Puffing Billy Railway Master Plan Upgrades, Belgrave to Gembrook, Victoria

Cultural Heritage Management Plan 15134

Sponsor: Puffing Billy Railway

Heritage advisor: Leah Tepper and Asher Ford

Author: Leah Tepper and Jocelyn Strickland

1 December 2017

Aboriginal Heritage Act 2006
Section 65

Cultural Heritage Management Plan – Notice of Approval

CHMP NAME:	Puffing Billy Railway Master Plan Upgrades, Belgrave to Gembrook, Victoria		
CHMP NUMBER:	15134		
SPONSOR:	Puffing Billy Railway	*ACN/ABN:*	99 299 638 143
Heritage Advisor(s):	Leah Tepper and Asher Ford		
Author(s):	Leah Tepper and Jocelyn Strickland (Biosis)		
Cover date:	1 December 2017	*Pages:*	170

Received for approval: 16 November 2017

Clock stopped: 28 November 2017 *Clock started:* 30 November 2017

Clock stopped: 1 December 2017 *Clock started:* 1 December 2017

TO BE COMPLETED BY THE SECRETARY (OR DELEGATE) **I have considered the Evaluation Report for this CHMP and:**	**Yes**	**No**
I am satisfied that the CHMP has been prepared in accordance with the standards prescribed for the purposes of section 53 (in the Aboriginal Heritage Regulations 2007 and the Approved Form).	✓	
I am satisfied that the CHMP adequately addresses the matters set out in section 61.	✓	
In considering this application, I consulted with and considered the views of Aboriginal persons or bodies I considered relevant to the application.	✓	
I have given proper consideration to any relevant human rights	✓	

I, Harry Webber, Director Heritage Services Aboriginal Victoria, acting under authority delegated to me by the Secretary, Department of Premier and Cabinet, and pursuant to section 65(2) of the *Aboriginal Heritage Act 2006* hereby **approve / refuse to approve** this cultural heritage management plan:

Signed: .....

HARRY WEBBER

Dated: 8 December 2017

- This notice of approval should be inserted after the title page and bound with the body of the management plan.
- The recommendations in this management plan are now compliance requirements. Officers from the Department of Premier and Cabinet may attend the subject land to monitor compliance with the recommendations.

Wurundjeri | Land and Compensation Cultural Heritage Council Aboriginal Corporation

11th December 2017 File No. WT0822 CHMP No. 15134

Bret Butler
Puffing Billy Railway
PO Box 451
Belgrave, VIC 3160

Dear Bret,

Cultural Heritage Management Plan: 15134 - Puffing Billy Railway Master Plan Upgrades, Belgrave to Gembrook

I refer to your application to the Wurundjeri Land & Compensation Cultural Heritage Council Aboriginal Corporation dated 19th October 2017 seeking approval of the Cultural Heritage Management Plan 15134 entitled *Puffing Billy Master Plan Upgrades, Belgrave to Gembrook* (1st December 2017)

With reference to s.53(1) and s.61(a)-(e), and in accordance with s.63(1) of the *Aboriginal Heritage Act* 2006 (the Act), the Wurundjeri Land & Compensation Cultural Heritage Council Aboriginal Corporation have considered and have approved this plan.

If you require any additional information about this advice, please contact me on the number below.

Yours sincerely,

Alex Parmington
Manager, Cultural Heritage Unit

Cc. Leah Tepper, Biosis

Biosis offices

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Document information

Activity:	Puffing Billy Railway Master Plan Upgrades, Belgrave to Gembrook, Victoria
Location:	Belgrave to Gembrook
CHMP No.	15134
Size:	Medium
Assessment:	Complex
Sponsor:	Puffing Billy Railway ABN 99 299 638 143
Heritage Advisor:	Leah Tepper Asher Ford
Author:	Leah Tepper Jocelyn Strickland
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Document control

Version	Internal reviewer	Date issued
Draft version 01	ASF	28/09/17
Final version	MT	17/10/17

Mapping

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

Executive summary

Activity

This is a mandatory Cultural Heritage Management Plan (CHMP) under Section 46(a) of the *Aboriginal Heritage Act 2006*. The Sponsor intends to upgrade existing facilities and construct new facilities at Puffing Billy Railway as part of the Puffing Billy Master Plan within the Activity Area from Belgrave to Gembrook, Victoria.

The proposed activity is a high impact activity under Regulation 43 Buildings and works for specified uses including: (1) (a)(b) (iii), construction of a car park, (viii) an education facility, (xv) a minor sports and recreation facility and under Regulation 44 Constructing specified items of infrastructure including: (1) (d) rail infrastructure, (i) a railway track with a length less than 100 metres and (vi) a platform with a length less than 100 metres; (e) a roadway with a length exceeding 100 metres and (f) a walking track exceeding 100 metres as defined in *Aboriginal Heritage Regulations 2007*. The Activity Area is in an area of cultural heritage sensitivity under Regulation 23 (1), a waterway or land within 200 metres of a waterway as defined in the *Aboriginal Heritage Regulations 2007*. Several named waterways cross through and are within 200 metres of the Activity Area including Clematis Creek, Monbulk Creek, Hardys Creek, Menzies Creek, Wattle Creek, and Cockatoo Creek.

The Victorian Aboriginal Heritage Register (VAHR) has allocated CHMP number 15134 to this assessment.

The Wurundjeri Land and Compensation Cultural Heritage Council Aboriginal Corporation (WLaCCHCAC) is the Registered Aboriginal Party (RAP) for the aspect of the Activity Area at Gembrook Station. The remainder of the Activity Area is located in a non-RAP area. The RAP elected to evaluate the plan on 6 July 2017 and the plan will be jointly evaluated by WLaCCHCAC and the Secretary of the Department of Premier and Cabinet (the Secretary).

Activity Area

The Activity Area is the entirety of the Puffing Billy Railway land, covering an area of approximately 26.31 hectares from Belgrave to Gembrook. The Activity Area crosses two Local Government Areas; Cardinia Shire and Yarra Ranges Shire and is bound by Belgrave in the west and Gembrook in the east.

