Summit & McLaughlin's Shoulder Walk, Mt Buller

Cultural Heritage Management Plan 18340

Sponsor: Mt Buller Mt Stirling Resort Management

Heritage advisors: Daniel Carpenter, Aaron Dalla-Vecchia, Zachary Carter, Ané van der Walt, Lauren Prosser and Lucy Amorosi

Authors: Daniel Carpenter, Aaron Dalla-Vecchia, Zachary Carter, Natasha Haysom, Ané van der Walt, Lauren Prosser and Lucy Amorosi

9 January 2023

Aboriginal Heritage Act 2006
Section 64

Cultural Heritage Management Plan Notice of Approval by Registered Aboriginal Party

Taungurung Clans Aboriginal Corporation

I, Matthew Burns, Chief Executive Officer Taungurung Clans Aboriginal Corporation, hereby approve the cultural heritage management plan referred to below:

Cultural Heritage Management Plan
For the proposed:
Summit & McLaughlin's Shoulder Walk, Mt Buller
Cultural Heritage Management Plan number:
#18340

Sponsor:
Mt Buller Mt Stirling Resort Management

Cultural Heritage Advisor:
Daniel Carpenter, Aaron Dalla-Vecchia, Zachary Carter, Anè van der Walt, Lauren Prosser, Lucy Amorosi

Authors:
Daniel Carpenter, Aaron Dalla-Vecchia, Zachary Carpenter, Natasha Haysom, Anè van der Walt, Lauren Prosser, Lucy Amorosi

Cover Date:
09/01/23

Pages:
113

Date received for approval:
02/02/23

Pursuant to s.64 of the Act this cultural heritage management plan takes effect upon its lodgement with the Secretary of the Department of Planning and Community Development with this notice of approval inserted. *

Signed:

Dated: 08/03/23

* This notice of approval must be inserted after the title page and bound with the body of the management plan.

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Document information

Title:	Summit & McLaughlin's Shoulder Walk Mt Buller Cultural Heritage Management Plan 18340
CHMP No.	18340
Size:	Medium
Assessment:	Standard
Aboriginal places:	No Aboriginal places within the Activity Area
Sponsor:	Mt Buller Mt Stirling Resort Management
Heritage Advisors:	Daniel Carpenter Aaron Dalla-Vecchia Zachary Carter Lucy Amorosi Ané van der Walt Lauren Prosser
Authors:	Daniel Carpenter Aaron Dalla-Vecchia Zachary Carter Natasha Haysom Ané van der Walt Lauren Prosser Lucy Amorosi
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Document control

Version	Internal reviewer	Date issued
Draft version 01	AOS	16/02/2022

Mapping

In accordance with the approved form, the following projected spatial data has been forwarded to VAHR for this CHMP: Activity Area boundary; ground survey areas and subsurface testing locations.

Disclaimer:

Biosis Pty Ltd has completed this assessment in accordance with the relevant federal, state and local legislation and current industry best practice. The company accepts no liability for any damages or loss incurred as a result of reliance placed upon the report content or for any purpose other than that for which it was intended.

Executive summary

Compliance requirements are set out in Part 1 of the Cultural Heritage Management Plan (CHMP).

Activity

Mt Buller Mt Stirling Resort Management has engaged Biosis Pty Ltd to undertake this CHMP to support and inform an activity to be undertaken in two stages:

- **Stage 1:** Construction of a Fire Tower Lookout
- **Stage 2:** the construction of a McLaughlin's Shoulder Viewing Platform and two walking trails of approximately 1.1 kilometres in length.

The area of the Resort that will be impacted by these Activities covers approximately 2.362 hectares.

Location

The Activity Area is located the Mount Buller summit and McLaughlin's Shoulder at Mt Buller Alpine Resort, Mt Buller Road, Mount Buller, 3723. The extent of the Activity Area covered by this CHMP is within Allot. 5A Sec. A, in the Parish of Changue East.

Assessment

A Desktop Assessment was undertaken to provide relevant background information on the activity and its likely impacts to cultural heritage within the Mt Buller Alpine Resort. This assessment includes an overview of previous archaeological studies, registered Aboriginal places, the local environment, land use history, the ethno-historical record, to support development of a prediction model for the Activity Area. A Standard Assessment was undertaken to provide information on the ground surface visibility, previous disturbance to the Activity Area and to identify areas of high archaeological potential. Consultation with representatives of the Registered Aboriginal Party (RAP), Taungurung Land and Waters Council (TLaWC), occurred throughout the CHMP.

Results

The Desktop Assessment found that there were no previously registered Aboriginal places within the Activity Area, or within a 200 metre buffer zone of the Activity Area. Since the mid-20th century, the Activity Area has been used primarily for recreational activities, including skiing and hiking. The past land use that has impacted the Activity Area includes construction of the Mount Buller Firetower, the Summit and Grimus Top chairlift stations and pylons, as well as the development of ski runs and walking trails, including one cut into the outcrop at the summit of Mount Buller, which would have impacted Aboriginal cultural heritage in these parts of the Activity Area. It was determined that it was reasonably possible for unidentified Aboriginal cultural heritage material to be within the Activity Area.

The Standard Assessment identified three specific landforms within the Activity Area; Mountain Face, Mountain Peak and Mountain Saddle. Each landform was prescribed an individual survey unit. Considerable disturbance was identified within Survey Unit 2 due to ski infrastructure, with Survey Unit 1 and 3 also displaying evidence of disturbance. No Aboriginal cultural heritage was identified during the Standard Assessment. Additionally, no areas of archaeological potential were identified. As a result of the Standard Assessment, a Complex Assessment was determined not to be required.

Aboriginal places

No Aboriginal places were identified during the CHMP.

Acknowledgements

Biosis acknowledges the contribution of the following people and organisations in undertaking this CHMP:

- Tom Karvonens (Turner & Townsend)
- Laura Osborne (Turner & Townsend)
- Daeyoo Kang (Biosis Pty Ltd)
- Alex Parmington (TLaWC)
- Francisco Almeida (TLaWC)
- Troy Wilkinson (TLaWC)
- Matt Antonopoulous (TLaWC)
- Dylan Wilkinson (TLaWC)

Abbreviations

ACHRIS	Aboriginal Cultural Heritage Register and Information System
AOP	Area of Potential (for archaeological deposits)
CHMP	Cultural Heritage Management Plan
DBYD	Dial Before You Dig
DGPS	Differential Global Positioning System
DPC	Department of Premier and Cabinet
FP-SR	First Peoples – State Relations (formerly Aboriginal Victoria)
GDA94	Geodetic Datum Australia 1994
HA	Heritage Advisor
LGA	Local Government Area
MGA	Map Grid of Australia
NOI	Notice of Intention
PGC	Primary Grid Coordinate
RAP	Registered Aboriginal Party
SGD	Significant Ground Disturbance
SU	Survey Unit
TLaWC	Taungurung Land and Waters Council (Aboriginal Corporation)
TO	Traditional Owner
VAHR	Victorian Aboriginal Heritage Register

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Tables

PART 1 – CULTURAL HERITAGE MANAGEMENT CONDITIONS

These conditions become compliance requirements once the Cultural Heritage Management Plan (CHMP) is approved. Failure to comply with a condition is an offence under Section 67A of the *Aboriginal Heritage Act 2006*.

The CHMP must be readily accessible to the Sponsor, and their employees and contractors when carrying out the activity.

1 Specific cultural heritage management requirements

1.1 Condition 1 – Copy of cultural heritage management plan

A physical copy of this approved Cultural Heritage Management Plan (management plan) must be held on site at all times during the Activity.

1.2 Condition 2 – Cultural heritage induction

To be completed before and during the activity

A cultural heritage induction must be conducted with all site workers/contractors involved in ground disturbing works by the RAP immediately before the commencement of any ground disturbing activities. If it is not possible to induct all workers in a single session, a second or subsequent inductions may be required to ensure that all site workers/contractors involved in ground disturbing works are inducted.

The induction must include:

1. A brief history of the Aboriginal occupation of the Activity Area and the broader region
2. A summary of the archaeological investigations conducted within the Activity Area
3. A summary of the conditions and contingencies contained within this CHMP
4. The obligations of site workers/contractors and Sponsors under the Victorian *Aboriginal Heritage Act* 2006
5. Information cards with contact numbers of the RAP.

The purpose of the cultural heritage induction is:

1. Explain the procedures outlined in this CHMP.
2. To show the site contractors examples of the most likely Aboriginal cultural heritage material to be located within the Activity Area.
3. To explain the procedure outlined in the Contingency Plan section (Section 2) of this CHMP in the event that this material is uncovered by them during the course of construction works.

A notification period of at least two weeks must be provided to the RAP to present a cultural heritage induction.

The cost of the cultural heritage induction must be met by the Sponsor or the site contractor/s.

1.3 Condition 3 – Supervision of works

To be completed during the activity

Supervision of works must be undertaken by a RAP representative during ground disturbing activities in the locations shown on Map 1. A RAP representative must conduct the supervision of works, and a Heritage Advisor/archaeologist may also attend if requested by the Sponsor or RAP. Monitoring may cease at the discretion of the RAP representative if it is thought that there is no probability of disturbing Aboriginal cultural heritage.

If suspected Aboriginal cultural heritage (including human remains) is identified during the supervision of works, then the contingencies outlined in Sections 2.5 – 2.7 must be initiated. If the supervision of works reveals a suspected breach of the Victorian *Aboriginal Heritage Act* 2006 then this must be reported to First Peoples - State Relations (FP-SR) immediately and an Authorised Officer or Aboriginal Heritage Officer may be called out and/or a Stop Order may be issued by FP-SR.

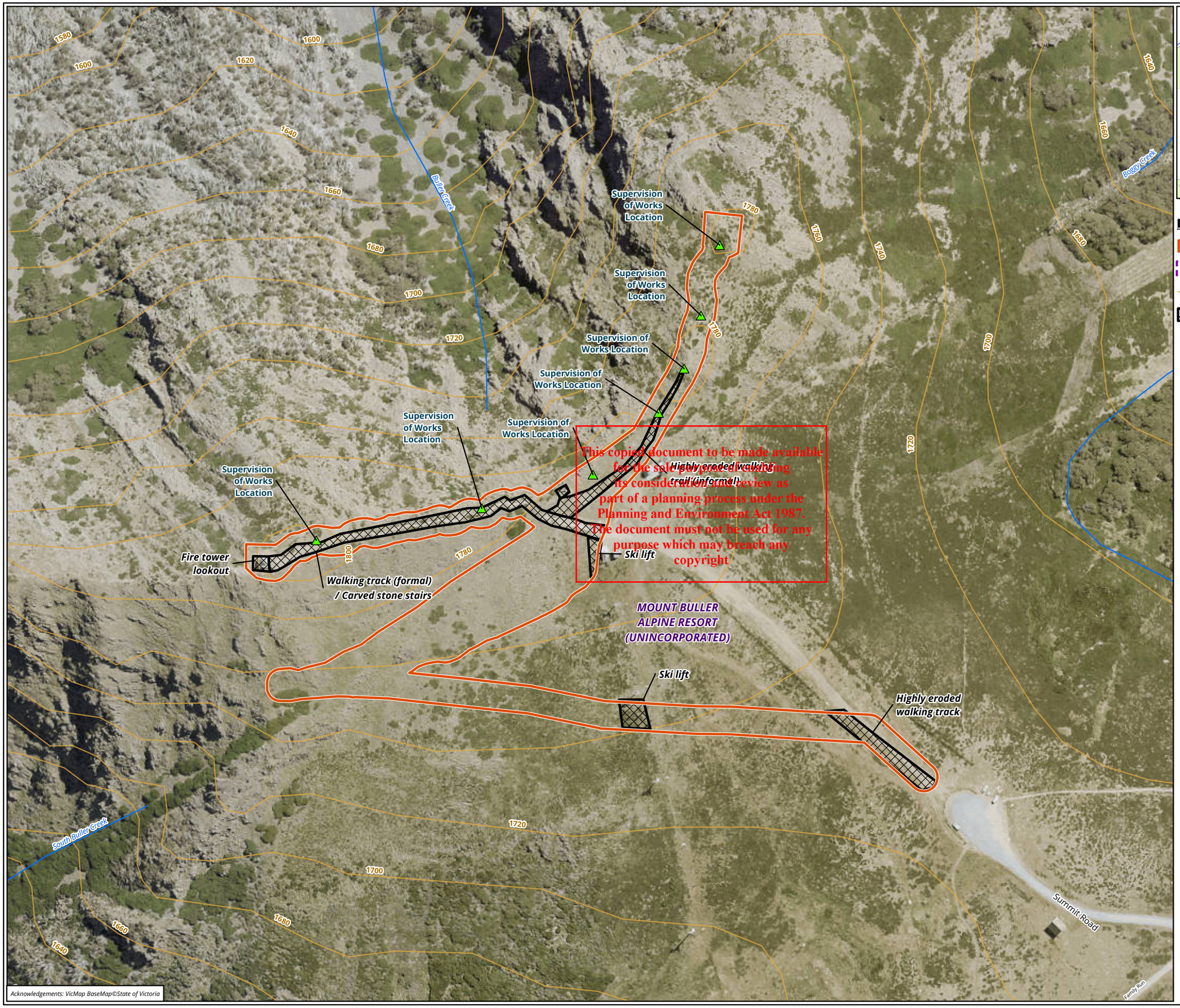
The RAP must be notified at least two weeks before the supervision of works is required, prior to or during the activity. A Worker Request Form must be completed and sent to the RAP to book a representative for each RAP supervision of works session.

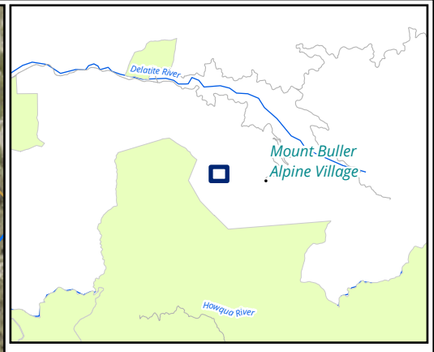
The procedures outlined in this condition must be organised and paid for by the Sponsor.

1.4 Condition 4 - Protocol for Handling Sensitive Information

To be completed before, during and after the activity

With the exception of publicly available information, there shall be no communication or public release of information concerning Aboriginal cultural heritage without the written permission of the RAP. No onsite photographs or information concerning Aboriginal cultural heritage is to be circulated to the media or via social media (before, during or after the Activity) without the written permission of the RAP.





Legend

- Activity Area
- Local government area
- Contour 20m interval
- Areas of previous ground disturbance
- Supervision of Works Location

Map 1 Management Conditions

0 20 40 60 80 100

Metres

Scale: 1:2,000 @ A3

Coordinate System: GDA 1994 MGA Zone 55

biosis

N

Matter: 36075, CHMP: 18340,
Date: 09 September 2022 ,
Prepared for: ZC, Prepared by: DK, Last edited by: dkang
Layout: 36075_M1_MgmtConditions
Project: P:\36000s\36075\Mapping\36075_MtBuller_McLachlin'sShoulder_CHMP.aprx

2 Contingency plans

2.1 Responsibility

It is the responsibility of the Sponsor of the activity to ensure that the contingencies in this section of the CHMP are implemented as required. Contingencies are a required as part of the CHMP under clause 13(1) Schedule 2 of the *Aboriginal Heritage Act 2006*.

2.2 Dispute resolution

In the event of a dispute between the Sponsor and any appointed Registered Aboriginal Party or Activity Advisory Group during the implementation of this CHMP, the following process must be followed:

1. The parties agree to use their best endeavours to resolve the dispute in good faith.
2. Initially the parties must identify the nature of the matter in dispute. Ideally the parties should agree in writing as to the nature and scope of the matter in disputes within five working days of the dispute arising, with reference to the specific conditions or requirements in the CHMP.
3. Once the nature of the dispute is identified, the parties should meet within five working days to discuss any options or remedial actions that are available to resolve the matter/s in dispute.
4. If agreement can be reached between the parties in relation to remedial actions, this agreement should be recorded in writing and include a programme for the implementation of the action. In these circumstances any appointed Registered Aboriginal Party or Activity Advisory Group agree that it will use its best endeavours to ensure there are no avoidable delays to the schedule for the works.
5. If an agreement cannot be reached in relation to remedial actions, the parties agree to appoint (at a shared cost) an independent mediator to oversee a meeting between the parties.
6. The mediation meeting should be scheduled as soon as practicable.
7. The parties must attend the mediation meeting in good faith and use their best endeavours to resolve the dispute.
8. If agreement can be reached at the mediation meeting, this agreement should be recorded in writing and include a programme for the implementation of any remedial actions. In these circumstances any appointed Registered Aboriginal Party or Activity Advisory Group agree that it will use its best endeavours to ensure there are no avoidable delays to the schedule for the works.

In the event that a mediated solution cannot be reached between the parties, any matter of non-compliance may be pursued under the *Aboriginal Heritage Act 2006*.

2.3 Reviewing compliance

The Sponsor must comply with this CHMP. Failure to comply with the conditions and contingencies in this CHMP is an offence pursuant to Section 67A and clause 13(1) Schedule 2 of the *Aboriginal Heritage Act 2006*.

A compliance checklist is included in Table 1

In order to ensure compliance with this CHMP, the Sponsor must:

1. Provide all persons, engaged by the sponsor or their subcontractor for the conduct of the Activity, with access to a copy of the CHMP, explain the purpose of the CHMP and implications of non-compliance.
2. Have an up to date contact list for any appointed Registered Aboriginal Party, First Peoples - State Relations, a heritage advisor, Victoria Police and the State Coroner's Office available on site at all times.
3. Respond to any questions or complaints in relation to the implementation and compliance with the CHMP within one working day.
4. Record any complaints received on a central register and keep a copy of any response/action taken in response to the complaint.

If it appears that there is non-compliance with the CHMP, then notification must be made to First Peoples - State Relations.

2.4 Remedying non-compliance

The Sponsor is responsible for remedying any non-compliance with the CHMP and is liable for any non-compliance.

In circumstances where there is non-compliance with the CHMP, the Sponsor must:

1. Notify the Secretary, Department of Premier and Cabinet within one day of the non-compliance. Under Section 159 of the Aboriginal Heritage Act 2006 the Secretary, Department of Premier and Cabinet may assign an Authorised Officer to investigate the non-compliance.
2. Implement any remedial action to the satisfaction of the Secretary only.

2.5 Management of Aboriginal cultural heritage found during the activity

If Aboriginal cultural heritage material is found, works must stop in the relevant area and the following process be followed:

1 Discovery

   a. If suspected Aboriginal cultural heritage is identified, all activity within a 10 metre buffer must stop. The activity can proceed outside the buffer.

   b. The suspected Aboriginal cultural heritage must be left in place, and protected from harm.

2 Notification

   c. The person who identified the suspected Aboriginal cultural heritage must notify the person in charge of the activity.

   d. The person in charge of the activity must notify the Secretary, Department of Premier and Cabinet of the identification of suspected Aboriginal cultural heritage within one working day of its discovery.

   e. The person in charge of the activity must notify a heritage advisor and any appointed Registered Aboriginal Party of the identification of suspected Aboriginal cultural heritage within one working day if its discovery.

3 Assessment

a. The person in charge of works must ensure that the 10 metre buffer is barricaded around the location of the suspected Aboriginal cultural heritage within one working day of its discovery.

b. The heritage advisor must attend the Activity Area within two working days of notification of the suspected Aboriginal cultural heritage and, in consultation with any appointed Registered Aboriginal Party:

   i. Fully assess and if required, record the Aboriginal cultural heritage.

   ii. Advise and make recommendations in relation to appropriate management measures for the Aboriginal cultural heritage, to the person in charge of the activity.

c. The person in charge of the activity, upon receipt of the assessment and recommendations from the heritage advisor and any appointed Registered Aboriginal Party, must provide the Secretary, Department of Premier and Cabinet with an indicative impact mitigation or salvage strategy.

4 Impact mitigation or salvage

a. Following Section 61 of the *Aboriginal Heritage Act 2006*, harm avoidance, mitigation and minimisation must be explored by the Sponsor as the first priority. Where harm cannot be avoided, the below process must be followed:

b. If the Aboriginal cultural heritage is assessed as being of low scientific significance and/or does not meet the threshold for registration as an artefact scatter or multi-component Aboriginal place:

   i. The Aboriginal cultural heritage can be recorded and collected by a heritage advisor; and

   ii. The activity may continue within the buffered area after the salvage has been completed to the satisfaction of the heritage advisor and any appointed Registered Aboriginal Party.

c. If the Aboriginal cultural heritage is assessed to be of high scientific significance and/or meets the threshold for registration as an artefact scatter or multi-component Aboriginal place:

   i. An appropriate impact mitigation or salvage strategy must prepared by the Heritage Advisor, in consultation with the RAP (if one has been appointed) In the absence of a Registered Aboriginal Party, the Traditional Owner group(s) for the Activity Area must be consulted. The impact mitigation or salvage strategy must comply with the *Aboriginal Heritage Act 2006 –Practice notes: Salvage Excavation*.

   ii. Once the impact mitigation or salvage strategy has been approved it must be implemented by the person in charge of works, in accordance with any conditions required by any appointed Registered Aboriginal Party (if one has been appointed) or relevant Traditional Owner Groups

   iii. The activity may continue within the buffered area after the salvage has been completed to the satisfaction of the heritage advisor and any appointed Registered Aboriginal Party (if one has been appointed) or relevant Traditional Owner Groups and the relevant Record Edits/new Place Registrations have been submitted to the VAHR.

   iv. A salvage report detailing the salvage undertaken and the results of the salvage works must be submitted to First Peoples - State Relations and the RAP (if one has

been appointed) or relevant Traditional Owner Groups within 3 months of the completion of the salvage works.

2.6 Custody of Aboriginal cultural heritage discovered during works

The custody of all Aboriginal cultural heritage material found during the activity must be assigned to the RAP (in accordance with Section 12 of the *Aboriginal Heritage Act 2006*). Where there is no RAP it should be assigned to the following in order of priority:

1. Any relevant RAP for the land from which the Aboriginal heritage is salvaged
2. Any relevant registered native title holder for the land from which the Aboriginal heritage is salvaged
3. Any relevant native title party (as defined in the Act) for the land from which the Aboriginal heritage is salvaged
4. Any relevant Traditional Owner or Owners of the land from which the Aboriginal heritage is salvaged
5. Any relevant Aboriginal body or organisation which has historical or contemporary interests in Aboriginal heritage relating to the land from which the Aboriginal heritage is salvaged
6. The owner of the land from which the Aboriginal heritage is salvaged
7. Museum Victoria.

If the Traditional Owners and the Sponsor agree, reburial within the Activity Area can take place as per Condition 4. The location of the reburied artefacts must be fully documented by an experienced and qualified archaeologist, clearly marked and all details provided registered via an updated Object Collection form (Record Edit). All details of the location and nature of the Aboriginal cultural heritage must be provided to the Victorian Aboriginal Heritage Register within 3 weeks of recording.

2.7 Discovery of suspected human remains

If any suspected human remains are discovered, you must contact the Victoria Police and the State Coroner's Office immediately. If there are reasonable grounds to believe that the remains are Aboriginal Ancestral Remains, the Coronial Admissions and Enquiries hotline must be contacted on 1300 888 544. This advice has been developed further and is described in the following 5-step contingency plan:

1. Discovery
    a. If suspected human remains are discovered, all activity must stop.
    b. The remains must be left in place, and protected from harm or damage.
2. Notification
    a. If suspected human remains have been found, the State Coroner's Office and the Victoria Police must be notified immediately.
    b. If there is reasonable grounds to believe the remains are Aboriginal Ancestral Remains, the Coronial Admissions and Enquiries hotline must be immediately notified on 1300 888 544.
    c. All details of the location and nature of the human remains must be provided to the relevant authorities.
    d. If it is confirmed by these authorities the discovered remains are Aboriginal Ancestral Remains, the person responsible for the activity must report the existence of them to the

Victorian Aboriginal Heritage Council in accordance with section 17 of the Aboriginal Heritage Act 2006.

3 Impact Mitigation or Salvage

a. The Victorian Heritage Council, after taking reasonable steps to consult with any Aboriginal person or body with an interest in Aboriginal Ancestral Remains, will determine the appropriate course of action as required by section 18(2)(b) of the Aboriginal Heritage Act 2006.

b. An appropriate impact mitigation or salvage strategy as determined by the Victorian Aboriginal Heritage Council must be implemented by the Sponsor.

4 Custody

a. The treatment of salvaged Aboriginal Ancestral Remains must be in accordance with the direction of the Victorian Aboriginal Heritage Council.

5 Reburial

a. Any reburial site(s) must be fully documented by an experience and qualified archaeologist, clearly marked and all details provided to First Peoples - State Relations.

b. Appropriate management measures must be implemented to ensure the Aboriginal Ancestral Remains are not disturbed in the future.

Table 1 Compliance checklist

Compliance Review Checklist		Yes	No
Prior to the commencement of the activity			
Has the CHMP been approved?			
Have all personnel been inducted or trained with regard to the requirements contained within the CHMP, particularly the conditions and contingencies?			
Have the appropriate personnel been inducted in accordance with Condition 2?			
During the activity			
Is a copy of the CHMP held on site at all times during the activity and accessible for all personnel in accordance with Condition 1?			
Is an up to date contact list for any appointed Registered Aboriginal Party, First Peoples - State Relations, a heritage advisor, Victoria Police and the State Coroner's Office available on site?			
Is there a register for all questions and complaints? Has the register been updated with any response/action?			
Have the supervision of works been undertaken in accordance with Condition 3?			
Discovery of Aboriginal cultural heritage during the activity			
Has any Aboriginal cultural heritage been discovered during the activity? If yes, have the following been undertaken:			
	Have all works ceased within 10 metres of the discovery location(s)?		
	Has the exposed Aboriginal cultural heritage been protected by a suitable barrier		

Compliance Review Checklist		Yes	No
	(e.g. fencing)?		
	Has the Secretary, DPC, been notified within one working day of the discovery?		
	Has a heritage advisor and any appointed RAP been notified within one working day of the discovery?		
	Has a heritage advisor and any appointed RAP assessed the Aboriginal cultural heritage within two working days of their notification?		
	Has an appropriate mitigation or salvage strategy been developed and implemented?		
	Has the heritage advisor completed new or updated Aboriginal place record(s) for the VAHR?		
Discovery of human remains during the activity			
Have any actual or suspected human remains been discovered during the activity? **If yes, have the following been taken:**			
	Has Victoria Police and the State Coroner's Office been contacted?		
	If there are reasonable grounds to believe that the remains are Aboriginal Ancestral Remains, has the Coronial Admissions and Enquiries hotline must be contacted on 1300 888 544?		
If a breach of the CHMP is identified the sponsor must immediately report the breach by contacting the Statewide Compliance & Enforcement Unit, First Peoples - State Relations via email to compliance.aboriginalvictoria@dpc.vic.gov.au or by telephoning 1800 762 003.			

PART 2 – CULTURAL HERITAGE ASSESSMENT

3 Introduction

3.1 Reasons for preparing the CHMP

This is a mandatory Cultural Heritage Management Plan (CHMP) under Section 46(1)(a) of the *Aboriginal Heritage Act 2006* and is required as per the Aboriginal Heritage Regulations 2018 (s.47). The Sponsor intends to construction of two walking trails of approximately 1.1 kilometres in length and associated viewing platforms at Mt Buller Alpine Resort within the Activity Area.

The Aboriginal Heritage Regulations 2018 that have prompted the requirement for this plan are:

The proposed activity is a high impact activity under the following regulations:

- Regulation 47(1)(g) a walking track with a length exceeding 500 metres
- Regulation 50(1) the construction of a building or the construction or carrying out of works in an alpine resort

The Activity Area is in an area of cultural heritage sensitivity under:

- Regulation 26 Waterway (South Buller Creek and Buller Creek).

3.2 Notifications

In accordance with s.54(1)(a)/(b) of the *Aboriginal Heritage Act 2006*, a Notice of Intent (NOI) to Prepare a CHMP was submitted to the Secretary, Department of Premier and Cabinet (DPC), TLaWC, the Registered Aboriginal Party (RAP) on 29 September 2021 (Appendix 1). In accordance with s.54(1)(d) of the *Aboriginal Heritage Act 2006* an NOI was submitted to Mount Buller Alpine Resort (UNINC) (LGA) on 19 October 2021.

The Victorian Aboriginal Heritage Register (VAHR) has allocated CHMP number 18340 to this assessment.

The RAP elected to evaluate the CHMP on 5 October 2021.

3.3 Location of the Activity Area

The Activity Area is located on the summit of Mount Buller at Mt Buller Road, Mount Buller, 3723. The extent of the Activity Area covered by this CHMP is 2.362 hectares of land, within Crown Allotment 5A Sec. A (SPI 5A~A\PP2370) and the Parish of Changue East. The Activity Area is approximately 150 kilometres east-north-east of Melbourne CBD and 86 kilometres south of Wangaratta.

3.4 Sponsor

Mt Buller and Mt Stirling Resort Management Board

Daniel Argentov
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Phone: (03) 5777 6077
Email: daniel.argentov@mtbuller.com.au
ABN: 44 867 982 534

3.5 Heritage advisors

Daniel Carpenter (B.Bus/GradCertArchae/GradDipArchHMgmt)

Daniel has five years' experience working in cultural heritage management in Victoria. He has experience in Aboriginal and historic sites and has been involved in fieldwork and reporting for both. He has authored and project-managed several CHMPs, identified and registered a historic site with Heritage Victoria as well as assisting with numerous other projects. Daniel's qualifications include a Bachelor of Business from RMIT as well as postgraduate qualifications in heritage management. His archaeological training includes writing cultural management plans, lithic identification and GIS. Daniel is a listed Heritage Advisor under the requirements of the Victorian *Aboriginal Heritage Act* 2006.

Aaron Dalla-Vecchia (BA Hons)

Aaron has over seven years' experience in cultural heritage management, including both Aboriginal and historic archaeology and heritage assessments. Aaron has worked both within and outside of Australia on a wide range of projects. As a heritage advisor he has authored and co-authored a number of reports including cultural heritage management plans, desktop assessments, salvage reports, as well as assessments of archaeological potential and due diligence reports.

Aaron's qualifications include a Bachelor of Arts with a double major in archaeology and history from La Trobe University. Aaron also completed his honours degree at La Trobe University with a thesis focusing around use-wear patterns found on clay tobacco pipes from various sites around Melbourne.

Aaron's previous Aboriginal cultural heritage experience includes undertaking and project managing large scale projects including CHMPs associated with the Warrnambool line Upgrade, Shepparton Line Upgrade and several large scale residential, commercial and industrial subdivisions. Aaron has undertaken and run large fieldwork teams on projects associated with the Ballarat Line Upgrade, APA gas pipeline, various residential subdivisions throughout Victoria as well as leading the assessment for small scale projects. Aaron has coordinated survey, subsurface testing, and salvage works as part of the requirements for various cultural heritage management plans. He has also participated in the excavation and recording of historic period sites in Melbourne.

Aaron is an associate member and State chapter Secretary for the Australian Association of Consulting Archaeologists and a listed heritage advisor under the provisions of the *Aboriginal Heritage Act* 2006.

Zachary Carter BA, MArchSc(Adv)

Zachary has over five years of experience in the archaeology sector. Prior to working with specifically in the cultural heritage sector within Victoria, Zachary engaged in archaeological research within and outside of Australia, predominately throughout Western Europe and South East Asia.

Zachary has completed a Bachelor of Arts degree with a double major in Archaeology and History from Monash University. Zachary then went on to complete a Masters of Archaeological Science (Advanced) through the Australian National University, where he specialised in Forensic Archaeology and Zooarchaeology with a thesis focusing on Colonial Tasmanian dietary practises through skeletal analysis.

As a project archaeologist at Biosis Pty Ltd, Zachary has undertaken a variety of Aboriginal cultural heritage research and fieldwork for small, medium and large scale projects across Victoria for a variety of clients and industries.

Zachary is a listed heritage advisor under the provisions of the *Aboriginal Heritage Act 2006*.

Lauren Prosser Ma Arch Sci (Adv) (Hons), B. Arch (Hons)

Lauren has over six years of industry experience within Victoria and has participated in archaeological excavations in both Vanuatu and Jordan. Lauren has been working for Biosis since late 2019. She has a variety of experience conducting archival research, field surveys, excavations, reporting, artefact analysis, site mapping as well as investigating site formation processes and project management.

Lauren has specialist skills in geoarchaeology and the application of earth science techniques such as archaeological micromorphology, scanning electron microscopy and spatial analysis of geochemical residues from ancient human occupation to answer archaeological questions. Lauren is further expanding her experience to include a deeper knowledge of legislation, Aboriginal cultural heritage analysis and landform testing approaches within Australian archaeologically sensitive landforms.

Lauren is a fully qualified and listed Heritage Advisor pursuant to Section 189 of the *Aboriginal Heritage Act* 2006 and is a full international member of ICOMOS and a member of the Australian Archaeological Association.

Lucy Amorosi BArch (Hons) La Trobe University

Lucy has over 20 years of experience managing a wide variety of cultural heritage projects, including background research, artefact analysis, archaeological place recording, cultural heritage assessments, Cultural Heritage Management Plans (CHMPs), archaeological survey and subsurface testing for a range of corporate and governmental clients. Lucy received a BArch (Honours) from La Trobe University in which she investigated Aboriginal artefact collections in Western Victoria.

Lucy's professional experience in both Aboriginal and Historical field archaeology has seen her work on small and large scale archaeological surveys and excavations throughout Victoria and has authored numerous CHMPs and other heritage assessments. Lucy is a fully qualified and listed Heritage Advisor pursuant to the Victorian Aboriginal Heritage Act 2006.

3.6 Owner/Occupier

The Activity Area is located within Crown land managed by Mt Buller and Mt Stirling Alpine Resort Management Board on behalf of the State Government of Victoria.

3.7 Registered Aboriginal Party

The Taungurung Land and Waters Council (TLaWC) is the RAP for the region that includes the Activity Area. The RAP elected to evaluate the plan on 5 October 2021 (Appendix 2).

4 Activity description

This CHMP is being prepared to support a planning permit application for the construction a fire tower lookout and two walking trails and of associated viewing platforms at Mt Buller Alpine Resort. The project has been divided into two stages:

- **Stage 1: Fire Tower Lookout Construction**:
  - Fire Tower Lookout, to be constructed on the northern side of the existing fire tower at the summit of Mount Buller. Maximum depth of impact will be 1500 millimetres with steel anchor rods in footings.
- **Stage 2: McLaughlin's Shoulder viewing platform and Path Construction**:
  - Construction of McLaughlin's Shoulder viewing platform. Maximum depth of impact will be 1000 millimetres
  - Construction of a new Summit walking trail, from the existing Summit carpark leading up to the existing section of Summit walking trail (approximately 825 metres). Approximate depth of impact will be 500 millimetres.
  - Construction of McLaughlin's Shoulder walking trail, from the top of Grimus chairlift leading north to McLaughlin's shoulder (approximately 240 metres). Approximate depth of impact will be 500 millimetres.

In addition to these specific activities, associated activities common to both stages will be spoil stockpiling, materially laydown, plant movement and vehicle movement.

In accordance with Clause 6(2) and 10, Schedule 2 of the Regulations, the proposed activity will involve activities permitted under the Mount Buller Alpine Resort (UNINC) Planning Scheme for a Comprehensive Development Zone (CDZ) Schedule 2.

Activity plans can be found in Appendix 3.

4.1 Likely impact on former or present land surfaces

The construction of the fire towner, viewing platform and paths will displace, disturb or remove the existing sediments from within the path alignment. This has the potential to harm Aboriginal places that may be present in surface or subsurface contexts.

5 Extent of the Activity Area

The extent of the Activity Areas is shown in Map 2. It is located within Crown land in the Mount Buller and Mount Stirling Alpine Resort (UNINC) on the summit of Mount Buller and MacLachlin Shoulder, approximately 1.15 kilometres west of Mount Buller Village. The Mt Buller fire tower and the top of the Grimus Chairlift and the top of the Summit Chairlift are all located within or nearby the boundaries of the Activity Area. The Activity Area is located within the Victorian Alps (VAlp) Bioregion and sits at a height of between 1720 and 1805 (summit) metres above sea level (asl). Several creeks drain down from the summit, including Buller Creek and Boggy Creek, which drains to the Delatite River in the north and South Buller Creek, and Little Buller Creek that drains into the Howqua River to the south.

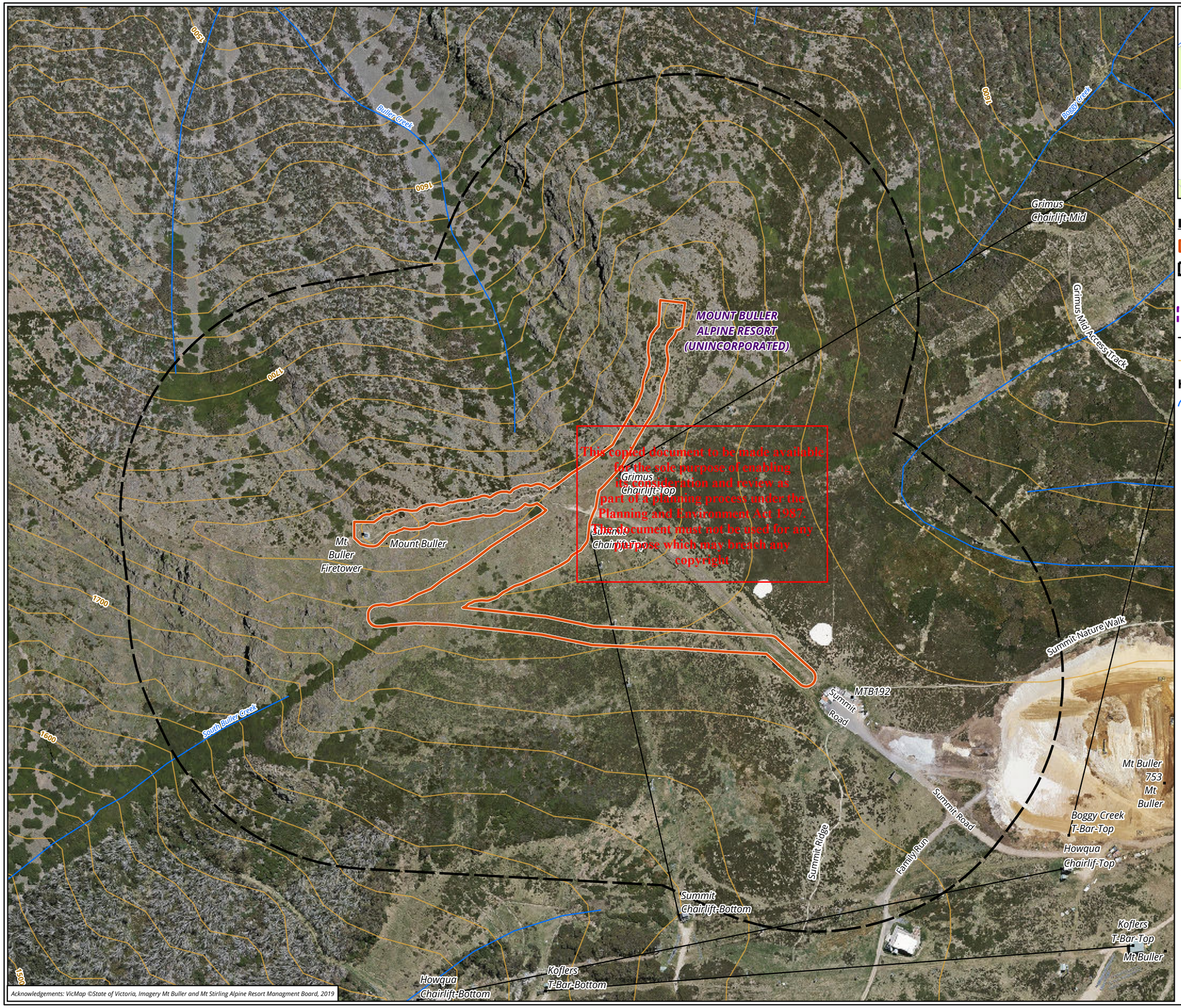
The Activity Area covers a total of 2.362 hectares with two trails and associated viewing platforms. The extent of the Activity Area covered by this CHMP is within Crown Allotment 5A Sec. A (SPI 5A~A\PP2370), Parish of Changue East.

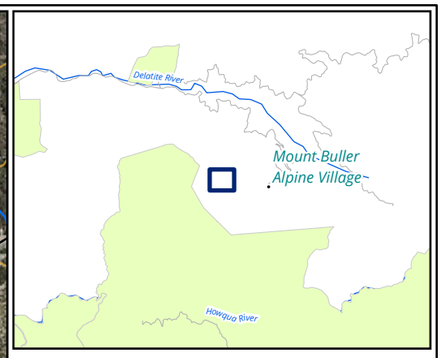
Cadastral information for the Activity Area is detailed in Table 2.

Table 2 Cadastral information for the Activity Area

Address	Mt Buller Road, Mount Buller, Victoria 3723
Local Government Authority	Mount Buller Alpine Resort (UNINC)
Lot/Plan	Crown Allotment 5A Sec. A. SPI 5A~A\PP2370
Parish	Changue East
Planning Zone	Comprehensive Development Zone (CDZ) Schedule 2
Coordinates*	E 449117.006 N 5888906.272
VicRoads	63 H4

* All geographic coordinates in this CHMP are referenced to the Victorian Government Standard GDA94 MGA (Zone 55).





Legend

- Activity Area
- 200m buffer
- VAHR Place
- Local government area
- Chairlift
- Contour 20m interval

Hydrology

- River or Creek

Map 2 Extent of the Activity Area

0 20 40 60 80 100

Metres

Scale: 1:3,000 @ A3

Coordinate System: GDA 1994 MGA Zone 55

N

biosis

Matter: 36075, CHMP: 18340,
Date: 21 December 2021 ,
Prepared for: LA, Prepared by: SKM, Last edited by: dkang
Layout: 36075_M2_Extent_AA
Project: P:\36000s\36075\Mapping\
36075_MtBuller_McLachlin'sShoulder_CHMP.aprx

6 Documentation of consultation

6.1 Consultation in relation to the assessment

Table 3 Consultation in relation to the assessment

Date	Name and Title	Organisation	Nature of Consultation
29/09/2021	Lucy Amorosi, Consultant Archaeologist, (Heritage Advisor)	Biosis, Mt Buller and Mt Stirling Alpine Resort Management Board (LGO), TLaWC	Submit NOI to RAP/LGA
05/10/2021	Matthew Burns, Chief Executive Officer, TLaWC	Biosis, Daniel Argentov, Mt Buller and Mt Stirling Alpine Resort Management Board, TLaWC	RAP has elected to evaluate the CHMP
15/11/2021	Kylie McFadyen (Heritage Advisor)	Biosis Pty Ltd	Inception Meeting
	Ané van der Walt (Heritage Advisor)	Biosis Pty Ltd	
	Francisco Almeida (Heritage Advisor)	TLaWC	
	Alex Parmington (Heritage Advisor and RAP Manager)		
	Michelle Monk (Elder, and Aboriginal Heritage Officer)		
07/03/2022	Zachary Carter (Heritage Advisor)	Biosis Pty Ltd	Standard Assessment results meeting
	Ashley O'Sullivan (Heritage Advisor)		
	Francisco Almeida (Heritage Advisor)	TLaWC	
	Alex Parmington (Heritage Advisor and RAP Manager)		
	Michelle Monk (Elder, and Aboriginal Heritage Officer)		
09/03/2022	Zachary Carter (Heritage	Biosis Pty Ltd	Zachary follows up on Standard Assessment

Date	Name and Title	Organisation	Nature of Consultation
	Advisor)		results meeting to Francisco with further information supporting the recommended of ceasing at Standard Assessment.
	Francisco Almeida (Heritage Advisor)	TLaWC	
23/03/2022	Francisco Almeida (Heritage Advisor)	TLaWC	Francisco responded to Zachary's email indicate ding Complex Assessment would be required.
	Zachary Carter (Heritage Advisor)	Biosis Pty Ltd	
24/03/2022	Zachary Carter (Heritage Advisor)	Biosis Pty Ltd	Zachary responded to Francisco's email questioning testing locations and suggesting alternatives.
	Francisco Almeida (Heritage Advisor)	TLaWC	
17/05/2022	Aaron Dalla-Vecchia (Heritage Advisor)	Biosis Pty Ltd	Telephone conversation between Aaron and Francisco regarding the methodology of the Complex Assessment.
	Francisco Almeida (Heritage Advisor)	TLaWC	
18/05/2022	Francisco Almeida (Heritage Advisor)	TLaWC	Email exchange between Francisco and Aaron regarding the methodology of the Complex Assessment.
	Aaron Dalla-Vecchia (Heritage Advisor)	Biosis Pty Ltd	
10/08/2022	Aaron Dalla-Vecchia (Heritage Advisor)	Biosis Pty Ltd	Aaron and Francisco communicated via telephone and email regarding the attempted Complex Assessment.
	Francisco Almeida (Heritage Advisor)	TLaWC	
23/08/2022	Francisco Almeida (Heritage Advisor)	TLaWC	Francisco responded to Aaron's email communication stating that internal discussions in TLaWC had taken place, and that the consensus was that Complex Assessment was not required.
	Aaron Dalla-Vecchia (Heritage Advisor)	Biosis Pty Ltd	
24/08/2022	Daniel Carpenter (Heritage Advisor)	Biosis Pty Ltd	Formal request for oral history
	Francisco Almeida (Heritage Advisor)	TLaWC	
	Alex Parmington (Heritage Advisor and RAP Manager)		

6.2 Participation in the conduct of the assessment

Table 4 Participation in the conduct of the assessment

Date	Name and Title	Organisation	Nature of Consultation
07/12/2021	Zachary Carter (Heritage Advisor)	Biosis Pty Ltd	Standard Assessment
	Troy Wilkinson (Field Representative)	TLaWC	
	Matt Antonopoulous; (Field Representative)		
23/05/2022	Aaron Dalla-Vecchia (Heritage Advisor)	Biosis Pty Ltd	Complex Assessment attempt
	Dylan Wilkinson (Field Representative)	TLaWC	

6.3 Consultation in relation to the conditions

Table 5 Consultation in relation to the conditions

Date	Name and Title	Organisation	Nature of Consultation
23/08/2022	Francisco Almeida (Heritage Advisor)	TLaWC	Francisco stated via email that TLaWC would require monitoring of works if no Complex Assessment was to be undertaken.
	Aaron Dalla-Vecchia (Heritage Advisor)	Biosis Pty Ltd	
06/09/2022	Daniel Carpenter (Heritage Advisor)	Biosis Pty Ltd	Draft conditions sent to TLaWC for provisional approval.
	Francisco Almeida (Heritage Advisor)	TLaWC	
	Alex Parmington (Heritage Advisor)	TLaWC	

6.4 Summary of outcomes of consultation

At the commencement of the project, a notice of intent to prepare a CHMP (NOI) was sent by Lucy Amorosi of Biosis Pty Ltd on 29 September 2021 through the ACHRIS platform. On the same day the VAHR acknowledged this and issued the number 18340 to the plan. This notification was sent to Mount Buller Alpine Resort on the same day and has been included in Appendix 1.Also on 29 September 2021, Lucy sent the notification and to TLaWc, inviting them to evaluate the plan. A request for oral history was also extended. TLaWc responded on 5 October indicating their intention to evaluation the plan. This notification has been included in Appendix 2.

