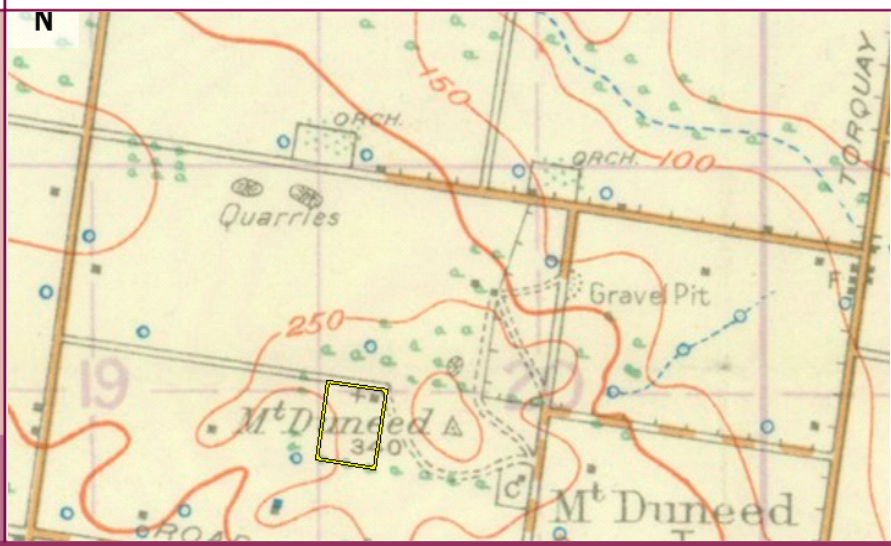
Residential Alcohol and Drug Rehabilitation Centre: 120 Russells Road, Mount Duneed

CHMP No. 15818

4 September 18



A Report to Foundation 61 Inc.

Cultural Heritage Advisor: Petra Schell

Authors: Mark Dowdell, Alyssa Gilchrist & Petra Schell

Sponsor: Foundation 61 Inc.

ochreimprints

Cover Photograph: excerpt of 1928 topographic map

***ochre* imprints pty ltd**

ABN 95 161 235 589
ACN 161 235 589

331 Johnston Street
Abbotsford VIC 3067

PO Box 280
Clifton Hill VIC 3068

phone (03) 9417 6094
fax (03) 9417 6095

Wathaurung Aboriginal Corporation
ICN 3330
trading as Wadawurrung
ABN 11 312 302 330

2nd October 2018

Aboriginal Heritage Act 2006
Section 63

Cultural Heritage Management Plan – Notice of Approval

The Wathaurung Aboriginal Corporation trading as Wadawurrung, acting as the Registered Aboriginal Party hereby approve the cultural heritage management plan referred to below:

'Residential and Drug Rehabilitation Centre: 120 Russells Road Mount Duneed'

Cultural Heritage Management Plan number: 15818

Sponsor: Foundation 61 Inc

Heritage Advisor: Petra Schell

Authors: Mark Dowdell, Alyssa Gilchrist & Petra Schell

Cover Date: 4th September 2018

Pages: Cover Page, i-xii, 1- 118

Received for Approval: 5th September 2018

Pursuant to s.64(1) of the Act this cultural heritage management plan takes effect upon the granting of this approval and once a copy is lodged with the Secretary of DPCD.*

Bryon Powell	Paul Davis
RAP Consultant	General Manager

Wathaurung Aboriginal Corporation
trading as: Wadawurrung

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

99 Mair Street East
BALLARAT VIC 3350

P: 03 4308 0420
F: 03 4308 0421
www.wathcorp.com.au

RESIDENTIAL ALCOHOL AND DRUG REHABILITATION CENTRE: 120 RUSSELLS ROAD, MOUNT DUNEED.

Cultural Heritage Management Plan Number: 15818

Sponsor: Foundation 61 Inc. (ACN 79 079 178 867)

Heritage Advisor: Petra Schell

Author: Mark Dowdell, Alyssa Gilchrist and Petra Schell

Issue Date: 4/09/2018

Assessment: Desktop, Standard and Complex Assessments (in accordance with r. 46 of the Aboriginal Heritage Regulations 2018)

Size of Activity Area: Small (in accordance with r. 81 of the Aboriginal Heritage Regulations 2018)

Copies Issued To: Wathaurung Aboriginal Corporation

Aboriginal Victoria

Foundation 61 Inc.

St Quentin Consulting Pty Ltd

Quality Control: Petra Schell

EXECUTIVE SUMMARY

Background

This Cultural Heritage Management Plan (CHMP) has been prepared in advance of ground disturbing works associated with the proposed construction of a residential alcohol and drug treatment facility at 120 Russells Road, Mount Duneed, approximately 10 km south west of Geelong CBD. The CHMP was commissioned by St Quentin Consultating Pty Ltd on behalf of Foundation 61 Inc., who are the Sponsor and the landowner of the activity area. This CHMP was voluntarily prepared under Section 45 of the *Aboriginal Heritage Act* 2006 and in accordance with the requirements of the Act. Wathaurung Aboriginal Corporation was the evaluation authority for this CHMP.

The aims of the CHMP were to:

- Identify the location, nature and significance of Aboriginal places within the activity area;
- Assess whether harm to Aboriginal places can be avoided by the proposed activity; and,
- Develop a framework for managing Aboriginal places, prior to, during and subsequent to the activity taking place.

Activity Area Location and Description

The activity area is located across a c.8.4 ha parcel of land at 120 Russells Road, Mount Duneed, approximately 10 km south west of Geelong CBD. The activity area is bound to the north by Russells Road, to the west by a private road and to the east and south by a recreation reserve currently used by the Mount Duneed Pony Club. Access to the property is directly from Russells Road.

Activity Description

The proposed activity involves development of the property by way of the construction of a residential alcohol and drug rehabilitation centre, and associated infrastructure.

Assessment Results

The Desktop Assessment established that no previously registered Aboriginal places are present within the activity area. A total of 24 Aboriginal places have been recorded within the geographic region, located predominantly in close vicinity to water sources, in surface and/or subsurface contexts. No Aboriginal cultural heritage has been identified to-date in areas similar to the activity area, and on this basis the archaeological sensitivity of the activity area was assessed to be low. A review of historical records indicated that previous land use

activities have disturbed soils in the activity area. This predominantly relates to the construction and subsequent demolition of the Mount Duneed Wesleyan Church, as well as agricultural practices.

The activity area was observed to comprise the lower slopes of Mount Duneed, a dormant volcano, during the Standard Assessment for this CHMP. No Aboriginal cultural heritage was identified in the activity area, a result which was attributed to very poor ground surface visibility and the low archaeological sensitivity of the activity area.

A total of two excavation pits (1 x 1 m) (EPs) and 10 shovel test pits (STPs) were excavated across the activity area during the Complex Assessment, representing a volume of 0.85m^3 and a spatial area of 4 m^2. No Aboriginal cultural heritage was identified in the activity area during the Complex Assessment, a result which was attributed to a combination of prior disturbance from the construction of the church and associated infrastructure, agricultural practices, tree plantation and the general low archaeological sensitivity of the activity area

Aboriginal Cultural Heritage in the Activity Area

No Aboriginal cultural heritage was identified in the activity area during the preparation of this CHMP.

Cultural Heritage Management Requirements

As no Aboriginal cultural heritage was identified in the activity area, no specific management conditions are required in order for the activity to avoid, or minimise harm to known Aboriginal cultural heritage. However, six management conditions and nine contingencies are required. While the management conditions are provided in full below, contingencies are summarised, with full details provided in Section 7 of this report.

These conditions and contingencies become compliance requirements once this Cultural Heritage Management Plan is approved. Failure to comply with a condition and contingency is an offence under section 67A of the *Aboriginal Heritage Act* 2006.

Condition 1: Status and Distribution of CHMP

This approved CHMP is a legally binding document. Copies of the approved CHMP must be distributed to the following parties:

- Secretary, Department of Premier and Cabinet (DPC) (s.64(1)(b)) [by the HA];
- The RAP who participated in the preparation of the CHMP [by the HA];
- All owners/managers of land encompassed by the activity area [by the Sponsor];
- Relevant responsible authority, where relevant [by the Sponsor]; and,

- New land managers at the completion of the activity, where relevant, [by the Sponsor].

Condition 2: Access to Approved CHMP

A copy of the CHMP must be kept on site during construction activity and all personnel working on the project must be advised of its location.

Condition 3: Conduct of Historical Excavation

An archaeologist who has demonstrated experience in Aboriginal archaeology must be present during any historical archaeological excavations that take place in the activity area. Contingency 1 must be followed in the event that Aboriginal cultural heritage is identified during the historical archaeological excavation.

Condition 4: Cultural Heritage Induction

Prior to the commencement of the activity, all personnel undertaking ground disturbing works in the activity area must participate in a cultural heritage induction. This must be conducted by representatives of the RAP, with the cost borne by the Sponsor.

The purpose of the cultural heritage induction is to:

- Promote knowledge and understanding of, and respect for, Aboriginal tradition and culture;
- Foster good relationships between the Sponsor and the RAP;
- Summarise the archaeological investigations undertaken within the activity area and obligations as per the CHMP;
- Outline relevant obligations of the Sponsor and its contractors under the *Aboriginal Heritage Act* 2006; and,
- Emphasise the importance of CHMP compliance.

The RAP must be contacted directly to organise the timing, content and duration of this induction, and must be given a minimum of 2 weeks' notice.

Condition 5: Compliance Inspections

Access to the activity area must be provided to representatives of the RAP before, during and after construction of the activity for the purpose of ensuring compliance with the CHMP. The representatives of the RAP must comply with the Sponsors' OH&S requirements. Compliance inspections by the RAP are required at the following stages in the works program:

- Prior to works commencing;

- During the conduct of the activity (preferably when topsoil has been stripped);
- At the completion of the works program.

It is the responsibility of the Sponsor to arrange for these inspections to take place and the RAP must be given a minimum of 2 weeks' notice.

Condition 6: Treatment of Topsoils

All stripped topsoil must be retained within the activity area. Underlying clay and rock does not need to be retained in the activity area.

Contingencies

The CHMP provides contingencies which address the following:

- The procedure to be followed in the event of identifying suspected Aboriginal cultural heritage during the historical excavation;
- The procedure to be followed in the event of identifying suspected Aboriginal cultural heritage during construction works associated with the activity;
- The procedure to be followed in the event of uncovering suspected human remains;
- The custody and management of Aboriginal cultural material;
- Requirements in the event that changes are made to the conduct of the activity;
- The handling of any sensitive cultural heritage data or information;
- Procedures in relation to communication between key stakeholders in relation to CHMP matters;
- A dispute resolution process; and,
- Provision to review the CHMP and compliance requirements.

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ABBREVIATIONS / ACRONYMS

AHO – Aboriginal Heritage Officer

ASTT – Australian Small Tool Tradition

AV – Aboriginal Victoria

BP – Before Present (i.e. 1950)

CHMP - Cultural Heritage Management Plan

CHP – Cultural Heritage Permit

DPC – Department of Premier and Cabinet

EES – Environment Effects Statement

EP – Excavation Pit

HA – Heritage Advisor

LDAD – Low Density Artefact Distribution

m asl – metres above sea level

NOI – Notice of Intent to Prepare a CHMP

OHS – Occupational Health & Safety

OI – Ochre Imprints

RAP – Registered Aboriginal Party

STP – Shovel Test Pit

VAHR – Victorian Aboriginal Heritage Register

WAC – Wathaurung Aboriginal Corporation

PART 1 – ASSESSMENT

1 INTRODUCTION

1.1 BACKGROUND

This Cultural Heritage Management Plan (CHMP) has been prepared in advance of ground disturbing works associated with the proposed construction of a residential alcohol and drug treatment facility at 120 Russells Road, Mount Duneed, approximately 10 km south west of Geelong CBD.

Terminology

Aboriginal cultural heritage and Aboriginal places are terms used throughout this report and their meanings are taken as follows from the *Aboriginal Heritage Act 2006*:

Aboriginal cultural heritage means 'Aboriginal places, Aboriginal objects and Aboriginal human remains' (s.4).

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' (s.5).

All known Aboriginal places in Victoria are recorded on the Victorian Aboriginal Heritage Register (s.145).

The CHMP was commissioned by St Quentin Consulting Pty Ltd on behalf of Foundation 61 Inc., who are the Sponsor and the landowner of the activity area.

This CHMP was voluntarily prepared under Section 45 of the *Aboriginal Heritage Act* 2006 and in accordance with the requirements of the Act. Wathaurung Aboriginal Corporation was the evaluation authority for this CHMP.

The aims of the CHMP were to:

- Identify the location, nature and significance of Aboriginal places within the activity area;
- Assess whether harm to Aboriginal places can be avoided by the proposed activity; and,
- Develop a framework for managing Aboriginal places, prior to, during and subsequent to the activity taking place.

Petra Schell was the Heritage Advisor for this CHMP. Petra meets the requirements for a Heritage Advisor under Section 189 of the *Aboriginal Heritage Act* 2006, in that she has a Bachelor of Arts (Honours) gained from the School of Archaeology at La Trobe University in 1993. In addition to this, Petra is a full member of the Australian Association of Consulting

Archaeologists Inc. and draws on over 20 years of consulting experience in the assessment and management of Aboriginal cultural heritage.

Mark Dowdell supervised the Standard and Complex assessment components of this CHMP. Mark is a qualified archaeologist – he has a Bachelor of Archaeology (2006) and Graduate Diploma of Cultural Heritage Management (2015) gained from the College of Education, Humanities and Law at Flinders University.

1.2. LEGISLATIVE CONTEXT

1.2.1. Aboriginal Heritage Act 2006

The *Aboriginal Heritage Act* 2006 provides blanket protection for Aboriginal cultural heritage in Victoria. This means that Aboriginal cultural heritage is protected from harm and it is illegal to carry out an activity that can disturb Aboriginal places without the appropriate authorities under the Act (and the associated Aboriginal Heritage Regulations 2018). There are two principal mechanisms under the Act that remove the risk of illegal harm to Aboriginal cultural heritage, namely:

- A Cultural Heritage Management Plan, and
- A Cultural Heritage Permit.

These are briefly discussed below.

Cultural Heritage Management Plan

A CHMP is a report recommending measures to be taken to protect Aboriginal cultural heritage affected by a development or use of land. It must include requirements for measures to be taken before, during and after a relevant activity. The underlying philosophy of the CHMP is to minimise harm to Aboriginal cultural heritage, however it is the document through which provisions can be made to harm Aboriginal places legally. A CHMP must be approved by the appropriate registered Aboriginal party or where no party exists for the area, the Secretary of the Department of Premier and Cabinet (DPC) before the activity may commence.[1]

A CHMP usually involves a staged investigation of the risk posed by a proposed activity to Aboriginal cultural heritage. The Act and associated Regulations set out the requirements for different levels of investigation:

- Desktop Assessment;

[1] The DPC replaced the Department of Victorian Communities, as referred to in the *Aboriginal Heritage Act* 2006. AV carries out the day-to-day administrative functions on behalf of the Secretary.

- Standard Assessment (Field Survey);
- Complex Assessment (Subsurface Testing; Controlled Excavation).

The Sponsor (usually the proponent) of a CHMP must ensure that the plan is prepared in accordance with the prescribed standards outlined in the Act, their associated regulations, and approved forms. The CHMP must consider the following matters:

a) Whether the activity will be conducted in a way that avoids harm to Aboriginal cultural heritage;

b) If it does not appear to be possible to conduct the activity in a way that avoids harm to Aboriginal cultural heritage, whether the activity will be conducted in a way that minimises harm to Aboriginal cultural heritage;

c) Any specific measures required for the management of Aboriginal cultural heritage likely to be affected by the activity, both during and after the activity;

d) Any contingency plans required in relation to disputes, delays and other obstacles that may affect the conduct of the activity;

e) Requirements relating to the custody and management of Aboriginal cultural heritage during the course of the activity.

It is an offence under the Act for a Sponsor to fail to comply with an approved CHMP (s. 67A).

Section 46 of the Act specifies the circumstances in which preparation of a CHMP is mandatory:

- When required by the Regulations;
- When the Minister directs a CHMP to be prepared for an activity; or
- When an EES is required for an activity.

Clause 6 of the Regulations states that a CHMP is required when:

- All or part of the activity is a high impact activity;

and

- All or part of the activity area is in an area of cultural heritage sensitivity - which has not been subject to significant ground disturbance.

‘High impact activities’ and ‘areas of cultural heritage sensitivity’ are defined in the Regulations. For activities which trigger a CHMP, a statutory authorisation cannot be granted for the activity without an approved CHMP.

A CHMP may be prepared voluntarily even when not required by the Act (s.45). It is illegal to carry out works that require a mandatory CHMP, without an approved CHMP in place (s. 46 (2-7).

Cultural Heritage Permit

A Cultural Heritage Permit (CHP) is issued by either a RAP, or where there is no RAP, the Secretary DPC, to "carry out an activity that will, or is likely to harm Aboriginal cultural heritage".

A CHP is sought for those instances where there is a known Aboriginal place that will be harmed by an activity. The permit outlines the measures that must be taken in order to disturb that place lawfully. Archaeological investigations are often required to inform a CHP application.

Other key features of the *Aboriginal Heritage Act* 2006 are:

- The creation of the Victorian Aboriginal Heritage Council to provide a state-wide voice for Aboriginal people and to advise the Minister for Aboriginal Affairs on issues relating to the management of Aboriginal cultural heritage.
- A system of Registered Aboriginal Parties – approved by the Victorian Aboriginal Heritage Council – to be involved in cultural heritage decision making processes, and in particular CHMPs.
- The capacity of the Secretary to establish an Activity Advisory Group (AAG) of Traditional Owners for a project/CHMP in an area where there is no appointed RAP, to advise on the proposed activity and its impact on Aboriginal cultural heritage.
- Aboriginal Cultural Heritage Agreements to support the development of partnerships around the protection and management of Aboriginal cultural heritage.
- Provisions relating to enforcement including: cultural heritage audits, protection declarations and stop orders, inspection arrangements and penalties. Maximum penalties for breaching the Act are more than $280,000 for an individual or more than $1.5 million for a company.

1.2.2. Other Relevant Legislation

Commonwealth Aboriginal and Torres Strait Islander Heritage Protection Act 1984

The *Aboriginal and Torres Strait Islander Heritage Protection Act* 1984 is intended to provide additional protection from injury or desecration of artefacts and areas which are of particular significance to Aboriginal peoples and traditions.

The Act provides for emergency declarations to be made for the protection of significant Aboriginal areas or objects which are under 'serious or immediate threat of injury or desecration'.

The Act protects 'significant Aboriginal areas' and 'significant Aboriginal objects'. A 'significant' area or object is one of particular significance to Aboriginal people in accordance with Aboriginal or Torres Strait Islander tradition.

An application for protection of a specified area or object under threat can be made orally or in writing by an Aboriginal or Torres Strait Islander person.

The Minister for Families, Housing, Community Services and Indigenous Affairs can make declarations to protect areas and objects if the area or object is under threat of injury or desecration (used, treated or affected in a manner inconsistent with Aboriginal tradition) and State law does not effectively protect the area.

The Minister may make emergency declarations or long-term declarations. Emergency declarations last for thirty days, but may be extended for a further thirty days. The Minister may not make a declaration in relation to an area or object located in a State, the Northern Territory or Norfolk Island unless he or she has consulted with the appropriate Minister of that State or Territory. These declarations may "contain provisions for and in relation to the protection and preservation of the area from injury or desecration".

Officers authorised by the Minister under the Act may also make emergency declarations, lasting up to 48 hours in relation to Indigenous heritage areas and objects.

Commonwealth Environment Protection and Biodiversity Conservation Act 1999

The *Environment Protection and Biodiversity Conservation Act* 1999 provide protection for the following types of heritage places and items:

- World Heritage;
- National Heritage; and
- Commonwealth Heritage.

Any action that is likely to have a significant impact on heritage properties and places must be referred to the Minister for the Environment and undergo an environmental assessment and approval process.

There are provisions for emergency listing of the national heritage values of a place if the Minister believes that those heritage values are under threat. The Minister can list the place before referring it to the Heritage Council and must take reasonable steps to advise any owners or occupiers of the place. Any person may request that a place be included on the

National Heritage List under the emergency listing provision, and, if the Minister does not list the place within ten business days after receiving the request, the Minister must:

- Publish notice of that on the internet; and
- Provide to the person who made the nomination and anyone else who requests them, reasons why the Minister has not listed the place.

1.2.3. Why Was A CHMP Undertaken For The Activity?

The Sponsor chose to undertake a voluntary CHMP under s. 45 of *the Aboriginal Heritage Act* 2006 in order to meet best cultural heritage management practices.

The proposed construction of a residential alcohol and drug rehabilitation centre does not require a mandatory CHMP as while the activity is a high impact activity under r.46, the activity area does not occur within an area of cultural heritage sensitivity. The relevant part of regulation 46 is:

- *r. 46(1) The construction of a building or the construction or carrying out of works on land is a high impact activity if the construction of the building or the construction or carrying out of the works-*
    - *a) would result in significant ground disturbance; and*
    - *b) is for, or associated with, the use of the land for any one or more of the following purposes-…*
        - *xxi) a residential building.*

Ochre Imprints Pty Ltd, on behalf of the Sponsor Foundation 61 Inc., submitted a Notice of Intent to Prepare a CHMP (NOI) to the Deputy Director of AV dated 20 June 2018. This CHMP has been issued with the identification No. 15818 by AV. The NOI was provided to the City of Greater Geelong and WAC. A response from WAC on 21 June 2018 notified the Sponsor of their intent to evaluate the CHMP. A copy of the NOI and WAC correspondence is provided in Appendix 1 and Appendix 2, respectively.[2]

This CHMP was prepared in accordance with the requirements of the *Aboriginal Heritage Act* 2006.

[2] At the time the NOI was lodged two VAHR places registered in proximity to the activity area were found to be incorrectly mapped on ACHRIS. The area of Cultural Heritage Sensitivity of one of these, VAHR 7721-0786, extended into the activity area. During the preparation of the CHMP this mistake was identified and following consultation with AV the ACHRIS mapping was revised. For this reason the NOI states the CHMP was mandatory, however after the identification of the incorrect mapping during the Desktop Assessment, the HA advised AV that the CHMP would be prepared voluntarily by the Sponsor. AV advised that they updated their records to indicate that the CHMP was being prepared voluntarily (email from Boheme Rawoteea to Petra Schell 29/08/18.

Documentation that has been provided separately to AV during the CHMP process includes:

- Spatial data generated as part of the CHMP showing the activity area, ground survey areas (if any), subsurface testing or excavation pits or transects (if any)
- An archaeological survey and excavation attributes form (where relevant);
- VAHR forms, including site inspection forms and representative photographs of every Aboriginal place (where relevant).

1.3. Location And Extent Of Activity Area

The activity area is located across a c.8.4 ha parcel of land at 120 Russells Road, Mount Duneed, approximately 10 km south west of Geelong CBD. The activity area is bound to the north by Russells Road, to the west by a private road and to the east and south by a recreation reserve currently used by the Mount Duneed Pony Club. Access to the property is directly from Russells Road. The activity area sits on the lower slopes of Mount Duneed, a dormant volcano.

The location of the activity area is shown in Figure 1, and existing conditions are described in Figure 2. Table 1 provides a summary of the activity area's cadastral details.

The majority of the activity area consists of cleared land, with plough marks visible across much of the open ground. Large trees are present at various places around the activity area boundary, the alignment of which suggests that they are an historical planting. Accumulations of trees or shrubs are present at various locations across the activity area, notably in its eastern part. A rectangular section of land in the south eastern corner (extending east outside of the activity area) contains a (recently established) plantation. South of this plantation, running parallel to the activity area's southern border, there appears to be a track or drainage line, extending east from a series of trees or bushes.

A field inspection of the property undertaken as part of a recent historical archaeological due diligence assessment (Gilchrist, Paynter & Schell 2018: 7-9) described the historical modifications to the activity area as follows:

- stands of mature pines and a post and wire fence along both the western and northern boundary;
- a wooden cattle ramp and associated pens in the western part of the activity area;
- near the property boundary; a large linear area of outcropping basalt east of the cattle ramp, the northern extent of which has likely been modified;

- partial stone footings of the former Mount Duneed Wesleyan Church in the north eastern part of the activity area, accompanied by demolition material in the form of a square shaped mound;
- a post and wire fence running north-south adjacent to the former church building;
- a young eucalyptus plantation in the south east; and,
- two shallow open cut drains in the south western part of the property.

A review of the Victorian Aboriginal Heritage Register undertaken as part of the Desktop Assessment for this CHMP (see Section 2.5) found that there are no registered Aboriginal places within 200 m of the activity area. This result is reflected in Figure 1.

Category	Details
Parish	Duneed
County	Grant
Local Government Area	City of Greater Geelong
Map Sheet (1:25,000)	7721
Property Address	120 Russells Road, Mount Duneed
Property Identifier (SPI)	L2~21\PP2561

Table 1: Cadastral information for the activity area.