Assessment

A Desktop Assessment was undertaken to provide background information on the activity and its impacts, other archaeological studies, previously recorded Aboriginal places, the environment and to develop a prediction model for the Activity Area.

A Standard Assessment was undertaken to provide information on the ground surface visibility, previous disturbance to the Activity Area and identify areas of archaeological potential.

A Complex Assessment was undertaken to test the prediction model and areas of archaeological potential within the Activity Area.

Consultation with Aboriginal representatives occurred throughout the CHMP.

Results

Desktop Assessment

The Activity Area is located within the geomorphological units 1.3.1 *Low relief landscapes at low elevation (Cann River south, Silvan, Templestowe)* and 1.4.4 *Deeply dissected ridge and valley landscapes (headwaters of major rivers such as Wonnangatta, King and Kiewa Rivers, Mt Coopracambra)*, landforms which are characterised by undulating plains, hills and ridges with deeply incised waterways. Soils in the geographic region are typified by loams, silts and clays with basaltic inclusions. The Activity Area is intersected by Clematis Creek, and is in close proximity to Menzies Creek, Wattle Creek, Cockatoo Creek and Shepherd Creek West Branch, while the topography of the Activity Area itself is gently undulating.

Seventy-three Aboriginal places have been recorded within the geographic region, with the dominant place type being artefact distributions, supplemented by scarred trees, Aboriginal historic places and earth features. There is a one historical reference within the northern most aspect of the Activity Area, being the Belgrave Boomerang Factory 2.3-13 which is noted for its owner, activist Bill Onus, and being the first boomerang factory producing Aboriginal art and artefacts for the tourist industry. No Aboriginal places are located within the Activity Area, however three artefact scatters and one scarred tree are located within 1 kilometre of the Activity Area on the same landform.

The current Activity Area has not been subject to a previous Cultural Heritage Management Plan. A number of archaeological investigations undertaken across the geographic region have involved varying levels of disturbance, predominantly associated with roads, residential development and railways, as well as the installation of services. Previous assessments identified poor ground surface visibility and ground disturbance as having a negative effect on any underlying in situ cultural heritage material.

A review of the land use history indicates a history of logging and alluvial mining in the region, while the Activity Area itself has been utilised over the past 117 years for the Puffing Billy Railway. The construction of the Puffing Billy Railway has impacting the Activity Area greatly through landscape modification in the form of cut and fill for the railway alignment, as well as the construction of station buildings and associated facilities, car parks and the installation of assets. Earlier ploughing has also impacted on the Activity Area.

Standard Assessment

The Activity Area was broken up into eight Survey Units for the Standard Assessment, all traversed by foot. The survey identified various levels of disturbance from railway track construction, cut and fill excavations, building construction, vegetation removal, vehicle track construction and asset installation across the Activity Area as a result of historic and current land uses.

Ground surface visibility was poor across the Activity Area due to deflated ballast and gravels, vegetation coverage and building locations. Surface visibility improved within areas of exposed ground and eroded soils on walking paths. A total of four manual augers were conducted in areas of unclear disturbance, in Survey Units 1, 7 and 8. Manual augering in survey units 7 and 8 contained disturbed similar soils and clay fill, while augering in Survey Unit 1 revealed silty clays overlaying clays. This indicated an area of less disturbance in Survey Unit 1.

No Aboriginal places were located within the Activity Area during the Standard Assessment. Two areas of archaeological potential were identified within Survey Unit 1 – Belgrave Station during the Standard Assessment. These areas were identified due to the lack of ground surface disturbance and the natural soil deposits identified during auger testing. There is potential for remnant in situ cultural heritage deposits to remain within these soils. As such, it was determined that a Complex Assessment would be required to adequately complete the current cultural heritage investigation.

Complex Assessment

The Complex Assessment subsurface testing program was designed to test the areas of archaeological potential identified in the Standard Assessment within Survey Unit 1 – Belgrave Station.

A regime of one 1x1 metre test pit and a transect of three 50x50 centimetre shovel test pits were excavated in the western most extent of the Activity Area in Survey Unit 1. The location of shovel test pits were severely impeded by the narrow corridor of land on which they were located on, piles of ballast and dense vegetation.

The subsurface testing identified fairly consistent deposits of silts and clays. Topsoil had been removed in two of the shovel test pits, and the other comprised entirely of very compact fill. The maximum depth of excavation ranged from 120-520 millimetres, with excavation limited by compact clays.

No new Aboriginal cultural heritage places were identified during the Complex Assessment. This appears to be largely due to extensive land use activities as the result of the construction of the railway track and the alteration of the landscape within the rail corridor from cut and fill practices and the laying of subsurface assets. It is likely that areas of occupation were in higher areas, which provided well-drained campsites with plentiful resources.

The Complex Assessment has shown the likelihood of identifying Aboriginal cultural heritage in the Activity Area is low, and consequently there is low potential for the activity to impact on Aboriginal cultural heritage.

Aboriginal places

No Aboriginal cultural heritage places were identified within the Activity Area during the CHMP investigation.

Management conditions

The management conditions for this activity have been split into two sections; the Gembrook Station Precinct (RAP area) and the remainder of the Activity Area (non-RAP area).

RAP area (Gembrook Station Precinct)

Condition 1 – Copy of the cultural heritage management plan

A copy of this approved Cultural Heritage Management Plan (management plan) must be held onsite at all times.

Condition 2 – Cultural Heritage induction

A cultural heritage induction must be conducted with the contractors involved in ground disturbing works by representatives of the Wurundjeri Land Council immediately **prior to the commencement of ground disturbance activities at the Gembrook locomotive shed site** (Map 4.8). A Heritage Advisor/archaeologist must be present. The induction must include:

- a brief history of the Aboriginal occupation of the Activity Area and the broader region;
- a summary of the archaeological investigations conducted within the Activity Area;
- specific details of all Aboriginal Places and Heritage located during the CHMP assessment;
- a summary of the conditions and contingencies contained within the CHMP; and
- the obligations of site workers/contractors and Sponsors under the Victorian *Aboriginal Heritage Act 2006*.

