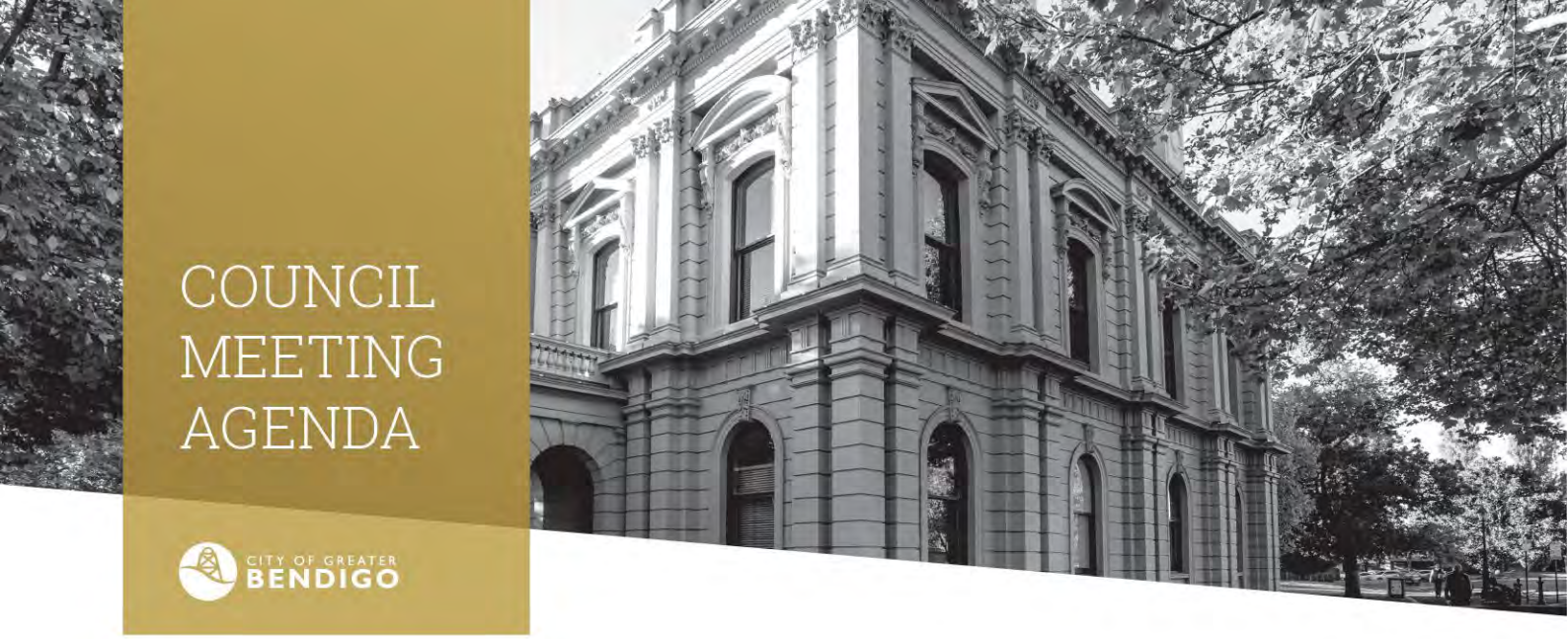


COUNCIL MEETING AGENDA

CITY OF GREATER BENDIGO

6:00 pm on Monday July 22, 2024

Location: Bendigo Bank Theatre, The Capital – 50 View Street Bendigo.

Livestreaming at https://www.bendigo.vic.gov.au/about-us/council/council-meetings#live-stream
Broadcast live on Phoenix FM 106.7

If you would like to attend, please register your interest through the following link:
https://www.bendigo.vic.gov.au/about-us/council/council-meetings#register-attend-meeting
or call the box office on 5434 6100 no later than 5pm on the day of the meeting.

Copies of the City of Greater Bendigo Council's Agendas & Minutes
can be obtained online at https://www.bendigo.vic.gov.au/about-us/council/council-meetings





COMMUNITY VISION 2021–2031

Greater Bendigo celebrates our diverse community.
We are welcoming, sustainable and prosperous.
Walking hand-in-hand with the Traditional custodians of this land.
Building on our rich heritage for a bright and happy future.

The community vision is underpinned by five values –
Transparency, sustainability, inclusion, innovation and equity.

COUNCIL PLAN (MIR WIMBUL) – OUTCOMES

The Council Plan (Mir wimbul) is based on seven outcomes, which are the main focus of the Council Plan.

Each outcome has a set of goals, objectives and actions that will help to achieve the community vision, and indicators to measure achievement against each goal:

1. Lead and govern for all
2. Healthy, liveable spaces and places
3. Strong, inclusive and sustainable economy
4. Aboriginal reconciliation
5. A climate-resilient built and natural environment
6. A vibrant, creative community
7. A safe, welcoming and fair community

STAFF VALUES AND BEHAVIOURS

The City of Greater Bendigo's values and behaviours describe how Councillors and staff will work together to be the best we can for our community.

They are aligned to our strategic documents, such as the Council Plan, which ensure they are meaningful for Council and the organisation.

A shared commitment to living our values and behaviours will help us to build the type of culture we need to be able to work together and support each other to deliver the best possible outcomes for the community.



This Council Meeting is conducted in accordance with the

- Local Government Act 2020
- Governance Rules

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1. ACKNOWLEDGEMENT OF COUNTRY

2. TRADITIONAL LANGUAGE STATEMENT

3. OPENING STATEMENT

4. MOMENT OF SILENT REFLECTION

5. ATTENDANCE AND APOLOGIES

6. LEAVE OF ABSENCE

RECOMMENDED MOTION

That a Leave of Absence be granted for Cr Greg Penna for the August 26, 2024 Council Meeting.

7. SUSPENSION OF STANDING ORDERS

RECOMMENDED MOTION

That Standing Orders be suspended to allow the conduct of the Community Recognition Section and Public Question Time.

8. COMMUNITY RECOGNITION

9. PUBLIC QUESTION TIME

Council allows up to 30 minutes for question time on any matter except for planning items that are on the agenda tonight or anything that is defamatory, otherwise inappropriate or outside the scope of Council.

Question time is also not to be used as a platform for campaigning by prospective council candidates.

If your question is about routine or operational Council requests, you should instead make a request through our Customer Request system.

Pre registering questions is recommended as this provides more time for a more detailed response to be provided to you at question time. Pre registered questions will also be given priority in accordance with the Governance rules. If a question is asked on the night and we don't have the answer immediately available we may need to take it on notice, please ensure you leave your contact details with the Governance officer so a response can be provided to you.

Regardless, any member of the community may ask a question in person. The preferred format is to state your name, suburb and briefly identify your topic (ie

parking or Lake Weeroona Playspace, etc). Then, without preamble or statements, please ask one relevant question only.

To ensure fairness, given time constraints, only one question per community member will be accepted each month, inclusive of pre-registered questions, and questions on the night.

Public Question time is only one of many ways the community is able to communicate with Council, other options include:

- Customer Request system
- Let's Talk Greater Bendigo
- Feedback and complaints process
- Petitions and joint letters
- Invitations to the Mayor (and other Councillors)
- Presentations to Councillors
- Councillor Ward Engagements events, generally held monthly
- Councillor attendance at many and varied events across the Municipality and over the year
- Councillor committee membership
- Various methods of contacting the City and individual Councillors

Public Question Time is not a requirement of Council under the Local Government Act. This Council has provides for Public Question Time in the Governance Rules adopted by the Council to ensure greater public transparency and accountability. The Council asks that the opportunity to ask a question of the Council in this forum is treated respectfully and within these rules.

10. RESUMPTION OF STANDING ORDERS

RECOMMENDED MOTION

That Standing Orders be resumed.

11. CR ROD FYFFE OAM - COUNCILLORS' REFLECTIONS

12. DECLARATIONS OF CONFLICT OF INTEREST

Section 130 of the *Local Government Act 2020* (Vic) (**the Act**) provides that a relevant person must disclose a conflict of interest in respect of a matter and exclude themselves from the decision making process in relation to that matter including any discussion or vote on the matter at any Council meeting or delegated committee meeting and any action in relation to that matter.

The procedure for declaring a conflict of interest at a Council Meeting is set out at rule 18.2.4 of the Governance Rules.

Section 126 of the Act sets out that a relevant person (Councillor, member of a delegated Committee or member of Council staff) has a conflict of interest if the relevant person has a **general conflict of interest** or a **material conflict of interest**.

A relevant person has a **general conflict of interest** in a matter if an impartial, fair minded person would consider that the person's private interests could result in that person acting in a manner that is contrary to their public duty.

A relevant person has a **material conflict of interest** in a matter if an *affected person* would gain a benefit or suffer a loss depending on the outcome of the matter.

13. CONFIRMATION OF PREVIOUS MINUTES

RECOMMENDED MOTION

That the Minutes of the Council Meeting held on June 24, 2024, as circulated, be taken as read and confirmed.

Previous minute location:
https://www.bendigo.vic.gov.au/about-us/council/council-meetings#past-meetings

14. PETITIONS AND JOINT LETTERS

14.1. Petition Response - Footpath construction on Simpsons Road, Eaglehawk

Author:	Nathan Sartori, Acting Manager Engineering
Responsible Director:	Brian Westley, Director Presentation and Assets

Purpose

Respond to a community petition requesting that the proposed new footpath on Simpsons Road, Eaglehawk, between Hill Street and Majors Road, be constructed on the southern side of the road as opposed to the northern side as currently designed.

Recommended Motion

That Council:

1. Advise the lead petitioner that it supports the operational rationale and decision made by officers to construct a new footpath along the northern side of Simpsons Road, between Hill Street and Majors Road.

2. Instruct officers to proceed with the construction of the footpath along Simpsons Road between Hill Street and Majors Road in accordance with the current engineering plan GB4924.

Background

Simpsons Road, Eaglehawk (the Road) is a busy collector road which provides connection between the residential areas north/north-east of Eaglehawk to the Eaglehawk town centre. The Road extends approximately 6km between Sailors Gully Road and Wallenjoe Road and abuts several local community facilities such as Lake Neangar, Lake Tom Thumb, Canterbury Park and the Eaglehawk Bowls Club. It provides an important transport conduit for both local residents and the broader community when accessing those locations via vehicle, bicycle or by foot.

The City has historically received several public requests for new footpath construction along the Road with most of it currently having no footpath on either side. Some isolated or non-contiguous sections of footpath have been constructed along the Road by the City or via historical subdivisions within the precinct. A map showing the extent of existing footpaths along the Road is provided in Attachment 1.

Consistent with the City's public infrastructure objectives, extensive footpath construction is required along the Road to achieve a high degree of connectivity between residential and community facilities and provide a comprehensive pathway network to support safe and efficient pedestrian movement within this precinct.

Various sections of footpath along the Road have progressively been listed within the City's rolling program for scoping, prioritisation and consideration during development of future annual Capital Works Programs (CWP).

The identified highest priority section of new footpath construction along the Road is the segment between Hill Street and Majors Road (northern side) (the Footpath). This project subsequently underwent detailed design in 2022 and was identified for funding as part of the City's 2024/25 CWP.

As part of the Footpath design process in 2022, adjacent residents were advised of the project and invited to comment on the draft design. This feedback was subsequently considered by officers when finalising the detailed design (see Attachment 2). Part of this community feedback included a joint letter/petition (the Petition) signed by 16 residents (see Attachment 3), objecting to the Footpath construction in front of their properties and calling for it to be alternatively constructed on the southern side of the Road.

This Petition was received and considered as an objection to the Footpath project in the context of the community consultation process underway at that time, however officers failed to identify that all petitions and joint letters are required to be presented to Council, in accordance with the Greater Bendigo City Council Governance Rules.

Construction work on the Footpath recently commenced, triggering further objections and complaints from the petitioners, that their concerns have not been appropriately addressed or responded to. Accordingly, all works on the Footpath have ceased pending both the joint letter/petition and associated officers report being presented to Council for consideration.

Previous Council decision dates: Council approved the City's 2024/25 Budget at its Ordinary meeting on 27 May 2024, inclusive of the Footpath project.

Report

Historical complaints received by the City with respect to the Road include:

- lack of footpaths
- lack of on-street and off-road parking provisions
- anti-social driver behaviour
- speeding.

Traffic counts for the Road identify use by approximately 1900 Vehicles Per Day (VPD), with 9.9% of those being commercial vehicles. It has a posted speed limit of 50km/hr and a recorded 85th percentile speed of 58.6km/hr, meaning a significant proportion of road users are travelling above the speed limit.

Speeding and antisocial driving behaviour is not uncommon on wide straight roads such as this, and the City liaises with Victoria Police regarding periodic enforcement, as well as implementation of various traffic calming interventions (e.g. speed advisory trailer deployment) where possible, to discourage such behaviour.

Provision of a comprehensive footpath network along the Road is also considered to be a high priority, to support pedestrian safety through appropriate separation from vehicles.
Construction of the Footpath commenced on 26 June 2024, following inclusion of the project within the City's 2024/25 CWP. Shortly thereafter the lead petitioner again made contact with the City to reiterate the petitioners ongoing objection to the Footpath project proceeding on the northern side of the Road in front of their residences, and in the course of this conversation requested that their Petition be presented to Council.

Whilst not opposed to the construction of new footpaths along the Road, it has been confirmed with the lead petitioner that their objection specifically relates to the section of path along the Road on the northern side between Hills Road and Averys Road, and that the grounds of their objection to construction of this segment of pathway is based upon the view that:

- Preference should be given to extending the existing segment of path on the southern side of the Road between Hills Street and Averys Road.
- There will be unreasonable disruption to residential amenity, property access and parking both during and post construction.
- Street trees and gardens within the naturestrip will need to be removed.
- There is a lower density of residences on the southern side of the Road and hence less impact as a result of the Footpath.
- The southern side of the Road offers improved safety for pedestrians due to less vehicle movement in and out of residential properties and a wider roadside area.

Despite not having presented the Petition to Council, the matters raised therein were dealt with at an operational level while finalising the detailed Footpath design. This included acknowledgement and discussion with the lead petitioner, during which officers explained the rationale for why construction of the Footpath on the northern side of the road remained preferable, namely:

1. Road classification / function:

   Evaluation of the Road against the standards outlined within the City's Infrastructure Design Manual (IDM) has identified that ultimately construction of a footpath on both sides of the Road is desirable. This recognises several factors including the Road's function in the context of the local road network (i.e. collector road), observed traffic volumes, carriageway width, and adjacent land uses.

2. Prioritisation of outstanding footpath segments:

   Noting the ultimate desire to construct a footpath on both sides of the Road throughout the primary residential catchment i.e. Sailors Gully Road to Gallway Drive, each incomplete/missing footpath segment has been prioritised within the City's rolling program, using several rating criteria.

   This prioritisation process has identified construction of the path along the northern side of the Road between Hills and Majors Road as the highest priority project, despite their being an existing segment of path on the southern side of the Road between Butts Road and 66A Simpsons Road.

3. Residential connection and Traffic patterns:

   A key rating criterion when prioritising footpath projects is the level of both direct and indirect access efficiency to the path from adjoining residential properties as well as downstream residences within the catchment.

   Within the defined catchment area, the are currently a total of 658 residential properties located north of Road centreline and 90 to the south. By focusing construction efforts on northern pathway segments, this better supports pedestrians and young cyclists filtering out of the residential catchment area, heading south towards the recreation and town centre facilities, whilst minimising required Road crossing movement.

   Construction of the footpath on the northern side of the Road enables direction of pedestrians and young cyclists towards set crossings points at safe and key access locations. These crossing points can be properly constructed and greatly reduce the number of ad hoc crossings of this busy road, which has a history of high commercial vehicle use and speeding.

4. Other links and crossings:

   The Footpath project includes establishment of a crossing over Averys Rd, which is an Over Dimensional vehicle route (assigned route for large trucks) servicing over 5500 VPD.

   The combination of contemporary design standards and recognised pedestrian safety concerns, warrant a pedestrian refuge island being constructed in the middle of Averys Rd to support pedestrian movement across this road.

   An existing refuge island (kerb island) in the middle of Averys Rd has been established approximately 50m south of the intersection with the Road to service the nearby bus stop, however it is likely that pathway users will seek to cross closer to the intersection.

   Establishing a second crossing point in closer proximity to the intersection is neither desirable nor practical given the presence of a right turn lane. Similarly movement across the Road to access a northern crossing over Averys Road can be avoided if the Footpath is constructed on the northern side of the Road.

   The northern Footpath alignment as per the current design, allows for the construction of a secondary pedestrian refuge on the northern side of this intersection.

5. Future footpath works:

   A further segment of footpath construction on the northern side of the Road between Burnside Street and Hill Street is planned for delivery as part of the 2025/26 CWP. Combined with the subject Footpath project, once this segment is constructed, it will complete the entire northern footpath link along the Road from Sailors Gully Road to Majors Road, servicing all the existing residential areas north of the Road.

6. Native Vegetation impacts

   During preparation of the Footpath design the City's biodiversity officer was engaged to assess existing vegetation and provide advice as to their preferred pathway alignment. Several large individual trees, and patches of important vegetation were identified along the southern side of the Road.

The recommendation from the biodiversity officers was therefore that the Footpath should remain on the northern side of the Road to minimise the risk of damage to important native vegetation that warranted protection.

In consideration of the above points, officers have formed the following response to each of the points raised within the Petition.

- *Preference should be given to extending the existing section of path on the southern side of the Road between Hills Street and Averys Road.*

  Officers views are that the northern pathway alignment services a greater catchment of the residential area and offers a safer and more efficient network to capture and direct pedestrian traffic.

- *There will be unreasonable disruption to residential amenity, property access and parking both during and post construction.*

  Construction of the Footpath is expected to take between 8 to 10 weeks, however observed disruption to individual properties will be significantly less than this as contractors progressively construct the path along the entire alignment.

  It is understood that part of this objection relates to the likely disruption to the historical practice of residents parking their vehicles on the naturestrip due to the presence of the footpath. Regardless of the footpath, this practice is a contravention of the City's local law.

- *Street trees and gardens within the naturestrip will need to be removed.*

  Any impact to any street trees or garden beds which encroach into the road reserve is offset by, and in preference to, the risk to native vegetation located on the southern side of the Road.

- *There is a lower density of residences on southern side of Road and hence less impact of the Footpath*.

  Contrary to the petitioner's argument, greater residence density immediately adjacent to the footpath is preferable and attracts a higher rating scope when prioritising footpath projects within the rolling program.

  Where possible the City prioritises footpath construction to service the maximum number of residential properties. Further, beyond those properties immediately adjacent to the Footpath, a larger number of properties exists within the northern catchment from the Road.

- *The southern side of the Road offers improved safety for pedestrians due to less vehicle movement in and out of residential properties and a wider roadside area.*

  Both sides of the road are suitable for construction of a footpath and whilst there may be greater instances of vehicle movements in and out of adjacent properties to the Footpath, any safety concerns related to this is adequately offset through avoidance of pedestrians having undertake additional crossing manoeuvres across this busy road and the ability to configure a pedestrian refuge at Averys Road.

Priority/Importance

Construction of the Footpath has been identified as having a high comparative priority when assessed against all other outstanding footpath projects listed within the City's rolling program. As such, this project has been nominated for delivery as part of the City's 2024/25 CWP.

Options Considered

The detailed engineering design for the Footpath project was completed by the City's Engineering unit in 2022. As part of this process the following options were considered:

1. Construction of footpath along the Road between Hills Street and Majors Road – north side only

2. Construction of footpath along the Road from 66A Simpsons Road to Averys Road on south side with balance of path between Averys Road and Majors Road on northern side.

Ultimately officers confirmed that construction of the entirety of the Footpath on the northern side of the Road was preferable.

Timelines

Design of the Footpath was completed in 2022. Construction of the Footpath commenced in early July 2024 and was expected to be completed within a period of 8 to 10 weeks. Temporary suspension of the works has been affected as of 3 July 2024, pending Council's consideration and response to the Petition.

Communications/Engagement

Properties adjoining and in the immediate vicinity of the proposed Footpath works received letters advising of this project and the pathway concept design in April 2022.

Objections were received from several residents to the Footpath design including the attached Petition. All objectors were contacted in the course of finalising the Footpath design. Conversely, several residents also made contact with the City to express their support and excitement for the Footpath project as presented.

A further letter drop occurred in the week preceding Footpath works commencing on site.

Financial Sustainability

Cost of construction of the Footpath as currently designed is approximately $420,000. Funding for this project has been provided from the $1.2 million new footpath allocation within the 2024/25 Council budget.

A preliminary estimate for construction of a footpath on the southern side of the Road between Hill Street and Averys Road, then transitioning to the northern side between Averys Road and Majors Road, is approximately $340,000.

Risk Assessment

By not continuing with a footpath connection along the northern side of the Road, there is a risk that the City may not be able to expend the full amount of new footpath funding provided within the 24/25 CWP.

Funding may need to be redirected to another footpath project pending resolution of further design work.

Policy Context

Primary Council Plan Reference

City of Greater Bendigo Council Plan *Mir wimbul* 2021-2025
Outcome 1 - Lead and govern for all
Outcome 2 - Healthy, liveable spaces and places

Secondary Council Plan Reference(s)

Goal 1 - Accountable, financially responsible, equitable, transparent decision making
Goal 3 - Everyday walking and cycling is easier for all ages and abilities.

Other Reference(s)

Greater Bendigo City Council Governance Rules
City of Greater Bendigo Budget 2024/2025

Conflict of Interest

No officer involved in the preparation or approval of this report declared a general or material conflict of interest.

Attachments

1. Attachment 1 - Footpath Network Simpsons Road [**14.1.1** - 2 pages]
2. GB 4924 - Detailed Design [**14.1.2** - 26 pages]
3. Les Yates ECM 4717264 v 1 Petition from 16 residents against siting of proposed Simpsons Rd Footpath [**14.1.3** - 2 pages]

Map : Existing Simpsons Road Footpath Network - Sailors Gully Road to



Created by Engineering on Friday, 5 July 2024

Map Scale : 1:7,114

Map Width is 1920 m

About this Document	Disclaimer
This map has been created for the purpose of showing basic locality information over Greater Bendigo City Council. Property boundary line network data is supplied by State Government. Any error should be reported to the GIS Section, Greater Bendigo City Council.	This map is a representation of the information currently held by Greater Bendigo City Council. While every effort has been made to ensure the accuracy of the product, Council accepts no responsibility for any errors or omissions.

Map : Existing Simpsons Road Footpath Network - Averys Road to



Created by Engineering on Friday, 5 July 2024

Map Scale : 1:7,114

Map Width is 1920 m

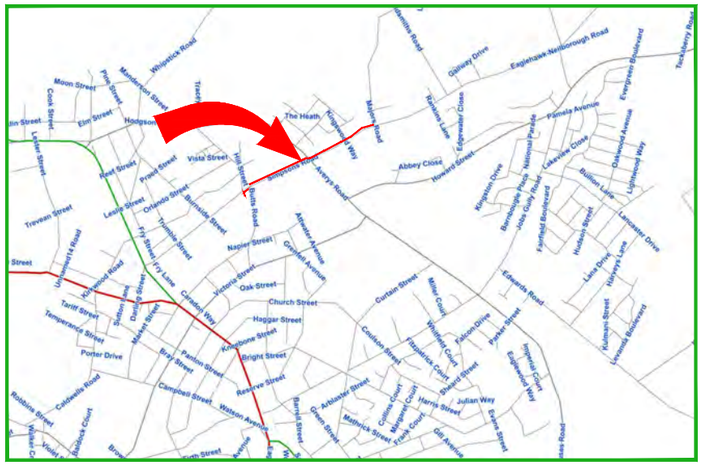
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SIMPSONS ROAD, EAGLEHAWK

GB4924

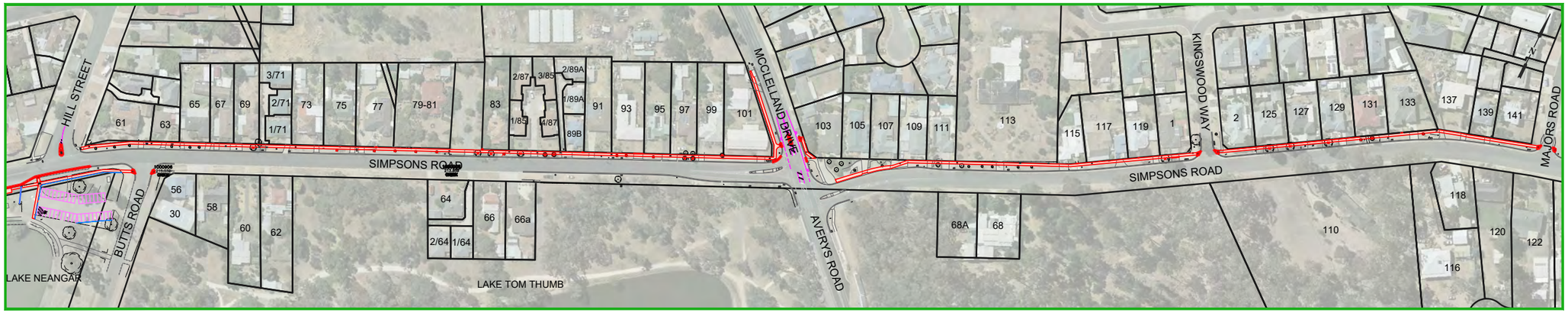
NEW FOOTPATH

JUNE 2024



LOCALITY MAP

DOCUMENT CONTROL				
SHEET No.	SHEET DESC.	01/04/22	11/04/24	26/06/24
		DRAFT	TENDER	CONSTRUCTION
		REVISION	REVISION	REVISION
1	COVER SHEET	-	A	-
2	GENERAL NOTES & TYPICAL SECTION	-	A	-
3-8	LAYOUT PLAN & LONGITUDINAL SECTION FP1	-	A	-
9-11	LAYOUT PLAN & LONGITUDINAL SECTION FP2	-	A	-
12-14	LAYOUT PLAN & LONGITUDINAL SECTION FP3	-	A	-
15-17	CROSS SECTIONS FP1	-	A	-
18-19	CROSS SECTIONS FP2	-	A	-
20	CROSS SECTIONS FP3	-	A	-
21	LAKE NEANGAR CARPARK	-	A	-
22	LAKE NEANGAR CARPARK - LONG SECTIONS	-	A	-
23	LAKE NEANGAR CARPARK - CROSS SECTIONS	-	A	-
24	SETOUT	N/A	N/A	-
25	SETOUT	N/A	N/A	-
26	SETOUT TABLES	N/A	N/A	-



PROJECT EXTENTS

PROJECT PLANNING REQUIREMENTS			
Item	Required	Comments	Contractor
Vegetation	No	-	
RRV	No	-	
CMA	No	-	
Planning Permit	No	-	
Land Acquisition	No	-	
CHMP	No	-	
Other	No	-	

AMENDMENTS			
Revision	Description	Approved by	Date
A	Increase Bus Stop Slab for shelter	AS	Apr 24

CITY OF GREATER BENDIGO

SIMPSONS ROAD
EAGLEHAWK
NEW FOOTPATH

COVER SHEET

Survey	H. WHYTOCK	31/01/22
Design	B. JANSSEN	04/04/22
Checked	A.SMITH	31/05/22
Approved by	N. SARTORI	31/05/22
Scale: -	Revision : -	
Original sheet size: A3	File : GB4924.dwg	
Sheet: 1 OF 26	Reference: GB4924	

ISSUED FOR CONSTRUCTION

Plot Date: 26/06/2024

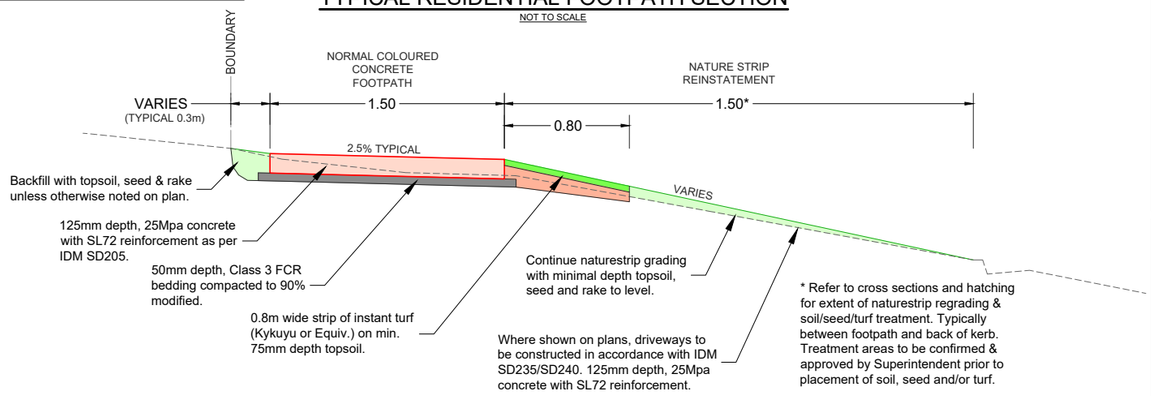
Plotted By: BAYLEY JANSSEN

DIAL 1100 BEFORE YOU DIG

IMPORTANT!
The location of underground services have been derived from available information, however accuracy cannot be guaranteed. All existing service information should therefore be treated as indicative only, and service locations must be arranged prior to commencement of any excavation. The contractor will be held responsible for any damage caused to underground services.

TYPICAL RESIDENTIAL FOOTPATH SECTION

NOT TO SCALE



FOOTPATH CONSTRUCTION NOTES

- Footpath to be constructed to IDM SD205 unless noted otherwise.
- An IDM SD210 expansion joint shall be provided at any joint with existing footpath, kerb, bridge or structural slab unless noted otherwise, or as directed by the superintendant.
- IDM SD210 expansion joints along new sections of footpath are to be at a maximum separation of 14m centres as per IDM SD205.
- Tool joints are to be at 1.5m centres for 1.5m wide footpath, 2.5m centres for 2.5m wide footpath and to be constructed as per IDM SD210 unless noted otherwise.
- Batter work and associated top soiling is to be limited to 2.0m from design edge of the footpath or unless otherwise noted. This width cannot be altered without consent from the superintendent.
- Plant and equipment is to be kept within the finished works area to avoid unnecessary damage to nature strips.
- Pedestrian crossings are to be as per CoGB SD192.
- All TGSIs are to be black (if on plain concrete), or white (if on black concrete) and shall be fibre reinforced polymer type and positioned in accordance with AS1428 unless noted otherwise or by direction from the Superintendent.
- Any residential mailboxes found to be in conflict with councils proposed assets (within the road reserve) shall be relocated to a position within the property in consultation with the landowner. Should the mailbox be a brick or concrete structure, the mailbox shall be demolished and consultation with the Superintendent shall be sought prior to reconstruction of a similar structure within the property.
- Once works are completed, contractor must undertake a site walk with the Superintendent to identify any hazards or level differences with the works area. Once the site walk is complete, the area may be opened to public use.
- All fill material is to be clean clay based soil, free of vegetative matter and is to be approved by the Superintendent prior to use.
- All earthworks are to be in accordance with VicRoads Specification Section 204.

NOTES ON SERVICE AUTHORITY ASSETS WITHIN THE WORKS AREA

SERVICE AUTHORITY UNDERGROUND INFRASTRUCTURE
- The location of underground services has been derived from available information, and shown on the plans. However accuracy can not be guaranteed. All existing service information should therefore be treated as indicative only and exact service locations must be arranged onsite prior to commencement of any excavation. The contractor will be held responsible for any damage caused to underground services.

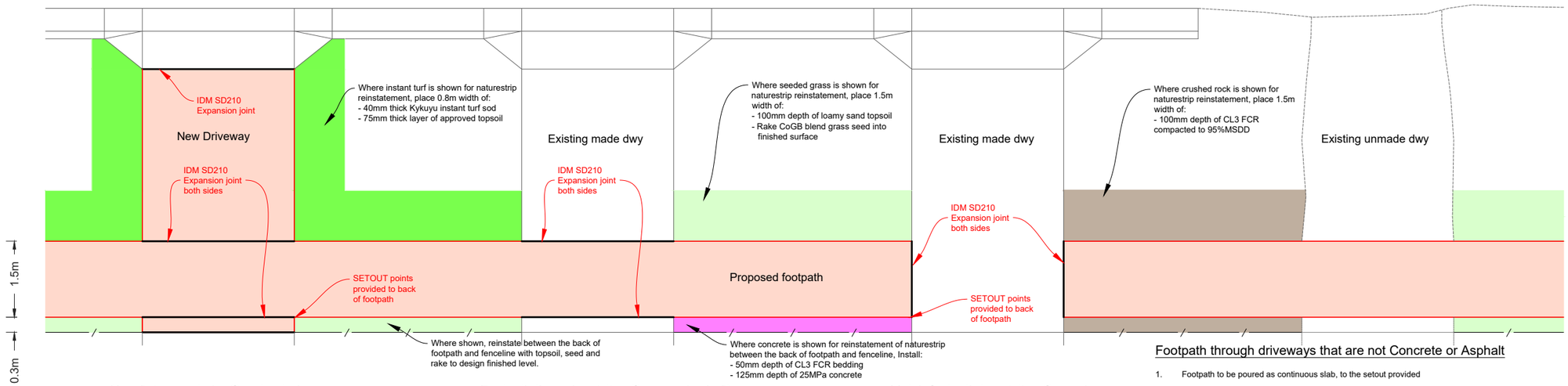
PIT LIDS and VALVE COVER LEVELS and LOCATION
- All service pit lids or valve covers within the works area are to be raised or lowered to match design surface level unless noted otherwise on the construction plans, or by approval from the Superintendent.
- Any service authority marker posts found within the works area are to be relocated adjacent to their current position to a point 150mm offset from the nearest property boundary.

SERVICE AUTHORITY ASSET RENEWAL
- Any sewer pit covers and or water valve covers within the works area are to be renewed to Coliban Water standards unless noted otherwise.
- PSM covers are to be renewed to CoGB standards using a 300x300mm galvanised steel checker plate flat cover.
- All other valve covers or pits within the works area are not to be renewed unless noted otherwise on the construction plans, or by agreement with the Superintendent.

IRRIGATION (COGB OR PRIVATE)
- Contractor responsible for location of irrigation prior to works beginning.
- Any conflicts between existing irrigation and footpath works to be resolved with superintendent onsite during works.

TYPICAL FOOTPATH DETAILS AT DRIVEWAY CROSSINGS

NOT TO SCALE



New Driveway to be Constructed

1. Footpath to be poured as continuous slab
2. New concrete or asphalt driveway to be constructed only where indicated on the Construction plans
3. New Concrete Dwy - 125mm thick 25MPa concrete slab
   Central SL72
   50mm CL3 FCR compacted to 90%MMDD
   IDM SD210 Expansion joint at back of layback
   IDM SD210 Expansion joint adjacent footpath
   IDM SD210 Expansion joint adjacent existing conc dwy
4. Asphalt Dwy - 40mm type L (7mm stone)
   150mm CL3 FCR compacted to 96%MMDD
   Timber edging (or reinstate existing owners edging as required by agreement with CoGB superintendent)
5. Driveway to span to edge of property boundary unless noted otherwise

Footpath through existing Conc. or Asph. Dwy

1. Sawcut
   Existing Conc dwy - Sawcut 1.5 m wide to allow new conc. FP to be constructed
   Existing Asph dwy - Sawcut 2.1 m wide to allow 1.5m conc. FP to be constructed
   300mm width of 40mm depth Type L asphalt on 150mm CL3 FCR compacted to 96%MMDD each side of footpath to ensure smooth transition from dwy to footpath to dwy
2. Concrete footpath to be poured as continuous slab
3. Footpath to match existing driveway levels unless Construction plans note otherwise
4. Exsiting Conc Dwys are to have an IDM SD210 Expansion joint installed between the existing driveway and the new footpath on both sides

Match footpath to existing Conc. dwy

1. Footpath to match levels of existing driveway edges
2. IDM SD210 expansion joint to be installed where footpath matches into existing concrete driveway

Footpath through driveways that are not Concrete or Asphalt

1. Footpath to be poured as continuous slab, to the setout provided
2. To reinstate driveway, place and compact an area of material that matches the existing driveway material (eg white pebbles, brick paving, crusher dust, etc).
   - The width of the material to be placed is to match the width of the existing driveway material
   - The depth of the driveway material is to be 125mm. Any extra filling required to match the level of the footpath is to be done with approved clean material which is to be compacted to 95%SMDD
   - Where there is no material (eg earth), Class 3 FCR shall be used.
3. The new driveway material shall extend to a minimum of 0.3m away from the footpath on both sides of the new footpath.
   - If 0.3m offset is not adequate to create a smooth vertical transition for vehicles traversing the driveway, the offset of new driveway material shall be increased to a maximum of 2.0m.
   - If the new material is required to enter private property, approval must be sought from the property owner prior to installation.
   - If a transition greater than 2.0m is required, approval must be sought from the Superintendent

AMENDMENTS

Revision	Description	Approved by	Date
A	Increase Bus Stop Slab for shelter	AS	Apr 24

CITY OF GREATER BENDIGO

SIMPSONS ROAD
EAGLEHAWK
NEW FOOTPATH

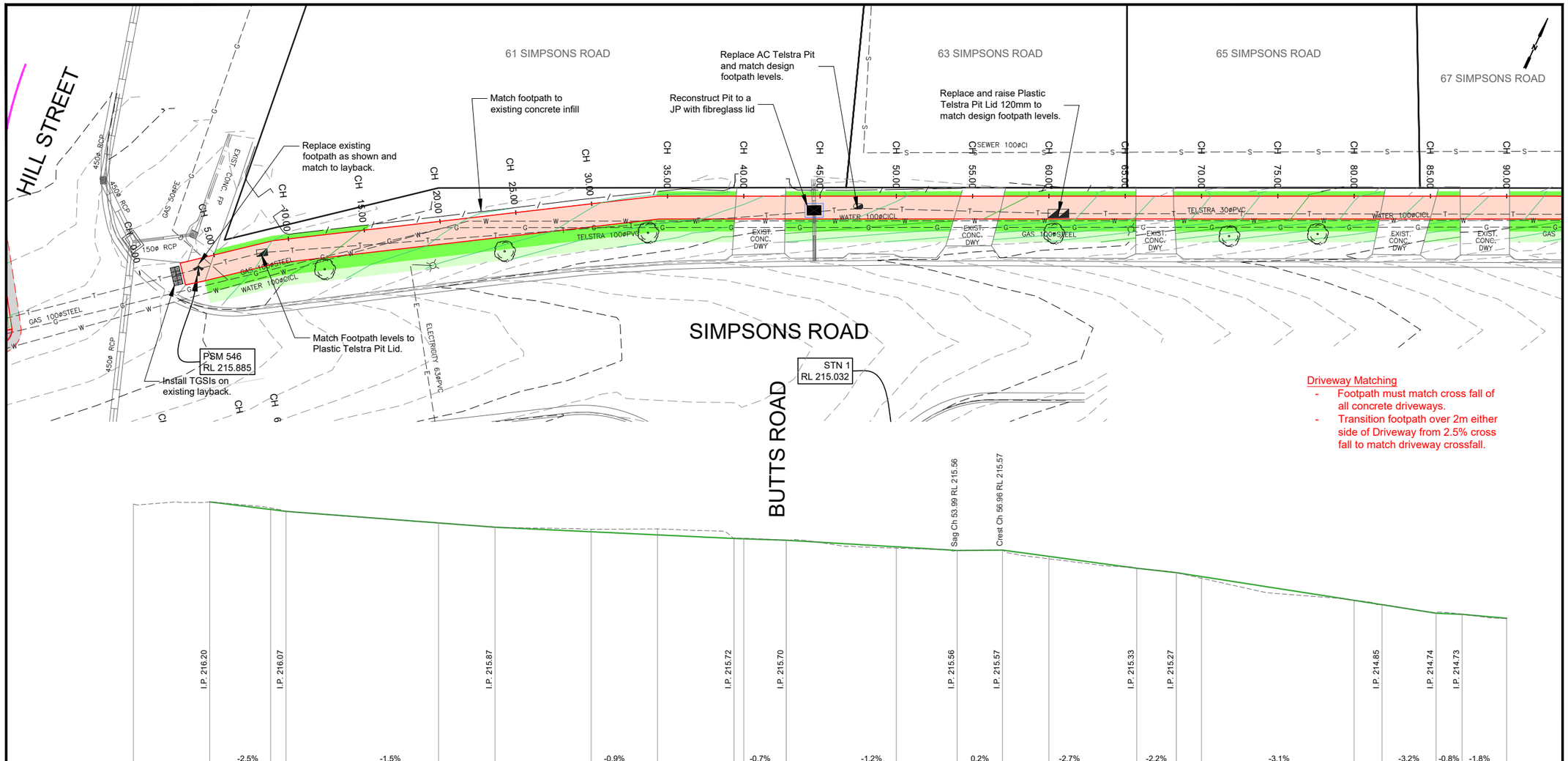
GENERAL NOTES

Survey	H. WHYTOCK	31/01/22
Design	B. JANSSEN	04/04/22
Checked	A.SMITH	31/05/22
Approved by	N. SARTORI	31/05/22

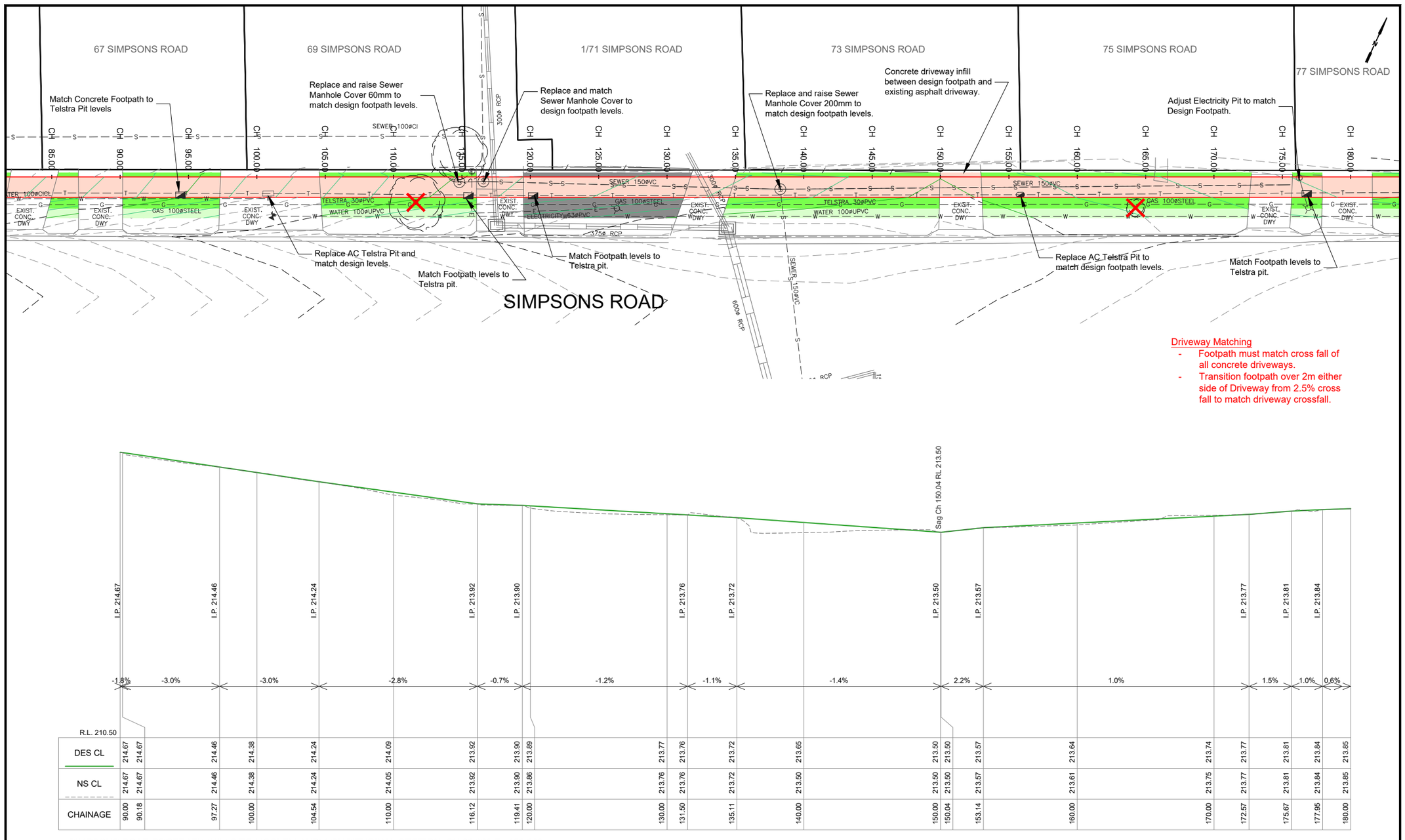
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Original sheet size: A3 File : GB4924.dwg
Sheet: 2 OF 26
Reference: GB4924

ISSUED FOR CONSTRUCTION

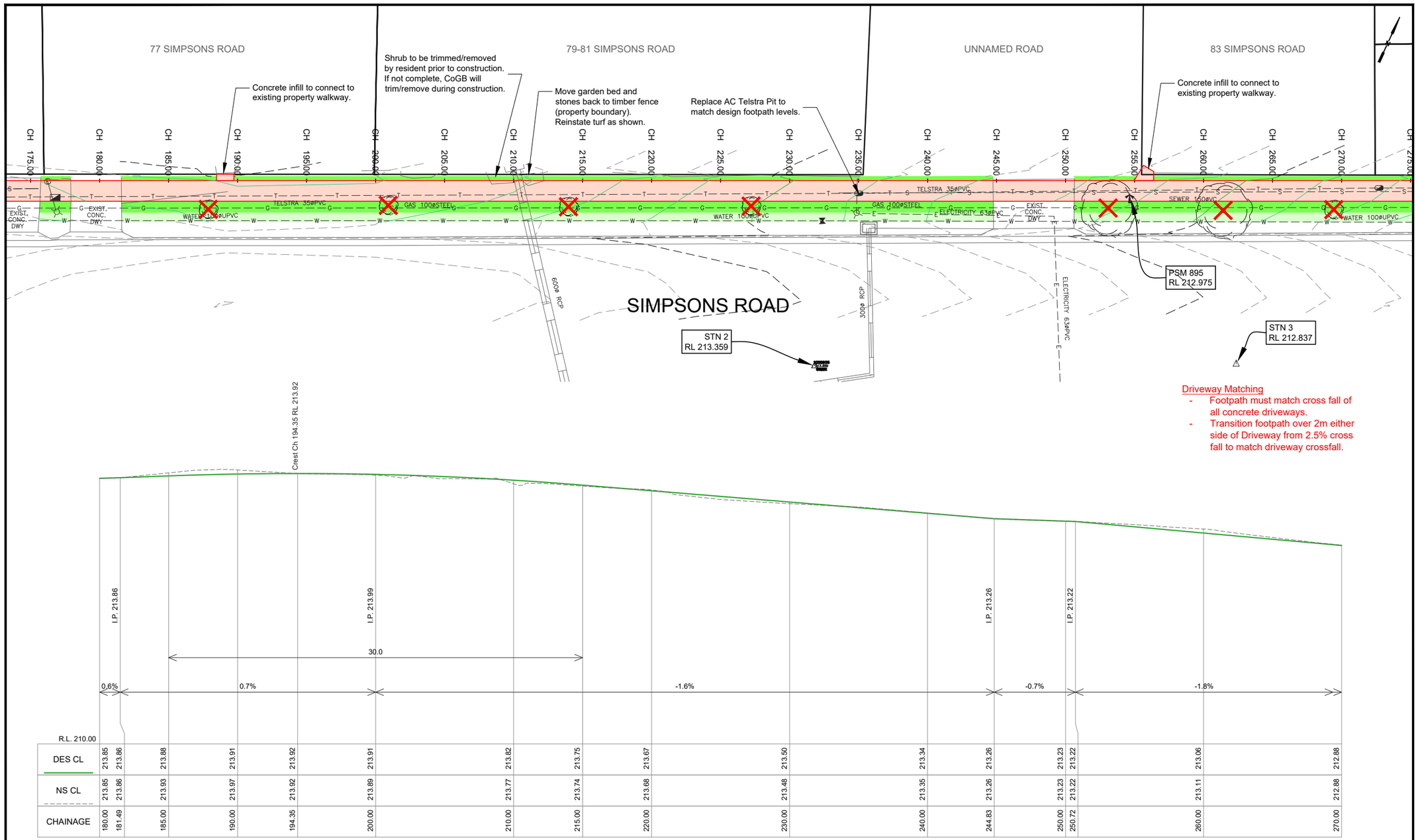
Plot Date: 26/06/2024
Plotted By: BAYLEY JANSSEN


HILL STREET
61 SIMPSONS ROAD
63 SIMPSONS ROAD
65 SIMPSONS ROAD
67 SIMPSONS ROAD
SIMPSONS ROAD
BUTTS ROAD
Replace existing footpath as shown and match to layback.
Match footpath to existing concrete infill
Reconstruct Pit to a JP with fibreglass lid
Replace AC Telstra Pit and match design footpath levels.
Replace and raise Plastic Telstra Pit Lid 120mm to match design footpath levels.
Match Footpath levels to Plastic Telstra Pit Lid.
Install TGSIs on existing layback.
PSM 546
RL 215.885
STN 1
RL 215.032
Sag Ch 53.99 RL 215.56
Crest Ch 56.96 RL 215.57
-2.5%
-1.5%
-0.9%
-0.7%
-1.2%
0.2%
-2.7%
-2.2%
-3.1%
-3.2%
-0.8%
-1.8%

| | | |


67 SIMPSONS ROAD
69 SIMPSONS ROAD
1/71 SIMPSONS ROAD
73 SIMPSONS ROAD
75 SIMPSONS ROAD
77 SIMPSONS ROAD
Match Concrete Footpath to Telstra Pit levels
Replace and raise Sewer Manhole Cover 60mm to match design footpath levels.
Replace and match Sewer Manhole Cover to design footpath levels.
Replace and raise Sewer Manhole Cover 200mm to match design footpath levels.
Concrete driveway infill between design footpath and existing asphalt driveway.
Adjust Electricity Pit to match Design Footpath.
Replace AC Telstra Pit and match design levels.
Match Footpath levels to Telstra pit.
Match Footpath levels to Telstra pit.
Replace AC Telstra Pit to match design footpath levels.
Match Footpath levels to Telstra pit.
SIMPSONS ROAD
Driveway Matching
- Footpath must match cross fall of all concrete driveways.
- Transition footpath over 2m either side of Driveway from 2.5% cross fall to match driveway crossfall.
Sag Ch 150.04 RL 213.50
I.P. 214.67
I.P. 214.46
I.P. 214.24
I.P. 213.92
I.P. 213.90
I.P. 213.76
I.P. 213.72
I.P. 213.50
I.P. 213.57
I.P. 213.77
I.P. 213.81
I.P. 213.84
-1.8%
-3.0%
-3.0%
-2.8%
-0.7%
-1.2%
-1.1%
-1.4%
2.2%
1.0%
1.5%
1.0%
0.6%
R.L. 210.50

| | | |



Driveway Matching

- Footpath must match cross fall of all concrete driveways.
- Transition footpath over 2m either side of Driveway from 2.5% cross fall to match driveway crossfall.

R.L. 210.00

DES CL	213.85	213.86	213.88	213.91	213.92	213.91	213.82	213.75	213.67	213.50	213.34	213.26	213.23	213.22	213.06	212.88					
NS CL	213.85	213.86	213.93	213.97	213.92	213.89	213.77	213.74	213.68	213.48	213.35	213.26	213.23	213.22	213.11	212.88					
CHAINAGE	180.00	181.49	185.00	190.00	194.35	200.00	210.00	215.00	220.00	230.00	240.00	244.83	250.00	250.72	260.00	270.00					

SIMPSONS ROAD FOOTPATH (HILLS TO MCCLELLAND) LONGITUDINAL SECTION CH 180.000 To 270.000
SCALES: H 1:250 V 1:50 (A3)

LEGEND

- PROPOSED CONCRETE: Footpaths - Refer SD200, SD205 & SD210 Driveways - Refer SD235 & SD240
- NATURE STRIP REINSTATEMENT: 75mm depth topsoil & kikuyu instant turf
- NATURE STRIP REINSTATEMENT: 25mm depth topsoil - seeded & raked.
- ASPHALT DRIVEWAY: See Page 2 for details
- GRAVEL DRIVEWAY: 50mm depth Gravel
- CONCRETE KERB & LAYBACKS: - B4 style kerb (COGB SD190) - Pedestrian Layback (COGB SD192)
- DESIGN CONTOUR 0.10m interval
- EXISTING CONTOUR 0.10m interval

AMENDMENTS

Revision	Description	Approved by	Date
A	Increase Bus Stop Slab for shelter	AS	Apr 24

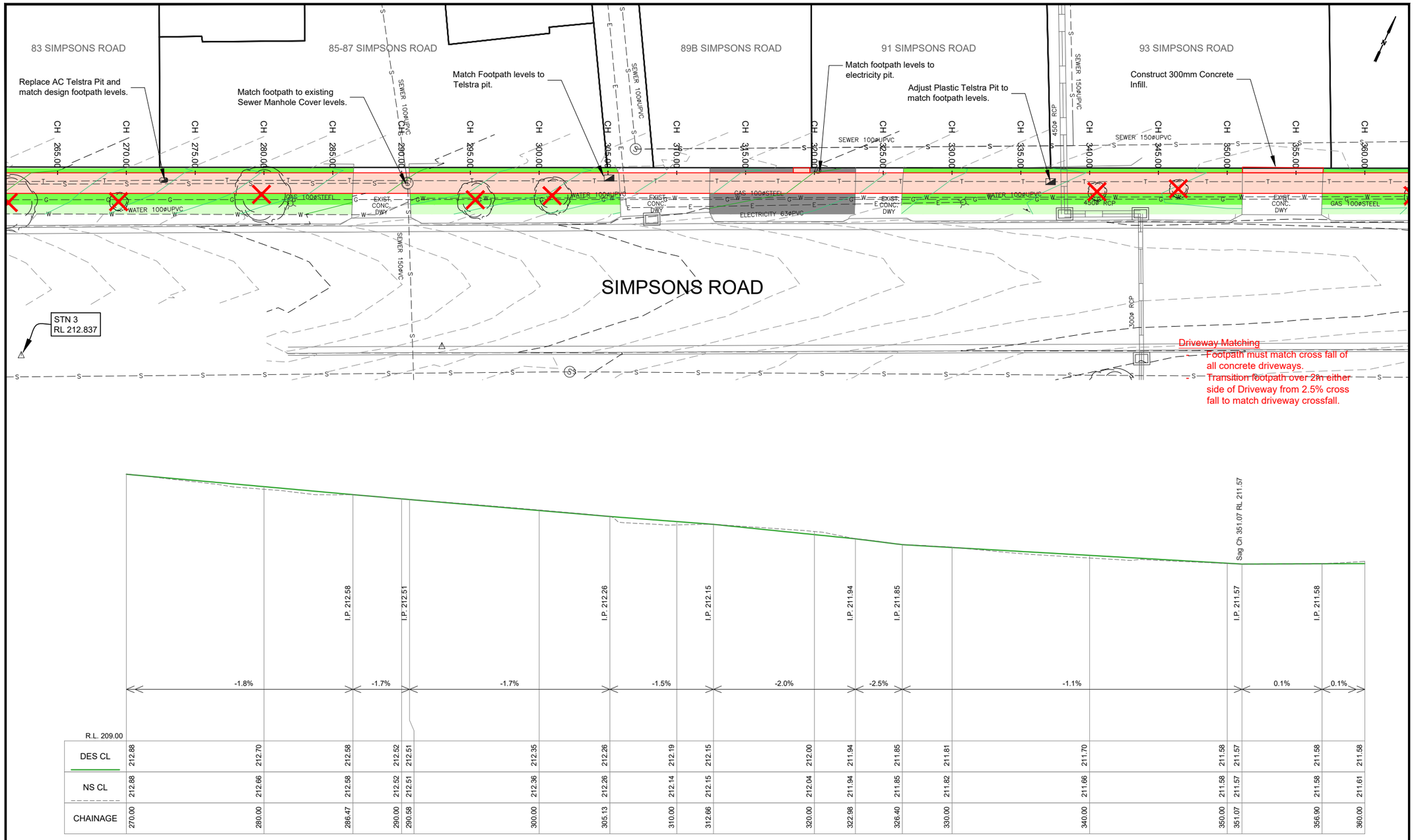
CITY OF GREATER BENDIGO

SIMPSONS ROAD
EAGLEHAWK
NEW FOOTPATH
LAYOUT PLAN & LONGITUDINAL SECTION

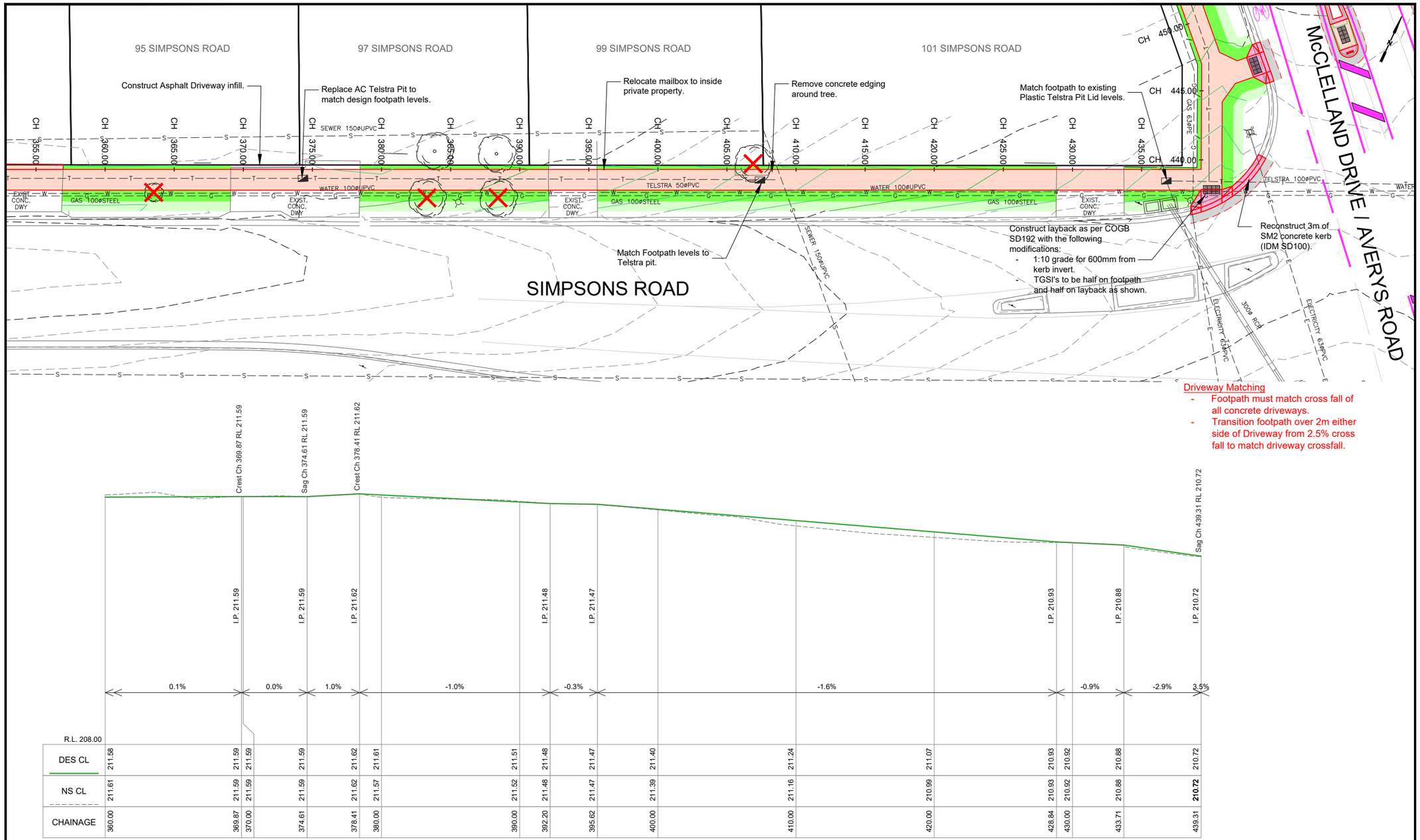
Survey	H. WHYTOCK	31/01/22
Design	B. JANSSEN	04/04/22
Checked	A.SMITH	31/05/22
Approved by	N. SARTORI	31/05/22
Scale: 1:250	Revision : -	
Original sheet size: A3	File : GB4924.dwg	
Sheet: 5 OF 26	Reference: GB4924	

ISSUED FOR CONSTRUCTION

Plot Date: 26/06/2024
Plotted By: BAYLEY JANSSEN


83 SIMPSONS ROAD
85-87 SIMPSONS ROAD
89B SIMPSONS ROAD
91 SIMPSONS ROAD
93 SIMPSONS ROAD
Replace AC Telstra Pit and match design footpath levels.
Match footpath to existing Sewer Manhole Cover levels.
Match Footpath levels to Telstra pit.
Match footpath levels to electricity pit.
Adjust Plastic Telstra Pit to match footpath levels.
Construct 300mm Concrete Infill.
SIMPSONS ROAD
STN 3
RL 212.837
Driveway Matching
Footpath must match cross fall of all concrete driveways.
Transition footpath over 2m either side of Driveway from 2.5% cross fall to match driveway crossfall.
Sag Ch 351.07 RL 211.57
I.P. 212.58
I.P. 212.51
I.P. 212.26
I.P. 212.15
I.P. 211.94
I.P. 211.85
I.P. 211.57
I.P. 211.58
-1.8%
-1.7%
-1.7%
-1.5%
-2.0%
-2.5%
-1.1%
0.1%
0.1%
R.L. 209.00

| | | |



Driveway Matching
- Footpath must match cross fall of all concrete driveways.
- Transition footpath over 2m either side of Driveway from 2.5% cross fall to match driveway crossfall.

SIMPSONS ROAD FOOTPATH (HILLS TO MCCLELLAND) LONGITUDINAL SECTION CH 360.000 To 439.310
SCALES: H 1:250 V 1:50 (A3)

LEGEND

- PROPOSED CONCRETE: Footpaths - Refer SD200, SD205 & SD210 Driveways - Refer SD235 & SD240
- NATURE STRIP REINSTATEMENT: 75mm depth topsoil & kikuyu instant turf
- NATURE STRIP REINSTATEMENT: 25mm depth topsoil - seeded & raked.
- ASPHALT DRIVEWAY: See Page 2 for details
- GRAVEL DRIVEWAY: 50mm depth Gravel
- CONCRETE KERB & LAYBACKS: - B4 style kerb (COGB SD190) - Pedestrian Layback (COGB SD192)
- DESIGN CONTOUR 0.10m interval
- EXISTING CONTOUR 0.10m interval

AMENDMENTS

Revision	Description	Approved by	Date
A	Increase Bus Stop Slab for shelter	AS	Apr 24

CITY OF GREATER BENDIGO

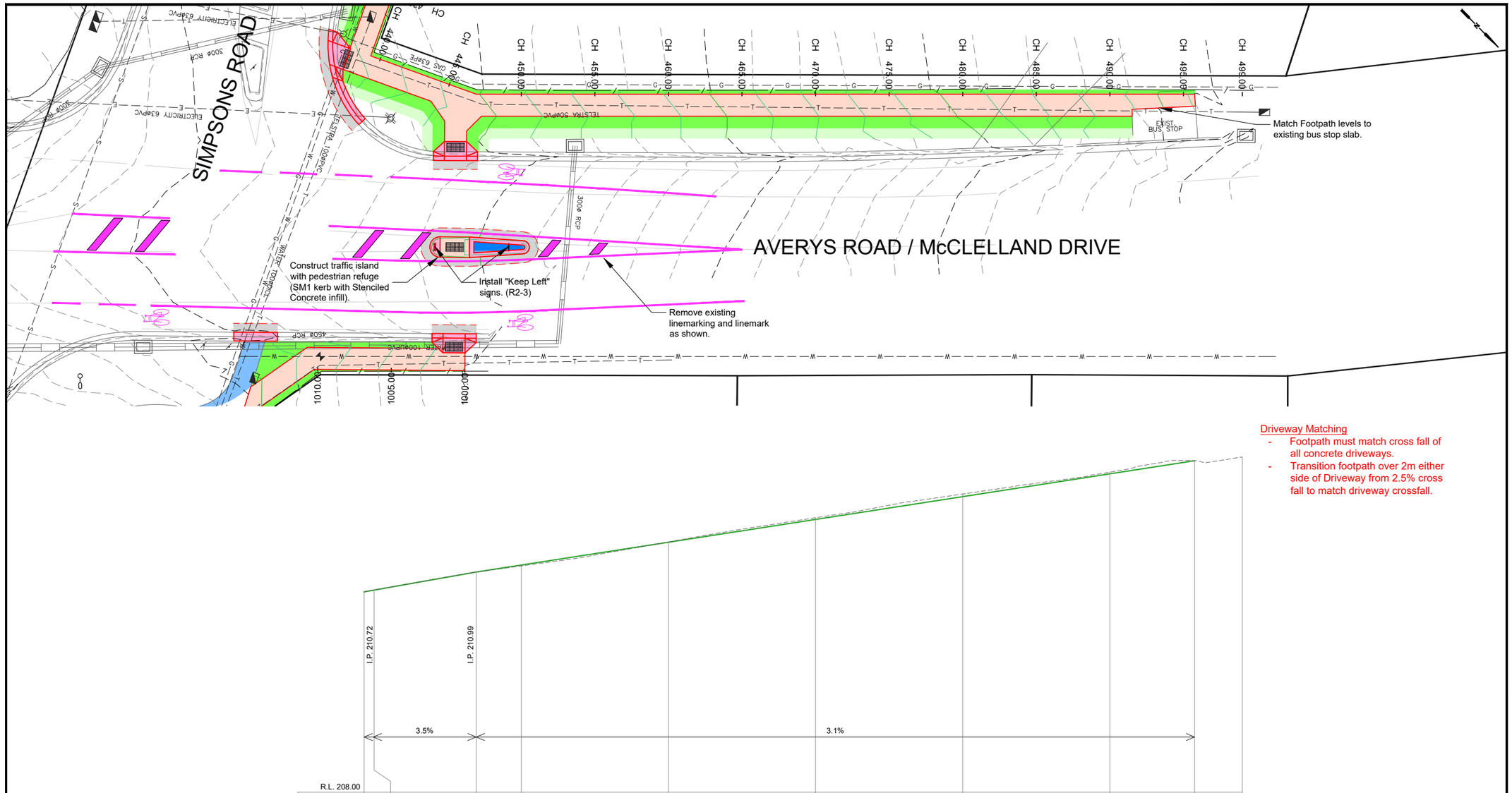
SIMPSONS ROAD
EAGLEHAWK
NEW FOOTPATH

LAYOUT PLAN & LONGITUDINAL SECTION

Survey	H. WHYTOCK	31/01/22
Design	B. JANSSEN	04/04/22
Checked	A.SMITH	31/05/22
Approved by	N. SARTORI	31/05/22
Scale: 1:250	Revision : -	
Original sheet size: A3	File : GB4924.dwg	
Sheet: 7 OF 26	Reference: GB4924	

ISSUED FOR CONSTRUCTION

Plot Date: 26/06/2024
Plotted By: BAYLEY JANSSEN



Driveway Matching

- Footpath must match cross fall of all concrete driveways.
- Transition footpath over 2m either side of Driveway from 2.5% cross fall to match driveway crossfall.

R.L. 208.00											
DES CL	210.72	210.75	210.99	211.09	211.40	211.71	212.02	212.33	212.51		
NS CL	**210.72**	210.75	**210.99**	211.08	211.40	211.73	212.05	212.35	**212.51**	**212.56**	
CHAINAGE	439.31	440.00	446.94	450.00	460.00	470.00	480.00	490.00	495.76	499.00	

SIMPSONS ROAD FOOTPATH (HILLS TO MCCLELLAND) LONGITUDINAL SECTION CH 439.310 To 499.000
SCALES: H 1:250 V 1:50 (A3)

LEGEND

- PROPOSED CONCRETE: Footpaths - Refer SD200, SD205 & SD210 Driveways - Refer SD235 & SD240
- NATURE STRIP REINSTATEMENT: 75mm depth topsoil & kikuyu instant turf
- NATURE STRIP REINSTATEMENT: 25mm depth topsoil - seeded & raked.
- ASPHALT DRIVEWAY: See Page 2 for details
- GRAVEL DRIVEWAY: 50mm depth Gravel
- CONCRETE KERB & LAYBACKS: - B4 style kerb (COGB SD190) - Pedestrian Layback (COGB SD192)
- DESIGN CONTOUR 0.10m interval
- EXISTING CONTOUR 0.10m interval

AMENDMENTS

Revision	Description	Approved by	Date
A	Increase Bus Stop Slab for shelter	AS	Apr 24

CITY OF GREATER BENDIGO

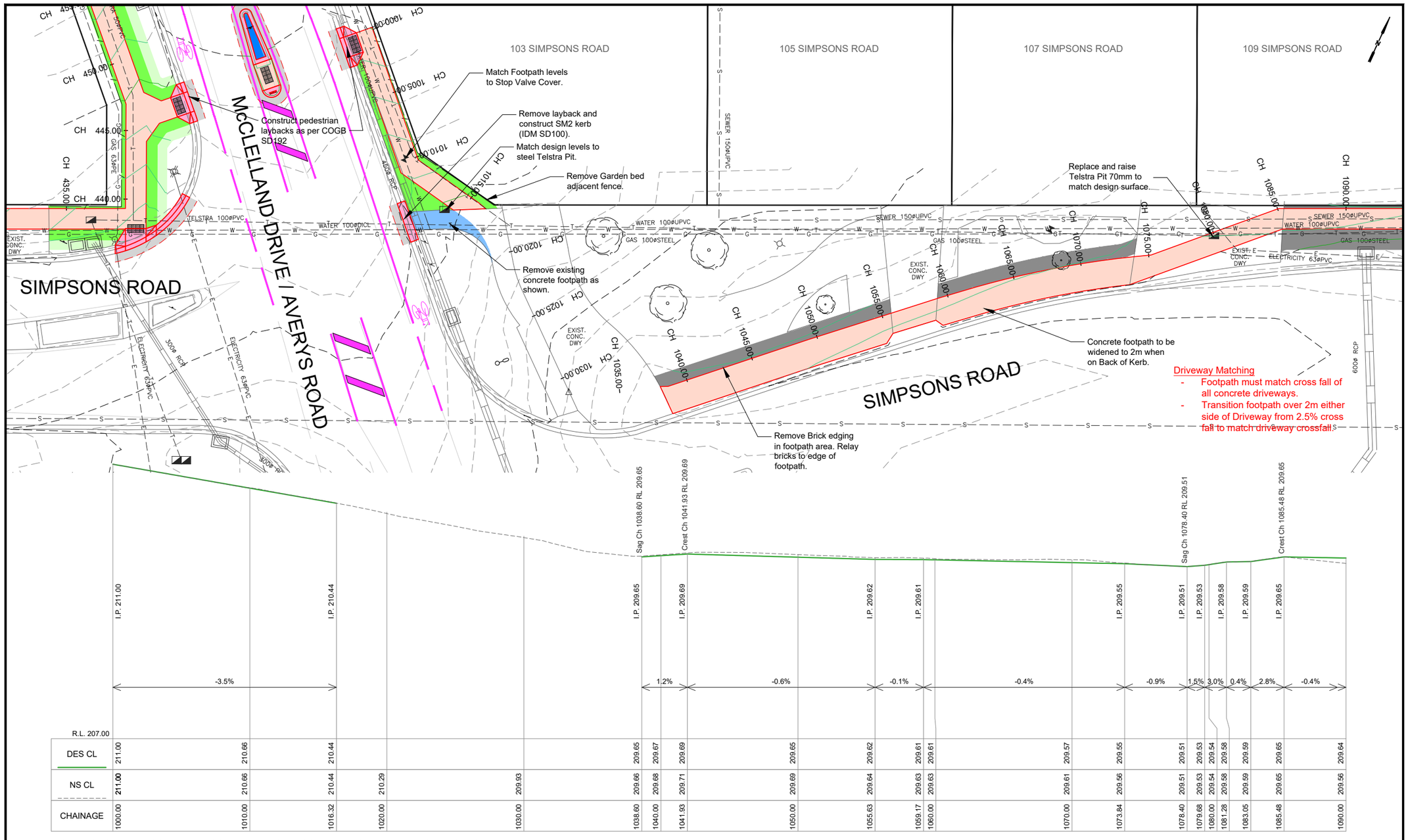
SIMPSONS ROAD
EAGLEHAWK
NEW FOOTPATH

LAYOUT PLAN & LONGITUDINAL SECTION

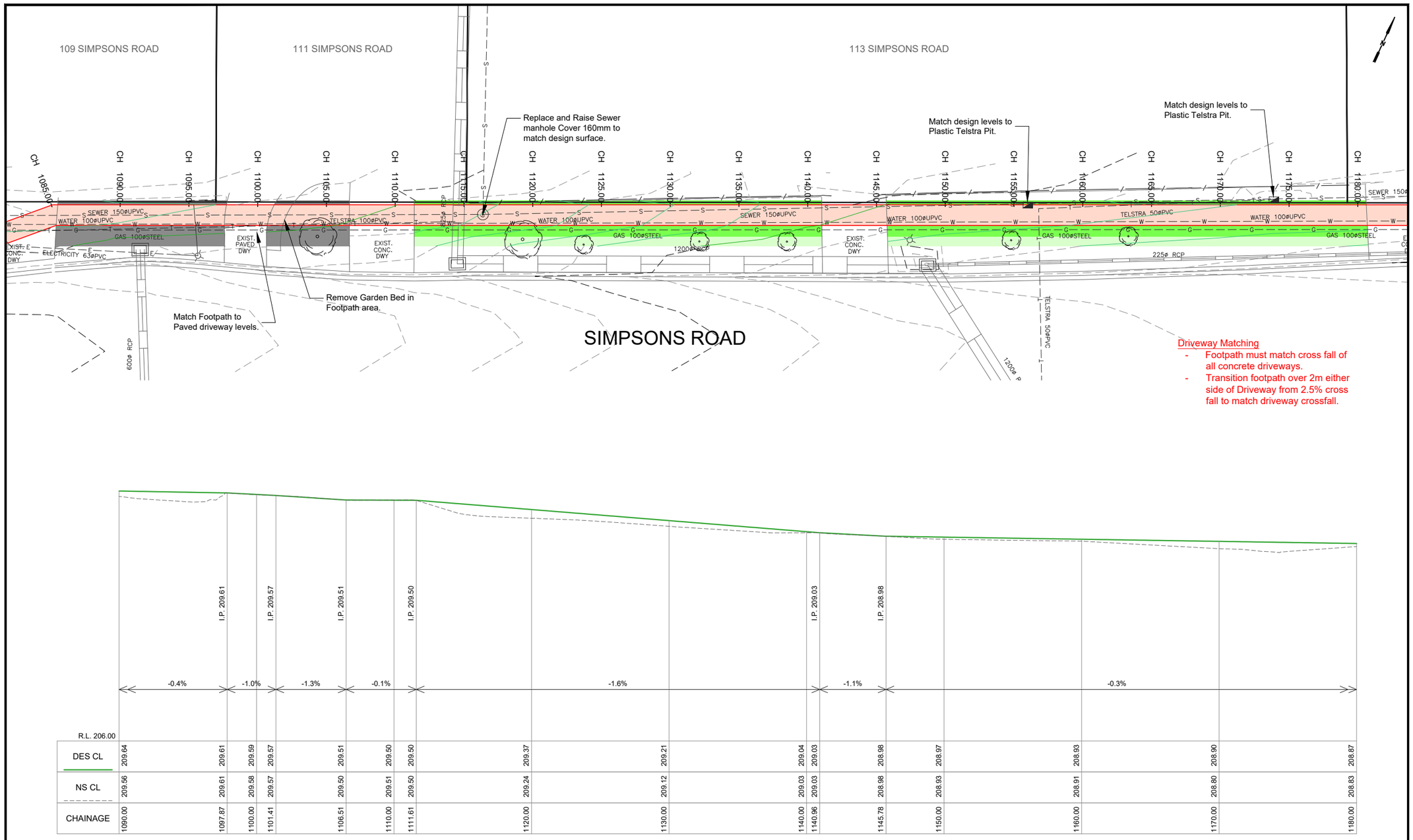
Survey	H. WHYTOCK	31/01/22
Design	B. JANSSEN	04/04/22
Checked	A.SMITH	31/05/22
Approved by	N. SARTORI	31/05/22
Scale: 1:250	Revision : -	
Original sheet size: A3	File : GB4924.dwg	
Sheet: 8 OF 26	Reference: GB4924	

ISSUED FOR CONSTRUCTION

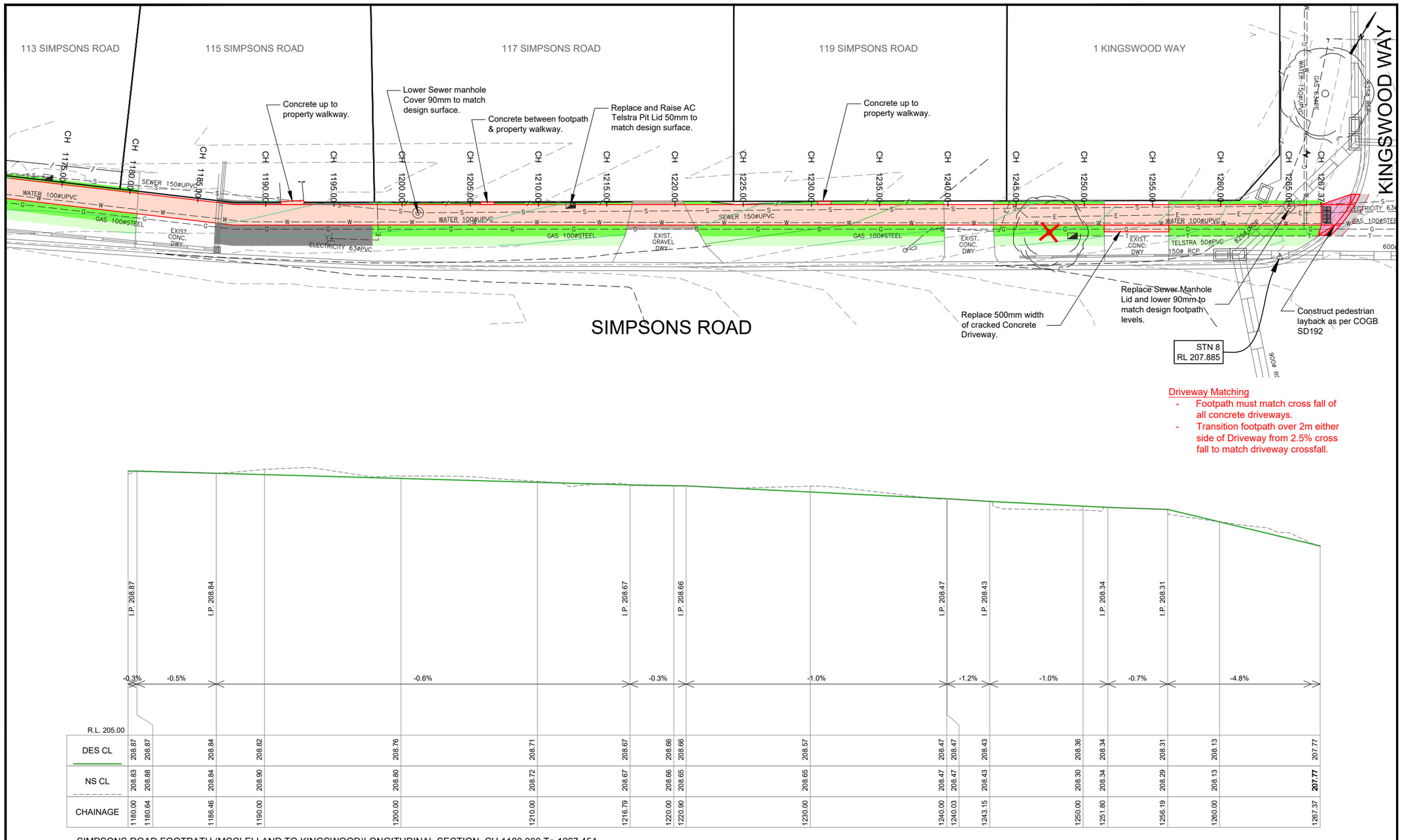
Plot Date: 26/06/2024
Plotted By: BAYLEY JANSSEN


103 SIMPSONS ROAD
105 SIMPSONS ROAD
107 SIMPSONS ROAD
109 SIMPSONS ROAD
SIMPSONS ROAD
McCLELLAND DRIVE / AVERYS ROAD
Match Footpath levels to Stop Valve Cover.
Remove layback and construct SM2 kerb (IDM SD100).
Match design levels to steel Telstra Pit.
Remove Garden bed adjacent fence.
Construct pedestrian laybacks as per COGB SD192
Remove existing concrete footpath as shown.
Replace and raise Telstra Pit 70mm to match design surface.
Concrete footpath to be widened to 2m when on Back of Kerb.
Remove Brick edging in footpath area. Relay bricks to edge of footpath.
Driveway Matching
- Footpath must match cross fall of all concrete driveways.
- Transition footpath over 2m either side of Driveway from 2.5% cross fall to match driveway crossfall.
Sag Ch 1038.60 RL 209.65
Crest Ch 1041.93 RL 209.69
Sag Ch 1078.40 RL 209.51
Crest Ch 1085.48 RL 209.65
-3.5%
1.2%
-0.6%
-0.1%
-0.4%
-0.9%
1.5%
3.0%
0.4%
2.8%
-0.4%
R.L. 207.00

| | | |


109 SIMPSONS ROAD
111 SIMPSONS ROAD
113 SIMPSONS ROAD
Replace and Raise Sewer manhole Cover 160mm to match design surface.
Match design levels to Plastic Telstra Pit.
Match design levels to Plastic Telstra Pit.
Remove Garden Bed in Footpath area.
Match Footpath to Paved driveway levels.
SIMPSONS ROAD
Driveway Matching
- Footpath must match cross fall of all concrete driveways.
- Transition footpath over 2m either side of Driveway from 2.5% cross fall to match driveway crossfall.
I.P. 209.61
I.P. 209.57
I.P. 209.51
I.P. 209.50
I.P. 209.03
I.P. 208.98
-0.4%
-1.0%
-1.3%
-0.1%
-1.6%
-1.1%
-0.3%
R.L. 206.00

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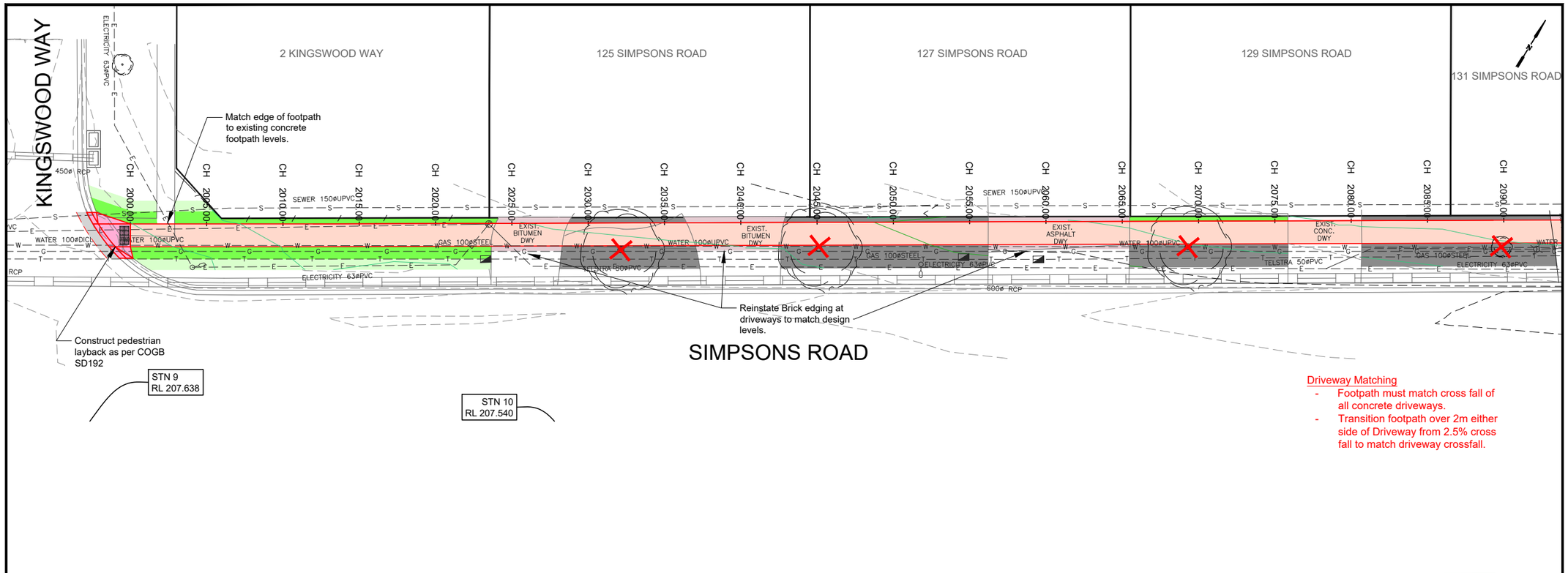


Driveway Matching

- Footpath must match cross fall of all concrete driveways.
- Transition footpath over 2m either side of Driveway from 2.5% cross fall to match driveway crossfall.

R.L. 205.00

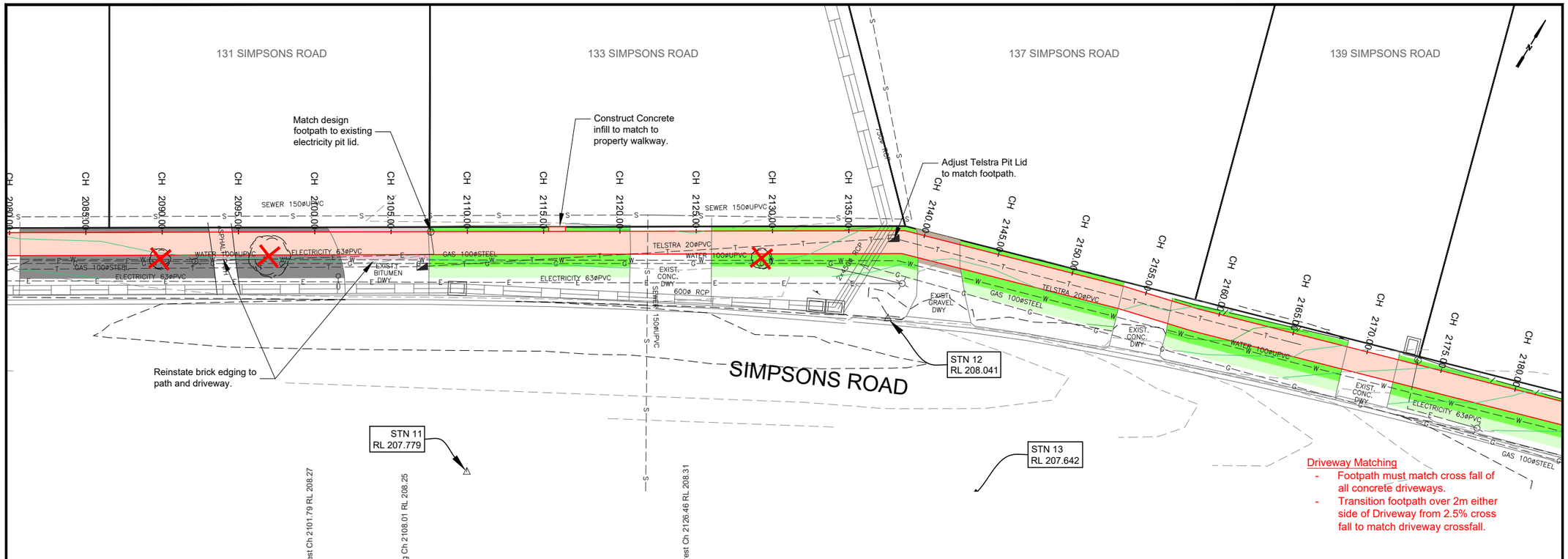
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Driveway Matching
- Footpath must match cross fall of all concrete driveways.
- Transition footpath over 2m either side of Driveway from 2.5% cross fall to match driveway crossfall.

R.L. 205.00

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CHAINAGE	DES CL	NS CL
2090.00	208.23	208.23
2100.00	208.26	208.27
2101.79	208.27	208.27
2108.01	208.25	208.24
2110.00	208.26	208.26
2120.00	208.29	208.30
2121.31	208.29	208.31
2126.46	208.31	208.31
2130.00	208.27	208.23
2138.56	208.17	208.15
2138.66	208.17	**208.16**
2140.00	208.15	208.15
2140.08	208.15	208.15
2143.19	208.15	208.19
2150.00	208.15	208.20
2153.53	208.15	**208.18**
2154.02	208.15	208.17
2157.45	208.12	208.14
2158.53	208.10	**208.13**
2160.00	208.07	208.13
2169.14	207.88	207.90
2170.00	207.87	207.89
2172.58	207.83	207.85
2180.00	207.71	207.73

SIMPSONS ROAD FOOTPATH (KINGSWOOD TO MAJORS) LONGITUDINAL SECTION CH 2090.000 To 2180.000
SCALES: H 1:250 V 1:50 (A3)

LEGEND

- PROPOSED CONCRETE: Footpaths - Refer SD200, SD205 & SD210 Driveways - Refer SD235 & SD240
- NATURE STRIP REINSTATEMENT: 75mm depth topsoil & kikuyu instant turf
- NATURE STRIP REINSTATEMENT: 25mm depth topsoil - seeded & raked.
- ASPHALT DRIVEWAY: See Page 2 for details
- GRAVEL DRIVEWAY: 50mm depth Gravel
- CONCRETE KERB & LAYBACKS: - B4 style kerb (COGB SD190) - Pedestrian Layback (COGB SD192)
- DESIGN CONTOUR 0.10m interval
- EXISTING CONTOUR 0.10m interval
- NATURESTRIP: Match existing gravel

AMENDMENTS

Revision	Description	Approved by	Date
A	Increase Bus Stop Slab for shelter	AS	Apr 24

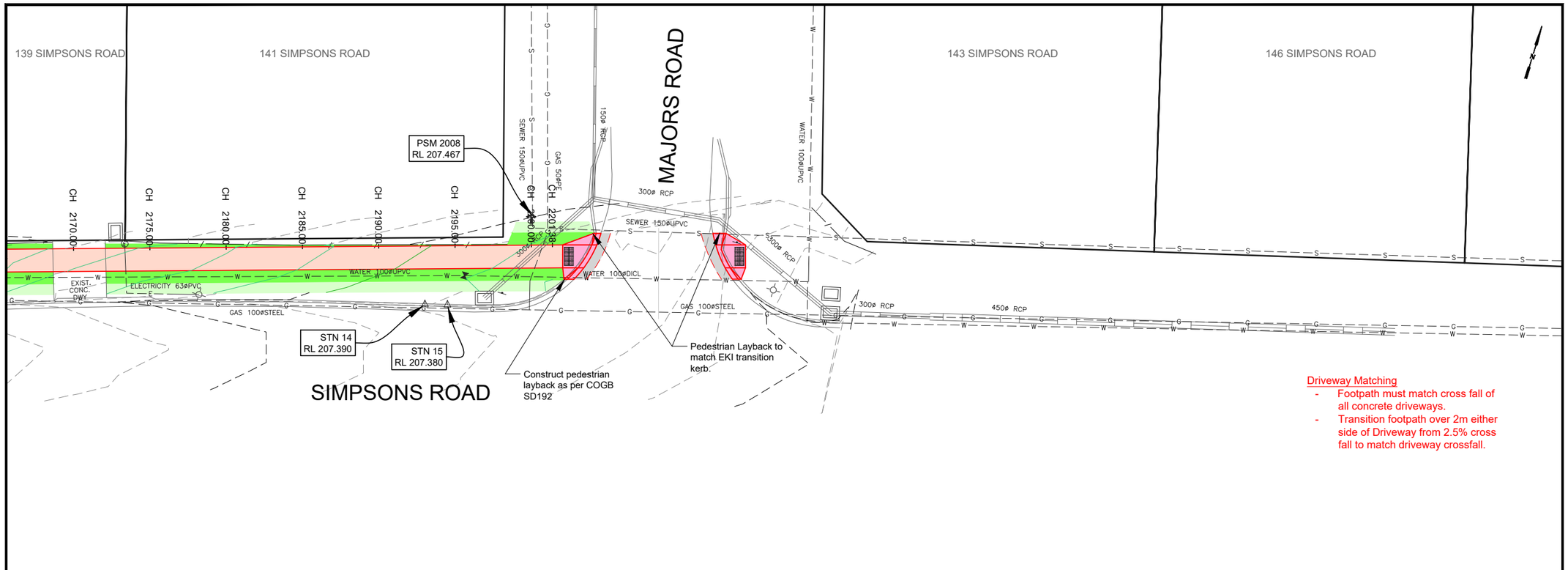
CITY OF GREATER BENDIGO

SIMPSONS ROAD
EAGLEHAWK
NEW FOOTPATH
LAYOUT PLAN & LONGITUDINAL SECTION

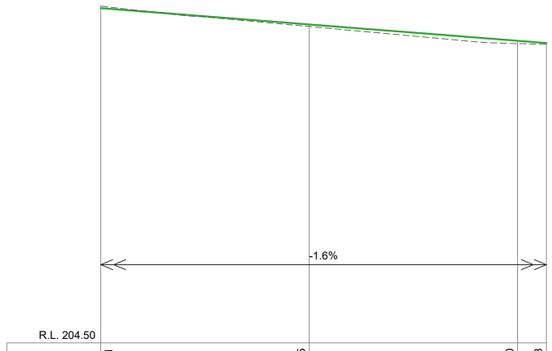
Survey	H. WHYTOCK	31/01/22
Design	B. JANSSEN	04/04/22
Checked	A.SMITH	31/05/22
Approved by	N. SARTORI	31/05/22
Scale: 1:250	Revision : -	
Original sheet size: A3	File : GB4924.dwg	
Sheet: 13 OF 26	Reference: GB4924	

ISSUED FOR CONSTRUCTION

Plot Date: 26/06/2024
Plotted By: BAYLEY JANSSEN



Driveway Matching
- Footpath must match cross fall of all concrete driveways.
- Transition footpath over 2m either side of Driveway from 2.5% cross fall to match driveway crossfall.



