Advertising Sign Review

Mountain Ridge Road

Date	24th July 2026	Project Number	P0055018
Client	Frasers Property	Prepared By	Brendan Chui
Project	Round Mountain Advertising Sign	Reviewed By	Alice Shi

Introduction

Overview

Urbis (Transport Advisory) has been engaged by Frasers Property (Client) to provide a traffic safety review of a proposed advertising sign near the Teviot Road / Mountain Ridge Road intersection in South Maclean.

The purpose of this report is to document the traffic and safety assessment of the proposed sign with reference to the key safety requirements for both motorists, pedestrians and cyclists from the following documents:

- Logan City Council (LCC) Advertising Device Code.

Proposed Signage

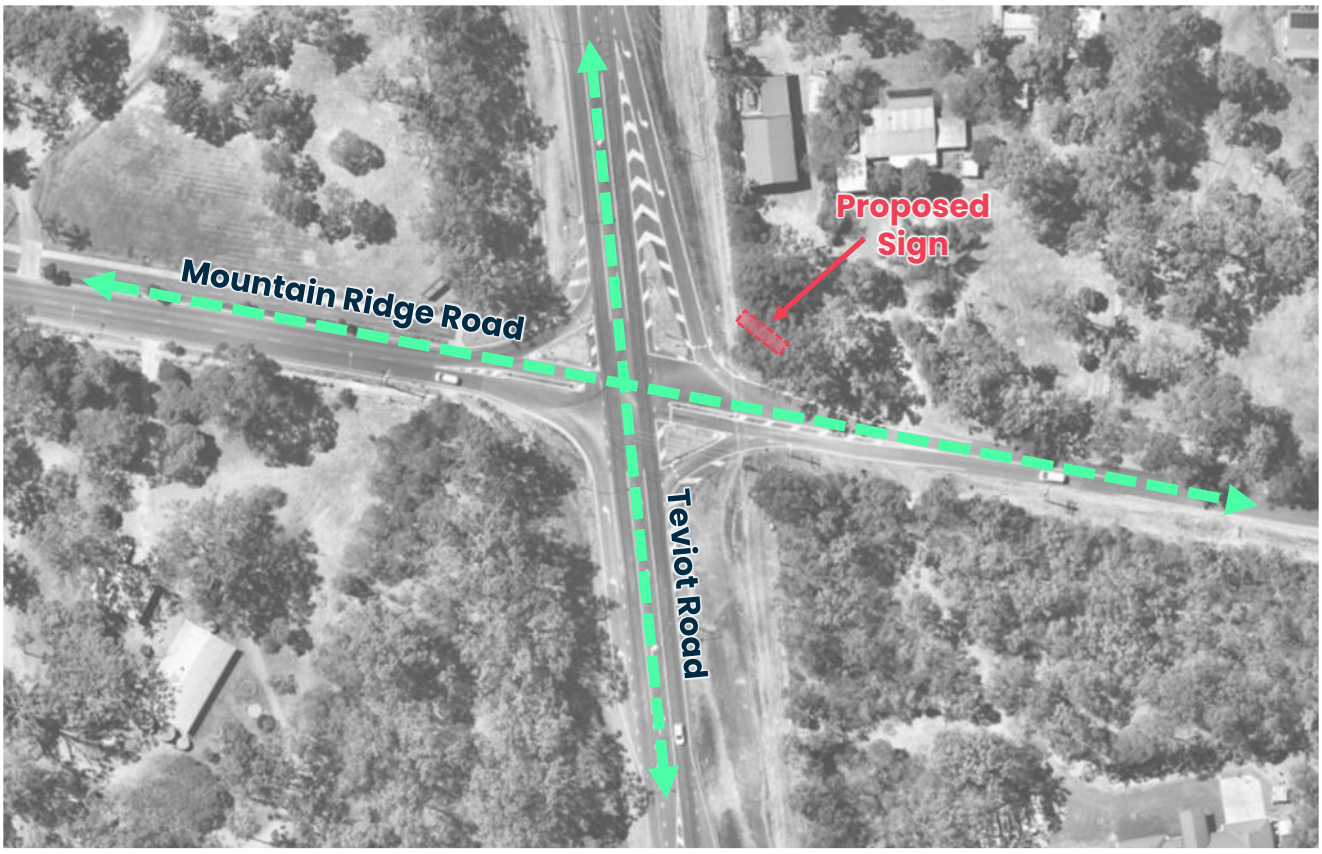
The proposed sign is located at the northeast corner of the Teviot Road / Mountain Ridge Road intersection, as indicated on Figure 1. The key characteristics of the proposed sign are summarised in Table 2.