The main aim of the cultural heritage induction is:

- to explain the procedures outlined in the CHMP;
- show the site contractors examples of the most likely Aboriginal cultural heritage material to be located within the Activity Area; and
- explain the procedure outlined in the Contingency Plan section of the CHMP in the unlikely event that this material is uncovered by them during the course of construction works.

Copies of the CHMP conditions and contingencies are to be circulated among all attendees by the Heritage Advisor during the Cultural Heritage induction session.

A notification period of at least 2 weeks must be provided to the RAP to present a cultural heritage induction.

Inductions are to be undertaken immediately prior to the commencement of ground disturbance activities within the Gembrook locomotive shed site.

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

Condition 3 – Compliance inspection

One site compliance inspection will be undertaken by Wurundjeri representatives at the **Gembrook locomotive shed site** (Map 4.8) following ground disturbance works and prior to constructions works in order to audit the works and ensure that they comply with the conditions and contingency plan contained within this CHMP. A heritage advisor/archaeologist must also be present.

A notification period of at least 2 weeks must be provided to the RAP to undertake an inspection. A worker Request Form must be filled out and sent to the Wurundjeri Council to book a Wurundjeri representative in for the inspection/s.

The cost of the inspection(s) must be met by the Sponsor, transferred title owner or the site contractor/s.

A Wurundjeri representative will conduct each inspection and fill out where relevant the compliance checklist attached as Appendix 6 to this CHMP. If Aboriginal cultural heritage material is found as a result of the inspection, the contingency for the unexpected discovery of Aboriginal cultural heritage material must be implemented (Section 10.3).

If the inspection reveals suspected non-compliance of the CHMP, then the procedure outlined in Section 10.5 will be initiated. If the inspection reveals a suspected breach of the Victorian Aboriginal Heritage Act 2006, then these actions must be reported to Aboriginal Victoria immediately and an Authorised Officer may be called out and/or a Stop Order may be issued by Aboriginal Victoria.

Condition 4 – Protocol for handling sensitive information

With the exception of publicly available information, there shall be no communication or public release of information concerning Aboriginal cultural heritage without the written permission of the Registered Aboriginal Party. No onsite photographs or information concerning Aboriginal cultural heritage is to be circulated to the media or via social media without the written permission of the Registered Aboriginal Party.

Condition 5 – Communication

The Sponsor and Site Supervisor and any relevant personnel involved with supervision of works for the Activity must read the approved cultural heritage management plan and be aware of the legal conditions and contingency plans concerning Aboriginal cultural heritage within the Activity Area. The Sponsor and Site

Supervisor or other relevant personnel must be responsible for implementing any conditions contained within the cultural heritage management plan.

Where possible, the Sponsor and the Registered Aboriginal Party shall ensure that all communication and correspondence is responded to within 5 working days.

Non- RAP area

Condition 1 – Copy of the cultural heritage management plan

A copy of this approved Cultural Heritage Management Plan (management plan) must be held onsite at all times.

Acknowledgements

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

- Bret Butler (Puffing Billy Railway)
- Gary Vines and Sonika Kumar (Biosis Pty Ltd)

Abbreviations

BLCAC	Bunurong Land Council Aboriginal Corporation
BWF	Boon Wurrung Foundation
CHMP	Cultural Heritage Management Plan
DGPS	Differential Global Positioning System
DPC	Department of Premier and Cabinet
GDA94	Geodetic Datum Australia 1994
GSV	Ground Surface Visibility
HA	Heritage Advisor
LDAD	Low Density Artefact Distribution
MGA	Map Grid of Australia
RAP	Registered Aboriginal Party
VAHR	Victorian Aboriginal Heritage Register
WLaCCHCAC	Wurundjeri Land and Compensation Cultural Heritage Council Aboriginal Corporation

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PART 1 – CULTURAL HERITAGE ASSESSMENT

1 Introduction

This is a mandatory CHMP under Section 46(a) of the *Aboriginal Heritage Act 2006*. The Sponsor intends to upgrade existing facilities and construct new facilities at Puffing Billy Railway as part of the Puffing Billy Master Plan within the Activity Area between Belgrave to Gembrook, Victoria.

The proposed activity is a high impact activity under Regulation 43 Buildings and works for specified uses including: (1) (a)(b) (iii), construction of a car park, (viii) an education facility, (xv) a minor sports and recreation facility and under Regulation 44 Constructing specified items of infrastructure including: (1) (d) rail infrastructure, (i) a railway track with a length less than 100 metres and (vi) a platform with a length less than 100 metres; (e) a roadway with a length exceeding 100 metres and (f) a walking track exceeding 100 metres as defined in *Aboriginal Heritage Regulations 2007*. The Activity Area is in an area of cultural heritage sensitivity under Regulation 23 (1), a waterway or land within 200 metres of a waterway as defined in the *Aboriginal Heritage Regulations 2007*. Several named waterways cross through and are within 200 metres of the Activity Area including Clematis Creek, Monbulk Creek, Hardys Creek, Menzies Creek, Wattle Creek, and Cockatoo Creek.

A Notice of Intent to Prepare a CHMP was submitted to the Secretary, DPC and the WLaCCHCAC RAP on 5 July 2017 (Appendix 1).

The VAHR has allocated CHMP number 15134 to this assessment.

1.1 Sponsor

Puffing Billy Railway
Bret Butler
1 Old Monbulk Road
PO Box 451 Belgrave VIC 3160
ABN 99 299 638 143

1.2 Heritage advisor

The Heritage Advisors (HAs) for this CHMP are Leah Tepper and Asher Ford, Biosis Pty Ltd.