R.L. 204.50				
DES CL	207.71	207.55	207.40	207.38
NS CL	207.73	207.53	207.37	207.36
CHAINAGE	2180.00	2190.00	2200.00	2201.38

SIMPSONS ROAD FOOTPATH (KINGSWOOD TO MAJORS) LONGITUDINAL SECTION CH 2180.000 To 2201.380
SCALES: H 1:250 V 1:50 (A3)

LEGEND

- PROPOSED CONCRETE: Footpaths - Refer SD200, SD205 & SD210 Driveways - Refer SD235 & SD240
- NATURE STRIP REINSTATEMENT: 75mm depth topsoil & kikuyu instant turf
- NATURE STRIP REINSTATEMENT: 25mm depth topsoil - seeded & raked.
- ASPHALT DRIVEWAY: See Page 2 for details
- GRAVEL DRIVEWAY: 50mm depth Gravel
- CONCRETE KERB & LAYBACKS: - B4 style kerb (COGB SD190) - Pedestrian Layback (COGB SD192)
- DESIGN CONTOUR 0.10m interval
- EXISTING CONTOUR 0.10m interval

AMENDMENTS

Revision	Description	Approved by	Date
A	Increase Bus Stop Slab for shelter	AS	Apr 24

CITY OF GREATER BENDIGO

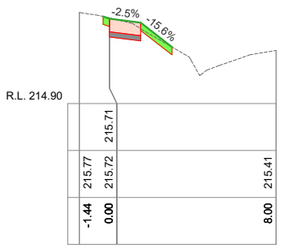
SIMPSONS ROAD
EAGLEHAWK
NEW FOOTPATH

LAYOUT PLAN & LONGITUDINAL SECTION

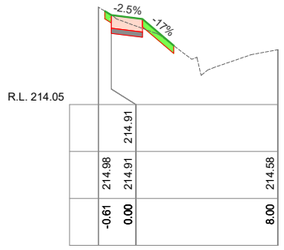
Survey	H. WHYTOCK	31/01/22
Design	B. JANSSEN	04/04/22
Checked	A.SMITH	31/05/22
Approved by	N. SARTORI	31/05/22
Scale: 1:250	Revision : -	
Original sheet size: A3	File : GB4924.dwg	
Sheet: 14 OF 26	Reference: GB4924	

ISSUED FOR CONSTRUCTION

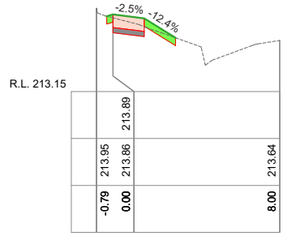
Plot Date: 26/06/2024
Plotted By: BAYLEY JANSSEN



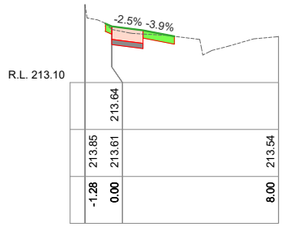
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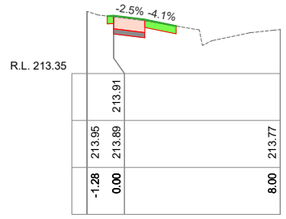
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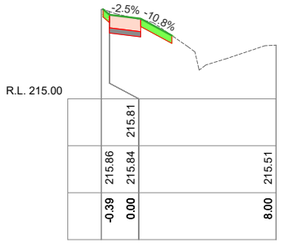
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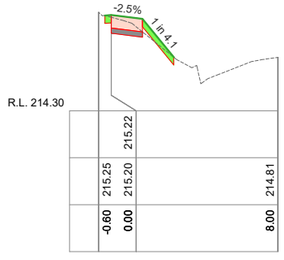
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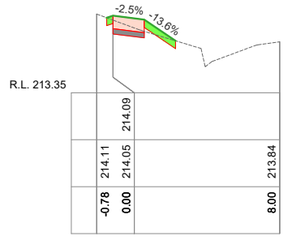
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Ch 30.00



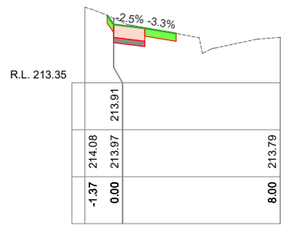
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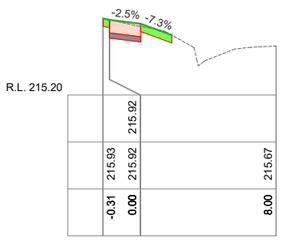
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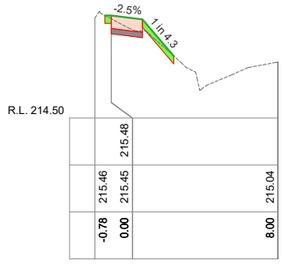
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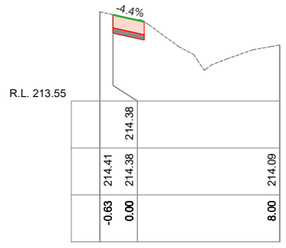
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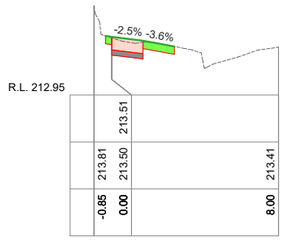
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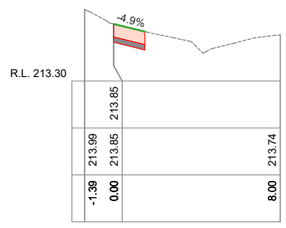
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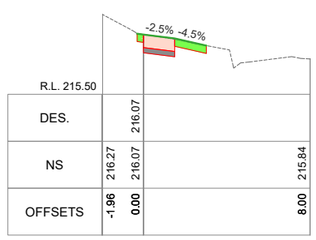
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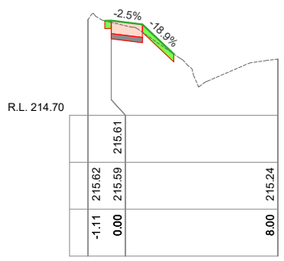


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Ch 10.00

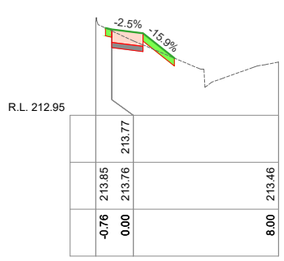
SCALES: H 1:250 V 1:50 (A3)



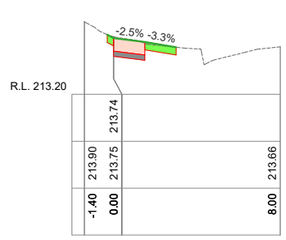
Ch 50.00



Ch 90.00



Ch 130.00



Ch 170.00

AMENDMENTS			
Revision	Description	Approved by	Date
A	Increase Bus Stop Slab for shelter	AS	Apr 24

CITY OF GREATER BENDIGO

SIMPSONS ROAD
EAGLEHAWK
NEW FOOTPATH

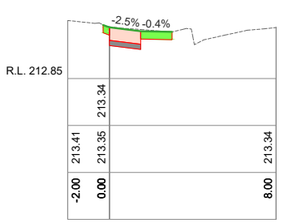
CROSS SECTIONS

Survey	H. WHYTOCK	31/01/22
Design	B. JANSSEN	04/04/22
Checked	A.SMITH	31/05/22
Approved by	N. SARTORI	31/05/22
Scale: -	Revision : -	
Original sheet size: A3	File : GB4924.dwg	
Sheet: 15 OF 26	Reference: GB4924	

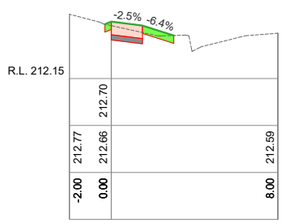
ISSUED FOR CONSTRUCTION

Plot Date: 26/06/2024

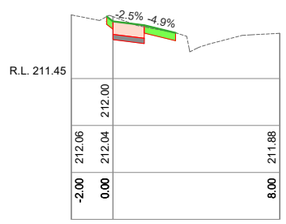
Plotted By: BAYLEY JANSSEN



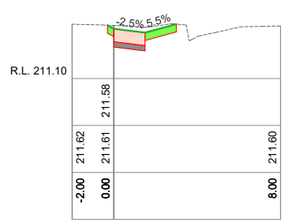
Ch 240.00



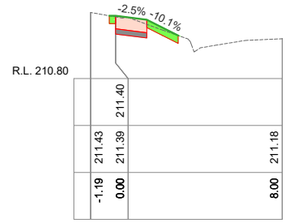
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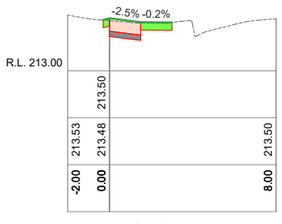
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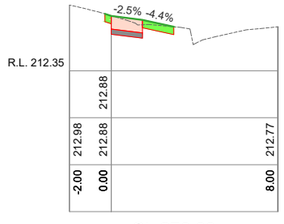
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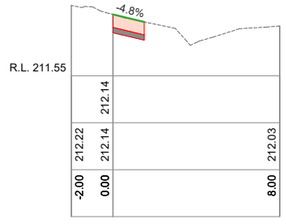
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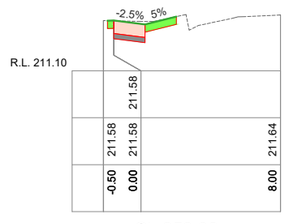
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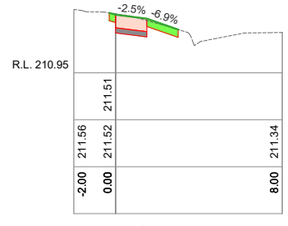
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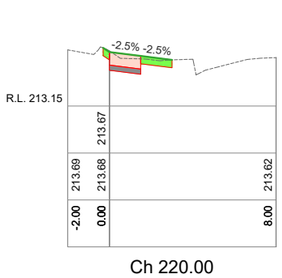
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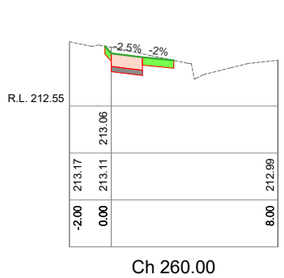
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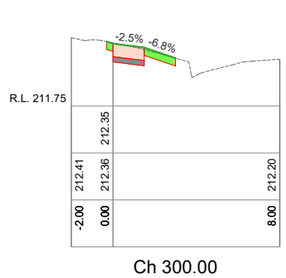
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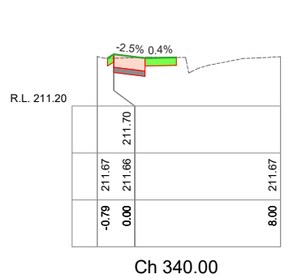
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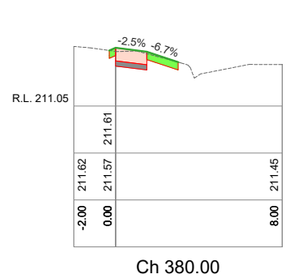
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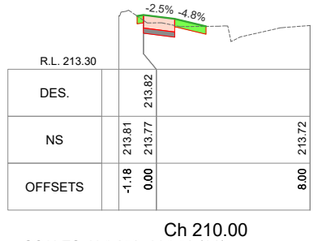
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Ch 340.00

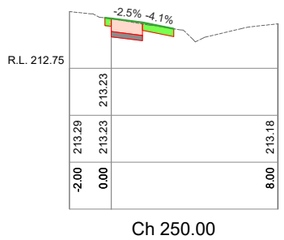


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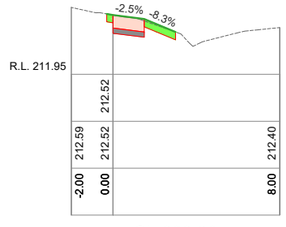


Ch 210.00

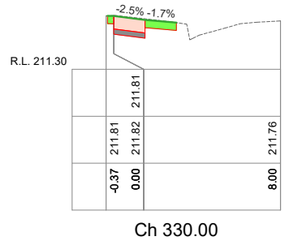
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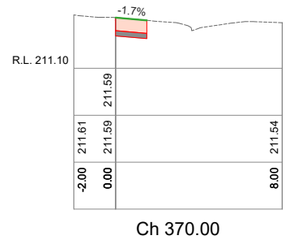
Ch 250.00



Ch 290.00



Ch 330.00



Ch 370.00

AMENDMENTS			
Revision	Description	Approved by	Date
A	Increase Bus Stop Slab for shelter	AS	Apr 24

CITY OF GREATER BENDIGO

SIMPSONS ROAD
EAGLEHAWK
NEW FOOTPATH

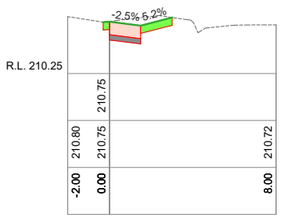
CROSS SECTIONS

Survey	H. WHYTOCK	31/01/22
Design	B. JANSSEN	04/04/22
Checked	A.SMITH	31/05/22
Approved by	N. SARTORI	31/05/22
Scale: -	Revision : -	
Original sheet size: A3	File : GB4924.dwg	
Sheet: 16 OF 26	Reference: GB4924	

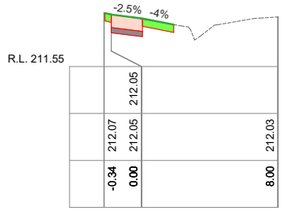
ISSUED FOR CONSTRUCTION

Plot Date: 26/06/2024

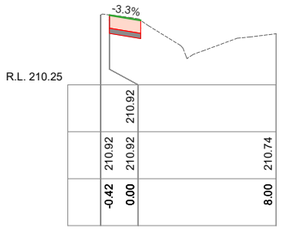
Plotted By: BAYLEY JANSSEN



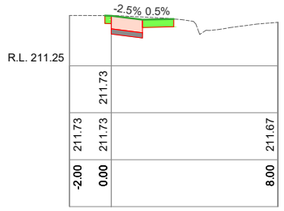
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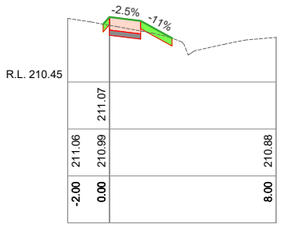
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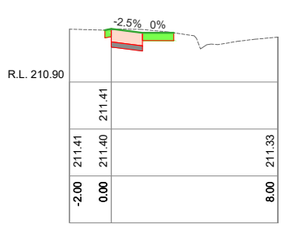
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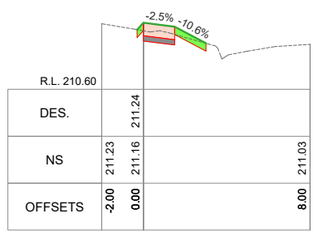
Ch 470.00



Ch 420.00

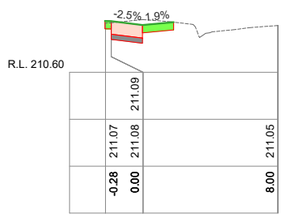


Ch 460.00

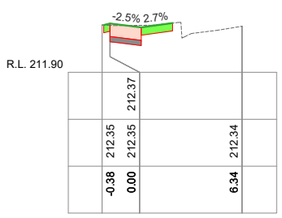


Ch 410.00

SCALES: H 1:250 V 1:50 (A3)



Ch 450.00



Ch 490.00

AMENDMENTS			
Revision	Description	Approved by	Date
A	Increase Bus Stop Slab for shelter	AS	Apr 24

CITY OF GREATER BENDIGO

SIMPSONS ROAD
EAGLEHAWK
NEW FOOTPATH

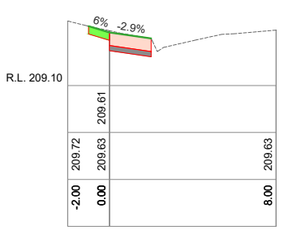
CROSS SECTIONS

Survey	H. WHYTOCK	31/01/22
Design	B. JANSSEN	04/04/22
Checked	A.SMITH	31/05/22
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Original sheet size: A3	File : GB4924.dwg	
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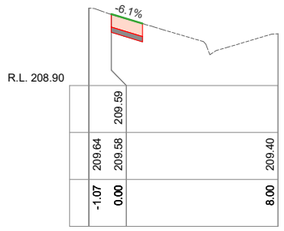
ISSUED FOR CONSTRUCTION

Plot Date: 26/06/2024

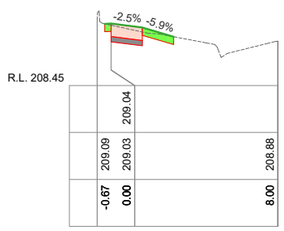
Plotted By: BAYLEY JANSSEN



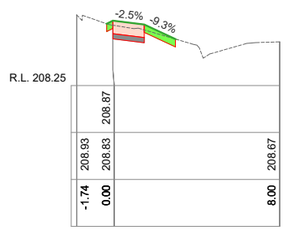
Ch 1060.00



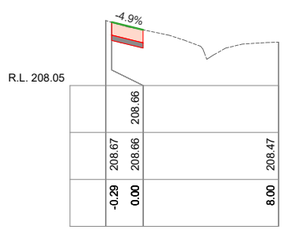
Ch 1100.00



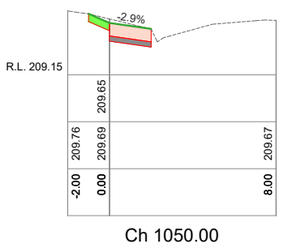
Ch 1140.00



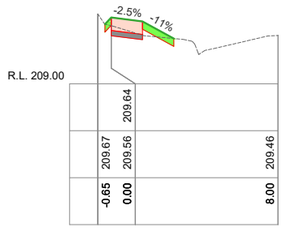
Ch 1180.00



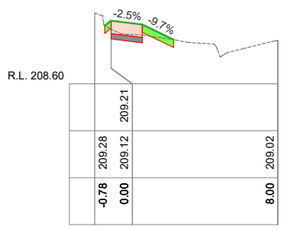
Ch 1220.00



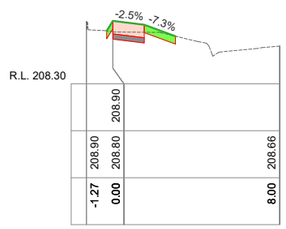
Ch 1050.00



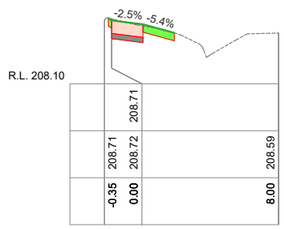
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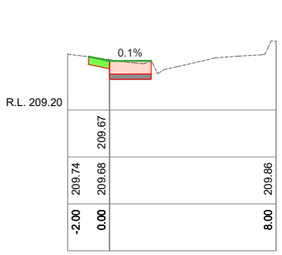
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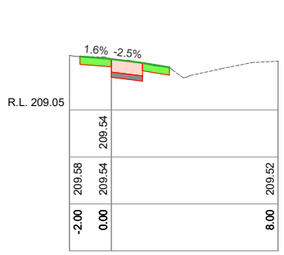
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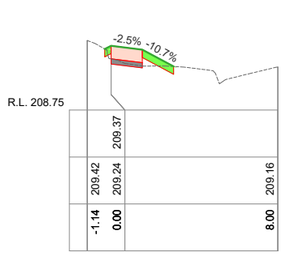
Ch 1210.00



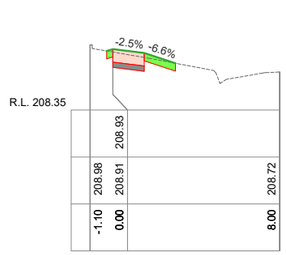
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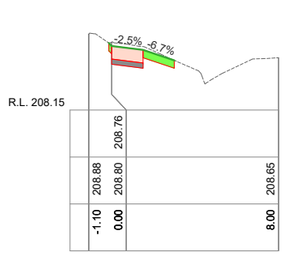
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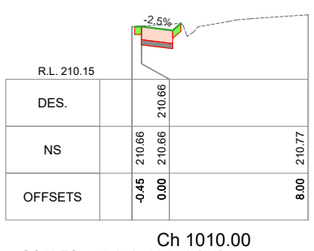
Ch 1120.00



Ch 1160.00

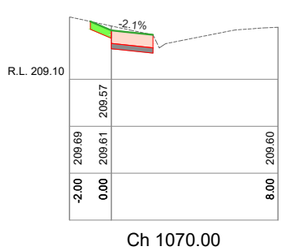


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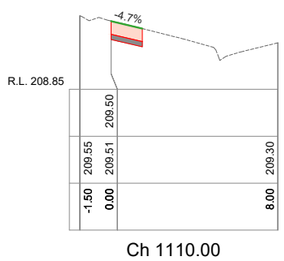


Ch 1010.00

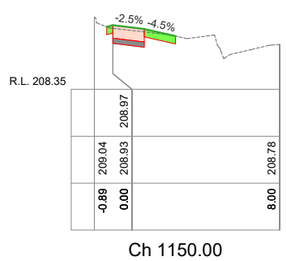
SCALES: H 1:250 V 1:50 (A3)



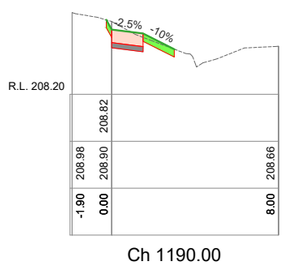
Ch 1070.00



Ch 1110.00



Ch 1150.00



Ch 1190.00

AMENDMENTS			
Revision	Description	Approved by	Date
A	Increase Bus Stop Slab for shelter	AS	Apr 24

CITY OF GREATER BENDIGO

SIMPSONS ROAD
EAGLEHAWK
NEW FOOTPATH

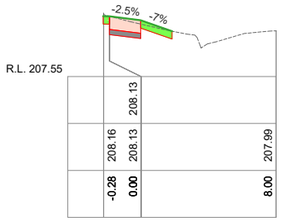
CROSS SECTIONS

Survey	H. WHYTOCK	31/01/22
Design	B. JANSSEN	04/04/22
Checked	A.SMITH	31/05/22
Approved by	N. SARTORI	31/05/22
Scale: -	Revision : -	
Original sheet size: A3	File : GB4924.dwg	
Sheet: 18 OF 26	Reference: GB4924	

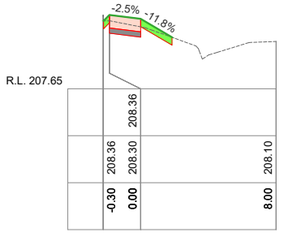
ISSUED FOR CONSTRUCTION

Plot Date: 26/06/2024

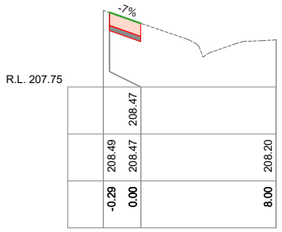
Plotted By: BAYLEY JANSSEN



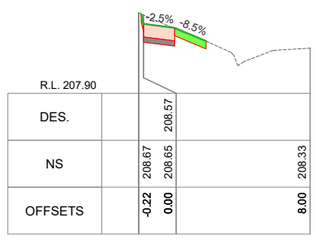
Ch 1260.00



Ch 1250.00



Ch 1240.00



Ch 1230.00

SCALES: H 1:250 V 1:50 (A3)

AMENDMENTS			
Revision	Description	Approved by	Date
A	Increase Bus Stop Slab for shelter	AS	Apr 24

CITY OF GREATER BENDIGO

SIMPSONS ROAD
EAGLEHAWK
NEW FOOTPATH

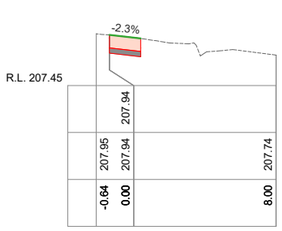
CROSS SECTIONS

Survey	H. WHYTOCK	31/01/22
Design	B. JANSSEN	04/04/22
Checked	A.SMITH	31/05/22
Approved by	N. SARTORI	31/05/22
Scale: -	Revision : -	
Original sheet size: A3	File : GB4924.dwg	
Sheet: 19 OF 26	Reference: GB4924	

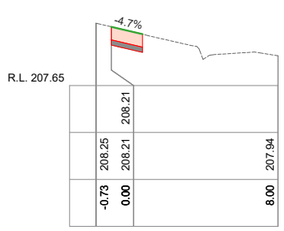
ISSUED FOR CONSTRUCTION

Plot Date: 26/06/2024

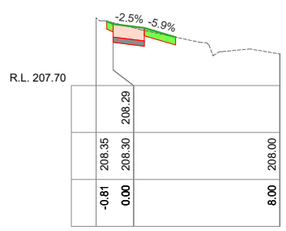
Plotted By: BAYLEY JANSSEN



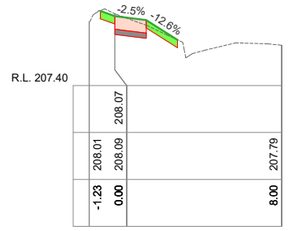
Ch 2040.00



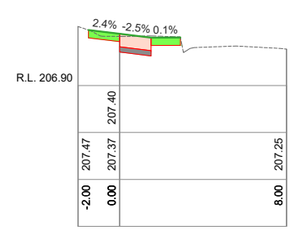
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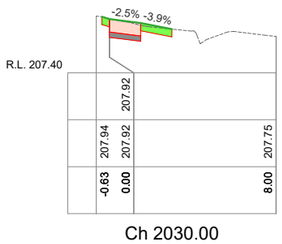
Ch 2120.00



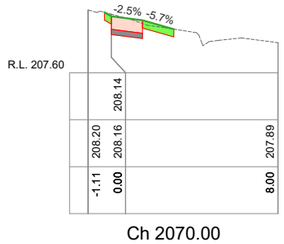
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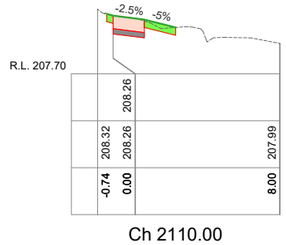
Ch 2200.00



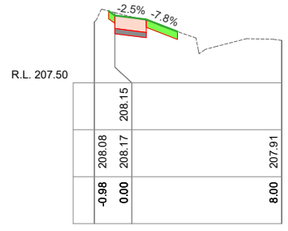
Ch 2030.00



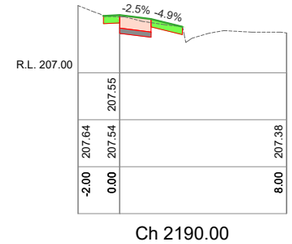
Ch 2070.00



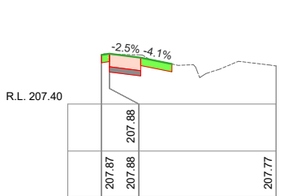
Ch 2110.00



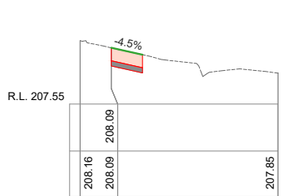
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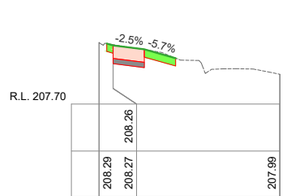
Ch 2190.00



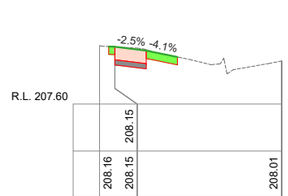
Ch 2020.00



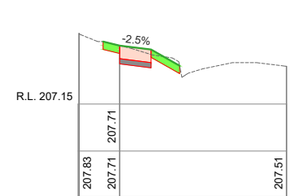
Ch 2060.00



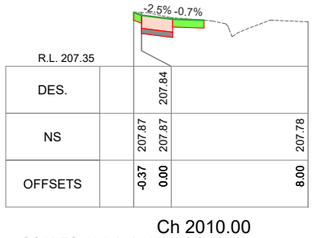
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Ch 2140.00

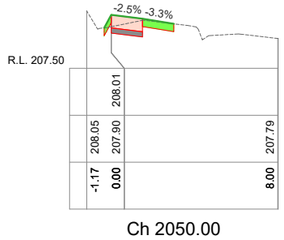


Ch 2180.00

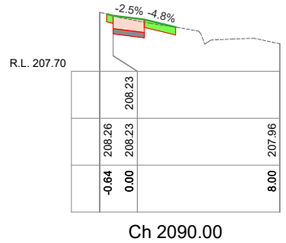


Ch 2010.00

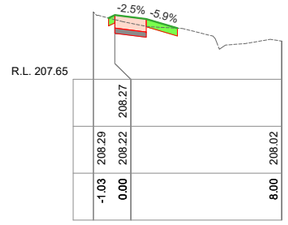
SCALES: H 1:250 V 1:50 (A3)



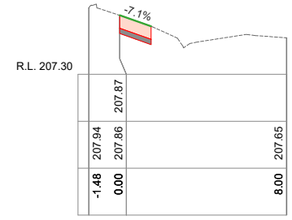
Ch 2050.00



Ch 2090.00



Ch 2130.00



Ch 2170.00

AMENDMENTS			
Revision	Description	Approved by	Date
A	Increase Bus Stop Slab for shelter	AS	Apr 24

CITY OF GREATER BENDIGO

SIMPSONS ROAD
EAGLEHAWK
NEW FOOTPATH

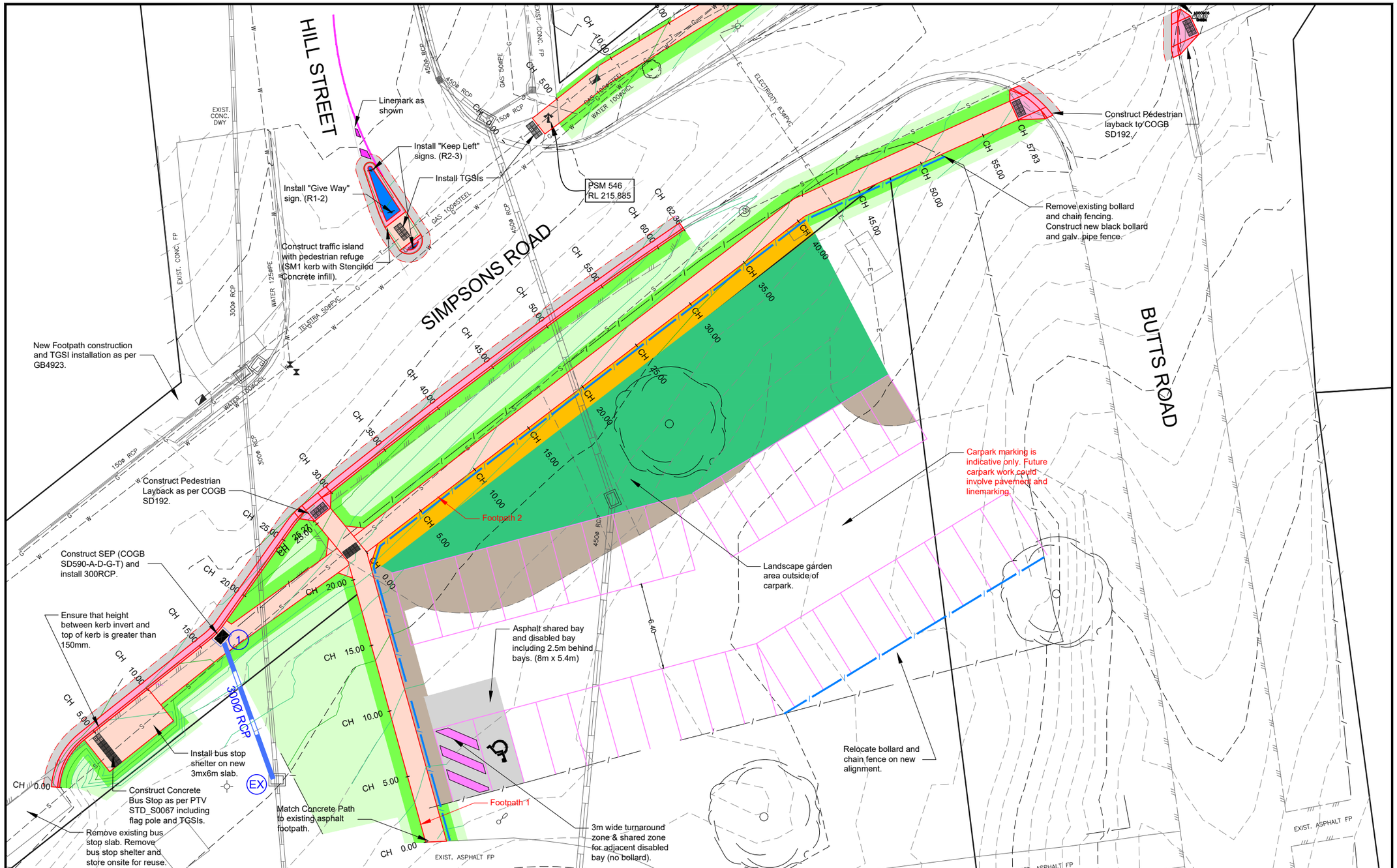
CROSS SECTIONS

Survey	H. WHYTOCK	31/01/22
Design	B. JANSSEN	04/04/22
Checked	A.SMITH	31/05/22
Approved by	N. SARTORI	31/05/22
Scale: -	Revision : -	
Original sheet size: A3	File : GB4924.dwg	
Sheet: 20 OF 26	Reference: GB4924	

ISSUED FOR CONSTRUCTION

Plot Date: 26/06/2024

Plotted By: BAYLEY JANSSEN



LEGEND

- PROPOSED CONCRETE: Footpaths - Refer SD200, SD205 & SD210 Driveways - Refer SD235 & SD240
- NATURE STRIP REINSTATEMENT: 75mm depth topsoil & kikuyu instant turf
- NATURE STRIP REINSTATEMENT: 25mm depth topsoil - seeded & raked.
- PAVEMENT REINSTATEMENT: - IDM SD130 (40mm Asphalt)
- GRAVEL: 50mm Depth Gravel
- CONCRETE KERB & LAYBACKS: - B4 style kerb (COGB SD190) - Pedestrian Layback (COGB SD192)
- DESIGN CONTOUR 0.10m interval
- EXISTING CONTOUR 0.10m interval
- MULCH: - 100mm Eucy Mulch or equivalent

AMENDMENTS

Revision	Description	Approved by	Date
A	Increase Bus Stop Slab for shelter	AS	Apr 24

CITY OF GREATER BENDIGO

SIMPSONS ROAD
EAGLEHAWK
NEW FOOTPATH

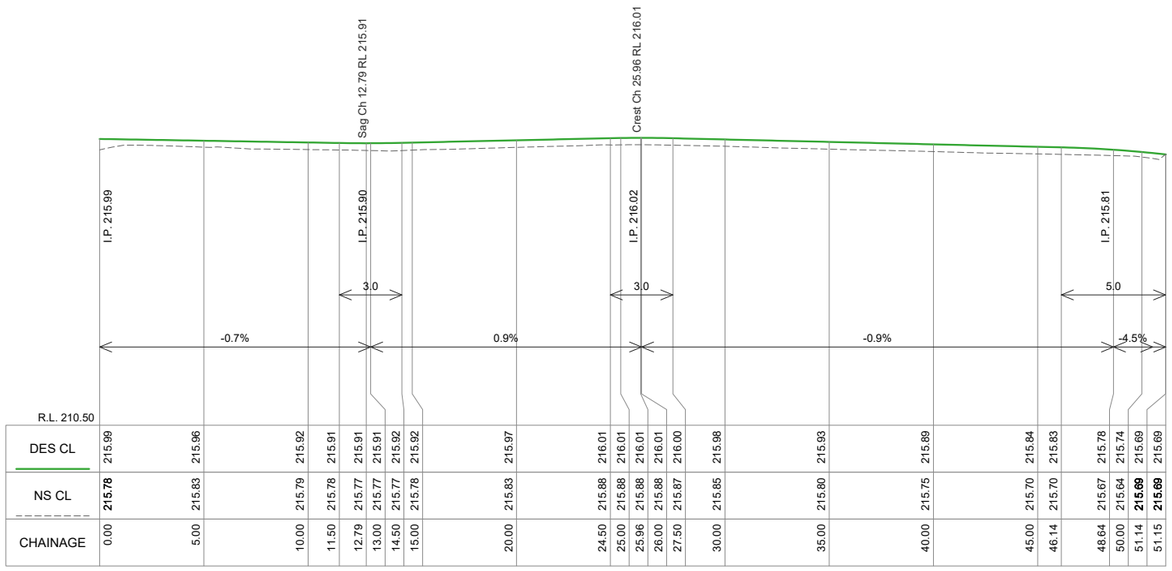
LAKE NEANGAR CARPARK

Survey	H. WHYTOCK	31/01/22
Design	B. JANSSEN	04/04/22
Checked	A.SMITH	31/05/22
Approved by	N. SARTORI	31/05/22

Scale: 1:250 | Revision : -
Original sheet size: A3 | File : GB4924.dwg
Sheet: 21 OF 26 | Reference: GB4924

ISSUED FOR CONSTRUCTION

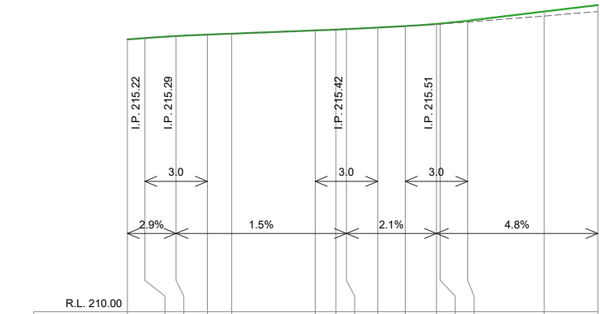
Plot Date: 26/06/2024
Plotted By: BAYLEY JANSSEN



R.L. 210.50

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DES CL	215.99	215.96	215.92	215.91	215.91	215.91	215.92	215.92	215.97	216.01	216.01	216.01	216.01	216.00	215.98	215.93	215.89	215.84	215.83	215.78	215.74	215.69	215.69
NS CL	**215.78**	215.83	215.79	215.78	215.77	215.77	215.77	215.78	215.83	215.88	215.88	215.88	215.88	215.87	215.85	215.80	215.75	215.70	215.70	215.67	215.64	**215.69**	**215.69**

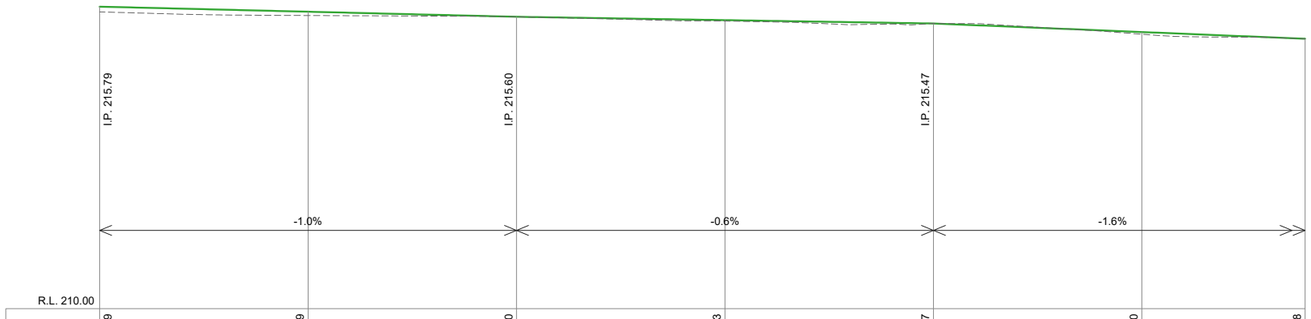
KERB LONGITUDINAL SECTION CH 0.000 To 51.145
SCALES: H 1:250 V 1:100 (A3)



R.L. 210.00

CHAINAGE	0.00	0.84	2.34	3.84	5.00	9.01	10.00	10.51	12.01	13.33	14.83	15.00	16.33	20.00	22.57
DES CL	215.22	215.25	215.29	215.31	215.33	215.39	215.41	215.42	215.45	215.48	215.51	215.53	215.58	215.76	215.88
NS CL	**215.22**	215.25	215.29	215.31	215.33	215.39	215.41	215.42	215.45	215.48	215.51	215.51	215.56	215.67	**215.76**

FOOTPATH 1 LONGITUDINAL SECTION CH 0.000 To 22.571
SCALES: H 1:250 V 1:100 (A3)



R.L. 210.00

CHAINAGE	0.00	10.00	20.00	30.00	40.00	50.00	57.83
DES CL	215.79	215.69	215.60	215.53	215.47	215.30	215.18
NS CL	**215.69**	215.62	215.60	215.52	215.47	215.26	**215.18**

FOOTPATH 2 LONGITUDINAL SECTION CH 0.000 To 57.829
SCALES: H 1:250 V 1:100 (A3)

AMENDMENTS

Revision	Description	Approved by	Date
A	Increase Bus Stop Slab for shelter	AS	Apr 24

CITY OF GREATER BENDIGO

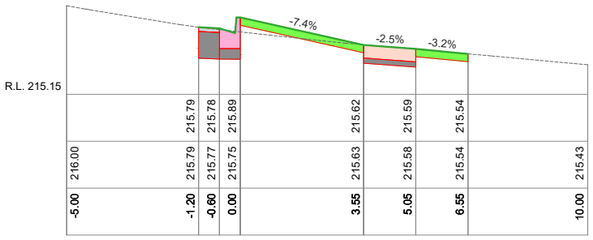
SIMPSONS ROAD
EAGLEHAWK
NEW FOOTPATH

LAKE NEANGAR CARPARK - LONG SECTIONS

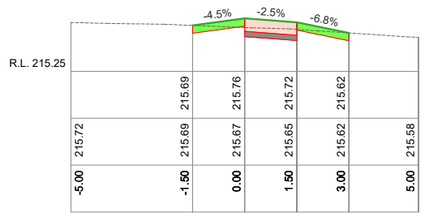
Survey	H. WHYTOCK	31/01/22
Design	B. JANSSEN	04/04/22
Checked	A.SMITH	31/05/22
Approved by	N. SARTORI	31/05/22
Scale: -	Revision : -	
Original sheet size: A3	File : GB4924.dwg	
Sheet: 22 OF 26	Reference: GB4924	

ISSUED FOR CONSTRUCTION

Plot Date: 26/06/2024
Plotted By: BAYLEY JANSSEN

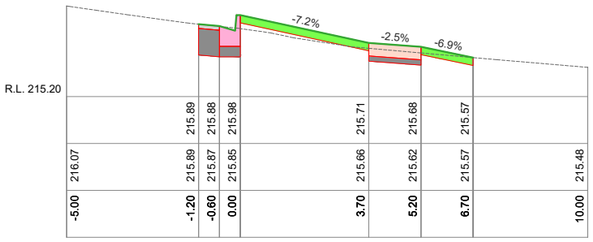


Ch 40.00

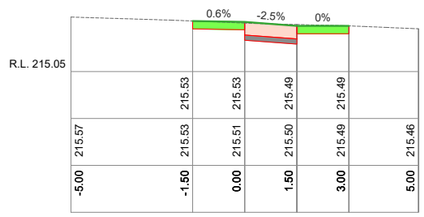


Ch 20.00

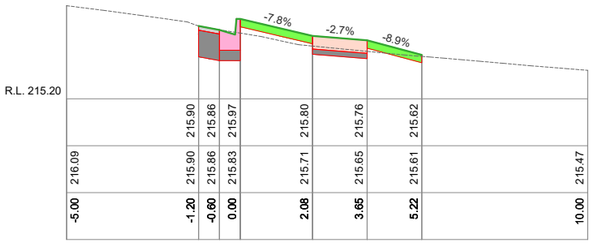
Pit Schedule										
Pit No.	Pit Type	Standard Drawing	Pit Width	Pit Length	Outlet Diameter	Outlet Invert RL	Inlet Diameter	Inlet Invert RL	Pit Depth	Pit Lid Level
			(mm)	(mm)	(mm)	(m)	(mm)	(m)	(m)	(m)
EX	EXISTING	-	600	900			300	214.877	0.631	215.508
1	COGB-Side Entry Pits	COGB SD590-A-D-G-T	600	900	300	215.181			0.631	215.812



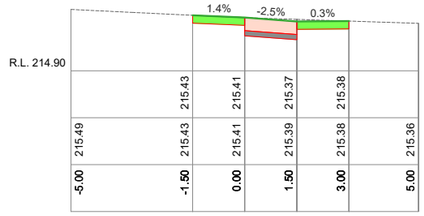
Ch 30.00



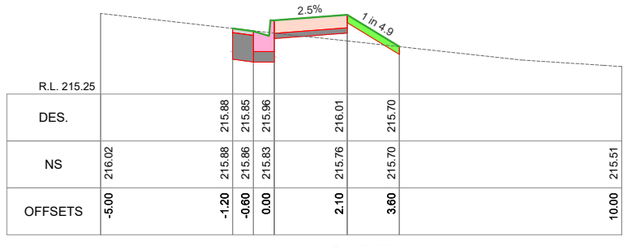
Ch 15.00



Ch 20.00

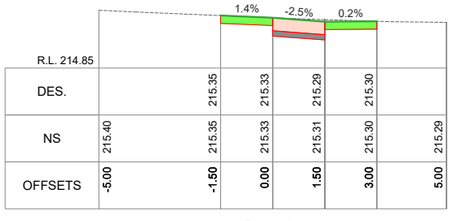


Ch 10.00



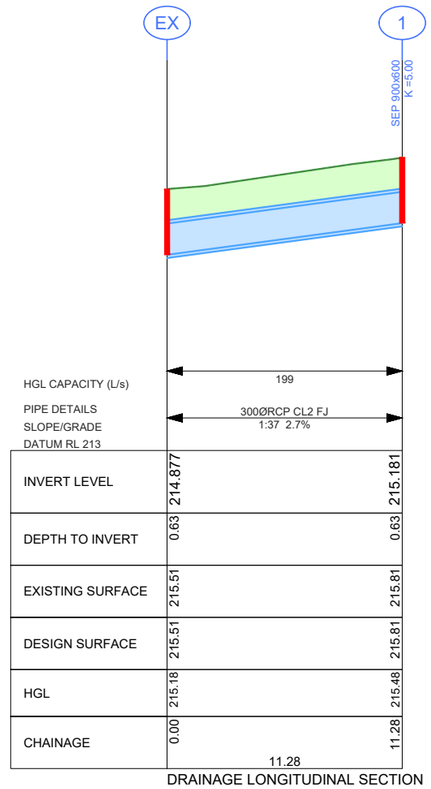
Ch 5.00

KERB & FOOTPATH 2 CROSS SECTIONS
SCALES: H 1:150 V 1:50 (A3)



Ch 5.00

FOOTPATH 1 CROSS SECTIONS
SCALES: H 1:150 V 1:50 (A3)



DRAINAGE LONGITUDINAL SECTION
SCALES: HORIZONTAL 1:250 VERTICAL 1:50

AMENDMENTS

Revision	Description	Approved by	Date
A	Increase Bus Stop Slab for shelter	AS	Apr 24

CITY OF GREATER BENDIGO

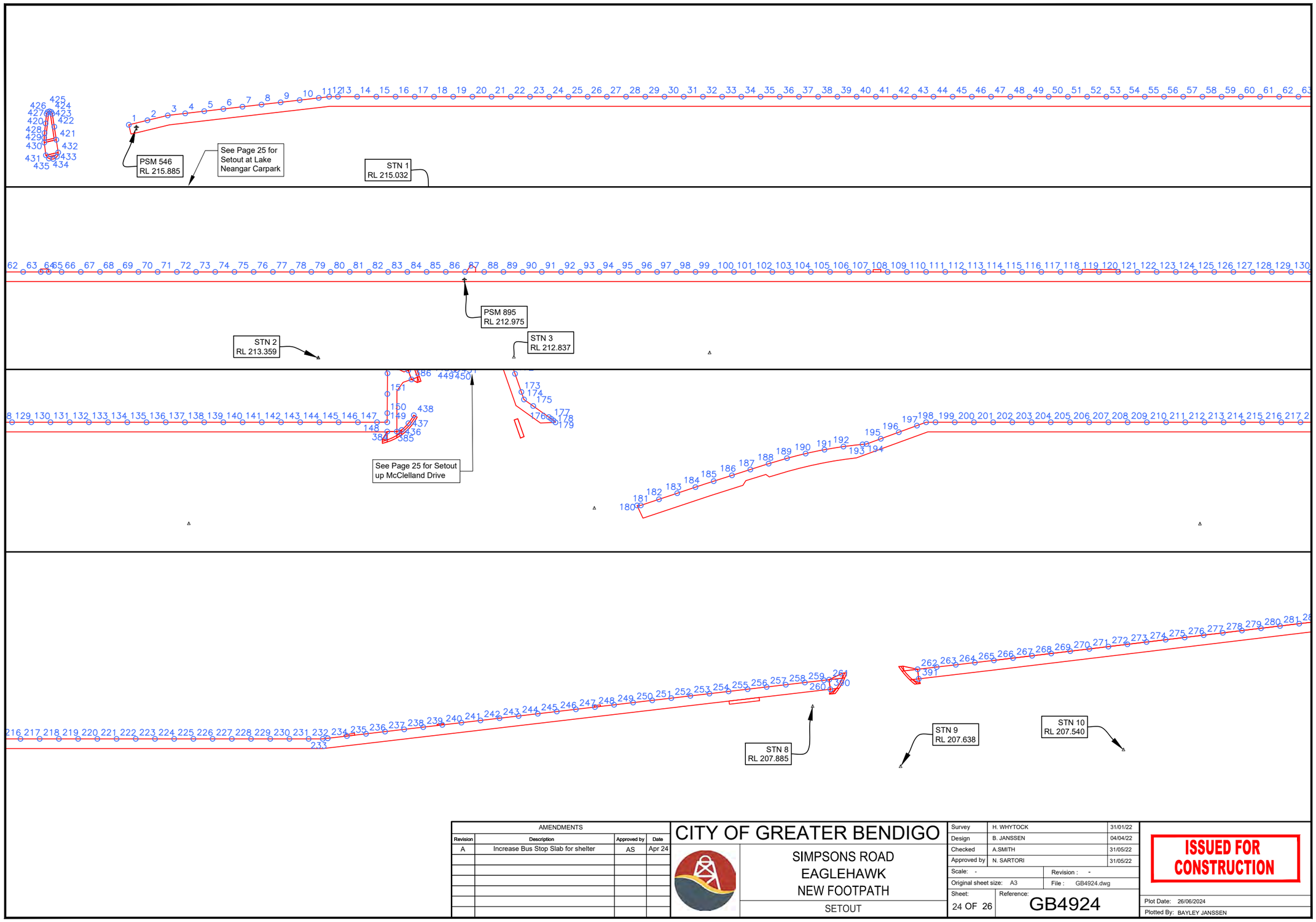
SIMPSONS ROAD
EAGLEHAWK
NEW FOOTPATH

LAKE NEANGAR CARPARK - CROSS SECTIONS

Survey	H. WHYTOCK	31/01/22
Design	B. JANSSEN	04/04/22
Checked	A.SMITH	31/05/22
Approved by	N. SARTORI	31/05/22
Scale: -	Revision : -	
Original sheet size: A3	File : GB4924.dwg	
Sheet: 23 OF 26	Reference: GB4924	

ISSUED FOR CONSTRUCTION

Plot Date: 26/06/2024
Plotted By: BAYLEY JANSSEN



AMENDMENTS			
Revision	Description	Approved by	Date
A	Increase Bus Stop Slab for shelter	AS	Apr 24

CITY OF GREATER BENDIGO

SIMPSONS ROAD
EAGLEHAWK
NEW FOOTPATH

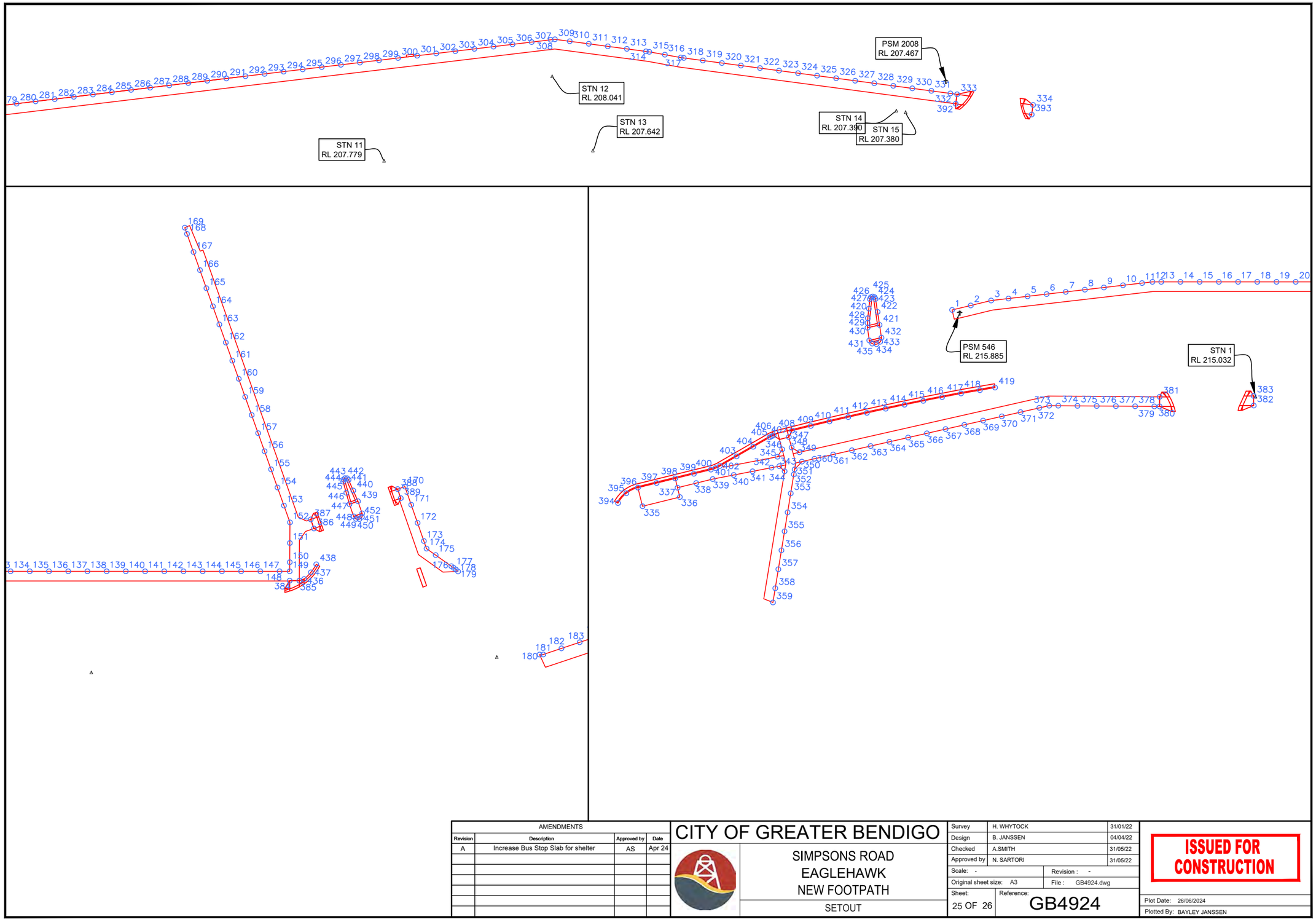
SETOUT

Survey	H. WHYTOCK	31/01/22
Design	B. JANSSEN	04/04/22
Checked	A.SMITH	31/05/22
Approved by	N. SARTORI	31/05/22
Scale: -	Revision : -	
Original sheet size: A3	File : GB4924.dwg	
Sheet: 24 OF 26	Reference: GB4924	

ISSUED FOR CONSTRUCTION

Plot Date: 26/06/2024

Plotted By: BAYLEY JANSSEN



AMENDMENTS			
Revision	Description	Approved by	Date
A	Increase Bus Stop Slab for shelter	AS	Apr 24

CITY OF GREATER BENDIGO

SIMPSONS ROAD
EAGLEHAWK
NEW FOOTPATH

SETOUT

Survey	H. WHYTOCK	31/01/22
Design	B. JANSSEN	04/04/22
Checked	A.SMITH	31/05/22
Approved by	N. SARTORI	31/05/22
Scale: -	Revision : -	
Original sheet size: A3	File : GB4924.dwg	
Sheet: 25 OF 26	Reference: GB4924	

ISSUED FOR CONSTRUCTION

Plot Date: 26/06/2024
Plotted By: BAYLEY JANSSEN

SETOUT

Point #	Easting	Northing	Level
1	255031.351	5933646.402	0.000
2	255033.704	5933648.262	216.179
3	255036.267	5933650.288	216.098
4	255038.602	5933651.709	216.047
5	255041.164	5933653.270	216.001
6	255043.726	5933654.830	215.956
7	255046.289	5933656.390	215.913
8	255048.851	5933657.950	215.878
9	255051.414	5933659.510	215.844
10	255053.976	5933661.070	215.809
11	255056.539	5933662.630	215.780
12	255057.929	5933663.476	215.765
13	255059.175	5933664.051	215.752
14	255061.900	5933665.306	215.724
15	255064.625	5933666.561	215.696
16	255067.350	5933667.816	215.664
17	255070.074	5933669.072	215.633
18	255072.799	5933670.327	215.600
19	255075.524	5933671.582	215.562
20	255078.249	5933672.837	215.525
21	255080.974	5933674.093	215.487
22	255083.698	5933675.348	215.412
23	255086.423	5933676.603	215.332
24	255089.148	5933677.858	215.253
25	255091.873	5933679.114	215.166
26	255094.597	5933680.369	215.072
27	255097.322	5933681.624	214.979
28	255100.047	5933682.879	214.891
29	255102.772	5933684.134	214.820
30	255105.497	5933685.390	214.750
31	255108.221	5933686.645	214.679
32	255110.946	5933687.900	214.592
33	255113.671	5933689.155	214.503
34	255116.396	5933690.411	214.415
35	255119.120	5933691.666	214.327
36	255121.845	5933692.921	214.241
37	255124.570	5933694.176	214.155
38	255127.295	5933695.432	214.075
39	255130.019	5933696.687	214.015
40	255132.744	5933697.942	213.955
41	255135.469	5933699.197	213.895
42	255138.194	5933700.452	213.858
43	255140.919	5933701.708	213.823
44	255143.643	5933702.963	213.789
45	255146.368	5933704.218	213.752
46	255149.093	5933705.473	213.714
47	255151.818	5933706.729	213.676
48	255154.542	5933707.984	213.636
49	255157.267	5933709.239	213.593
50	255159.992	5933710.494	213.550
51	255162.717	5933711.750	213.508
52	255165.442	5933713.005	213.540
53	255168.166	5933714.260	213.581
54	255170.891	5933715.515	213.622
55	255173.616	5933716.770	213.656
56	255176.341	5933718.026	213.686
57	255179.065	5933719.281	213.716
58	255181.790	5933720.536	213.747
59	255184.515	5933721.791	213.780
60	255187.240	5933723.047	213.812

SETOUT

Point #	Easting	Northing	Level
61	255189.965	5933724.302	213.845
62	255192.689	5933725.557	213.865
63	255195.414	5933726.812	213.884
64	255197.911	5933727.963	213.901
65	255199.054	5933728.489	213.909
66	255200.864	5933729.323	213.909
67	255203.588	5933730.578	213.908
68	255206.313	5933731.833	213.906
69	255209.038	5933733.088	213.899
70	255211.763	5933734.344	213.874
71	255214.488	5933735.599	213.849
72	255217.212	5933736.854	213.823
73	255219.937	5933738.109	213.779
74	255222.662	5933739.365	213.733
75	255225.387	5933740.620	213.687
76	255228.111	5933741.875	213.640
77	255230.836	5933743.130	213.591
78	255233.561	5933744.386	213.542
79	255236.286	5933745.641	213.493
80	255239.010	5933746.896	213.444
81	255241.735	5933748.151	213.395
82	255244.460	5933749.406	213.346
83	255247.185	5933750.662	213.311
84	255249.910	5933751.917	213.276
85	255252.634	5933753.172	213.242
86	255255.359	5933754.427	213.198
87	255258.084	5933755.683	213.146
88	255260.809	5933756.938	213.095
89	255263.533	5933758.193	213.043
90	255266.258	5933759.448	212.989
91	255268.983	5933760.704	212.935
92	255271.708	5933761.959	212.881
93	255274.433	5933763.214	212.827
94	255277.157	5933764.469	212.773
95	255279.882	5933765.724	212.719
96	255282.607	5933766.980	212.665
97	255285.332	5933768.235	212.612
98	255288.056	5933769.490	212.559
99	255290.781	5933770.745	212.506
100	255293.506	5933772.001	212.455
101	255296.231	5933773.256	212.404
102	255298.956	5933774.511	212.354
103	255301.680	5933775.766	212.305
104	255304.405	5933777.021	212.257
105	255307.130	5933778.277	212.209
106	255309.855	5933779.532	212.156
107	255312.579	5933780.787	212.099
108	255315.304	5933782.042	212.042
109	255318.029	5933783.298	211.985
110	255320.754	5933784.553	211.929
111	255323.479	5933785.808	211.873
112	255326.203	5933787.063	211.817
113	255328.928	5933788.319	211.780
114	255331.653	5933789.574	211.746
115	255334.378	5933790.829	211.712
116	255337.102	5933792.084	211.677
117	255339.827	5933793.339	211.643
118	255342.552	5933794.595	211.609
119	255345.277	5933795.850	211.582
120	255348.001	5933797.105	211.581

SETOUT

Point #	Easting	Northing	Level
121	255350.726	5933798.360	211.580
122	255353.451	5933799.616	211.578
123	255356.176	5933800.871	211.580
124	255358.901	5933802.126	211.583
125	255361.625	5933803.381	211.585
126	255364.350	5933804.637	211.590
127	255367.075	5933805.892	211.597
128	255369.800	5933807.147	211.604
129	255372.524	5933808.402	211.601
130	255375.249	5933809.657	211.571
131	255377.974	5933810.913	211.540
132	255380.699	5933812.168	211.510
133	255383.424	5933813.423	211.479
134	255386.148	5933814.678	211.447
135	255388.873	5933815.934	211.416
136	255391.598	5933817.189	211.374
137	255394.323	5933818.444	211.325
138	255397.047	5933819.699	211.276
139	255399.772	5933820.955	211.226
140	255402.497	5933822.210	211.177
141	255405.222	5933823.465	211.128
142	255407.947	5933824.720	211.079
143	255410.671	5933825.975	211.032
144	255413.396	5933827.231	210.985
145	255416.121	5933828.486	210.938
146	255418.846	5933829.741	210.882
147	255421.570	5933830.996	210.819
148	255424.295	5933832.252	210.756
149	255425.736	5933832.915	210.723
150	255425.151	5933834.203	210.773
151	255423.910	5933836.934	210.879
152	255422.581	5933839.860	210.993
153	255420.632	5933841.851	211.082
154	255418.534	5933843.995	211.178
155	255416.435	5933846.139	211.274
156	255414.337	5933848.283	211.370
157	255412.239	5933850.427	211.465
158	255410.140	5933852.571	211.561
159	255408.042	5933854.715	211.657
160	255405.943	5933856.859	211.753
161	255403.845	5933859.003	211.849
162	255401.746	5933861.147	211.945
163	255399.648	5933863.291	212.040
164	255397.549	5933865.435	212.136
165	255395.451	5933867.579	212.232
166	255393.352	5933869.723	212.328
167	255391.254	5933871.866	212.427
168	255389.156	5933874.010	212.573
169	255388.432	5933874.750	212.623
170	255436.544	5933852.447	211.005
171	255438.627	5933850.288	210.901
172	255440.709	5933848.129	210.797
173	255442.792	5933845.969	210.694
174	255443.655	5933845.075	210.651
175	255445.382	5933844.751	210.590
176	255448.331	5933844.199	210.486
177	255448.751	5933844.120	210.472
178	255449.187	5933844.023	210.456
179	255449.615	5933843.897	210.440
180	255466.612	5933837.449	0.000

SETOUT

Point #	Easting	Northing	Level
181	255467.123	5933837.701	209.666
182	255469.312	5933839.753	209.689
183	255471.500	5933841.805	209.691
184	255473.688	5933843.858	209.685
185	255475.887	5933845.898	209.672
186	255478.103	5933847.920	209.654
187	255480.322	5933849.939	209.643
188	255482.534	5933851.966	209.632
189	255484.790	5933853.943	209.617
190	255487.129	5933855.822	209.607
191	255489.545	5933857.599	209.598
192	255492.035	5933859.272	209.585
193	255494.597	5933860.833	209.566
194	255495.138	5933861.152	209.569
195	255496.822	5933862.822	209.588
196	255498.953	5933864.934	209.611
197	255501.083	5933867.046	209.635
198	255502.175	5933868.129	209.648
199	255503.503	5933868.741	209.643
200	255506.228	5933869.996	209.634
201	255508.953	5933871.251	209.620
202	255511.678	5933872.506	209.607
203	255514.402	5933873.762	209.593
204	255517.127	5933875.017	209.573
205	255519.852	5933876.272	209.548
206	255522.577	5933877.527	209.523
207	255525.301	5933878.782	209.494
208	255528.026	5933880.038	209.453
209	255530.751	5933881.293	209.413
210	255533.476	5933882.548	209.372
211	255536.200	5933883.803	209.324
212	255538.925	5933885.059	209.276
213	255541.650	5933886.314	209.228
214	255544.375	5933887.569	209.180
215	255547.100	5933888.824	209.131
216	255549.824	5933890.080	209.083
217	255552.549	5933891.335	209.040
218	255555.274	5933892.590	209.016
219	255557.999	5933893.845	208.992
220	255560.723	5933895.100	208.969
221	255563.448	5933896.356	208.958
222	255566.173	5933897.611	208.948
223	255568.898	5933898.866	208.939
224	255571.623	5933900.121	208.930
225	255574.347	5933901.377	208.921
226	255577.072	5933902.632	208.911
227	255579.797	5933903.887	208.902
228	255582.522	5933905.142	208.893
229	255585.246	5933906.397	208.883
230	255587.971	5933907.653	208.874
231	255590.696	5933908.908	208.859
232	255593.421	5933910.163	208.844
233	255595.421	5933911.085	208.833
234	255596.102	5933911.500	208.828
235	255598.663	5933913.063	208.811
236	255601.223	5933914.626	208.794
237	255603.784	5933916.189	208.778
238	255606.344	5933917.752	208.761
239	255608.905	5933919.316	208.744
240	255611.466	5933920.879	208.727

SETOUT

Point #	Easting	Northing	Level
241	255614.026	5933922.442	208.710
242	255616.587	5933924.005	208.695
243	255619.148	5933925.568	208.680
244	255621.708	5933927.131	208.665
245	255624.269	5933928.694	208.643
246	255626.829	5933930.257	208.615
247	255629.390	5933931.820	208.588
248	255631.951	5933933.383	208.559
249	255634.511	5933934.946	208.530
250	255637.072	5933936.509	208.500
251	255639.633	5933938.072	208.471
252	255642.193	5933939.635	208.438
253	255644.754	5933941.198	208.406
254	255647.315	5933942.761	208.373
255	255649.875	5933944.325	208.321
256	255652.436	5933945.888	208.252
257	255654.996	5933947.451	208.182
258	255657.557	5933949.014	208.097
259	255660.118	5933950.577	207.953
260	255662.678	5933952.140	207.809
261	255663.381	5933952.569	207.770
262	255675.250	5933959.814	207.698
263	255677.806	5933961.383	207.741
264	255680.371	5933962.940	207.783
265	255682.931	5933964.503	207.825
266	255685.492	5933966.066	207.868
267	255688.048	5933967.637	207.868
268	255690.603	5933969.208	207.872
269	255693.160	5933970.779	207.884
270	255695.715	5933972.350	207.890
271	255698.271	5933973.921	207.904
272	255700.827	5933975.492	207.916
273	255703.382	5933977.063	207.923
274	255705.938	5933978.634	207.931
275	255708.494	5933980.205	207.935
276	255711.050	5933981.776	207.939
277	255713.605	5933983.347	207.962
278	255716.161	5933984.918	207.993
279	255718.717	5933986.489	208.023
280	255721.273	5933988.061	208.054
281	255723.828	5933989.632	208.079
282	255726.384	5933991.203	208.090
283	255728.940	5933992.774	208.102
284	255731.495	5933994.345	208.115
285	255734.051	5933995.916	208.135
286	255736.607	5933997.487	208.156
287	255739.163	5933999.058	208.176
288	255741.718	5934000.629	208.198
289	255744.274	5934002.200	208.219
290	255746.829	5934003.772	208.227
291	255749.385	5934005.343	208.230
292	255751.941	5934006.913	208.224
293	255754.498	5934008.482	208.236
294	255757.056	5934010.050	208.247
295	255759.613	5934011.619	208.259
296	255762.170	5934013.188	208.260
297	255764.728	5934014.756	208.259
298	255767.285	5934016.325	208.258
299	255769.842	5934017.893	208.263
300	255772.399	5934019.462	208.272

SETOUT

Point #	Easting	Northing	Level
301	255774.957	5934021.030	208.282
302	255777.514	5934022.599	208.291
303	255780.071	5934024.167	208.300
304	255782.629	5934025.736	208.292
305	255785.186	5934027.304	208.270
306	255787.743	5934028.873	208.237
307	255790.300	5934030.441	208.202
308	255792.858	5934032.010	208.167
309	255793.421	5934032.355	208.160
310	255795.656	5934033.046	208.148
311	255798.522	5934033.932	208.147
312	255801.388	5934034.818	208.146
313	255804.255	5934035.704	208.146
314	255807.121	5934036.590	208.145
315	255807.625	5934036.741	208.145
316	255810.019	5934037.362	208.125
317	255812.468	5934037.995	208.085
318	255812.918	5934038.134	208.075
319	255815.784	5934039.019	208.016
320	255818.650	5934039.905	207.956
321	255821.517	5934040.791	207.896
322	255824.383	5934041.676	207.843
323	255827.249	5934042.562	207.796
324	255830.116	5934043.447	207.749
325	255832.982	5934044.333	207.702
326	255835.848	5934045.218	207.655
327	255838.715	5934046.104	207.608
328	255841.581	5934046.989	207.561
329	255844.447	5934047.875	207.514
330	255847.314	5934048.760	207.467
331	255850.180	5934049.646	207.420
332	255853.046	5934050.531	207.373
333	255854.059	5934050.844	0.000
334	255865.528	5934054.292	0.000
335	255000.260	5933598.365	216.210
336	255004.949	5933602.106	216.120
337	255004.015	5933603.279	216.082
338	255006.357	5933605.154	216.037
339	255008.435	5933606.806	215.925
340	255011.150	5933608.759	215.907
341	255013.588	5933610.507	215.891
342	255016.026	5933612.256	215.875
343	255017.049	5933612.983	215.868
344	255018.128	5933612.602	215.737
345	255016.172	5933614.200	215.905
346	255016.349	5933615.555	215.955
347	255016.491	5933617.743	216.016
348	255017.571	5933616.431	215.911
349	255018.999	5933616.267	215.820
350	255019.953	5933615.109	215.782
351	255019.425	5933613.538	215.734
352	255019.639	5933612.765	215.684
353	255020.439	5933609.873	215.540
354	255021.239	5933606.982	215.464
355	255022.038	5933604.090	215.392
356	255022.838	5933601.199	215.340
357	255023.638	5933598.307	215.293
358	255024.437	5933595.416	215.238
359	255025.034	5933593.258	0.000
360	255021.540	5933616.327	215.762

SETOUT

Point #	Easting	Northing	Level
361	255023.920	5933618.152	215.733
362	255026.301	5933619.977	215.704
363	255028.682	5933621.803	215.675
364	255031.063	5933623.628	215.646
365	255033.444	5933625.453	215.616
366	255035.824	5933627.279	215.591
367	255038.205	5933629.104	215.571
368	255040.586	5933630.929	215.552
369	255042.967	5933632.755	215.533
370	255045.348	5933634.580	215.514
371	255047.728	5933636.405	215.494
372	255050.109	5933638.231	215.475
373	255051.366	5933639.193	215.459
374	255052.657	5933639.777	215.436
375	255055.391	5933641.013	215.386
376	255058.125	5933642.248	215.337
377	255060.858	5933643.483	215.288
378	255063.592	5933644.719	215.239
379	255066.326	5933645.954	215.189
380	255067.082	5933646.295	215.176
381	255066.464	5933647.662	0.000
382	255080.365	5933652.572	0.000
383	255079.731	5933653.932	0.000
384	255426.348	5933831.586	0.000
385	255427.710	5933832.214	0.000
386	255426.387	5933840.568	0.000
387	255425.340	5933841.642	0.000
388	255435.681	5933851.614	0.000
389	255436.722	5933850.535	0.000
390	255664.163	5933951.289	207.732
391	255676.031	5933958.533	207.661
392	255854.491	5934049.408	0.000
393	255865.960	5934052.855	0.000
394	254996.572	5933597.213	216.115
395	254997.109	5933599.155	216.125
396	254998.389	5933600.711	216.135
397	255000.734	5933602.581	216.090
398	255003.080	5933604.452	216.045
399	255005.424	5933606.323	216.000
400	255007.561	5933608.025	215.962
401	255008.122	5933608.542	215.959
402	255008.607	5933609.132	215.963
403	255010.343	5933611.578	216.006
404	255012.079	5933614.025	216.052
405	255013.789	5933616.433	216.096
406	255013.996	5933616.704	216.099
407	255014.222	5933616.961	216.102
408	255016.538	5933618.867	216.086
409	255018.883	5933620.738	216.058
410	255021.240	5933622.594	216.030
411	255023.609	5933624.434	216.002
412	255025.990	5933626.260	215.974
413	255028.382	5933628.070	215.946
414	255030.786	5933629.865	215.918
415	255033.201	5933631.644	215.890
416	255035.628	5933633.408	215.862
417	255038.066	5933635.158	215.834
418	255040.536	5933636.858	215.781
419	255042.513	5933638.219	215.694
420	255019.458	5933641.153	216.424

SETOUT

Point #	Easting	Northing	Level
421	255022.043	5933639.549	216.336
422	255020.913	5933641.259	216.395
423	255019.782	5933642.969	216.452
424	255019.525	5933643.155	216.460
425	255019.209	5933643.126	216.466
426	255018.991	5933642.895	216.467
427	255018.980	5933642.578	216.461
428	255019.937	5933639.728	216.384
429	255020.199	5933639.035	216.363
430	255020.511	5933638.363	216.343
431	255021.591	5933636.670	216.281
432	255023.145	5933637.872	216.272
433	255023.230	5933637.200	216.255
434	255022.866	5933636.627	216.251
435	255022.221	5933636.419	216.260
436	255428.285	5933832.759	0.000
437	255428.814	5933834.158	0.000
438	255429.049	5933835.637	0.000
439	255430.843	5933847.298	210.982
440	255429.480	5933848.513	211.027
441	255428.118	5933849.728	211.070
442	255427.808	5933849.851	211.077
443	255427.499	5933849.727	211.088
444	255427.360	5933849.425	211.085
445	255427.467	5933849.109	211.077
446	255428.629	5933847.744	211.031
447	255429.839	5933846.328	210.983
448	255431.225	5933844.885	210.932
449	255431.715	5933844.670	210.922
450	255432.213	5933844.866	210.921
451	255432.426	5933845.357	210.925
452	255432.229	5933845.854	210.936

STATION DATA

Point #	Description	Easting	Northing	Level
901	STN 1	255080.072	5933653.886	215.032
902	STN 2	255242.886	5933733.905	213.359
903	STN 3	255270.584	5933746.805	212.837
904	STN 4	255298.067	5933760.200	212.161
905	STN 5	255404.229	5933805.568	210.920
906	STN 6	255460.738	5933834.259	209.885
907	STN 7	255547.659	5933871.604	208.902
908	STN 8	255662.789	5933947.694	207.885
909	STN 9	255679.190	5933944.919	207.638
910	STN 10	255709.723	5933961.846	207.540
911	STN 11	255777.161	5934003.922	207.779
912	STN 12	255795.475	5934026.878	208.041
913	STN 13	255806.104	5934019.015	207.642
914	STN 14	255846.531	5934044.501	207.390
915	STN 15	255847.950	5934044.907	207.380
950	PSM 2009	256052.046	5934083.419	204.515
951	PSM 2008	255851.506	5934052.160	207.467
952	PSM 546	255032.523	5933646.705	215.885
953	PSM 895	255258.431	5933754.720	212.975

PIT SETOUT

Point #	Pit #	Easting	Northing
500	1	255008.495	5933608.281

AMENDMENTS

Revision	Description	Approved by	Date
A	Increase Bus Stop Slab for shelter	AS	Apr 24

CITY OF GREATER BENDIGO

SIMPSONS ROAD
EAGLEHAWK
NEW FOOTPATH

SETOUT TABLES

Survey	H. WHYTOCK	31/01/22
Design	B. JANSSEN	04/04/22
Checked	A.SMITH	31/05/22
Approved by	N. SARTORI	31/05/22
Scale: -	Revision : -	
Original sheet size: A3	File : GB4924.dwg	
Sheet: 26 OF 26	Reference: GB4924	

ISSUED FOR CONSTRUCTION

Plot Date: 26/06/2024

Plotted By: BAYLEY JANSSEN

Nathan Sartori
Co-Ordinator Civil Design

Attention: Bayley Janssen

Dear Sir

Proposed Footpath Works – Simpsons Rd, Eaglehawk

We the undersigned residents of Simpsons road hereby lodge our objection to the proposed footpath on the northern side between Hill street to Majors Road.

We all agree that the community and residents of Simpsons road would be better served by continuing the existing footpath on the southern side of Simpsons road.

By continuing the existing footpath, which, already covers one third of the length of the proposed works would:

Save the Council, rate payers and contractors considerable costs and time to complete the works as one third of the footpath is already done.

Save the residents considerable disruption to their lives and properties.

There are forty six properties that would be affected on the northern side with some requiring trees removed lawns and garden beds destroyed

There are only five properties on the southern side, none of which have nature strips, trees or garden beds.

The southern side also has more space between properties and roadside making it much **safer** for pedestrians using the footpath as they will have much less chance of being injured by a vehicle either travelling along Simpons road or reversing from a property.

Three weeks ago Bendigo police attended an accident at 99 Simpsons where a vehicle lost control and mounted their nature strip smashing down a post and the front tap. The resident told police the council were going to put a footpath there, the police stated, "that would be a very bad idea".

I am sure Bendigo Council is just as concerned as the residents of Simpsons road are for the safety of its pedestrians.

Please see attached details of residents that object to the footpath being place on the northern side of Simpsons road.

NAME	ADDRESS	Ph No	signature
LES YATES	[redacted]	[redacted]	
Renae Boucher			
SCOTT BOUCHER			
RUSSELL BIRCH			
WENDY YATES			W yates
Alan Angove			
Kerry Hosking			
S. Ashman			
L. Ashman			
D. Bowler			
P. Kelly			
A. Sargeant			
Faye Harvey			Faye Mharvey
Laura McGlashan			
MARIE SPENCE			
ROBERT CARTER			

Please note all of the above all live on the northern side of Simpsons Rd between Hill St and McClellan Rd which already has a footpath on the southern side.

15. LEAD AND GOVERN FOR ALL

15.1. Contracts Awarded Under Delegation

Author:	Corinne Fisher, Procurement Officer
Responsible Director:	Jessica Howard, Director Corporate Performance

Purpose

To inform Council of contracts signed under Delegation.

Recommended Motion

That Council note the contracts awarded under delegation during the previous reporting period.

Policy Context

Primary Council Plan Reference

City of Greater Bendigo Council Plan *Mir wimbul* 2021-2025
Outcome 1 - Lead and govern for all

Secondary Council Plan Reference(s)

Goal 1 - Accountable, financially responsible, equitable, transparent decision making

Conflict of Interest

No officer involved in the preparation or approval of this report declared a general or material conflict of interest.

Attachments

1. Contracts Awarded Under Delegation Council Report July 2024 [**15.1.1** - 1 page]

Capital Contracts							
Contract No	Project	Successful Contractor	Delegated Officer	Date Signed	Price (ex GST)	Practical Completion	Budget
CT000703	Kennington Reservoir Dam Safety Upgrade - Sheet Piling	Entracon Civil Pty Ltd	Brian Westley	20-Jun-24	$474,210.00	12-Aug-24	$488,600.00
Service Contracts							
Contract No	Project	Successful Contractor	Delegated Officer	Date Signed	Price (ex GST)	Contract Term & Options	Budget
Contracts Awarded at Council							
Contract No	Project	Successful Contractor	Delegated Officer	Date Signed	Price (ex GST)	Practical Completion / Contract Term & Options	Budget
CT000701	Lease for Two Landfill Compactors & One Landfill Crawler Loader	North West Services Pty Ltd	Andrew Cooney	25-Jun-24	Schedule of Rates	2 Years	$1,665,360.00

15.2. Audit and Risk Committee Biannual Report and Draft Meeting Minutes

Author:	Rebecca Maple, Risk and Assurance Advisor
Responsible Director:	Jessica Howard, Director Corporate Performance

Purpose

To provide Council:

- the Biannual Audit and Risk Committee Report in accordance with section 54(5) of the *Local Government Act 2020* (Vic) (the Act); and
- the unconfirmed minutes of the May 15, 2024 Audit and Risk Committee meeting in accordance with the Committee Charter.

Recommended Motion

That Council:

1. Note the unconfirmed minutes of the Audit and Risk Committee meeting held on May 15, 2024;
2. Note the minutes will be tabled for confirmation at the next Audit and Risk Committee meeting, to be held on September 4, 2024; and
3. Note the Biannual Audit and Risk Committee Report.

Executive Summary

The Audit and Risk Committee has requirements under the Act and the Committee Charter to report to Council.

Section 54(5) of the *Local Government Act 2020* (Vic) requires the Committee to:

a) prepare a biannual audit and risk report that describes the activities of the Audit and Risk Committee, including findings and recommendations; and
b) provide a copy of the biannual audit and risk report to the Chief Executive Officer for tabling at the next Council meeting.

The Committee Charter requires the minutes of Committee meetings be reviewed by the Director Corporate Performance and the Committee Chair and then provided to Council for information at the next opportunity following each Committee meeting.

Minutes from the Committee meeting held on May 15, 2024 and the Biannual Audit and Risk Committee Report are attached to this report for information.

Background

Council is committed to good governance, public transparency and accountability to the City of Greater Bendigo's community. The Committee has been established to strengthen Council's governance, risk management, financial management and to drive continuous improvement.

Report

The Biannual Audit and Risk Committee Report prepared by the Committee's chairperson is attached to this report. The report was noted by the Committee at its meeting of May 15, 2024.

The Committee Chair has reviewed the unconfirmed minutes of the May 15, 2024 Committee meeting and has approved their release. The unconfirmed minutes of the meeting are attached to this report.

Policy Context

Primary Council Plan Reference

City of Greater Bendigo Council Plan *Mir wimbul* 2021-2025
Outcome 1 - Lead and govern for all

Secondary Council Plan Reference(s)

Goal 1 - Accountable, financially responsible, equitable, transparent decision making

Conflict of Interest

No officer involved in the preparation or approval of this report declared a general or material conflict of interest.

Attachments

1. Audit and Risk Committee Biannual Report endorsed 15 May 2024 [**15.2.1** - 8 pages]
2. Unconfirmed Audit and Risk Committee Minutes May15 May 2024 [**15.2.2** - 19 pages]

City of Greater Bendigo
Audit and Risk Committee Report

City of Greater Bendigo
Audit and Risk Committee
Biannual Activity and Performance Report

1 October 2023 - 30 March 2024

Contents

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2. Purpose of the biannual activity report 4
3. Audit and Risk Committee Membership 4
4. Audit and Risk Committee Attendance 6
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6. Internal Audit 7
7. Meeting schedule for 2024 8

1. Introduction

The Audit and Risk Committee (Committee) is a requirement under the Part 2, Division 8 *Local Government Act 2020* (the Act). The role Committee is set out in the Committee Charter, adopted by Council on 19 August 2020.

The Committee is established to strengthen Council's governance, risk management, financial management and to drive continuous improvement. Pursuant to section 53(2) of the Act, the Committee is an advisory committee and does not have any delegated powers, including executive powers, management functions, or delegated financial responsibility.

The Committee assists Council to discharge its responsibilities under the Act to:

- monitor the compliance of Council policies and procedures with:
    - the overarching governance principles
    - the Act and the regulations and any Ministerial directions
    - other relevant laws and regulations
- monitor internal controls
- monitor Council financial and performance reporting
- monitor and provide advice on risk management and fraud prevention systems and controls
- oversee internal audit function
- oversee external audit functions.

The Committee operates to advise Council on how best to fulfil its responsibilities, and facilitate decision making, by providing a forum for improving communication between the Council members, senior management, finance, risk and compliance managers, internal and external auditors.

The Council authorises the Committee, within its responsibilities, to:

- endorse key documents and reports prior to seeking approval by Council, including annual financial reports, annual performance statements, new or revised policies and other documents that assist in maintaining a strong internal control environment.
- endorse the 3 year Strategic Internal Audit Plan, prior to being adopted by Council. The Committee has the authority to make necessary changes throughout the year to adapt to new information, and risks as they arise.
- obtain any information it requires from any official or external party (subject to any legal obligation to protect information).
- discuss any matters with the Victorian Auditor General's Office (VAGO), or other external parties (subject to confidentiality considerations).
- request the attendance of any official, including Councillors and Council Officers at Committee meetings.
- obtain legal or other professional advice at the City's expense, as considered necessary to meet its responsibilities, subject to prior agreement with the Chief Executive Officer (CEO).
- obtain legal or other professional advice at the City's expense, as considered necessary to meet its responsibilities, subject to prior agreement with the CEO.

2. Purpose of the biannual activity report

This report meets the requirements of section 54(5) of the Act. The report provides Council and the community with a summary of matters that the Committee has addressed in the reporting period, as part of discharging its responsibilities under the Committee Charter and the Act.

Further, the report provides Council with the Committee's findings and recommendations for the period. This report provides an overview of the activity of the Committee from 1 October 2023 to 30 March 2024.

3. Audit and Risk Committee Membership

The Committee comprises of seven members, four independent members and three Councillors. In addition to the members, other attendees include the CEO, Director Corporate Performance, Manager Financial Strategy, Manager Governance, Risk and Assurance Advisor and Internal and External Auditors.

Independent Members



Jovana Obradovic-Tantra- Chair of the Committee
October 2018 – Current

Jovana is currently serving her second term on the council's Audit and Risk Committee (ARC).

She is a governance professional, with over 15 years' experience in a wide array of industries including ports, transport, warehousing, heavy industry, construction, and manufacturing. She started her own compliance consultancy in 2016 servicing a variety of SMEs and local government clients.

She understands the shifting risk landscape faced by local government and proactively works with the ARC towards better outcomes for the council.



Stephen Brown
October 2020 – Current

Stephen has held senior management and executive positions in the banking and finance industry during his career of over thirty years. In addition to his executive work Stephen is also an experienced Board Director.

He is a Graduate of the Australian Institute of Company Directors, a registered Company Auditor and a Fellow of the Chartered Accountants Australia and New Zealand.



Rob Stephenson
October 2021- Current

Rob Stephenson is a qualified accountant, with broad experience during more than thirty years employed in professional roles in Bendigo. His roles have included public accounting, non-bank finance and member-service sectors, including as Head of La Trobe University's Bendigo Campus, and most recently, as Interim CEO of Be.Bendigo.

Since finishing his role at La Trobe, Rob has become more deeply involved in a range of Community Boards and organisations, with a focus on Leadership Development, Learning and Education. Rob is a Fellow of the Royal Society of Arts, CPA Australia and Institute of Managers & Leaders, and Member of Australian Institute of Company Directors and International Leadership Association.



Dan Butel
October 2023 – current

Dan Butel is a certified professional member of the Australian Computer Society and has held a range of ICT professional and leadership roles over the last 20 years, in industries including local government, casino and entertainment, taxation software, not-for-profit services and education.

Mr Butel holds tertiary qualifications in information technology, business and administration, and health service management and currently serves on several boards and audit and risk committees

Councillor Members



Mayor Cr Andrea Metcalf
November 2019 – Current

Cr Metcalf is a lifelong resident of Bendigo and is returning to Council for a second term. She is focused on being accessible to the community and looks forward to hearing from and meeting with residents throughout this term. So as the community understands her decision making, Cr Metcalf also looks forward to continuing her record on speaking to most matters before Council.

Cr Metcalf is passionate about support for the business community in the wake of the COVID-19 pandemic and also wants to see the development of a sustainable outcome to manage waste as the Eaglehawk Landfill approaches the end of its life. She also understands the importance of community facilities and is a keen supporter of Greater Bendigo's rural communities, and wants to help them develop and maintain their unique characteristics.

Cr Metcalf lives with her husband Jason and has two adult children.



Cr Margaret O'Rourke
December 2016 – Current

This is Cr O'Rourke's second Council term. Her focus will be to support our business community to recover and thrive following the COVID-19 pandemic. She is also interested in the health and wellbeing of families and seeing the continued development of open space and recreational facilities to support this. She believes advocacy to State and Federal governments will be critical to driving the continued success of Greater Bendigo and the region. Her focus will also be on sustainably managing growth, protecting our environment, and ensuring the differing needs of rural communities are understood and met.

Cr O'Rourke is a long-time Bendigo resident and lives with her husband and two teenage daughters. She is a former manager of Telstra Countrywide and her current Board appointments include Deputy Chair at Bendigo Kangan Institute and Director at Goulburn Murray Water.



Cr Julie Sloan
December 2021 – Current

Cr Julie Sloan has lived in the Whipstick Ward for 21 years and joins Council for the first time. Her vision for the Whipstick Ward and wider municipality is of a healthy, engaged and inclusive community that is proud of its culture, environment, animal welfare, and vibrant economic growth.

Her favourite parts of her ward include the forests, parks and lakes, native wildlife, family and community spaces, art and culture precincts, recreation reserves, local eateries, markets and friendly local traders. Cr Sloan is interested in supporting strategies that encourage economic and employment growth in small business, local construction and manufacturing industries.

Other issues important to Cr Sloan include sustainable environmental outcomes, considering animals and the environment in decision making, reconciliation and healing initiatives, community arts and culture hubs and interconnected cycling and pedestrian networks across the municipality and outlying towns.

4. Audit and Risk Committee Attendance

The Committee met twice during the period on 9 November 2023 and 22 February 2024 with attendance outlined below:

Member	Meetings Attended
Jovana Obradovic-Tantra (Chair)	2 of 2
Stephen Brown	2 of 2
Rob Stephenson	2 of 2
Dan Butel	2 of 2
Mayor Cr Andrea Metcalf	1 of 2
Cr Margaret O'Rourke	1 of 2
Cr Julie Sloan	2 of 2

5. Key Activities for the Reporting Period

9 November 2023

Matter considered	Summary
Appointment of new Chair	Jovana Obradovic-Tantra was appointed Chair for the period 1 October 2023 to 1 October 2024.
Review of actions arising from previous meeting	The Committee reviewed the status of actions arising in previous Committee meetings.
Quarterly Finance Report	The report showed an operating surplus against budget. The surplus is primarily due to rates notices being issued in August 2023 and phasing projects across the financial year.
Internal Audit - Status Report	Council's internal auditors reported on the status of the internal audit program.
Review of actions arising from previous internal audits	The Committee reviewed the status of the implementation of agreed management actions arising from previous internal audits.
Review of relevant reports and publications	Recent relevant reports and publications were presented to the Committee.
Bi-Annual Chairperson Report	The Bi-Annual Chairperson report was presented to the Committee.
Information Technology Report	An update on the status of the CCTV Network was provided.
WHS Overdue Audit Actions	An update with timeframes was provided to the Committee on overdue actions.
Report by the Chief Executive Officer	The CEO provided an overview of the following items: • Appointment of new CEO, Andrew Cooney • Appointment of new Director Strategy and Growth, Rachel Lee • Municipal Electoral Boundary Review has commenced • Last meeting for Craig Niemann as CEO prior to retirement
Councillor and Delegated Committee Member Expenses Report	Report tabled on Councillor and Delegated Committee Member Expenses.

22 February 2024

Matter considered	Summary
Internal Auditor presentations	The current internal auditor's contract concludes on 30 June 2024. Two internal auditor shortlisted candidates presented to the Committee.
Review of actions arising from previous meeting	The Committee reviewed the status of actions arising in previous Committee meetings.
External Audit - Update	The Committee noted VAGO's Audit Service Provider is HLB Mann Judd – Chartered Accountants and the draft audit strategy memorandum for the financial year ending 30 June 2024.
Quarterly Finance Report	The operational results and forecast for the 2023/2024 financial year have been updated.
Internal Audit - Status Report	Council's internal auditors reported on the status of the internal audit program.
Internal Audit Program	Committee endorsed 2024/25 – 2026/27 Internal Audit Program
Review of relevant reports and publications	Recent relevant reports and publications were made available to the Committee.
Review of actions arising from previous internal audits	The Committee reviewed the status of the implementation of agreed management actions arising from previous internal audits.
Cyber Security Report	A presentation on the Cyber Security Roadmap was presented to the Committee.
Report by the Chief Executive Officer	The CEO provided an overview of the following items: • Flood events for January 2024 • Rate cap announced at 2.75% for 2024/25 • Update on Municipal Electoral Boundary Review
Councillor and Delegated Committee Member Expenses Report	A report was tabled on the Councillor and Delegated Committee Member Expenses.
Employee Gifts, Benefits and Hospitality Register	A report was tabled on the Employee Gifts, Benefits and Hospitality Register
LGPRF Half Yearly Report	The Committee noted the LGPRF half yearly results.

6. Internal Audit

AFS and Associates were appointed as the Internal Auditor on July 1, 2019, with a renewal of the contract on July 1, 2022, for a further 12 months (ending June 30, 2023). The internal audit function provides an independent review of the effectiveness and efficiency of selected internal control processes and forms a key component of the Council's Governance and Risk Management Framework. The Internal Audit actions are reported and monitored by the Audit and Risk Committee at each meeting.

Below is an overview of the Internal Audits undertaken in 2021/22:

2021/22	
Occupational Health and Safety and Wellbeing (including working alone and WorkCover claim management)	**September 2021**
Fees and Charges	**November 2021**
Past Issues Follow Up— Portable and Attractive Assets	**February 2022**
Developer Contributions Planning	**March 2022**
Business Continuity Management/ Disaster Recovery Planning/Emergency Management	**May 2022**
Past Issues Follow Up – Contract Management	**May 2022**

Below is an overview of the Internal Audits scheduled for 2022/23:

2022/23	
Low Value Procurements (including Purchasing Cards)	**11-15 July 2022**
Community and Stakeholder Engagement (service coverage to be confirmed at scoping)	**2-10 November 2022**
Workforce and Succession Planning (including Gender Equity)	**February 2023**
Payroll	**March 2023**
Past Issues Follow Up – Management of Contaminated Land	**May 2023**

Below is an overview of the Internal Audits scheduled for 2023/24:

2023/24	
Native Vegetation Removal	**August 2023**
Past Issues Follow Up – Waste Management	**October 2023**
Procurement and Tendering Processes	**October 2023**
Livestock Exchange	**15 – 26 April 2024**
Past Issues Follow Up – Community and Stakeholder Engagement	**15 – 16 April 2024**
Social Justice Framework and Equity in decision making	**17 – 28 June 2024**

The 2024/25 – 2026/27 Strategic Internal Audit Program was endorsed at the February 22, 2024, Committee meeting and adopted by Council at the March 25, 2024, Council meeting. Below is an overview for the Internal Audits scheduled for 2024/25:

2024/25	
Assets – Road Management Plan	**July 2024**
Strategy, Business and Services Planning and Implementation Framework and Processes	**September 2024**
Organisational Culture	**November 2024**
Cybersecurity Risk Management and strategy implementation follow-up	**February 2025**
Service Area Review – Volunteer Management	**May 2025**

7. Meeting schedule for 2024

The Committee's meeting schedule for 2024 is as follows:

- 22 February 2024
- 15 May 2024
- 18 September 2024
- 14 November 2024

This report provides an overview of the requirements of the Audit and Risk Committee Charter and Committee Workplan, and I am pleased to report that the Committee has met its objectives during the reporting period.

Jovana Obradovic-Tantra
Chair
On behalf of the Audit and Risk Committee

AUDIT AND RISK COMMITTEE MINUTES

1:00 pm WEDNESDAY MAY 15, 2024

BENDIGO TOWN HALL

Unconfirmed

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Unconfirmed

1. INTRODUCTION

1.1. WELCOME

1.2. ACKNOWLEDGEMENT OF COUNTRY

We acknowledge that the City of Greater Bendigo is on Dja Dja Wurrung and Taungurung Country.

We would like to acknowledge and extend our appreciation to the Dja Dja Wurrung People, the Traditional Owners of the land that we are standing on today.

Today, we pay our respects to leaders and Elder's past, present and future for they hold the memories, the traditions, the culture and the hopes of all Dja Dja Wurrung People.

We express our gratitude in the sharing of this land, our sorrow for the personal, spiritual and cultural costs of that sharing and our hope that we may walk forward together in harmony and in the spirit of healing.

1.3. ATTENDANCE AND APOLOGIES

Attendance

- Jovana Obradovic-Tantra (Chair)
- Stephen Brown
- Robert Stephenson
- Dan Butel
- Cr Andrea Metcalf
- Cr Julie Sloan (via TEAMS)
- Cr Margaret O'Rourke (via TEAMS – left the meeting at 1:45pm)

- Nick Walker, HLB Mann Judd, External Auditor (via TEAMS)
- Je Lyn, HLB Mann Judd, External Auditor (via TEAMS)
- Brad Ead, AFS and Associates Pty Ltd, Internal Auditor
- Andrew Cooney, Chief Executive Officer
- Jessica Howard, Director Corporate Performance
- Nathan Morsillo, Manager Financial Strategy
- Nathan Cutting, Coordinator Finance Operations
- Ryan Millard Acting Manager Governance
- Rebecca Maple, Risk and Assurance Advisor
- Jock Schofield, Manager Safe Environments
- Nick Walker, HLB Mann Judd, External Auditor (via TEAMS)
- Je Lyn, HLB Mann Judd, External Auditor (via TEAMS)
- Brad Ead, AFS and Associates Pty Ltd, Internal Auditor

Apologies

Nil

Unconfirmed

2. DECLARATIONS

2.1. DECLARATIONS OF INTEREST, CONFLICT OF INTEREST AND PECUNIARY INTEREST

Committee recommendations must be transparent and accountable, to protect the public interest, maintain the integrity of the Committee and Council and enable the public to be confident that the Committee is performing its duties properly. If a conflict of interest exists, it must be declared and managed.

Division 2 of Part 6 of the *Local Government Act 2020* applies to Independent Members, as if the member were a member of a delegated Committee.

A member has a ***conflict of interest*** if they have:

1. a general conflict of interest within the meaning of section 127 of the Act
2. a material conflict of interest within the meaning of section 128 of the Act

Members of the Committee will provide declarations in accordance with statutory requirements.

At the beginning of each committee meeting, members are required to declare any conflict of interest that may apply to matters on the meeting agenda and will then be required to leave the room while those items are considered. Declared conflicts will be appropriately recorded in the minutes.

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At the beginning of each committee meeting, members are required to declare any conflict of interest that may apply to matters on the meeting agenda and will then be required to leave the room while those items are considered. Declared conflicts will be appropriately recorded in the minutes.

Declarations of interest outlined below considered standing declarations:

- Stephen Brown declared he is an employee of the Bendigo and Adelaide Bank
- Stephen Brown declared he is on the Board of Directors of Vision Super
- Robert Stephenson declared he is currently Advocacy lead of Be Bendigo

Unconfirmed

- Cr O'Rourke declared she is a customer of AFS and Associates Pty Ltd

Additional declarations of interest:

- Dan Butel declared he has commenced on the Board of the Star Cinema, Eaglehawk and advised this declaration to be added as a standing declaration.

Unconfirmed

3. STANDING ITEMS

3.1. Previous Minutes

Presenters: {custom-field-presenters}

Feedback/questions:

Nil

Resolution:

The Committee approved the minutes of the Audit and Risk Committee meeting held February 22, 2024.

Moved: Cr Andrea Metcalfe
Seconded: Stephen Brown

Unconfirmed

3.2. Actions Management

Presenter: {custom-field-presenters}

Feedback/questions:

Taken as read.

Actions/outcomes:

- The Committee noted the Action Register.

Unconfirmed

3.3. External Auditor Update

Presenters: {custom-field-presenters}

Feedback/questions:

Nil

Outcomes/Actions:

- The Committee noted the Interim Management Letter for the Financial Year ending 30 June 2024.

Unconfirmed

3.4. Internal Auditor Update

Presenters: {custom-field-presenters}

Feedback/questions:

- The Committee discussed:
  - City's approach to strategic planning including Integrated Strategic Planning Governance Group.
  - City's approach to participation in the House of Representatives Standing Committee on Regional Development Infrastructure and Transport inquiry into the role of federal government in addressing the sustainability of local government.

Outcomes/Actions:

- The Committee noted the following reports:
  - Strategic Internal Audit Program Status Update
  - Internal Audit Planning Document 'Strategy Business and Service Planning and Implementation Framework'
  - Past Issues Follow Up 'Community and Stakeholder Engagement'
  - Industry Update

- The Committee noted the planning/scoping document for the ‘Social Justice Framework and Equity in Decision Making’ will be circulated to Committee members for endorsement out of session.

- The Committee acknowledged this was Brad Ead's last meeting and thanked Brad for his work with the Audit and Risk Committee and the City.

Resolution

The Committee approved an amendment to the Strategic Internal Audit Program to reschedule the ‘Strategy, Business and Service Planning and Implementation Framework’ audit to September 2024 and bring forward the ‘Social Justice Framework and Equity in Decision Making’ audit to June 2024.

Moved: Dan Butel
Seconded: Robert Stephenson

Unconfirmed

3.5. Finance Update

Presenters: {custom-field-presenters}

Feedback/questions:

- The Committee discussed:
  - Adoption of a new tool used in financial statements preparation process;
  - Timeline for providing financial statements to the Committee and Council meetings;
  - City's approach to vulnerable rate debtors.

Outcomes/Actions:

- The Committee noted the Finance Update including:
  - Q3 Finance and Capital Management Report
  - Shell Financial Statements - City of Greater Bendigo 2024

- Timetable for provision of finance papers for Committee review to be circulated to Committee members out of session.

Unconfirmed

3.6. Risk and Assurance Update

Presenters: {custom-field-presenters}

Feedback/questions:

- The Committee discussed:
  - How mandatory training is tracked, monitored and implemented for employees without access to e-learning.
  - Risk controls including insurance and policy settings related to information technology, data and cyber security strategic risk.

Outcomes/Actions:

- The Committee noted the Risk and Assurance Update including:
  - Strategic Risks Report
  - Audit Actions Report

- The Committee to receive further information related to insurance coverage and Social Media Policy controls for technology, data, and cyber security strategic risk.

- The Committee to receive information on tracking. monitoring and implementing mandatory training for employees without online access.

Unconfirmed

3.7. CEO Report

Presenters: {custom-field-presenters}

Feedback/questions:

- The Committee discussed anticipated time frames for Enterprise Agreement negotiations.

Outcomes/Actions:

- The Committee noted the CEO Report.

Unconfirmed

3.8. Councillor Expenses and Gifts Report

Presenters: {custom-field-presenters}

Feedback/questions:

Nil

Outcomes/Actions:

- The Committee noted the:
  - Councillor Expenses for Quarter 3, 2024
  - Councillor Gift Register for Quarter 3, 2024

Unconfirmed

3.9. Employee Gifts, Benefits and Hospitality Register

Presenters: {custom-field-presenters}

Feedback/questions:

- The Committee discussed application of the Employee Gifts, Benefits and Hospitality Policy in relation to token offers ($20) and community/significant events.
- Employee Gifts, Benefits and Hospitality Policy review will consider issues experienced with the policy and ensure it is fit for purpose.

Actions/outcomes:

- The Committee noted the Gifts, Benefits and Hospitality Register.
- Declarations of gifts accepted on the Gifts, Benefits and Hospitality Register to be clarified.

Unconfirmed

3.10. ARC Workplan

Presenters: {custom-field-presenters}

Feedback/questions:

Nil

Outcomes/Actions:

- For information only

Unconfirmed

3.11. Internal Control Environment 2024 to 2027

Presenters: {custom-field-presenters}

Feedback/questions:

Nil

Actions/outcomes:

- For information only

Unconfirmed

4. GENERAL ITEMS

4.1. ARC Biannual Report

Presenters: {custom-field-presenters}

Feedback/questions:

- Update to Internal Audit program discussed at Item 3.4 noted.

Actions/outcomes:

- The Committee noted the Audit and Risk Committee Biannual Report subject to an amendment to page 8 “Overview of the Internal Audits scheduled for 2023/24” to reflect rescheduling of the Strategy, Business and Service Planning and Implementation Framework’ audit to September 2024 and the ‘Social Justice Framework and Equity in Decision Making’ audit to June 2024.

Unconfirmed

4.2. Good Governance Framework

Presenters: {custom-field-presenters}

Feedback/questions:

- The Committee discussed the usefulness of the draft Good Governance Framework to the public, Councillors, and employees.
- The Committee provided feedback including the importance of simple layout, community accessibility and ensuring currency of information.

Actions/outcomes:

- The Committee noted the draft Good Governance Framework.

Unconfirmed

5. URGENT BUSINESS

5.1. URGENT BUSINESS - NIL

6. CLOSE OF MEETING

There being no further business, the meeting closed at 2:35pm.

Unconfirmed

16. HEALTHY, LIVEABLE SPACES AND PLACES

16.1. Voddens Road, Sebastian - Use and Development of the Land for a Dwelling

Author:	Beth Lavery, Senior Statutory Planner
Responsible Director:	Rachel Lee, Director Strategy and Growth

Summary/Purpose

Application No:	DU/460/2022
Applicant:	Bendigo Planning Services
Land:	Voddens Road, SEBASTIAN 3556
Zoning:	Farming Zone
Overlays:	Bushfire Management Overlay
No. of objections:	1
Consultation meeting:	No
Key considerations:	• Whether the amended proposal is consistent with the purpose of the Farming Zone and the relevant planning policy relating to the protection of agricultural land; • Whether bushfire risk can be reduced to an acceptable level; and • Whether the use of land for a dwelling is compatible with surrounding land use and development and may result in any adverse amenity impacts.
Conclusion:	The use and development this land for a dwelling is inconsistent with planning policy and the purpose and decision guidelines of the Farming Zone. A dwelling is not required on the land to support an agricultural use of the land, and approval of the dwelling would lead to further fragmentation of agricultural land within the Farming Zone and will reduce the ability of this land to be used for this purpose in the future. Refusal of the application is recommended.

Recommended Motion

That Council issue a Notice of Decision to Refuse to Grant a Permit for the use and development of land for a dwelling at Voddens Road, SEBASTIAN 3556 on the following grounds:

1. The proposal is not consistent with Clauses 02.03-1 (Settlement), 02.03-4 (Natural resource management) and 02.03-6 (Housing) as it does not protect agricultural land from fragmentation and development, has the potential to restrict normal agricultural practices and will result in the loss of agricultural land by using the land for rural residential style living.
2. The proposal is not consistent with Clauses 14.01-1S (Protection of agricultural land) and 14.01-1L (Protection of agricultural land – Greater Bendigo) as it will result in the development of a dwelling on an existing, isolated small lot in the Farming Zone and the application has not demonstrated that a dwelling is required to support a genuinely economically viable agricultural use of the land that requires permanent and continuous care, supervision or security.
3. The proposal is not consistent with the purpose of the Farming Zone which seeks to ensure the retention of agricultural land and to ensure that non-agricultural uses, including dwellings, do not adversely affect the use of the land for agriculture. The dwelling has the potential to adversely affect the operation and expansion of nearby agricultural uses through changing the land use and reducing the ability of the site to be used for agricultural purposes in the future.

Background Information

At its meeting of 22 May 2023, Council resolved to refuse a previous version of this application on the site – which at that time was for the *use and development of land for a dwelling and vehicle store and reduction in car parking requirements.*

This application proposed:

- Construction of a 425 square metre dwelling comprising 5 bedrooms, 2 bathrooms, an open plan kitchen, living and dining area, rumpus room and attached garage, with the dwelling to be located centrally on the allotment and constructed of brick with a galvanised iron roof.
- New access to the proposed dwelling via a 3 metre wide crossover from Voddens Road and a 4 metre wide crushed gravel driveway.
- A 768 square metre storage shed (‘vehicle store’) to store vehicles associated with the landowners’ earthmoving business. All vehicles/machinery and equipment associated with the earthmoving business were proposed to be stored within this purpose-built building.

- Use of the vehicle store by six staff, between the hours of 7:30am-3:30pm Monday to Friday.
- As the use of the land for a vehicle store attracted a statutory parking requirement of 10 percent of the site, a reduction in this requirement was sought.

The application was refused by Council on 22 May 2023 on the following grounds:

1. The proposal does not support or enhance agriculture.
2. The proposal would result in the permanent removal of agricultural land.
3. The proposal is inconsistent and not compatible with surrounding land uses.
4. The proposal would result in a disorderly and undesirable planning outcome.

A copy of the 22 May 2023 report to Council is attached to this Council report.

Subsequent to the refusal to grant a permit for the proposal, the permit applicant sought review of Council's decision at the Victorian Civil and Administrative Tribunal (The Tribunal).

The matter proceeded to a Practice Day Hearing on 6 October 2023, to consider the following:

- The characterisation of the non-residential component of the land use; and
- To consider whether a preliminary hearing is required to determine whether the application meets the requirements of the *Aboriginal Heritage Act 2006 (Vic)* and the *Aboriginal Heritage Regulations 2018 (Vic).*

At this Practice Day Hearing the Tribunal indicated it was satisfied with the permissions sought and that the characterisation of the proposed use associated with the vehicle store related to the permit applicant's earthmoving business, and that the use was more broadly categorised as an industrial use under the Planning Scheme.

The question of whether a Cultural Heritage Management Plan was required necessitated more in-depth consideration. When submitting their application to Council, the permit applicant had submitted advice they had sought from a Heritage Advisor from Djandak which concluded that the development of the land for two dwellings (described by them as a 'home' and a 'flat') did not qualify as a 'High Impact Activity' and therefore did not trigger the preparation of a Cultural Heritage Management Plan.

It is important to note that this advice reflected an alternative development of the land (two dwellings) as opposed to one dwelling and one vehicle store as was ultimately applied for by the permit applicant and considered by Council.

Part of the subject land is within an area of cultural heritage sensitivity, due to the land being within 200 metres of Check Gully. Use of the land for Industry is defined as a 'High Impact Activity' under the Aboriginal Heritage Regulations, and therefore the proposed store necessitates the mandatory preparation of a Cultural Heritage Management Plan under the Regulations.

Section 52 of the Aboriginal Heritage Act provides that a decision maker must not grant statutory authorisation for an activity unless a Cultural Heritage Management Plan is approved, where such a Plan is required.

While the permit applicant sought review of Council's refusal to grant a permit, the Tribunal was not in a position to grant a permit even if it were persuaded to do so by the applicant in the course of a Hearing, because a Cultural Heritage Management Plan for the site has not been approved.

During the Practice Day Hearing, the permit applicants indicated to the Tribunal that they would not be able to proceed with the proposal as intended, due to the prohibitive costs of obtaining a Cultural Heritage Management Plan for the required activities, and on this basis, indicated that they intended to amend their application to remove the vehicle store component from their application.

Given the proposed changes to the application, the Tribunal determined that the most appropriate course of action was to set aside Council's decision to refuse the application, and to remit the application to Council to allow the permit applicant to make the foreshadowed changes to the application and allow Council to reconsider the merits of the amended application.

An order to this effect was received by the Tribunal on the day of the Practice Day Hearing (6 October 2023).

Subsequently the permit applicant formally submitted a request to amend the application to remove the vehicle store from the application and submitted plans on 17 November 2023 indicating the construction of a dwelling on the land only.

Report

Subject Site and Surrounds

Details of the subject site and surrounds were outlined within the 22 May 2023 Council Report and remain largely unchanged from that time.

> *The subject site is formally referred to as Crown Allotment 61 Section H Parish of Neilborough and is generally rectangular in shape with an area of 8.08 hectares.*

The site has a northern boundary of 271.98 metres to Voddens Road and a depth of 297.125 metres. The site is currently vacant and is heavily vegetated within the southern portion of the site. Access is provided via a 7.3 metre wide rural residential crossover from Voddens Road. The site has historically been used for agricultural purposes.

The site is located within the Farming Zone and is affected by the Bushfire Management Overlay. Surrounding land to the north, south and west is located within the Farming Zone and land further to the east is located within the Rural Conservation Zone. The area is primarily used for large scale agricultural uses such as dairy farming, piggeries and grazing. A number of dwellings are located within the immediate surrounding area, primarily to the north and north-east, some of which are associated with the use of the land for agriculture.