Table 1. Proposed Sign Details

Sign Aspect	Proposed Details
Dimensions	6.1m × 3.0m
Area	18.3m²
Sign type	Static
Configuration	Single-sided and freestanding
Orientation	Face orientation southwest
Viewed Approaches	Facing northbound traffic on Teviot Road and eastbound traffic on Mountain Ridge Road
Overall height / clearance	Approximately 5.0 m overall, lower edge approximately 2.0 m above ground

The sign location and the surrounding road network is shown in Figure 1.

Figure 1. Proposed Sign Location



Source: Nearmap

Existing Condition

Surrounding Road Network

A summary of the surrounding road network characteristics is provided in Table 2.

Table 2. Road Environment

Road Name	Authority	Road Hierarchy	Cross Section	Posted Speed Limit
Teviot Road	Council	Rural Arterial Single Carriageway	Two-Four lanes, undivided,	80km/h
Mountain Ridge Road	Council	District Road	Two lanes, undivided,	60km/h

Site Inspection

A drive-through site inspection was completed on 17 July 2026. The following available sight distances to the proposed sign location were confirmed:

- Southern Approach, Teviot Road: approximately 190m.
- Western Approach, Mountain Ridge Road: approximately 150m.

Additionally, the inspection confirmed that the proposed sign would not physically obscure any existing traffic-control devices. Figure 2 illustrates how the proposed sign would present to the drivers on each approach to the intersection based on the site inspection photos.

Figure 2. Available Sight Distance to Proposed Sign

Source: Nearmap

Two existing static advertising signs are located at the northwest and southeast corners of the Teviot Road / Mountain Ridge Road intersection. These two signs are understood not to have Council approval at this stage. As such, the two existing signs will be excluded from the following review.

Sign Assessment Against Council's Advertising Device Code

Table 3 details the relevant requirements noted in Council 's Advertising Device Code.

Table 3. PO1 / AO1 of Council's Advertising Device Code

Performance Outcomes	Acceptable Outcomes
PO1 An advertising device is designed and located: a. to be compatible and visually integrate with the built form and streetscape; b. to be safe for pedestrians, cyclists and vehicular traffic; c. c. to not cause a distraction to road users or light nuisance to residents.	**AO1.4** An advertising device: a. is not animated and does not rotate or flash; b. that is illuminated or contains an electronic display: i. does not contain scrolling, moving images or moving text; ii. does not obscure traffic signals, directional, regulatory or advisory road signage; iii. is not located to create an obstruction to a road user's clear line of vision to other road users; iv. is not located within 50 metres of: A. a school zone; B. an intersection; C. an unsignalised pedestrian crossing; D. a roundabout; v. displays a message for a minimum display dwell time of 30 seconds;

Performance Outcomes	Acceptable Outcomes
	vi. vi. ensures message changes are instantaneous (within 0.5 seconds); vii. has luminous levels consistent with Table 9.4.1.3.5 - Luminance levels

The proposed sign is static, non-illuminated and would not rotate, flash or display animated content. On this basis, the proposal complies with AO1.4(a) and as the sign will not be illuminated or have an electronic display, AO1.4(b) is not applicable to the proposal.

Notwithstanding compliance with AO1.4(a), a first principles traffic safety assessment has been undertaken to address PO1(b) and PO1(c) to demonstrate the suitability of the proposed sign.

First Principles Assessment

Sign Location

The sign is located in proximity to the Teviot Road / Mountain Ridge Road intersection. The following key points are noted regarding location of the sign:

- The Teviot Road / Mountain Ridge Road intersection is a four way priority-controlled intersection.
- At the southern approach (Teviot Road):
  - Teviot Road provides a through lane and two turning lanes as follows:
    - 50m deceleration lane for left turn.
    - 80m deceleration lane for right turn.
  - The provision of dedicated turning lanes allows turning vehicles to decelerate and queue clear of the through traffic lane. This reduces the likelihood of through vehicles being required to slow or stop behind a turning vehicle and therefore reduces the potential for rear-end conflicts.
  - The maximum sight distance to the sign is approximately 190m which provides approximately 8-9s at the posted speed limit for the driver to view the sign. This duration is considered sufficient for drivers to briefly view the sign (guidance states 3 seconds of travel time required for drivers to read the sign) with the remaining 5-6 seconds on approach to the sign to observe on-road conditions and undertake any necessary driving tasks.
- At the western approach (Mountain Ridge Road):
  - Mountain Ridge Road forms a minor road approach and provides a high-angle slip lane for the left-turn movements.
  - The slip lane separates left-turning vehicles from other approach movements and allows these vehicles to undertake the turn within a dedicated lane. This reduces the likelihood of a turning vehicle obstructing other traffic or creating an unexpected stationary vehicle within the general traffic lane.
  - The maximum sight distance to the sign is approximately 160m which provides approximately 9-10s at the posted speed limited for the driver to view the sign. This duration is considered sufficient for drivers to briefly view the sign (guidance states 3 seconds of travel time required for drivers to read the sign) with the remaining 6-7 seconds on approach to the sign to observe on-road conditions and undertake any necessary driving tasks.
- The site inspection indicates that the proposed sign would appear within the forward field of view before drivers reach the intersection decision point.

Based on the above assessment, there is sufficient visibility to the sign from both approach directions to allow time for drivers to view the sign and focus ahead on road conditions. Therefore, the sign's location is considered appropriate.

Sign Characteristics

The following characteristics are proposed for the sign:

- The proposed sign is static and will not contain any digital content which reduces the potential for distraction risk.
- The proposed sign will not be lit and therefore, will not be visible in the evening.
- The proposed sign will not physically obscure any relevant line marking or intersection priority control signage in both directions.

Based on the above assessment, the distraction risk associated with the proposed sign is considered low. Therefore, the sign is unlikely to introduce any significant additional traffic safety risk to the surrounding road network.

Crash Review

A review of the latest Department of Transport and Main Roads (TMR) crash data for the most recent five year period between 1st July 2020 to 30th June 2025 outlined 6 crashes occurred in the surrounding road network. The locations of the crash are illustrated on Figure 3 and detailed in Table 4.

Figure 3. Crash Locations

Source: TMR

Table 4. Relevant Crash Data

Crash ID	TMR Ref #	Severity	Date / time	Conditions	DCA	Key Approach Direction
A	164747	Hospitalisation	Apr 2021, Sun 12:00	Dry / clear / daylight	708 / off-path hit traffic island	N
B	384592	Medical Treatment	Feb 2024, Fri 08:00	Dry / clear / daylight	104 / adjacent thru–right	S
C	207812	Hospitalisation	Jul 2024, Mon 07:00	Wet / clear / daylight	202 / opposing thru–right	S

Crash ID	TMR Ref #	Severity	Date / time	Conditions	DCA	Key Approach Direction
D	97950	Medical Treatment	Jun 2025, Wed 09:00	Dry / clear / daylight	202 / opposing thru–right	E
E	336012	Hospitalisation	Nov 2023, Thu 18:00	Wet / rain / lighted - darkness	202 / opposing thru–right	S
F	327426	Medical Treatment	Mar 2021, Sat 04:00	Dry / clear / lighted - darkness	704 / right off-road hit object	N

Based on the above, five of the six crashes occurred at the intersection. There were no fatalities recorded. The crash history included:

- Two single-vehicle off-path crashes (**Crashes A and F**).
- Four through-right crashes (**Cashes B, C, D and E**).

Further review of these crashes is provided below:

- **Crashes A and F** These crashes do not form part of the identified intersection turning-conflict pattern. However, as both were single-vehicle off-path crashes, they remain potentially relevant to the proposed sign.
- **Crash B**: Involved a through vehicle travelling southbound on Teviot Road and a vehicle turning right from Mountain Ridge Road. Both vehicles were not travelling in the direction of where the proposed sign is facing. Therefore, this crash is considered irrelevant.
- **Crash D**: involved a through vehicle travelling eastbound on Mountain Ridge Road and a vehicle turning right from the opposing Mountain Ridge Road approach. This occurred on an approach which would be able to view the proposed sign. The crash resulted in medical treatment.
- **Crashes C and E**: Involved a through vehicle travelling northbound on Teviot Road and a vehicle turning right from the opposing Teviot Road approach. Both crashes occurred under wet or rainy conditions, resulting in hospitalisation. While these crashes occurred on an approach which would be able to view the proposed sign, road surface and weather conditions are considered the most likely contributing factors. The proposed sign is unlikely to materially influence the recurrence of this crash type.