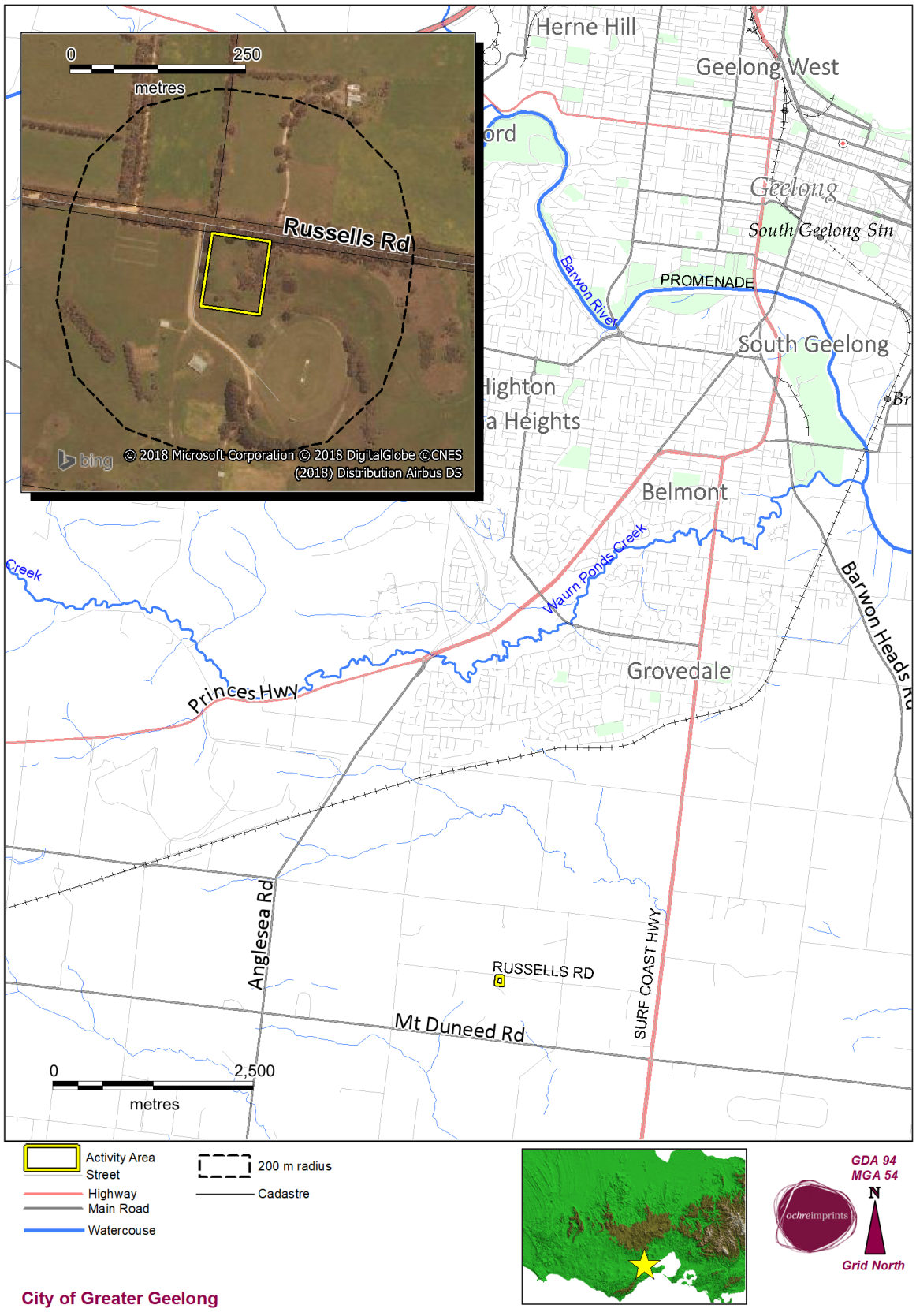


Figure 1: Location of the activity area.

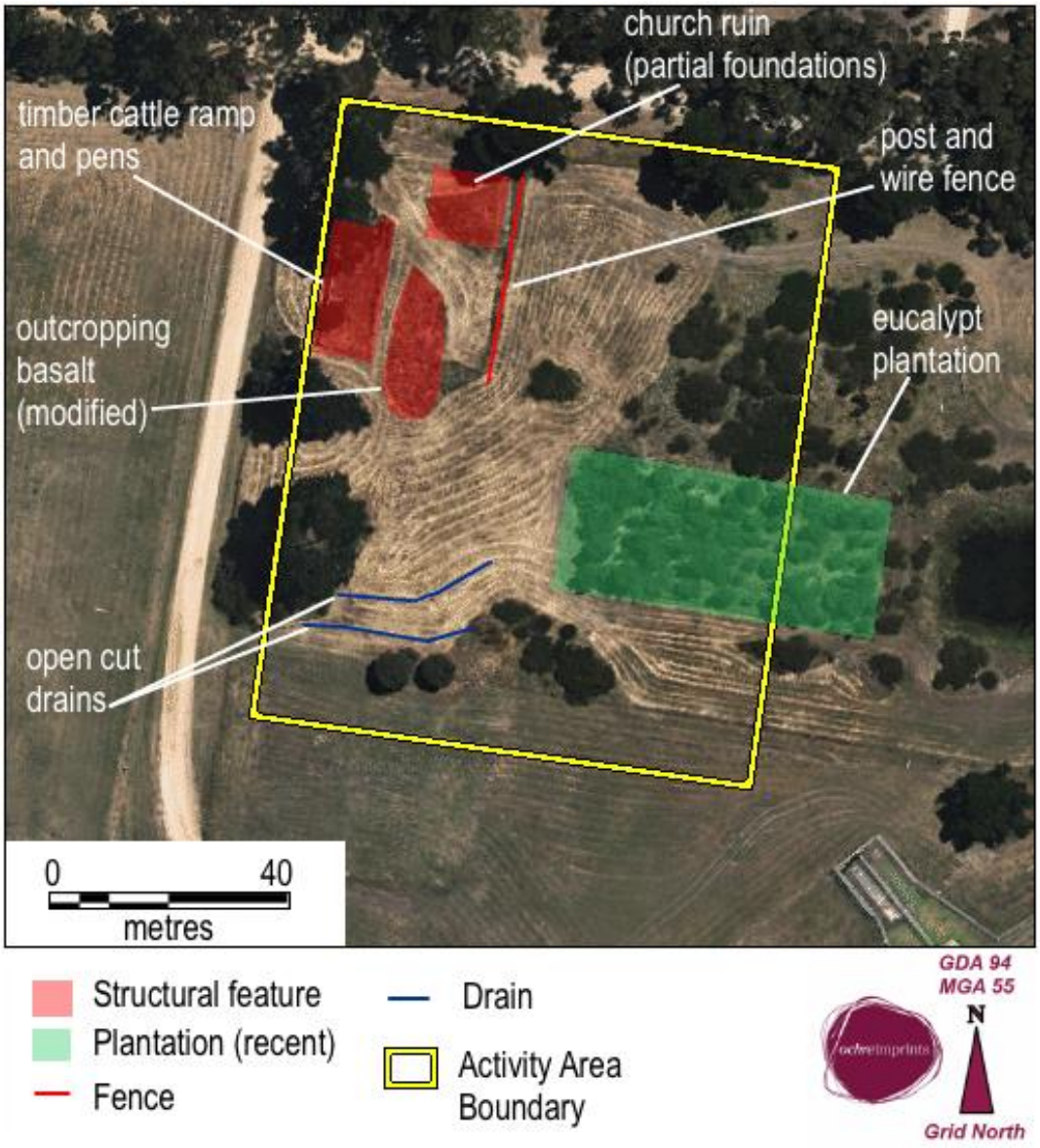


Figure 2: Existing conditions within the activity area. Base map source: Google Earth.

1.4. DESCRIPTION OF PROPOSED ACTIVITY

The proposed activity involves development of the property by way of the construction of a residential alcohol and drug rehabilitation centre. The proposed development will include provision for amenities such as parking and landscaping. A development plan is provided in Figure 3.

Activities that will occur during the course of the development include:

- Site preparation, including clearance of vegetation and fencing;
- Soil excavation for the construction of the centre building, a 10 m long path leading from the car park to the centre and a 6 x 8 m storage shed;
- Soil excavation and the grading of soil during driveway and parking lot construction (to a depth of c. 200 mm);
- Soil excavation for service trenches (e.g. gas, electricity, water, drainage, and telecommunications);
- Construction of a septic sand filter which will involve excavation of a 4 x 5 m area to a depth of 1.5 m;
- Creation of a raised mound orchard using soil from onsite excavation; and,
- Landscaping, including the planting of a native hedge around the property.

The proposed activity will involve some degree of disturbance to both surface and subsurface soils, clay and volcanic bedrock. The standard depth of excavation for pipes and services, to the top of the pipe, are:

- 600 mm for water and septic discharge;
- 900 mm for electricity;
- 900 mm minimum for drainage; and
- 1,300 mm for sewerage

Works associated with the activity that will involve impacting, or the relocation, of surface and subsurface soils, have the potential to impact Aboriginal cultural heritage (if present). No prior land surfaces are known to exist in the activity area.

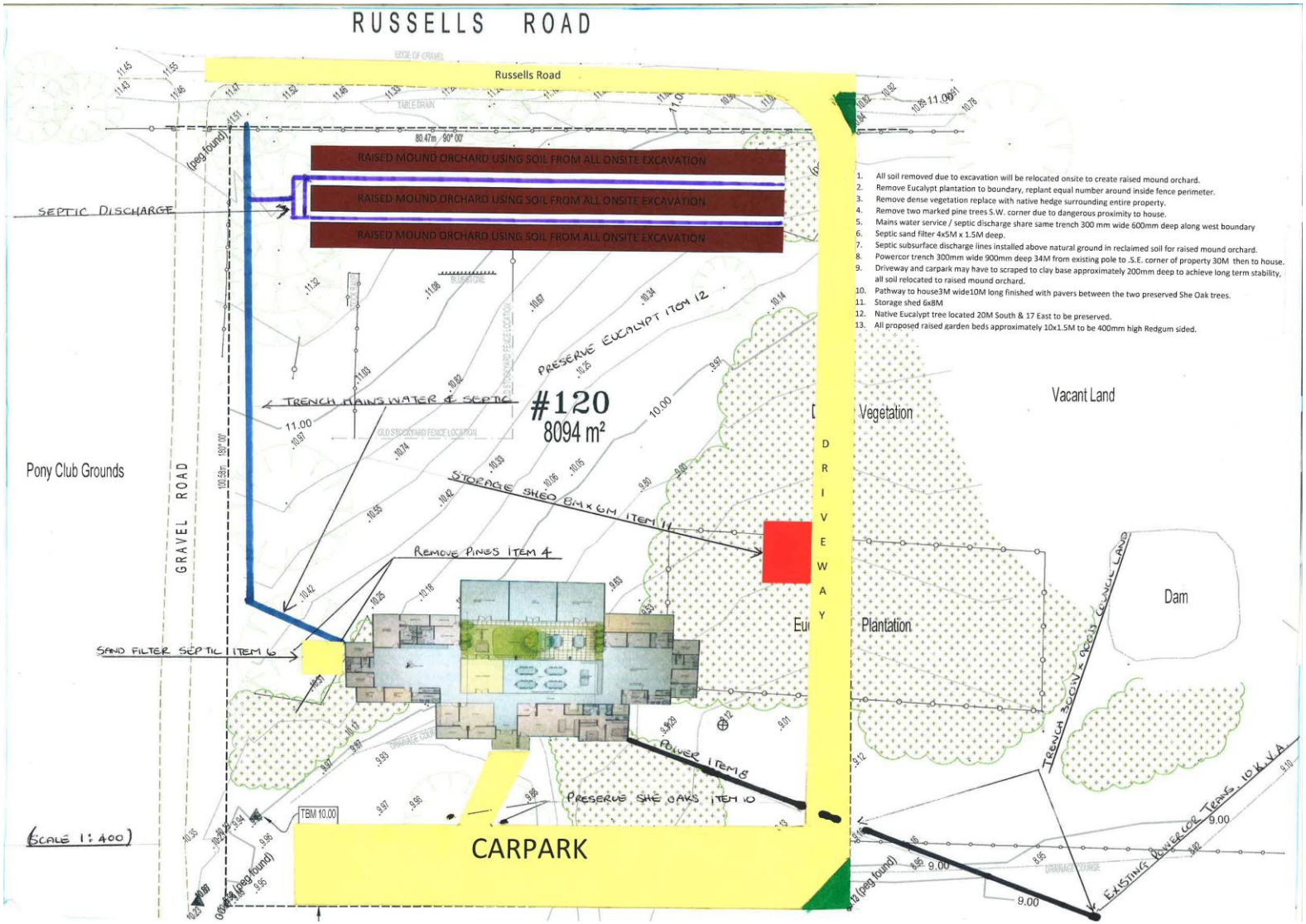


Figure 3: Development plan for the project.

1.5. REGISTERED ABORIGINAL PARTY (RAP)

1.5.1. Communication with the RAP

Wathaurung Aboriginal Corporation (WAC) is the Registered Aboriginal Party (RAP) for the activity area. WAC was consulted throughout the preparation of this CHMP, and communication with WAC is summarised in Table 2. While meeting outcomes are provided in section 1.4.2.

Table 2: Communication with Aboriginal stakeholders.

Date	Group/Person	Nature of Contact	Reason
20/06/2018	Petra Schell (Director/ Senior Heritage Advisor - Ochre Imprints) to WAC Administration	Email	Submitted Notice of Intent (NOI) to undertake CHMP
20/06/2018	Fjorn Butler (Ochre Imprints Administration) to WAC Administration	Email	Organise WAC inception meeting
21/06/2018	WAC Administration to Fjorn Butler	Email	Responded that WAC had received the NOI and would evaluate the CHMP
5/07/2018	Fjorn Butler to WAC Administration	Email	Organise field representatives for Standard and Complex Assessment
30/07/2018	Petra Schell to Stephanie Frydas (Heritage Advisor / Archaeologist, WAC)	Email	Petra provided a summary record of the project inception meeting to WAC.
31/07/2018	Stephanie Frydas to Petra Schell	Email	Stephanie advised she had received the meeting notes.
24/08/2018	Petra Schell to Stephanie Frydas	Email	Petra provided a summary record of the post-field work to meeting to WAC along with the draft management conditions and contingencies.
27/08/2018	Stephanie Frydas to Petra Schell	Email	Stephanie advised she had received the meeting notes and the content was accepted.
28/08/2018	Petra Schell to Stephanie Frydas	Email	Petra requested clarification that the management conditions and contingencies had also been reviewed.
29/08/2018	Stephanie Frydas to Petra Schell	Email	Stephanie advised she had reviewed the conditions and contingencies and did not require any changes to them.

1.5.2. Views of the RAP

WAC provided the following statement of cultural significance regarding social and spiritual values:

> All sites within the Wathaurung area are significant in cultural terms as they are a tangible link to our past and a non-renewable source of information about the lifestyle of our ancestors. The cultural significance afforded to the sites by the Aboriginal community must be given a higher standing than the scientific rating as the scientific rating is based on a European perspective without due regard to the value of the Aboriginal culture as a whole (Bryon Powell, Chairperson WAC).

The views of WAC were also sought during two face-to-face meetings held with Ochre Imprints, the Sponsor and WAC. The scope and outcomes of these meetings, including WAC views, are described below.

Inception – 24 July 2018

Attendees: Rob Lytzki (Program Director, Foundation 61 Inc), Petra Schell (Director/Senior Heritage Advisor, Ochre Imprints), Chris Mason (Senior Planner, St Quentin), Stephanie Frydas (Heritage Advisor/Archaeologist, WAC)

Meeting Record:

- General discussion about the triggers for the CHMP – The CHMP is a voluntary, while the activity is a high impact activity, the activity is not in an area of Cultural Heritage Sensitivity;
- Registered Aboriginal places were listed on ACHRIS as being within 50 m of the activity area (7721-0786 & -0785), however both been mapped incorrectly and are not located within 50 m of the activity area;
- The Sponsor outlined the proposed activity that comprises of a residential drug and alcohol rehabilitation centre and associated infrastructure.
- A development plan was presented which shows the layout of the rehabilitation centre which is proposed in the southern part of the activity area. A road is proposed to extend along the eastern margin of the activity area with a car park proposed south of the centre. Elsewhere impacts are anticipated to be limited to planting vegetation and raised garden beds;
- Petra outlined the environment and landforms (volcanic plain) and archaeology of the area, including registered Aboriginal places and previous archaeological investigations. All of the places in the geographic region are artefact scatters, scarred

trees or LDADs, those with larger numbers of stone artefacts occur close to Curly Sedge Creek on stony rises or floodplain;

- WAC proposed the following Complex methodology:
  - Subsurface testing to include two 1 x 1 m Excavation Pits and up to 10 Shovel Test Pits, with 10 m interval radial shovel test pit testing to be undertaken of any pits found to contain Aboriginal cultural heritage. The testing will focus on the location of the proposed rehabilitation centre and the alignment of the proposed road along the eastern margin of the activity area. The testing will avoid known historical archaeological features and the EVC 132;
- The historical archaeological assessment running concurrently to the CHMP was discussed with WAC commenting of the need for the CHMP to provide contingencies in the event Aboriginal cultural heritage is identified during any future historical archaeological excavation;
- WAC advised that the next meeting will occur after the field survey and subsurface testing and management requirements will be discussed at that meeting.
- WAC comments regarding the activity are:
  - **Bryon Powell (WAC Spokesperson) after meeting**: the activity area sits on the north side of Mount Duneed in an area that is protected from the prevailing southerly winds. This would have made it an attractive location for Aboriginal occupation, and subsequent European occupation in the post-contact period. Bryon does not know of any specific interactions between the church which was constructed in 1857 and the Aboriginal community.

120 Russells Road post field work meeting - 22 August 2018

Attendees: Rob Lytzki (Program Director, Foundation 61 Inc), Petra Schell (Director/Senior Heritage Advisor, Ochre Imprints), Chris Mason (Senior Planner, St Quentin), Stephanie Frydas (Heritage Advisor/Archaeologist, WAC)

Meeting Record:

- Petra presented the results of the field survey (Standard Assessment) – the activity area sits within the lower slopes of Mount Duneed, surface visibility was generally low with a small area of increased visibility associated with a tree plantation. Disturbance was noted from a number of land use practices including ploughing, stock yard and church construction, stock grazing, dumping of gravel etc. No Aboriginal cultural heritage was identified during the field survey;

- The subsurface testing results (Complex Assessment) were also presented. A total of two excavations pits and 10 shovel test pits were excavated and did not identify any Aboriginal cultural heritage. The soils were found to be quite shallow, on average 170 mm depth with a maximum depth of 320 mm. Soils were grey silt/clayey silt overlying dark grey and yellow clay. Some disturbance from ploughing and gravel was noted in the pits.
- Discussed management conditions (in summary), as follows:
    - Condition 1 is around the distribution of the CHMP to relevant parties;
    - Condition 2: a copy of the approved CHMP must be kept onsite during construction works associated with the activity;
    - Condition 3: an archaeologist with expertise must take part in any historical archaeological excavations that take place within the activity area;
    - Condition 4: a cultural heritage induction must be delivered by WAC to relevant contractors/subcontractors undertaking ground disturbing works associated with the activity;
    - Condition 5: three compliance inspections by WAC are required (before, during and at the completion of the activity);
    - Condition 6: All topsoil stripped from the activity area during the conduct of the activity must remain onsite.
- Discussed management contingency should Aboriginal cultural heritage be identified during historical excavation that will likely be required of a former church site that sits in the activity area. A contingency (as per Contingency 1 in final CHMP) which addresses this scenario and has been taken from a recent CHMP where AV was the approval authority, but has been adjusted to reflect RAP involvement, was discussed and WAC approved in principle with this contingency. The remaining contingencies which are standard for CHMPs were briefly discussed (i.e. what to do if suspected Aboriginal cultural heritage, or human remains, are identified during the works program, custody of any identified Aboriginal cultural heritage, handling sensitive information, communication, dispute resolution and compliance review);
- Rob provided further detail on the layout of the development, ancillary works and depth of works.
- Stephanie is able to review the draft management conditions and contingencies prior to the CHMP being submitted for evaluation.

1.5.3. Participation in Standard and Complex Assessments

The following Aboriginal stakeholder representatives participated in the field survey and subsurface testing carried out 2 August 2018.

- Dale Hyatt (WAC); and
- Garry Hanson (WAC).

2 DESKTOP ASSESSMENT

2.1. INTRODUCTION

This section fulfils the CHMP requirements for a Desktop Assessment. It provides contextual geographical, environmental, historical and archaeological information for the activity area and the region surrounding it. The focus of the Desktop Assessment is on placing the activity area in a regional context to inform the expected nature of Aboriginal places in the activity area. This allows a comparative analysis and significance assessment to be undertaken if Aboriginal places are found to be present in the activity area, and a predictive model to be established to inform the rationale behind, and methodology for the Standard and Complex Assessments.

2.2. ENVIRONMENTAL CONTEXT

2.2.1. Geographic Region

The *Aboriginal Heritage Act* 2006 requires a Desktop Assessment to include 'an identification and determination of the geographic region of which the activity area forms a part that is relevant to the Aboriginal cultural heritage that may be present in the activity area' (Section 57).

The geographic region for this CHMP is defined as a 2 km radius from the central part of the activity area. The geographic region was selected in this way in order to incorporate a representative sample of the registered Aboriginal places most relevant to the current activity area. This region is considered relevant as it contains geological and geomorphological characteristics that are representative of those present within the activity area (dormant volcanoes and volcanic plains). The geographic region is presented in Figures 4 and 5, along with an illustration of its geological and geomorphological features in relation to the distribution of registered Aboriginal places.

The following sections provide background information of relevance to the geographic region. Where information is limited on a given topic (i.e. climate, land use history, ethnohistory), data has been drawn from a wider area.

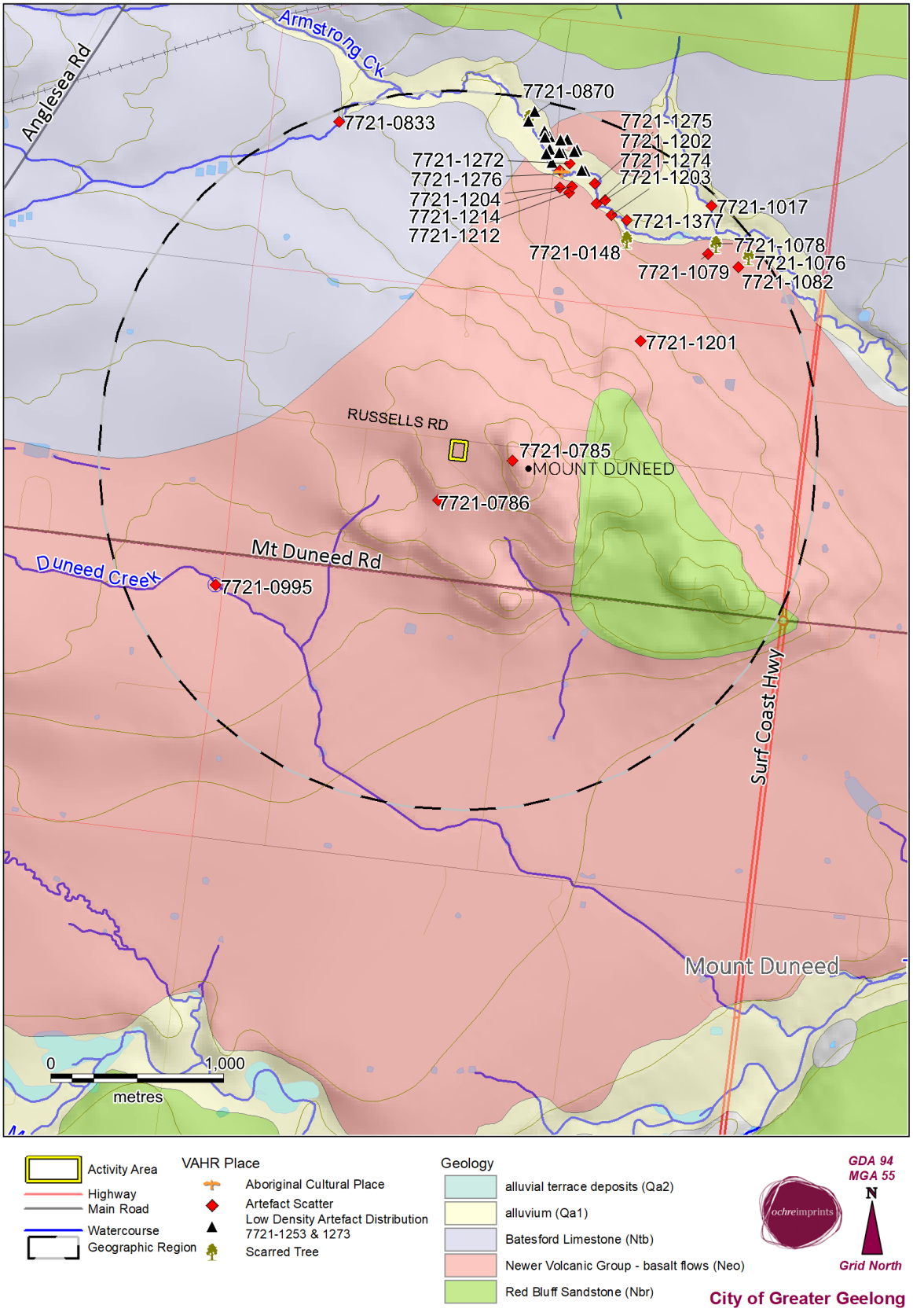


Figure 4: Geomorphology of the Geographic region, showing the distribution of VAHR places.