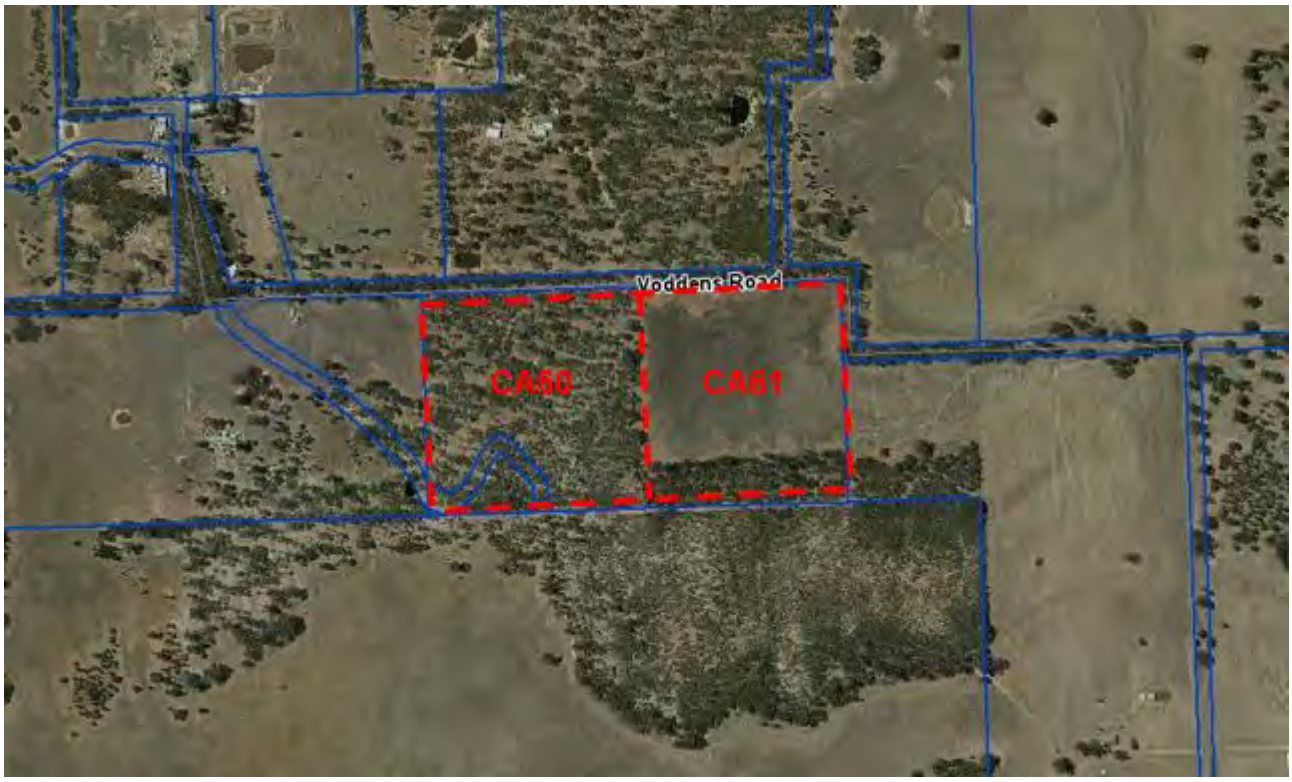


Figure 1. Aerial photo of subject land. The dwelling is proposed on CA61.

The allotment adjoins another Crown Allotment (Crown Allotment 60, Section H, Parish of Neilborough), with both of the allotments being owned by the permit applicants. The current application relates to Crown Allotment 61 only, shown in Figure 1.

The land is located approximately 1.5km south east of the township of Sebastian and is located approximately 12.5km north west of central Eaglehawk. Figures 2-4 demonstrate views into the site.



Figure 2. View into site from Voddens Road.



Figure 3. View into site from Voddens Road.



Figure 4. View into site from Voddens Road.

Proposal

The revised application proposes the use and development of the land for a dwelling only.

The siting of the proposed dwelling remains unchanged from the previous version of the plans, being set back 130.7 metres from Voddens Road, 78 metres from the western boundary and 140 metres from the southern boundary.

Again, the dwelling would comprise 5 bedrooms, 2 bathrooms, an open plan kitchen, living and dining area, rumpus room and attached garage, with the dwelling to be located centrally on the allotment, and constructed of brick with a galvanised iron roof.

Access and wastewater disposal areas remain unchanged.

It is noted that no associated agricultural use of the land is proposed in conjunction with the dwelling, and the site is to be used solely for rural residential purposes. The amended site plan is shown in Figure 5.

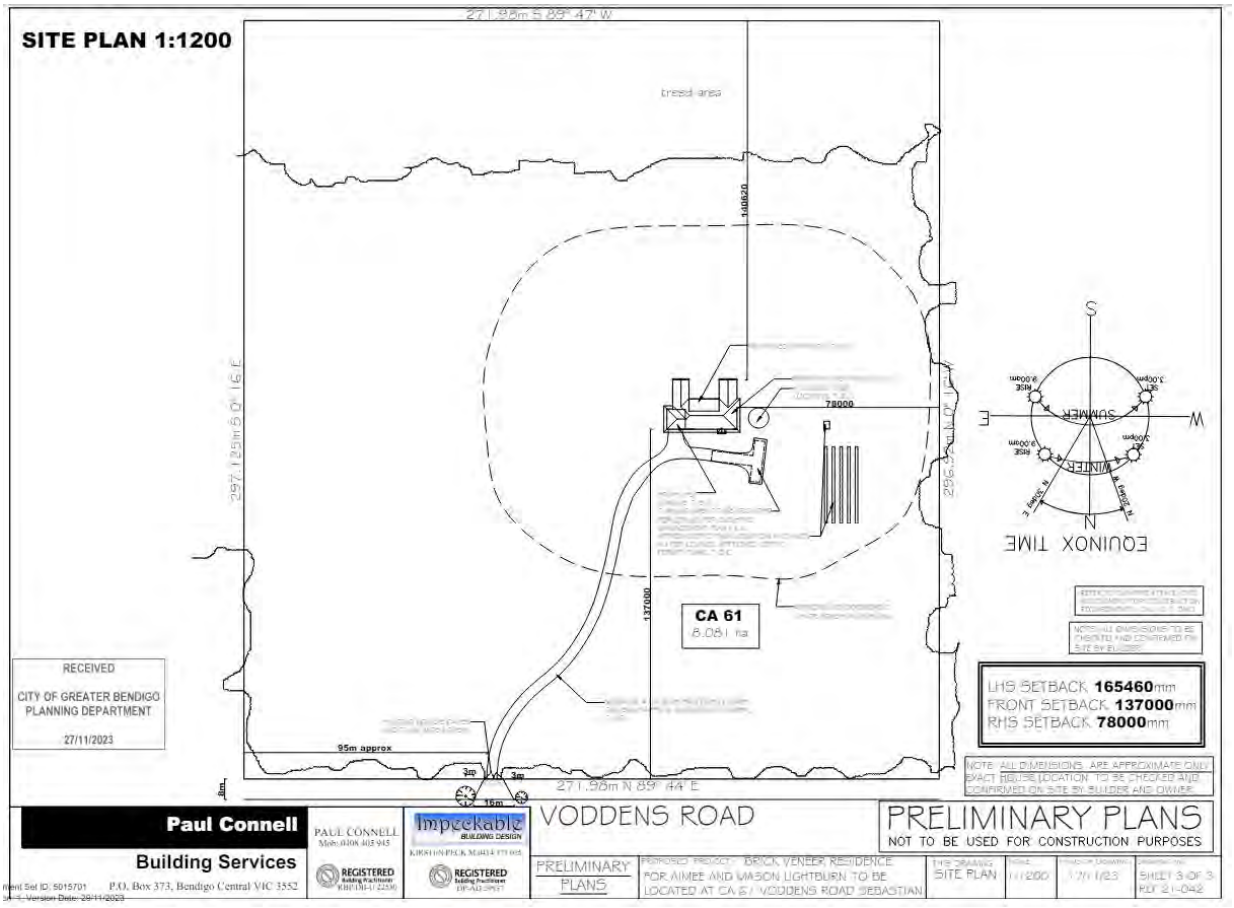


Figure 5. Amended site plan (showing dwelling only).

Planning Controls - Greater Bendigo Planning Scheme

Why is a permit needed?

A planning permit is required for the proposal pursuant to the following Clauses within the Greater Bendigo Planning Scheme:

Planning control	Why is a permit required?
Clause 35.07 (Farming Zone)	• Clause 35.07-1 – a permit is required to use the land for a dwelling as the lot is less than 40 hectares in size. • Clause 35.07-4 – a permit is required for buildings and works associated with a dwelling.
Clause 44.06 (Bushfire Management Overlay)	• Clause 44.06-2 – a permit is required for buildings and works associated with accommodation (dwelling).

The following clauses are relevant in the consideration of this proposal:

Municipal Planning Strategy

- Clause 02.03-1 Settlement
- Clause 02-03-3 Environmental risks and amenity
- Clause 02.03-6 Housing
- Clause 02.03-7 Economic Development

Planning Policy Framework

- Clause 11 Settlement
- Clause 11.01-1R Settlement – Loddon Mallee South
- Clause 13.01-1S Natural hazards and climate change
- Clause 13.02-1S Bushfire Planning
- Clause 14.01-1S Protection of agricultural land
- Clause 14.01-1L Protection of agricultural land – Greater Bendigo
- Clause 14.01-2S Sustainable agricultural land use
- Clause 15.01-6S Design for rural areas
- Clause 16.01-3S Rural residential development
- Clause 16.01- 3L Rural residential development – Greater Bendigo

Other Provisions

- Clause 35.07 Farming Zone
- Clause 44.06 Bushfire Management Overlay
- Clause 53.02 Bushfire Planning

Policy Context

Primary Council Plan Reference

City of Greater Bendigo Council Plan *Mir wimbul* 2021-2025

Outcome 2 – Healthy, liveable spaces and places

Secondary Council Plan Reference(s)

Goal 7 – Sustainable population growth is planned for

Consultation/Communication

Referrals

The following authority has been consulted on the proposal:

Referral	Comment
CFA	Provided conditional consent.

Public Notification

The amended application was re-advertised by way of notice on the site and letters to adjoining and nearby owners and occupiers, as well as to the existing objector. As a result of advertising, no additional objections were received. The original objection to the application remains live.

The objection submitted to the original application and plans stated the following grounds of concern:

(a) The size of the store – whether this is sufficient to house the proposed number of vehicles and associated earth moving equipment.
(b) Concerns relating to the site currently being used by the owners for the storage of imported soil, rocks, concrete, culverts and off-site materials associated with their existing earth moving business.
(c) Concerns relating to the significant earthworks that have been undertaken on site including the construction of a dam.
(d) Proposal not consistent with existing use and character of area.
(e) Road/traffic safety concerns – increased traffic, heavy vehicles traversing the roads and the 100 km/h speed limit.
(f) Detrimental amenity impacts from hours of operation, increase in traffic and heavy vehicles.
(g) The planning report submitted with the application states there are several commercial sites within the area, although these operations have been ceased for in excess of 5 years.

As the vehicle store and associated industrial use has been removed from the application, grounds (a),(f) and (g) are no longer relevant and (c) was addressed in the previous Council report.

Grounds (d) and (e) can be applied as concerns with the proposed use and development of the dwelling on the land and should be considered within this assessment.

The concerns regarding unauthorised use of the land for storage of material (fill presumably related to the applicant's business) from off the site raised in (b) have and will continue to be addressed through a planning compliance process.

Planning Assessment

In deciding whether the proposed use and development of the land for a dwelling (only) is appropriate, the following matters (which were also considered in the original decision making) must be revisited:

- Whether the use and development of agricultural land for a dwelling is consistent with planning policy and the purpose, objectives and decision guidelines of the Farming Zone;
- Whether the change to the application (deletion of store / industrial use) means the application should now be supported;
- Whether bushfire risk can be mitigated to an acceptable level; and
- Consideration of objector concerns relating to the appropriateness of a dwelling in terms of existing character and detrimental impacts from increased traffic associated with the dwelling.

These will be considered in turn below.

<u>Is the proposal consistent with relevant planning policy regarding rural dwellings and protection of agricultural land and the purpose of the Farming Zone?</u>

Most important for Council to understand is that the proposal, as it was when it was first considered, does not propose any type of agricultural use of the land.

The 22 May 2023 Council report correctly identified that rural residential encroachment into Farming zoned land poses an ongoing risk to the use and supply of agricultural land, not only within the municipality, but also at a state-wide level. Planning policy at both a State and local level identifies this risk at Clauses 02.03-4 (Natural resource management), 14.01-1S (Protection of agricultural land) and14.01-1L (Protection of agricultural land – Greater Bendigo).

Strategies outlined within Clause 14.01-1L (Protection of agricultural land – Greater Bendigo) outline that the approval of dwellings should be avoided unless required to support a genuinely economically viable agricultural use of the land that requires permanent and continuous care, supervision and security. This policy also sets out that the construction of a dwelling on existing small lots (lots smaller than the zone minimum) should be avoided in the Farming Zone.

The Municipal Planning Strategy at Clause 02.03-4 (Natural resource management) notes that isolated dwellings in rural areas have the potential to disrupt agricultural

activities, as ongoing agricultural production in part depends on maintaining a mass of productive land, and concentrations of residential type uses have the potential to restrict normal agricultural practices in these rural areas.

The application relies on the supposition of the agricultural value of the subject land being low, however little evidence has been provided to substantiate this claim and the size of the allotment on its own should not be used to determine whether the site has the capacity to be productive or otherwise. The land is proximate to other farming operations and therefore potentially has the capacity to be absorbed into larger farming operations (whether on contiguous land or not).

Ward v Macedon Ranges SC [2013] VCAT 1758 (10 October 2013) contemplated the impacts of allowing dwellings on small farming lots in relation to the ability for agricultural land to be consolidated into larger agricultural operations [at para 26):

> *Planning policy at a state and local level also seeks for land to be available for consolidation into larger enterprises consistent with a vision for broad acre agricultural activity. Allowing a dwelling on this land would mean future consolidation into larger land holdings would be unlikely. The effect of the dwelling would be to de-couple this land from its agricultural value and hence the purposes of the zone*.

It is acknowledged that rural residential living is a legitimate style of living which is recognised within the Planning Scheme and within planning policy, however there is a large, existing supply of Rural Living zoned land within the municipality (noted at Clause 02.03-6), and as such, those seeking this lifestyle are best directed to land that is appropriately zoned for that purpose, rather than encroaching into small lots on Farming zoned land which then removes that land from the state's agricultural base.

In *Moore v Greater Bendigo* CC [2023] VCAT 418 (19 April 2023), the Tribunal remarked:

> *The fact that agricultural land is fragmented into lots smaller than a zone minimum is common across much of the rural areas of Victoria. Such lots, particularly the multitude of Crown allotments created in the 19th century, have often been owned and managed as part of a larger farming enterprise. They are in essence 'paper lots' and it is only when they are sought to be developed for dwellings that the number and size of such lots becomes obvious [para 20].*

In relation to the need for permits for dwellings on these small lots, Member Bennett goes on to say at paragraphs 22 and 23:

> *For at least four decades the advice to purchasers wanting to live on vacant rural land is 'don't buy without a valid planning permit for a dwelling or a contract of sale that is conditional on obtaining a planning permit for a dwelling'.*
>
> *It is my experience that without such guarantees there is a high probability that a planning permit for a dwelling will not be granted on small rural lots across Victoria. I can recall that in the 1970s the State Government published a booklet which strongly advised prospective landowners not to buy small rural lots unless and until a planning permit for a dwelling had been obtained. That advice is equally relevant today.*

In *Gippsland Coastal Board v South Gippsland SC & Ors (*Red Dot) [2008] VCAT 1545 (29 July 2008), the Tribunal notes:

> *Planning, under the Planning and Environment Act 1987, is to encompass and integrate relevant environmental, social and economic factors. It is directed towards the interests of sustainable development for the benefit of present and future generations, on the basis of relevant policy and legislation. ... (Tribunal's emphasis)*
>
> *For this reason, it is imperative that planning decision makers are guided by relevant policy. It is not appropriate to exempt individual decisions from the application of policy* ***because it is only through the consistent application of policy that objectives leading to net community benefit and sustainable development will be achieved*** *[para 11 – author's emphasis added].*

In this instance there is substantial planning policy which discourages the construction of dwellings on small lots within the Farming Zone unless they are legitimately required to support the agricultural use of the land. The purpose of the Farming Zone itself includes ensuring that non-agricultural uses, including dwellings, do not adversely affect the use of the land for agriculture, and the decision guidelines also require consideration as to the impacts of a dwelling on the operation and expansion of agricultural uses, and whether a dwelling will result in the loss or fragmentation of agricultural land.

These themes and policy objectives should be consistently applied and upheld to ensure that agricultural land is not dwindled away through inconsistent application of policy to suit individual circumstance.

The amended proposal is not supported by planning policy nor is it consistent with the objectives of the Farming Zone.

A permit should not be granted for the dwelling as such a decision would be at odds with the Planning Scheme which expressly discourages dwellings on lots of less than 40 hectares except in a limited number of exceptional cases.

No agricultural use is proposed in this case so there is no planning argument as to why this dwelling should be allowed on this small Farming zoned lot.

Whether the change to the application (deletion of store / industrial use) means the application should now be supported

This application is a remittal from VCAT. It is relevant to consider whether the application as it now stands warrants Council making a different decision than that which was made previously.

When VCAT is dealing with a 'repeat' application the Tribunal decision of *Sprut Pty Ltd v Stonnington CC* [2012] VCAT 1675 is often referred to. *Sprut* states:

> *"[14] The 'usual principles' that have been generally adopted are outlined in decisions such as Reichert v Banyule City Council and are sometimes referred to (and were referred to in the hearing before me) as the "Reichert principles". Relevant factors to consider when reviewing an application that is similar to a proposal that has been the subject of previous Tribunal findings are:*
>
> - *Significant changes in the application itself;*
> - *Changes in the circumstances of the land and its surrounds;*
> - *Changes in planning policy; and/or*
> - *Changes in the interpretation of the facts or law relevant to the Tribunal's consideration.*

As stated previously; the store/industrial element of the proposal has been amended out of the application.

It stands to reason that the discussion and grounds of refusal related to that aspect of the proposal fall away.

In terms of the other considerations:

- There have not been changes to the circumstances of the land and surrounds;
- There have not been relevant changes to planning policy; and
- There have been no changes in the interpretation of the facts or law relevant to the decision makers' consideration.

The deletion of the store / industrial use does not warrant Council forming a different position to that which was previously determined.

Can bushfire risk be appropriately mitigated?

The site is wholly located within the Bushfire Management Overlay, owing to the proximity of the site in all directions to land which remains relatively heavily vegetated.

An updated Bushfire Hazard Landscape Assessment, Bushfire Management Statement and Bushfire Management Plan have been provided which now reflects the single dwelling on the property and details how the proposal responds to bushfire risk and the requirements of Clause 44.06 (Bushfire Management Overlay) and Clause 53.02 (Bushfire planning provisions).

The amended application was re-referred to the Country Fire Authority who has provided conditional consent to the construction of a dwelling on the land.

It is considered that the proposal has appropriately responded to bushfire risk and any dwelling on the land could employ ongoing bushfire protection and mitigation measures which would ensure that there is not any unacceptable risk to human life from bushfire.

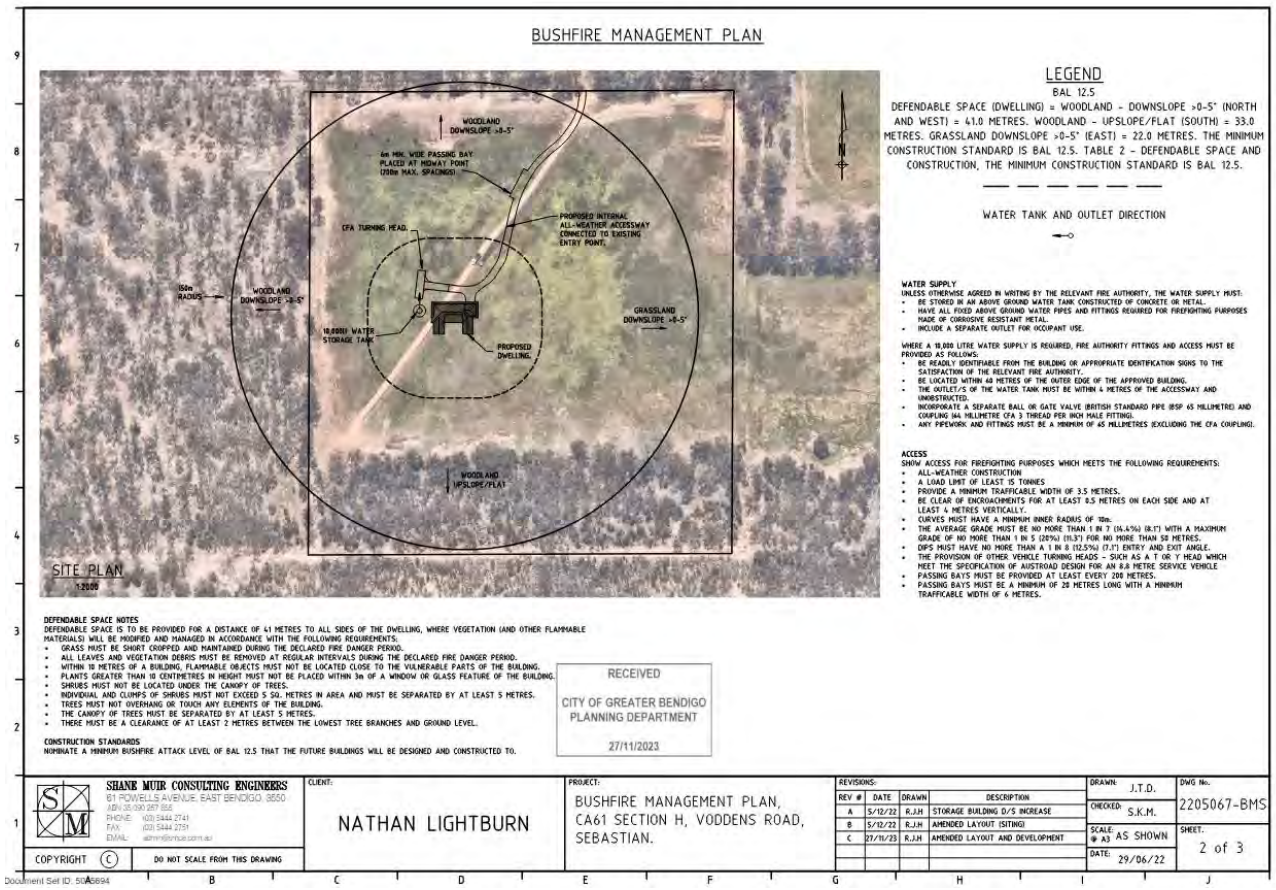


Figure 3. Amended Bushfire Management Plan

Remaining relevant objector concerns

As outlined earlier within this report, only two of the previous objector concerns remain relevant for the amended proposal; these being that the proposal is not consistent with existing use and character of area, and that it will result in road/traffic safety concerns particularly with regard to increased traffic.

As stated within the 22 May 2023 report to Council, there are a number of other existing dwellings in the surrounding area, and as such, it cannot be argued that the use and development of the land for a dwelling would be at odds or incompatible with the existing pattern of use and development in the area. The issue in this instance is that a dwelling on the land is not consistent with planning policy nor the purposes of the Farming Zone.

In terms of traffic likely to be generated by approval of a dwelling on the land, this is considered negligible and unlikely to cause significant amenity impacts given the relatively small number of vehicle movements likely to be generated by a single dwelling.

The previous concern relating to the unauthorised use of the land for storage of material from off the site has been the subject of an ongoing investigation by the City's Planning Compliance Officer and the EPA.

Conclusion

While bushfire risk has been addressed and the remaining objector concerns are somewhat satisfied, the proposed use and development of the land for a dwelling remains inconsistent with relevant planning policy regarding the protection of agricultural land and the purpose and decision guidelines of the Farming Zone. The application does not demonstrate that a dwelling is required to support a genuine agricultural use of the land, as directed by policy. Approval of a dwelling on the land would be inconsistent with state and local policy objectives which seek to protect the state's agricultural base and would result in the further fragmentation of this land.

It is recommended that a Notice of Decision to Refuse to Grant a Permit be issued for the amended proposal.

Options

Council, acting as the responsible authority for administering the Planning Scheme, may resolve to: grant a permit, grant a permit with conditions, or refuse to grant a permit.

Conflict of Interest

No officer involved in the preparation or approval of this report declared a general or material conflict of interest.

Attachments

1. Council Meeting Minutes - May 22, 2023 - Voddens Road, Sebastian - DU 460 2022 (2) [**16.1.1** - 22 pages]

17. HEALTHY, LIVEABLE SPACES AND PLACES

17.1. Use and Development of the Land for a Dwelling and Vehicle Store and a Reduction in Car Parking Requirements - Voddens Road, SEBASTIAN 3556

Author:	Rhiannon Biezen, Statutory Planner
Responsible Director:	Steve Hamilton, Director Strategy and Growth

Summary/Purpose

Application No:	DU/460/2022
Applicant:	Bendigo Planning Services
Land:	Voddens Road, SEBASTIAN 3556
Zoning:	Farming Zone
Overlays:	Bushfire Management Overlay
No. of objections:	1
Consultation meeting:	N/A
Key considerations:	• Whether the proposal is consistent with the purposes of the Farming Zone and the relevant planning policy that deals with rural dwellings and the protection of agricultural land. • Whether the proposal is compatible with surrounding land use and development and will result in any adverse amenity impacts. • Whether bushfire risk can be reduced to an acceptable level. • Whether the proposed car parking reduction is acceptable. • Objector concerns.
Conclusion:	The application is not in accordance with the Greater Bendigo Planning Scheme. It is recommended that Council refuse to grant a permit as the proposal does not present an acceptable planning outcome with regards to the purposes of the Farming Zone and the relevant planning policy that deals with rural dwellings and the protection of agricultural land.

Recommended Motion

Pursuant to section 61 of the Planning and Environment Act (1987), Council issue a Notice of Decision to Refuse to Grant a Permit for the use and development of the land for a dwelling and store, and for a reduction in car parking requirements at Voddens Road, SEBASTIAN 3556 (Crown Allotment 61 Section H Parish of Neilborough), on the following grounds:

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1. The proposal does not support or enhance agriculture.
2. The proposal would result in the permanent removal of agricultural land.
3. The proposal is inconsistent and not compatible with surrounding land uses.
4. The proposal would result in a disorderly and undesirable planning outcome.

RESOLUTION - Resolution No. 2023-69

Moved: Cr Fagg
Seconded: Cr Penna

That pursuant to section 61 of the Planning and Environment Act (1987), Council grant a permit for the use and development of the land for a dwelling and store and a reduction in car parking requirements at Voddens Road, SEBASTIAN 3556 (Crown Allotment 61 Section H Parish of Neilborough) subject to the following conditions:

1. MODIFIED PLANS REQUIRED
   Before the development commences, amended plans to the satisfaction of the responsible authority must be submitted to and approved by the responsible authority. When approved, the plans will be endorsed and will then form part of the permit. The plans must be drawn to scale with dimensions. The plans must be generally in accordance with the plans submitted with the application but modified to show:

   1. All reference to dwelling and shed locations 'TBC' to be removed, and exact locations provided.
   2. An amended Site Plan which removes reference to 'Proposed Granny Flat TBC'.
   3. A schedule of external colours and materials for the dwelling.

2. NO LAYOUT ALTERATION
   The use and development permitted by this permit as shown on the endorsed plans and/or described in the endorsed documents must not be altered or modified (for any reason) except with the prior written consent of the responsible authority.

3. LANDSCAPE PLAN REQUIRED
   Before the development starts, a landscape plan to the satisfaction of the responsible authority must be submitted to and approved by the responsible authority. When approved, the plan will be endorsed and will then form part of the permit. The plan must be drawn to scale with dimensions. The plan must show:

   1. A survey (including botanical names) of all existing vegetation to be retained and/or removed.
   2. Details of surface finishes of pathways and driveways.
   3. Planting schedule of all proposed trees, shrubs and ground covers, including botanical names, common names, pot sizes, sizes at maturity, and quantities of each plant.
   4. Native plantings along property boundaries in order to enhance the biodiversity of the area and provide a visual screen to surrounding properties.
   5. All plantings must be in accordance with the requirements of the Bushfire

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Management Plan endorsed to form part of this permit.

All species selected must be to the satisfaction of the responsible authority.

4. CONSOLIDATION OF PARCELS
Within six months of the date of this Planning Permit No. DU/460/2022 Crown Allotments 60 and 61 Section H Parish of Neilborough which comprise the application site must be consolidated and registered by the Land Titles office.

5. Construct a Gravel Driveway
Prior to the commencement of works for the dwelling, the owner must construct the following:

    1. The driveway between the property boundary and the edge of the gravel road must be constructed in accordance with the Infrastructure Design Manual SD 255 Rural Driveway.
    2. Access to the proposed dwelling must be provided via an all-weather (gravel) driveway with a minimum trafficable width of 3.5 metres with 500mm horizontal clearance and 4 metre vertical clearance to trees to accommodate emergency vehicles. A table drain is required on the high side with a turnaround area at the residence.
    3. Sight distance at the access driveway must comply with AS/NZS 2890.1:2004 Fig 3.2.

6. General Drainage – Buildings AND Houses
The proposed building(s) and works must be drained to the satisfaction of the City of Greater Bendigo as the responsible drainage authority.

7. Electricity Supply
The dwelling must be connected to a reticulated electricity supply or have an alternative energy source to the satisfaction of the responsible authority.

8. HOURS OF OPERATION – STORE
Except with the prior written consent of the responsible authority, the movement of vehicles and machinery to and from the store must only occur between the following times:

    - Monday to Friday 7.30am to 3.30pm.

9. USE OF THE LAND – STORE
All goods, machinery or vehicles associated with the use of the land for a store must be kept within the approved store building.

10. NO REPAIRS, SERVICING OR WASHING - STORE
Repairs, servicing or washing of vehicles associated with the use of the land for a store must not be carried out on the subject land except with the prior written consent of the responsible authority.

11. AMENITY OF THE LOCALITY
The use permitted by this permit must not, in the opinion of the responsible authority, adversely affect the amenity of the locality by reason of the processes carried on; the

transportation of materials, goods or commodities to or from the subject land; the appearance of any buildings, works or materials; the emission of noise, artificial light, vibration, smell, fumes, smoke vapour, steam, soot, ash, dust, waste water, waste products, grit, or oil; the presence of vermin, or otherwise.

12. BAFFLED LIGHTING
Outdoor lighting, where provided, must be designed, baffled and located to the satisfaction of the responsible authority such that no direct light is emitted outside the boundaries of the subject land.

13. NO MUD ON ROADS
In the event of mud, crushed rock or other debris being carried onto public roads or footpaths from the subject land, appropriate measures must be implemented to minimise the problem to the satisfaction of the responsible authority.

14. COUNTRY FIRE AUTHORITY
Endorsement of Bushfire Management Plan
Before the development starts, the Bushfire Management Plan prepared by Rod Hinton (Drawing No: 2205067-BMS (Revision B), dated 5/12/22) must be endorsed by the Responsible Authority. Once endorsed the plan must not be altered unless agreed to in writing by CFA and the Responsible Authority.

15. BUSHFIRE PROTECTION MEASURES
The bushfire protection measures forming part of this permit or shown on the endorsed plans, including those relating to construction standards, defendable space, water supply and access, must be maintained to the satisfaction of the responsible authority on a continuing basis. This condition continues to have force and effect after the development authorised by this permit has been completed.

16. EXPIRY OF PERMIT - COMPLETION AND COMMENCEMENT
This permit will expire if the development permitted by this permit is not completed and the use permitted by this permit is not commenced within 2 years from the date hereof or if the use is discontinued for a period of 2 years. The time within which the development must be completed and the use must commence may, on written request made before or within 12 months after the expiry of the permit, be extended by the responsible authority.

Planning Note:
This development has been assessed and approved under the Planning Scheme provisions ***Clause 35.07 – Farming Zone*** only. This approval does not indicate that requirements of Part 4 of the Building Regulations 2018 have been satisfied.

City of Greater Bendigo Environmental Health Note:

- Before a building permit is issued for a dwelling at the property, a Permit to Install an Onsite Wastewater Management System is required to be issued by Council.
- No plumbing fixtures are permitted to be installed in the shed without prior approval from Council/Wastewater shall not be generated from the shed without prior approval from Council.

City of Greater Bendigo Engineering Note:

A “Works Within Road Reserve Permit” must be obtained from Council’s Engineering Department prior to commencing any work outside the property boundary on the road reserve including works specified in 3 above. (Note: A Planning Permit is not a Works Within Road Reserve Permit)

CONSENT FOR WORK ON ROAD RESERVES
The applicant must comply with:

1. The Road Management Act 2004,
2. Road Management (Works and Infrastructure) Regulations 2005, and
3. Road Management (General) Regulations 2005

with respect to any requirements to notify the Coordinating Authority and/or seek consent from the Coordinating Authority to undertake “works” (as defined in the Act) in, over or under the road reserve. The responsible authority in the inclusion of this condition on this planning permit is not deemed to have been notified of, or to have given consent, to undertake any works within the road reserve as proposed in this permit.

LOST

RESOLUTION - Resolution No. 2023-75

Moved: Cr O'Rourke
Seconded: Cr Alden

That the recommended motion be adopted.

CARRIED

Report

Background Information

Preliminary concerns were raised with the applicant during the process with regards to the proposal not being in accordance with planning policy relating to rural dwellings and the protection of agricultural land. Further, the lot is an old Crown Allotment, pre-dating modern planning instruments and the Greater Bendigo Planning Scheme discourages their use for de-facto rural living purposes.

The applicant has provided further justification to support the proposal, but has failed to persuade City officers that the proposal presents a desirable or acceptable planning outcome.

It is noted that the application initially included the use and development of the land for a dependent person’s unit, but the application was later amended to remove this component.

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Subject Site and Surrounds

The subject site is formally referred to as Crown Allotment 61 Section H Parish of Neilborough, and is generally rectangular in shape with an area of 8.08 hectares.

The site has a northern boundary of 271.98 metres to Voddens Road and a depth of 297.125 metres. The site is currently vacant and is heavily vegetated within the southern portion of the site. Access is provided via a 7.3 metre wide rural residential crossover from Voddens Road. The site has historically been used for agricultural purposes.

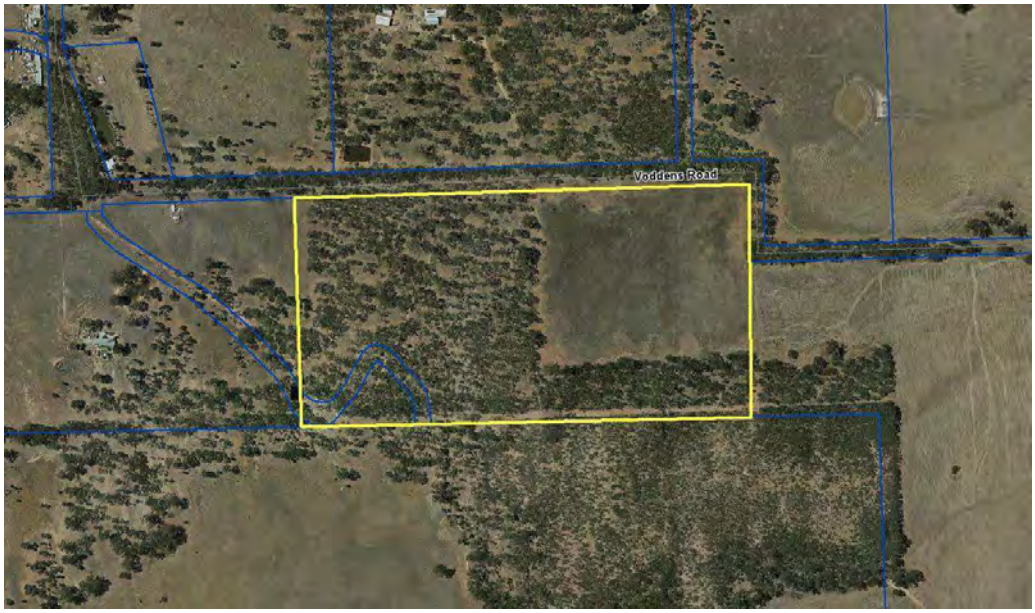


Figure 1: Aerial image of site and surrounding area

The site is located within the Farming Zone and is affected by the Bushfire Management Overlay.

Surrounding land to the north, south and west is located within the Farming Zone and land further to the east is located within the Rural Conservation Zone. The area is primarily used for large scale agricultural uses such as dairy farming, piggeries and grazing. A number of dwellings are located within the immediate surrounding area, primarily to the north and north-east., some of which are associated with the use of the land for agriculture.

Proposal

The application seeks approval for the use and development of the land for a dwelling and store, and a reduction in car parking requirements.

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The use and development are proposed to occur wholly within the title boundary of Crown Allotment 61 (the eastern half of the site).

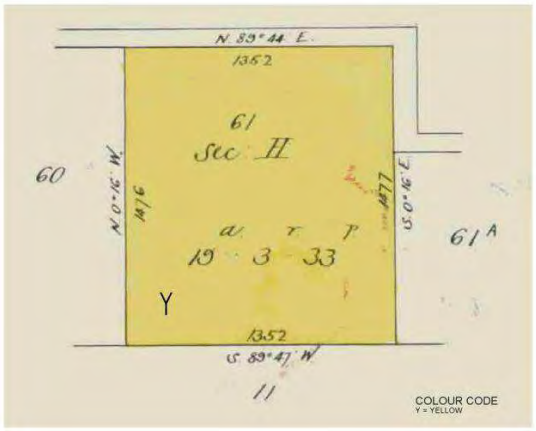


Figure 2: Title Plan of Crown Allotment 61, Section H, Parish of Neilborough

Use and development of the land for a dwelling

Details of the proposal dwelling include:

- Construction of a 425 square metre dwelling comprising of 6 bedrooms, 2 bathrooms, an open plan kitchen, living and dining area, rumpus room and attached double garage.
- The dwelling would be located approximately in the centre of the lot and setback 137 metres from the northern boundary (Voddens Road), 141 metres from the southern (rear) boundary and 78 metres from the western (internal side) boundary.
- The dwelling would be constructed of brick with a galvanised iron roof.
- The dwelling would be constructed to a BAL rating of 12.5 and be provided with a 10,000 litre water tank for fire fighting purposes.
- Access would be provided via a 3 metre wide crossover from Voddens Road and a 4 metre wide crushed gravel driveway.
- The application was accompanied by a Bushfire Management Plan (and associated bushfire documents) and a Land Capability Assessment.

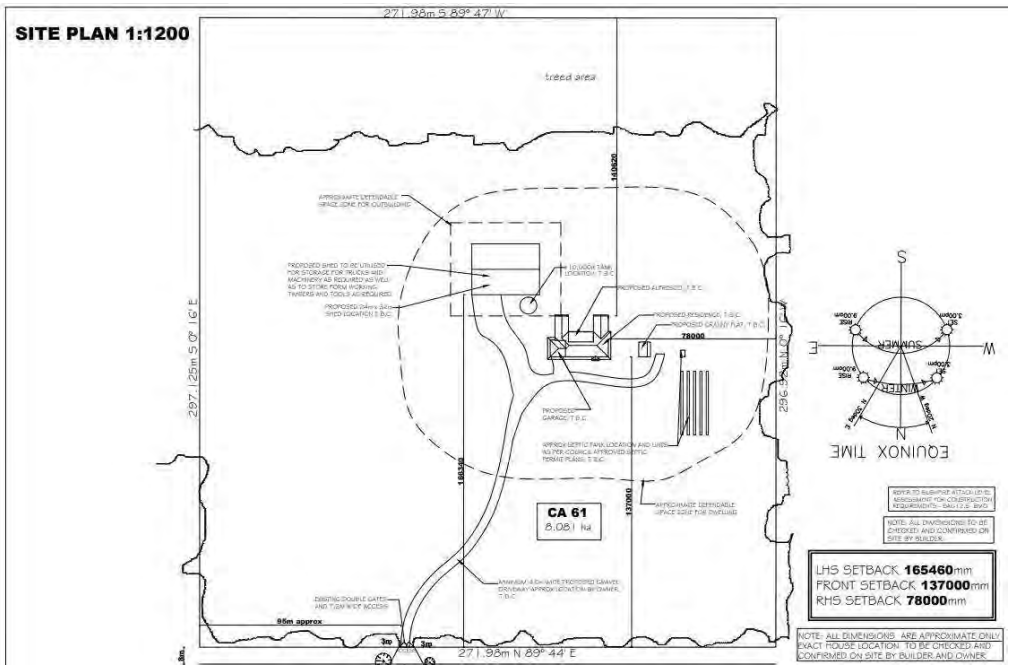


Figure 3: Proposed Site Plan

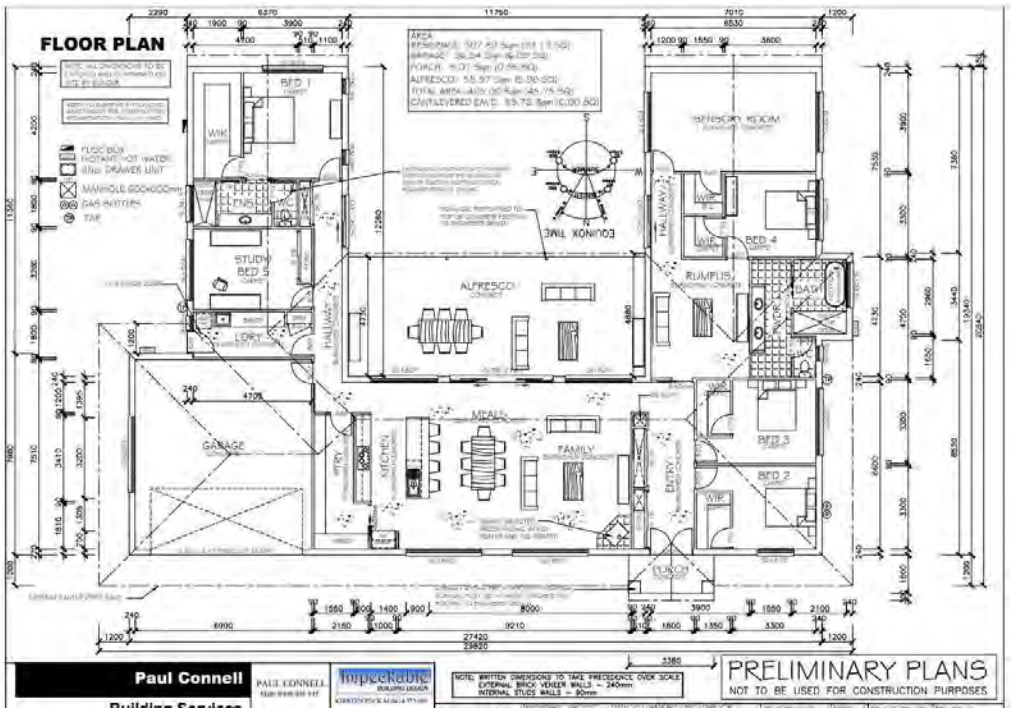


Figure 3: Proposed Dwelling Floor Plan

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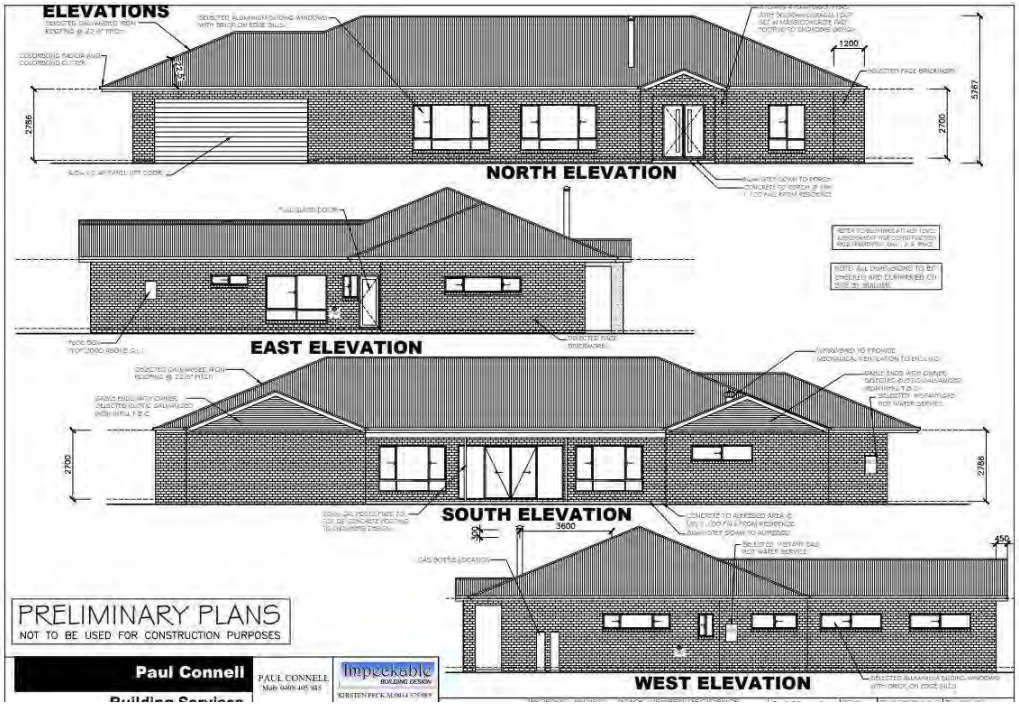


Figure 4: Proposed Dwelling Elevation Plans

Use and development of the land for a store

Details of the proposed store include:

- Construction of a 768sqm (24m x 32m) storage shed which would be setback a minimum of 166.34 metres from Voddens Road. The store would be constructed to a BAL rating of 12.5 and be provided with a 10,000 litre water tank for fire fighting purposes.
- It would store vehicles/machinery/equipment associated with the owner's earth moving business (GDL Excavations). All vehicles/machinery/equipment would be stored within the purpose-built building.
- The vehicles (and associated equipment) proposed to be stored on the site include:
  - 2 trucks with one float
  - A water cart
  - 3 excavators
  - 2 skid steers
  - 1 roller
  - 3 trailers
  - Hand tools, form working, temporary fencing, pipes, end walls, mesh etc.
  - Chemicals etc.

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- The applicant has advised that the number of vehicles entering and exiting the site per day would be:
  - 2 light vehicles (car and ute)
  - 1 truck with float
- 6 staff would use the store, including the owner of the business, two labourers, administrator, operator and concreter.
- The hours of operation proposed are:
  - 7.30 am to 3.30 pm Monday to Friday.
  - The applicant has noted some weekend hours of operation would occur but no further details have been provided.
- Security lighting would be fitted to the outside of the store.

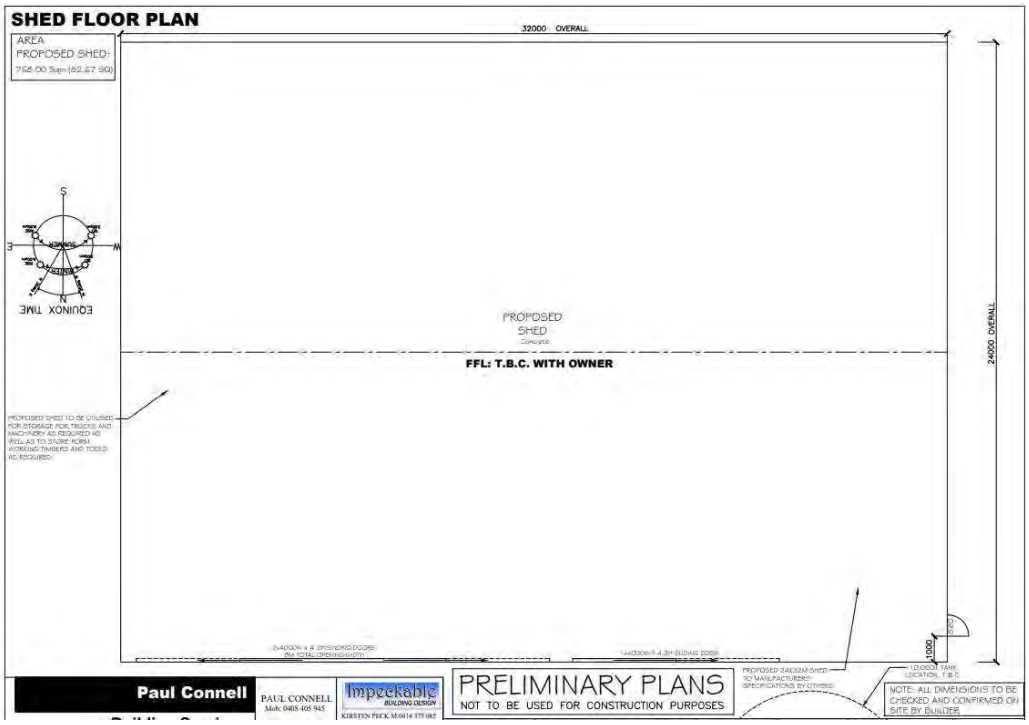


Figure 5: Proposed Store Floor Plan

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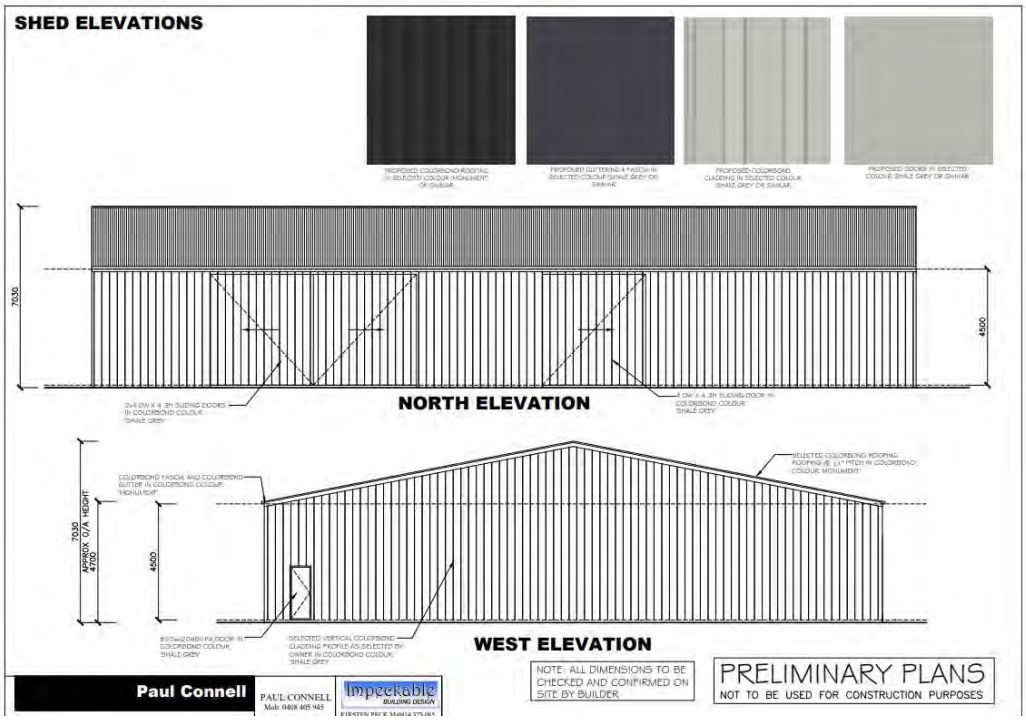


Figure 6: Proposed Store Elevations Plan

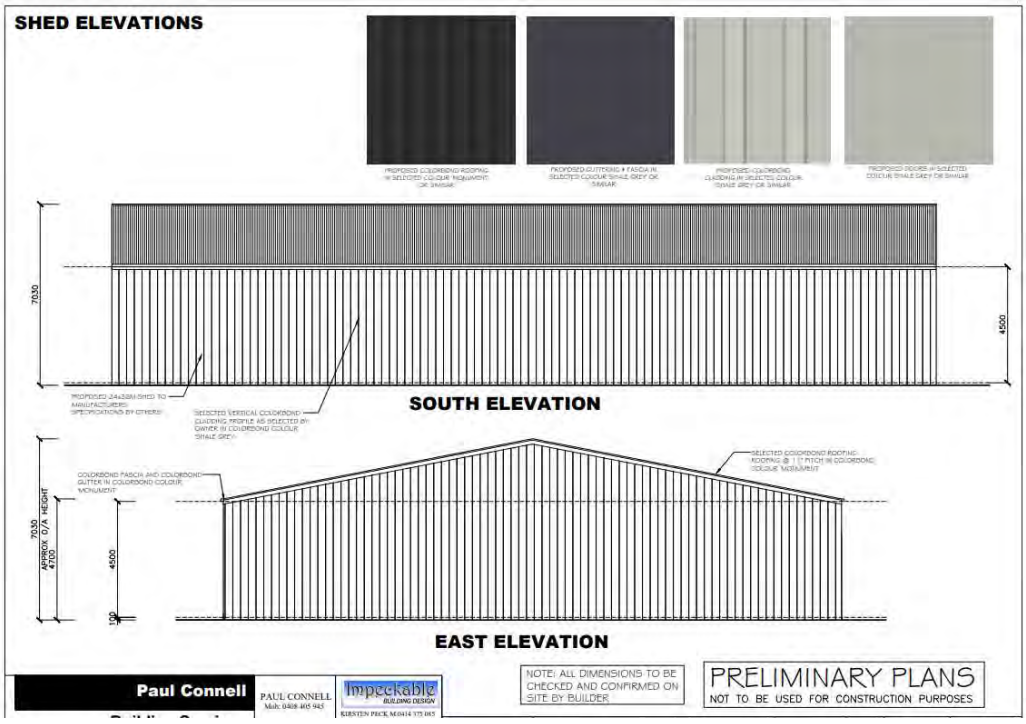


Figure 7: Proposed Store Elevations Plan

Reduction in car parking

The application seeks a reduction in car parking requirements associated with the store, being 10 per cent of the site area.

It is noted that car parking is provided in association with the dwelling.

Planning Controls – Greater Bendigo Planning Scheme

Why is a permit needed?

A planning permit is required for the proposal pursuant to the following clauses within the Greater Bendigo Planning Scheme:

Planning control	Why is a permit required?
Clause 35.07 (Farming Zone)	• Clause 35.07-1 – a permit is required to use the land for a dwelling (as the lot is less than 40 hectares in size). • Clause 35.07-1 – a permit is required to use the land for a store. • Clause 35.07-4 – a permit is required for buildings and works associated with a Section 2 use.
Clause 44.06 (Bushfire Management Overlay)	• Clause 44.06-2 – a permit is required for buildings and works associated with accommodation (dwelling) and a warehouse (store).
Clause 52.06 (Car Parking)	• Clause 52.06-5 – a permit is required to reduce the number of car parking spaces.

The following clauses are relevant in the consideration of this proposal:

Municipal Planning Strategy
- Clause 02.03-1 Settlement
- Clause 02-03-3 Environmental risks and amenity
- Clause 02.03-6 Housing
- Clause 02.03-7 Economic Development

Planning Policy Framework
- Clause 11 Settlement
- Clause 11.01-1R Settlement – Loddon Mallee South
- Clause 13.01-1S Natural hazards and climate change
- Clause 13.02-1S Bushfire Planning
- Clause 13.07-1S Land use compatibility

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- Clause 14.01-1S Protection of agricultural land
- Clause 14.01-1L Protection of agricultural land – Greater Bendigo
- Clause 14.01-2S Sustainable agricultural land use
- Clause 15.01-6S Design for rural areas
- Clause 16.01-3S Rural residential development
- Clause 16.01- 3L Rural residential development – Greater Bendigo
- Clause 17.01-1S Diversified economy

Other Provisions

- Clause 35.07 Farming Zone
- Clause 44.06 Bushfire Management Overlay
- Clause 52.06 Car Parking
- Clause 53.02 Bushfire Planning

Policy Context

Primary Council Plan Reference

City of Greater Bendigo Council Plan Mir wimbul 2021-2025

Outcome 2 – Healthy, liveable spaces and places

Secondary Council Plan Reference(s)

Goal 7 Sustainable population growth is planned for

Consultation/Communication

Referrals

The following authorities and internal departments have been consulted on the proposal:

Referral	Comment
CFA	No objection – subject to standard conditions.
Traffic	No objection – subject to standard conditions.
Environmental Health	No objection – subject to standard notes.

Public Notification

The application was advertised by way of notice on the site and letters to adjoining and nearby owners and occupiers. It is noted that the application was re-advertised due to an error in what the permit allows during the first advertising period.

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As a result of advertising, 1 objection was received, with the grounds of objection being:

- The size of the store – whether this is sufficient to house the proposed number of vehicles and associated earth moving equipment.
- Concerns relating to the site currently being used by the owners for the storage of imported soil, rocks, concrete, culverts and off-site materials associated with their existing earth moving business.
- Concerns relating to the significant earthworks that have been undertaken on site including the construction of a dam.
- Proposal not consistent with existing use and character of area.
- Road/traffic safety concerns – increased traffic, heavy vehicles traversing the roads and the 100 km/h speed limit.
- Detrimental amenity impacts from hours of operation, increase in traffic and heavy vehicles.
- The planning report submitted with the application states there are several commercial sites within the area, although these operations have ceased for in excess of 5 years.

The concerns raised relating to works having been undertaken on site and in relation to how the site is currently being used have been referred to the City's Planning Compliance Officer for further investigation.

Planning Assessment

Introduction

Rural lifestyle development poses an ongoing risk to the operations of agricultural land. Planning Schemes in rural municipalities will usually seek to address these challenges through directing 'rural lifestyle' development to appropriately zoned land (Rural Living Zone), and through the use of local planning policies to manage the development of dwellings in other rural zones, so as to protect the primacy of agriculture.

The *Rural Areas Strategy, September 2009* notes that the use of discretion to allow new dwellings in rural areas, primarily the Farming Zone, has been and continues to be generously applied, despite an over supply of zoned Rural Living land (estimated to be an 80 year supply) to cater for such demand. The Farming Zone has been facing increasing pressures in more recent years for subdivision and residential development, primarily for rural lifestyle opportunities rather than for farming purposes. Rural residential development should be directed to existing planned areas for this purpose.

Such is also the case for other non-agricultural land uses looking to encroach on agricultural land. Consideration must be given to whether these land uses are consistent with the purpose and decision guidelines of the Farming Zone, along with broader planning policy relating to the protection of agricultural land.

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Whether the proposal is consistent with the purposes of the Farming Zone and the relevant planning policy that deals with rural dwellings and the protection of agricultural land.

State planning policy at Clause 14.01-1S relates to the protection of agricultural land, and seeks to protect the State's agricultural base by preserving productive farmland. Some of the main strategies include ensuring the State's agricultural base is protected from the unplanned loss of productive land, preventing inappropriately dispersed urban activities in rural areas and limiting new housing in rural areas.

Local planning policy at Clause 14.01-1L *Protection of agricultural land - Greater Bendigo* draws together these themes to provide a consistent basis for considering the use and development of rural land, and has the following relevant strategies:

- *Avoid the construction of a dwelling unless required to support a genuinely economically viable agricultural use of the land that requires permanent and continuous care, supervision or security.*
- *Ensure that where a dwelling is deemed necessary to support an agricultural use, that the use is viable based on the level of investment required and the estimated return as shown in an integrated land management plan.*
- *Ensure that where a dwelling has been deemed necessary to support an agricultural use, that the agricultural use has been established on the land prior to the construction of a dwelling.*
- *Avoid the construction of a dwelling proximate to locations for intensive animal production, pig farm or poultry farms unless associated with the use.*
- *Avoid the construction of a dwelling on existing small lots (lots smaller than the zone schedule minimum) in the Farming Zone, except if allowed under a Restructure Overlay.*

It is evident that the primary purpose of the Farming Zone is for agriculture. However, a number of non-agricultural land uses are allowable within the Farming Zone subject to planning approval. Such uses, commonly referred to a 'Section 2 uses' require planning approval so that they can be considered against the purpose and decision guidelines of the zone on a case by case basis.

The Farming Zone has the following identified purposes:

- *To implement the Municipal Planning Strategy and the Planning Policy Framework.*
- *To provide for the use of land for agriculture.*
- *To encourage the retention of productive agricultural land.*
- *To ensure that non-agricultural uses, including dwellings, do not adversely affect the use of land for agriculture.*
- *To encourage the retention of employment and population to support rural communities.*
- *To encourage use and development of land based on comprehensive and sustainable land management practices and infrastructure provision.*

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- *To provide for the use and development of land for the specific purposes identified in a schedule to this zone.*

The Farming Zone includes the following relevant Decision guidelines:

General issues:
- *The Municipal Planning Strategy and the Planning Policy Framework.*
- *Any Regional Catchment Strategy and associated plan applying to the land.*
- *The capability of the land to accommodate the proposed use or development, including the disposal of effluent.*
- *How the use or development relates to sustainable land management.*
- *Whether the site is suitable for the use or development and whether the proposal is compatible with adjoining and nearby land uses.*
- *How the use and development makes use of existing infrastructure and services.*

Agricultural issues and the impacts from non-agricultural uses:
- *Whether the use or development will support and enhance agricultural production.*
- *Whether the use or development will adversely affect soil quality or permanently remove land from agricultural production.*
- *The potential for the use or development to limit the operation and expansion of adjoining and nearby agricultural uses.*
- *The agricultural qualities of the land, such as soil quality, access to water and access to rural infrastructure.*

Accommodation issues:
- *Whether the dwelling will result in the loss or fragmentation of productive agricultural land.*
- *Whether the dwelling will be adversely affected by agricultural activities on adjacent and nearby land due to dust, noise, odour, use of chemicals and farm machinery, traffic and hours of operation.*
- *Whether the dwelling will adversely affect the operation and expansion of adjoining and nearby agricultural uses.*
- *The potential for the proposal to lead to a concentration or proliferation of dwellings in the area and the impact of this on the use of the land for agriculture.*

Environmental issues:
- *The impact of the proposal on the natural physical features and resources of the area, in particular on soil and water quality.*
- *The impact of the use or development on the flora and fauna on the site and its surrounds.*
- *The need to protect and enhance the biodiversity of the area, including the retention of vegetation and faunal habitat and the need to revegetate land including riparian buffers along waterways, gullies, ridgelines, property boundaries and saline discharge and recharge area.*
- *The location of on-site effluent disposal areas to minimise the impact of nutrient loads on waterways and native vegetation.*

Design and siting issues:
- *The need to locate buildings in one area to avoid any adverse impacts on surrounding agricultural uses and to minimise the loss of productive agricultural land.*

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- *The impact of the siting, design, height, bulk, colours and materials to be used, on the natural environment, major roads, vistas and water features and the measures to be undertaken to minimise any adverse impacts.*
- *The impact on the character and appearance of the area or features of architectural, historic or scientific significance or of natural scenic beauty or importance.*
- *The location and design of existing and proposed infrastructure including roads, gas, water, drainage, telecommunications and sewerage facilities.*

Clause 65 of the Planning Scheme states that because a permit can be granted does not imply a permit should or will be granted. The responsible authority must decide whether the proposal will produce an acceptable outcome in terms of the decision guidelines of this clause.

It is evident that the overall aims of the relevant policy framework are to ensure that agricultural land is carefully managed in order to prevent adverse impacts on agricultural production, to prevent the fragmentation of rural land, and to ensure an orderly development of residential development in rural areas so that agricultural production of these areas is not disadvantaged or prejudiced by ad hoc and unplanned residential development.

Current planning scheme policy (introduced into the Greater Bendigo Planning Scheme on 11 March 2022) seeks to ensure that new dwellings in the Farming Zone are only approved in instances where they are considered to support or enhance agriculture. In making such a determination, consideration should be given to why there is a need to live on site and how that would support or enhance agricultural use/production, whether agriculture would remain the primary land use, and whether it is likely that the land would remain in agricultural use into the future following development of the dwelling.

No agricultural land use is proposed. Rather, the applicant is seeking to use and develop the land for their family home and business. The applicant has provided justification in support of the proposal, which rests on the following arguments:

- The available cleared land, existing transport connections and the surrounding mixed use land holdings mean the site is deemed suitable for the proposal.
- The proposal would not permanently remove viable agricultural land due to the land not being suitable for agricultural use, the selected development footprint as well as minimal disturbance required to implement infrastructure.
- The proposal would have a low impact on limiting agricultural production on adjoining or nearby land.
- The proposal would not result in land fragmentation due to being located amongst small land holdings used mainly for rural residency, with viable agricultural land holdings further north and west of Sebastian.
- The use of the land for agriculture would not be economically viable, without causing environmental harm.
- The use of the land for agriculture would have a detrimental impact upon the environmental values of the site.

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Whilst it is acknowledged that the western portion of the site is constrained due to vegetation, the eastern portion of the site is cleared and could be utilised for an agricultural pursuit. This is evidenced by the land previously having been used for the purposes of grazing. The applicant advised that the land was previously sold due to the low quality pasture for grazing, however it is unclear if any land management measures were undertaken to improve soil quality and overall output. The application material states that the soil of the area, being shallow stony uniform and gradational soil with red and/or yellow duplex soils dispersed, has traditional qualities that support current agricultural activity within the wider locality.

The applicant has failed to substantiate their claims that the use of the land for agriculture would not be financially viable. This is purely an assumption and it is unclear what agricultural land use this assumption is based on. No evidence has been provided to support this statement.

If supported for residential and commercial purposes, the proposal would permanently remove the land from future agricultural activity.. The approval of a dwelling that does not include an agricultural component would result in the fragmentation of agricultural land and could lead to a proliferation of dwellings within the surrounding area.

The proposal is not in accordance with the above stated policy. In short, the applicant has failed to produce a compelling argument that the proposal is in accordance with the purposes of the Farming Zone and the relevant planning policy that deals with rural dwellings and the protection of agricultural land. No aspect of the proposal aligns with these clear policy objectives.

It should be noted that concerns relating to the use and development do not extend to wastewater treatment or the ability for the buildings to be connected to an electricity and water supply.

Whether the proposal is compatible with surrounding land use and development, and will result in any adverse amenity impacts.

There are a number of dwellings found within the immediate surrounding area and as such it cannot be argued that the use and development of the land for a dwelling would be incompatible with the character of surrounding land use and development.

The issue lies in relation to the use and development of the land for a dwelling not being consistent with the purpose of the Farming Zone and planning policy relating to rural land and the protection of agriculture as discussed above. These policy objectives clearly set the desired future character for the area.

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State planning policy at Clause 13.07-1S relates to land use compatibility and seeks to protect community amenity, human health and safety while facilitating appropriate commercial, industrial, infrastructure or other uses with potential adverse off-site impacts. Identified strategies include ensuring that use or development of land is compatible with adjoining and nearby land uses.

Concerns were raised by the objector in relation to the proposal not being consistent with the existing use and character of the area and concerns that the proposal would result in detrimental amenity impacts from the hours of operation and an increase in traffic and heavy vehicles.

The use of the land for a store is nested under the broader land use category of a warehouse. In this instance, the purpose of the store is in relation to the landowner's business (GDL excavations). Careful consideration must be given to whether this is the appropriate location for such a use, or if this land use should be directed to a more appropriate land zone such as an industrial zone.

The use and development of the land for a store is not in accordance with the purpose of the Farming Zone or the broader policy framework relating to agricultural land. Whilst the applicant has argued that the scale of the development is comparable to normal development for a Farming Zone property used for an agricultural activity, the issue remains that the development is associated with a non-agricultural land use. The size of the store (being 768 square metres) is considered to be substantial, with buildings of this size generally found on much larger lots.

The applicant has advised that the land will not be used for the purposes of industry and as such no repairs, servicing or washing of vehicles or machinery will occur on the site. This is contrary to information submitted at the start of the application process which indicated that there would be mechanical work undertaken on the site. As such, it is difficult to determine whether the proposal would result in any unreasonable amenity impacts. It is acknowledged that whilst a condition could be included on a permit preventing any processes of repairs, servicing or washing of vehicles being undertaken on the land; it is unclear if this would align with how the landowner intends to use the site.

The applicant has advised that large vehicles will turn off Bendigo-Pyramid Road onto Evans Road which connects with Voddens Road. It is acknowledged that large vehicles coming to/from the site on Voddens Road and Evans Road could result in dust and noise emissions impacting surrounding properties. This, along with potential safety issues, was raised by the objector. Whilst the applicant has advised that the vehicle movements per day would be approximately 3 vehicles coming and going, rural roads are not designed for heavy vehicle traffic. Both Voddens Road and Evans Road are unsealed rural roads.

Whilst planning scheme policy seeks to support business and economic development, such proposals should be directed to appropriate zones.

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Land use and development such as this should be directed to an industrial or commercial area where the facilities are available for both storage and maintenance which will not impact the amenity of the area. The industrial nature of the use and development, along with increased traffic heavy vehicle entering and exiting the site and using local unmade roads is not consistent with the rural character of the area and constitutes the scale of activity normally found in an industrial or commercial area. The local road is used for local traffic only, and is not designed for carrying large vehicles. The intersection of Bendigo-Pyramid Hill Road and Evans Road is also degraded and is a school bus stop for residents within the immediate area, which could create safety concerns.

It should also be highlighted that there are no existing commercial and/or industrial enterprises that operate within the immediate context of the site and the wider surrounding area. Although the submitted planning report with the application refers to eucalyptus industry and its associated distillery, this has been decommissioned for a number of years.

Whether bushfire risk can be reduced to an acceptable level.

Planning policy through Clauses 13.02, 44.06 and 53.02 seeks to prioritse the protection of human life and strengthen community resilience to bushfire, ensure that the location, design and construction of development appropriately responds to the bushfire hazard, and ensure development is only permitted where the risk to life, property and community infrastructure from bushfire can be reduced to an acceptable level.

Bushfire management requirements apply to both the dwelling and store. The application was accompanied by a Bushfire Management Statement, Bushfire Hazard Site Assessment and Bushfire Management Plan in accordance with Planning Scheme requirements.

It is proposed that both the dwelling and store would be constructed to BAL 12.5, defendable space would be provided for the distances shown on the Bushfire Management Plan, a 10,000 litre water tank would be provided for each building and all-weather access would be provided for emergency vehicles.

The application was referred to the Country Fire Authority who supported the proposal subject to standard conditions relation to the endorsement of the Bushfire Management Plan and for bushfire mitigation measures to be employed on an ongoing basis. Subject to the inclusion of such requirements as conditions on a permit, it is considered that bushfire risk can be reduced to an acceptable level. No vegetation will be required to be removed to create defendable space for both the dwelling and the store.

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Whether the proposed car parking reduction is acceptable.

Planning policy through Clause 52.06 seeks to ensure the provision of an appropriate number of car spaces. The planning scheme specifies car parking requirements for both a dwelling and store.

Land use	Number of car spaces required
Dwelling	2 car spaces to each 3 or more bedroom dwelling.
Store	10 per cent of the site area

The dwelling would be provided with two car spaces in the form of an attached garage which is consistent with the above requirements. The application seeks approval for a reduction in car parking requirements associated with the store.

Planning approval may be granted to reduce the required number of car spaces, with consideration given to factors such as the nature of the use, the car parking demand likely to be generated by the proposal, any adverse impacts from a shortfall of parking and the character of the area.
Whilst 10 per cent of the site could undoubtedly be set aside for the purposes of car parking, the applicant has sought a reduction on the following basis:

- 10 per cent of the site would equate to approximately 1.71 hectares.
- Setting aside 10 per cent of the site for car parking would lead to assumptions that the parking of multiple vehicles on the site would occur.
- A car parking reduction presents a more favourable planning outcome on the basis that the land use would not generate a car parking demand beyond the dwelling itself and vehicles parked within the store.
- Setting aside 10 per cent of the site for car parking is unwarranted and undesirable.

The car parking requirements for a store do not vary based on the zoning of the land or the specifics of the land use proposal. Unnecessarily setting aside such a large proportion of Farming Zone land for the purposes of car parking is unnecessary and would result in an undesirable planning outcome. Given the nature of the land use and the size of the site, a reduction in car parking requirements associated with the store would be supported if a permit was to be issued.

Objector concerns

Concerns were raised by objectors in relation to the size of the store and in essence whether this was large enough to house the proposed number of vehicles and equipment, or if the vehicles and equipment would be stored externally. The applicant has advised that all vehicles and machinery associated with the use would be stored within the building. Such a requirement could form a permit condition.

Concerns were raised by the objector in relation to the site currently being used for the storage of imported soil, rocks, concrete, culverts and off site materials associated with their existing earth moving business. The objector claims that materials have been

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'dumped' on the site, whilst the applicant argues that the materials are merely being 'stored' on the site. Approval has not been sought for any materials to be stored outside of the purpose built shed. If approved, these materials would need to be relocated to within the building or removed from the site.

It was also noted that earthworks that have been undertaken on site, including the construction of a dam. Planning approval is only required for the construction of a dam in this instance if it changes the rate of flow of water across a property boundary.

As outlined above, the concerns raised relating to the current use and the works undertaken on site have been referred to the City's Planning Compliance Officer for further investigation.

Concerns were also raised by the objector that the planning report, prepared by the applicant, states there are several commercial sites within the area although these operations have ceased for in excess of 5 years. The applicant provided an updated response, correcting the error.

Conclusion

The application is not in accordance with the Greater Bendigo Planning Scheme. Whilst bushfire risk can be reduced to an acceptable level, the proposal is inconsistent with the purpose and decision guidelines of the Farming Zone, along with planning policy relating to the protection of agricultural land and land use compatibility. The proposal should be directed to a more suitable location.

It is recommended that Council does not support this proposal as the proposal does not present an acceptable planning outcome with regards to the purposes of the Farming Zone and the relevant planning policy that deals with rural dwellings and the protection of agricultural land.

It is recommended that a Notice of Decision to Refuse to Grant a Permit be issued.

Options

Council, acting as the responsible authority for administering the Planning Scheme, may resolve to refuse to grant a permit; grant a permit; or grant a permit with conditions.

Conflict of Interest

No officer involved in the preparation or approval of this report declared a general or material conflict of interest.

Attachments

Nil

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16.2. CA 9 Bendigo-Maldon Road, Lockwood South - Use and Development of Land for a Dwelling and Outbuilding, Creation of Access to a Road in a Transport Zone 2

Author:	Corbin Wright, Statutory Planner (Planning Enquiries)
Responsible Director:	Rachel Lee, Director Strategy and Growth

Summary/Purpose

Application No:	DR/666/2023
Applicant:	K A Patton
Land:	CA 9 Bendigo-Maldon Road, Lockwood South
Zoning:	Farming Zone 1 Transport Zone 2
Overlays:	Environmental Significance Overlay 1 Salinity Management Overlay
No. of objections:	0
Consultation meeting:	N/A
Key considerations:	• The history of planning permit refusal relating to the site and whether there is any reasonable justification for departing from the finding of the previous application. • Whether the dwelling would be supporting a viable agricultural use or rather, will it be the primary use of the land? • Whether the proposal would result in an acceptable planning outcome having regard to the purpose and decision guidelines of the Farming Zone and the relevant planning policy that deals with rural dwellings and the protection of agricultural land. • Whether the proposal is consistent with decisions made by the Victorian Civil and Administrative Tribunal.
Conclusion:	The applicant has failed to demonstrate that the land will be used for a genuinely viable agricultural use that warrants the need for a dwelling. The approval of a dwelling would remove land from agricultural production, increase pressure for proliferation of dwellings in the zone and potentially impact on nearby farming uses. This is an outcome that is contrary to policy relating to the protection of agricultural land.

	It is recommended that Council refuse to grant a permit as the proposal does not present an acceptable planning outcome with regards to the purpose and decision guidelines of the Farming Zone and the relevant planning policy for rural dwellings.

Recommended Motion

That Council issue a Notice of Decision to Refuse to Grant a Permit for the use and development of land for a dwelling and outbuilding, creation of access to a road in a Transport Zone 2 at CA 9 Bendigo-Maldon Road, LOCKWOOD SOUTH on the following grounds:

1. The proposal is inconsistent with policy relating to rural dwellings and the protection of agricultural land at Clause 14.01-1S, Clause 14.01-1L and the purpose and decision guidelines of the Farming Zone, in the following manner:
   (a) The proposal does not support or enhance agriculture and would result in the permanent removal of agricultural land.
   (b) The application has not established that the type and scale of agricultural production requires a dwelling on the land.
   (c) The dwelling would cause fragmentation of agricultural land by limiting its ability to consolidate with adjoining or nearby land.
   (d) The dwelling would result in a permanent change in land use and stymie genuine agricultural activities on surrounding land.

Background Information

A previous application (DR/1001/2021) for the use and development of a dwelling and outbuilding was considered by Council at its Ordinary Meeting on 27 June 2022. The application was refused on the grounds that the proposal was inconsistent with local planning policy and the purpose and decision guidelines of the Farming Zone, citing that the dwelling did not support or enhance agriculture and would cause the fragmentation of agricultural land.

The current application is now proposing the same land use and development that was not supported by the previous planning permit decision. Noting VCAT principles relating to repeat applications, there is no reasonable justification for departing from the basic findings of the previous application. It’s important to note that a Farm Management Plan was not submitted with the previous or current application.

The Land Management Plan that accompanied the application has not adequately demonstrated that the agricultural use will be viable or enduring, or that the type and scale of the agricultural use requires a dwelling on the land.

Preliminary concerns were raised with the applicant with the proposal not being in accordance with planning policy relating to rural dwellings, the protection of agricultural land and the previous planning permit refusal for the site. The applicant was given the opportunity to provide further information in response to these concerns, however the information provided has not been sufficient in addressing the issues and justifying the need for a dwelling on the site. This is discussed in greater detail below.

Report

Subject Site and Surrounds

The site is formally referred to as Crown Allotment 9 Section 18 Parish of Lockwood, comprises an area of 7.66ha and is an historical Crown allotment (not created by a subdivision) that is shown on a 1929 Parish / Survey Plan. The site is rectangular in shape with an eastern frontage to Bendigo-Maldon Road of 201.57m, a northern side boundary of 381.01m and a southern side boundary of 380.21m to an unmade government road.

The site is currently vacant and contains two watercourses and a dam. The vegetation is clustered around the watercourses on the western portion of the site. The site has historically been used for light agricultural practices (grazing).

The site is located within the Farming Zone and surrounding land is also within the Farming Zone, whilst 215m north of the site is land within the Low Density Residential Zone, as part of the Lockwood South township.

The area contains multiple poultry farms as well as grazing farms within 2km of the site. This is an intact agricultural area containing multiple agricultural industries that require physical buffers between the agricultural land use and residential land.

The bordering properties to the north, south and west are all vacant parcels and previously part of a single, larger landholding under one ownership, which included the subject site. The larger land holding was previously utilised as part of broad acre farming practices. All parcels individually are below the minimum lot size within the Farming Zone, and collectively the parcels create a generous area suitable for genuine agricultural uses.



Figure 1: Aerial view of the subject site.

The site is partially affected by an Environmental Significance Overlay Schedule 1 (watercourse protection), and the Salinity Management Overlay, however the proposed development would be sited outside of these overlays.

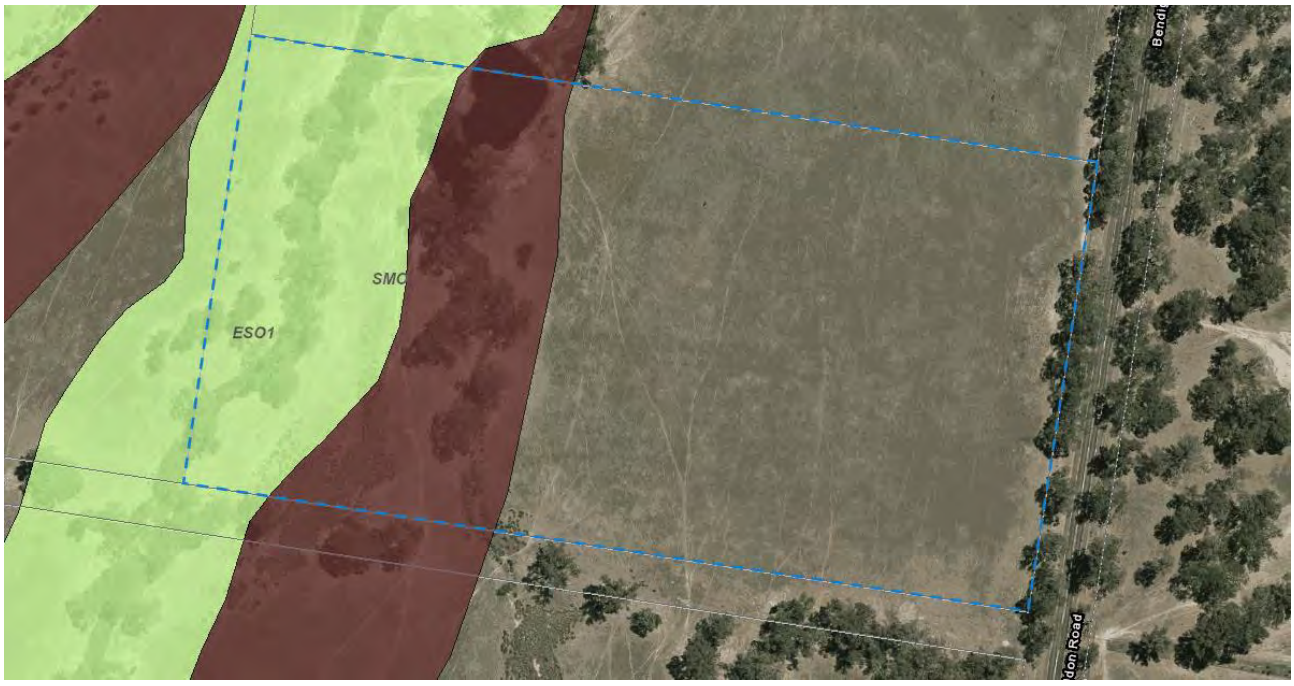


Figure 2: Environmental Significance Overlay Schedule 1 (shaded pale green) and the Salinity Management Overlay (shaded brown).



Figure 3: View of the eastern portion of the site from the southern boundary.

Proposal

The application proposes the use and development of land for a dwelling and outbuilding and the creation of access to a road in a Transport Zone 2.

The proposed dwelling is sited within the eastern portion of the lot, 123.38 metres from the Bendigo-Maldon Road boundary and 121.44 metres south-east of the dam in a central part of the site.

The dwelling would have a total floor area of 448.78 square metres and of a single storey design. The dwelling would comprise of five bedrooms, two bathrooms, three living areas, a 57.60 square metres alfresco area and a double garage. The dwelling would be constructed of a combination of brick, colorbond and timber cladding.

The proposed outbuilding would have an area of 162 square metres and be on the southern portion of the property, 3 metres from the southern boundary (unmade road) and 145.02 metres from the Bendigo-Maldon Road boundary.

The proposal seeks to create access from Bendigo-Maldon Road, which is within the Transport Zone 2 and managed by the Department of Transport and Planning. The

proposed crossover is 65 metres north of the southern side boundary in an area clear of vegetation.

No native vegetation removal is required to facilitate construction and access to the dwelling and outbuilding.

The application states that a small farm operation is proposed to breed and cultivate shedding sheep (particular breeds that don't require shearing) for meat production. No flock size has been indicated, nor has a financial assessment of the farm operation been undertaken.



Figure 4: Proposed site plan.

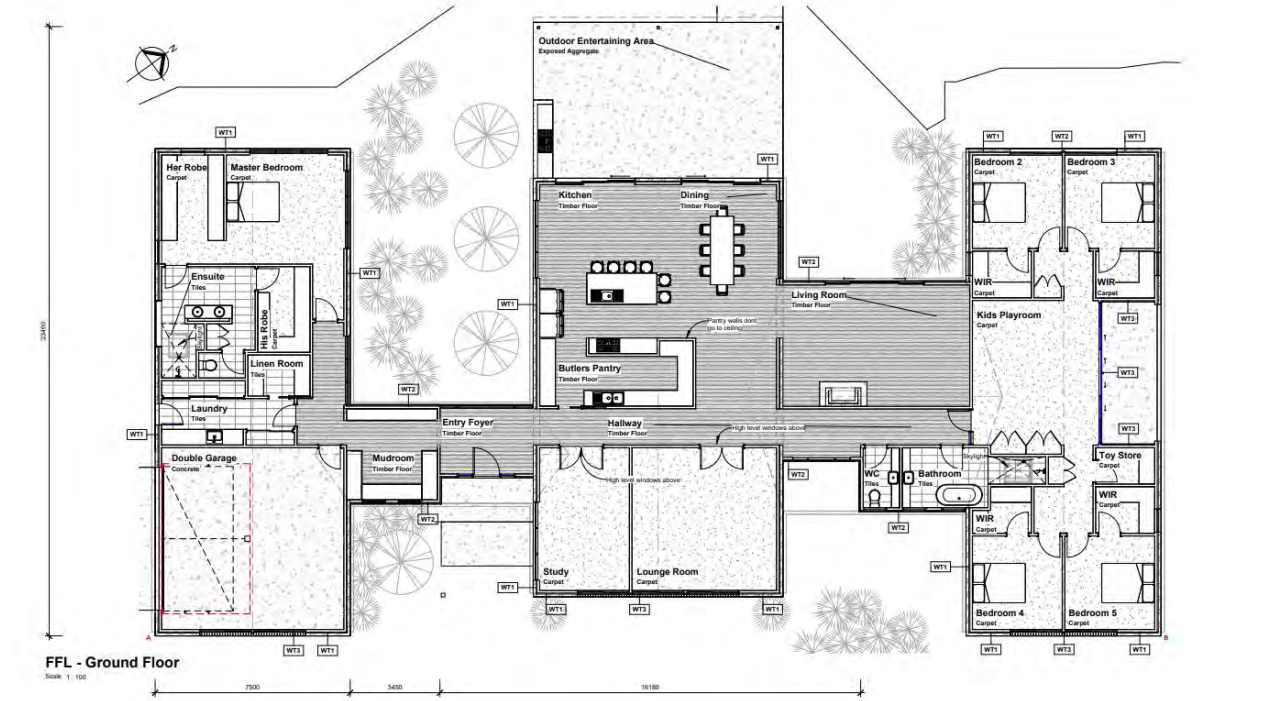


Figure 5: Proposed dwelling floor plan.



Figure 6: Dwelling south-east elevation.

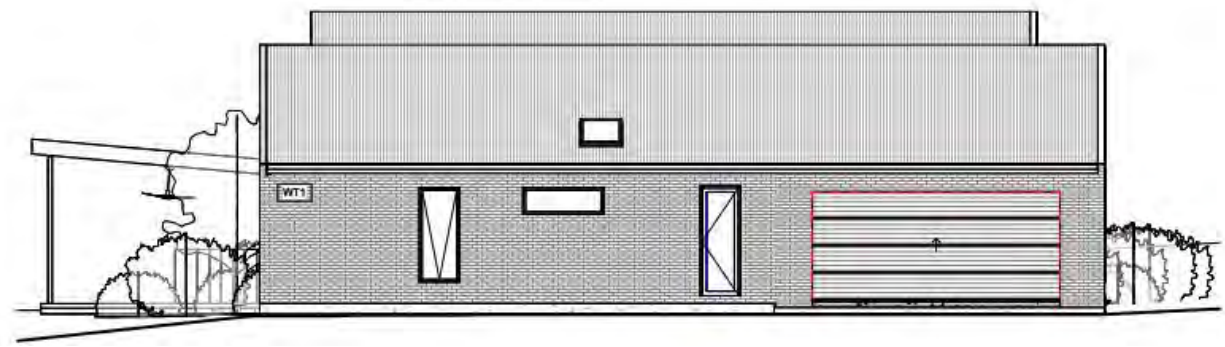


Figure 7: Dwelling south-west elevation.



Figure 8: Dwelling north-west elevation.

Planning Controls - Greater Bendigo Planning Scheme

Why is a permit needed?

Clause	Permit trigger
Clause 35.07-1 Farming Zone	Use of land for a dwelling, as the lot does not meet the minimum area of 40ha.
Clause 35.07-4 Farming Zone	• Construct a building or to construct or carry out works associated with a section 2 use (dwelling). • Construct a building within 5m of a boundary. • Construct a building within 100m of a watercourse.
Clause 52.29-2 Land Adjacent to the Principal Road Network	Create or alter access to a road in a Transport Zone 2.

The following clauses are relevant in the consideration of this proposal:

Municipal Planning Strategy

- Clause 02.03-1 Settlement
- Clause 02.03-3 Environmental risks and amenity
- Clause 02.03-4 Natural resource management
- Clause 02.03-6 Housing

Planning Policy Framework

- Clause 11.01-1S Settlement
- Clause 11.01-1L-01 Settlement Greater Bendigo
- Clause 13.02-1S Bushfire planning
- Clause 14.01-1S Protection of agricultural land
- Clause 14.01-1L Protection of agricultural land – Greater Bendigo
- Clause 14.01-2S Sustainable agricultural land use
- Clause 15.01-6S Design for rural areas
- Clause 16.01-3S Rural residential development
- Clause 16.01-3L Rural residential development – Greater Bendigo

Other Provisions

- Clause 35.07 Farming Zone Schedule 1
- Clause 36.04 Transport Zone 2

- Clause 42.01 Environmental Significance Overlay Schedule 1
- Clause 44.02 Salinity Management Overlay
- Clause 52.29 Land Adjacent to the Principal Road Network
- Clause 65 Decision Guidelines

Policy Context

Primary Council Plan Reference

City of Greater Bendigo Council Plan *Mir wimbul* 2021-2025

Outcome 2 – Healthy, liveable spaces and places

Secondary Council Plan Reference(s)

Goal 7 – Sustainable population growth is planned for

Consultation/Communication

Referrals

The following authorities and internal departments have been consulted on the proposal:

Referral	Comment
Department of Transport and Planning	No objection, subject to conditions.
Environmental Health	No objection.
Engineering - Traffic	No objection, subject to conditions.

Referral	Comment
Agribusiness Officer	Unsupportive of the application for the following reasons: • Very limited reference to the agricultural use of the property. • Shedding sheep on less than 8ha is not a commercially effective return to agriculture. The description is consistent with a lifestyle or hobby farm. • The number of animals that could be sustained on the property without needing to buy in feed would be severely limited and therefore the possible benefits achieved through livestock regeneratively grazing the landscape are limited as well. • Sheep production for breeding or trading does not require a dwelling to be built in the area to sustain the agricultural production, as they are a broadacre enterprise.

Public Notification

The application was advertised by way of notice on the site and letters to adjoining and nearby owners and occupiers. No objections were received.

Planning Assessment

Introduction

Rural lifestyle development poses an ongoing risk to agricultural land and this can be challenging for Farming Zone land given the legacy of decisions made in the past.

Clause 65 of the Planning Scheme states that because a permit can be granted does not imply a permit should or will be granted. The responsible authority must decide whether the proposal will produce an acceptable outcome in terms of the decision guidelines of this clause.

Planning schemes in rural municipalities will usually seek to address these challenges through directing ‘rural lifestyle’ development to appropriately zoned rural land (such as the Rural Living Zone), and through the use of local planning policies to manage the development of dwellings in other rural zones, so as to protect the primacy of agriculture.

The *Rural Areas Strategy, September 2009* notes that the use of discretion to allow new dwellings in rural areas, primarily the Farming Zone, has been and continues to be generously applied, despite an oversupply of zoned Rural Living land (estimated to be an 80 year supply) to cater for such demand. Such decision making poses a significant threat to the viability of the local agricultural sector as it progressively compromises the ability of local businesses to grow and operate relatively unhindered. It should also be noted that the Farming Zone has been facing increasing pressures in more recent years for subdivision and residential development, primarily for rural lifestyle opportunities rather than for farming purposes. Rural residential development should be directed to existing planned areas for this purpose and not the Farming Zone.

Planning legal principles with reference to repeat applications

There are numerous Victorian and Civil Administrative Tribunal (VCAT) cases dealing with repeat appeals and the factors that should be considered for such applications. Although no appeal was lodged for the refusal of the previous application, it is recommended that the principles established by the Tribunal be considered by Council in making its determination on this application.

The decision in *Batsis Nominees Pty Ltd v Hobsons Bay CC [2009] VCAT 928 (25 May 2009)* sets out four principles that should be considered in justifying a departure from an earlier determination. The Tribunal found that unless a compelling case can be made about one or more of these factors, then there is no reasonable justification for departing from the basic findings in the previous application.

Principle: Significant or material changes to the application itself which address the primary reasons for the previous proposal being refused.
Assessment: There has been a material change to the application in that a Land Management Plan has been prepared detailing management zones for domestic, conservation and agriculture uses. There is limited reference to the agricultural use and rather the Land Management Plan primarily focuses on conservation and enhancing biodiversity, which can be done without the need for a dwelling. The previous application was refused on the basis that it did not align with the purpose of the Farming Zone and would not support a meaningful agricultural activity on the land.

The proposed Land Management Plan has not adequately demonstrated that the agricultural use will be viable or enduring, or that the type and scale of the agricultural use requires a dwelling on the land.
Principle: Significant or material changes in the circumstances of the land or its surrounds.
Assessment: There have been no significant or material changes in the circumstances of the land or its surrounds.
Principle: Significant or material changes in planning controls and policy.
Assessment: Amendment C256gben to the Greater Bendigo Planning Scheme was gazetted on 11 March 2022 to make changes to the Planning Policy Framework and implement the review of the Municipal Strategic Statement. This Amendment included additional and stronger policy considerations for rural dwellings in the Farming Zone. The previous application decision was on 4 July 2022 and therefore the previous application had the same policy considerations as this current application.
Principle: Significant or material changes in the interpretation of the facts or law.
Assessment: There have been no significant or material changes in the interpretation of the facts or law relevant to this application.

Despite the material change to the application, being the addition of a Land Management Plan outlining the proposed agricultural use for the land, there is insufficient justification to depart from the findings of the previous application.

Will the proposal result in an acceptable planning outcome having regard to the purposes of the Farming Zone and the relevant planning policy that deals with rural dwellings and the protection of agricultural land?

At a Statewide planning level, Clauses 14.01-1S and 14.01-1L relating to the protection of agricultural land have the objective to "*protect the State's agricultural base by preserving productive farmland*." Some of the main strategies in response to this objective seek to ensure the State's agricultural base is protected from the unplanned loss of productive land, prevent inappropriately dispersed urban activities in rural areas and to limit new housing in rural areas.

The Farming Zone Schedule 1 specifies that the minimum area for which no permit is required to use land for a dwelling is at least 40 hectares. A planning permit may be granted for the use of land for a dwelling on a lot less than 40 hectares, which is under consideration with this proposal. However, this discretion does not mean that a permit can be automatically approved for the use and development of land for a dwelling and outbuilding.

The responsible authority must decide whether the proposal will produce acceptable outcomes in terms of the decision guidelines of the Farming Zone and relevant planning policy.

The purpose of the Farming Zone includes the following relevant matters:

- *To implement the Municipal Planning Strategy and the Planning Policy Framework.*
- *To provide for the use of land for agriculture.*
- *To encourage the retention of productive agricultural land.*
- *To ensure that non-agricultural uses, including dwellings, do not adversely affect the use of land for agriculture.*
- *To provide for the use and development of land for the specific purposes identified in a schedule to this zone.*

In addition to the purposes of the Zone, consideration must also be given to a series of decision guidelines. The decision guidelines provide a means by which to assess such applications and include the following matters that are relevant to this application:

- *The Municipal Planning Strategy and the Planning Policy Framework.*
- *The capability of the land to accommodate the proposed use or development, including the disposal of effluent.*
- *How the use or development relates to sustainable land management.*
- *Whether the site is suitable for the use or development and whether the proposal is compatible with adjoining and nearby land uses.*
- *How the use and development makes use of existing infrastructure and services.*
- *Whether the use or development will support and enhance agricultural production.*
- *Whether the use or development will adversely affect soil quality or permanently remove land from agricultural production.*
- *The potential for the use or development to limit the operation and expansion of adjoining and nearby agricultural uses.*
- *The agricultural qualities of the land, such as soil quality, access to water and access to rural infrastructure.*
- *Any integrated land management plan prepared for the site.*

- *Whether the dwelling will result in the loss or fragmentation of productive agricultural land.*
- *Whether the dwelling will adversely affect the operation and expansion of adjoining and nearby agricultural uses*
- *The potential for the proposal to lead to a concentration or proliferation of dwellings in the area and the impact of this on the use of the land for agriculture.*

The proposal has been assessed against, and found to be contrary to, the relevant planning policy framework as follows.

Use of Farming Zone land for a dwelling:

Policy within the Planning Scheme seeks to ensure that new dwellings in the Farming Zone are only approved in instances where they have been demonstrated to support or enhance agriculture. In making such a determination, consideration should be given to why there is a need to live on site and how that would support or enhance agricultural use/production. The construction of a dwelling on this site would lead to a clustering of dwellings in the area and this is clearly a planning outcome that State and local planning policy is seeking to avoid.

The City's local agricultural policy at Clause 14.01-1L seeks to protect agricultural land, with relevant identified strategies being to:

- *Avoid the construction of a dwelling unless required to support a genuinely economically viable agricultural use of the land that requires permanent and continuous care, supervision or security.*
- *Ensure that where a dwelling has been deemed necessary to support an agricultural use, that the agricultural use has been established on the land prior to the construction of a dwelling.*

And a Policy guideline, which requires the consideration of:

- *Whether there is a demonstrated need to reside on the site to support the agricultural land use.*

If approved, the construction of a dwelling would create a rural-residential form of development which is contrary to both the purpose and decision guidelines of the Farming Zone along with the broader Planning Policy Framework. Consequently, the approval of a dwelling that does not support or enhance agriculture on the site would result in the fragmentation of agricultural land and could lead to a proliferation of dwellings within the surrounding area.

The *Rural Areas Strategy, September 2009* recognises that:

> *"Council and the community need to be more realistic about the opportunities for new dwellings to promote agricultural use in farming areas and recognise the risk that new dwellings pose to farming uses. In most cases land can be used for agriculture without a dwelling to support it. Rural living areas offer the opportunity for residents to pursue part time and hobby agricultural enterprises. Such enterprises, that generally do involve the desire to live on site, should be directed away from Farming zoned areas."*

The argument that the current poor soil and pasture quality means that the site requires a dwelling to allow for active management is a poor response to policy for the protection of agricultural land and a farming operation of this scale. Limited to no weight should also be given to the fact that vegetation retention, plantings, land management/improvements are to be provided to warrant the construction of a dwelling on a small Farming Zoned lot.

The applicant's intention to increase the current agricultural capacity and enhance the environmental aspects of the property can be completed without the need for a dwelling on the site. Further to this, the agricultural capacity of the site is reduced by the proposed development due to its site coverage and siting within a central part of the site.

In *Daylesford Design Studio v Hepburn SC [2008] VCAT 2128 (17 October 2008)* the Tribunal considered the use and development of the land for a dwelling on a small lot in the Farming Zone, affirming the Council's decision to refuse to grant a permit. In this instance Member Cooks states the following:

> *"The purposes of the Farming Zone do not provide any encouragement for the use of a dwelling on a relatively small lot in a farming area, particularly if it has no relationship with a farming activity. The zone purposes focus on encouraging improved agricultural practices and avoiding uses that have the potential to cause conflict with existing agricultural practices."*

The subject site is an 'undersized lot' within the Farming Zone with an area of 7.66 hectares. Whilst it is acknowledged that there are 'undersized' lots in the broader surrounding area that already contain dwellings, in cases such as *Russell Smith Town Planning Services v Mount Alexander SC [2018] VCAT 58 (11 January 2018)*, the Tribunal has determined that the presence of dwellings and smaller lot sizes within the surrounding area does not mean it should become a 'de-facto' rural living area.

McCormick v Golden Plains SC [2023] VCAT 1295 (23 November 2023) furthers this by stating that the capacity to use the land for agriculture is limited by the land size and the dwelling area only takes away further land from this potential. The risk is that

this leads to the residential use becoming the primary purpose of the land (as a rural residential type of use), rather than it being an adjunct to the agricultural use.

It has not been satisfactorily demonstrated that the possible benefits of having a dwelling on the site outweigh the policy directions of Clause 14.01-1S to avoid such circumstances. It has not been satisfactorily demonstrated that the possible benefits of having a dwelling on the site would outweigh what is being sought by the policy directions of Clause 14.01-1S (Protection of agricultural land) . Further to this, this application presents a high risk of the permanent loss of agricultural land through the use and development of a dwelling on such a lot.

Whilst the lot size may create some limitations, dependent on the proposed agricultural land use, it does not prevent the land from being productive. The site has the potential to sustain an agricultural activity, whether used as a small-scale, standalone operation or consolidated as part of a larger agricultural landholding. It is important to note that the refusal of the application would not in any way hinder the ability of the land to be used for agricultural purposes.

Currently there is potential for the subject site to be consolidated with adjoining parcels of land to allow for an outcome that would improve agricultural productivity and allow for a sustainable and economically viable agricultural activity to occur. The approval of a dwelling would fragment the land, lead to a likely irreversible change in land use and affect the ability of the site to support or enhance agricultural production.

The application was referred to the City’s Agribusiness Officer for comment. The response provided was unsupportive of the proposal and highlighted the inconsistencies between the proposal and the requirements of the Greater Bendigo Planning Scheme, including relevant planning policy and the provisions of the Farming Zone.

The officer’s assessment outlines that there is very limited reference to an agricultural use, rather, the description is consistent with a lifestyle or hobby farm. Sheep production for breeding or trading does not require a dwelling to be built in the area to sustain the agricultural production, as they are a broadacre enterprise. Raising shedding sheep on less than 8ha is also not a commercially effective return to agriculture.

It is accepted that there are dwellings on smaller sized Farming zoned lots in the broader surrounding area. However, these dwellings predate the changes to policy that are discussed throughout this report. The strengthening of the policy over time has been driven in part by past, undesirable proliferation of dwellings.

On this basis, the construction of a dwelling would not result in an orderly planning outcome as the application material depends on the presence of the dwelling. If the agricultural use is dependent on the dwelling, particularly for a farming operation of this smaller scale, then the dwelling is the land's primary use. In the Farming Zone the agricultural use of the land must be the primary use and any dwelling must be secondary or ancillary.

For the above reasons, the proposal is contrary to the purpose of the Farming Zone and the relevant policy framework that deals with rural dwellings and the protection of agricultural land.

Dwelling siting, design and servicing:

The dwelling has been designed to minimise the potential for visual amenity impacts and to ensure that it is in keeping with the rural landscape. The dwelling would be single storey in form with materials and colours that respect the rural context.

The proposal can meet the mandatory requirements outlined in Clause 35.07-2 of the Farming Zone to use the land for a dwelling which includes the following:

- *Access to the dwelling provided via an all-weather road with dimensions adequate to accommodate emergency vehicles;*
- *The wastewater generated from the dwelling treated and retained within the lot in accordance with the requirements of the Environment Protection Regulations under the Environment Protection Act 2017 for an on-site wastewater management system;*
- *The dwelling connected to a reticulated potable water supply or have an alternative potable water supply with adequate storage for domestic use as well as for firefighting purposes; and*
- *The dwelling connected to a reticulated electricity supply or have an alternative energy source.*

The dwelling and outbuilding are within 100m of the waterway which transverses the site and the outbuilding is also within 5m of the southern side boundary. However, these buildings are proposed outside the Environmental Significance Overlay and Salinity Management Overlay and more than 120m from Bendigo-Maldon Road. All other setback requirements are met.

The proposed area for wastewater disposal was supported by the City’s Environmental Health team. The siting avoids vegetation removal and the building design is generally appropriate, however, this does not justify support for the dwelling at the expense of the inconsistencies outlined in the section above.

Siting the dwelling in the central portion of the site would impact the ability of the balance of the land to be used for agriculture. The siting would also result in the unnecessary loss of productive land due to the construction of a lengthy internal driveway. Whilst the siting of the dwelling is not considered significant as a standalone issue, the siting along with the compelling matters listed above result in the proposal being an unacceptable planning outcome that is at odds with the direction of the Planning Scheme.

Conclusion

The application proposes a use and development that is contrary to planning policies relating to rural dwellings and the protection of agricultural land. The proposal would allow a rural dwelling on an undersized lot within the Farming Zone that does not support or enhance agriculture and does not comply with the Planning Policy Framework. There is insufficient justification that the agricultural use is viable and a dwelling is genuinely needed to support the agricultural use.

If approved, the proposal would likely contribute to the incremental shift towards rural living and this is discouraged by the policies discussed in this report. The proposal would create an undesirable planning outcome and rural living developments of this nature result in permanent land use changes that are contrary to policy regarding the protection of agricultural land.

It is recommended that a Notice of Decision to Refuse to Grant a Permit be issued.

Options

Council, acting as the responsible authority for administering the Planning Scheme, may resolve to: grant a permit, grant a permit with conditions, or refuse to grant a permit.

Conflict of Interest

No officer involved in the preparation or approval of this report declared a general or material conflict of interest.

