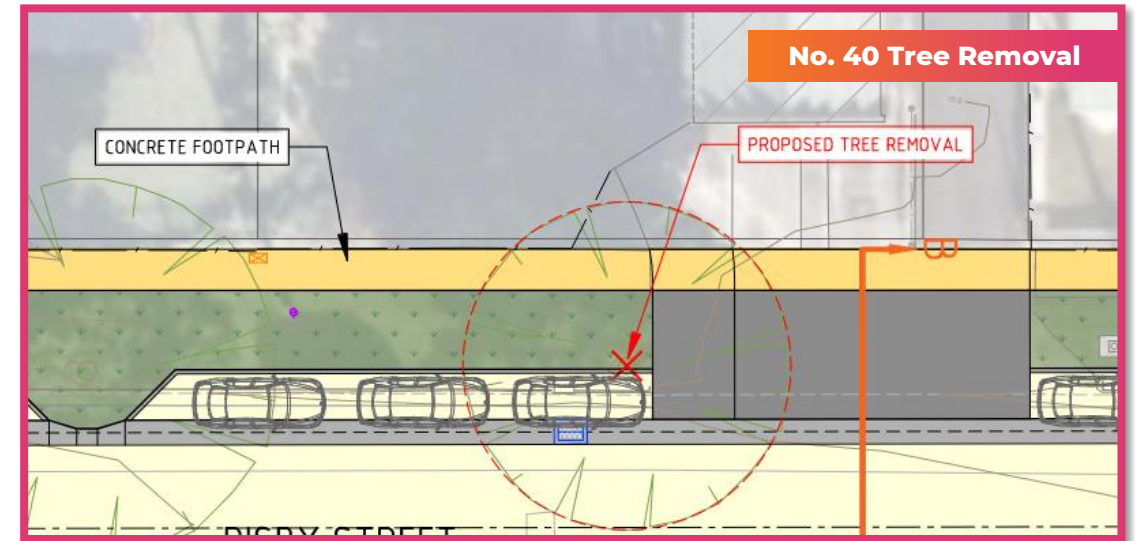
Typical Indented Parking Bay

- Provide one (1) parking bay per property street frontage (where feasible)
- Concrete spoon drain/kerb divides road and parking bay
- Proposed parking bay widths and lengths exceed Australian Standards
- Additional length provided in parking bays that abut 'single width' vehicle crossings
- Dual width vehicle crossing do not include additional length



Proposed Tree/Vegetation Removal

- Two (2) trees within the road reserve are proposed for removal as part of this design
- One (1) located outside No. 40 of Risby Street due to its close proximity to existing underground drainage infrastructure and ability to achieve another car space
- One (1) located outside No. 18 of Risby Street due to its close proximity to the existing vehicle crossing and ability to achieve another car space
- Six (6) planting locations for new trees and vegetation have been proposed in the design



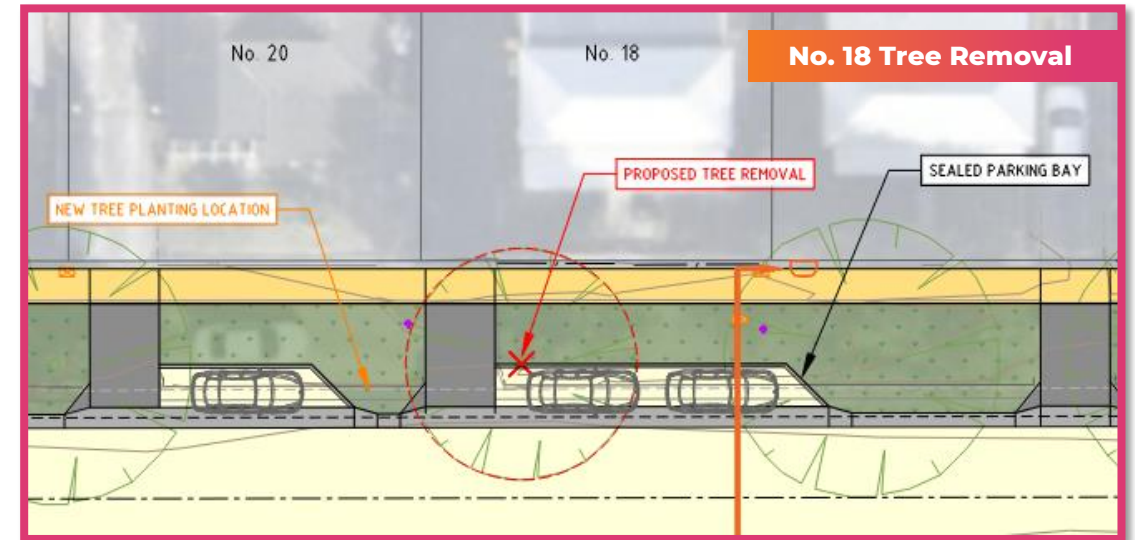
Proposed Tree/Vegetation Removal

- Two (2) trees within the road reserve are proposed for removal as part of this design
- One (1) located outside No. 40 of Risby Street due to its close proximity to existing underground drainage infrastructure and ability to achieve another car space
- One (1) located outside No. 18 of Risby Street due to its close proximity to the existing vehicle crossing and ability to achieve another car space
- Six (6) planting locations for new trees and vegetation have been proposed in the design