In summary, three crashes (**crashes A, D and F**) were identified as potentially relevant to the proposed sign during the five-year period, including one FSI (hospitalisation) crash. This number of potentially relevant crashes of differing natures does not indicate a crash trend or high crash concentration. There is no clear evidence that distraction is a cause of crashes at the intersection.

Additionally, the proposed sign would be static and would not contain digital, animated, flashing or changing content. Accordingly, it is not expected to significantly increase distraction risk.

On this basis, the proposed static sign is not expected to materially increase the existing crash risk within the surrounding road network.

Sign Spacing

Based on the site inspection and corridor review, no other approved advertising signs were identified within 200m of the proposed sign along Teviot Road or Mountain Ridge Road. As such, the proposed sign location is considered appropriate regarding to sign spacing.

Advance Visibility

A minimum continuous visibility time of three seconds is generally adopted to allow drivers to view a sign without requiring prolonged attention away from the driving task. Based on the posted speed limits, minimum continuous visibility distances of approximately 67m and 50m are required for Teviot Road and Mountain Ridge Road, respectively.

The site inspection confirmed approximately 190m of available continuous visibility from Teviot Road and 150m from Mountain Ridge Road. These distances exceed the respective minimum requirements. Accordingly, the proposed sign is considered to provide sufficient advance visibility from both approaches.

Visual Proximity

Based on the site inspection, the proposed sign would not obstruct or interfere with drivers' sightlines to traffic control devices, including regulatory, warning and directional signs. As such, the proposed sign is not expected to create any distraction or confusion risk associated with its visual proximity to traffic-control devices.

Active Transport

No dedicated cycle lanes or pedestrian paths are provided along Teviot Road in the vicinity of the proposed sign.

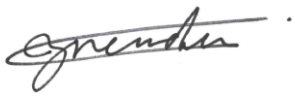
Pedestrian paths are provided on both sides of the western approach of Mountain Ridge Road in addition to a two way cycle track. No footpaths are provided on the eastern approach of Mountain Ridge Road.

The proposed sign would be located clear of these paths and would not obstruct pedestrian movements. The crossing location (approximately 30m back from the intersection on the western Mountain Ridge Road approach) is not within the pedestrian line of sight of the proposed sign. As such, the proposed sign is not expected to result in a material pedestrian or cyclist safety risk.

Conclusion

Based on our assessment, the proposed sign to be located at the north-eastern corner of the Teviot Road / Mountain Ridge Road intersection complies with Council's Advertising Device Code AO1.4. Based upon review of the crash history, site inspection observations and proposed sign location and characteristics, it is not expected to cause a distraction risk to road users. Of note, the proposed sign will be static and not contain any digital content.

Therefore, the proposed sign would not present a significant safety risk to pedestrians, cyclists and vehicular traffic.