Attachments

Nil

16.3. 155 Victa Road, East Bendigo - Staged Subdivision of Land, Removal of Native Vegetation and Removal and Variations of Easements (Amendment to Permit and Plans to Allow Further Subdivision)

Author:	Shannon Rosewarne, Senior Planner
Responsible Director:	Rachel Lee, Director Strategy and Growth

Summary/Purpose

Application No:	AM/763/2010/E
Applicant:	Bendigo Properties Pty Ltd
Land:	155 Victa Road, EAST BENDIGO 3550
Zoning:	Industrial 1 Zone
Overlays:	Design and Development Overlay (Schedules 17 and 18); Land Subject to Inundation Overlay 1; Bushfire Management Overlay; and Airport Environs Overlay 2
No. of objections:	0
Consultation meeting:	N/A
Key considerations:	• Planning policy for industrial land. • Subdivision requirements within the Design and Development Overlay – Schedule 18 Strategic planning forecasts for industrial land supply and demand.
Conclusion:	The proposal is an unacceptable planning outcome for the site with regard to the relevant provisions and policies of the Greater Bendigo Planning Scheme. It is recommended that Council refuse this application.

Recommended Motion

That Council issue a Notice of Refusal to Grant a Permit for the staged subdivision of land, removal of native vegetation and removal and variation of easements (amendment to permit and plans) at 155 Victa Road, EAST BENDIGO on the following grounds:

1. The proposed subdivision is not consistent with the requirement within Schedule 18 of Clause 43.02 (Design and Development Overlay) to retain large lots.
2. The proposed subdivision is inconsistent with Clause 17.03-1L (Industrial land supply – Greater Bendigo) as it will not provide a suitable variety of lot sizes to support different industry types.

Background Information

Planning Permit DS/763/2010 was issued on 9 March 2011 and allows a staged subdivision of land into 49 lots. At the time of the approval of the Planning Permit, the land was subject to a different planning control - Development Plan Overlay - Schedule 13 *East Bendigo Food Manufacturing Precinct – Victa Road, Wellsford*. The planning control at that time was different to the current Design and Development Overlay and included the following requirement for subdivision:

*"**Where practical**, subdivision should allow:*

- *Efficient solar orientation of allotments;*
- ***Retention of large allotments**; and*
- *Common trenches for reticulated services".*

A series of amendments to the permit were undertaken in 2018, 2020, 2022 and 2023 and two amendments via secondary consent have occurred this year.

Amendment AM/763/2010/A decreased the number of lots to 39, made alterations to the subdivision layout and revised the staging of the subdivision. Plans were endorsed under condition 1 of the permit on 6 June 2018.

Amendment AM/763/2010/B included the removal of native vegetation in the statement of what the permit allows, changed the layout to provide for a total of 28 lots within the estate, revised building envelopes and updated referral authority conditions, including the addition of Department of Energy, Environment and Climate Action conditions. Plans were endorsed under condition 1 of the permit on 31 March 2020.

Amendment AM/763/2010/C revised the subdivision layout to create 25 lots and two superlots of 5.563 hectares and 5.5466 hectares. Plans were endorsed under condition 1 of the permit on 22 December 2022.

Amendment AM/763/2010/D was issued on 25 May 2023 and is the current permit. This amendment allowed further subdivision of the two superlots for a total of 35 lots within the estate and included an amendment to the Bushfire Management Plan to reflect the subdivision layout.

A plan of subdivision was certified on 11 December 2023 in accordance with the endorsed plan under AM/763/2010/D.

The plans were recently amended via secondary consent on 11 April 2024 to alter the staging of the subdivision and make minor changes to the layout including creating a reserve for Coliban Water infrastructure and increasing the width of the access onto Arbor Boulevard for Lot 27 from 12 to 16 metres.

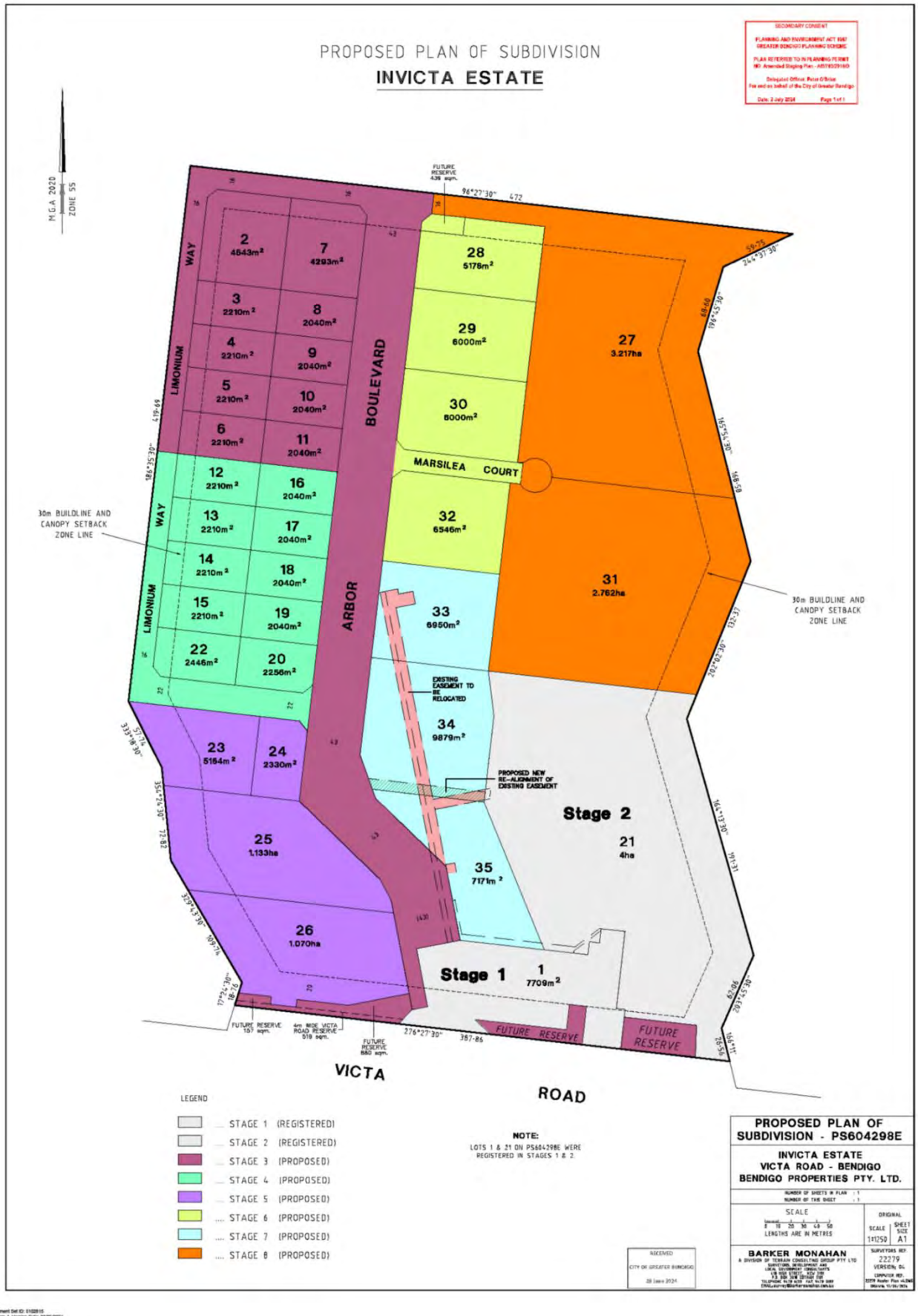


Figure 1. Current approved plan (endorsed on 2 July 2024)

A further secondary consent request was then approved on 2 July 2024 to further alter the staging plan to split stage 6 into two stages and renumber the stages accordingly. This has renumbered the stage relevant to this application as Stage 8. The amended plan submitted with the application, which is the subject of this report, *has not been updated* to reflect the approved staging plan, however, for clarity the stage in question is referred throughout this report as Stage 8.

Report

Subject Site and Surrounds

The subject site is located on the northern side of Victa Road, East Bendigo and comprises 3 parcels known as Lots 1, 21 and S3 on PS604298E. The address of the land is 155 Victa Road, East Bendigo. The site is an irregular shape and has an overall area of approximately 28.07 hectares. It is relatively flat with a gentle slope towards the centre of the site and the land draining towards the north. Works have commenced on site for the subdivision approved under the existing permit. Stages 1 and 2 of the subdivision have been completed and now contain industrial developments. Stages 3 – 8 are yet to be completed.

The land is zoned Industrial 1 Zone and is affected by a Bushfire Management Overlay, Land Subject to Inundation Overlay - Schedule 1, Airport Environs Overlay – Schedule 2, Design and Development Overlay - Schedule 17 and Design and Development Overlay – Schedule 18.

The site adjoins Bendigo Airport to the west, zoned Special Use Zone 7. A Coliban Water channel, zoned Public Use Zone 1 (Service and Utility), also abuts part of the western boundary. To the north, the site adjoins a parcel known as Lot 1 Victa Road zoned Public Use Zone 6 (Local Government) owned by City of Greater Bendigo. This land is being subdivided into two lots, with one of the lots being transferred to Parks Victoria. To the east, the site adjoins the Greater Bendigo Regional Park. A strip of land immediately adjacent to the site's eastern boundary is zoned Public Use Zone 1 (Service and Utility), but the regional park is otherwise zoned Public Conservation and Resource Zone. Land on the opposite side of Victa Road also forms part of the Greater Bendigo Regional Park.

Victa Road is a sealed local road managed by the City of Greater Bendigo and is two lanes (one for each direction of travel), which has been constructed for the full length of the site and terminates at the eastern end of the site.

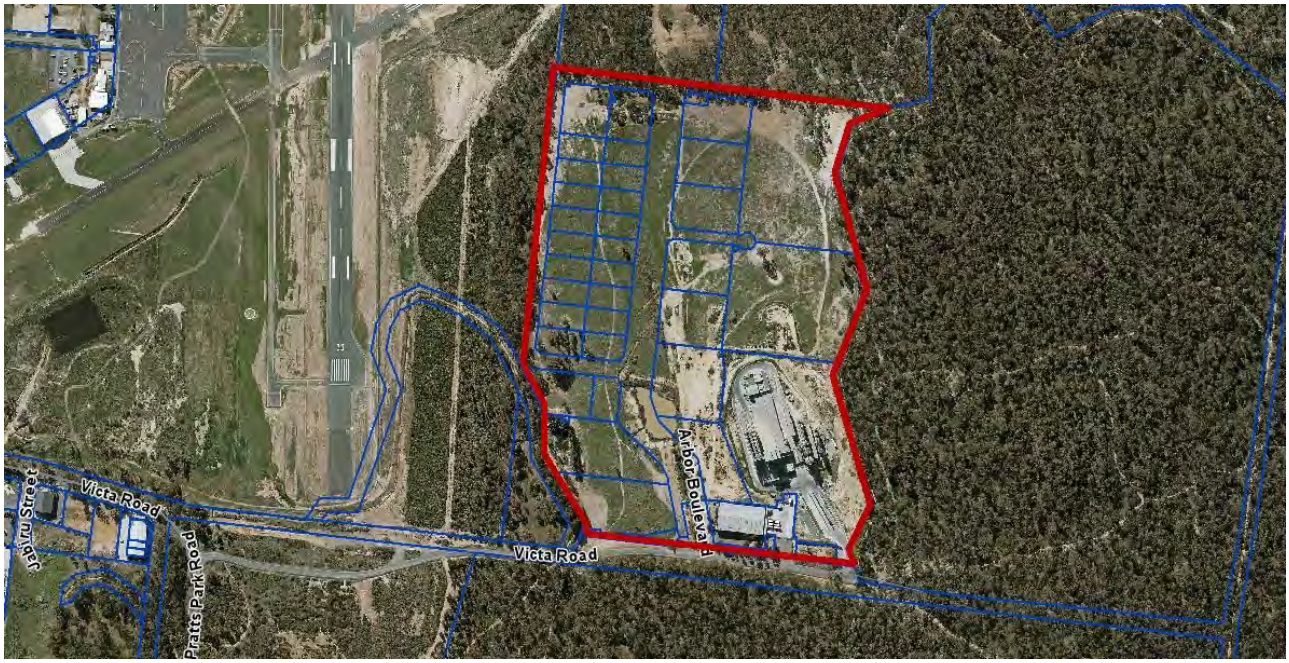


Figure 2: Location map showing subject site.

Proposal

The proposal is to amend the approved plan of subdivision to further subdivide Lots 27 and 31 (Stage 8 of the estate) into smaller lots. The proposal would result in an overall increase from 35 to 44 lots within the overall estate.

The proposed lots created within Lots 27 and 31 would range in size from 2,000 square metres to 1.312 hectares.

As this is an amendment to an existing permit, Council is only required to consider the merits of the changes to the proposal.

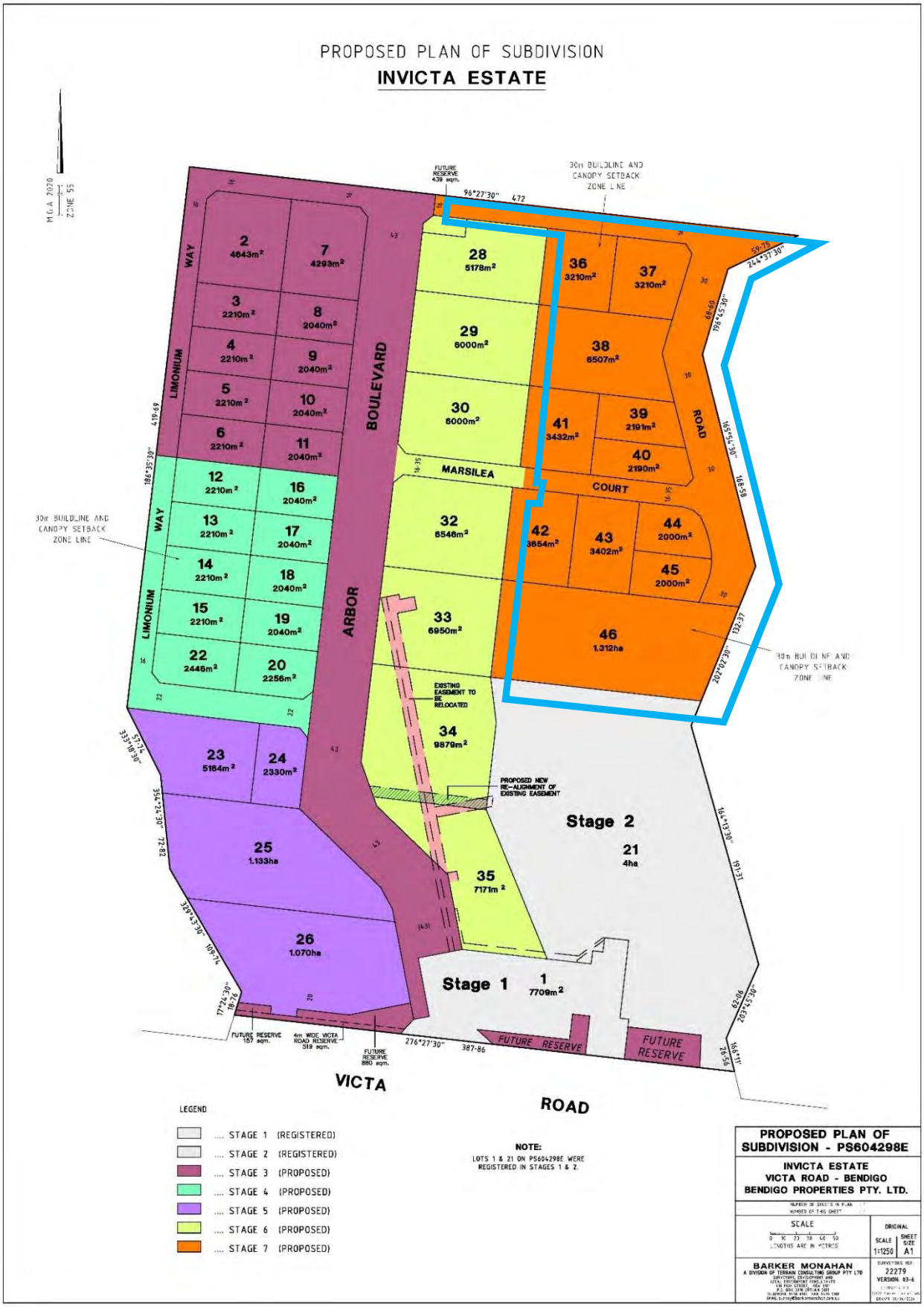


Figure 3. Proposed plan of subdivision – the subject area is outlined in blue.

Planning Controls - Greater Bendigo Planning Scheme

Why is a permit needed?

The need for a planning permit is triggered by:

- Clause 33.01-3 of the Industrial 1 Zone - which states that a permit is required to subdivide land.
- Clause 43.02-3 of the Design and Development Overlay - which states that a permit is required to subdivide land.
- Clause 44.06-2 of the Bushfire Management Overlay - which states that a permit is required to subdivide land.
- Clause 44.04-3 of the Land Subject to Inundation Overlay - which states that a permit is required to subdivide land.
- Clause 45.02-3 of the Airport Environs Overlay - which states that a permit is required to subdivide land.
- Clause 52.17 - which states that a permit is required to remove native vegetation.

The following clauses are relevant in the consideration of this proposal:

Municipal Planning Strategy

- Clause 02.01 Context
- Clause 02.02 Vision
- Clause 02.03-3 Environmental risks and amenity
- Clause 02.03-7 Economic development
- Clause 02.03-9 Infrastructure
- Clause 02.04 Strategic framework plans

Planning Policy Framework

- Clause 11 Settlement
- Clause 11.01-1S Settlement
- Clause 11.01-1R Settlement – Loddon Mallee South
- Clause 11.02-1S Supply or urban land
- Clause 12.05-2L Urban forest interface – Greater Bendigo
- Clause 13.02-1S Bushfire planning
- Clause 17.01-1K Diversified economy
- Clause 17.03-1S Industrial land supply
- Clause 17.03-1L Industrial land supply – Greater Bendigo

Other Provisions

- Clause 33.01 Industrial 1 Zone
- Clause 43.02 Design and Development Overlay
- Clause 44.06 Bushfire Management Overlay
- Clause 53.02 Bushfire planning
- Clause 65.02 Approval of an application to subdivide land
- Clause 72.02-3 Integrated decision making
- Clause 72.08 Background documents

Policy Context

Primary Council Plan Reference

City of Greater Bendigo Council Plan *Mir wimbul* 2021-2025

Outcome 2 – Healthy, liveable spaces and places
Outcome 3 - Strong, inclusive and sustainable economy

Secondary Council Plan Reference(s)

Goal 7 – Sustainable population growth is planned for
Goal 4 - Employment land available for industry expansion and attraction

Consultation/Communication

Referrals

The following authorities and internal departments have been consulted on the proposal:

Referral	Comment
Fire Rescue Victoria	No objection subject to conditions requiring endorsement of the updated Bushfire Management Plan, a requirement for a building and canopy setback line as shown in the Bushfire Management Plan, provision of hydrants and construction of roads to CFA requirements.
Coliban Water	No objection subject to standard conditions relating to the provision of reticulated water and sewerage.
Powercor	No objection subject to standard conditions relating to the provision of reticulated electricity.

Referral	Comment
Downer Utilities	No response received.
Development Engineer	No objection but recommended that the plan be amended to provide suitable access arrangements for Lots 44, 45 and 46. The alignment of the boundaries for Lots 44 and 45 should be configured such that they have frontage to Marsilea Court, and part of the road along the eastern boundary be incorporated into Lot 46. This would then avoid the need for the creation of a court bowl at the end of the eastern road. Should the application be approved by Council, an amendment could be required as a condition of permit.
Engineering -Traffic	No objection.
Strategic Planning	The proposed amendment to create smaller lots from the two larger lots is not supported. The Design and Development Overlay 18 is clear in the need for larger lots in this location including the *'retention of larger lots'* under subdivision. Bendigo East is identified in the adopted *Greater Bendigo Industrial Land Strategy* as the premier industrial precinct in Bendigo. Being the largest site within this precinct, the Invicta Estate (previously Wellsford Estate) provides one, if not the only, current opportunity for larger businesses looking to establish in Bendigo.

The amended permit application was not re-referred to North Central Catchment Management Authority, Department of Energy, Environment and Climate Action and Bendigo Airport as the two lots proposed for further subdivision are not within the Land Subject to Inundation Overlay or Airport Environs Overlay and no additional native vegetation is proposed to be removed.

Public Notification

The application was advertised by way of notice on the site and letters to adjoining and nearby owners and occupiers and a sign displayed on the site. As a result of advertising, no objections were received.

Planning Assessment

Planning policy

The following clauses of the Planning Policy Framework and Municipal Planning Strategy are relevant in the consideration of this application:

Clause 02.01 (Context) of the Municipal Planning Strategy notes that Greater Bendigo performs a regional service role and manufacturing is among the major contributors to economic output.

Clause 02.02 (Vision) states that the Greater Bendigo of the future will, amongst other things, have a strong economy that supports job growth, attracts visitors, and is diversified.

Clause 02.03-3 (Environmental risks and amenity) notes that bushfire and flooding are two of the key environmental risks for Greater Bendigo.

Clause 02.03-7 (Economic development) notes that 'traditionally industry in Greater Bendigo has been located within the Bendigo urban area and focused on manufacturing and engineering. These sectors remain important to the economy.' It further notes that many of the areas set aside for industrial use, particularly in the Bendigo urban area, are not suitable to the needs of modern industry due to small lot sizes and adjoining incompatible uses. Strategic directions for economic development are:

- Develop and expand employment generating industries.
- Make well located affordable employment land available.
- Direct commercial growth to activity centres.
- Plan for the future growth of the industrial sector by providing zoned land in appropriate locations and lot configurations.

Clause 02.03-9 (Infrastructure) includes a strategy to manage water supply, water resources, wastewater, drainage and stormwater sustainably through an integrated water management approach.

Clause 02.04 (Strategic framework plans) identifies the subject site as a location for industrial land uses, as part of the East Bendigo industrial precinct.

Clause 11 (Settlement) states that planning is to anticipate and respond to the needs of existing and future communities through provision of zoned and serviced land for housing, employment, recreation and open space, commercial and community facilities and infrastructure. Planning is to recognise the need for, and as far as practicable contribute towards, amongst other things:

- Health, wellbeing and safety.
- Diversity of choice.
- Economic viability.
- Protecting, conserving and improving biodiversity, waterways and other natural resources.
- Land use and transport integration.

Clause 11.01-1R (Settlement – Loddon Mallee South) contains a strategy to support Bendigo as the regional city and the major population and economic growth hub for the region, offering a range of employment and services.

Clause 11.02-1S (Supply of urban land) seeks to ensure a sufficient supply of land is available for residential, commercial, retail, industrial, recreational, institutional and other community uses. Strategies include ensuring that sufficient land is available to meet forecast demand.

Clause 12.05-2L (Urban interface policy) applies to a number of urban zones, including the Industrial 1 Zone and this policy seeks to protect the ecological values of forested private and public land around Bendigo from the impacts of urban development and reinforce the urban forest backdrop surrounding and dispersed with the Bendigo Growth Boundary.

Relevant strategies include:

- Plan subdivisions so that streets direct and frame views to the forest edges and other areas of bushland within and abutting the Bendigo Urban Growth Boundary.
- Avoid encroachment of urban development into forest areas
- Located buffers of up to 30 metres wide on non-vegetated private land that adjoins private and public forested land to protect forest values.
- Design subdivisions to:
    - Include higher density lots in areas that have been previously disturbed.
    - Provide continuous street access along the urban forest interface.
    - Provide multiple access and egress options for pedestrians and vehicles, including emergency and maintenance vehicles.
    - Retain undisturbed forest areas and areas of native vegetation wherever possible where it can be demonstrated that vegetation can be managed to avoid increasing bushfire risk.
    - Protect existing native vegetation from construction impacts through tree protection zones.

Relevant policy guidelines include:

- Avoiding stormwater discharge onto public land. Where unavoidable, consider how stormwater can be managed in a way that incorporates water sensitive urban design principles.
- Using building envelopes or other measures to achieve the objective.
- Locating utility services to minimise impacts on the urban forest interface.
- Designing the locations, species mix and density of new planting to reflect the surrounding forest biodiversity values.
- Constructing fencing to create a rabbit and dog proof barrier between the forest and the development at the following heights:
  - 1.8 metres high where there is no intervening road reserve.
  - 1.2 metres high where there is an intervening road.
- Mitigating risks associated with bushfire through a combination of urban design and land management measures.
- Designing subdivisions (including a road) to be set back 5 metres from the forest boundary.
- Providing a 30 metre buffer, which may incorporate a road, from habitable buildings to the forest boundary. This buffer should not include trees, except for street trees.
- Providing street tree plantings that are of locally indigenous species. The planting of exotic flora should be avoided. Seed collection, vegetative propagation or transplanting of indigenous vegetation is encouraged.

Clause 13.02-1S (Bushfire planning) seeks to strengthen the resilience of settlements and communities to bushfire through risk-based planning that priorities the protection of human life. Strategies include giving priority to the protection of human life by:

- Prioritising the protection of human life over all other policy considerations.
- Directing population growth and development to low risk locations and ensuring the availability of, and safe access to, areas where human life can be better protected from the effects of bushfire.
- Reducing the vulnerability of communities to bushfire through the consideration of bushfire risk in decision making at all stages of the planning process.

Clause 17.01-1L (Diversified economy – Greater Bendigo) sets out a strategy to support development that maintains Bendigo as a key regional city an economic growth hub for the Loddon Mallee South region.

Clause 17.03-1S (Industrial land supply) seeks to ensure the availability of land for industry. Strategies include:

- Providing an adequate supply of industrial land in appropriate locations including sufficient stocks of large sites for strategic investment.
- Identifying land for industrial development in urban growth areas where:
  - Good access for employees, freight and road transport is available.
  - Appropriate buffer areas can be provided between the proposed industrial land and nearby sensitive land uses.
- Protecting and carefully plan existing industrial areas to, where possible, facilitate further industrial development.
- Preserving locally significant industrial land for industrial or employment generating uses, unless long-term demand for these uses can be demonstrably met elsewhere.
- Avoiding approving non-industrial land uses that will prejudice the availability of land in identified industrial areas for future industrial use.

Clause 17.03-1L (Industrial land supply – Greater Bendigo) contains the objective of encouraging diversification and expansion of the municipality's industrial base. This clause contains strategies to direct industrial development and infrastructure to East Bendigo and the Wellsford Estate Industrial Precinct and to *"support industrial subdivisions that provide a variety of lot sizes to support different industry types"* and "*ensure land in undeveloped areas is not fragmented and remains in large holdings until it is required for development".*

Specific strategies within this clause for East Bendigo and Wellsford (now Invicta) Industrial Precinct are:

- Facilitate the growth and development of both new and existing local, regional and international industries.
- Support development that does not adversely impact on the heritage and environmental values of the surrounding area.
- Support the redevelopment of the East Bendigo Railway Workshop for freight or transport related activities.

The *Bendigo Industrial Land Strategy (2002)*, *Review of Demand and Supply for Industrial Land in Greater Bendigo (2012)* and *East Bendigo Local Structure Plan (amended 2013)* are referenced within this clause. These are currently background documents within the Planning Scheme.

The Industrial Strategic Framework Plan within this clause shows that a large proportion of the East Bendigo industrial area is zoned Industrial 1 Zone.

The subject site has been zoned for industrial development and is identified within local planning policy as being part of a key industrial precinct in East Bendigo. Bushfire risk has been appropriately considered and responded to in the proposed

design of the subdivision and new development on the proposed lots would be able to achieve defendable space for BAL 12.5.

The site is not remote from the existing urban area as access to the estate is via Victa Road, an established, sealed, public road which provides connection to other urban areas in East Bendigo including Rohs Road, a link road managed by Department of Transport and Planning. Water supplies will be required to be provided on site and ongoing vegetation management requirements will apply in accordance with an approved Bushfire Management Plan. The application has satisfactorily demonstrated that the bushfire risk posed by the broader landscape can be mitigated to an acceptable level.

Flood risk has also been considered and addressed in the design of the overall estate and can be mitigated to appropriately minimise the risk to life and property. Stormwater drainage infrastructure for the estate would be developed on and off site in accordance with requirements of the City's Engineering Unit and North Central Catchment Management Authority.

The central concern with this application is the appropriateness of lot sizes within Stage 8. There is concern that the proposed amended subdivision plan is not consistent with the requirements of the Design and Development Overlay – Schedule 18 and policies within the Planning Scheme which seek to provide for a variety of lot sizes. Taking into account these matters together with broader strategic planning considerations, it is recommended that the proposal not be supported.

The *Greater Bendigo Industrial Land Development Strategy* (GBILDS) was first adopted by Council in May 2020 and was amended this year. At its meeting of 24 June this year, Council adopted the updated Strategy and resolved to request authorisation to prepare and exhibit Amendment C282gben to the Greater Bendigo Planning Scheme, which would introduce this strategy into the Planning Scheme and delete the *Bendigo Industrial Land Strategy (2002)* which is now outdated.

The application states that limited weight ought to be given to GBILDS as it is not a document referenced in the Planning Scheme. GBILDS, although adopted, is not yet referenced in the Planning Scheme, however, section 60(1A)(g) of the *Planning and Environment Act 1987* allows the responsible authority to consider any other strategic plan or policy statement which has been adopted by the municipal council, before deciding on an application.

Given the *Bendigo Industrial Land Strategy (2002)* is now over 20 years old, the *Greater Bendigo Industrial Land Development Strategy (2024)* (GBILDS) is considered a relevant strategy when considering this application as it is the most recent analysis of industrial land supply for the municipality.

GBILDS identifies that in addition to the general need for industrial land, there is a specific need to provide for larger industrial lot sizes in the order of 1-5 hectares.

The *Bendigo Industrial Land Strategy (2002)* considered large lots as being sites over 1 hectare in size whilst the more recent *Review of Demand and Supply for Industrial Land in Bendigo (2012)*, which was undertaken as part of the strategic assessment for Amendment C161 to rezone land for the Marong Business Park, referred to large lots as being those between 2 – 4 hectares. Both documents are currently background documents in the Planning Scheme listed in the Schedule to Clause 72.08. As such, there has been some variation in the definition of a large lot over time, however, there seems to be consensus between the current and proposed background documents to suggest that a large lot should be taken to be at least 1 hectare in size.

Bendigo East is identified in GBILDS (2024) as the premier industrial precinct in Bendigo. It is considered that the Invicta Estate provides one, if not the only current opportunity for larger businesses looking to establish in Bendigo.

The *Review of Future Industrial Land Supply in Bendigo (2023)* is an independent strategic assessment of future industrial land supply in Greater Bendigo prepared by SGS Planning and Economics. It was undertaken to confirm the need for both the Bendigo Regional Employment Precinct and the Marong Business Park for longer term industrial land supply.

This report states that industrial land audits have identified a critical shortage of industrial zoned land in Greater Bendigo; with the most recent audit indicating there is a maximum of 11 years supply of industrial land and an additional 170 to 270 ha is required for a 30 year pipeline. The audits reveal a shortage of large industrial lots. It states that:

> *"with an 11 year supply of industrial land, Greater Bendigo falls short of meeting the 15 year minimum supply benchmark set in state policy (Clause 11.02). In addition to the shortfall of industrial land supply, other key issues include:*
>
> - *There is a limited supply of larger lot sizes, of the 100-120ha vacant industrial land, 74 per cent are 0.5ha or less.*
> - *Industrial land is fragmented and scattered across Bendigo which increases freight traffic through urban areas and limits the growth and expansion of existing businesses.*
> - *There is no large business park in the area.*
>
> *Smaller lots in some precincts, such as East Bendigo, are suited to small industrial businesses with commercial links."*

Whilst the proposed rezoning of a 294 hectare site to the south of the Marong township for an employment precinct, together with the realisation of the Marong Business Park, some 313 hectares zoned Comprehensive Development Zone to allow industrial use and development as part of Amendment C161, would meet long term industry needs, these projects will take some time to complete before industrial lots are provided with the necessary infrastructure and are subdivided and become available for purchase.

The Marong Business Park cannot be relied upon for short or medium term industrial land supply as the current landowner is not looking to sell or develop the land and the land is currently being used for farming.

The application states that the proposed further subdivision of Stage 8 will not compromise industrial land supply in the municipality and makes the following summarised points in support of this argument:

- The consumption rates assumptions which form the basis for the GBILDS findings do not appear to have been realised, with economic analysis indicating limited demand for large and very large lots since the GBILDS was approved. This has been observed both on the site and more broadly across the city and the municipality, with large and very large lots sitting on the market for long periods without significant uptake.
- The Marong Township Structure Plan confirms the planning and delivery of the future industrial precinct (BREP) is a short term priority for the municipality. The BREP is intended to provide short to medium term industrial land supply for Greater Bendigo. While this precinct is still in planning stages, it is expected that based on current timeframes and action plans that new industrial land will be available within necessary timeframes and will be more than sufficient to service short to medium term land demand within the municipality.
- Council adopted the revised GBILDS 2024 at its June Ordinary Meeting to factor new industrial land supply into an updated economic analysis and update existing land supply estimates. It is anticipated that lower than expected levels of consumption of large lots since 2020 combined with updated projections on new industrial land supply will necessitate updates to this policy and relieve pressure on the East Bendigo and Wellsford Precincts.
- Land in the Marong Business Park has already been zoned and planned to facilitate industrial and commercial development, including land for large and very large landholdings. This land remains available for long term industrial demand.

A Planning Scheme Amendment process to rezone land for the Bendigo Regional Employment Precinct has yet to commence. The timeframe for the delivery of this precinct is within the next 5-10 years.

The *Review of Future Industrial Land Supply in Bendigo (2023)* prepared by SGS Economics and Planning forecasts that there will be a consumption rate of 11 hectares of industrial land per year from 2027 onwards. It states that aside from the Marong Business Park, there are currently 100 hectares of vacant, industrially zoned land available, of which 7% are lots between 1-5 hectares in size. The report notes that there is a concentration of small businesses in Greater Bendigo's main industrial precinct, East Bendigo, contained within smaller lots. Analysis by consultants REMPLAN, as part of the *Bendigo Industrial Land Review – Strategic Economic Inputs* report (2019), which has informed GBILDS indicates that lots between 1-5 hectares will be exhausted by 2027.

The report states that *"while there is potential for industrial lots to come to market through subdivision, Greater Bendigo is already experiencing a shortage of large lots and subdivision into smaller lots limits prospects for land-hungry and larger industrial businesses. Small lots in some precincts, such as East Bendigo, are suited to small industrial businesses with commercial links."*

It is acknowledged that East Bendigo has a high concentration of existing, small industrial lots that serves a need for smaller industrial businesses and that this precinct is constrained with freight movements given its location. The City's Strategic Planning Unit has advised that despite this, given the existing municipal-wide shortage of large lots, Council should require retention of large lots within the Invicta Estate until the Bendigo Regional Employment Precinct, in the first instance, is able to replenish this supply.

Zone

The purposes of the zone include implementing the Municipal Planning Strategy and the Planning Policy Framework and providing for manufacturing industry, the storage and distribution of goods and associated uses in a manner which does not affect the safety and amenity of local communities.

The decision guidelines for subdivision under this zone at set out at Clause 33.01-3 and include consideration of the Municipal Planning Strategy and the Planning Policy Framework, any natural or cultural values on or near the land, streetscape character, landscape treatment and interface with non-industrial areas.

The relevant planning policies have been outlined and discussed above. Stage 8 adjoins the Bendigo Regional Park to the east. The overall site also has an interface with the Bendigo Airport to the west and part of the site abuts a Coliban Water channel along the western boundary, however no changes are proposed to Stages 3, 4 and 5 therefore no changes to this interface are proposed. To the north, the site abuts a vegetated parcel owned by the City of Greater Bendigo. A drainage basin

will be constructed on this site in connection with the proposed subdivision, in accordance with a section 173 Agreement registered on the land.

The changes to the layout of Stage 8 would allow for an appropriate development setback to be maintained to the Bendigo Regional Park. A 30 metre building and canopy setback required under the current approved plan would be maintained along the northern boundary of the site and for Lot 46, whilst the road reserve along the eastern boundary would be 30 metres wide. It is noted that the setback line itself is not clearly marked on the amended plan and if approved this would need to be shown.

The width of the proposed roads within Stage 8 would provide for a suitable streetscape character and allow for street tree planting and on-street parking.

There is no minimum lot size specified within the zone. A detailed discussion about the appropriateness of the proposed lot sizes within Stage 8 is provided above.

There is a concern that the proposal is not consistent with the purposes of the zone, in that the estate and surrounding area within the East Bendigo industrial precinct already provides suitable opportunities for the establishment of businesses for the storage and distribution of goods and associated uses, based on the number of small and medium lots approved and existing. However, there are limited opportunities for the establishment of new manufacturing uses, which typically require large sites, as there are only a small number of large lots. The Industrial 1 Zone caters for a greater range of industries and typically provides for greater separation from residential areas, whereas under the Industrial 3 Zone all industrial land uses, other than service industries, require a permit to establish and Industrial 3 Zone locations are typically closer to residential development.

The application was referred to relevant referral authorities who confirmed that the land is able to be serviced with reticulated services. Should Council decide to approve the amended permit application, then the servicing authority conditions should be updated in accordance with the referral responses received.

Bushfire Management Overlay and Clause 53.02 (Bushfire Planning) requirements

The whole of the site is affected by the Bushfire Management Overlay. A revised Bushfire Management Statement and Bushfire Management Plan were submitted for the proposed subdivision as part of the amended permit application.

The bushfire risk for the site has previously been assessed. There is no change to the proposed building setback of 33 metres to the eastern and northern boundaries of the land with respect to Stage 8 to achieve a minimum Bushfire Attack Level of BAL 12.5.

The application was referred to Fire Rescue Victoria who had no objection to the application, subject to conditions of permit, as outlined previously.

The Bushfire Management Plan satisfactorily addresses the requirements of Clause 53.02 (Bushfire planning) in relation to the required bushfire mitigation measures for defendable space, water supply, access and vegetation management requirements, however it is noted that the width of the road abutting the northern boundary does not appear to match that shown on the plan of subdivision, being 16 metres. Should Council approve the application, the Bushfire Management Plan should be amended to match the proposed plan of subdivision, as a condition of permit.

Land Subject to Inundation Overlay

The central part of the site is affected by the Land Subject to Inundation Overlay – Schedule 1 (LSIO1). The proposed amendment does not impact levels or stormwater/flood management requirements for the site. No part of the LSIO1 is located within Stage 8. As such, referral of the application to North Central Catchment Management Authority and further assessment of the application against the requirements of the LSIO1 are not required. If approved, existing permit conditions required by the North Central Catchment Management Authority would be retained.

Airport Environs Overlay

The western edge of the subject site is affected by the Airport Environs Overlay – Schedule 2. Stage 8 sits outside this overlay area and therefore there is no requirement to assess the application against the requirements of this overlay.

Design and Development Overlay

Part of the site is affected by the Design and Development Overlay – Schedule 17, which relates to Bendigo Airport height restriction areas. This overlay extends between approximately 95 and 204 metres into the western part of the site. As there are no subdivision requirements specified within this particular Schedule, there is no requirement for assessment of the application under this Schedule.

The whole of the site is affected by Design and Development Overlay – Schedule 18. This is a *site-specific* schedule for the subject site, formerly known as the Wellsford Estate. No other industrial areas within Greater Bendigo are affected by planning controls in relation to lot sizes.

Relevant design objectives for subdivision under Schedule 18 include:

- To ensure an appropriate buffer is maintained between new development and the adjoining forested land.
- To incorporate good quality design, built form and landscaping, which will enhance the visual and streetscape amenity of the estate.
- To ensure that subdivisions and development are integrated with the surrounding area and that the landscape setting is retained.

The following requirements apply to an application to subdivision land under the DDO18:

- Efficient solar orientation of lots;
- Retention of large lots; and
- Common trenches for reticulated services.

Clause 43.02-3 of the Design and Development Overlay states that subdivision must occur in accordance with any lot size or other requirement specified in the schedule to this overlay. A permit may be granted to subdivide land which is not in accordance with any lot size or other requirement in a schedule to the overlay unless the schedule specifies otherwise.

In this case, Schedule 18 does not specify that the subdivision requirements cannot be varied by way of a permit. In other words, Council has discretion to grant a permit for a subdivision which does not retain large lots as DDO18 does not specify that a permit must only be granted to subdivide land if it retains large lots.

In determining this application, in addition to considering the Municipal Planning Strategy and the Planning Policy Framework, one of the key decision guidelines is whether the subdivision design, layout and lot sizes will achieve the design objectives and requirements of this overlay.

The application states that despite numerous market campaigns, there has been no interest in Lots 27 and 31 in the past 3 years. It is therefore proposed to subdivide Lot 27 into 6 lots ranging from 2,190 to 6,507 square metres and Lot 31 into 5 lots from 2,000 square metres to 1.312 hectares.

The application states that the wording of DDO18 is ambiguous in its application given that a ‘large lot’ is not defined in the Planning Scheme. It is agreed that the Planning Scheme does not define this, however guidance can be found within the City’s most recent strategic planning analysis of industrial land supply and demand.

What is a large lot?

Large lots are not defined in DDO18 or elsewhere in the Planning Scheme and there is no minimum lot size specified under the zone. The Design and Development Overlay – Schedule 18 was applied to the site as part of Amendment C191 which was gazetted on 19 December 2013. This Planning Scheme Amendment deleted Development Plan Overlay – Schedule 13 from the site. The requirement for retention of large lots was translated from the Development Plan Overlay – Schedule 13 to the Design and Development Overlay – Schedule 18. The Design and Development Overlay for subdivision now states:

"The following subdivision requirements apply to an application to subdivide land:

- *Efficient solar orientation of lots;*
- *Retention of large lots; and*
- *Common trenches for reticulated services".*

The policy direction for this industrial estate has been in the Planning Scheme for a significant period of time. The key difference is that former control (Development Plan Overlay) with respect to lot sizes included the words *'where practical'* whereas the Design and Development Overlay contains clearer language of its intent by plainly stating the requirements apply to an application to subdivide land.

Based on the City's most recent industrial land strategy, being the *Greater Bendigo Industrial Land Development Strategy (2024)*, a large lot is one that is between 1 hectare and 5 hectares.

The proposed amendment would result in only one large lot over 1 hectare within Stage 8 and would remove the possibility of any other large lots on Lots 27 and 31 in the future.

Is the application consistent with the requirements of DDO18?

There are no concerns regarding the solar orientation of the lots proposed within Stage 8, or the ability to provide services within common trenches.

Under the current approved plan, there are two large lots within Stage 8 being Lots 27 and 31, and five large lots within the overall estate.

The proposed layout would provide for 1 large lot of at least 1 hectare in Stage 8. The application would therefore result in less large lots than are provided in the current approved plan for Stage 8.

Based on the area of land within Lots 27 and 31, there is potential to provide for at least 5 lots of 1 hectare plus a lot in the order of 8,890 square metres.

It is considered that the proposed amended plan will not result in the retention of large lots and is therefore not consistent with the requirements of DDO18.

Clause 65.02 Approval of an application to subdivide land

Clause 65 (Decision guidelines) state that because a permit can be granted does not imply that a permit should or will be granted. The responsible authority must decide whether the proposal will produce acceptable outcomes in terms of the decision guidelines of this clause.

In addition to the decision guidelines set out in Clause 65.01 (Approval of an application or plan), before deciding on an application to subdivide land, Council, as the responsible authority must also consider, as appropriate, the matters listed under clause 65.02 (Approval of an application to subdivide land) of the Planning Scheme, which include:

- The suitability of the land for subdivision.
- The existing use and possible future development of the land and nearby land.
- The availability of subdivided land in the locality, and the need for the creation of further lots.
- The subdivision pattern having regard to the physical characteristics of the land including existing vegetation.
- The density of the proposed development.
- The area and dimensions of each lot in the subdivision.
- The layout of roads having regard to their function and relationship to existing roads.
- The movement of pedestrians and vehicles through the subdivision and the ease of access to all lots.
- The staging of the subdivision.
- The design and siting of buildings having regard to safety and the risk of spread of fire.
- The availability and provision of utility services, including water, sewerage, drainage, electricity, and, where the subdivision is not a residential subdivision, gas.

The key concern with the proposed amended subdivision layout is the proposed area and dimensions of each lot within Stage 8. Whilst the land is suitable for subdivision, can be fully serviced and the proposed layout would achieve an acceptable design response with respect to the general subdivision pattern in the area and the potential to site buildings, the amendment to the permit would not achieve the requirement

within the Design and Development Overlay – Schedule 18 which seeks to retain large lots within this estate or planning policy which seeks to provide a variety of lot sizes.

According to the *Review of Future Industrial Land Supply in Bendigo (2023)*, small and medium sized lots of less than 1 hectare currently make up in the order of 88% of the available land supply within the municipality. As such, there is a greater need to provide for large lots of 1 hectare or greater. Small lots would not provide sufficient flexibility or opportunity to establish larger industrial developments within the estate. Whilst there may be an argument that smaller lots can be assembled for larger developments, there is a real risk that this won't happen due to fragmentation of ownership when lots are created and sold, and some development occurs on the smaller lots.

In this regard, the proposed subdivision will not produce an acceptable planning outcome.

Clause 72.02-3 Integrated decision making

Clause 72.02-3 states that the Planning Policy Framework operates together with the remainder of the Scheme to deliver integrated decision making. Planning and responsible authorities should endeavour to integrate the range of planning policies relevant to the issues to be determined and balance conflicting objectives in favour of net community benefit and sustainable development for the benefit of present and future generations.

While the applicant's legal advice states that the requirement to retain large lots has *'little operative effect given it is so ambiguous as to be unenforceable and does not seemingly align with the weight of policy outcomes contemplated for development of the site and surrounds'* and suggests it is outweighed by other policies objectives within the Industrial 1 Zone and the Greater Bendigo Planning Scheme, Council must make an integrated decision which takes into account all the relevant planning considerations in this matter. When considering the relevant background reports, it is open to Council to interpret large lots to mean those within 1-5 hectares.

Weighing up the various controls and planning policies, the proposed subdivision is not an acceptable planning outcome as the creation of small and medium sized industrial lots would negatively impact the ability for larger industrial land uses to be accommodated within the East Bendigo industrial precinct, and the Greater Bendigo municipality more broadly in the short term. This would have impacts for the local economy in terms of the ability to attract new industry and jobs and retaining existing businesses looking to expand.

Cultural Heritage Management Plan (CHMP)

The site does not lie within an area of cultural heritage sensitivity. Accordingly, the proposal does not trigger the need for the preparation of a CHMP under the Aboriginal Heritage Regulations 2018.

Conclusion

It is recommended that the application be refused on the basis that it represents an unacceptable planning outcome with regards to the requirement within the Design and Development Overlay – Schedule 18 to retain large lots. The proposed amendment would result in less large lots in Stage 8 than in the current approved plan. There is scope for a re-subdivision of Lot 27 and 31 which would still retain at least 5 large lots.

The proposed amended subdivision plan also fails to provide for a suitable variety of lot sizes with regard to the overall estate and this has the potential to negatively impact the ability to accommodate larger industrial businesses within the estate and municipality in the short to medium term.

Although previous plans approved under this permit allowed smaller lots than what is currently proposed, the supply and availability of larger lots within the municipality is now critical. The City must take a broader and long term view of land supply and consider the supply of industrial land within the municipality, not just within this estate. The Bendigo Regional Employment Precinct proposed for Marong is still in the planning stages and the Planning Scheme Amendment to rezone this land is yet to commence. To date, there is not sufficient evidence that an abundance or surplus supply of serviced larger lots with limited constraints exists within the municipality, as such it could be argued that the application is premature.

In any case, even if sufficient supply of large industrial lots existed elsewhere within the municipality to meet forecast demand, Design and Development Overlay – Schedule 18 requires subdivisions to retain large lots within this particular estate. In order to remove this requirement, a Planning Scheme Amendment would be required to change the requirements of the Schedule.

Options

Council, acting as the responsible authority for administering the Planning Scheme, may resolve to: grant a permit, grant a permit with conditions, or refuse to grant a permit.

Conflict of Interest

No officer involved in the preparation or approval of this report declared a general or material conflict of interest.

Attachments

Nil

17. STRONG, INCLUSIVE AND SUSTAINABLE ECONOMY

Nil

18. ABORIGINAL RECONCILIATION

Nil

19. A CLIMATE-RESILIENT BUILT AND NATURAL ENVIRONMENT

19.1. Big Hill and Mandurang Valley Significant Landscape Study Draft Report

Author:	Richie Dean, Strategic Planner
Responsible Director:	Rachel Lee, Director Strategy and Growth

Purpose

This report provides an overview of the Draft *Big Hill and Mandurang Valley Landscape Review 2024*, including the revised Landscape Management Framework. Council endorsement is sought to release the Draft Review for public consultation.

Recommended Motion

That Council:

1. Endorse the Draft *Big Hill and Mandurang Valley Landscape Review 2024* provided at Attachment 1 for public consultation.
2. Receive a further report following consultation, outlining the findings of the engagement process.

Executive Summary

In 2013, the City sought to progress the *Bendigo Landscape Assessment - Big Hill and Mandurang Valley*.

In 2015, Planning Scheme Amendment C217 sought to implement the recommendations of the *Bendigo Landscape Assessment - Big Hill & Mandurang Valley 2013* into the Greater Bendigo Planning Scheme. This Amendment was ultimately not supported by the Planning Panel for the reasons outlined later in this report.

To progress this work, which was identified as an action in the Council Plan (Mir Wimbul) 2021-2025, the City engaged consultants (Hansen Partnership) in September 2022.

The Draft *Big Hill and Mandurang Valley Landscape Review 2024* has now been prepared. This includes a revised Landscape Management Framework with updated recommendations for Significant Landscape Overlay (SLO) controls across parts of the study area.

The Draft *Big Hill and Mandurang Valley Landscape Review 2024* builds upon existing work and is directly informed by key gaps and recommendations outlined by the Panel for Amendment C217.
Detailed and comprehensive visual analysis and fieldwork has been undertaken to better understand the visibility and prominence of significant landscape features to determine if those areas warrant the application of the SLO.

The report finds that the Big Hill Ridgeline and Upper Slopes and the Big Hill Granitic Uplands areas are the most highly valued landscape features. These areas have been identified at a regional significance level and are visually prominent from key / frequented viewing corridors and locations. Therefore, the Landscape Management Framework recommends the application of the SLO over these areas that align with natural landscape features including an area within the Greater Bendigo National Park.

The report determines that the Mandurang Valley area is of much lower visual significance and exposure than the area south of the Big Hill ridgeline. Therefore, it is not recommended to apply the SLO over this area, although it may be appropriate to investigate alternative planning controls in the future. This contrasts with previous studies and recommendations.

Updated community landscape values from the consultation at end of 2023 have been incorporated into the Draft *Big Hill and Mandurang Valley Landscape Review 2024*.

The Draft *Big Hill and Mandurang Valley Landscape Review 2024* provides a refreshed and highly robust analysis to support its revised recommendations that addresses key gaps and issues reflected through the process of previous Amendment C217.

Should the Draft *Big Hill and Mandurang Valley Landscape Review 2024* be endorsed for consultation it will be released for stakeholder and community feedback over a three week period.

While the Draft *Big Hill and Mandurang Valley Landscape Review 2024* provides recommendations around the application of the SLO in identified areas, the application of the Overlay would be subject to a future Planning Scheme Amendment and exhibition process.

Background

The original landscape assessment, *Bendigo Landscape Assessment - Big Hill & Mandurang Valley* was prepared in 2013. This assessment provided a detailed understanding of the character and values of these two landscapes, along with

recommendations for the application of two Significant Landscape Overlays (SLO) shown in Figure 1. The *Bendigo Landscape Assessment - Big Hill & Mandurang Valley 2013* was adopted by Council in 2013.

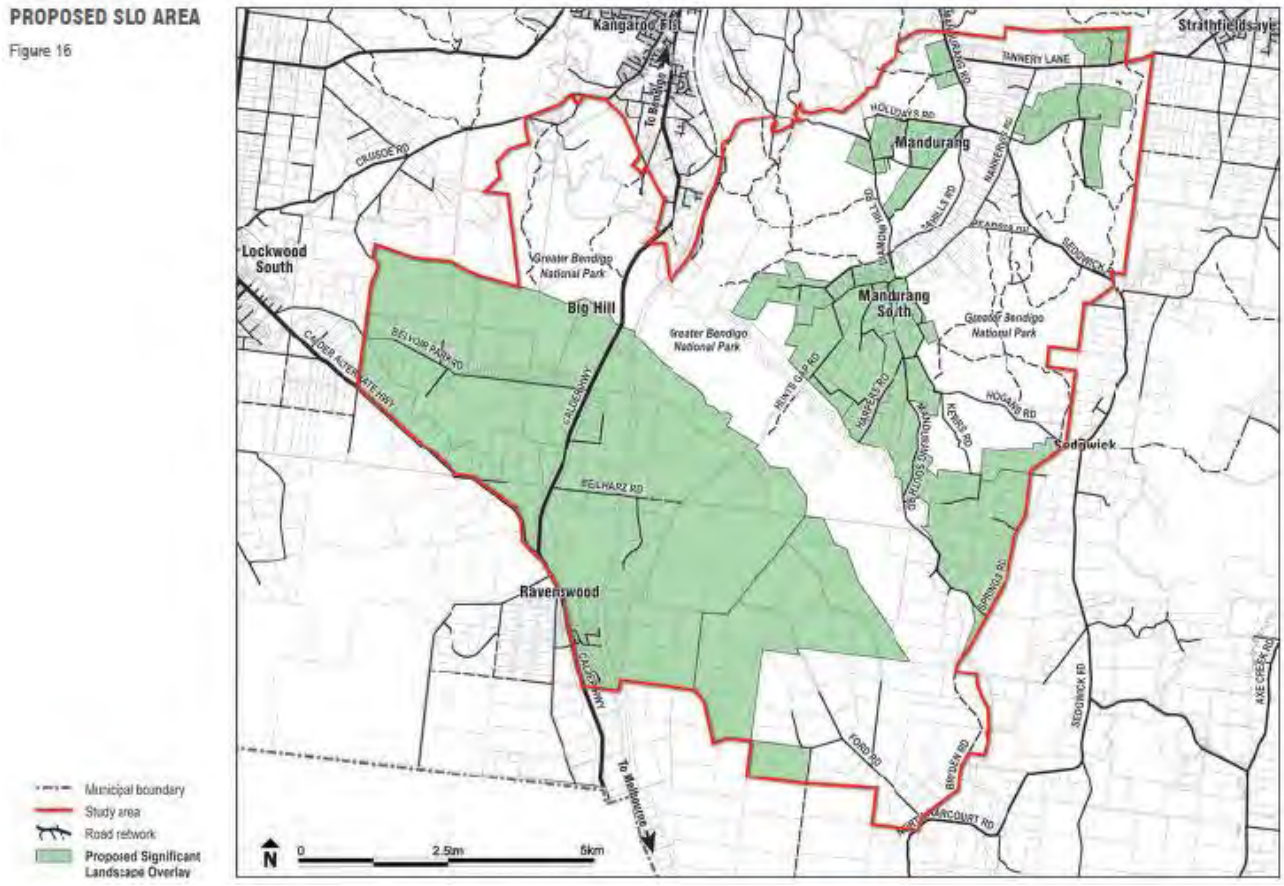


Figure 1. SLO areas proposed under the recommendations of the *Bendigo Landscape Assessment - Big Hill & Mandurang Valley 2013*.

To apply the SLO as per the *Bendigo Landscape Assessment – Big Hill & Mandurang Valley 2013*, Council resolved to request the authorisation to prepare and exhibit a Planning Scheme Amendment (C217) in February 2015.

On 14 October 2015 Council resolved to refer all the submissions received during exhibition of Amendment C217 to an Independent Panel appointed by the Minister for Planning. The Panel conducted its hearing on 27-29 January 2016 which included an inspection of land known as 'Ravenswood Run' (a large landholding south of Big Hill).

The Panel ultimately did not support Amendment C217, with the reasons summarised below:

- The nexus between the *Bendigo Landscape Assessment – Big Hill & Mandurang Valley 2013*, and the extent of the SLO proposed, was not clear.

- There is a need to re-examine the areas covered by the SLO. The areas should be more carefully and logically defined so that land is not unnecessarily included.
- The SLO needs to use landscape/natural features to determine the overlay curtilage and not cadastral boundaries.
- The application of the SLO, Schedule 3 needs to be reviewed with consideration of all landscape visibility and use of natural features to determine boundaries and a reduction in its size.
- The SLO should include the ridgeline and escarpment at Big Hill.
- The area to the south east of the exhibited area of Big Hill should be considered for the SLO.
- The SLO, Schedule 4 should only be applied to the forest interface to protect the landscape values of Mandurang.
- There needs to be a greater understanding of the comparative significance of the landscape assessed, to help understand the relative importance of protection and appropriate tools to achieve this.

The Panel recommended deferment of Amendment C217 and that further work be undertaken to address the issues outlined above. In 2017 the City engaged an independent consultant (Claire Scott), to undertake a peer review of the *Bendigo Landscape Assessment - Big Hill & Mandurang Valley 2013* and Panel Report. While the peer review was supportive of the assessment and description of character areas in the landscape assessment, it shared similar opinions with the Panel regarding the assessment of landscape significance and the proposed extent of overlays. The peer review also included additional landscape assessment work including viewshed mapping and revised recommendations of proposed SLO areas across Big Hill and Mandurang Valley, shown in Figure 2.

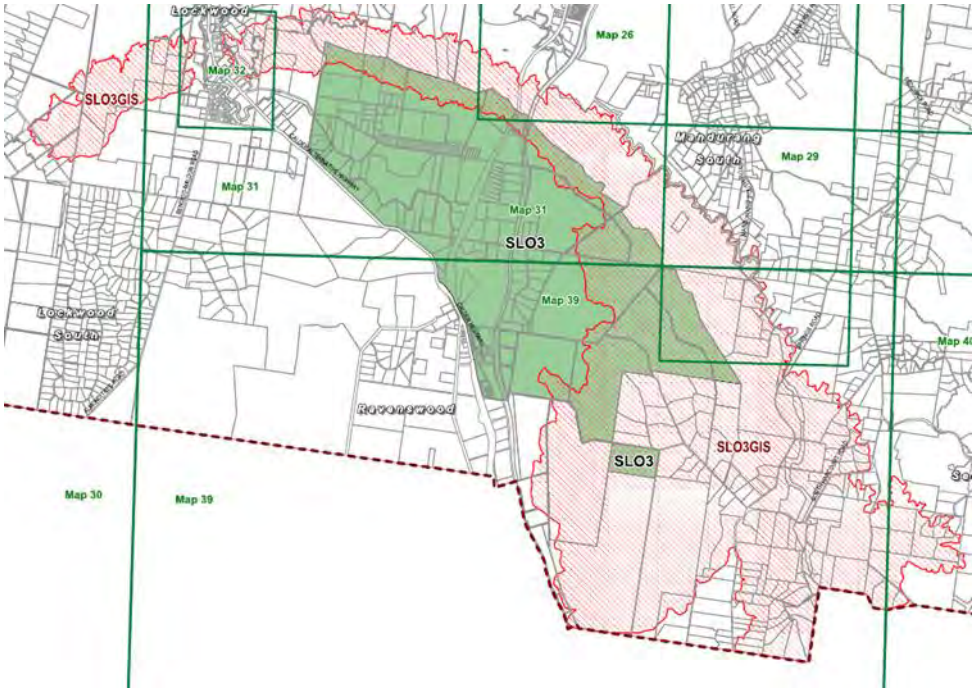


Figure 2. Claire Scott's recommended revised SLO3 boundaries for Big Hill in the red shaded area.

Council did not support the Panel's recommendations and proceeded to adopt the amendment. The Minister for Planning refused Amendment C217 in 2019.

The Council Plan of 2021-2025, Mir Wimbul includes an action to *'Scope a Gateway Study for Big Hill and Mandurang Valley landscape preservation'*. The current landscape assessment work that resumed in 2022 responds to this action.

The *Big Hill & Mandurang Valley Landscape Review, May 2024* builds on the strengths of the existing work completed to date and seeks to address those issues outlined in the Panel Report for C217 through additional work. The Review provides a comprehensive technical landscape assessment to determine areas of high significance and those that warrant the application of the SLO. The refreshed Landscape Management Framework includes proposed SLO boundaries, revised from previously proposed boundaries, along with clear justification.

Previous Council decision dates:

- 6 July 2011 – Council endorsed a project brief describing the purpose and scope of a landscape assessment covering the areas of Big Hill and the Mandurang Valley.
- 11 February 2015 – Council resolved to request authorisation to prepare and exhibit a Planning Scheme Amendment to implement the recommendations of the Landscape Assessment Report for Big Hill and Mandurang Valley into the Greater Bendigo Planning Scheme.
- 14 October 2015 – Council considered submissions to Amendment C217 and resolved to refer all submissions to an Independent Panel.

- 29 June 2016 – Council adopted Amendment C217 to the Greater Bendigo Planning Scheme subject to modifications and request approval from the Minister for Planning.

Report

Hansen Partnership was engaged to undertake an independent review of the previous landscape assessment work from 2013 and to undertake a revised Landscape Assessment and Landscape Management Framework (LMF). Hansen Partnership has prepared the Draft *Big Hill & Mandurang Valley Landscape Review, May 2024*, which addresses the key issues and weaknesses outlined in the Panel Report of 2016 from the previous Amendment C217. The revised landscape assessment and recommendations propose alternative overlay boundaries to those previously recommended with a single SLO across the Big Hill ridgeline and Granitic Uplands, split into high and moderate sensitivity areas.

The Draft *Big Hill & Mandurang Valley Landscape Review, May 2024* report concludes that a second SLO across the Mandurang Valley area is not justified given the more limited visibility, lower visual significance and localised setting of this area. The report recommends that alternative controls could be investigated for the protection of that area in the future and to consider controls such as the Environmental Significance Overlay or Vegetation Protection Overlay. This would need to be the subject of further strategic work.

The Draft *Big Hill & Mandurang Valley Landscape Review, May 2024* has been informed by detailed and rigorous visual analysis and fieldwork to better understand the extent and visibility and prominence of the landscape features identified in earlier studies. The report finds that the Big Hill ridgeline and Upper Slopes, and the Big Hill Granitic Uplands areas are the most highly valued landscape features of a regional significance level that are visually prominent from key / frequented viewing corridors and locations. An SLO is proposed across these areas only.

The following sections explain the process of the landscape assessment and analysis to arrive at the revised SLO boundaries and Landscape Management Framework in the final stages of the study.

<u>Landscape Assessment</u>

Although the study and the report are often referred to more broadly as a ‘landscape assessment’, the landscape assessment in Part 2 specifically provides a detailed understanding of the existing conditions across the study area through various themes. This process helps in the initial stage to identify and understand the different landscape types with common characteristics.

Visual Analysis and Viewshed

The visual analysis and accompanying fieldwork fill an important gap in understanding the scenic and visual realm of the study area. The visual analysis and fieldwork were undertaken to understand the visibility of key landscape features and how they are experienced. The viewshed analysis component is an initial, desktop-based assessment undertaken to understand visible terrain from given viewpoints. This process enables the identification of potentially visible terrain as a basis for ground truthing the results through fieldwork.

The viewshed mapping focuses on several viewing corridors including the Calder Highway, Calder Alternative Highway and the railway corridor, which have high viewing frequency. It is important to note that the focus of the viewpoint analysis narrows to the Big Hill and Granitic Uplands areas as the key area of further assessment and investigation. This excludes the Mandurang area north of the Big Hill ridgeline given the findings of lower visibility of landscape features of that area and the more localised setting.

Insights from the viewshed mapping process identified a series of 25 potential viewpoints around the Big Hill and Granitic Uplands registering high visibility to be investigated for further on-ground visual analysis selected along publicly accessible and highly frequented areas, typically along roads and at intersections. This was intended to ‘paint a picture’ of the typical visual experience of Big Hill and Granitic Uplands that would be experienced on the ground at those points. The visibility analysis and fieldwork confirmed that the Big Hill ridgeline and Upper Slopes and the Granitic Upland areas were most visually exposed and prominent in views along the key viewing corridors of the Calder Highway, Calder Alternative Highway and Melbourne-Bendigo railway corridor, as well as other main roads and lower order scenic roads or local viewing locations.

Revised Landscape Characterisation

Classification of landscape character types provides a basis for understanding combinations of landscape features, vegetation, land use, views and topography distinct to an area. Discussion around levels of sensitivity to change and anticipated landscape change are included to better understand the kinds of threats to character areas.

The previous *Bendigo Landscape Assessment – Big Hill & Mandurang Valley 2013* identified and defined six distinctive landscape character areas grouped by common characteristics. Some of those character areas also formed the basis for the boundaries of previously proposed SLO areas. The 2024 Study refines these earlier character types, overlaying the findings of the landscape assessment and visual analysis. This resulted in a total of seven landscape character types and a distinction

made between the Big Hill ridgeline and its escarpments from the rural landscapes of the foreground.

Two of the revised character areas, the Big Hill Ridgeline and Upper Slopes (Character Area 1) and Big Hill Granitic Uplands (Character Area 3) were advanced to further landscape assessment. This was because of the visual and scenic values identified and the regional viewshed they cast at the southern gateway to urban Bendigo from highly frequented and important viewing corridors. These two areas therefore become the primary focus of Part 5 of the report and the areas further assessed for landscape significance.

The character area analysis of the Mandurang Valley areas highlights a more enclosed landscape pattern and lower to medium levels of sensitivity to change, in contrast to the Big Hill ridgeline and Granitic Uplands. It is not contested that the Box-Ironbark Forest areas and surrounds to the north of the Big Hill ridgeline might be significant on the grounds of environmental, cultural and ecological factors, but the analysis determines that those areas are of much lower visual significance and exposure due to the localised setting experienced primarily from local roads and proximate private properties.

Landscape Significance and Visual Values

The findings of the 2024 study are consistent with the two previous landscape assessments (2013 Bendigo Landscape Assessment and Claire Scott's peer review) in attributing high landscape significance levels to the Big Hill ridgeline area and Granitic Uplands. A key finding and departure from the previous studies is that in the current study the Big Hill ridgeline and Granitic Uplands are determined to be more prominent and highly visible along key viewing corridors. This includes the viewing of the transition in the landscape features and scenery through the southern gateway into urban Bendigo. This is in contrast to the other land within the study area.

This elevates those two areas for protection under the SLO given their high visual values and exposure.

A key part of the methodology used in the current study to determine landscape significance is the weighting of visual values above all other values. This approach is consistent with many other recent landscape studies in Victoria and is supported by the Victorian Planning Provisions. The earlier Bendigo Landscape Assessment of 2013 took a more holistic approach in its methodology to determine areas appropriate for protection under the SLO but was not considered robust enough or in-line with best practice landscape assessment according to both the Planning Panel's recommendations and later, the Minister's determination to refuse Amendment C217.

The landscape and visual values assessment of the Big Hill Ridgeline and Upper Slopes and the Big Hill Granitic Uplands details a deeper assessment of specific landscape components through an analysis of Landscape Features, Aesthetic Variety and Composition to determine overall significance level ratings. The methodology applies a scenic and visual lens to underpin the purpose of the SLO. The assessment concludes that the two landscapes were significant at ‘High’ or ‘Regional’ level that is worthy of the application of the SLO.

The current project undertook a refresh of the 2013 community engagement, that sought community landscape values, to understand if those previous landscape values remained valid or whether new values had emerged. The City ran an online engagement survey in November-December 2023 with a series of the same questions to determine what the community most valued about these landscapes and what concerns they had in terms of the present and future. Of over 60 responses received, many of the previous themes were reflected in relation to scenic views and vistas of the area, the rich biodiversity and native vegetation and most notably the southern gateway experience and the highly unique and valued landscape features upon entering urban Bendigo via the Calder Highway. The 2023 revised community values play a role in providing a more informal and subjective assessment of landscape significance to accompany what is a highly technical study to determine landscape significance and areas warranted for the SLO.

The current report’s findings recommend reducing the extent of the two areas considered to be of significance and subsequently revising the SLO boundary areas. The extent of the revised SLO boundary area has been determined by the level of visual exposure of the two significant landscape areas, measured through viewshed mapping (the visibility at eye level from highly frequented viewing locations and survey photography to determine actual visibility). A further refinement of the boundary is the division of the SLO area into areas of high and moderate sensitivity. These two classifications distinguish areas of greater visual exposure from key viewing corridors with those areas of slightly lower exposure but still high enough to warrant some level of protection as shown in Figure 3.

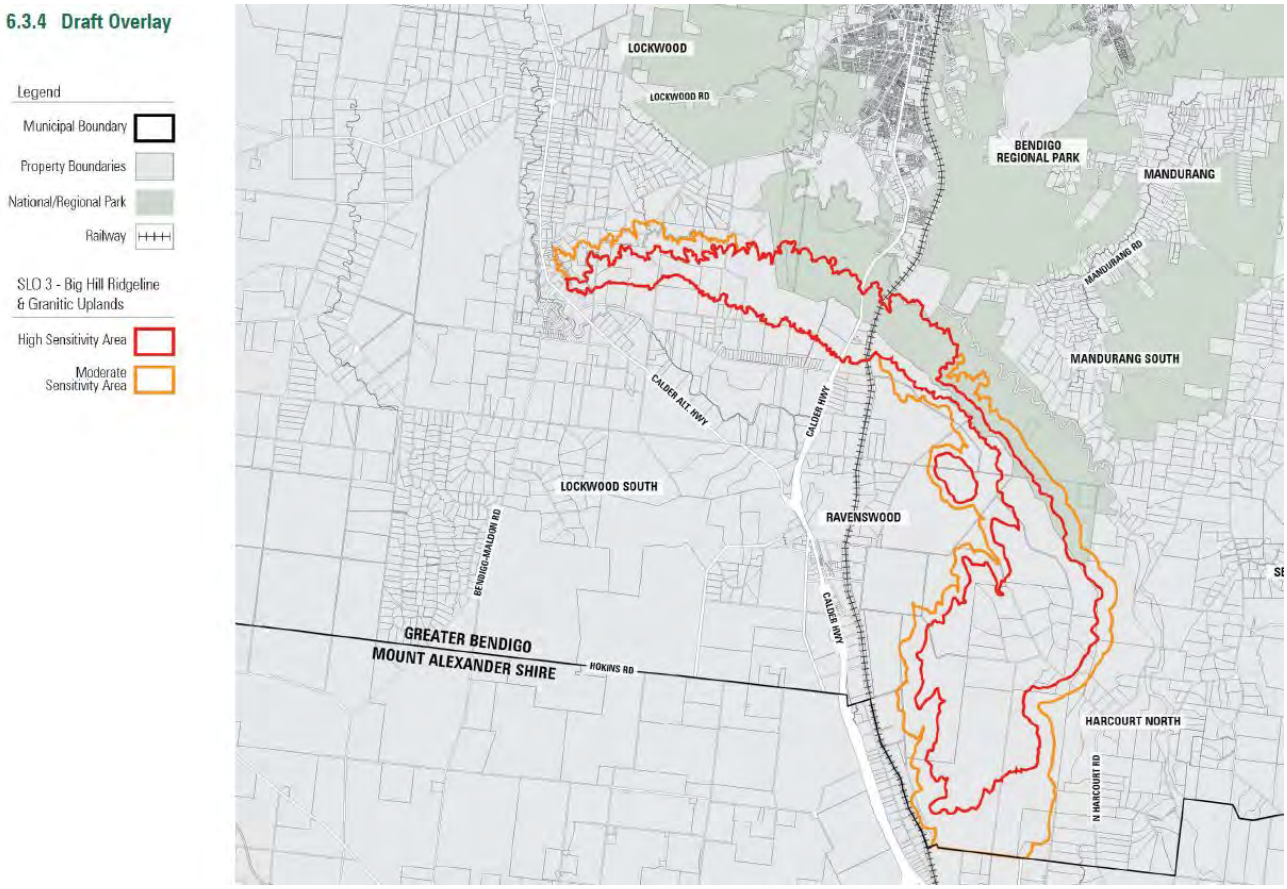


Figure 3. Hansen's revised SLO3 Overlay boundaries with high and moderate sensitivity areas

Recommended Changes to the Greater Bendigo Planning Scheme

The revised Landscape Management Framework outlines a suite of planning scheme recommendations towards providing protection of the identified significant landscapes and a future Planning Scheme Amendment.

- Firstly, at a high level strategic direction, changes are proposed to the Municipal Planning Strategy under Clause 02.03-2 – Environment and landscape values to identify both the Big Hill ridgeline and Granitic Uplands as recognised environment and landscape features in Greater Bendigo.
- Under the Planning Policy Framework, a new local policy is proposed under Clause 12.05 Significant Environments and Landscapes, titled 'Big Hill Ridgeline and Granitic Uplands'. This Policy is proposed to include the Design guidelines outlined in Section 6.4 of the Review.
- A new Schedule 3 to the SLO is proposed, titled 'Big Hill Ridgeline and Granitic Uplands'. This Overlay is proposed to include (as outlined in detail section 6.3 of the Review):
    - Statement of nature and key elements of landscape
    - Landscape character objectives to be achieved
    - Permit requirements
    - Application requirements
    - Decision guidelines

The proposed high and moderate sensitivity areas within the SLO area are proposed to be translated into the draft planning permit triggers in the Schedule. Planning controls for these two areas are differentiated by exempting permit requirements for buildings and works within a certain threshold for areas of moderate sensitivity. Broader exemptions for both high and moderate areas are included for specific vegetation removal requirements are also proposed under the schedule. It is also important to note the table of exemptions under the parent provision of the Overlay also provides a broader list of permit requirement exemptions, outlined under Clause 42.03.

The proposed controls seek to better recognise the regional significance of the Big Hill ridgeline and Granitic Uplands landscapes as a key topographic gateway into the southern entrance of urban Bendigo and more broadly the Greater Bendigo region. They aim to preserve the upper slopes of the Big Hill ridgeline and Granitic Uplands from inappropriate development and/or native vegetation removal that may otherwise compromise their unique and attractive visual aesthetic. The accompanying proposed Design Guidelines provide clear guidance on how future development and works within the proposed overlay area should be sited and designed to minimise visual impacts within the significant landscape.

Next steps and Public Engagement

Given the level of public interest in this project that was evident through the previous engagement from 2013 onwards, it is recommended to provide the community and stakeholders with the opportunity to review the draft Review and recommendations prior to preparing a future Planning Scheme Amendment. It is therefore proposed that the draft Review be placed on public consultation for a period of 3 weeks from 23 July 2024. Comments from the community consultation will be presented back to Council for consideration. At this meeting, City officers also intend to seek endorsement of the Review, and to seek support to commence a new Planning Scheme Amendment process.

Priority/Importance

The project is an important priority given the level of previous community and stakeholder interest in progressing an SLO in this area and the time that has elapsed since the previous, unsuccessful Planning Scheme Amendment.

This task responds to the Council Plan action 5.3.3 from 2021/2022: *Scope a Gateway Study for Big Hill and Mandurang landscape preservation.*

Options Considered

Council has two options:

- To endorse the draft Draft Big Hill and Mandurang Valley Landscape Review 2024 for public consultation.
- To abandon Draft Big Hill and Mandurang Valley Landscape Review 2024 and not to proceed with public consultation.

Timelines

Subject to Council support, the draft Review will commence consultation on 23 July 2024. Following consultation and Council's consideration of feedback, a Planning Scheme Amendment process could commence from September 2024.

Undertaking a Planning Scheme Amendment is expected to take approximately 18 months.

Communications/Engagement

Given the level of public interest in this project that was evident through the previous engagement from 2013 onwards, it is recommended to provide the community and stakeholders with the opportunity to review the draft Review and recommendations

prior to preparing a future planning scheme amendment. Consultation on the draft report is proposed from 23 July 2024 for a period of three weeks.

Consultation will include letters to landowners and residents in the impacted areas including Big Hill and Mandurang Valley. Further information including a summary will be placed on the City's Let's Talk platform.

Further public engagement would occur through the public exhibition process for a future Planning Scheme Amendment.

Financial Sustainability

This project is being managed within the Strategic Planning Unit operational budget.

Risk Assessment

The primary risk with this project is reputational due to the previous community interest in the project and the Panel and Minister ultimately not supporting Amendment C217 as drafted.

Policy Context

Primary Council Plan Reference

City of Greater Bendigo Council Plan *Mir wimbul* 2021-2025
Outcome 5 - A climate resilient and healthy landscape

Secondary Council Plan Reference(s)

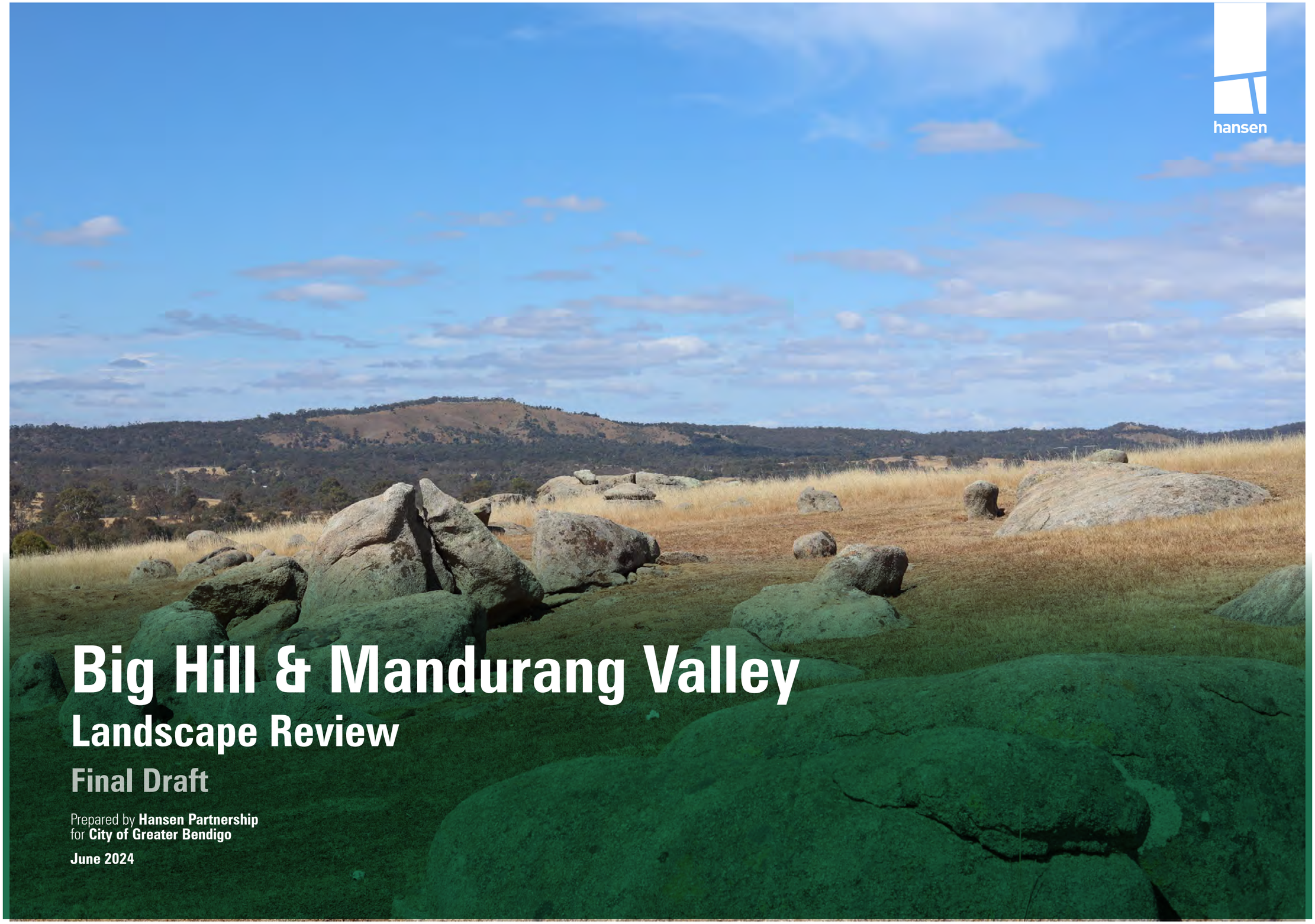
Goal 3 - Thriving landscapes and ecosystems

Conflict of Interest

No officer involved in the preparation or approval of this report declared a general or material conflict of interest.

Attachments

1. Big Hill & Mandurang Valley Landscape Review June 2024 [**19.1.1** - 174 pages]



Big Hill & Mandurang Valley

Landscape Review

Final Draft

Prepared by **Hansen Partnership**
for **City of Greater Bendigo**

June 2024



Hansen Partnership acknowledges the Traditional Owners of the diverse lands on which we live and work and recognise their deep spiritual connection to land, air and water as Custodians of Country.

We pay our respects to all First Nations people and to their ancient and enduring culture.

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Appendix 1

SLO Boundary Testing - Photomontages

Appendix 2

Regional Significance Benchmarking

Glossary

The following Glossary includes key terms in this document and their definition

Development

- Any proposal which results in a change to the landscape or visual environment

Intervisibility

- The surface area or terrain from which a view point is visible or a series of viewpoints are visible.

Key View

- An area that is in constant sight from the observers viewpoint that is of high value.

Landscape Character Area

- Areas of similar patterns of elements in the landscape such as landform, vegetation, waterbodies and land use as well as individual features..

Landscape Features

- Visually dominant, easily identified or significant characteristics in a landscape.

Landscape Typology

- A broad classification of landscape features, such as natural, rural or built.

Landscape Value

- Ranking of landscape characteristics that are significant for reasons such as aesthetic, social, environmental and heritage values.

Peri-urban

- The transition zone between urban land use and rural land use.

Potential change area

- An area identified as having potential for statutory change ie amendment to planning zone schedules.

Riparian Bushland

- Heavily vegetated areas adjacent to a watercourse.

Urban Growth Boundary

- A boundary around Melbourne defined by the Metropolitan Planning Authority to accommodate future residential development.

View

- A portion of a landscape seen by an observer.

Viewpoint

- The point from which a view is observed.

Viewshed

- The surface area or terrain visible from a given viewpoint, based on topography only and with no consideration of built form, vegetation or any other potential visual obstruction.

Visual exposure

- A graphic summary of a number of viewsheds overlaid to indicate surface area or terrain visible from more than one viewpoint location.

Visual sensitivity

- A graphic summary of visual exposure mapping overlaid with landscape

Break of slope

- A distrinct change in the gradient or steepness of land, often denoting the transition between different types of terrain or geological features.

Cumulative viewshed

- A graphic summary of total area visible from multiple viewpoints, based on topography.

Metamorphic Crescent

- A curved ridge line formation where Metamorphic rocks are predominantly found due to historic tectonic activity.

Visual terminus / termination

- A point or area within the topography or landscape where the views terminate or key visual elements converge.

Vantage point

- A specific location or position from which a view or observation can be made of a key area, scene, or sightline.

Significant Landscape Overlay

- Planning scheme tool for the protection and management of significant landscapes, seeking to identify, conserve and enhance landscape character.

Static Cones

- Viewlines from a fixed position.

Landscape Significance

- Denoting the importance of a landscape type or area based on characteristics such as aesthetic, social, environmental and heritage values

Visual Analysis

- The examination and interpretation of visual evidence and gathered information to understand visibility of key landscape features and how they are experienced.

Viewshed Modelling

- GIS technique to map visible areas from specific viewpoints based on topography.

Windrow Vegetation

- Linear arrangement of plants or trees which provide shelter or help control wind erosion typically located along property or paddock boundaries.

Executive Summary

Project Background

In 2009, The Greater Bendigo Rural Areas Strategy identified the need for further strategic work to identify and manage significant landscapes. The strategy included identifying the Big Hill escarpment and Mandurang Valley as being worthy of recognition given their visual features and the need for more sensitive management.

The subsequent action was the development of the Big Hill & Mandurang Valley Landscape Assessment, published in 2013, which provided a detailed understanding of the character and values of the Big Hill and Mandurang Valley landscapes. The study defined and described a suite of landscape character areas within the Big Hill & Mandurang Valley study areas and sought to determine which were most significant and required management.

The assessment subsequently proposed a Landscape Management Framework comprising recommendations for implementation into the Greater Bendigo Planning Scheme via a planning scheme amendment. These recommendations included the application of two Significant Landscape Overlays (SLO3 and SLO4) aligning with the character areas deemed most significant.

The proposed Planning Scheme Amendment (C217) was unsuccessful for reasons including the proposed extent of the overlays, the relationship between the study and overlay boundaries, the exclusion of the ridge line and public land within the overlays (Greater Bendigo National Park & Bendigo Regional Park) and the curtilage of the overlay extents being informed by zoning, property parcels and road alignments rather than natural features.

Following the unsuccessful C217 Amendment, a peer review of the earlier study and panel report was undertaken by Claire Scott Planning in 2017, which while supportive of the assessment and description of character areas, shared similar opinions with the panel regarding the assessment of landscape significance and the proposed extent of overlays. The Claire Scott Planning Peer Review 2017 subsequently provided an independent assessment of landscape assessment, applying a different methodology including viewshed mapping the peer review proposed revised SLO areas.

The Clare Scott Peer Review of 2017 was the most recent assessment of the landscape significance of Big Hill and Mandurang Valley, until now.

This Engagement

In 2022, Hansen Partnership was engaged to provide an independent review of the project chronology to date, previous outputs and recommend a way forward for the project for Council's consideration. Following this review, Hansen Partnership was again engaged in 2023 to act on the key recommendations which primarily included:

- A refresh of the earlier landscape assessment.
- Undertaking detailed visual analysis - missing from the ealier works, in the form of viewshed modelling and further fieldwork to understand the extent and visual exposure of the landscape features identified as valued in earlier studies.
- Undertaking of an updated landscape significance assessment, applying the methodology applied in the 2017 Peer Review.
- Based on findings and the identification and extent of significant landscape; Significant Landscape Overlay boundary drafting and further 3D visualisations of its curtilage and elevation from key viewing corridors.
- Integration of revised Significant Landscape Overlay into an updated Landscape Management Framework including:
  - Drafting of Significant Landscape Overlay schedule content.
  - Drafting of design guidelines.
  - Other Greater Bendigo Planning Scheme implementation recommendations as required.

Process

Part 1 - Introduction

Part 2 - Landscape Assessment

Part 3 - Visual Analysis

Part 4 - Landscape Characterisation

Part 5 - Landscape Significance

Part 6 - Landscape Management Framework

Executive Summary

Part 1 - Introduction

This section provides the context of the project and describes the study area within its broader context.

Part 2 – Landscape Assessment

The landscape assessment seeks to provide a detailed understanding of the existing conditions within the study area across a suite of themes, to help inform the characterisation of different 'types' of landscapes with common characteristics. Identifying and understanding different landscape types that are distinct from each other is the first step in facilitating an assessment of each type's significance, in tandem with the visual assessment of Section 3.

The landscape assessment was undertaken by a mix of review of relevant background documentation and data, desktop analysis and fieldwork to ratify findings conducted over several visits to the study area.

The Landscape Assessment includes the following themes:

- Planning Parameters
- Urban Form
- Hydrology & Waterways
- Geology & Landform
- Ecological Vegetation Classes
- Vegetation & Environment
- Heritage & Cultural Sensitivity
- Infrastructure Influences
- Development Trajectory

Part 3 – Visual Analysis

While the Landscape Assessment in the previous study was considered to be fulsome and rigorous, the Visual Analysis fills an important gap in understanding the scenic and visual realm of the study area. This section sought to firstly understand the key viewing experiences through fieldwork and viewshed modelling of where the Big Hill slope 'breaks.' These visual experiences were documented through photography and further modelling to understand the viewshed from each location. The analysis then sought to understand the extent of visibility of key landscape features identified in the Landscape Assessment. Cumulative viewsheds confirmed the 'visual exposure' of landscape features to assist in characterising the landscape types.

The visibility analysis and fieldwork confirmed that the Big Hill Ridge Line and Granitic Uplands areas were most visually exposed and prominent in views along the key viewing corridors of the Calder Highway, Calder Alternative Highway and Melbourne-Bendigo Railway Corridor, as well as other main roads and lower order scenic roads or local viewing locations. This includes parts of the Box-Ironbark Forest of the Mandurang Valley where it is visible atop the ridge line and upper slopes.

Part 4 – Landscape Characterisation

Overlaying the findings of the Landscape Assessment and Visual Analysis allowed refinement to the previously identified character types of the earlier study. Updates were underpinned by the findings of the Visual Analysis and the different visual experiences offered by the landscape types. Specifically, it provides distinction between the Big Hill Ridge Line and its escarpments from the rural landscapes of its foreground. The Landscape Character Types identified in this study are:

- Character Area 1: Big Hill Ridge Line & Upper Slopes
- Character Area 2: Big Hill Lower Slopes & Foreground
- Character Area 3: Big Hill Granitic Uplands
- Character Area 4: Mandurang Valley South
- Character Area 5: Mandurang Valley North
- Character Area 6: Mandurang Forest Interface
- Character Area 7: Bendigo Box-Ironbark Forest

The visual and scenic values of the Character Areas 1 and 3, Big Hill Ridge Line & Upper Slopes and the Big Hill Granitic Uplands respectively were considered to be potentially significant due to the regional viewshed they cast at the southern gateway to Bendigo, from highly frequented and important viewing corridors. These two character areas therefore advanced to a Landscape Significance Assessment in Part 5.

While Character Areas 2, 4, 5, 6, and 7 were recognized for their landscape features, which are highly valued for their environmental, ecological, and cultural heritage significance, these features offer views that are more confined and localized, primarily experienced in the immediate area from local viewpoints, or private properties.

Executive Summary

Part 5 – Landscape Significance

This section evaluated the landscape significance of Character Area 1: Big Hill Ridge Line & Upper Slopes and Character Area 3: Big Hill Granitic Uplands to understand their significance level and warrant for the implementation of protective measures. The assessment applied the same methodology as the 2017 Peer Review, evaluating the significance of the landscape features, aesthetic variety and composition of the landscapes. This methodology applies a scenic and visual lens, which underpins the purpose of a Significant Landscape Overlay.

The assessment found that both landscapes were significant at a Regional level and worthy of protective measures relative to the tools currently in place within the Greater Bendigo Planning Scheme.

The study and assessment acknowledges that attributes of the Box-Ironbark Forest and Mandurang Valley may be considered significant in relation to environmental, cultural and/or social values. However when assessing its scenic qualities, the assessment found that significance was limited to local levels and therefore did no warrant the application of a Significant Landscape Overlay. Future investigations could consider alternate controls that are commensurate with valued attributes, such as the application of overlays including Environmental Significant Overlays, Vegetation Protection Overlays or similar tools.

The City of Greater Bendigo undertook a 'refresh' of community engagement as to contemporise the identification of community values identified in the original study. Key findings are documented within the landscape significance assessment of Character Area 1: Big Hill Ridge Line & Upper Slopes and Character Area 3: Big Hill Granitic Uplands

Part 6 – Landscape Management Framework & Implementation

Following the landscape assessment, the Landscape Management Framework provides recommendations to bolster the protection of the regionally significant landscapes. The primary recommendation in doing so, is the application of the Significant Landscape Overlay across the two connected landscapes of the Big Hill Ridge Line & Upper Slopes and Granitic Uplands. This section provides the potential content for an overlay schedule for Council's consideration.

The overlay boundary is informed by Part 4 – Visual Analysis and subsequent photomontaging that led to the refinement of the boundary. Photomontages show the proposed boundary in position when viewed from several surveyed locations along the key viewing corridors. It was recommended that the overlay was composed of two parts:

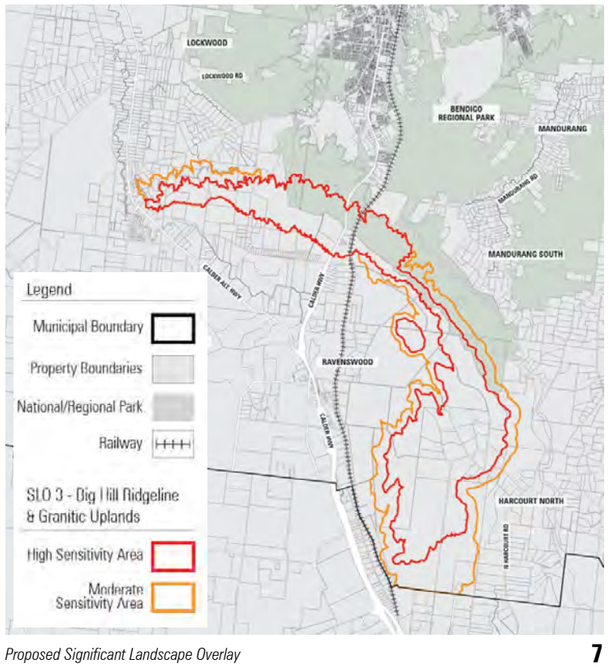
- Area of Moderate Sensitivity – where development and works could be managed through sensitive siting and design as per guidance within the draft overlay schedule.
- Area of High Sensitivity – the threshold in which development would begin to compromise the scenic and visual values of the landscapes and their prominence within the landscape setting.



The Big Hill Granitic Uplands

The Landscape Management Framework also provides a series of design objectives and guidelines across a suite of themes. It was recommended that these could be implemented via the introduction of a new local policy 'Clause 12.05-3L - Big Hill Ridge Line and Granitic Uplands' that would be applicable to where a permit is required in Farming Zone (FZ) and Rural Conservation Zone (RCZ) land between the Calder Highway, Calder Alternative Highway and the proposed Draft SLO boundary. This would also provide an opportunity for the study to be introduced as a Policy Document. This seeks to guide development in the foreground of the proposed SLO area, as to be complementary to its objectives.

The section also provides other Planning Scheme recommendations in response to identified gaps, through minor amendments in Clause 02.02 – Vision and Clause 02.03 – Strategic Directions to reference the landscapes assessed to be significant in this study.



Proposed Significant Landscape Overlay



Part 1 Introduction

1 Introduction

1.1 Landscape Context

The study areas is situated within the picturesque setting of the expansive Greater Bendigo region, located at its south eastern corner at its interface with Mount Alexander Shire. The study area comprises a mix of landscapes including pastoral plains, forest areas, hills and ridge lines as well as urban settlement areas. It is dissected by highways and rail corridors, offering glimpses into the scenic qualities afforded by the landscape.

Bendigo nestles itself in the northernmost part of the Western Victorian Midlands, enveloped by the scenic beauty of the Great Dividing Range, within the expanse of the Goldfields Bioregion.

To the west of Bendigo's is the vast and open Wimmera Plain, contrasting the 'City in the Forest' chracter of Bendigo. The northern section of Greater Bendigo extends into the Murray Lowlands, with its western aspect being defined by the distinct features of the Mallee Dunefield, while the eastern side boasts the unique charm of the Riverine Plain.

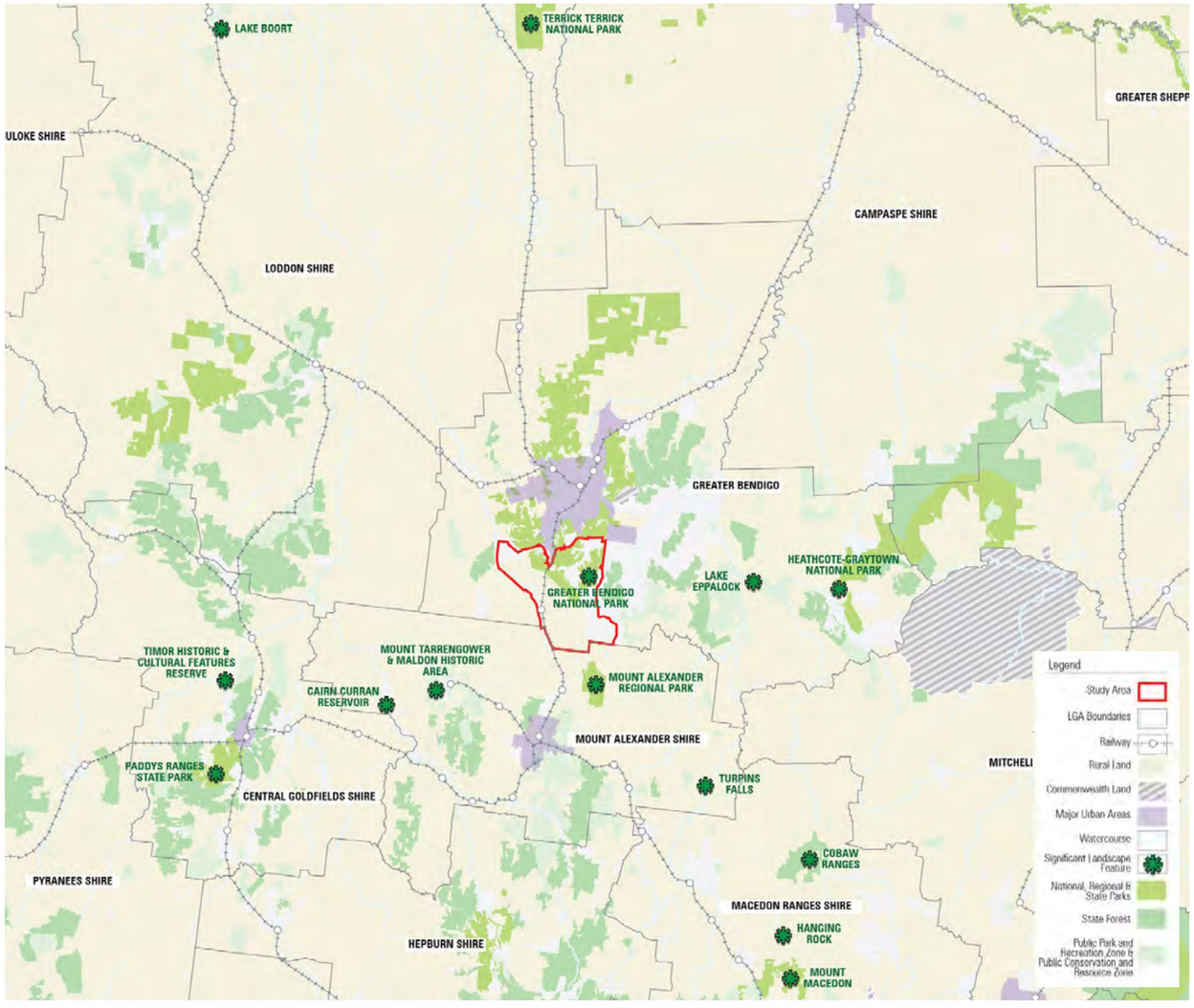


Figure 1. The subject landscape within the broader region

1.2 Study Area & Surrounds

The 'updated study area extent' is broadly defined by the area of investigation first established within the Bendigo Landscape Assessment Boundary (2013). This purpose of that document, prepared by Planisphere, was to gain a detailed understanding of the character and values of the Big Hill and Mandurang Valley landscapes, and to develop a framework for their future management as they continue to evolve over time.

For the purposes of this document, the study area boundary has been refined and expanded based on findings in subsequent peer reviews, and through detailed fieldwork and viewshed analysis. This work provided more insight regarding the visual exposure and extent of the subject landscape features.

While the study area has expanded from previous studies, it is important to note that the study area is just that - an area of which has been closely considered in this study for the purposes of understanding the landscape.

The boundary is not considered to be a hard edge, and does not seek to investigate the application of planning controls across its entire extent, but provides a spatial framework for investigation.

The Study Area has been expanded towards the south and west to include land considered influential to the Big Hill and Granitic Uplands landscape, determined by fieldwork and detailed viewshed modelling of landscape features.

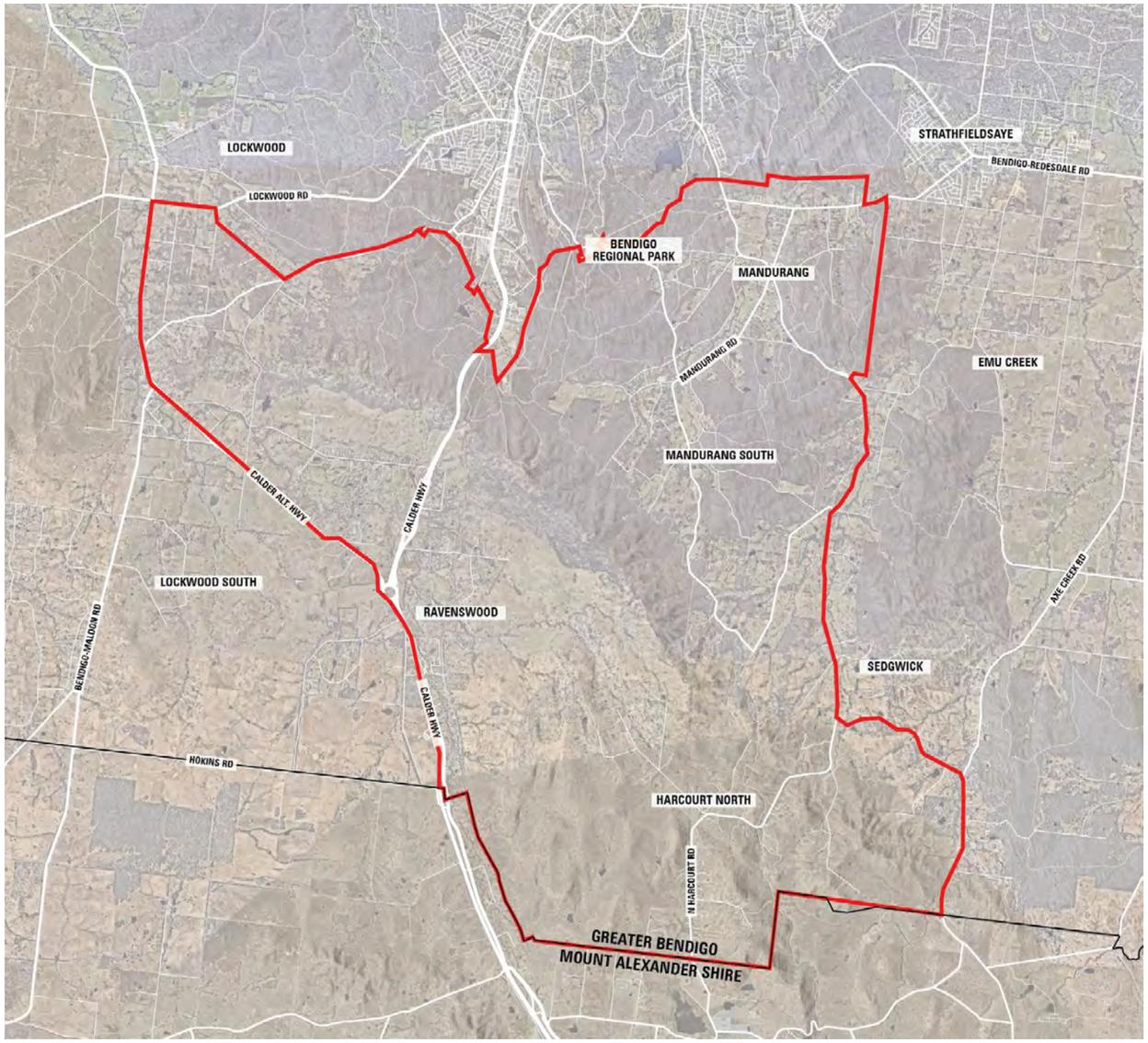


Figure 2. The study area



Part 2 Landscape Assessment

2 Landscape Assessment

2.1 Overview

The landscape assessment seeks to provide a detailed understanding of the existing conditions within the study area across a suite of themes, to help inform the characterisation of different 'types' of landscapes with common characteristics. Through identifying and understanding different landscape types that are distinct from each other is the first step in facilitating an assessment of each type's significance, in tandem with the visual assessment of Section 3.

The landscape assessment was undertaken by a mix of review of relevant background documentation and data, desktop analysis and fieldwork to ratify findings conducted over several visits to the study area.

The Landscape Assessment includes the following themes:

Planning Parameters

- Understanding the composition and spatial application of planning zones and overlays are instrumental in understanding the current tools in place that manage change and development within the study area. It also helps to understand 'gaps' in policy and management tools when navigating the implementation of new ones.

Urban Form

- Urban Form assessment is a valuable tool for comprehending the influence of the constructed environment within the study area. Its significance lies in the insight it provides into the effects of human intervention, notably with regard to visual and ecological impacts.
- By delineating subdivision patterns, road networks, and ownership details (including Crown Land), this process unveils the intricate interplay between human activities and the natural surroundings.

Topography & Elevation

- Topography and elevation assessment play a pivotal role in enhancing our comprehension of the potential vistas that areas of elevated terrain may offer, as well as the perspectives that can be gained from these locations.
- Through the mapping of slope, ridge lines, high and low points, we can discern which areas are likely to command greater visual prominence, especially when viewed from well-travelled roads and highways.
- This insight is invaluable in assessing the visual impact and significance of such elevated landscapes, particularly for areas frequently frequented by the public.