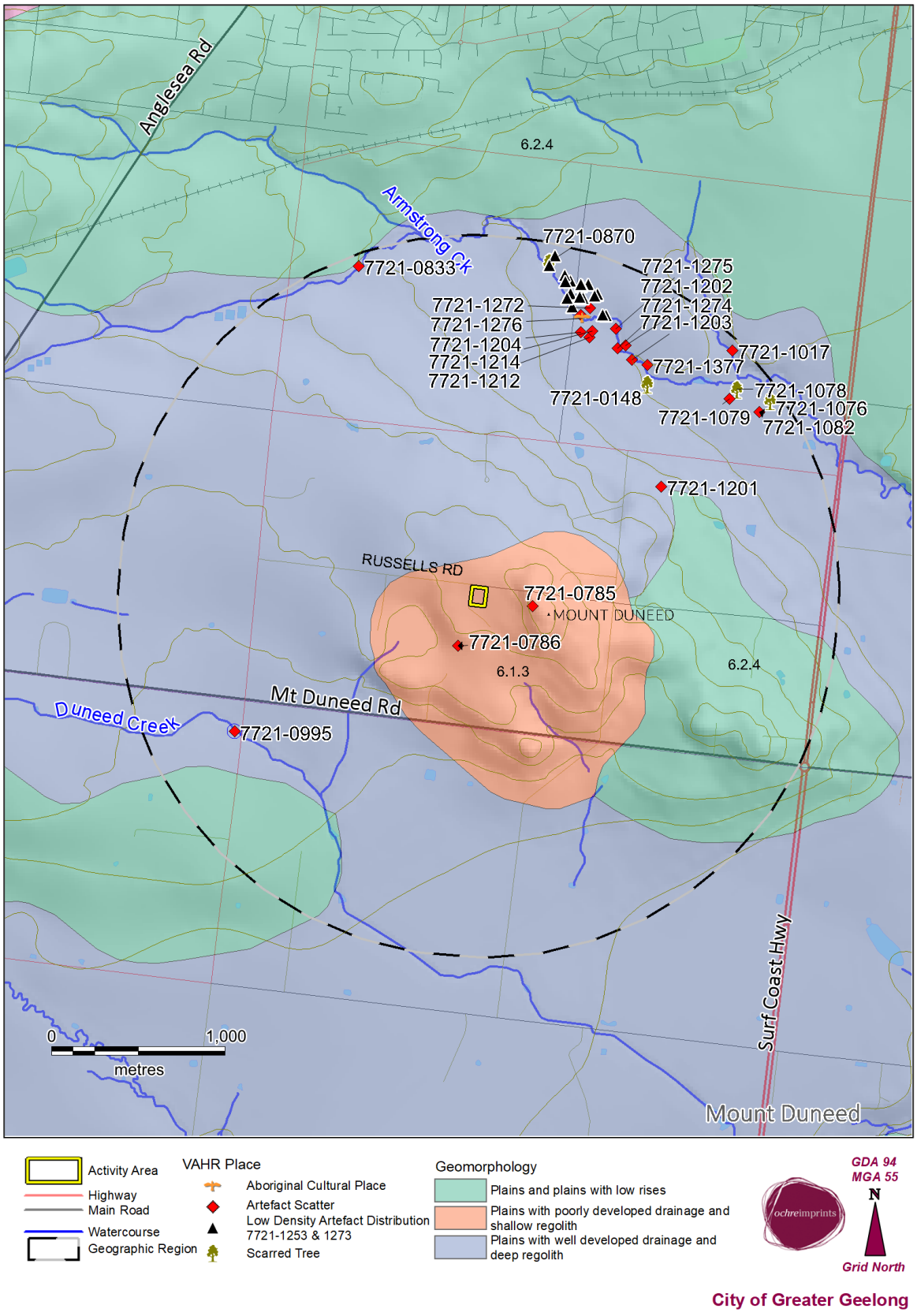


Figure 5: Geology of the Geographic region, showing the distribution of VAHR places.

2.2.2. Landforms and Underlying Geology

The geographic region is characterised by undulating volcanic plains dissected by Armstrong Creek in the north, and minor ephemeral creeks or drainage lines in the south. To the east of the activity area is Mount Duneed, a small volcanic scoria cone (Johnson 1989: 140) that is the major obtrusive landform feature of the geographic region. The activity area itself is located on the lower western slopes of Mount Duneed, whose geology was described on an early geological plan (Geological Survey of Victoria 1868: [cartographic material]):

> the Pliocene tertiary sea has swept over the greater portion of the Mt Duneed Lava leaving a thin surface deposit of Sand, Clay Ironstone & Quartz pebble drift, much of this has been subsequently denuded & has gone to form a thicker deposit of the same material rearranged in the gullies.

The landforms within the geographic region form part of the wider Western Victorian Volcanic Plains, a series of vast plains of sheetflow basalt of the Newer Volcanics province that extend west from Melbourne almost all the way to the Victoria-South Australia border (Cochrane *et al.* 1995: 80). Known geologically as the Newer Volcanics (Vandenberg 1997), the region is characterised by flat to undulating plains dotted with many hills formed by extinct volcanoes, and numerous relatively thin basalt flows. Low lying lakes and swamps are common due to the impervious nature of the basalt substrate. The Newer Volcanics formation overlies Palaeozoic sedimentary rocks including siltstones, mudstones and sandstones.

The activity area is located within the geomorphological unit ‘Plains with poorly developed drainage and shallow regolith’ (6.1.3), while the wider geographic region is dominated by the geomorphological unit ‘Plains with well developed drainage and deep regolith’ (6.1.4). Mount Duneed and its immediate surrounds, to the east and south of the activity area, falls within the ‘Plains and plains with low rises’ (6.2.4) geomorphological unit. These geomorphological units contain soils of varying type and depth. Areas of deep regolith are ‘characterised by very planar landscapes with thicker soil development’ (VRO Online accessed July 2018); whereas in areas of shallower regolith, ephemeral drainage lines are more common, and are obtrusive features of the landscape. A notable feature of the plains with shallow regolith is the presence of basalt ‘floaters’ on the ground surface (VRO Online accessed July 2018).

The landscape of the volcanic plains is generally poorly drained (VRO Online: accessed July 2018) and geological survey of Victoria mapping (GeoVic Online: accessed July 2018) indicates that the activity area is dominated by extrusive basalt, minor scoria and ash that is Pliocene to Holocene in age. In the northern part of the geographic region, associated with Armstrong Creek, Holocene alluvial deposits are present, including gravels, sands and silt

(GeoVic Online: accessed July 2018). The land associated with Mount Duneed contains deposits of Moorabool Viaduct Sand, which are Miocene to Pliocene in age, are characterised by gravel, sand and silt and are part of the Red Bluff Sandstone formation (Figure 5).

2.2.3. Climate

In its c. 50-60,000 years of human habitation, Australia's climate has undergone a series of fluctuations, and at times quite dramatic changes. These fluctuations have affected sea levels, geomorphological processes, flora and fauna communities and hydrology. While over larger time scales glacial-interglacial cycles dominate broader scale changes, significant decadal to centennial timescale climatic variations occur, in part due to atmospheric, oceanic and terrestrial interactions. These are known to have had a significant impact on vegetation, hydrology etc. – which in turn has been attributed to changes in the archaeological record - but this information has not been systematically collated or validated over larger spatial scales (Mills *et al:* 2013; Williams *et al.* 2010: 831).

During the Pleistocene period, at the time of the last glacial maximum (approximately 21,000-15,000 years BP), temperatures would have been an average of 6-10°C lower than presently experienced (Mulvaney & Kamminga 1999: 115-116). The colder temperatures influenced sea levels and at this time the coast extended much further southward, joining Tasmania to the mainland as part of one larger landmass (Mulvaney & Kamminga 1999). Conditions were notably drier around this time, with less than half of today's annual rainfall falling across the region. This reduced rainfall meant that forested areas were scant across southern Victoria, with the region dominated by grasses (Kershaw 1995: 664).

Between 12,000 and 9,000 years BP, warmer temperatures and increased precipitation encouraged the expansion of eucalypts, and forested areas became more common with the grasses surviving 'as the dominant understorey' (Kershaw 1995: 666). Sea levels also began to rise at this time, separating Tasmania from the mainland. Sea levels in Victoria stabilised around 1.0-1.5 m above today's levels between 7,700-7,400 BP, before reaching current levels approximately 2,000 years BP (Lewis *et al.* 2008: 74; Lewis *et al.* 2013: 128). There is evidence that Port Phillip Bay becoming an estuarine-marine environment at c. 8,200 BP, although it dried out for a period of time 2,800-1,000 years ago. The later was likely caused by sediment blocking the channel entrance coupled with high evaporation rates (Nunn & Reid 2016: 18; Holdgate *et al*. 2011: 157, 167-168)

There is evidence for the onset of the El Niño-Southern Oscillation phenomenon c. 6,000 to 5,500 years BP and this may relate to subsequent drier and variable climatic conditions (Mills & Walsh 2013: 8). An analysis of vegetation patterns in the mid Holocene and last

glacial maximum found that differences between Mid-Holocene and modern vegetation patterns are comparatively small and reflect changes in moisture availability rather than temperature (Pickett *et al*. 2004: 1381). However, these changes would have nevertheless had an impact on the distribution of subsistence resources utilised by Aboriginal people, and the way they interacted with the landscape. This is supported by an analysis of radiometric dates across northern and central Australia which identified 'notable declines' in the archaeological record over ca. AD 700 and 1,000 and post-AD 1,500. This decline, measured by a reduced number of radiometric dates at archaeological sites, broadly correlate with transitions of the El Niño-Southern Oscillation (Williams *et al.* 2006: 831).

The current climate of the region is generally described as temperate with warm, dry summers and cool winters with a mean maximum temperature of 19.6ºC and a mean minimum temperature of 9.4ºC. Average annual rainfall in the region is recorded as 550.3 mm (Bureau of Meteorology: July 2018).

2.2.4. Flora and Fauna

The vegetation of the geographic region prior to European arrival was characterised by the Plains Grassland ecological vegetation class (EVC 132), with Grassy Woodland (EVC 175) present in association with Mount Duneed, to the east of the activity area (NVIM DEWLP interactive mapping, accessed July 2018). Parts of the Western Victorian Volcanic Plains covered by Plains Grassland were generally treeless and dominated by grasses, sedges, rushes and herbs. All vegetation within this class was less than 1 metre tall, and the landscape would have been open, with the dormant volcanoes serving as high points in the landscape. According to Presland (2009: 137) '[i]t was the plant communities of the basalt plains…that was the prime attraction to European settlers…the vast expanse of grasslands that stretched almost as far as the eye could see'. A portion of the activity area in the south west corner is currently listed as an EVC protection zone as its Bioregional Conservation Status is listed as endangered.

Grassy Woodland, present on and around Mount Duneed itself, was characterised by an open eucalypt woodland with a sparse shrub component 'over a diverse ground layer of grasses and herbs' (DSE 2004: n.p.). Grassy Woodland was generally characterised by tall Eucalypts including Swamp and Manna Gum (*Eucalyptus ovata* and *viminalis*) and Narrow-leaf Peppermint (*Eucalyptus radiate s.l.*); but was sometimes dominated instead by tree species such as Drooping Sheoak (*Allocasuarina verticillata*), and Acacias such as Black Wattle and Lightwood (*Acacia mearnsii and implexa*). Grasses and herbs present in Grassy Woodland areas may have included Common Wallaby Grass (*Austrodanthonia caespitosa*),

and Wattle mat-rush (*Lomandra filiformis*) and Nodding Saltbush (*Einadia nutans* ssp. *nutans*).

Plant resources of the geographic region would have included the roots of lilies, orchids and *murnong*. The latter is a daisy yam (*Microseris scapigera*) which was a staple food of the Aboriginal people of Victoria at the time of contact. It was collected in very large quantities and roasted in fires. Kangaroo grass (*Poa labilllardieri*), common on the plains, was used for fibre to make fishing nets, and the seeds may also have been ground and baked (Zola & Gott 1990: 58). Native tussock grass fibres were also used for string, nets, baskets and bags (Zola & Gott 1990: 12). The fauna of the volcanic plains would have included large game such as kangaroos and emus, a variety of snakes and lizard species, and the nearby watercourses such as Armstrong Creek would have been a focal point for bird species as well as supporting aquatic animals such as species of perch (ALA Online: Accessed July 2018).

WAC provided the following summary of Aboriginal flora resources that were used by *Wadawurrung*, taken from Gott and Nola (1992):

- Black Wattle- *Acacia mearnsii:* A source of gum which could be used as a resin. The gum and the nectar flower when mixed with water can make a sweet drink.
- Golden Wattle- *Acacia pycnantha:* Gum could be eaten or to make a sweet drink. The bark used to treat indigestion. Fibre was used for baskets and bags
- Blackwood- *Acacia melanoxylon*. Bark used to treat rheumatism by heating over a fire and infusing in water. Wood used to make shields, clubs and spear-throwers.
- Black She-oak- *Allocasuarina littoralis:* Wood used to make boomerangs.
- Drooping She-oak-*Allocasuarina verticillata:* Wood used to make boomerangs and other implements. Young shoots and cones eaten.
- Chocolate Lily- *Arthropodium strictum:* Tubers roasted before eaten.
- Silver Banksia- *Banksia marginate:* Flowers soaked in water to extract nectar and make a sweet drink.
- Bulbine Lily- *Bulbine bulbosa:* Sweet corms cooked and eaten.
- Milkmaids- *Burchardia umbellate:* Roots cooked before eating.
- Inland Pigface- *Carprobrotus modestus:* Sweet red fruits eaten raw. Fleshy green leaves eaten raw or cooked
- Blue Stars- *Chamaescilla corymbosa:* Elongated tubers eaten
- Small-leaved Clematis- *Clematis microphylla:* Roots cooked in baskets, pounded and kneaded into a dough. Leaves crushed and inhaled to treat headaches.

- Australian Bindweed- *Convolvulus erubescens:* Roots cooked, kneaded into dough and eaten
- River Red Gum- *Eucalyptus camaldulensis:* Canoes made from large sheets of bark. Bark also used to make shelters, shields and containers. Sap used to seal burns and mixed with water to treat diarrhoea. Leaves were used in aromatic steam baths as a remedy for a range of ailments.
- Yellow Gum- *Eucalyptus leucoxylon ssp.connata:* Oil from leaves used to treat colds and chest complaints. Nectar was collected from the flowers. Wood was used to craft weapons and tools
- Manna Gum- *Eucalyptus viminalis:* Sugary white extrusions on leaves (manna) gathered from the ground and eaten. Wood used to make shields and water containers. Smoke produced from burning the long, thin older leaves belied to reduce fever.
- Cherry Ballart- *Exocarpos cupressiformis:* Red fruits enjoyed as a springtime snack. The wood was used to make spear throwers.
- Yam Daisy- *Microseris lanceolate:* Tubers roasted or cooked in baskets and eaten. Tubers can also be eaten raw
- Large Kangaroo Apple- *Solanum laciniatum:* Dark orange fruit eaten only when very ripe. Poisonous at other times.
- Warrigal Spinach- *Tetragonia tetragonioides:* Leaves eaten as a raw salad although cooking is recommended before consumption.
- Kangaroo Grass- *Themeda triandra:* String from leaves and stem to make bags and fishing nets. Seeds ground into flour.
- Twining Fringe Lily- *Thysanotus patersonii:* White, watery tubers cooked before being eaten.

George Armytage, an early land holder in the Geelong area, noted that the *Wadawurrung* depended upon fishing in the summer and autumn periods and hunting and the plant food *murnong* in the winter and spring period (Bride 1969, 173). Other early settlers recorded that the diet of the *Wadawurrung* consisted of a wide range of mammals, fish, birds, plant foods and fungi (Dawson 1881, 18-22). Ethnohistorical records suggest the *murnong* was a staple plant food on the volcanic plains west of Melbourne (Gott 1983, 6-8). *Murnong* was available year-round, although less palatable in early winter (Gott 1983, 10). Dawson (1881) refers to a gum which was used by Aboriginal people. His reference reflects how the distribution and availability of a food source was affected by the arrival of Europeans:

> Another kind of manna, also called *buumbuul*, is deposited in considerable quantities by the large dark-coloured cicadae on the stems of white gum trees near the River

> Hopkins. The natives ascend the trees, and scrape off as much as a bucketful of waxen cells filled with a liquid resembling honey, which they mix with gum dissolved in cold water, and use as a drink. They say that, in consequence of the great increase of opossums, caused by the destruction of the wild dog, they never get any *buumbuul* now, as the opossums eat it all. (Dawson 1881, 21)

Many accounts of subsistence strategies in the region refer to the seasonal use of eels by Aboriginal people. Eels were caught by spearing, fishing and using traps. Eel traps were made from stones and/or sticks (Smyth 1878 Vol II, 388). Stone and stick barriers, constructed across drainage lines were used to channel the eels through a narrow opening over which baskets were often placed to catch the eels. The most notable observations of this were made by Robinson, Chief Protector of the Aborigines for the Aboriginal Protectorate, in his 1841 journey through the Western District (Presland 1977).

The activity area has been cleared of native vegetation, and contains a number of non-native mature trees as well as a recent tree plantation. The dominant vegetation in the activity area is currently pasture grasses.

2.3. EUROPEAN LAND USE HISTORY

The post-contact land use history of the activity area has resulted in a degree of modification to its character over time, and almost certainly will have had an impact on its pre-contact archaeological record. This section discusses the history of the activity area and its surrounds through a review of the history of the local area as well as a review of historical documents, maps, plans and aerial photography. This review is undertaken in order to predict the type of modifications that are likely to have occurred within the activity area, which may in turn have had an impact on the activity area's Aboriginal archaeological record.

The historical overview provides a broad outline of the post-contact history of the local region, while the land use history proper discusses historical use of the activity area specifically.

2.3.1. Historical Overview

The first detailed European exploration of Corio Bay was undertaken in February 1802, by Lieutenant John Murray on the *Lady Nelson*. Early exploration and settlement of the region was undertaken slowly, and it wasn't until the late 1830s and 1840s that European settlement began in earnest. In 1824 Hamilton Hume and William Hovell arrived at Corio Bay following an overland exploration of the country from Sydney to Port Phillip (Wynd 1992:1), and in 1835 John Helder Wedge, a surveyor, produced a favourable report of the region, recommending it as 'fine pasturage for sheep' (Wynd 1992: 5). Shortly afterwards, in the late

1830s, squatters began to populate the region. One of those early squatters was John Armstrong (after whom Armstrong Creek is named) who leased land to the north of the activity area.

Following the subdivision and sale of large squatting runs, the regional industry remained rural in outlook but its industry shifted from a predominantly pastoral to an agricultural focus. In the 1861 census, 179 farmers and 167 farm labourers were recorded in Duneed Parish, and by 1867 Mt Duneed was noted as one of the most cultivated areas in the region (Wynd 1992: 30-32). However, by the late nineteenth century, drought and soil exhaustion led to the decline of cultivation and sheep grazing became once again the principal industry (Wynd 1992:38-45).

Small scale dairying increased during the 1890s, with several creameries operating in the region. Viticulture was also an important local industry, and many vignerons operated within the Mount Duneed region in the mid to late 19th century – related to a large influx of German migrants to Grovedale (north of the activity area). At least two vignerons existed along Mt Duneed Road in 1879, supplied by what was described as exceptionally clean water from Armstrong Creek (Wynd 1992:62).

Transport within the region was limited to a few roads bordering original land allotments, with the major thoroughfare from Geelong to Torquay (Torquay Road) located east of the activity area. A tollgate operated between 1861-1870 near Boundary and Torquay Road (Grimmer & Howard 1978). The Yarbrough Inn was established near the corner of Stewarts Road and Torquay Road in 1858 however the lack of passing trade caused its closure in 1864 (Wynd 1992:94).

Throughout the early twentieth century, the region remained generally rural in character, with subdivisions occurring from the mid 1900s onwards, as a market developed for hobby farms that required smaller acre lots (Wynd 1992: 175)

2.3.2. Activity Area

Historical Plans and Aerial Photography

There are few available historical plans that encompass the activity area, and aerial photography from c. 1947 onwards indicates that the activity area has served as pastoral / agricultural land since this time.

The earliest available historical plan that specifically identifies the activity area is a Duneed Parish Plan c. 1888. This plan shows the activity area subdivided as it is today and identifies it as a Wesleyan reserve. The Mt Duneed Recreation Reserve that borders the activity area was also allocated as a reserve at this time. To the east of the activity area, along what is

now Williams Road, reserves are marked for a Quarry, Cemetery and Presbyterian Church (Figure 6).

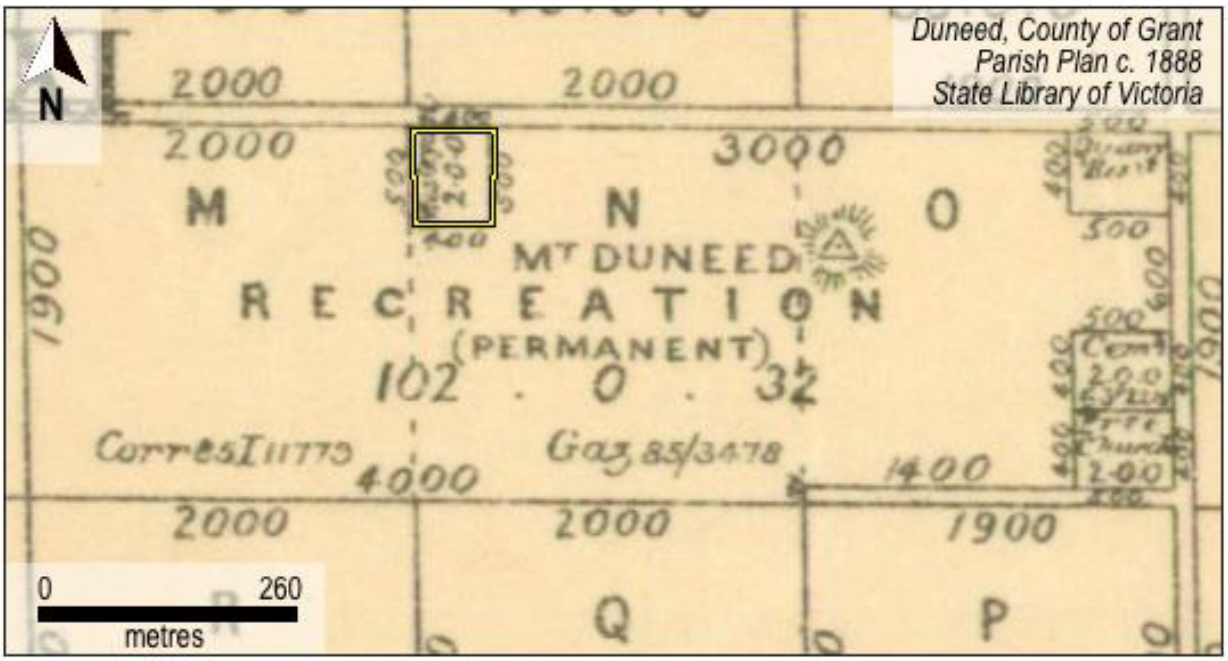


Figure 6: Excerpt from c. 1888 Duneed Parish Plan with activity area overlain. Base image source: State Library of Victoria.

A c. 1913 plan (Figure 7) depicts a road or track extending down the western side of the activity area, approximately where Russells Road turns today. This road or track comes to a fork in the south and branches off, crossing the activity area's south east corner as it extends in a north-east direction, up the slopes of Mount Duneed. The map indicates the presence of a Rifle Range in the Mt Duneed Recreation Reserve, and possibly extending into the activity area for this CHMP.

A structure is present on this map that appears to be located in the north-east corner of the activity area. It is possible that the map, being broad scale, lacks accuracy, and that this structure represents the Mt Duneed Wesleyan Methodist Church, which was known to be located within the activity area at this time. Alternatively, the structure marked on this map could represent a different building also located in or near the activity area.

A c. 1928 topographic map marks the presence of a church building within the activity area, and also indicates the possible presence of another built structure (Figure 8). However, it is not clear whether the built structure and the symbol indicating the presence of a church are two indicators for one building, or whether the map is showing two separate structures. The road or track present in c. 1917 to the west is not marked on this plan. A road does extend from the north east corner of the activity area, however, towards the cemetery reserve on Williams Road.

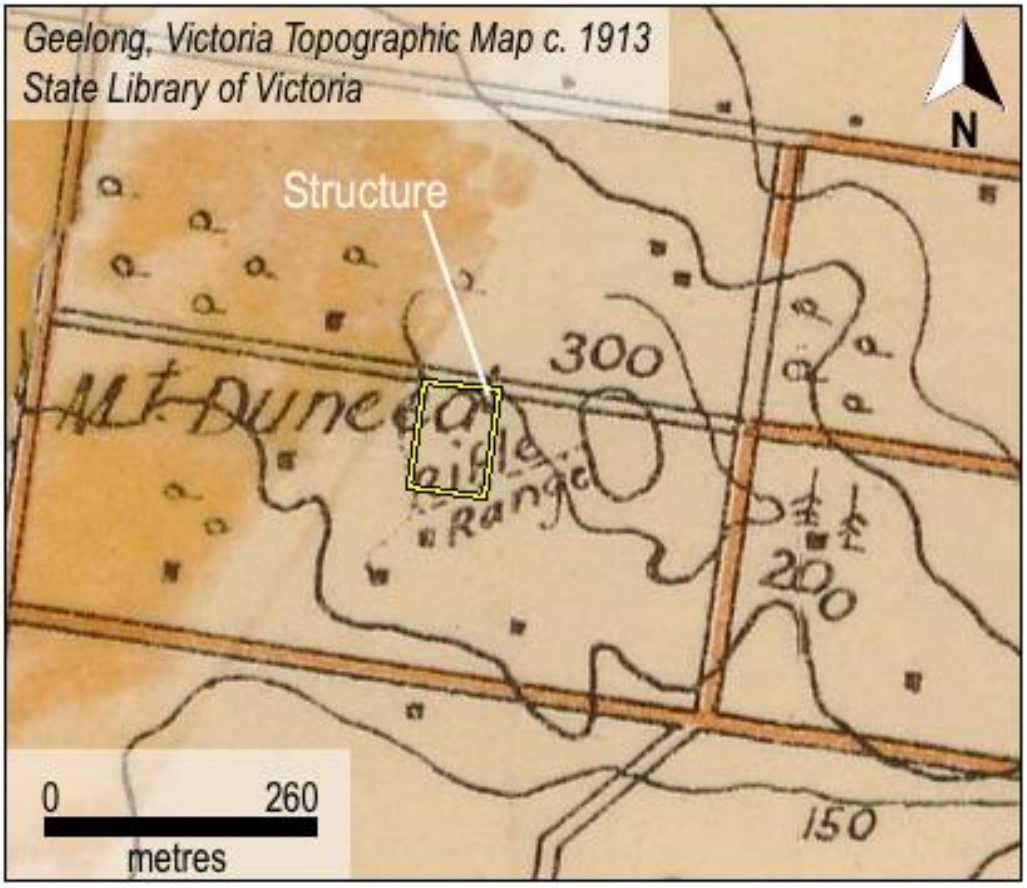


Figure 7: Excerpt from c. 1913 topographic map with activity area overlain. Base image source: State Library of Victoria.