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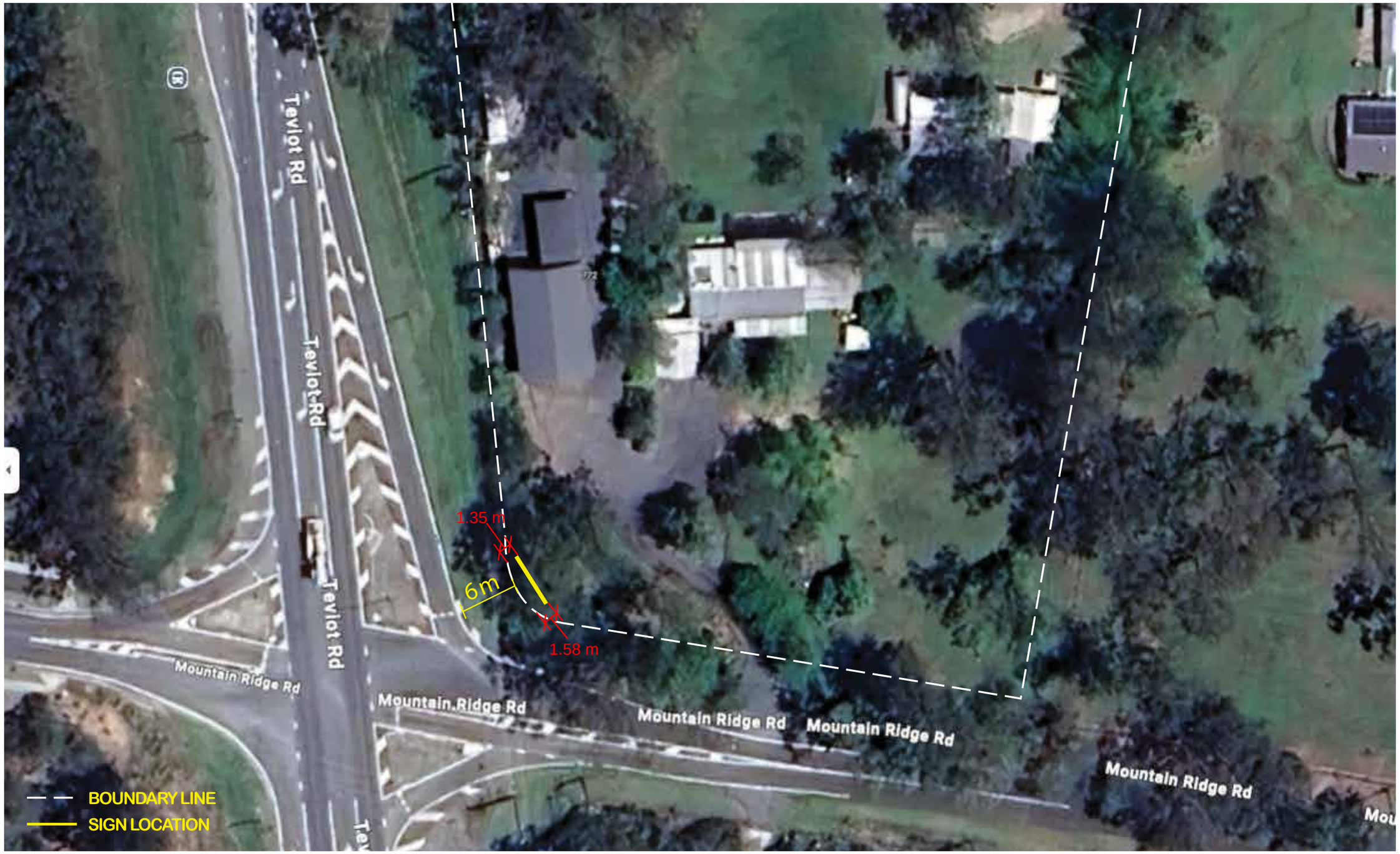
Appendix A – Proposed Sign Details



Client FRASERS
Project ROUND MOUNTAIN
Date 22/07/2026

Proposed 6x3m Billboard Site:
75 Mountain Ridge Road,
South Maclean.

Issue	03
Drawn	CB
Checked	SH
Page	1 OF 4

Revisions

Date	Description	Issue
09/12/2025	First Issue	01
16/07/2026	Second Issue	02
22/07/2026	Third Issue	03

Drawing No.
CB_160726a

SUNSET signs
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ABN 31 151 349 209