An inception meeting was held via Microsoft Teams on 30 August 2022. Present at this meeting was Kylie McFadyen, Ané van der Walt (Biosis Pty Ltd), Francisco Almeida, Alex Parmington and Michelle Monk (TLaWC). In this meeting, Kylie and Ané presented the results of the background research. Kylie and Ané discussed the

nature of the proposed activity and the impacts that it would have. They also presented the results of the Desktop Assessment. The result of the meeting is that Standard Assessment would be required.

On 7 December 2021 a Standard Assessment took place. Present was Zachary Carter (Biosis Pty Ltd), Troy Wilkinson and Matt Antonopoulous (TLaWC). A request for particular knowledge of the area was made by Zachary to the TLaWC field representatives, however, no particular knowledge was passed on. It was noted by the representatives that the area would have been seasonally used by Taungurung people.

A Standard Assessment results meeting was held via Microsoft Teams on 7 March 2022. Present at the meeting were Zachary Carter, Ashley O'Sullivan (Biosis Pty Ltd), Francisco Almeida, Alex Parmington and Michelle Monk (TLaWC). The findings of the Standard Assessment were presented to the RAP which noted the disturbance and the poor place preservation potential. TLaWC Heritage Advisors requested that a Complex Assessment be undertaken in the saddle area, and that spatial data of the trail alignment be sent through so that a elevation model could be prepared to identify flat areas within the Activity Area.

Following the Standard Assessment results meeting, email correspondence occurred between Zachary Carter, Aaron Dalla-Vecchia (Biosis Pty Ltd) and Francisco Almeida (TLaWC). This consisted of a discussion around the Complex Assessment methodology. Initially, Zachary provided the spatial data requested at the Standard Assessment results meeting (9 March 2022) with a recommendation of not proceeding with Complex Assessment. Francisco responded on 23 March 2022 with a spatial analysis of the Activity Area providing a rationale for proceeding with the Complex Assessment and details of the required methodology. Zachary responded on 24 March accepting the requirement for a Complex Assessment, however, requesting adjustments to the methodology. On 17 and 18 May 2022 there was further email and telephone correspondence between Francisco and Aaron regarding the methodology of the Complex Assessment, and an agreement was reached.

On 23 May 2022, Complex Assessment was attempted to be completed by Aaron Dalla-Vecchia (Biosis Pty Ltd) and Dylan Wilkinson (TLaWC). Conditions were cold, with some snow cover. Although Biosis had received initial indication from TLaWC Heritage Advisors that field representatives would be comfortable digging through snow, the field representative advised that due to OH&S issues, it was unsafe to complete Complex Assessment at this time.

On 10 August 2022 email consultation and telephone consultation took place between Aaron Dalla-Vecchia (Biosis Pty Ltd)and Francisco Almeida (TLaWC) regarding the outstanding Complex Assessment. Aaron made a requested that the project cease at Standard Assessment level due to further in-field assessment identifying low-nil levels of remnant topsoil within the Activity area.

On 23 August 2022 an email was sent by Francisco Almeida (TLaWC) to Aaron Dalla-Vecchia and Daniel Carpenter (Biosis Pty Ltd) stating that due to the steepness of the slopes and additional advice provided by TLaWC field representatives, Complex Assessment would not be required. He noted that in lieu of the completion of Complex Assessment, supervision of construction works in areas where Complex Assessment was proposed would form part of the Conditions of the plan.

On 24 August 2022 an email was sent by Daniel Carpenter (Biosis Pty Ltd) to Francisco Almeida and Alex Parmington (TLaWC) making a request for oral history. No response was received. On 6 September 2022 an email was sent by Daniel Carpenter (Biosis Pty Ltd) to Francisco Almeida and Alex Parmington (TLaWC) requesting provisional endorsement of draft management conditions. No response was received.

7 Desktop Assessment

The following section contains the results of the Desktop Assessment. The Desktop Assessment was prepared in accordance with Regulation 61 and includes the information set out in Schedule 2 of the Aboriginal Heritage Regulations 2018.

7.1 Geographic region

The geographic region for the Activity Area has been selected to represent a range of landforms and resources that would have been accessible from the Activity Area. This has been defined by a wide sample of different landforms in the area, comprising the Alpine summits of Mount Buller and Mount Stirling to the north, as well as intersecting ridges and valleys which contain a number of watercourses and their tributaries that would have been accessed by Aboriginal peoples in the region (Map 3). Due to the complexity of the landscape features found throughout this area (e.g. the topography and number of watercourses present), higher points in the landscape and the 200 metre cultural heritage sensitivity buffers of creeks and the Delatite River have been selected as general boundaries of the geographic region.

Five geomorphological units (GMU) are identified within the geographic region. These include:

- *GMU 1.1.1 - Summit plateaux (Mount. Bogong, Baw Baw, Buffalo, Mount Wills).*
- *GMU 1.1.4 - Capped (basalt) plains (Mount. Jim, Bogong High Plains, Dargo Plains, Nunniong Plains).*
- *GMU 1.3.2 - Enclosed landscapes of low relief (Murmungee, Omeo, Dargo, Buldah).*
- *GMU 1.4.1 - Prominent summits above 1200m (Mount. Feathertop, Mount. Howitt, Mount. Buller).*
- *GMU 1.4.3 - Escarpments, gorges (Mount. Buffalo escarpment/gorge, Erinundra escarpment; Genoa, Mitchell, Moroka gorges and Snowy River gorges); and*
- *GMU 1.4.4 - Deeply dissected ridge and valley landscapes (headwaters of major rivers such as the Wonnangatta, King and Kiewa Rivers Mount. Coopracambra).*

The geographic region contains a number of waterways, with those closest to the Activity Area forming the headwaters of the Delatite River in the north and Howqua River in the south. It is likely that snow melting after winter snowfalls results in significantly higher water flows from the alpine summits located within the geographic region. Such high levels of water movement may have impacted the survivability of archaeological material (either surface or subsurface deposits) located on slopes by redepositing artefacts and sediments further downstream from their original depositional location. This indicates that cultural material located at the base of slopes within the geographic region may not be *in situ*.

The geographic region is situated in the Highlands – Northern Fall and the Victorian Alps bioregions. Pre-1750s Ecological Vegetation Classes (EVCs) within the geographic region include Sub-alpine Treeless, Sub-alpine Woodland, Montane Dry Woodland, Montane Damp Woodland, Riparian Forest, Shrubby Dry Forest and Herb-rich Foothill Forest. A comparison of pre-1750s EVCs with the 2005 EVCs show that all native vegetation classes have remained protected and unaltered within much of the geographic region (Department of Environment, Land, Water and Planning 2021).

The geographic region would have provided Aboriginal peoples with an ample supply of freshwater which, in turn, would have attracted an abundance of native flora and fauna. The EVCs surrounding the Activity Area would have provided Aboriginal peoples with edible bulbs and tubers, as well as open eucalypt woodland, the

bark of which was used for making canoes, shelters, shields and containers while the leaves and sap were used for medicinal purposes (De Angelis 2005).

The geographic region is shown in Map 3.

7.2 Landforms and/or geomorphology of the Activity Area

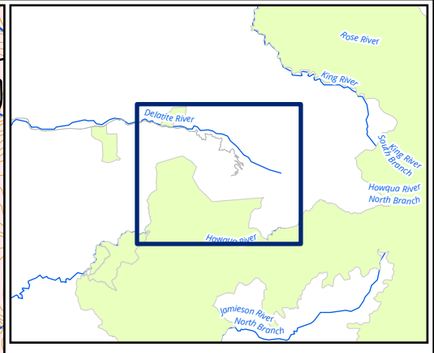
The Activity Area is within the Eastern Uplands (EU) Tier 1 GMU. There is low variation in bedrock and documented patterns of soil development across the Eastern Highlands (Land Conservation Council 1977). On drier slopes, shallow, friable, stony red and brown gradation soils are dominant (Land Conservation Council 1977), corresponding with the lithosols described by Costin (1986). These soils are gradational from weathered bedrock and are largely mineral in character. Moist slopes, lower gradient areas and increasing altitude show progressively increasing amounts of organic material in the upper soil profile, passing through a transition into the Alpine Humus Soils (Costin 1986). The majority of the Activity Area is within the Tier 2 GMU Landscapes above 1200 m of low relief and Tier 3 *GMU 1.1.4 Capped (basalt) plains (Mount. Jim-Bogong High Plains, Dargo Plains, Nunniong Plains)* that has been capped by extensive flows of Older Volcanics (Palaeogene) basalt, with soils that are deep organic loams (Chernic Tenosols) to red or brown gradational soils (Dermosols). A small section of the Activity Area is within Tier 2 Dissected landscapes at a range of elevations and Tier 3 *GMU 1.4.4 Deeply dissected ridge and valley landscapes (headwaters of major rivers such as the Wonnangatta, King and Kiewa Rivers Mt. Coopracambra)*. In GMU 1.4.4, high, narrow-topped ridges form the divides between major streams in this unit, with steep spurs and side slopes extending down to steeply graded streams. Soils in this unit vary from red/brown gradational soils (i.e. dermosols) on the wetter and more stable slopes to poorly structured gradational soils (i.e. Kandosols) on the drier slopes, with soils on steep slopes typically being shallow and containing abundant stones (Agriculture Victoria 2020).

The geology of the majority of the Activity Area consists of Cobbannah Group (Sc) comprised of hornfels formed from contact metamorphism of sandstone and mudstone, and with Mount Stirling Granodiorite (G184) at the southern end, which is described as hornblende granodiorite, diorite, gabbro; medium to coarse grained, which is a geological igneous intrusion from the Devonian (Middle Devonian) period (Welch, Higgins, & Callaway 2011). Basalts, such as the capped basalt of the Activity Area and the surrounding area, have been weathered sufficiently to form slopes and subtle low rises adjacent to areas carved by snowmelt water flow (Birch 2003). As a result of this water movement and other weathering processes, basalt outcrops are known to occur within the local area and may occur within the Activity Area. These outcrops commonly occur along alluvial valleys such as Cow Camp Creek and may have provided a local source of raw material for stone tool production.

The Activity Area is situated on the summit of Mount Buller (1805 metres asl) and slopes to 1720 metres asl. It is within an alpine massif, consisting of steep-sided ridges reaching 1600–1700 metres elevation and dissected by streams and larger valleys (Birch 2003). Located in the Victorian Alps bioregion, the pre-1750s EVCs within the Activity Area was Sub-alpine Treeless Vegetation (EVC 44). A comparison of pre-1750s EVCs with the 2005 EVCs show that all native vegetation classes have remained protected and unaltered within the Activity Area (Department of Environment, Land, Water and Planning 2021).

The geographic region contains a number of waterways, including those forming the headwaters of Delatite River and Howqua River. The waterways that are the closest to the Activity Area are Buller Creek, located approximately 45 metres to the north, South Buller Creek, located approximately 90 metres to the west and Boggy Creek, located approximately 220 metres to the east. Snow melting after winter snowfalls results in significantly higher water flows across the region. Access to reliable potable water is a significant determinant in the feasibility of a landscape being used by Aboriginal people, and the presence of these waterways in close proximity indicates that water would have been readily available in the area. However, as noted above, the significant increase in water flow due to melting snow may have made certain areas unsuitable for use for

extended periods and also may have significantly impacted the survivability of Aboriginal stone artefacts (either surface or subsurface) in their original context.



Legend

- VAHR Place
- Activity Area
- Geographic region
- Contour 20m interval
- Major road

Hydrology

- River or Creek

Geomorphological units

- 1.1.1 Summit plateaux
- 1.1.4 Capped (basalt) plains
- 1.2.1 Moderate elevation plateaux and broad ridges
- 1.3.2 Enclosed landscapes of low relief
- 1.4.1 Prominent summits above 1200 m
- 1.4.3 Escarpments and gorges
- 1.4.4 Deeply dissected ridge and valley landscapes

Map 3 Victorian Aboriginal Heritage Register (VAHR) Places and geomorphology of the geographic region

0 0.3 0.6 0.9 1.2 1.5

Kilometers

Scale: 1:40,000 @ A3

Coordinate System: GDA 1994 MGA Zone 55

N

Acknowledgements: VicMap BaseMap©State of Victoria

Matter: 36075, CHMP: 18340,
Date: 27 October 2021 ,
Prepared for: LA, Prepared by: SKM, Last edited by: smitchell
Layout: 36075_M3_GR_Geomorph_VAHR
Project: P:\36000s\36075\Mapping\
36075_MtBuller_McLachlin'sShoulder_CHMP.aprx

7.3 Historical and ethno-historical accounts in the geographic region

For the purposes of this assessment, information about Aboriginal peoples pre and post contact history has been sourced from 19th and 20th century primary and secondary ethnographic/historical records.

7.3.1 Ethno-historical accounts of Aboriginal peoples

Linguistic boundaries and social organisation

Prior to non-Aboriginal colonisation, the Victorian landscape was delineated by various socio-dialectical groups who shared a common language and who, as a group, identified as owning particular areas of land, with individually owned tracts of country. This was a system of spatial organisation based on land tenure (Clark 1990).

Aboriginal groups often mapped natural features as 'boundaries' for their ranges, estates and economic 'territories'. It is important to note that boundaries are a non-Aboriginal construct—one which places emphasis on identity as being defined by bounded territories. This is seen in native title claims which place Aboriginal peoples in a position where they must defend their Aboriginality and connection to Country, and to 'meet expectations of "authenticity" in asserting cultural identity' (Lydon 2016, p. 656).

Aboriginal land ownership and access rights or responsibilities centred on the smaller named groups that together formed the broader language grouping. These groups are often referred to as 'clans' or 'local descent groups', however as Wesson (2000) reasons, they are better described as 'named groups', as the membership structure of these groups and their degree of division from other groups could vary. In most instances, primary allegiance was owed to this named group, although this could also vary according to context and location. Most commonly, named groups were led by senior elders who exercised internal political and religious authority, while also being recognised as the group's spokesperson when dealing with other groups (Atkinson & Berryman 1983). Particularly influential group leaders could also assume authority over the leaders of other culturally affiliated groups (Wesson 2000).

Based on the ethnographic information available on the Activity Area and Mount Buller more generally, it is probable that the Activity Area was frequented by two Aboriginal groups. The first of these groups were the *Yowung-illam balug*, who are part of the *Daung wurrung* language group. This clan was known to have occupied land around Mount Buller, Mount Stirling, the Howqua River quarry (*Yowung-illam* stone quarry), Mount Battery, Alexandra, the Upper Goulburn River at Mansfield, sources of the Goulburn River and the Hunter and Watsons 'Wappan' Run (Barwick 1984, Clark 1990). The second group were the *Mogullumbidj* (Clark 2010, p. 182). Based upon ethnographic information collected by George Augustus Robinson in the 1840s, it is understood that the *Mogullumbidj,* who are otherwise known as the Mount Buffalo tribe, held land as far south as Dandongadale and the Wabonga Plateau to the back of Mount Buller (Durrant 2020, p. 24). The name *Mogullumbidj* was previously thought to represent a regional language name or subdialect name, however based upon a reassessment of ethnographic references, Clark (2010, p. 187) has argued that *Mogullumbidj* is a Kulin descriptive name and is likely to be an exonym (i.e. a name used only by people from outside the area). Clark (2010, p. 188) contends that the term *Minjambuta*, employed by Matthews and Tindale, is a Wiradjuri exonym for *Mogullumbidj* and/or *Pallanganmiddang* groups, but that the label of the *Mogullumbidj* for this specific region should remain despite most likely representing a 'collective group exonym based on descriptive characteristics'.

According to Durrant (2020, p. 26–27), it is reasonable to assume the *Mogullumbidj* spoke *Dhudhuroa* or at least some form of *Dhudhuroa*, as Assistant Protector William Thomas recorded six words spoken by the *Mogullumbidj*, which were later analysed by Stephen Morey who deduced they were of a *Dhudhuroa* dialect.

Moiety affiliation

A further level of social organisation was moiety affiliation. Based upon ethnographic information collected by Howitt (1904), it is understood that the moiety of the *Mogullumbidj* was *Bunjil*. This suggests that *Mogullumbidj* could have intermarried with their immediate neighbours including people from the *Daung wurrung* language area (Durrant 2020, p. 23).

Membership to a named group is variably defined by a localised matrilineal or patrilineal descent group, with female members of the group partnering with men outside of their own group (exogamous) and across moiety lines. These female members would, however, maintain an identity of belonging to their father's group and the men that they partnered with had to adhere to certain duties such as providing food to their father-in-law. Social engagement could also be influenced by specific and appropriate conduct between family members. For example, partnered men had avoidance behaviours that they had to adhere to in the presence of their mother-in-law, and there were other speech or special duties which were expected in family relationships (Atkinson & Berryman 1983).

Dual classification systems have provided a source for many moiety names, with opposing physical characteristics of totemic animals or human beings considered to form a basis of classification and related groups (Koch, Hercus, & Kelly 2018, p. 170). Bird names are emblematic of moieties in many parts of Australia; including the Eaglehawk and crow of the Eastern Kulin and Alpine areas, and the Corella and black cockatoo in south-western Victoria (Koch, Hercus, & Kelly 2018, p. 170). Meteorological contrasts have also been noted as a basis for dual classification systems, such as the hot west or north wind and the opposing cold east or south wind and floodwater or lightning (Koch, Hercus, & Kelly 2018, p. 171).

Religion

Knowledge of Aboriginal religion was recorded and maintained through a highly sophisticated visual and oral tradition which ensured the maintenance of social structures through generations. Such knowledge was not always readily shared with non-Aboriginal social observers and as such there are limited written versions of Aboriginal religious traditions from early non-Aboriginal settlers, explorers or government employees in existence within Victoria. Ceremonies, or versions thereof, were occasionally performed to entertain non-Aboriginal people, however the meanings behind these performances were never fully explained (Robinson 1840). Private ceremonies, such as age initiations, important places and many other significant parts of Indigenous culture were actively kept secret (Presland 1994).

Brumm (2010, p. 188) speaks of one significant piece of traditional knowledge that exists across multiple Aboriginal groups: "the sky was a dome propped up by poles resting somewhere in the mountains in the north-east of Victoria". At the time of pastoral expansion into the north east of what is now known as Victoria, the message was passed between the Aboriginal groups that these poles were becoming rotten If the poles fell the sky would also fall in and the clouds would break and all would drown (Brumm 2010, p. 188). This 'falling sky' message appears to have originated from the headwaters of the Ovens River, however the deep antiquity of this belief has been called into question by Hiscock (2013), who suggests that it may indicate an incorporation of Christian motifs, such as the deluge, into Traditional Owner cosmology. Brumm (2017), however, supports the antiquity of the belief, thus countering Hiscock's claims of Christian imagery.

Economy and resource utilisation

Certain individuals within the Aboriginal groups had assigned responsibilities for the management of natural resources. Anthropogenic manipulation of the environment was observed by the first non-Aboriginal people within northern Victoria. For example, fire regimes which cleared tracks through reed beds aided hunting practices and also dissuaded settlers from entering Aboriginal territory (Atkinson & Berryman 1983). Hooped nets made from fibres were used to catch crayfish, yabbies and other fish, while cross-line nets were strung

low above the water for catching ducks, or below the water to catch schools of fish. Line nets were also used to catch emus and kangaroos, with a strategically placed group of people driving the animals toward the nets. Reed spears with hafted bone, carved barbs, stone pieces or hardened wooden points set into the head were used for catching larger marsupials. Oven mounds, an underground cooking pit, were then constructed to bake the game or large volumes of vegetables (Atkinson & Berryman 1983).

Occurrences of archaeological material connect the Mount Hotham, Dinner Plain and Horse Hair Plain ridge system from Cobungra Hill in the east to Mount Feathertop in the west, which would have provided suitable conditions for a walking route that would also provide access to the Alps, Bogong High Plains and Mount Buffalo (Shawcross, Hughes, & Mullett 1999). Significantly, the granite and gneiss tors, jointed basalt outcrops and basalt block streams of the southern Bogong High Plains also provide the right habitat conditions for the Bogong moth *Agrotis infusa*. These moths migrate to the south-eastern Alps during summer for aestivation in dark dry localities such as crevices in rock outcrops, and under boulders and rocks on scree slopes. In contrast, areas of the open plains above the tree line would not have provided such suitable conditions for aestivation (Hughes & Clarkson 2002).

The *Mogullumbidj, Yaitmathang, Daung wurrung, Yuin, Monero (Ngarigo), Pallanganmiddang* and other groups from the Baw Baw Plateau in Victoria (and Brindabella Ranges in New South Wales) each held a Bogong moth harvesting area over which they had sovereignty (Payton 1849, Tindale 1974). The *Mogullumbidj* had access to Bogong moths at Mount Howitt and the Howitt Plains (Wesson 2000). The routes taken were along the valleys and ridges in the area. As Flood (1973) noted:

> *There is strong ethnographic evidence that in the Victorian High Plains the route from Beechworth to Omeo via the Bogong High Plains was a traditional Aboriginal route* (Carr 1962) *and also the route taken by the present Omeo Highway to Bruthen and south Gippsland* (McMillan 1969).

Flood (1980) argued that the main reason that these groups travelled to the mountains was for harvesting seasonally available Bogong moths, which began in October and continued to March. The moths were collected on bark sheets, nets and skins after which they were carefully cooked as to not scorch the bodies. After cooking, the moths were winnowed and eaten or ground into a paste to make smoked cakes which would preserve the food for carrying in coolamons back to their groups (Flood 1980, p. 67). Flood's (1980) analysis of historical data concluded that moth harvesting was primarily a male activity, however Kamminga (1992) proposed that women and children harvested moths in lower altitudes.

The Bogong High Plains were important to neighbouring Aboriginal groups for the harvest of Bogong moths; however Shawcross et al. (1999) argues that other important activity also took place, which is evident by the presence and types of artefactual material that they identified in the area that could not be attributed to moth exploitation. Aboriginal peoples in the region were also likely to have been taking advantage of other available alpine resources such as *Tasmannia* (Drimys) (berries), *xerophila* (alpine pepper) and various fauna.

Other important social activities also took place during the Bogong moth harvesting season, including ceremonial meetings during which the local groups would participate in marriage arrangements, trade, political affairs and entertainment (Bennet 1834). Howitt (1904) described numerous groups travelling to attend these occasions. Aboriginal groups also travelled to the alpine region to meet with people of distinction who may have held a more permanent presence in the region.

7.3.2 Historical accounts of Aboriginal people

The rapid spread of non-Aboriginal colonisation throughout Victoria altered Victorian Aboriginal societies. The increased presence of settlers resulted in dispossession of Aboriginal people from their traditional lands and diminished their access to resources. These factors combined with population decline from introduced diseases and conflict, transformed Aboriginal society.

In 1839, an Aboriginal Protectorate Scheme was established in Victoria. The Protectorates provided religious instruction, rations, homes and medical care to Aboriginal peoples whilst simultaneously allowing them to record population information (Broome 2005). Official inquiries into the welfare of Aboriginal peoples were held in 1849 and again in 1858. Although informants at the inquiries remarked on the rapid fall in the Aboriginal population, it was a number of years before any action was taken. The 1858 inquiry led to the formation of the Aboriginal Protection Board in 1860, which encouraged Aboriginal peoples to move onto reserves (Edwards 1988). In 1869, the Aborigines Act was passed to give the Governor of Victoria power to dictate where Aboriginal peoples could reside, what activities they could undertake on and off reserves and also provided the Governor with the authority to take charge of Aboriginal children (Edwards 1988).

William Thomas, Assistant Protector of the Aborigines, obtained two early Aboriginal drawings which he described as the shape of stone houses of *Aboriginal druids* who reside in the Australian Alps. He elaborated:

> *There are in the Australian Alps a race of Blacks who live in stone houses made by themselves (not caves) and that some of these Blacks never to out to seek their food but eat herbs and what Blacks give them, that these Blacks are very like our Sunday, that they teach Omeo, Devils River, Broken River and other Blacks Dances and Singing (Brumm 2010, p. 190).*

Whilst Thomas refers to these people as druids, anthropologically they were referred to as Aboriginal men of high degree who were connected with the alpine mountains and were often visited by neighbouring groups (Elkin 1977).

Between the years of 1843-1844, a large ceremonial gathering with Kulin peoples was attended by assistant protector of Aborigines in Melbourne, William Thomas, who recorded the presence of the *Mogullumbidj* (Durrant 2020, p. 17). The gathering, which ran for six days, was comprised of 800 people from seven groups. During this gathering a *gaiggip* was performed by the *Mogullumbidj* and the *Daung wurrung* (Durrant 2020, p. 17). This performance may have been sung in one of the *Yuin* languages, which include *Ngarigu*—a language spoken around the Snowy Mountains, Monaro and Omeo (Durrant 2020, p. 28).

The Aboriginal population in the north east of Victoria declined dramatically during the 1840s and 1850s. While there were attacks on the non-Aboriginal settlers by Aboriginal peoples, including the killing of 8 shepherds working for pastoralists William and George Faithfull in April 1838 (Durrant 2020, p. 30-31), there were also reprisal killings and other attacks that were initiated by the settlers, including George Faithfull and Peter Snodgrass' massacre of Aboriginal peoples attending a ceremonial gathering near Wangaratta (Barwick 1984).

7.4 Land use history of the Activity Area

7.4.1 Historical Land Use

In 1835, the explorer Thomas Mitchell passed through the Mansfield area and named Mount Buller after a man who worked for the British Colonial Office. Cattle mustering in the high country began in the 19th century and has influenced the development of the existing network of trails and other developments throughout the Victorian Alps. By the 1860s, European pastoralists were droving their cattle to the high plains for the summer. One pastoral family, the Klingsporns, have been credited with developing the roadway from Mansfield to Mount Buller.

The development of Mount Buller as a tourist resort has its origins in the 1920s, when a company with five shareholders was formed with the intention of backing the building of a chalet at Mount Buller. The Horse Hill Chalet, which was completed in 1929, was reached by a bridle track 13 kilometres in length that the present road closely follows. The access track to the chalet was cut and widened by teams of workers during the Great Depression, from 1929 to 1938, and became a vehicle track in 1939 (Darby 2008, pp. 27). Logging and increasing tourism activity from the early 20th century also had an impact on the gradual development

of the Mount Buller Alpine Resort(Schlitz 2008). The first ski-lift went into service in 1949 and the village post office opened in 1958 (Mt Buller 2018).

The 1950 map of Mount Buller Recreation Reserve shows the presence of a structure on the summit of Mount Buller, east of the trig point, but there appears to be no other tracks or structures in the Activity Area. The map does, however, show the presence of ski runs and the subdivision of land for the Mount Buller Alpine Village in the east (Figure 1). The 1967 Mount Buller Area map by the Forest Commission Victoria indicates that there are roads and that the Mount Buller Alpine Village to the east is developed. Within the Activity Area, the only structure that appears to be present at this time is the fire lookout (see Figure 2). The 1975 revised map of the Mount Buller Area shows that Mount Buller Alpine Village has further developed and that within the Activity Area trails now extend over the summit of Mount Buller from Summit Road past the fire tower, and with another trail extending north-east along MacLachlin Shoulder (see Figure 3). The 1986 map of the region shows that Mt Buller Alpine Resort and Mt Stirling Alpine Park have been divided and exist within the parish of Changue East (Figure 4).

The Mt Buller and Mt Stirling Alpine Resort are currently used for areas of winter and summer recreational activities. Popular winter activities include downhill and cross-country skiing, snowboarding and snowshoe trekking. Popular summer activities include bushwalking, camping, mountain biking, horse riding and four wheel driving. The main impacts of the current land use within the Activity Area relate to these recreational activities, and to the operation of emergency services during the bushfire season. There are two structures, the Mount Buller Firetower and Grimus Chairlift Top, within the Activity Area, as well as a number of access tracks that lead to the summit of Mt Buller and McLaughlin's Shoulder. These trails include the Summit Ridge Trail, Fannys Finish Trail, Summit Skiers Right Trail, Fast One Trail, SCV Hut Trail, and Access to Summit Chair Lift Trail, as well as sections of Ridge Run and Slalom Gully. The Summit Chairlift Top is adjacent to the Activity Area (see Figure 5). The Activity Area is easily and frequently accessed by the public for recreational purposes. Current structures and trails within and adjacent to the Activity Area are shown in Figure 5. Aerial photography in Section 7.4.2 from 1945 to 2019 show the changes in the Activity Area in more detail.

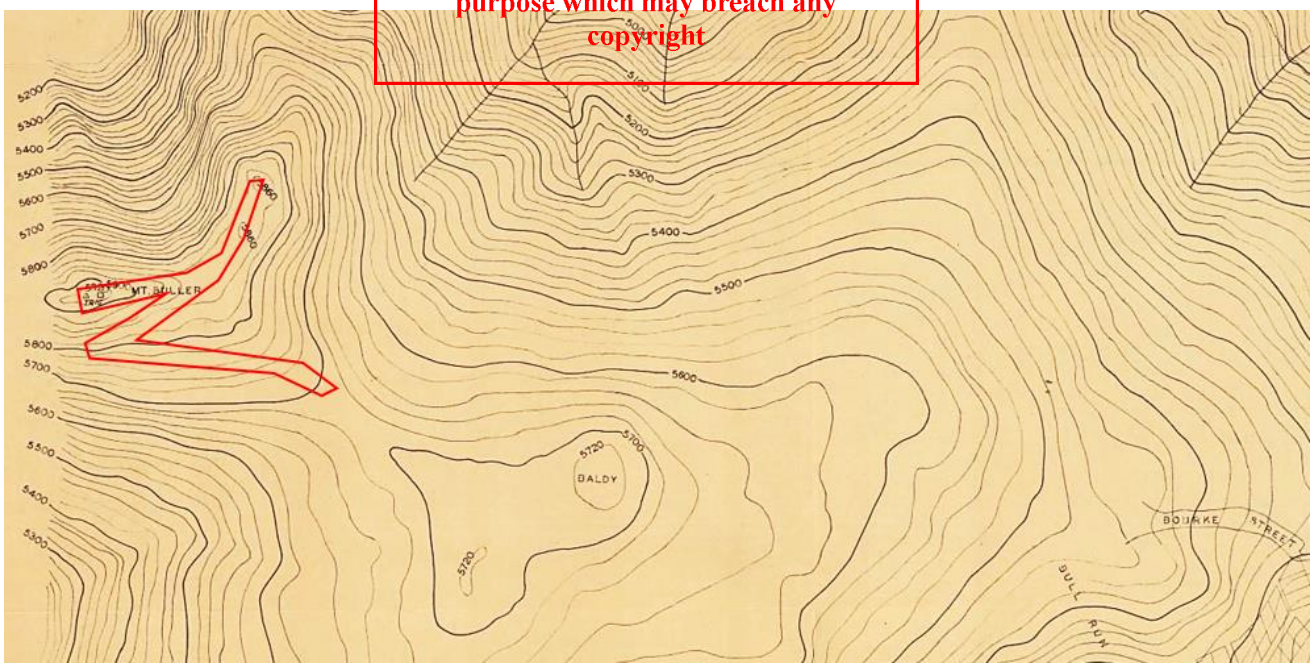


Figure 1 Detail from map of Mount Buller Recreation Reserve, parish of Changue, approximate location of Activity Area in red (Department of Lands and Survey 1950)

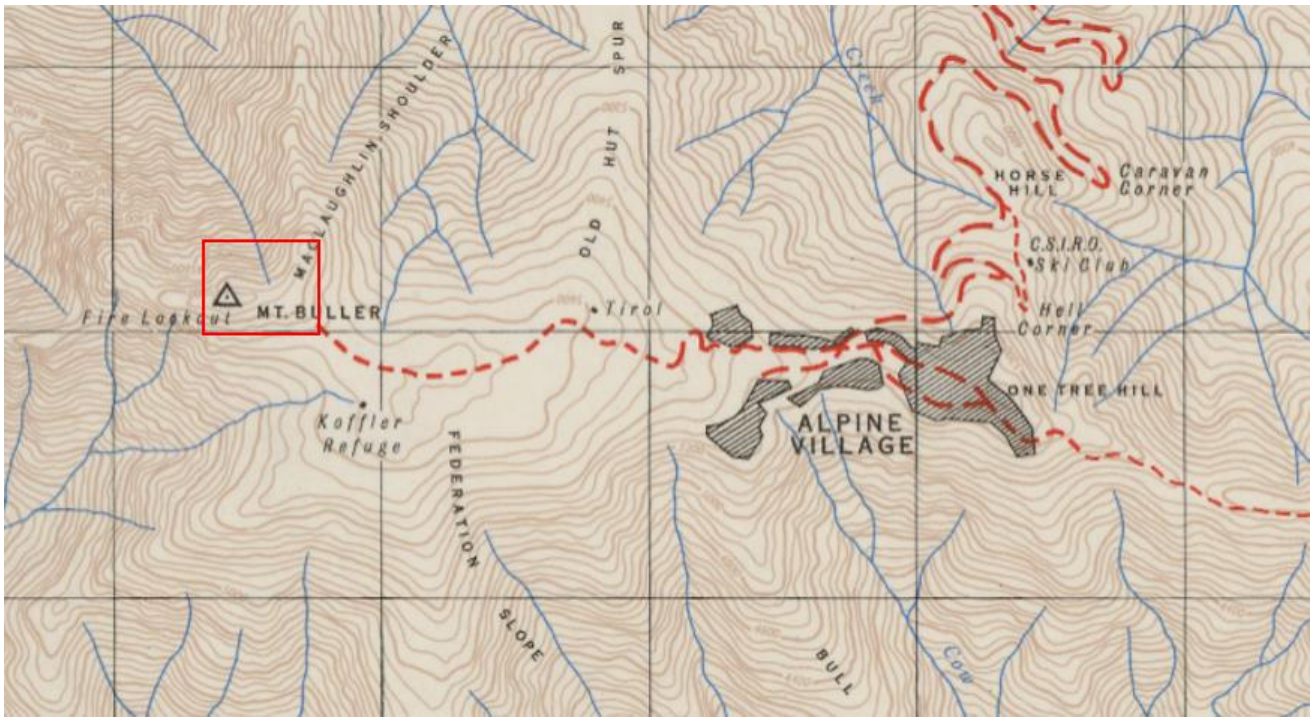


Figure 2 Detail from Mount Buller Area Forest Commission Map, approximate location of Activity Area in red (Division of Forest Management 1967)

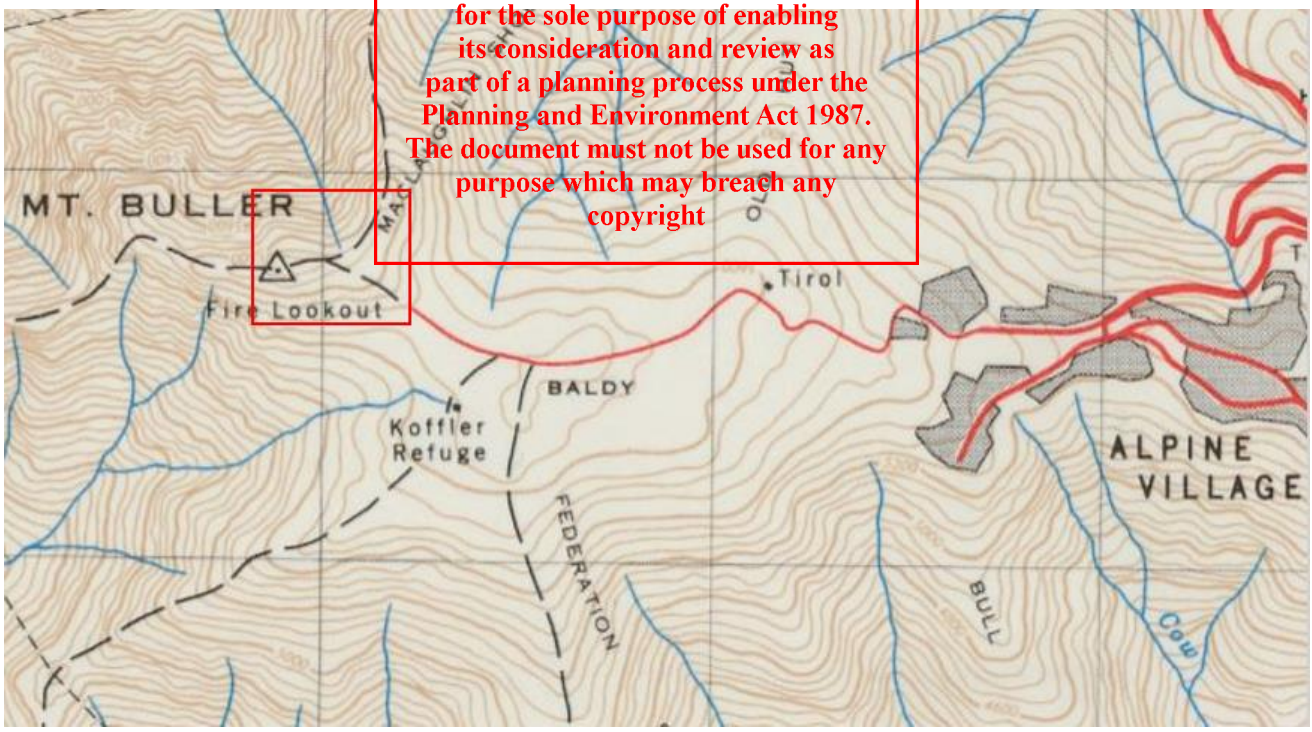


Figure 3 Detail from revised Mount Buller Area Forest Commission Map, approximate location of Activity Area in red (Division of Forest Management 1975)

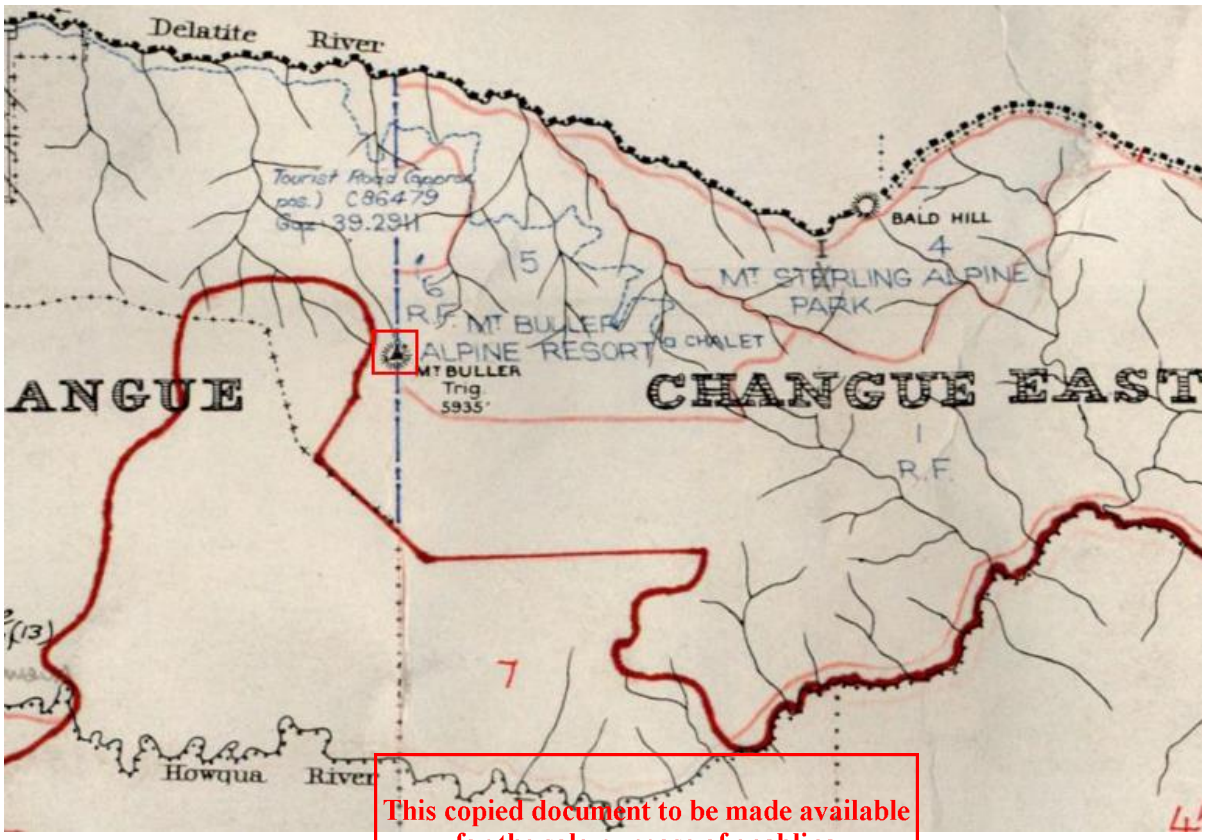


Figure 4 Detail of Wonnangatta plan showing approximate location of Activity Area in Changue East parish (Central Plan Office 1986)

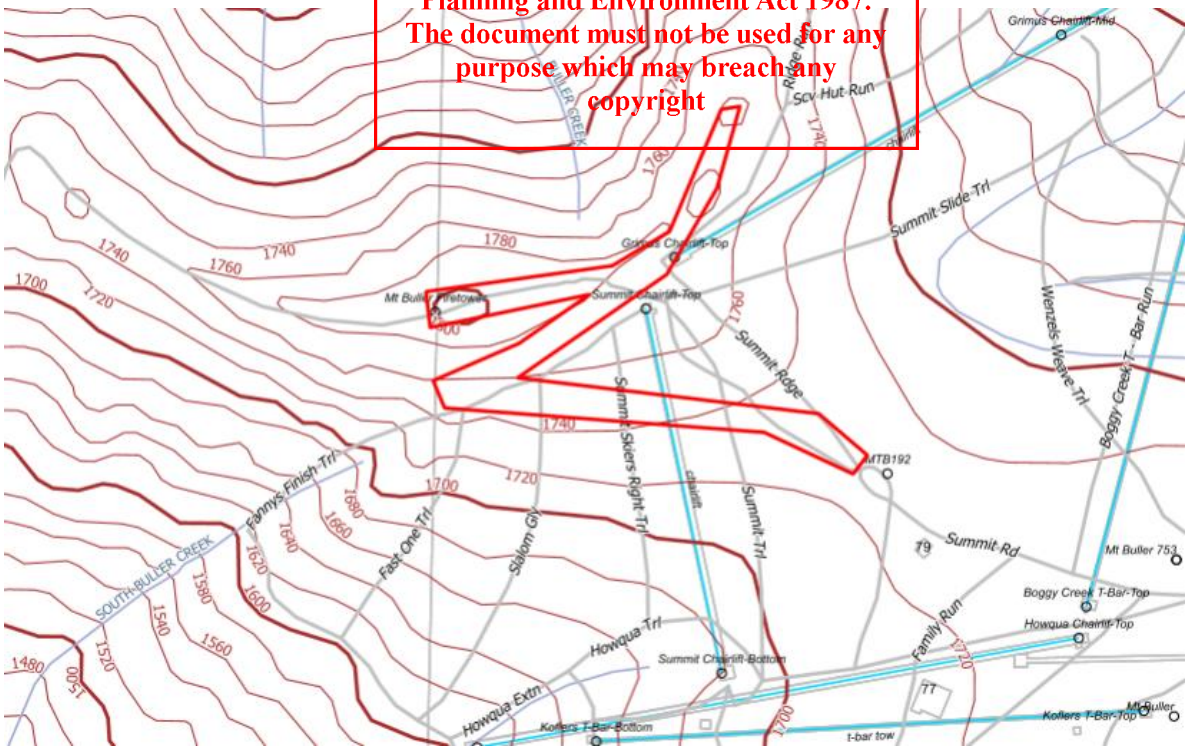


Figure 5 Features within and adjacent to the Activity Area (red) (First Peoples - State Relations ACHRIS 2021)

7.4.2 Aerial Photography

Historic aerial photography of the Activity Area captured between 1945 and 2019 demonstrate that the region has undergone a variety of development.