Leah Tepper BArch (Hons)

Leah has over three years' experience in cultural heritage management in Victoria. Leah has been involved in Aboriginal Cultural Heritage assessments, archaeological surveys, subsurface testing, monitoring and salvage excavations around metropolitan Melbourne and Victoria. Leah provides project management and support services to consulting archaeologists in their analysis and research in both Aboriginal and historical projects. While at Biosis, Leah has authored and co-authored consultant reports, including Cultural Heritage Management Plans, due diligence reports, Conservation Management Plans, Cultural Heritage Permits, Preliminary Aboriginal Heritage Tests and Heritage Management Plans. She has undertaken a variety of Aboriginal cultural heritage research for small, medium and large scale projects across Victoria for a variety of clients and industries. Her qualifications include a Bachelor of Archaeology with honours, at La Trobe University, Bundoora where she undertook a project involving a typology of 19th century clay tobacco pipes found in Victoria, Australia. Her skills include Aboriginal and historical place identification and recording, survey and subsurface archaeological testing and excavation, project research and report writing.

Leah is a registered Heritage Advisor (HA) under the *Aboriginal Heritage Act 2006*.

Asher Ford BA (Hons)

Asher has over ten years' experience in cultural heritage management and his skills include Aboriginal and non-Aboriginal archaeological assessments, management plans, statements of heritage impacts, Aboriginal and historical site recording, survey, sub surface testing and excavation, project research, geographic information systems (GIS), graphics and report writing. Asher has technical experience in recording artefact scatters, art sites, engraving sites, scarred trees, middens and stone features across a range of Australian environments including the Victorian Western Volcanic Plains, Gippsland, the Victorian High Country, the Murray River, the Cumberland Plains, the Illawarra, the Hunter Valley, the NSW Southern Tablelands and the Woomera Prohibited Area. Asher also has experience in recording and developing conservation policies for historical sites, particularly in the coalmining industry. Asher has undertaken projects for a wide range of clients and industries within New South Wales, Victoria and South Australia. Asher has conducted Indigenous stakeholder consultation under State and Commonwealth Acts within these states and is conscientious of achieving best practice outcomes for all stakeholders. Asher has worked on a range of small to large development projects including wind farms, large linear infrastructure projects, residential developments, mine sites and small utilities installations.

Asher is a registered HA under the *Aboriginal Heritage Act 2006*.

1.3 Location of the Activity Area

The Activity Area is the entirety of the Puffing Billy Railway land, covering an area of approximately 26.31 hectares from Belgrave to Gembrook. The Activity Area crosses two Local Government Areas; Cardinia Shire and Yarra Ranges Shire and is bound by Belgrave in the west and Gembrook in the east. The Activity Area is crossed by Clematis Creek and it within close proximity to Shepard Creek West Branch, Monbulk Creek, Menzies Creek, Wattle Creek, and Cockatoo Creek.

The location of the Activity Area is indicated on Map 1 and cadastral information is given in Table 1.

Table 1 Cadastral information for the Activity Area

Development Site	Local Government Authority	SPI	Volume and Folio	Planning Zone	Coordinates	Melways (ed. 39)
Belgrave Station	Yarra Ranges	1\LP18205 4\LP10262 6\LP6675 CP171080 2\LP18205 5\LP10262 1\TP548963 2\LP10262 1\TP567765 2043\PP3279 2050\PP3279 3\LP10262 1\TP111024 6\LP10262	N/A	PUBLIC USE ZONE – TRANSPORT/	355652.1002 5803227.136	75 F10

Development Site	Local Government Authority	SPI	Volume and Folio	Planning Zone	Coordinates	Melways (ed. 39)
Menzies Creek Station	Yarra Ranges	23A~A\PP3279 1\TP109558	N/A	PUBLIC USE ZONE - TRANSPORT	359788.0202 5801781.626	75 G10
Emerald Station	Cardinia	6\TP561270 5A~A\PP5280 5\TP561270 2007\PP5280 1\TP561270 2\TP561270 3\TP561270 4\TP561270 5F~A\PP5280 5D~A\PP5280 5G~A\PP5280	N/A	PUBLIC USE ZONE - OTHER PUBLIC USE	362729.6332 5800525.922	127 E5
Nobelius Packing Shed Lakeside	Cardinia	1\TP115326 CP159745	N/A	PUBLIC USE ZONE - OTHER PUBLIC USE	364560.4482 5800566.848	127 J5
Lakeside Station	Cardinia	16\TP848518 1\TP515885 1\TP606325 1\TP623557 2\TP606325	N/A	PUBLIC USE ZONE - OTHER PUBLIC USE	364791.3355 5800824.311	127 K4
Cockatoo Station	Cardinia	80D\PP2645 1\TP172448 2034\PP2645 7H\PP2645 7F\PP2645	N/A	PUBLIC USE ZONE - OTHER PUBLIC USE	367988.9189 5799497.944	311 G5
Proposed Gembrook Workshop	Cardinia	2\LP36146 5A~G\PP2645	N/A	GREEN WEDGE ZONE - SCHEDULE 2	371214.9184 5799020.473	312 F9
Gembrook Station	Cardinia	1\TP409261 A11A\PP2645	N/A	PUBLIC USE ZONE - OTHER PUBLIC USE	372521.9325 5798575.719	312 K10

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

1.4 Owner/Occupier

Puffing Billy Railway
Bret Butler
1 Old Monbulk Road
PO Box 451 Belgrave VIC 3160

1.5 RAP

The Wurundjeri Land and Compensation Cultural Heritage Council Aboriginal Corporation (WLaCCHCAC) is the Registered Aboriginal Party (RAP) for the aspect of the Activity Area at Gembrook. The RAP elected to evaluate the plan on 6 July 2017 (Appendix 2). The remainder of the Activity Area is located in a non-RAP area. The Sponsor and the HA are consulting with the following Traditional Owners.

- Boon Wurrung Foundation
- Bunurong Land Council Aboriginal Corporation

The CHMP will be co-evaluated by WLaCCHCAC and the Secretary, DPC.