Hydrology & Waterways

- Waterways and hydrological features constitute a vital component of the natural landscape. Their significance extends beyond enhancing the scenic attributes, as they also play a crucial role in shaping the habitats of local wildlife.
- In addition to their ecological importance, waterways and water bodies can provide valuable insights into the broader landscape. It is not uncommon for them to align with topographic features, further enriching our understanding of the terrain. In the study area, numerous creeks, gullies, and tributaries dissect the landscape, often comprising lush vegetation.

Geology & Landform

- Evaluating the geology and landform in the Big Hill and Mandurang region offers invaluable perspectives into the area's environmental well-being and ecological robustness, enriching the scenic aspects of the landscape.
- This assessment not only aids in identifying potential mineral resources, groundwater reservoirs, and soil characteristics, including the management of salinity concerns (Dyson, 2007), but also lays the groundwork for informed land management and conservation strategies.
- It is a crucial step toward safeguarding the distinctive ecological heritage of this region, promoting a harmonious coexistence with nature while preserving its unique beauty.

Ecological Vegetation Classes

- Mapping Ecological Vegetation Classes (EVC's), especially across various time frames, offers valuable insights into the dominance of specific plant species. It provides a direct means of assessing the extent to which human activities have influenced and altered these vegetation communities.
- By tracking changes in EVC's over time, we gain a clearer understanding of the species that have been most affected by human intervention and can make informed decisions for conservation and land management.

Vegetation & Environment

- Mapping vegetation, including distribution and density provides insight into areas of environmental significance and highlights areas of limited human intervention. Examining windrow plantings and roadside vegetation aids in assessing potential visual impacts or limitations on surrounding views due to screening.

Heritage & Cultural Sensitivity

- Mapping areas of heritage and cultural significance, with a special emphasis on identifying Aboriginal heritage sites is paramount. Box-Ironbark Forests hold significant cultural and historical value, especially within Indigenous Australian communities, which have enduring ties to the land and its resources.
- Heritage overlays and associated cultural significance overlays provide valuable insights into areas of cultural importance, encompassing both natural and human-made heritage values.

Infrastructure Influences

- Assessing infrastructure's impact unveils areas where human intervention affects the visual appeal of the landscape, potentially compromising its scenic qualities. Furthermore, identifying Crown Land is useful as these regions are less likely to undergo immediate infrastructure development.

Development Trajectory

- In assessing development trajectory and planning applications we can determine areas of anticipated urban growth and the degree of change that may be expected, which may compromise the natural qualities of a landscape.

2.2 Planning Zones

"Figure 3. Planning Zones" provides a graphic summary of the existing planning zones that apply to the study area and the immediate surrounding land. A summary of the purpose or objectives of zones which are present in the study area from the Greater Bendigo Planning Scheme has been included below:

Farming Zone

- *To provide for the use of land for agriculture.*
- *To encourage the retention of productive agricultural land.*
- *To ensure that non-agricultural uses, including dwellings, do not adversely affect the use of land for agriculture.*
- *To encourage the retention of employment and population to support rural communities.*
- *To encourage use and development of land based on comprehensive and sustainable land management practices and infrastructure provision.*
- *To provide for the use and development of land for the specific purposes identified in a schedule to this zone.*

Public Conservation and Resources Zone

- *To protect and conserve the natural environment and natural processes for their historic, scientific, landscape, habitat or cultural values.*
- *To provide facilities which assist in public education and interpretation of the natural environment with minimal degradation of the natural environment or natural processes.*
- *To provide for appropriate resource based uses.*

Rural Living Zone

- *To provide for residential use in a rural environment.*
- *To provide for agricultural land uses which do not adversely affect the amenity of surrounding land uses.*
- *To protect and enhance the natural resources, biodiversity and landscape and heritage values of the area.*
- *To encourage use and development of land based on comprehensive and sustainable land management practices and infrastructure provision.*

Rural Conservation Zone

- *To conserve the values specified in a schedule to this zone.*
- *To protect and enhance the natural environment and natural processes for their historic, archaeological and scientific interest, landscape, fauna habitat and cultural values.*
- *To protect and enhance natural resources and the biodiversity of the area.*
- *To encourage development and use of land which is consistent with sustainable land management and land capability practices, and which takes into account the conservation values and environmental sensitivity of the locality.*
- *To provide for agricultural use consistent with the conservation of environmental and landscape values of the area.*
- *To conserve and enhance the cultural significance and character of open rural and scenic non urban landscapes.*

Low Residential Zone

- *To provide for low-density residential development on lots which, in the absence of reticulated sewerage, can treat and retain all wastewater.*

Public Use Zone

- *To recognise public land use for public utility and community services and facilities.*
- *To provide for associated uses that are consistent with the intent of the public land reservation or purpose.*

Transport Zone

- *To provide for an integrated and sustainable transport system.*
- *To identify transport land use and land required for transport services and facilities.*
- *To provide for the use and development of land that complements, or is consistent with, the transport system or public land reservation.*
- *To ensure the efficient and safe use of transport infrastructure and land comprising the transport system.*

Residential Growth Zone

- *To provide housing at increased densities in buildings up to and including four storey buildings.*
- *To encourage a diversity of housing types in locations offering good access to services and transport including activity centres and town centres.*
- *To encourage a scale of development that provides a transition between areas of more intensive use and development and other residential areas.*
- *To ensure residential development achieves design objectives specified in a schedule to this zone.*
- *To allow educational, recreational, religious, community and a limited range of other non-residential uses to serve local community needs in appropriate locations.*

Industrial Zone

- *To provide for manufacturing industry, the storage and distribution of goods and associated uses in a manner which does not affect the safety and amenity of local communities.*

Special Use Zone

- *To recognise or provide for the use and development of land for specific purposes as identified in a schedule to this zone.*

Comprehensive Development Zone

- *To provide for a range of uses and the development of land in accordance with a comprehensive development plan incorporated in this scheme.*

Commercial 1 Zone

- *To create vibrant mixed use commercial centres for retail, office, business, entertainment and community uses.*
- *To provide for residential uses at densities complementary to the role and scale of the commercial centre.*

Commercial 2 Zone

- *To encourage commercial areas for offices, appropriate manufacturing and industries, bulky goods retailing, other retail uses, and associated business and commercial services.*
- *To ensure that uses do not affect the safety and amenity of adjacent, more sensitive uses.*

Mixed Use Zone

- *To provide for a range of residential, commercial, industrial and other uses which complement the mixed-use function of the locality.*
- *To provide for housing at higher densities.*
- *To encourage development that responds to the existing or preferred neighbourhood character of the area.*
- *To facilitate the use, development and redevelopment of land in accordance with the objectives specified in a schedule to this zone.*

Public Park and Recreation Zone

- *To recognise areas for public recreation and open space.*
- *To protect and conserve areas of significance where appropriate.*
- *To provide for commercial uses where appropriate.*

General Residential Zone

- *To encourage development that respects the neighbourhood character of the area.*
- *To encourage a diversity of housing types and housing growth particularly in locations offering good access to services and transport.*
- *To allow educational, recreational, religious, community and a limited range of other non-residential uses to serve local community needs in appropriate locations.*

Planning Zones

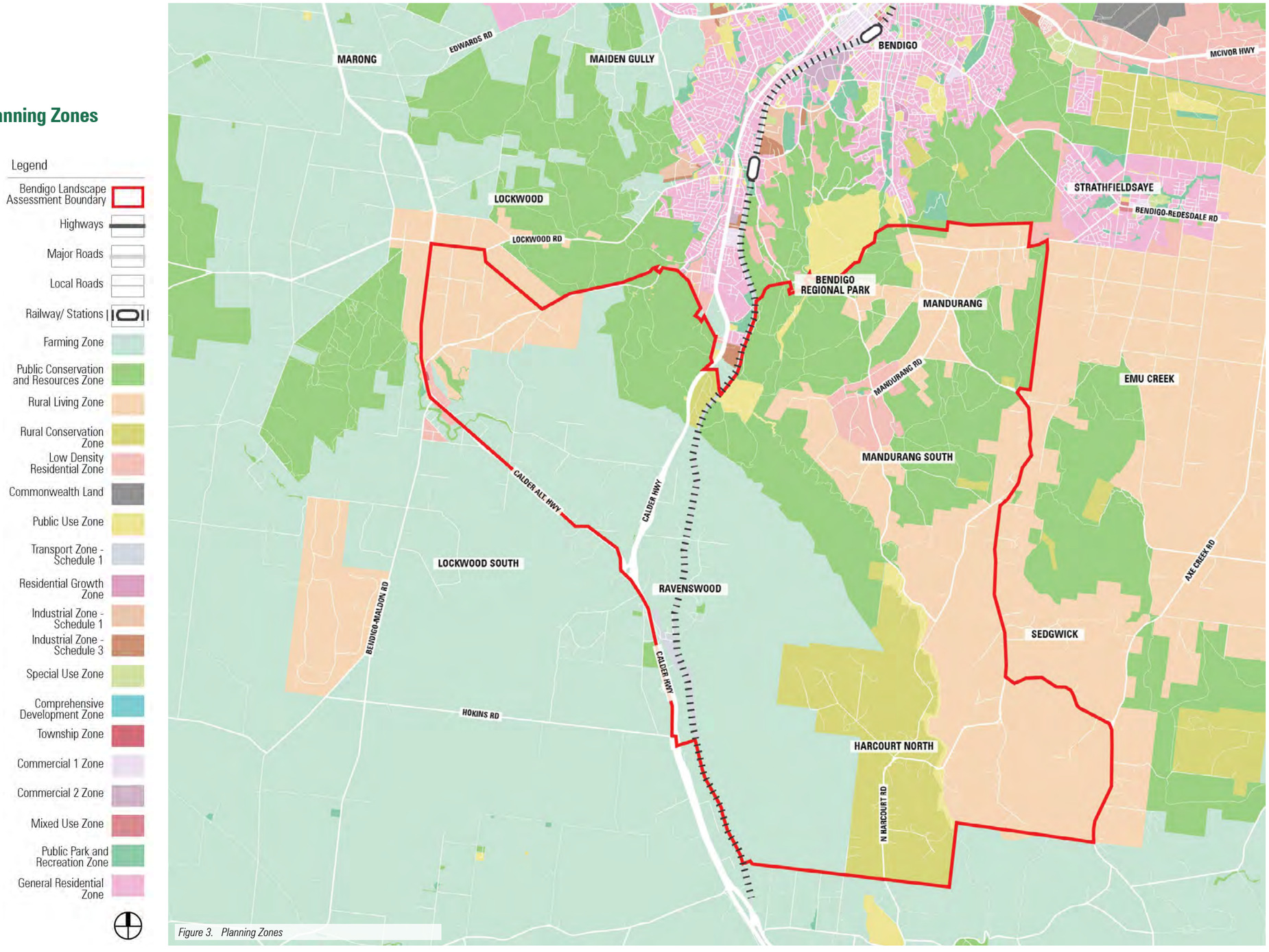


Figure 3. Planning Zones

2.3 Planning Overlays

The study area is subject to several overlays, illustrated on "Figure 4. Planning Overlays". A summary of the purpose or objectives of overlays which are relevant and present in the study area from the Greater Bendigo Planning Scheme has been included below:

Heritage Overlay (HO)

Within the study area, HO is scattered throughout the landscape, typically applied to buildings of heritage significance, former railway infrastructure and even particular trees within the study area. Its objectives are:

- *To conserve and enhance heritage places of natural or cultural significance.*
- *To conserve and enhance those elements which contribute to the significance of heritage places.*
- *To ensure that development does not adversely affect the significance of heritage places.*
- *To conserve specified heritage places by allowing a use that would otherwise be prohibited if this will demonstrably assist with the conservation of the significance of the heritage place.*

Design & Development Overlay (DDO)

Within the study area, DDO is only noted sparingly, including portions of the Calder Highway on approach to Big Hill and Bendigo. Its objectives are:

- *To identify areas which are affected by specific requirements relating to the design and built form of new development.*

Land Subject to Inundation Overlay (LSIO)

Within the study area, LSIO is present in limited areas, yet is noted along creek lines in Big Hill and in a pocket of relatively low-lying land in Lockwood South. Its objectives are:

- *To identify flood prone land in a riverine or coastal area affected by the 1 in 100 (1 per cent Annual Exceedance Probability) year flood or any other area determined by the floodplain management authority.*
- *To ensure that development maintains the free passage and temporary storage of flood waters, minimises flood damage, responds to the flood hazard and local drainage conditions and will not cause any significant rise in flood level or flow velocity.*
- *To minimise the potential flood risk to life, health and safety associated with development.*
- *To reflect a declaration under Division 4 of Part 10 of the Water Act, 1989.*
- *To protect water quality and waterways as natural resources by managing urban stormwater, protecting water supply catchment areas, and managing saline discharges to minimise the risks to the environmental quality of water and groundwater.*
- *To ensure that development maintains or improves river, marine, coastal and wetland health, waterway protection and floodplain health.*

Salinity Management Overlay (SMO)

Within the study area, SMO is present in minor scatterings across the landscape. Its objectives are:

- *To identify areas subject to saline ground water discharge or high ground water recharge.*
- *To facilitate the stabilisation of areas affected by salinity.*
- *To encourage revegetation of areas which contribute to salinity.*
- *To encourage development to be undertaken in a manner which brings about a reduction in salinity recharge.*
- *To ensure development is compatible with site capability and the retention of vegetation, and complies with the objectives of any salinity management plan for the area.*
- *To prevent damage to buildings and infrastructure from saline discharge and high watertable.*

Bushfire Management Overlay (BMO)

Within the study area, the BMO is present situated in a large patch along the north and northwest, covering regions of Mandurang, Mandurang South, and south of Lockwood. Its objectives are:

- *To ensure that the development of land prioritises the protection of human life and strengthens community resilience to bushfire.*
- *To identify areas where the bushfire hazard warrants bushfire protection measures to be implemented.*
- *To ensure development is only permitted where the risk to life and property from bushfire can be reduced to an acceptable level.*

Erosion Management Overlay (EMO)

Within the study area, EMO is present and predominantly noted in two large patches, the largest is within Harcourt North and the other is located in Big Hill, between the Calder Highway and Calder Alternative Highway. Its objectives are:

- *To protect areas prone to erosion, landslip, other land degradation or coastal processes by minimising land disturbance and inappropriate development.*

Vegetation Protection Overlay (VPO)

Within the study area, VPO is scattered across the landscape and is noted in patches in Mandurang, Big Hill and often traverses creek lines and tributaries. Its objectives are:

- *To protect areas of significant vegetation.*
- *To ensure that development minimises loss of vegetation.*
- *To preserve existing trees and other vegetation.*
- *To recognise vegetation protection areas as locations of special significance, natural beauty, interest and importance.*
- *To maintain and enhance habitat and habitat corridors for indigenous fauna.*
- *To encourage the regeneration of native vegetation.*

Vegetation Protection Overlay - Schedule 1 (VPO1)

- *To protect and preserve indigenous vegetation and rare and endangered flora and fauna species.*
- *To maintain the integrity of the Box-Ironbark vegetation around Bendigo and Heathcote.*
- *To maintain and enhance habitat and corridor requirements for indigenous fauna.*
- *To ensure population viability of fauna species by maintaining connectivity between large areas of remnant vegetation.*

Vegetation Protection Overlay - Schedule 2 (VPO2)

- *To protect remnant native vegetation and habitat, including understorey,*

and facilitate natural revegetation.

- *To promote the maintenance of ecological processes and genetic diversity.*
- *To encourage maintenance and development of linkages between existing remnant vegetation.*
- *To recognise the catchment-wide land and water management benefits resulting from vegetation retention.*
- *To maintain and enhance Bendigo's scenic and recreational landscape assets.*

Vegetation Protection Overlay - Schedule 3 (VPO3)

- *To protect and preserve indigenous vegetation and rare and endangered flora and fauna species on linear reserves.*
- *To achieve high landscape quality on roadsides.*
- *To maintain and enhance habitat and corridor values for indigenous fauna.*
- *To protect trees with hollows used by indigenous fauna*

Significant Landscape Overlay (SLO)

Within the study area, SLO is present in small portions, particularity to the north, in proximity to the Bendigo Township. Its objectives are:

- *To identify significant landscapes.*
- *To conserve and enhance the character of significant landscapes.*

Significant Landscape Overlay - Schedule 1 (SLO1)

- *To provide for housing in a bushland setting.*
- *To provide for sensitive siting of buildings and works, access and earthworks and by the restoration of native vegetation where considered appropriate.*
- *To provide for the conservation and enhancement of the environmental values of the area, by limiting the removal of native vegetation to the minimum extent practicable and by encouraging the planting of vegetation which is native to the Bendigo area, particularly vegetation of species which previously grew on the site.*
- *To ensure that the development of land and the removal of native vegetation are not detrimental to the natural environment and character of the area.*
- *To minimise threats to the natural environment through the unnecessary removal of native vegetation.*
- *To protect remnant native vegetation and habitat, including understorey, and to facilitate natural revegetation.*
- *To promote the maintenance of ecological processes and genetic diversity.*
- *To encourage maintenance and development of linkages between existing areas of remnant vegetation.*
- *To recognise the catchment-wide land and water management benefits resulting from vegetation retention.*
- *To maintain and enhance Bendigo's scenic and recreational landscape assets.*

Environmental Significance Overlay (ESO)

Within the study area, ESO is more widespread and often aligns with large patches of vegetation or traversing creek lines, streams and tributaries.

- *To identify areas where the development of land may be affected by environmental constraints.*
- *To ensure that development is compatible with identified environmental values.*

Environmental Significance Overlay - Schedule 1 (ESO1)

- *To maintain the water quality.*
- *To contribute to the enhancement of water quality throughout the Murray -Darling Basin.*
- *To maintain the ability of streams and watercourses to carry natural flows.*
- *To prevent erosion of banks, stream beds and adjoining land and the siltation of watercourses, drains and other features.*
- *To protect and encourage the long term future of flora and fauna habitat in and along watercourses.*
- *To ensure development does not occur on land liable to flooding and minimise the potential for damage to human life, buildings and property caused by flood events.*
- *To prevent pollution, elevated nutrients and increased turbidity in natural watercourses.*
- *To prevent increased surface run-off or concentration of surface water run-off leading to erosion or siltation of watercourses.*
- *To conserve existing wildlife habitats close to natural watercourses and, where appropriate, to allow for generation and regeneration of habitats.*
- *To restrict the intensity of use and development of land and water to activities which are sensitive to environmental values and which are compatible with potential drainage or flooding hazards.*

Environmental Significance Overlay - Schedule 2 (ESO2)

- *To promote the appropriate management of groundwater recharge areas.*
- *To prevent high levels of groundwater recharge.*
- *To limit consequent saline discharge.*
- *To maintain groundwater quality and groundwater resources, and the potential for groundwater use.*
- *To encourage revegetation of areas which contribute to high groundwater recharge.*

Environmental Significance Overlay - Schedule 3 (ESO3)

- *To ensure the protection and maintenance of water quality and water yield within the Eppalock Water Supply Catchment Area as listed under Section 5 of the Catchment and Land Protection Act 1994.*

Environmental Significance Overlay - Schedule 4 (ESO5)

- *To protect, conserve and enhance natural resources and the biodiversity of the area, in particular remnant vegetation.*
- *To protect and enhance geological and natural interest areas of flora and fauna habitat.*
- *To encourage development of land which is consistent with sustainable land management, and which takes into account the conservation values and environmental sensitivity of the locality.*
- *To ensure that development does not impact on the environmental significance of the land.*

Planning Overlays

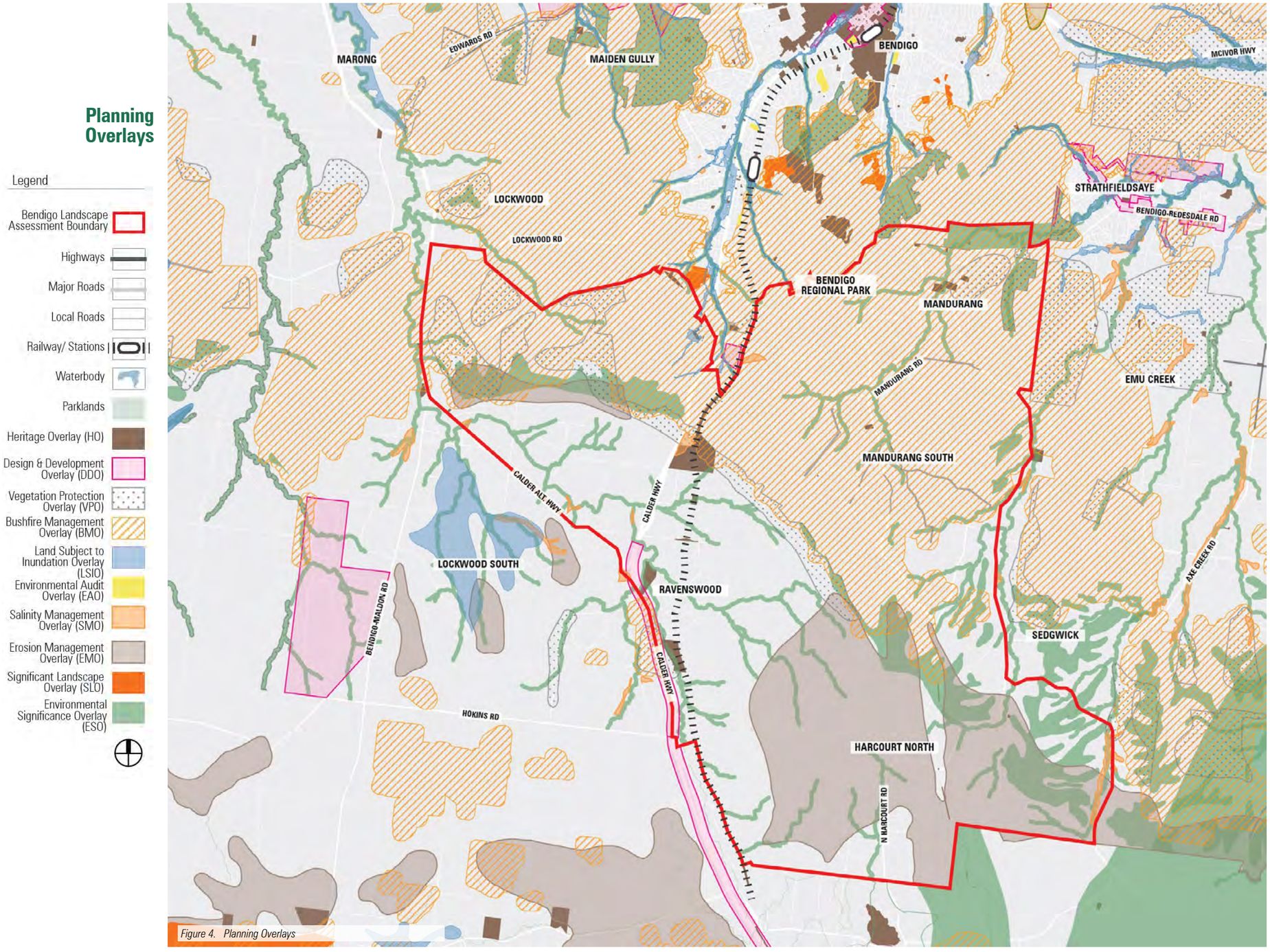


Figure 4. Planning Overlays

2.4 Urban Form

Key Observations

- The existing layout of Bendigo's urban form is closely aligned to the winding course of the north-south oriented Bendigo Creek. The narrow valley floor accommodates not only the creek itself but also serves as a passage for the key vehicle routes into the township via the Calder Highway and the regional railway link. Along this trajectory emerge clusters of smaller nodes with the Bendigo Township situated between the creek and the railway line.
- Bendigo's urban layout is distinctive, arising from the amalgamation of mining settlements. These clusters, arising sporadically in various locations, presenting a seemingly random arrangement. However, this seemingly haphazard distribution closely aligns with the views of gold-bearing rock beneath the city, predominantly aligned along the north-south axis.
- In contrast to other formal settlements, where the urban evolution is traceable through neighbourhoods transitioning from old to new as one moves outward from the core, Bendigo is atypical in this regard. Suburban areas here exhibit an intriguing blend of architectural styles and eras.
- This pattern of settlements finds its rationale when considering the historical remnants of former gold mines, shedding light on the unexpected coexistence of Victorian cottages amidst the backdrop of 1950s or 1970s bungalows.
- The concept of a standardised grid pattern is challenged across Bendigo's urban landscape. The remnants of past settlement clusters combined with the contours of the land, disrupt to uniformity of a possible grid pattern.
- Another characteristic that stands out is the presence of undeveloped parcels of land, often stretching through the urban expanse. These parcels are often associated with past mining activities marked by dense vegetation. These stretches extend right up the edges of the CBD, forming a distinctive visual landscape.
- Moving away from Bendigo along the main routes, formerly distinct pockets like Huntly and Marong have merged as urban development extends outward. Beyond the boundaries of this urban expansion, a diverse range of settlements comes into view, spanning from clusters of residences to sizable rural centres like Elmore and Heathcote.
- Smaller lot sizes cluster around Bendigo primarily consisting of single detached residential units. As one moves beyond the townships, lot sizes expand, with clusters of larger rural properties (ranging from 10,000m^2 to 50,000m^2) becoming evident in locales such as Junortoun, Mandurang, and Lockwood South.
- The most expansive lots (measuring 50,000m^2) typically find their place on the outskirts of townships, often reserved for rural recreational or agricultural purposes.



Detached dwelling comprising background vegetation on South Mandurang Road, South Mandurang.



Open pastoral land with scattered vegetation and distant view to the Big Hill Ridge Line - looking west along Granite View, Ravenswood

Urban Form

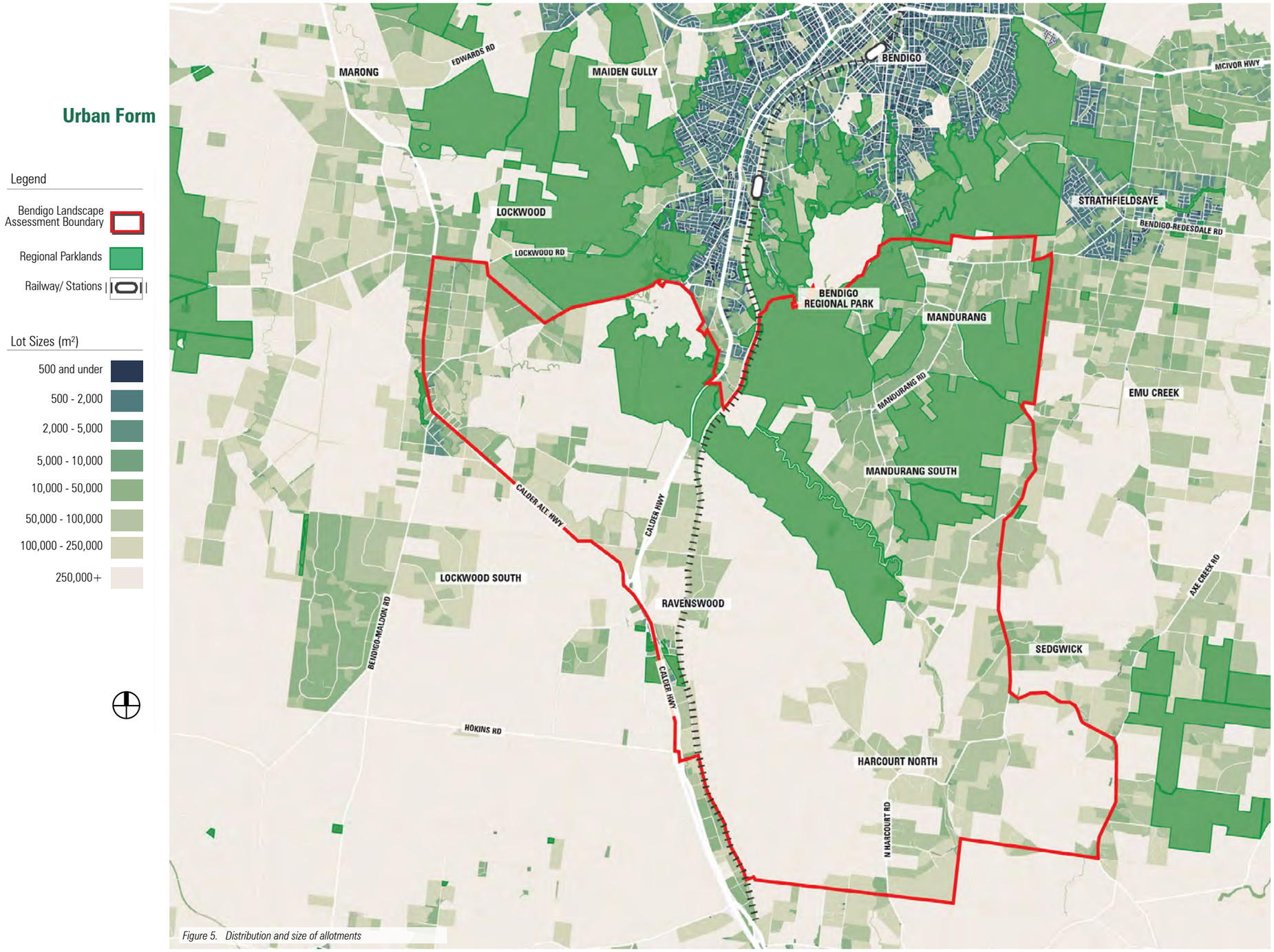


Figure 5. Distribution and size of allotments

2.5 Topography & Elevation

Key Observations

- The Topographical Analysis map opposite provides an understanding of the topography of the study area and immediate surrounds. The contour data for the study area has been collated at 10m intervals and overlays a shaded graphic which identifies areas of relative elevation.
- This assists to understand the relative changes in level and the pattern of geology and landform which contributes to the landscape composition. On this basis the study area has been shaded to indicate topography ranging from low (light blue) to very high (red).
- What "Figure 6. Topography - elevation" reveals is that the topographical makeup of the study area and its broader surrounds comprises a complex and varied terrain, characterised by a scattering of hills and sporadic granite outcrops.
- Greater Bendigo is ensconced within a natural amphitheatre of rocky hills, gently unfurling into the expansive alluvial plain stretching northward. The avenues leading to the city from the western, southern, and eastern directions gradually ascend the edges of this geological bowl before descending into the embrace of the Bendigo Creek valley, its waters flowing northward to eventually merge with the Campaspe River.
- One striking and easily discernible feature of the landscape is the Big Hill ridge line, a prominent geographic element that extends across the confines of the Bendigo Landscape Assessment Boundary study area.
- While the ridge line stands out due to its imposing nature, its humbly intersected by the Calder Highway and the regional railway, serving as a functional entry point to the relatively 'low-lying' Bendigo township that lies beyond.
- In stark contrast to the dominance of Big Hill and the neighbouring terrain, the Granitic Uplands emerge to the south, reaching past the original assessment boundary and extending even further into the landscape. Here, the land ascends impressively above its immediate surrounds up to 350m above sea level.
- The elevated position allows for commanding views, offering sweeping panoramic perspective that encapsulates both the immediate surrounds and distant horizons. Continuing southward, Mount Alexander takes the spotlight as the paramount land form in the entire region, standing tall as a beacon of distinction against the landscape.
- The interplay between these diverse topographical characteristics adds a later of intricacy to the Bendigo region. Comprising a multitude of undulating hills, the presence of the Big Hill ridge line, the elevated Granitic Uplands and the presence of Mount Alexander together contribute to a narrative of geological diversity.
- The experience of the topography is underpinned by the Calder Highway and the regional railway, creating a tangible link between the elevated terrains and the township nestled within the valley.



The Big Hill Ridge Line viewed from a high point within Ravenswood Run



Undulating land form of the Big Hill foreground with the Granitic Uplands forming the horizon, and Mount Alexander further distant in the background.

Topography - Elevation

Legend

- Bendigo Landscape Assessment Boundary
- Contours 10m
- Peaks (high points)
- Secondary peaks
- Ridgelines
- Elevation: 580m+ to 180m

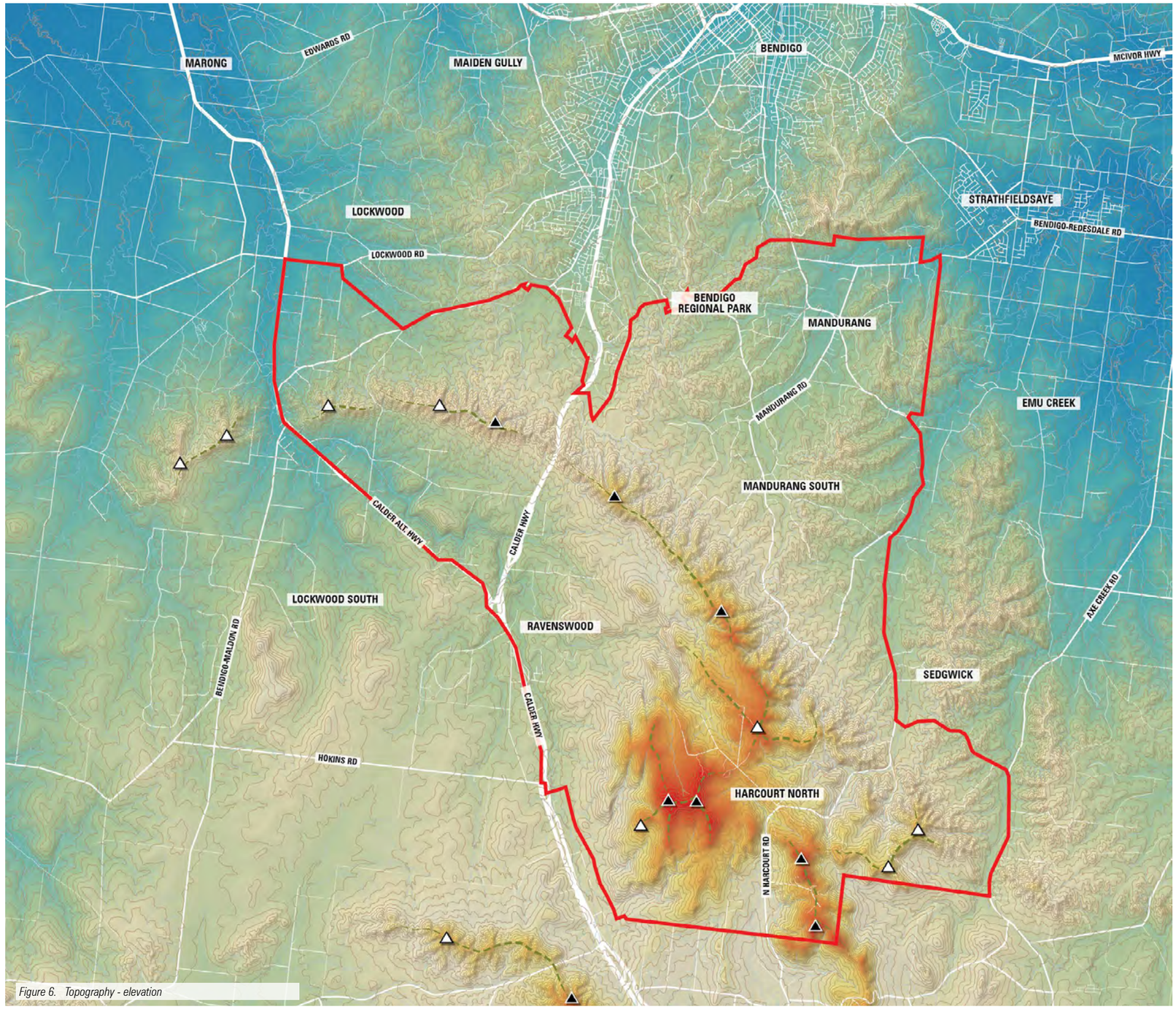


Figure 6. Topography - elevation

Topography - Slope

Legend

- Bendigo Landscape Assessment Boundary
- Contours 10m
- Peaks (high points)
- Secondary peaks
- Ridgelines
- Slope: 30%+ to 0%

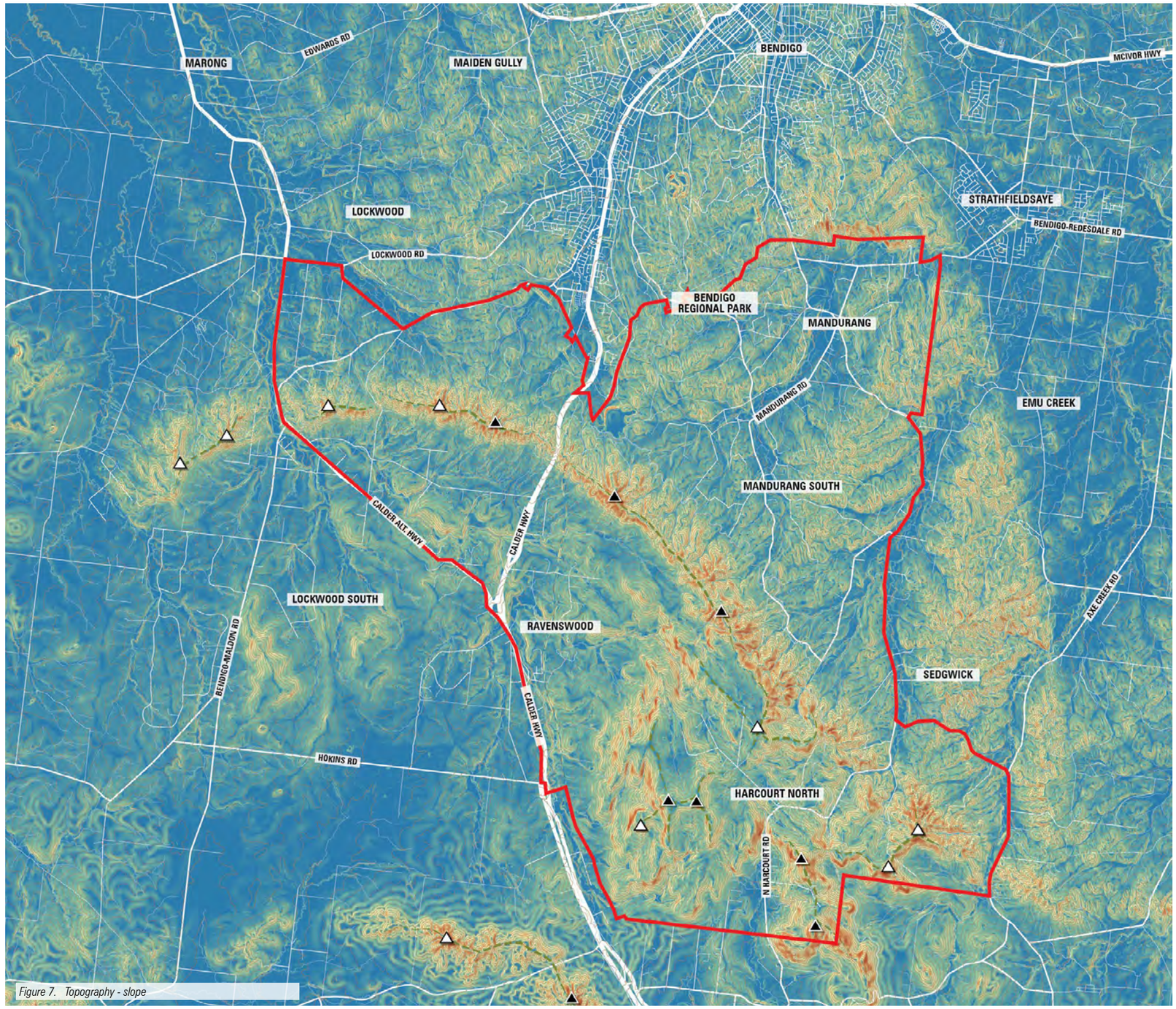


Figure 7. Topography - slope

2.6 Hydrology & Waterways

Key Observations

- Bendigo's unique geographical location plays a pivotal role in its distinct character, benefiting from a natural buffer that mitigates the impact of intense coastal weather systems. This natural shield translates to comparatively modest rainfall levels within the region. Between 2006 and 2010, the Bendigo area grappled with a severe drought, which finally abated in the mid to later months of 2010, leading to the replenishment of reservoirs to full capacity.
- Spanning across the expansive territory of the city, a complex system of creeks and gullies intricately weaves through the landscape. These watercourses find their origins in catchments nestled within the embrace of the surrounding hills. Frequently, creeks and gullies served as natural demarcations for property boundaries.
- This is evident along Bullock Creek to the south of Big Hill and Sheepwash Creek. Presently a significant number of gullies and creeks are adorned with vegetation along their banks. However, signs of erosion are discernible, particularly in areas where vegetation is absent along the edges.
- While they can surge during periods of floods or intense rainfall, a substantial duration of the year witnesses these waterways remaining desiccated and dry.
- The early years of the gold rush left a marked imprint on the local creeks and waterways causing enduring environmental harm in the region, initially drawing attention as sites of alluvial mining and later as subjects of the puddling technique.
- This method involved extracting a muddy sludge from riverbanks, leading to the pollution of waterways and the constriction of creeks, morphing them into a series of stagnant pools and influencing their natural course.
- This method also led to the obliteration of generational Dja Dja Wurrung infrastructure that optimised seasonal drainage patterns. Their timber stake-built channels and weirs, designed to slow receding summer flows, were destroyed.
- Water holes that served as gathering points in times of scarcity were muddied, polluted, and drained. Similarly, the soaks they dug into sandy sediment to access the water table were eradicated. While some of their waterholes in creek rock platforms, covered with protective slabs, may still endure, they often remain unidentified.
- In order to rectify the pollution and damage to waterways as a result of mining activity Bendigo Creek underwent a transformation, being straightened and channelled to mitigate the damage inflicted by this process.
- Amid the gold rush, securing fresh water posed a significant hurdle due to surging populations and the subsequent pollution of water systems resulting in the creation of numerous dams and reservoirs. A network of channels was devised to gather and disseminate water resources, exemplified by the enduring functionality of the Coliban Channel which still exists today.



Farming dams are common throughout the study area within agricultural properties

Hydrology & Waterways

Legend

- Bendigo Landscape Assessment Boundary
- Railway/ Stations
- Waterbodies
- Watercourse
- Reservoirs
- Contours

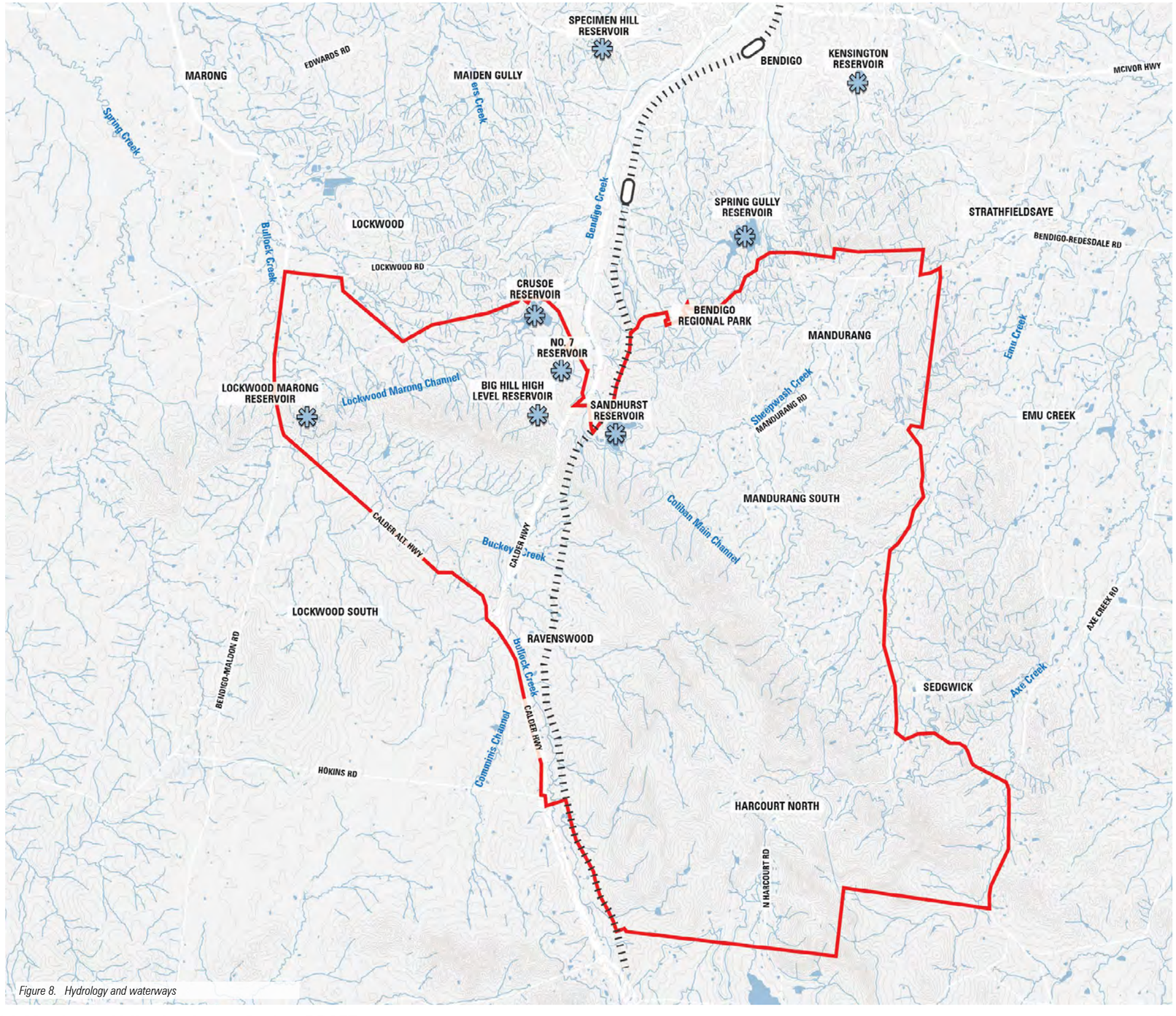


Figure 8. Hydrology and waterways

2.7 Geology & Landform

Key Observations

- Situated at the edge, Big Hill commands a position within the periphery of a metamorphic crescent, stretching along the southern outskirts of Greater Bendigo.
- This geological feature extends its reach south-eastward, seamlessly blending into the granitic landscape of Harcourt North. A noteworthy ridge line, it maintains its path southward, extending its influence towards the elevated summits of Mount Tarrengower and Mount Alexander.
- The foundational bedrock of the ridge line primarily consists of granite rock formations formed by historic igneous intrusions. This rock type is prominently visible in the exposed sections of Big Hill's cutting. It is situated between the Ordovician sediments to the north and the granite to the south.
- In contrast, granite, which forms the underlying geological layer to the south, displays less resistance to the forces of erosion. Consequently, it forms the basis for the lower-lying slopes and the more level stretches of terrain. Throughout these lower slopes, granitic outcrops punctuate the landscape, with substantial rocks scattered across the surrounding paddocks.
- The Mandurang Valley presents itself as a gently undulating expanse characterised by low hills. Nestled between two ridge lines that align roughly in a north-south orientation, this landscape offers a distinct topography.
- On the south-western boundary of the valley, the landscape is defined by the northern slopes of Big Hill. These slopes, composed of metamorphic rock, provide the foundation for the growth of Box-Ironbark forests. The presence of this rock type contributes to the unique ecological makeup of the area.
- To the northeast, the valley floor gracefully curves around the southern tip of a forested range. This forested range lends a distinct character to the landscape.
- As the valley extends in this direction, it undergoes a subtle flattening before eventually melding into the rise of One Tree Hill, marking a seamless transition between these distinct topographical features.

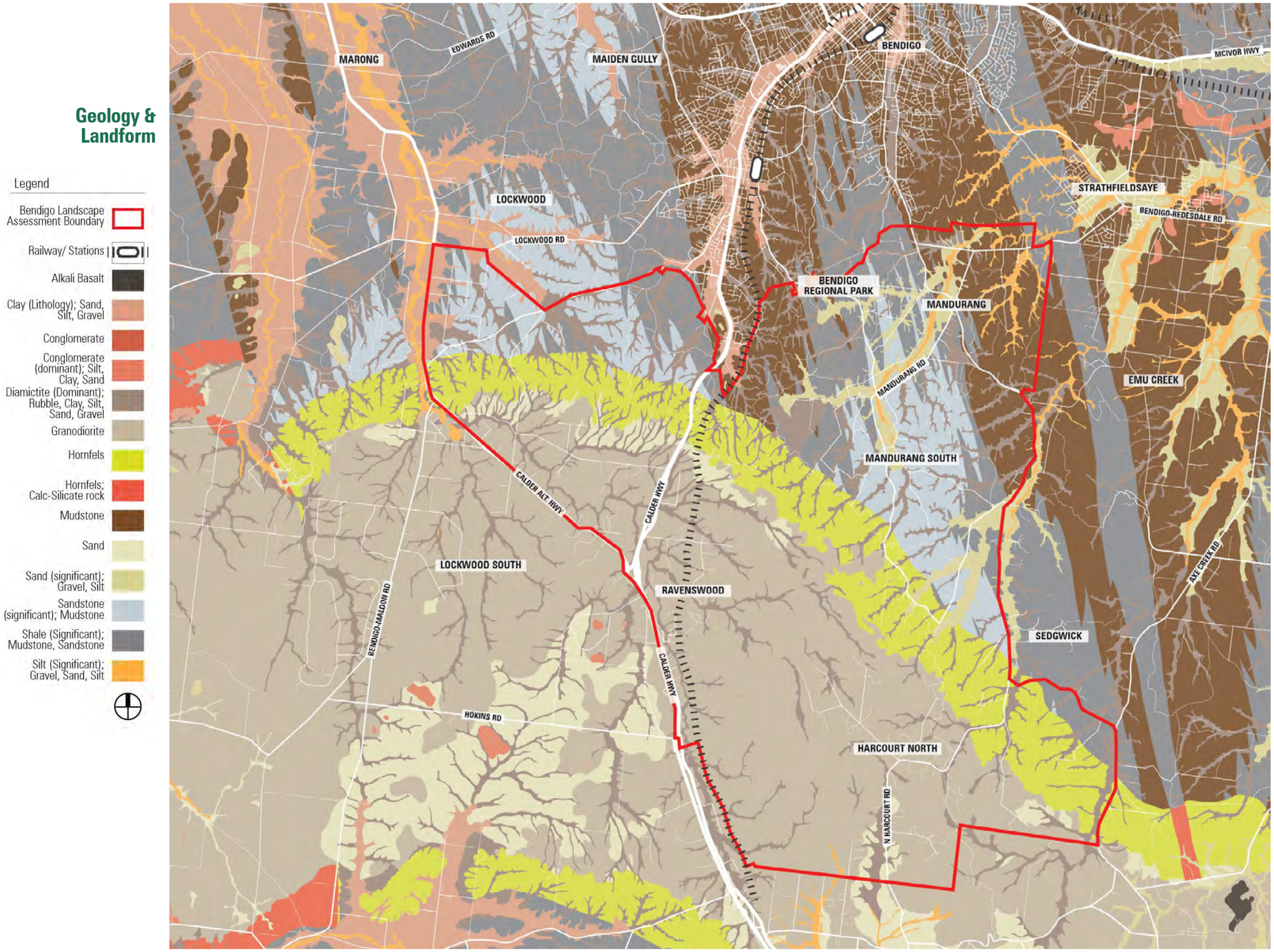


Granite outcrops on undulating land in Harcourt North



Granite outcrops on undulating land in Harcourt North

Geology & Landform



2.8 Ecological Vegetation Classes

Key Observations

- Embedded within the tapestry of the Goldfields Bioregion, the encompassing area showcases distinct Ecological Vegetation Classes (EVCs), most notably the Box-Ironbark Forest and the more open Grassy Woodland.
- While the Box-Ironbark Forest predominantly thrives upon sedimentary rocks, the granite country south of Big Hill provides fertile ground for the Grassy Woodland to flourish. The hard metamorphic rock encircling the rim of Big Hill supports tall eucalypts, a departure from the Box-Ironbark Forest's characteristic composition.
- Historically, Bendigo's forests underwent substantial transformation due to timber harvesting during the gold rush era. Subsequent land use practices further moulded these landscapes, leading to a reduction in the number of substantial trees and a proliferation of smaller coppiced ones compared to the pre-1850s forest composition.
- Deforestation, coupled with grazing pressures, has led to the decline of trees in woodlands impeding the natural process of regeneration and obscuring its inherent capacity for rejuvenation.
- Extending beyond forested areas, the landscape bordering these woods has largely surrendered to grazing or rural residential development. While traces of the original woodland persisting, many of these areas remain bare and lacking the presence of trees. Grazing activities have continued to thwart the organic cycle of tree renewal.
- Yet there are notable pockets of resilience. Vestiges of vegetation are notable along banks of creeks, creating serene enclaves with the neighbouring protected forest areas.
- Woodland vegetation along roadside reserves extend into grassy paddocks, weaving a subtle continuity between these distinct elements.
- While the introduction of exotic plant species remains relatively restrained, select properties exhibit avenues that gracefully line driveways, front fences, and entrances.
- In contrast, certain areas bear the burden of invasive species such as blackberries, occasionally encroaching upon the roadside reserves. Agricultural pests like Patterson's Curse, Horehound, Golden Thistle, and Blackberry further complicate the ecological equilibrium, constituting a tangible threat to the natural balance.
- The juxtaposition of pre-European settlement and the present day is striking, visibly illustrating the loss of vegetation. "Figure 9. EVC mapping (pre 1750)" serves as a poignant representation of Ecological Vegetation Classes prior to 1750, capturing the pristine landscape before the touch of European settlement.
- In stark contrast, "Figure 10. EVC mapping (2007)" overlays the current state of EVC's as mapped in 2007, with the blank spaces signifying the land that has been stripped of its native cover and remains untouched by regeneration efforts.
- The once abundant Box-Ironbark Forest, has conspicuously diminished in comparison to its pre-1750 Ecological Vegetation Class levels. Particularly noticeable reductions have materialised in recently urbanised zones to the north, encompassing Bendigo, Junortoun, and their surrounding environs.
- Additionally, discernible declines are evident on either side of Axe Creek Road and also land adjacent to roads in Mandurang, primarily due to increase in agricultural land uses and residential activity.
- The once prevalent Granitic Hills Woodlands have experienced substantial reduction when compared to their pre-1750 Ecological Vegetation Class levels. A modest fraction of the remaining Woodlands finds sanctuary within the bounds of the Rural Conservation Zone.
- However, the majority of the surviving EVC is primarily situated on private properties, highlighting the dispersion of this valuable resource across the landscape.
- It is worth highlighting that a significant proportion of the remaining forest has found refuge within reservation parkland areas.



Heathy Dry Forest at One Tree Hill Regional Park



Outlook from private property in Hilda Drive, Ravenswood



Ironbark Forest in the Greater Bendigo National Park

EVC Mapping

Pre 1750

Legend

- Bendigo Landscape Assessment Boundary
- Railway/ Stations
- Waterbody
- Box Ironbark Forest
- Creekline Grassy Woodland
- Granatic Hills Woodland
- Grassy Dry Forest
- Grassy Woodland
- Heathy Dry Forest
- Hills Herb-rich Woodland
- Plains Woodland
- Red Gum Swamp
- Valley Grassy Forest
- Hillcrest Herb-rich Woodland
- Metamorphic Slopes Shrubby Woodland
- Alluvial Terrace Herb-Rich Woodland
- Alluvial Terraces Herb-rich Woodland/ Creekline Grassy Woodland Mosaic

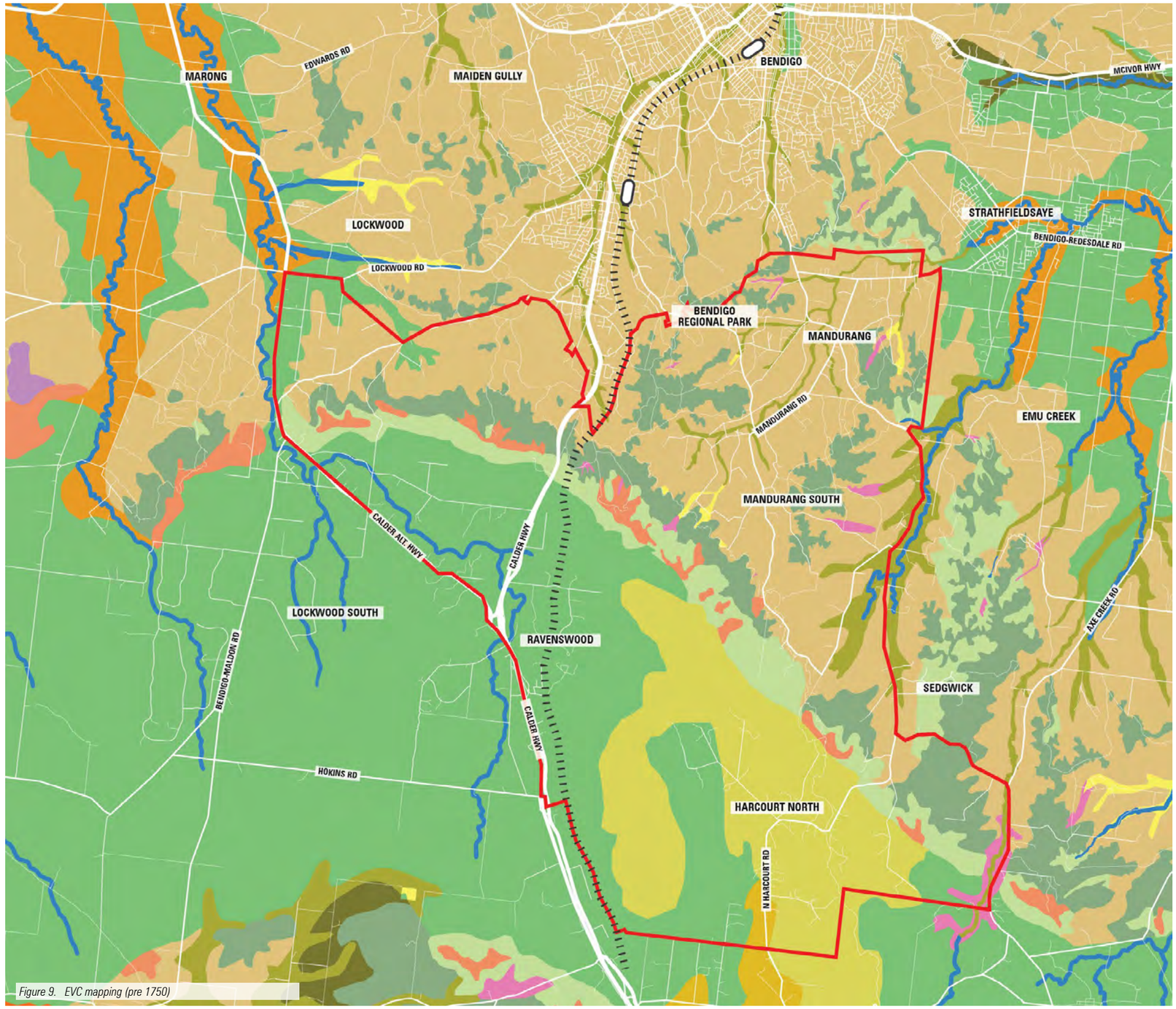


Figure 9. EVC mapping (pre 1750)

EVC Mapping 2007

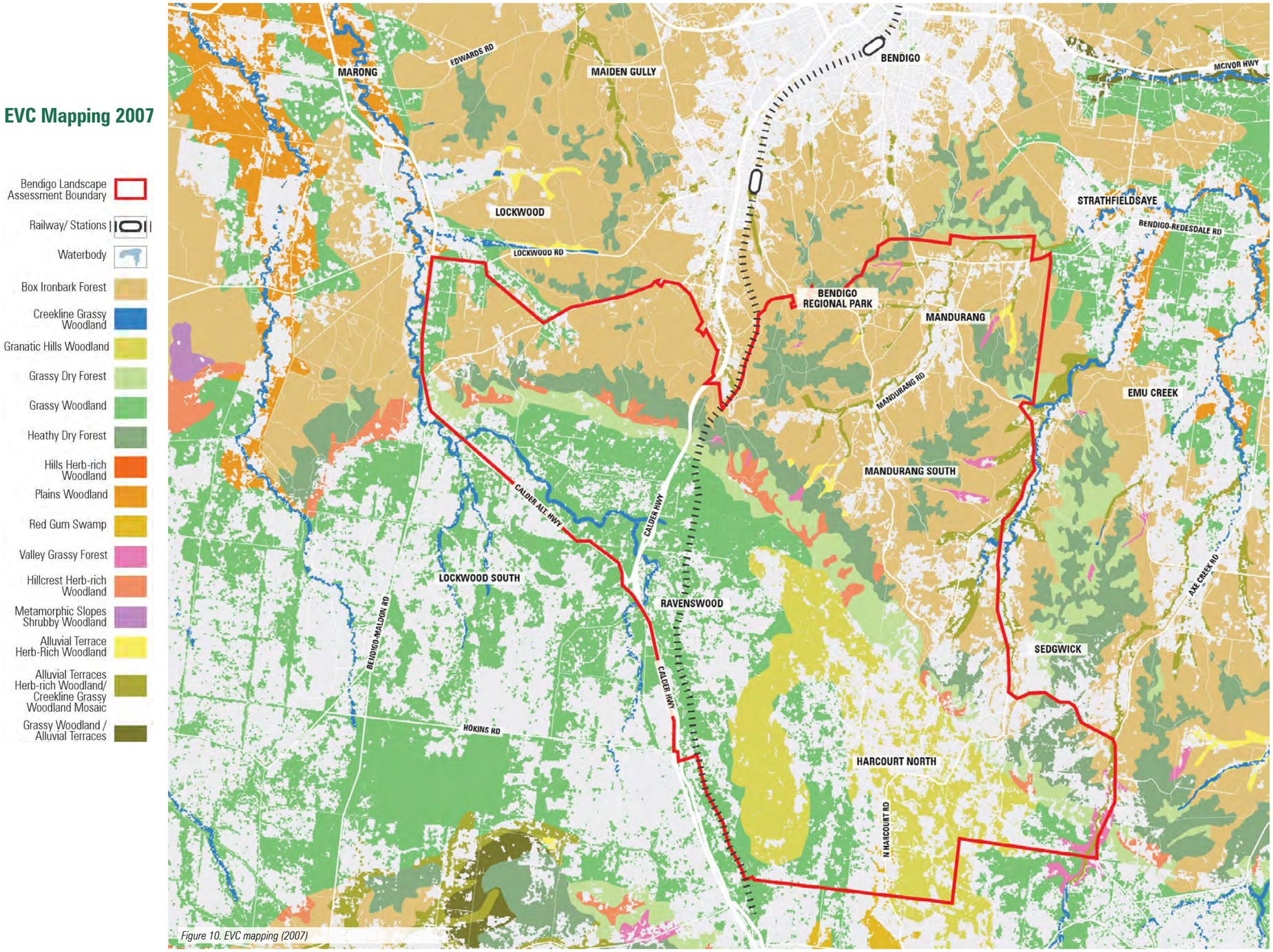


Figure 10. EVC mapping (2007)

2.9 Vegetation & Environment

Key Observations

- Bendigo's distinctiveness is woven from a diverse array of environmental elements and factors, each playing a vital role in shaping its identity. Bendigo possesses a unique character rooted in its surroundings, as the encompassing hills are adorned with Box-Ironbark forest, a significant portion of which is now safeguarded within National and Regional Parks.
- These forests, characterised by their open and arid nature, stretch uninterrupted over vast stretches of terrain. These forests create an intimate enclosure that rarely offers glimpses outward to the surroundings.
- In some pockets these forest are dense and immersive offering a sense of disorientation and solace, granting an intimate connection with nature despite proximity to urban land beyond.
- The northern plains, on the other hand, comprise an entirely different panorama dominated by crop lands and pastures beneath open skies. Some stretches to the north of the city have been stripped of their native cover.
- The exception lies in the sheltered areas of river valleys and the verdant corridors created by rural roadways and railway reserves, where trees stand as sentinels of preservation.
- Roads within and on the outskirts of the study area often find themselves veiled by dense roadside vegetation, providing intermittent glimpses of the broader landscape.
- Amidst this greenery, transient openings occasionally reveal transient views of the surrounding terrain, offering fleeting glimpses from the highways and byways that traverse the region. This contrast underscores Bendigo's natural diversity, from the embracing forested hills to the sweeping openness of the northern plains.
- The region's intricate pattern is further reflected in the Vegetation Protection Overlay that blankets areas within and at the edges of National/Regional Parks.
- This overlay extends its guardianship to the southern escarpment of the ridge line and a sprawling forested tract east of the National Park boundary. These areas stand as sanctuaries for the vibrant tapestry of plant life that characterises Bendigo's natural identity.
- Bendigo's ecological mosaic extends beyond aesthetics, delving into practical and zoning considerations. The proposed SLO3, identified within the Big Hill and Mandurang Valley Review, aligns with public open spaces and reservation lands within the Public Conservation and Resources Zone. In some instances the SLO3 'bleeds' out into rural properties where there is significant or notable densities of vegetation.
- According to Dyson (2004) there is a presence of weathered/ deeply weathered granitic terrain immediately below the Big Hill Ranges in the vicinity of the Calder Highway. Evidence suggests a remnant landscape with all the attributes of deep weathering including inherent salinity and soil erosions issues.
- These ancient land surfaces are noted to be sensitive to contemporary farming practices with regard to the subsequent water balance.



Entry to the Lockwood South State Forest



Undulating pastoral land and scattered canopy vegetation, looking north along Ford Road, Harcourt North

Vegetation & Environment

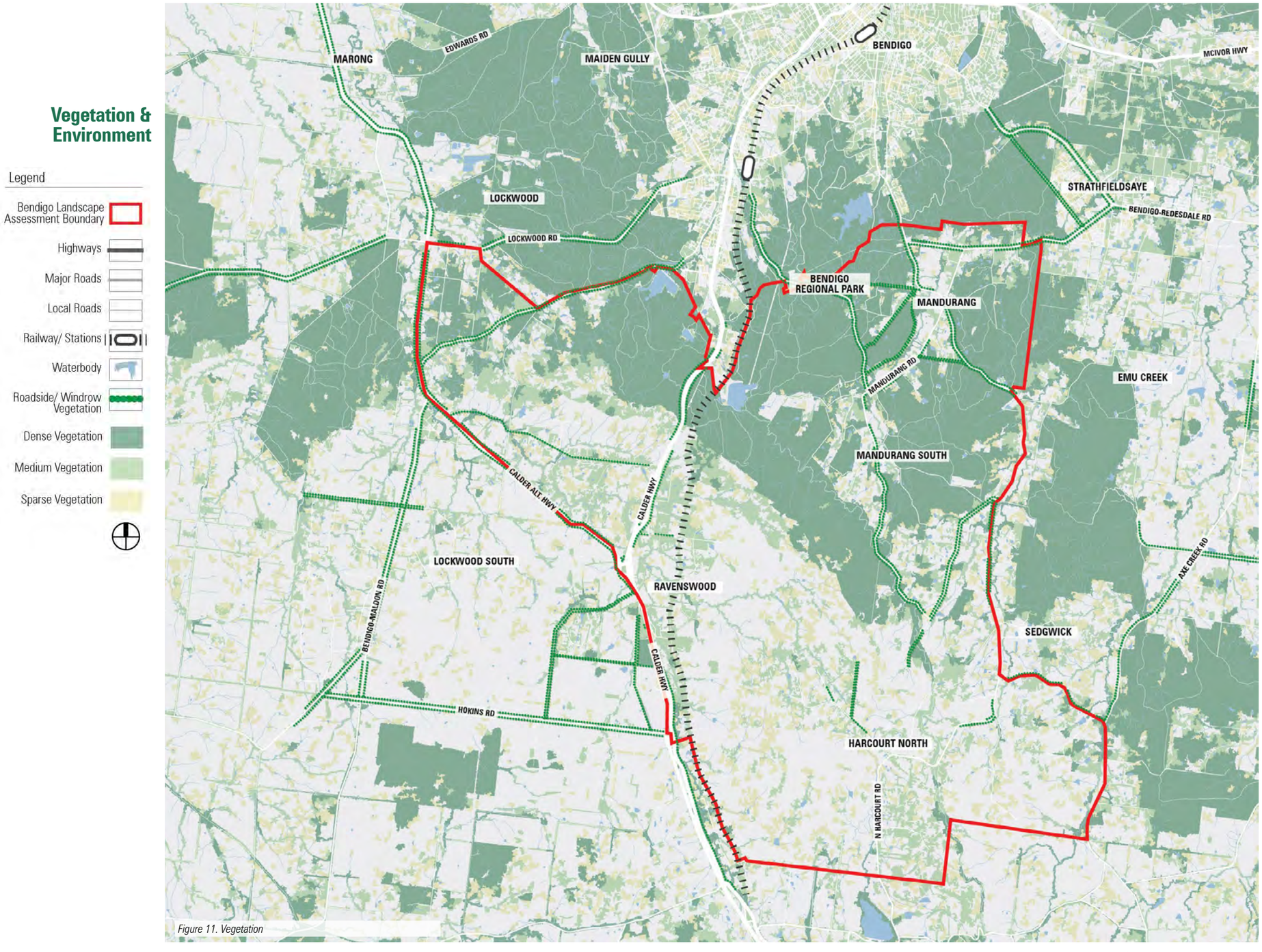


Figure 11. Vegetation

2.10 Heritage & Cultural Sensitivity

Key Observations

Dja Dja Wurrung Country

- The study area is located within Dja Dja Wurrung country. The Dja Dja Wurrung People are the Traditional Owners of a significant area of Central Victoria. Dja Dja Wurrung Country extends north from the Great Dividing Range, including Mount Franklin and the towns of Creswick and Daylesford in the south-east, to Castlemaine.
- The Dja Dja Wurrung People faced profound disruption and displacement due to the early establishment and expansion of European settlement. They continued to be displaced from their traditional lands following the discovery of gold in Central Victoria in 1851.
- Today, the Dja Dja Wurrung People continue to practice their cultural traditions, celebrate their community, and work to achieve their aspirations for Dja Dja Wurrung Country and people.
- In 2013 the Dja Dja Wurrung Clans Aboriginal Corporation entered into an historic native title settlement with the State of Victoria on behalf of all past, current and future Jaara People. A Recognition and Settlement Agreement was made under the Traditional Owners Settlement Act 2010 (Dja Dja Wurrung Country Plan 2014-2034).
- The Agreement formally recognises the Dja Dja Wurrung People as the Traditional Owners of Central Victoria. The terms of the settlement included the transfer of the Bendigo National Park to be jointly managed in perpetuity with the State of Victoria.
- Land within the project study area, particularly those areas of Aboriginal title including Greater Bendigo National Park need to be considered with respect to the rights of the Traditional Owners as outlined under the Natural Resource Agreement. These rights include access to, the use and management of natural and cultural resources on Country.
- A number of relevant strategies are in place including the Dja Dja Wurrung Country Plan 2014-2034, Joint Management Plan for the Dja Dja Wurrung Parks Strategy and the Forest Gardening Strategy 2022-2034. The Forest Gardening Strategy (Galk-galk Dhelkuna) is designed to restore Djaara's traditional landscape management practices including approaches such as cultural thinning (thinning overgrown forests) and culture burning (Djandak Wi) to heal and care for Country.
- The project to identify and protect significant landscape areas around Big Hill and Mandurang valley acknowledges and respects the rights and aspirations of the Dja Dja Wurrung People to continue and practice their culture and customs, and not to exclude traditional owners in their efforts to heal country.



Distant views over the Greater Bendigo National Park an area of joint management with Aboriginal Title

European Settlement

- European settlement in the area began in the 1830s-50s with the establishment of large pastoral holdings, including Mt Alexander Station (later Ravenswood Station).
- Subdivision of the land occurred and sheep grazing became common land uses.
- Over time, tree clearing, weed infestations, erosion, and salinity have occurred since European settlement.
- Infrastructure and housing construction, along with changes to vegetation, significantly altered the landscape's visual appearance.
- Granite quarrying took place around Big Hill, including stone for the Big Hill tunnel's entrance work, constructed in 1862 as a remarkable engineering feat. A monument on Big Hill commemorates workers who lost their lives during this project.
- Early mining activities cleared all forested areas within approximately 16 km of Bendigo, with "One Tree Hill" being named after the sole remaining tree, which was later cut down.
- While parts of the forest regenerated, significant areas remained cleared for purposes like sheep grazing, dairying, and other rural uses. Today, most forests in the region are protected in National and Regional Parks.
- More fertile lands saw forested areas replaced with pastures or horticultural crops, with some indigenous vegetation pockets surviving.
- Mandurang and Big Hill produced wines, fruit, vegetables, and dairy products during the gold era. In 1882, Mandurang/Strathfieldsaye had 29 wineries and contributed 12% of Victoria's wine production. Phylloxera wiped out the vines in the 1890s.
- Two major structures in the Big Hill area are listed on the Victorian Heritage Register: the Melbourne-Bendigo Railway (1862) and the Coliban Main Channel (1877, subsequently modified).
- There are three mining sites at Mandurang listed on the Victorian Heritage Inventory, including the exceptionally well-preserved Tannery Lane Puddler.
- A large old River Red-gum on Mandurang-Sedgwick Road, marking a camp-site of the Burke and Wills Rescue Party, is a National Trust significant tree and an aboriginal scar tree.
- The Mandurang Uniting Church (built 1863) and Chateau Dore Winery are also recognised by the Trust (H7724-0595) (Context 2009).
- Heritage Overlays in the local Planning Scheme cover places such as stone drains, several houses on Tannery Lane, Chateau Dore, Mandurang Church, former Hotel, and Edinburgh Tannery (site).
- In recent times, sheep grazing has continued on larger properties to the south, water rights have been sold to Harcourt landowners, and agricultural production has declined as hobby farms have developed. Cherries are still grown in the area.
- Hobby farm development, in some cases, has led to weed spread, loss of indigenous vegetation in specific areas, and challenges for commercial farmers, including issues with roaming dogs or objections to certain farming activities. This has also contributed to the predominantly open landscape with limited tree cover.

Heritage & Cultural Sensitivity

Legend

- Bendigo Landscape Assessment Boundary
- Railway/ Stations
- Waterbody
- Area of Joint Management With Aboriginal Title
- Aboriginal Cultural Heritage Sensitivity
- Box Ironbark Forest
- Heritage Overlay (HO)

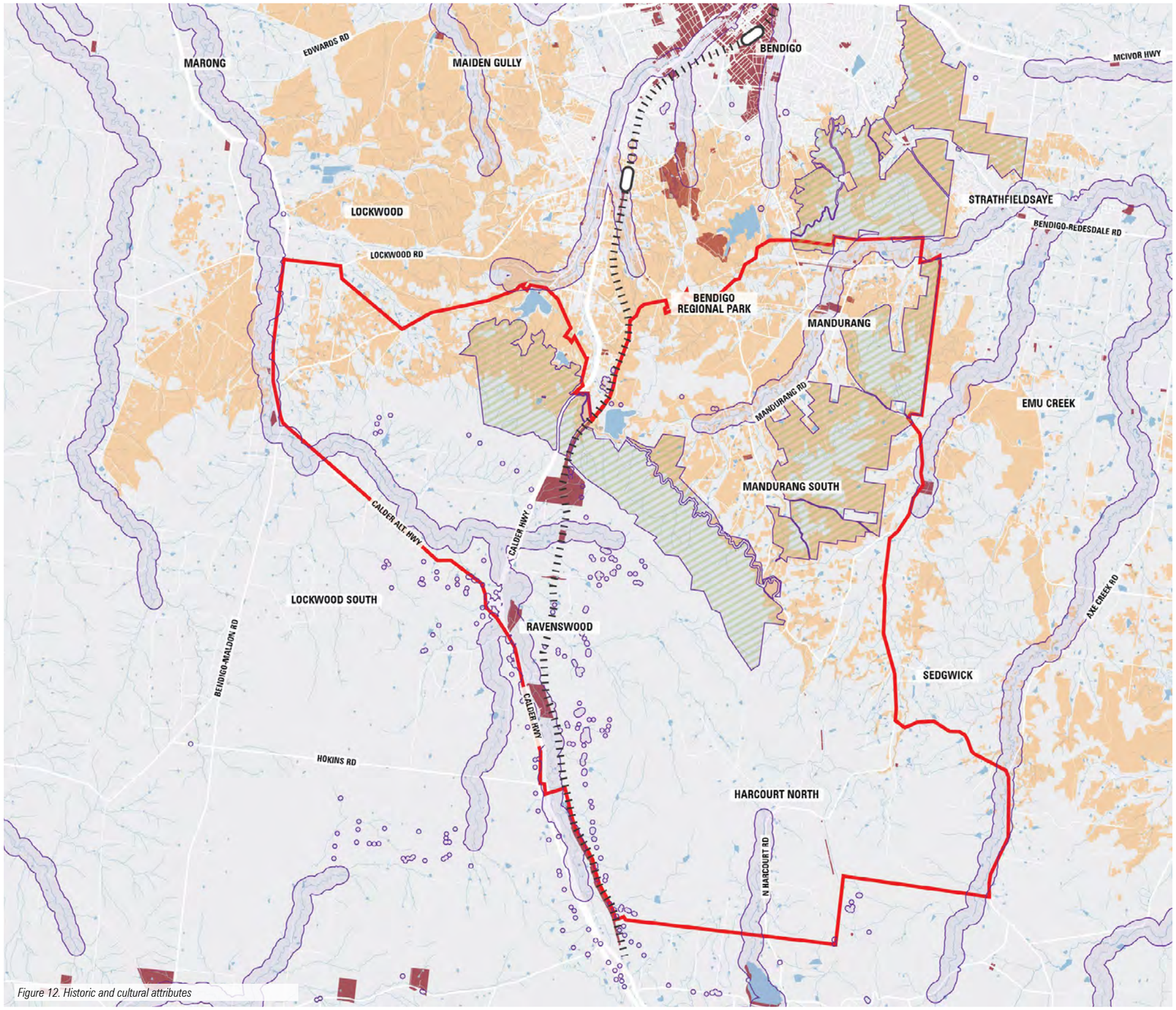


Figure 12. Historic and cultural attributes

2.11 Infrastructure Influences

Key Observations

- Dominant within the landscape, the overhead power lines and transmission towers emerge as prominent features of infrastructure that hold the capacity to significantly impact the visual and aesthetic character of the terrain.
- In instances their presence is notable in the landscape, drawing visual attention in contrast to the scenic qualities that define the area's character. Among the various elements of infrastructure, these power lines and towers stand out as having the most substantial potential to alter the landscape's visual integrity, prompting a careful evaluation of their integration within the broader surroundings.
- Crown land, given its tenure and purpose, is projected to maintain its current state without significant infrastructural developments that could compromise the scenic essence of the landscape.
- The intrinsic nature of this land's tenure inherently safeguards against actions that might jeopardise the visual allure of the surroundings. This assurance stems from the understanding that the preservation of the landscape's aesthetic qualities is of paramount consideration within the framework of Crown land management.
- Integrating pivotal transportation routes, the expansive region is intricately laced with vital thoroughfares and intersections, with the prominent Calder Highway notably threading through its fabric.
- Particularly noteworthy is the recent addition of the highway interchange at Ravenswood. This addition, while subtly interweaving itself into the land's fabric subtly redefines the landscape's dynamic while underscoring the importance of seamless connectivity within the area.
- Within the expanse of park reservation land, a network of unsealed roads and trails contribute to the broader landscape's vista. Especially from elevated points like the majestic Big Hill ridge line, these routes afford panoramic perspectives, further enhancing the landscape's allure.
- Traversing the ridge lines, visitors encounter walking tracks and unpaved roads that occasionally yield captivating vistas, allowing glimpses of the expansive landscape. These instances provide moments of scenic delight, enhancing the multi-dimensional experience of the terrain.



Communication tower at the top of One Tree Hill Regional Park Lookout



Ravenswood highway interchange



Looking north along the Bendigo Railway line, east of Calder Freeway

Infrastructure Influences

Legend

- Bendigo Landscape Assessment Boundary
- Railway/ Stations
- Freeway
- Crownland
- Highway Interchange Works
- Overheard Powerlines
- Transmission Towers
- Communication Tower
- Water Treatment Plant
- Big Hill Tunnel
- Water Reservoirs

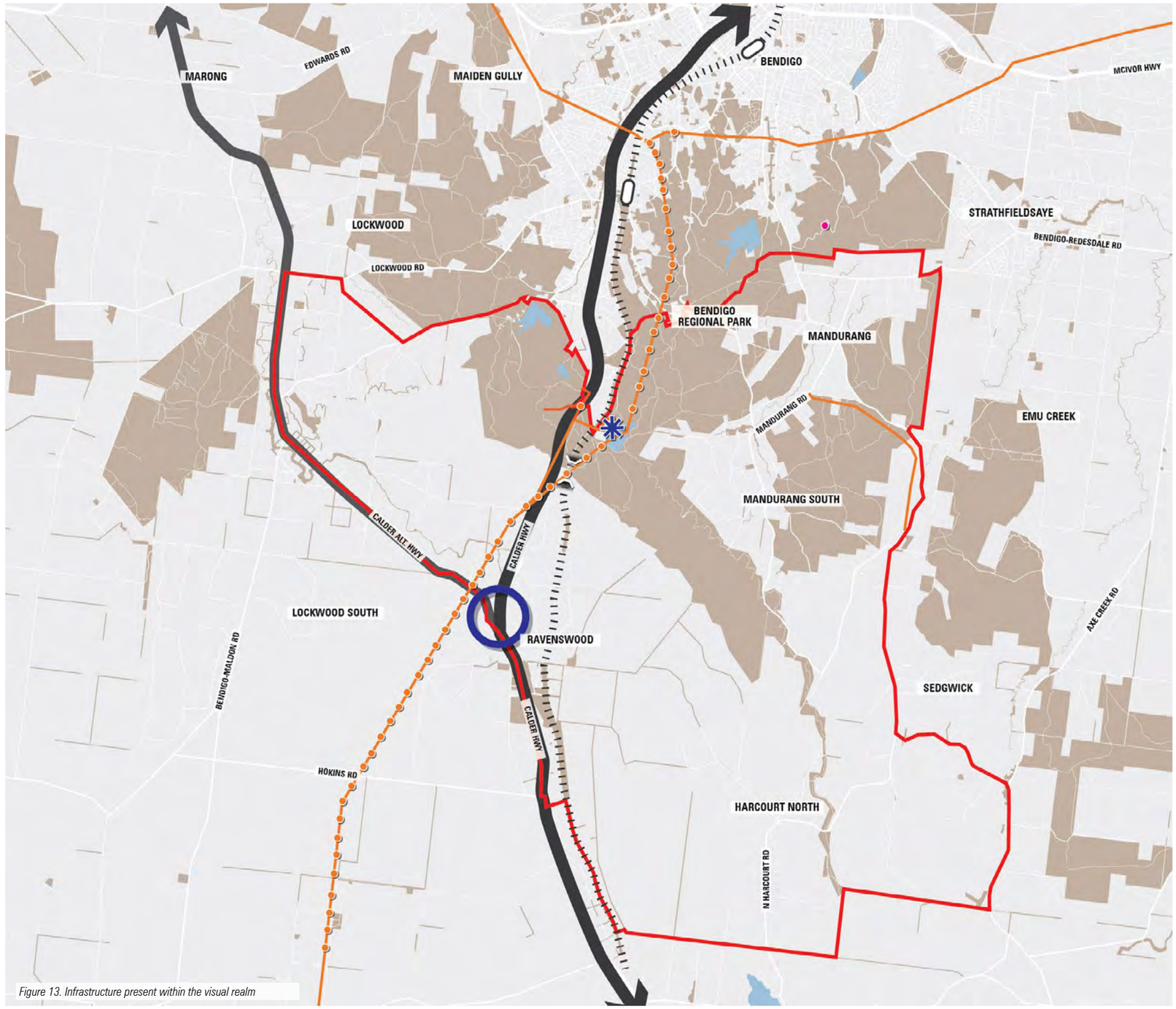


Figure 13. Infrastructure present within the visual realm

2.12 Development Trajectory

Key Observations

- Since the inception of the original study, the spectrum of development applications within and adjacent to the study area has predominantly encompassed relatively modest endeavours. These have predominantly manifested as incremental modifications to existing structures, the erection of sheds, and the division of land into 2-lot subdivisions.
- Notably, clusters of subdivisions featuring 3 or more lots have taken shape in various pockets, both within and proximate to the study area. This is especially evident in locales like Sedgewick to the southwest and within the Mandurang Valley.
- In instances where subdivisions comprise 3 or more lots, discernible alterations include an expanded network of roadways and a heightened presence of dwellings within the landscape. Deeper field investigations would likely unveil the subsequent consequences of these increased subdivisions, such as the interplay of roof lines and reflective materials that might now shape the visual character.
- It is noteworthy that none of these developments occupy the southern foreground of the ridge line. Given the relatively unconstrained nature of this area of land, there is development interest in more intensive residential subdivision and development over the longer term which would potentially reshape the landscape's narrative.
- Telecommunication infrastructure finds its place within this evolving landscape, although their construction appears to have transpired either prior to or concurrently with the original study's timeline in 2015. Their presence signifies a distinct facet of the landscape, interwoven with its contemporary features, providing a glimpse into the region's technological evolution over time.



Private property located along Mandurang South Road, Mandurang South, comprising perimeter canopy vegetation



Single storey detached dwelling at the perimeter of the Greater Bendigo National Park - Keogh Drive, Spring Gully



Private property at the perimeter of the Greater Bendigo National Park - looking north on Pearces Street, Mandurang

Development Trajectory

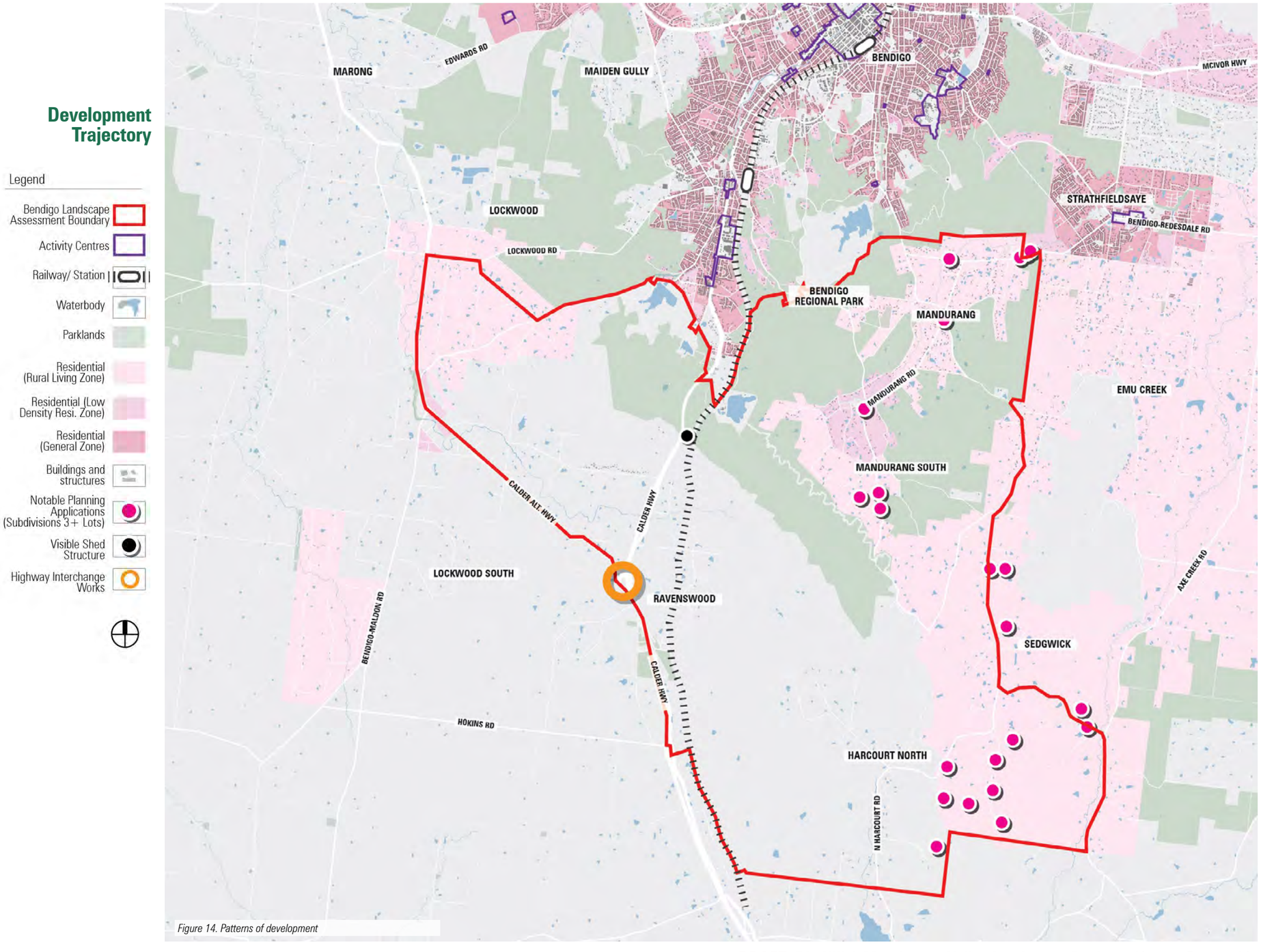


Figure 14. Patterns of development

2.13 Fieldwork Observations

Key Observations

- Northbound along the Calder Highway, the Bendigo entrance experience is more confined by dense established roadside vegetation, with glimpses to more significant topography through breaks in treetops and roadside batter.
- North of the freeway interchange, traversing the Calder Highway, the experience leading towards the southern suburbs of Bendigo is defined by the forest. Traveling northbound looking west, the Big Hill 'summit' is visible but only subtly protrudes above the rolling topography in the foreground, given that the Highway is also gradually rising to traverse over the ridge line.
- Further north along the Highway approaching Kangaroo Flat – treetops of the densely forested National Park and ridge line form the visual horizon, however the topography does not stand out relative to the suburban surrounds.
- Calder Alternative Highway presented a more dramatic visual experience, albeit transient. Travelling southbound to the east, the presence of the ridge line was far more noticeable and dramatic, punctuating the lower topography in the foreground.
- Views were generally available via glimpses through breaks in roadside vegetation, however there was less topographic foreground elements restricting visibility of the ridge line (perhaps the road was more elevated relative to land to its east, or less/lower roadside embankment.
- Given the transient nature of the viewing experience, travelling at 80km/h, it was challenging to fully absorb the view in the absence of static locations such as roadside lookouts.
- The westernmost portion of the ridge line to the west of the highway can be appreciated from along the highway as well as public vantage points such as from Bullock Creek Reserve and the recreational oval.
- Views to this western portion of the ridge line were more prominent from its south, specifically along Mcglashans Road and Bendigo-Maldon Road from where broad and open views were available across the pastured plains.
- Distant but clear views for the ridge line were available along segments of rural residential streets to the southwest including Pinjara Drive and Sunrise Crescent. From these streets in the southwest.
- Relatively panoramic views towards the various landforms of the study area are available from the Ravenswood interchange - but transient and short lasting.
- Travelling further south along the Calder Highway exiting Bendigo, the rising land at the south-eastern portion of the study area is visually prominent. The presence of rock embedded in the landscape is dense and prominent in this views, interspersed throughout clumps of canopy vegetation and pastoral plains. Large areas of land within this area comprises private property - with views therefore limited from either distant locations along the highways and railway line, or closer range views from local roads.
- Views toward landforms from roadside locations (i.e. Jack Cominal Memorial rest spot) are somewhat confined due to dense roadside and paddock vegetation. However glimpses to the granitic uplands and Big Hill are available.
- Belvoir Park Road provides a more localised but unencumbered visual experience of the ridge line and its escarpment, particularly given the lack of dense vegetation along the southern side of the ridge line. Rural residential streets in this vicinity such as Skinner Lane and Grassy Lane offer sweeping views towards the ridge line. These streets have a clear rural character and low density footprint.
- The ridge line rounds out views from the golf course - less prominent from car park but more prominent from the holes further south on lower land (it sits in somewhat of a topographic basin).
- A few streets off North Harcourt road provide opportunity to explore the granitic uplands. These are Ford Road, Bryden Road, Moffra Drive, Fenton Drive. These streets provide clear viewing opportunities to the unique rocky formations interspersed throughout pastoral plains, as well as segments of the ridge line in distant views.
- While this offers a unique and highly aesthetic visual experience, it is very localised due to the low-order status of these no-through roads. The frequency of view would therefore be quite low, with receptors generally limited to residents and their visitors, or potential viewers with pre-existing knowledge of the landscape.
- Mount Alexander was the more prominent landscape feature when travelling eastbound along McIvor Road and southbound along North Harcourt Road.
- Lockwood presents an immersive visual experience within the Box-Ironbark forest, as it is largely flanked by the National Park to both sides. It is a transient visual experience with no static locations on offer.
- Driving through the National Park presents an immersive visual experience through the Box-Ironbark forest. The visual extent is generally limited due to the density of the forest, however this is to be expected.

Fieldwork Observations

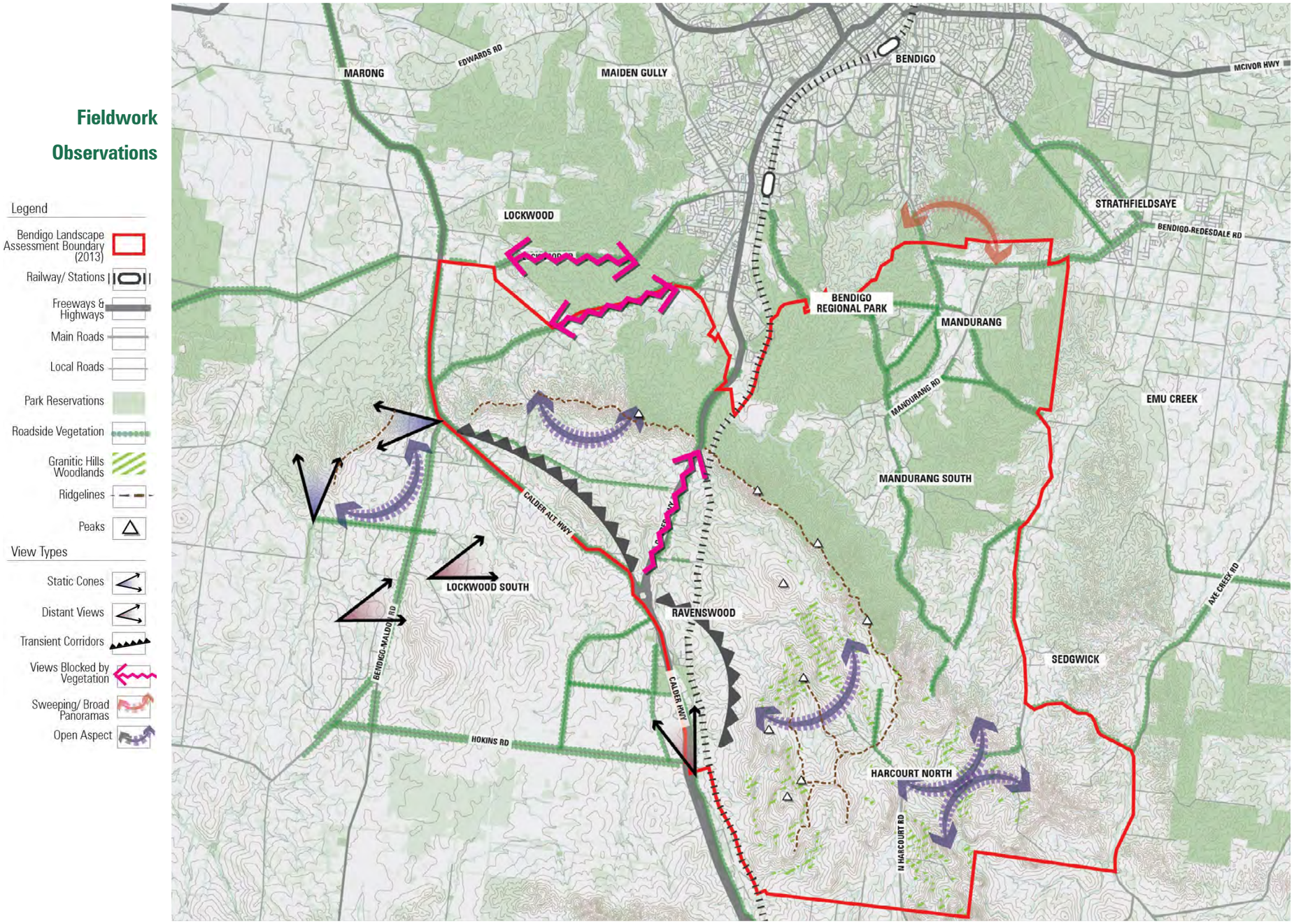


Figure 15. Fieldwork observations from site visit conducted on 28th August 2023



Part 3 Visual Analysis

3 Visual Analysis

3.1 Overview

Supporting desktop and fieldwork analysis of the study area, visual analysis seeks to understand the visibility of key landscape features and how they are experienced. The viewshed analysis is undertaken early on in the assessment as a means to ascertain the full extent of technically feasible views to and within the study area from the surrounding landscape.

This section first focuses on the visibility of the Big Hill Ridge Line and the connected Granitic Uplands, recorded through analysis and fieldwork as being equal or higher in the topographic realm the Big Hill Ridge Line. The presence and density of granite boulders immersed within the agricultural landscape are noticeable from short and long distant views and contribute to the unique experience of arriving to and departing from Bendigo.

To understand the relationship between Big Hill and the Granitic Uplands and the surrounding landscape within the visual realm, visual analysis has followed the following steps:

1. Determining the 'break of slope' of the Big Hill Ridge Line and Granitic Uplands.
2. Understanding the visibility of the 'break of slope' within the broader landscape through undertaking viewshed analysis from its alignment.
3. Analysing the viewshed to identify areas and locations from where the 'break of slope' has high visual exposure.
4. Undertaking viewshed modelling from each of these locations to confirm the visibility of the 'break of slope' and to inform fieldwork.
5. Undertaking fieldwork to the identified locations of high visual exposure, to begin identifying views that are key to experiencing the valued landscape attributes of the study area.

3.2 Viewshed Methodology

A viewshed is defined as the surface area or terrain visible from a given viewpoint. It is also the area from which that viewpoint or series of viewpoints may be seen. This is referred to as the 'intervisibility' relation. Although the viewshed plans shown only the visible terrain from a specific viewpoint, the visibility between two points depends upon the presence of on-ground obstacles, such as trees and buildings along the sight-line which connects the two points. Such obstacles may obstruct or reduce the reciprocal vision of the same two points.

The approach is to identify this extent of potentially visible terrain from a specific point, as a basis for ground proofing the results through extensive fieldwork and landscape assessment. It is important to emphasise that the viewshed analysis will yield a much broader extent of views as the study is based on topography only and does not take into consideration the restrictive impact on views from built form and existing vegetation.

Viewsheds in this analysis have been generated from a Digital Elevation Model (DEM) created using 10m contour data converted into a 10m raster grid using QGIS.

Utilising Rhino terrain and based on the concept of intervisibility described above, a projection was simulated at a height of 1.7m above the ground radially to the surrounding terrain. This height was selected to represent the height of an average viewer. The objective of this process is to ascertain all locations that are conceivably visible from a particular location. This analysis is based on topography only and does not consider built form, vegetation or any other potential visual obstruction.

The resultant map provides an illustrative description of the viewshed from a specific point, whereby the potentially visible terrain is shown coloured in green. Areas not visible are left uncoloured.

3.3 Viewpoint Selection

3.13.1 Static Locations

Viewshed analysis provides insight into the visibility both to and from a point of interest. As an initial step in identifying land within the study area with visual access to the Big Hill Ridge Line and Granitic Uplands, the alignment of the 'break of slope' determined in previous studies used as the viewshed origin, formed by points created at 100m intervals.

This allows a cumulative viewshed to be created, to reveal land within the study area with varying levels of visual exposure to the 'break of slope' and land above it. The potential viewpoints for further viewshed analysis are selected within publicly accessible areas, typically along roads and at intersections - where they are recorded to have moderate to high levels of visual exposure to the subject landscape features.

Each viewpoint has also been assessed through subsequent field work to review the outcomes of the viewshed analysis. This process is necessary in order to account for the potential screening and filtering effect on views caused by existing vegetation and built form.

It is important to reinforce that the viewshed analysis maps are based on topography only and do not take into account the screening effects of other elements in the landscape such as existing vegetation and built structures that further obscure views. Typically the actual view from the ground will be reduced once these factors are taken into consideration.

3.13.2 Transient Views

The above process is oriented to identifying static viewpoints. As confirmed during earlier fieldwork, frequent visual experiences of the Big Hill and the Granitic Uplands are available via the Calder Highway/Freeway, Calder Alternative Highway and the railway corridor.

As these offer a transient viewing experience rather than a static one (unless the vehicle or train is static), viewpoints at 500m intervals were created along the centreline of the railway or road carriageways (both directions) to inform cumulative viewsheds across the landscape.

3.4 Corridor Views

3.4.1 Calder Highway

The cumulative viewshed from the Calder Highway corridor points is illustrated on Figure 16.

Points were generated at 300m intervals along the highway alignment, including both carriageways where they are separated.

The viewshed shows that the viewing experience towards the south is generally confined to close range views of the Granitic Uplands given the proximity of its sloping escarpment to the highway corridor.

The viewshed illustrates that northward views from the south predominantly terminate at the Big Hill Ridge Line. The metamorphic crescent of the ridge line is present across the viewshed, but most visible where it is dissected by the highway including the Big Hill 'summit' located to its immediate west.

Generally, the viewshed has limitations due to the presence of roadside embankments and the alignment of the highway traversing beneath the Ravenswood Interchange - whereas other roads traversing the roundabout are positioned on a more elevated plane.

Fieldwork confirmed the presence and role of roadside vegetation in further filtering views. Junctions with east-west oriented roads, slip lanes and stopping points - such as the northbound service station and truck stop, provide both transient and static viewing opportunities due to 'openings' through vegetation and embankments or positions on higher topography.

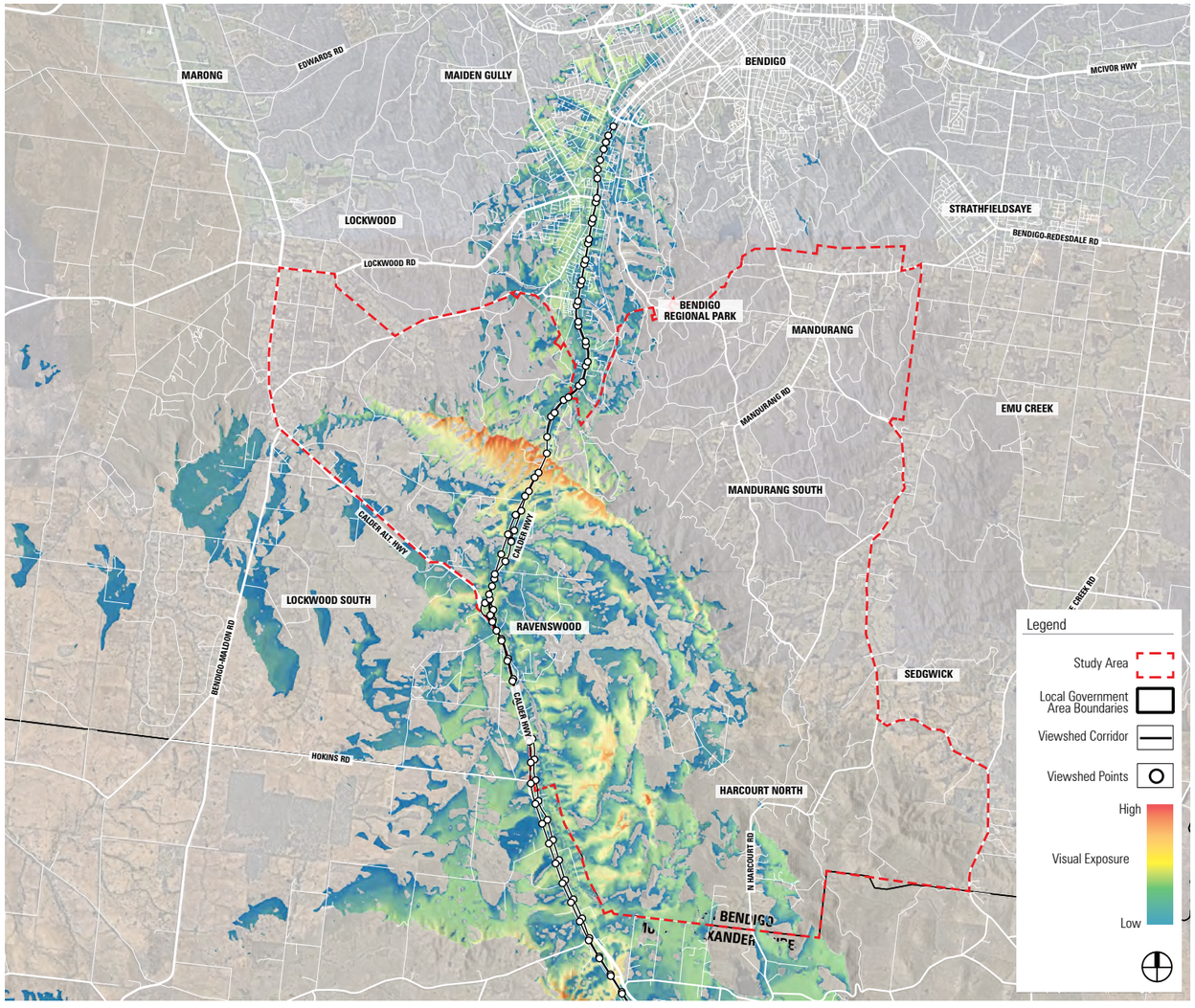


Figure 16. Cumulative viewshed of Calder Highway corridor points

3.4.2 Calder Alternative Highway

The cumulative viewshed from the Calder Alternative Highway corridor points is illustrated on Figure 17.