The aerial photograph from 1945 shows very little vegetation and no obvious development within the Activity Area or near the present day Mount Buller Alpine Village, with the white marked road signalling the beginnings of Mount Buller Road (Figure 6), which had been cut during the 1920s (see Section 7.4.1). By 1968 there is a double track up from the current day Summit Road to a nearby clearing, a track up to the summit of Mount Buller and a structure—most likely the Mount Buller Firetower—at the north-western extent of the Activity Area (Figure 7). By 1979 the Summit Road carpark area has been cleared and shaped adjacent to the southern extent of the Activity Area, very little else in the Activity Area has changed since 1968 (Figure 8). The 2009 aerial photograph shows that the Summit Chairlift and Grimus Chairlift had been constructed by this time, and several informal trails (Access to Summit Chair Lift top trail, Summit Trail and Summit Ridge trail) with some sections of each occurring within the Activity Area, had been developed. Additionally, the Summit Road carpark had been sealed just outside of the Activity Area and fencing along Summit Road has been erected (Figure 9). There is some widening of Summit Ridge Trail evident in the 2013 and 2019 aerials, but the remainder of the Activity Area shows very little change otherwise (Figure 10 and Figure 11).

In addition to the inspection of aerial photography, photographs available via a Google images search that were taken within the Activity Area from 2014 to 2019 were inspected. These photos show that the trail up the summit is cut into the rocky outcrop up to the Mount Buller Firetower, with the associated steps and path carefully fashioned with flat stones and cement. In contrast, these images show that other trails within this area appear to be more informal in structure. The images also show the presence of a small cairn along Summit Trail and to the east of the firetower. It is evident that the construction of the Top Grimus Chairlift and Top Summit Chairlift, as well as the pylons for the Summit Chairlift, would have required extensive rock and earth disturbance in those areas (Google Maps 2021).

Figure 6 Detail from historic aerial imagery of Mount Buller (Forests Commission of Victoria 1945) showing approximate location of Activity Area in red.

Figure 7 Detail form 1968 aerial, showing Activity Area in red (Australia and New Zealand Land Information Council, Intergovernmental Committee on Surveying & Mapping 2021)

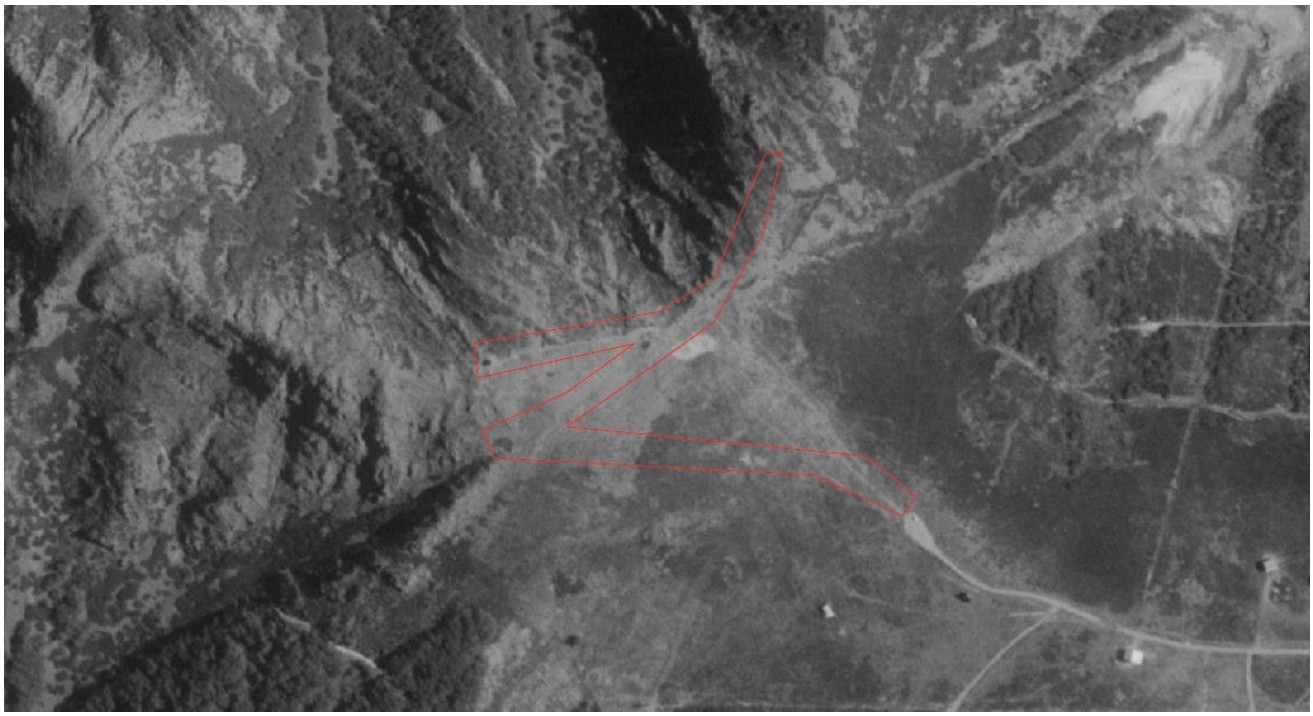


Figure 8 Detail from 1979 aerial, showing Activity Area in red (Australia and New Zealand Land Information Council, Intergovernmental Committee on Surveying & Mapping 2021)

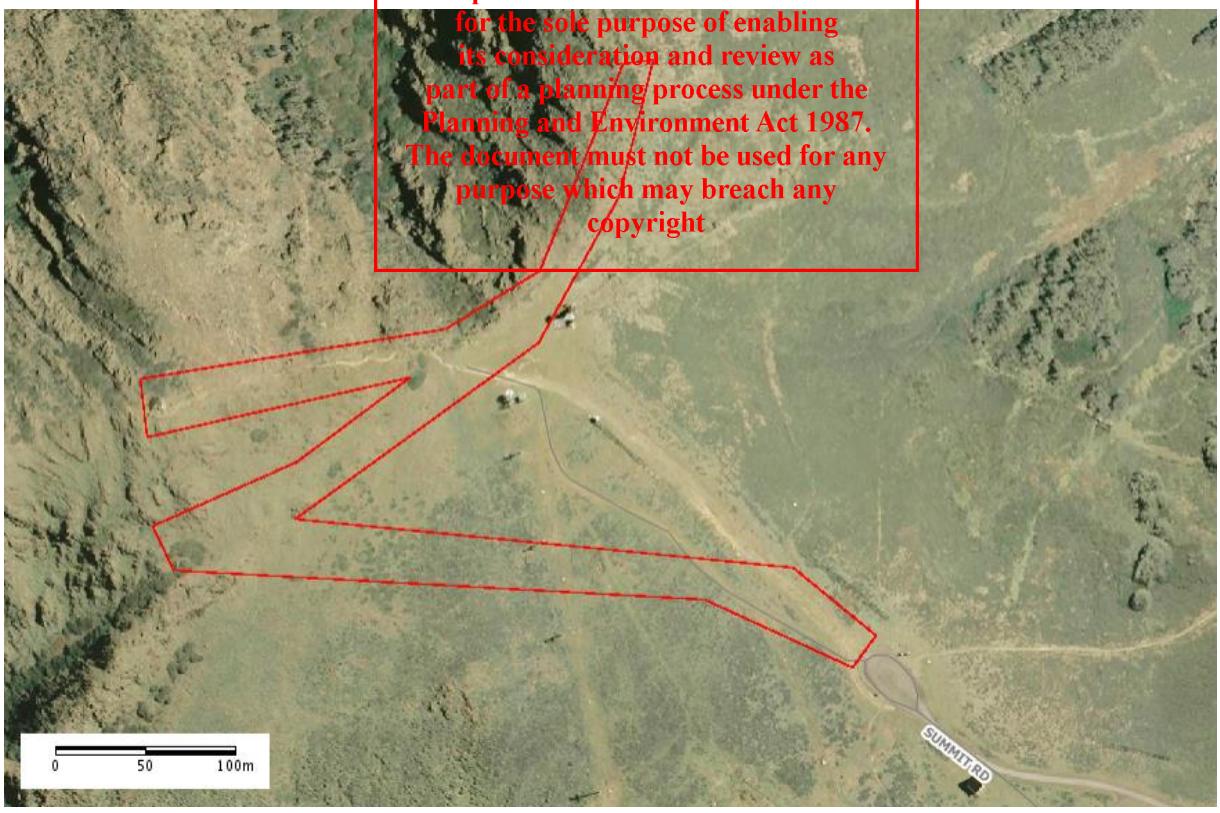


Figure 9 Detail from aerial photograph Land Cover North East, December 2009, Activity Area highlighted in red (Department of Jobs, Precincts and Regions 2021)

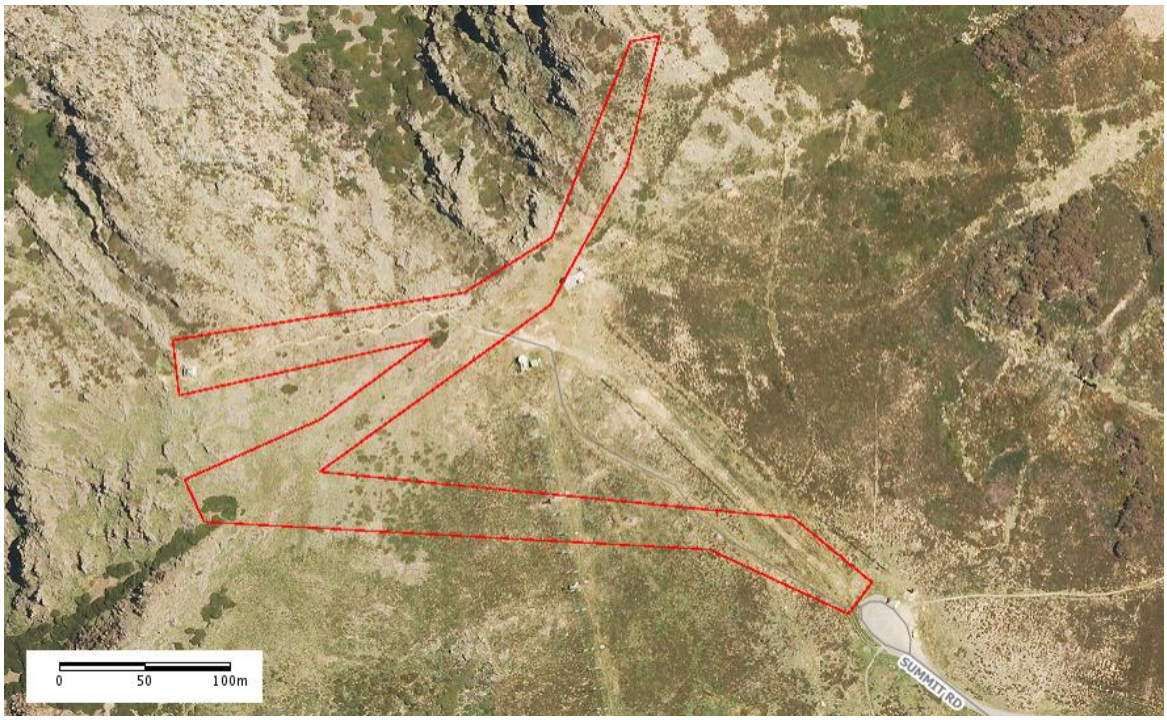


Figure 10 Detail from aerial photograph North East Victoria November 2013, Activity Area highlighted in red (Department of Jobs, Precincts and Regions 2021)

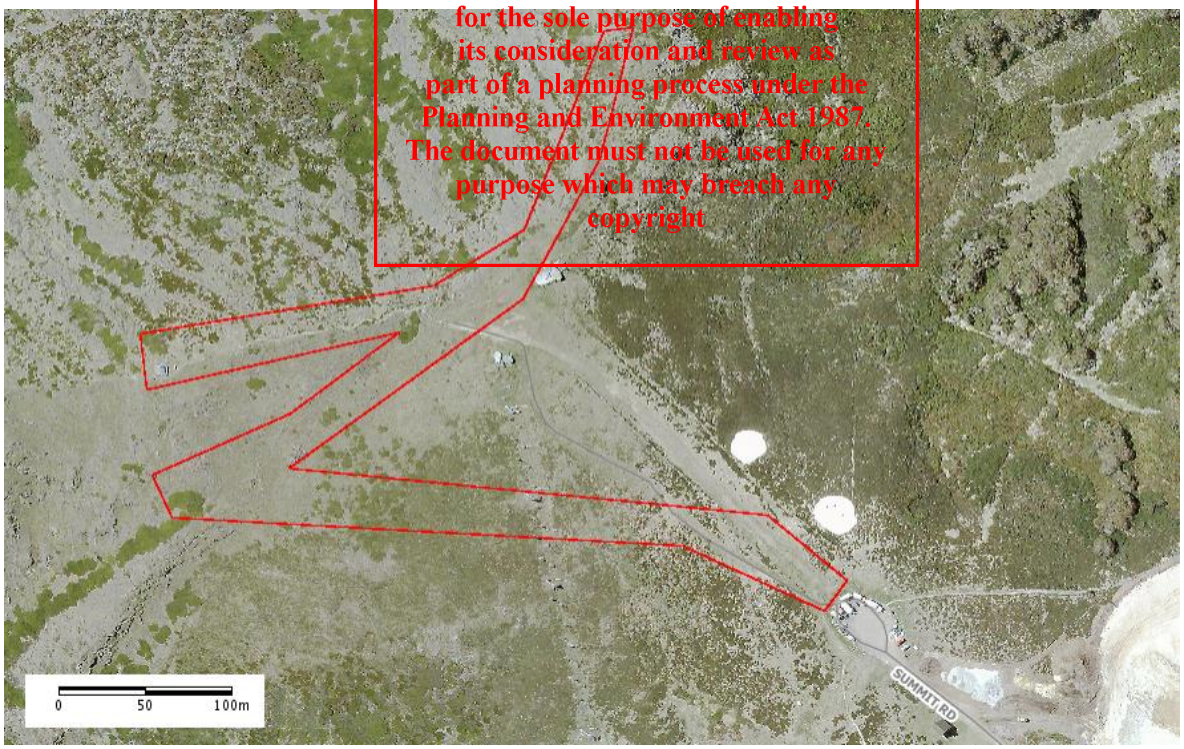


Figure 11 North East, October 2019, Activity Area highlighted in red (Department of Jobs, Precincts and Regions 2021)

7.4.3 DBYD Results

A dial before you dig (DBYD) enquiry was conducted on 19 of October 2021. Subsurface communications assets were identified within and adjacent to the Activity Area. These results are shown in Table 6.

The presence of the telecommunications assets indicate high levels of disturbance during the recent past, particularly to the west of the Summit and Grimus top stations, which are located within the Activity Area, and as a result of trenching related to the installation of underground assets. While there are no AusNet assets present, there is likely to be some electricity infrastructure up to the top chairlifts.

Table 6 DBYD Results

Service	Authority	Response
Communications	Telstra VICTAS	Subsurface communication assets present within the Activity Area. Assets are in NNW-SSE orientation and are present between Summit and Grimus top stations and Mount Buller Firetower (see Figure 12)..
Communications	Optus and/or Uecomm	No assets present within the Activity Area. Underground asset present adjacent to Activity Area at Summit Road car park.
Gas & Petroleum	Indigo Shire Council – Buller Gas	No assets
Electricity	AusNet	No assets
Council	Mount Buller Alpine Resort (UNINC)	No assets

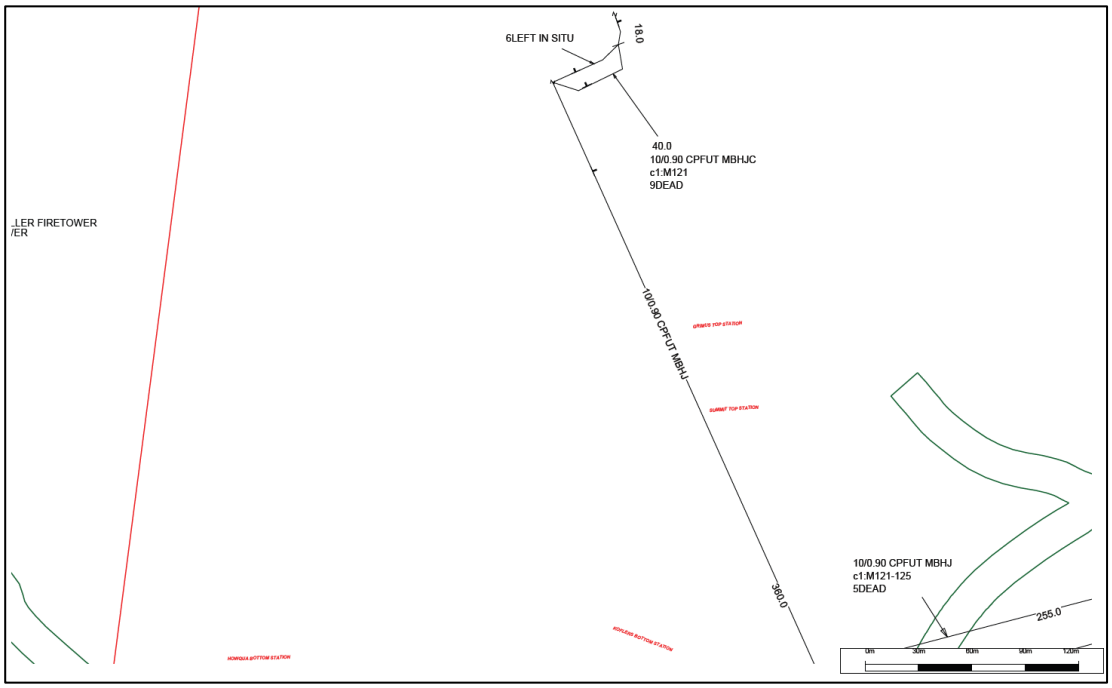


Figure 12 Detail from cable plan supplied by Telstra in DBYD search

7.5 Search of the Victorian Aboriginal Heritage Register

The VAHR contains information on all recorded Aboriginal cultural heritage within Victoria. It is accessed via the Aboriginal Cultural Heritage Register and Information System (ACHRIS), a web based tool with restricted access.

A search of the VAHR was undertaken by Lucy Amorosi, Biosis Pty Ltd, on 18 October 2021. An updated search was undertaken by Daniel Carpenter, Biosis Pty Ltd on 7 September 2022.

7.6 Aboriginal places in the geographic region

A list of all Aboriginal places within the geographic region has been tabulated and provided in Appendix 5.

A search of the VAHR record revealed that 14 Aboriginal places have been previously identified and registered within the geographic region (Table 7).

Table 7 Previously recorded Aboriginal places within the geographic region

Aboriginal Place Type	Total number of components	Total % of Aboriginal components
Low Density Artefact Distribution	2	14%
Artefact Scatter	10	72%
Object collections	2	14%
Total Registered Places	14	100%

The most common Aboriginal place component type are stone artefact scatters (n=10, 72%), followed by Low Density Artefact Distributions (LDAD) (n=2, 14%), and object collections (n=2, 14%). The object collections include one ground edge axe (VAHR 8123-0062) and the artefacts collected from an LDAD (VAHR 8123-0053), which are currently held at Mount Stirling - Resort Management with permission from TLaWC. All (n=14, 100%) Aboriginal archaeological place types within the geographic region are artefact distributions (artefact scatters and LDADs). These places are predominantly located within the Mount Stirling saddle and contain a variety of raw stone materials and artefacts at all stages of reduction.

Two knapping events are present: one containing cores and debitage and another containing microliths and debitage. These artefacts are recorded as containing quartz and acid volcanic rock material. Edge ground and flaked axes, grinding stones, anvil and hammerstones are also present within these places, comprised of a variety of materials, including greenstone, feldspar, diorite, granite, sedimentary stone (possibly sandstone), sandstone, basalt and other materials (see summary below and Table 8).

Aboriginal places within 200 metres of the Activity Area

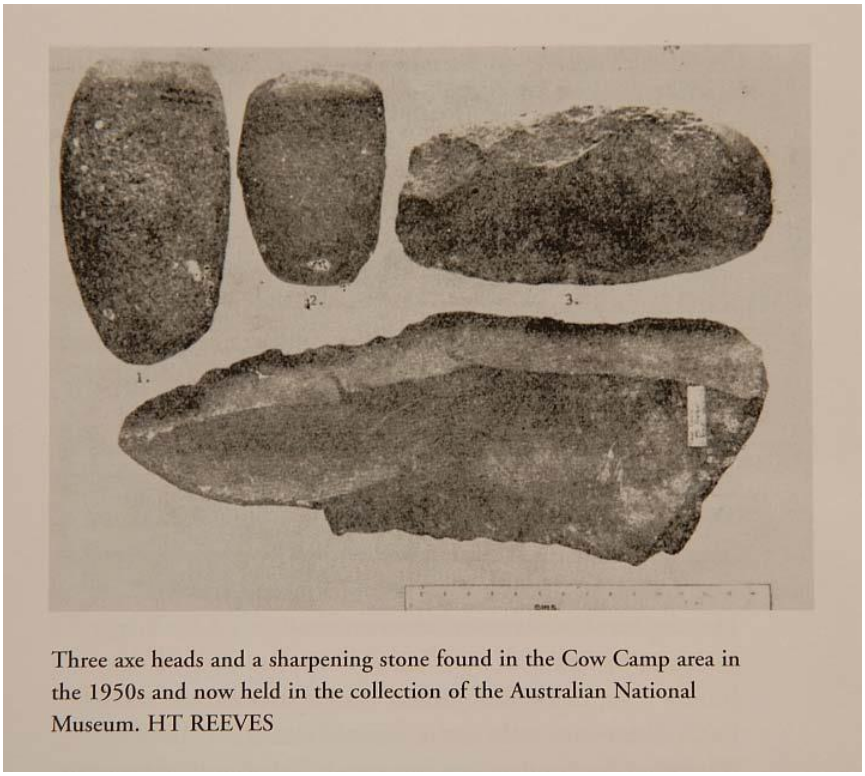
No Aboriginal places have been identified within, or within 200 metres of the current Activity Area (see Map 2).

Aboriginal places of particular relevance to the Activity Area within the geographic region

There is one Aboriginal place recorded at Mount Buller, which is discussed below. The remaining Aboriginal places are all recorded at Mount Sterling between 4.2 and 6.6 kilometres east of the Activity Area, these places are summarised in Table 8.

VAHR 8123-0003 (Mount Buller Cow Camp) is located approximately 1.5 kilometres east of the Activity Area and consists of three stone axes and a grinding stone located in a 'suitable' campsite location. This place was

registered based on an article authored by Paul Fisch and published in *The Victorian Naturalist* in 1953. The article details Fisch's trip to Mount Buller which occurred for three days in the middle of January, 1952. The artefacts recorded in the article include one feldspar porphyry broken ground edge axe head, one diorite ground edge axe head, one chiastolite slate axe head, which had been shaped by flaking, and one hard sedimentary *sharpening stone* containing a "well-worn grinding groove" (Fisch 1953). One of the axe heads was recorded as being hammer dressed and the axe comprised of diorite was recorded as "resembling rock from the Mount William aboriginal quarry" (Fisch 1953). The artefacts were located upon the ground surface and no additional archaeological investigation has been undertaken in order to determine the depth or extent of the place. According to Marshall et al (1999), any additional information that could be recovered from this Aboriginal place has most likely been destroyed by building construction during the development of Mount Buller Alpine Village. The artefacts recorded in 1952 are now held in the collection of the Australian National Museum.



Three axe heads and a sharpening stone found in the Cow Camp area in the 1950s and now held in the collection of the Australian National Museum. HT REEVES

Figure 13 Artefacts from VAHR 8123-0003 Australian National Museum Collection (Darby 2008)

Table 8 Aboriginal places within the geographic region

VAHR Place	Component Number and Type	Landform and Land Use	Place Details	Proximity to Activity Area
8123-0003 Mount Buller Cow Camp	1 - Artefact Scatter (surface)	Mt. Buller summit GMU 1.4.4	Three stone axes and a grinding stone located where Mount Buller Alpine Village is now constructed (see above for detailed summary).	1.5 km east
8123-0014 Mt Stirling 1	1 - Artefact Scatter (surface)	Base of a steep slope GMU 1.4.4	A hammerstone manufactured from metamorphosed sandstone (quartzite). The artefact is located at the peak of Mount Stirling and was recorded by Victorian	6.09 km east-north-east

VAHR Place	Component Number and Type	Landform and Land Use	Place Details	Proximity to Activity Area
			Archaeological Survey (VAS) staff in 1982. Little additional information is available on the place regarding its condition, as no place inspections have occurred since its original recording.	
8123-0015 Mt Stirling 2	1 - Artefact Scatter (surface)	Top of ridge GMU 1.4.4	An unused flake manufactured from acidic volcanic material, likely dacite. The artefact is located at the peak of Mount Stirling. As with VAHR 8123-0014, it was recorded by VAS in 1982 with minimal information and as no place inspections have occurred since its original recording there is no information on its condition.	6 km east-north-east
8123-0016 Mt Stirling 3	1 - Artefact Scatter (surface)	Top of ridge GMU 1.4.4	An unutilised flaked pebble found near the summit of Mount Sterling. As with VAHR 8123-0014, it was recorded by VAS in 1982 with minimal information and as no place inspections have occurred since its original recording there is no information on its condition.	5.7 km east-north-east
8123-0019 Mt Stirling 4	1 - Artefact Scatter (surface)	Saddle between two high points GMU 1.4.4	Surface artefact scatter 90x5 metres in size of 42 stone artefacts of chert, silcrete, quartz and basalt, including five microliths and a ground fragment. It is located on the saddle between two summits of Mount Stirling (Stanley Bowl), approximately 50 metres from VAHR 8123-0021. Dark grey to reddish brown thin soils over granite were noted. The area was noted to be eroded and damaged by vehicular access tracks and cattle trampling. The movement of artefacts was also attributed to water slope wash action and vehicles. The place was recorded by Aboriginal Affairs Victoria (AAV) staff in 1994. It was assessed by Muhlen-Schulte et al (1995) as being of high scientific significance and further archaeological investigation, including subsurface testing was recommended prior to any proposed development in the location.	6.6 km east
8123-0020 Mt Stirling 2	1 - Artefact Scatter (surface)	Ridge top GMU 1.4.4	Surface artefact scatter of 30x5 metres comprised of five artefacts manufactured of an acidic volcanic material (n=4) and quartz (n=1) on granitic soil. The four acidic volcanic artefacts (one core and three flakes) were considered to be from the same knapping event. The artefact scatter is located on a mountain ridge top in a disturbed context with the artefact scatter likely to have been graded over for the creating of a track/road. The place was recorded by Muhlen-Schulte et al (1995) and assessed as being of	6.03 km east

VAHR Place	Component Number and Type	Landform and Land Use	Place Details	Proximity to Activity Area
			moderate scientific significance, further archaeological investigation, including subsurface testing was recommended prior to any proposed development or track upgrade in the location.	
8123-0021 Mt Stirling 3	1 - Artefact Scatter (surface)	Mt. Stirling saddle GMU 1.4.4	Surface artefact scatter 1x4 metres in size of 12 stone artefacts of fine grained acid volcanic stone, including a backed microlith, and noted to possibly be a knapping event. Located on granitic soils in an eroded sheet wash exposure on the western side of the saddle between two summits of Mount Stirling (Stanley Bowl), approximately 50 metres from VAHR 8123-0019. The area was noted to be eroded and damaged by cattle trampling. VAHR 8123-0021 was assessed by Muhlen-Schulte et al (1995) as being of high scientific significance and further archaeological investigation, including subsurface testing was recommended prior to any proposed development in the location.	6.16 km east
8123-0022 Mt Stirling 5	1 - Artefact Scatter (surface)	Top of ridge GMU 1.4.4	A surface scatter of seven artefacts of chert, quartz and silcrete, including a silcrete microlith. Recorded in 4WD wheel ruts on a disturbed vehicle track. VAHR 8123-0022 was assessed by Muhlen-Schulte et al (1995) as being of high scientific significance and further archaeological investigation, including subsurface testing, was recommended prior to any proposed development in the location.	6.3 km east
8123-0023 Mt Stirling 6	1 - Artefact Scatter (eroding out of cut section)	On a ridge, large flat area with granite boulders GMU 1.4.4	Three artefacts, two (quartz and acidic volcanic stone flakes) recorded on the break of slope eroding out of section, and one amorphous lump of acidic volcanic stone 60 metres lower down on a track. Located at the 'cricket pitch' area of Mount Stirling. Although VAHR 8123-0023 was assessed by Muhlen-Schulte et al (1995) as being of low scientific significance, further archaeological investigation, including subsurface testing, was recommended prior to any proposed development in the location.	6.06 km north-east
8123-0024 Mt Stirling 7	1 - Artefact Scatter (surface and eroding from exposure)	Ridge saddle GMU 1.1.1	Low density surface scatter on 2x2 metre oarea comprised of one amorphous silcrete piece, two quartz flakes, and a recently broken in two greenstone axe, located 30 metres east of Razorback/Purcells Hut Complex. VAHR 8123-0024 was assessed by Muhlen-Schulte et al (1995) as being of moderate scientific significance, however the ground stone axe was considered a rare example of	5.25 km north-north-east

VAHR Place	Component Number and Type	Landform and Land Use	Place Details	Proximity to Activity Area
			this artefact type and additional artefacts were likely to be found in the area. Therefore, further archaeological investigation, including subsurface testing was recommended prior to any proposed development in the location. As the axe was considered to be highly threatened in this location it was collected and stored at AAV with permission of the cultural officer from Camp Jungai, until it could be stored appropriately by Camp Jungai.	
8123-0053 Stirling Black Track artefacts	1 and 2 - LDAD (surface) 3 – Object Collection	Mid slope west of the 'cricket pitch' GMU 1.4.4	Sandstone hammerstone and anvil recorded on Stirling Black Track and collected. The artefacts were recorded as an opportunistic find by a Gaye Sutherland, Heritage Advisor in 2015 and is stored in a display cabinet at Mount Stirling - Resort Management with permission from TLaWC.	5.96 km north-east
8123-0055 Bluff Spur Hammer Stone	1 - Low Density Artefact Distribution (surface)	Ridgeline GMU 1.4.4	Basalt hammerstone located on ridgeline 1.4 kilometres west of Mount Stirling summit. The artefact was recorded as an opportunistic find by a Gaye Sutherland, Heritage Advisor in 2015 and not collected.	5 km east-north-east
8123-0062 Pannican Creek Ground-Edge Axe	2 - Low Density Artefact Distribution (surface)	Not provided GMU 1.4.4	Greenstone ground edge axe. The artefact was recorded as an opportunistic find by a Gaye Sutherland, Heritage Advisor in 2020 and is stored in a display cabinet at Mount Stirling - Resort Management with permission from TLaWC.	4.2 km north-north-east

7.6.1 Aboriginal Historical References

There are no Aboriginal Historical References in the geographic region.

7.7 Previous work in the geographic region

The previous Aboriginal archaeological assessments which have occurred within the geographic region (n=25), are associated with specific infrastructure and walking/bike trails, as well as broad regional studies (Table 9). Eleven CHMPs (five Complex and six Standard) have been prepared within the geographic region, with none of these CHMPs recording any new Aboriginal places. A 340 square metres section of one CHMP has a very small section that overlaps a central eastern section current Activity Area (Murphy & Owen 2010). The reports reviewed below were associated with archaeological investigations which took place within the same landforms and geomorphological units which underlie the Activity Area and are deemed most pertinent for the information on the archaeological potential and subsurface nature of deposits likely to be encountered in the Activity Area.

Table 9 Summary of archaeological assessment types within the geographic region

Report type	Number	Percentage
CHMP Complex Assessment	5	21.7%
CHMP Standard Assessment	8	26.1%
Desktop or Paper or Due Diligence or Other	4	17.4%
Heritage Management	1	4.3%
Site Specific Investigation (not excavation)	1	4.3%
Survey	5	21.7%
Test Excavation and Survey	1	4.3%
Total	25	100.0%

Regional studies

Muhlen-Schulte et al (1995) prepared an Environment Effects Statement for Mount Stirling, approximately 4.1 kilometres east of the current Activity Area. They undertook a ground survey that resulted in the identification of six new Aboriginal archaeological places, five of which are within the present geographic region (VAHR 8123-0019, VAHR 8123-0020, VAHR 8123-0021, VAHR 8123-0022 and VAHR 8123-0024). The material was located within the alpine zone above the tree line. The assemblages contained non-local raw materials and included edge-ground axes, core and microliths. It was assessed that areas of flat ground on ridge lines and in hill saddles were sensitive for Aboriginal archaeological material as Aboriginal movement patterns through rugged terrain were likely to have followed ridge lines and saddles. Muhlen-Schulte et al (1995) noted that no systematic or comprehensive archaeological survey of the area had been conducted prior to this statement. Among other landforms, ridge tops, saddles and well drained, level to gently sloping ground were surveyed and two LDAD Aboriginal places VAHR 8123-0020 (Mount Stirling 2) and VAHR 8123-0023 (Mount Stirling 6) were located in Mount Stirling on flat ground along ridge lines with snow gum woodland. Both places were located in areas of minimal disturbance and high visibility. VAHR 8123-0020 (Mount Stirling 2) consists of five stone artefacts identified in a surface context on a crest of a ridge while VAHR 8123-0023 (Mount Stirling 6) consists of a quartz artefact and an acid volcanic rock flake identified in an area of erosion within 100 metres of a creek line. It was suggested that very poor ground surface visibility and ground surface disturbance many account for why no other artefacts were identified.

Marshall et al (1999) undertook an Aboriginal Heritage Management Study for the Mount Buller Alpine Village for which they undertook a targeted sample survey and subsurface testing, approximately 1.2 kilometres east of the present Activity Area. Ground surface visibility within their study area is described as poor, although concentrations of fractured quartz in either blocks or fragments were noted. The lack of identified archaeological material was attributed to the impact of previous development, ground surface obscured by grass and scree and the incline of the area which was unsuitable for occupation and not conducive for the deposition and accumulation of archaeological material. A subsurface testing program was undertaken which uncovered a large concentration of fractured quartz, none of which was culturally modified. The soil profile contained fine grained sandy clay with a high humic content and a large quantity of fractured quartz. The overall potential for Aboriginal archaeological material within their study area was considered to be low due to previous development causing ground disturbance and an undesirable location of Aboriginal use or occupation. No Aboriginal cultural heritage material was identified during this assessment.

Murphy (2001) undertook a cultural heritage assessment on land located immediately west of the Mount Buller village settlement on the mountain summit, approximately 770 metres east of the present Activity Area. The area comprises 3000 square metres of generally steep sloping land that has been subject to past developments relating to the ski resort. A ground surface survey was undertaken across the study area, with coverage of around 60%. However, the effective survey coverage of the study area that was achieved was assessed as being less than five percent due to low ground visibility. No Aboriginal places were recorded during the assessment. One location showing archaeological potential was identified at the level area north of the base of Burnt Hut Ski Run, however, a ground survey was not possible due to thick vegetation cover.

Cultural Heritage Management Plans (CHMPs)

A total of 13 CHMPs have been completed within the geographic region; six of these CHMPs ceased at the Standard Assessment for the following reasons: lack of Aboriginal cultural heritage found during the survey, lack of landforms likely to contain Aboriginal heritage and high levels of ground disturbance. No new Aboriginal places were registered as a result of the CHMPs completed.

Schlitz (2008) prepared standard CHMP 10467 for an alternative alignment for the proposed road link between Mount Buller and Mount Stirling, located within a majority of the proposed Corn Hill Entry to Delatite River and Woolybutt Extension tracks, 3.28 kilometres east of the present Activity Area. Schlitz's Activity Area was located within *GMU 1.4.4 Deeply dissected ridge and valley landscapes*. During the survey ground surface visibility was constrained by vegetation cover and was poor. Disturbance at the proposed road entry (Corn Hill Walking Track) was noted in the form of heavy machine activity. No Aboriginal cultural heritage material was identified during the survey. This was determined to be a result of the steep gradient within the Activity Area, which offered no level areas for typical short or long term Aboriginal campsite activity within this landform.

During the Standard Assessment, Schlitz (2008) found there was a low expectation that undetected Aboriginal cultural deposits would be present within the Activity Area. In addition, no Aboriginal cultural values were identified and no Aboriginal archaeological sites were identified. As a result, no Complex Assessment was required.

Schlitz (2009) completed a CHMP (10595) for the Australian Women's Ski Club Redevelopment at Mount Buller including an underground carpark and a new club premises. The Activity Area comprised 11,000 square metres of land to the south-west of the Mount Buller Village centre on the south side of The Avenue, approximately 1.6 kilometres east of the present Activity Area. The entire area was surveyed during the Standard Assessment via pedestrian survey. Ground surface visibility varied from 10% in cleared and vegetated areas to upwards of 50% on the outcrop. Extensive ground disturbances had occurred across the Activity Area due to heavy mechanical grading, installation of services and utilities and a nearby timber lodge. One area of Aboriginal cultural heritage potential was recorded as an outcrop on the north-west corner of the Activity Area. One 0.5 x 0.5 metre test pit was excavated over this outcrop to test the stratigraphy in this area. Modern materials were found within compact silt and gravels at depths of 220 millimetres. Due to the lack of deep deposits in the region and the amount of high impact ground disturbances, it was concluded that Aboriginal cultural heritage material was unlikely to occur in the area. No Aboriginal cultural material was identified during the CHMP.

Patton and Schlitz (2009) undertook a CHMP (10871) for the Alpine Club Victoria lodge redevelopment at Mount Buller involving the demolition of the existing lodge and construction of two new buildings. The Activity Area covered 813 square metres of land to the south-west of the Mount Buller Village Centre, on the southern side of The Avenue, approximately 1.55 kilometres east of the present Activity Area. A pedestrian survey was undertaken across the Activity Area with intervals of 2 metres between participants. Surface visibility was very poor at 5% due to thick vegetation, but portions were made visible by parting the vegetation. Extensive ground disturbances had occurred across the Activity Area due to heavy mechanical grading, installation of services and utilities and the nearby Alpine Club timber lodge. Two shovel probes (50 x 50 centimetres) were

excavated to test the stratigraphy of the flat surface behind the existing building and a third was excavated at the front of the building. The soil profile consisted of dark brown clayey loams over clay and granitic rock to depths between 350–450 millimetres. No Aboriginal cultural heritage was recorded during assessment. This was concluded to be the result of unsuitable landform structure (sloped) in the Activity Area, as well as extensive land use activity within the region that have greatly affected subsurface deposits.

Murphy and Owen (2010) prepared standard CHMP 11467 for the construction of new ski runs, chairlifts and snowmaking facilities in the Mount Buller Alpine Resort, of which approximately 340 square metres overlaps with the central-eastern extent of the current Activity Area. Murphy and Owen's Activity Area was predominately located within *GMU 1.4.4 Deeply dissected ridge and valley landscapes*. During the survey, Murphy and Owen (2010) observed that more than 60% of their Activity Area had been subject to previous ground disturbance and ground surface visibility was poor due to dense vegetation. It was determined that the remainder of their Activity Area remained vegetated, however due to the steep sloping nature of the site due to its location on the summit of Mt Buller it was unlikely that any Aboriginal cultural heritage material would be present. No Aboriginal cultural heritage material was identified during the Standard Assessment, as such a Complex Assessment was not required.

Robb and Cavanagh (Biosis Pty Ltd 2013) completed complex CHMP 12489 for proposed mountain bike trails, with the closest being 4.69 kilometres north-west of the present Activity Area, within geomorphological units 1.4.4 Deeply dissected ridge and valley landscapes and 1.3.2 Enclosed landscapes of low relief. During the survey dense vegetation, deep slopes and disused logging tracks were identified. Overall, ground surface visibility in the Activity Area was extremely low. Dense bracken fern, saplings, fallen trees and vegetation such as blackberry bush made any ground visibility difficult to access. While visibility was marginally better along the logging tracks, overall the ground surface visibility for the survey units was 1%. Areas of Aboriginal cultural heritage potential were identified along the Delatite River in two sections of flat ground and along rocky outcrops. However, these sections were deemed unlikely to contain any in situ cultural heritage materials. Whilst no Aboriginal cultural heritage was identified during the Standard Assessment, these findings demonstrated the potential for unrecorded Aboriginal cultural heritage therefore, a Complex Assessment was subsequently undertaken.

The Complex Assessment involved the excavation of four 1 x 1 metre test pits, each located in areas of Aboriginal cultural heritage potential. Test Pit 1, located on a rocky terrace above the Delatite River, was excavated to a maximum depth of 500 millimetres. The sediment profile was identified as a friable loam topsoil overlying a damp silt transitioning to a silty sand. Test Pit 2, located near the northern bank of the Delatite River along a flat alluvial plain, was excavated to a maximum depth of 240 millimetres. Fine silt over a sandy deposit was identified, with large granite cobbles transitioning to boulder present throughout. Test Pit 3 was located in the centre of an old logging road, Pinnacle Track, and was excavated to a maximum depth of 400 millimetres. Introduced fill (likely from the track construction) was identified above a natural profile of silt transitioning to silty clay. Test Pit 4 was placed at the beginning of an old logging road and was excavated to a maximum depth of 200 millimetres with a similar sediment profile as Test Pit 3. No Aboriginal cultural heritage material was identified during complex testing.

Cavanagh (2014) prepared a standard CHMP (12992) for the Mount Stirling Micro-hydroelectricity project, requiring the installation of a new generator and infrastructure at the Mount Stirling Alpine Resort, located approximately 3.8 kilometres north-east of the current Activity Area, within GMUs *1.4.4 Deeply dissected ridge and valley landscapes* and *1.1.1 Summit plateaux*. A survey was conducted on foot across the entirety of their Activity Area, beginning at the public facilities at Telephone Box Junction (TBJ). Surface visibility was limited between 0-10% due to the development in this area, dense vegetation, and also due to frequent leaf litter across the remaining areas of higher ground exposure. No areas sensitive for archaeological deposits were identified during the survey. It was concluded the sloping landform and eroding deposits were not conducive to Aboriginal occupation and the accumulation of archaeological material. No Aboriginal cultural heritage

material was recording during the survey, and as no sensitive deposits were identified a Complex Assessment was not undertaken.

Thomas (2014) undertook a CHMP (12912) for the Mount Buller off-stream storage dam. The Activity Area abuts the present Activity Area at the Summit Road car park (south-western extent of the present Activity Area). Geotechnical testing had been previously undertaken, indicating a soil profile of sandy silt and clays overlaying hard granite, basalt and sandstone approximately 490 millimetres deep. This stratigraphy was confirmed by subsurface testing which included the excavation of two test pits and 46 shovel test probes to a maximum depth of 600 millimetres. No Aboriginal cultural heritage material was identified during the investigation. **Biosis** (2016 amendment) prepared an amendment to this CHMP with a slightly altered Activity Area, with removal of two outlying parts of the development footprint and the addition of two small areas to the original Activity Area. The changes to the Activity Area for the CHMP were considered unlikely to impact any cultural heritage and no additional fieldwork was required.

Cavanagh and Houghton (2015) conducted a Standard Assessment (CHMP 13391) for the proposed Fawlty Towers development on Mount Buller (now Whitehorse Village). The Activity Area is located approximately 1.1 kilometres east of the present Activity Area. The desktop assessment found that the most likely Aboriginal place type to occur within the geographic region were artefact scatters consisting of one or more stone artefacts. These were most commonly recorded on high ground overlooking alluvial valleys. Although their area of investigation was located on elevated, relatively flat to sloping ground overlooking the surrounding landscape, previous archaeological investigation (surface and subsurface) did not identify any archaeological material of Aboriginal cultural significance. No Aboriginal places or areas of potential were identified during the Standard Assessment. As it was determined that there was low potential for subsurface Aboriginal cultural heritage material to be present within the area of investigation, a Complex Assessment was not conducted. This CHMP was amended in 2017 to include a change to the activity from a proposed hotel to 10 chalets (rather than six) and a café/apartment. The Activity Area did not change.