2 Activity description

The Puffing Billy Railway Master Plan, 2017 identifies short and long term developments for a number of future projects to expand the capacity of the tourist facility and provide higher standards of service and facilities. These works include construction of new buildings for visitor services, locomotive and rolling stock maintenance, and staff facilities, access pathways car parking and roadworks and landscaping.

Landscaping and the laying of services are likely to occur within each of the precincts listed below.

Work is proposed at eight locations within the Activity Area; Belgrave Station, Menzies Creek Station, Emerald Station, Lakeside/Emerald Lake Station, Cockatoo Station, Gembrook Engineering Workshops and Gembrook Station and includes the following:

Belgrave Proposed Developments

Belgrave Station is the primary arrival and departure point for the Puffing Billy Railway. Proposed works at Belgrave Station include:

- Construction of a new and extended station building
- Construction of a new Way and Works Building
- Construction of a new Signal Box
- Construction of a new Undercarriage Inspection Facility / Siding
- Expansion of the locomotive workshop to a 4 or 5 road facility with additional crew and workspace facilities
- A second platform
- Additional car parking for volunteers
- Construction of improved pedestrian and vehicle access to the site

Menzies Creek Proposed Developments

- Construction of a visitors service and staff facilities to include public toilets and tool store
- Construction of 2 road maintenance and rolling stock restoration workshops adjacent to the museum
- Paved pedestrian space with seating and a ramp to museum level
- Creation of a short term off road drop off and pick up point for 5 coaches
- Construction of a new platform toilet as well as souvenir sales facility and shelter
- Creation of indented and off-street bus and car parking and an entry road to the car park
- Consideration of possible removal/relocation of the Station Master's House

Emerald Station Proposed Developments

- Construction of secure carriage storage areas with underground inspection pits
- Construction of a new 2 road locomotive running shed
- Construction of a new coal dock and fuel store storage facility

- Creation of car parking and a vehicle exit to Belgrave-Gembrook Road
- Reinstatement of original platform buildings
- Longer term relocation of the S&T and Carriage Workshops to the Gembrook Service Centre

Nobelius Packing Shed

- Maintenance in a fashion such as to retain and comply with heritage listing
- Upgrade of kitchen, bar and toilet area

Lakeside/Emerald Lake Proposed Developments

- Construction of a 2 storey Lakeside Discovery Centre
- Creation of car parking and vehicle drop off area with a pedestrian connection to the rail station
- Construction of a new signal box on the existing platform
- Track work to facilitate connection to and operations with the new Discovery Centre

Cockatoo Station Proposed Developments

- Reconstruct station buildings rebuilt to a design similar to that of the original station
- Relocate No. 2 road, subject to passing loop and passenger considerations
- Potential to collaboratively re-shape the rail / road crossing intersection in co-operation with Vic Roads and local government
- Parking and other visitor facilities will be accommodated within *existing* places on the edge of the retail centre

Gembrook Engineering Workshop

- Relocate select Belgrave loco workshop and Menzies Creek carriage workshop activities to Gembrook Service Centre in the next 8-10 years
- Construct fabrication, maintenance and rolling stock / Locomotive component storage facilities
- Relocate Signals and Telegraph (S&T) Workshop to this service centre

Gembrook Station Proposed Developments

- Minor facility installation within events staging area for ticketing, toilets, food vending et al.
- Reinstate a Loco Shed over or near the existing servicing pit / new station
- Reinstate original heritage station buildings with new toilet facilities to support the event area
- Reinstate the original cattle loading dock
- Reinstate the original tramway interchange storage shed
- Reinstate the timber tramway\Extend parkland to the north
- Long term construction of a rail museum with a paved garden courtyard and walk to old platform
- Creation of additional car parking

2.1 Impacts to buried land surfaces

The buried land surfaces within the Activity Area may be subjected to a variety of impacts including;

- Excavation to maximum depths of approximately 600 millimetre to 3.0 metres for pads or bored piles;
- Excavation to depths of between 1.0 to 3.0 metres for the laying of subsurface services (i.e. water, sewerage, electrical);
- Minor landscaping and planting to a depth of no more than approximately 300 millimetres;
- Grading to a depth of 1.0 metres for concrete pathways and roads;
- Excavation to a maximum depth of 4.0 metres for underground inspection pits;
- Trenching and track work to a maximum depth of 300 millimetres;
- Earthworks with up to 1 to 2 cubic metres of fill or cut in certain locations.

3 Extent of the Activity Area

The Activity Area is comprised of the Puffing Billy Railway and associated stations which is aligned east/west from Belgrave-Gembrook Road, Belgrave to Main Street, Gembrook. The Activity Area comprises of eight sections, seven of which are station precincts and one which is currently houses a landscape and soil supplier. These eight areas total approximately 26.31 hectares. The Activity Area is crossed by Clematis Creek and it within close proximity to Shepard Creek West Branch, Monbulk Creek, Menzies Creek, Wattle Creek, and Cockatoo Creek.

The westernmost extent of the Activity Area includes Belgrave Station, the beginning of the Puffing Billy Railway, with the easternmost extent housing Gembrook Station, the termination of the line. The Activity Area currently contains a number of station buildings and associated facilities for train travellers, railway lines and cuttings, warehouses and shipping containers, sealed roads and parking areas, recreation areas, stockpiled material and vegetated areas of native and introduced species.

The extent of the Activity area is indicated in Map 2.