Points were generated at 300m intervals along the centreline of the road alignment.

The viewshed illustrates the broad visibility of metamorphic crescent of the Big Hill Ridge Line and its southern escarpment - of which are balanced in visibility along the highway viewing experience, including hills and ridges of the crescent to the west of where the road corridor dissects the ridge line.

While the northern escarpment registers visibility due to the Calder Alternative Highway extending north of the ridge line in the analysis, the viewshed shows that the ridge line is the terminus of many views - particularly towards the east.

In the distance, the western escarpment of the rising Granitic Uplands is visible in a moderate number of views.

Fieldwork confirmed the findings of the viewshed analysis, where the ridge line is prominent in views looking east from the Calder Alternate Highway. The ridge line reveals itself through breaks in roadside vegetation and at crests along the road. The viewing experience is transient with limited formal opportunities to stop for static viewing opportunities.

Visibility to a broad extent of the metamorphic crescent is available on approach to the Ravenswood Interchange southbound along the Calder Alternative Highway, where a broad panorama reveals itself to approaching and slowing motorists.

The viewshed also indicates high visual exposure of higher topography located between Bendigo-Maldon Road and the Calder Alternative Highway. Based on fieldwork, visibility to this land was limited due to roadside embankments on the southwestern side of the Calder Alternative Highway, and dense roadside vegetation.

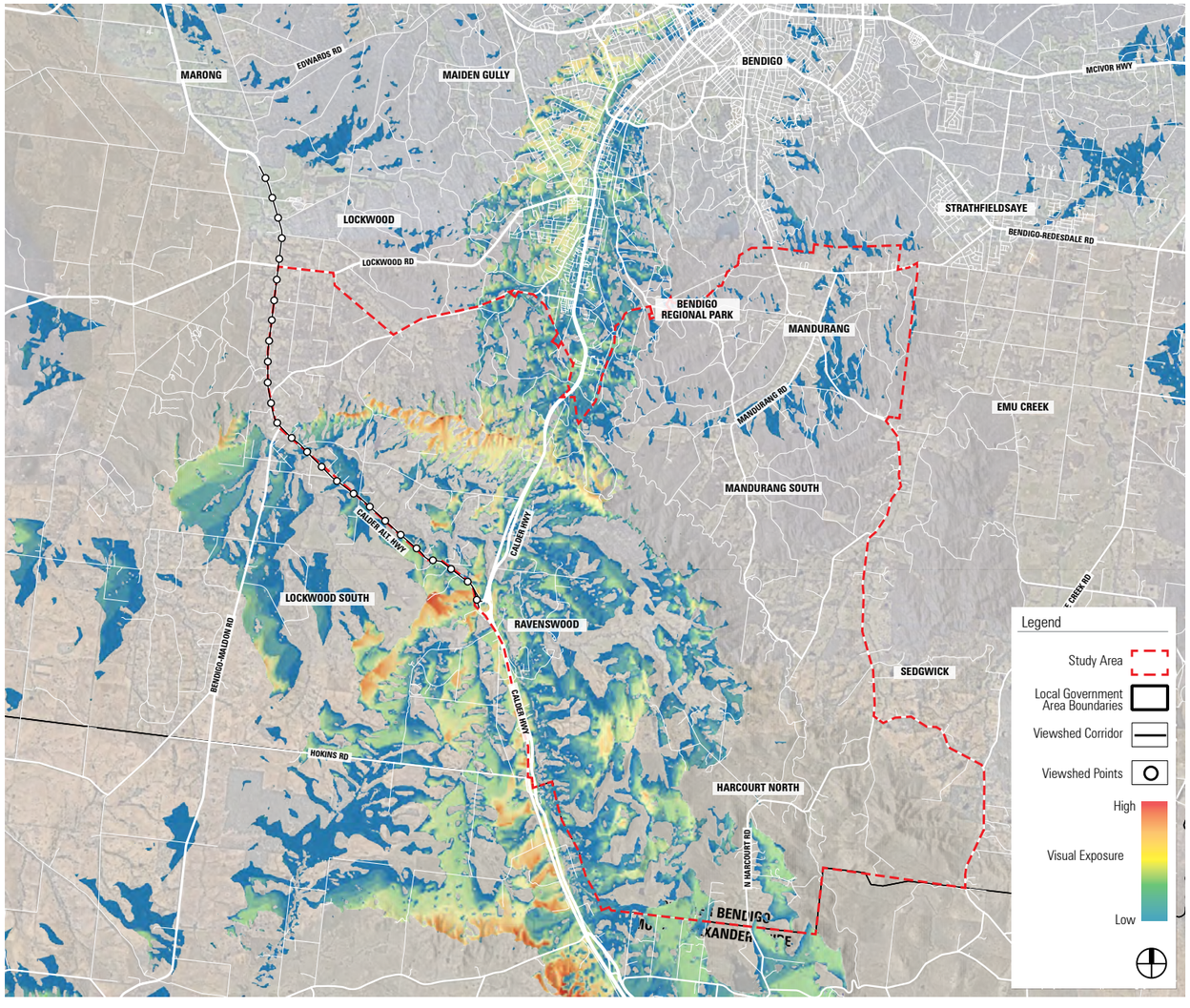


Figure 17. Cumulative viewshed of Calder Alternative Highway corridor points

3.4.3 Railway Corridor

The cumulative viewshed from the railway corridor points is illustrated on Figure 18.

Points were generated at 300m intervals along the centreline of the railway alignment.

The viewshed illustrates a generally confined extent of visual exposure to the south, with views typically terminating at the escarpment of the adjacent Granitic Uplands or intermediate foreground and middleground hills (some of which are located within the 'Ravenswood Run' site).

The metamoprhic crescent of the ridge line is present, however more prominently exposed towards the west of the Calder Highway.

Fieldwork is to date limited to intersecting roads such as Ravenswood Street and Beilharz Road. At these particular locations, visibility was limited to dense roadside vegetation or embankments lining the railway. Further fieldwork is required to capture the transient experience enjoyed by railway passengers.

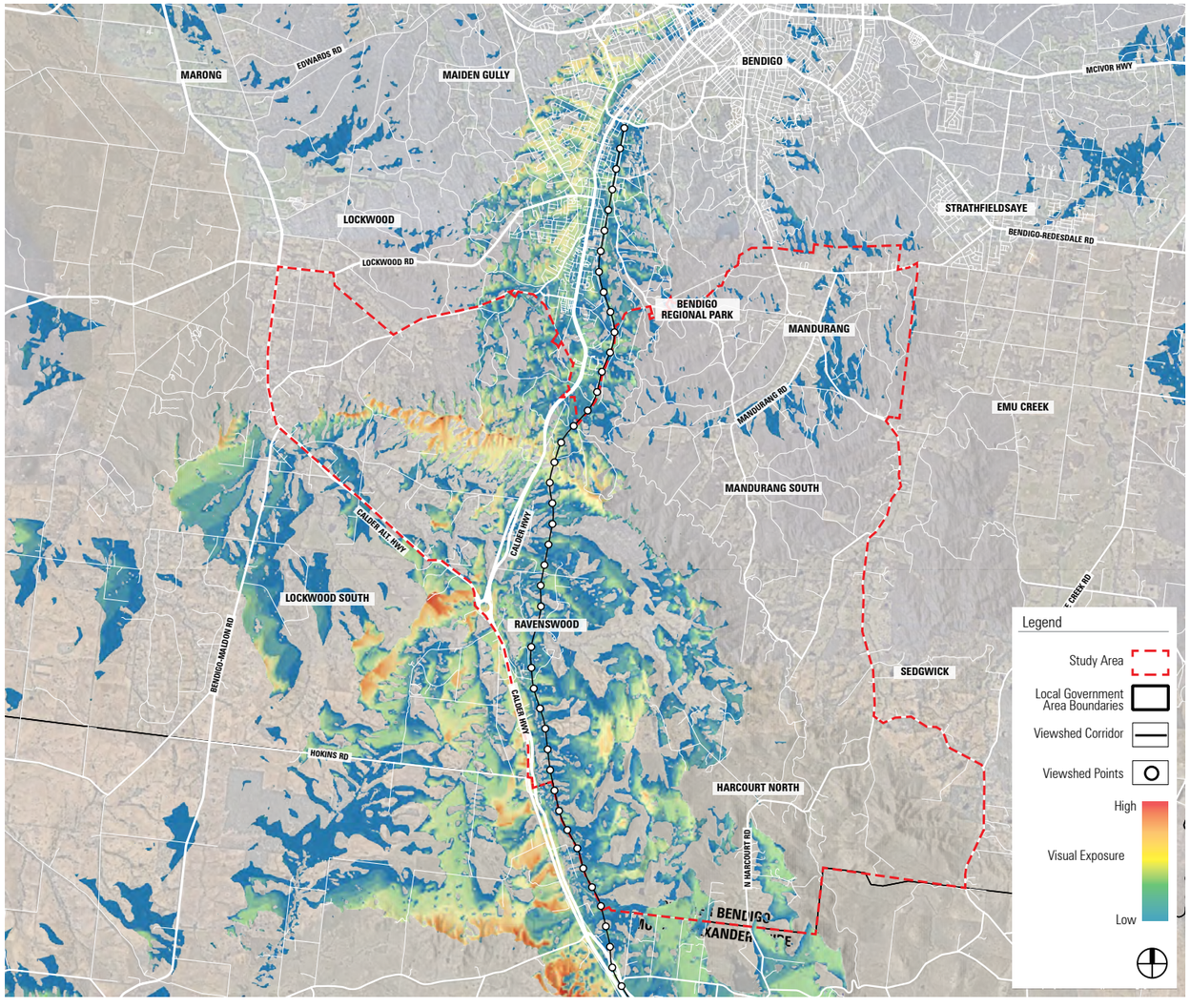


Figure 18. Cumulative viewshed of railway corridor points

3.4.4 Cumulative Viewing Corridor Viewshed

Figure 19 illustrates the cumulative viewshed of all corridor points when combined.

The viewshed illustrates that the full metamorphic crescent of the ridge line is experienced within the transient viewing corridors. It also highlights the visual contrast between the ridge line and its southern escarpment with land within the foreground of views coloured in blue or uncoloured.

It also highlights the visual prominence of the western escarpment of the Granitic Uplands in close proximity to the highway and railway corridors. Based on fieldwork, this area (which forms some of the higher land within the topographic setting as illustrated in earlier elevation and slope mapping), is also visible from longer distant southbound and eastbound views - forming the visual backdrop on departure from Bendigo.

As illustrated by the sharp contrast between red and lighter green/blue colours on the northern side of the ridge line, the ridge line is a consistent element in forming the visual terminus of many views. This highlights its visual prominence within the setting.

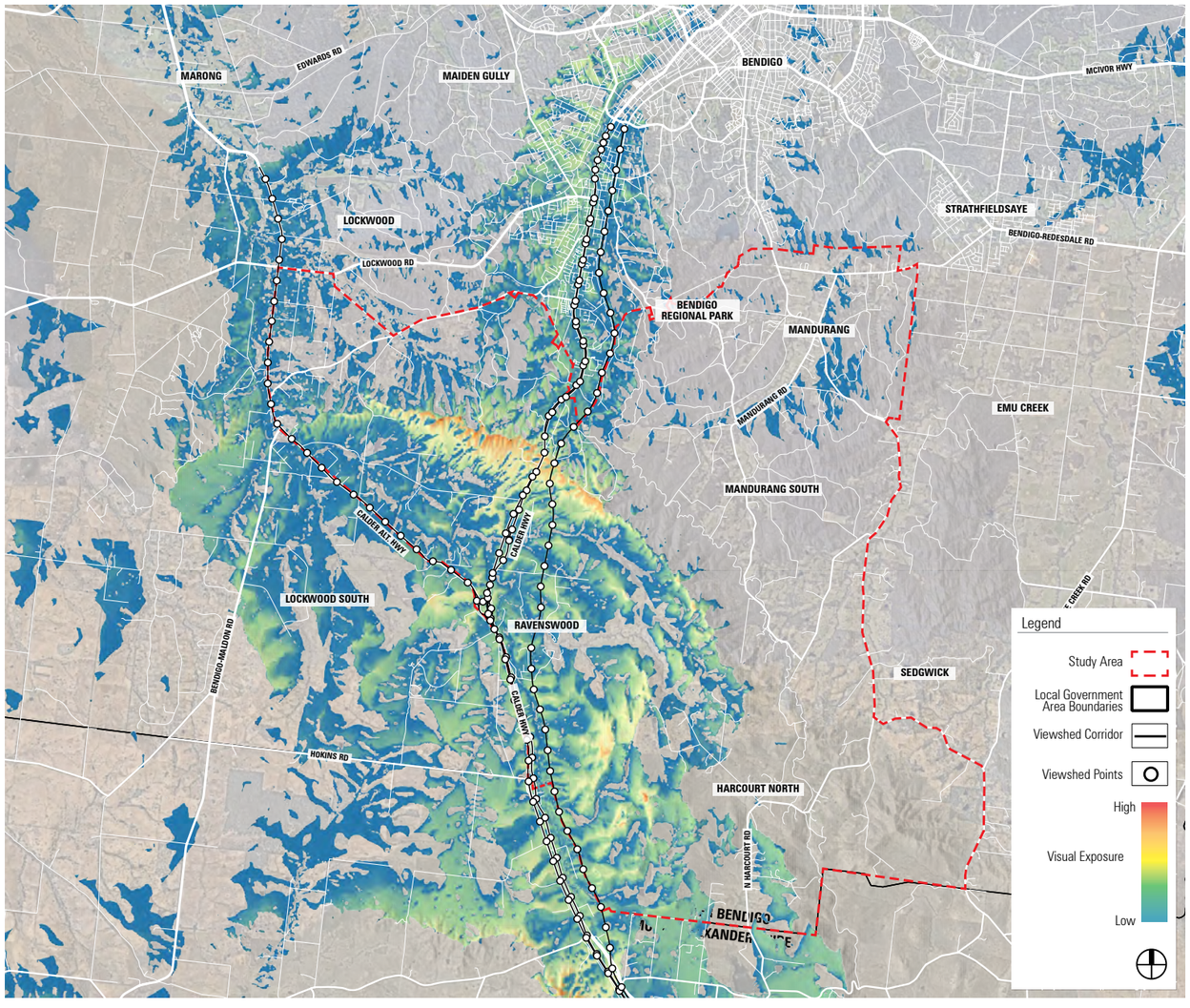


Figure 19. Cumulative Vviewshed of all corridor points

3.5 Viewpoint Analysis

3.5.1 Viewpoint Selection

Points were generated at 300m intervals along the 'break of slope' (determined to be contour lines at 300-350m within the 2017 Peer Review), to understand its visibility within the broader landscape.

Within areas registering high visibility, points within the public realm (along key roads, intersections and other stopping places) were selected for further visual analysis - seeking to paint a picture of the typical visual experience of Big Hill and the Granitic Uplands. The viewshed and these points are illustrated on Figure 20 and are documented below:

View	Location
1	Calder Highway Service Station / Truck Stop
2	Hokins Road & Landry Lane
3	Bendigo-Maldon Road and Pinjara Drive (South)
4	Bendigo-Maldon Road and Pinjara Drive (North)
5	McGlashans Road & Springvale Road
6	Bendigo-Maldon Road and Suttons Lane
7	Calder Alternative Highway near Wingrave Road
8	Calder Alternative Highway
9	Calder Alternative Highway near Fentons Lane
10	Fentons Lane
11	Ravenswood Interchange A
12	Ravenswood Interchange B
13	Ravenswood Interchange & Beilharz Road
14	Hilda Drive
15	Belvoir Park Road West
16	Belvoir Park Road
17	Belvoir Park Road & Skinner Lane
18	Skinner Lane & Granite View
19	Skinner Lane & Grassy Lane
20	Calder Highway Southbound
21	Calder Highway & McDonalds Lane
22	North Harcourt Road & Ford Road
23	North Harcourt Road & Barker Road
24	Broadway Street & O'Keefe Street
25	Francis Road Power Station

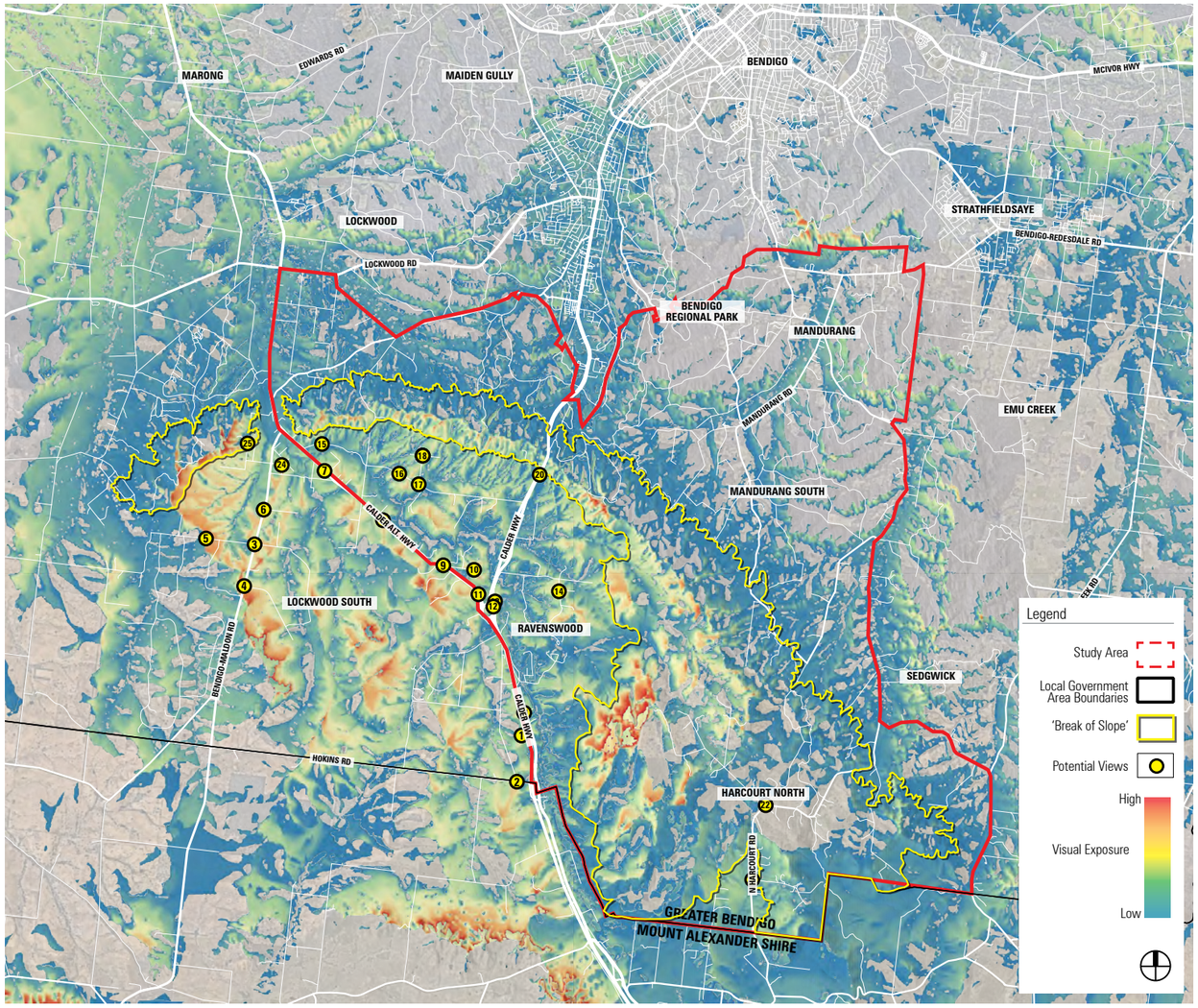


Figure 20. 'Break of slope' cumulative viewshed

3.5.2 Viewshed Location 1 - Calder Highway Service Station / Truck Stop

Viewshed Analysis

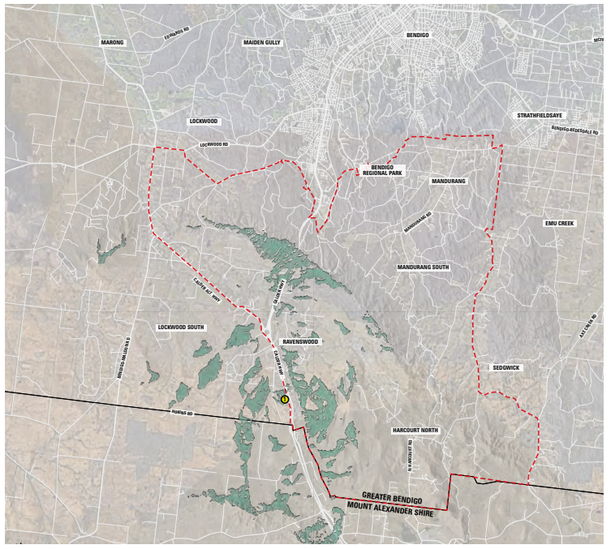


Figure 21. Location 1 Viewshed

Viewpoint 1 is located at the truck stop reserve / service station on the northbound side of the Calder Highway, north of Hokins Road. The results of the viewshed analysis have been mapped and areas of potential visual exposure are shown shaded in green on the opposite map.

The analysis reveals several visually exposed areas within the study zone. Notable instances include elevated terrain east of Calder Highway at the foot of the prominent ridge line. Similarly, there are discernible pockets of visual exposure to the west, typically aligning with topographical features. The northern ridge line serves as a significant termination point for visibility and stands out prominently in the analysis.

Fieldwork Assessment

The image depicts a westward view across Calder Highway towards the Granitic uplands. In the foreground, open grasses within the petrol station allotment offer an unobstructed view to the ridge line beyond.

A band of canopy windrow vegetation along the Calder Highway characterises the middleground. The distant elevated terrain near Harcourt North forms the horizon, revealing granite outcrops and scatterings of native canopy vegetation.

This view, prominently exposed, is likely to be observed primarily by individuals stopping at the petrol station.



Figure 22. Location 1 View

3.5.3 Viewshed Location 2 - Hokins Road & Landry Lane

Viewshed Analysis

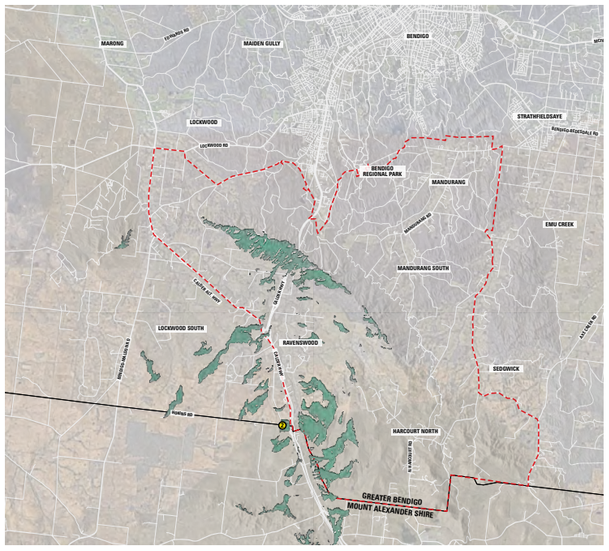


Figure 23. Location 2 Viewshed

Viewpoint 2 is located at the intersection of Hokins Road and Landry Lane.

Not dissimilar to Viewpoint 1, the examination identifies various patches with visual prominence in the study zone. Noteworthy examples encompass elevated terrain to the east of Calder Highway, situated at the base of the prominent ridge line.

Similarly, identifiable pockets of visual exposure are found to the west, generally corresponding with topographical features. The northern ridge line acts as a notable endpoint for visibility, standing out prominently in the analysis.

Fieldwork Assessment

The image below shows the view from this location looking north-west at the intersection of Hokins Road and Landry Lane.

The view looks across predominantly cleared undulating pasture, where a ridge line in the vicinity of Harcourt North appears prominently in the view and features scattered stands of trees and vegetation.

A band of windrow canopy plantings lines the edges of the Calder Highway in the middleground restricting aspect to the base of the hill.

In the distance, elevated views of the Granitic Uplands are visible and prominent due to their proximity. In the distance towards the north is the Big Hill Ridge Line forming the horizon behind intermediate hills and a glimpse of the petrol station and associated signage to the north.

This view is primarily observed by local motorists accessing private properties, reflecting the likely relatively low traffic volume on these roads.

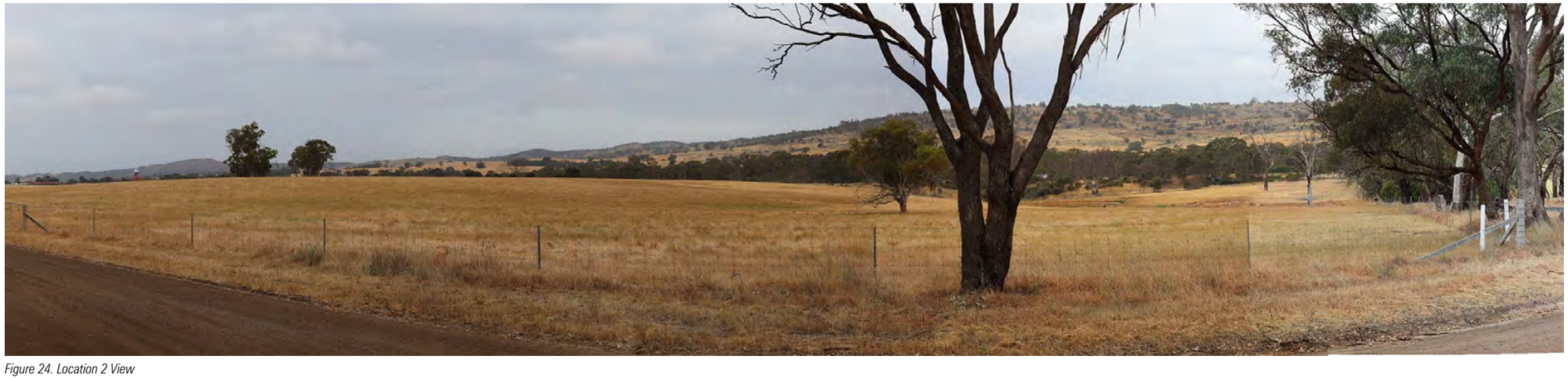


Figure 24. Location 2 View

3.5.4 Viewshed Location 3 - Bendigo-Maldon Road & Pinjarra Drive (South)

Viewshed Analysis

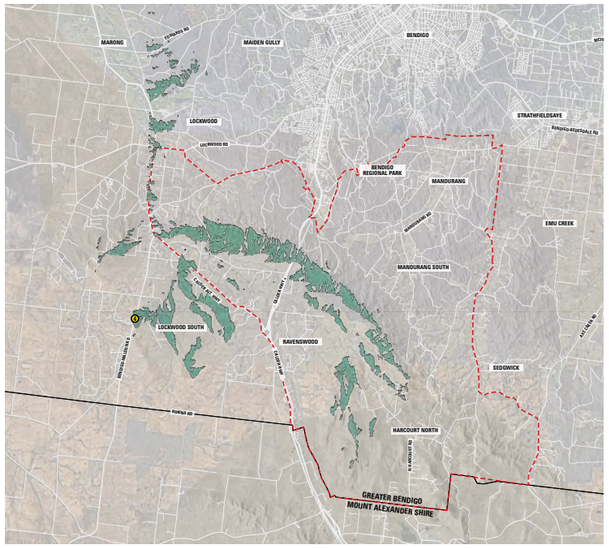


Figure 26. Location 3 Viewshed

Viewpoint 3 is located at the intersection of Bendigo-Maldon Road & Pinjarra Drive (south).

This analysis most clearly identifies the sweeping elevated ridge line in the distance, assisted by its relatively elevated position within the broader landscape. Other notable patches are revealed in close proximity as one looks west of the viewshed origin. Patches of visual exposure also notable lining the eastern edge of the Calder Alternative Highway to the north.

Study Area

Viewshed Origin

Viewshed

Fieldwork Assessment

The image captures the westward view from this location across the property at Pinjarra Drive. In the foreground, there's open pastoral land featuring a dam and grazing horses.

The landscape includes scattered native vegetation, and the elevated position provides a perspective of the distant farming land on undulating topography. Distant views reveal the metamorphic crescent of the Big Hill Ridge Line that extends across the entire panorama.

This viewpoint is primarily observed by passing motorists and local residents, offering a notably open perspective compared to other sections of this road, where windrow plantings typically filter views to open farmland beyond.



Figure 25. Location 3 View

3.5.5 Viewshed Location 4 - Bendigo-Maldon Road & Pinjarra Drive (North)

Viewshed Analysis

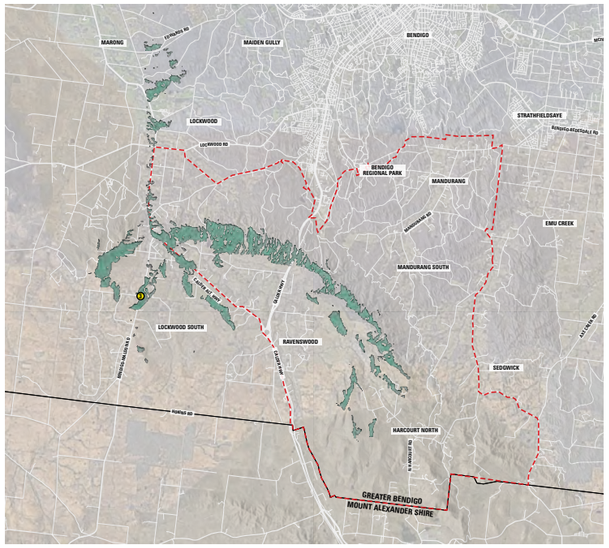


Figure 27. Location 4 Viewshed

Viewpoint 4 is located at the intersection of Bendigo-Maldon Road & Pinjarra Drive (north).

This analysis highlights two prominent areas within the potential viewshed. Firstly, the sweeping Big Hill Ridge Line is notably distinctive, marked by its elevated topography, standing out in the landscape, and serving as the visual termination point.

Secondly, the land on either side of the Calder Alternative Highway extending north toward Marong is theoretically visible, yet in practicality, may be obstructed by the prominent roadside vegetation.

Study Area

Viewshed Origin

Viewshed

3.5.6 Fieldwork Assessment

The image below shows the view from this location looking north with distant aspect to the Big Hill Ridge Line Beyond.

In the foreground is cleared and relatively flat pastoral land, while the flanks of the image reveal canopy windrow plantings that line the edges of Bendigo-Maldon Road and Pinjarra Drive.

The property at Pinjarra Drive is noted in the middleground surrounded by a mix of native trees and canopy plantings. This property and associated plantings restrict views to the distant ridge line only permitting narrow glimpses from this vantage point.

This view is most likely experienced by passing motorists or local residents access rural properties in the vicinity.



Figure 28. Location 4 View

3.5.7 Viewshed Location 5 - McGlashans Road & Springvale Road

Viewshed Analysis

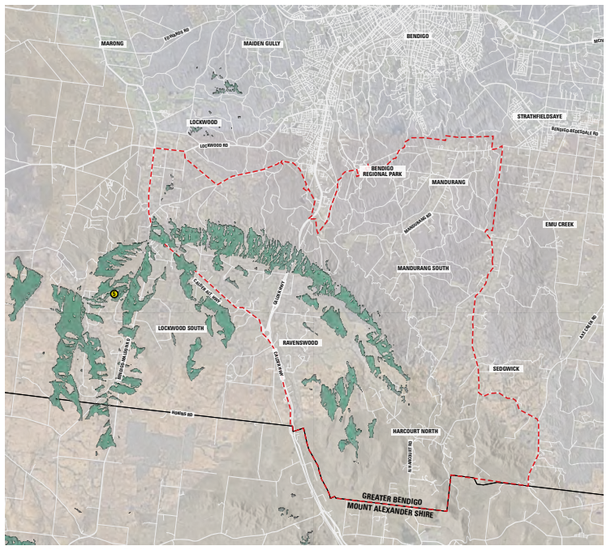


Figure 30. Location 5 Viewshed

Viewpoint 5 is located at the McGlashans Road and Springvale Road junction in Lockwood South.

Similar to Viewpoint 4, this location suggests that the prominent and distant Big Hill Ridge Line is theoretically visible from this vantage point. The land in the immediate vicinity of the viewpoint origin is visible from all angles, primarily due to its elevated position relative to the surrounding terrain.

Study Area

Viewshed Origin

Viewshed

3.5.8 Fieldwork Assessment

The image below shows the view from this location looking north from McGlashans Road at the junction of Springvale Road.

The foreground displays an open vista of cleared pastoral land, although the prevalent vegetation along this road generally screens views of the broader region. Notably, exotic plantings along creek lines and internal roads of 98 McGlashans Road form prominent features in the middleground.

However, the presence of power poles and fence posts, man-made elements in the landscape, diminishes the scenic appeal of the elevated Big Hill Ridge Line in the distance.

This viewpoint is primarily observed by passing motorists and local residents, offering a notably open perspective compared to other sections of this road, where windrow plantings typically filter views to open farmland beyond.



Figure 29. Location 5 View

3.5.9 Viewshed Location 6 - Bendigo - Maldon Road & Suttons Lane

Viewshed Analysis

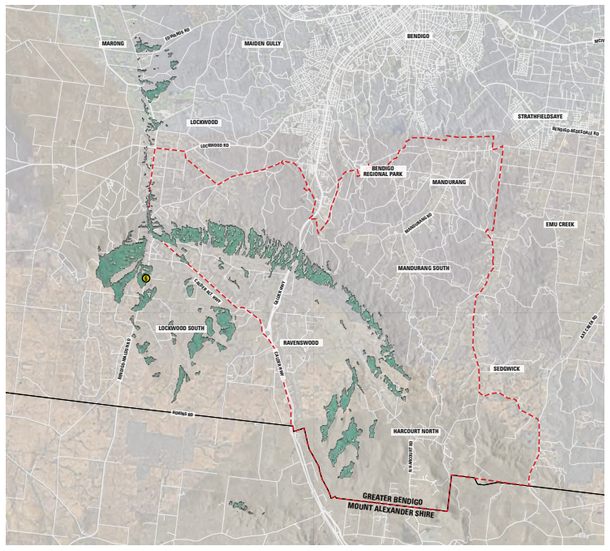


Figure 31. Location 5 Viewshed

Viewpoint 6 is located at the Bendigo-Maldon Road and Suttons Lane junction.

There is a notable 'gap' within the Big Hill Ridge Line, dissected by Calder Alternative Highway which theoretically permits views towards the north. Once again, the Big Hill Ridge Line features prominently within this view, with other patches of elevated terrain extending towards the south-east as revealed from the viewshed analysis.

Study Area

Viewshed Origin

Viewshed

3.5.10 Fieldwork Assessment

The image below shows the view from this location looking west from the Bendigo-Maldon Road and Suttons Lane junction.

The focal point of the foreground in this image is the fence line marking private property. The land gradually slopes downward to grazing pastures adorned with scattered native canopy vegetation along the banks of creeks and tributaries that traverse the property. As the land gently ascends in the background, the imposing Big Hill ridge line becomes a prominent feature, although partially obscured by the mentioned trees.

Similar to other viewpoints along Bendigo-Maldon Road, this perspective is likely to be encountered by passing motorists and local residents accessing their rural properties. Notably, this viewline provides a relatively unobstructed panorama of the surrounding landscape, a departure from the usual filtering effect of roadside vegetation.



Figure 32. Location 5 View

3.5.11 Viewshed Location 7 - Calder Alternative Highway & Wingrave Road

Viewshed Analysis

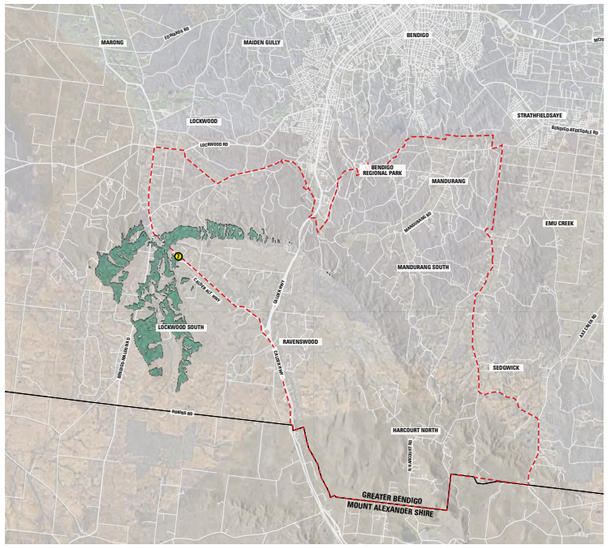


Figure 33. Location 7 Viewshed

Viewpoint 7 is located at along the Calder Alternative Highway, in proximity to Wingrave Road.

Located at the base of the Big Hill Ridge Line, this viewpoint offers a relatively confined viewshed in comparison to others tested within the broader analysis.

Visible patches are noted in relative proximity to the viewshed origin, west and towards Lockwood South. Views towards the eastern portion of the ridge line are inhibited by a small hill immediately east of the viewshed origin point.

Study Area

Viewshed Origin

Viewshed

3.5.12 Fieldwork Assessment

The image below shows the view from this location looking north-west from Calder Alternative Highway.

The foreground features roadside grasses and scattered windrow plantings, acting as a filter for views toward rural properties and the ridge line beyond.

The sloping topography minimises the presence of a distinct 'middleground,' yet the roof line of the property on Wingrave Road provides evidence of rural and semi-rural properties that characterise the broader area. Notable man-made features along this road include these properties, defining the landscape. The Big Hill Ridge Line becomes prominent in the background, adorned with dense vegetation covering the hill.

This is considered a highly transient view, especially given the relatively high-speed of vehicles along this road. It is unlikely that people would stop here to experience this view.



Figure 34. Location 7 View

3.5.13 Viewshed Location 8 - Calder Alternative Highway

Viewshed Analysis

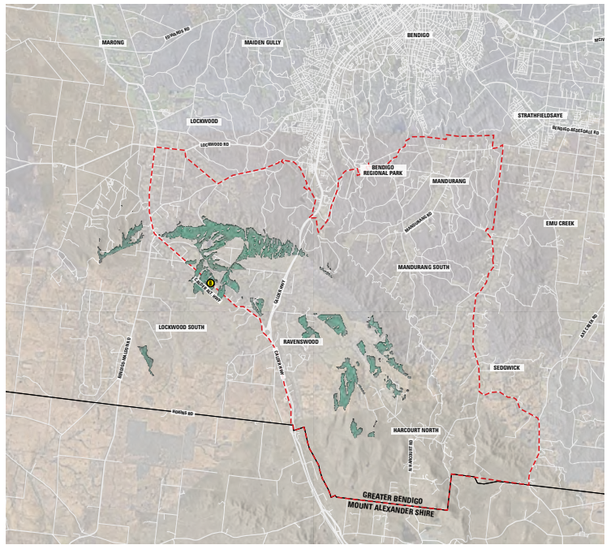


Figure 35. Location 8 Viewshed

Viewpoint 8 is located along Calder Alternative Highway, in proximity to the property at 376 Calder Highway Alternative, Ravenswood.

Scattered sections of the northern ridge line prominently feature in this view, while other areas to the southwest unveil patches of notably elevated terrain. The embankment of a small hill in Lockwood South is effectively the sole visible land west of the Calder Highway.

Study Area

Viewshed Origin

Viewshed

Fieldwork Assessment

The image below shows the view from this location looking north-east along Calder Alternative Highway.

In the foreground, windrow canopy trees flank the road, with fences delineating rural property boundaries and open paddock areas. Beyond the property of 376 Calder Alternative Highway, the land undulates, adorned with scattered canopy vegetation. In the distance, the Big Hill Ridge Line prominently forms the horizon.

This is considered a highly transient view, especially given the relatively high-speed of vehicles along this road. It is unlikely that people would stop here to experience this view.



Figure 36. Location 8 View

3.5.14 Viewshed Location 9 - Calder Alternative Highway & Fentons Lane

Viewshed Analysis

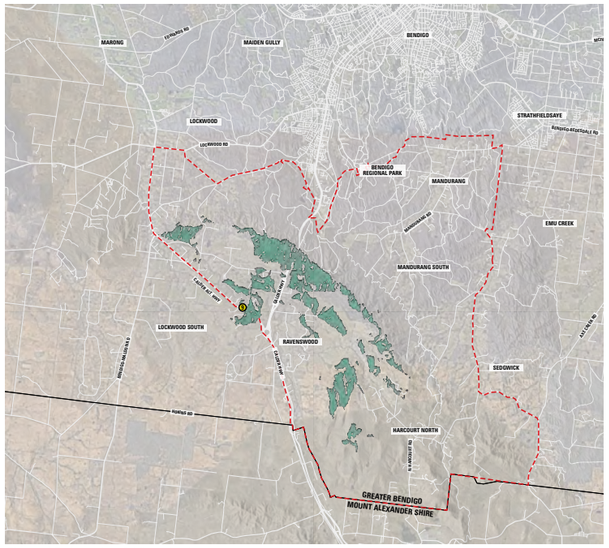


Figure 37. Location 9 Viewshed

Viewpoint 9 is located along Calder Alternative Highway, near the junction of Fentons Lane.

This view encompasses significant sections of the ascending ridge line, with portions toward Harcourt North notably excluded. Furthermore, the viewshed is not observable to the west, mainly due to a small section of elevated topography restricting views in that direction.

Study Area

Viewshed Origin

Viewshed

3.5.15 Fieldwork Assessment

The image below shows the view from this location looking west along Calder Alternative Highway.

The view is obstructed by roadside vegetation, typical for this road segment. The land slopes gently downhill, offering glimpses of undulating terrain with dense native canopy plantings. While not prominently visible, the topography allows occasional views towards the distant Big Hill Ridge Line.

This is considered a highly transient view, especially given the relatively high-speed of vehicles along this road. It is unlikely that people would stop here to experience this view.



Figure 38. Location 9 View

3.5.16 Viewshed Location 10 - Fentons Lane

Viewshed Analysis

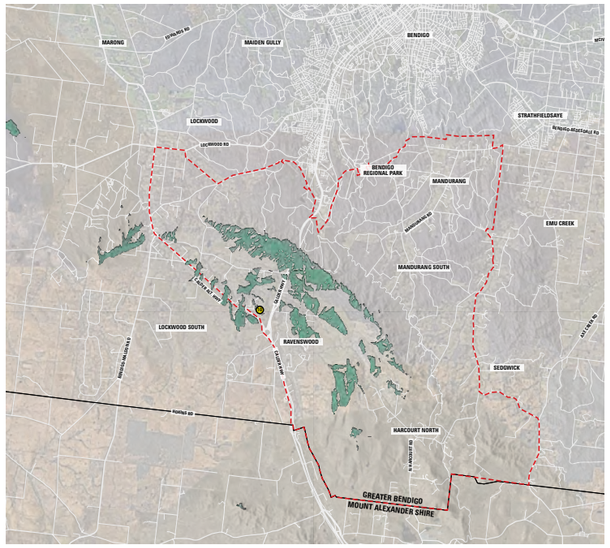


Figure 39. Location 10 Viewshed

Viewpoint 10 is located along Fentons Lane, Ravenswood.

Rising land of the Big Hill Ridge Line is the primary focus of this viewshed, spanning a large portion that sweeps across the focus area, the shape of the ridge is easily discernible from this vantage point.

Scatterings of viewshed lining either side of the Calder Alternative Highway feature too, extending north and effectively terminating at the edge of the Lockwood State Forest.

Study Area

Viewshed Origin

Viewshed

3.5.17 Fieldwork Assessment

The image below shows the view from this location looking north from Fentons Lane.

Given the lack of roadside vegetation in this view, there is open aspect to the middleground comprising scattered, and relatively tall canopy vegetation surrounding private rural properties.

Glimpses to the Big Hill Ridge Line are afforded in moments, between these canopy plantings. A power pole in the centre of the view also moderately obstructs views to the elevated topography in the distance.

Fentons Lane is an unsealed no through road which is east-west aligned, it is primarily used for residents accessing rural properties in the vicinity and as such comprises low frequency. In addition, it will most likely be experienced by motorists and given the relatively unremarkable view from this location, is unlikely that people will stop here to experience the view.



Figure 40. Location 10 View

3.5.18 Viewshed Location 11 - Ravenswood Interchange A

Viewshed Analysis

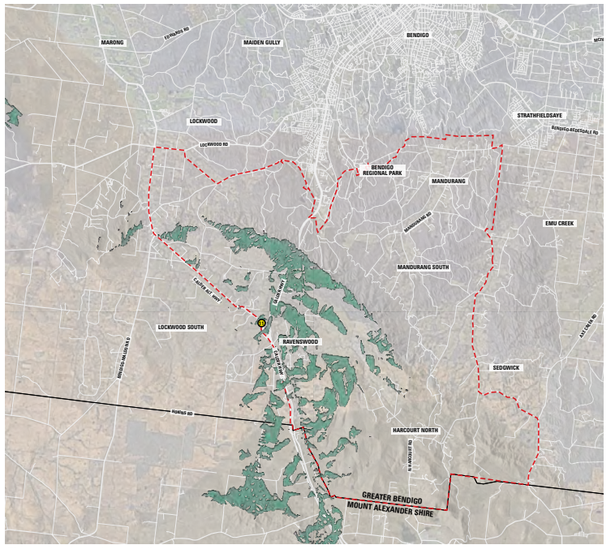


Figure 41. Location 11 Viewshed

Viewpoint 11 is located at the Ravenswood Interchange, proximate to 94 Calder Alternative Highway Ravenswood.

In the context of this viewshed analysis, the prominence of the ridge line is notable, but equally striking are extensive stretches of visible terrain extending southward along the Calder Highway. This analysis reveals a notably expansive viewshed, suggesting the potential for extended and theoretically far-reaching vistas toward the southern direction.

Study Area

Viewshed Origin

Viewshed

3.5.19 Fieldwork Assessment

The image below shows the view from this location looking east from Ravenswood Interchange.

The foreground is devoid of roadside vegetation, offering an open view to the expansive panorama beyond. The gradual decline in topography across the rural properties at the fork between the Calder Alternative Highway and Calder Highway enhances this openness. The Big Hill Ridge Line appears along the horizon above the crowns of scattered canopy plantings in the foreground.

As a highly transient view, it is likely to be experienced by passing motorists at relatively high speeds.



Figure 42. Location 11 View

3.5.20 Viewshed Location 12 - Ravenswood Interchange B

Viewshed Analysis

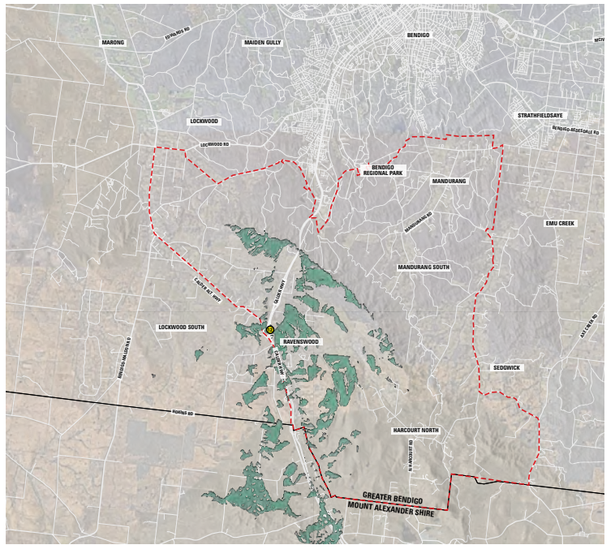


Figure 43. Location 12 Viewshed

Viewpoint 12 is located along Calder Highway, close to the Ravenswood Interchange.

A mosaic of views provides intermittent glimpses of the ascending ridge line to the north-east, complemented by extensive expanses of land to the south, in close proximity to the origin of the viewshed. In this case, the viewshed surpasses the confines of the study region, and although not entirely practical, it effectively illustrates the potential theoretical reach of this particular vantage point.

Fieldwork Assessment

The image below shows the view from this location looking east from Ravenswood Interchange.

The foreground features tall grasses and native shrub-land, subtly framing views to the middle-ground and the distant Big Hill Ridge Line. In the middle-ground, the visibility is partially hindered by vehicle barriers, light poles, and power lines, yet the prominent silhouette of the ridge line remains clearly visible.

This viewpoint is frequently passed but highly transient due to the nature of this road section, providing limited opportunities or incentives for people to stop and appreciate the vista.



Figure 44. Location 12 View

3.5.23 Viewshed Location 13 - Ravenswood Interchange & Beilharz Road

Viewshed Analysis

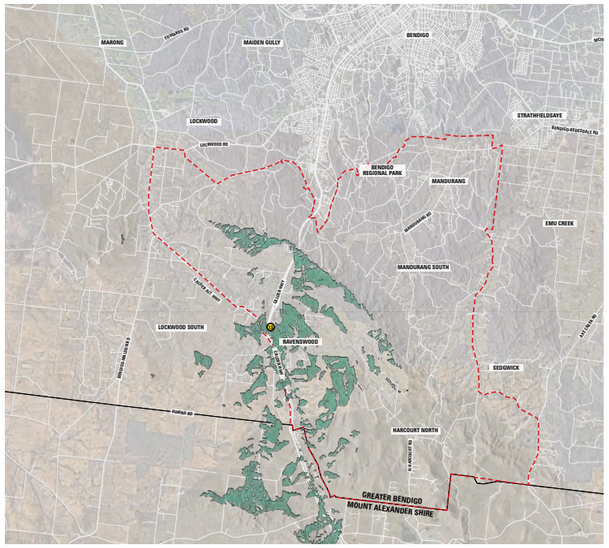


Figure 45. Location 13 Viewshed

Viewpoint 13 is located at the along Beilharz Road, which runs parallel to the Calder Highway.

This location provides a notably extensive viewshed, especially towards the south, surpassing the boundaries of the study area. The ridge line is prominently displayed and acts as the northern endpoint of the view. A varied and theoretically expansive view surrounds the origin of the viewshed on all sides, indicating a depression in the topography at this particular location.

Study Area

Viewshed Origin

Viewshed

Fieldwork Assessment

The image below shows the view from this location looking east along Beilharz Road, which in this section runs parallel to the Calder Highway.

The foreground is open and clear, marked by grasses and a fence line. As the land slopes eastward, these elements do not obstruct the middleground, characterised by dense canopy vegetation along the edges of creeks and tributaries on private properties.

These trees are effective in screening views to the ridge line beyond, however it remains to be visible along the horizon. Another transient view in this portion of land, this view will primarily be experienced by passing motorists



Figure 46. Location 13 View

3.5.24 Viewshed Location 14 - Hilda Drive

Viewshed Analysis

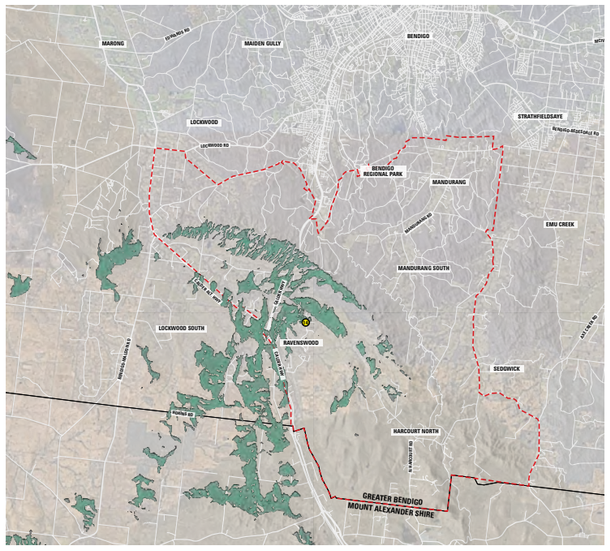


Figure 47. Location 14 Viewshed

Viewpoint 14 is located at on Hilda Drive, Ravenswood.

Situated directly on the Big Hill Ridge Line, this viewpoint offers a commanding and extensive perspective across the study area and its surroundings. The peaks of the ridge line are observable to the north, serving as the conclusion of that particular vista. In the southern direction, the landscape unfolds, showcasing large areas of Ravenswood and Lockwood South prominently.

Fieldwork Assessment

The image below shows the view from this location looking north along the unsealed road of Hilda Drive.

In the foreground, the ridge line is obscured by roadside vegetation and plantings on private land in Ravenswood. The sloping topography downhill to the north allows occasional glimpses of the ridge line as it rises along the horizon. Power poles act as additional man-made obstructions in this view.

This road is expected to be less frequented by passing motorists and is more likely experienced by local residents accessing rural properties.



Figure 48. Location 14 View

3.5.25 Viewshed Location 15 - Belvoir Park Road (West)

Viewshed Analysis

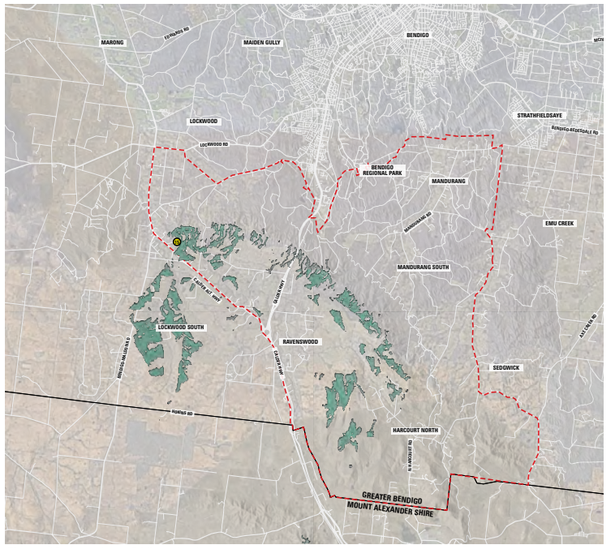


Figure 49. Location 15 Viewshed

Viewpoint 15 is located along Belvoir Park Road, close to 68 Belvoir Park Road.

This viewpoint holds a relatively distinctive position, owing to the unique topography of its origin points within the broader landscape. From this location, the peaks of the ridge line are discernible, along with expansive patches of land within Lockwood South. Looking towards the south-west, a patchwork of views unfolds, concluding before reaching Harcourt North.

Study Area

Viewshed Origin

Viewshed

Fieldwork Assessment

The image below shows the view from this location looking north-east from Belvoir Park Road.

The road in this section provides a break in the common roadside vegetation, particularly evident on the right-hand side of the image, allowing an open aspect to the undulating land on rural properties.

Cleared pastoral land at 68 Belvoir Park Road is featured in the middle-ground, along with visible power poles, a dwelling, and other associated structures. The elevated land in the background is characterised by dense patches of canopy vegetation lining the hilltops across the majority of the panorama.

As a relatively low-order and unsealed road, this view is expected to be primarily experienced by local residents accessing rural allotments.



Figure 50. Location 15 View

3.5.26 Viewshed Location 16 - Belvoir Park Road

Viewshed Analysis

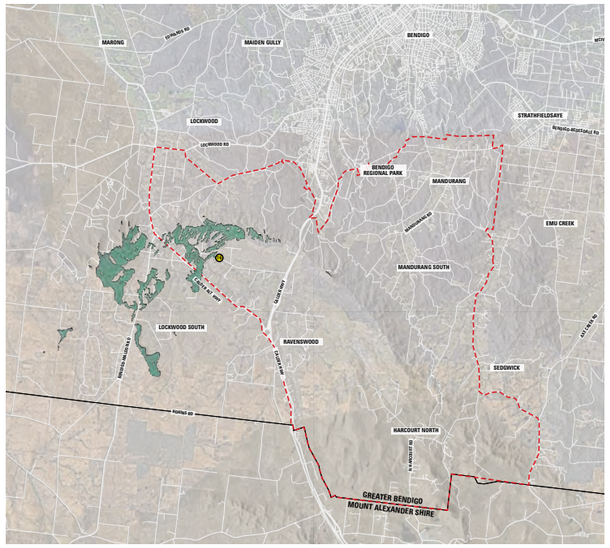


Figure 51. Location 16 Viewshed

Viewpoint 16 is located along Belvoir Park Road, close to 102-104 Belvoir Park Road.

This viewpoint offers a comparatively constrained panorama when compared to others in this analysis. Views to the south and southeast are inaccessible, with only pockets of visible land available at the northern endpoint of the ridge line. On the western side, across the Calder Alternative Highway, patches of land become visible from this vantage point.

Study Area

Viewshed Origin

Viewshed

Fieldwork Assessment

The image below shows the view from this location looking east along Belvoir Park Road.

This view across rural properties offers open views to the Big Hill Ridge Line. The foreground is characterised by cleared pastoral land, with the property at 102-104 Belvoir Park Road partially obstructing views to the distance.

In the middleground to background, other rural properties are scattered, but they contribute little to restricting the aspect to the ridge line beyond. The landscape features scatterings of vegetation on farmland and along the ridge, enhancing the overall scenic qualities of this expansive vista.

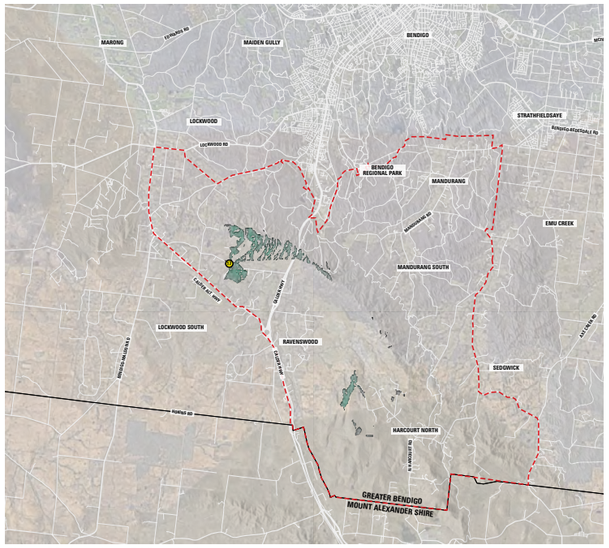
As a relatively low-order and unsealed road, this view is expected to be primarily experienced by local residents accessing rural allotments.



Figure 52. Location 16 View

3.5.27 Viewshed Location 17 - Belvoir Park Road & Skinner Lane

Viewshed Analysis



Study Area

Viewshed Origin

Viewshed

Figure 53. Location 17 Viewshed

Viewpoint 17 is located at the corner of Belvoir Park Road and Skinner Lane.

The viewshed from this location is constrained due to its close proximity to the northern ridge line and its encirclement by a series of small hills, restricting visibility beyond. Notably, a small but distinctive pocket at the southern portion of the ridge line becomes visible, in proximity to Harcourt North.

Fieldwork Assessment

The image below shows the view from this location looking north-east at the corner of Belvoir Park Road and Skinner Lane.

This viewpoint offers a relatively unobstructed view of the elevated Big Hill Ridge Line, prominently visible in the not-too-distant background. Some roadside vegetation partially filters a portion of the view; however, the remaining area provides a largely unrestricted vista.

Power poles line the edge of Skinner Lane which provide power to the rural properties visible at the base of the ridge. While predominantly cleared and open, scattered vegetation is a characteristic of these properties as well.

This view will likely be frequented by local residents accessing rural properties.



Figure 54. Location 17 View

3.5.28 Viewshed Location 18 - Skinner Lane & Granite View

Viewshed Analysis

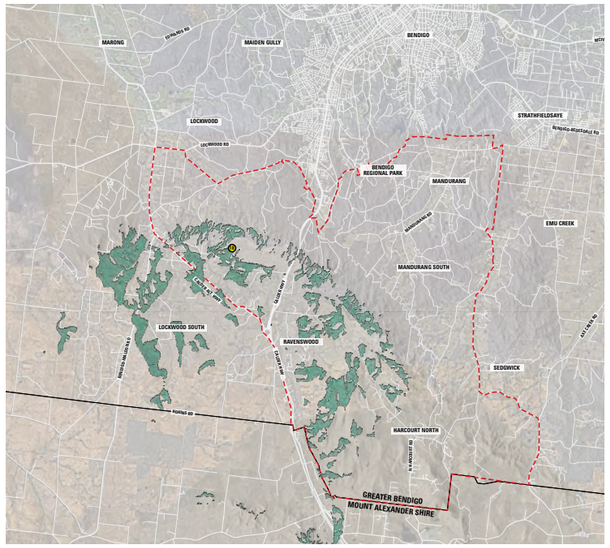


Figure 55. Location 18 Viewshed

Viewpoint 18 is located at the corner of Skinner Lane and Granite View.

This viewpoint located to the south of the break of slope, provides sweeping and extensive views across the eastern study area. The elevated position allows for clear visibility of the peaks along the ridge line, acting as a natural termination point for the northern perspective. Substantial patches of visible land extend outward from this location, encompassing areas such as Lockwood South, Harcourt North, and beyond.

3.5.29 Fieldwork Assessment

The image below shows the view from this location looking east along Granite View.

This vantage point provides an unobstructed view of the elevated ridge line in the distance, with little to no roadside or windrow vegetation in the immediate vicinity. The properties in this area are predominantly cleared of natural vegetation, and there is evidence of exotic plantings surrounding dwellings in the middleground. Notable features in this view include shed structures, associated outbuildings, fence lines, and power poles.

In the distance canopy vegetation becomes more dense as land undulates towards the ridge line that is visible along the majority of the horizon.

It is a reasonable assumption that the majority of people experiencing this view consists of residents or visitors to properties on Granite View, as it is a no-through road.



Figure 56. Location 18 View

3.5.30 Viewshed Location 19 - Skinner Lane & Grassy Lane

Viewshed Analysis

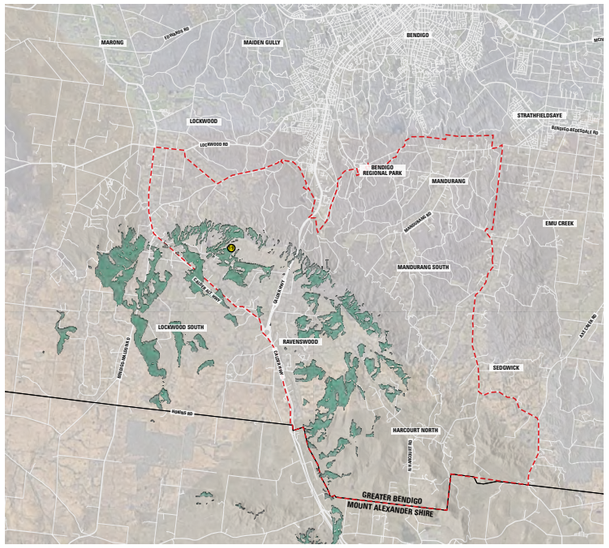


Figure 57. Location 19 Viewshed

Viewpoint 19 is located at the corner of Skinner Lane and Grassy Lane.

The elevated position allows for clear visibility towards lower slopes of the western ridge line, acting as a natural termination point for the northern perspective. Substantial patches of visible land extend outward from this location, encompassing areas such as Lockwood South, Harcourt North, and beyond.

3.5.31 Fieldwork Assessment

The image below shows the view from this location looking west along Grassy Lane.

Within the foreground, scattered vegetation along property boundaries and within rural properties in this area comprise the majority of this view, effectively screening aspect to the middle-ground. Glimpses of roof lines are structures are afforded in these gaps in vegetation.

It is a reasonable assumption that the majority of people experiencing this view consists of residents or visitors to properties on Granite View, as it is a no-through road.



Figure 58. Location 19 View

3.5.32 Viewshed Location 20 - Calder Highway Southbound

Viewshed Analysis

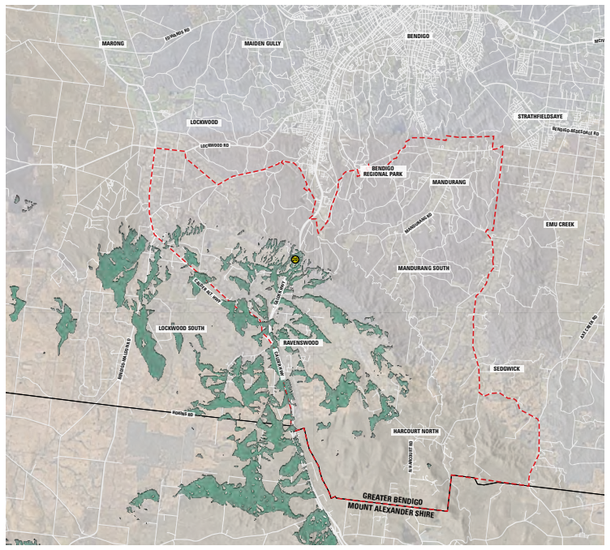


Figure 59. Location 20 Viewshed

Viewpoint 20 is located at just south of the Big Hill Ridge Line, along the Calder Highway.

This viewpoint theoretically provides extensive vistas to the south-west, spanning across the study area and extending towards Lockwood, Ravenswood, and beyond. However, views to the north are restricted due to the viewshed's origin being positioned on the southern embankment of the ascending ridge.

Study Area

Viewshed Origin

Viewshed

3.5.33 Fieldwork Assessment

The image below shows the view from this location looking south-east as one travels southbound along Calder Highway.

This view is captured from a relative highpoint as one descends from the Big Hill Ridge Line. Scenic vistas of the broader region and other sections of the ridge line unfold along the horizon. The foreground and middleground are predominantly characterised by patches of vegetation, which act to filter views to the broader region.

This is considered a highly transient view, especially given the relatively high-speed of vehicles along this road. It is unlikely that people would stop here to experience this view.



Figure 60. Location 20 View

3.5.34 Viewshed Location 21 - Calder Highway & McDonalds Lane

Viewshed Analysis

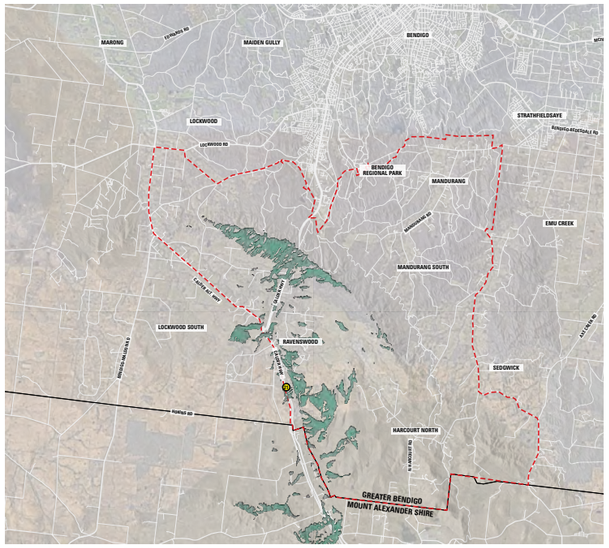


Figure 61. Location 21 Viewshed

Viewpoint 21 is located at the corner of Calder Highway and McDonalds Lane.

In this viewshed, the elevated ridge line is clearly discernible to the north, sweeping across the Calder Highway. Notable patches of visibility extend towards Harcourt in the east, while views to the west are largely non-existent. Scattered potential views are also observed in a cluster surrounding the Ravenswood exchange.

Study Area

Viewshed Origin

Viewshed

3.5.35 Fieldwork Assessment

The image below shows the view from this location looking east at the corner of the Calder Highway and McDonalds Lane.

This view offers a rare glimpse through the windrow plantings that are characteristic of this portion of Calder Highway. It comprises three distinctive banding elements. In the foreground is cleared pastoral land comprising fence lines and open pastures. The middle-ground is defined by a row of established canopy trees that filter views to the base of the ridge line. In the background, the proximate ridge line is highly visible, defined by scatterings of vegetation and granite outcrops.

Despite being located on Calder Highway, McDonalds Lane acts as a service road. It is expected that motorists may stop here on occasion and will experience this view.



Figure 62. Location 21 View

3.5.36 Viewshed Location 22 - North Harcourt & Ford Road

Viewshed Analysis

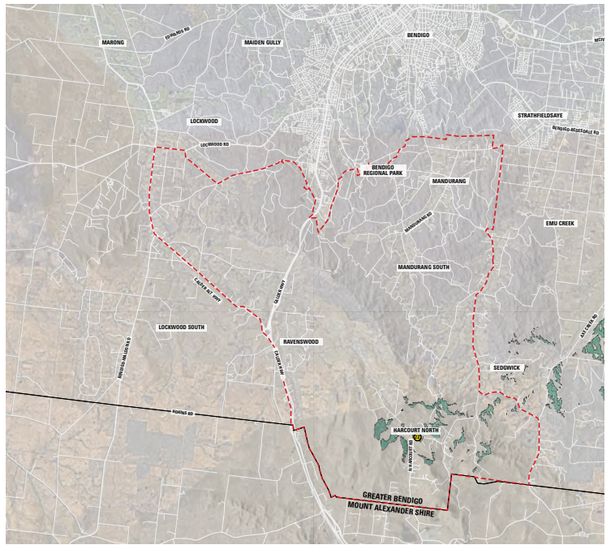


Figure 63. Location 22 Viewshed

Viewpoint 22 is located at the junction of North Harcourt Road and Ford Road.

This viewpoint appears relatively confined when compared to others identified in this analysis. Significantly, the elevated ridge line is not visible from this vantage point, obscured by undulating topography in the Harcourt North region, eliminating the potential for views towards its peaks. However, patches of visibility are notable in close proximity to the viewpoint origin and extend outward toward Sedgwick, reaching beyond the confines of the observable study area.

Study Area

Viewshed Origin

Viewshed

3.5.37 Fieldwork Assessment

The image below shows the view from this location looking north at the junction of North Harcourt Road and Ford Road.

This view offers a open aspect to the undulating land in the middle and background with only a subtle interruption by roadside vegetation noted on the right-hand side of the image. The rolling hills are adorned with granitic outcrops and scattered vegetation. Patches of denser vegetation are noted centrally, adding depth to the scenery.

As the landscape extends into the far distance, it transforms into a flatter terrain, characterised by lush and dense vegetation that blankets the expanse.

This scene will largely be experienced by passing motorists, however an area of vehicle circulation behind this image offers a chance for motorists to experience this view if stopped at this location.



Figure 64. Location 22 View

3.5.38 Viewshed Location 23 - North Harcourt Road & Barker Road

Viewshed Analysis

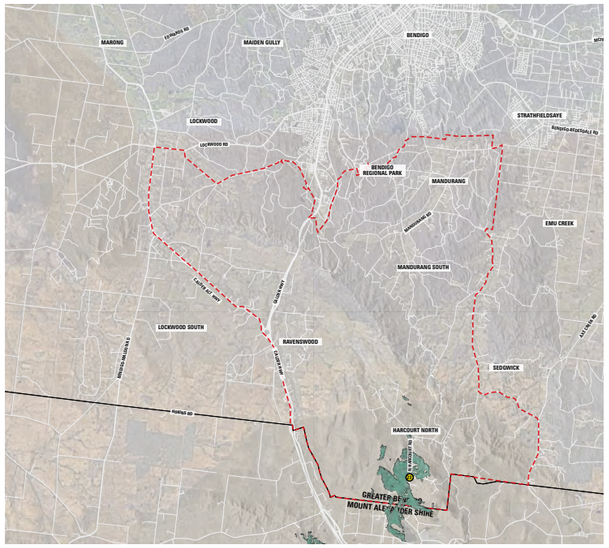


Figure 65. Location 23 Viewshed

Viewpoint 23 is located at the intersection of North Harcourt Road and Barker Road in Harcourt South. Its viewshed is confined being located on the valley floor of adjacent hills.

This viewpoint is characterised by its confined and localised nature, providing glimpses of its immediate surroundings in comparison to other potential vistas identified in this analysis. The undulating topography and rolling hills in the Harcourt North region restrict the view outward. A small, insignificant patch is identified to the north, toward the ridge line, but otherwise, this viewpoint is confined to its immediate context.

Study Area

Viewshed Origin

Viewshed

3.5.39 Fieldwork Assessment

The image below shows the view from this location looking north at the corner of North Harcourt Road and Barker Road.

The view at this location is notably unobstructed, due to the cleared agricultural land in the foreground, granting a clear perspective of the defining Granitic Uplands that contribute to the area's scenic appeal.

The scene is intricately woven with a blend of man-made and natural elements — fence lines, sheds, and dwellings dot both the foreground and middleground, harmonising with scattered vegetation that punctuates the entire landscape.

This roadside view is primarily transient, catering to passing motorists. However, the expansive roadside provides ample opportunities for drivers to stop and take in the surroundings.



Figure 66. Location 23 View

3.5.40 Viewshed Location 24 - Broadway Street & O'Keefe Street

Viewshed Analysis

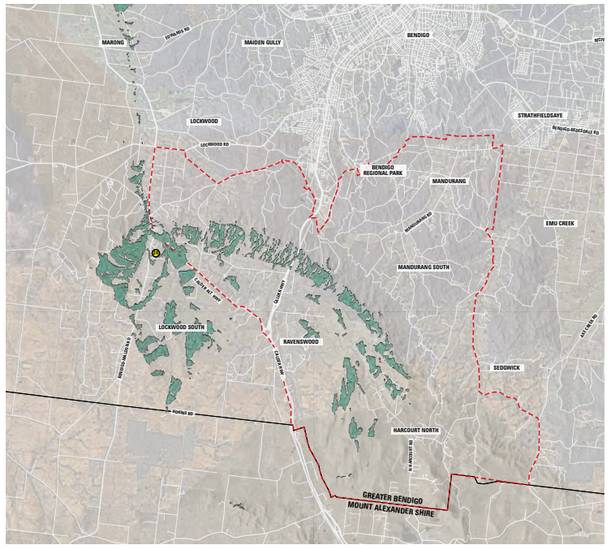


Figure 67. Location 24 Viewshed

Viewpoint 24 is located at the corner of Broadway Street and O'Keefe Street.

From this vantage point, the sweeping ridge line is easily noticeable, providing glimpses of its peaks that shape the eastern horizon. The patches within the immediate surroundings of this viewshed origin are sizable and noteworthy, stretching south towards Lockwood South and concluding in this region. A distinct 'break' in the topography created by the Calder Alternative Highway allows for theoretical views extending north, well beyond the confines of the study area, reaching toward Marong.

Study Area

Viewshed Origin

Viewshed

3.5.41 Fieldwork Assessment

The image below shows the view from this location looking north-east at the corner of Broadway and O'Keefe Street.

This stretch of the road features minimal roadside vegetation, mostly confined within property boundaries, as observed in the middleground.

A strip of canopy vegetation along Bullock Creek becomes apparent in the distance, as the land descends towards the creek. This vegetation obstructs most views of the ridge line, although occasional glimpses of the elevated ridge are visible in the distance.

This vista is expected to be encountered primarily by local residents and visitors to properties in this region, given that the road network consists predominantly of local roads, including no-through roads.



Figure 68. Location 24 View

3.5.42 Viewshed Location 25 - Francis Road Power Station

Viewshed Analysis

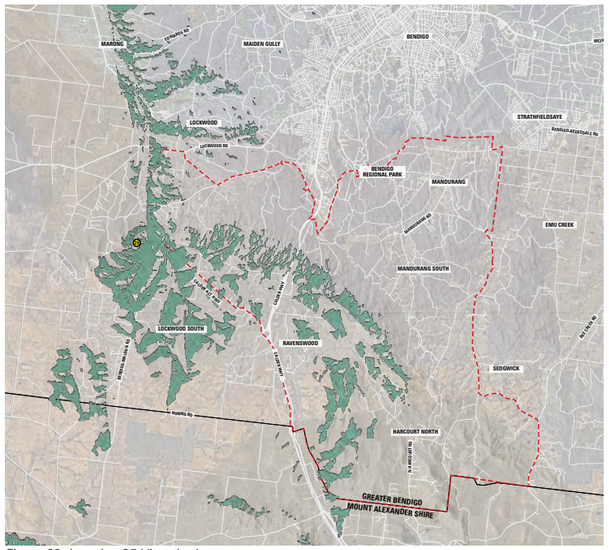


Figure 69. Location 25 Viewshed

Viewpoint 25 is located on Francis Road, proximate to the prominent power pole located at its peak.

This viewpoint stands out for providing one of the most expansive viewsheds in this analysis, thanks to its elevated position within the study area. Panoramic views across the region are available from this point, with the ridge line forming the distant horizon to the east. Towards the north, extensive patches of viewshed extend well beyond the confines of the study area. To the south, the majority of Lockwood South and its surrounding land is prominently visible.

Study Area

Viewshed Origin

Viewshed

3.5.43 Fieldwork Assessment

The image below shows the view from this location looking east from Francis Road, adjacent to the power station. This elevated position allows expansive views and outlook to the broader landscape.

In the foreground, a band of canopy trees lines an internal road of the property at 50 Francis Street. Despite this, the elevated position of this viewpoint allows a clear view of the distant middle-ground. This area is characterised by an undulating land form, featuring a mix of dense vegetation patches and cleared pastoral land.

The landscape is dotted with various features of farmland, including dwellings, shed structures, fence lines, and dams. In the long-range views, the elevated Big Hill Ridge Line stands prominently as the backdrop to this expansive panorama.



Figure 70. Location 25 View

3.6 Cumulative Viewshed

The cumulative viewshed of the selected viewpoints is illustrated in Figure 71. It illustrates the prominence of the Big Hill Ridge Line as being the view terminus in the majority of views.

It also illustrates the prominence of the south western escarpment of the Granitic Uplands.

While large portions of this area are less visible from the viewpoints due to the presence of the steep escarpments in the foreground and middleground of views, valued landscape attributes can be experienced via local roads within the study area.

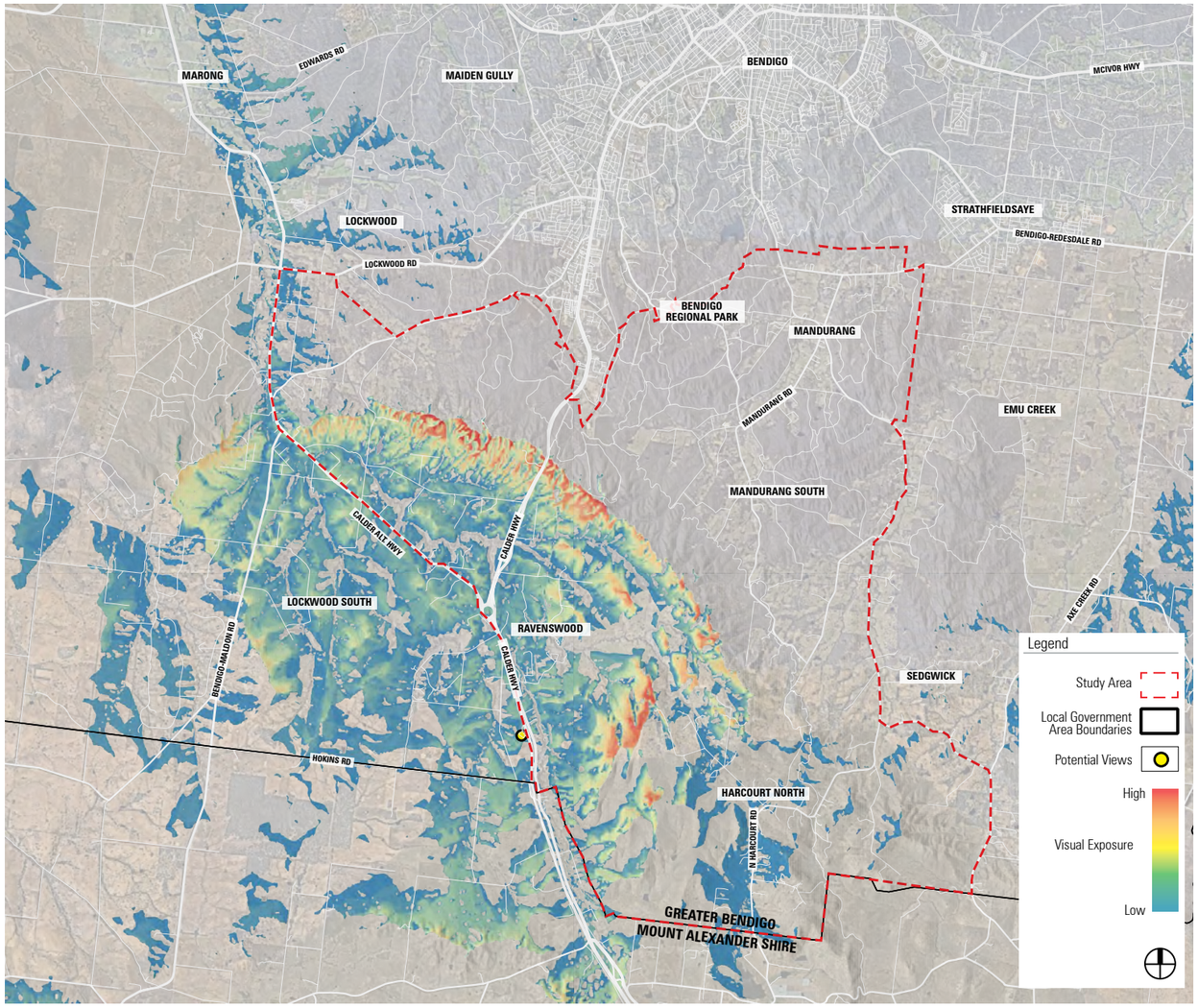


Figure 71. Cumulative Viewshed of Photo Locations

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Part 4 Landscape Characterisation

4 Landscape Character Types & Areas

4.1 Overview

Description

The landscape in the study area can be categorised into three distinctive Landscape Character Types based on geography, access and land use:

- Big Hill & Granitic Uplands
- Mandurang Valley
- Bendigo Box-Ironbark Forest

Big Hill & Granitic Uplands

Big Hill serves as a significant topographic gateway to the Bendigo urban area and is notable for its high visibility, primarily from the busy Calder Highway, a major road connecting Melbourne and northern/north-western Victoria. It forms part of a forested hill range that frames the Bendigo urban area.

Big Hill is a key landscape feature, characterised by the absence of visible buildings and structures. The urban area of Bendigo is entirely situated to the north of Big Hill, with the urban growth boundary located well beyond its crest.

The southern foreground landscape features grassy woodlands with clusters of mature River Red Gums interspersed with granitic outcrops. This landscape is essential in providing a scenic backdrop for Big Hill and offers a rural ambiance in the last few kilometres before entering the Bendigo urban area. Creeks in the vicinity are lined with River Red Gums, contributing to a shaded and more intimate landscape setting.

Mandurang Valley

Mandurang Valley is situated just outside the encircling hills that surround Bendigo city. This valley is characterised by a mix of small farms, larger rural properties, and extensive forested areas. Such fringe regions often gradually transition into the suburban areas of some regional towns.

However, Mandurang Valley remains distinct from the Bendigo urban area due to its separation by the Box-Ironbark forested hills. The valley's isolation from major traffic routes contributes to its concealed and secluded character.

Bendigo Box-Ironbark Forest

The Box-Ironbark forests found within the National and Regional Parks surrounding the urban area of the City of Greater Bendigo serve as a natural barrier, creating a separation between Big Hill and the Mandurang Valley. These forests constitute a unique landscape Character Type, forming a single Character Area

Landscape Character Areas

The identified character areas have largely been adopted from the *Bendigo Landscape Assessment: Big Hill & Mandurang Valley* (Planisphere, 2013) report, which stated that the process of identifying these areas began with an initial desktop analysis and mapping, utilising geographic information system (GIS) data provided by the City of Greater Bendigo.

In this updated study, an updated landscape assessment paired with extensive visual analysis has resulted in updates to these character areas. The main change has occurred in the form of acknowledging distinction between the Big Hill Ridge Line and its escarpments, from its lower undulating slopes and pastoral foreground.

The following 7 character areas are identified, each characterised by a set of common features and qualities:

- **Character Area 1:** Big Hill Ridge Line & Upper Slopes
- **Character Area 2:** Big Hill Lower Slopes & Foreground
- **Character Area 3:** Big Hill Granitic Uplands
- **Character Area 4:** Mandurang Valley South
- **Character Area 5:** Mandurang Valley North
- **Character Area 6:** Mandurang Forest Interface
- **Character Area 7:** Bendigo Box-Ironbark Forest

Landscape Character Types & Areas

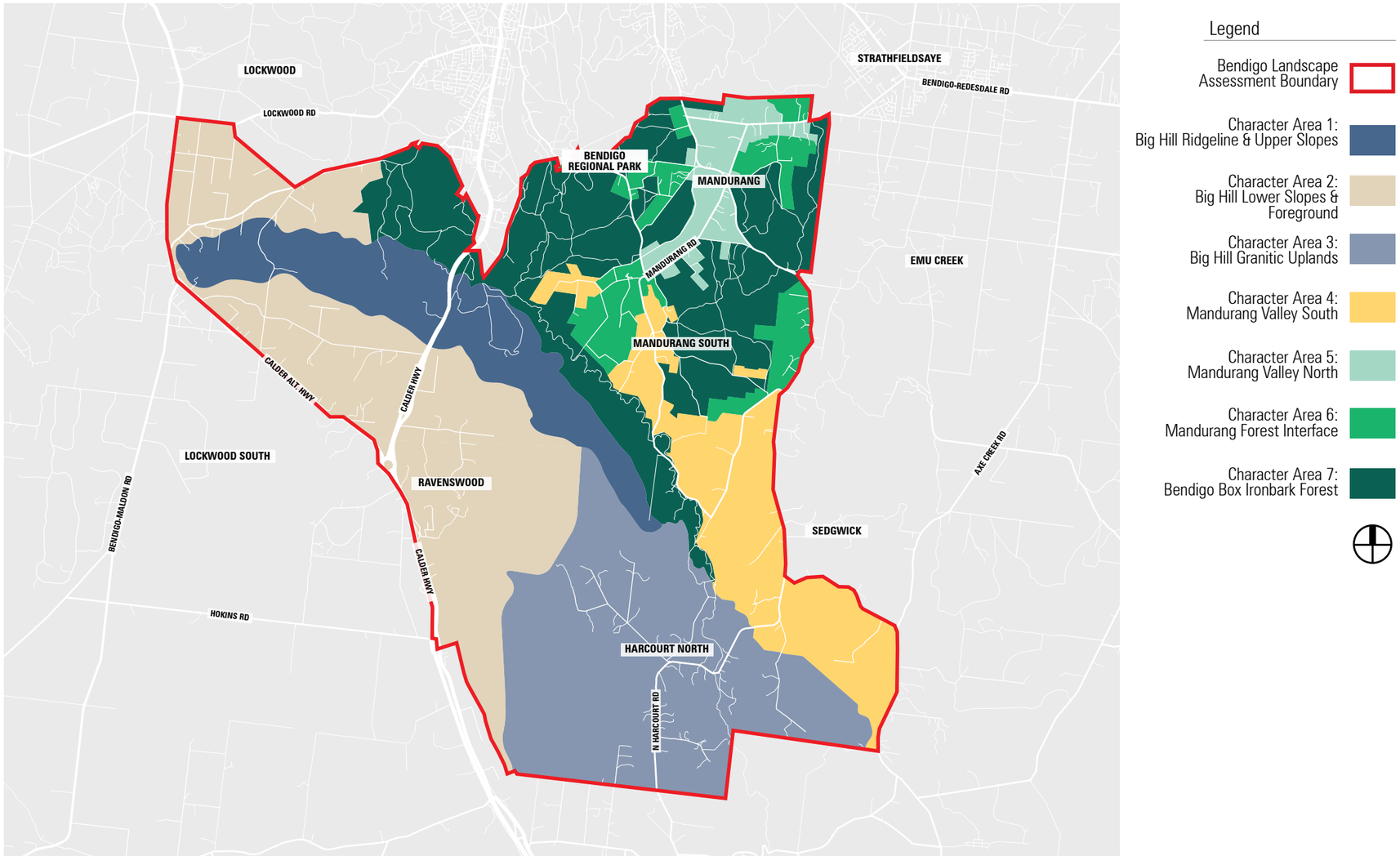
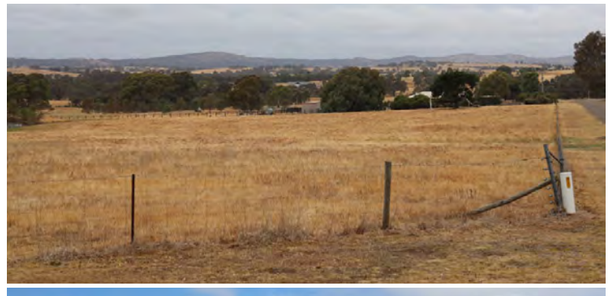


Figure 72. Landscape Character Areas

4.2 Landscape Character Area 1: Big Hill Ridge Line & Upper Slopes







Various views of the Big Hill Ridge Line forming the horizon from different distances and directions in the foreground, noting open grasslands lined by the dense Box-Ironbark Forest toward the ridge line.

Description

The long crested ridge line of Big Hill is a prominent topographic feature situated at the southern gateway to Bendigo. It serves as a transitional point, marking the shift from rolling agricultural lands in the foreground to the urban areas on the northern side of the ridge via passage through the Box-Ironbark Forest.

While the ridge line forms the backdrop in bidirectional views across the agricultural foreground from the Calder Highway and Calder Alternative Highway, its presence is more dramatic traveling southbound and eastbound respectively. It is also prominent in views from the rail corridor in breaks between dense linings of native vegetation. The ridge line is also prominent from more distant viewing locations from further west, such as at intersections openings along Bendigo-Maldon Road and from vantage points within the private realm.

The presence of Box-Ironbark forest along the ridge line and upper slopes is prominent. The mature canopy increases the perceived height of the ridge line in distant views. Patches of cleared forest reveal the earth and contribute to visual variety, while in other areas towards the west and east, the forest blends into more lightly wooded areas and the rocky earth of the Granitic Uplands.

Key Features

- Prominent ridge line visible from a distance south of the study area, forming an important southern entry point to the City.
- Undeveloped upper slopes of Big Hill where no dwellings or permanent structures are visible.
- Dense vegetation lining the ridge line where the Box-Ironbark Forest extends towards the southern slopes.

Sensitivity to Change

The Big Hill upper slopes and ridge line are particularly noticeable because of its contrast with the lower and open pastoral plains in its southern foreground. The character area has very little evidence of human contact within the panoramic views it presents. Infrastructure elements are visible at closer range in the form of tracks and overhead power lines. Given the prominence and breadth of natural features that the Character Area presents, development and alteration to the landscape would likely be highly noticeable. It is therefore considered to be highly sensitive to change.

Rating: High

Anticipated Landscape Change

The steepness of the slope, density of remnant forest and the fact that the Character Area is partially located within the Greater Bendigo National Park, results in a generally low anticipation of change in the form of future development. However there is evidence of infrastructure and scattered sheds positioned on escarpments, as well as established and more recently constructed residential buildings at the base of foothills and within the foreground of views towards the Character Area. Revegetation or clearing of forest outside of the National Park boundary would also result in some alteration to the visual setting.

As found in the visibility analysis, the Character Area is visually prominent across an expansive visual realm due to its topographic contrast with its lower lying foregrounds. Change is therefore likely to be highly perceptive in the broader context.

Landscape Character Area 1: Big Hill Ridge Line & Upper Slopes

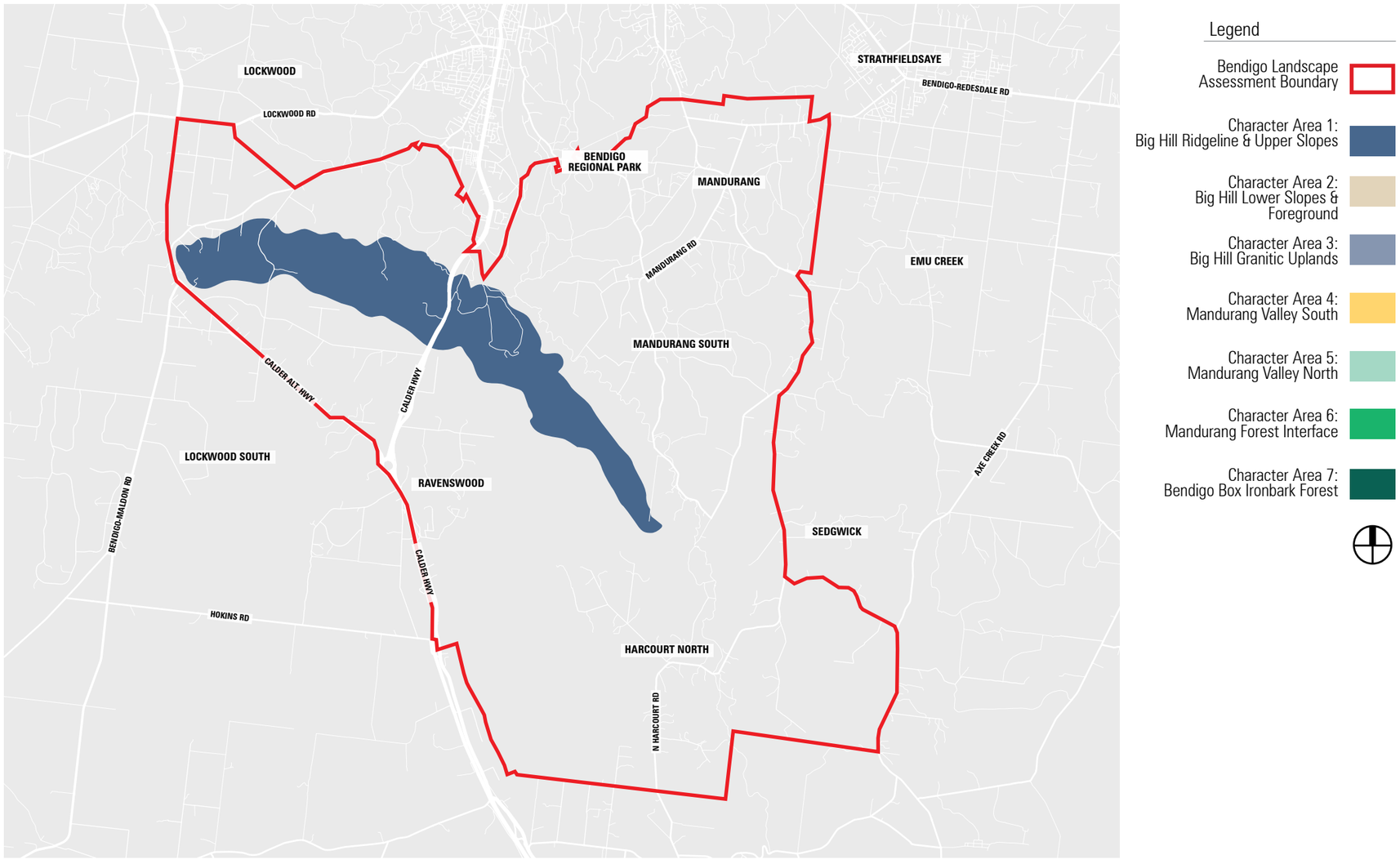


Figure 73. Landscape Character Area 1

4.3 Landscape Character Area 2: Big Hill Lower Slopes & Foreground



Low density rural housing within the foreground of the Big Hill Ridge Line



Undulating open plains of the ridge line foreground with slopes of the Granitic Uplands forming the horizon

Description

This area comprises a blend of undulating pastoral plains and patches of grassy woodlands bound by the Big Hill Ridge Line and Granitic Uplands forming a prominent backdrop. Low density rural settlement areas and other land uses that mark the landscape including vineyards and a golf course, highlight the mark of human contact on the natural landscape.

The openness of the setting allows travelers on the Calder Highway to gradually witness the Big Hill ridge as they approach. Due to undulating topography including lower land between the highways and break of slope, large areas of the foreground area are visually concealed - as confirmed in detailed viewshed modeling and fieldwork.

The geological features of this Character Area are expressed through the land's form, with a presence of scattered rocky outcrops strewn across the paddocks, as well as native vegetation lining creeks and gullies.

Key Features

- Open, undulating agricultural land interspersed with patches of native woodland.
- Grazing on the lower parts of the slope which has contributed to erosion and salinity, and diminished the values of the original woodland.
- Underlying granitic rock formations, which are exposed at the surface in some locations.
- A range of land uses along Belvoir Park Road, including large residential allotments, vineyards and the golf course, which have cleared areas and exotic plantings replacing original woodland vegetation.
- With a few exceptions, existing dwellings are concealed fully or partly from view (in passing) by vegetation and/or topography.

Sensitivity to Change

The character area is already subject to clustered settlement areas in the form of rural subdivisions and supporting land uses. While breaks in roadside vegetation allows for clear views across the landscape and towards the Big Hill Ridge Line behind, the undulating topography provides opportunity to nestle development into the contours of the land and thereby reduce their visual impact upon the rural and uncluttered landscape.

Rating: Medium

Anticipated Landscape Change

Anticipated and ongoing changes to the landscape of this Character Area include:

- It is expected that rural subdivisions and other land uses will continue to evolve within the character area. It is important for future development to be appropriately and sensitively sited relative to Big Hill's lower slopes, as to not detract from the natural features of the landscape.
- Given the presence of settlement and recreational functions throughout the character area, it is considered that additional change can be absorbed if appropriately designed and sited.
- There are a number of gazetted government roads from old subdivisions that have not been developed throughout the foreground of Big Hill. If these are to be formalised for access to undeveloped properties it may result in the loss of native vegetation and visual intrusion.
- Future re-vegetation programs will result in a more heavily vegetated characteristic.

As found in the visibility analysis, the Character Area generally records a low visual exposure relative to more prominent ridge lines and elevated topography. While visible from key viewing corridors, its undulating topography, roadside vegetation and roadside embankments conceal large portions of the Character Area.

Landscape Character Area 2: Big Hill Lower Slopes & Foreground

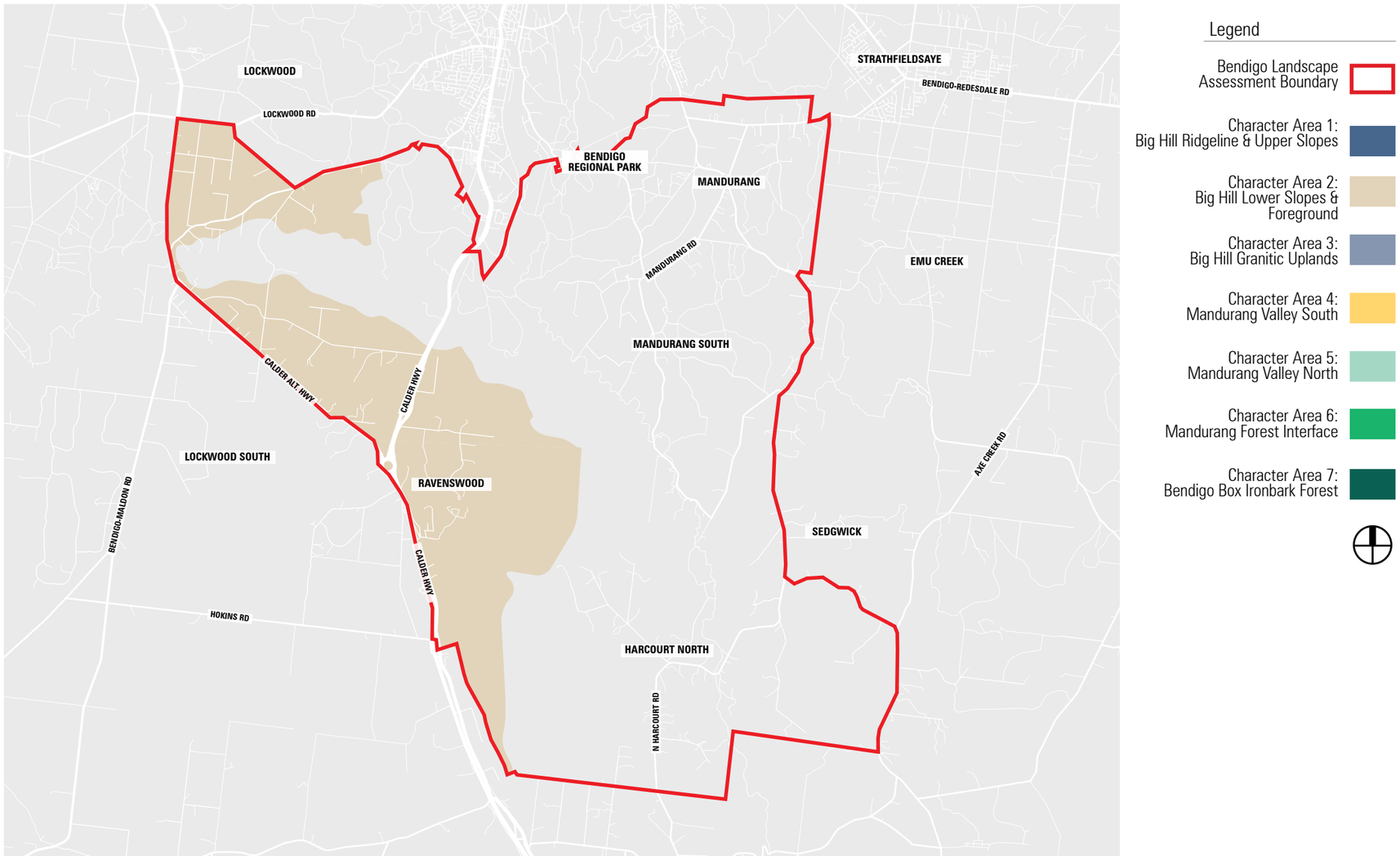


Figure 74. Landscape Character Area 2

4.4 Landscape Character Area 3: Big Hill Granitic Uplands



Sculptural granite boulders embedded within the landscape



Scattered granitic outcrops

Description

This Character Area encompasses the rolling upland pastures extending from the southern end of the Big Hill Ridge Line. In areas, it presents the highest elevated landscape within the study area and projects a broad visual viewshed. The topographic feature blends with the Big Hill Ridge Line, and is particularly prominent to viewers traveling south from Bendigo.

It's marked by prominent granitic rock formations that contrast with the open, grassy paddocks. The elevation in this area offers panoramic views of the Mandurang Valley, the Box-Ironbark forested ranges to the north and west, and beyond.

This character area has been expanded to include a section of land to the southeast within the subject area. This expansion is based on the presence of significant granitic outcrops scattered throughout this portion of the landscape.

Key Features

- High elevation and rolling topography.
- Large number of unique and sculptural granitic rock formations and smaller scattered outcrops.
- Cleared, grassy paddocks with remnant trees scattered throughout and concentrated in low points.
- Panoramic viewing opportunities over Mandurang Valley to the uplands and ranges beyond.
- Heritage, natural, and recreational values along the Coliban Channel.

Sensitivity to Change

Areas within the character area, particularly the western and southern escarpments of the Granitic Uplands have high visual exposure to the broader study area. The rocky outcrops and scattered vegetation are key visual features of the escarpments and are clearly visually distinguishable at close range and distant views.

The undulating topography in the foreground of the rising Granitic Uplands provides the opportunity to nestle development into the contours of the land and thereby reduce their visual impact from the key viewing corridors.