Edwards and White (2017) undertook a CHMP (14793) for the proposed demolition of an existing lodge building and the construction of four chalets at the corner of The Avenue and Breathtaker Road, Mount Buller, approximately 1.3 kilometres east of the present Activity Area. A ground survey identified a number of areas of previous ground disturbance within the Activity Area including existing ski lodge buildings, driveways, drain and utility covers. Ground surface visibility was poor due to heavy vegetation and snow in those areas of low disturbance. It was determined that due to previous disturbances the likelihood of subsurface Aboriginal cultural heritage was extremely low and a Complex Assessment was not required.

Edwards and Aitchison (2018) conducted a CHMP (15649) for the proposed construction of cabins, carparks and pedestrian access at RMB Workshop Road, Mount Buller, approximately 1.15 kilometres east of the present Activity Area. During the Standard Assessment, ground surface visibility was identified as very poor due to the thick alpine vegetation and modified ground surfaces. No areas of archaeological potential were identified in the Activity Area during the Standard Assessment. It was determined highly unlikely for subsurface Aboriginal cultural heritage to remain in the Activity Area. This was due to past ground disturbing activities such as removal of native vegetation, the construction of the existing roads and tracks and the installation of utilities. No Aboriginal places were identified during the assessment.

Aitchison and Fitzgerald (2019) completed a CHMP (16352) for the proposed construction of a garage associated with the existing Mount Buller Police Station located approximately 1.86 kilometres east of the present Activity Area. A desktop assessment found potential for Aboriginal cultural heritage to be found in subsurface conditions, based on its location in the high plains ridge top and in close proximity to Alpine watercourses. A Standard Assessment was undertaken to access the Activity Area, this included a pedestrian survey which found poor ground surface visibility and some disturbances due to the construction of a residence and makeshift driveway. A Complex Assessment was undertaken comprising of the excavation of

one 1x1 metre test pit and three 50 x 50 centimetre shovel test pits. Excavations showed clayey sand overlying granodiorite rocks at a maximum depth of 250 millimetres. They also revealed modern disturbance through glass fragments and metal wire inclusions in the upper 100 millimetres. No Aboriginal cultural heritage was identified during subsurface testing.

McFadyen et al (2021) completed a CHMP (17675) to Standard Assessment level prior to the development of three mountain bike trails in the Taungurung RAP area. The result of the Desktop Assessment was that there was potential for Aboriginal material culture to be present on river or creek flats, terraces or slopes within 100 metres of major waterway. Although much of the Activity Area could not be accessed during the Standard Assessment, the survey was sufficient to conclude that due to the moderate to steep slopes, the presence of Aboriginal places was unlikely. Therefore, Complex Assessment was not deemed to be practical or necessary. Management conditions included a copy of the CHMP to be onsite during works, a cultural heritage induction and compliance inspections.

Lushey and Bell (2022) completed a CHMP (18597) to a Standard Assessment level. The Desktop Assessment noted that stone artefacts were the most likely Aboriginal material to be found, and these may occur on flat ground and close to waterways. The Standard Assessment found that the high levels of disturbance from historical land use and the steep slope made the presence of Aboriginal material unlikely, therefore a Complex Assessment was not required. Management conditions included a copy of the CHMP to be onsite, a protocol for communication, notification to the RAP of commencement of works, , a cultural heritage induction and compliance inspections.

7.8 Prediction statement

Based on the above review of the geographic region, including its environment, recorded Aboriginal places, previous archaeological assessments and information on the activities of Aboriginal people, a place prediction statement has been developed. This utilises the existing regional information in order to target landforms which might have archaeological potential during the Standard Assessment. The place prediction statement acts as a guideline for designing the ground survey strategy and identifies key points for consideration (Table 7).

Table 10 Predicted Aboriginal place types in the Activity Area

Place type	Description	Likelihood within the Activity Area
Artefact distributions	Artefact distributions consisting of one or more stone artefacts are associated with tool production, domestic activities and resource procurement. Scatters and isolated finds are most likely to occur on river or creek flats, terraces or slopes within 100 metres of major water courses.	All Aboriginal places within the geographic region have comprised artefact distributions (n= 13). These have been found on rise landforms such as ridges, and on level land within saddles, including the saddle adjacent to the summit of Mount Stirling. All Aboriginal places were identified in surface contexts, with the remainder identified within eroding exposures. Given the nature of the Activity Area, and its location within the alpine landscape, which includes landforms around the summit of Mount Buller with saddles and a broad gentle slope, there is low-moderate likelihood of surface artefact distributions

		to be present within the current Activity Area. In particular, where the Activity Area crosses within 100 metres of a waterway and where it passes over the summit, saddles and areas with a less pronounced slope that have not been subject to historical and modern disturbances.

7.9 Summary and Conclusions from the Desktop Assessment

The geographic region is centred within an alpine landscape comprised of steep-sided ridges, dissected streams and large valleys. The geographic region is within the geomorphological units 1.*1.1 - Summit plateaux (Mount. Bogong, Baw Baw, Buffalo, Mount Wills)*, *1.1.4 - Capped (basalt) plains (Mount. Jim-Bogong High Plains, Dargo Plains, Nunniong Plains)*, *1.3.2 Enclosed landscapes of low relief*, *1.4.3 Escarpments, gorges* and 1.*4.4 Deeply dissected ridge and valley landscapes*. Within the Activity Area, the landscape will likely feature a variation of ridges with high plateaus, broad ridges with flattened or rounded crests, low reliefs bordered by higher and steeper landscapes, and stable slopes. The waterways that are the closest to the Activity Area are Buller Creek, South Buller Creek and Boggy Creek, which would have provided rich resources including fish and plant life. Elevated, flat landforms in proximity to these waterways would have been appealing to Aboriginal people for short or long-term encampment.

The named group who occupied the Activity Area were the *Mogullumbidj*, who held land as far south as Dandongadale and the Wabonga Plateau to the back of Mount Buller (Durrant 2020, p. 24). The alpine region was important to Aboriginal groups for the harvesting of Bogong moths which provided a plentiful harvest as well as being an important social activity during the moth harvesting season, where marriage arrangements, trade and entertainment took place.

A total of 13 Aboriginal places have been recorded within the geographic region. No Aboriginal places have been recorded within 200 metres of the Activity Area. All Aboriginal archaeological place types in the geographic region are artefact scatters or LDADs. Most Aboriginal places within the geographic region are located near or on Mount Stirling and the majority of these were recorded on saddles or on ridges. The nearest Aboriginal place to the Activity Area, VAHR 8123-0003 (Mount Buller Cow Camp), is located approximately 1.5 kilometres east and comprises three axe heads and one sharpening stone. VAHR 8123-0003 is the only Aboriginal place recorded at Mount Buller and is considered to be a significant place as it contains several formal tools of varying raw materials, including greenstone, thought to have been traded from the Mount William Quarry. These stone artefacts provide evidence for the Aboriginal occupation of the land and surrounds. Identification of surface cultural material does indicate that at the time, impacts to the ground surface were minimal, at least up until the 1950s when these artefacts were recorded. While the artefacts were identified in a surface context, this does not preclude the potential for subsurface archaeological deposits to remain within the wider area (and within the Activity Area) should suitable landforms and soil deposition be present

All but one Aboriginal place in the geographic region were identified on *GMU 1.4.4 Deeply dissected ridge and valley landscape*s. The Activity Area is situated partly within this GMU, the remainder of the Activity Area is in *GMU 1.1.4 Capped (basalt) plains (Mount. Jim-Bogong High Plains, Dargo Plains, Nunniong Plains)*, which includes a saddle between the summit and a lower peak to the east, a narrower saddle to the north-east of the peak, and a broad gentle slope towards Summit car park. While the previous findings may suggest a higher likelihood for Aboriginal cultural material to be found within components of the Activity Area which traverse GMU 1.4.4, GMU 1.1.4 covers a comparatively small area confined to Mt Buller summit and has not been

subject to a comparable level of archaeological investigation. The findings of Muhlen-Schulte et al. (1995) indicate that Aboriginal places are most likely to be located in areas of flat ground such as saddles or ridges.

Land use history revealed that the Activity Area and surrounding landscape was impacted by non-Aboriginal settlers during the 19th century when pastoralists drove their cattle into the high plains seasonally. During the 20th century, logging and tourism was prevalent in the alpine region, leading to the development of the Mount Buller Alpine Resort. In terms of tourism development, the Activity Area has been disturbed by the construction of Grimus Chairlift – Top, the pylons of Summit Chairlift within the Activity Area and works around Summit Chairlift – Top. Several trails including the trail to the summit of Mount Buller, which has been cut into the rocky outcrop and paved with flat rocks and has a small cairn constructed along it, and trails to McLaughlin's Shoulder from the Summit Road carpark and a number of trails from the west, south-west and east, and ski runs on the slope of Mount Buller. The remainder of the Activity Area is largely undisturbed since 19th century cattle movement, as seen in aerial and satellite images between the mid-1940s and 2019. In addition, ground disturbances associated with the installation of telecommunications assets are present within the Activity Area to the west of the top chairlift stations, if electricity assets associated with the top chairlifts was installed underground, these would have caused disturbance also.

A review of the previous archaeological assessments in the geographic region was completed to determine possible areas of archaeological sensitivity that will aid in identifying the potential for and types of Aboriginal cultural heritage within the Activity Area. Of the 11 CHMPs reviewed, six were completed to Standard Assessment on the basis of ground disturbance, undetected Aboriginal cultural deposits and values, and the presence of steep gradients which would not provide a suitable location for camping. Generally, it was assessed that areas of flat ground (ridgelines and ridge saddles) would be sensitive for Aboriginal archaeological material, when investigated, these landforms occasionally contained Aboriginal cultural heritage in very low densities. However, a number of archaeological investigations have been conducted within the Mount Buller Alpine Resort (within close proximity to the current Activity Area) and no Aboriginal archaeological places have been identified. Although areas of Aboriginal archaeological potential were initially identified during Desktop Assessments (or comparable assessments), following field investigation (either during a Standard Assessment or comparable assessment), these areas were generally assessed as either being subject to high levels of disturbance, unsuitable landforms (such as steep slopes) or did not retain A horizon soils due to erosion or sheet wash as a result of high water flow during snow melt.

Previous complex CHMPs which included subsurface testing showed soil profiles of fine grained sandy clay with a high humic content and a large quantity of fractured quartz, and sandy silt and clays overlaying hard granite, basalt and sandstone. Excavations generally ceased at underlying rock bases and were excavated to maximum depths of approximately 600 millimetres. Subsurface testing also revealed varying levels of disturbance associated with the development of Mount Buller Alpine Village, with these investigations indicating that there is a low potential across the Mount Buller Alpine Resort due to the extent of ground disturbance present. However, it is noted that the environmental, ethno-historical and archaeological information available for the wider area indicates that Aboriginal people utilised the area for encampment and subsistence practices, and evidence of this use may still remain in areas that have been subject to lower levels of disturbance.

In consideration of the Activity Area, which is situated on the summit of Mount Buller, with two saddles, and a broad gentle slope and is a landscape with aspect, which have been shown to retain moderate archaeological potential.. It is noted that the Activity Area has been subject to varying disturbances, in particular the ongoing expansion and use of the Mount Buller Alpine Resort since 1950. As a result of this previous ground disturbance, it is likely that any unrecorded Aboriginal cultural heritage which may be present within the Activity Area within the disturbed areas (such as trails, ski runs, chair lifts and pylons and underground assets) has either been impacted or displaced. Where the impacts of these disturbances are lessened within the Activity, suitable landforms with the potential for subsurface Aboriginal archaeological deposits may remain.

As a result, there is a low-moderate likelihood for Aboriginal cultural heritage material to occur within the Activity Area.

The results of the Desktop Assessment have indicated that it is reasonably possible for unidentified Aboriginal cultural heritage material to be within the Activity Area. Therefore, as per Regulation 62(1), it is necessary to undertake a Standard Assessment.

8 Standard Assessment

The following section contains the results of the Standard Assessment. The Standard Assessment was prepared in accordance with Regulation 63 and Clause 8(1), Schedule 2 of the Aboriginal Heritage Regulations 2018.

8.1 Aims

The aims of the Standard Assessment are to:

- Identify and record any surface Aboriginal cultural heritage material.
- Identify landforms with the potential for subsurface Aboriginal cultural heritage material.
- Ascertain the extent of ground disturbance resulting from previous land use activities and natural processes.
- Assess whether a Complex Assessment is required.

8.2 Methodology

The Standard Assessment was completed on 7 December 2021. The ground survey was supervised by Zachary Carter, Biosis Pty Ltd, with assistance from Troy Wilkinson and Matt Antonopoulous from Taungurung Land and Water Council (see Section 6.2). Prior to the commencement of the Standard Assessment, the representatives were invited to share any knowledge they had of the area. Whilst no specific oral history was provided, representatives did comment that they believed that area would have been seasonally visited during the warmer months.

For the purpose of the Standard Assessment, the Activity Area was divided into 3 survey units (Table 11). Survey units were divided based on differing landforms within the Activity Area.

Table 11 Description of survey units in the Activity Area

Survey Unit	Land Use	Features	Size (ha)
Survey Unit 1	Ski slope and walking trails	Mountain face - Very steep with large rocky outcrops	1.176886
Survey Unit 2	Pre-existing walking trail	Fire Tower Trail - Pre-existing trail with carved stone steps	0.395776
Survey Unit 3	Ski slope	Mountain saddle and summit	0.342468

The Standard Assessment was completed by traversing the Activity Area on foot at intervals of 2 metres between survey participants. Full survey coverage of the Activity Area was undertaken and views of the Activity Area were recorded using Nikon AW 120 camera. Field notes were also taken recording ground conditions, the vegetation type, landform and details of areas of archaeological potential for Aboriginal cultural heritage. The location of ground survey area is shown on Map 4.

No mature indigenous trees were present within the Activity Area.

No Aboriginal cultural heritage material was recorded.

Following the completion of the ground survey, discussions were held with the Aboriginal representatives to establish cultural heritage management requirements for the Activity Area including whether a Complex Assessment was required.

8.3 Results

Table 12 Survey unit 1

Survey team	
Heritage advisor	Zachary Carter (Biosis Pty Ltd)
Aboriginal representatives	Troy Wilkinson and Matt Antonopoulous (TLaWC)
Methodology	
Survey method	Systematic pedestrian.
Date survey completed	7 December 2021
Attributes	
Obstacles	Heavy and rolling cloud impacting visibility. Survey impeded by steep inclines.
Mature trees	No mature trees were identified during the Standard Assessment.
Caves or rock shelters	No caves or rock shelters were identified during the Standard Assessment.
Assessment of archaeological potential	
No areas of archaeological potential were identified. This primarily due to the steep slopes observed across the Activity Area and natural periods of high snowfall. While some suitable landforms for subsurface deposits were observed in the form of flat, open spaces on the mountain face, snowmelt after periods of high snowfall is highly likely to have resulted in the displacement of any remnant soils downslope. As a result, there is negligible archaeological potential present.	
Aboriginal Cultural Heritage	
No Aboriginal cultural heritage was identified within Survey Unit 1.	

8.3.1 Discussion of Results from Survey Unit 1

Survey Unit 1 (SU1) is situated on a mountain face with small sections of shallow, flat, open spaces of approximately 3 – 6 square metres, with frequent rocky outcrops across the survey unit. SU1 is generally very steep with sharp inclines, although limited instances of flat, open areas were observed. The soil type was a dry silt with a high proportion of degrading rock, with predominate vegetation comprised of short, dense grasses. The previous and current land use include ski slopes and informal walking trails. Disturbances were

present within SU1 including ski infrastructure and the presence of man holes for subsurface utilities. The ground surface visibility across SU1 was 0-5%, with grass and moss covering the majority of the survey unit. Whilst three areas which demonstrated potential were identified on flat open spaces on the mountain face, no suitable soil deposition with the potential to contain subsurface Aboriginal archaeological deposits was observed. This is likely due to natural periods of high snowfall and subsequent snowmelt periods displacing any remnant soils downslope from the Activity Area. As a result, there is negligible archaeological potential present within SU1.

Photograph 1 Typical landforms within SU1 (facing west) (Z. Carter 7/12/21)

Photograph 2 Example of ground disturbance within SU1 (Z. Carter 7/12/21)

Photograph 3 Typical ground surface visibility within SU1 (Z. Carter 7/12/21)

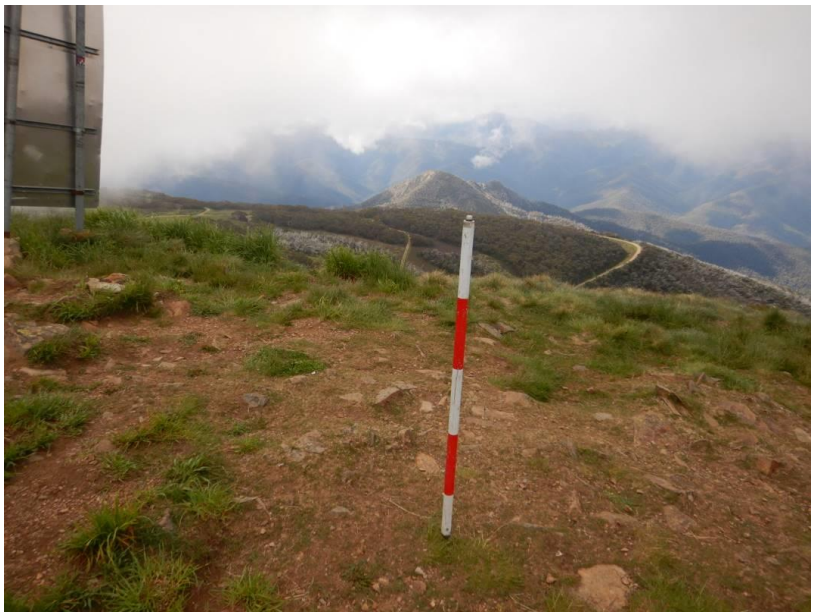
Table 13 Survey Unit 2

Survey team	
Heritage advisor	Zachary Carter (Biosis Pty Ltd)
Aboriginal representatives	Troy Wilkinson and Matt Antonopoulous (TLaWC)
Methodology	
Survey method	Systematic pedestrian.
Date survey completed	7 December 2021
Attributes	
Obstacles	Heavy and rolling cloud impacting visibility. Survey impeded by steep inclines.
Mature trees	No mature trees were identified during the Standard Assessment.
Caves or rock shelters	No caves or rock shelters were identified during the Standard Assessment.
Assessment of archaeological potential	
No areas of archaeological potential were identified. This due to the level of disturbance observed and the lack of suitable landforms for soil retention, in association with natural periods of high snowfall and subsequent snowmelt periods displacing any remnant soils downslope. As a result, there is negligible archaeological potential present.	
Aboriginal Cultural Heritage	

No Aboriginal cultural heritage was identified within Survey Unit 2.

8.3.2 Discussion of results from Survey Unit 2

Survey Unit 2 (SU2) is situated on a ridge and summit of a mountain. The survey unit covers a section of the Activity Area where there is a pre-existing trail which extends towards the fire tower. Sections of carved stone steps are present along the trail, with a high proportion of exposed rocky outcrops across the survey unit. The survey unit is steady with sharp inclines. The soil type was a dry silt with a high proportion of degrading rock, with predominate vegetation comprised of short, dense grasses. The previous and current land use include ski slopes and informal walking trails. Disturbances were present within SU2 include the pre-existing trail, carved stone steps, historic marker and fire tower. The ground surface visibility across SU2 was 0-5%, with grass and moss covering the majority of the survey unit. Due to the level of disturbance observed and the lack of suitable landforms for soil retention, in association with natural periods of high snowfall and subsequent snowmelt periods displacing any remnant soils downslope. As a result, there is negligible archaeological potential present within SU2.



Photograph 4 Typical landforms within SU2 (facing east) (Z. Carter 7/12/21)

Photograph 5 Example of ground disturbance within SU2 (Z. Carter 7/12/21)

Photograph 6 Typical ground surface visibility and disturbance within SU2 (Z. Carter 7/12/21)

Table 14 Survey Unit 3

Survey team	
Heritage advisor	Zachary Carter (Biosis Pty Ltd)
Aboriginal representatives	Troy Wilkinson and Matt Antonopoulous (TLaWC)
Methodology	

Survey method	Systematic pedestrian.
Date survey completed	7 December 2021
Attributes	
Obstacles	Heavy and rolling cloud impacting visibility. Survey impeded by steep inclines.
Mature trees	No mature trees were identified during the Standard Assessment.
Caves or rock shelters	No caves or rock shelters were identified during the Standard Assessment.
Assessment of archaeological potential	
No areas of archaeological potential were identified. This primarily due to the steep slopes observed across the Activity Area and natural periods of high snowfall. While some suitable landforms for subsurface deposits were observed in the form of flat, open spaces on the mountain face, snowmelt after periods of high snowfall is highly likely to have resulted in the displacement of any remnant soils downslope. As a result, there is negligible archaeological potential present.	
Aboriginal Cultural Heritage	
No Aboriginal cultural heritage was identified within Survey Unit 3.	

8.3.3 Discussion of results from Survey Unit 3

Survey Unit 3 (SU3) is situated on a mountain saddle and peak, with frequent rocky outcrops across the survey unit. The survey unit is steady with sharp inclines. The soil type was a dry silt with a high proportion of degrading rock, with predominate vegetation comprised of short, dense grasses. The previous and current land use include ski slopes. There is minimal evidence of disturbance present across the survey unit. The ground surface visibility across SU3 was 0-5%, with grass and moss covering the majority of the survey unit. Whilst a saddle landform was identified within SU3, no suitable soil deposition with the potential to contain subsurface Aboriginal archaeological deposits was observed. This is likely due to natural periods of high snowfall and subsequent snowmelt periods displacing any remnant soils downslope from the Activity Area. As a result, there is negligible archaeological potential present within SU3.

Photograph 7 Typical landforms within Survey Unit 3 (facing east) (Z. Carter 7/12/21)

Photograph 8 Example of ground disturbance within SU3 (Z. Carter 7/12/21)

Photograph 9 Typical ground surface visibility within SU3 (Z. Carter 7/12/21)

8.4 Effective Survey Coverage

The survey effort assessed each survey unit within the Activity Area and factored in variables such as vegetation coverage and ground disturbance, and how these have affected ground surface exposure. The effective survey coverage calculation assesses the average percentage of ground surface visibility across the areas covered during survey within the Activity Area. The Activity Area covers an area measuring 1.915 ha / 19,150 square metres and the total Activity Area was physically surveyed. The observed GSV ranged between 0% and 5%. The effective survey coverage calculation for the entire Activity Area was 5% and 957.5 square metres.

8.5 Conclusions from the Standard Assessment

The Desktop Assessment determined that it was reasonably possible for unidentified Aboriginal cultural heritage material to be within the Activity Area. Aboriginal places were identified as being likely to occur as surface artefact distributions located at the summit and saddle of the mountain, and in areas with less pronounced slopes. For completion of this CHMP a Standard Assessment was necessary to investigate whether unidentified Aboriginal cultural heritage material is located within the Activity Area and determine the extent of prior ground disturbances.

The Standard Assessment involved a systematic pedestrian survey of the Activity Area, however there were inaccessible areas including very steep inclines and areas where buildings such as the fire tower were located. GSV was severely hampered by dense ground vegetation throughout the Activity Area. A number of disturbances were noted across the Activity Area, including manholes with access to subsurface utilities, signs, a fire tower, chairlift infrastructure, a current path and carved stone steps.

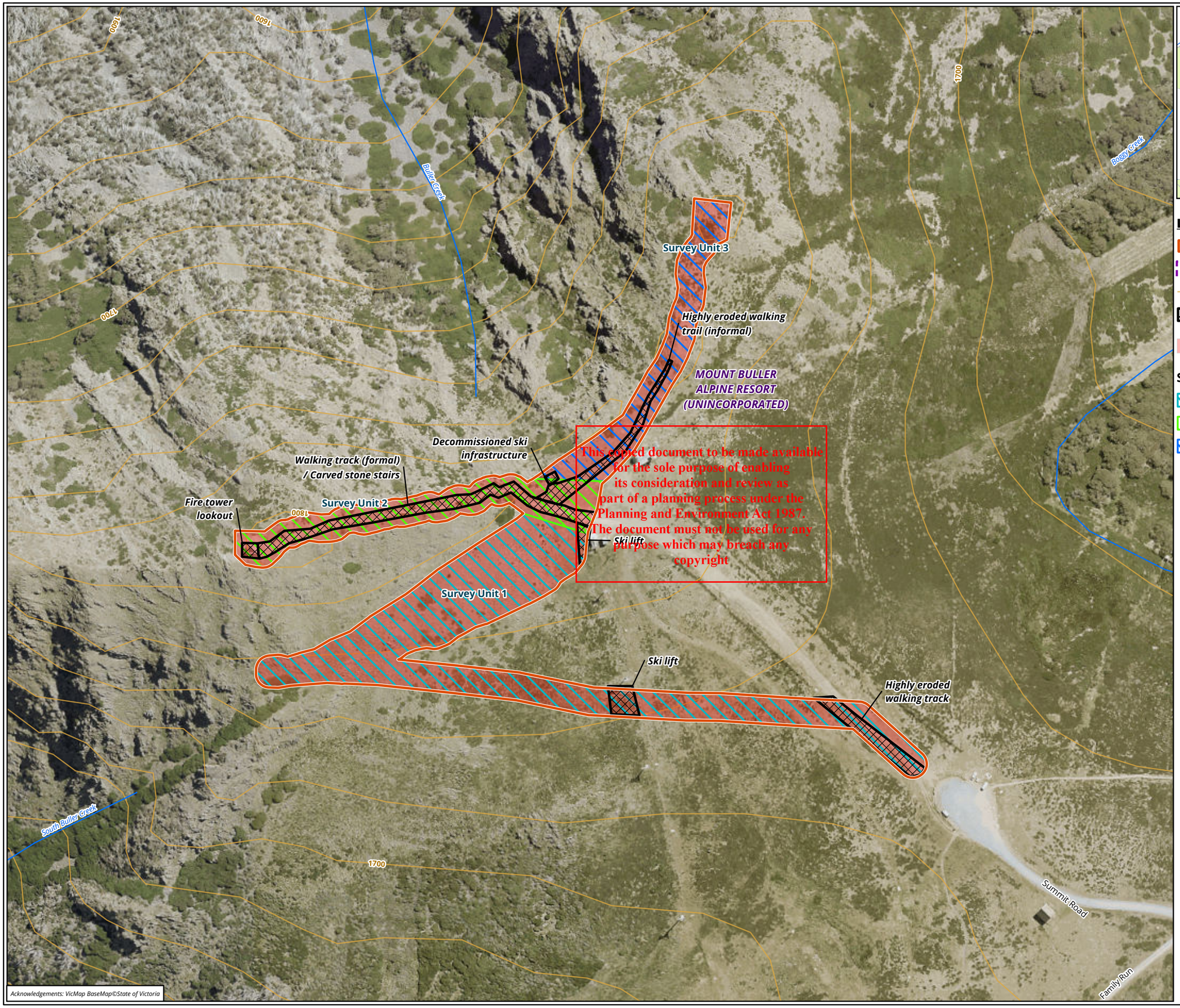
GSV across the Activity was low 0-5% throughout, which was reflected in the effective survey coverage calculation for the entire Activity Area equalling 5% and 957.5 square metres. The Activity Area was divided into three survey units for ease of mapping and reporting and were divided based on landform. No unidentified Aboriginal places were located during the ground survey. No areas of archaeological potential were identified within the Activity Area. This assessment was concluded due to the natural periods of high snowfall and subsequent snowmelt periods that occur within the Activity Area. These events are highly likely

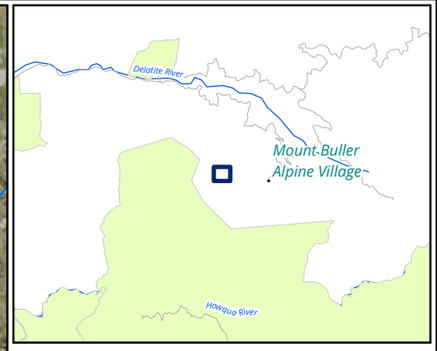
to have resulted in the displacement of remnant soils downslope due to the large scale sheet wash. This natural movement of sediment, as has been observed previously in other investigations, is highly likely to have removed any Aboriginal archaeological material or deposits that may have previously existed within the Activity Area. As such, there is negligible archaeological potential present within the subsurface.

No Aboriginal Cultural heritage was identified during the Standard Assessment.

As per Regulation 64(1), a Complex Assessment is required if the Desktop and/or Standard Assessment have identified areas likely to contain Aboriginal cultural heritage within the Activity Area. The results of the Standard Assessment identified that it is unlikely for Aboriginal cultural material to remain in either surface or subsurface contexts. As a result of this assessment and consultation with TLaWC, it has been determined that Complex Assessment is not required to assess the potential impacts to Aboriginal cultural heritage. However, it was identified during consultation with TLaWC Heritage Advisors that in order to ensure that impacts to Aboriginal cultural heritage are wholly mitigated for during the construction program for the activity, a condition that includes targeted supervision of ground disturbing works at areas that were proposed for Complex Assessment should be included in the CHMP.

Compliance conditions regarding this supervision of works are outlined in Section 1 of the CHMP.





Legend

- Activity Area
- Local government area
- Contour 20m interval
- Areas of ground disturbance
- Area of ground survey - 0-5% ground surface visiblity (gsv)

Survey Units

- Survey Unit 1
- Survey Unit 2
- Survey Unit 3

ESC:
5% (957.5 square metres)

Map 4 Results of the Standard Assessment

0 20 40 60 80 100
Metres
Scale: 1:2,000 @ A3
Coordinate System: GDA 1994 MGA Zone 55

biosis

N

Matter: 36075, CHMP: 18340,
Date: 24 March 2022 ,
Prepared for: LA, Prepared by: DK, Last edited by: dkang
Layout: 36075_M4_Std_Assessment
Project: P:\36000s\36075\Mapping\36075_MtBuller_McLachlin'sShoulder_CHMP.aprx

9 Consideration of Section 61 matters – Impact Assessment

No Aboriginal cultural heritage has been identified within the Activity Area. As such, no harm mitigation measures have been deemed as required in relation to the proposed activity.

9.1 What are the cumulative impacts on Aboriginal cultural heritage in the Activity Area?

Cumulative impacts of Aboriginal cultural heritage have been considered based on the combination of the overall impact of development within the geographic region, and how this development has impacted Aboriginal cultural heritage.

The limitations of a cumulative impact assessment on Aboriginal cultural heritage material is that the amount of recorded Aboriginal cultural heritage material is finite; and no region (however well-investigated) has been the subject of a comprehensive and systematic survey from which Aboriginal cultural heritage base data can be absolutely defined. The base datum for assessment must rely on Aboriginal cultural heritage material that has been identified, recorded and preferably preserved in situ in order to determine a calculation of loss.

First Peoples – State Relations' Guide to Preparing a Cultural Heritage Management Plan states that:

> An assessment of the likely impacts on Aboriginal cultural heritage of the Activity should also include consideration and assessment of the cumulative impact of the Activity on Aboriginal cultural heritage in the Activity Area in relation to the Aboriginal cultural heritage of the region.

At present, there are no agreed criteria or explicit guidance on a method for assessing potential cumulative effects on Aboriginal cultural heritage material. The following methodology has been developed based on advice from First Peoples – State Relations, in order to consider regional/landform factors relevant to the current CHMP.

Thirteen Aboriginal places were recorded within the geographic region, these were all artefact scatters or isolated finds recorded variously as artefact scatters, object collections or LDADs. Of these, 10 Aboriginal places (76.92%) were not impacted by development at the time of recording, of these, nine have not been inspected since 1982 or 1995, and one was recorded in 2020. The remaining three artefact distributions of ground artefacts have been collected and stored, with the location of one of these places (VAHR 8123-0003), which was collected in 1952, likely to have been destroyed when Mount Buller Alpine Village was constructed (see Table 15).

Table 15 Impacts to Aboriginal places within the geographic region

VAHR Place	Place Type	Current condition	Impact
8123-0003 Mount Buller Cow Camp	Artefact Scatter	Location destroyed by construction of Mount Buller Alpine Village and artefacts collected stored at Australian National Museum	Artefacts collected – in storage Location - Destroyed
8123-0014 Mt Stirling 1	Artefact Scatter	Unknown	No impact when recorded
8123-0015 Mt Stirling 2	Artefact Scatter	Unknown	No impact when recorded
8123-0016	Artefact Scatter	Unknown	No impact when

VAHR Place	Place Type	Current condition	Impact
Mt Stirling 3			recorded
8123-0019 Mt Stirling 4	Artefact Scatter	Unknown	No impact when recorded
8123-0020 Mt Stirling 2	Artefact Scatter	Unknown	No impact when recorded
8123-0021 Mt Stirling 3	Artefact Scatter	Unknown	No impact when recorded
8123-0022 Mt Stirling 5	Artefact Scatter	Unknown	No impact when recorded
8123-0023 Mt Stirling 6	Artefact Scatter	Unknown	No impact when recorded
8123-0024 Mt Stirling 7	Artefact Scatter	Unknown	No impact when recorded
8123-0053 Stirling Black Track artefacts	LDAD	Artefacts collected stored at Mount Stirling Resort Management in display cabinet.	Artefacts collected – in storage
8123-0055 Bluff Spur Hammer Stone	LDAD	Artefact left in location	No impact when recorded
8123-0062 Pannican Creek Ground-Edge Axe	LDAD	Artefacts collected stored at Mount Stirling Resort Management in display cabinet.	Artefacts collected – in storage

The Desktop, Standard and Complex Assessment concluded that due to significant historical and modern impacts to the Activity Area, there was a low likelihood for Aboriginal heritage. The assessment recorded high levels of ground disturbance across most of the Activity Area, likely associated with the modification of the landscape to existing infrastructure associated with the ski resort. It was noted through the background research for the assessment and through the completion of the Standard Assessment that parts of the Activity Area have been wholly modified to support this use.

Future archaeological investigations, such as those triggered by the CHMP process for the region have the potential to identify areas with a higher likelihood for Aboriginal cultural heritage to occur such areas with lower levels of disturbance away from existing ski infrastructure.

Impact to this Activity Area is not likely to contribute to the cumulative impact of Aboriginal heritage in the region.

9.2 Are there particular contingency plans that might be necessary?

In accordance with Section 61 of the *Aboriginal Heritage Act 2006*, a CHMP must consider any contingency plans required in relation to disputes, delays and other obstacles that may affect the conduct of the activity. Contingencies plans are presented in full in Section 2.

9.3 What custody and management arrangements might be needed?

In accordance with Section 61 of the *Aboriginal Heritage Act 2006*, a CHMP must consider requirements relating to the custody and management of Aboriginal cultural heritage collected during the course of the proposed activity. No Aboriginal cultural heritage was recorded during the preparation of the CHMP, however, contingency plans for the custody and management of Aboriginal cultural heritage collected during the activity are presented in full in Part 1.

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Appendix 1 Notice of intention to prepare a CHMP

Notice of Intent to prepare a Cultural Heritage Management Plan for the purposes of the *Aboriginal Heritage Act 2006*

This form can be used by the Sponsor of a Cultural Heritage Management Plan to complete the notification provisions pursuant to s.54 of the *Aboriginal Heritage Act 2006* (the "Act").

For clarification on any of the following please contact Victorian Aboriginal Heritage Register (VAHR) enquiries on 1800-726-003.

SECTION 1 - Sponsor information

Sponsor:	Mt Buller Mt Stirling Resort Management		
ABN/ACN:	44 867 982 534		
Contact Name:	Daniel Argentov		
Postal Address	10 Summit Road, Mt Buller VIC 3723		
Business Number:	03 5777 6077	Mobile:	0490 012 037
Email Address:	daniel.argentov@mtbuller.com.au		

Sponsor's agent (if relevant)

Company:			
Contact Name:			
Postal Address			
Business Number:		Mobile:	
Email Address:			

SECTION 2 - Description of proposed activity and location

Project Name:	Summit and McLaughlin's Shoulder Walk, Mt Buller
Municipal district:	Mount Buller Alpine Resort (Unincorporated)

Clearly identify the proposed activity for which the cultural heritage managment plan is to be prepared (ie. Mining, road construction, housing subivision)

Walking track exceeding 500m

SECTION 3 - Cultural Heritage Advisor

Name	Company	Email address
Lucy Amorosi	Biosis	lamorosi@biosis.com.au

SECTION 4 - Expected start and finish date for the cultural heritage management plan

Start Date:	29-Sep-2021	Finish Date:	29-Sep-2023

Submitted on: 29 Sep 2021

Premier and Cabinet

SECTION 5 - Why are you preparing this cultural heritage management plan?

☑ A cultural heritage management plan is required by the Aboriginal Heritage Regulations 2007

What is the high Impact Activity as it is listed in the regulations?

Is any part of the activity an area of cultural heritage sensitivity, as listed in the regulations? 0

☐ Other Reasons (Voluntary)

☐ An Environment Effects Statement is required

☐ A Cultural Heritage Management Plan is required by the Minister for Aboriginal Affairs.

☐ An Impact Management Plan or Comprehensive Impact Statement is required for the activity

SECTION 6 - List the relevant registered Aboriginal parties (if any)

This section is to be completed where there are registered Aboriginal parties in relation to the management plan.

TAUNGURUNG Clans Aboriginal Corporation

SECTION 7A - List the relevant Aboriginal groups or Aboriginal people with whom the Sponsor intends to consult (if any)

*This section is to be completed only if the proposed activity in the management plan is to be carried out in an area where there is **no Registered Aboriginal Party.***

Taungurung Clans Aboriginal Corporation

SECTION 7B - Describe the intended consultation process (if any)

*This section is to be completed only if the proposed activity in the management plan is to be carried out in an area where there is **no Registered Aboriginal Party.***

Taungurung Land and Waters Council (TLaWC) is the Registered Aboriginal Party (RAP) for the area. They will be evaluating the CHMP and will need to be consulted throughout the life of the project, in the form of meetings (inception, ~~post standard assessment and post complex assessment~~) and participation in fieldwork.

SECTION 8 – State who will be evaluating this plan (mandatory)

The plan is to be evaluated by:

☐ Joint - Registered Aboriginal Party AND The Secretary

☑ A Registered Aboriginal Party

If checked, list the relevant Registered Aboriginal Party Evaluating:

☐ The Secretary

☐ Victorian Aboriginal Heritage Council

SECTION 9 – Preliminary Aboriginal Heritage Tests (PAHTs)

List the Reference Number(s) of any PAHTs conducted in relation to the proposed activity:

SECTION 10 - Notification checklist

Submitted on: 29 Sep 2021

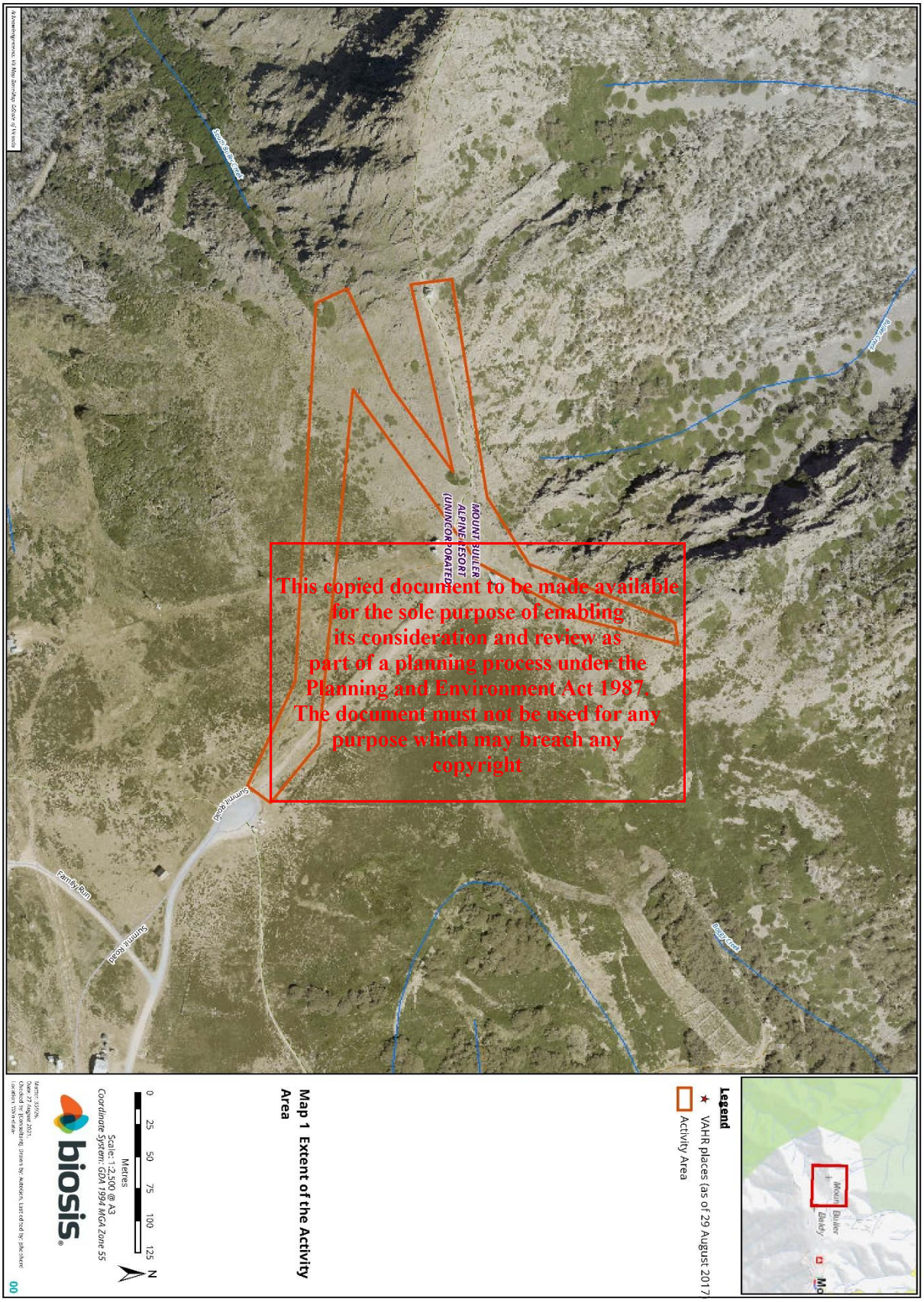
Premier and Cabinet

Ensure that any relevant registered Aboriginal party/ies is also notified. A copy of this notice with a map attached may be used for this purpose.
(A registered Aboriginal party is allowed up to 14 days to provide a written response to a notification specifying whether or not it intends to evaluate the management plan.)

In addition to notifying the Deputy Director and any relevant registerd Aboriginal party/ies, a Sponsor must also notify any owner and/or occupier of any land within the area to which the management plan relates. A copy of this notice with a map attached may be used for this purpose.

Ensure any municipal council, whose municipal district includes an area to which the cultural heritage management plan relates, is also notified. A copy of this notice, with a map attached, may also be used for this purpose.

Submitted on: 29 Sep 2021



Appendix 2 Notice to evaluate the CHMP

Tuesday, October 05, 2021

Dear Daniel Argentov

Re: Notice of Intent – CHMP 18340
Summit and McLoughlin's Shoulder Walk, Mt Buller

I refer to your notification to the Taungurung Land and Waters Council (TLaWC) to prepare a Cultural Heritage Management Plan for the above project, received on the 29 September 2021.

Having reviewed this notice, I wish to advise that the TLaWC accepts this notice and will evaluate this CHMP. We advise that during the preparation of this plan, TLaWC requires regular consultations with the Heritage Advisor and the Sponsor in relation to the assessments of the activity area and the management recommendations before the plan is complete. TLaWC also requires that representatives of the Corporation participate in all field assessments.

Please note the following requirements as stipulated by the TLaWC Board:

Meetings

Inception Meeting:
In order to clarify the aims of the CHMP and assessment methodologies it is a requirement that the Heritage Advisor who will be involved in the fieldwork and Sponsor attend an inception meeting at the TLaWC office **before** any fieldwork commences.

The TLaWC requires the following information before or at the Project Inception Meeting:

- an aerial photo and map of the Activity Area
- all Aboriginal site location data within a 5km radius of the Activity Area
- Aboriginal place cards for places already recorded in the Activity Area

Progress Meeting:
In order to discuss the fieldwork results for this CHMP the Heritage Advisor who was involved in the fieldwork must attend a progress meeting at the TLaWC office **after the fieldwork**.

Pre CHMP Submission Meeting:
In order to discuss the final Management requirements for CHMP the Heritage Advisor who was involved in the fieldwork must attend a meeting at the TLaWC office **before the CHMP is submitted for evaluation**. An on-site visit may be a preferable to an office meeting.

Meeting Bookings
Each meeting must be booked via the CHMP Meeting Request Form attached and emailed to the Administration Officer on the email address below.

Financial Payments

TLaWC's meeting and fieldwork fee schedule is attached.