Montrose
Kalorama
Silvan
Mount Dandenong
Olinda
KNOX CITY
YARRA RANGES SHIRE
Sassafras
Monbulk
Wurundjeri Land and Compensation Cultural Heritage Council Aboriginal Corporation
Sherbrooke
The Patch
Kallista
Belgrave Station
Menzies Creek Station
Selby
Nobelius Packing Shed
Lakeside Station
Belgrave
Emerald
Cockatoo Station
Cockatoo
Emerald Station
Gembrook Engineering workshop
Gembrook
Nangana
Gembrook Station
CARDINIA SHIRE
Mount Burnett
Beaconsfield Upper
Pakenham Upper
CASEY CITY
Nar Nar Goon North

Legend
Activity Area
RAP boundary

biosis

Biosis Pty Ltd
Albury, Ballarat, Melbourne,
Newcastle, Sydney, Wangaratta & Wollongong

Map 1 Location of the Activity Area

Matter: 24777, CHMP No. #####
Date: 15 November 2017,
Checked by: JDS, Drawn by: SSK, Last edited by: gdavies
Location: \\bio-data-01\matters$\24700s\24777\Mapping\24777_CHMP_M1_Location.mxd

0 1,000 2,000 3,000 4,000
Metres
N
Scale 1:100,000 @ A4, GDA 1994 MGA Zone 55

Legend

- Activity area
- Parcel boundary
- Local government area
- Historical place

Map 2.1 Extent of the Activity Area - Belgrave Station

0 10 20 30 40 50

Metres
Scale: 1:1,500 @ A3
Coordinate System: GDA 1994 MGA Zone 55

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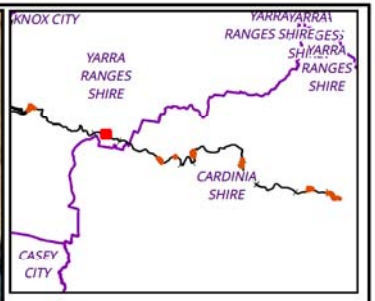

Legend

- Activity area
- Parcel boundary
- Local government area

Map 2.2 Extent of the Activity Area - Menzies Creek Station

0 10 20 30 40 50

Metres
Scale: 1:1,000 @ A3
Coordinate System: GDA 1994 MGA Zone 55

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Legend

- Activity area
- Parcel boundary
- Local government area

Map 2.3 Extent of the Activity Area - Emerald Station

0 10 20 30 40 50

Metres
Scale: 1:1,500 @ A3
Coordinate System: GDA 1994 MGA Zone 55

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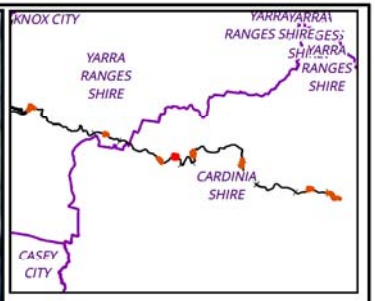

Legend

- Activity area
- Parcel boundary
- Local government area

Map 2.4 Extent of the Activity Area - Nobelius Packing Shed

0 5 10 15 20 25

Metres
Scale: 1:500 @ A3
Coordinate System: GDA 1994 MGA Zone 55

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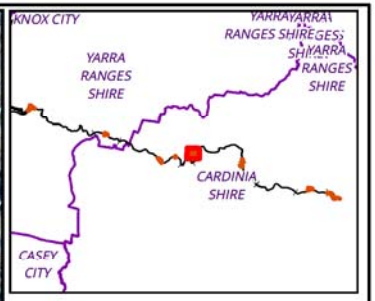

Legend

- Activity area
- Parcel boundary
- Local government area

Map 2.5 Extent of the Activity Area - Lakeside Station

0 20 40 60 80 100

Metres
Scale: 1:2,000 @ A3
Coordinate System: GDA 1994 MGA Zone 55

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Legend

- Activity area
- Parcel boundary
- Local government area

Map 2.6 Extent of the Activity Area - Cockatoo Station

0 20 40 60 80 100

Metres
Scale: 1:2,000 @ A3
Coordinate System: GDA 1994 MGA Zone 55

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Legend

- Activity area
- Parcel boundary
- Local government area
- VAHR place

Map 2.7 Extent of the Activity Area - Gembrook Engineering workshop

0 10 20 30 40 50

Metres
Scale: 1:1,000 @ A3
Coordinate System: GDA 1994 MGA Zone 55

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Legend

- Activity area
- Parcel boundary
- Local government area

Map 2.8 Extent of the Activity Area - Gembrook Station

0 25 50 75 100 125

Metres
Scale: 1:2,500 @ A3
Coordinate System: GDA 1994 MGA Zone 55

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4 Documentation of consultation

4.1 Consultation in relation to the assessment

Table 2 Consultation in relation to the assessment

Date	Name	Organisation	Nature of Consultation
05 July 2017	Leah Tepper	Heritage Advisor, Biosis Pty Ltd	On behalf of the Sponsor, submits Notice of Intent to Prepare a CHMP
	VAHR	Aboriginal Victoria, DPC	
05 July 2017	Registrar	VAHR	Assigns CHMP number 15134
	Leah Tepper	Heritage Advisor, Biosis Pty Ltd	
	Bret Butler	Manager of infrastructure, Puffing Billy Railway	
05 July 2017	Leah Tepper	Heritage Advisor, Biosis Pty Ltd	On behalf of the Sponsor, submits Notice of Intent to prepare a CHMP to WLaCCHCAC
	Helen Officer	RAP Administration officer, WLaCCHCAC	
06 July 2017	Helen Officer	RAP Administration officer, WLaCCHCAC	WLaCCHCAC advise their intentions to evaluate the CHMP
	Leah Tepper	Heritage Advisor, Biosis Pty Ltd	
	Bret Butler	Infrastructure Project Manager, Puffing Billy Railway	
06 July 2017	Boheme Rawoteea	VAHR	Co-evaluation of CHMP discussion
	Leah Tepper	Heritage Advisor, Biosis Pty Ltd	
25 August 2017	Alex Parmington	Manager, Cultural Heritage Unit, WLaCCHCAC	Inception meeting
	Ron Jones	Elder, WLaCCHCAC	
	Alan Wandin	Elder, WLaCCHCAC	
	Bobby Mullins	Elder, WLaCCHCAC	
	Bret Butler	Infrastructure Project Manager, Puffing Billy Railway	