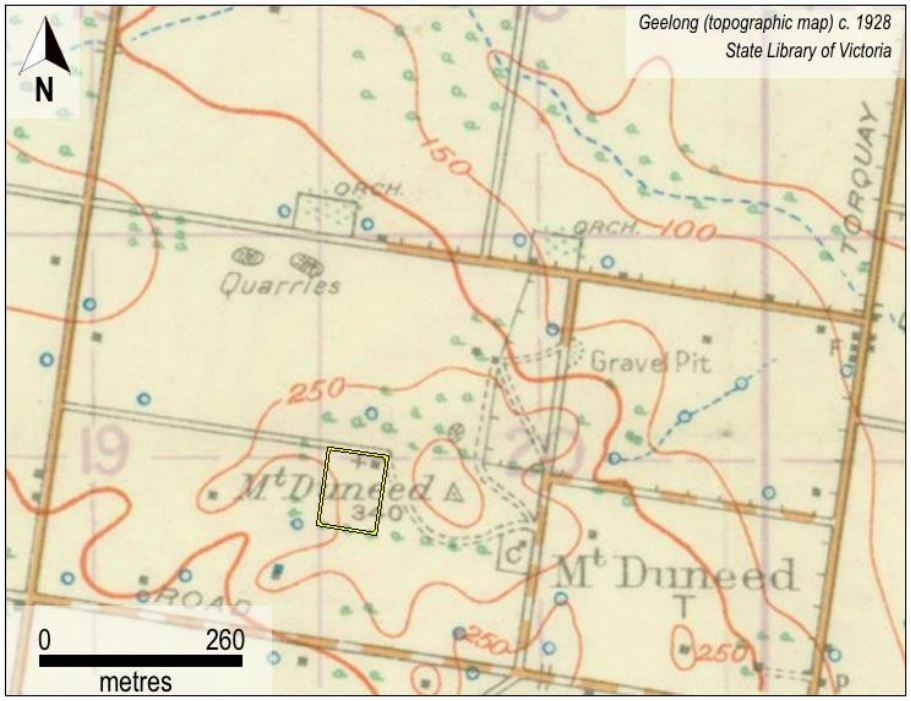


Figure 8: Excerpt from c. 1928 topographic map with activity area overlain. Base image source: State Library of Victoria.

An aerial photograph c. 1947 (Figure 9) shows a property boundary lined with trees and presumably fenced. This boundary roughly conforms to the activity area boundary – although it extends slightly beyond it to the east and west, while stopping short of the activity area's southern border. A farm dam, still extant today, is present immediately adjacent the south east corner of this outlined area. The eastern part of the activity area (which is shown as greener on recent aerial photographs and contains trees/shrubs) is slightly darker in colour and appears to contain some trees/shrubs at this time. The north west corner of the activity area is lighter in colour, possibly at the location of the church ruin.

Figure 10 shows the activity area c. 1951, looking much the same as in c. 1947. This photograph is clearer, and plainly shows a lighter area of ground in the approximate location of the church ruin. The ruin does not appear much larger than that which is visible today, whoever it does appear to possibly extend north toward the property boundary. Immediately north of the ruin there is a gap between the trees, which possibly indicates a former path/ entranceway to the church. A dark patch is present south of the church ruin site – at the approximate location of the basalt outcrop. In neither this nor the c. 1947 photograph is there any indication of a cattleyard on the property.

Figure 9: Historical aerial photograph c. 1947, with activity area overlain. Base image source: LANDATA.

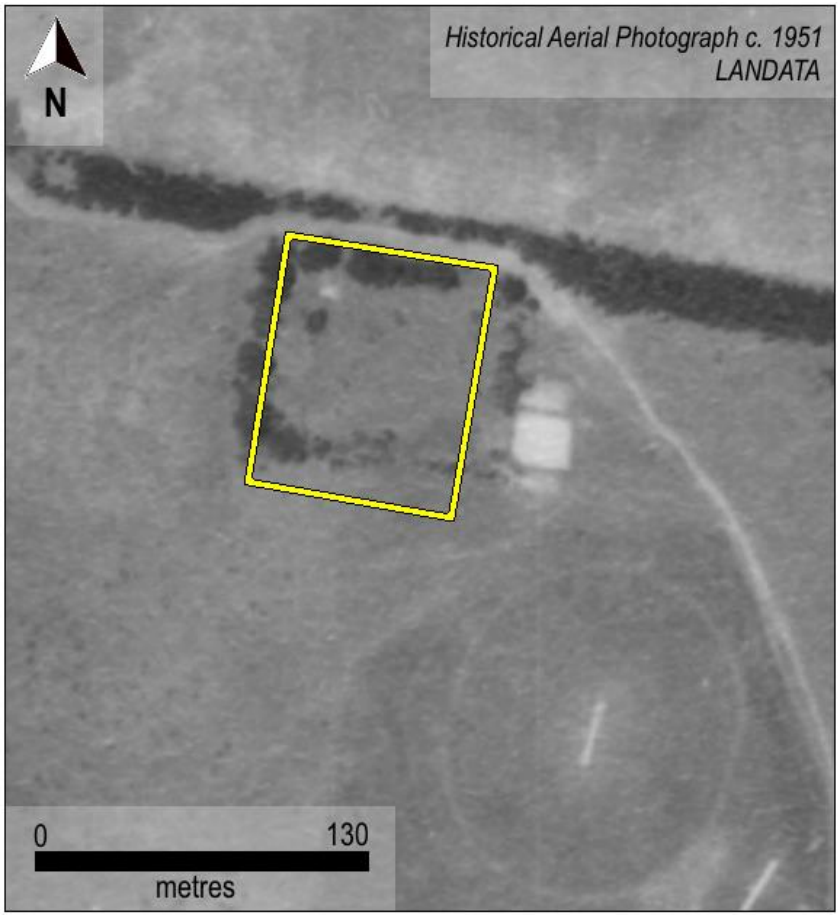


Figure 10: Historical aerial photograph c. 1951. Base image source: LANDATA.

By c. 1984 the property and its previously marked boundary were looking much more open – with several trees having been removed by this stage (Figure 11). Some modifications had been made to the south west corner of the activity area, as part of a larger rectangular block of land that has clearly been put to some sort of use and possibly fenced. A track was present extending west to east across the southern part of the activity area at this stage, and Russells Road was on its current alignment, extending south along the western border of the activity area, terminating at an oval to the south.

Shadows from tree cover are obscuring the church ruin in this photograph, however the adjacent fenceline is clearly visible. Outcropping basalt is no longer an obvious feature from above, and there is possibly evidence of a cattle yard on the western border at this stage.

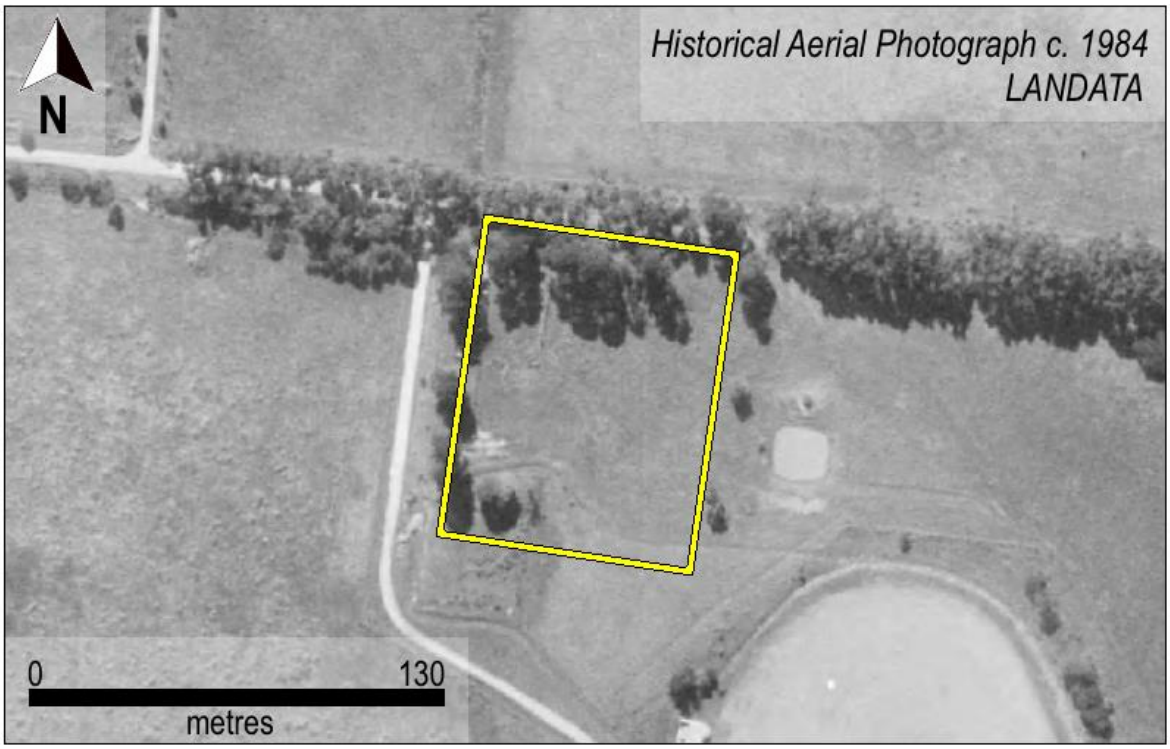


Figure 11: Historical aerial photograph c. 1984, with activity area overlain. Base image source: LANDATA.

Mt Duneed Wesleyan Methodist Church

Mt Duneed Wesleyan Methodist Church was located within the activity area from c. 1857 to c. 1944, when it was destroyed by fire. Opened on 7 June 1857 (Australasian Wesleyan Methodist Church 1867: 19), the church serviced the religious needs of the local Methodist community and played host to a range of community events such as harvest thanksgiving services over nearly nine decades[3]. The *Geelong Methodist* (April-July 1921) described the congregation at Mt Duneed as 'small but consistent'. The Geelong Family History Group Inc (Frewin & Phelan, N.D.: 71) describe the history of the Wesleyan Church at Duneed as follows:

> The foundation stone of the Mt Duneed Methodist Church was laid on the 1st January 1857 by the Rev. Isaac Harding. On the 7th June 1857 the early English style, stone church was completed, and the Rev. W. Hill preached the opening sermons. Commenting on the opening, the *Wesleyan Chronicle* reported that the church was nearly out of debt and that this was due to the "liberality of Mr Lowe, and the industry and skill of Mr John Hope". The *Geelong Methodist* of May 1943 reported that due to the loss of the minister from South Geelong, services at Mt Duneed would have to cease for a time. The church, along with St Wilfrid's Anglican Church, was destroyed by a bush fire that swept through the district on the 14th January 1944. The church does not appear to have been rebuilt after the fire.

[3] See for example Geelong Advertiser: 26 Feb 1918: 5; 16 Feb 1917: 5; 27 May 1893: 4; 24 Nov 1909: 6; 30 Sept 1890: 4.

The loss of the church through bushfire was described by the *Geelong Methodist* (February 1944: 2) as follows:

> As we go to press we learn of the destruction of the Mount Duneed Church in the disastrous grass fires which swept the Waurn Ponds, Freshwater Creek, and Mount Duneed districts on Friday, January 14. The Church was built in 1856 and had served the district for nearly 88 years. People like the late Mr. James Williams, who was born the year after the Church was built, and died in 1936, spent all their lives in association with the old Church. They were baptised there, went to Sunday School there, and, in the case of Mr. James Williams, became Sunday School Superintendent and Church Steward. Mr and Mrs Joseph Williams, now in Geelong Public Hospital, recovering from effects of burns and shock, were the last two stalwarts of this Church which, until four or five years ago, had its regular weekly service.

A photograph (reproduced below, see Figure 12) shows the Mount Duneed Wesleyan Methodist Church at an unknown date.

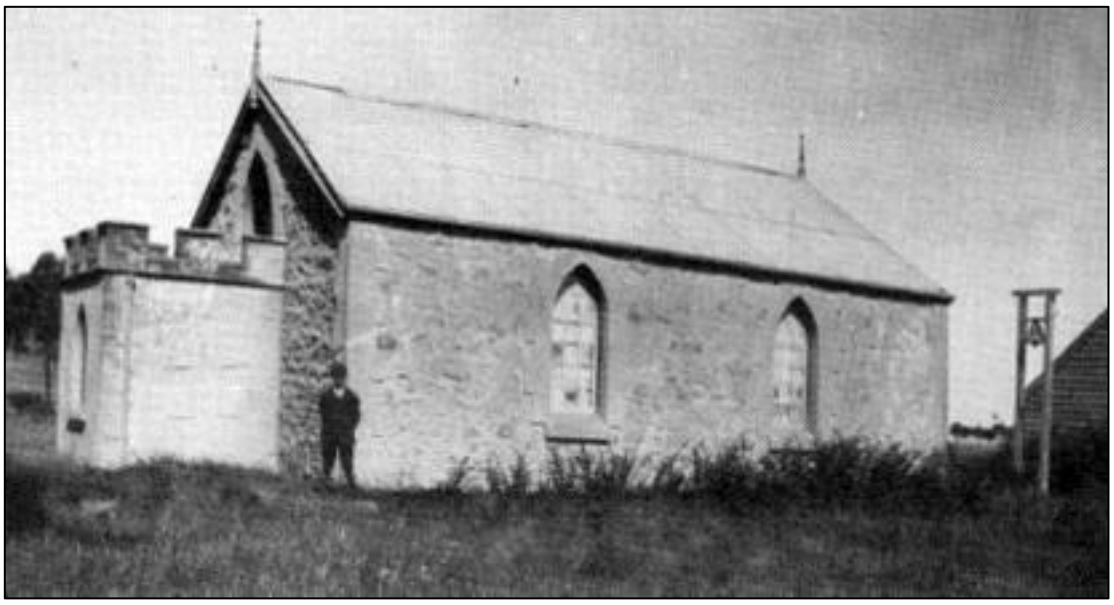


Figure 12: Historical photograph of Mt Duneed Wesleyan Methodist Church, date unknown. Photograph source: Mt Duneed History Group.

In summary, the activity area has likely been subject to historical land use activities since the mid nineteenth century, when the majority of the activity area was reserved for use by the Wesleyan / Methodist Church. A stone church was present in the northern part of the property from c. 1857 to c. 1944, and other structures relating to the use of the property as a church and grounds (such as the timber structure visible at the edge of Figure 12) may also have been present at various times in the historical period. After the church was demolished in 1944 following a bushfire, the activity area appears to have been put to pastoral use, and a cattle yard and ramp was constructed within it. Recent aerial photography (see Figure 2)

indicates that parts of the activity area have been ploughed, and a eucalypt plantation is present in the south eastern part of the property.

The activity area has thus likely been subject to varying degrees of ground disturbance across the site, related to the following historical land use activities:

- clearing of native vegetation and surface stone;
- construction of stone and timber church buildings;
- modification (possible quarrying) of surface stone;
- demolition of the stone church building and possibly other buildings;
- historical plantings of windrow and landscaping trees;
- construction of a cattle ramp and yard;
- use of part of the activity area for a eucalypt plantation;
- excavation of soil for the open-cut drain lines;
- post and wire fencing construction;
- construction and/or use of vehicle tracks;
- ploughing;
- stock grazing and trampling; and
- small scale agricultural activities.

2.4. ETHNOHISTORY

2.4.1. Introduction

The following section presents historical information in order to gain insights into Aboriginal culture and land use. It should be noted that information gathered from historical sources is biased and incomplete, presenting a European perspective of Aboriginal society at a time when traditional lifestyles were being severely disrupted. Post settlement observations should be viewed critically when attempting to understand a dynamic culture that according to consensus has survived in Victoria for at least 40,000 years (Mulvaney & Kamminga 1999: 172).

The lives of Aboriginal groups across Victoria were severely disrupted by the establishment and expansion of a European settlement. As a result, limited information is available regarding the pre-contact lifestyle of Aboriginal people in the geographic region. A full ethnographic search was outside the scope of this assessment. The following section

broadly summarises major synthesis previously undertaken on Aboriginal associations within the wider Geelong area in the pre-contact and post-contact period. No Aboriginal oral history has been gathered during this research.

2.4.2. Pre-contact History

The basic unit of Aboriginal social organisation in Victoria was the clan: a group based on kinship through the male line with a shared historical, religious and genealogical identity (Barwick 1984b: 105-6). The clan was a land-owning unit whose territory was defined by ritual and economic responsibilities (Barwick 1984b: 106). Groups of neighbouring clans speaking the same dialect and sharing political and economic interests identified themselves by a language name. In many cases, this name used the suffix *(w)urrung*, meaning 'mouth or way of speaking' (Barwick 1984b: 105).

The activity area is located within the *Wadawurrung* language boundary, which was one of four primary languages spoken in south-west Victoria (Clark 1990: 275). This language area extended from the Geelong area north to Ballarat, as far east as the Werribee River, south along the coast to Aireys Inlet and north-west for 180 km as far as Beaufort. In turn, the *Wadawurrung* was made up of at least 25 smaller clans. The closest documented clan to the activity area was the *Wadawurrung balug* (often referred to as the Barrabool Tribe – Clark 1990: 311).

The *Wadawurrung*, along with the *Dja Dja Wurrung*, *Taungurong, Woi Wurrung* and *Boon Wurrung*, formed the Kulin peoples who lived in south-central Victoria. 'Kulin' was a common word among the language groups meaning 'a human being' (Presland 2006: 36). The Kulin "nation" was a type of confederacy that enshrined social, political and cultural ties between the different member groups. Each language group that belonged to the Kulin had a clan-based social structure grouped around exogamous patrilineal moieties: the *Waa* (crow) and *Bunjil* (eaglehawk – Clark 1990: 276-7). The moieties structures marriage between individuals as a person could not marry a person from their own moiety. Once married, *Wadawurrung* women moved to their husband's country.

The *Wadawurrung* appear to have had a close connection with the *Bunurong* clans than their other neighbours (possibly due to marriage ties), with the coastal strip around Port Phillip Bay acting as a corridor between each group's traditional lands (Presland 2006: 42, 60). Such marriage ties promoted cooperation in times of abundance and shortage (Presland 2006: 60-1).

The *Wadawurrung* also had trading and marriage relationships with the matrilineal clans of the *Gulidjan, Djab Wurrung* and *Djargurd Wurrung* (to the west and north west) (Clark 1990: 275). In the early 1840s, George Augustus Robinson reported significant tensions between

these groups based on disputes relating to marriage arrangements (Robinson Journal 7.4.1840).

Large-scale meetings (corroborees) of the Kulin peoples occurred regularly and facilitated the exchange of material goods, marriage partners, knowledge and information. They also often included ritual activities. Meetings often took place at times of plenty, such as during the migration of eels (late summer / early autumn) or when *murnong* were abundant (late spring / early summer).

The gatherings incorporated the collaborative management, gathering and / or hunting of animals such as emus and marsupials (Richards & Jordan 1999: 19). They formed an integral part of traditional lifestyle of Aboriginal people and contrast with the more usual mobile, smaller scale way of life of clan groups. Gatherings were known to have occurred at Noorat, about 240 km west of Melbourne in south-western Victoria, to trade stone for hand axes and a particularly adhesive wattle gum (Horton 1994: 116). The *Wadawurrung balug* utilised resources within their clan territory such as Lake Modewarre, where they caught eels and at the mouth of the Bream Creek where the clan had fish traps and access to extensive rock platforms to collect shellfish. William Buckley, an escaped convict, who lived with the *Wadawurrung* from around 1803 to 1835 lived much of his time at Bream Creek (Wynd 2005: 5). He also recounted hunting with the neighbouring *Wadawurrung* clan at Indented Head.

Little was recorded regarding the more detailed cultural practices of the *Wadawurrung* at the time of contact with Europeans. Ellen Richards informed to R.H. Mathews in the early 1900's of the initiation processes that girls went through once they reached puberty. This involved a highly ritualised process after which the girl wore a girdle around her waist made of animal fur from which hung a "*ngurratg*" or apron of emu feathers (R.H. Mathews 1904: 334 in Clark 1990: 277). At this time the young woman became a "*ngurramdurragurk*", or initiated woman and she could then be married.

The headmen of each clan within the *Wadawurrung* language group were known as either "*Nourenit/Nare nit*" or "*Arweet*" (Clark 1990: 277).

2.4.3. Post-contact History

The advent of European colonisation had a profound effect upon the population of the *Wadawurrung*. Some of the direct causes of the sharp population decline included introduced disease (e.g. influenza, whooping cough, measles, smallpox), dispossession, alcohol abuse, and massacre by Europeans via poison or gunshot (Robinson 1846; Thompson 1985: 19). Clark (1990: 307-8) estimates, based on Dawson's (1881) calculations, that the *Wadawurrung* population comprised between 1,620 to 3,240 people at

the time of European contact. By 22 August 1865, a total of 108 *Wadawurrung* people were recorded in their language area. The population of the *Wadawurrung balug* clan was estimated to be over 300 at contact although by 1853 the clan was reduced to nine women, seven men and one child (Clark 1990: 332).

The earliest recorded meeting between the *Wadawurrung* and European colonists was in February 1802, when Lieutenant John Murray chartered part of Indented Head in the Lady Nelson, and named Swan Bay (Parker 1854: 25). The first known violent encounter with the *Wadawurrung* was in October 1803, when Lieutenant J.H. Tuckey was surveying and exploring the North West Harbour (Corio Bay), as a part of Lieutenant-Colonel David Collins' brief settlement at Sorrento (Tuckey 1805: 168).

By the end of 1836, European settlers' sheep runs had extended into *Wadawurrung* territory around Geelong, within a semi-circular radius of twenty-five miles. In the subsequent years larger streams of squatters, from both Melbourne and Geelong, gradually met and pushed westwards towards the Colac district, Bacchus Marsh lands, and then the headwaters of the Leigh and Buninyong rivers. The effects of this expansion meant that Aboriginal resources were being rapidly depleted through clearing and grazing. Access to traditional lands was frequently prevented by settlers (Barwick 1984a: 31). Conflict with encroaching Europeans was inevitable, and during the twenty years after contact, conflicts between Aboriginal people and European settlers occurred on several pastoral runs on the Barwon River (Clark 1990: 281-312).

In response to the increasing amount of conflict between European settlers and Aboriginal people, the Government established protectorates, reserves and missions to act as bases for displaced Aboriginal communities. The first four Aboriginal Assistant Protectors were appointed in 1838 to work under Chief Protector George Augustus Robinson. Their job was to establish reserves for Aboriginal people in Port Phillip who wished to live in a traditional manner (Caldere & Goff 1991: 3-5; Culvenor 1992: 1). Captain C.W. Sievwright was responsible for the Geelong – Wimmera districts (Massola 1971: 10).

From 1838 onwards, an increasing number of *Wadawurrung* people moved to the nearby mission station at Buntingdale. Such institutions aimed to teach Aboriginal people the "arts" of British civilisation, to transform them from hunter-gatherers to a farming people, and to protect them from the "worst effects" of colonisation (Broome 2005: 36). The Wesleyan Buntingdale Mission (VAHR 7621-0099) was the second mission to open in Victoria, and was established by Rev. Francis Tuckfield just outside Birregurra (approximately 50 km west-south-west of the activity area) in 1838 (Le Griffon 2006). However, it closed a decade later in 1848 (Broome 2005: 38) and in 1849 the government-run Protectorate was

abolished. It was replaced with a form of Guardianship, 'to watch over the interests of Aborigines', overseen by William Thomas in 1850 (Woolmington 1973: 173). This involved two systems: local reserves and local guardians who operated Honorary Correspondent Depots distributing food and clothing to local Aboriginal people (Clark 1990: 301).

Several unofficial reserves were established in the Geelong region for local Aboriginal populations. In the 1850s Aboriginal people were noted camping at 'Toolim Beal' or 'Dooliebeal' 3 km to the south-east of the activity area on Armstrong's Creek where J. Armstrong held River Run station (L. Lane Collection: GHC 1104/1/37). One depot operated in the Geelong area at Lake Connewarre distributing rations, clothing and other provisions between 1860 and 1886 (Aboriginal Historic Place 5.4-98). In c. 1856, John Stewart donated this parcel of land (Stewarts Reserve – VAHR 7721-0787) for use by local Aboriginal people as a place where the "dispossessed could camp unmolested" (Rowe & Huddle 1998-2000: 10). Stewart donated food to the Aboriginal people who camped at this unofficial reserve. Stewart's son, interviewed in the late 1960s when he was 80, recalled "he could clearly remember the last camp of the Aborigines….they camped in Stewarts Lane opposite the Stewarts farm gates on a bush setting". Walter Burville, a resident of the area born on Whites Road in 1871, later purchased part of Armstrong's station and old homestead south of Stewarts Reserve. He noted that local Aboriginal people often called in to his homestead for food and tobacco (Pescott 1985: 148). Lane claims that this area was significant to Aboriginal people, with Armstrong Creek forming part of a travel route leading from Mount Moriac to Lake Connewarre, then onto Barwon Heads (L. Lane Collection: GHC 1104/1/37).