37 High St. Broadford, VIC 3658 PO BOX 505 Broadford, VIC 3658 +61 3 5784 1433 enquiries@taungurung.com.au

TLaWC requires a flat fee of $3,000 (excl GST) for meeting costs to be paid **before the project inception meeting**. This fee is for the time of two TLaWC representatives to attend the meetings and does not include travel expenses, including accommodation if required and mileage costs. These associated costs will be invoiced separately.

Once TLaWC has received the Inception Meeting booking form request and a copy of the remittance for the TLaWC CHMP meeting fees, our Administration Officer will organise a meeting time with you and your Heritage Adviser.

Please direct all project queries and requests to the TLaWC Administration Officer on 03 5784 1433 or 0427 832 241 or via email sbrown@taungurung.com.au please cc careforculture@taungurung.com.au in on any email correspondence. Please ensure the subject line includes the CHMP number.

Enclosed with this notice of intent response is the meeting booking form, the TLaWC schedule of fees and the field representative booking form. If you have any queries or concerns, please don't hesitate to let us know.

Yours sincerely,

Matthew Burns
Chief Executive Officer

37 High St. Broadford, VIC 3658 PO BOX 505 Broadford, VIC 3658 +61 3 5784 1433 enquiries@taungurung.com.au

Appendix 3 Activity plans

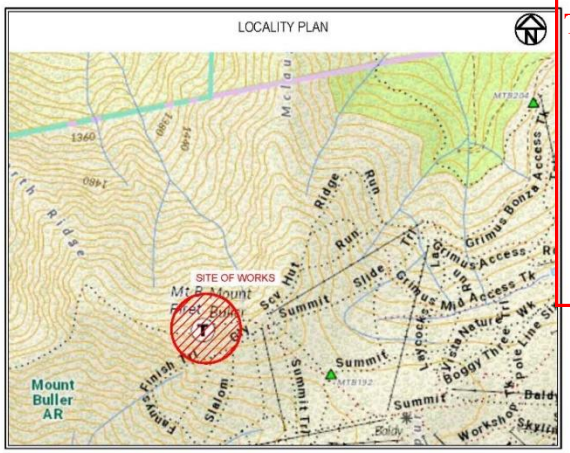
GMR

GMR Engineering Services

PRELIMINARY
(NOT FOR CONSTRUCTION)
12/09/2022

REDUCED SCALE

Mt Buller Mt Stirling Resort Management
Fire Tower Lookout Design
Mt Buller Summit, Mt Buller



DRAWING SCHEDULE

DRAWING NUMBER	DRAWING TITLE	REVISION
GMR21019 FT01	Cover Sheet	
GMR21019 FT02	Existing Conditions	A
GMR21019 FT03	Existing Conditions - Aerial	A
GMR21019 FT04	Proposed Conditions	A
GMR21019 FT05	Proposed Conditions - Aerial	A
GMR21019 FT06	Proposed Long Section	A
GMR21019 FT07 - FT15	Proposed Cross Sections	A
GMR21019 FT16	Proposed Beam Support	A
GMR21019 FT17	Proposed Member Schedule	A
GMR21019 FT18 - FT19	Proposed Details	A
GMR21019-FT20	General Notes	A
GMR21019-OPT01	Optional Elevated Structure	A

ADVERTISED PLAN

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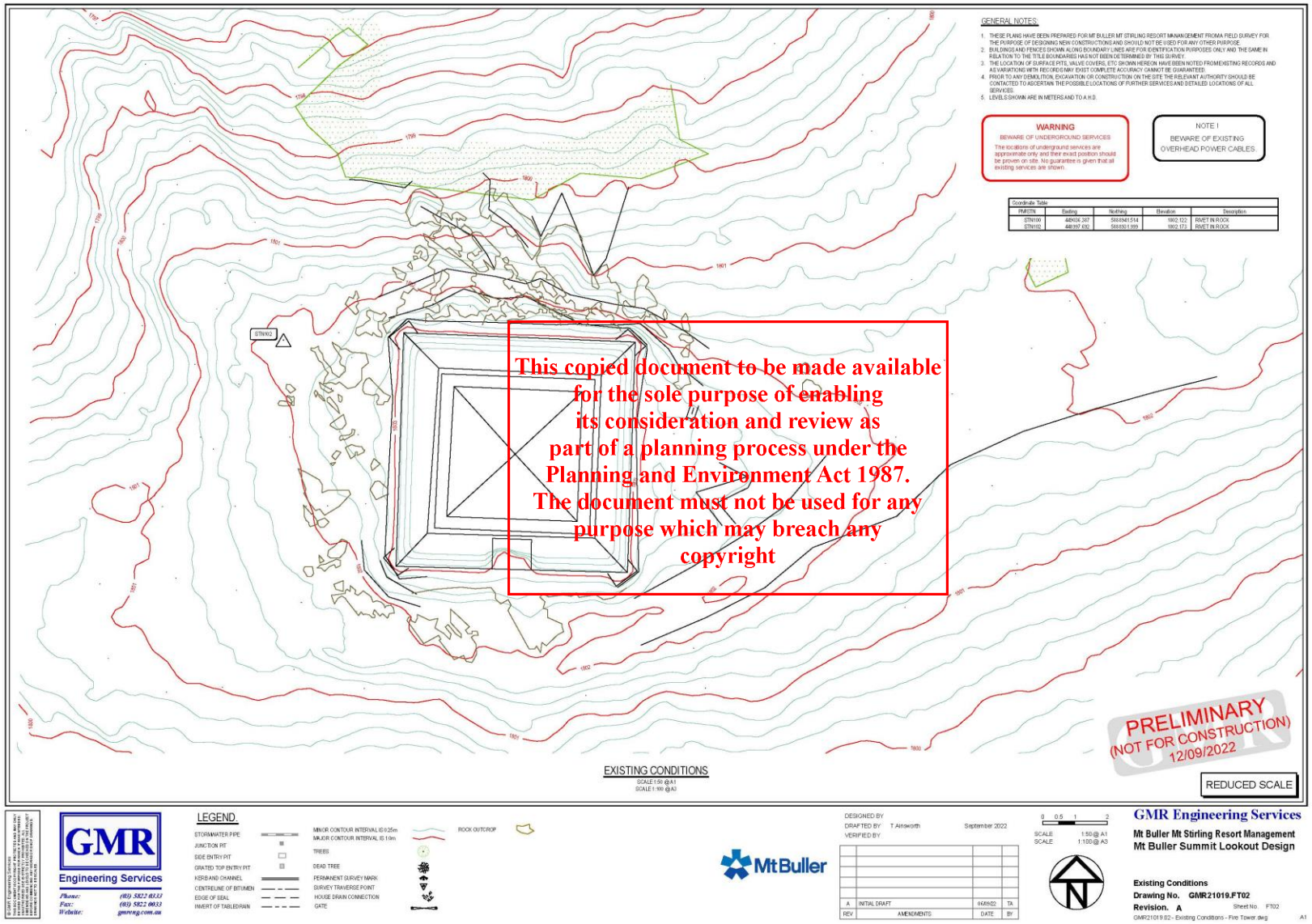
WARNING
BEWARE OF UNDERGROUND SERVICES
The locations of underground services are approximate only and their exact position should be proven on site. No guarantee is given that all existing services are shown.



GMR Engineering Services
Phone: (03) 5822 0133
Fax: (03) 5822 0033
Website: gmreng.com.au

LEGEND
STORMWATER PIPE
JUNCTION PIT
SIDE ENTRY PIT
GRATED TOP ENTRY PIT
KERB AND CHANNEL
CENTRELINE OF BITUMEN
EDGE OF SEAL
INVERT OF TABLE DRAIN
MINOR CONTOUR INTERVAL IS 0.25m
MAJOR CONTOUR INTERVAL IS 1.0m
TREES
DEAD TREE
PERMANENT SURVEY MARK
SURVEY TRAVERSE POINT
HOUSE DRAIN CONNECTION
GATE
ROCK OUTCROP

Mt Buller

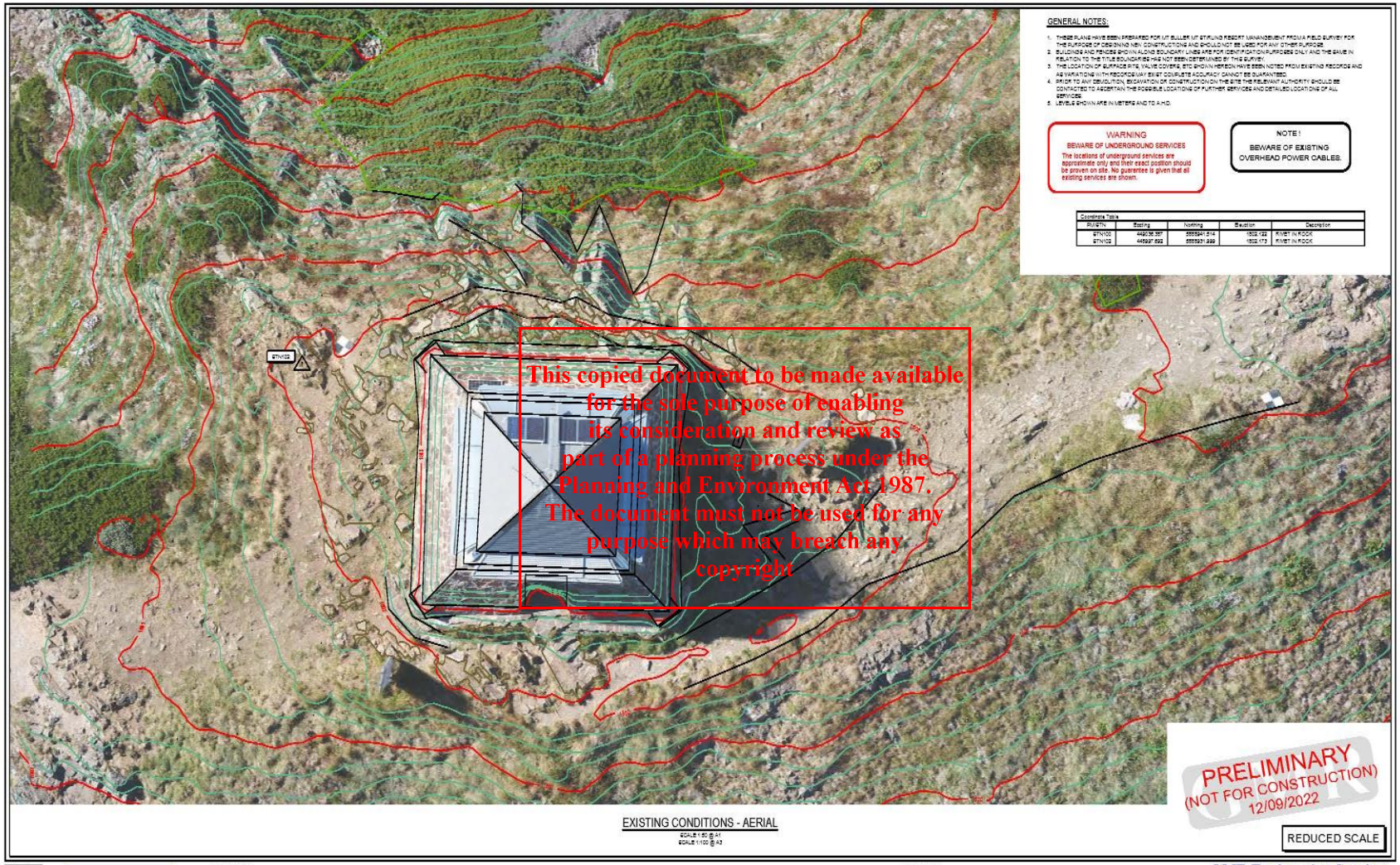
DESIGNED BY
DRAFTED BY T Ainsworth September 2022
VERIFIED BY

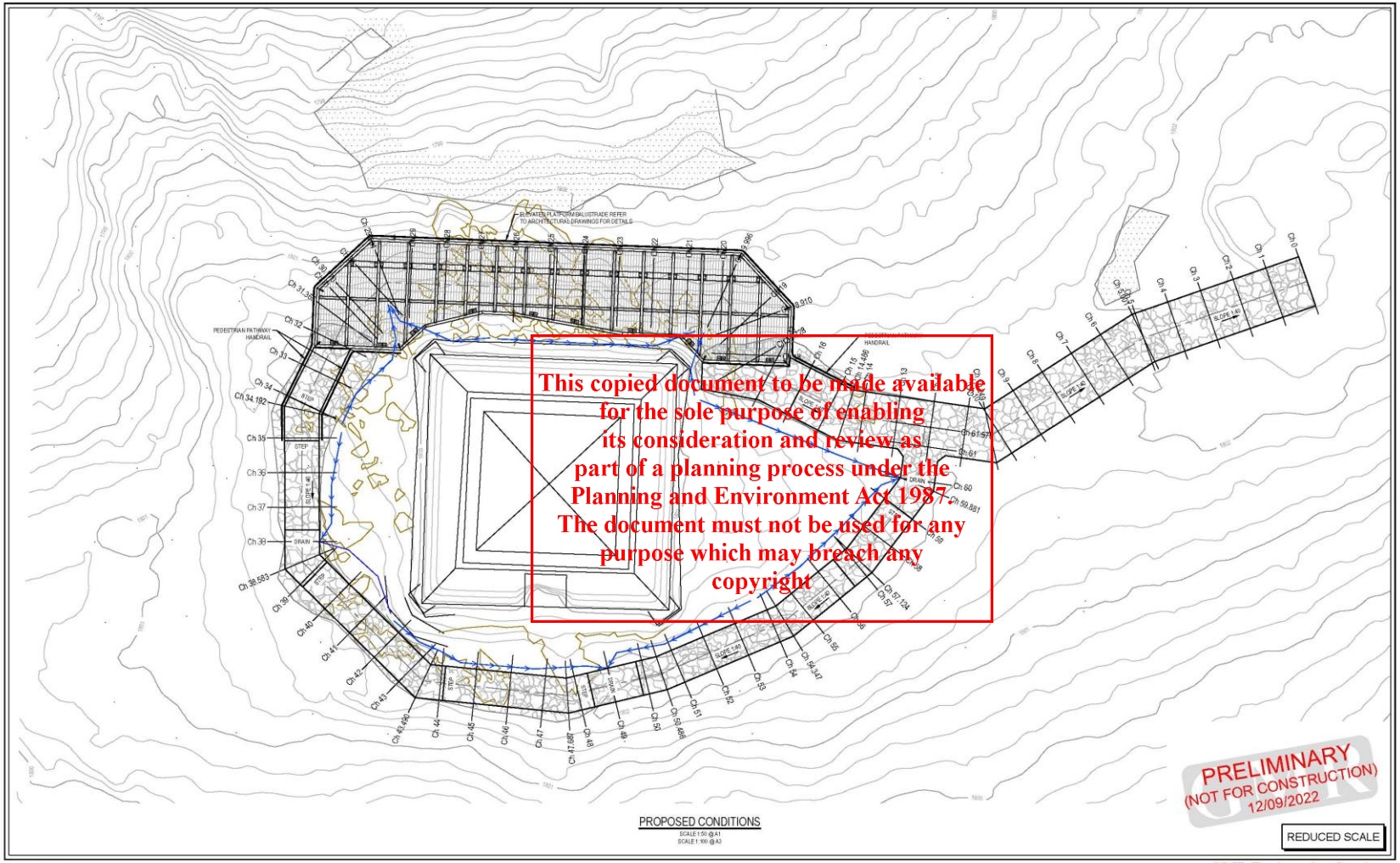
REV	AMENDMENTS	DATE	BY
A	INITIAL DRAFT	06/09/22	TA

SCALE 1:50 @ A1
SCALE 1:100 @ A3

GMR Engineering Services
Mt Buller Mt Stirling Resort Management
Mt Buller Summit Lookout Design

Existing Conditions
Drawing No. GMR21019.FT02
Revision. A
Sheet No. FT02
GMR21019.02 - Existing Conditions - Fire Tower.dwg A1





LEGEND

STORMWATER PIPE
JUNCTION PIT
SIDE ENTRY PIT
GRATED TOP ENTRY PIT
KERB AND CHANNEL
CENTRELINE OF BITUMEN
EDGE OF SEAL
INVERT OF TABLE/DRAIN
MINOR CONTOUR INTERVAL IS 0.25m
MAJOR CONTOUR INTERVAL IS 1.0m
TREES
DEAD TREE
PERMANENT SURVEY MARK
SURVEY TRAVERSE POINT
HOUSE DRAIN CONNECTION
GATE
ROCK OUTCROP

GMR Engineering Services
Phone: (03) 5822 0133
Fax: (03) 5822 0033
Website: gmreng.com.au

Mt Buller

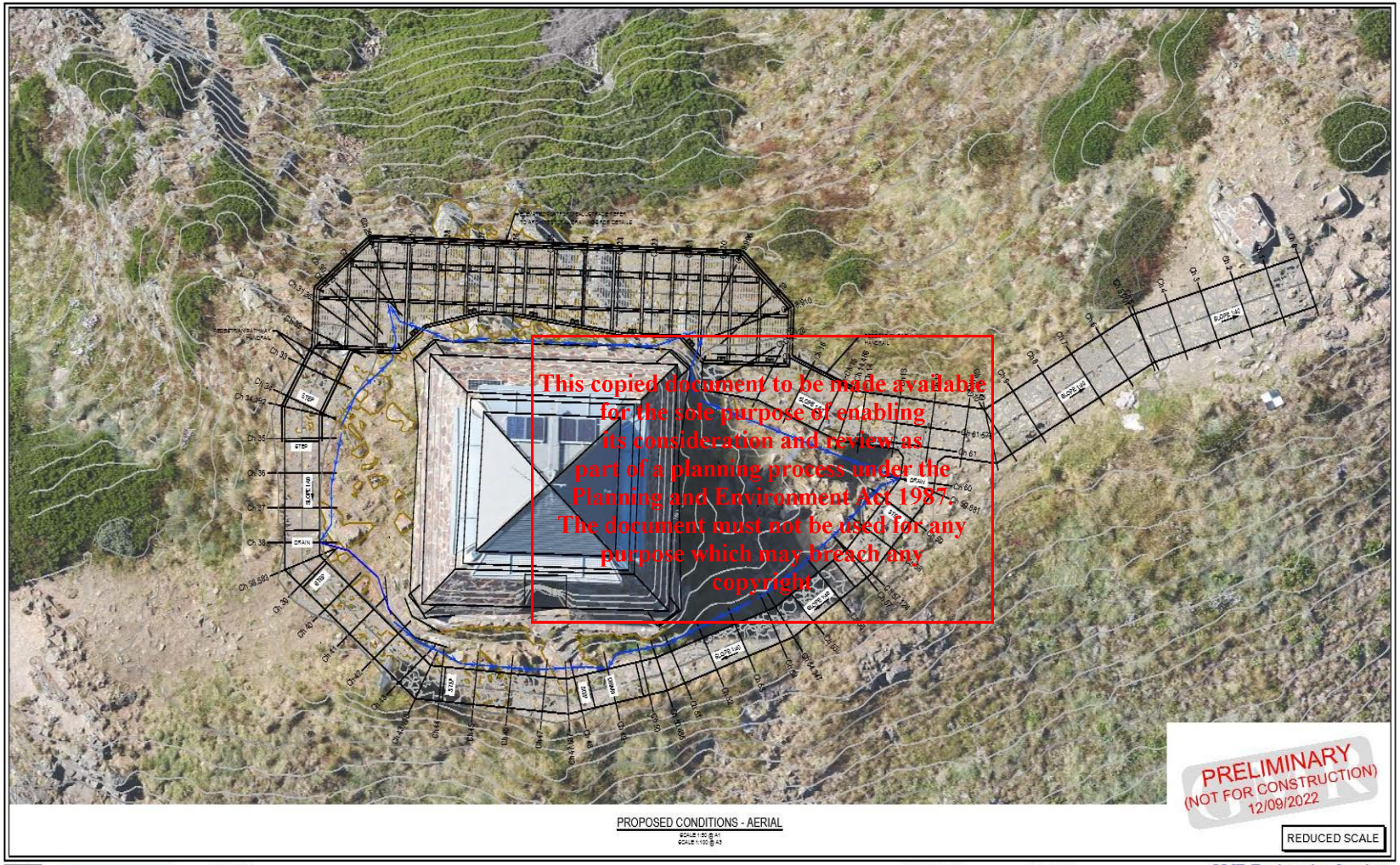
DESIGNED BY G.Ryan September 2022
DRAFTED BY T.Ainsworth September 2022
VERIFIED BY

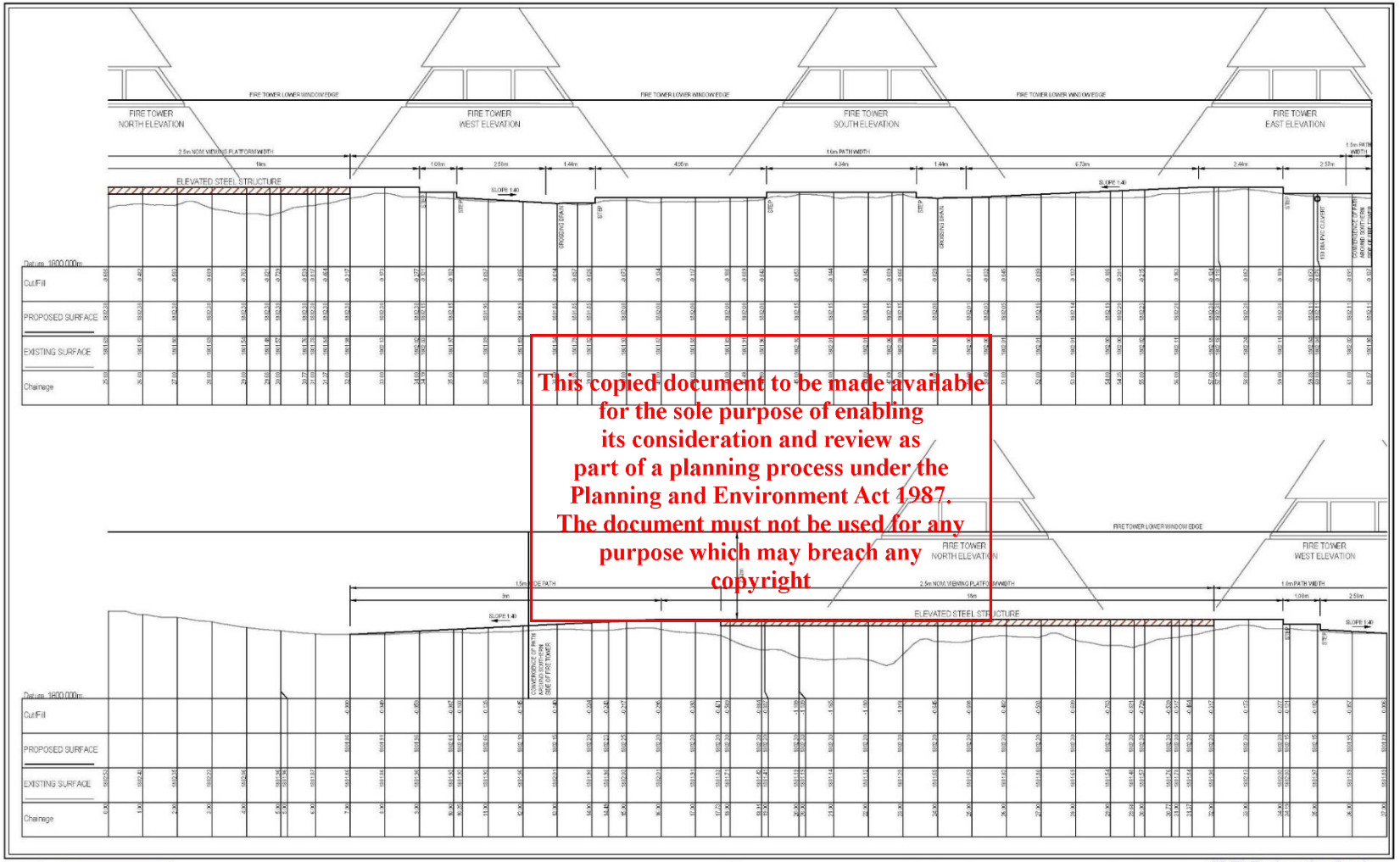
REV	AMENDMENTS	DATE	BY
A	INITIAL DRAFT	06/09/22	TA

SCALE 1:50 @ A1
SCALE 1:100 @ A3

GMR Engineering Services
Mt Buller Mt Stirling Resort Management
Mt Buller Summit Lookout Design

Proposed Conditions
Drawing No. GMR21019.FT04
Revision. A
Sheet No. FT04
GMR21019.03 - Proposed Conditions - Fire Tower.dwg A1





GMR Engineering Services

PRELIMINARY
(NOT FOR CONSTRUCTION)
12/09/2022

REDUCED SCALE

MtBuller

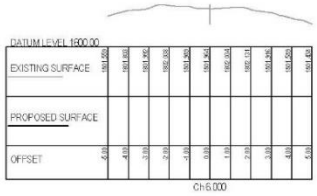
DESIGNED BY G.Ryan September 2022
DRAFTED BY T.Ainsworth September 2022
VERIFIED BY

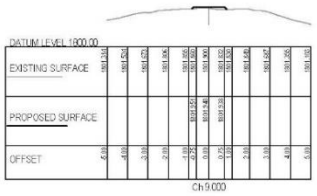
REV	AMENDMENTS	DATE	BY
A	INITIAL DRAFT	6/09/22	TA

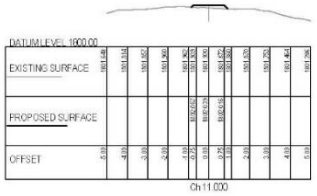
SCALE 1:50@ A1
SCALE 1:100@ A3

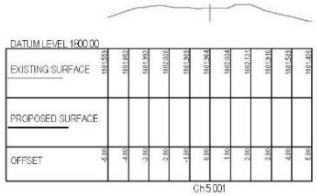
GMR Engineering Services
Mt Buller Mt Stirling Resort Management
Mt Buller Summit Lookout Design

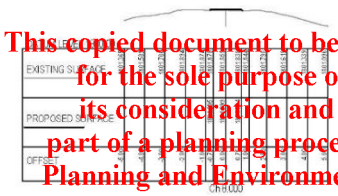
Proposed Long Section
Drawing No. GMR21019.FT06
Revision. A
Sheet No. 08
GMR21019.03 - Proposed Conditions - Fire Tower.dwg A1

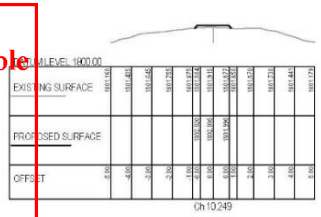


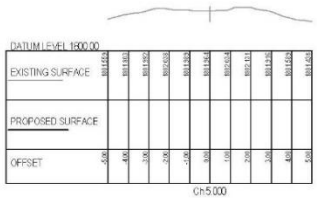


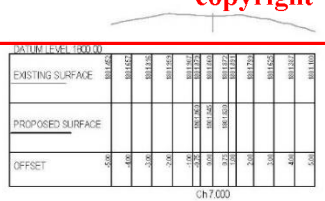


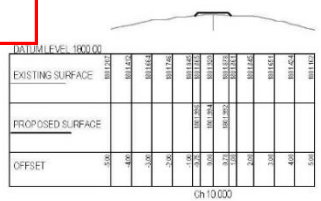












GMR Engineering Services

PRELIMINARY (NOT FOR CONSTRUCTION) 12/09/2022

REDUCED SCALE

Mt Buller

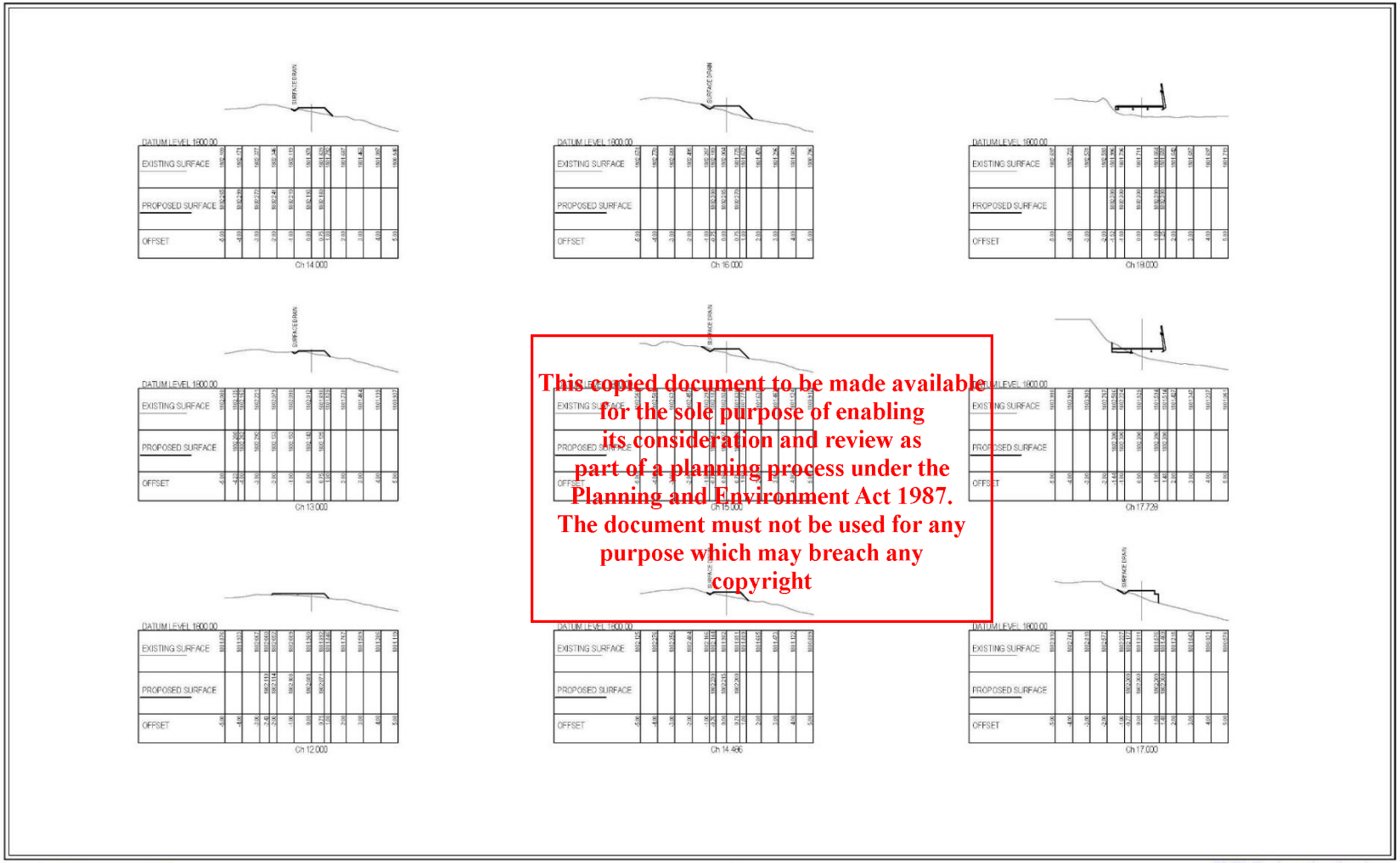
DESIGNED BY	G.Ryan	September 2022	
DRAFTED BY	T.Ainsworth	September 2022	
VERIFIED BY			
SCALE	1:50@ A1		
SCALE	1:100@ A3		

REV	AMENDMENTS	DATE	BY
A	INITIAL DRAFT	9/08/22	TA

GMR Engineering Services

Mt Buller Mt Stirling Resort Management
Mt Buller Summit Lookout Design

Proposed Cross Sections
Drawing No. GMR21019.FT07
Revision. A
Sheet No. FT07
GMR21019.03 - Proposed Conditions - Fire Tower.dwg A1



GMR Engineering Services

PRELIMINARY (NOT FOR CONSTRUCTION) 12/09/2022

REDUCED SCALE

MtBuller

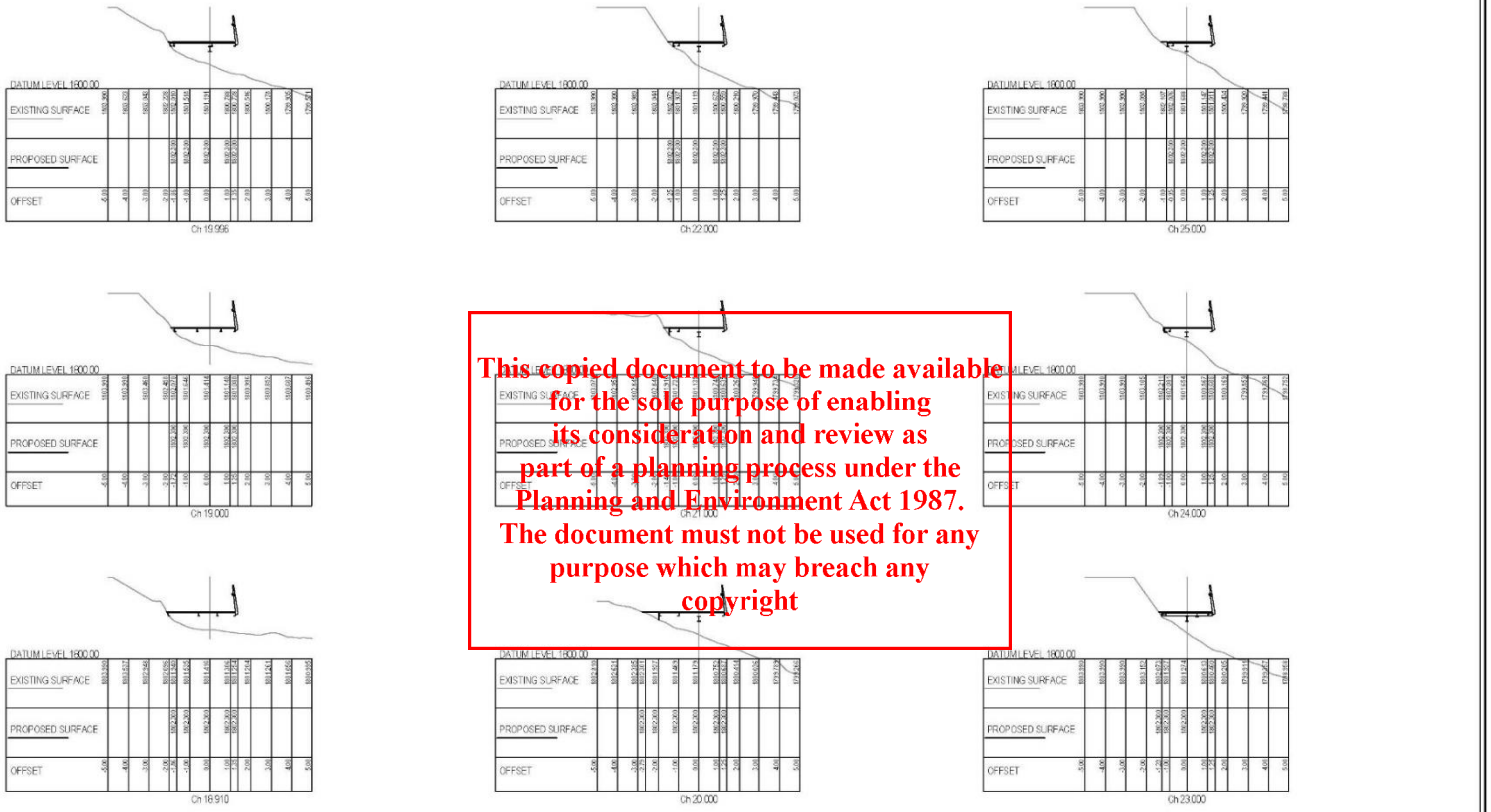
DESIGNED BY G.Ryan September 2022
DRAFTED BY T.Ainsworth September 2022
VERIFIED BY

SCALE 1:50@A1
SCALE 1:100@A3

REV	AMENDMENTS	DATE	BY
A	INITIAL DRAFT	9/08/22	TA

GMR Engineering Services
Mt Buller Mt Stirling Resort Management
Mt Buller Summit Lookout Design

Proposed Cross Sections
Drawing No. GMR21019.FT08
Revision. A
Sheet No. FT08
GMR21019.03 - Proposed Conditions - Fire Tower.dwg A1



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PRELIMINARY (NOT FOR CONSTRUCTION) 12/09/2022

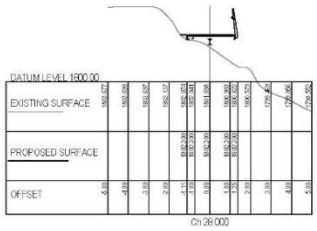
REDUCED SCALE

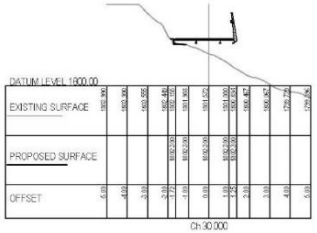
Mt Buller

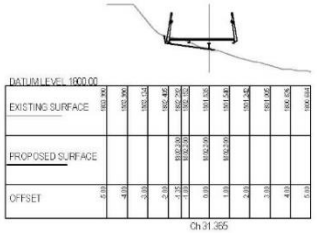
REV	AMENDMENTS	DATE	BY
A	INITIAL DRAFT	6/09/22	TA

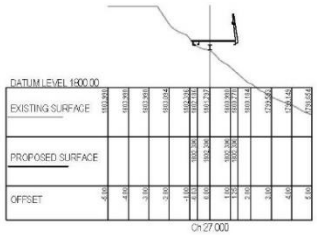
GMR Engineering Services
Mt Buller Mt Stirling Resort Management
Mt Buller Summit Lookout Design

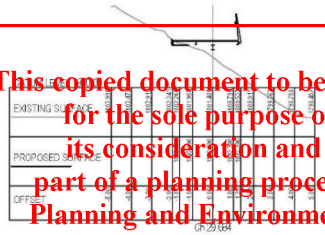
Proposed Cross Sections
Drawing No. GMR21019.FT09
Revision. A

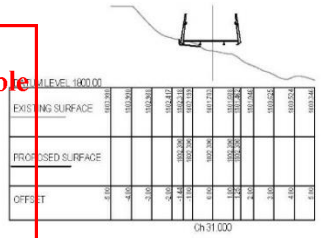


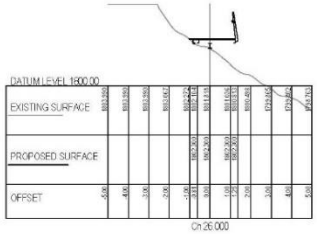


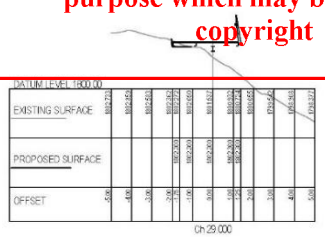


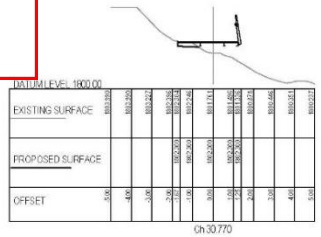












GMR Engineering Services

PRELIMINARY (NOT FOR CONSTRUCTION) 12/09/2022

REDUCED SCALE

Mt Buller

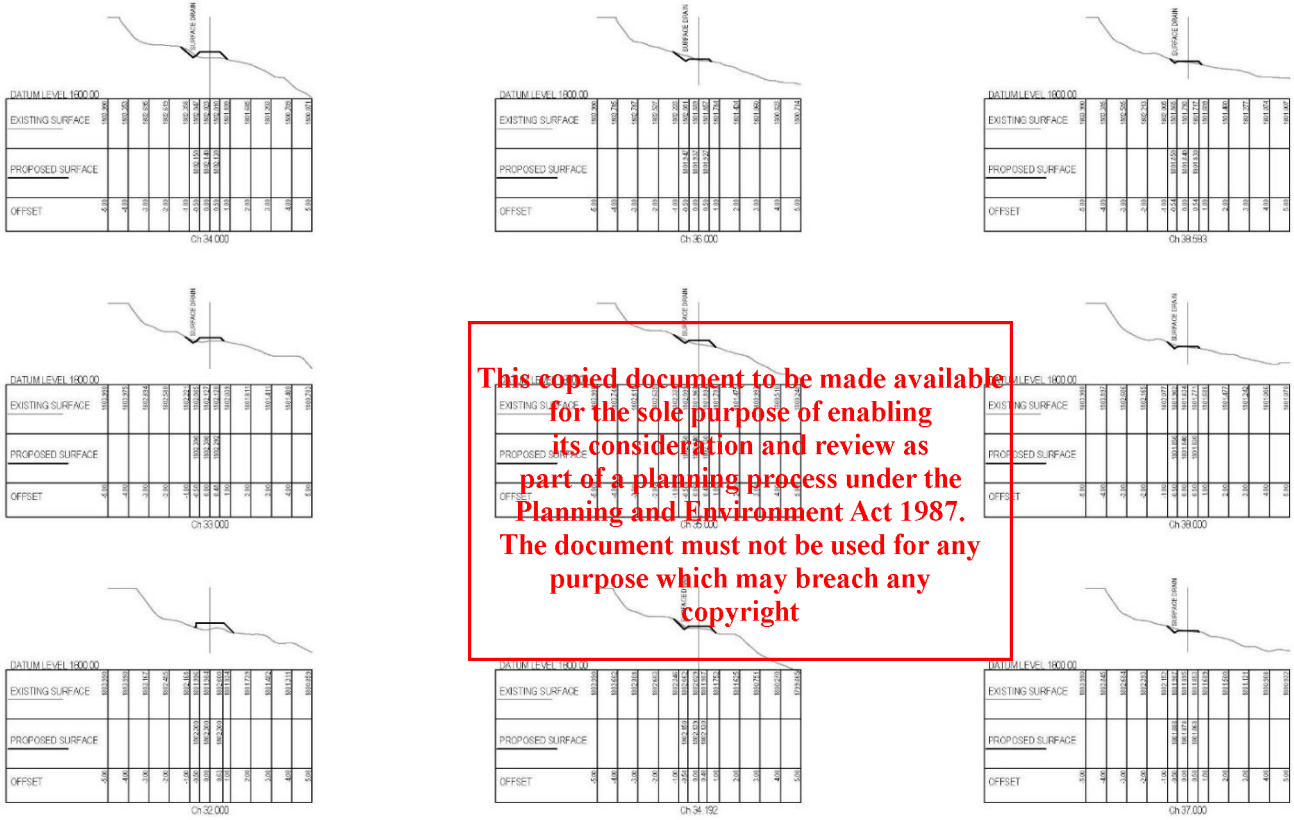
DESIGNED BY	G.Ryan	September 2022	
DRAFTED BY	T.Ainsworth	September 2022	
VERIFIED BY			
SCALE			1:50@ A1
SCALE			1:100@ A3

REV	AMENDMENTS	DATE	BY
A	INITIAL DRAFT	9/08/22	TA

GMR Engineering Services

Mt Buller Mt Stirling Resort Management
Mt Buller Summit Lookout Design

Proposed Cross Sections
Drawing No. GMR21019.FT10
Revision. A
Sheet No. FT10
GMR21019.03 - Proposed Conditions - Fire Tower.dwg A1



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PRELIMINARY (NOT FOR CONSTRUCTION) 12/09/2022