Date	Name	Organisation	Nature of Consultation
	Leah Tepper	Heritage Advisor, Biosis Pty Ltd	
	Asher Ford	Heritage Advisor, Biosis Pty Ltd	
5 Sept 2017	Catherine La Puma	Manager, Cultural Heritage Unit, WLaCCHCAC	Standard Assessment Results Meeting
	Ron Jones	Elder, WLaCCHCAC	
	Alan Wandin	Elder, WLaCCHCAC	
	Bobby Mullins	Elder, WLaCCHCAC	
	Bret Butler	Infrastructure Project Manager, Puffing Billy Railway	
	Leah Tepper	Heritage Advisor, Biosis Pty Ltd	
	Asher Ford	Heritage Advisor, Biosis Pty Ltd	
6 Sept 2017	David Thomas	Aboriginal Victoria, DPC	Consultation with Traditional Owners discussion
	Leah Tepper	Heritage Advisor, Biosis Pty Ltd	
	Asher Ford	Heritage Advisor, Biosis Pty Ltd	
14 Sept 2017	Leah Tepper	Heritage Advisor, Biosis Pty Ltd	Consultation regarding possible artefacts
	Dan Turnbull	CEO, BLCAC	

4.2 Participation in the conduct of the assessment

Table 3 Participation in the conduct of the assessment

Date	Name	Organisation	Nature of Consultation
04 Sept 2017	Leah Tepper	Biosis Pty Ltd	Standard Assessment
	Shane Nicholson	Field representative, WLaCCHCAC	
	Bret Butler	Puffing Billy Railway	
18 Sept 2017	Leah Tepper	Biosis Pty Ltd	Complex Assessment
	Shane Nicholson	Field representative, WLaCCHCAC	

Date	Name	Organisation	Nature of Consultation
	Eric Edwards	Field representative, BLCAC	
	James Hughes	Field representative, BWF	

4.3 Consultation in relation to the conditions

Table 4 Consultation in relation to the conditions

Date	Name	Organisation	Nature of Consultation
28 Sept 2017	Alex Parmington	Manager, Cultural Heritage Unit, WLaCCHCAC	Results and Conditions Meeting
	Ron Jones	Elder, WLaCCHCAC	
	Alan Wandin	Elder, WLaCCHCAC	
	Bobby Mullins	Elder, WLaCCHCAC	
	Bret Butler	Infrastructure Project Manager, Puffing Billy Railway	
	Leah Tepper	Heritage Advisor, Biosis Pty Ltd	
	Asher Ford	Heritage Advisor, Biosis Pty Ltd	

4.4 Summary of outcomes of consultation

A phone conservation was held between Leah Tepper (HA, Biosis Pty Ltd) and Boheme Rawoteea (VAHR) regarding the co-evaluation of a CHMP. Boheme reiterated the importance of submitting the CHMP for evaluation to the RAP and to the VAHR at the same time to ensure the evaluation process and comments can be co-ordinated.

A project inception meeting was held on 25 August 2017 at the offices of Wurundjeri Land and Compensation Cultural Heritage Council Aboriginal Corporation. (WLaCCHCAC) in Abbotsford. Present at the meeting was Leah Tepper and Asher Ford (HA, Biosis Pty Ltd), Alex Parmington, Ron Jones, Bobby Mullins and Allan Wandin (WLaCCHCAC) and Bret Butler (Puffing Billy Railway). The Activity Area and land use history was introduced and discussed in detail by Leah Tepper, and proposed build areas within the Activity Areas were shown on mapping. The activity description was presented by Bret Butler as upgrading the Puffing Billy Railway buildings and facilities in eight locations along the railway alignment as part of the proposed works within the Puffing Billy Railway Masterplan. The methods of construction and impacts to the ground surface were discussed, with the proposed timeline of activities taking place over 10 years. Aboriginal places in the geographic region were discussed, however it was emphasised that historical disturbance has taken place within the Activity Area over a considerable period of time. It was agreed upon that soil augering during the Standard Assessment was an appropriate methodology to assist in determining levels of disturbance within proposed build areas.

The Standard Assessment was completed on the 4 September 2017 led by Leah Tepper (HA, Biosis Pty ltd) and assisted by Shane Nicholson (Field Representative, WLaCCHCAC). A Bunurong representative was invited to attend but did not turn up. The survey was completed by inspecting each of the eight areas on foot, with particular attention paid to the proposed build areas. Bret explained the activities proposed at each location. High levels of disturbance from the construction of the railway and rail corridor, buildings, infrastructure, subsurface assets, road construction and landscaping was noted across the entirety of the Activity Area. Ground surface visibility was poor. Soil augering was undertaken in proposed build areas when it was unclear what level of disturbance had taken place at Belgrave Station, Gembrook Workshops and Gembrook Station. While augers at Gembrook Workshop and Gembrook Station were clearly disturbed, the augers at Belgrave Station did not resolve the level of disturbance, and undisturbed soil deposits indicated the potential for archaeological deposits. Shane noted that due to the long history of disturbance within the Activity Area it was unlikely any Aboriginal cultural heritage material remained. He also pointed out that due to the cold temperatures of the region and other more suitable locations for campsites, it was not likely long term occupation would have taken place in the Activity Area.

Leah Tepper received second hand word on 5 September 2017 of quartz artefacts located at Menzies Creek Station by a Bunurong representative two months earlier. These artefacts were not located during an assessment and it was unclear of the whereabouts of the artefacts, but subsequent discussions seemed to indicate they were located outside of the Activity Area.

Following the completion of the Standard Assessment, a results meeting was held between Leah Tepper and Asher Ford (HA, Biosis Pty Ltd), Catherine La Puma, Ron Jones, Bobby Mullins and Allan Wandin (WLaCCHCAC) and Bret Butler (Puffing Billy Railway) at the RAP offices on the 5 September 2017. The results of the Standard Assessment were discussed by Leah and included information on ground surface visibility, disturbances and the location of the soil augers. As it was shown the soil augers at Belgrave Station did not resolve the possibility of disturbance, a Complex Assessment methodology was agreed on involving a 1 x 1 metre test pit and a series of 500 x 500 millimetre shovel test pits. The test pit would be excavated in the are proposed for a car park, while shovel test pits in 20 metre intervals would be excavated in a narrow corridor in the location of a proposed rail siding. The artefacts seen by a Bunurong representative two months earlier at Menzies Creek were discussed, and it was decided due to the amount of disturbance and the lack of artefacts at this location during the Standard Assessment that the area would not be subject to subsurface testing.