In June 1860, this Guardianship was replaced by the Central Board for the Protection of Aborigines. The Board was responsible for mediating between the Government and Aboriginal groups, and distributing items of foodstuffs to Aboriginal groups in the neighbourhood until 1885. By the end of 1861, three reserves had been gazetted for the use of the *Wadawurrung*: 640 acres at Steiglitz, located between the Moorabool and Werribee Rivers, three acres at Karngun, and one acre at Mount Duneed (Clark 1990: 300). However, Karngun was revoked in 1900, Steiglitz was handed back to the Department of Lands in 1902 due to the continuing decrease in the Aboriginal population, and Mount Duneed was revoked in 1906, as it was no longer required (Clark 1990: 300, 307).

The Duneed Aboriginal Reserve (VAHR 7721-0903), comprising one acre of Government land along the northern branch of Armstrong Creek 2 km north west of the activity area, was established on 29 June 1861 (Felton 1981: 199). J.M. Garratt, an Honorary Correspondent, reported in the 1860s that the Aboriginal people in the Geelong district had a good shelter hut erected for them at Duneed and believed that they had no need for entering into the

Geelong Township. James McCann recalled that “the remnant of the Geelong or Barabool 'tribe' and a few of the Colac blacks used to come into Geelong every day but by regulation had to leave the town every evening at sundown for their camps near Mount Duneed” (McCann 1918: 190, cited in Clark 1990: 301-2).

Seven of the last ‘full blood’ (using the term of the time) *Wadawurrung* people were sent to the Duneed Reserve, but all died between 1862 and 1885 (Barton 1997, cited in Paynter & Rhodes 2006: 19). The reserve was revoked in 1906, although Hanrahan (1984: 8) indicates that the reserve was open until 1948 (Clark 1990: 307).

Also in the post-contact period, there is reference to local Aboriginal people using the area around Mt Duneed as a camping place, with a note in the Louis Lane Collection (GRS 1104/38 ‘Dooliebeal & Duneed’: 3) that ‘the tribes people were in habit of camping in Feehan’s Lane area, in the lee of Mt Duneed, at certain seasons, both before & after the land was sold to prospective farmers’. Furthermore, it is recorded by MacGann (GRS 1104/37) that Robert de Bruce Johnstone [Mayor of Geelong from 1865 to 1868] at his own expense had a number of huts build on the southern slope of Mt Duneed & sent them regular supply of food, blankets etc (sic). And paid a local Doctor to go out to this camp to do what he could to help the sick ones’. It is not clear where these huts were located, but it is likely they were some distance east from the activity area. The reference to the slopes of Mt Duneed, suggest that this camp site was a different location to Duneed Aboriginal Reserve, a post-contact Aboriginal Reserve located on the volcanic plains adjacent to Armstrong Creek, 2.7 km north west of the activity area.

The Wathaurung Aboriginal Corporation (WAC) is the Registered Aboriginal Party for land encompassing the activity area, and has both a cultural and a legal role in cultural heritage decision making. The WAC is actively involved in the management of *Wadawurrung* cultural and natural heritage, and members of WAC have continued to live on country and have maintained an ongoing relationship with the land of *Wadawurrung* people.

2.5. SEARCH OF THE VICTORIAN ABORIGINAL HERITAGE REGISTER

A review of the Victorian Aboriginal Heritage Register (VAHR) maintained by AV was undertaken on 18 July 2018. This review identified that 24 Aboriginal places have been registered within the geographic region as defined in Figures 4 and 5. None of these Aboriginal places occur within the activity area.

Table 3: VAHR places within the geographic region, summary data.

VAHR No	Place Type	Place Contents	Place Context
7721-0148	Scarred Tree	River Red Gum with 1 scar. 52 x 18 cm.	Site located within 50 m of Armstrong Creek. Dead tree, with scar of probable Aboriginal origin.
7721-0785	Artefact Scatter	7 flaked stone artefacts of silcrete, quartzite and crystal quarts.	Surface exposure covering an area of 50 x 15 m, located on the crest of Mt Duneed in an area of stony outcrops.
7721-0786	Artefact Scatter	Single isolated flaked stone artefact (silcrete).	Located within the Mt Duneed Recreation Reserve, to the south of the activity area, adjacent to a swamp. Note: the registered location of this site differs from the marked location on the site card. The site is likely actually located to the south west of its registered location, further than 50 m from the activity area.
7721-0833	Artefact Scatter	2 quartz flaked stone artefacts.	Surface exposure of two quartz flaked pieces adjacent to a dry waterhole.
7721-0870	Scarred Tree	1 scar on tree of unknown eucalypt species. 1055 x 55 cm.	Site located adjacent Armstrong Creek. One probable cultural scar and one probable natural scar present on the tree, which is alive and healthy.
7721-0995	Artefact Scatter	1 silcrete flaked stone artefact.	Subsurface artefact recovered from 150mm depth in disturbed topsoil. Site located along the northern margin of Duneed Creek, in a cleared paddock.
7721-1017	Artefact Scatter	4 surface and subsurface flaked stone artefacts. Raw material included crystal quartz.	Site located on the northern margin of Armstrong Creek, extending west along the creek and north west along an adjacent tributary for 400m. Located in a ploughed paddock and undisturbed creek bank.
7721-1076	Scarred Tree	River Red Gum with 1 scar, 60 x 20 cm.	Dead, standing tree located on the volcanic plain 75 m south of Armstrong Creek.
7721-1078	Scarred Tree	River Red Gum with 2 scars – 90 x 20 and 20 x 30 cm.	Dead, standing tree located within the Armstrong Creek margin, 35 m south of the creek itself.
7721-1079	Artefact Scatter	59 flaked stone artefacts on quartz, quartzite, crystal quartz, silcrete and coastal flint.	Subsurface artefact scatter located on a silty rise 50 m south of Armstrong Creek, up to 420 mm depth. Plough disturbance to top 200 m of soil, with overall density averaging 15.7 artefacts per m^2.
7721-1082	Artefact Scatter	1 quartz flaked stone artefact.	Subsurface stone artefact located on volcanic plain 145 m south of Armstrong Creek. Located at 100 mm depth in disturbed topsoil.
7721-1201	Artefact Scatter	1 silcrete flaked stone artefact.	Subsurface artefact recovered from disturbed topsoil 100-200 mm in depth. Site located on a volcanic plain approximately 540 m from Armstrong Creek.
7721-1202	Artefact Scatter	2 quartz flaked stone artefacts.	Subsurface scatter on creek margin associated with Armstrong Creek. Artefacts recovered from a depth of 0-200 mm in disturbed topsoil.
7721-1203	Artefact Scatter	2 silcrete flaked stone artefacts.	Subsurface scatter on creek margin associated with Armstrong Creek. Artefacts recovered from a depth of 0-200 mm in disturbed topsoil.
7721-1204	Artefact Scatter	1 quartzite flaked stone artefact.	Subsurface scatter on a volcanic plain located approximately 60 m south of Armstrong Creek.

VAHR No	Place Type	Place Contents	Place Context
			Artefacts recovered from between 2-250 mm depth, in disturbed topsoil.
7721-1212	Artefact Scatter	12 flaked stone artefacts on quartz, quartzite and silcrete.	Subsurface scatter of flaked stone artefacts located on a volcanic plain landform approximately 100 m south of Armstrong Creek. Artefacts recovered from depths of between 0-300 mm in disturbed soils.
7721-1214	Artefact Scatter	15 flaked stone artefacts on quartz, quartzite and silcrete.	Subsurface flaked stone artefacts located on a creek margin landform. Artefacts recovered from depths of between 100-359 mm in disturbed soils.
7721-1253	LDAD	19 flaked stone artefacts on silcrete, crystal quartz, quartz and quartzite.	Surface and subsurface low density artefact distribution associated with Armstrong Creek.
7721-1272	Artefact Scatter	329 flaked stone artefacts made on mostly quartz, and also silcrete.	Subsurface scatter of flaked stone artefacts located on the volcanic plain adjacent to Armstrong Creek. Average stone density of 2.2 artefacts per m^2, including evidence of a quartz knapping episode.
7721-1273	LDAD	17 flaked stone artefacts on quartz, quartzite and silcrete.	Various locations on the north side of Armstrong Creek, containing surface and subsurface artefacts.
7721-1274	Artefact Scatter	124 flaked stone artefacts made on quartz, silcrete, quartzite, coastal flint, chert and crystal quartz.	Subsurface scatter located on Armstrong Creek floodplain. Average artefact density of 11.9 per m^2. Evidence of stone tool reduction occurring at the site.
7721-1275	Artefact Scatter	107 flaked stone artefacts on quartz, silcrete and hornfels.	Subsurface scatter located on the Armstrong Creek floodplain, with artefact densities of 39.27 per m^2 and 119.34 per m^3. Evidence of stone tool reduction and remains of a knapping episode at the site.
7721-1276	Artefact Scatter and Aboriginal Cultural Place.	32 flaked stone artefacts on quartz, quartzite, silcrete and coastal flint. Mature River Red Gum with cultural significance to WAC.	Site located on the Armstrong Creek floodplain. Subsurface artefacts present in densities of 18.29 per m^2 and 48.67 per m^3.
7721-1377	Artefact Scatter	49 flaked stone artefacts on quartz, quartzite, silcrete and crystal quartz.	Subsurface scatter at depths of between 5 – 300 mm, located on floodplain adjacent to Armstrong Creek.

The majority of Aboriginal places registered within the activity area are stone artefact scatters or low density artefact distributions (LDADs) (83%) followed by scarred trees (16.6%). An Aboriginal Cultural Place is also present, which is part of a multi-component site that includes a stone artefact scatter. The following patterns in relation to the location and character of Aboriginal places within the geographic region have been observed:

- all scarred tree sites recorded in the geographic region are located in close vicinity to a watercourse (Armstrong Creek);

- the records of most artefact scatter and LDAD sites in the geographic region make mention of their proximity to water sources such as creeks (Armstrong and Duneed), prior/dry waterholes or swamps;
- the volcanic plain landform is known to contain artefact scatter and LDAD sites in the region;
- Aboriginal cultural material in the form of an artefact scatter is known to be present on Mount Duneed;
- of the stone artefact scatters recorded in the region, the majority comprise low to very low density surface and subsurface scatters of stone artefacts manufactured on quartz, quartzite, crystal quartz and silcrete, with coastal flint and chert also found in assemblages in the region;
- moderate density artefact scatters are present in the region on plains landforms in association with Armstrong Creek. Some of these sites contain evidence of knapping events and/or stone tool reduction activity;
- most subsurface artefact scatter sites in the region are located in shallow soils which have suffered historical disturbance from activities such as ploughing.; and,
- no Aboriginal cultural heritage has previously been identified on a comparable landform to the activity area (lower slopes of dormant volcano).

The patterns described above provide indicative data about the type and frequency of site likely to be present in the activity area. It should be noted, however, that site recording data may be heavily influenced by the locations of previous archaeological assessments, the manner in which the assessments took place (whether they involved subsurface testing and the way this testing was carried out), the legislative circumstances under which assessments were carried out, as well as their scope - and likely do not reflect a true distribution of Aboriginal archaeological sites across the landscape.

2.6. PREVIOUS ARCHAEOLOGICAL INVESTIGATIONS

2.6.1. Introduction

This section summarises the results of relevant previous archaeological studies undertaken within the geographic region, and includes the following:

- Section 2.6.2 summarises three regional archaeological studies of the region relevant to the activity area, and which have relevance to its archaeological potential; and
- Section 2.6.3 summarises a series of localised archaeological assessments that have been undertaken within the geographic region. These assessments have been chosen for review based on their relevance to the activity area for this CHMP (taking

into account location, landform, assessment type and when the assessment was carried out). Those assessments that included a subsurface testing component are discussed in the body of the document, whereas those that included a survey and/or desktop component only are summarised in Table 3.

2.6.2. Regional Archaeological Studies

The Mount Duneed/Armstrong Creek Urban Development Activity (Weaver 1994)

Weaver (1994) assessed the Aboriginal archaeological potential of a large area that included the geographic region within its scope, as part of the identification and assessment of a future urban growth corridor. The study area for the project was bordered in the west by Ghazeepore Road, in the south by Lower Duneed Road and in the east by Lake Connewarre. The major landform features in Weaver's study area were Mount Duneed, the Barwon River, Armstrong Creek, the margins of Reedy Lake, and Lake Connewarre.

The field assessment was undertaken by way of a vehicular survey, which targeted all existing roads in the study area. Areas of archaeological potential were identified along these roads, and subject to a pedestrian field survey. No Aboriginal places were identified during the field assessment, and the results of the desktop and field assessment indicated that 'several areas with great potential for stone artefact sites or scarred trees' (Weaver 1994: Section 7.2) were identified, with Mt Duneed noted as an area of archaeological potential.

Aboriginal Archaeological Investigations in the Barwon Drainage Basin (Richards & Jordan 1999)

In 1995, Aboriginal Affairs Victoria undertook a statewide survey program, of which the Barwon Drainage Basin Archaeological Project was a part (Richards & Jordan 1999: xi). The study area was divided into three parts, and these encompassed an area of land to the east (Bellarine Peninsula Study Area), northwest (Inverleigh Study Area) and southwest (Upper Barwon Study Area) of the study area (see Richards & Jordan 1999: Figure 5). Although none of these parts of the study area were located within the geographic region for this CHMP, its coverage of similar landform types and its location nearby suggest its results may nevertheless have relevance to the activity area's archaeology.

For the Upper Barwon and Bellarine Peninsula study areas a desktop assessment only was undertaken. For the Inverleigh study area, survey and subsurface testing also formed part of the assessment process. The following paragraphs summarise the results of the Bellarine Peninsula desktop assessment (this area being closest to the activity area for this CHMP), and the Inverleigh study area, whose assessment was more comprehensive.

The study noted that the archaeological record of the Bellarine Peninsula had been severely distorted due to the activities of artefact collectors. In addition, an analysis of previous archaeological research was hampered by a lack of basic information, particularly regarding survey area boundaries, surface visibility and the number and types of places previously identified (Richards & Jordan 1999: 131). Richards and Jordan summarised the types of places found on the Bellarine Peninsula in order of frequency: surface scatter, isolated artefact, shell middens, exposure in bank, scarred tree, burial, literature reference, hearth feature, quarry, and Aboriginal places with intangible value. Most places were assessed as being probably less than 5,000 years old, and most were in poor condition. Four radiocarbon dates available at the time for Aboriginal places on the Peninsula ranged between c. 200 and 5,300 years BP (Richards & Jordan 1999: 141-3).

Richards and Jordan questioned the results of an earlier archaeological assessment of the Bellarine Peninsula undertaken by Rhoads (1986), who predicted Aboriginal place densities of one Aboriginal place per 6 km² in this region (Rhoads 1986: 56). Richards and Jordan (1999) placed density for the Lower Barwon inland areas as 7.2 places per 1 km², an estimated they suggested is conservative and probably two or three times lower than the actual place density (Richards & Jordan 1999: 142).

For the Inverleigh study area, a field survey was undertaken in targeted locations, and consisted of pedestrian transects, with participants generally spaced 10 metres apart. The associated subsurface testing program took the form of a series of 50 cm^2 shovel test pits, excavated at 10 m intervals along 100 m transects (Richards & Jordan 1999: 38). Shovel test pits were excavated to an average 5 cm and maximum 10 cm depth, and were aimed at affording ‘a clear view of the sediments underlying the turf’ (Richards & Jordan 1999: 38).

Site types identified during this assessment included, in order of frequency, isolated artefacts, artefact scatters and scarred tree sites (Richards & Jordan 1999: 43). As a result of the field study, a site prediction model was proposed. Aboriginal places (overwhelmingly artefact scatters) were found to be most concentrated close to fresh water - both major permanent watercourses and lesser creeks and small lakes (Richards & Jordan 1999: 123-8). Areas within 300 metres of permanent water sources and 200 metres of seasonal water sources were considered to be of high archaeological sensitivity, with predicted site densities of 25 archaeological sites or 650 artefacts per km^2. Areas outside of this zone, located on ‘flat to gently rolling’ plains, were considered to be of lower archaeological sensitivity, with a predicted 20 Aboriginal places or 80 artefacts per km^2 (Richards & Jordan 1999: 125-6).

The authors considered it likely that ‘most of the known sites in the study area are Holocene in age…and most are probably only a few thousand years old’ (Richards & Jordan 1999:

128). It was noted that the available information was not detailed enough to ascertain whether the study area was occupied on a year-round or regular basis by Aboriginal people, although 'there is no compelling reason why the area would have been abandoned seasonally' (Richards & Jordan 1999: 128).

It should be noted that the nature of the subsurface testing undertaken as part of this study was limited to removing vegetation in order to create an unobscured view of the soil beneath it. The study should therefore be understood as largely a surface survey, which does not include an assessment of subsurface Aboriginal cultural heritage in the region.

Armstrong Creek Urban Growth Plan: Indigenous Cultural Heritage (Paynter & Rhodes 2006).

This study (Paynter & Rhodes 2006) assessed sections of Waurn Ponds Creek, Armstrong Creek and the Barwon River for Aboriginal cultural heritage. The eastern boundary of the study area was formed by Reedy Swamp and Hospital Swamp, while Ghazeepore Road formed the western boundary and Mount Duneed and Lower Mount Duneed the southern boundary.

The desktop research undertaken for this report identified Mount Duneed Reserve as an Aboriginal Historic Place, described as a camping site for local Aboriginal people and as the location of a 1 acre Mount Duneed Reserve gazetted for use by *Wada wurrung* c. 1861 (Paynter & Rhodes 2006: 18, 25). Mount Duneed Reserve was differentiated in this report from both Stewarts Reserve (Paynter & Rhodes 2006: 18) and Duneed Aboriginal Reserve (Paynter & Rhodes 2006: 19). The historical context of Mount Duneed Reserve was described as follows (Paynter & Rhodes 2006: 18).

> According to Councillor F. Rossack the local Aborigines were "in the habit of camping in the Feehan's Lane area, in the lee of Mount Duneed before and after the land was sold" in 1858 (cited in Louis Lane Collection, GHC 1104/1/37). The 1 acre Mount Duneed Reserve was gazetted in 1861 for the *Wadawurrung* and a shelter hut was erected (AAV Historic Place Report Card). At this time there were 11 traditional owners, nine men and two women (AAV Historic Place Report Card). According to James McCann some members of the Barrabool tribe and others from Colac travelled into Geelong but had to be back at Mount Duneed before sundown (cited in the AAC Historic Place Report Card). The then current mayor of Geelong, Robert de Bruce Johnstone had "at his own expense a number of huts built on the southern slope of Mount Duneed, and sent them regular supplies of food, blankets etc. and paid a local doctor to go out and see this camp to do what he could to help the sick ones" (Louis Lane Collection, McCann 1970, GHC 1104/1/37). By 1906 was listed as being revoked as it was no longer required (Clark 1990: 304).

Based on the available evidence it is likely that the above description is partially about the gazetted reserve 2.7 km north west of Mt Duneed and partially about informal camping by Aboriginal people at Mt Duneed. In relation to Aboriginal use of the Mt Duneed area for informal camping in the post-contact period, the northern part of Mount Duneed (around Feehans Road) may have been used as a camping area as well as the southern part which was the site of a number of huts erected by Johnstone (see Section 2.4.3 for further information).

A field assessment combining a foot survey and a windscreen survey was undertaken which targeted land where development was considered likely, as well as any areas predicted to be sensitive for Aboriginal places. Ground visibility was generally found to be poor, although small areas provided some variable surface visibility. A total of six Aboriginal places were identified during the pedestrian survey (Paynter & Rhodes 2006: 31-3):

- Mount Duneed Reserve. A small stone artefact scatter (VAHR 7721-0785) and a single stone artefact (VAHR 7721-0786) were located here. Raw materials were silcrete, quartzite and crystal quartz.
- Tracks and exposures within Stewarts Reserve were examined. A recently made scarred tree / Aboriginal place (VAHR 7721-0787) was identified.
- Armstrong Creek within the Geelong Crematorium. Good ground visibility along the banks of the creeks resulted in the identification of two small stone artefact scatters (VAHR 7721-0784, -0782) of silcrete, quartzite and crystal quartz. A possible scarred tree was recorded on Armstrong Creek (VAHR 7721-0783).

Other areas of varying surface visibility were surveyed by foot. Sections of Charlemont Road, Mount Duneed Cemetery, north end of Baenschs Lane, sections of Armstrong Creek at 280 Whites Road, corner of Lower Duneed and Charlemont Road and 99 Tannery Road. No Aboriginal cultural heritage was identified at these locations. The windscreen survey covered all roads within the study area, but no Aboriginal places were identified as a result. The survey was generally limited to areas with public access (Paynter & Rhodes 2006: 31).

Aboriginal places VAHR 7721-0786 and 7721-0785, which occur close to the current activity area, comprised:

- a single isolated surface artefact located on a rise adjacent to an area described as a swamp c. 200-250 metres south of the southern border of the current activity area (VAHR 7721-0786);
- seven flaked stone artefacts scattered on a 50x15 m surface exposure at the crest of Mt Duneed.

Mount Duneed was identified by Paynter & Rhodes (2006: 41) as an area of 'particularly high sensitivity' for Aboriginal archaeological sites. Further, as part of the consultation with the organisations representing the *Wadawurrung* traditional owners at the time, a number of 'no go zones…where urban development should not occur' (Paynter & Rhodes 2006: 44) were identified. These areas were places that were considered to be 'of high archaeological sensitivity and are also significant for their cultural, historical, and geological associations' (Paynter & Rhodes 2006: 44). Mt Duneed Recreation Reserve was one of the no-go zones identified in this process, considered 'significant for its post contact associations' (Paynter & Rhodes 2006: 45).

2.6.3. Local Archaeological Assessments

Cultural Heritage Management Plans undertaken since the introduction of the Aboriginal Heritage Act 2006 are a rigorous form of Aboriginal archaeological assessment, and when widely available within a geographic region, is generally the most relevant type of local archaeological assessments to the CHMP being undertaken. A number of CHMPs have been undertaken within the geographic region in recent years. These assessments, and any available associated archaeological salvage programs, have been summarised below.

Armstrong Creek West Housing Development - 75 Airport Road, Mount Duneed CHMP 13039 (Tuechler & Porter 2014) and Archaeological Salvage Program (Tuechler *et al* 2015)

Ochre Imprints (Tuechler & Porter 2014) was engaged by Armstrong Creek Developments Pty Ltd in 2014 to undertake a CHMP ahead of a proposed residential development at 75 Airport Road, Mount Duneed. A CHMP was subsequently prepared for the c. 13.5 ha property, which encompassed a section of Armstrong Creek (Tuechler & Porter 2014: 39-49). The CHMP activity area was bound by Airport Road to the west; agricultural land to the east, north and south and Armstrong Creek in part to the south, and was characterised by a largely flat volcanic plain, adjoining the Armstrong Creek floodplain.

The Desktop Assessment found that two previously registered Aboriginal places, VAHR 7721-0824 and VAHR 7721-1205, occurred in the activity area. These Aboriginal places comprised single stone artefacts identified on the northern margin of Armstrong Creek. The Desktop Assessment established that there was high potential for additional Aboriginal cultural heritage to occur within the study area, particularly in the form of surface and subsurface stone artefacts. Scarred trees were also identified as a site type likely to be present. The area in proximity to Armstrong Creek was considered to have high potential to contain Aboriginal cultural heritage (Tuechler & Porter 2014: 65-91).

Despite poor ground surface visibility across the bulk of the activity area, the Standard Assessment resulted in the identification of a single stone artefact on the volcanic plain north

of Armstrong Creek, and a mature River Red Gum in the Armstrong Creek corridor with cultural values to WAC. No cultural heritage associated with registered Aboriginal places VAHR 7721-0824 and VAHR 7721-1205 was identified, a result attributed to low surface visibility. One area of archaeological sensitivity, a low rise on the volcanic plain north of Armstrong Creek, was also identified (Tuechler & Porter 2014: 93-101).

The Complex Assessment involved a series of excavation pits (EPs), a mechanically excavated trench, and shovel test pits (STPs) across two landforms (floodplain and volcanic plain). A total of 312 Aboriginal stone artefacts were identified, which were registered as five Aboriginal places (VAHR 7721-1272, 7721-1273, 7721-1274[4], 7721-1275 and 7721-1276). Stone artefacts were most commonly found at depths of between 200-300 mm and occurred at an average density of 9.8 artefacts per m² (26.6 artefacts per m³) on the floodplain and 0.9 artefacts per m² (2.8 artefacts per m³) on the volcanic plain. Two stone artefact flaking floors were identified, with both locations characterised by particularly high densities of quartz stone artefacts. The results indicate that the Armstrong Creek floodplain was a focus of Aboriginal occupation, although the wider volcanic plain was also utilised (Tuechler & Porter 2014: 103-181).

A surface and subsurface salvage was carried out by Ochre Imprints (Tuechler *et al* 2015) as per the management recommendations of CHMP 13039. The salvage included a surface collection of stone artefacts at VAHR 7721-1273, and salvage excavation at VAHR 7721-1272 and -1274. The surface salvage of VAHR 7721-1273 recovered one stone artefact (Tuechler *et al* 2015: 12).

Excavation at VAHR 7721-1272 consisted of one excavation pit (8 x 2 m) and one open mechanical trench that incorporated the initial excavation pit (approx. 34 x 4 m including initial excavation pit). A total of 293 stone artefacts were recovered from the salvage excavation of VAHR 7721-1272 to a maximum depth of 450 mm with an average density of 2.2 artefacts per m^2 (Tuechler *et al* 2015: 12-15)

Excavation at VAHR 7721-1274 consisted of two excavation pits (2 x 2 m). A total of 95 stone artefacts were recovered to a maximum depth of 400 mm (Tuechler *et al* 2015: 21) with an average density of 11.9 artefacts per m^2 (Tuechler *et al* 2015: 21).