Some areas - particularly atop the ridge lines where the land flattens out at a higher plane, are relatively isolated and less frequently viewed as other parts of the character area such as its western and southern escarpments.

Rating: High

Anticipated Landscape Change

Anticipated and ongoing changes to the landscape of this Character Area might include farming structures or occasional dwellings where the land is flatter atop and behind the escarpments.

Due to the sloping land and density of the granitic features, it is unlikely that development pressure would be high within this Character Area. However, the cumulative effect of additional buildings, structures, roads or infrastructure could have the ability to be prominent in the visual setting.

As found in the visibility analysis, visual exposure of the Character Area is expansive across the study areas including from key viewing corridors - particularly its western and southern escarpment. Change is therefore likely to be highly perceptive in the broader context.

Landscape Character Area 3: Big Hill Granitic Uplands

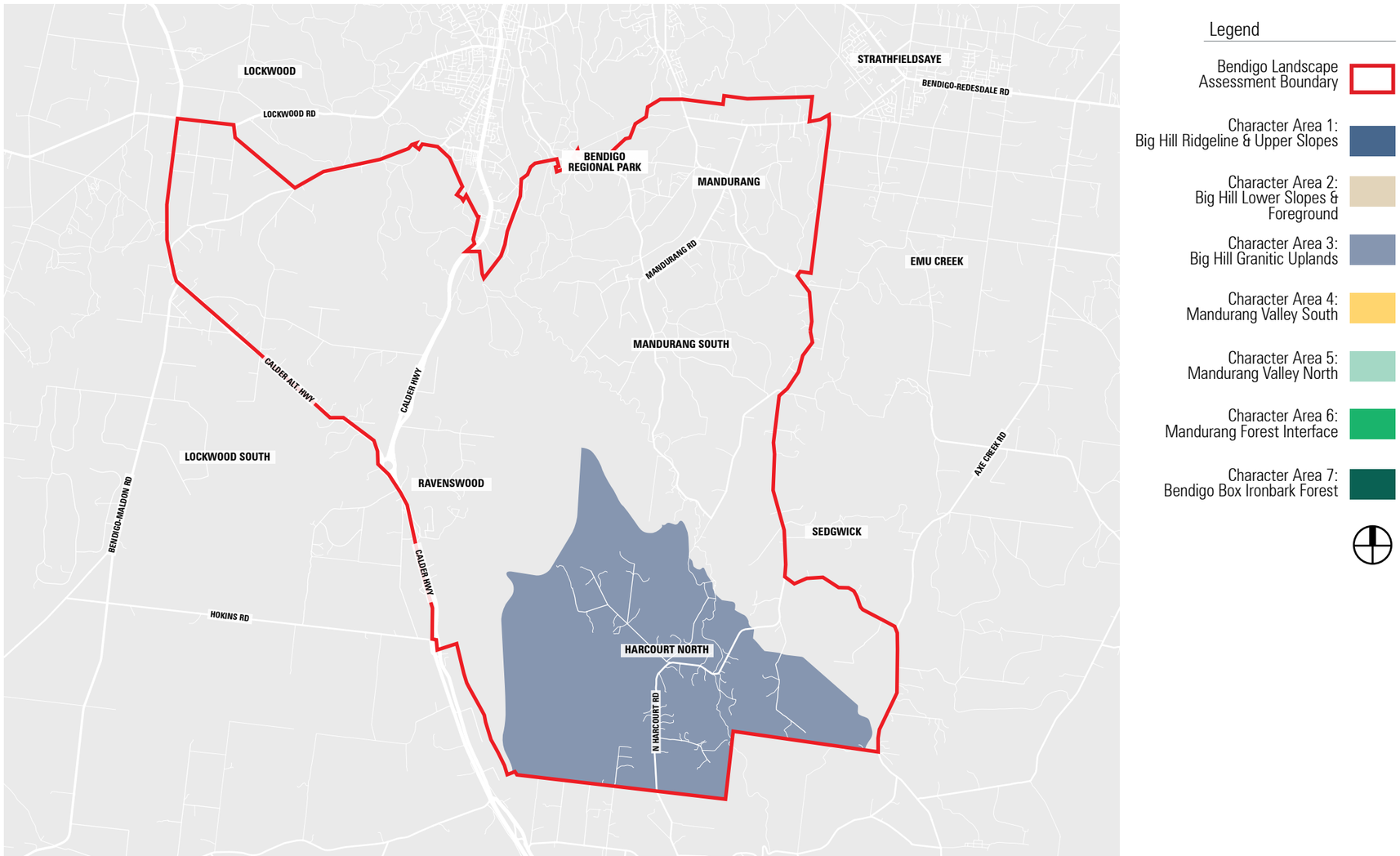


Figure 75. Landscape Character Area 3

4.5 Landscape Character Area 4: Mandurang Valley South



Farmland with scattered canopy vegetation within the Mandurang Valley South Character Area



Canopy vegetation within the Mandurang Valley South Character Area

Description

This area comprises a spacious and gently undulating valley floor, enclosed by the hills of the nearby National and Regional Parks covered in Box-Ironbark forests.

The landscape is characterised by extensive cleared lots and relatively low-density development, which contributes to its open and pastoral ambiance. There's a significant presence of remaining vegetation in this region, fostering a sense of harmony with the surrounding forests. In certain spots, you can also enjoy views of the Granitic Uplands.

This Landscape Character Area has been expanded to the south-east to encompass portions of land within the Greater Bendigo municipality that comprise similar characteristics.

Key Features

- Rolling, pastoral valley floor with a backdrop of forested hills.
- Valley enclosed by the Box-Ironbark forests of the National and Regional Parks.
- Large, open allotments dominated by rural uses that include productive agricultural land or small rural residential development.
- Remnant native vegetation throughout paddocks and along roadsides.
- Views across paddocks to forested hills or open, Granitic Uplands of Harcourt North.
- Sense of isolation created by limited access; the 'hidden valley'.
- Limited development that has provided some protection of remnant ecosystems and habitat.

Sensitivity to Change

This landscape is moderately sensitive. The rolling terrain and thick vegetation in various sections of this Character Area can act as a natural screen for development, provided it is sited and designed in a suitable manner.

Rating: Moderate

Anticipated Landscape Change

Anticipated and ongoing changes to the landscape of this Character Area include:

- Removal of indigenous vegetation for farming, residential development or bushfire management.
- Prominent built form.
- Introduction of exotic plant species and formal garden design.
- Further sub-division and fragmentation of land.

The Character Area generally records a low visual exposure from key viewing corridors, with its visual realm generally limited to local roads that traverse it and from within private property.

Landscape Character Area 4: Mandurang Valley South

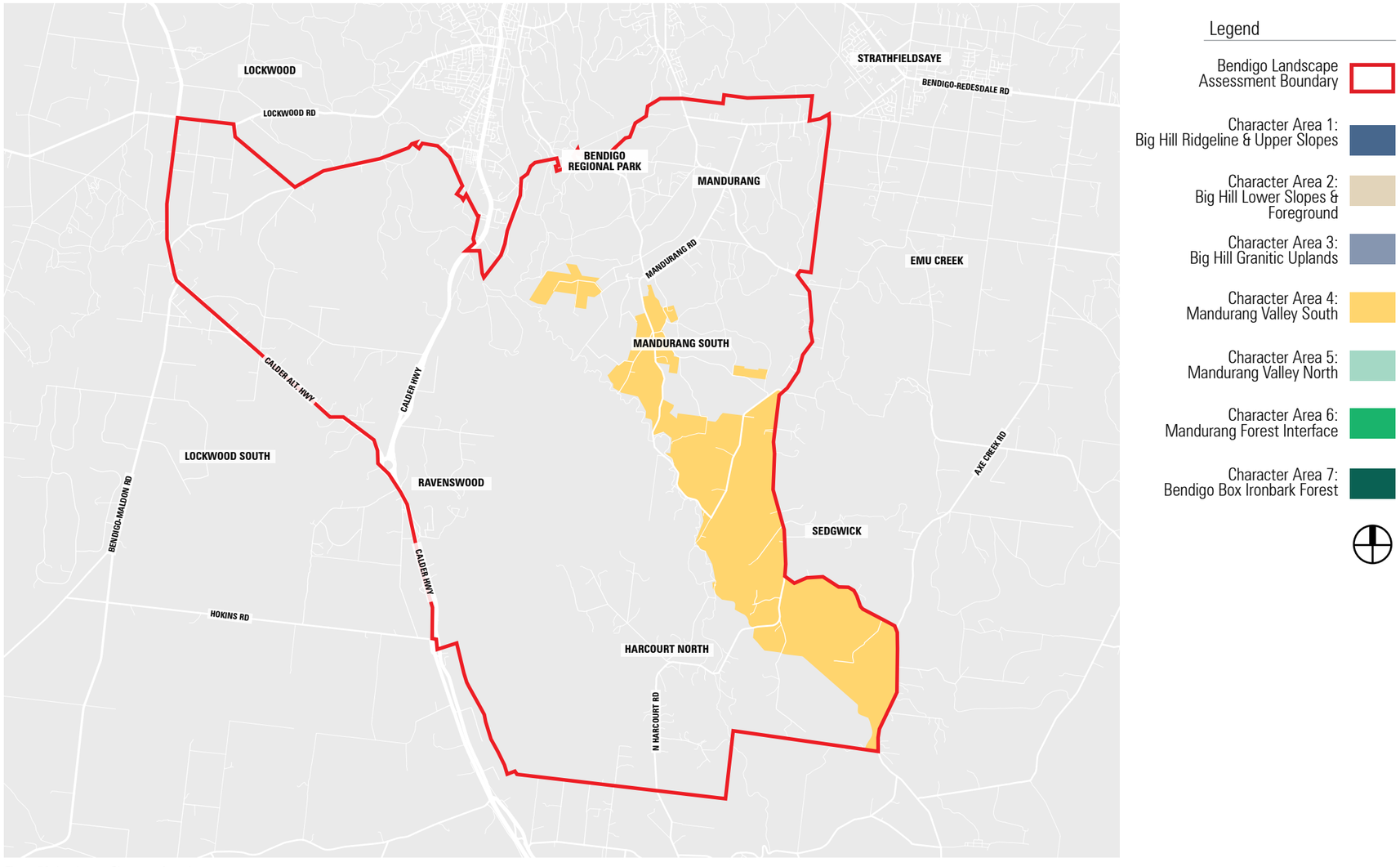


Figure 76. Landscape Character Area 4

4.6 Landscape Character Area 5: Mandurang Valley North



Property at the interface of the Mandurang Valley North Character Area



Rural property within the Mandurang Valley North Character Area

Description

The Mandurang Valley North Character Area encompasses the central and northern parts of the Mandurang Valley, including areas along Nankervis Road, Mandurang Road, and Tannery Lane. It also comprises pockets of land abutting the northern edge of the study boundary that do not form part of the Bendigo Box-Ironbark Forest Character Type.

This region features gently rolling terrain and a blend of remaining native vegetation and non-indigenous plantings. It is home to various rural residential, small agricultural, and hobby farm plots, with extensive modifications through land clearing and development. Despite these changes, the area is still characterised by tree canopies that dominate the landscape and frequently provide a backdrop for structures and buildings.

Key Features

- Small rural residential allotments with remnant indigenous vegetation and exotic plantings
- Proximity of National and Regional Parks which are visible in the distance
- Open, cleared paddocks, many of which include farming infrastructure
- A range of developments and building styles, many of which are set close to the road.
- Limited development that has provided some protection of remnant ecosystems and habitat.

Sensitivity to Change

The Mandurang Valley North Character Area presents for the most part, a notably open landscape due to the clearing of vegetation in fields and alongside roads. Portions of this Landscape Area to the north of the subject boundary comprise comparatively more dense residential forms, predominantly characterised by single storey detached dwellings on orderly subdivided land.

In this area, notable features are the substantial sheds and ranch-style houses that occupy the foreground of views, standing out against the backdrop of forested ranges and ridge lines in the distance.

This landscape has undergone significant modification due to human activity and the development of rural residential properties. While most new developments are generally expected to be visible, the sensitivity to change in this area is relatively low, primarily because of the extensive existing development that has already shaped the landscape.

Rating: Low

Anticipated Landscape Change

Anticipated and ongoing changes to the landscape of this Character Area include:

- Removal of indigenous vegetation for farming or bushfire management.
- Prominently sited built form that fails to integrate into the landscape character of the area.
- Introduction of exotic plant species and formal garden design.
- Further sub-division and development of land.

As found in the visibility analysis, the Character Area generally records a low visual exposure from key viewing corridors, with its visual realm generally limited to local roads that traverse it and from within private property.

Landscape Character Area 5: Mandurang Valley North

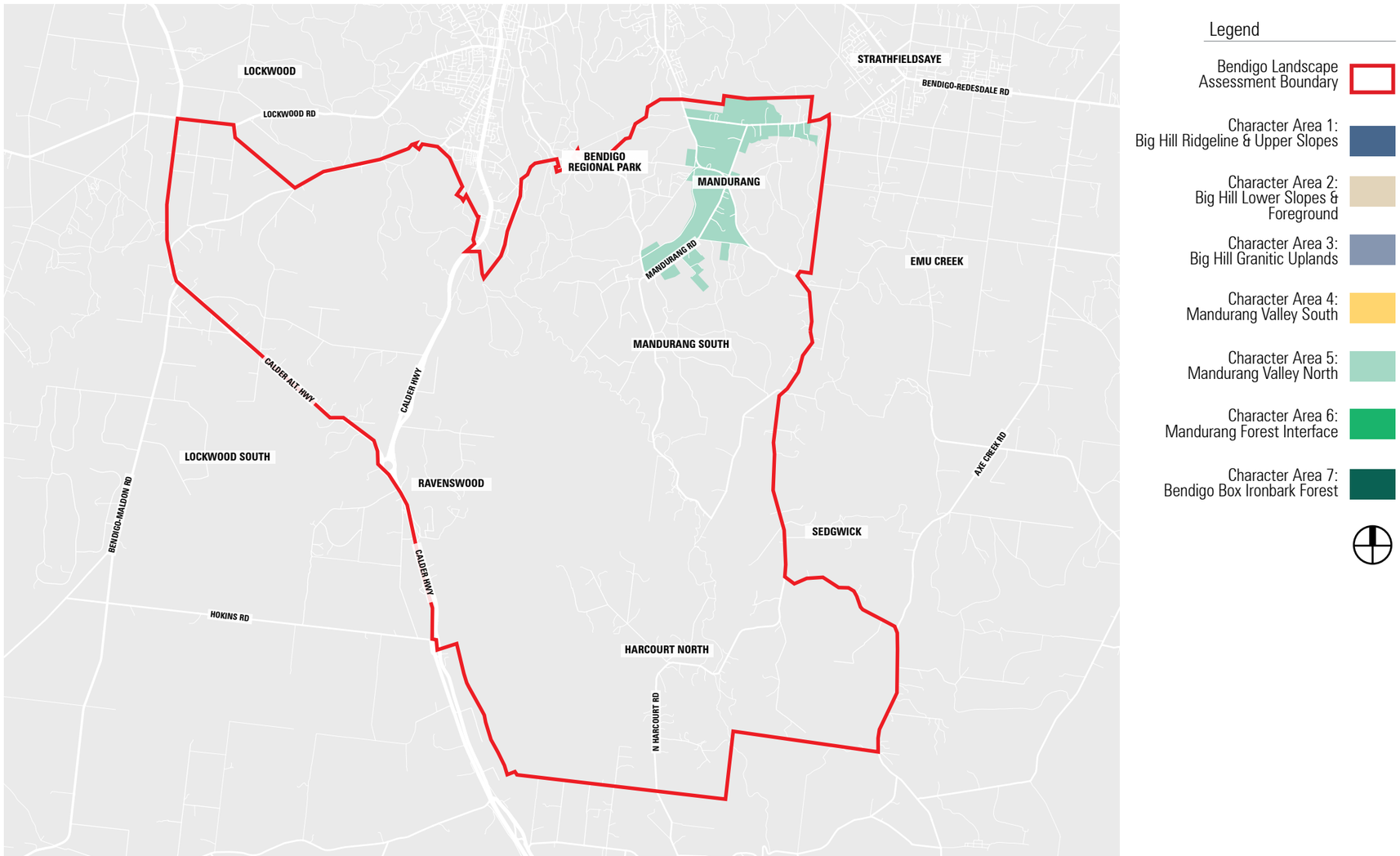


Figure 77. Landscape Character Area 5

4.7 Landscape Character Area 6: Mandurang Forest Interface



Thick canopy vegetation within the Mandurang Forest Interface Character Area

Description

This landscape type occupies the transitional zone where forested hill slopes meet the open fields of the Mandurang Valleys. It's distinguished by the dominance of Box-Ironbark forest vegetation, forming a natural buffer between the conserved forested regions and neighboring areas that have experienced notable human impact.

Furthermore, a section to the west, encompassing the Lockwood State Forest, has been incorporated into this Landscape Character area. This addition is justified by its resemblance to Box-Ironbark forest and its status as a preserved enclave, surrounded by cleared pastureland and rural properties.

Within this landscape, residences are often nestled deep within the native bushland, concealed by the surrounding greenery, which defines the area's primary feature.



Residential dwellings immersed within the forest interface

Key Features

- Dwellings nestled into an undulating, forested setting.
- Lifestyle allotments with limited likelihood of adjacent development.
- Valley enclosed by the Box-Ironbark forests of the National and Regional Parks.
- Sense of isolation created by limited access.
- Limited development that has provided some protection of remnant ecosystems and habitat.

Sensitivity to Change

This landscape is of moderate sensitivity due to its reliance on the prevalence of vegetation over built structures to maintain its character. The undulating terrain and dense vegetation in various areas can help shield any developments if sited appropriately.

Rating: Moderate

Anticipated Landscape Change

Anticipated and ongoing changes to the landscape of this Character Area include:

- Removal of indigenous vegetation, e.g. for bushfire management or farming/recreational purposes.
- Prominent built form that does not appear recessive to the tree canopy.
- Introduction of exotic plant species and formal garden design.
- Further subdivision and fragmentation of land.

As found in the visibility analysis, visual exposure of the Character Area is limited to local settings and short range views from roads and tracks that traverse through it, or from private properties that adjoin forest areas.

Landscape Character Area 6: Mandurang Forest Interface

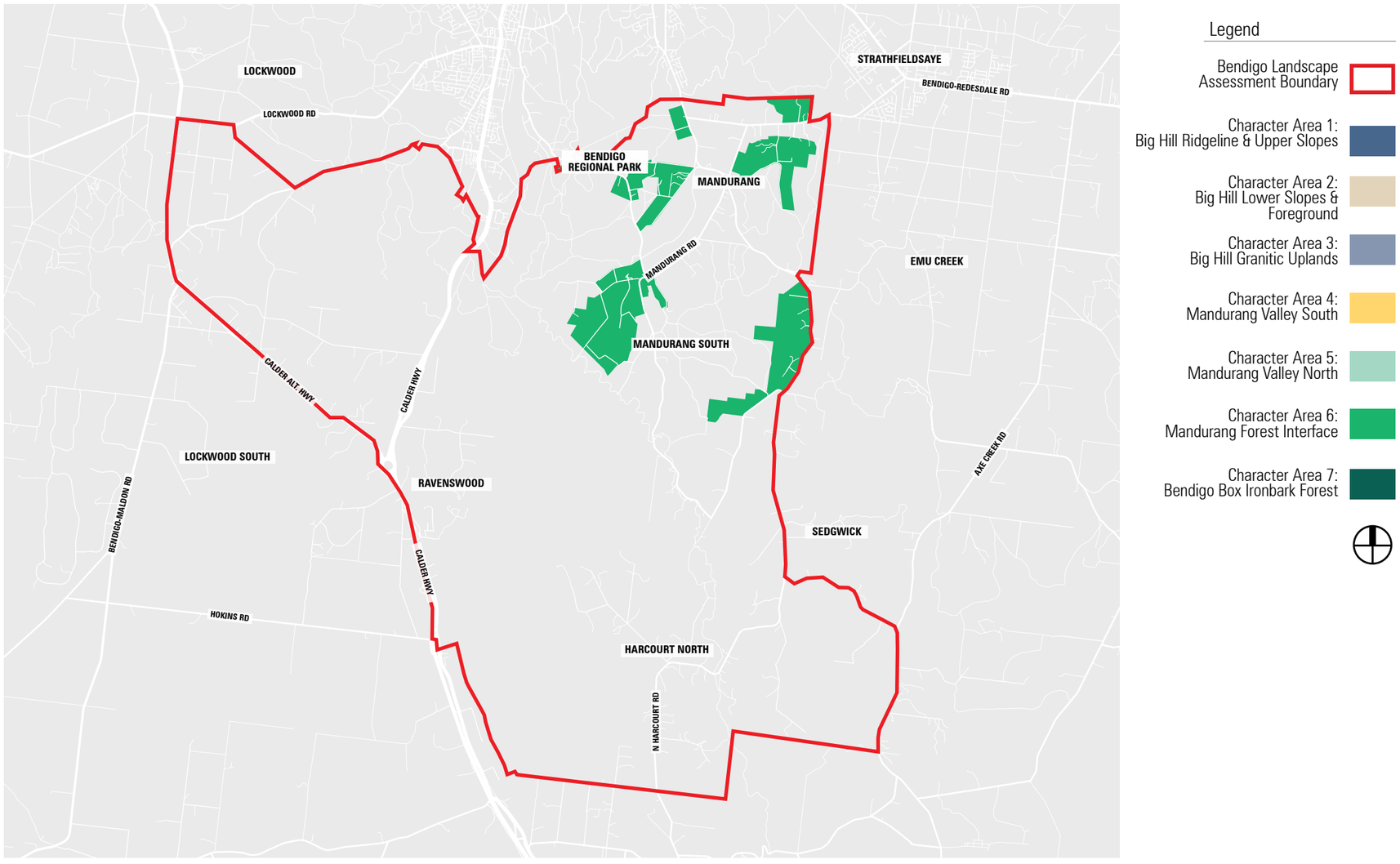


Figure 78. Landscape Character Area 6

4.8 Landscape Character Area 7: Bendigo Box-Ironbark Forest



Box-Ironbark Forest within the Bendigo National Park



Box-Ironbark Forest at the One Tree Hill Lookout Tower

Description

This Character Area comprises the hills and ridges of Box-Ironbark forests that enclose the Mandurang Valley and clothe the area north of the Big Hill escarpment. Most of this Character Area is included within the Greater Bendigo National Park and Bendigo Regional Park which form the forested upland areas surrounding Bendigo. The Box-Ironbark forests of Bendigo are a remnant of a much greater ecosystem that extended across the uplands and goldfields regions of central Victoria, originally covering 13% of the State. This Character Area supports significant remnant vegetation and wildlife habitat that contributes to the conservation and recreation value of the wider study area. It provides a heavily forested backdrop that is visible throughout the Mandurang Valley. The dark, deeply furrowed bark of Ironbark trees contributes to the characteristic appearance of these forests.

Key Features

- High coverage of Box-Ironbark forests.
- Lifestyle allotments with limited likelihood of adjacent development.
- National and Regional Parks.
- Remnant vegetation and wildlife habitats that contribute to conservation values and recreation opportunities.
- The park areas are relatively inaccessible by regular vehicles: four wheel drive tracks and walking tracks crease the forest.
- Occasional dirt roads navigable by regular vehicles lead to settled areas.
- In many areas the forest edges blend with the adjacent agricultural land where remnant vegetation exists on private property.
- Crusoe and No. 7 Reservoir Reserves.

Sensitivity to Change

Located within National and Regional parkland, the dense forest areas are sensitive to change given that is not subject to any urban development except for infrastructure elements in the form of power lines, roads/tracks, telecommunication towers and water reservoirs.

The likelihood of change occurring is minimal due to the zoning and conservation status that is applied. The dry, woody forests are however sensitive to bush fires in which events would modify the landscape setting. While many species of tree within the Box-Ironbark forests have a high capacity to tolerate fire, and are quick to rejuvenate afterwards, the scrubby understorey is more vulnerable.

Rating: Moderate

Anticipated Landscape Change

Limited change is expected to occur in this Character Area as it is located within National and Regional Parks. Ongoing conservation will see an increase in flora and fauna species and reduction of weeds.

As found in the visibility analysis, visual exposure of the Character Area is however generally limited to local settings and short range views from roads and tracks that traverse through it.

Landscape Character Area 7: Bendigo Box-Ironbark Forest

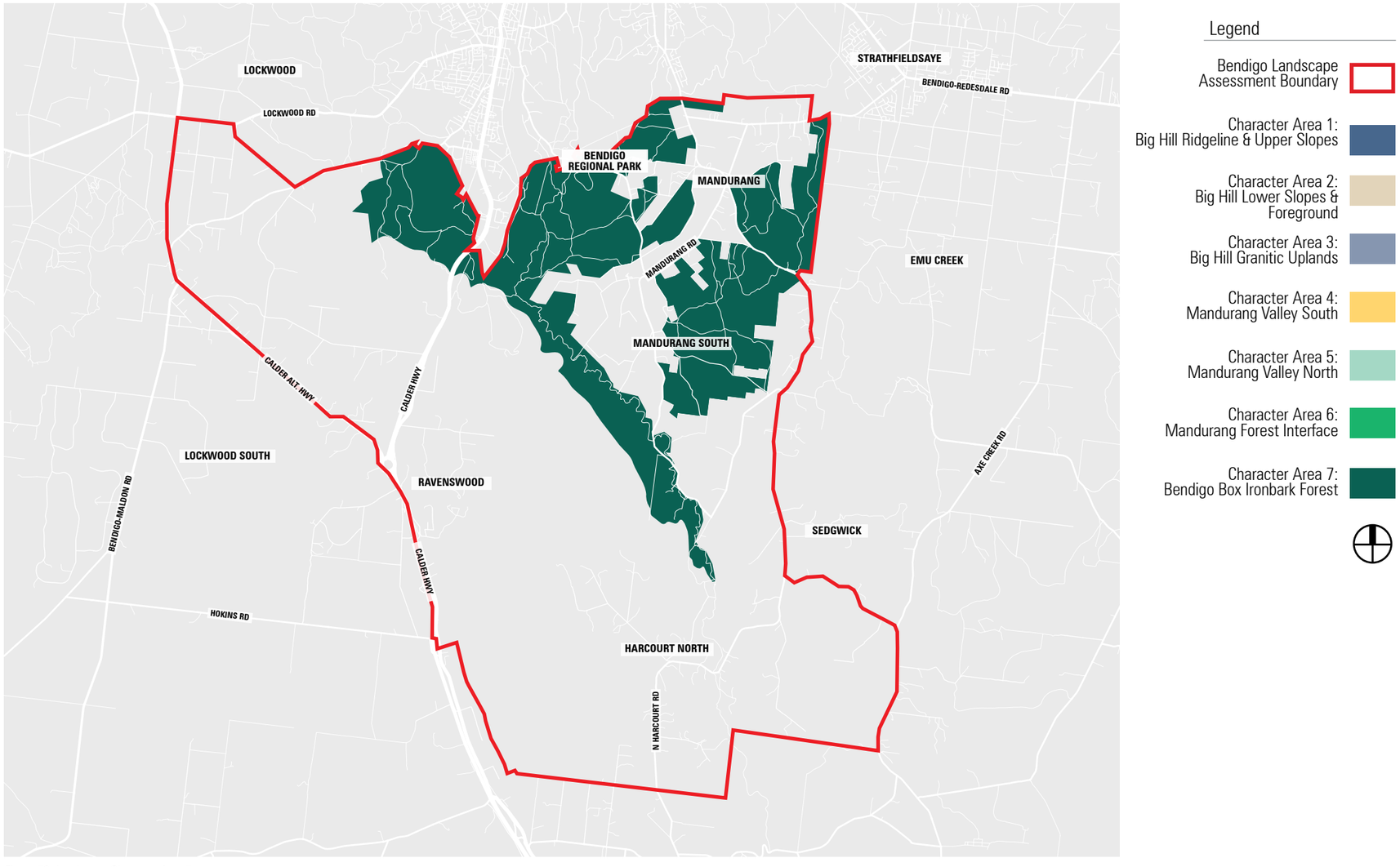


Figure 79. Landscape Character Area 7



Part 5 Landscape Significance

5 Landscape & Visual Values

5.1 Overview

The 2015 Big Hill & Mandurang Valley Landscape Assessment and subsequent 2017 Peer Review both proposed different methodologies in evaluating the significance of the landscape character areas. Both methodologies found that areas within the Big Hill Ridge Line, Granitic Uplands and areas of the Mandurang Valley to be of significance at levels worthy of the application of a Significant Landscape Overlay.

As both volumes of work reached the same conclusion, this updated assessment does not seek to introduce a third methodology in evaluating significance, but instead seeks to ratify and confirm their findings.

While both methodologies reached this conclusion, the extent of landscape considered to be of significance varied. Further, visual and scenic value differed between the reports due to either the lack of or limited degree of visual analysis undertaken. As recorded in previous chapters, this updated analysis has undergone extensive visual analysis - both in 2-dimensional (viewshed) and 3-dimensional (photomontages) forms to form a clearer understanding of the visibility of significant landscape features from key locations as to determine an appropriate for protection.

A key finding of this analysis presenting departure from earlier studies, is that the Big Hill Ridge Line and Granitic Uplands cast expansive viewsheds that are experienced along these key viewing corridors. Their position and role as a transitional point in the landscape at the southern gateway to Bendigo, and visibility from key viewing corridors with high viewing frequency is far distinguishable from the localised visual setting of the Mandurang Valley and Forest.

Meanwhile and comparatively, the extent of landscape considered 'significant' be varied within the Box-Ironbark Forest is reduced to where it is most visually prominent from highly frequented viewing corridors and positions of municipal and regional stature. While not contesting the 'significance' of environmental features from within the Box-Ironbark Forest and its interface - the visual analysis and fieldwork confirms that visibility of these character areas do not extend beyond the local setting.

While it is not contested that the Box-Ironbark Forest of Bendigo and surrounds are significant on environmental, cultural, ecological and scientific grounds - this work has determined that this area has a low 'visual' significance (local) due to its localised setting - experienced primarily from local roads and proximate private properties. Supporting this, the 2015 Landscape Assessment only found the Big Hill Southern Slopes & Woodlands (CA01) and Big Hill Granitic Uplands (CA02) to be of 'higher' visual values, while areas associated with the Mandurang Forest recorded 'low or moderate' visual values.

This approach is supported by the Victoria Planning Provisions, where State Policy refers to recognising 'the natural landscape for its aesthetic value' (Clause 12.05-2S); protecting 'the visual amenity of valued rural landscapes and character areas' (Clause 15.01-6S); and siting and designing development 'to minimise visual impacts on surrounding natural scenery and landscape features' (Clause 15.01-6S). The objectives and content of the Significant Landscape Overlay (SLO) also suggest a clear emphasis on aesthetic and visual aspects, prioritising them over parallel environmental, scientific, social and cultural heritage considerations. This emphasis on the visual and aesthetic aligns with established international standards and the framework for landscape evaluation in Victoria dating back to the early 1970s.

It is acknowledged that 'gaps' in Policy exist regarding the type and coverage of protective measures across valued attributes of the Box-Ironbark Forest. However, subject to relevant technical investigations, this assessment concludes that an alternative tool to the Significant Landscape Overlay is more appropriate, such as those typically applied to highly valued and/or sensitive environmental, ecological and vegetation features of a landscape (i.e. Environmental Significance Overlay, Vegetation Protection Overlay).

While the previous studies have provided detailed assessment of other values, within the realm of 'landscape' other than visual/scenic values, this update provides the necessary analysis to inform the visual and scenic values that traditionally underpin application of the Significant Landscape Overlay.

In conclusion, this report finds that the application of the Significant Landscape Overlay is appropriate in areas with highly valued landscape features that are visually prominent from key and frequented viewing corridors and location. Specifically, the Significant Landscape Overlay can in our opinion only be substantiated to the Big Hill Ridge Line & Upper Slopes and Granitic Uplands, within a curtilage closely aligned to the findings of the viewshed analysis, further refined through 3-dimensional photomontaging and fieldwork.

5.2 Determining Landscape Significance

Landscape significance is the designation of a particular landscape as special or important arising from its landscape values, including aesthetic values and other documented values such as historic, environmental, scientific, social or other values.

In this study, visual values are prioritised above other values, hold the greatest weight in determining the potential significance of the identified landscapes. This emphasis stems from the understanding that the ultimate aim of landscape assessment is to protect and manage significant landscapes relative to future development. Essentially, the purpose of such a study is to ensure that the appropriate planning tools are in place to effectively manage the visual impact of development on significant landscapes.

The following methodology is consistent with that applied in the 2017 peer review of the original landscape assessment. While it is noted that there are various methodologies in practice, this methodology has been applied in landscape studies since the *Great Ocean Road Region Landscape Assessment Study by Planisphere (2003)*, later the *South West Victoria Landscape Assessment Study, June 2013, (SWLAS)* and adapted and refined throughout subsequent studies and findings from Planning Panels Victoria and other similar forums. Most recently, the methodology is applied to the *Mitchell Shire Landscape Assessment Study by Claire Scott Planning (2023)* leading to the drafting of several Significant Landscape Overlays. This methodology is considered appropriate given its historic application to this study area, and comparable study areas such as in Mitchell Shire where common landscape features (such as topographic contrasts, granitic outcrops and forest areas) and viewing experiences (transient corridors and static locations) are present.

The assessment methodology is set out as follows.

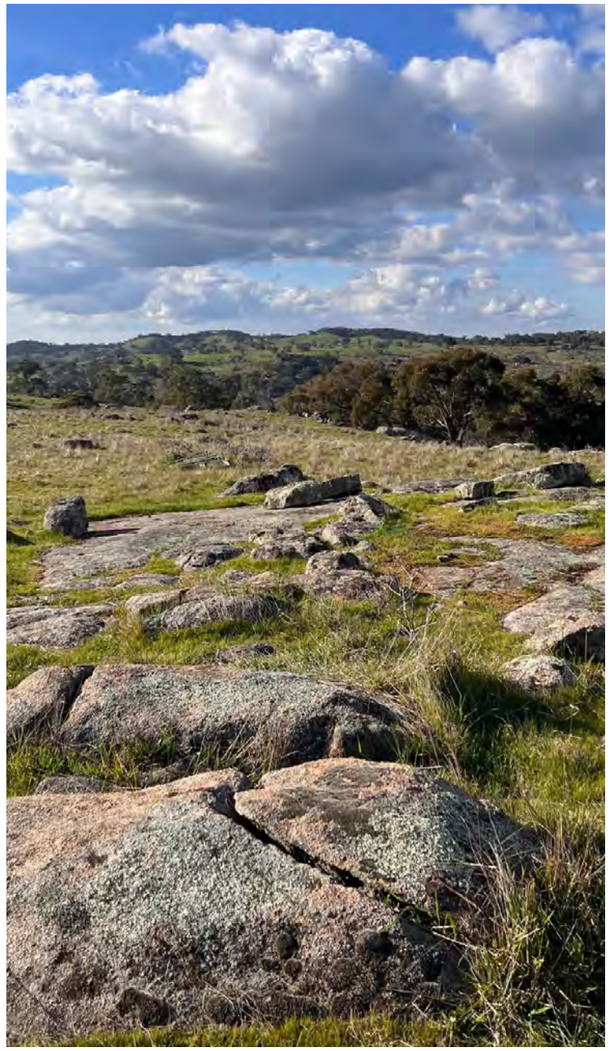
5.2.1 Visual Assessment

As this study is underpinned by the objective to identify potentially significant landscapes and ensure that future development and practices consider visual impacts, detailed visual assessment was undertaken following the desktop landscape assessment.

This included detailed viewshed modelling, fieldwork and photography focusing on visual values of the study area.

Fieldwork has been undertaken on three separate occasions, including a dedicated visit for a guided site visit of the largest private land holding in the study area known as 'Ravenswood Run.' Two additional private properties were visited as being representative examples of properties recording a high degree of visual exposure to the 'break of slope' of the Big Hill Ridge Line. Fieldwork was otherwise predominantly dedicated to the public realm.

The fieldwork, viewshed analysis and photography confirmed the type and extent of landscape features that are visible and prominent from key and highly frequented viewing locations.



Scattered rocky outcrop within the Granitic Uplands

5.2.2 Visual Values Assessment

To determine the overall visual value of landscapes, **three** landscape components are assessed:

1. Landscape features

Landscape Features Criterion:

The landscape is distinctive or inspirational for its landscape feature or features that attract the viewer and may provoke an emotional response.

A landscape feature is a topographic element or prominent landmark such as a headland, mountain range or volcanic cone that is visually dramatic and provides the landscape with its 'wow factor'. The prevalence or concentration of a particular landscape attribute or vegetation type e.g., weathered granitic boulders, a stand of River Red Gums, a proliferation of dry stone walls etc. may also be classified as a landscape feature.

When assessing landscape features the following considerations are relevant:

- Characteristics that are visually dramatic
- Symbolism
- Iconic elements
- Evocative qualities of the landscape
- Expressive attributes

2. Aesthetic variety

Aesthetic Variety Criterion:

The landscape is visually compelling for its aesthetic variety, including landscape edges and/or contrasts in form, scale, colour or texture that provide visual diversity and interest for the viewer.

Aesthetic variety in a landscape contributes to making it visually interesting. Aesthetic variety is found in the presence of landscape edges, or contrasts in form, scale, colour or texture. Edges occur at the point of intersection between two landscape elements e.g., the coastline; the edge of a forest or a lake; the boundary between vegetation types or different landscape types; the intersection between a mountain range and a plain; an incised valley etc. Visual contrasts can also occur at a micro scale, such as across a mosaic of coastal headland scrub, or within the geological layering of a sea cliff. Aesthetic variety in also present in the dynamic changes that occur within a landscape e.g., at the coastal edge, where light, weather, tides, wave action and other coastal processes add to the visually compelling nature of a seascape.

Overall, the existence of edges or contrasts in the landscape provides visual diversity, a quality associated with scenic value. Conversely, uniformity in a landscape is generally deemed monotonous. It should be noted though, that contrasts that are discordant or which disrupt the character or pattern of a landscape, such as a cleared timber plantation adjacent to a scenic road, would not usually be seen as positive visual elements.

The following considerations are relevant when assessing aesthetic variety:

- Points of intersection in the landscape
- Areas of interesting visual difference or aesthetic contrast
- Variegated textures
- Colours and patterns
- Visual complexity
- Picturesqueness Composition

3. Composition

Composition Criterion:

The landscape has outstanding compositional qualities, the combination of which achieve a unified whole, and provide the setting or subject of notable views.

The composition of a landscape is its make-up or configuration, including arrangements of features or other landscape elements and their form, scale and unity. Arrangements and patterns of colours and textures are also important, as well as how and from where the landscape is viewed and experienced.

When assessing landscape composition the following considerations are relevant:

- Arrangement, structure and configuration
- Balance and proportion
- Form and scale
- Elements such as enclosure or openness
- The unity of landscape elements
- Views to and from the landscape

5.3 Levels of Landscape Significance

To determine a level of significance for each landscape, the following rating considerations are applied to visual landscape components (landscape features, aesthetic variety and composition) with consideration of the landscape significance criteria:

Exemplary

How representative or illustrative is the landscape (and its features, aesthetic variety, and composition)? Is it the 'best' of its type? Is it exemplary within the local, regional, or state context?

Iconic

Is the landscape (and its features, aesthetic variety, and composition) instantly recognisable? Is it symbolic for its visual qualities? Has the landscape been represented in art, photography, literature etc.? Is it iconic within the local, regional, or state context?

Scarce

How uncommon, rare, or endangered is the landscape (and its features, aesthetic variety, and composition)? Is it scarce within the local, regional, or state context?

The assessment of each of the three landscape components against the criteria results in the determination of four geographical significance ratings (low, moderate, high or exceptional). As overall significance level in relation to visual values is then determined for the landscape.

The significance levels are:

Low = No Significance

Moderate = Local Significance

High = Regional Significance

Exceptional = State Significance

The final determination of significance does not rely on the number of 'moderate', 'high' or other ratings. Rather, for example, if a landscape is rated 'high' against one or more of the landscape significance criteria, that level is the overall rating attributed to the visual significance of the landscape.

This method of determining a significance level is consistent with the approved standard for listing of a place on a heritage register, that is, the place or object meets one or more of the set criteria.



Undulating granitic landscapes with a ridge line horizon

Other landscape values

Levels of significance are attributed to the other landscape values based on the stated level of significance in the secondary source or based on the source itself (where available). For example, a landscape that forms part of the Victorian Heritage Register logically has cultural heritage values of State significance.

For the purposes of this study, which prioritises visual or aesthetic values, a landscape cannot be classified as significant for cultural heritage, environmental, scientific, social, or other values alone. For a landscape to be classified as significant, it must singularly meet the definition of landscape significance and have established (i.e., assessed and documented) visual values.

Community values

During the Landscape Assessment component of this study, Greater Bendigo Council Officers undertook a 'refresh' of earlier community consultation to confirm if previously identified values remained valid or if new values had emerged, acknowledging that time has passed since the 2015 study and the community has continued to evolve.

The questionnaire included the following questions:

- Which parts of the study area do you live in, work or visit?
- What do you value the most or think is special about these landscapes?
- Do you have any concerns about the way these landscapes are changing or may change in future?
- Can you suggest any ways to protect, enhance or improve these landscapes?

Key findings are recorded within this landscape significant assessment, specifically where they relate to the visual realm.

5.4 Significant Landscapes

Two landscapes have been determined to be significant at a local or regional level based on the methodology outlined above. As discussed in the overview, it is important to reiterate Step 1 - Visual Assessment as the starting point, to understand which Character Areas (and the extent of landscape within) record high visual values underpinned by their visual prominence at levels beyond a local viewshed.

The determined 'boundaries' of significant landscape vary from the higher level Character Areas which are based on common physical characteristics confirmed in the updated Landscape Assessment. In an iterative process, the boundaries have been refined through additional viewshed testing, photomontage testing and fieldwork to ratify findings. The boundaries represent an extent of the landscape that are notably visible from key locations, particularly the transient corridors of the Calder Highway, Calder Alternate Highway and Melbourne-Bendigo railway line. These represent the acknowledged 'gateways' experience into the Greater Bendigo region.

The significant landscapes within the study area are:

- **Big Hill Ridge Line & Upper Slopes**
- **Big Hill Granitic Uplands**



Uniquely formed boulders punctuating the Granitic Uplands landscape



The sweeping panorama of the Big Hill Ridge Line

5.5 Significance Assessment: Big Hill Ridge Line & Upper Slopes

Regional significance

The metamorphic crescent of the Big Hill Ridge Line extends widely across the study area - mostly east of the Calder Highway, and presents a distinct visual landmark that forms a visual and physical gateway between the southern established settlement areas of Bendigo and the surrounding agricultural and bushland setting.

5.5.1 Visual Significance Assessment

Landscape Features

The landscape is distinctive or inspirational for its landscape feature or features that attract the viewer and may provoke an emotional response."

The long metamorphic crescent of the Big Hill Ridge Line and the forested upper slopes of its escarpments forms a distinct landscape feature that capture the attention of viewers as they traverse to and from Bendigo along primary transit corridors, and form the horizon in longer distant views in the broader surrounds from secondary roads and static positions within both public and private realms.

Together with the connected Granitic Uplands and more broadly, Mt Alexander, the ridge line is evidence of ancient volcanic activity through its distinctive metamorphic crescent formation. The perceived height of the ridge line is embellished by the presence of dense remnant forest lining its top, and extending down into the southern escarpment of which is generally located within the Greater Bendigo National Park.

The topographic formation and presence of remnant Box-Ironbark Forest, stand in contrast to the foreground of low and open pastoral plains, and are highly visible in the broader landscape setting and form a key visual marker at the southern entrance and exit to the Greater Bendigo region. There are generally few examples of granitic boulders present - reinforcing the distinction between this character area and the Granitic Uplands.

The Big Hill summit on the western side of the Calder Highway is a distinguishable feature, while a taller peak to the east of the Big Hill railway tunnel forms a prominent marker in the ridge line and is easily identifiable due to its cleared vegetation exposing the landform in contrast to its forested surrounds.

In addition to portions of cleared ridge line and escarpments, other evidence of intervention is present including radio towers and some shed structures. These are however tertiary to the more prominent natural landscape features. Evidence of revegetation of cleared escarpment is also evident in lighter wooded areas on the southern escarpment.

EXEMPLARY?	HIGH (REGIONAL)
The rising and heavily forested Big Hill Ridge Line and its several peaks are prominent landscape features within the broader setting and contribute to high scenic beauty at the doorstep of the region. The ridge line and southern escarpment are therefore exemplary at regional level.	

ICONIC?	HIGH (REGIONAL)
The landscape is visually prominent at the southern entrance to Bendigo and is well regarded as forming the southern gateway in and out of this region as frequently noted in community consultation. It is therefore iconic at regional level.	

SCARCE?	HIGH (REGIONAL)
While this type of landform is not uncommon across Victoria which enjoys many ranges, hills and mountains in regional areas, it is unique to the generally flat urban areas of Bendigo and lower lying natural and agricultural surrounds and therefore considered scarce within the region.	

Overall Landscape Features rating: HIGH (REGIONAL)



The Big Hill Ridge Line is a prominent landscape feature within the setting



The Big Hill Ridge Line west of the Calder Highway, forming the backdrop to a rural landscape



The Big Hill Ridge Line forming the horizon of this view from Francis Road, Lockwood South, with Mount Alexander visible in the more distant background (towards the right of image)

Aesthetic Variety

The landscape is visually compelling for its aesthetic variety, including landscape edges and/or contrasts in form, scale, colour or texture that provide visual diversity and interest for the viewer.

The Big Hill Ridge Line provides a high degree of aesthetic variety to the broader setting. Its steeply rising topography is in clear contrast to the lower lying agricultural foreground, while its densely forested ridge line contrasts the open pastoral plains to its south and west. Its metamorphic crescent forms the horizon of many views and becomes more prominent from greater distances which reinforces this contrast in the broader setting.

Its break of slope creates a clear edge with the undulating agricultural plains in the foreground while clear edges in density of tree canopy alludes to boundaries between private farmland and the Regional and National parks. While the ridge line generally consistently densely vegetated, patches of cleared or lightly wooded escarpment contributes to a mix of colour and texture in the landscape.

The nature of the metamorphic crescent formation results in a gradually curving profile where creases, nooks and shadows contribute to a dynamic escarpment throughout the changing light of the day, altering colour and depth and providing further visual variety. This variety is far more distinguishable on the southern side of the ridge line - where the slope is more dramatic relative to more gradual and subtle transitions to the north of which is also cloaked in the dense canopy of the Mandurang Forest.

The edge formed by the forest along the southern escarpment is notable in marking entrance into this section of the Box-Ironbark Forest as somewhat of a 'green wedge' to the south of Bendigo's established settlement areas - contributing to Bendigo's profile as the 'City in the Forest.' This contrast is particularly experienced passing through the highway and railway.

EXEMPLARY?	HIGH (REGIONAL)
The distinctive break of slope to the south of ridge line and edges in canopy cover and species relative to the broader agricultural setting contribute to prominent and compelling contrasts between the subject landscape and its surrounds. Its aesthetic variety is therefore considered exemplary at regional level.	

ICONIC?	HIGH (REGIONAL)
The prominence of the Big Hill Ridge Line is commonly identified as the southern gateway to the Greater Bendigo region, largely owed to its topographic distinction from the lower and undulating agricultural surrounds. It forms a clear contrast between the established settlement areas and agricultural surrounds, while being lined with remnant National Park tree canopy. It is therefore considered iconic at regional level.	

SCARCE?	HIGH (REGIONAL)
Contrasts and clear edges in topography and vegetation are generally more subtle in the broader context compared to those of which are prominently formed by the Big Hill Ridge Line. Peaks and escarpments of mixed vegetation cover, contributing to revealing the landform are also scarce when compared to the densely forested ridge and escarpments of Mt Alexander in the broader setting. The landscape is therefore considered scarce within the region.	

Overall Aesthetic Variety rating: HIGH (REGIONAL)





The mix of forested and cleared ridge line as well as variation in elevation and slope provides aesthetic variety along its length

Composition

The landscape has outstanding compositional qualities, the combination of which achieve a unified whole, and provide the setting or subject of notable views.

The Big Hill Ridge Line offers a dynamic visual panorama due to the prominent metamorphic crescent bending across the lower lying and undulating agricultural landscape. The curved nature of the ridge line in the context of variously aligned primary movement corridors where visibility is most frequent, results in many different offerings of visual composition towards the landscape.

As the Calder Highway and Melbourne-Bendigo Railway line traverse through the ridge line, a unique visual composition through these literal 'gateways' into Bendigo. Along these transient corridors, the landscape is glimpsed through roadside vegetation which provides filtered views and add to the visual intrigue of the landscape. Travelling south from Bendigo along both highways and the railway, a more complete appreciation of the ridge line and connected Granitic Uplands are appreciated.

The full panorama of the ridge line and its forested upper slopes are more available from elevated peaks within private properties, but also become evident at greater distances travelling northbound along Bendigo-Maldon Road and other elevated local roads.

Due to the contrast between the ridge line and lower lying and undulating agricultural plains in the foreground, the ridge line consistently forms the horizon in views from the south and west. Its presence as the backdrop of these views across farmland and rural residential areas is key to the picturesque scenes available. At closer range, key ridge line peaks often form the backdrop of streetscape views of local roads, or as the backdrop to short range views across farmland and private property.

The presence of the Box-Ironbark Forest lining the ridge line and escarpments, and its contrast with cleared or lightly wooded areas also contribute to the compositional qualities of these views, introducing variety in texture, colours and hues to the prominent backdrop. Appreciation of the densely forested northern escarpment can be experienced from the One Tree Hill lookout tower - although the landform itself is less evident in this view.

Overall landscape features rating: **High**

EXEMPLARY?	HIGH (REGIONAL)
The ridge line forms the prominent backdrop to views on approach and departure from Bendigo, as well as the horizon in short and long distant views from the lower lying rural surrounds. Its compositional qualities are therefore considered exemplary at regional level.	

ICONIC?	HIGH (REGIONAL)
The landscape is regionally iconic, being exposed to a high number of viewers from the Calder Highway and Alternate Highway and Melbourne-Bendigo Railway Line and forming the backdrop to picturesque views across the landscape. The passage through the landscape via highway and railway line is also iconic to the region as one becomes immersed in the Box-Ironbark Forest on arrival to Bendigo.	

SCARCE?	HIGH (REGIONAL)
The visual relationship between the landscape and arrival experience into the main urban centre of the region is considered to be a relatively unique experience within the region.	

Overall Composition rating: HIGH (REGIONAL)



Foreground slopes and landscape features with the ridge line consistently forming the background of views contribute to high compositional qualities



Highly compositional panoramic views of the ridge line are frequently available across the broader setting



The Big Hill Ridge Line in the middleground of the view from One Tree Hill Lookout, with the peak of Mount Alexander in the more distant background

5.5.2 Secondary values

As discussed, the focus of the research and review within this study is primarily focused on the visual realm. However it is acknowledged that other 'secondary' values, as transcribed in earlier studies, are present and are noted below.

Aboriginal Cultural Values

- The landscape forms part of the lands of the Dja Dja Wurrung people who have a deep and ongoing connection to the landscape and an ongoing role in caring for Country. According to their tradition, this country was established in the Dreaming.
- Resources of the forest and woodlands within this landscape supported their nomadic communities who moved through the forest areas seasonally.
- Much of the landscape is proclaimed within the Greater Bendigo National Park, particularly north of the ridge line.
- Past surveys have located many places of significance around Big Hill including scarred trees and artefacts scatters, in addition to waterways and the Greater Bendigo National Park, recognised as places of Cultural Heritage Sensitivity.

Post contact heritage values

- Two major structures in the Big Hill area are listed on the Victorian Heritage Register: the Melbourne-Bendigo Railway opened in 1862, and the Coliban main Channel, opened in 1877 and subsequently modified.
- The railway tunnel which traverses through the ridge line is a notable engineering feat of its time, with local granite of the nearby Granitic Uplands serving as a key construction material. A small monument exists on Big Hill dedicated to workers who lost their lives on this project.

Environmental and identified values

- The 'Big Hill Range' is listed as a site of geological significance at a State level on the Geological Survey of Victoria.
- The 'Big Hill Cutting,' where the Calder Highway traverses through the ridge line, is listed as a site of geological significance at a Local level on the Geological Survey of Victoria. It has marked the main southern physical entrance into Bendigo since its creation in 1851.
- The Box-Ironbark Forest of which is predominantly contained within the Greater Bendigo National Park comprises a considerable extent and density of remnant indigenous vegetation. This type of forest across Victoria has been undergone considerable historic deforestation particularly during the gold rush and in the early establishment of agricultural areas.

Social & other values

- As acknowledged repeatedly in community consultation, the Big Hill Ridge Line is valued as a distinct landmark in the landscape, denoting the southern 'gateway' into the Bendigo Region.
- The ridge line is represented in artwork and photography such as the landscape portrait "Sandhurst from Quarry Hill" by George Rowe (1857), where the forested ridge line forms a clear horizon to the landscape.



"Sandhurst from Quarry Hill" by George Rowe (1857) reveals the deforestation of land on the goldfields of the Bendigo region (Bendigo Art Gallery)

Community values

In response to community consultation regarding valued landscape attributes within the study area, features of the Big Hill Ridge Line were commonly referenced in the submissions received. The open rolling hills, densely forested ridge lines and escarpments and a clear sense of Big Hill marking the entrance and gateway in and out of Bendigo presented as reoccurring themes of valued landscape attributes.

"Gateways to Bendigo from the south (Calder, Crusoe, Mandurang and Guys Hill) reinforce Bendigos overall character as city in the forest and convey a strong connection to the geological features of transition from Granite in the south to Goldfield sedimentary soils of Bendigo."

"Currently it is a magnificent, beautiful, unspoilt landscape which everybody get to appreciate and share in as they enter Bendigo - it sets the tone for the beauty of our town which is great for tourism and the mental health and pride of all Bendigo's residents."

"Varied vistas of rural properties with a backdrop of hills makes for a unique and peaceful area."

"The scenic views of the Big Hill valley as you drive out of Bendigo with the granitic rocks is awe inspiring. It was and still is a landmark of Bendigo to me as I return home along the Calder Highway."

"The beauty of the contrast between the Big Hill granite studded grassland valley and Box Iron Bark forest never diminishes for me."

"To have these vistas so close to Bendigo is priceless and unique to our city".

"The landscape is a beautiful gateway to the city of Bendigo and needs to be preserved"

"The general topography of Bendigo is flat. Therefore the ridge acts as a gateway to the city. Its trees, rocks and outcrops define the area and as such mark Bendigo as a beautiful city; and its people are aware of this important factor.

The natural surroundings, hills, and creeks contribute an incredible beauty of the entire area. It is something that needs to be preserved for people to experience, enjoy, and be inspired by."



The forested upper slopes and ridge line with foreground outcrops



The ridge line forms the horizon in many views in the setting



The densely forested Big Hill Ridge Line transitioning towards scattered vegetation of ridge lines within the Granitic Uplands towards the south (right of image), viewed from near the Ravenswood Interchange.

5.6 Significance Assessment: Big Hill Granitic Uplands

Regional Significance

The rugged, visually striking and rising Granitic Uplands landscape is located towards the south eastern portion of the study area and extends across the municipal boundary into the Mount Alexander Shire, where related landscape features are present.

5.6.1 Visual Significance Assessment

Landscape Features

The landscape is distinctive or inspirational for its landscape feature or features that attract the viewer and may provoke an emotional response."

Particularly significant to the landscape is the presence and density of scattered granitic boulders, often clustered, standing in contrast to the open grassy plains and often imposing in scale with unique shapes and compositions. They serve as evidence of an ancient volcanic eruption resulting in this scenic landscape. When clustered, the boulders are often arranged in unique formations including organically shaped or spherical boulders stacked atop each other in ways that evokes the viewer to ponder their origin.

Their visual scale and presence within the landscape heightens their visual presence and attracts viewers at short and long distant ranges. The visual presence of the Uplands is prominent on arrival to Bendigo from the south - looking east, while also forming a clear southern silhouette when travelling from the north along the key transit corridors.

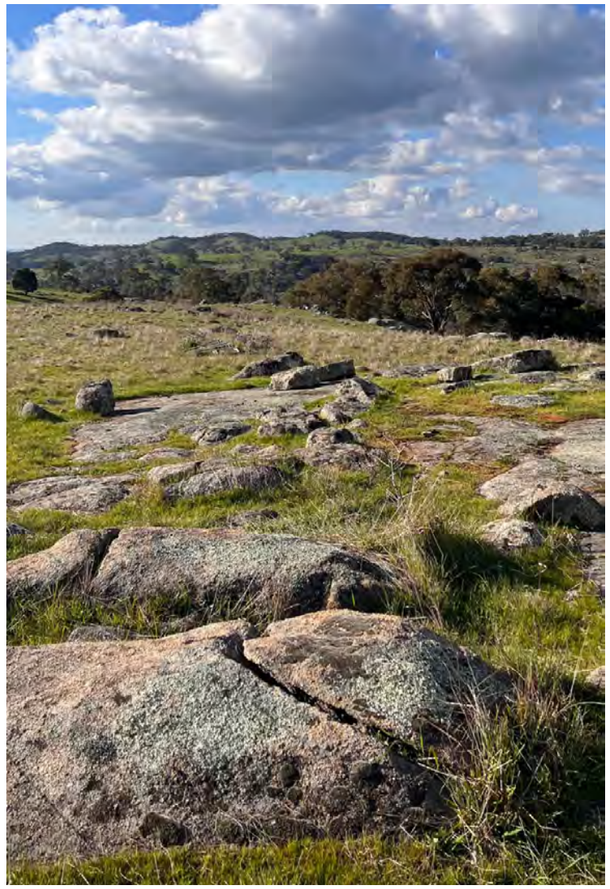
Remnant indigenous vegetation scattered across the landscape including Box-Ironbark and Red Gum trees, add further visual interest together with the imposing rocky formations. While these outcrops are a prominent feature, they have also historically served as a local construction material in (known as Harcourt Granite), for some of Bendigo's notable public buildings and in infrastructure (such as railway bridges along the Bendigo-Melbourne railway line).

EXEMPLARY?	HIGH (REGIONAL)
The imposing topographic presence of the Granitic Uplands, frequently and densely marked by the unique granite rocky formations is exemplary within the regional context.	

ICONIC?	HIGH (REGIONAL)
An ancient geological eruption that formed this landscape is unique and rare within the regional context. The presence of unique granite rocky formations present an uncommon geological feature and their presence on the rising topography in contrast to the broader surrounds present a visually iconic landscape relative to the region.	

SCARCE?	HIGH (REGIONAL)
While granitic landscapes are common across distinct regions of rural Victoria, they are rarely as abundant and visually accessible as they are in this study area - due to their dense presence on the escarpments and atop the rising uplands in this instance, of which topographically stand notably higher relative to the lower and flatter surrounds.	

Overall landscape features rating: HIGH (REGIONAL)



Granite ground cover is common in addition to more imposing and upstanding sculptural boulders

Aesthetic Variety

The landscape is visually compelling for its aesthetic variety, including landscape edges and/or contrasts in form, scale, colour or texture that provide visual diversity and interest for the viewer.

While the dense presence of rocky outcrops subtly transitions into the broader landscape as a soft 'edge,' the steeply sloping Uplands are in clear contrast to the flatter surrounds. While the rising topography is a feature of the landscape, the Granite boulders and rocky ground have historically constrained both development and canopy growth - creating a clear landscape distinction from the dense forested Big Hill Ridge Line to the north.

The rising topography and imposing granite boulders provide a contrast to the lower lying and open pastoral plains to the west - which form a foreground from viewing corridors. The clear presence of creasing gullies and rocky folds within the landform also contrast to the foreground and smoother ridge line of Big Hill.

At close range, the unique shapes, textures and colours of the granite boulders contrast to other landscape features across the viewshed.

EXEMPLARY?	HIGH (REGIONAL)
The landscape comprises a clear contrast between the rolling pastoral plains and forested Big Hill Ridge Line, with the notably rugged landscape of the Granitic Uplands defined by the unique and visually varying granite boulder formations. Clustered or sometimes isolated remnant vegetation interwoven throughout the rocky formations also contribute to visual interest. This aesthetic variety is exemplary relative to the broader region.	

ICONIC?	HIGH (REGIONAL)
The imposing and unique rocky formations which are often spherical and stacked in intriguing compositions are visually iconic within the region, and able to be perceived at both short and long distance ranges from key viewing corridors.	

SCARCE?	HIGH (REGIONAL)
This landscape is unique to the broader municipality and when considered with parts of Mount Alexander's foothills, is scarce relative to the broader region.	

Overall landscape features rating: **HIGH (REGIONAL)**



The highly varied forms and scale of the granite boulders contribute to a high degree of aesthetic variety





The granite boulders and ground cover interspersed throughout other features including agricultural landscape and prominent native vegetation contributes to aesthetic variety

Composition

The landscape has outstanding compositional qualities, the combination of which achieve a unified whole, and provide the setting or subject of notable views.

The landscape comprises impressive compositional qualities when viewed from a mix of settings and viewing ranges. From a distance - such as from the Ravenswood Interchange or Calder Highway exiting through the Big Hill Ridge Line travelling south, a wide breadth of the uplands topographic clearly dotted and marked by scatterings and more imposing granite formations can be enjoyed. Travelling north on arrival towards Bendigo, the rising topographic formation and the rocky outcrop contribute to a visual 'gateway' experience.

From closer range views such as from the railway corridor and scenic roads traversing the uplands, the rocky formations can be enjoyed in greater detail. The visual uniqueness of the sculptural formations set within the backdrop of open and rolling pastoral plains create a highly compositional viewing experience. Equally, impressive and unique views can be composed where high points of the Big Hill Ridge Line form the backdrop of visually stunning collections and precariously stacked rocky formations.

EXEMPLARY?	HIGH (REGIONAL)
Distant views comprising a wide breadth of the rising topographic landform painted a collection of granite boulder formations, form an imposing and breathtaking view particularly when travelling south from Bendigo. Closer range views of individual boulders and stacks set within backdrops of either rolling pastoral plains or the Big Hill Ridge Line, present exemplary compositional qualities within the region.	

ICONIC?	HIGH (REGIONAL)
The uniquely formed boulders that in some instances are precariously stacked atop one another and are highly photogenic. They are a compositionally iconic landscape feature in the broader region.	

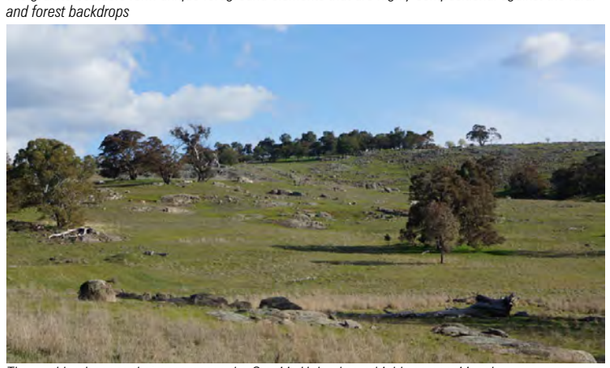
SCARCE?	HIGH (REGIONAL)
The rocky formations that can be experienced as features of the broader rising topography, or as individual subjects in closer range views, are unique to this region. They are however not uncommon across the Victoria, but are limited to this character area and therefore scarce within the broader region.	

Overall landscape features rating: **HIGH (REGIONAL)**





The granite boulders form unique foreground elements that are highly compositional against the rural and forest backdrops



The rural landscapes that encompass the Granitic Uplands are highly compositional

5.6.2 Secondary values

As discussed, the focus of the research and review within this study is primarily focused on the visual realm. However it is acknowledged that other 'secondary' values, as transcribed in earlier studies, are present and are noted below.

Aboriginal Cultural Values

- The landscape forms part of the lands of the Dja Dja Wurrung people who have a deep and ongoing connection to the landscape and an ongoing role in caring for Country. According to their tradition, this country was established in the Dreaming.
- Past surveys have located many places of significance around Big Hill including scarred trees and artefacts scatters, in addition to waterways and the Greater Bendigo National Park, recognised as places of Cultural Heritage Sensitivity.

Post contact heritage values

- The Granitic Uplands has a rich post-contact history in regard to the gold mining boom of the 19th century.

Environmental and identified values

- The presence of unique granite formations are evidence of a major ancient geological eruption, pushing up layers of the earth approximately 368 million years ago. It is recognised as being geologically significant at State level, with evidence of this eruption abundant and intrinsic to the landscape today.
- The Bendigo region is well known for its fossil graptolites, which attract geologists from around the world

Social & other values

- Given their topographic prominence in the broader viewshed, the Granitic Uplands contribute to the 'gateway' experience at the southern entrance to the Bendigo Region, blending in with the Big Hill Ridge Line.
- Harcourt granite is a well-known construction material and is a primary material in some of Bendigo's major public buildings and in other infrastructure including railway bridges present in the broader study area.



Rolling fields of the Granitic Uplands

Community values

In response to community consultation regarding valued landscape attributes within the study area, features of the Granitic Uplands were commonly referenced in the submissions received. The granitic geological features as a point of transition in the landscape and an identifiable feature at the southern gateway of Bendigo were common referenced, as well as the clear presence of rocky outcrop as intact, historic features in the landscape. Key quotes include:

"Gateways to Bendigo from the south (Calder, Crusoe, Mandurang and Guys Hill) reinforce Bendigo's overall character as city in the forest and convey a strong connection to the geological features of transition from Granite in the south to Goldfield sedimentary soils of Bendigo."

"The character of rolling granitic hills with rocky outcrops and large, mature trees. Much of which has not changed significantly over time"

"The scenic views of the Big Hill valley as you drive out of Bendigo with the granitic rocks is awe inspiring. It was and still is a landmark of Bendigo to me as I return home along the Calder Highway

"The beauty of the contrast between the Big Hill granite studded grassland valley and Box Iron Bark forest never diminishes for me."

"It is a fantastic entry to Bendigo from the south. It is a very sensitive and ancient environment with wonderful rock formations,

"The general topography of Bendigo is flat. Therefore the ridge acts as a gateway to the city. Its trees, rocks and outcrops define the area and as such mark Bendigo as a beautiful city; and its people are aware of this important factor."

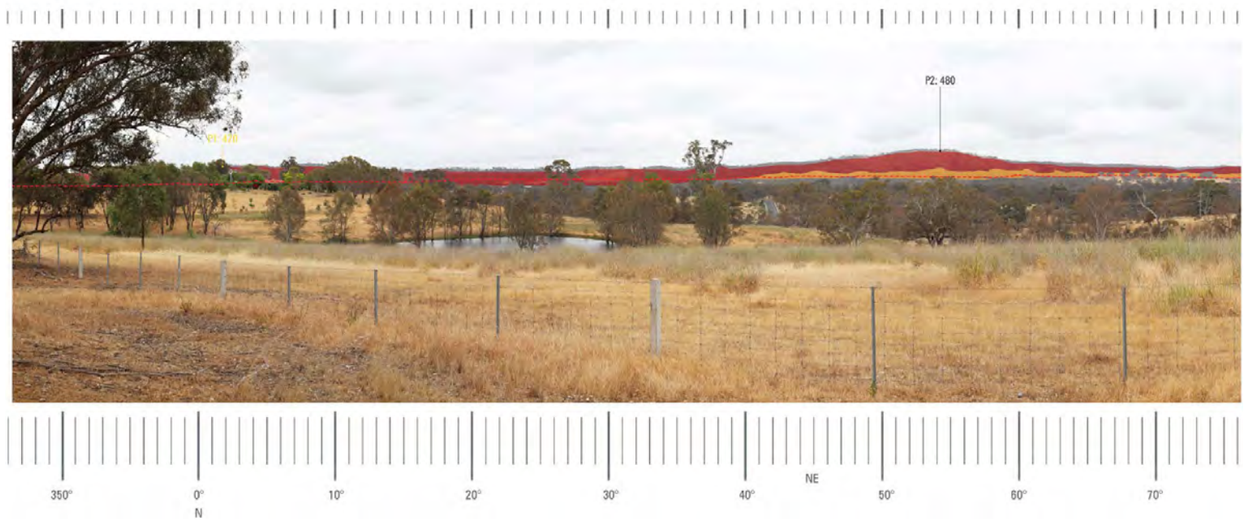


Sculptural rock formations strewn across the Granitic Uplands landscape

5.6.3 Determining the extent of significant landscape

The following considerations have been used to determine an appropriate extent for a future Significant Landscape Overlay encompassing areas within both the Big Hill Ridge Line & Upper Slopes and Big Hill Granitic Uplands.

- **'Mapping'** of the significant landscape features including the metamorphic crescent of the ridge line and its upper sloping escarpments, together with the connecting Granitic Uplands to the southeast. As a starting point, the 'break of slope' was considered where the escarpments begin the contrast against the more gently undulating foreground setting (documented in the 2017 peer review).
- **'Determination of Visibility'** of the landscape from highly frequented viewing locations, specifically the transient experience along (and at static points along) the Calder Highway, Calder Alternative Highway and Bendigo-Melbourne Railway. This is mapped in degrees of 'visual exposure' in Part 3 – Visual Analysis and mapped overleaf on "Figure 81. Extent of Significant Landscape" on page 109.
- **'Documenting the Viewshed'** of the break of slope across the broader study area to understand where it is most visible from, informing photographic documentation in fieldwork and the surveying of photo locations where the landscape feature was most prominent in.
- Informed by the viewshed of the 'break of slope' and degrees of 'visual exposure' from the key viewing locations; the undertaking of **'3-Dimensional photomontaging'** to further refine a potential overlay boundary. This testing is found in Appendix 2: SLO Boundary Testing - Photomontages.
- **'Refinement of the SLO Boundary'** to include areas where the landscape is most visually exposed from the key viewing corridors, and establishing a 'setting' (or appropriate buffer) of the significant landscape feature, at its interface with adjacent landscapes. These are registered as two classifications of:
  - **'areas of high sensitivity:'** the determined threshold in which the siting future development would compromise the scenic values of the landscape.
  - **'areas of moderate sensitivity:'** the threshold in which the landscape and visual impact of future development activity could be managed through sensitive siting and design.
- **'Fieldwork and Ground Truthing'** to further ratify the boundary.



Where parts of the landscape are only visible within immediate and local settings, (thereby registering low or no visual exposure from the key viewing corridors), the boundary is adjusted. This is to ensure the boundary is underpinned by visual and scenic values.

While areas to the immediate east of the ridge line register low visual exposure, for the purposes of this review, a 300m buffer has been applied to ensure the parts of the ridge line and northern upper slopes are included – acknowledging the oblique nature of the viewing experience.

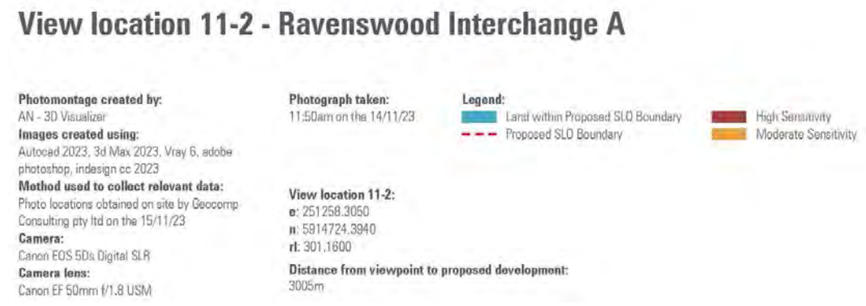


Figure 80. Example of photomontage testing

Extent of Significant Landscape

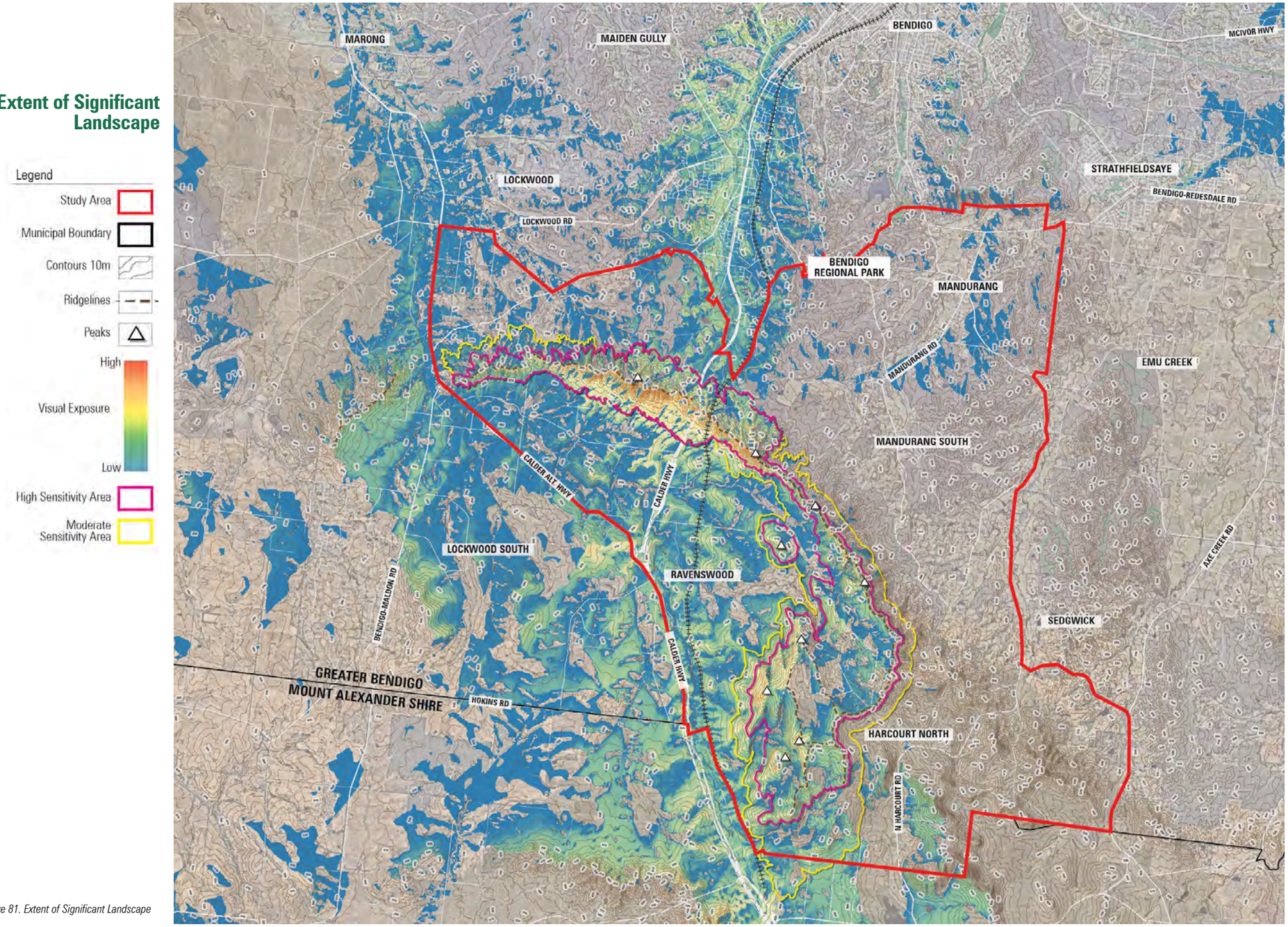


Figure 81. Extent of Significant Landscape



Part 6 Landscape Management Framework & Implementation

6 Landscape Management Framework & Implementation

6.1 Overview

The Big Hill & Mandurang Valley Landscape Assessment has identified two significant landscapes (and viewing corridors) across the study area of regional significance, while also acknowledging the locally valued landscape attributes outside of these two landscape areas.

Landscapes can be protected and managed with a combination of policy, zoning, overlays and particular provisions, some of which are already in place in the Greater Bendigo Planning Scheme.

The most appropriate overlay to protect and manage significant landscapes is the Significant Landscape Overlay (SLO). Other factors, not just significance, come into play when deciding whether to apply the SLO and whether it will be supported through the planning scheme amendment process by a Planning Panel.

These factors include how frequently, and from where, the landscape is viewed; existing planning scheme provisions; current or potential development pressure and/or threats to landscape character; and visual sensitivity. These factors have been identified and discussed in preceding chapters and analysis.

This section, the Landscape Management Framework provides recommendations that seeks to strengthen the management of the scenic and visual values of the significant landscapes both within the proposed SLO boundary and the broader landscape setting.

This is set out as follows:

- Planning Scheme Recommendations
- Significant Landscape Overlay
- Design Guidelines

6.2 Planning Scheme Recommendations

6.2.1 Greater Bendigo Planning Scheme - Vision

The Greater Bendigo Planning Scheme is its primary statutory tool, and it must provide the strategic rationale and context for all statutory controls introduced into the planning scheme. A number of changes to the aspects that address landscape and landscape management are warranted.

Reference to the outcomes of this Study should be embedded within the strategic vision of City of Greater Bendigo Local Planning Policy Framework (LPPF). Recommendations for according updates to the LPPF are as follows:

Clause 02.03-2 - Environment and landscape values within Clause 02.03 - Strategic Directions

- Under the statement *"Environment and landscape features in Greater Bendigo include:"* consider inserting in addition to the landscapes already listed:
  - The metamorphic crescent of the Big Hill Ridge Line that forms the southern visual and landscape gateway of the City.
  - Uniquely formed granite outcrops embedded in the rural landscape of the Granitic Uplands.
- Beneath the heading, *"the strategic directions for environment and landscape values are:"* consider inserting reference to the Granitic Uplands in addition to existing references to Big Hill, Mount Camel Range and Coliban and Campaspe Rivers.

6.2.2 Policy Gaps

Policy gaps can be addressed through a package of statutory and non-statutory implementation techniques. The planning scheme is perhaps the most important part of implementation as it legally binds the City of Greater Bendigo, the Victorian Civil and Administrative Tribunal (VCAT) and applicants to consider the landscape management objectives identified through a study such as this.

In view of the identified gaps in planning provisions and the options for statutory implementation, it is recommended that the City of Greater Bendigo:

- Inserts a new Local Policy under Clause 12.05 - Significant Environments and Landscapes titled 'Clause 12.05-3L - Big Hill Ridge Line and Granitic Uplands' composed of:
  - The objectives and design guidelines of Section 6.4 of this report.
  - Reference to this study as a Policy Document.
- The policy application could be applied to Farming Zone (FZ), Rural Conservation Zone (RCZ) and Public Conservation and Resource Zone (PCRZ) land between the Calder Highway, Calder Alternative Highway and the proposed Draft SLO boundary.

In tandem with the proposed Draft SLO, the above seeks to ensure that supporting design objectives and guidelines are in place in policy, to land outside of but related to the Draft SLO boundary. This seeks to ensure that the visual and scenic values of the broader study area are preserved. Within the proposed Draft SLO Boundary, objectives, requirements and guidelines within the proposed Draft SLO Schedule will be triggered where a permit is required. Where a permit is required within the FZ and RCZ land described above, this proposed policy would apply.

Assessed against existing policy and zoning schedules, an outstanding 'gap' would exist where works within the FZ, RCZ and PCRZ do not currently trigger a permit such as structures associated with agricultural uses. This is not considered to be a key threat given that the curtialge and elevation of the proposed Draft SLO Boundary has been designed to maximise preservation of the prominence of valued landscape features. However, Council may consider investigating the use of a Design & Development Overlay that provides additional guidance to manage this or other 'gaps' that may emerge.

6.3 Significant Landscape Overlay

6.3.1 Overview

The comprehensive landscape and visual analysis, visual testing and fieldwork has found that parts of the study area warrant further statutory protection through the Significant Landscape Overlay.

This would apply to land within the Big Hill Ridge Line and Granitic Uplands Character Areas, which have demonstrated landscape value and significance, are subject to pressure for change and a high sensitivity to that potential change. For land within these Character Areas, landscape management issues are not considered to be adequately addressed and the SLO should be applied.

The first part of the overlay schedule will read as a 'statement of nature and key elements of the landscape' for the area. It will describe the character and significance of the landscape, based on the contents of the relevant character area paper and significance assessment undertaken as part of the study.

The objectives in the overlay schedule will reflect the principles contained in the 'future character directions' statement and the objectives contained in the character area analysis paper.

The permit requirements specified in the schedule to the SLO will be based on the sensitivity to change of the landscape, and the threats to landscape that have been identified.

A permit will be required for buildings and works within the SLO area, with some permit exemptions noted.

6.2.3 Statement of nature and key elements of landscape

The connected landscape formed by the metamorphic crescent of the Big Hill Ridge Line and adjacent Granitic Uplands form a natural landmark that is significant to the Greater Bendigo region. Primarily viewed from the south, the landscape abruptly rises from the undulating pastoral plains of Ravenswood and Harcourt North, forming a visual gateway and physical barrier between established settlement areas of Bendigo to the north and the vast and open pastoral plains to the south.

Uniquely formed and imposing granite boulders and the dense presence of the Box-Ironbark Forest atop the ridge line and escarpments are also key landscape features.

The distinctive topographic formation is highly visible from key viewing corridors at the southern gateway to the region, on both departure and arrival. Along the transient viewing experiences offered along the Calder Highway, Calder Alternative Highway and Bendigo Railway Line, the landscape reveals itself through breaks in roadside vegetation and topographic vantage points. From surrounding scenic roads and higher land in the broader setting to the southwest, the landscape remains visually prominent.

Contributing to this visual distinction is the presence of remnant vegetation including the Box-Ironbark Forest of the Bendigo National and Regional Parks lining the Big Hill Ridge Line, extending down across the face of the southern escarpment. The presence of forest diminishes at the boundary of pastoral plains, and more subtly blends into the more lightly wooded Granitic Uplands to the southeast, interspersed throughout imposing granitic boulders and scatterings of rocky outcrop.

The distinctive topographic formation of the Big Hill Ridge Line paired with the unique sculptural forms of the granitic boulders of the Granitic Uplands are visual evidence of an ancient metamorphic intrusion that has resulted in a landscape of high scenic beauty that is unique within a regional context.

While evidence of human contact within the landscape setting is present in the form of agricultural plains and scattered buildings, the ridge line and presence of granitic boulders are visually imposing in a range of viewing experiences.

6.2.4 Landscape character objectives to be achieved

1. To recognise the regional significance of the Big Hill and Granitic Uplands landscape as a key topographic gateway into the southern entrance to the Greater Bendigo region.
2. To preserve the Big Hill Ridge Line, forested slopes and Granitic Uplands as the prominent backdrop of views from key corridors of the Calder Highway, Alternative Calder Highway, Melbourne-Bendigo Railway Corridor and key vantage points.
3. To avoid inappropriately scaled and sited development on the ridge line and upper slopes of Big Hill and the Granitic Uplands, within areas of high sensitivity.
4. To ensure buildings, structures and signs are sensitively designed and sited within the foreground of Big Hill and the Granitic Uplands in areas of moderate sensitivity, reinforcing the rural landscape character of the area.
5. To retain and enhance valued landscape features, including remnant vegetation and scattered granitic outcrops.
6. To retain existing locally indigenous vegetation and encourage revegetation, particularly of River Red Gums in the Big Hill foreground, Box-Ironbark on the southern slopes and ridge line and locally indigenous vegetation along roadsides and within private properties to strengthen wildlife and landscape corridors.

6.3.2 Draft Permit Triggers

- A permit is not **required for:**
  - Additions or alterations to an existing dwelling or building used for agriculture where the additions or alterations are not more than 5 metres in height above natural ground level and not more than 50 square metres in additional floor area, in areas outside areas of high sensitivity.
  - A building used for agriculture that is not more than 5 metres in height above natural ground level and not more than 100 square metres in floor area, in areas outside areas of high sensitivity.
  - A building ancillary to a dwelling, up to 5 metres in height and 50 square metres in floor area, in areas outside areas of high sensitivity.
  - Construction of a farm access track.
  - Works undertaken by a public authority relating to watercourse management or environmental improvements.
  - Construction of a timber post and wire or timber post and railing fence up to 1.8 metres in height, in areas outside areas of high sensitivity.
- A permit is not **required for:**
  - Removal, destruction or lopping of dead vegetation; or
  - Removal, destruction or lopping of the minimum extent of vegetation necessary for the maintenance of existing fences, to a combined maximum width of clearing for either side of the fence of 4 metres.

An application to the responsible authority must be accompanied by the following information to assess the potential impact of a proposal upon the landscape, as appropriate:

- A detailed site evaluation which considers the existing landscape context including topography, existing vegetation (species, location and character), and views to the site from public roads, the railway line, settlements, publicly accessible waterways and recreation and tourism locations.
- A landscape plan that proposes the use of locally appropriate species (e.g. indigenous or non invasive native / exotic plants that are a feature of the character of the area) and how the affected area will be remediated after the development.
- A visual impact assessment of the proposal from major viewing corridors of the Calder Highway, Calder Alternate Highway and the Melbourne-Bendigo Railway line and significant viewing locations identified within this study, to demonstrate how the proposed siting, scale, form and detailed design of the development will relate to the identified areas of moderate and high sensitivity within the landscape.



A dwelling sited in the foreground towards the western extent of the Big Hill Ridge Line

6.3.3 Draft Decision Guidelines

The following decision guidelines apply to an application for a permit under Clause 42.03, in addition to those specified in Clause 43.03 and elsewhere in the scheme which must be considered, as appropriate, by the responsible authority:

- The visual impact of buildings or works on the landscape viewed from Calder Highway, Calder Alternate Highway, Melbourne-Bendigo railway line and key views noted in the Big Hill & Mandurang Valley Landscape Assessment.
- Whether the building or works are sited:
  - To avoid visually prominent locations within the Big Hill Ridge Line and upper slopes.
  - Away from significant landscape features including granitic boulders, granitic rock, Red Gums and Box-Ironbark Forest to retain their visual prominence in the landscape.
  - To maximise clustering of new buildings with existing buildings where possible.
  - Among established vegetation and/or screened with substantial landscaping of native species, with sufficient regard to bushfire risk.
  - To follow contours and the natural form of the landscape, minimising cut and fill.
  - To be set back sufficient distances from roads to minimise visual prominence when viewed from the road corridor, relative to the open rural setting.
  - To be set back 30 metres from watercourses.
- Whether the buildings or works are designed:
  - Utilising building forms, design detailing, colours and finishes that best immerse the building within the landscape and minimise contrast with the surrounds at close range and in distant views.
  - To avoid building forms, roof profiles and colour schemes that result in contrast against the natural tones of the landscape backdrop.
  - To minimise the extent of hard paving and impervious surfaces.
- The scale of a building and its impact on its surroundings, including its relationship to the existing or future tree canopy height.
- The visual impact of signage on landscape features.
- The scale and character of fencing and gates and whether they reflect the rural character of the landscape.
- The effect of removing remnant vegetation on the landscape character and significance of the area, and whether the loss of vegetation can be managed onsite through rehabilitation or replacement with native vegetation that will grow to a similar size.
- Whether the vegetation is isolated or part of a grouping.
- Whether farm access tracks, National & Regional Park access roads or other access roads are located across the slope to minimise their visibility.
- The visual impact of overhead infrastructure such as power lines on landscape features and the forested ridge line.



Several dwellings and structures sited at the foot of the Big Hill Ridge Line

6.3.4 Draft Overlay

Legend

- Municipal Boundary
- Property Boundaries
- National/Regional Park
- Railway

SLO 3 - Big Hill Ridgeline & Granitic Uplands

- High Sensitivity Area
- Moderate Sensitivity Area

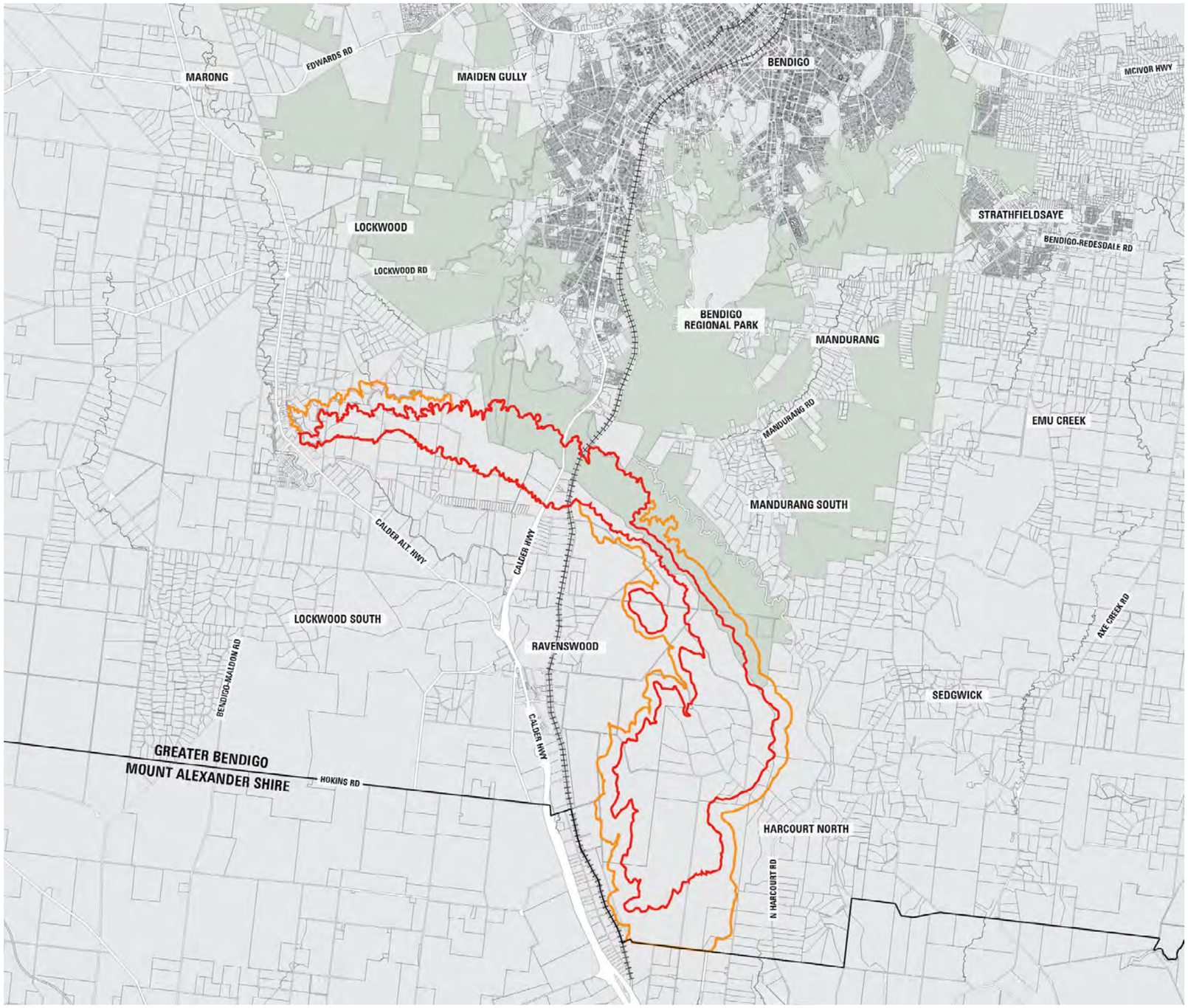


Figure 82. Draft SLO Mapping

6.4 Design Guidelines

Design and development should positively contribute to the surrounding landscape. Good site planning and building design is essential if new developments are to respect and reinforce the existing character of the surrounding environment.

Community feedback and field surveys have shown that the integrity of landscapes within the study area has been threatened by new land uses or development which do not respond to the local characteristics of the area.

Key design issues within the landscapes of Big Hill and the Mandurang Valley include the design, size and scale of buildings, the siting of dwellings in prominent locations, the presence of multiple out-buildings and other structures, use of reflective materials, clearing of vegetation, private landscaping, and other elements such as signage, fencing and lighting that all potentially compromise the valued landscape qualities of Big Hill & the Mandurang Valley.

Landscape elements that have been identified as having a potential impact on these landscapes include:

- Siting of Subdivision, Buildings & Structures
- Design of Subdivision, Buildings & Structures
- Vegetation & Landscaping
- Views & Vistas
- Rural Buildings & Structures
- Property Entrances, Front Boundary Fencing & Gates
- Car Parking, Formed Driveways & Roads

These Design and Development Guidelines may be used as the basis of the 'decision guidelines' in any proposed planning scheme overlay schedule, and can be incorporated into local policy to help in determining planning permit applications.



The guidelines seek to guide future development in complementing the scenic values of the study area

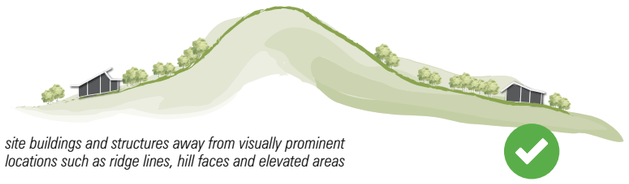
6.4.1 Siting of Subdivision, Roads, Buildings & Structures

Objectives

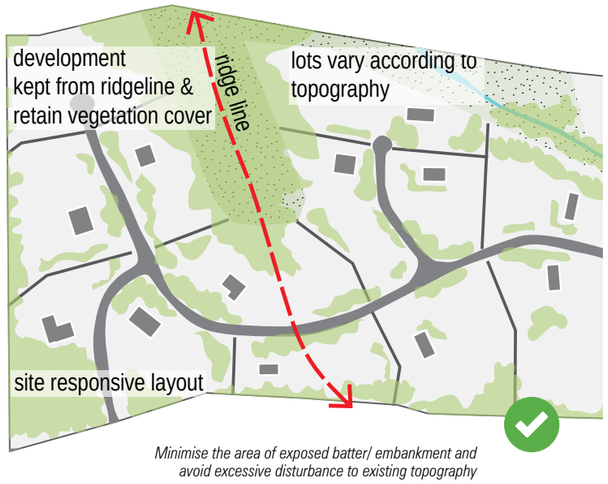
- To minimise subdivision and development within 'Areas of High Sensitivity.'
- To minimise the visual impact of buildings and structures within the natural landscape within the 'Areas of Moderate Sensitivity' and foreground areas.
- To site buildings and structures to reflect the natural topography and complement the landscape character of the area.
- To ensure future development is sensitively designed to minimise impacts on scenic and landscape values.
- To minimise the visual impact of car parking, formed driveways, access tracks and roads on the landscape, particularly when visible from key viewing corridors, main roads and other publicly accessible locations.

Guidelines

- Design allotments, driveways and access roads to follow contours of the land and be sensitively sited relative to natural landscape features such as ridge lines, peaks, forest edges and granitic rock formations.
- Buildings and structures should be sited:
  - Away from visually prominent places such as ridge lines and hill faces.
  - Away from landscape features such as river and creek corridors.
  - To minimise visibility from identified significant viewing corridors and other main roads.
- Maximise openness between buildings to provide visual breaks and to provide adequate space for the retention of existing vegetation and /or new landscaping.
- Site and design roads, access tracks, driveways and car parking areas to reduce visual intrusion by following the topography and maintaining vegetation as a screen.
- In highly visible locations, use dark, locally sourced material for gravel roads and driveways where possible.
- Site buildings and structures to utilise existing access roads and car parks where possible.
- Where practical, retain unsealed roads, access tracks and driveways as an important character element.
- Limit the extent of large hard/paved surfaces, including driveways, yards, car parks, footpaths, and roads, in both the private and public domain.



site buildings and structures away from visually prominent locations such as ridge lines, hill faces and elevated areas

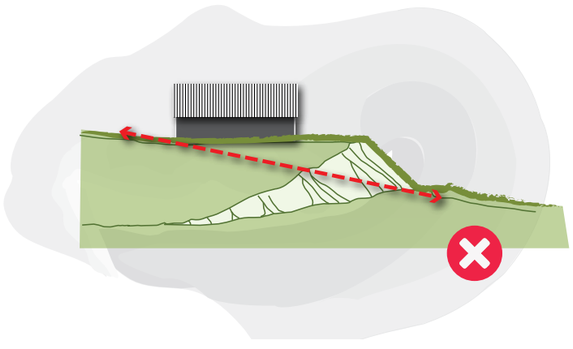


Minimise the area of exposed batter/ embankment and avoid excessive disturbance to existing topography

Discourage

- Subdivision and development with the 'Areas of High Sensitivity.'
- Intrusive developments on prominent hill faces.
- Numerous storage areas / outbuildings on a site.
- Scattering of buildings and structures across a site.
- Buildings and structures that protrude above the dominant tree height of the vegetated (or proposed vegetated) backdrop.
- Straight roads that do not reflect the natural contour of the slope.
- Roads, access tracks and driveways, which require the removal of substantial vegetation or are constructed of bright and/or highly contrasting materials.
- Construction of additional roads and car parking areas, where existing infrastructure is adequate.
- Roads and streetscapes with a strong 'urban' character, i.e. expansive impermeable surfaces and limited landscaping opportunities, that are not commensurate with the rural setting.

Minimise the area of exposed batter/ embankment and avoid excessive disturbance to existing topography



6.4.2 Design of Subdivision, Buildings & Structures

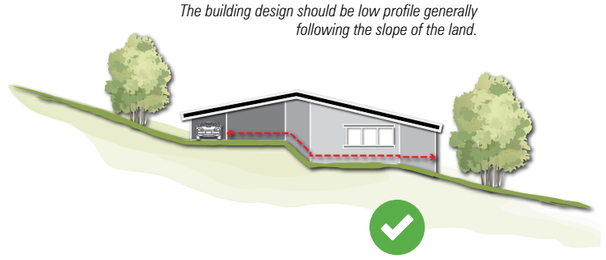
Objectives

- To ensure that buildings and structures demonstrate a high standard of design and complement the landscape character of the area.
- To ensure that the design and appearance of buildings and structures blend in and are sympathetic to the landscape.
- To ensure buildings and structures demonstrate a high standard of contemporary design and respond to the principles of environmental sustainability.
- To minimise the impact of property entrances, front boundary fencing and gates on the dominant rural andscape character.

Guidelines

- Buildings and structures should be appropriately scaled relative to landscape features and the broader landscape setting, including being sited beneath the prevailing tree canopy in key views.
- On sloping land, building form should be stepped to follow the natural topography.
- The composition of building mass and form should:
  - Provide division of form in broader building elevations
  - Recess upper levels to moderate their presence in the landscape setting and to minimise the presentation of visual bulk
  - Apply division of form in broad elevations through façade articulation, rebates and/or staggered building lines

The building design should be low profile generally following the slope of the land.

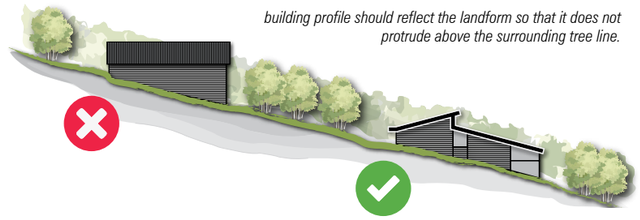


- The design and external appearance of buildings and structures should complement the texture and visual palette of the surrounding landscape by:
  - Maximising façade articulation which reflects the grain and texture of the natural landscape setting
  - Using building form and design detail with reference to the Australian rural architectural vernacular
  - Utilising colours and finishes that best immerse the building within the landscape and minimise contrast with the surrounds (such as muted colours and matte finishes, or corrugated iron or timber that will weather and blend in with the surrounds over time)
  - Utilising materials and finishes that reduce distant visibility (e.g. darker colours on hill slopes, and lighter colours on sky lines)
  - Utilise open style fencing that is not visually obtrusive and is traditionally used in rural areas, such as post and wire or post and rail fencing
- Incorporate best practice environmental sustainability principles into the design and construction of all new buildings.
- Any increase in agricultural activity should be consistent with the future character direction of the related Character Area.
- Maximise openness and transparency in property boundary fencing and gates that are commensurate with the rural character.
- Ensure that front boundary fencing and entry gateways are small and constructed of light traditional materials (e.g. timber, post and wire or stone) in preference to large heavy materials and structures.
- Utilise understorey plantings of indigenous and native vegetation to soften the appearance of fencing particularly along property frontages.

Discourage

- The siting of buildings on the upper escarpments of the Big Hill Ridge Line and Granitic Uplands.
- Buildings and structures that break the silhouette of ridge lines.
- Buildings and structures that visually dominates landscape features and the broader setting.
- Buildings and works that require excessive cut-and-fill of land.
- Buildings or structures that do not harmonise with the character of the surrounding natural / rural environment.
- Sheer, visually dominant elevations.
- Mock historical style buildings with excessive use of 'reproduction' or decorative detailing.
- Visual clutter and scattered structures within the landscape.
- Light, reflective materials and colours which do not blend in with the surrounding landscape.
- High, solid or non-permeable fencing or gates that dominate the open rural environment or conceal the property frontage.
- Lack of vegetation screening along rural and ancillary structures.
- Exotic tree avenues or boundary planting that are not consistent with the native landscape character of the landscape.

building profile should reflect the landform so that it does not protrude above the surrounding tree line.





Primary Colours



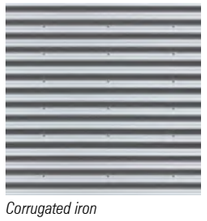
Accent Colours

- Primary building colours should reflect a muted earthy tone that will blend with the landscape setting.
- Accent colours are encouraged to be strategically used for feature architectural elements that reference secondary and detailed colours in the broader landscape setting.
- Building materials should also contribute to built form 'blending' into the setting, in both colour tone and texture that are inspired by the grain and patterns of the landscape setting.

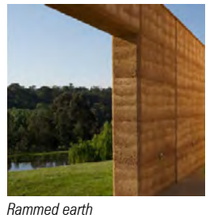


Encouraged: traditional rural materials & finishes such as timber, stone or brick in muted earthy colours

Muted tones



Corrugated iron

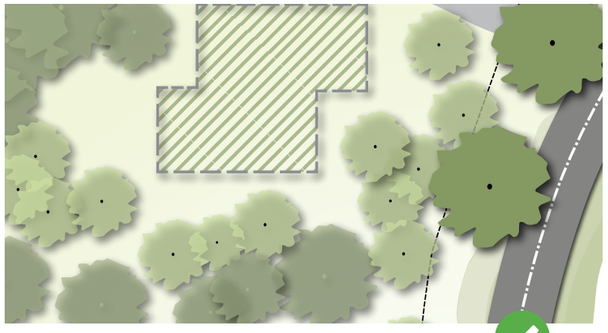


Rammed earth

6.4.3 Vegetation & Landscaping

Objectives

- To protect and enhance areas of native or indigenous vegetation as a key, valued character element of the Big Hill & Granitic Uplands area particularly in established forest areas.
- To encourage natural regeneration, particularly of old trees and understorey vegetation where possible.
- To encourage additional planting of endemic vegetation along roadsides and within private properties.
- To provide opportunities for revegetation with endemic species that will assist in strengthening wildlife and landscape corridors between settled and forested areas.



Planning of buildings around existing vegetation where practical and in accordance with bushfire management requirements.

Guidelines

- Minimise indigenous and/or native vegetation removal in new development, particularly remnant vegetation.
- Maximise protection and rehabilitation of remnant indigenous and/or native vegetation, particularly on prominent hill faces, ridge lines, roadsides, throughout paddocks, and along creek corridors, subject to considerations such as fire protection, safety and bushfire recovery.
- Where vegetation loss cannot be avoided, balance the loss of vegetation with rehabilitation on the site or nearby areas, and replace any native or indigenous trees lost with indigenous trees that will grow to a similar size.
- Encourage landowners to protect and manage paddock trees such as old River Red Gums, retaining understorey vegetation, trimming diseased or damaged branches, leaving dead trees standing for wildlife habitat (where practical), and planting new trees, particularly in bare paddocks.
- Design revegetation on private land to reinforce natural forms such as the meandering forest edge, using both canopy trees and appropriate understorey planting.
- Reinforce vegetative linkages and biodiversity corridors to natural features such as the surrounding Box-Ironbark forest through private properties and existing creek environs.
- Encourage the removal of environmental weeds and their replacement with local native and indigenous species.
- Screen buildings, structures and large areas of hard surfaces with appropriately scaled informal landscaping, suitable to the landscape character of the area.

Discourage

- Dense planting of vegetation and trees along the key viewing corridors that diminish scenic views to valued landscape features.
- Loss of significant stands of vegetation, particularly on prominent hill faces/ridge lines, at roadsides, along river and creek corridors.
- Ad-hoc clearing and removal of vegetation.
- Development which requires clearing of vegetation.
- Reduction in the overall vegetation coverage of the area.
- Landscaping that provides little connection to the surrounding natural environment and existing landscape character.
- Formal landscape design (e.g. geometrically aligned tree avenues/large areas of lawn/formal garden beds).
- Hard surfaces and hard edges in landscaping.
- Continuous spreading/planting of environmental weeds.