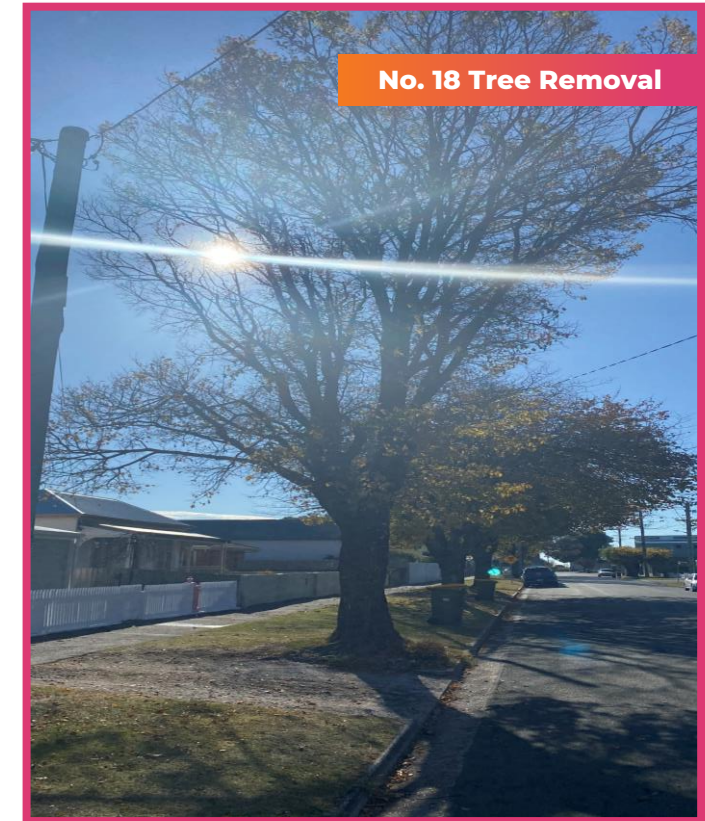
Proposed Tree/Vegetation Removal

- Two (2) trees within the road reserve are proposed for removal as part of this design
- One (1) located outside No. 40 of Risby Street due to its close proximity to existing underground drainage infrastructure and ability to achieve another car space
- One (1) located outside No. 18 of Risby Street due to its close proximity to the existing vehicle crossing and ability to achieve another car space
- Six (6) planting locations for new trees and vegetation have been proposed in the design

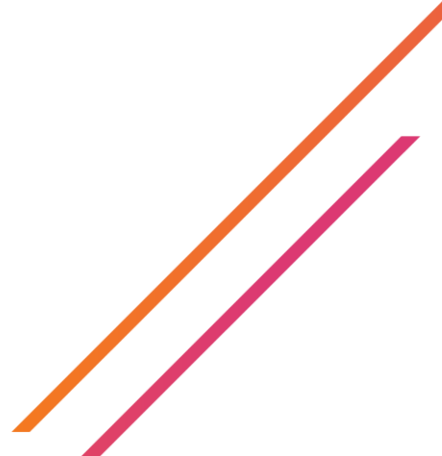


Proposed Tree/Vegetation Removal

- Two (2) trees within the road reserve are proposed for removal as part of this design
- One (1) located outside No. 40 of Risby Street due to its close proximity to existing underground drainage infrastructure and ability to achieve another car space
- One (1) located outside No. 18 of Risby Street due to its close proximity to the existing vehicle crossing and ability to achieve another car space
- Six (6) planting locations for new trees and vegetation have been proposed in the design