[4] This site is an amalgamation of the two previously recorded sites, VAHR 7721-1205 and 7721-0824, with cultural heritage recorded during this CHMP.

Armstrong Creek West Residential Development - Stage 1, Torquay Road, Mount Duneed CHMP 11385 (Collins *et al*. 2012) and associated Archaeological Salvage Program (van der Linde 2013)

Ochre Imprints (Collins *et al* 2012) was engaged by Villawood Properties in 2012 to undertake a CHMP ahead of a proposed residential development at Torquay Road, Mount Duneed. Collins *et al* (2012: 55-7, 93) prepared a CHMP for a 101 ha area between Whites Road and Boundary Road on the western side of Torquay Road, to the north east of the current activity area. The activity area was characterised by ploughed agricultural land and the Geelong Airport, with Armstrong Creek extending through its centre. The Desktop Assessment identified three previously registered Aboriginal places within the activity area (VAHR 7721-0822, 7721-0146 and 7721-0147) and predicted that surface and subsurface stone artefact scatters and scarred trees were likely to occur along creek corridors, on plains and elevated landforms associated with perennial and seasonal water resources.

Aboriginal cultural heritage in the form of 23 stone artefacts and two Aboriginal scarred trees (VAHR 7721-1076 and 7721-1078, on two large dead River Red gums) were identified in the activity area during the field survey, although the two previously recorded scarred trees (VAHR 7721-0146 and 7721-0147) were not able to be relocated[5]. Stone artefacts were identified in recently ploughed paddocks and in areas of the ploughed volcanic plains disturbed by rabbit burrowing within the creek margin (c. 50 m) and up to 80 m from Armstrong Creek and its tributary. Recent ploughing provided excellent ground surface visibility (80%) for those areas to the north of Armstrong Creek; it also revealed the nature of subsurface volcanic plain deposits exposing shallow clay (Collins *et al*. 2012: 95-105).

A subsequent subsurface testing program identified Aboriginal cultural heritage in the form of 297 subsurface stone artefacts in 11 EPs and 8 STPs. The testing determined that subsurface stone artefacts occur within:

- Alluvial deposits that occur along the margins (c. 50 m) of Armstrong Creek and its tributary (VAHR 7721-0822, and 7721-1017);
- in a disturbed context within volcanic plains (VAHR 7721-1016, 7721-1082) up to 145 m from Armstrong Creek; and,
- within a low rise on the southern side of Armstrong Creek (VAHR 7721-1079).

Deposits within the creek margin and low rise are characterised by low to moderate densities of stone artefacts with pockets of very high densities, interpreted as representing discrete

[5] Andrew Long provides a detailed assessment of the scarred trees in the study area in Appendix 7 of Collins *et al.*'s report. These trees are no longer surviving.

knapping episodes (EP1 in VAHR 7721-0822 contained 168 stone artefacts between 200-300 mm – Collins *et al*. 2012: Appendix 6). The top 200 mm of soil throughout the creek margin and low rise landforms have been variably impacted by ploughing and erosion, but deposits that occur below this level and within buried alluvial silt deposits up to 590 mm deep have been subject to limited disturbance and have the potential to contain intact deposits (Collins *et al*. 2012: 126-34).

Two isolated stone artefacts (VAHR 7721-1016 and 7721-1082) were identified on the surface and in shallow disturbed deposits on the volcanic plain 80 m and 145 m respectively from Armstrong Creek. The volcanic plain across the CHMP activity area, particularly within the northern section of the study area, was found to be heavily disturbed by ploughing often to the depth of underlying clay (200-300 mm). This landform is not considered to be sensitive for Aboriginal cultural heritage, with isolated stone artefacts most likely displaced by ploughing across this area (Collins *et al*. 2012: 150-65).

Higher densities of surface artefacts were found to occur in the central and eastern sections of the activity area, with artefact densities dropping off in the west, along with the depth of alluvial deposits (Collins *et al*. 2012: 174-6). Low densities of surface stone artefacts also occurred up to 80 m from Armstrong creek on the volcanic plain. Overall the results showed that the margins of Armstrong Creek and rises overlooking this landform were the focus of Aboriginal occupation, with isolated stone artefacts occurring on the volcanic plain away from the creek most likely representing the transient use of this landform when moving between resources.

As part of compliance conditions for VAHR 7721-0822, -1016 and -1017 stipulated in CHMP 11385, Ochre Imprints carried out an archaeological salvage program in 2013 (van der Linde 2013). The salvage program consisted of the following:

- VAHR 7721-0822: Subsurface salvage excavation of two excavation pits (2 x 2m) with a total of 175 stone artefacts to a maximum depth of 440 mm. Surface collection of 13 stone artefacts identified during the subsurface salvage program.
- VAHR 7721-1016: No previously recorded stone artefacts (n=1) were relocated, a result attributed to continued land use practises (i.e. ploughing) and environment factors since the time the place was initially recorded (van der Linde 2013: 33).
- VAHR 7721-1017: Surface collection of four previously recorded surface artefacts.

At the conclusion of the salvage program, van der Linde (2013: 11) concluded that

> a stone artefact analysis undertaken on the salvaged material determined that the results and observations were broadly consistent with the results of CHMP 11385. In terms of

artefact depth, the CHMP investigations highlighted that the majority of subsurface artefacts occurred between 200-300 mm deep. The same results were highlighted during the salvage excavations. Raw material proportions were generally similar, with silcrete dominating all assemblages and slightly differing proportions of quartz and quartzite at each assemblage, with a little more quartz than quartzite. When comparing technological classes, the assemblages considered separately and as a whole are generally similar, with the major difference being the absence of whole cores in the salvage assemblage as well as fewer formal tool types.

Armstrong Creek West, Whites Road, Mount Duneed CHMP 11920 (Collins 2012)

Ochre Imprints (Collins *et al* 2012) was engaged by Armstrong Creek Development Corporation in 2012 to undertake a CHMP ahead of a proposed residential subdivision at Armstrong Creek West, Whites Road, Mount Duneed. Collins (2012) subsequently prepared a CHMP for a 74.2 ha area covering four non-adjoining properties along Whites Road, Mount Duneed, located to the north east of the activity area for this CHMP. The activity area for the project fell within the upper drainage catchment of Armstrong Creek and was generally of low relief, characterised by undulating volcanic plains flanked by low rises. Armstrong Creek was situated in the north western section of the CHMP activity area (Collins 2012: 46).

One quartz flake was identified during the Standard Assessment (VAHR 7721-1205) undertaken as part of this CHMP, located within an area disturbed by a rabbit burrowing on the northern side of Armstrong Creek. No additional cultural material was identified in the surrounding area, with poor ground surface visibility conditions (2%) thought to have influenced this result (Collins 2012: 73).

Subsurface testing was undertaken within the CHMP activity area to establish the stratigraphy of landforms, to determine whether cultural heritage existed within the activity area, and to define the extent, nature and significance of any cultural heritage found (Collins 2012: 76, 89). A total of 12 EPs and 79 STPs were excavated in the study area, which resulted in the identification of six Aboriginal places: VAHR 7721-1201 to -1203, 7721-1205, 7721-1212, and 7721-1214. These included:

- nine stone artefacts identified within the volcanic plain landform at depths of 0-300 mm, including one silcrete flake (VAHR 7721-1201) c. 540 m south of Armstrong Creek, one quartzite flake (VAHR 7721-1204) c. 60 m of the southern side of Armstrong Creek, three quartzite angular fragments, one quartzite proximal flake, one quartz tool (amorphous scraper), one quartz core and one quartz flaked piece (all at VAHR 7721-1212) c. 100 m south of Armstrong Creek;

- nineteen stone artefacts located within the creek margin landform at depths of 0-359 mm, including one quartz flaked piece and one quartz angular fragment (VAHR 7721-1202); one silcrete core and one silcrete distal flake (VAHR 7721-1203); and fifteen predominantly quartzite (but also quartz and silcrete) whole flakes, broken flakes, angular fragments, one tool (a quartzite backed blade), and flaked pieces (VAHR 7721-1214).

The recorded artefact density at moderate density site VAHR 7721-1212 was recorded as 14 per m^2, and at VAHR 7721-1214 as 8.57 artefacts per m^2 (Collins *et al* 2012: 10). Artefact density at the other recorded artefact scatter sites were too low to be subject to meaningful analysis. Collins (2012: 94-6) concluded that Aboriginal cultural heritage in the form of stone artefacts occurred along the margins of Armstrong Creek, with diffuse low density / isolated artefacts occurring up to 100 m from the creek on the volcanic plain, and isolated disturbed artefacts occurring on the volcanic plain elsewhere in the CHMP activity area. The results confirmed the strong association of the Armstrong Creek margin with subsurface Aboriginal stone artefact deposits, and the reduced potential for the surrounding volcanic plains to contain Aboriginal cultural heritage. The lower artefact densities identified in the activity area when compared to other locations along Armstrong Creek to the south-east were attributed to the lower volume of water available in the upper reaches of Armstrong Creek.

Armstrong Creek West Housing Development – Precincts 4-5, Boundary Road, Mount Duneed CHMP 12748 (Thomas *et al.* 2014)

Ochre Imprints (Thomas *et al* 2014) was engaged by Villawood Properties in 2013 to undertake a CHMP ahead of a proposed housing development at Boundary Road, Mount Duneed. Thomas, Collins, and Turnbull (2014: 7) subsequently prepared a CHMP for a 34.63 ha area of agricultural land on either side of Airport Road, to the north of the activity area. One previously registered Aboriginal place was found to be located within the CHMP activity area (a scarred tree – VAHR 7721-0870) as part of the desktop assessment, which predicted that Aboriginal cultural heritage was likely to occur within the activity area, particularly within proximity to Armstrong Creek. The activity area was characterised as volcanic plain to the immediate north of Armstrong Creek that runs along the southern boundary of the area.

The pedestrian survey focused on the ploughed portion of the CHMP activity area, where the visibility was good, and a total of 17 surface artefacts were identified as part of the Standard Assessment, located in two clusters associated with the upper ends of the two palaeochannels identified in the activity area during the pedestrian survey. The assemblage was made on quartzite (n=10), quartz (n=5) and silcrete (n=2), and comprised six complete

and six proximal flakes, one distal flake, one longitudinal split flake, one angular fragment and two cores (Thomas *et al*. 2014: 56-57).

A total of 39 EPs and 26 STPs were undertaken on the volcanic plain landform during the Complex Assessment. Nineteen EPs targeted the area within 100 m of the north bank of Armstrong Creek, with the remaining 20 sampling the area further away from the creek. The STPs excavated during the subsurface testing program were utilised to establish whether any additional stone artefacts could be identified around three EPs that contained Aboriginal cultural heritage (Thomas *et al*. 2014: 63-64). The EPs generally had a stratigraphic sequence of dark brown clayey silt topsoil overlying compact, dark brown clay with an average depth of 280 mm. There was some variation in depth across the CHMP activity area, with EPs further from Armstrong Creek comprising shallower deposits than those in the south and closer to Armstrong Creek (Thomas *et al*. 2014: 80-81).

The association of the different clusters of artefacts with micro-landforms / hydrological features were considered likely to represent separate, and possibly multiple, activities and were therefore recorded as four different LDADs – VAHR 7721-1251, 7721-1252, 7721-1253, and 7721-1254. Thomas *et al* (2014: 105) concluded that these artefact assemblages as a whole were indicative of the deliberate discard and / or accidental loss of artefacts over an undetermined but probably lengthy amount of time during repeated movement across the landscape.

Surf Coast Shire Drainage Works, Freshwater Creek CHMP 11233 (Turnbull & Collins 2010)

Ochre Imprints (Turnbull & Collins 2010) were engaged in 2010 to prepare a CHMP for Surf Coast Shire, ahead of proposed drainage augmentation works along a minor waterway at Freshwater Creek. The activity area for the CHMP was located to the north west of the current activity area. The CHMP included a Desktop, Standard and Complex Assessment. The review undertaken as part of the Desktop Assessment found that there were no previously recorded Aboriginal places located within the activity area (Turnbull & Collins 2010: 48). The desktop review found that unrecorded Aboriginal cultural material may exist within the activity area, with low density artefact scatters predicted as the site type most likely to occur (Turnbull & Collins 2010: 48).

No Aboriginal places were identified during the Standard Assessment carried out for this CHMP. A Complex Assessment was subsequently undertaken to assess the subsurface archaeology of the activity area. The Complex Assessment included the excavation of one 1 x 1 m test pits as well as a series of eight 40 x 40 cm shovel test pits. One silcrete flaked stone artefact was identified in disturbed topsoil deposits as a result of the Complex Assessment and recorded as VAHR 7721-0995.

The average artefact density within the activity area is too low to be subject to meaningful analysis. VAHR 7721-0995 was located at a depth of 150 mm on the northern margin of a waterway. An area of less disturbed ground associated with a waterway was identified by the CHMP as having moderate archaeological sensitivity (Turnbull & Collins 2010: 70).

Table 4: Summary of localised Aboriginal archaeological assessments without subsurface testing programs undertaken in the geographic region.

Author/s	Landforms	Type and Coverage of Assessment	Results	Archaeological Sensitivity / Interpretation
Collins & Schell 2015	Armstrong Creek floodplain and adjacent volcanic plain.	Desktop CHMP 13577	The CHMP is located within the boundaries of a previous CHMP, and works will extend into part of VAHR 7721-1274, the former extent of 7721-1272 (prior to salvage) and into areas of moderate and low archaeological sensitivity.	As the activity area had been previously assessed and salvage undertaken as part of the conditions of CHMP 13039, recommendations were made for soil that will be disturbed by construction to be retained within open space in the activity area of CHMP 13039 (Collins & Schell 2015: ix).
Mitchell & McFarlane 2014	Floodplain and creek margin.	Standard CHMP 11605 [discontinued]	Five new Aboriginal places were recorded during the course of the field survey (VAHR 7721-1242 – 1246), four artefact scatters and one isolated artefact.	Four of the five Aboriginal places identified during the field survey were located on the banks of Armstrong Creek, 'and this is considered to be an area of high archaeological sensitivity' (Mitchell & McFarlane 2014: ii). Areas further away from the creek were considered less archaeologically sensitive. The CHMP was discontinued, but subsurface testing was recommended prior to any development of the area.
Clark 2006	Plain.	Desktop study and field survey.	One previously recorded and no new Aboriginal places were identified during the course of the assessment.	A number of areas of archaeological sensitivity were identified, all within road reserve as this formed the study area for the project.

2.6.4. Summary

The Desktop Assessment established that no registered Aboriginal places occur in the activity area, however the activity area has not been subject to prior Aboriginal archaeological assessment. An analysis of the character of Aboriginal places in the geographic region provides an opportunity to draw conclusions on the likely archaeological sensitivity of the activity area.

A total of 24 Aboriginal places are located within the geographic region, which incorporates a 2 km radius around the activity area. Most places are artefact scatters or LDADs (83%) and scarred trees (16%). The majority of the Aboriginal places occur in the Armstrong Creek corridor and a further Aboriginal place occurs along Duneed Creek. The three Aboriginal places that do not occur in proximity to Armstrong Creek and Duneed Creek comprise a single artefact on the wider volcanic plain (VAHR 7721-1201), and the following two Aboriginal places at Mt Duneed:

- Seven flaked stone artefacts located on a stony outcrop/exposure at the crest of Mt Duneed (VAHR 7721-0785); and,
- A single stone artefact located on the lower slopes of Mt Duneed, adjacent to a swamp (VAHR 7721-0786).

The distribution of Aboriginal places and previous archaeological assessments in the geographic region indicates that Aboriginal places are:

- A common occurrence in this region and aside from scarred trees (VAHR 7721-0148, -0870, -1076 & 1078) or mature River Red Gums with cultural values (component of VAHR 7721-1276) are entirely characterised by stone artefacts in surface and subsurface deposits. The stone artefact occurrences have been identified on many landforms represented in the geographic region, namely floodplains, creek banks and terraces of Armstrong Creek, the adjacent volcanic plain and on the crest of Mt Duneed;
- Influenced by the proximity of the Armstrong Creek. Stone artefact scatters with high densities of stone artefacts have been identified within 100 m of the Armstrong Creek. Only four Aboriginal places occur outside of the Armstrong Creek corridor, and two of these are associated with other sources of water, either Duneed Creek (VAHR 7721-0995) or in the case of VAHR 7721-0786 a small swamp;
- Generally in a disturbed context in shallow volcanic soils, however intact subsurface stone artefacts scatters have been identified in deeper alluvial deposits, in close proximity to Armstrong Creek;

- An occasional occurrence at Mt Duneed, with the crest of the dormant volcano and locations adjacent to water at the base of the volcano, associated with Aboriginal cultural heritage in the form of stone artefacts.

Drawing on the results of the Desktop Assessment, the following site predictive statements were formulated for the activity area:

- It is possible that Aboriginal cultural heritage in the form of flaked stone artefacts will be present in the activity area;
- It is unlikely that high numbers of stone artefacts will be present, given that the lower slopes of Mt Duneed are known to be archaeologically sensitive, with the exception of lower slopes adjacent to localised swamps;
- Stone artefacts, if present, may occur within a surface or subsurface context;
- If in a subsurface context, stone artefacts are expected to occur in shallow volcanic soils;
- Mature native trees with potential for cultural scarring are unlikely to occur in the activity area due to prior land clearing activities; and,
- Aboriginal cultural heritage, if present, will have been impacted by clearing, ploughing and works associated with the construction and demolition of a church.

2.7. IMPLICATIONS

The Aboriginal Heritage Regulations 2018 (r. 62) states that a Standard Assessment is required in circumstances where a Desktop Assessment shows that it is reasonably possible that Aboriginal cultural heritage is present in the activity area. Further, the Aboriginal Heritage Regulations 2018 (r. 64) state that a Complex Assessment is required in circumstances where a Desktop Assessment or Standard Assessment shows that Aboriginal cultural heritage is, or is likely to be, present in the activity area; and it is not possible to identify the extent, nature and significance of the Aboriginal cultural heritage in the activity area unless a Complex Assessment is carried out.

The Desktop Assessment could not conclusively state that no Aboriginal cultural heritage occurs in the activity area, it was considered prudent to progress the CHMP to Standard and Complex Assessments. This was required to determine the presence, nature and significance of any Aboriginal cultural heritage present, and to determine the actual archaeological sensitivity of the activity area.

3 STANDARD ASSESSMENT

3.1. INTRODUCTION

The Standard Assessment undertaken as part of the preparation of this CHMP involved a pedestrian archaeological field survey. The aims, method, coverage and results of the field survey are presented in this section.

The field survey work was carried out on 2 August 2018. The archaeological field program was supervised by Mark Dowdell (Ochre Imprints - Project Archaeologist). Dale Hyatt, Garry Hanson (WAC) and Natalie Paynter (Consultant Archaeologist) participated in the field survey.

3.2. AIMS OF THE STANDARD ASSESSMENT

The aims of the field assessment were to determine the nature, distribution and significance of any Aboriginal cultural heritage that might occur in the activity area. The Standard Assessment was undertaken to establish:

- Whether any Aboriginal cultural heritage was visible on surface exposures in the activity area; and
- The nature and distribution of landforms in the activity area, and their archaeological sensitivity.

3.3. METHOD AND COVERAGE

Field Method

The field survey involved an examination of the activity area by four people using the following method:

- a survey of the activity area in a c. 12 m wide transect with four people spaced 2m apart;
- the inspection of mature native trees, if present, for signs of Aboriginal bark removal and/or other cultural scarring practices;
- the examination and recording of all Aboriginal cultural heritage at its identified location (no material was to be removed from the original find location); and
- the use of a differential GPS (Topcon GMS-2) to record the location of any identified Aboriginal cultural heritage.

Caves, rock shelter features and mature native trees were not present in the activity area, and therefore were not examined.

Survey Coverage

Survey coverage is shown in Figure 13, with ground surface visibility conditions and coverage summarised in Table 5 (as per Witter 1990). Weather during the Standard Assessment was cold and mostly cloudy.

The ground surface visibility across the activity area was poor, <1% overall, due to the presence of grasses or thick vegetation (Plates 1,4, 5 & 7, Figure 13). However, ground exposures with good visibility were present on a vehicle access track (Plate 6 & 7), and in occasional areas of low vegetation (Plates 2 & 3). An analysis of the survey coverage results reveals that 21.53% (1,802 m^2 out the total 8,368 m^2) of the activity area was effectively surveyed.

Landform	Exposure Type	Area Surveyed (a) (m²)	Visibility (%)	Effective Survey Coverage (ESC) (m²)	Number of Surface Artefacts
Volcanic Plain	Thin Grass/ surface exposures	3,356	30%	1,006.8	0
Volcanic Plain	Tracks/ under tree plantation	994	80%	795.2	0
Volcanic Plain	Grassed	4,018	<1%	0	0
Total		***8,368***		***1,802***	***0***

Table 5: Surface visibility and survey coverage

Plate 1: General poor ground surface visibility, facing south

Plate 2: Moderate ground surface visibility, facing west

Plate 3: Occasional good ground surface visibility in areas of low vegetation

Plate 4: Tree plantation, facing east

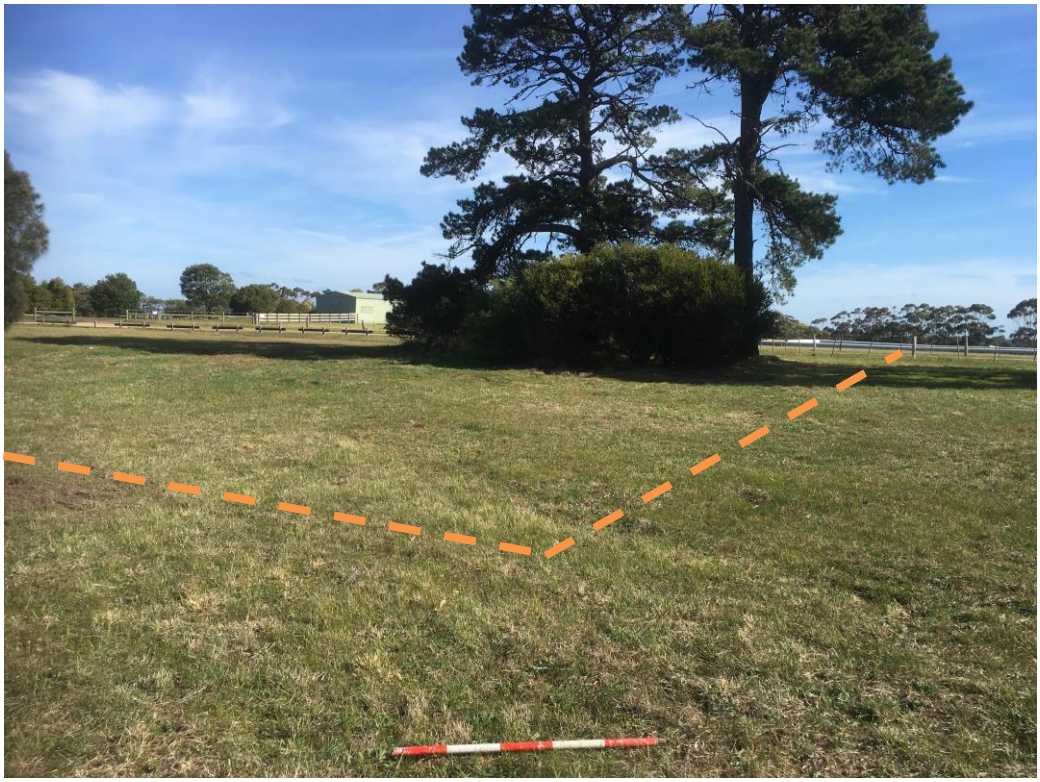


Plate 5: Approximate EVC zone location denoted by orange line, facing south west

Plate 6: Historic ruin in north west corner, facing north west

Plate 7: Dense vegetation along eastern boundary, facing south

Figure 13: Results of the field survey

3.4. ASSESSMENT RESULTS

No Aboriginal cultural heritage was identified in the activity area during the Standard Assessment. Scarred trees were not identified as no mature native vegetation is present in the activity area. The absence of stone artefacts was attributed to a combination of low archaeological sensitivity, and the type of cultural heritage most likely to be represented, which is discussed further below. Given the overall effective surface coverage of 21.53%, any large stone artefact scatters, if present should have been identified during the field survey. On this basis it is unlikely that artefact scatters with high densities of stone artefacts are present in the activity area.

Disturbance was noted across the activity area that consists of the following:

- Church ruins (north east);
- Agricultural structures such as stockyards and fencing (north west);
- Tree plantations;
- Vehicle traffic; and
- Horse trampling.

The field survey identified that one landform occurs within the activity area, comprising the lower slopes of Mount Duneed, with a westerly aspect (see Figure 8). Surface exposures where present (see Plate 3) revealed mid grey silt that typically reflect volcanic plain deposits in the geographic region.

Archaeological Sensitivity

One landform was observed in the activity area at the time of the Standard Assessment comprising an undulating volcanic plain that forms the lower slopes of Mount Duneed (see Figure 8). The Desktop Assessment found that no Aboriginal cultural heritage had been identified to-date on this landform, aside from VAHR 7721-0786, which differed in that it was located adjacent to a localised swamp. No stone artefacts were identified on this landform during the Standard Assessment, despite localised areas with high ground surface visibility. This landform has been subject to varying levels of disturbance because of the agricultural activities and the prior construction and demolition of a church. The westerly aspect of the landform was considered likely to make it less attractive for Aboriginal occupation as it is exposed to the prevailing westerly winds. On this basis the activity area was rated as having **low archaeological sensitivity**. Aboriginal cultural heritage, if present, will most likely be in the form of diffuse stone artefacts that occur in shallow subsurface contexts.