6.4.4 Views & Vistas

Objectives

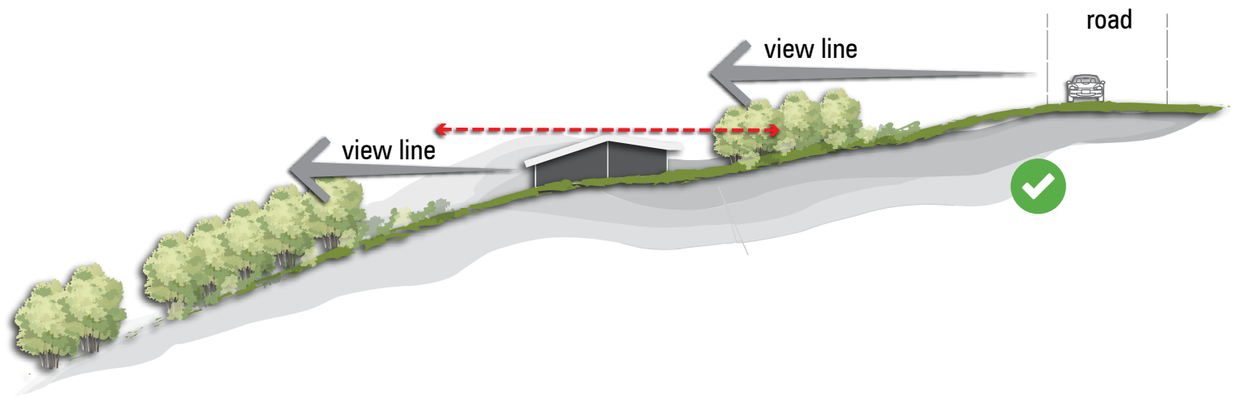
- To protect and maintain the visual prominence of the Big Hill Ridge Line & Granitic Uplands in scenic views on approach and departure from Bendigo along main roads, the railway and other publicly accessible locations.
- To maintain views to the forested hillslopes of the Big Hill upper slopes and ridge line.
- To maintain views to the rocky outcrop of the Granitic Uplands.
- To acknowledge and celebrate views of uniquely formed granite boulders present within the area.

Guidelines

- Where possible, buildings, structures and other infrastructure should be sited away from prominent views along identified viewing corridors.
- Retain the sense of openness in the rural landscape, with buildings and structures subservient to this openness and valued landscape features.
- Consider the cumulative impact of developments visible from main roads and other publicly accessible areas, on the open, rural character of these views.
- Make use of low points and troughs in the landscape relative to key viewing corridors and ridge lines when siting future development, to maximise concealment in key views across the landscape setting.
- Consider the impact of developments on immediate views within the area.
- Design vegetation planting and regeneration works to retain viewing opportunities where possible.
- Enhance and prioritise access roads/ points to the Bendigo National and Regional Parks, to direct and facilitate viewing and visitation opportunities whilst protecting existing landscape and environmental values.

Discourage

- Subdivision and development within the 'Areas of High Sensitivity.'
- Inappropriately sited and scaled develpment within the 'Areas of Moderate Sensitivity' and foreground areas.
- Inappropriately sited development atop intermediate ridges and hilltops between the key viewing corridors and Big Hill Ridge Line and Granitic Uplands.
- Conspicuous or incongruous buildings and structures that obscure views of the Bendigo National and Regional Parks and surrounding rural environs.
- Loss of the open, isolated rural character.
- Conspicuous or incongruous buildings, structures or infrastructure that impact on the open, rural character of the landscape, as viewed from all publicly accessible locations
- Dense planting of vegetation that disrupts viewing opportunities.



6.4.5 Signage & Infrastructure

Objectives

- To minimise the visual impact of signage and infrastructure, particularly when visible from identified significant viewing corridors and viewing locations.

Guidelines

- Maximising the grouping of individual signs to minimise visual impact, avoid signage clutter, and to maintain scenic outlooks.
- Infrastructure should be sited to avoid disruption to scenic locations and in views from key viewing corridors.
- Locate new power lines and other utility services underground wherever possible.
- Locate power lines, access tracks and other infrastructure in areas of low visibility, preferably in previously cleared locations.
- Avoid or minimise the loss of vegetation to accommodate new infrastructure particularly where visible from key viewing corridors and locations, to avoid disturbance to their scenic qualities.
- Use materials and colours that minimise contrast with the surrounding landscape and distant visibility, and use vegetation to screen infrastructure from identified significant viewing corridors, locations and other scenic roads.
- New lighting associated with infrastructure should minimise disturbance to the scenic qualities of valued character areas.

Discourage

- Signage clutter in the landscape and along key viewing corridors and scenic roads.
- Visually obtrusive and/or colourful signage in natural landscape settings.
- Highly visible infrastructure in the context of valued landscape features.
- Infrastructure that is visually prominent in views, particularly from identified significant viewing corridors or locations.
- Landscape scarring and contrasts as a result of vegetation removal.
- Street and infrastructure lighting that illuminates areas of the landscape in contrast to valued landscape features.

Background References

Informing this study are a series of documents that have been reviewed and considered, including:

- Bendigo Forest Management Plan, Victorian Government 2008
- Bendigo Landscape Assessment, Big Hill & Mandurang Valley Final Report, City of Greater Bendigo and Planisphere 2013
- Big Hill & Mandurang Valley SLO Review, Claire Scott Planning 2017
- City Of Greater Bendigo Cultural Heritage Study, City of Greater Bendigo & Dale Sampson, 2010
- City of Greater Bendigo Thematic Heritage Study, Lovell Chen, May 2012 Geology of Victoria, Special Publication 23, Geological Society of Australia (Victoria Division) 2003
- Dja Dja Wurrung Country Plan 2014-2034, Dja Dja Wurrung Clans Aboriginal Corporation, 2013
- Greater Bendigo 2036: Community Plan
- Greater Bendigo National Park Management Plan, Parks Victoria, 2007
- Greater Bendigo Planning Scheme
- Greater Bendigo Public Space Plan, June 2019
- Greater Bendigo Thematic Environmental History, Lovell Chen, June 2013
- Heritage Study, Heathcote-Strathfieldsaye Thematic History, Earth Tech, September 2002
- Landscapes, Groundwater Systems and Salinity Management in the Northern Sector of the Harcourt Granodiorite - Metamorphic Aureole Complex, Part 2 of Landscapes, Groundwater Flow Systems, and Salinity Management in the Ravenswood Valley, Phil Dyson & Associates 2004
- Rural Areas Strategy, City of Greater Bendigo Strategy Unit, 2009
- Spatial Data sourced from the City of Greater Bendigo and Data Vic



Appendix 1 SLO Boundary Testing - Photomontages

Stage 2 - Big Hill & Mandurang Valley SLO Review

Location 1 - Existing view



View location 1 - Calder Highway Service Station / Truck Stop

Photomontage created by:
AN - 3D Visualizer
Images created using:
Autocad 2023, 3d Max 2023, Vray 6, adobe photoshop, indesign cc 2023
Method used to collect relevant data:
Photo locations obtained on site by Geocomp Consulting pty ltd on the 15/11/23
Camera:
Canon EOS 5Ds Digital SLR
Camera lens:
Canon EF 50mm f/1.8 USM

Photograph taken:
9:15am on the 14/11/23

View location 1:
e: 252282.1050
n: 5911365.3300
rl: 315.7980

Distance from viewpoint to proposed development:
1600m

Camera location



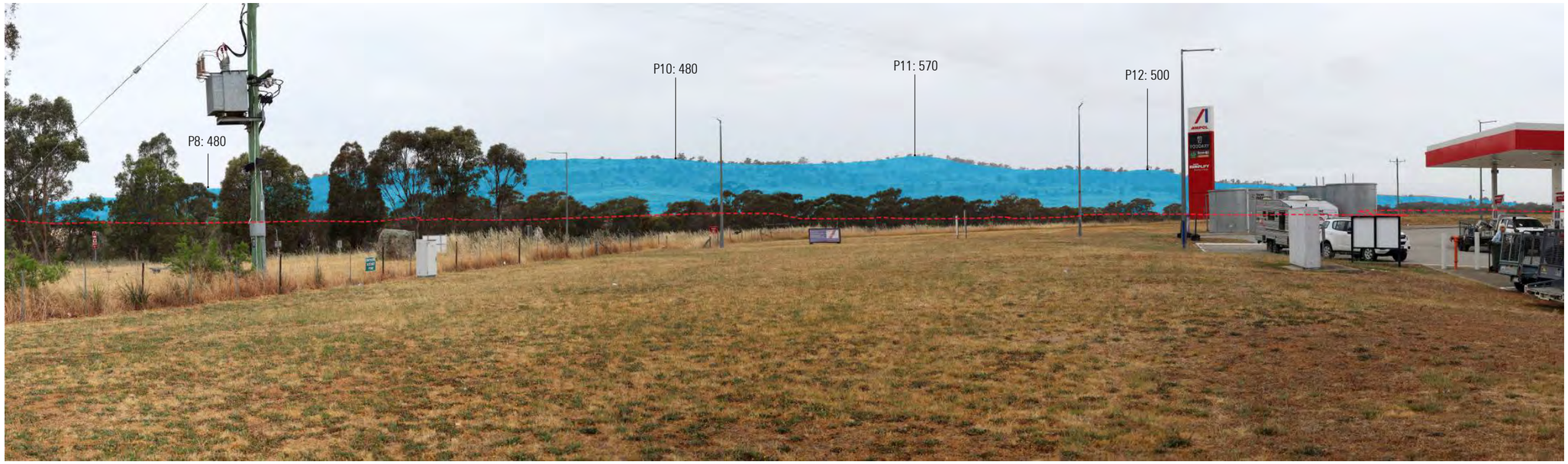
project ref:	23.0286
dwg no.:	VIA-001
date:	13/05/24
revision:	A

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Stage 2 - Big Hill & Mandurang Valley SLO Review

Location 1 - Proposed SLO3 (2017) Boundary

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View location 1 - Calder Highway Service Station / Truck Stop

Photomontage created by:
AN - 3D Visualizer
Images created using:
Autocad 2023, 3d Max 2023, Vray 6, adobe photoshop, indesign cc 2023
Method used to collect relevant data:
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Camera lens:
Canon EF 50mm f/1.8 USM

Photograph taken:
9:15am on the 14/11/23

Legend:
Land within Proposed SLO Boundary
Proposed SLO Boundary
High Sensitivity
Moderate Sensitivity

View location 1:
e: 252282.1050
n: 5911365.3300
rl: 315.7980

Distance from viewpoint to proposed development:
1600m

Camera location

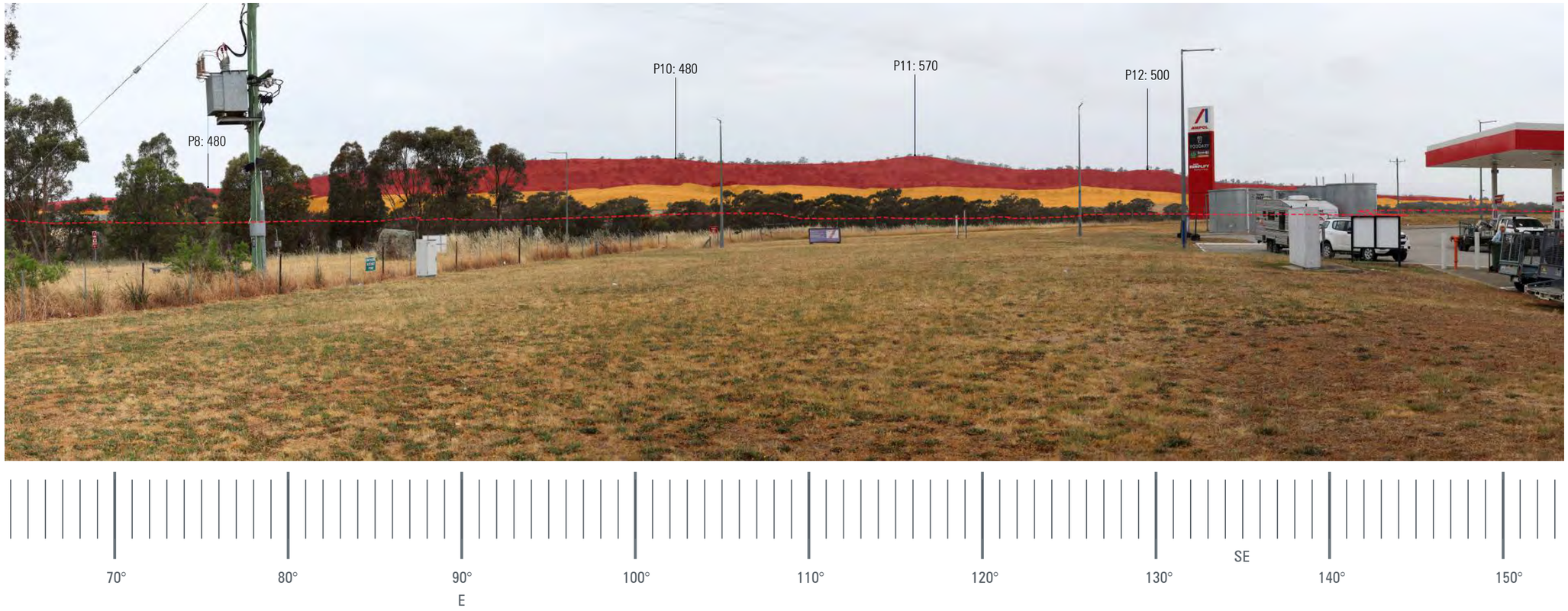


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revision:	A

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Stage 2 - Big Hill & Mandurang Valley SLO Review

Location 1 - Testing - Moderate Sensitivity & High Sensitivity



View location 1 - Calder Highway Service Station / Truck Stop

Photomontage created by:
AN - 3D Visualizer
Images created using:
Autocad 2023, 3d Max 2023, Vray 6, adobe photoshop, indesign cc 2023
Method used to collect relevant data:
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Camera lens:
Canon EF 50mm f/1.8 USM

Photograph taken:
9:15am on the 14/11/23

Legend:
Land within Proposed SLO Boundary
Proposed SLO Boundary
High Sensitivity
Moderate Sensitivity

View location 1:
e: 252282.1050
n: 5911365.3300
rl: 315.7980

Distance from viewpoint to proposed development:
1600m

Camera location

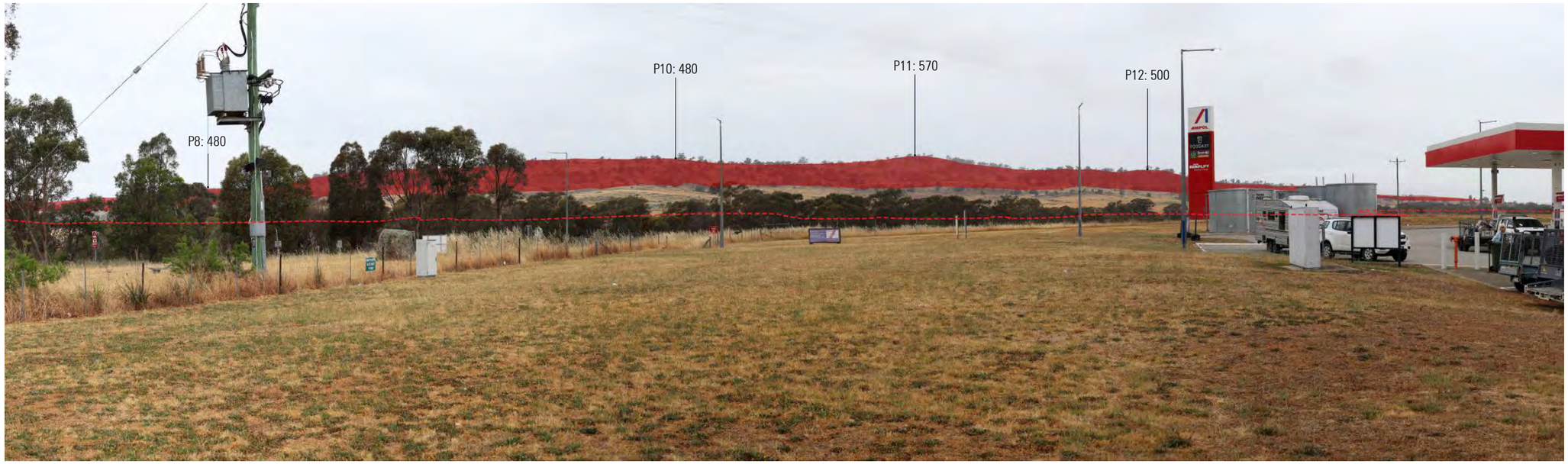


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dwg no.:	VIA-003
date:	13/05/24
revision:	A

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Stage 2 - Big Hill & Mandurang Valley SLO Review

Location 1 - Testing High Sensitivity Only



View location 1 - Calder Highway Service Station / Truck Stop

Photomontage created by:
AN - 3D Visualizer
Images created using:
Autocad 2023, 3d Max 2023, Vray 6, adobe photoshop, indesign cc 2023
Method used to collect relevant data:
Photo locations obtained on site by Geocomp Consulting pty ltd on the 15/11/23
Camera:
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Camera lens:
Canon EF 50mm f/1.8 USM

Photograph taken:
9:15am on the 14/11/23

Legend:
Land within Proposed SLO Boundary
Proposed SLO Boundary
High Sensitivity
Moderate Sensitivity

View location 1:
e: 252282.1050
n: 5911365.3300
rl: 315.7980

Distance from viewpoint to proposed development:
1600m

Camera location



project ref:	23.0286
dwg no.:	VIA-004
date:	13/05/24
revision:	A

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Stage 2 - Big Hill & Mandurang Valley SLO Review

Location 2-1 - Existing view



340° 350° 0° 10° 20° 30° NE 40° 50° 60°

N

View location 2-1 - Hokins Road & Landry Lane

Photomontage created by:
AN - 3D Visualizer
Images created using:
Autocad 2023, 3d Max 2023, Vray 6, adobe photoshop, indesign cc 2023
Method used to collect relevant data:
Photo locations obtained on site by Geocomp Consulting pty ltd on the 15/11/23
Camera:
Canon EOS 5Ds Digital SLR
Camera lens:
Canon EF 50mm f/1.8 USM

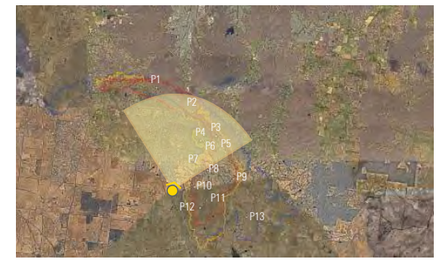
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n: 5910285.6560
rl: 320.9430

Distance from viewpoint to proposed development:
1350m

Location 2

12-1 12-2



Camera location

project ref: 23.0286
dwg no.: VIA-005
date: 13/05/24
revision: A

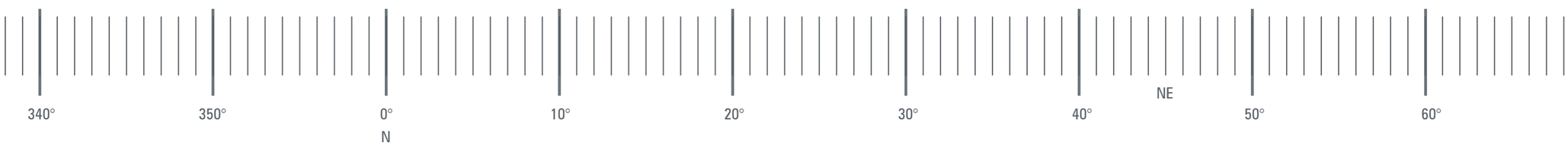
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Stage 2 - Big Hill & Mandurang Valley SLO Review

Location 2-1 - Proposed SLO3 (2017) Boundary

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View location 2-1 - Hokins Road & Landry Lane

Photomontage created by:
AN - 3D Visualizer
Images created using:
Autocad 2023, 3d Max 2023, Vray 6, adobe photoshop, indesign cc 2023
Method used to collect relevant data:
Photo locations obtained on site by Geocomp Consulting pty ltd on the 15/11/23
Camera:
Canon EOS 5Ds Digital SLR
Camera lens:
Canon EF 50mm f/1.8 USM

Photograph taken:
9:44am on the 14/11/23

Legend:
Land within Proposed SLO Boundary
Proposed SLO Boundary
High Sensitivity
Moderate Sensitivity

View location 2-1:
e: 252174.9170
n: 5910285.6560
rl: 320.9430

Distance from viewpoint to proposed development:
1350m



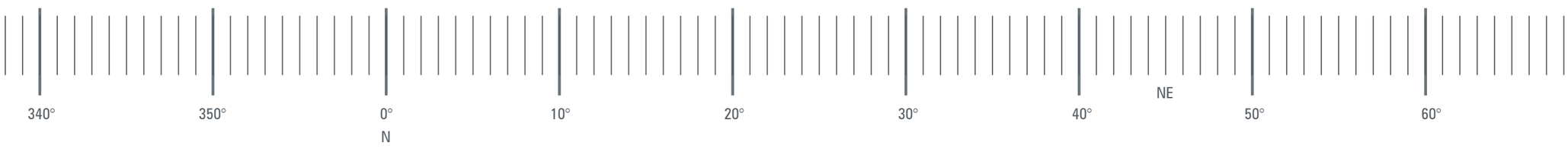
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dwg no.:	VIA-006
date:	13/05/24
revision:	A

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Stage 2 - Big Hill & Mandurang Valley SLO Review

Location 2-1 - Testing - Moderate Sensitivity & High Sensitivity





View location 2-1 - Hokins Road & Landry Lane

Photomontage created by:
AN - 3D Visualizer
Images created using:
Autocad 2023, 3d Max 2023, Vray 6, adobe photoshop, indesign cc 2023
Method used to collect relevant data:
Photo locations obtained on site by Geocomp Consulting pty ltd on the 15/11/23
Camera:
Canon EOS 5Ds Digital SLR
Camera lens:
Canon EF 50mm f/1.8 USM

Photograph taken:
9:44am on the 14/11/23

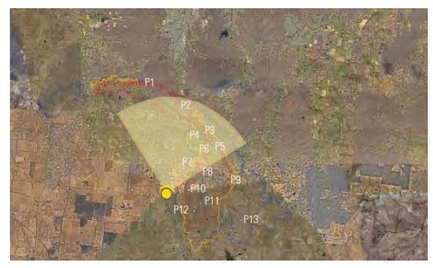
Legend:
Land within Proposed SLO Boundary
Proposed SLO Boundary
High Sensitivity
Moderate Sensitivity

View location 2-1:
e: 252174.9170
n: 5910285.6560
rl: 320.9430

Distance from viewpoint to proposed development:
1350m

Location 2

12-1 12-2



Camera location

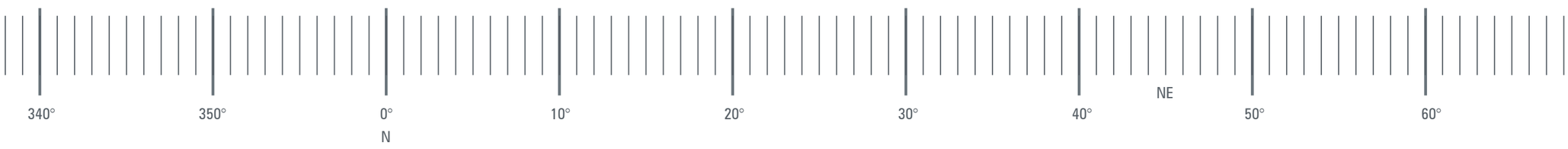
project ref:	23.0286
dwg no.:	VIA-007
date:	13/05/24
revision:	A

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Stage 2 - Big Hill & Mandurang Valley SLO Review

Location 2-1 - Testing - High Sensitivity Only





View location 2-1 - Hokins Road & Landry Lane

Photomontage created by:
AN - 3D Visualizer
Images created using:
Autocad 2023, 3d Max 2023, Vray 6, adobe photoshop, indesign cc 2023
Method used to collect relevant data:
Photo locations obtained on site by Geocomp Consulting pty ltd on the 15/11/23
Camera:
Canon EOS 5Ds Digital SLR
Camera lens:
Canon EF 50mm f/1.8 USM

Photograph taken:
9:44am on the 14/11/23

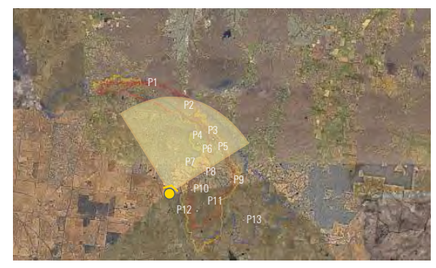
Legend:
Land within Proposed SLO Boundary
Proposed SLO Boundary
High Sensitivity
Moderate Sensitivity

View location 2-1:
e: 252174.9170
n: 5910285.6560
rl: 320.9430

Distance from viewpoint to proposed development:
1350m

Location 2

12-1 12-2



Camera location

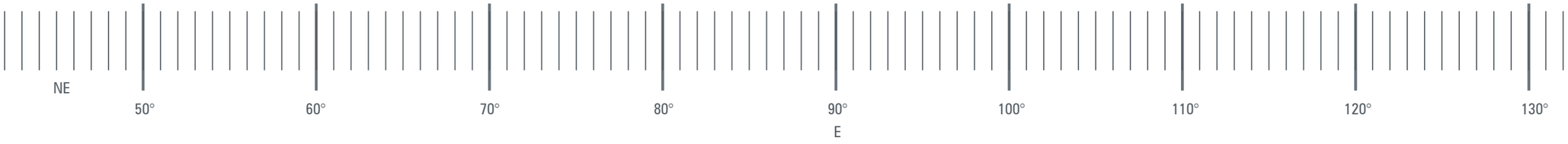
project ref:	23.0286
dwg no.:	VIA-008
date:	13/05/24
revision:	A

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Stage 2 - Big Hill & Mandurang Valley SLO Review

Location 2-2 - Existing view





View location 2-2 - Hokins Road & Landry Lane

Photomontage created by:
AN - 3D Visualizer
Images created using:
Autocad 2023, 3d Max 2023, Vray 6, adobe photoshop, indesign cc 2023
Method used to collect relevant data:
Photo locations obtained on site by Geocomp Consulting pty ltd on the 15/11/23
Camera:
Canon EOS 5Ds Digital SLR
Camera lens:
Canon EF 50mm f/1.8 USM

Photograph taken:
9:44am on the 14/11/23

View location 2-2:
e: 252174.9170
n: 5910285.6560
rl: 320.9430

Distance from viewpoint to proposed development:
1350m

Location 2





Camera location

project ref: 23.0286
dwg no.: VIA-009
date: 13/05/24
revision: A

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Stage 2 - Big Hill & Mandurang Valley SLO Review

Location 2-2 - Proposed SLO3 (2017) Boundary



View location 2-2 - Hokins Road & Landry Lane

Photomontage created by:
AN - 3D Visualizer
Images created using:
Autocad 2023, 3d Max 2023, Vray 6, adobe photoshop, indesign cc 2023
Method used to collect relevant data:
Photo locations obtained on site by Geocomp Consulting pty ltd on the 15/11/23
Camera:
Canon EOS 5Ds Digital SLR
Camera lens:
Canon EF 50mm f/1.8 USM

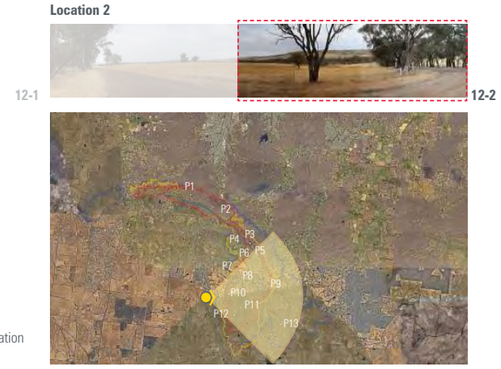
Photograph taken:
9:44am on the 14/11/23

Legend:
Land within Proposed SLO Boundary
Proposed SLO Boundary
High Sensitivity
Moderate Sensitivity

View location 2-2:
e: 252174.9170
n: 5910285.6560
rl: 320.9430

Distance from viewpoint to proposed development:
1350m

Location 2



project ref:	23.0286
dwg no.:	VIA-010
date:	13/05/24
revision:	A

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Stage 2 - Big Hill & Mandurang Valley SLO Review

Location 2-2 - Testing - Moderate Sensitivity & High Sensitivity



View location 2-2 - Hokins Road & Landry Lane

Photomontage created by:
AN - 3D Visualizer
Images created using:
Autocad 2023, 3d Max 2023, Vray 6, adobe photoshop, indesign cc 2023
Method used to collect relevant data:
Photo locations obtained on site by Geocomp Consulting pty ltd on the 15/11/23
Camera:
Canon EOS 5Ds Digital SLR
Camera lens:
Canon EF 50mm f/1.8 USM

Photograph taken:
9:44am on the 14/11/23

Legend:
Land within Proposed SLO Boundary
Proposed SLO Boundary
High Sensitivity
Moderate Sensitivity

View location 2-2:
e: 252174.9170
n: 5910285.6560
rl: 320.9430

Distance from viewpoint to proposed development:
1350m

Location 2



Camera location

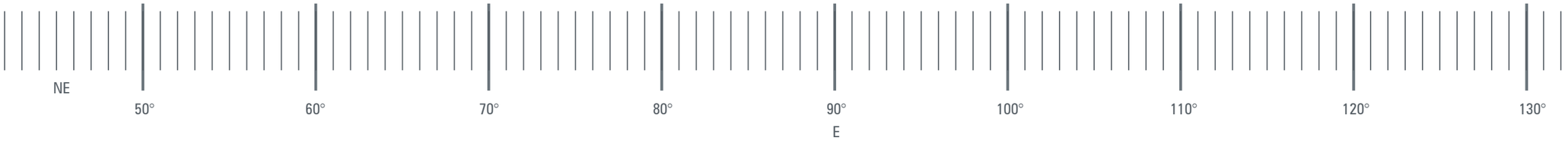
project ref:	23.0286
dwg no.:	VIA-011
date:	13/05/24
revision:	A

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Stage 2 - Big Hill & Mandurang Valley SLO Review

Location 2-2 - Testing - High Sensitivity Only





View location 2-2 - Hokins Road & Landry Lane

Photomontage created by:
AN - 3D Visualizer
Images created using:
Autocad 2023, 3d Max 2023, Vray 6, adobe photoshop, indesign cc 2023
Method used to collect relevant data:
Photo locations obtained on site by Geocomp Consulting pty ltd on the 15/11/23
Camera:
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Camera lens:
Canon EF 50mm f/1.8 USM

Photograph taken:
9:44am on the 14/11/23

Legend:
Land within Proposed SLO Boundary
Proposed SLO Boundary
High Sensitivity
Moderate Sensitivity

View location 2-2:
e: 252174.9170
n: 5910285.6560
rl: 320.9430

Distance from viewpoint to proposed development:
1350m

Location 2





Camera location

project ref: 23.0286
dwg no.: VIA-012
date: 13/05/24
revision: A

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Stage 2 - Big Hill & Mandurang Valley SLO Review

Location 3 - Existing view



View location 3 - Bendigo-Maldon Road & Pinjarra Drive (South)

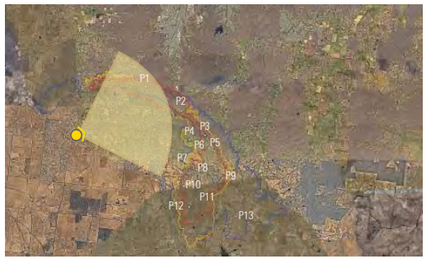
Photomontage created by:
AN - 3D Visualizer
Images created using:
Autocad 2023, 3d Max 2023, Vray 6, adobe photoshop, indesign cc 2023
Method used to collect relevant data:
Photo locations obtained on site by Geocomp Consulting pty ltd on the 15/11/23
Camera:
Canon EOS 5Ds Digital SLR
Camera lens:
Canon EF 50mm f/1.8 USM

Photograph taken:
10:08am on the 14/11/23

View location 3:
e: 245696.5750
n: 5914918.1240
rl: 292.7180

Distance from viewpoint to proposed development:
8970m

Camera location



project ref:	23.0286
dwg no.:	VIA-013
date:	13/05/24
revision:	A

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W hansenpartnership.com.au

Stage 2 - Big Hill & Mandurang Valley SLO Review

Location 3 - Proposed SLO3 (2017) Boundary



View location 3 - Bendigo-Maldon Road & Pinjarra Drive (South)

Photomontage created by:
AN - 3D Visualizer
Images created using:
Autocad 2023, 3d Max 2023, Vray 6, adobe photoshop, indesign cc 2023
Method used to collect relevant data:
Photo locations obtained on site by Geocomp Consulting pty ltd on the 15/11/23
Camera:
Canon EOS 5Ds Digital SLR
Camera lens:
Canon EF 50mm f/1.8 USM

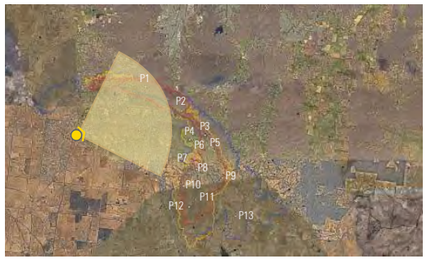
Photograph taken:
10:08am on the 14/11/23

Legend:
Land within Proposed SLO Boundary
Proposed SLO Boundary
High Sensitivity
Moderate Sensitivity

View location 3:
e: 245696.5750
n: 5914918.1240
rl: 292.7180

Distance from viewpoint to proposed development:
8970m

Camera location



project ref: 23.0286
dwg no.: VIA-014
date: 13/05/24
revision: A

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Stage 2 - Big Hill & Mandurang Valley SLO Review

Location 3 - Testing - Moderate Sensitivity & High Sensitivity





View location 3 - Bendigo-Maldon Road & Pinjarra Drive (South)

Photomontage created by:
AN - 3D Visualizer
Images created using:
Autocad 2023, 3d Max 2023, Vray 6, adobe photoshop, indesign cc 2023
Method used to collect relevant data:
Photo locations obtained on site by Geocomp Consulting pty ltd on the 15/11/23
Camera:
Canon EOS 5Ds Digital SLR
Camera lens:
Canon EF 50mm f/1.8 USM

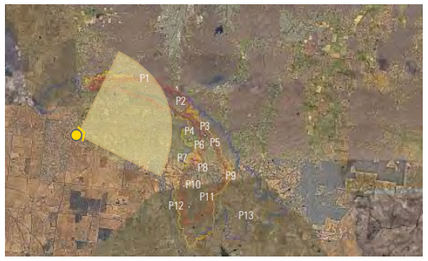
Photograph taken:
10:08am on the 14/11/23

Legend:
Land within Proposed SLO Boundary
Proposed SLO Boundary
High Sensitivity
Moderate Sensitivity

View location 3:
e: 245696.5750
n: 5914918.1240
rl: 292.7180

Distance from viewpoint to proposed development:
8970m

Camera location



project ref: 23.0286
dwg no.: VIA-015
date: 13/05/24
revision: A

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Stage 2 - Big Hill & Mandurang Valley SLO Review

Location 3 - Testing - High Sensitivity Only



View location 3 - Bendigo-Maldon Road & Pinjarra Drive (South)

Photomontage created by:
AN - 3D Visualizer
Images created using:
Autocad 2023, 3d Max 2023, Vray 6, adobe photoshop, indesign cc 2023
Method used to collect relevant data:
Photo locations obtained on site by Geocomp Consulting pty ltd on the 15/11/23
Camera:
Canon EOS 5Ds Digital SLR
Camera lens:
Canon EF 50mm f/1.8 USM

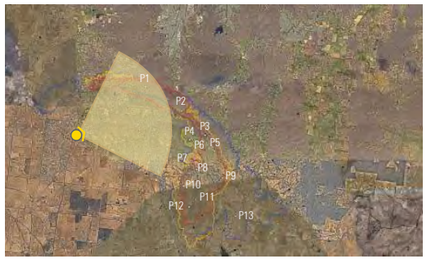
Photograph taken:
10:08am on the 14/11/23

Legend:
Land within Proposed SLO Boundary
Proposed SLO Boundary
High Sensitivity
Moderate Sensitivity

View location 3:
e: 245696.5750
n: 5914918.1240
rl: 292.7180

Distance from viewpoint to proposed development:
8970m

Camera location



project ref: 23.0286
dwg no.: VIA-016
date: 13/05/24
revision: A

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Stage 2 - Big Hill & Mandurang Valley SLO Review

Location 11-1 - Existing view



70° 80° 90° E 100° 110° 120° SE 130° 140° 150°

View location 11-1 - Ravenswood Interchange A

Photomontage created by:
AN - 3D Visualizer
Images created using:
Autocad 2023, 3d Max 2023, Vray 6, adobe photoshop, indesign cc 2023
Method used to collect relevant data:
Photo locations obtained on site by Geocomp Consulting pty ltd on the 15/11/23
Camera:
Canon EOS 5Ds Digital SLR
Camera lens:
Canon EF 50mm f/1.8 USM

Photograph taken:
11:50am on the 14/11/23

View location 11-1:
e: 251258.3050
n: 5914724.3940
rl: 301.1600

Distance from viewpoint to proposed development:
3005m

Location 11



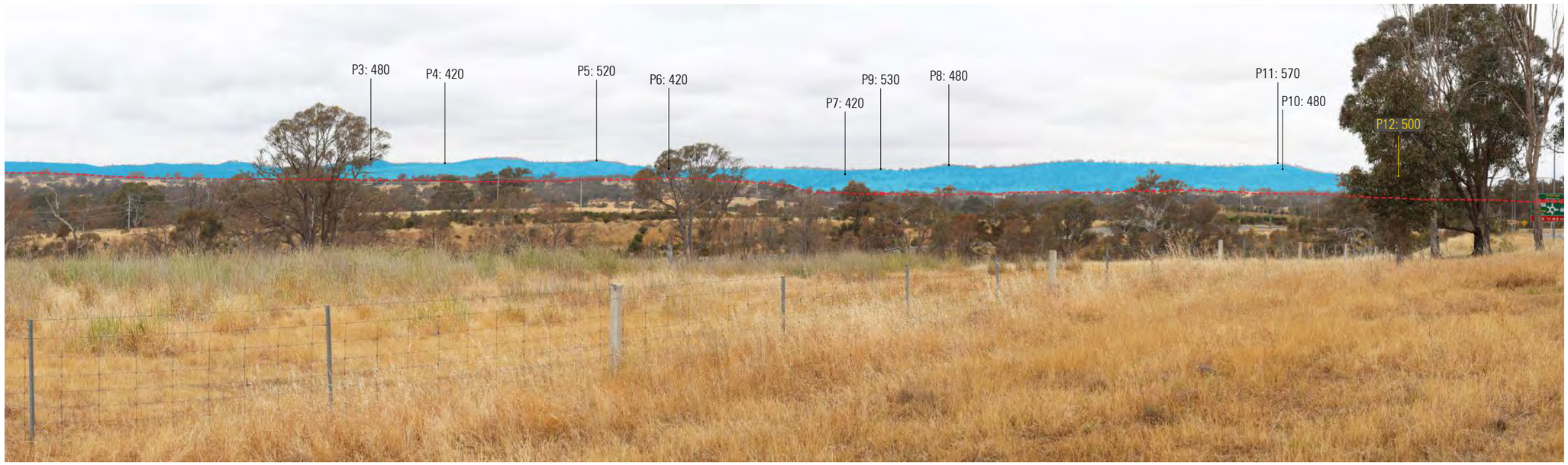
Camera location

project ref:	23.0286
dwg no.:	VIA-017
date:	13/05/24
revision:	A

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Stage 2 - Big Hill & Mandurang Valley SLO Review

Location 11-1 - Proposed SLO3 (2017) Boundary



View location 11-1 - Ravenswood Interchange A

Photomontage created by:
AN - 3D Visualizer
Images created using:
Autocad 2023, 3d Max 2023, Vray 6, adobe photoshop, indesign cc 2023
Method used to collect relevant data:
Photo locations obtained on site by Geocomp Consulting pty ltd on the 15/11/23
Camera:
Canon EOS 5Ds Digital SLR
Camera lens:
Canon EF 50mm f/1.8 USM

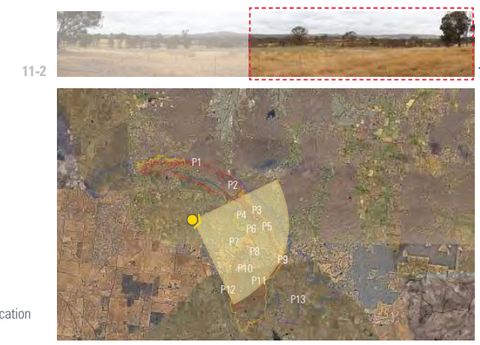
Photograph taken:
11:50am on the 14/11/23

Legend:
Land within Proposed SLO Boundary
Proposed SLO Boundary
High Sensitivity
Moderate Sensitivity

View location 11-1:
e: 251258.3050
n: 5914724.3940
rl: 301.1600

Distance from viewpoint to proposed development:
3005m

Location 11



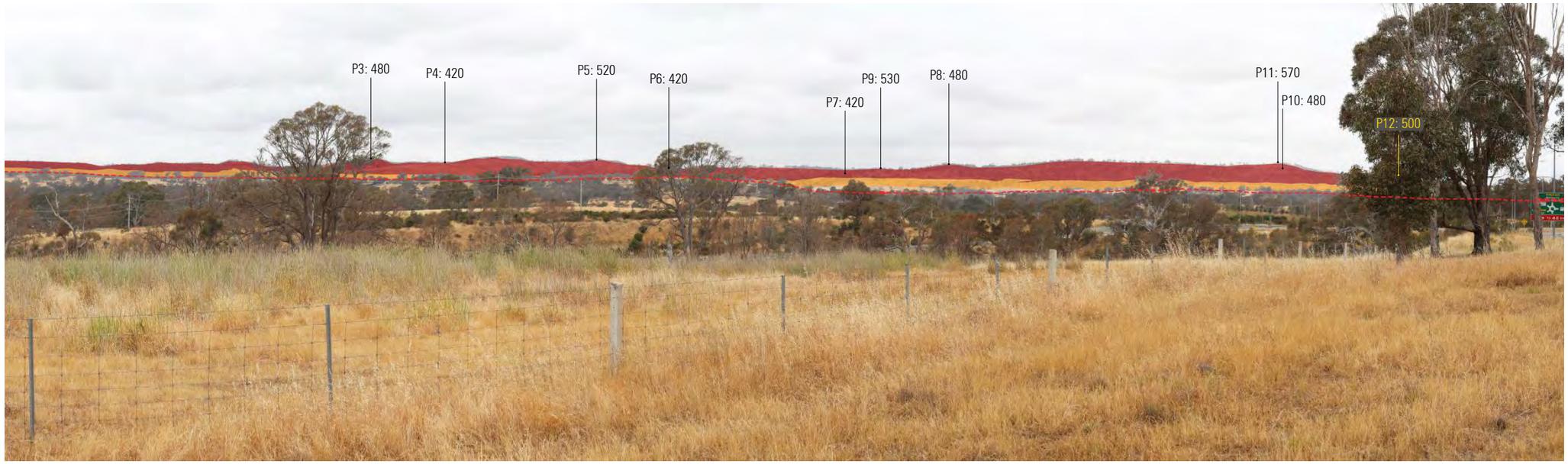
Camera location

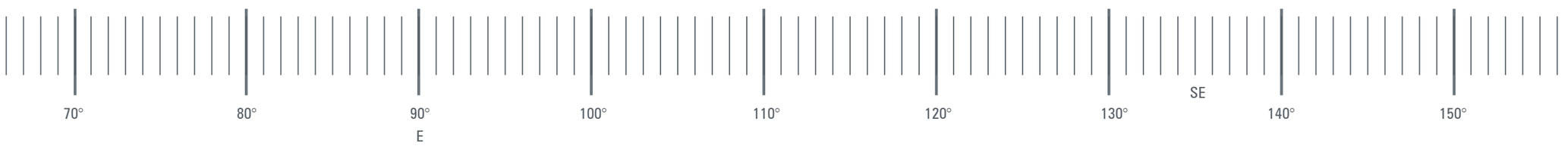
project ref:	23.0286
dwg no.:	VIA-018
date:	13/05/24
revision:	A

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Stage 2 - Big Hill & Mandurang Valley SLO Review

Location 11-1 - Testing - Moderate Sensitivity & High Sensitivity





View location 11-1 - Ravenswood Interchange A

Photomontage created by:
AN - 3D Visualizer
Images created using:
Autocad 2023, 3d Max 2023, Vray 6, adobe photoshop, indesign cc 2023
Method used to collect relevant data:
Photo locations obtained on site by Geocomp Consulting pty ltd on the 15/11/23
Camera:
Canon EOS 5Ds Digital SLR
Camera lens:
Canon EF 50mm f/1.8 USM

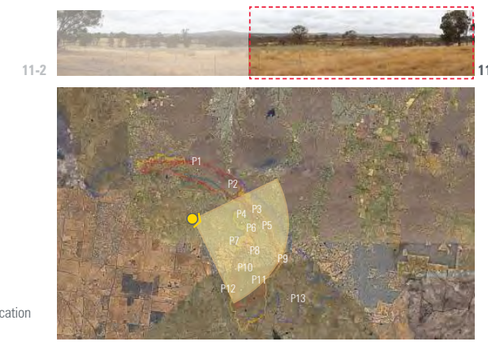
Photograph taken:
11:50am on the 14/11/23

Legend:
Land within Proposed SLO Boundary
Proposed SLO Boundary
High Sensitivity
Moderate Sensitivity

View location 11-1:
e: 251258.3050
n: 5914724.3940
rl: 301.1600

Distance from viewpoint to proposed development:
3005m

Location 11



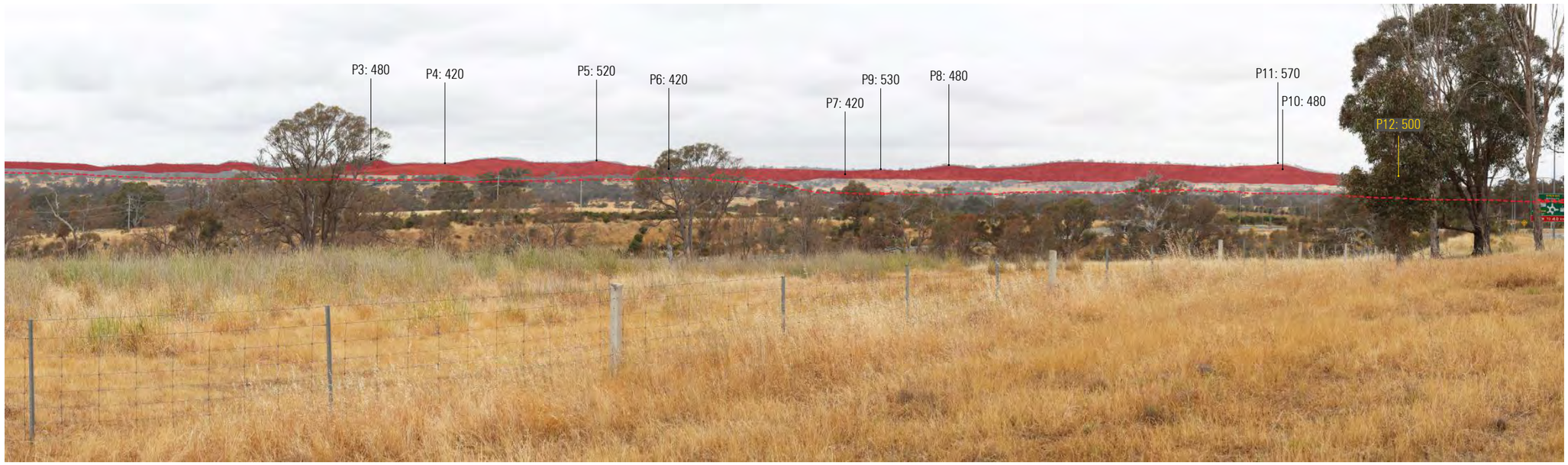
Camera location

project ref:	23.0286
dwg no.:	VIA-019
date:	13/05/24
revision:	A

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Stage 2 - Big Hill & Mandurang Valley SLO Review

Location 11-1 - Testing - High Sensitivity Only





View location 11-1 - Ravenswood Interchange A

Photomontage created by:
AN - 3D Visualizer
Images created using:
Autocad 2023, 3d Max 2023, Vray 6, adobe photoshop, indesign cc 2023
Method used to collect relevant data:
Photo locations obtained on site by Geocomp Consulting pty ltd on the 15/11/23
Camera:
Canon EOS 5Ds Digital SLR
Camera lens:
Canon EF 50mm f/1.8 USM

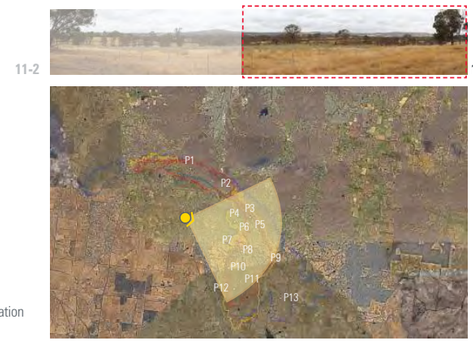
Photograph taken:
11:50am on the 14/11/23

Legend:
Land within Proposed SLO Boundary
Proposed SLO Boundary
High Sensitivity
Moderate Sensitivity

View location 11-1:
e: 251258.3050
n: 5914724.3940
rl: 301.1600

Distance from viewpoint to proposed development:
3005m

Location 11



Camera location

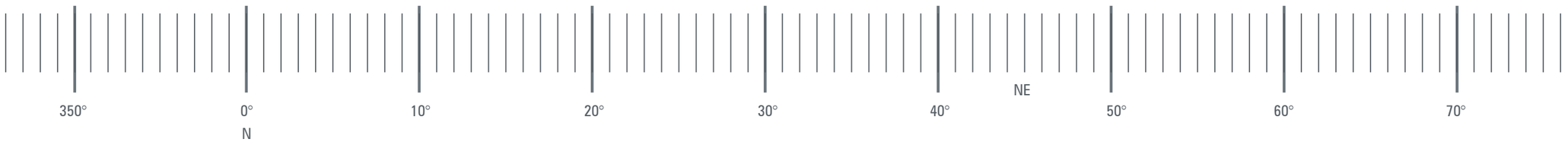
project ref: 23.0286
dwg no.: VIA-020
date: 13/05/24
revision: A

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Stage 2 - Big Hill & Mandurang Valley SLO Review

Location 11-2 - Existing view





View location 11-2 - Ravenswood Interchange A

Photomontage created by:
AN - 3D Visualizer
Images created using:
Autocad 2023, 3d Max 2023, Vray 6, adobe photoshop, indesign cc 2023
Method used to collect relevant data:
Photo locations obtained on site by Geocomp Consulting pty ltd on the 15/11/23
Camera:
Canon EOS 5Ds Digital SLR
Camera lens:
Canon EF 50mm f/1.8 USM

Photograph taken:
11:50am on the 14/11/23

View location 11-2:
e: 251258.3050
n: 5914724.3940
rl: 301.1600

Distance from viewpoint to proposed development:
3005m

Location 11



Camera location

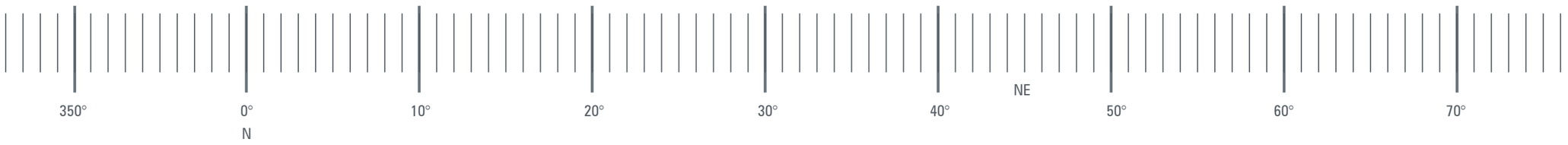
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dwg no.:	VIA-021
date:	13/05/24
revision:	A

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Stage 2 - Big Hill & Mandurang Valley SLO Review

Location 11-2 - Proposed SLO3 (2017) Boundary





View location 11-2 - Ravenswood Interchange A

Photomontage created by:
AN - 3D Visualizer
Images created using:
Autocad 2023, 3d Max 2023, Vray 6, adobe photoshop, indesign cc 2023
Method used to collect relevant data:
Photo locations obtained on site by Geocomp Consulting pty ltd on the 15/11/23
Camera:
Canon EOS 5Ds Digital SLR
Camera lens:
Canon EF 50mm f/1.8 USM

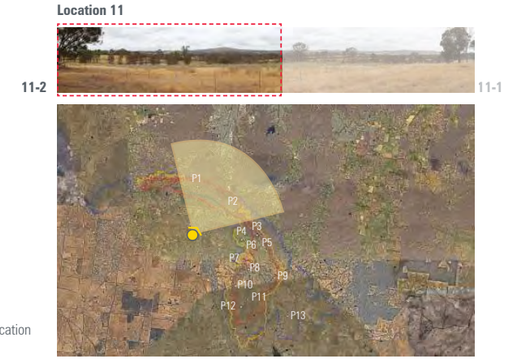
Photograph taken:
11:50am on the 14/11/23

Legend:
Land within Proposed SLO Boundary
Proposed SLO Boundary
High Sensitivity
Moderate Sensitivity

View location 11-2:
e: 251258.3050
n: 5914724.3940
rl: 301.1600

Distance from viewpoint to proposed development:
3005m

Location 11



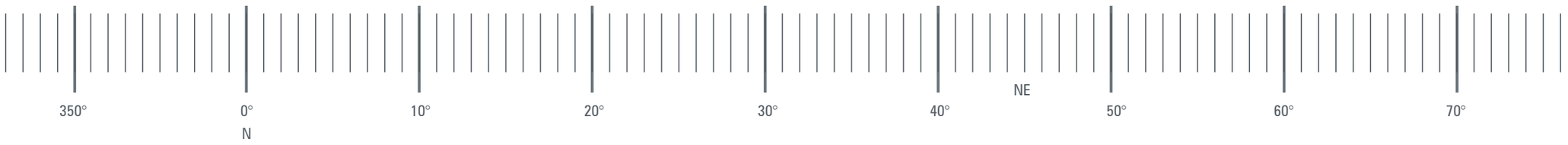
project ref: 23.0286
dwg no.: VIA-022
date: 13/05/24
revision: A

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Stage 2 - Big Hill & Mandurang Valley SLO Review

Location 11-2 - Testing - Moderate Sensitivity & High Sensitivity





View location 11-2 - Ravenswood Interchange A

Photomontage created by:
AN - 3D Visualizer
Images created using:
Autocad 2023, 3d Max 2023, Vray 6, adobe photoshop, indesign cc 2023
Method used to collect relevant data:
Photo locations obtained on site by Geocomp Consulting pty ltd on the 15/11/23
Camera:
Canon EOS 5Ds Digital SLR
Camera lens:
Canon EF 50mm f/1.8 USM

Photograph taken:
11:50am on the 14/11/23

Legend:
Land within Proposed SLO Boundary
Proposed SLO Boundary
High Sensitivity
Moderate Sensitivity

View location 11-2:
e: 251258.3050
n: 5914724.3940
rl: 301.1600

Distance from viewpoint to proposed development:
3005m

Location 11



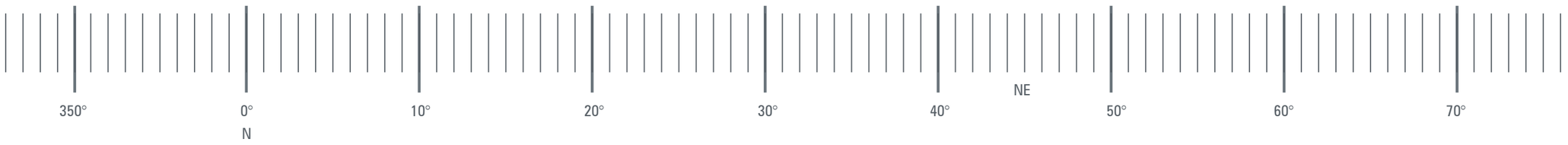
project ref: 23.0286
dwg no.: VIA-023
date: 13/05/24
revision: A

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Stage 2 - Big Hill & Mandurang Valley SLO Review

Location 11-2 - Testing - High Sensitivity Only





View location 11-2 - Ravenswood Interchange A

Photomontage created by:
AN - 3D Visualizer
Images created using:
Autocad 2023, 3d Max 2023, Vray 6, adobe photoshop, indesign cc 2023
Method used to collect relevant data:
Photo locations obtained on site by Geocomp Consulting pty ltd on the 15/11/23
Camera:
Canon EOS 5Ds Digital SLR
Camera lens:
Canon EF 50mm f/1.8 USM

Photograph taken:
11:50am on the 14/11/23

Legend:
Land within Proposed SLO Boundary
Proposed SLO Boundary
High Sensitivity
Moderate Sensitivity

View location 11-2:
e: 251258.3050
n: 5914724.3940
rl: 301.1600

Distance from viewpoint to proposed development:
3005m

Location 11



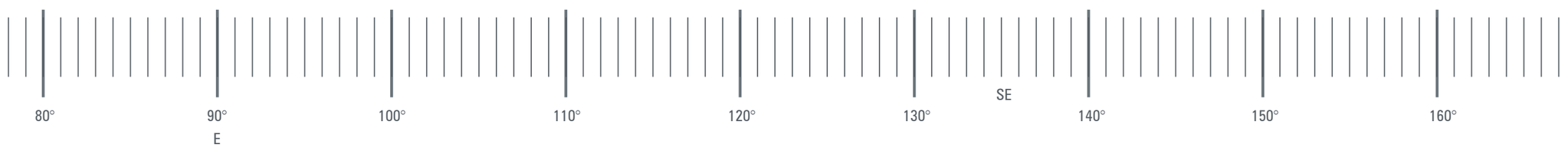
project ref:	23.0286
dwg no.:	VIA-024
date:	13/05/24
revision:	A

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Stage 2 - Big Hill & Mandurang Valley SLO Review

Location 12-1 - Existing view





View location 12-1 - Ravenswood Interchange B

Photomontage created by:
AN - 3D Visualizer
Images created using:
Autocad 2023, 3d Max 2023, Vray 6, adobe photoshop, indesign cc 2023
Method used to collect relevant data:
Photo locations obtained on site by Geocomp Consulting pty ltd on the 15/11/23
Camera:
Canon EOS 5Ds Digital SLR
Camera lens:
Canon EF 50mm f/1.8 USM

Photograph taken:
12:06pm on the 14/11/23

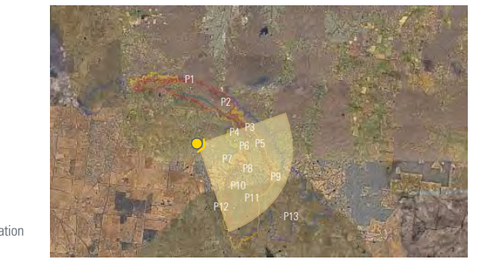
View location 12-1:
e: 251607.0790
n: 5914430.7510
rl: 293.7650

Distance from viewpoint to proposed development:
2683m

Camera location

Location 12





project ref:	23.0286
dwg no.:	VIA-025
date:	13/05/24
revision:	A

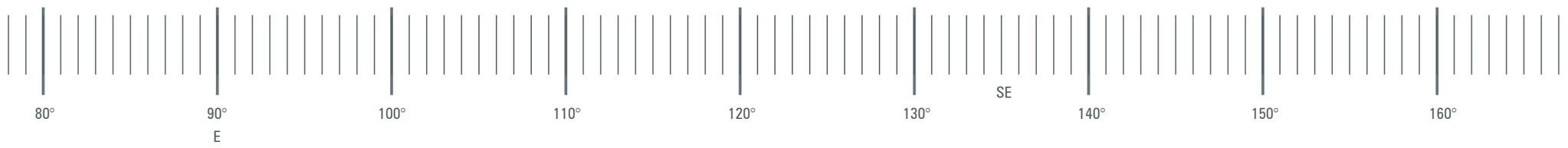
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Stage 2 - Big Hill & Mandurang Valley SLO Review

Location 12-1 - Proposed SLO3 (2017) Boundary

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View location 12-1 - Ravenswood Interchange B

Photomontage created by:
AN - 3D Visualizer
Images created using:
Autocad 2023, 3d Max 2023, Vray 6, adobe photoshop, indesign cc 2023
Method used to collect relevant data:
Photo locations obtained on site by Geocomp Consulting pty ltd on the 15/11/23
Camera:
Canon EOS 5Ds Digital SLR
Camera lens:
Canon EF 50mm f/1.8 USM

Photograph taken:
12:06pm on the 14/11/23

Legend:
Land within Proposed SLO Boundary
Proposed SLO Boundary
High Sensitivity
Moderate Sensitivity

View location 12-1:
e: 251607.0790
n: 5914430.7510
rl: 293.7650

Distance from viewpoint to proposed development:
2683m

Camera location

Location 12



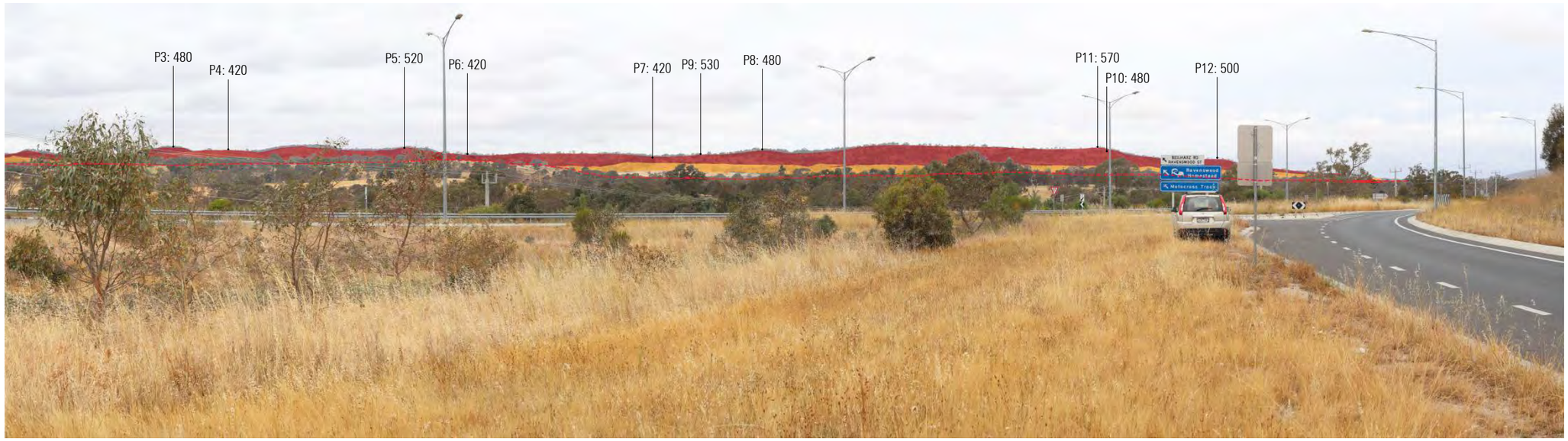
project ref:	23.0286
dwg no.:	VIA-026
date:	13/05/24
revision:	A

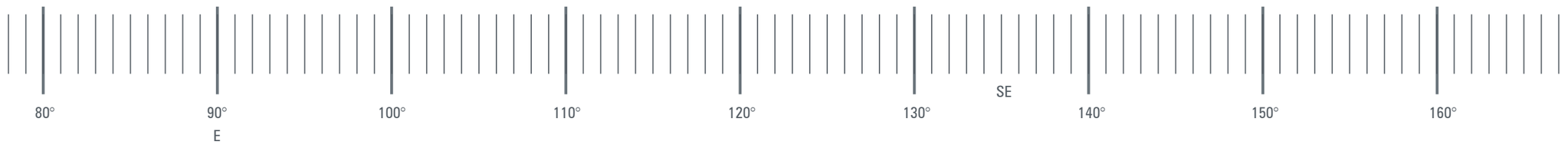
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Stage 2 - Big Hill & Mandurang Valley SLO Review

Location 12-1 - Testing - Moderate Sensitivity & High Sensitivity

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View location 12-1 - Ravenswood Interchange B

Photomontage created by:
AN - 3D Visualizer
Images created using:
Autocad 2023, 3d Max 2023, Vray 6, adobe photoshop, indesign cc 2023
Method used to collect relevant data:
Photo locations obtained on site by Geocomp Consulting pty ltd on the 15/11/23
Camera:
Canon EOS 5Ds Digital SLR
Camera lens:
Canon EF 50mm f/1.8 USM

Photograph taken:
12:06pm on the 14/11/23

Legend:
Land within Proposed SLO Boundary
Proposed SLO Boundary
High Sensitivity
Moderate Sensitivity

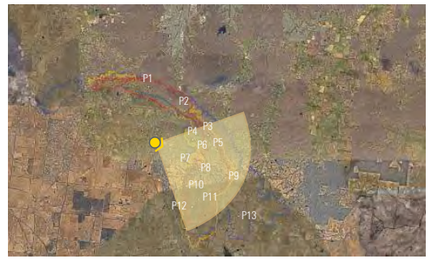
View location 12-1:
e: 251607.0790
n: 5914430.7510
rl: 293.7650

Distance from viewpoint to proposed development:
2683m

Camera location

Location 12





project ref: 23.0286
dwg no.: VIA-027
date: 13/05/24
revision: A

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Stage 2 - Big Hill & Mandurang Valley SLO Review

Location 12-1 - Testing - High Sensitivity Only



View location 12-1 - Ravenswood Interchange B

Photomontage created by:
AN - 3D Visualizer
Images created using:
Autocad 2023, 3d Max 2023, Vray 6, adobe photoshop, indesign cc 2023
Method used to collect relevant data:
Photo locations obtained on site by Geocomp Consulting pty ltd on the 15/11/23
Camera:
Canon EOS 5Ds Digital SLR
Camera lens:
Canon EF 50mm f/1.8 USM

Photograph taken:
12:06pm on the 14/11/23

Legend:
Land within Proposed SLO Boundary
Proposed SLO Boundary
High Sensitivity
Moderate Sensitivity

View location 12-1:
e: 251607.0790
n: 5914430.7510
rl: 293.7650

Distance from viewpoint to proposed development:
2683m

Camera location

Location 12



project ref:	23.0286
dwg no.:	VIA-028
date:	13/05/24
revision:	A

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Stage 2 - Big Hill & Mandurang Valley SLO Review

Location 12-2 - Existing view



View location 12-2 - Ravenswood Interchange B

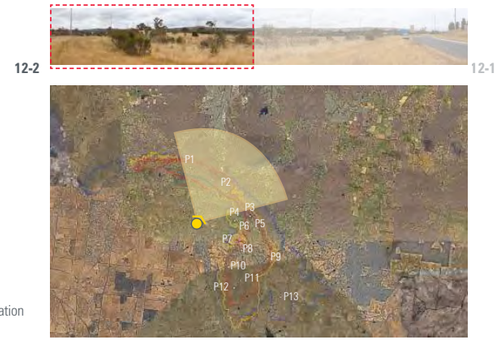
Photomontage created by:
AN - 3D Visualizer
Images created using:
Autocad 2023, 3d Max 2023, Vray 6, adobe photoshop, indesign cc 2023
Method used to collect relevant data:
Photo locations obtained on site by Geocomp Consulting pty ltd on the 15/11/23
Camera:
Canon EOS 5Ds Digital SLR
Camera lens:
Canon EF 50mm f/1.8 USM

Photograph taken:
12:06pm on the 14/11/23

View location 12-2:
e: 251607.0790
n: 5914430.7510
rl: 293.7650

Distance from viewpoint to proposed development:
2683m

Location 12



Camera location

project ref:	23.0286
dwg no.:	VIA-029
date:	13/05/24
revision:	A

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Stage 2 - Big Hill & Mandurang Valley SLO Review

Location 12-2 - Proposed SLO3 (2017) Boundary



View location 12-2 - Ravenswood Interchange B

Photomontage created by:
AN - 3D Visualizer
Images created using:
Autocad 2023, 3d Max 2023, Vray 6, adobe photoshop, indesign cc 2023
Method used to collect relevant data:
Photo locations obtained on site by Geocomp Consulting pty ltd on the 15/11/23
Camera:
Canon EOS 5Ds Digital SLR
Camera lens:
Canon EF 50mm f/1.8 USM

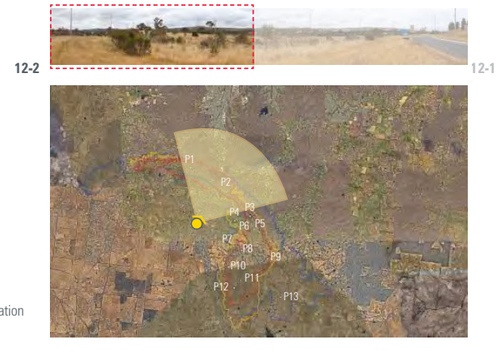
Photograph taken:
12:06pm on the 14/11/23

Legend:
Land within Proposed SLO Boundary
Proposed SLO Boundary
High Sensitivity
Moderate Sensitivity

View location 12-2:
e: 251607.0790
n: 5914430.7510
rl: 293.7650

Distance from viewpoint to proposed development:
2683m

Location 12



Camera location

project ref: 23.0286
dwg no.: VIA-030
date: 13/05/24
revision: A

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Stage 2 - Big Hill & Mandurang Valley SLO Review

Location 12-2 - Testing - Moderate Sensitivity & High Sensitivity



View location 12-2 - Ravenswood Interchange B

Photomontage created by:
AN - 3D Visualizer
Images created using:
Autocad 2023, 3d Max 2023, Vray 6, adobe photoshop, indesign cc 2023
Method used to collect relevant data:
Photo locations obtained on site by Geocomp Consulting pty ltd on the 15/11/23
Camera:
Canon EOS 5Ds Digital SLR
Camera lens:
Canon EF 50mm f/1.8 USM

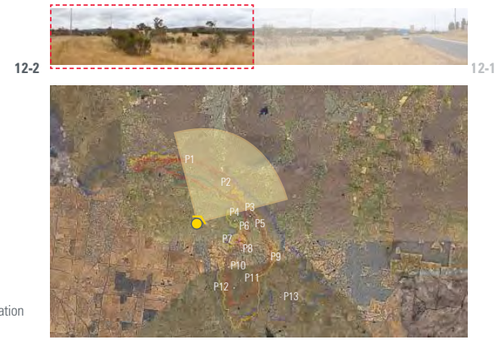
Photograph taken:
12:06pm on the 14/11/23

Legend:
Land within Proposed SLO Boundary
Proposed SLO Boundary
High Sensitivity
Moderate Sensitivity

View location 12-2:
e: 251607.0790
n: 5914430.7510
rl: 293.7650

Distance from viewpoint to proposed development:
2683m

Location 12



Camera location

project ref:	23.0286
dwg no.:	VIA-031
date:	13/05/24
revision:	A

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Stage 2 - Big Hill & Mandurang Valley SLO Review

Location 12-2 - Testing - High Sensitivity Only



View location 12-2 - Ravenswood Interchange B

Photomontage created by:
AN - 3D Visualizer
Images created using:
Autocad 2023, 3d Max 2023, Vray 6, adobe photoshop, indesign cc 2023
Method used to collect relevant data:
Photo locations obtained on site by Geocomp Consulting pty ltd on the 15/11/23
Camera:
Canon EOS 5Ds Digital SLR
Camera lens:
Canon EF 50mm f/1.8 USM

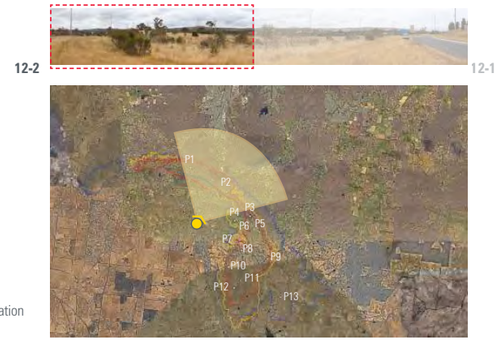
Photograph taken:
12:06pm on the 14/11/23

Legend:
Land within Proposed SLO Boundary
Proposed SLO Boundary
High Sensitivity
Moderate Sensitivity

View location 12-2:
e: 251607.0790
n: 5914430.7510
rl: 293.7650

Distance from viewpoint to proposed development:
2683m

Location 12



Camera location

project ref: 23.0286
dwg no.: VIA-032
date: 13/05/24
revision: A

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Stage 2 - Big Hill & Mandurang Valley SLO Review

Location 17 - Existing view





View location 17 - Belvoir Park Road & Skinner Lane

Photomontage created by:
AN - 3D Visualizer
Images created using:
Autocad 2023, 3d Max 2023, Vray 6, adobe photoshop, indesign cc 2023
Method used to collect relevant data:
Photo locations obtained on site by Geocomp Consulting pty ltd on the 15/11/23
Camera:
Canon EOS 5Ds Digital SLR
Camera lens:
Canon EF 50mm f/1.8 USM

Photograph taken:
12:56m on the 14/11/23

View location 17:
e: 249836.8590
n: 5917339.6830
rl: 263.5400

Distance from viewpoint to proposed development:
1187m

Camera location



project ref:	23.0286
dwg no.:	VIA-033
date:	13/05/24
revision:	A

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Stage 2 - Big Hill & Mandurang Valley SLO Review

Location 17 - Proposed SLO3 (2017) Boundary



View location 17 - Belvoir Park Road & Skinner Lane

Photomontage created by:
AN - 3D Visualizer
Images created using:
Autocad 2023, 3d Max 2023, Vray 6, adobe photoshop, indesign cc 2023
Method used to collect relevant data:
Photo locations obtained on site by Geocomp Consulting pty ltd on the 15/11/23
Camera:
Canon EOS 5Ds Digital SLR
Camera lens:
Canon EF 50mm f/1.8 USM

Photograph taken:
12:56m on the 14/11/23

Legend:
Land within Proposed SLO Boundary
Proposed SLO Boundary
High Sensitivity
Moderate Sensitivity

View location 17:
e: 249836.8590
n: 5917339.6830
rl: 263.5400

Distance from viewpoint to proposed development:
1187m

Camera location



project ref: 23.0286
dwg no.: VIA-034
date: 13/05/24
revision: A

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Stage 2 - Big Hill & Mandurang Valley SLO Review

Location 17 - Testing - Moderate Sensitivity & High Sensitivity



View location 17 - Belvoir Park Road & Skinner Lane

Photomontage created by:
AN - 3D Visualizer
Images created using:
Autocad 2023, 3d Max 2023, Vray 6, adobe photoshop, indesign cc 2023
Method used to collect relevant data:
Photo locations obtained on site by Geocomp Consulting pty ltd on the 15/11/23
Camera:
Canon EOS 5Ds Digital SLR
Camera lens:
Canon EF 50mm f/1.8 USM

Photograph taken:
12:56m on the 14/11/23

Legend:
Land within Proposed SLO Boundary
Proposed SLO Boundary
High Sensitivity
Moderate Sensitivity

View location 17:
e: 249836.8590
n: 5917339.6830
rl: 263.5400

Distance from viewpoint to proposed development:
1187m

Camera location



project ref: 23.0286
dwg no.: VIA-035
date: 13/05/24
revision: A

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Stage 2 - Big Hill & Mandurang Valley SLO Review

Location 17 - Testing - High Sensitivity Only



View location 17 - Belvoir Park Road & Skinner Lane

Photomontage created by:
AN - 3D Visualizer
Images created using:
Autocad 2023, 3d Max 2023, Vray 6, adobe photoshop, indesign cc 2023
Method used to collect relevant data:
Photo locations obtained on site by Geocomp Consulting pty ltd on the 15/11/23
Camera:
Canon EOS 5Ds Digital SLR
Camera lens:
Canon EF 50mm f/1.8 USM

Photograph taken:
12:56m on the 14/11/23

Legend:
Land within Proposed SLO Boundary
Proposed SLO Boundary
High Sensitivity
Moderate Sensitivity

View location 17:
e: 249836.8590
n: 5917339.6830
rl: 263.5400

Distance from viewpoint to proposed development:
1187m

Camera location



project ref: 23.0286
dwg no.: VIA-036
date: 13/05/24
revision: A

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Stage 2 - Big Hill & Mandurang Valley SLO Review

Location 18 - Existing view



View location 18 - Skinner Lane & Granite View

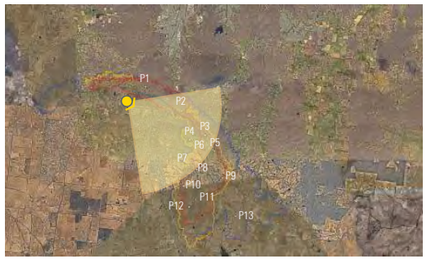
Photomontage created by:
AN - 3D Visualizer
Images created using:
Autocad 2023, 3d Max 2023, Vray 6, adobe photoshop, indesign cc 2023
Method used to collect relevant data:
Photo locations obtained on site by Geocomp Consulting pty ltd on the 15/11/23
Camera:
Canon EOS 5Ds Digital SLR
Camera lens:
Canon EF 50mm f/1.8 USM

Photograph taken:
1:08pm on the 14/11/23

View location 18:
e: 249934.3990
n: 5918021.1620
rl: 286.1020

Distance from viewpoint to proposed development:
2726m

Camera location

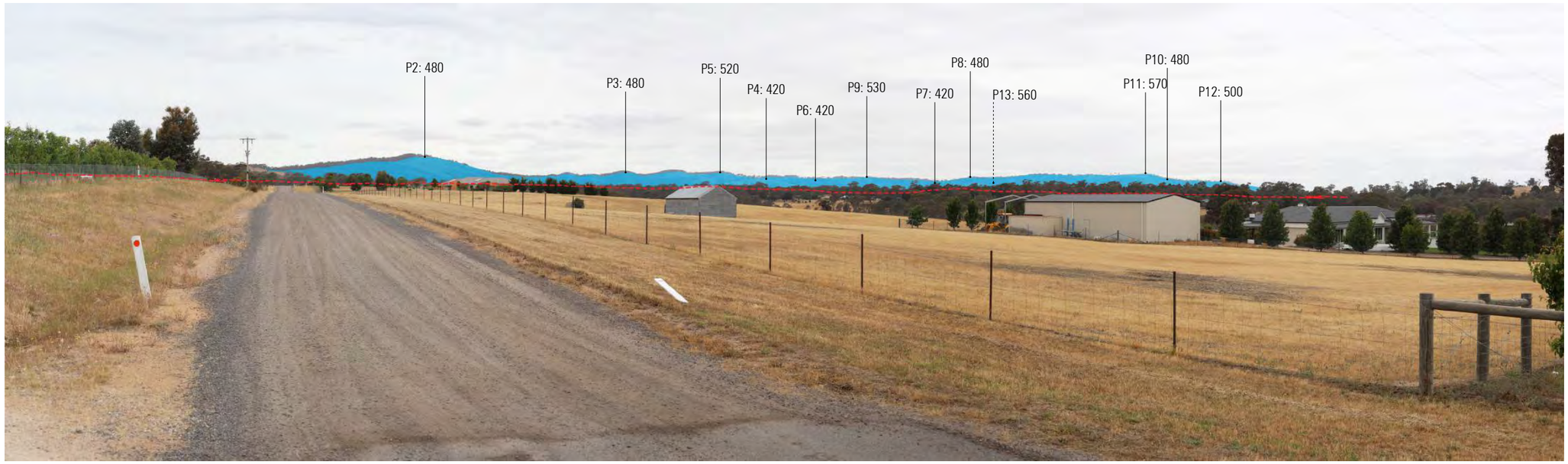


project ref:	23.0286
dwg no.:	VIA-037
date:	13/05/24
revision:	A

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Stage 2 - Big Hill & Mandurang Valley SLO Review

Location 18 - Proposed SLO3 (2017) Boundary



View location 18 - Skinner Lane & Granite View

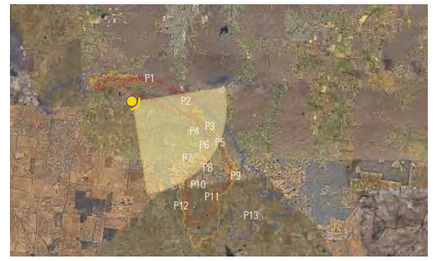
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Camera:
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Camera lens:
Canon EF 50mm f/1.8 USM

Photograph taken:
1:08pm on the 14/11/23

Legend:
Land within Proposed SLO Boundary
Proposed SLO Boundary
High Sensitivity
Moderate Sensitivity

View location 18:
e: 249934.3990
n: 5918021.1620
rl: 286.1020

Distance from viewpoint to proposed development:
2726m



Camera location

project ref:	23.0286
dwg no.:	VIA-038
date:	13/05/24
revision:	A

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Stage 2 - Big Hill & Mandurang Valley SLO Review

Location 18 - Testing - Moderate Sensitivity & High Sensitivity



View location 18 - Skinner Lane & Granite View

Photomontage created by:
AN - 3D Visualizer
Images created using:
Autocad 2023, 3d Max 2023, Vray 6, adobe photoshop, indesign cc 2023
Method used to collect relevant data:
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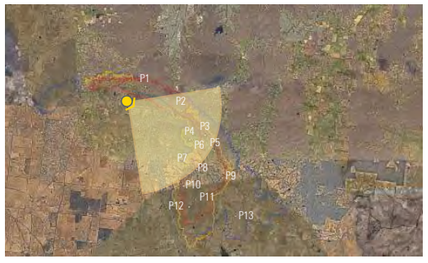
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1:08pm on the 14/11/23

Legend:
Land within Proposed SLO Boundary
Proposed SLO Boundary
High Sensitivity
Moderate Sensitivity

View location 18:
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n: 5918021.1620
rl: 286.1020

Distance from viewpoint to proposed development:
2726m

Camera location



project ref: 23.0286
dwg no.: VIA-039
date: 13/05/24
revision: A

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Location 18 - Testing - High Sensitivity Only



View location 18 - Skinner Lane & Granite View

Photomontage created by:
AN - 3D Visualizer
Images created using:
Autocad 2023, 3d Max 2023, Vray 6, adobe photoshop, indesign cc 2023
Method used to collect relevant data:
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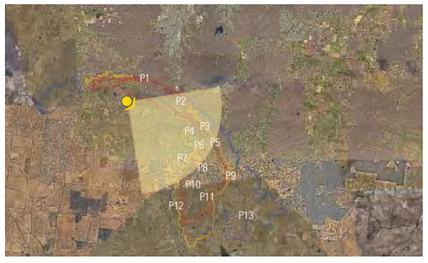
Photograph taken:
1:08pm on the 14/11/23

Legend:
Land within Proposed SLO Boundary
Proposed SLO Boundary
High Sensitivity
Moderate Sensitivity

View location 18:
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n: 5918021.1620
rl: 286.1020

Distance from viewpoint to proposed development:
2726m

Camera location



project ref:	23.0286
dwg no.:	VIA-040
date:	13/05/24
revision:	A

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Stage 2 - Big Hill & Mandurang Valley SLO Review

Location 18 - Existing view





View location 19 - Skinner Lane & Grassy Lane

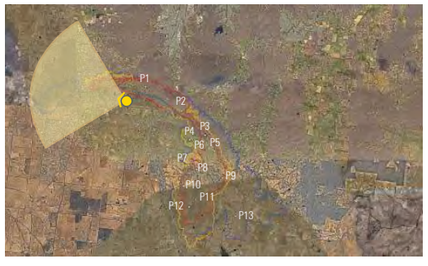
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Images created using:
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Method used to collect relevant data:
Photo locations obtained on site by Geocomp Consulting pty ltd on the 15/11/23
Camera:
Canon EOS 5Ds Digital SLR
Camera lens:
Canon EF 50mm f/1.8 USM

Photograph taken:
1:16pm on the 14/11/23

View location 19:
e: 249926.4420
n: 5918022.6990
rl: 285.0670

Distance from viewpoint to proposed development:
2275m

Camera location



project ref: 23.0286
dwg no.: VIA-041
date: 13/05/24
revision: A

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Stage 2 - Big Hill & Mandurang Valley SLO Review

Location 19 - Proposed SLO3 (2017) Boundary





View location 19 - Skinner Lane & Grassy Lane

Photomontage created by:
AN - 3D Visualizer
Images created using:
Autocad 2023, 3d Max 2023, Vray 6, adobe photoshop, indesign cc 2023
Method used to collect relevant data:
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Camera lens:
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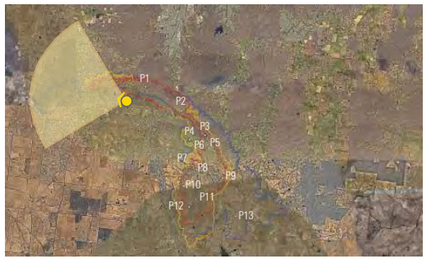
Photograph taken:
1:16pm on the 14/11/23

Legend:
Land within Proposed SLO Boundary
Proposed SLO Boundary
High Sensitivity
Moderate Sensitivity

View location 19:
e: 249926.4420
n: 5918022.6990
rl: 285.0670

Distance from viewpoint to proposed development:
2275m

Camera location



project ref:	23.0286
dwg no.:	VIA-042
date:	13/05/24
revision:	A

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Stage 2 - Big Hill & Mandurang Valley SLO Review

Location 19 - Testing - Moderate Sensitivity & High Sensitivity





View location 19 - Skinner Lane & Grassy Lane

Photomontage created by:
AN - 3D Visualizer
Images created using:
Autocad 2023, 3d Max 2023, Vray 6, adobe photoshop, indesign cc 2023
Method used to collect relevant data:
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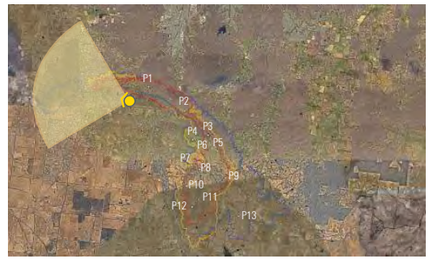
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Legend:
Land within Proposed SLO Boundary
Proposed SLO Boundary
High Sensitivity
Moderate Sensitivity

View location 19:
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n: 5918022.6990
rl: 285.0670

Distance from viewpoint to proposed development:
2275m

Camera location



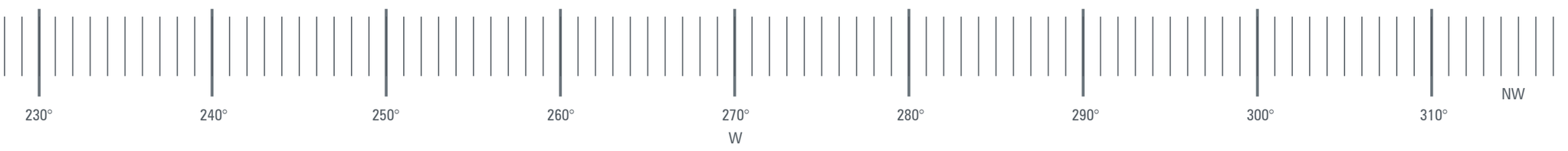
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dwg no.:	VIA-043
date:	13/05/24
revision:	A

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Stage 2 - Big Hill & Mandurang Valley SLO Review

Location 19 - Testing - High Sensitivity Only





View location 19 - Skinner Lane & Grassy Lane

Photomontage created by:
AN - 3D Visualizer
Images created using:
Autocad 2023, 3d Max 2023, Vray 6, adobe photoshop, indesign cc 2023
Method used to collect relevant data:
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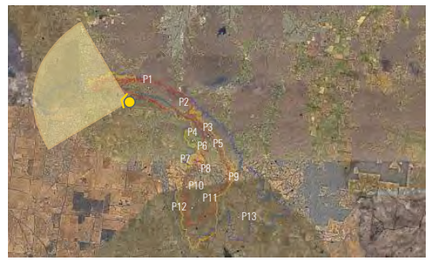
Photograph taken:
1:16pm on the 14/11/23

Legend:
Land within Proposed SLO Boundary
Proposed SLO Boundary
High Sensitivity
Moderate Sensitivity

View location 19:
e: 249926.4420
n: 5918022.6990
rl: 285.0670

Distance from viewpoint to proposed development:
2275m

Camera location



project ref:	23.0286
dwg no.:	VIA-044
date:	13/05/24
revision:	A

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Appendix 2 Regional Significance Benchmarking

The Landscape's Relative Significance

Overview

This chapter seeks to provide an understanding of the comparative significance of the subject landscape, to reiterate the relative importance of protection and to help identify the appropriate tools and mechanisms required to do so.

Landscape significance is the designation of a particular landscape as special or important arising from its landscape values, including aesthetic values (both visual and non-visual) historic, environmental, scientific, social or other values (Draft Central Victoria Landscape Assessment Study, 2015).

Landscapes are significant to different people for different reasons. These reasons may include their scenic beauty, historic value, environmental qualities, or less tangible values associated with the place, such as memories or associations. The fact that landscape values are held both by individuals and communities, and that many values exist in the subjective territory of human perceptions is what makes the assessment of landscape significance so challenging and often contentious (Draft Central Victoria Landscape Assessment Study, 2015)..

Unlike previous and subsequent landscape assessments, the original study did not rank the levels of significance of the landscapes. It did however state that it was possible to "infer a ranking of significance from the (values summary) table… e.g. higher could be taken to mean State, moderate to mean regional, lower to mean local27". It was reiterated at the Panel Hearing by Council that in the absence of a landscape assessment for the whole of Greater Bendigo or the wider region, a comparative ranking of significance was not possible.

While it is preferable to have completed local or regional landscape studies for comparative purposes, the well known landscape assessment methodology that establishes 'rating considerations' and attributes 'significance levels' to them, does make a decision about significance levels possible and justifiable.

The benefit of the completion (at least to draft standard) of the Central Victoria Landscape Assessment Study (2015) makes a comparative analysis now more possible still, and other indicators, such as the designation of a landscape as a National or Regional Park, can provide a further indication of significance level.

In order to justify the application of the SLO an indication of the level of significance to the municipality, region and State is preferable, and this should be included in the SLO schedule as part of the 'statement of nature and key elements of landscape' or 'statement of significance'.

Significance levels

Levels of significance are attributed to each landscape component, and an overall significance level in relation to aesthetic value is determined. The significance levels are:

- Moderate = local significance
- High = regional significance
- Exceptional = State significance or higher

The final determination of significance level for aesthetic value is not a matter of adding up the number of 'moderate' or 'high' ratings. Rather, if a landscape rates 'high' for example in one or more of the landscape components, that level is the overall significance rating attributed to the aesthetic values of that landscape. This approach is similar to the standard for listing a place on a heritage register, for instance, is that a place meets one or more criteria.

Within the study area 17 Significant Areas have been defined. These are shown on the map over the page. The methodology and the significant areas are described in more detail in Appendix B, and are summarised below.

Greater Bendigo National Park

Landscape Character Type: Goldfields

Overall significance rating: State

Bendigo is known as the 'city within a forest', surrounded by National and Regional Parks. Greater Bendigo National Park includes 5 separate areas including the former Whipstick and Kamarooka State Parks. The One Tree Hill section is almost entirely surrounded by residential areas of the city.

Greater Bendigo National Park abuts the Bendigo city on the north and south sides. The area has a rugged 'gold rush' character. The scope of this study does not include Bendigo city.

- Mount Macedon (including Hanging Road & Mount Jim Jim) - State or higher
- Greater Bendigo National Park - State
- Heathcote-Graytown National Park - State
- Mount Tarrengower & Maldon Historic Area - State
- Cairn Curran Reservoir - Regional
- Mount Aitken - Regional
- Mount Gisborne - Regional
- Cobaw Ranges - Regional
- Turpins Falls - Regional
- Pyramid Hill - Regional
- Terrick Terrick National Park - Regional
- Lake Boort & Environs - Regional
- Lake Eppalock - Regional
- Mount Alexander - Regional
- Paddys Ranges State Park- Regional
- Pyrenees - Regional
- Timor Historic & Cultural Features Reserve- Regional

Summary

The Draft Central Victoria Landscape Assessment 2015 provided a detailed analysis of potentially significant landscapes within the broader Central Victorian region. The study was high level, relative to detailed studies of individual landscapes, and provided an overview of landscape character types, levels of significance and recommendations to inform more detailed studies in the future of specific landscapes. It is acknowledged that this study remains in draft form and thereby no statutory weight can be placed on it.

However, for the purposes of this Landscape Significance Study, it provides a useful identification of other potentially significant landscapes in the region and provides insights into their values.

It does not seek to adopt the significance levels of each set of values, as these have not undergone rigorous assessment or been adopted, but they serve to identify what types of values were considered relevant to the high-level study of the landscapes. This allows a 'benchmarking' exercise to compare:

- What values of the landscapes were considered to be significant;
- What local planning scheme measures protective measures currently are in place, and how they are spatially applied;
- What landscape values and attributes do those measures seek to protect; and
- What other indicators apply, such as the designation of a landscape as a National or Regional park.

The potentially significant landscapes that were subject to the study were:

- Cairn Curran Reservoir, Maldon*
- Mount Aitken, Gisborne South*
- Mount Gisborne & Mount Jim Jim, Gisborne*
- Mount Macedon including Hanging Rock, Macedon Ranges*
- Cobaw Ranges, Kyneton*
- Turpins Falls, Kyneton
- Pyramid Hill
- Terrick Terrick National Park, Riverina region
- Lake Boort and Environs , Boort
- Greater Bendigo national Park, Bendigo
- Heathcote-Grayton National Park, Heathcote
- Lake Eppalock, Bendigo
- Mount Alexander Regional Park, Harcourt
- Mount Tarrengower and Maldon Historic Area, Maldon*
- Paddys Ranges State Park, Maryborough
- Pyrenees, Acova
- Timor Historic & Cultural Features Reserve

**Landscapes subject to a SLO*



Mount Gisborne

Cairn Curran Reservoir

- Planning Scheme: Central Goldfields
- Landscape Character Type: Goldfields & Victorian Volcanic Plains
- Significance: Regional
- National/State/Regional Park: Nil
- Protective measure:

  SLO1 – Cairn Curran Reservoir (West Bank)

Key Findings

Cairn Curran Reservoir, under the management of Goulburn-Murray Water, is a substantial water catchment with a rich history and layered significance. Construction on this reservoir began in 1947, and by 1956, it was fully operational.

One notable feature of the reservoir is the presence of both a primary and secondary spillway, the latter situated 2kms southwest of the main structure to prevent embankment overtopping.

The main purpose of Cairn Curran Reservoir is to supply water for irrigation, domestic use, and livestock along the Loddon River. However, it holds significance beyond its utilitarian role, encompassing environmental, scenic, and social significance.

From an environmental perspective, the area is notable for its granite outcrops, warranting protection for both their aesthetic and geological value. The reservoir's scenic appeal lies in its undulating landscape, characterised by plateaus and ridges cascading towards the Cairn Curran Basin, features which are in stark contrast to the surrounding Moolort Plains.

These features contribute to its identity and visual charm. From a social and recreational perspective this area is considered significant, Cairn Curran Reservoir attracts outdoor enthusiasts who visit the area to engage in activities such as camping, boating, picnicking, and fishing, enhancing the reservoir's social value as a recreational hub.

The area shares similarities with the Big Hill and Mandurang Study area, as they are all known for their scenic and environmental attributes. However, in this case, the primary distinguishing feature is the presence of a substantial water body, and its social function which is not a focal point of the study area.

Mount Tarrengower and Maldon Historic Area

- Planning Scheme: Mount Alexander Planning Scheme
- Landscape Character Type: Goldfields
- Significance: State (Draft 2015 Study)
- National/State/Regional Park: Nil
- Protective measure:

  SLO1 - Maldon Landscape Area

  SLO3 – Scenic Landscape Area (Approaches to Maldon)

Key Findings

Maldon's history is intrinsically linked to the Victorian gold rush of the 1850s, which began when gold was discovered in the area in 1852. This discovery prompted a rapid influx of prospectors and miners, and by the mid-1850s, Maldon had blossomed into a bustling gold mining town.

The Maldon landscape is characterised by a blend of natural features, such as Mount Tarrengower and the surrounding areas, and historic gold mining landscapes that date back to the 19th century. These elements combine to create a unique gold mining landscape that significantly contributes to Maldon's heritage significance.

The primary theme underlying the significance of this landscape is defined by its scenic qualities, historical value, and the preservation of its existing character, with some recognition of its environmental significance, particularly in terms of preserving bushland.

To safeguard this historically and culturally rich landscape, Specific Landscape Objectives (SLOs) have been established. These SLOs aim to protect the landscape's existing features, ensuring that modern activities like mining and new developments do not compromise its historical character.

This objective is consistently reiterated throughout the SLOs, emphasising the importance of preserving Maldon's unique heritage. The historical significance of this area shares similarities with the wider study area, reflecting the rich gold mining heritage that is characteristic of Greater Bendigo.

Mount Aitken

- Planning Scheme: Macedon Ranges
- Landscape Character Type: Victorian Volcanic Plains
- Significance (2015 Draft Study): Regional
- National/State/Regional Park: Nil
- Protective measure:

  SLO2 – Ridges & Escarpments

Key Findings

The primary significance of this area is rooted in its topographical features, particularly those associated with Mount Aitken. The Significant Landscape Overlay (SLO2) named "Ridges and Escarpments" aptly captures the essence of this area's importance by emphasising the scenic qualities linked to ridge lines and hilly terrain.

Geological elements, including outcrops and watercourses, further enhance the area's visual appeal. Volcanic activity in the past has left behind fertile soil that supports abundant plant life, contributing to the region's aesthetics.

The SLO's primary concern is to safeguard key views and prevent human development from compromising the area's scenic qualities. This region bares similarities to the Study area in that its significance is deeply rooted in its topography and resulting scenic qualities associated with the ridge line.

Mount Macedon & Hanging Rock, Macedon Ranges

- Planning Scheme: Macedon Ranges Shire
- Landscape Character Type: Rolling Foothills
- Significance (Draft 2015 Study): State or higher
- National/State/Regional Park: Regional Park (excluding Hanging Rock)
- Protective Measure:

  SLO1 – Mountain Ranges & Features

Key Findings

The significance of the Mount Macedon is multifaceted and further reiterated through its designation of 'State or higher' significance in the Central Victoria Landscape Assessment Study 2015 and its protection as Regional Park.

The ranges are a notable and distinctive natural landmark in the state of Victoria visible from long range views from multiple vantage points. A key theme within the statement is the contrast between the topographic landscape features and the surrounding pastoral plains, of which is a related value to the Big Hill study area.

Their importance extends beyond their scenic qualities; they serve as a magnet for tourists and a hub for recreational activities, boasting culturally valuable gardens. These ranges originated from ancient volcanic activity, resulting in fertile soils that nurture dense and diverse plant life, amplifying their natural allure. Consequently, the Macedon Ranges are regarded as significant from aesthetic, environmental, scientific, and social standpoints.

Cobaw, Macedon Ranges

- Planning Scheme: Macedon Ranges
- Landscape Character Type: Rolling Foothills
- Significance (Draft 2015 Study): Regional
- National/State/Regional Park: Nil
- Protective Measure:

  SLO1 – Mountain Ranges & Features

Key Findings

The Cobaw Range landscape is primarily characterised by its geological features, particularly the granite boulder outcrops that are scattered throughout the range. These unique geological formations contribute significantly to the landscape's aesthetic appeal.

Additionally, the steep slopes of the Cobaw Ranges, covered in dense forests, further enhance its scenic qualities. As a result, this range is recognised as a prominent element within the broader Macedon Ranges Landscape.

The Cobaw Ranges share similarities with the "granitic uplands" portion of the study area, emphasising the significance of these geological features within the region.

Similarly, the 'low ranges' that are described – both forested and harvested and forming an important backdrop to local rural areas, is relatable to the Big Hill Ridge Line and escarpment.

Mount Gisborne & Mount Jim Jim, Gisborne

- Planning Scheme: Macedon Ranges
- Landscape Character Type: Victorian Volcanic Plains
- Significance (Draft 2015 Study): Regional
- National/State/Regional Park: Nil
- Protective measure:

  SLO2 – Ridges & Escarpments

Key Findings

Mount Gisborne and Mount Jim Jim are characterised by their striking scenic qualities, shaped by the remnants of former volcanic activity – relatable to the Big Hill crescent ridge line and Granitic Uplands. The rocky outcrop is clearly a valued feature of this landscape.

These geological formations are noted to create distinctive landscapes that can be admired from various viewpoints. Notably, Mount Gisborne serves as a prominent natural landmark in the region and is easily visible from the major Calder Highway, likely offering a similar transient viewing experience as that available from the Calder Highway to Big Hill.

A key theme of the statement includes contrast and transition between different landscapes, contributing to the topographic features being key visual landmarks. The environmental value of Mount Gisborne is also noteworthy, with patches of eucalyptus trees gracing the slopes of the ridge line, adding to the area's ecological significance.

The statement references potential threats to this valued landscape feature, particularly contrasting appearance and form of development – of which is potentially relevant to Big Hill escarpments and the Mandurang Valley.

Conclusion

An analysis of existing significant landscapes and their SLO (Significant Landscape Overlay) status reveals a range of values that can enhance a place's significance. These values encompass scenic, environmental, historic, and social aspects.

In the Big Hill and Mandurang Study area, there are several similarities with these significant landscapes. For instance, it shares the historical significance of gold mining activities seen in places like Mount Tarrengower and Maldon Historic Area.

The presence of granite outcrops in areas like Cairn Curran Reservoir and the Cobaw Ranges are relatively unique to their broader landscapes, and mirrors similar geological features in the study area within the Granitic Uplands area.

Furthermore, some of these significant areas stand out due to their stark contrast with their surroundings, contributing to their scenic beauty and aesthetic value. This is akin to the Big Hill Ridge Line, which rises prominently above its environment and can be observed from various vantage points.

Notably, the Big Hill and Mandurang study area includes both regional and national parkland. This designation is a key input into understanding the significance of landscape and place. Mount Macedon is the only other landscape within this study located within a Regional Park.

Its environmental and culturally significant qualities, including extensive areas of Box-Ironbark Forest are comparable to the environmental significance of the Mandurang Valley.

Significant Landscape Summary

	Municipality	SLO	Land Management	Significance Level (2015 Draft Study)	Values			
					Scenic/ Visual	Environmental	Histor- ic	Social/ Cultural
Big Hill & Mandurang Valley Study Area	*Greater Bendigo*	*Nil*	*National and Regional Parks*	*N/A*	✓	✓	✓	
Cairn Curran Reservoir, Maldon	*Central Goldfields*	*SLO1 - Cairn Curran Reservoir (West Bank)*	*Nil*	*Regional*	✓	✓		✓
Mount Aitken, Gisborne South	*Macedon Ranges*	*SLO2 – Ridges & Escarpments*	*Nil*	*Regional*	✓	✓		
Mount Gisborne & Mount Jim Jim, Gisborne	*Macedon Ranges*	*SLO2 – Ridges & Escarpments*	*Nil*	*Regional*	✓	✓		
Mount Macedon including Hanging Rock, Macedon Ranges	*Macedon Ranges*	*SLO1 – Mountain Ranges & Features*	*Regional Park (Excluding Hanging Rock)*	*State (or higher)*	✓	✓		✓
Cobaw Ranges, Kyneton	*Macedon Ranges*	*SLO1 – Mountain Ranges & Features*	*Nil*	*Regional*	✓	✓		
Mount Tarrengower and Maldon Historic Area, Maldon	*Mount Alexander*	*SLO1 – Maldon Landscape* *SLO3 – Scenic Landscape Area* *(Approaches Maldon)*	*Nil*	*State (or higher)*	✓	✓	✓	

20. A VIBRANT, CREATIVE COMMUNITY

Nil

21. A SAFE, WELCOMING AND FAIR COMMUNITY

Nil

22. URGENT BUSINESS

Nil

23. NOTICES OF MOTION

Nil

24. MAYOR'S REPORT

25. CHIEF EXECUTIVE OFFICER'S REPORT

26. CLOSE OF MEETING