REDUCED SCALE

Mt Buller

DESIGNED BY	G.Ryan	September 2022	
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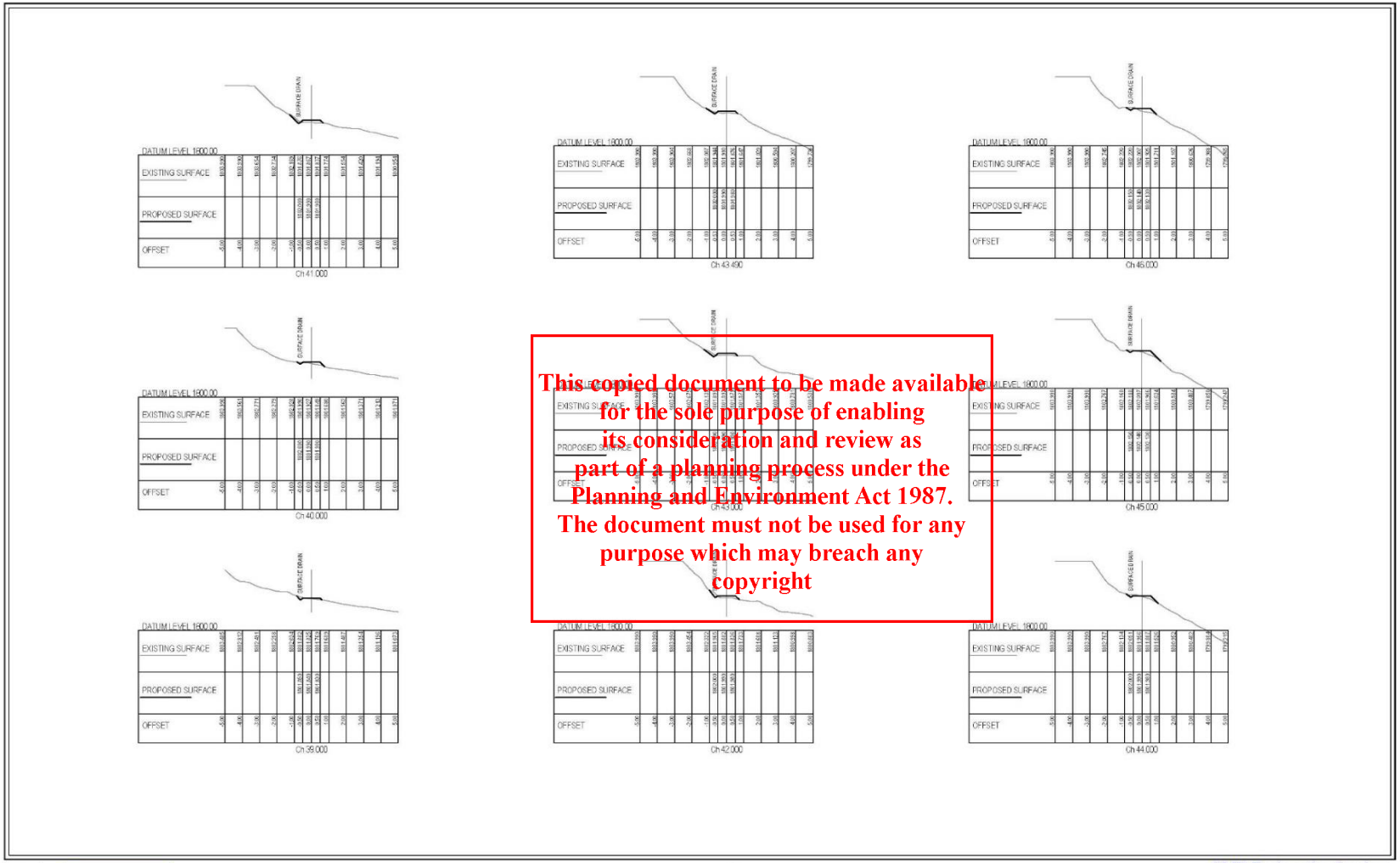
VERIFIED BY			
SCALE	1:50@ A1		
SCALE	1:100@ A3		

REV	AMENDMENTS	DATE	BY
A	INITIAL DRAFT	9/08/22	TA

GMR Engineering Services
Mt Buller Mt Stirling Resort Management
Mt Buller Summit Lookout Design

Proposed Cross Sections
Drawing No. GMR21019.FT11
Revision. A
Sheet No. FT11
GMR21019.03 - Proposed Conditions - Fire Tower.dwg A1



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PRELIMINARY (NOT FOR CONSTRUCTION) 12/09/2022

REDUCED SCALE

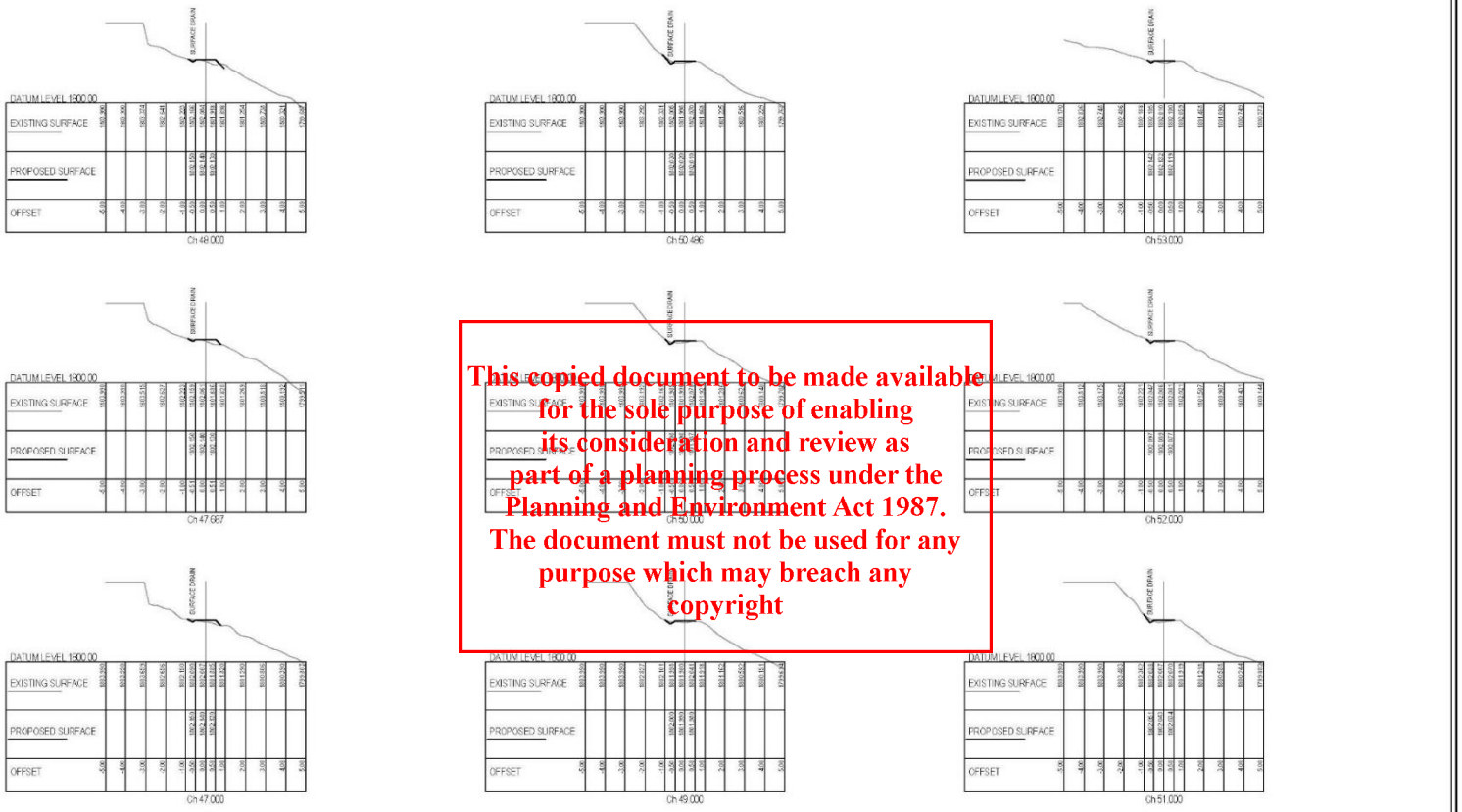
MtBuller

DESIGNED BY	G.Ryan	September 2022	
DRAFTED BY	T.Ainsworth	September 2022	
VERIFIED BY			
SCALE	1:50@ A1		
SCALE	1:100@ A3		

REV	AMENDMENTS	DATE	BY
A	INITIAL DRAFT	9/08/22	TA

GMR Engineering Services
Mt Buller Mt Stirling Resort Management
Mt Buller Summit Lookout Design

Proposed Cross Sections
Drawing No. GMR21019.FT12
Revision. A
Sheet No. FT12
GMR21019.03 - Proposed Conditions - Fire Tower.dwg A1



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PRELIMINARY (NOT FOR CONSTRUCTION) 12/09/2022

REDUCED SCALE

Mt Buller

GMR Engineering Services

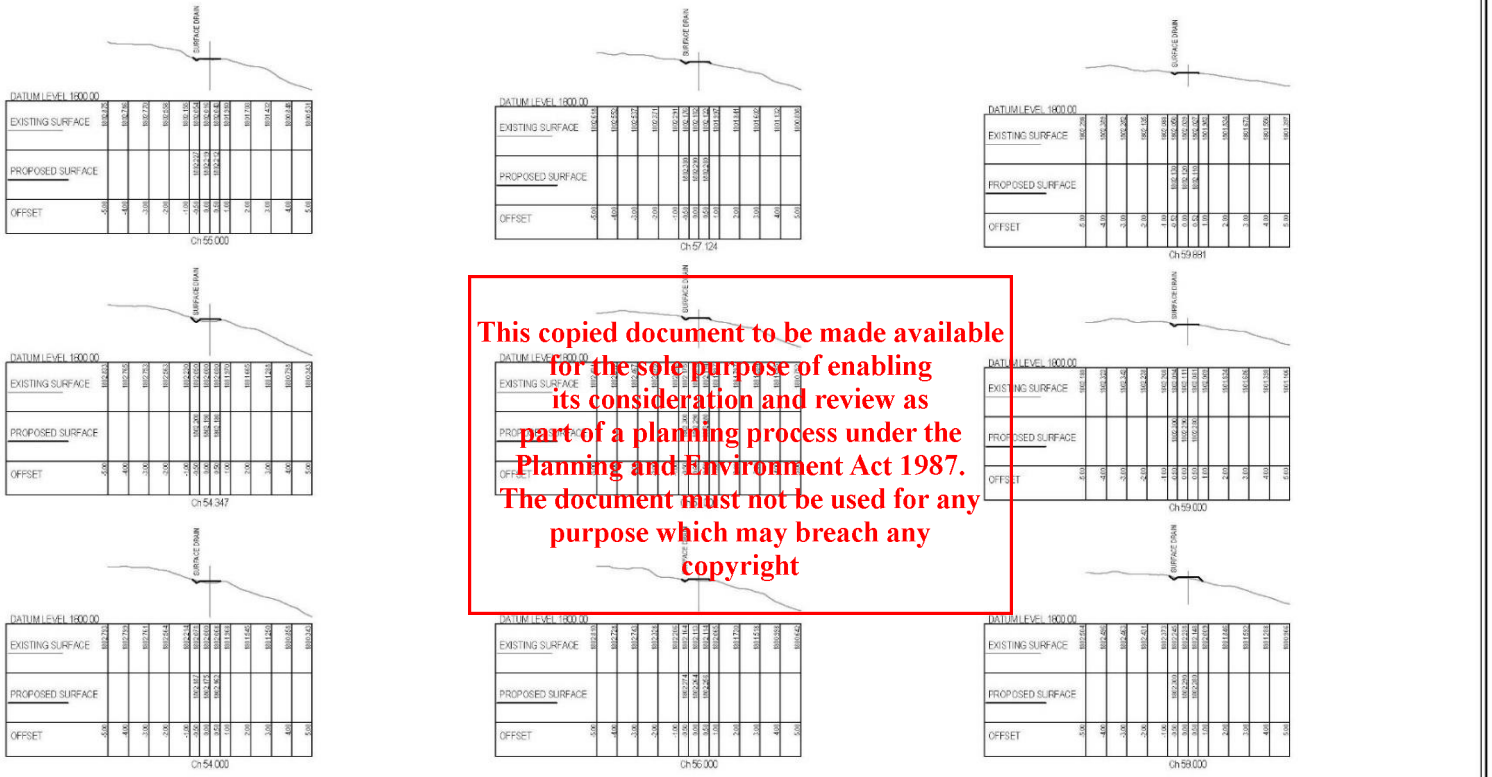
Mt Buller Mt Stirling Resort Management

Mt Buller Summit Lookout Design

Proposed Cross Sections

Drawing No. GMR21019.FT13

Revision. A



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PRELIMINARY (NOT FOR CONSTRUCTION) 12/09/2022

REDUCED SCALE

MtBuller

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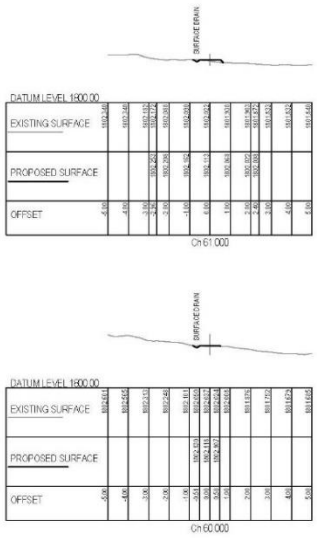
REV	AMENDMENTS	DATE	BY
A	INITIAL DRAFT	9/09/22	TA

SCALE 1:50@ A1
SCALE 1:100@ A3

GMR Engineering Services
Mt Buller Mt Stirling Resort Management
Mt Buller Summit Lookout Design

Proposed Cross Sections
Drawing No. GMR21019.FT14
Revision. A
Sheet No. FT14
GMR21019.03 - Proposed Conditions - Fire Tower.dwg A1



GMR Engineering Services

PRELIMINARY
(NOT FOR CONSTRUCTION)
12/09/2022

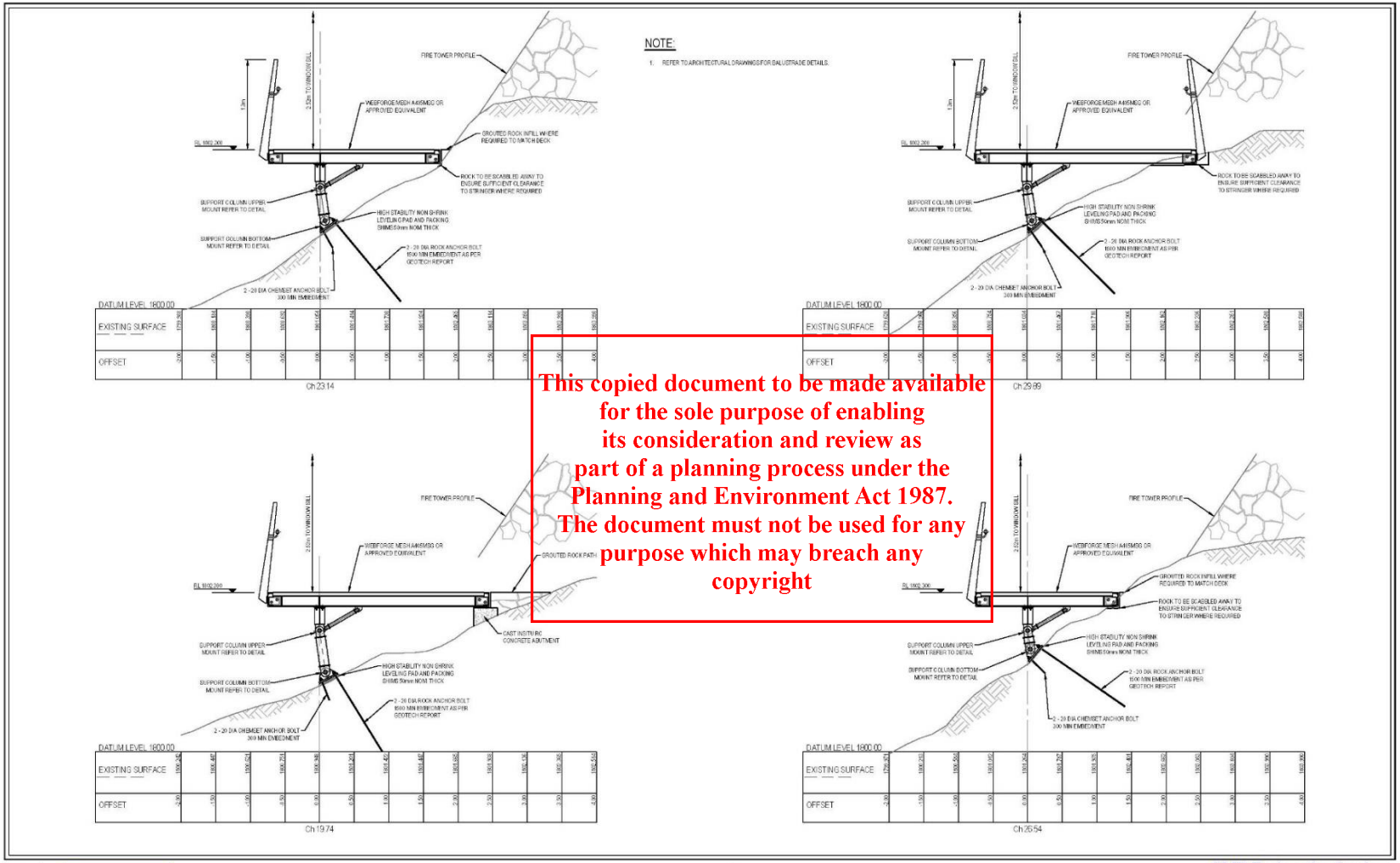
REDUCED SCALE

Mt Buller

GMR Engineering Services

Mt Buller Mt Stirling Resort Management
Mt Buller Summit Lookout Design

Proposed Cross Sections
Drawing No. GMR21019.FT15
Revision. A



GMR Engineering Services

PRELIMINARY (NOT FOR CONSTRUCTION) 12/09/2022

REDUCED SCALE

MtBuller

DESIGNED BY G.Ryan September 2022
DRAFTED BY T.Ainsworth September 2022
VERIFIED BY
SCALE 1:25 @ A1
SCALE 1:50 @ A3

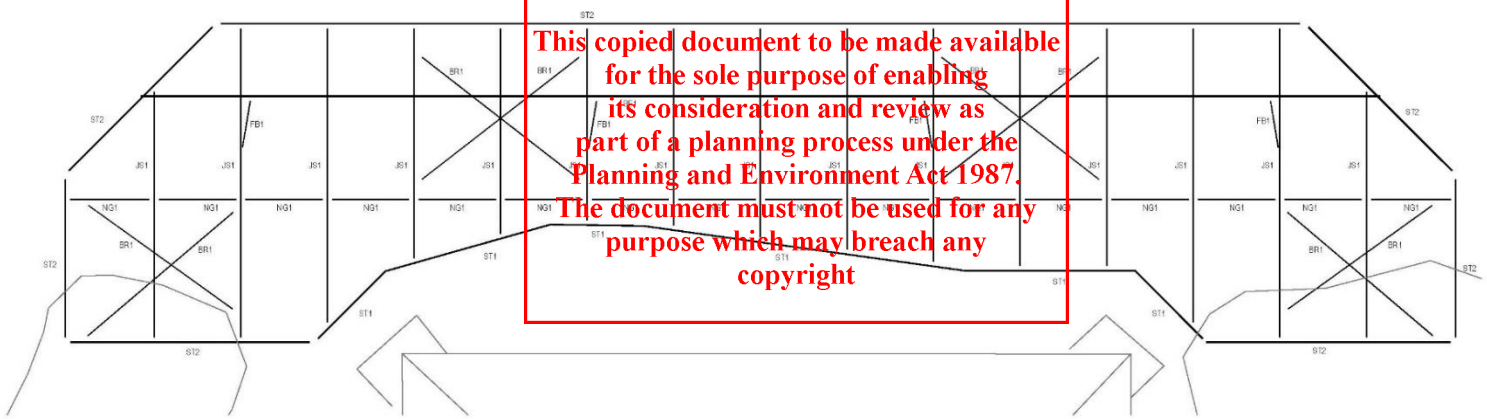
REV	AMENDMENTS	DATE	BY
A	INITIAL DRAFT	6/6/8/05	TA

GMR Engineering Services
Mt Buller Mt Stirling Resort Management
Mt Buller Summit Lookout Design

Proposed Beam Support
Drawing No. GMR21019.FT16
Revision. A
Sheet No. FT16
GMR21019.04 - Proposed Details - Fire Tower.dwg A1

STRUCTURAL MEMBER SCHEDULE		
MARK	MEMBER SIZE	REMARK
BE1	250UB31.4	BEAM
BR1	20 DIA ROD	BRACING
FB1	48.3 x 2.9 CHS 250LO	FLY BRACE
JS1	150UB 18.0	JOIST @ 0.5m MAX SPACING
NG1	150PFC	MESH SUPPORT NOGGIN
SC1	139.7 x 6.4 CHS 250LO	SUPPORT COLUMN
ST1	200 PFC	WELDED STRINGER ARRANGEMENT
ST2	200 PFC	BOLTED STRINGER ARRANGEMENT

ADVERTISED PLAN



MEMBER SCHEDULE
SCALE 1:20 @ A1
SCALE 1:40 @ A3

GMR Engineering Services
Phone: (03) 5822 0133
Fax: (03) 5822 0033
Website: gmreng.com.au

PRELIMINARY (NOT FOR CONSTRUCTION) 12/09/2022

REDUCED SCALE

Mt Buller

DESIGNED BY G.Ryan September 2022
DRAFTED BY T.Ainsworth September 2022
VERIFIED BY

REV	AMENDMENTS	DATE	BY
A	INITIAL DRAFT	6/09/22	TA

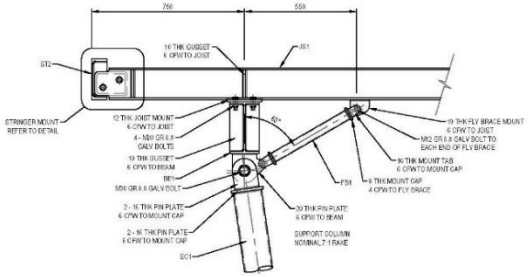
0 0.2 0.4 0.8
SCALE 1:20 @ A1
SCALE 1:40 @ A3

GMR Engineering Services
Mt Buller Mt Stirling Resort Management
Mt Buller Summit Lookout Design

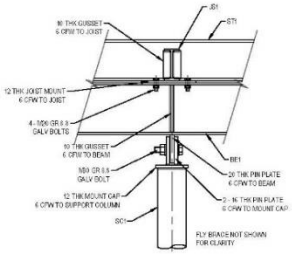
Proposed Conditions
Drawing No. GMR21019.FT17
Revision. A
Sheet No. FT17
GMR21019.04 - Proposed Details - Fire Tower.dwg A1

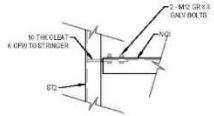
NOTE:

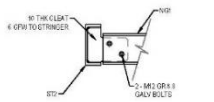
1. ALL STEEL MEMBERS TO BE NOT LESS THAN 100mm CLEAR OF GROUND.



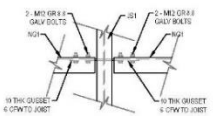
SUPPORT COLUMN BEAM DETAILS

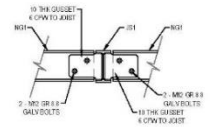




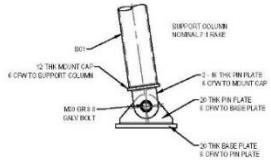


STRINGER NOGGIN DETAILS

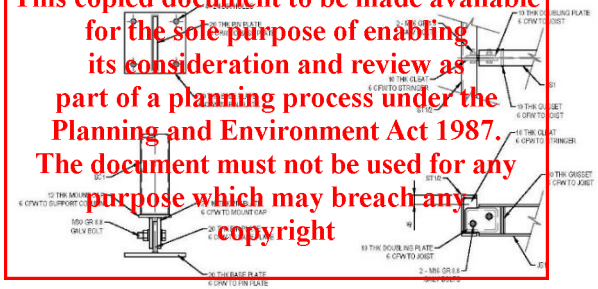


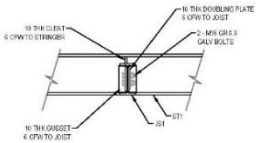


JOIST NOGGIN DETAILS

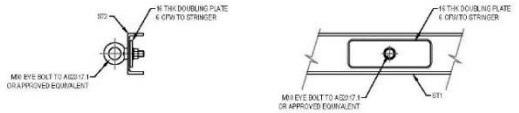


SUPPORT COLUMN BASE DETAILS





STRINGER JOIST DETAILS



RECOVERY EYELET ANCHOR DETAILS

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PRELIMINARY
(NOT FOR CONSTRUCTION)
12/09/2022

REDUCED SCALE

MtBuller

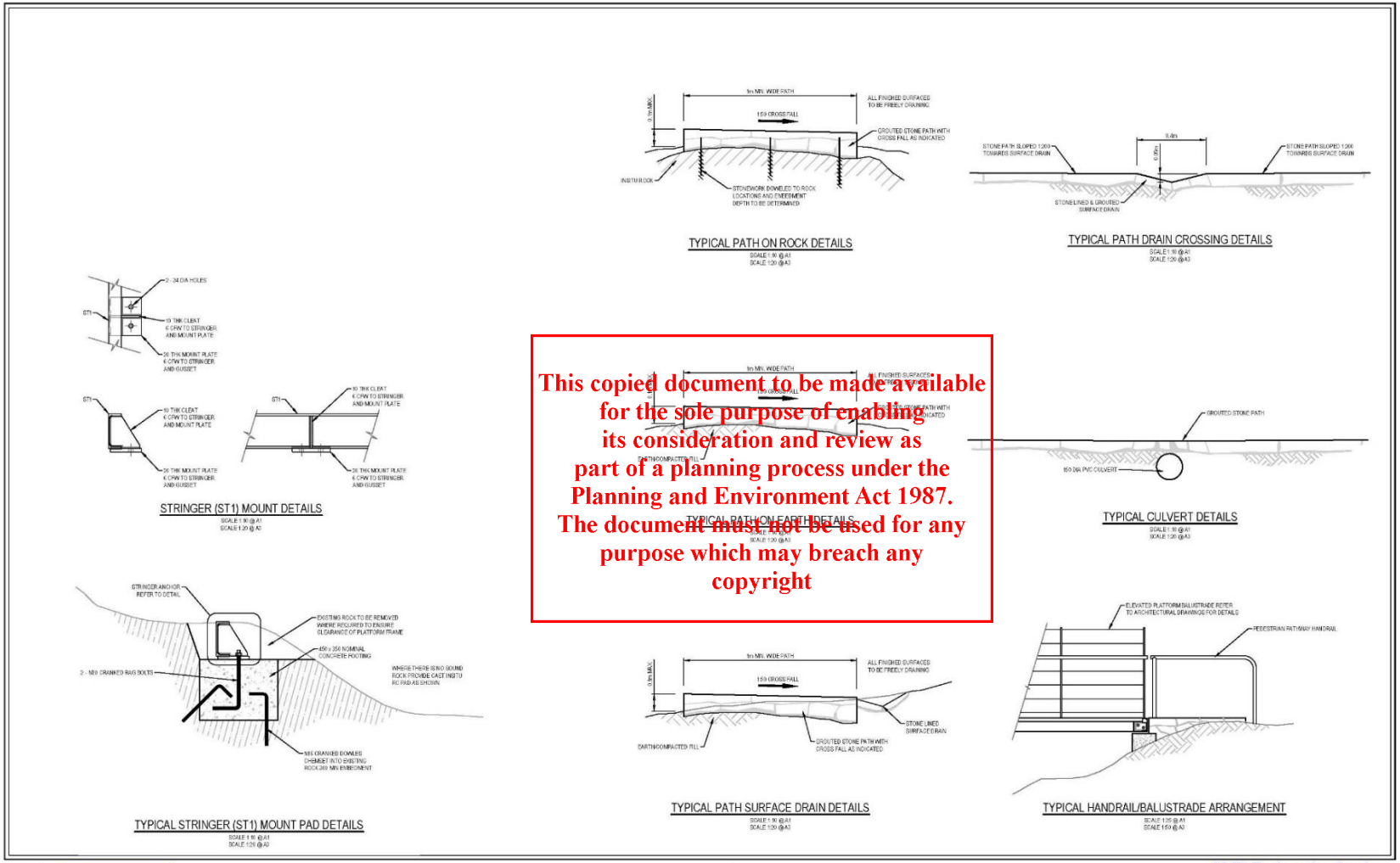
DESIGNED BY	G.Ryan	September 2022	
DRAFTED BY	T.Ainsworth	September 2022	
VERIFIED BY			

SCALE 1:10 @ A1
SCALE 1:20 @ A3

REV	AMENDMENTS	DATE	BY
A	INITIAL DRAFT	9/08/22	TA

GMR Engineering Services
Mt Buller Mt Stirling Resort Management
Mt Buller Summit Lookout Design

Proposed Details
Drawing No. GMR21019.FT18
Revision. A
Sheet No. FT18
GMR21019 04 - Proposed Details - Fire Tower.dwg A1



ADVERTISED PLAN

biosis

GENERAL NOTES:

1. PRIOR TO SETTING OUT / CONSTRUCTING THESE WORKS THE PROPERTY BOUNDARIES TO BE CONFIRMED BY A LICENSED SURVEYOR.
2. THE ALIGNMENT GEOMETRY SHALL BE ADJUSTED TO SUIT. NO LAND ACQUISITION OR PROPERTY ADJUSTMENTS REQUIRED.
3. ALL DRAINAGE PIPES TO BE CLASS 2 RRJ RCP UNLESS NOTED OTHERWISE.
4. BACKFILL FOR STORMWATER PIPES UNDER PAVEMENTS AND DRIVABLE AREAS TO BE AS PER TRENCH DETAIL, TYPE 1.
5. PIT LID LEVELS SHALL MATCH TOP OF ADJACENT SURFACE LEVELS FOR JUNCTION PITS AND GRATED TOP ENTRY PITS. ALL PIT LIDS TO MATCH LEVEL AND GRADE OF DESIGN SURFACE IN WHICH LOCATED.
6. THE CONTRACTOR SHALL CONFIRM CONDUIT LOCATION PRIOR TO EXCAVATION AND PLACEMENT.
7. THE LOCATION OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION AND LEVEL SHOULD BE PROVEN ON SITE PRIOR TO THE COMMENCEMENT OF ANY WORKS.
8. TREES TO BE REMOVED / TRIMMED ARE TO BE DONE SO WITH APPROVAL FROM SUPERINTENDENT. TO BE SAWCUT, GRUBBED AND REMOVED OFF SITE TO AN APPROVED LOCATION.
9. CARE IS TO BE TAKEN TO LIMIT THE DAMAGED CAUSED TO TREE ROOTS. ANY ROOTS DAMAGED DURING EXCAVATION THAT ARE GREATER THAN 25mm DIAMETER SHOULD BE CUT CLEAN AND APPLY A COAT OF STERIPRUNE.
10. STRIP TOPSOIL TO A DEPTH OF 75mm AND STOCKPILE AT AN APPROVED LOCATION FOR LATER REUSE.
11. EXCAVATE ALONGSIDE EXISTING JUNCTION PITS & BREAKAWAY SIDE WALL. CONSTRUCT NEW PIT AS DETAILED IN DRAWINGS. REMOVE OFF SITE.
12. EXISTING HARDSTAND AREAS (ie. CONCRETE DRIVEWAYS) TO BE BROKEN UP & REMOVED OFFSITE TO AN APPROVED LOCATION WITHIN 10km.
13. ANY EXISTING SIGNS REMOVED DURING WORKS TO BE REINSTATED AT AN APPROPRIATE LOCATION TO APPROVAL OF SUPERINTENDENT.
14. EXISTING ELECTRICITY MAIN TO BE DEPTHED UPON BEGINNING OF CONTRACT. ELECTRICITY MAIN TO COMPLY WITH AUTHORITY CLEARANCES. CONTRACTOR TO MAKE NECESSARY ADJUSTMENTS TO REQUIREMENTS OF AUTHORITY STANDARDS AND ADJUST IF REQUIRED.
15. ELECTRICAL CONTRACTOR TO DISCONNECT AND DISMANTLE EXISTING LIGHTING. STORE OFF SITE AT A LOCATION DIRECTED BY COUNCIL SUPERINTENDENT.
16. EXCAVATE TRENCH AND PROVIDE NEW ELECTRICAL CONDUITS AS SHOWN. USE LONG BEND RADIUS FOR SMOOTHER TRANSITION AROUND CURVES AND CHANGES IN DIRECTION.
17. EXISTING SEWER MAIN TO BE DEPTHED UPON BEGINNING OF CONTRACT. SEWER MAIN TO COMPLY WITH AUTHORITY CLEARANCES. CONTRACTOR TO MAKE NECESSARY ADJUSTMENTS TO AUTHORITY STANDARDS AND ADJUST IF REQUIRED.
18. EXISTING WATER MAIN TO BE DEPTHED UPON BEGINNING OF CONTRACT. WATER MAIN TO COMPLY WITH AUTHORITY CLEARANCES. CONTRACTOR TO MAKE NECESSARY ADJUSTMENTS TO AUTHORITY STANDARDS AND ADJUST IF REQUIRED.
19. EXISTING TELECOMMUNICATION MAINS TO BE DEPTHED UPON BEGINNING OF CONTRACT. TELECOMMUNICATION MAINS TO COMPLY WITH AUTHORITY CLEARANCES. CONTRACTOR TO MAKE NECESSARY ADJUSTMENTS TO AUTHORITY STANDARDS AND ADJUST IF REQUIRED.
20. EXISTING GAS MAINS TO BE DEPTHED UPON BEGINNING OF CONTRACT. GAS MAINS TO COMPLY WITH AUTHORITY CLEARANCES. CONTRACTOR TO MAKE NECESSARY ADJUSTMENTS TO AUTHORITY STANDARDS AND ADJUST IF REQUIRED.
21. EXCAVATE, DEMOLISH AND REMOVE EXISTING KERB AS SHOWN. REMOVE OFF SITE TO AN APPROVED LOCATION WITHIN 10km.
22. EXCAVATE, DEMOLISH AND REMOVE EXISTING PAVEMENT FOR TRENCHING AS SHOWN. REMOVE OFF SITE TO AN APPROVED LOCATION WITHIN 10km.
23. REFER TO INFRASTRUCTURE DESIGN MANUAL (I.D.M) DRAWINGS FOR FURTHER STANDARDS.
24. EXCAVATED MATERIAL TO BE STORED AT AN APPROVED LOCATION AND RECOVERED FOR REUSE (IF SUITABLE) AFTER TESTING AS APPROVED BY COUNCIL SUPERINTENDENT.
25. EXCAVATE TO SUBGRADE LEVEL, STABILISE AND COMPACT PRIOR TO SUPPLY AND COMPACTION OF SUITABLE ROAD PAVEMENT.
26. RECOVER EXISTING SUITABLE TOPSOIL, SCREEN, SPREAD AND COMPACT TO DESIGN LEVELS AS SPECIFIED.
27. EXCAVATE AND SHAPE SURFACE RELIEF DRAIN ALONG ROAD AS NOTED ON DRAWINGS.
28. ON COMPLETION OF WORKS SPREAD RECOVERED TOPSOIL TO ALL LANDSCAPED AREAS. ENSURE SURFACES ARE FREELY DRAINING, EVENLY GRADED AND HAVE SMOOTH INTERFACE.

MAINTENANCE NOTES:

1. UNLESS NOTED OTHERWISE, ON COMPLETION OF THE REHABILITATION AND RE-VEGETATION THE SITE WILL BE ROUTINELY CHECKED FOR WEEDS & CONTROL MEASURES DEPLOYED TO REMOVE THEM FOR A MINIMUM OF 12 MONTHS POST COMPLETION OF THE CONSTRUCTION WORKS.
2. ALL TOP SOIL WILL BE REGULARLY WATERED TO PREVENT DRYING OUT & LOSSES TO WIND.
3. ANY PLANT LOSSES WILL BE REPLACED WITH EQUIVALENT STOCK.
4. ANY ERODED OR DEGRADED AREAS WILL BE REPAIRED IMMEDIATELY & SURFACE DRAINAGE CORRECTED OR OTHERWISE EFFECTIVELY REMEDIATED.

CHEMSET INSTALLATION NOTES & REQUIREMENTS

1. RAMSET M20 & M24 CHEMSET ANCHOR STUDS WITH CHEMSET REO 502 ANCHORING ADHESIVE (OR EQUIVALENT) CAN BE USED IN LIEU OF M20 OR M24 CAST-IN HOLD DOWN BOLTS.
2. M24 CHEMSET ANCHOR STUDS TO HAVE A MINIMUM 300 LONG WITH MINIMUM 250mm EMBEDMENT INTO CONCRETE FOOTINGS.
   M20 CHEMSET ANCHOR STUDS TO HAVE A MINIMUM 250 LONG WITH MINIMUM 200mm EMBEDMENT INTO CONCRETE FOOTINGS.
3. BUILDER TO ENSURE CHEMSET INSTALLATION ARE IN ACCORDANCE WITH SPECIFICATIONS AND THE MANUFACTURERS INSTALLATION REQUIREMENTS.
4. BUILDER TO PROVIDE CERTIFICATION TO BUILDING SURVEYOR THAT THE CHEMSETS HAVE BEEN INSTALLED IN ACCORDANCE WITH THE STRUCTURAL PLANS, SPECIFICATIONS AND MANUFACTURERS INSTALLATION REQUIREMENTS.

DEFLECTION MANAGEMENT DURING CONSTRUCTION NOTES:

1. DURING ERECTION PROVISION SHALL BE MADE TO LIMIT DEFLECTIONS TO DEAD LOADS ONLY. THE CONSTRUCTOR SHALL ENSURE THE STRUCTURE IS ADEQUATELY SUPPORTED WITH TEMPORARY PROPS AND FALSEWORK DURING CONSTRUCTION/ERECTION TO CONTROL DEFLECTIONS.
2. NO TEMPORARY CONSTRUCTION LOADS, PACKS OF MATERIALS OR OTHER SURCHARGES SHALL BE IMPOSED UPON THE STRUCTURE DURING ERECTION.
3. THE CONSTRUCTOR SHALL WARRANTEE THAT THE DEFLECTIONS OF PRINCIPAL MEMBERS UPON COMPLETION DO NOT EXCEED THE DESIGNERS STATED "DEAD LOAD DEFLECTION".
4. ANY SUSPENDED CAST IN-SITU CONCRETE SLABS SHALL BE PROPPED DURING CONSTRUCTION UNTIL THE SLAB HAS CURED.

FOOTING NOTES:

1. THE FINISHED SURFACE AROUND THE SLAB & FOOTINGS SHALL BE GRADED AWAY FROM THE FOUNDATIONS.
2. MATERIALS & WORKMANSHIP TO BE IN ACCORDANCE WITH THE RELEVANT CURRENT CODE OF THE STANDARDS ASSOCIATION OF AUSTRALIA & THE BUILDING REGULATIONS.
3. REMOVE ORGANIC LAYER OF TOP SOIL & SOFT AREAS PRIOR TO PLACING FILLING UNDER SLAB. FILL TO BE GRANULAR MATERIAL WELL COMPACTED TO 150kPa MIN. IN 150mm MAX. LAYERS (MAX. DEPTH 300mm).
4. ANY FILL UNDER BUILDING FOOTPRINT SHALL BE SELECT, APPROVED MATERIAL (CONTROLLED FILL) TO BE SUPERVISED & TESTING TO BE UNDERTAKEN BY A NATA ACCREDITED GEOTECHNICAL CONSULTANT AS PER AS3798-1996.
5. FOOTINGS INC. PADS ARE TO BE FOUNDED IN ORIGINAL UN-DISTURBED GROUND HAVING A SAFE BEARING CAPACITY OF 150kPa. BEFORE ANY CONCRETE IS PLACED, THE SAFE BEARING CAPACITY SHALL BE VERIFIED BY A QUALIFIED ENGINEER, OR A REGISTERED BUILDING PRACTITIONER. THE CONTRACTOR IS TO ALLOW THIER TENDER PRICE FOR THOSE INSPECTIONS AND REPORTING TO BE UNDERTAKEN BY THEIR GEOTECHNICAL ENGINEER. ALL DOCUMENTATION IS TO BE SUBMITTED TO THE PRINCIPAL WITHIN 48 HOURS OF THE INSPECTION.
6. EXCAVATIONS BEYOND THE DIMENSIONS SPECIFIED SHALL BE FILLED WITH MINIMUM 15 MPa CONCRETE.
7. THE CONTRACTOR IS TO UNDERTAKE ALL OF THE NECESSARY INVESTIGATIONS TO LOCATE UNDERGROUND SERVICES WITHIN THE SITE OR LIKELY TO BE INFLUENCED BY THE PROPOSED WORKS. THE CONTRACTOR SHALL INFORM THE PRINCIPAL IF ANY SERVICES ARE FOUND PRIOR TO PROCEEDING.
8. ALL FOUNDATIONS ARE TO BE FREE OF WATER & LOOSE MATERIAL PRIOR TO POURING ANY CONCRETE.
9. THE CONTRACTOR IS TO ALLOW FOR ANY ADDITIONAL INVESTIGATIONS, TESTING, ANALYSIS OR ANY OTHER WORK TO BE UNDERTAKEN NECESSARY TO SATISFY THEMSELVES OF THE GROUND CONDITIONS, SUCH THAT THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING ALL MATERIAL QUANTITIES & CONSTRUCTION TECHNIQUES NECESSARY TO ACHIEVE THE MINIMUM SAFE SOIL BEARING PRESSURE NOMINATED.
10. CONCRETE Fc = N40 GRADE @ 28 DAYS, 80 SLUMP. CONCRETE TO BE COMPACTED & WORKED AROUND REINFORCEMENT BY USE OF MECHANICAL VIBRATOR. CONCRETE TO BE CURED FOR 7 DAYS BY APPROVED METHOD. CONCRETE IS TO BE AVAILABLE FOR TESTING DURING POURING.

CONCRETE NOTES:

1. ALL WORKMANSHIP, MATERIALS AND TESTING SHALL BE IN ACCORDANCE WITH AS 3600.
2. MINIMUM COVER OF 45mm TO ALL REINFORCEMENT TO SATISFY B2 EXPOSURE (AS THE STRUCTURE IS LOCATED IN A SPLASH ZONE/ MARINE ENVIRONMENT) CLASSIFICATION WHERE STANDARD FORMWORK & COMPACTION ARE USED, UNLESS OTHERWISE INDICATED ON THE DRAWINGS.
3. CONCRETE MIX DESIGN SHOULD SATISFY THE RECOMMENDATIONS PROVIDED WITHIN AS 4997-2005.
4. CONCRETE CLASS OF SB40 IN ACCORDANCE WITH AS 1379 (TO SATISFY RECOMMENDATIONS PROVIDED WITHIN AS 4997-2005 FOR MIX DESIGN, SUPPLIERS WOULD NEED TO PROVIDE A SPECIAL CLASS, 40 MPa CONCRETE MIX).
5. THE DURABILITY CLASS OF AGGREGATES SHOULD BE CLASS [illegible] IN COMPLIANCE WITH AS2758.1.
6. GALVANISED REINFORCEMENT SHOULD BE SPECIFIED IN COMBINATION WITH STAINLESS STEEL OR GALVANISED TIE WIRE.
7. BLACK STEEL REINFORCEMENT SHOULD BE SPECIFIED IN COMBINATION WITH MILD STEEL TIE WIRE.
8. COVER TO BLACK STEEL REINFORCEMENT SHOULD BE GREATER THAN FOR GALVANISED REINFORCEMENT TO ACHIEVE THE DESIGN LIFE.
9. DESIGN STRESS FOR SERVICEABILITY ACTIONS SHOULD REMAIN LESS THAN OR EQUAL TO 150 MPa TO CONTROL CRACK WIDTHS.
10. ANY CAST IN- FIXTURES, OR DOWELED CONNECTIONS USED SHOULD BE STAINLESS STEEL [illegible] AND ELECTRICALLY ISOLATED FROM INTERNAL REINFORCEMENT. THIS IS ACHIEVED BY ENSURING THERE IS NO CONTACT BETWEEN ELEMENTS OR USE OF A NON CONDUCTIVE BARRIER MATERIAL BETWEEN ELEMENTS.
11. SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES.
12. BEAM DEPTHS ARE WRITTEN FIRST AND INCLUDE SLAB THICKNESS.
13. NO HOLES, CHASES OR EMBEDMENT OF PIPES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT PRIOR APPROVAL OF THE ENGINEER.
14. REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY AND NOT NECESSARILY SHOWN IN TRUE PROJECTION.
15. SPLICES IN REINFORCEMENT SHALL BE MADE ONLY IN THE POSITIONS SHOWN OR AS OTHERWISE APPROVED BY THE ENGINEER.
16. WELDING OF REINFORCEMENT SHALL BE MADE ONLY IN THE POSITIONS SHOWN OR AS OTHERWISE APPROVED BY THE ENGINEER.
17. THE CONTRACTOR TO GIVE THE ENGINEER A MINIMUM OF 48 HOURS NOTIFICATION OF HIS INTENTION TO POUR CONCRETE.
18. ALL REINFORCEMENT SHALL BE SUPPORTED IN IT'S CORRECT POSITION DURING CONCRETING BY APPROVED BAR CHAIRS, SPACER OR SUPPORT BARS.
19. CONCRETE PROPERTIES SHALL BE AS FOLLOWS:

ELEMENT & LOCATION	MIN GRADE (MPa)
FOOTINGS	40
SLABS ON GROUND	40
SUSPENDED SLABS	40
PRECAST PANELS	40

20. ANY TRAFFICABLE (VEHICULAR) AREAS TO BE SR 40MPa CONCRETE.
21. THE USE OF CHLORINE ADDITIVES AND FLY ASH IS EXPRESSLY FORBIDDEN IN ALL CONCRETE.
22. UNLESS OTHERWISE SHOWN, PROVIDE N12-300 DISTRIBUTION REINFORCEMENT, LAPPED 450 AT SPLICES, 2 x N12 DIAGONAL CORNER BARS 2000 LONG AT ALL RE-ENTRANT CORNERS OF OPENINGS SLABS AND WALLS.
23. ALL CONCRETE ON THIS PROJECT IS TO BE TYPE SR GRADED N40 MPa. U.N.O. THE OWNERS SHOULD BE ADVISED OF GENERAL FOUNDATION MAINTENANCE REQUIREMENTS AS OUTLINED ON CSIRO DOCUMENT "GUIDE TO HOME OWNERS ON FOUNDATION MAINTENANCE AND FOOTING PERFORMANCE".