Community Plans





CENTRAL COAST
COUNCIL

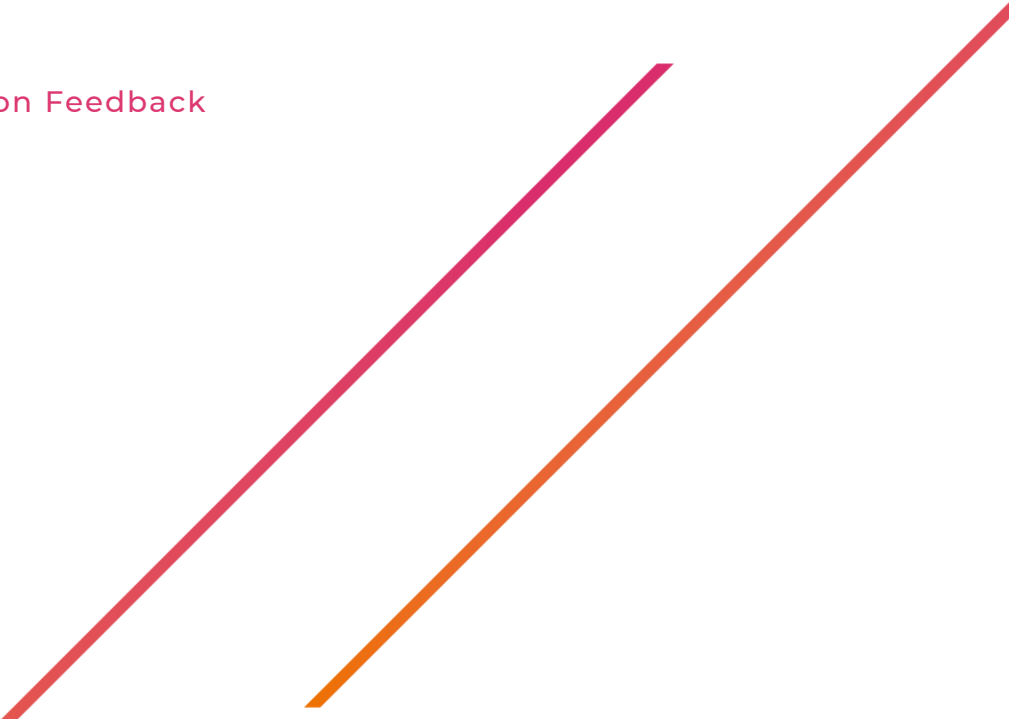


ENGINEERING



Appendix D

Community Consultation Feedback



COMMUNITY CONSULTATION FEEDBACK - RISBY STREET, ULVERSTONE

RESIDENT DETAILS				Comments
Name	Address	Email	Phone	
				Removal of Trees - Replace with Native Trees that will fit under power lines
				Where to put bins?
				Instead of grass - can we put native garden on nature strip?
				As Above / Remove Tree (FMG NOTE: Above comment reflects tree removal, where to put bins and request for native garden instead of topsoil and seed reinstatement)
				As Above / Remove Trees (FMG NOTE: Above comment reflects tree removal, where to put bins and request for native garden instead of topsoil and seed reinstatement)
				Straighten Driveway of No. 25
				Looks great overall! Good to see the tree taken as it is a safety issue on the footpath.
				We do have concerns with patients coming to the clinic with very limited mobility during construction - so would like to discuss how this will be managed. And also confirm the house driveway angle is accessable with parking.
				Our tree rootball is currently more than 1/2 meter out of the ground causing great concerns for us, with the question will it fall over.
				PLEASE, PLEASE remove our current tree and plant a more suitable native along one side of our nature strip so we can have car parking in front of our house.
				Please be aware a new smooth road surface will be a race track for local hoons and with no police pressence after dark it will be their paradise.
				Trees (retain)
				Remove Trees + Replace with Native (Just had solar added + I am losing full sun at 2:30pm)
				Nowhere to place Garbage Bins
				Please consider removing nature strip between 33 + 33A as my driveway is slightly angled to come at
				Remove all trees and replace with limited (uepout - unknown) trees
				Remove grassed area south of No. 3 please make concrete & merge 1 & 3 no grass
				Driveway to be combined with No. 3 - No Landscaping
				Although not directly affecting No. 1 - agree with consensis of meeting to remove all existing trees & replant in appropriate positions
				Line Marking (No Parking) near intersections
				Rubish Collection (Bins)
				#40 Laneway ?
				Slow down traffic
				Higher / increasing traffic
				One car bay centrally located outside U1/13 Risby St, but preferably <u>yellow line marking</u> .
				Remove existing trees & replace with native trees
				If possible could a layback place in front of No. 8 if my wife takes sick and requires a ambulance the response car park in front No. 8 as cars are in parking area. The ambulance drives striaght into the yard.
				G Lovell called and briefed Abigail re proposed scope of project including questions re:
				1.G Lovell provided a summary of the proposed scope of work.
				2.Meeting attendee's consensus was to remove existing trees and replace with a more suitable (smaller) species. Abigail initially thought the trees should stay but accepted that they are quite old and generally not in good health.
				Accepted that they could be replaced.
				3.When will it start? No commitment as yet , depends on Council and budget.
				4.Impacts during construction? Local access to properties would be expected to be provided but there would be disruption, particularly rebuilding footpaths and driveways in concrete.
				5.No individual charge / cost to the residents
				6.Referred Alison to the link to drawings provided on the Flyer (she is in Hobart and was not able to attend the Community Consultation Session).



ENGINEERING

ADELAIDE

67 Greenhill Rd
Wayville SA 5034
Ph: 08 8132 6600

MELBOURNE

2 Domville Ave
Hawthorn VIC 3122
Ph: 03 9815 7600

SYDNEY

Suite 28, 38 Ricketty St
Mascot NSW 2020
Ph: 1300 975 878

ABN: 58 083 071 185