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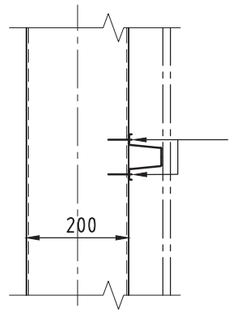
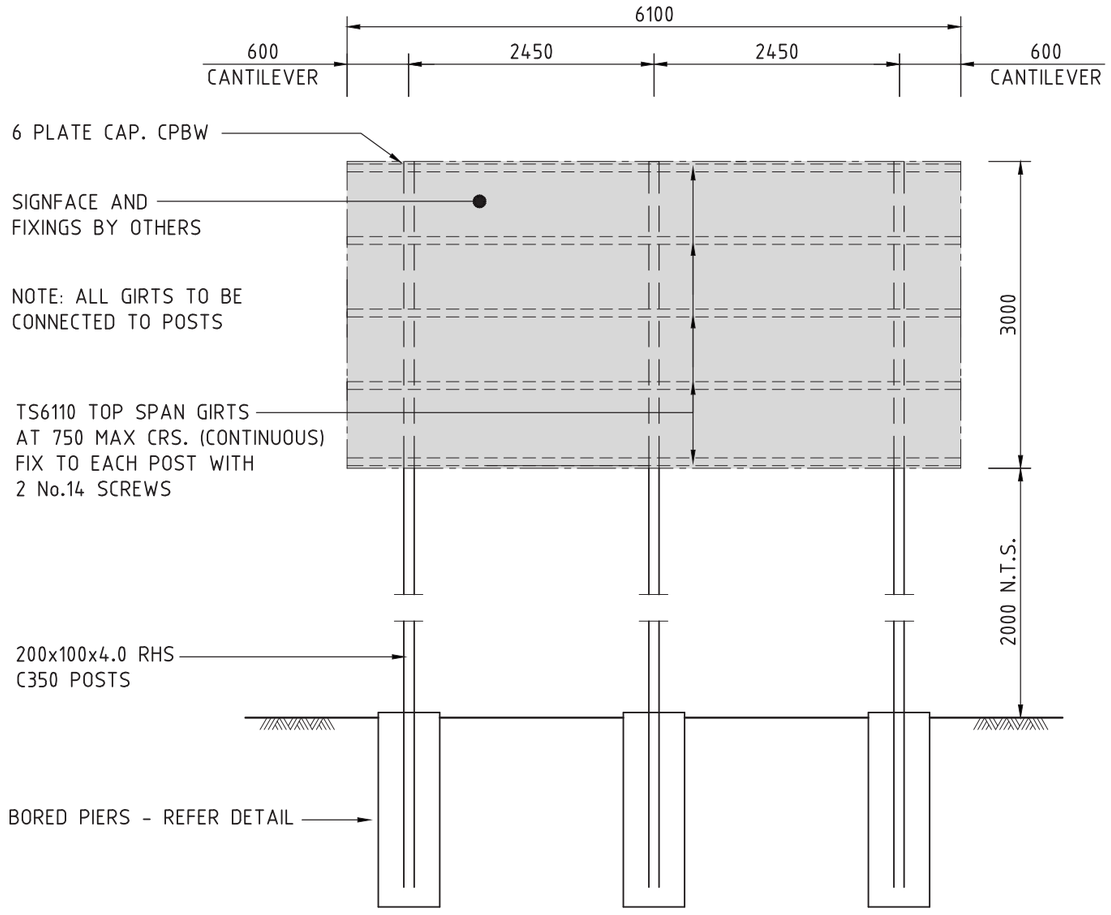


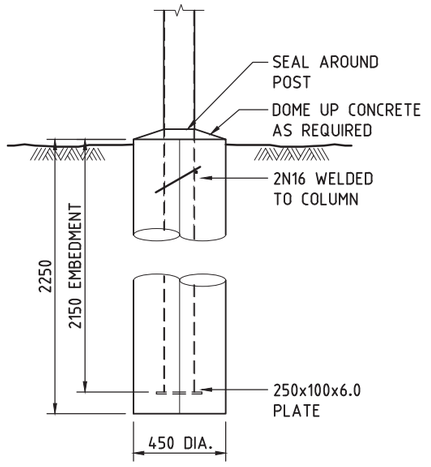
TYPICAL GIRT FIXING

SCALE 1:10



SIGN FRONT ELEVATION

SCALE 1:50



FOOTING DETAIL

SCALE 1:20

STRUCTURAL STEELWORK

1. FABRICATE AND ERECT ALL STRUCTURAL STEELWORK IN ACCORDANCE WITH AS 1554, AS 4100 AND AS 1252.
2. VARIFY ALL SETTING OUT DIMENSIONS FROM THE ARCHITECTURAL DRAWINGS.
3. DO NOT OBTAIN DIMENSIONS BY SCALING THE STRUCTURAL ELEMENTS.
4. UNLESS OTHERWISE NOTED USE - 10 mm THICK GUSSET, FIN AND END PLATES. M16 8.8/S BOLTS , ALL HOT DIP GALV. BOLTS SO MARKED MAY BE 8.8/TF 6mm CONTINUOUS FILLET WELD MADE WITH E 48 xx MILD STEEL ELECTRODES.
5. CPBW DENOTES COMPLETE PENETRATING BUTT WELD
   CFW DENOTES CONTINUOUS FILLET WELD
   ALL WELDS CATEGORY STRUCTURAL PURPOSE (SP) UNLESS NOTED OTHERWISE.
6. PROVIDE TEMPORARY BRACING AS TO STABILISE THE STRUCTURE.
7. CORROSION PROTECTION AND SURFACE FINISH IS TO BE AS AGREED WITH OWNER.
   - TOUCH UP AFTER ERECTION TYPICAL.
8. IF IN DOUBT ASK.