STRUCTURAL STEELWORK NOTES:

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 4100.
2. ALL HOT ROLLED SECTIONS ARE TO BE GRADE 300 PLUS.
3. ALL STRUCTURAL HOLLOW SECTIONS ARE TO BE GRADE 350 MPA.
4. WELDING SHALL BE PERFORMED BY AN EXPERIENCED OPERATOR IN ACCORDANCE WITH AS 1554, INSPECTED AND CERTIFIED BY A QUALIFIED PERSON AS DESCRIBED IN AS 2214.
5. THE BOLTING PROCEDURES ARE TO BE IN ACCORDANCE WITH AS 1111 AND AS 1252.
6. THE CONTRACTOR SHALL PROVIDE TEMPORARY BRACING AND LEAVE IN PLACE UNTIL PERMANENT BRACING ELEMENTS ARE CONSTRUCTED. SUCH TEMPORARY BRACING AS IS NECESSARY TO STABILISE THE STRUCTURE.
7. CONCRETE ENCASED STEELWORK SHALL BE COMPLETELY WRAPPED WITH FGW41 GIRDER WRAP FABRIC, UNLESS OTHERWISE SHOWN.
8. THE ENDS OF ALL HOLLOW SECTION MEMBERS ARE TO BE SEALED WITH NOMINAL THICKNESS PLATES AND CONTINUOUS FILLET WELD UNLESS OTHERWISE SHOWN.
9. UNLESS OTHERWISE SPECIFIED STEELWORK SHALL BE PAINTED ONE SHOP COAT OF RED OXIDE ZINC PHOSPHATE PRIMER. MEMBERS ENCASED IN CONCRETE, FIRE SPRAYED OR FRICTION GRIP BOLTED CONNECTIONS MUST NOT BE PAINTED.
10. PAINTING, AS SPECIFIED BY THE PRINCIPAL, SHALL BE IN ACCORDANCE WITH AS 2312, TO SUIT SITE EXPOSURE CONDITIONS.
11. EXCEPT WHERE OTHERWISE SHOWN, WELDS ARE TO BE 6mm CONTINUOUS FILLET WELDS. ALL WELDS ARE TO BE STRUCTURAL PURPOSE U.N.O.
12. THE CONTRACTOR IS TO ALLOW FOR ALL THE NECESSARY TRIMMING ANGLES AND FIXINGS TO SUPPORT CLADDING AND FLASHING AT ROOF OR WALL INTERSECTIONS.
13. UNLESS OTHERWISE SHOWN, PROVIDE SINGLE LINE OF BOLTS CLEAT CONNECTIONS, 10mm CLEAT PLATE, 6mm CONTINUOUS FILLET WELD AND M20 8.8/S BOLTS. PROVIDE 2 NO. BOLTS TO MEMBERS 200mm DEEP & LESS. A.I.S.C. STANDARDIZED STRUCTURAL CONNECTIONS.
14. IN ADDITION THE FABRICATOR SHALL SUBMIT THREE SETS OF SHOP DRAWINGS TO THE ENGINEER FOR REVIEW. APPROVAL OF THE SHOP DRAWINGS SHALL BE OBTAINED FROM THE ENGINEER PRIOR TO COMMENCEMENT OF THE STEELWORK MANUFACTURE.
15. REMOVE ALL BURS, SHARP EDGES, DAGS, SLAG, DUST, RUST, DIRT, MILL SCALE AND OTHER DEBRIS.

TYPICAL STEEL CONNECTION NOTES:

1. ALL PLATES AND FLATS SHALL BE GRADE 350 AND SHALL BE 10mm THK (MIN) - UNO.
2. ALL WELDS SHALL BE 6CFW ALL AROUND, BOTH SIDES - UNO.
3. ALL BOLTS SHALL BE M20 8.8S - UNO.
4. ALL STEEL CONNECTIONS SHALL BE GALVANISED.
5. PROVIDE A MINIMUM OF TWO BOLTS PER FIXING - UNO.
6. PROVIDE THREE BOLTS PER SUPPORT FOR BEAM DEPTHS BETWEEN 300 AND 399mm - UNO. PROVIDE FOUR BOLTS PER SUPPORT FOR BEAM DEPTHS BETWEEN 400 AND 499mm - UNO.
7. [illegible] WITH 100mm [illegible]

STRUCTURAL STEEL GALVANISING NOTES:

1. ALL EXPOSED STRUCTURAL STEEL SHALL BE HOT DIP GALVANISED IN ACCORDANCE WITH AS1650 WITH A MINIMUM ZINC MASS OF 600g/m². ALL GALVANISING DRAIN HOLES ARE TO BE PLUGGED WITH SILICONE SEALANT.
2. [illegible] PREPARED & SHALL BE PRIMED & HAVE TWO COATS OF AN APPROVED ZINC RICH PAINT FINISH COAT.
3. ALL COLUMNS & BASE PLATES IN CONTACT WITH THE GROUND ARE TO HAVE TWO COATS OF TAUBMANS DURAMASTIC.

ALPINE WORKING CONDITIONS:

1. ALL PRODUCTS AND MATERIALS TO BE SUITABLE FOR ALPINE CONDITIONS, RESISTANT TO FREEZE AND THAW EFFECTS.
2. ALL FINISHED SURFACES TO BE FREELY DRAINING.
3. [illegible]
4. ALL IMPACT SURFACES TO BE REINSTATED UPON COMPLETION.
5. NO SOIL TO BE IMPORTED TO THE SITE FROM ELSEWHERE.
6. [illegible] ENVIRONMENTAL MANAGEMENT PLAN.
7. ALL SITE WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH APPROVED SITE SAFETY PLAN.
8. [illegible] FALL PROTECTION COUNTER MEASURES.
9. THIS SITE IS PRONE TO SUDDEN WEATHER CHANGES, EXTREME CONDITIONS AND SEVERE WIND GUSTS.
10. THE MT.BULLER FIRE TOWER IS A SIGNIFICANT STRUCTURE AND SHALL BE PROTECTED FROM ANY ADVERSE IMPACTS.
11. THE FIRE TOWER IS AN OPERATIONAL FACILITY DURING SUMMER. ACCESS & FUNCTIONALITY SHALL REMAIN UNHINDERED FOR THE DURATION OF THIS WORK.
12. THIS SITE IS A POPULAR DESTINATION AND LOCATION FOR VISITORS. NO WORK SHALL TAKE PLACE ON WEEKENDS OR PUBLIC HOLIDAYS.
13. THE CONTRACTOR SHALL MAINTAIN A SECURE PERIMETER TO LIMIT UNAUTHORISED ACCESS TO THE WORK SITE.
14. ALL STONE TO BE IMPORTED TO THE SITE. NO NATURAL STONE BEYOND FOOTPRINT OF SITE TO BE DISTURBED OR DISPLACED.

GROUND ANCHOR NOTES:

1. ALL FOUNDATIONS SHALL BE SUPPORTED UPON AND ANCHORED TO INSITU ROCK WITHOUT DETACHMENT POTENTIAL AND BEING HIGHLY OR LESS WEATHERED WITH AN UNCONFINED COMPRESSIVE STRENGTH OF AT LEAST 1 MPa.
2. A DETAILED ANCHOR CONSTRUCTION METHODOLOGY SHOULD BE PROVIDED FOR APPROVAL OF THE STRUCTURAL ENGINEER PRIOR TO ANCHOR CONSTRUCTION.
3. ROCK ANCHORS SHOULD BE INSTALLED IN ACCORDANCE WITH VICROADS SPECIFICATION 680, BONDED ANCHORS (FEBRUARY 2021).
4. ROCK ANCHORS SHALL BE RATED TO A MINIMUM ALLOWABLE TENSILE LOADS CAPACITY AS INDICATED ON DRAWINGS.
5. ALL STEEL COMPONENTS (i.e. ANCHOR BARS, HEAD PLATES AND NUTS) SHOULD BE EITHER:
   - GALVANISED AND PROVIDED WITH A MINIMUM 40MM GROUT/SHOTCRETE COVER OR;
   - COMPRISED OF STAINLESS STEEL (OR OTHER) CORROSION RESISTANT ELEMENTS TO THE SATISFACTION OF THE STRUCTURAL ENGINEER.
6. IF CEMENTITIOUS GROUT IS USED TO SECURE THE ANCHOR IN THE BOREHOLE, GROUTING SHOULD BE UNDERTAKEN IN A CONTINUOUS OPERATION SO AS TO AVOID THE FORMATION OF COLD JOINTS WITHIN THE GROUT. GROUT SHOULD BE INJECTED USING TREMIE TECHNIQUES, COMMENCING AT THE BASE OF THE HOLE USING A GROUT TUBE. THE COLLAR OF THE HOLE SHOULD BE PLUGGED DURING THE GROUTING OPERATION TO ALLOW THE GROUT TO FULLY FILL THE BOREHOLE. ALTERNATIVELY, CHEMICAL BONDING TECHNIQUES (CHEMSET) OR OTHER PROPRIETARY ANCHORING METHODS COULD BE USED SUBJECT TO APPROVAL FROM THE STRUCTURAL ENGINEER.
7. WHERE OPEN JOINTS ARE ENCOUNTERED THERE IS THE POTENTIAL FOR GROUT LOSS AND IN THESE CIRCUMSTANCES CONSIDERATION MAY NEED TO BE GIVEN TO THE USE OF A GROUT SOCK OR ALTERNATIVE CONSTRUCTION METHODOLOGY.
8. CENTRALISERS SHOULD BE EQUALLY SPACED ALONG THE ANCHOR WITH A MINIMUM OF 1 CENTRALISERS PER ANCHOR. THE CENTRALISER NO MORE THAN 0.25M FROM THE END OF THE BAR.
9. THE ANCHOR SHALL BE INSTALLED IN HIGHLY OR LESS WEATHERED ROCK WITH A MINIMUM UNCONFINED COMPRESSIVE STRENGTH OF 1MPa AND A MINIMUM ULTIMATE GROUT/GROUND BOND STRENGTH OF 250 kPA. THE MINIMUM BONDED ANCHOR LENGTH SHALL BE 0.5M AND MINIMUM ANCHOR FREE LENGTH SHOULD BE 0.25M.
10. CORROSION PROTECTION IS TO COMPRISE A MINIMUM OF 40MM GROUT COVER OVER STEEL ANCHOR ELEMENTS. ALTERNATIVELY, THE CONTRACTOR MAY PROPOSE CORROSION RESISTANT STRUCTURAL ELEMENTS TO THE APPROVAL OF THE STRUCTURAL ENGINEER.
11. ALL ANCHOR HOLES SHOULD BE DRILLED USING AIR FLUSH DRILLING TECHNIQUES AND FLUSHED WITH AIR TO REMOVE DEBRIS PRIOR TO ANCHOR INSTALLATION. ANCHORS SHOULD BE INSTALLED AS SOON AS POSSIBLE AFTER DRILLING AND NOT MORE THAN 24 HOURS AFTER DRILLING.
12. ANCHORS ARE TO BE PROOF LOADED IN ACCORDANCE WITH VICROADS SPECIFICATION 680, BONDED ANCHORS (FEBRUARY 2021) AND AUSTRALIAN STANDARDS AS 4678-2002 EARTH RETAINING STRUCTURES TO CONFIRM THAT THE DESIGN LOADS ARE ACHIEVED. THE PROOF LOAD IS TO BE A MINIMUM OF 1.5 TIMES THE ANCHOR WORKING LOAD.
13. THE CONTACT BETWEEN STRUCTURAL ELEMENTS AT THE HEAD OF THE ANCHOR AND GROUND SHOULD BE CLEANED OFF TO EXPOSE NATURAL ROCK, DRY AND FREE OF LOOSE DEBRIS AT THE TIME OF CONSTRUCTION.
14. ALL FOOTING AND ANCHOR LOCATIONS ARE TO BE INSPECTED BY STRUCTURAL ENGINEER PRIOR TO ANCHOR INSTALLATION.

HOLD POINTS:

WRITTEN APPROVAL FROM THE DNF REPRESENTATIVE IS REQUIRED TO CONFIRM THE FOLLOWING MANDATORY HOLD POINTS:

1. SUBMISSION AND APPROVAL OF CONTRACT WORKS PROGRAM AND SITE ENVIRONMENTAL MANAGEMENT PLAN.
2. SUBMISSION AND APPROVAL OF ALL STEEL COMPONENTS SHOP DRAWINGS FOR PARKS VICTORIA REPRESENTATIVE APPROVAL.
3. SET OUT OF ALL DEFINED WORKS AREA WITH STAKES AND PROTECTIVE TAPE AS AGREED WITH THE PARKS VICTORIA REPRESENTATIVE.
4. SET OUT OF ALL HARD LANDSCAPE WORKS ON SITE (USING DIGITAL AUTOCAD FILES) BY REGISTERED SURVEYOR WITH PROVEN EXPERIENCE IN THE ACCURATE SET OUT OF LANDSCAPE CONSTRUCTION WORKS USING ELECTRONIC CAD FILES, PRIOR TO THE COMMENCEMENT OF ANY SITE WORKS. REFER TO CLAUSE 1.11. THE CONTRACTOR IS TO SET OUT THE ENTIRE WORKS, LAYOUT OF PANELS, CHANGES IN GRADE, AND DESIGN LEVELS USING PEGS, STRING LINES OR ALL PANELS AND MARKERS FOR CONFIRMATION ON SITE BY THE PARKS VICTORIA REPRESENTATIVE.
5. INSPECTION OF COMPLETED TEST ROCK BOLT INSTALLATION IN ACCORDANCE WITH THE APPROVED METHODOLOGY.
6. SET OUT OF CABINS INCLUDING LEVELS AND ORIENTATION.
7. PROGRAMMED SITE PROGRESS WORKS MILESTONES IN ACCORDANCE WITH THE AGREED CONTRACT WORKS PROGRAM.
8. PRACTICAL COMPLETION INCLUDING RECTIFICATION OF ANY TO ALL DEFECTS APPROVAL OF PARKS VICTORIA REPRESENTATIVES TO COMMENCE 52 WEEKS DEFECTS PERIOD.
9. FINAL COMPLETION ON COMPLETION OF 52 WEEKS DEFECTS PERIOD, INCLUDING RECTIFICATION OF ANY TO ALL DEFECTS APPROVAL OF PARKS VICTORIA REPRESENTATIVES.

NOTE:

1. THE PARKS VICTORIA REPRESENTATIVE RESERVES THE RIGHT TO INSERT ADDITIONAL HOLD POINTS IF DEEMED NECESSARY TO ENSURE QUALITY CONTROL OF WORKS.
2. ALL SAMPLES ARE TO BE DELIVERED TO A REGIONAL VICTORIA ADDRESS TO BE ADVISED.

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PRELIMINARY (NOT FOR CONSTRUCTION) 12/09/2022

REDUCED SCALE

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DESIGNED BY G.Ryan September 2022
DRAFTED BY T.Ainsworth September 2022
VERIFIED BY

REV	AMENDMENTS	DATE	BY
A	INITIAL DRAFT	05/09/22	TA

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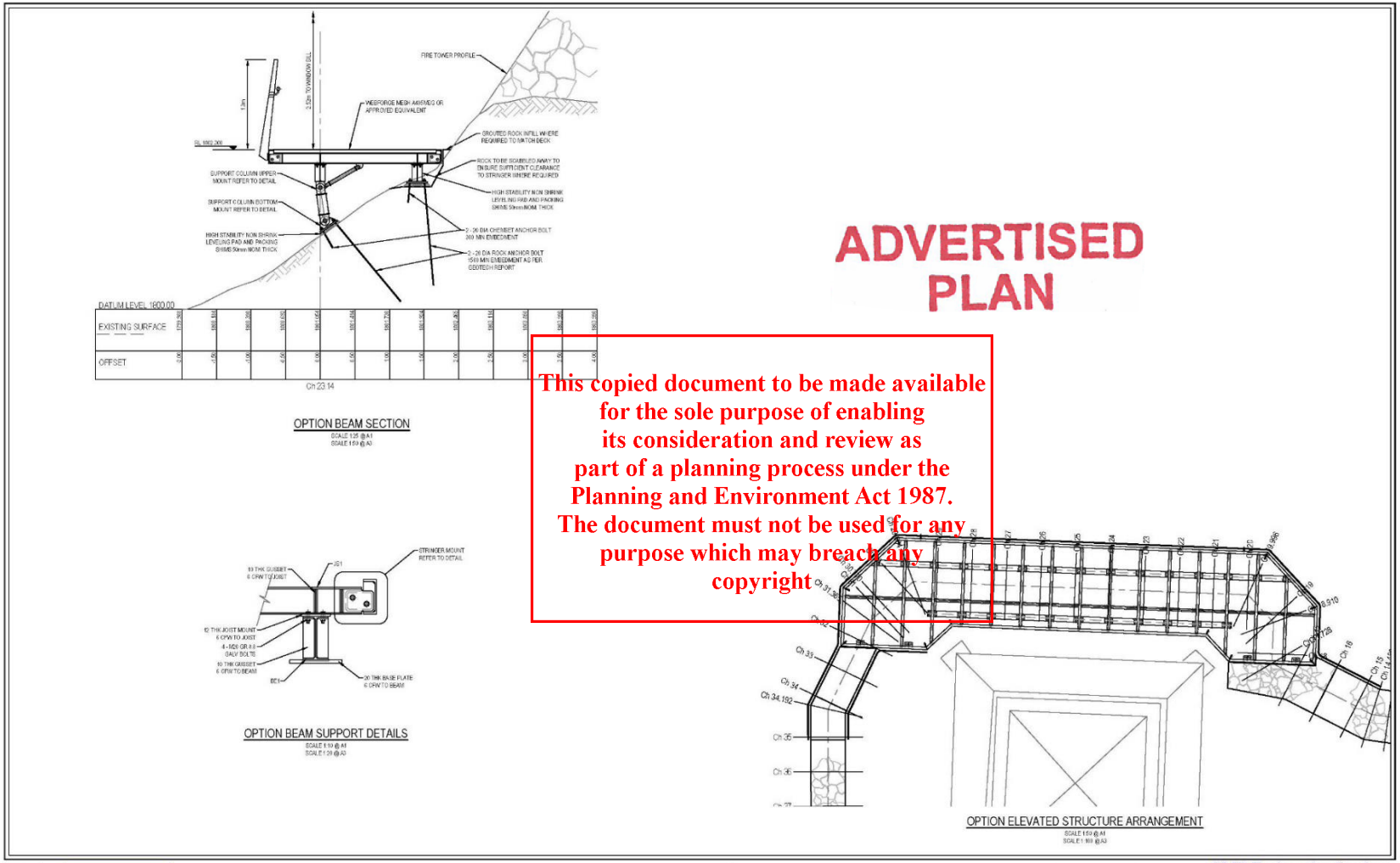
Mt Buller Mt Stirling Resort Management
McLaughlans Shoulder Lookout Design

General Notes
Drawing No. GMR21019.FT20
Revision. A Sheet No. FT20
GMR21019.05 - General Notes - Fire Tower.dwg A1



GMR

GMR Engineering Services

PRELIMINARY
(NOT FOR CONSTRUCTION)
12/08/2022

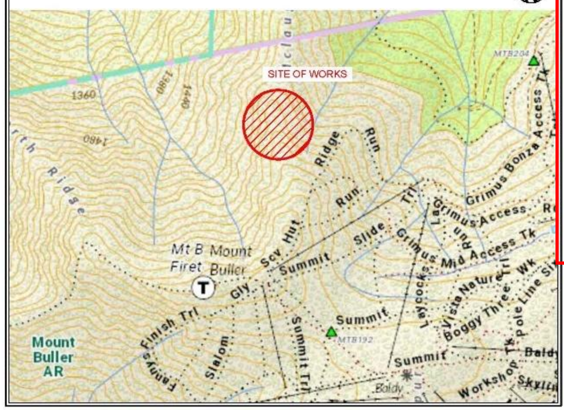
REDUCED SCALE

Mt Buller Mt Stirling Resort Management

McLaughlans Shoulder Lookout Design

McLaughlans Shoulder, Mt Buller

LOCALITY PLAN



MtBuller

DRAWING SCHEDULE

DRAWING NUMBER	DRAWING TITLE	REVISION
GMR21019.MS01	Cover Sheet	
GMR21019.MS02	Existing Conditions	A
GMR21019.MS03	Existing Consitions - Aerial	A
GMR21019.MS04	Proposed Conditions	C
GMR21019.MS05 - MS06	Proposed Sections	C
GMR21019.MS07	Proposed Structural & Details	C
GMR21019.MS08	Proposed Details	C
GMR21019.MS09	General Notes	A

ADVERTISED PLAN

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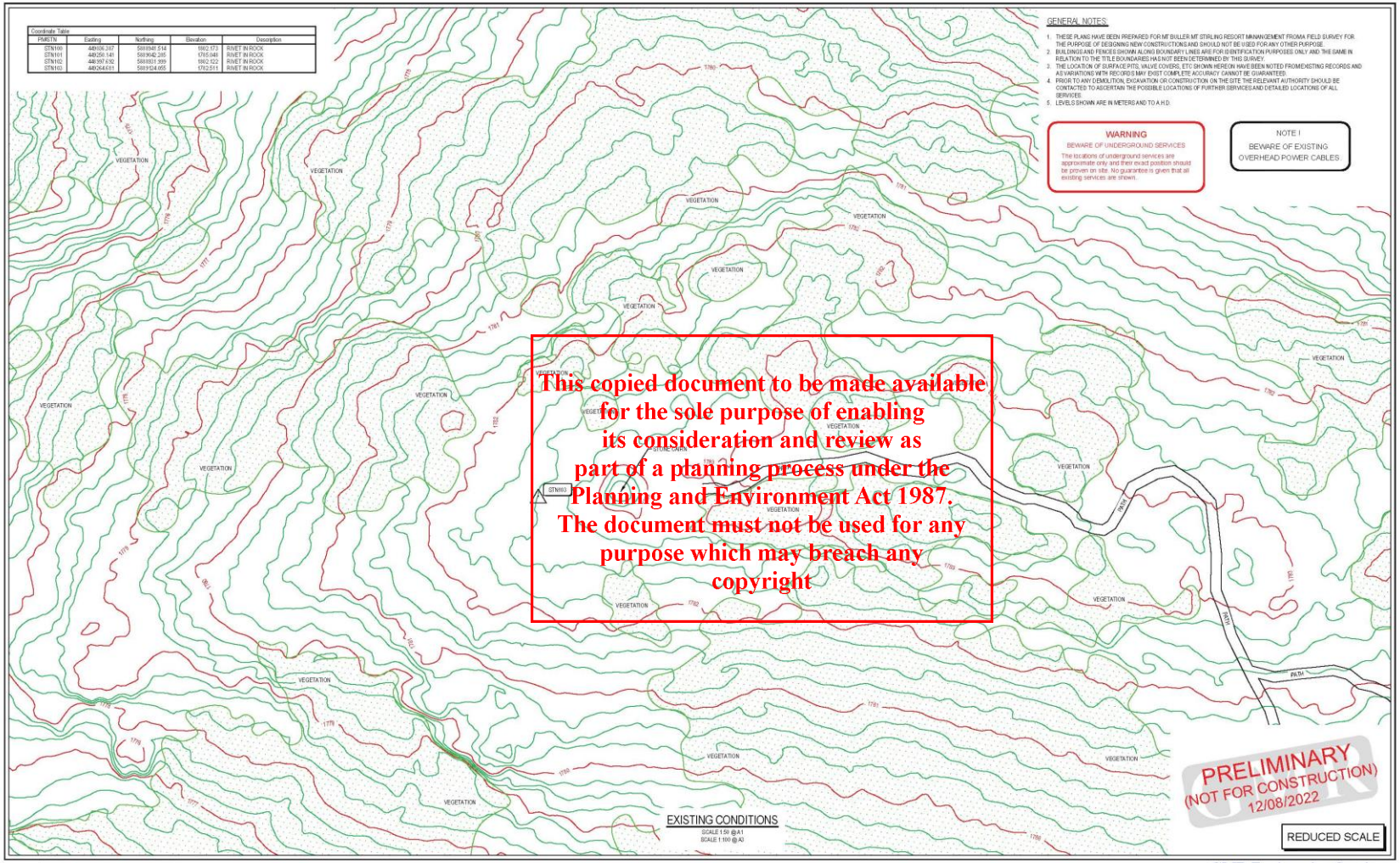
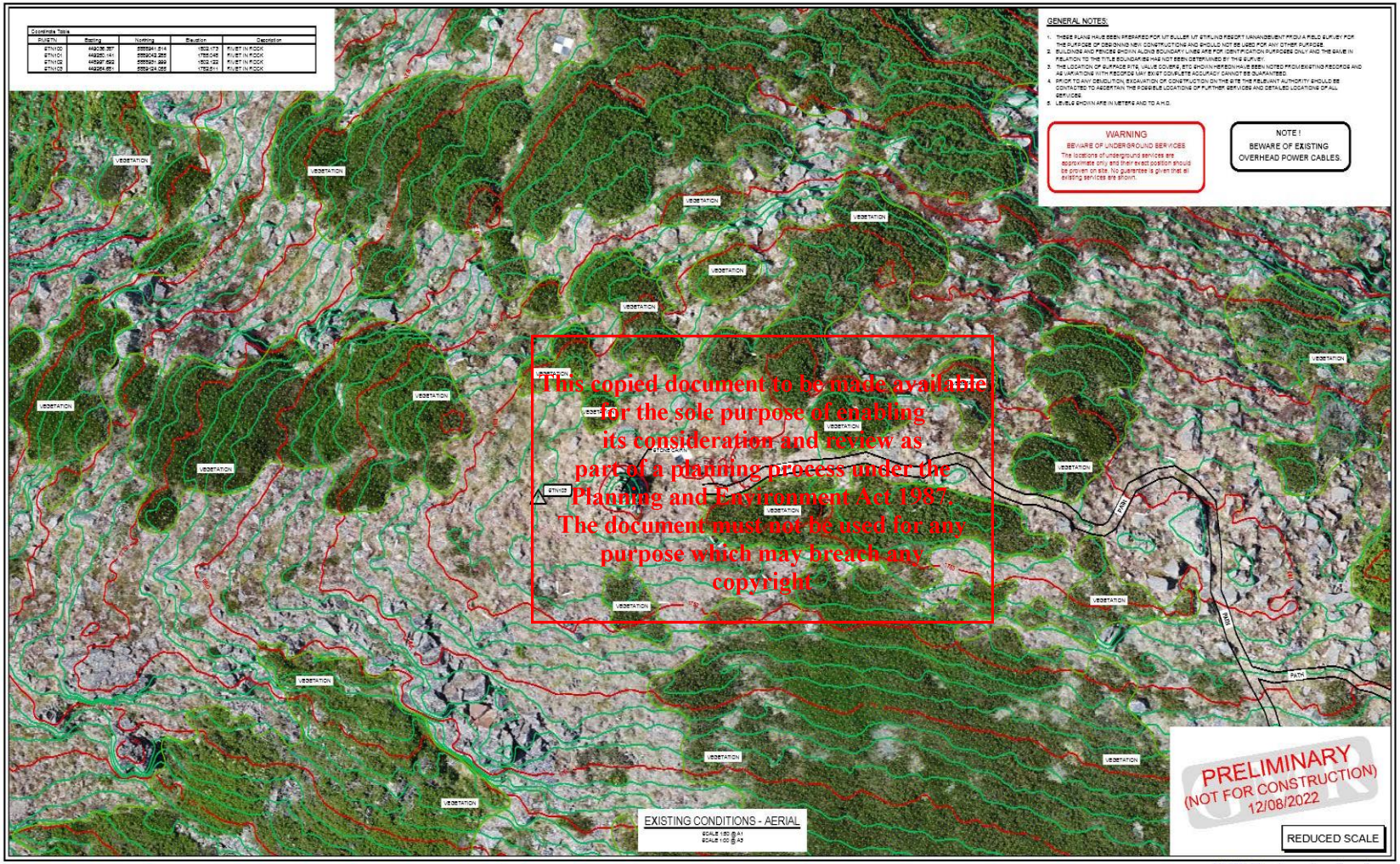
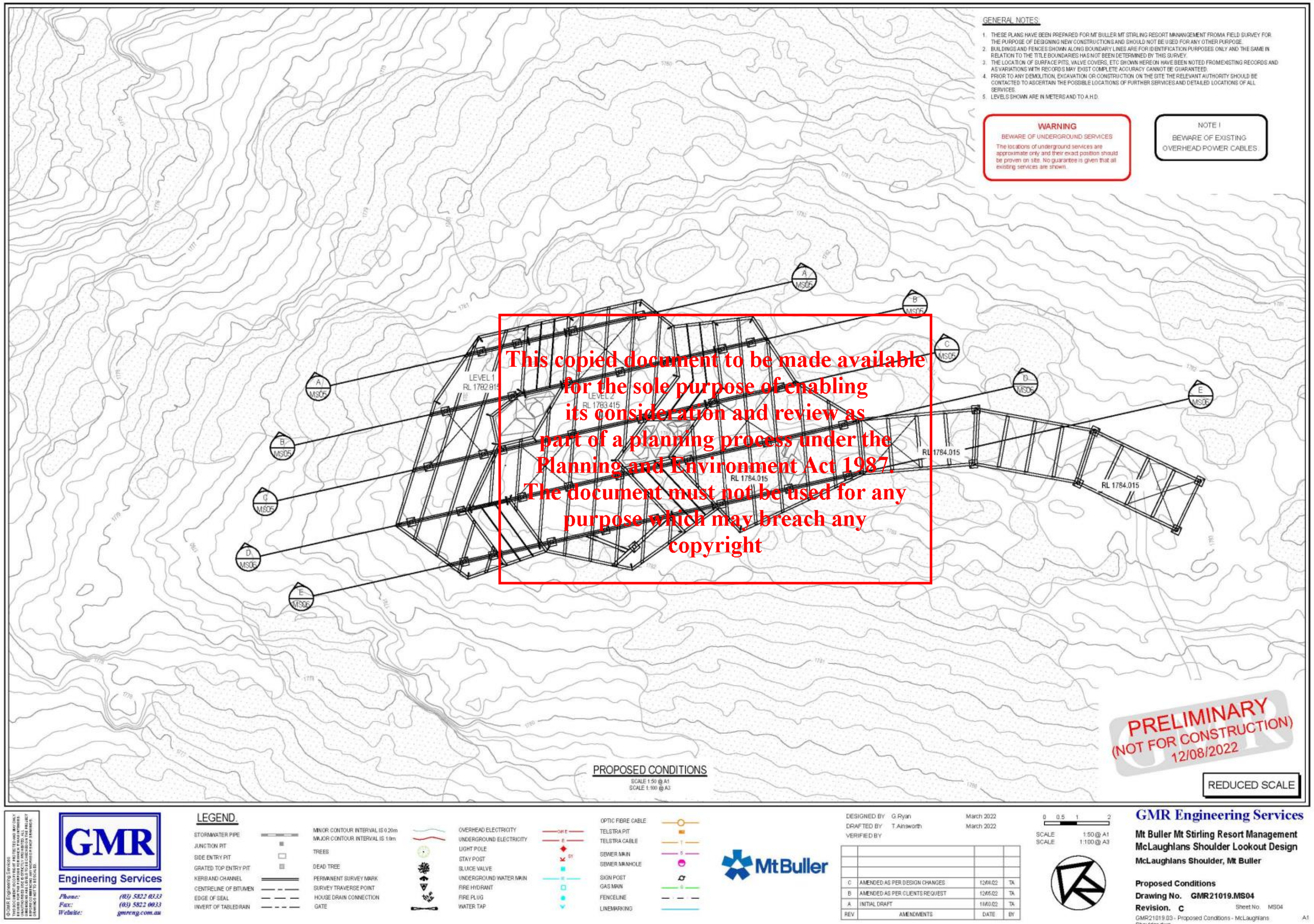
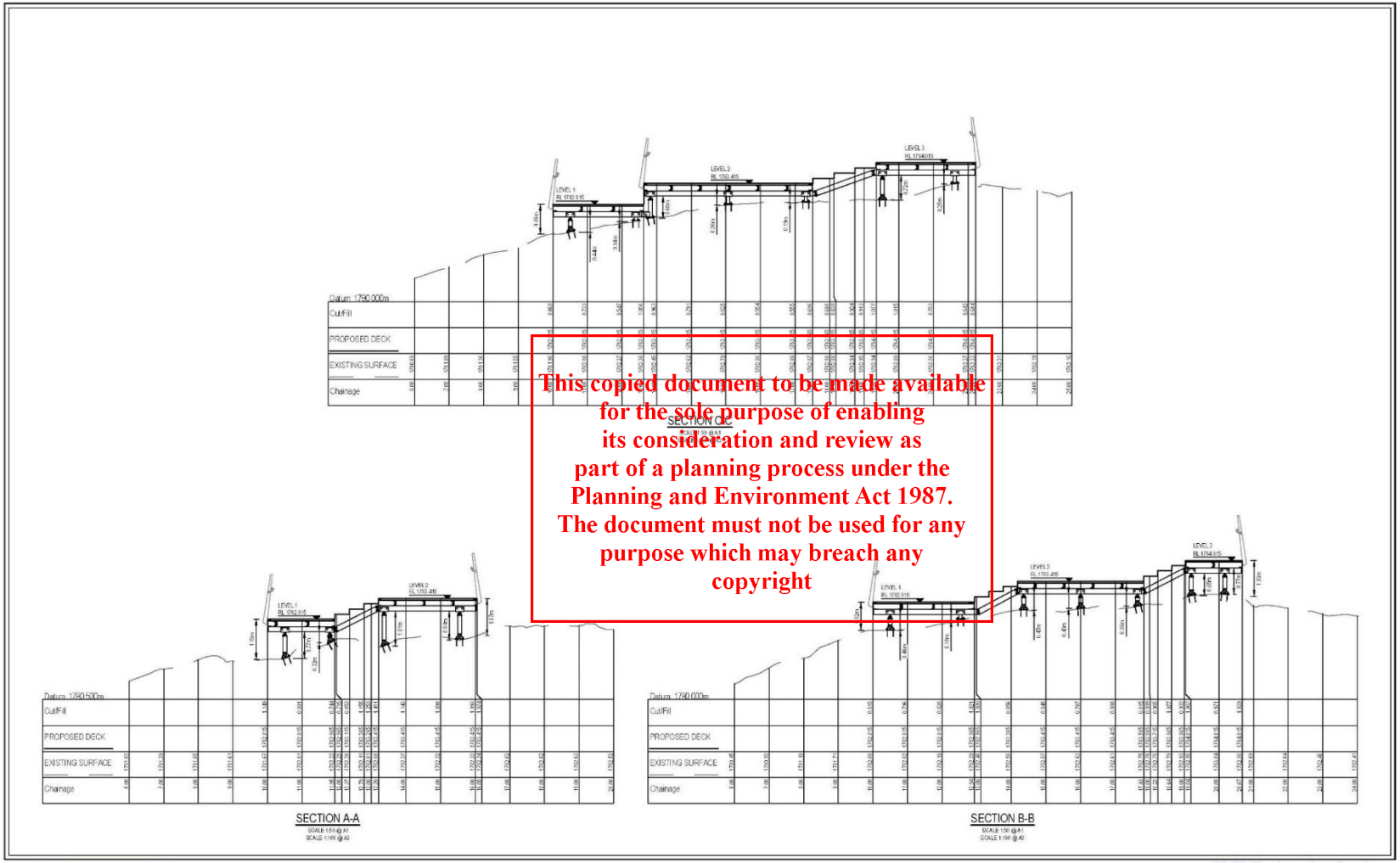
WARNING
BEWARE OF UNDERGROUND SERVICES
The locations of underground services are approximate only and their exact position should be proven on site. No guarantee is given that all existing services are shown.





ADVERTISED PLAN





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Mt Buller

REV	AMENDMENTS	DATE	BY
C	AMENDED AS PER DESIGN CHANGES	10/08/22	TA
B	AMENDED AS PER CLIENTS REQUEST	12/05/22	TA
A	INITIAL DRAFT	16/02/22	TA

DESIGNED BY: G.Ryan March 2022
DRAFTED BY: T.Ainsworth March 2022
VERIFIED BY:

SCALE 1:50 @ A1
SCALE 1:100 @ A3

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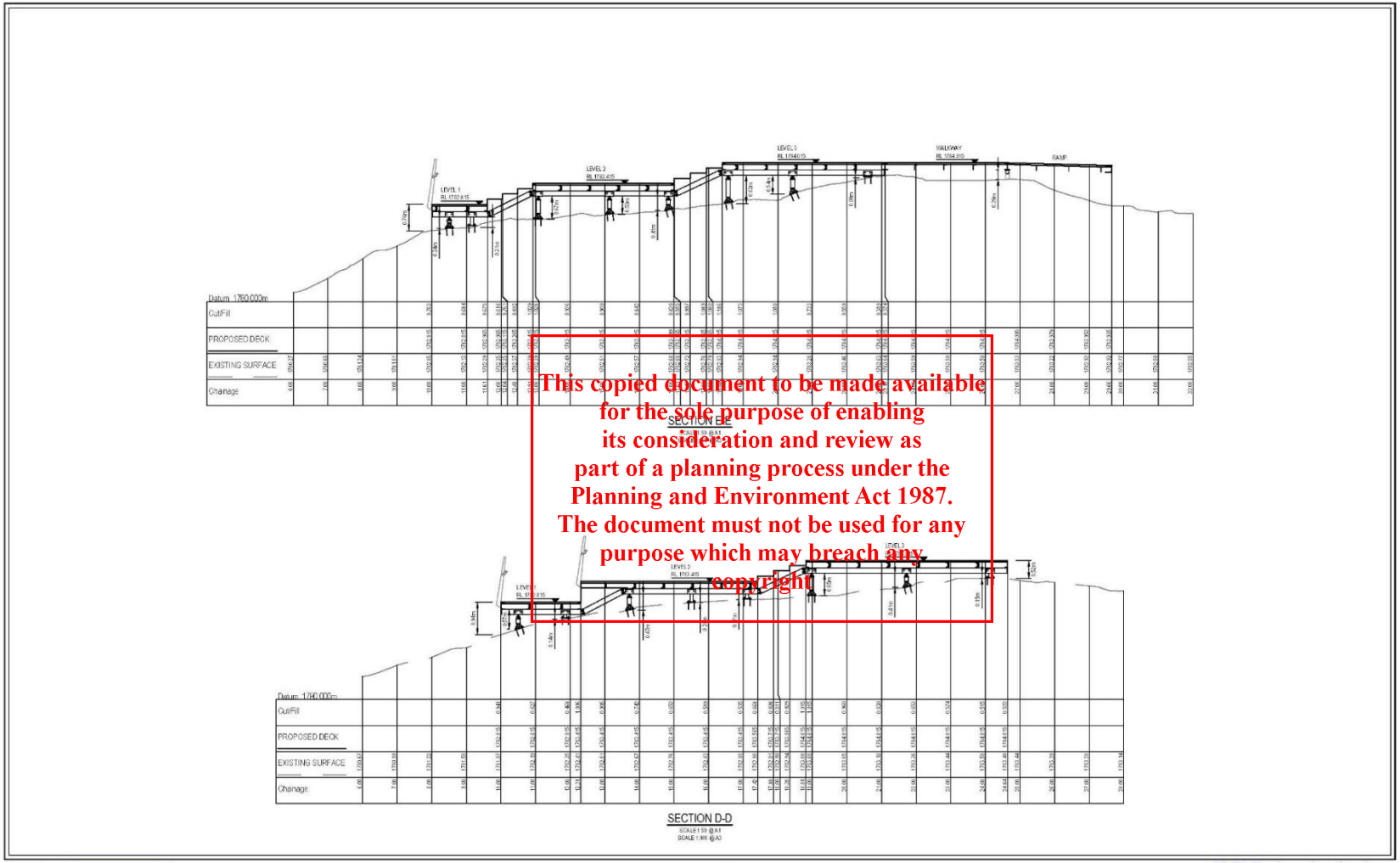
Mt Buller Mt Stirling Resort Management
McLaughlans Shoulder Lookout Design
McLaughlans Shoulder, Mt Buller

Proposed Sections
Drawing No. GMR21019.MS05
Revision. C
Sheet No. MS05

GMR21019.03 - Proposed Conditions - McLaughlans Shoulder.dwg A1



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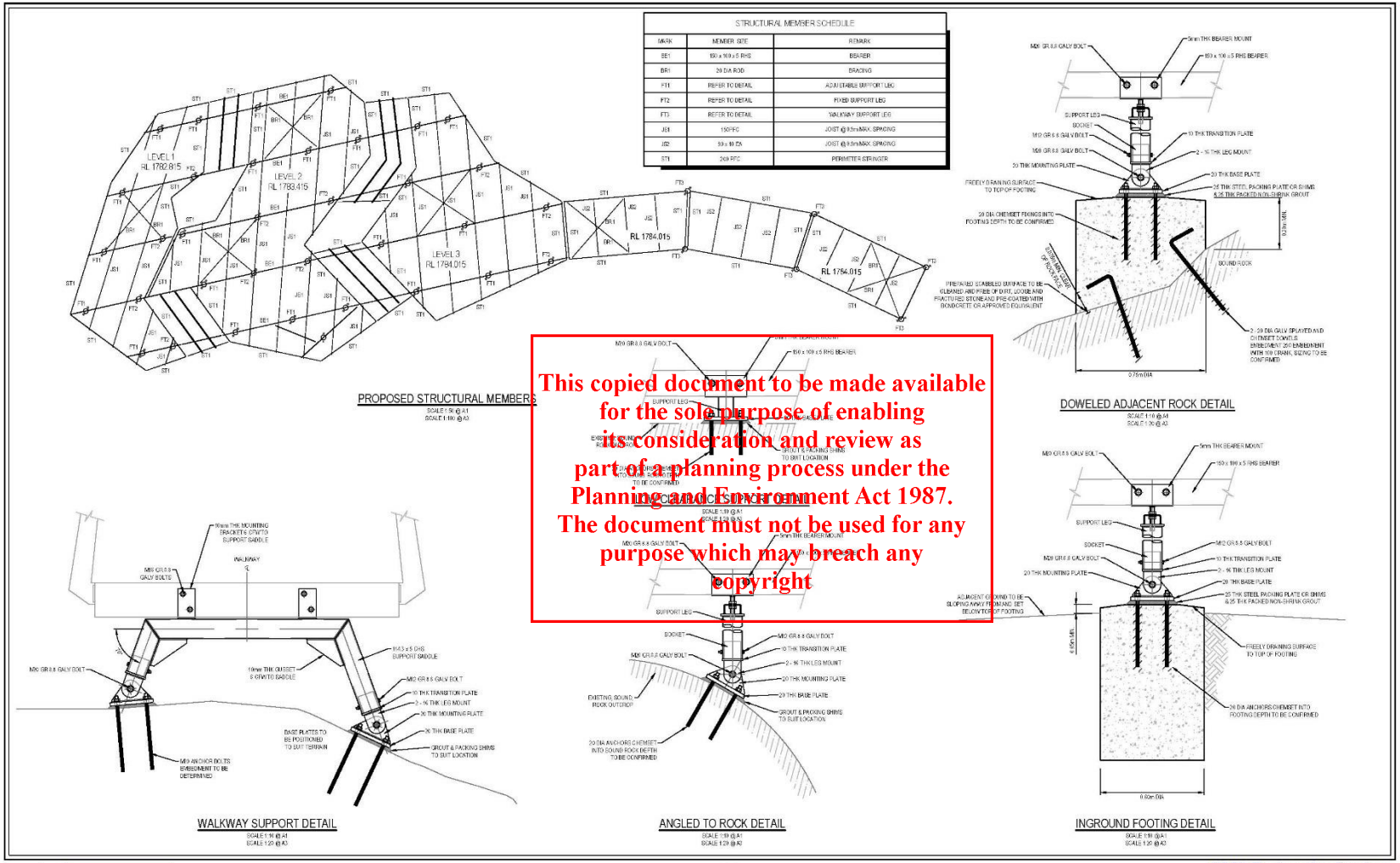
Mt Buller Mt Stirling Resort Management
McLaughlans Shoulder Lookout Design
McLaughlans Shoulder, Mt Buller

Proposed Sections
Drawing No. GMR21019.MS05
Revision. C



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MtBuller

DESIGNED BY G.Ryan March 2022
DRAFTED BY T.Ainsworth March 2022
VERIFIED BY

REV	AMENDMENTS	DATE	BY
C	AMENDED AS PER DESIGN CHANGES	12/8/22	TA
B	AMENDED AS PER CLIENTS REQUEST	10/6/22	TA
A	INITIAL DRAFT	19/5/22	TA