3.5. IMPLICATIONS AND DISCUSSION

The Standard Assessment did not identify any Aboriginal cultural heritage, despite some localised exposures with good ground surface visibility. In summary it found:

- No surface stone artefacts were visible on surface exposures in the activity area;
- No mature native trees were present;
- The activity area has been subject to clearing, ploughing and agricultural land use practices, which has impacted the condition of surface deposits. In addition, a church has been constructed and demolished in the north west corner of the activity area.
- One landform, the lower slopes of Mt Duneed, was identified within the activity area. This landform had a westerly aspect.

The results of the Standard Assessment conform to the results of the Desktop Assessment in that they appear to support the low archaeological sensitivity of the lower slopes of Mt Duneed, where they occur away from any localised swamps or water sources. As such this result seems to mirror the results for the wider volcanic plains landform in this region, where Aboriginal cultural heritage is a rare occurrence away from water sources.

The Aboriginal Heritage Regulations 2018 (r. 64) state that a Complex Assessment is required in circumstances where a Standard Assessment determines that Aboriginal cultural heritage is, or is likely to be, present in the activity area; and it is not possible to identify the extent, nature and significance of the Aboriginal cultural heritage unless a Complex Assessment is carried out. While the Desktop and Standard Assessments had concluded that the archaeological potential of the activity area was low, in the absence of very high ground surface visibility during the Standard Assessment it was considered prudent to test this via a subsurface testing program.

4 COMPLEX ASSESSMENT

4.1. INTRODUCTION

A Complex Assessment was undertaken as part of the preparation of this CHMP because the Desktop and Standard Assessment could not confirm or discount the potential for Aboriginal cultural heritage to occur in the activity area within a subsurface context.

The subsurface investigation was carried out on 2 August 2018. The archaeological field program was supervised by Mark Dowdell (Ochre Imprints - Project Archaeologist) with assistance from Natalie Paynter (Consultant Archaeologist) and the following Aboriginal stakeholder representatives:

- Dale Hyatt (WAC), and;
- Garry Hanson (WAC).

4.2. AIMS OF THE COMPLEX ASSESSMENT

The Aboriginal Heritage Regulations 2018 (r. 64) state that a Complex Assessment is required in circumstances where a Desktop Assessment or Standard Assessment show that Aboriginal cultural heritage is, or is likely to be, present in the activity area; and it is not possible to identify the extent, nature and significance of that Aboriginal cultural heritage unless a Complex Assessment is carried out. In this instance, subsurface testing (Complex Assessment) was required to:

- Determine whether Aboriginal cultural heritage occurs within subsurface deposits within the activity; and,
- Test the archaeological sensitivity of the lower slopes of Mt Duneed landform within the activity area.

4.3. METHOD AND COVERAGE

Subsurface Testing Methodology

The subsurface testing method involved the excavation of a combination of excavation pits (EPs) and shovel test pits (STPs). Two EPs were excavated in order to determine the stratigraphy of the lower slopes of Mt Duneed landform in a controlled manner and the archaeological sensitivity of subsurface deposits. Ten STPs were subsequently excavated to further test the presence/absence of Aboriginal cultural heritage and any changes in stratigraphy.

The excavation of EPs and STPs were restricted to the sections of the activity area directly affected by the development (see Figure 3) but avoiding the current Ecological Vegetation Classes (EVC) protection zone and the area that contains archaeological features associated with the Mt Duneed Wesleyan Methodist Church. The location of the EVC zone and historical archaeological features are shown in Figure 14.

The following methodology was applied to the subsurface testing program:

- 1 x 1 m excavation pits (EP) excavated by shovel to an underlying culturally sterile deposit, proceeding in 100 mm spits until Aboriginal cultural heritage was located, thereafter (if present) proceed by trowel in 50 mm spits;
- 0.5 x 0.5 m shovel test pits (STPs) excavated by hand in at intervals of 10 m or where possible due to dense vegetation) across the development footprint to an underlying culturally sterile deposit, proceeding in 100 mm spits until Aboriginal cultural heritage was located, thereafter (if present) proceed by trowel in 50 mm spits and opening STP up to a 1 x 1 m EP;
- Excavation of radial STPs 0.5 x 0.5 m (RSTPs) at all cardinal points of any EPs with Aboriginal cultural heritage. RSTPs excavated at 5m intervals until two negative pits have been excavated;
- All excavated sediments were sieved through 5 mm mesh;
- Written and photographic documentation was prepared for each EP, STP and RSTP (if required). This included the taking of pH readings to test for the acidity of the deposits (the greater the acidity, the lower the chances of bone preservation) and Munsell chart readings of the deposits to standardise colour descriptions;
- The locations of all Aboriginal cultural heritage (if present) identified during excavation was to be documented prior to the removal of cultural heritage for further analysis and cataloguing;

- All Aboriginal cultural heritage identified during subsurface testing (if present) was to be individually catalogued and collected.
- A dGPS was used to record EP, STP and RSTP (if required) locations and the location of any identified Aboriginal cultural heritage (if present)

Coverage

A total of two EPs and 10 STPs were excavated during the subsurface testing program. Their locations are shown in Figure 14. The precise locations of the EPs and the STPs were guided by the inception meeting with WAC and the views of Aboriginal representatives in the field. A description of the EP 1, which is considered representative for the lower slopes of Mt Duneed landform that occurs in the activity area, is provided in Table 6. The results of the remaining EPs and STPs are provided in Appendix 4.

Aside from the constraints associated with the EVC and historical archaeological site, no obstacles were encountered during the Complex Assessment.

Figure 14: Location of subsurface testing.

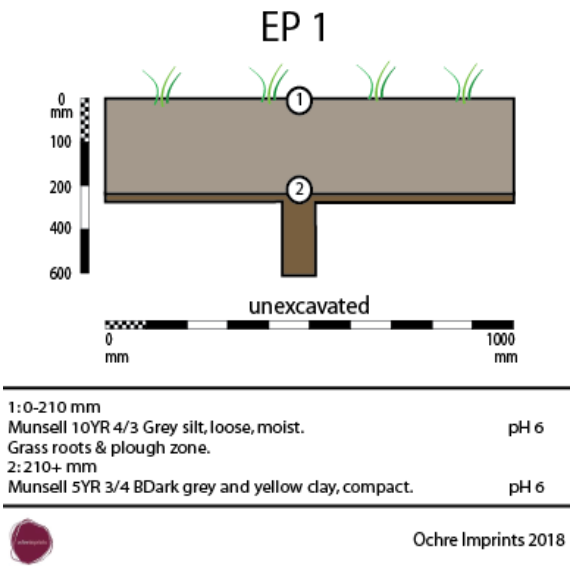
Excavation Pit EP1 (1X1 m) Undulating volcanic plain	**Grid Reference GDA 94 MGA Zone 55** E 264698 N 5764193
Soil Horizons 0-210 mm: Munsell 10YR 4/3 pH 6. grey, loose, moist, silt. 210 mm+: Munsell 5YR 3/4 pH 6. Dark grey and yellow, compact, clay. (110-610mm auger)	**Maximum Depth:** North west: 200 mm North east: 180 mm South east: 150 mm South west: 160 mm **Disturbance**: Grass roots and ploughing. **Obstacles**: NA.
Aboriginal Cultural Heritage: None.	
 EP1 North Section	 EP1 North Section

Table 6: Results of EP 1.

4.4. ASSESSMENT RESULTS

4.4.1. Stratigraphy of Landforms

During the Complex Assessment, a total of two EPs and 10 STPs were excavated across the lower slopes of Mt Duneed landform within the activity area, representing the excavation of a 4 m² area and a volume of 0.87 m³ (see Table 7).

The soil profile of this landform comprised loose grey silt or clayey silt overlying compact dark grey and yellow clay at c. 10-320 mm depth. The depth of soils was largely consistent across the activity area, with an average depth of 70 mm. No *in situ* soil horizons were detected with ploughing or livestock trampling the most apparent cause of disturbances.

Landform	Excavated Sediment Volume (m³)	Excavated Area m²	Number of Artefacts
Lower slopes of Mt Duneed	0.87	4	0

Table 7: Excavated area and volume by landform.

4.4.2. Aboriginal Cultural Heritage in the Activity Area

No Aboriginal cultural heritage was identified during the Complex Assessment. The depth of silt and clayey silt deposits was on average 70 mm within the activity area. The silty and clayey silts was the only horizon which was expected to contain Aboriginal cultural heritage in the form of stone artefacts, given the shallow nature of basalt bedrock in this area. Based on the Desktop Assessment the lower slopes of Mt Duneed, and the surrounding volcanic plains, are not commonly associated with Aboriginal cultural heritage, unless they are located close to a seasonal or permanent water source. As there is no water source in very close proximity to the activity area, the absence of Aboriginal cultural heritage supports the findings of the Desktop Assessment.

4.5. DISCUSSION

No Aboriginal cultural heritage was identified within the activity area during the Complex Assessment. This finding supports the Desktop and Standard Assessment results which found that the activity area comprises the lower slopes of Mt Duneed, which are not known to be archaeologically sensitive, unless they occur adjacent to a water source.

5. ABORIGINAL CULTURAL HERITAGE

5.1. INTRODUCTION

No Aboriginal cultural heritage was identified in the activity area during the preparation of this CHMP. This section is included in this CHMP as it provides an assessment of the archaeological sensitivity of the activity area.

5.2. ABORIGINAL CULTURAL HERITAGE

No Aboriginal places were identified in the activity area during the Desktop, Standard or Complex Assessments.

5.3. INFORMATION PROVIDED BY RAPS OR OTHER PERSONS

WAC provided the following statement of cultural significance:

> All sites within the Wathaurung area are significant in cultural terms as they are a tangible link to our past and a non-renewable source of information about the lifestyle of our ancestors. The cultural significance afforded to the sites by the Aboriginal community must be given a higher standing than the scientific rating as the scientific rating is based on a European perspective without due regard to the value of the Aboriginal culture as a whole (Bryon Powell, Chairperson WAC).

5.4. ARCHAEOLOGICAL SENSITIVITY OF THE ACTIVITY AREA

Archaeological places frequently consist of buried deposits of material, which are not visible on the ground surface due to a range of factors (cf. sedimentation, vegetation cover, etc.). It is usually not possible to identify every archaeological place within a given area due to these factors, or because the size of an area is too large to survey fully. Most heritage impact assessments rely on predictive modelling to define areas of archaeological sensitivity.

An area of Aboriginal archaeological sensitivity potentially contains Aboriginal cultural heritage. Areas of archaeological sensitivity are rated from low to high, depending on the relative probability that archaeological deposits will be present. The known registered Aboriginal place distribution and the types of landforms present influence the end rating. The conditions that generally apply for each rating level that is used in the report are described below, though it is stressed that other factors may come into play depending on the individual area.

Low: No registered Aboriginal places are present or Aboriginal places are confined to single stone artefacts or Low Density Artefact Distributions (LDAD). Landforms in the activity area

are not known to be associated with Aboriginal places (aside from isolated stone artefacts) in the wider region.

Moderate: No registered Aboriginal places or registered Aboriginal places of low-moderate significance are present. Landforms in the activity area are not known to be associated with Aboriginal places in the wider region.

High: No registered Aboriginal places or registered Aboriginal places of moderate to high significance are present. Landforms in the activity area are not known to be associated with significant Aboriginal places in the wider region.

Based on the results of the CHMP, the Aboriginal archaeological sensitivity of the activity area has been rated as low. This result is due to the absence of archaeologically sensitive landforms within the activity area. Aboriginal cultural heritage in the form of diffuse stone artefacts are the most likely type of cultural heritage expected to occur in the activity area. Any such material, if present, will likely be situated within a disturbed context.

5.5. AREAS LIKELY TO CONTAIN ABORIGINAL CULTURAL HERITAGE

No areas that have increased potential to contain Aboriginal cultural heritage, that will not be impacted by the proposed activity, occur in the activity area. The entire area has been rated as having low archaeological sensitivity.

5.6. CONCLUSION

No Aboriginal cultural heritage was identified during the Desktop, Standard or Complex assessments during preparation of this CHMP. Based on the findings of the CHMP assessment, the archaeological sensitivity of the activity area was found to be low.

6. CONSIDERATION OF SECTION 61 MATTERS

CHMPs are required to address matters raised in Section 61 of the Aboriginal Heritage Act 2006. These matters concern the management of Aboriginal cultural heritage prior to, during, and after the activity. A discussion of these matters is provided below. The matters raised in this section inform the management conditions and contingencies presented in Section 7.

No Aboriginal cultural heritage was identified in the activity area during the preparation of this CHMP. Sections 61a-c of the Act, which relate to the avoidance and minimisation of harm to Aboriginal cultural heritage and specific measures required for the management of Aboriginal cultural heritage, therefore do not apply. The remaining Section 61 matters are discussed below.

Section 61d any contingency plans required in relation to disputes, delays and other obstacles that may affect the conduct of the activity.

Processes to be followed in relation to delays, communication, OHS and other matters are outlined in the management contingencies (Section 7.3). Procedures are also outlined for other factors that may affect the conduct of the activity, such as contingency measures to deal with the discovery of previously unidentified Aboriginal cultural heritage (during planned historical excavation and construction works) and suspected human remains.

Section 61e requirements relating to the custody and management of Aboriginal cultural heritage during the course of the activity.

The custody and management of Aboriginal cultural heritage that may be uncovered during the activity is addressed in Section 7.3.

Cumulative Impacts

CHMPs are required to consider the 'cumulative impact of the activity on Aboriginal cultural heritage in the activity area [and] in relation to the Aboriginal cultural heritage of the region.' As the activity proposed as part of this CHMP will not harm Aboriginal cultural heritage, consideration of this issue is not required in this instance.

PART 2 – CULTURAL HERITAGE MANAGEMENT CONDITIONS

7. CULTURAL HERITAGE MANAGEMENT

7.1. INTRODUCTION

This section presents conditions and contingencies for managing Aboriginal cultural heritage, prior to, during and after the proposed activity. A total of six conditions and nine contingencies are presented here.

These conditions and contingencies become compliance requirements once this Cultural Heritage Management Plan is approved. Failure to comply with a condition or contingency is an offence under section 67A of the *Aboriginal Heritage Act*.

7.2. SPECIFIC CULTURAL HERITAGE CONDITIONS

The timing of specific conditions in relation to the activity (i.e. before, during and/or after subdivision works) is indicated in Table 8.

When	CHMP onsite (C2)	Induction by RAP (C4)	Compliance Inspections (C5 & 6)	Other CHMP Requirements
Historical Excavation				Archaeologist with expertise in Aboriginal heritage to be present (C3)
Prior to any development works	-	✓	✓	Distribute approved CHMP as required (C1)
During activity	✓	✓(any new personnel undertaking ground disturbing works)	✓	No topsoil to be removed during the conduct of the activity (C6)
Completion of activity	-	-	✓	

Table 8: Timing of management conditions (C=Condition)

7.2.1. Condition 1: Status and Distribution of CHMP

This approved CHMP is a legally binding document. Copies of the approved CHMP must be distributed to the following parties:

- Secretary, Department of Premier and Cabinet (DPC) (s.64(1)(b)) [by the HA];
- The RAP who participated in the preparation of the CHMP [by the HA];
- All owners/managers of land encompassed by the activity area [by the Sponsor];
- Relevant responsible authority, where relevant, [by the Sponsor]; and,
- New land managers at the completion of the activity, where relevant [by the Sponsor].

7.2.2. Condition 2: Access to Approved CHMP

A copy of the CHMP must be kept on site during construction activity and all personnel working on the project must be advised of its location.

7.2.3. Condition 3: Conduct of Historical Excavation

An archaeologist who has demonstrated experience in Aboriginal archaeology must be present during any historical archaeological excavations that take place in the activity area. Contingency 1 must be followed in the event that Aboriginal cultural heritage is identified during the historical archaeological excavation.

7.2.4. Condition 4: Cultural Heritage Induction

Prior to the commencement of the activity, all personnel undertaking ground disturbing works in the activity area must participate in a cultural heritage induction. This must be conducted by representatives of the RAP, with the cost borne by the Sponsor.

The purpose of the cultural heritage induction is to:

- Promote knowledge and understanding of, and respect for, Aboriginal tradition and culture;
- Foster good relationships between the Sponsor and the RAP;
- Summarise the archaeological investigations undertaken within the activity area and obligations as per the CHMP;
- Outline relevant obligations of the Sponsor and its contractors under the *Aboriginal Heritage Act* 2006; and,
- Emphasise the importance of CHMP compliance.

The RAP must be contacted directly to organise the timing, content and duration of this induction, and must be given a minimum of 2 weeks' notice.

7.2.5. Condition 5: Compliance Inspections

Access to the activity area must be provided to representatives of the RAP before, during and after construction of the activity for the purpose of ensuring compliance with the CHMP. The representatives of the RAP must comply with the Sponsors' OH&S requirements. Compliance inspections by the RAP are required at the following stages in the works program:

- Prior to works commencing;
- During the conduct of the activity (preferably when topsoil has been stripped);
- At the completion of the works program.

It is the responsibility of the Sponsor to arrange for these inspections to take place and the RAP must be given a minimum of 2 weeks' notice.

7.2.6. Condition 6: Treatment of Topsoils

All stripped topsoil must be retained within the activity area. Underlying clay and rock does not need to be retained in the activity area.

7.3. Contingency Plans and Other Matters

The following contingency processes must be followed as required during the conduct of the activity.

7.3.1. Contingency 1: Historical Excavation Contingencies

If suspected Aboriginal cultural heritage is identified during historical archaeological excavation the following process applies:

- If the suspected Aboriginal cultural heritage is located within historical fill and/or within a disturbed context (i.e. modern underground services trench) historical archaeological works can continue in the vicinity. The RAP must be contacted within 24 hours of the find to establish a course of action, which must be followed. This may include the collection, documentation and registration of the Aboriginal cultural heritage through completing the required VAHR forms and/or other mitigation measures.
- If suspected Aboriginal cultural heritage is located in natural undisturbed soils then the following steps should be taken:
  - Historical archaeological works must cease within 5 m of the location.
  - The RAP must be contacted within 24 hours of the find to establish a course of action, which must be followed. This may include the collection, documentation and registration of the Aboriginal cultural heritage through completing the

required VAHR forms and/or other mitigation measures, including further consultation with the RAP and salvage excavation.

- Any salvage excavation should be undertaken in accordance with proper archaeological practice and standards, and the AV Salvage Excavation Practice Note.
- If appropriate material suitable for radiometric dating or residue and use wear analysis is retrieved during salvage excavation i.e. *in situ* organic material associated with cultural material and *in situ* cultural material respectively) then this material will be subject to these procedures.
- The RAP must be provided with the opportunity to participate in a salvage excavation (if required).
- Salvage excavation results should be appropriately analysed, recorded and reported in a salvage excavation report which must, along with required Aboriginal place and artefact information, be submitted to AV within 6 months of the end of excavation.
- The HA (with the approval of the RAP) will advise the Sponsor's representative when any salvage excavation is complete and historical excavation can re-commence (if required).

- The Sponsor is responsible for all costs associated with this contingency, in the event it is required.

7.3.2. Contingency 2: Discovery of Unexpected Aboriginal Cultural Heritage

If suspected Aboriginal cultural heritage is identified the following process applies:

Isolation to Protect Cultural Heritage

a) All works within 10 m of the discovery must be suspended immediately and the place extent must be isolated from further disturbance by safety webbing or other suitable above ground barriers/temporary fencing (i.e. no subsurface component). The cultural material must not be removed.

Notification and Inspection

a) The Site Supervisor must be notified immediately and a Heritage Advisor (HA) and the RAP must be notified within two working days of the discovery.

b) A HA and RAP representative will inspect the site within an agreed timeframe of being notified.

c) During this inspection an appropriate course of action for the investigation and management of any Aboriginal cultural heritage will be discussed and mutually agreed to by the RAP and the HA.
d) Agreement to the process to be followed to manage the Aboriginal cultural heritage and how to proceed with works must be made in writing within a period not exceeding three working days from the on-site meeting by a RAP representative, the HA and the Sponsor.

Investigation of Unexpected Cultural Heritage

a) The RAP and the HA shall, in consultation with the Sponsor, mutually determine the most appropriate course of action to investigate the nature of the cultural heritage. This should include establishing the nature and extent of the cultural heritage through the application of minimally intrusive archaeological techniques such as surface survey, cleaning back exposed sections and auguring.
b) If during the initial inspection and investigation the Aboriginal cultural heritage is determined to be:

    1) not part of a previously identified and recorded Aboriginal place where existing management recommendations apply;

    2) of archaeological/scientific significance (e.g. it is an intact cultural deposit), and/or;

    3) of cultural significance to the RAP;

then *protection*, *impact mitigation* or *salvage* measures may be required.

c) Options for the implementation of *protection*, *impact mitigation* or *salvage* measures must:

    1) be explored mutually by the HA and the RAP, in consultation with the Sponsor, and;

    2) consider the application of the General Principles outlined below.

General Principles to apply upon discovery of unexpected cultural heritage:

a) ***Investigation of cultural heritage*** - further investigation may be required to confirm the nature and extent of the cultural heritage;
b) ***Protection of cultural heritage*** - all attempts must be made to protect the cultural heritage from being disturbed further by the activity. This must include written agreement on:

1) management of the cultural heritage during the activity (e.g. with the installation of fencing to prevent disturbance);

2) management of the cultural heritage during the site remediation works at the end of the activity.

c) ***Impact mitigation*** - If protection of the all of the cultural heritage place is not possible then consideration must be given to reducing the impact of the activity through the introduction of harm mitigation measures e.g. limiting impact on the cultural heritage so that a portion remains unaffected by the activity.

d) ***Salvage of cultural material and information*** - If the cultural heritage cannot be protected, salvage of all or part of the Aboriginal place that is consistent with the significance of the place may be required prior to the activity resuming and the impact to cultural heritage proceeding. Any salvage must be undertaken to the mutual satisfaction of RAP and the HA. The following parameters must be considered during the salvage process:

<u>For Surface Cultural Heritage</u>

1) recording spatial characteristics (e.g. Differential GPS records of artefact locations, mapping the place boundary, drawing detailed plans of place extent and features);

2) documenting fabric/raw materials (e.g. earth feature, silcrete quarry; shell types in shell midden);

3) creating a photographic record;

4) collecting cultural heritage.

<u>For Subsurface Cultural Heritage</u>

1) controlled excavation of cultural deposits

2) salvage excavation must be carried out in accordance with proper archaeological practice and standards, and an archaeological report detailing the methods, analysis and results of the excavation must be prepared.

If appropriate material suitable for radiometric dating or residue and use wear analysis is retrieved, then this material will be subject to these procedures. The cost of this process will be borne by the Sponsor.

Works Proceeding

a) The HA (with the approval of the RAP) will advise the Sponsor's representative when suspended construction works can proceed.

b) In general, works may recommence:

1) When the appropriate protective or salvage measures have been taken;

2) Where the relevant Aboriginal cultural heritage records have been updated and/or completed;

3) Where all parties agree there is no prudent or feasible course of action; or

4) Once any existing dispute has been resolved.

Notification to AV

AV will be notified about the Aboriginal place via the submission of the appropriate Victorian Aboriginal Heritage Registry forms;

If a salvage excavation has been conducted, the report must be submitted to AV.

7.3.3. Contingency 3: Unexpected Discovery of Human Remains

If any suspected human remains are found during any activity, works must cease. The Victoria Police and the State Coroner's Office should be notified immediately. If there are reasonable grounds to believe the remains are Aboriginal, the Coronial Admissions and Enquiries hotline must be contacted immediately on 1300 888 544. This advice has been developed further and is described in the following 5-step contingency plan.

Any such discovery at the activity area must follow these steps.

1. Discovery:

- If suspected human remains are discovered, all activity in the vicinity must stop; and,
- The remains must be left in place, and protected from harm or damage.

2. Notification:

- If suspected human remains have been found, the State Coroner's Office and the Victoria Police must be notified immediately;
- 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;
- All details of the location and nature of the human remains must be provided to the relevant authorities; and,

- 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:

- The Victorian Aboriginal Heritage Council, after taking reasonable steps to consult with any Aboriginal person or body with an interest in the Aboriginal Ancestral Remains, will determine the appropriate course of action as required by section 18(2)(b) of the *Aboriginal Heritage Act* 2006,
- An appropriate impact mitigation or salvage strategy as determined by the Victorian Aboriginal Heritage Council must be implemented by the Sponsor.

4. Curation and further analysis:

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

5. Reburial:

- Any reburial site(s) must be fully documented by an experienced and qualified archaeologist, clearly marked and all details provided to Aboriginal Victoria;

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

7.3.4. Condition 4: Custody and Management of Aboriginal Cultural Material

It is the responsibility of the HA to ensure that Aboriginal cultural heritage recovered from the activity area is fully documented, bagged and labelled. AV will be advised of this through the completion and submission of relevant VAHR forms to the Heritage Registrar, AV, by the HA. Once scientific analysis of any cultural heritage is completed, it will be returned to the RAP. The RAP will rebury all recovered Aboriginal cultural heritage within an appropriate part of the activity area.

WAC's Standard Procedure for the Reburial of Cultural Material outlined below, must be adhered to.

Aboriginal cultural material recovered/collected during the course of the assessment, salvage program or activity, may be reburied in a location agreed to by WAC and the following must occur:

- *a reburial location should be identified in the activity area, and this location must be in an area which is protected from future development or disturbance;*
- *once reburied, the reburial location must be recorded to sub-metre accuracy by a HA and be relocatable;*
- *flagging tape should be laid within the hole, at a depth of 30cm above the reburied cultural material to identify that cultural material is buried below the flagging tape;*
- *the relevant VAHR site record card must be updated and a 'collection' component form must be completed by the HA and lodged with AV;*
- *cultural material to be reburied must be placed in a durable container manufactured by WAC;*
- *a separate container is to be manufactured for each Aboriginal Place to be reburied;*
- *where an Aboriginal Place is comprised of a large amount of cultural material it will be necessary to manufacture a number of containers to rebury the cultural material;*
- *the contents of the container must include the cultural material to be reburied, a catalogue of the cultural material to be reburied both on paper and on an archive quality storage medium, a copy of the relevant sections of the CHMP under which the reburial is being performed, and a handful of soil from the Aboriginal Place from which the cultural material originated;*
- *a smoking ceremony must be performed prior to the reburial of cultural material;*
- *the reburial must be attended by WAC representatives;*
- *the cost of the manufacture of the container, the analysis and preparation of the cultural material for reburial, smoking ceremony and WAC attendance at the reburial must be borne by the Sponsor.*

The HA will manage and facilitate the implementation of these measures in consultation with the RAP and the Sponsor. The cost of implementing the requirements of this condition will be borne by the Sponsor.