COLD FORMED SECTIONS

1. COLD FORMED SECTIONS SHALL COMPLY WITH AS 1397, AS 4600, AS 1594 AND AS 1595
2. MILD STEEL YIELD STRESSES:
   PURLINS AND GIRTS - 450 MPa
   OTHER SECTIONS - 250MPa
3. ALL SECTIONS UP TO 250mm IN DEPTH SHALL HAVE A MINIMUM HOT DIPPED ZINC COATING THICKNESS OF 275gms/sq.m AND SECTIONS OF GREATER DEPTH A MINIMUM COATING THICKNESS OF 450gms/sq.m.
4. ALL LAPS AND BRIDGING TO PURLINS AND GIRTS SHALL BE IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS.

NOTE:
FOOTINGS DESIGNED TO FOUND INTO SOUND NATURAL GROUND HAVING A MINIMUM ALLOWABLE BEARING CAPACITY OF 100kPa. CONFIRM ON SITE

DESIGN LOADS

WIND - REG. B - TC3
DESIGN WORKING LIFE - 5 YEARS
IMPORTANCE LEVEL 1

FOOTING DESIGN

FOOTING DESIGN TO FOUND INTO SOUND NATURAL MATERIAL HAVING A MINIMUM ALLOWABLE BEARING PRESSURE OF 100KPa. CONFIRM ON SITE.

GENERAL

1. CARRY OUT ALL WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE RELEVANT SAA CODES.
2. VERIFY ALL SETTING OUT DIMENSIONS WITH THE ARCHITECT OR DESIGNER.
3. DO NOT OBTAIN DIMENSIONS BY SCALING THE STRUCTURAL ELEMENTS.
4. IN CASE OF DOUBT - ASK.

CONCRETE

1. ALL CONCRETE WORK IS TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF AS 3600.
2. PARTICULAR ATTENTION IS TO BE PAID TO THE CURING OF EXPOSED CONCRETE.
3. ALL CONCRETE IS TO BE VIBRATED.
4. SAMPLE AND TEST CONCRETE IN ACCORDANCE WITH AS 3600.
5. CONCRETE STRENGTHS TO BE AS LISTED BELOW.-
   FOOTINGS - 25MPa
6. SLUMP 70mm - MAX. AGGREGATE 20 mm.

REINFORCEMENT

1. FIX REINFORCEMENT AS SHOWN ON DRAWINGS. THE TYPE AND GRADE ARE INDICATED BY SYMBOLS SHOW BELOW FOLLOWED BY A NUMBER DENOTING THE BAR DIAMETER IN mm -
   N - DENOTES 500N BAR TO AS 4671
   S - DENOTES STRUCTURAL GRADE DEFORMED BAR
   R - DENOTES STRUCTURAL GRADE PLAIN ROUND BAR
   SL - DENOTES HARD DRAWN WIRE FABRIC.
2. LAPS IN REINFORCEMENT TO BE FULL TENSION LAPS EXCEPT AS OTHERWISE NOTED.
3. REINFORCEMENT TO BE ADEQUATELY CHAIRED TO MAINTAIN SPECIFIED COVERS - MAXIMUM CHAIR SPACING TO BE 800 mm. PROVIDE ADDITIONAL SUPPORT BARS IF NECESSARY TO MAINTAIN COVERS.
4. SUPPORT BARROW RUNS AND PUMP LINES CLEAR OF REINFORCEMENT.
5. UNLESS NOTED OTHERWISE ON DRAWINGS, CONCRETE COVER TO REINFORCEMENT TO BE AS LISTED BELOW:
   FOOTINGS - 50mm MIN. ALL ROUND

Rev.		
-	-	-

Client: **SUNSET SIGNS**

Project: **75 MOUNTAIN RIDGE ROAD, SOUTH MACLEAN**

Subject: **SIGN FRAME AND FOOTING DETAIL**

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Date	Design	Drawn	Checked
Aug-25	L.O	K.K	LAURENCE OAR BEng (Hons) MIEAust CPEng NER IntPE (Aus)
Job No. 25-384		Scale A3	RPEQ 2011
DRG. No. S01	Reg No.	Rev.	

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