SCALE 1:50 @ A1
SCALE 1:100 @ A3

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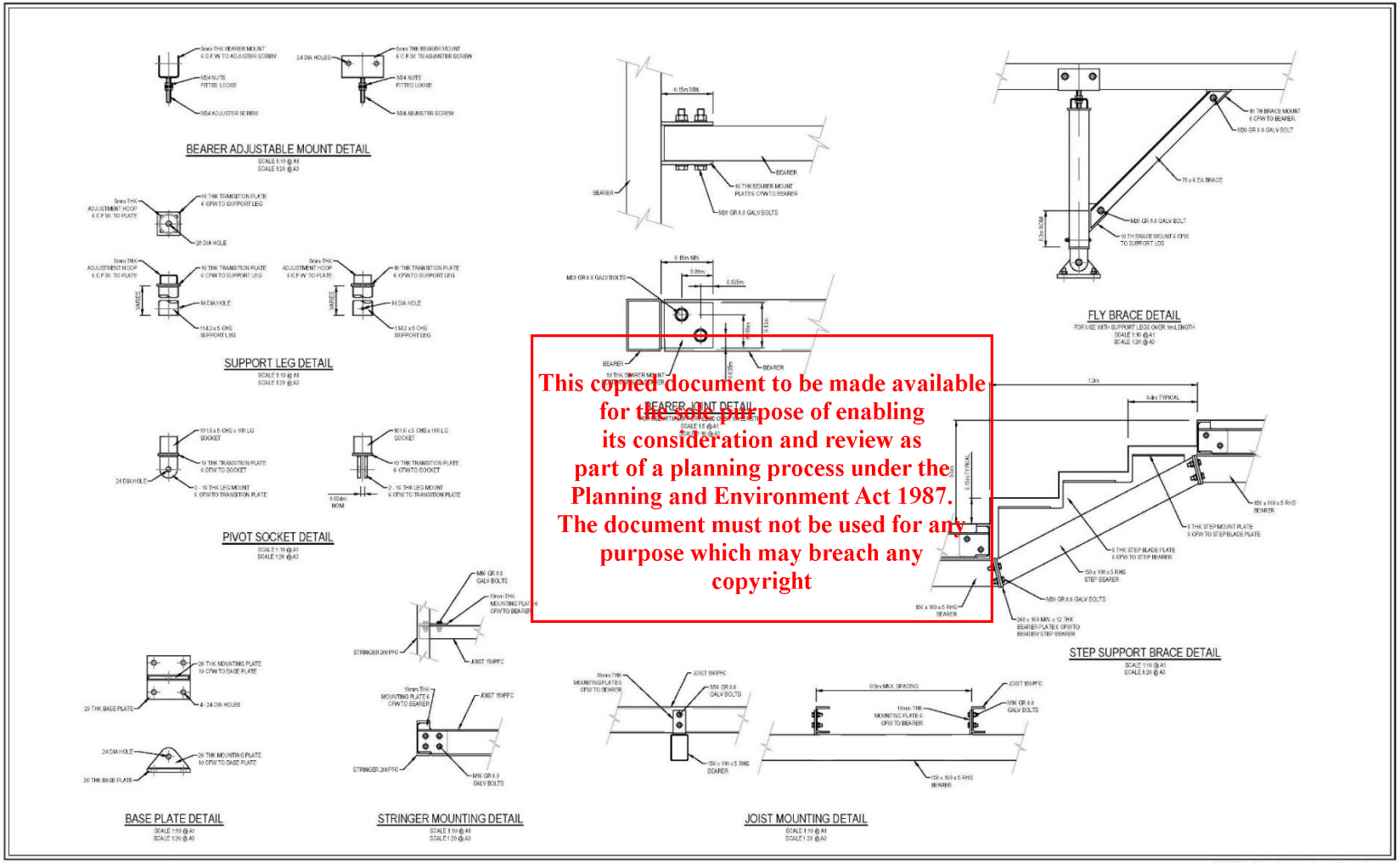
Mt Buller Mt Stirling Resort Management
McLaughlans Shoulder Lookout Design
McLaughlans Shoulder, Mt Buller
Proposed Structural Members & Details
Drawing No. GMR21019.MS07
Revision. C
Sheet No. MS07
GMR21019.03 - Proposed Conditions - McLaughlans Shoulder.dwg
A1



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Mt Buller

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C	AMENDED AS PER DESIGN CHANGES	10/08/22	TA
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Mt Buller Mt Stirling Resort Management
McLaughlans Shoulder Lookout Design
McLaughlans Shoulder, Mt Buller

Proposed Details
Drawing No. GMR21019.MS08
Revision. C

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GENERAL NOTES:

1. PRIOR TO SETTING OUT / CONSTRUCTING THESE WORKS THE PROPERTY BOUNDARIES TO BE CONFIRMED BY A LICENSED SURVEYOR.
2. THE ALIGNMENT GEOMETRY SHALL BE ADJUSTED TO SUIT. NO LAND ACQUISITION OR PROPERTY ADJUSTMENTS REQUIRED.
3. ALL DRAINAGE PIPES TO BE CLASS 2 RRJ RCP UNLESS NOTED OTHERWISE.
4. BACKFILL FOR STORMWATER PIPES UNDER PAVEMENTS AND DRIVABLE AREAS TO BE AS PER TRENCH DETAIL, TYPE 1.
5. PIT LID LEVELS SHALL MATCH TOP OF ADJACENT SURFACE LEVELS FOR JUNCTION PITS AND GRATED TOP ENTRY PITS. ALL PIT LIDS TO MATCH LEVEL AND GRADE OF DESIGN SURFACE IN WHICH LOCATED.
6. THE CONTRACTOR SHALL CONFIRM CONDUIT LOCATION PRIOR TO EXCAVATION AND PLACEMENT.
7. THE LOCATION OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION AND LEVEL SHOULD BE PROVEN ON SITE PRIOR TO THE COMMENCEMENT OF ANY WORKS.
8. TREES TO BE REMOVED / TRIMMED ARE TO BE DONE SO WITH APPROVAL FROM SUPERINTENDENT. TO BE SAWCUT, GRUBBED AND REMOVED OFF SITE TO AN APPROVED LOCATION.
9. CARE IS TO BE TAKEN TO LIMIT THE DAMAGED CAUSED TO TREE ROOTS. ANY ROOTS DAMAGED DURING EXCAVATION THAT ARE GREATER THAN 25mm DIAMETER SHOULD BE CUT CLEAN AND APPLY A COAT OF STERIPRUNE.
10. STRIP TOPSOIL TO A DEPTH OF 75mm AND STOCKPILE AT AN APPROVED LOCATION FOR LATER REUSE.
11. EXCAVATE ALONGSIDE EXISTING JUNCTION PITS & BREAKAWAY SIDEWALL. CONSTRUCT NEW PIT AS DETAILED IN DRAWINGS. REMOVE OFF SITE.
12. EXISTING HARDSTAND AREAS (ie. CONCRETE DRIVEWAYS) TO BE BROKEN UP & REMOVED OFFSITE TO AN APPROVED LOCATION WITHIN 10km.
13. ANY EXISTING SIGNS REMOVED DURING WORKS TO BE REINSTATED AT AN APPROPRIATE LOCATION TO APPROVAL OF SUPERINTENDENT.
14. EXISTING ELECTRICITY MAIN TO BE DEPTHED UPON BEGINNING OF CONTRACT. ELECTRICITY MAIN TO COMPLY WITH AUTHORITY CLEARANCES. CONTRACTOR TO MAKE NECESSARY ADJUSTMENTS TO REQUIREMENTS OF AUTHORITY STANDARDS AND ADJUST IF REQUIRED.
15. ELECTRICAL CONTRACTOR TO DISCONNECT AND DISMANTLE EXISTING LIGHTING. STORE OFF SITE AT A LOCATION DIRECTED BY COUNCIL SUPERINTENDENT.
16. EXCAVATE TRENCH AND PROVIDE NEW ELECTRICAL CONDUITS AS SHOWN. USE LONG BEND RADIUS FOR SMOOTHER TRANSITION AROUND CURVES AND CHANGES IN DIRECTION.
17. EXISTING SEWER MAIN TO BE DEPTHED UPON BEGINNING OF CONTRACT. SEWER MAIN TO COMPLY WITH AUTHORITY CLEARANCES. CONTRACTOR TO MAKE NECESSARY ADJUSTMENTS TO AUTHORITY STANDARDS AND ADJUST IF REQUIRED.
18. EXISTING WATER MAIN TO BE DEPTHED UPON BEGINNING OF CONTRACT. WATER MAIN TO COMPLY WITH AUTHORITY CLEARANCES. CONTRACTOR TO MAKE NECESSARY ADJUSTMENTS TO AUTHORITY STANDARDS AND ADJUST IF REQUIRED.
19. EXISTING TELECOMMUNICATION MAINS TO BE DEPTHED UPON BEGINNING OF CONTRACT. TELECOMMUNICATION MAINS TO COMPLY WITH AUTHORITY CLEARANCES. CONTRACTOR TO MAKE NECESSARY ADJUSTMENTS TO AUTHORITY STANDARDS AND ADJUST IF REQUIRED.
20. EXISTING GAS MAINS TO BE DEPTHED UPON BEGINNING OF CONTRACT. GAS MAINS TO COMPLY WITH AUTHORITY CLEARANCES. CONTRACTOR TO MAKE NECESSARY ADJUSTMENTS TO AUTHORITY STANDARDS AND ADJUST IF REQUIRED.
21. EXCAVATE, DEMOLISH AND REMOVE EXISTING KERB AS SHOWN. REMOVE OFF SITE TO AN APPROVED LOCATION WITHIN 10km.
22. EXCAVATE, DEMOLISH AND REMOVE EXISTING PAVEMENT FOR TRENCHING AS SHOWN. REMOVE OFF SITE TO AN APPROVED LOCATION WITHIN 10km.
23. REFER TO INFRASTRUCTURE DESIGN MANUAL (I.D.M) DRAWINGS FOR FURTHER STANDARDS.
24. EXCAVATED MATERIAL TO BE STORED AT AN APPROVED LOCATION AND RECOVERED FOR REUSE (IF SUITABLE) AFTER TESTING AS APPROVED BY COUNCIL SUPERINTENDENT.
25. EXCAVATE TO SUBGRADE LEVEL, STABILISE AND COMPACT PRIOR TO SUPPLY AND COMPACTION OF SUITABLE ROAD PAVEMENT.
26. RECOVER EXISTING SUITABLE TOPSOIL, SCREEN, SPREAD AND COMPACT TO DESIGN LEVELS AS SPECIFIED.
27. EXCAVATE AND SHAPE SURFACE RELIEF DRAIN ALONG ROAD AS NOTED ON DRAWINGS.
28. ON COMPLETION OF WORKS SPREAD RECOVERED TOPSOIL TO ALL LANDSCAPED AREAS. ENSURE SURFACES ARE FREELY DRAINING, EVENLY GRADED AND HAVE SMOOTH INTERFACE.

MAINTENANCE NOTES:

1. UNLESS NOTED OTHERWISE, ON COMPLETION OF THE REHABILITATION AND RE-VEGETATION THE SITE WILL BE ROUTINELY CHECKED FOR WEEDS & CONTROL MEASURES DEPLOYED TO REMOVE THEM FOR A MINIMUM OF 12 MONTHS POST COMPLETION OF THE CONSTRUCTION WORKS.
2. ALL TOP SOIL WILL BE REGULARLY WATERED TO PREVENT DRYING OUT & LOSSES TO WIND.
3. ANY PLANT LOSSES WILL BE REPLACED WITH EQUIVALENT STOCK.
4. ANY ERODED OR DEGRADED AREAS WILL BE REPAIRED IMMEDIATELY & SURFACE DRAINAGE CORRECTED OR OTHERWISE EFFECTIVELY REMEDIATED.

CHEMSET INSTALLATION NOTES & REQUIREMENTS

1. RAMSET M20 & M24 CHEMSET ANCHOR STUDS WITH CHEMSET REO 502 ANCHORING ADHESIVE (OR EQUIVALENT) CAN BE USED IN LIEU OF M20 OR M24 CAST-IN HOLD DOWN BOLTS.
2. M24 CHEMSET ANCHOR STUDS TO HAVE A MINIMUM 300 LONG WITH MINIMUM 250mm EMBEDMENT INTO CONCRETE FOOTINGS.
   M20 CHEMSET ANCHOR STUDS TO HAVE A MINIMUM 250 LONG WITH MINIMUM 200mm EMBEDMENT INTO CONCRETE FOOTINGS.
3. BUILDER TO ENSURE CHEMSET INSTALLATION ARE IN ACCORDANCE WITH SPECIFICATIONS AND THE MANUFACTURERS INSTALLATION REQUIREMENTS.
4. BUILDER TO PROVIDE CERTIFICATION TO BUILDING SURVEYOR THAT THE CHEMSETS HAVE BEEN INSTALLED IN ACCORDANCE WITH THE STRUCTURAL PLANS, SPECIFICATIONS AND MANUFACTURERS INSTALLATION REQUIREMENTS.

DEFLECTION MANAGEMENT DURING CONSTRUCTION NOTES:

1. DURING ERECTION PROVISION SHALL BE MADE TO LIMIT DEFLECTIONS TO DEAD LOADS ONLY. THE CONSTRUCTOR SHALL ENSURE THE STRUCTURE IS ADEQUATELY SUPPORTED WITH TEMPORARY PROPS AND FALSEWORK DURING CONSTRUCTION/ERECTION TO CONTROL DEFLECTIONS.
2. NO TEMPORARY CONSTRUCTION LOADS, PACKS OF MATERIALS OR OTHER SURCHARGES SHALL BE IMPOSED UPON THE STRUCTURE DURING ERECTION.
3. THE CONSTRUCTOR SHALL WARRANTEE THAT THE DEFLECTIONS OF PRINCIPAL MEMBERS UPON COMPLETION DO NOT EXCEED THE DESIGNERS STATED "DEAD LOAD DEFLECTION".
4. ANY SUSPENDED CAST IN-SITU CONCRETE SLABS SHALL BE PROPPED DURING CONSTRUCTION UNTIL THE SLAB HAS CURED.

FOOTING NOTES:

1. THE FINISHED SURFACE AROUND THE SLAB & FOOTINGS SHALL BE GRADED AWAY FROM THE FOUNDATIONS.
2. MATERIALS & WORKMANSHIP TO BE IN ACCORDANCE WITH THE RELEVANT CURRENT CODE OF THE STANDARDS ASSOCIATION OF AUSTRALIA & THE BUILDING REGULATIONS.
3. REMOVE ORGANIC LAYER OF TOP SOIL & SOFT AREAS PRIOR TO PLACING FILLING UNDER SLAB. FILL TO BE GRANULAR MATERIAL WELL COMPACTED TO 150kPa MIN. IN 150mm MAX. LAYERS (MAX. DEPTH 300mm).
4. ANY FILL UNDER BUILDING FOOTPRINT SHALL BE SELECT, APPROVED MATERIAL (CONTROLLED FILL) TO BE SUPERVISED & TESTING TO BE UNDERTAKEN BY A NATA ACCREDITED GEOTECHNICAL CONSULTANT AS PER AS3798-1996.
5. FOOTINGS INC. PADS ARE TO BE FOUNDED IN ORIGINAL UNDISTURBED GROUND HAVING A SAFE BEARING CAPACITY OF 150kPa. BEFORE ANY CONCRETE IS PLACED, THE SAFE BEARING CAPACITY SHALL BE VERIFIED BY A QUALIFIED ENGINEER, OR A REGISTERED BUILDING PRACTITIONER. THE CONTRACTOR IS TO ALLOW THIER TENDER PRICE FOR THOSE INSPECTIONS AND REPORTING TO BE UNDERTAKEN BY THEIR GEOTECHNICAL ENGINEER. ALL DOCUMENTATION IS TO BE SUBMITTED TO THE PRINCIPAL WITHIN 48 HOURS OF THE INSPECTION.
6. EXCAVATIONS BEYOND THE DIMENSIONS SPECIFIED SHALL BE FILLED WITH MINIMUM 15 MPa CONCRETE.
7. THE CONTRACTOR IS TO UNDERTAKE ALL OF THE NECESSARY INVESTIGATIONS TO LOCATE UNDERGROUND SERVICES WITHIN THE SITE OR LIKELY TO BE INFLUENCED BY THE PROPOSED WORKS. THE CONTRACTOR SHALL INFORM THE PRINCIPAL IF ANY SERVICES ARE FOUND PRIOR TO PROCEEDING.
8. ALL FOUNDATIONS ARE TO BE FREE OF WATER & LOOSE MATERIAL PRIOR TO POURING ANY CONCRETE.
9. THE CONTRACTOR IS TO ALLOW FOR ANY ADDITIONAL INVESTIGATIONS, TESTING, ANALYSIS OR ANY OTHER WORK TO BE UNDERTAKEN NECESSARY TO SATISFY THEMSELVES OF THE GROUND CONDITIONS, SUCH THAT THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING ALL MATERIAL QUANTITIES & CONSTRUCTION TECHNIQUES NECESSARY TO ACHIEVE THE MINIMUM SAFE SOIL BEARING PRESSURE NOMINATED.
10. CONCRETE Fc = N40 GRADE @ 28 DAYS, 80 SLUMP. CONCRETE TO BE COMPACTED & WORKED AROUND REINFORCEMENT BY USE OF MECHANICAL VIBRATOR. CONCRETE TO BE CURED FOR 7 DAYS BY APPROVED METHOD. CONCRETE IS TO BE AVAILABLE FOR TESTING DURING POURING.

CONCRETE NOTES:

1. ALL WORKMANSHIP, MATERIALS AND TESTING SHALL BE IN ACCORDANCE WITH AS 3600.
2. MINIMUM COVER OF 45mm TO ALL REINFORCEMENT TO SATISFY B2 EXPOSURE (AS THE STRUCTURE IS LOCATED IN A SPLASH ZONE/MARINE ENVIRONMENT) CLASSIFICATION WHERE STANDARD FORMWORK & COMPACTION ARE USED, UNLESS OTHERWISE INDICATED ON THE DRAWINGS.
3. CONCRETE MIX DESIGN SHOULD SATISFY THE RECOMMENDATIONS PROVIDED WITHIN AS 4997-2005.
4. CONCRETE CLASS OF S840 IN ACCORDANCE WITH AS 1379 (TO SATISFY RECOMMENDATIONS PROVIDED WITHIN AS 4997-2005 FOR MIX DESIGN, SUPPLIERS WOULD NEED TO PROVIDE A SPECIAL CLASS, 40 MPa CONCRETE MIX).
5. THE DURABILITY CLASS OF AGGREGATES SHOULD BE CLASS C IN COMPLIANCE WITH AS2758.1.
6. GALVANISED REINFORCEMENT SHOULD BE SPECIFIED IN COMBINATION WITH STAINLESS STEEL OR GALVANISED TIE WIRE.
7. BLACK STEEL REINFORCEMENT SHOULD BE SPECIFIED IN COMBINATION WITH MILD STEEL TIE WIRE.
8. COVER TO BLACK STEEL REINFORCEMENT SHOULD BE GREATER THAN FOR GALVANISED REINFORCEMENT TO ACHIEVE THE DESIGN LIFE.
9. DESIGN STRESS FOR SERVICEABILITY ACTIONS SHOULD REMAIN LESS THAN OR EQUAL TO 150 MPa TO CONTROL CRACK WIDTHS.
10. ANY CAST IN- FIXTURES, OR DOWELED CONNECTIONS USED SHOULD BE STAINLESS STEEL [illegible] AND ELECTRICALLY ISOLATED FROM INTERNAL REINFORCEMENT. THIS IS ACHIEVED BY ENSURING [illegible] BETWEEN ELEMENTS OR USE OF A NON CONDUCTIVE BARRIER MATERIAL BETWEEN ELEMENTS.
11. SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES.
12. BEAM DEPTHS ARE WRITTEN FIRST AND INCLUDE SLAB THICKNESS.
13. NO HOLES, CHASES OR EMBEDMENT OF PIPES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT PRIOR APPROVAL OF THE ENGINEER.
14. REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY AND NOT NECESSARILY SHOWN IN TRUE PROJECTION.
15. SPLICES IN REINFORCEMENT SHALL BE MADE ONLY IN THE POSITIONS SHOWN OR AS OTHERWISE APPROVED BY THE ENGINEER.
16. WELDING OF REINFORCEMENT SHALL BE MADE ONLY IN THE POSITIONS SHOWN OR AS OTHERWISE APPROVED BY THE ENGINEER.
17. THE CONTRACTOR TO GIVE THE ENGINEER A MINIMUM OF 48 HOURS NOTIFICATION OF HIS INTENTION TO POUR CONCRETE.
18. ALL REINFORCEMENT SHALL BE SUPPORTED IN ITS CORRECT POSITION DURING CONCRETING BY APPROVED BAR CHAIRS, SPACER OR SUPPORT BARS.
19. CONCRETE PROPERTIES SHALL BE AS FOLLOWS:

ELEMENT & LOCATION	MIN GRADE (MPa)
FOOTINGS	40
SLABS ON GROUND	40
SUSPENDED SLABS	40
PRECAST PANELS	40

20. ANY TRAFFICABLE (VEHICULAR) AREAS TO BE SR 40MPa CONCRETE.
21. THE USE OF CHLORINE ADDITIVES AND FLY ASH IS EXPRESSLY FORBIDDEN IN ALL CONCRETE.
22. UNLESS OTHERWISE SHOWN, PROVIDE N12-500 DISTRIBUTION REINFORCEMENT, LAPPED 450 AT SPLICES, 2 x N12 DIAGONAL CORNER BARS 2000 LONG AT ALL RE-ENTRANT CORNERS OF OPENINGS SLABS AND WALLS.
23. ALL CONCRETE ON THIS PROJECT IS TO BE TYPE SR GRADED N40 MPa. U.N.O. THE OWNERS SHOULD BE ADVISED OF GENERAL FOUNDATION MAINTENANCE REQUIREMENTS AS OUTLINED ON CSIRO DOCUMENT "GUIDE TO HOME OWNERS ON FOUNDATION MAINTENANCE AND FOOTING PERFORMANCE".

STRUCTURAL STEELWORK NOTES:

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 4100.
2. ALL HOT ROLLED SECTIONS ARE TO BE GRADE 300 PLUS.
3. ALL STRUCTURAL HOLLOW SECTIONS ARE TO BE GRADE 350 MPA.
4. WELDING SHALL BE PERFORMED BY AN EXPERIENCED OPERATOR IN ACCORDANCE WITH AS 1554, INSPECTED AND CERTIFIED BY A QUALIFIED PERSON AS DESCRIBED IN AS 2214.
5. THE BOLTING PROCEDURES ARE TO BE IN ACCORDANCE WITH AS 1111 AND AS 1252.
6. THE CONTRACTOR SHALL PROVIDE TEMPORARY BRACING AND LEAVE IN PLACE UNTIL PERMANENT BRACING ELEMENTS ARE CONSTRUCTED. SUCH TEMPORARY BRACING AS IS NECESSARY TO STABILISE THE STRUCTURE.
7. CONCRETE ENCASED STEELWORK SHALL BE COMPLETELY WRAPPED WITH FGW41 GIRDER WRAP FABRIC, UNLESS OTHERWISE SHOWN.
8. THE ENDS OF ALL HOLLOW SECTION MEMBERS ARE TO BE SEALED WITH NOMINAL THICKNESS PLATES AND CONTINUOUS FILLET WELD UNLESS OTHERWISE SHOWN.
9. UNLESS OTHERWISE SPECIFIED STEELWORK SHALL BE PAINTED ONE SHOP COAT OF RED OXIDE ZINC PHOSPHATE PRIMER. MEMBERS ENCASED IN CONCRETE, FIRE SPRAYED OR FRICTION GRIP BOLTED CONNECTIONS MUST NOT BE PAINTED.
10. PAINTING, AS SPECIFIED BY THE PRINCIPAL, SHALL BE IN ACCORDANCE WITH AS 2312, TO SUIT SITE EXPOSURE CONDITIONS.
11. EXCEPT WHERE OTHERWISE SHOWN, WELDS ARE TO BE 6mm CONTINUOUS FILLET WELDS. ALL WELDS ARE TO BE STRUCTURAL PURPOSE U.N.O.
12. THE CONTRACTOR IS TO ALLOW FOR ALL THE NECESSARY TRIMMING ANGLES AND FIXINGS TO SUPPORT CLADDING AND FLASHING AT ROOF OR WALL INTERSECTIONS.
13. UNLESS OTHERWISE SHOWN, PROVIDE SINGLE LINE OF BOLTS CLEAT CONNECTIONS, 10mm CLEAT PLATE, 6mm CONTINUOUS FILLET WELD AND M20 8.8/S BOLTS. PROVIDE 2 NO. BOLTS TO MEMBERS 200mm DEEP & LESS. A.I.S.C. STANDARDIZED STRUCTURAL CONNECTIONS.
14. IN ADDITION THE FABRICATOR SHALL SUBMIT THREE SETS OF SHOP DRAWINGS TO THE ENGINEER FOR REVIEW. APPROVAL OF THE SHOP DRAWINGS SHALL BE OBTAINED FROM THE ENGINEER PRIOR TO COMMENCEMENT OF THE STEELWORK MANUFACTURE.
15. REMOVE ALL BURS, SHARP EDGES, DAGS, SLAG, DUST, RUST, DIRT, MILL SCALE AND OTHER DEBRIS.

TYPICAL STEEL CONNECTION NOTES:

1. ALL PLATES AND FLATS SHALL BE GRADE 350 AND SHALL BE 10mm THK (MIN) - UNO.
2. ALL WELDS SHALL BE 6CFW ALL AROUND, BOTHSIDES - UNO.
3. ALL BOLTS SHALL BE M20 8.8S - UNO.
4. ALL STEEL CONNECTIONS SHALL BE GALVANISED.
5. PROVIDE A MINIMUM OF TWO BOLTS PER FIXING - UNO.
6. PROVIDE THREE BOLTS PER SUPPORT FOR BEAM DEPTHS BETWEEN 300 AND 399mm - UNO. PROVIDE FOUR BOLTS PER SUPPORT FOR BEAM DEPTHS BETWEEN 400 AND 499mm - UNO.
7. [illegible] WITH 100mm [illegible]

STRUCTURAL STEEL GALVANISING NOTES:

1. ALL EXPOSED STRUCTURAL STEEL SHALL BE HOT DIP GALVANISED IN ACCORDANCE WITH AS4680 WITH A MINIMUM ZINC MASS OF 900g/m². ALL GALVANISING DRAIN HOLES ARE TO BE PLUGGED WITH SILICONE SEALANT.
2. [illegible] PREPARED & SHALL BE PRIMED & HAVE TWO COATS OF AN APPROVED ZINC RICH PAINT FINISH COAT.
3. ALL COLUMNS & BASE PLATES IN CONTACT WITH THE GROUND ARE TO HAVE TWO COATS OF TAUBMANS DURAMASTIC.

GROUND ANCHOR NOTES:

1. ALL FOUNDATIONS SHALL BE SUPPORTED UPON AND ANCHORED TO INSITU ROCK WITHOUT DETACHMENT POTENTIAL AND BEING HIGHLY OR LESS WEATHERED WITH AN UNCONFINED COMPRESSIVE STRENGTH OF AT LEAST 1 MPa.
2. A DETAILED ANCHOR CONSTRUCTION METHODOLOGY SHOULD BE PROVIDED FOR APPROVAL OF THE STRUCTURAL ENGINEER PRIOR TO ANCHOR CONSTRUCTION.
3. ROCK ANCHORS SHOULD BE INSTALLED IN ACCORDANCE WITH VICROADS SPECIFICATION 680, BONDED ANCHORS (FEBRUARY 2021).
4. ROCK ANCHORS SHALL BE RATED TO A MINIMUM ALLOWABLE TENSILE LOADS CAPACITY AS INDICATED ON DRAWINGS.
5. ALL STEEL COMPONENTS (i.e. ANCHOR BARS, HEAD PLATES AND NUTS) SHOULD BE EITHER:
   - GALVANISED AND PROVIDED WITH A MINIMUM 40MM GROUT/SHOTCRETE COVER OR,
   - COMPRISED OF STAINLESS STEEL (OR OTHER) CORROSION RESISTANT ELEMENTS TO THE SATISFACTION OF THE STRUCTURAL ENGINEER.
6. IF CEMENTITIOUS GROUT IS USED TO SECURE THE ANCHOR IN THE BOREHOLE, GROUTING SHOULD BE UNDERTAKEN IN A CONTINUOUS OPERATION SO AS TO AVOID THE FORMATION OF COLD JOINTS WITHIN THE GROUT. GROUT SHOULD BE INJECTED USING TREMIE TECHNIQUES, COMMENCING AT THE BASE OF THE HOLE USING A GROUT TUBE. THE COLLAR OF THE HOLE SHOULD BE PLUGGED DURING THE GROUTING OPERATION TO ALLOW THE GROUT TO FULLY FILL THE BOREHOLE. ALTERNATIVELY, CHEMICAL BONDING TECHNIQUES (CHEMSET) OR OTHER PROPRIETARY ANCHORING METHODS COULD BE USED SUBJECT TO APPROVAL FROM THE STRUCTURAL ENGINEER.
7. WHERE OPEN JOINTS ARE ENCOUNTERED THERE IS THE POTENTIAL FOR GROUT LOSS AND IN THESE CIRCUMSTANCES CONSIDERATION MAY NEED TO BE GIVEN TO THE USE OF A GROUT SOCK OR ALTERNATIVE CONSTRUCTION METHODOLOGY.
8. CENTRALISERS SHOULD BE EQUALLY SPACED ALONG THE ANCHOR WITH A MINIMUM OF 1 CENTRALISERS PER ANCHOR. THE CENTRALISER NO MORE THAN 0.25M FROM THE END OF THE BAR.
9. THE ANCHOR SHALL BE INSTALLED IN HIGHLY OR LESS WEATHERED ROCK WITH A MINIMUM UNCONFINED COMPRESSIVE STRENGTH OF 1MPa AND A MINIMUM ULTIMATE GROUT/GROUND BOND STRENGTH OF 250 kPA. THE MINIMUM BONDED ANCHOR LENGTH SHALL BE 0.5M AND MINIMUM ANCHOR FREE LENGTH SHOULD BE 0.25M.
10. CORROSION PROTECTION IS TO COMPRISE A MINIMUM OF 40MM GROUT COVER OVER STEEL ANCHOR ELEMENTS. ALTERNATIVELY, THE CONTRACTOR MAY PROPOSE CORROSION RESISTANT STRUCTURAL ELEMENTS TO THE APPROVAL OF THE STRUCTURAL ENGINEER.
11. ALL ANCHOR HOLES SHOULD BE DRILLED USING AIR FLUSH DRILLING TECHNIQUES AND FLUSHED WITH AIR TO REMOVE DEBRIS PRIOR TO ANCHOR INSTALLATION. ANCHORS SHOULD BE INSTALLED AS SOON AS POSSIBLE AFTER DRILLING AND NOT MORE THAN 24 HOURS AFTER DRILLING.
12. ANCHORS ARE TO BE PROOF LOADED IN ACCORDANCE WITH VICROADS SPECIFICATION 680, BONDED ANCHORS (FEBRUARY 2021) AND AUSTRALIAN STANDARDS AS 4678-2002 EARTH RETAINING STRUCTURES TO CONFIRM THAT THE DESIGN LOADS ARE ACHIEVED. THE PROOF LOAD IS TO BE A MINIMUM OF 1.5 TIMES THE ANCHOR WORKING LOAD.
13. THE CONTACT BETWEEN STRUCTURAL ELEMENTS AT THE HEAD OF THE ANCHOR AND GROUND SHOULD BE CLEANED OFF TO EXPOSE NATURAL ROCK, DRY AND FREE OF LOOSE DEBRIS AT THE TIME OF CONSTRUCTION.
14. ALL FOOTING AND ANCHOR LOCATIONS ARE TO BE INSPECTED BY STRUCTURAL ENGINEER PRIOR TO ANCHOR INSTALLATION.

HOLD POINTS:

WRITTEN APPROVAL FROM THE DNP REPRESENTATIVE IS REQUIRED TO CONFIRM THE FOLLOWING MANDATORY HOLD POINTS:

1. SUBMISSION AND APPROVAL OF CONTRACT WORKS PROGRAM AND SITE ENVIRONMENTAL MANAGEMENT PLAN.
2. SUBMISSION AND APPROVAL OF ALL STEEL COMPONENTS SHOP DRAWINGS FOR PARKS VICTORIA REPRESENTATIVE APPROVAL.
3. SET OUT OF ALL DEFINED WORKS AREA WITH STAKES AND PROTECTIVE TAPE AS AGREED WITH THE PARKS VICTORIA REPRESENTATIVE.
4. SET OUT OF ALL HARD LANDSCAPE WORKS ON SITE (USING DIGITAL AUTOCAD FILES) BY REGISTERED SURVEYOR WITH PROVEN EXPERIENCE IN THE ACCURATE SET OUT OF LANDSCAPE CONSTRUCTION WORKS USING ELECTRONIC CAD FILES, PRIOR TO THE COMMENCEMENT OF ANY SITE WORKS. REFER TO CLAUSE 1.11. THE CONTRACTOR IS TO SET OUT THE ENTIRE WORKS, LAYOUT OF PANELS, CHANGES IN GRADE, AND DESIGN LEVELS USING PEGS, STRING LINES OR ALL PANELS AND MARKERS FOR CONFIRMATION ON SITE BY THE PARKS VICTORIA REPRESENTATIVE.
5. INSPECTION OF COMPLETED TEST ROCK BOLT INSTALLATION IN ACCORDANCE WITH THE APPROVED METHODOLOGY.
6. SET OUT OF CABINS INCLUDING LEVELS AND ORIENTATION.
7. PROGRAMMED SITE PROGRESS WORKS MILESTONES IN ACCORDANCE WITH THE AGREED CONTRACT WORKS PROGRAM.
8. PRACTICAL COMPLETION INCLUDING RECTIFICATION OF ANY TO ALL DEFECTS APPROVAL OF PARKS VICTORIA REPRESENTATIVES TO COMMENCE 52 WEEKS DEFECTS PERIOD.
9. FINAL COMPLETION ON COMPLETION OF 52 WEEKS DEFECTS PERIOD, INCLUDING RECTIFICATION OF ANY TO ALL DEFECTS APPROVAL OF PARKS VICTORIA REPRESENTATIVES.

NOTE:

1. THE PARKS VICTORIA REPRESENTATIVE RESERVES THE RIGHT TO INSERT ADDITIONAL HOLD POINTS IF DEEMED NECESSARY TO ENSURE QUALITY CONTROL OF WORKS.
2. ALL SAMPLES ARE TO BE DELIVERED TO A REGIONAL VICTORIA ADDRESS TO BE ADVISED.

GMR Engineering Services

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PRELIMINARY (NOT FOR CONSTRUCTION) 12/08/2022

REDUCED SCALE

MtBuller

DESIGNED BY G.Ryan March 2022
DRAFTED BY T.Ainsworth March 2022
VERIFIED BY

REV	AMENDMENTS	DATE	BY
A	INITIAL DRAFT	18/03/22	TA

SCALE
SCALE

GMR Engineering Services

Mt Buller Mt Stirling Resort Management
McLaughlans Shoulder Lookout Design
McLaughlans Shoulder, Mt Buller

General Notes
Drawing No. GMR21019.MS09
Revision. A Sheet No. MS09
GMR21019.04 - General Notes - McLaughlans Shoulder.dwg A1

Appendix 4 Aboriginal Places within the Geographic Region

VAHR Place	Place Name	Component Number	Place Type
8123-0003	Mount Buller Cow Camp	8123-0003-1	Artefact Scatter
8123-0014	Mt Stirling 1	8123-0014-1	Artefact Scatter
8123-0015	Mt Stirling 2	8123-0015-1	Artefact Scatter
8123-0016	Mt Stirling 3	8123-0016-1	Artefact Scatter
8123-0019	Mt Stirling 4	8123-0019-1	Artefact Scatter
8123-0020	Mt Stirling 2	8123-0020-1	Artefact Scatter
8123-0021	Mt Stirling 3	8123-0021-1	Artefact Scatter
8123-0022	Mt Stirling 5	8123-0022-1	Artefact Scatter
8123-0023	Mt Stirling 6	8123-0023-1	Artefact Scatter
8123-0024	Mt Stirling 7	8123-0024-1	Artefact Scatter
8123-0053	Stirling Black Track artefacts	8123-0053-1	Low Density Artefact Distribution
8123-0053	Stirling Black Track artefacts	8123-0053-2	Low Density Artefact Distribution
8123-0053	Stirling Black Track artefacts	8123-0053-3	Object Collection
8123-0055	Bluff Spur Hammer Stone	8123-0055-1	Low Density Artefact Distribution
8123-0062	Pannican Creek Ground-Edge Axe	8123-0062-2	Object Collection

Appendix 5 Glossary

The glossary provides definitions of various terms used in this CHMP. There is often a degree of confusion about the use of terms such as *heritage place*, *historical place*, *archaeological place*. The definitions of these terms, as used in this report, have been included in the glossary. The term used most consistently is *heritage place.* For the purpose of discussion in this plan 'heritage place' can be subdivided into Aboriginal place and Historic place.

Heritage place: A place that has aesthetic, historic, scientific or social values for past, present or future generations – ' ...this definition encompasses all cultural places with any potential present or future value as defined above' (Pearson & Sullivan 1995, pp. 7).

Aboriginal place: Aboriginal place is defined under Section 5 of the *Aboriginal Heritage Act* 2006 as follows:

5 What is an Aboriginal place?

(1) For the purposes of this Act, an Aboriginal place is an area in Victoria or the coastal waters of Victoria that is of cultural heritage significance to the Aboriginal people of Victoria.

(2) For the purposes of subsection (1), *area* includes any one or more of the following—

(a) an area of land;

(b) an expanse of water;

(c) a natural feature, formation or landscape;

(d) an archaeological place of cultural heritage significance;

(e) the area immediately surrounding anything referred to in paragraphs (c) and (d), to the extent that it cannot be separated from the thing without diminishing or destroying the cultural heritage significance attached to the thing by Aboriginal people;

(f) land set aside for the purpose of enabling Aboriginal human remains to be re-interred or otherwise deposited on a permanent basis;

(g) a building or structure.

Alluvial terrace: a platform created from deposits of alluvial material along river banks.

Angular fragment: a piece of stone that is blocky or angular, not flake-like.

Archaeology: the study of the remains of past human activity.

Artefact scatter: a surface scatter of cultural material. Aboriginal artefact scatters are defined as being the occurrence of five or more items of cultural material within an area of about 100 square metres. Artefact scatters are often the only physical remains of places where people have lived camped, prepared and eaten meals and worked.

Backed piece: a flake or blade that has been abruptly retouched along one or more margins opposite an acute (sharp) edge. Backed pieces include backed blades and geometric microliths. They are thought to have been hafted onto wooden handles to produce composite cutting tools. Backed pieces are a feature of the 'Australian small tool tradition', dating from between 5,000 and 1,000 BP in southern Australia (Holdaway & Stern 2004).

Blade: a flake at least twice as long as it is wide.

Burial place: usually a sub-surface pit containing human remains and sometimes associated artefacts.

Contact place: see 'Aboriginal historical archaeological place'.

Core: an artefact from which flakes have been detached using a hammerstone. Core types include single platform, multi-platform and bipolar forms.

Cortex: original or natural (unflaked) surface of a stone.

Cortical: refers to the cortex.

Flake: a stone piece removed from a core by percussion (striking it) or pressure. It is identified by the presence of a striking platform and bulb of percussion, not usually found on a naturally shattered stone.

Flaked piece: a piece of stone with definite flake surfaces, which cannot be classified as a flake or core.

Formal tool: an artefact that has been shaped by flaking, including retouch, or grinding to a predetermined form for use as a tool. Formal tools include scrapers, backed pieces and axes.

Geocentric Datum of Australia 1994 (GDA94): a system of latitudes and longitudes, or east and north coordinates, centred at the centre of the earth's mass. GDA94 is compatible with modern positioning techniques such as the Global Positioning System (GPS). It supersedes older coordinate systems (AGD66, AGD84). GDA94 is based on a global framework, the IERS Terrestrial Reference Frame (ITRF), but is fixed to a number of reference points in Australia. GDA94 is the Victorian Government Standard and spatial coordinates for excavations, transects and places in CHMP documents.

Geometric microlith: a small tool that has been fashioned from breaking apart a microblade. The piece is then retouched or backed and a small tool formed.

Grindstones: upper (handstone) and lower (basal) stones used to grind plants for food and medicine and/or ochre for painting. A handstone sometimes doubles as a hammerstone and/or anvil.

Hearth: usually a sub-surface feature found eroding from a river or creek bank or a sand dune - it indicates a place where Aboriginal people cooked food. The remains of a hearth are usually identifiable by the presence of charcoal and sometimes clay balls (like brick fragments) and hearth stones. Remains of burnt bone or shell are sometimes preserved within a hearth.

Isolated artefact: the occurrence of less than five items of cultural material within an area of about 100 square metres. It/they can be evidence of a short-lived (or one-off) activity location, the result of an artefact being lost or discarded during travel, or evidence of an artefact scatter that is otherwise obscured by poor ground visibility.

Manuport: foreign fragment**,** chunk or lump of stone that shows no clear signs of flaking but is out of geological context and must have been transported to the place by people.

Map Grid of Australia (MGA): The official coordinate projection for use with the Geocentric Datum of Australia 1994 (GDA94).

Mound: these places, often appearing as raised areas of darker soil, are found most commonly in the volcanic plains of western Victoria or on higher ground near bodies of water. The majority were probably formed by a slow build-up of debris resulting from earth-oven cooking; although some may have been formed by the collapse of sod or turf structures.

Percussion: the act of hitting a core with a hammerstone to strike off flakes.

Platform preparation: removal of small flake scars on the dorsal edge of a flake, opposite the bulb of percussion. These overhang removal scars are produced to prevent a platform from shattering.

Pre-contact: before contact with non-Aboriginal people.

Post-contact: after contact with non-Aboriginal people.

Quarry (stone/ochre source): a place where stone or ochre is exposed and has been extracted by Aboriginal people. The rock types most commonly quarried for artefact manufacture in Victoria include silcrete, quartz, quartzite, chert and fine-grained volcanics such as greenstone.

Rejuvenation flake: a flake that has been knapped from a core solely for the purpose of preparing a new platform and making it easier to get flakes off a core, as it reduces the angle between platform and core surface.

Retouch: a flake, flaked piece or core with intentional secondary flaking along one or more edges.

Rock art: 'paintings, engravings and shallow relief work on natural rock surfaces' (Rosenfeld 1988, pp. 1). Paintings were often produced by mineral pigments, such as ochre, combined with clay and usually mixed with water to form a paste or liquid that was applied to an unprepared rock surface. Rock engravings were made by incising, pounding, pecking or chiselling a design into a rock surface. Rare examples of carved trees occasionally survive.

Rock shelter: may contain the physical remains of camping places where people prepared meals, flaked stone, etc. They are often classed as a different type of place due to their fixed boundaries and greater likelihood of containing sub-surface deposits. Rock shelters may also contain rock art.

Scarred tree: scars on trees may be the result of removal of strips of bark by Aboriginal people e.g. for the manufacture of utensils, canoes or for shelter, or resulting from small notches chopped into the bark to provide hand and toe holds for hunting possums and koalas. Some scars may be the result of non-Aboriginal activity, such as surveyors' marks.

Scraper: a flake, flaked piece or core with systematic retouch on one or more margins.

Shell midden: a surface scatter and/or deposit comprised mainly of shell, sometimes containing stone artefacts, charcoal, bone and manuports. These place types are normally found in association with coastlines, rivers, creeks and swamps – wherever coastal, riverine or estuarine shellfish resources were accessed and exploited.

Significance: the importance of a heritage place or place for aesthetic, historic, scientific or social values for past, present or future generations.

Striking platform: the surface of a core, which is struck by a hammerstone to remove flakes.

Structures (Aboriginal): can refer to a number of different place types, grouped here only because of their relative rarity and their status as built structures. Most structures tend to be made of locally available rock, such as rock arrangements (ceremonial and domestic), fishtraps, dams and cairns, or of earth, such as mounds or some fishtraps.

Stratified deposit: material that has been laid down, over time, in distinguishable layers.

Transect: A fixed path along which one records archaeological remains.

Utilised artefact: a flake, flaked piece or core that has irregular small flake scarring along one or more margins that does not represent platform preparation.

Table 16 Scientific significance assessment criteria

Place Contents	Place Condition	Representativeness	Overall Significance
0 - No cultural material remaining.	**0** - Place destroyed.		
1 - Place contains a small number (e.g. 0–10 artefacts) or limited range of cultural materials with no evident stratification.	**1** - Place in a deteriorated condition with a high degree of disturbance; some cultural materials remaining.	**1** - Common occurrence	**1 - 3** - Low
2 - Place contains a larger number, but limited range of cultural materials; and/or some intact stratified deposit remains; and/or rare or unusual example(s) of a particular artefact type.	**2** - Place in a fair to good condition, but with some disturbance.	**2** - Occasional occurrence	**4 - 6** - Moderate
3 - Place contains a large number and diverse range of cultural materials; and/or largely intact stratified deposit; and/or surface spatial patterning of cultural materials that still reflect the way in which the cultural materials were deposited.	**3** - Place in an excellent condition with little or no disturbance. For surface artefact scatters this may mean that the spatial patterning of cultural materials still reflects the way in which the cultural materials were deposited.	**3** - Rare occurrence	**7 - 9** - High