7.3.5. Contingency 5: Future Changes to the Activity

Future changes to the activity can be made so long as they are confined to the activity area and are associated with the same activity. If changes do not comply with this requirement then a new or amended CHMP may be required.

7.3.6. Contingency 6: Handling of Sensitive Information

Outside of publicly available information and information presented in this CHMP, no Aboriginal cultural heritage information will be distributed without the approval of the RAP. All Aboriginal place GPS co-ordinates must be removed from this CHMP prior to its distribution to all parties other than those listed in Condition 1. Relevant information from the CHMP may be provided by the Sponsor to its stakeholders (e.g. approval and planning authorities) and sub-consultants for the sole interest of co-ordinating site works.

7.3.7. Contingency 7: Communication Between Parties

Notification of the following parties to the CHMP by the means as indicated is deemed to comply with the requirements for notice to be given under this CHMP.

Each party is to ensure that there is an electronic means of confirmation of notification. Telephone notification is to be confirmed by email within 12 hours of the telephone conversation

Contact details for communication between parties

Party to Agreement	Name of Delegate	Phone	Email
The Sponsor	Hal Bisset	TBA	hal.bisset@wardbisset.com.au
RAP	Stephanie Frydas	(03) 4308 0420	stephanie@wathcorp.com.au
Site Supervisor	TBA	TBA	TBA
HA	TBA	TBA	TBA

7.3.8. Contingency 8: Dispute Resolution

Clause 13(1) Schedule 2 of the Regulations requires that the CHMP must contain a contingency plan for the resolution of any disputes between the Sponsor and relevant RAPs in relation to the implementation of an approved CHMP or the conduct of the activity. Disputes may occur at various stages during the activity. Procedures for dispute resolution aim to ensure that all parties are fully aware of their rights and obligations, that full and open communication between parties occurs and those parties conduct themselves in good faith.

If a dispute arises that may affect the conduct of the activity, resolution between parties using the following Informal Dispute Resolution guidelines is recommended.

Informal Dispute Resolution

The following steps have been designed to guide the dispute resolution process:

- The party raising the dispute will complete a Dispute Notification Form (included below) and email a copy to all parties listed in Contingency 5.
- Project delegates (as listed in Contingency 5) of each party (RAP and Sponsor) will attempt to negotiate a resolution to any dispute related to cultural heritage management of the activity area within two working days of written notice being received that a dispute between parties is deemed to exist.
- If the project delegates cannot reach an agreement, representatives of both parties will negotiate a resolution to an agreed schedule.
- If representatives of the relevant parties fail to reach an agreement, an independent mediator should be initially sought to assist in resolving the dispute.
- Both parties must agree upon a timeframe for the independent mediator.
- If an independent mediator cannot be agreed on or fails to resolve the dispute within the allowed timeframe, the Victorian Aboriginal Heritage Council may be approached for their willingness to act in resolving the dispute.
- All disputes will be jointly investigated.
- Where a breach of a CHMP recommendation has been found to occur, the RAP and the Sponsor will agree to the best method of correction or remediation.
- Any correction or remedial activities required (e.g. repairing damage to an Aboriginal place) will be overseen by two RAP representatives and will take place in accordance with their instruction and at the cost of the Sponsor.
- The RAP will use their best endeavours to minimise delays to work schedules while not compromising cultural places or values.
- Only issues directly relating to cultural heritage management will be handled through the dispute resolution mechanism.

DISPUTE RESOLUTION NOTIFICATION FORM

Cultural Heritage Plan No 15818

Relevant Party Raising the Dispute:

Contact Person:

Date:

Nature of the dispute:

Proposed Meeting Time/Date and Place:

Relevant parties who have been sent (email) this notification (tick box):

Party to Agreement	Name of Delegate	Email	Contacted (√)
RAP	Stephanie Frydas (WAC)	stephanie@wathcorp.com.au	
The Sponsor	Hal Bisset	hal.bisset@wardbisset.com.au	
Site Supervisor	TBA	TBA	
HA	TBA	TBA	

7.3.9. Contingency 9: Provision for Review

Review of this plan can be undertaken at any time by a project delegate(s) representing the Sponsor, a HA or an Authorised Officer to ensure compliance with the management measures outlined in the plan. If concerns are raised by the RAP, AV, HA, an Authorised Officer or another party, a project delegate(s) will review CHMP compliance within 7 working days of such concerns being raised by completing the checklist provided.

The project delegate will submit the completed checklist to the RAP, Sponsor, Site Supervisor and Heritage Advisor within 7 working days of the compliance review being undertaken.

Authorised Officers

Under Section 160 the Minister of Aboriginal Victoria may appoint an Authorised Officer to:

- Monitor compliance with the Act;
- Investigate suspected offences against the Act;
- Direct the conduct of a cultural heritage audit;
- Issue and deliver stop orders;
- Report to the Secretary in relation to these matters. (s. 159)

An authorised officer must produce his or her identity card for inspection before exercising powers under the Act and when asked to do so (s.165).

If a compliance check or review identifies any areas of non-compliance with the CHMP:

- AV must be notified of any non-compliance.
- A meeting will be required between the HA, Sponsor and the RAP to establish actions to address non-compliance. AV must be given the opportunity to participate at the meeting.
- The meeting should be undertaken within 7 working days, or as soon as is practical, from the completion of the 'CHMP Compliance Checklist'.
- Agreed actions must be implemented by the Sponsor.

It is noted that under Part 6 of the *Aboriginal Heritage Act 2006* the Minister may order a cultural heritage audit if:

- The Sponsor of an approved CHMP has contravened, or is likely to contravene, the recommendations in the plans (s.81a); or,
- The impact on Aboriginal cultural heritage of an activity to which an approved CHMP applies will be greater than that determined at the time the plan was approved (s.81c).

The Minister can also issue a stop order (s.87) to a person carrying out, or proposing to carry out, works that might harm Aboriginal cultural heritage. This might apply to circumstances within the context of a CHMP, such as where activities not sanctioned by the CHMP will, or have a risk of, harming Aboriginal cultural heritage (see Text Box for further information).

Maximum penalties for breaching the *Aboriginal Heritage Act 2006* are more than $280,000 for an individual or more than $1.5 million for a company.

Stop Orders

Under Section 87 of the AHA 2016 the Minister or an authorised officer can issue a stop order to a person if the person is carrying out, or proposes to carry out an act for which the Minister or authorised officer believe that the act will harm Aboriginal cultural heritage and that the Aboriginal cultural heritage could not be properly protected unless the stop order is issued (s.87 (1) (a-c)).

Effect of a Stop Order

The stop order may require the person to stop immediately the act specified in the order; or prohibit the person from doing the act specified in the order (s.89(1)(a-b)).

How Long Does a Stop Order Operate?

A stop order can last up to 30 days and can be extended by the Minister for an additional 14 days only (s.91 and s.92).

A stop order for an act can be issued again if the circumstances relating to that act have substantially changed (s.94).

Offence to Contravene a Stop Order

It is an offence under the AHA 2016 to contravene a stop order. A person who contravenes a stop order can be fined up to $279,828; a body corporate $1,554,600. Any such offence is an indictable offence (s95 (1 & 2)).

CHMP Compliance Checklist		
Requirement	**Yes / No**	**If No – Proposed Action to Remedy Non-Compliance**
Has the CHMP been distributed to the relevant parties (Condition 1)?		
Is a copy of this CHMP being kept onsite (Condition 2)?		
Is an archaeologist with experience in Aboriginal archaeology present during the historical archaeological excavation (Condition 3?)		
Has a cultural heritage induction been undertaken as per Condition 4?		
Has access to the activity area been provided to the RAP for compliance inspections as required by Condition 5?		
Are all topsoils being retained onsite as per Condition 6?		
If Aboriginal cultural heritage has been identified during the historical excavation is the process in Contingency 1 being followed?		
Are Cultural Heritage Contingencies being adhered to during construction works associated with the activity (Contingencies 2&3)?		
Do the custody arrangements of any Aboriginal cultural heritage follow the requirements of the CHMP (Contingency 4)?		
If there are changes to the conduct of the activity, are they being managed as per the requirements of Contingency 5?		
Is cultural heritage information being handled as per Contingency 6?		
Is communication in relation to cultural heritage matters being handled as per Contingency 7?		
In the event of a dispute, has the dispute resolution process been guided by Contingency 8?		
Has a review been undertaken within 7 days of any concerns being raised regarding compliance with the CHMP (Contingency 9)?		
If the review has identified any areas of non-compliance, has a meeting taken place between the HA, Sponsor and RAP to establish actions required to address non-compliance (Contingency 9)?		

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APPENDIX 1: COPY OF 'NOTICE OF INTENT TO PREPARE A CHMP'

VICTORIA State Government | Premier and Cabinet

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:	Foundation 61 Inc.		
ABN/ACN:	79 079 178		
Contact Name:	Rob Lytzki		
Postal Address	470 Williams Rd, Mt Duneed		
Business Number:	03 52641517	Mobile:	0408318417
Email Address:	rob@foundation61.org.au		

Sponsor's agent (if relevant)

Company:	St Quentin		
Contact Name:	Chris Mason		
Postal Address	PO Box 919, Geelong VIC 3220		
Business Number:	03 5201 1811	Mobile:	0411 325 007
Email Address:	chris@stqc.com.au		

SECTION 2 - Description of proposed activity and location

Project Name:	Residential Alcohol and Drug Rehabilitation Centre, 120 Russells Road, Mount Duneed
Municipal district:	Greater Geelong City Council

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

Dwellings (3+)

SECTION 3 - Cultural Heritage Advisor

Petra Schell	Ochre Imprints	petra@ochreimprints.com.au
Name	*Company*	*Email address*

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

Start Date:	25-Jun-2018	Finish Date:	31-Dec-2018

Submitted on: 20 Jun 2018

VICTORIA State Government | 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?

Dwellings (3+) - actually residential dwelling or village but this isn't provided as an option above

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

☐ 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.

Wathaurung 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.***

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.***

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

The plan is to be evaluated by:

☑ A Registered Aboriginal Party **AND / OR**

If checked, list the relevant Registered Aboriginal Party Evaluating: Wathaurung Aboriginal Corporation

☐ The Secretary **AND / OR**

☐ The 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

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.)

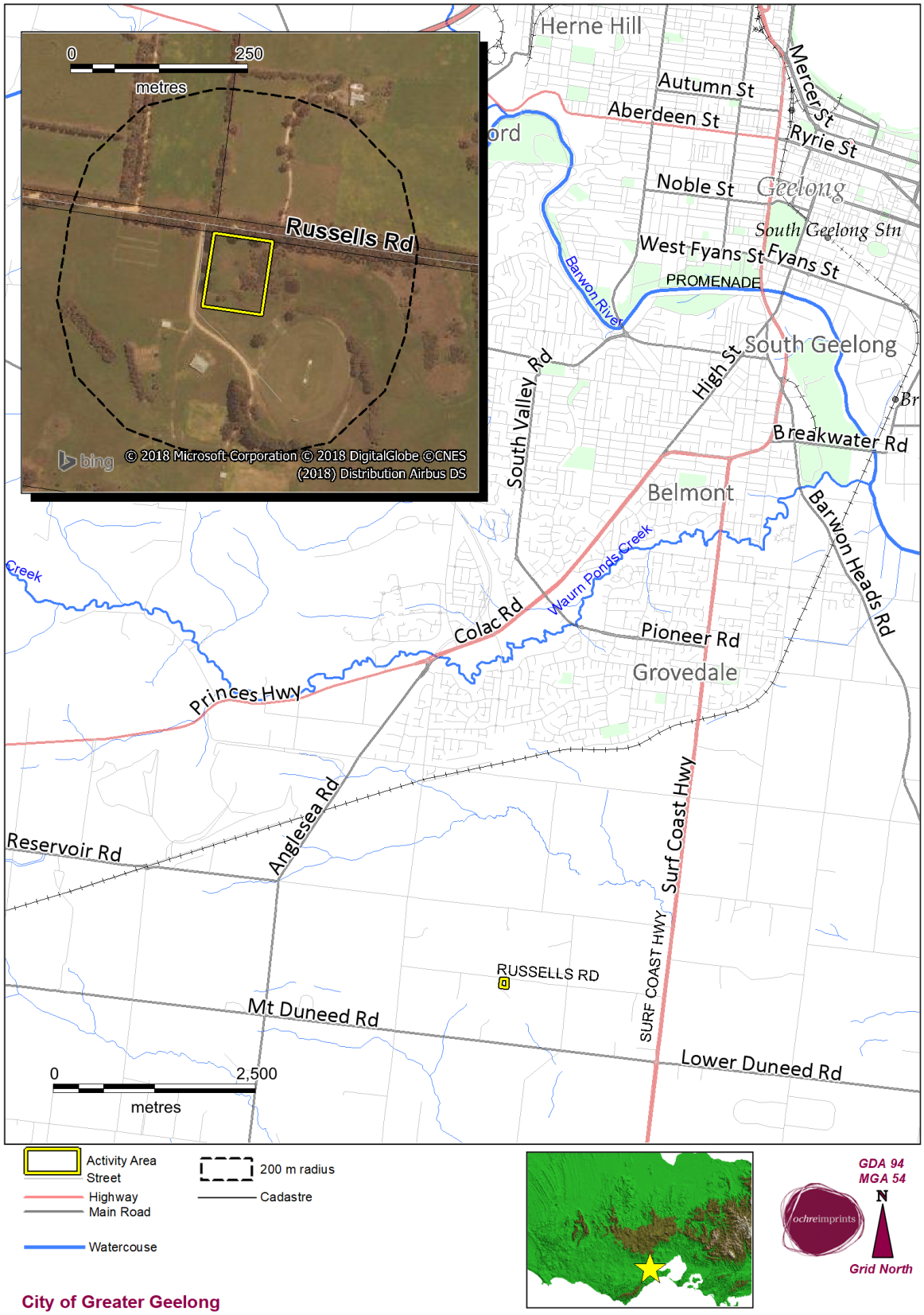
Submitted on: 20 Jun 2018

VICTORIA State Government | Premier and Cabinet

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: 20 Jun 2018



NOI location map

APPENDIX 2: RESPONSE FROM WAC

Wathaurung Aboriginal Corporation
ICN 3330
trading as Wadawurrung
ABN 11 312 302 330

21st June 2018

Foundation 61 Inc
Rob Lytzkl
470 Williams Rd,
Mount Duneed

To Whom It May Concern,

NOTICE OF INTENT TO PREPARE A CULTURAL HERITAGE MANAGEMENT PLAN

I am writing to acknowledge your written notice of intention to prepare a management plan, received on the 21st June 2018, Residential Alcohol and Drug Rehabilitation Centre, 120 Russells Road, Mount Duneed CHMP 15818.

Wathaurung Aboriginal Corporation (WAC) trading as Wadawurrung is the Registered Aboriginal Party (RAP) for the proposed activity area and will:

1. Evaluate the plan when it is completed and
2. Pursuant to s.60 of the *Aboriginal Heritage Act 2006* give notice that the WAC will do all or any of the following-
   (a) Consult with the sponsor in relation to the assessment of the area for the purposes of the plan.
   (b) Consult with the sponsor in relation to the conditions to be included in the plan.
   (c) Participate in the conduct of the assessment.

To aid in the development of the CHMP, the following process is requested as a minimum:

At least one pre-planning meeting with Sponsor and Heritage Advisor to determine process and methodology.

One post-investigation meeting to develop appropriate management recommendations.

And for the evaluation of the CHMP, the following is required:

1 hard copy, 1 electronic (PDF or word) copy and full payment to the Wadawurrung Office for evaluation.
Once all three are received the 30-day evaluation period will begin.

For further information regarding this advice, please contact

Paul Davis on:
03 43080420
paul@wathcorp.com.au
Yours sincerely,

Paul Davis
General Manager
Wathaurung Aboriginal Corporation
Trading as Wadawurrung

99 Main Street East
BALLARAT VIC 3350

P: 03 4308 0420
F: 03 4308 0421
www.wathcorp.com.au

APPENDIX 3: GLOSSARY

This glossary utilises definitions taken from the following reference books:

- Bahn, P. 2004. *The New Dictionary of Archaeology*. Penguin Books, London.
- Holdaway, S. and N. Stern. 2004. *A Record in Stone: The Study of Australia's Flaked Stone Artefacts*. Museum Victoria, Melbourne.

ASSTT	Australian Small Stone Tool Tradition
Backed / Backing	Any stone artefact on which one (usually) or more margins contains consistent retouch, opposite a sharp working edge.
Blade	Blade: Any stone artefact retaining observable and complete fracture planes, platform, lateral margins and termination and has a length more than twice its width. Broken Blade: Any stone artefact retaining partial diagnostic features of a blade.
BP	Before Present
Chalcedony	Very fine grained cryptocrystalline silica quartz found in a range of colours from transparent to opaque. Branded forms include agate, jasper and onyx.
Chert	Very fine grained siliceous rock of organic and inorganic origin with no macroscopic visible grains.
Core	Any stone artefact retaining more than two negative scars of previous flakes struck from the piece.
Cortex	The original surface of the stone prior to the flaking episode. This may be further divided into nodule, pebble and terrestrial cortex indicating the original source of the material (i.e. pebble indicates a river or beach source).
Flaked Piece/ Angular Fragment	Any stone artefact retaining evidence of cultural modification (i.e. fracturing consistent with stone tool manufacture) but no diagnostic features associating it to other artefact class categories.
Edge Damage	Minor retouch or use-wear that is unable to be described as formal retouch. May also be a result of post deposition breakage.
Flake	Broken flake: Any stone artefact retaining partial diagnostic features of a flake. Complete/Whole flake: Any stone artefact retaining observable and complete fracture planes, platform, lateral margins and termination. Distal Flake: Any flake on which the breakage removes the platform but

	retains the termination. Left Split Flake: Any flake on which the breakage removes the right portion of the flake (the left is retained) when oriented platform down and dorsal surface exposed. Proximal Flake: Any flake on which the breakage removes the termination but retains the platform. Right Split Flake: Any flake on which the breakage removes the left portion of the flake (the right is retained) when oriented platform down and dorsal surface exposed.
Flint	A member of the chalcedony group of silica minerals characterised by its dark (black, grey or brown) colour resulting from included organic matter.
Geometric Microlith	A piece on which at least one end and sometimes one lateral margin is backed forming a tool that is 'symmetrical around its transverse axis' (e.g. triangles, trapezoids) (Holdaway and Stern 2004: 262).
Manuport	Any object, generally stone material, transported and deposited by humans.
Platform	Cortical Platform: A platform retaining cortex. Crushed Platform: A platform which retains the diagnostic features of a proximal flake but on which too much damage has occurred to identify its features. Facetted Platform: A platform on which negative flake scars (≥1) are present. Plain Platform: A platform surface that shows no evidence of preparation, cortex, or negative scars. Overhung Platform: A platform surface that shows evidence of overhang removal prior to being struck.
Quartzite	A metamorphic rock; 'a quartz-rich sandstone that has been recrystallised by heat, by pressure, or by both… [it is] granular (or sugary) in texture and varies in grain size' (Holdaway and Stern 2004: 24).
Quartz	A mineral that, while not ideal for flaking due to its irregularity (difficult to predict fracturing behaviour), was often utilised for artefact production.
Tool	Complete Tool: Any piece retaining edges modified by use or consistent retouch.

	Broken Tool: Any piece retaining a partial edge modified by use or consistent retouch. Formal Tool: Any tool that is unambiguously a known tool type (cf. artefact type Holdaway and Stern 2004).
Tachylite	A fine grained grey to black volcanic material, often with a thin grey weathered cortex.
Scraper	Scraper: Any piece with systematic retouch along part of its margin. Thumbnail Scraper: Small semi-discoidal flake with unifacial and systematic steep retouch around a curved margin.
Stone Artefact Dimensions	Oriented Length: In this case, the distance from the impact point to the distal margin in the direction of flaking. Maximum Dimension: The largest measurement possible to take on a stone artefact. Oriented Thickness: In this case, measured at right angles to the oriented width and oriented length. Oriented Width: In this case, the width of the artefact at the mid-point at right angles to the oriented length. Quadrants: artefact is oriented with proximal end down and dorsal side facing observer.
Retouch	Scalar: Shallow scale like scars on margin with feather terminations. Usually small rounded scars. Step: Small, abrupt flake scars on margin, with step terminations.
Silcrete	A sedimentary rock; 'formed through the impregnation of a sedimentary layer with silica [consisting] of quartz grains in a matrix of either amorphous or fine-grained silica' (Holdaway and Stern 2004: 24).
Stone Artefact	A piece of stone that has been formed by Aboriginal people to be used as a tool or is the bi-product of Aboriginal stone tool manufacturing activities. Stone artefacts can be flaked (i.e. to make points and scrapers) or ground (i.e. ground-edge axes, grinding stones).
VAHR	Victorian Aboriginal Heritage Register

APPENDIX 4: DETAILED DESCRIPTIONS OF EPS AND STPS

EP/MEP	GPS coordinates (MGA 55 GDA 94) Easting Northing	Size / Depth	Landform	Stratigraphy
EP1	E 264698 N 5764193	1x1m 210 mm (210-610mm auger)	Lower Slope	0-210 mm: Munsell 10YR 4/3 pH 6. Grey silt, loose, moist. Occasional grass roots. 210-610 mm+: Munsell 10YR 6/6 pH 6. Dark grey and yellow, compact, clay.
EP2	E 264733 N 5764230	1x1m 210 mm	Lower Slope	0-210 mm: Munsell 10YR 4/3 pH 6. Grey silt, loose, moist. Occasional grass roots. 210 mm+: Munsell 10YR 6/6 pH 6. Dark grey and yellow, compact, clay.
STP1	E 264732 N 5764237	500 x 500 mm 150 mm	Lower Slope	0-150 mm: Munsell 10YR 4/3 pH 6. Grey silt, loose, moist. Occasional grass roots, vehicle disturbance. 150 mm+: Munsell 10YR 6/6 pH 6. Dark grey, white and yellow, compact, clay.
STP2	E 264728 N 5764208	500 x 500 mm 160 mm	Lower Slope	0-160 mm: Munsell 10YR 4/3 pH 6. Grey clay, loose, moist. Occasional grass roots, tree roots. 160 mm+: Munsell 10YR 6/6 pH 6. Dark grey, white and yellow, cemented, clay.
STP3	E 264731 N 5764201	500 x 500 mm 320 mm	Lower Slope	0-120 mm: Munsell 10YR 4/3 pH 6. Grey silt, loose, moist. Occasional grass roots, tree roots. 120-320 mm: Munsell 10YR 8/1 pH 6. White silt, firm, dry. Occasional grass roots and tree roots. 320 mm+: Munsell 10YR 6/6 pH 6. Dark grey, orange and yellow, cemented, clay.
STP4	E 264690 N 5764193	500 x 500 mm 170 mm	Lower Slope	0-170 mm: Munsell 10YR 4/2 pH 6.5. Dark grey brown clayey silt, weak, moist. Occasional grass roots and basalt inclusions. 170 mm+: Munsell 10YR 4/2 pH 6. Dark grey brown, firm, clay.
STP5	E 264690 N 5764182	500 x 500 mm 250 mm	Lower Slope	0-250 mm: Munsell 10YR 5/2 pH 6.5. Dark grey brown clayey silt, firm, moist. Occasional grass roots and glass fragments. 250 mm+: Munsell 10YR 4/2 pH 6. Dark grey, brown and orange compact, clay.
STP6	E 264697 N 5764180	500 x 500 mm 180 mm	Lower Slope	0-180 mm: Munsell 10YR 5/2 pH 6. Grey brown clayey silt, cemented, moist. Basalt inclusions and brick fragments. 180 mm+: Munsell 10YR 6/6 pH 6. Dark grey, white and yellow, cemented, clay.
STP7	E 264707 N 5764179	500 x 500 mm 200 mm	Lower Slope	0-200 mm: Munsell 10YR 4/3 pH 6. Grey silt, weak, moist. Occasional grass roots and tree roots. 200 mm+: Munsell 10YR 6/6 pH 6. Dark grey, compact, clay. Occasional tree roots.
STP8	E 264716 N 5764177	500 x 500 mm 200 mm	Lower Slope	0-100 mm: Munsell 10YR 5/2 pH 6. Grey brown clayey silt, weak, moist. Occasional grass roots and tree roots. 100 mm+: Munsell 10YR 6/6 pH 6. Dark grey and white, cemented, clay.

EP/MEP	GPS coordinates (MGA 55 GDA 94) Easting Northing	Size / Depth	Landform	Stratigraphy
STP9	E 264727 N 5764174	500 x 500 mm 100 mm	Lower Slope	0-100 mm: Munsell 10YR 4/3 pH 6. Grey clayey silt, weak, wet. Occasional grass roots. 100 mm+: Munsell 10YR 6/6 pH 6.5. Dark grey, compact, wet, clay. Occasional tree roots.
STP10	E 264705 N 5764161	500 x 500 mm 100 mm	Lower Slope	100 mm+: Munsell 10YR 6/6 pH 6.5. Dark grey, compact, moist, clay. Occasional tree roots. No topsoil