Asher Ford (HA, Biosis Pty Ltd) and Leah Tepper (Biosis Pty Ltd) phone conversation with David Thomas regarding consultation requirements on 6 September 2017. As BLCAC were recently awarded RAP status, the heritage advisors were unsure about the level of consultation required with Tradition Owners. David reiterated that a broad level of consultation with Traditional Owners was preferred by AV.

On the on 14 September 2017, Dan Turnbull (manager, BLCAC) and Leah Tepper (HA, Biosis Pty Ltd) had a discussion regarding the artefacts seen at Menzies Creek. Dan was satisfied that testing not occur in this area.

The Complex Assessment was conducted on 18 September 2017 with Leah Tepper (HA, Biosis Pty Ltd), Shane Nicholson (Field Representative, WLaCCHCAC, Eric Edwards (Field Representative, BLCAC) and James Hughes (BWF). A total of one 1 x 1 metre test pit and three 500 x 500 millimetre shovel test pits were excavated across the western aspect of the Activity Area at the Belgrave Station precinct. No Aboriginal places were located during the subsurface testing.

The final Complex Results and Management Conditions meeting was held on 28 September 2017 at the RAP offices. Present at the meeting was Leah Tepper and Asher Ford (HA, Biosis Pty Ltd), Alex Parmington, Ron Jones, Bobby Mullins and Allan Wandin (WLaCCHCAC) and Bret Butler (Puffing Billy Railway). The results of the Complex Assessment were discussed including the disturbance noted in the shovel test pits. It was described how the Complex Assessment had revealed a stratigraphy of silts and clays which was similar across the Activity Area. The Activity Area was given a low likelihood of any cultural material being found within the area.

As no cultural heritage material was identified during the Standard and Complex investigation, standard management conditions and contingencies were discussed. The following management conditions were created in conjunction with the Sponsor and Wurundjeri Council Elders:

- A cross cultural heritage induction training to take place prior to ground disturbing works for all involved in earth disturbing works at both Belgrave Station and Gembrook Station
- A copy of the approved CHMP to be held on site throughout the life of the construction works
- A maximum of one compliance inspection at Belgrave Station to take place following ground disturbance and preparation works but prior to construction
- A maximum of one compliance inspection at Gembrook Station to take place following ground disturbance and preparation works but prior to construction
- Standard WLaCCHCAC contingencies to be included.

Under further discussion with AV, it was indicated that compliance inspections and inductions in non-RAP areas were not appropriate due to the low potential of Aboriginal heritage in these areas. Conditions were altered as such.

5 Desktop Assessment

5.1 Search of the Victorian Aboriginal Heritage Register

A search of the VAHR was undertaken by Leah Tepper, Biosis Pty Ltd on 17 July 2017.

5.2 Geographic region

The geographic region for the Activity Area has been selected to represent a range of landforms and resources that would be accessible from the Activity Area. The geographic region within this assessment is defined by major roadways and the geomorphology of the Activity Area: *Low relief landscapes at low elevation (Cann River south, Silvan, Templestowe*; geomorphological unit 1.3.1) and *Deeply dissected ridge and valley landscapes (headwaters of major rivers such as the Wonnangatta, King and Kiewa Rivers Mt. Coopracambra*; geomorphological unit 1.4.4). The geographic region also includes several waterways that would have been utilised as a natural resource as well as for food and shelter.

The northern extent of the geographic region follows the alignment of Maroondah Highway in an eastward direction, where it turns into Warburton highway to the east of Lilydale. The geographic region then turns to the south at the Woori Yallock Creek, following the border of the *Low relief landscapes at low elevation* geomorphological unit. This geomorphological unit continues on the southern border of the geographic region. At Belgrave Heights the geomorphology changes to that of *Deeply dissected ridge and valley landscapes (headwaters of major rivers such as the Wonnangatta, King and Kiewa Rivers Mt. Coopracambra)*. The southern border of the geographic region continues to follow the extent of this geomorphological unit to the Dandenong Creek where the geographic region turns towards the north. The western border of the geographic region continues to follow the extent of the *Low relief landscapes at low elevation*, where it terminates at Maroondah Highway.

Waterways in the geographic region include Dandenong Creek, Bungalook Creek, Blind Creek, Ferny Creek, Dobsons Creek, Rifle Range Gully, Lyrebird Gully Creek, Stringybark Creek, Boggy Creek, Sassafras Creek, Stoney Creek as well as all of the aforementioned creeks that bisect the Activity Area. The geographic region also encompasses the Highlands – Southern Fall (HSF) bioregion. The Highlands – Southern Fall bioregion is the southerly aspect of the Great Dividing Range. These dissected uplands have moderate to steep slopes, with high plateaus and alluvial flats in the main valleys. The underlying geology of the bioregion is of sedimentary and granitic rock of Palaeozoic age. The brown and red porous Dermasols are found in the upper reaches and the yellow and red contrast Chromosols and Kurosols graduate down the valley slopes (Department of Environment, Land, Water and Planning, 2017).

The geographic region is shown in Map 3.

5.3 Aboriginal places in the geographic region

A search of the VAHR identified 73 Aboriginal places within the geographic region (Map 3). Artefact scatters (n=48) are the dominant place types in the geographic region accounting for 66% of places (Figure 1). The remainder are scarred trees (n=10), low density artefact distributions (LDAD) (n=9), earth features (n=2), Aboriginal historical places (n=2), a quarry (n=1) and a stone feature (n=1).

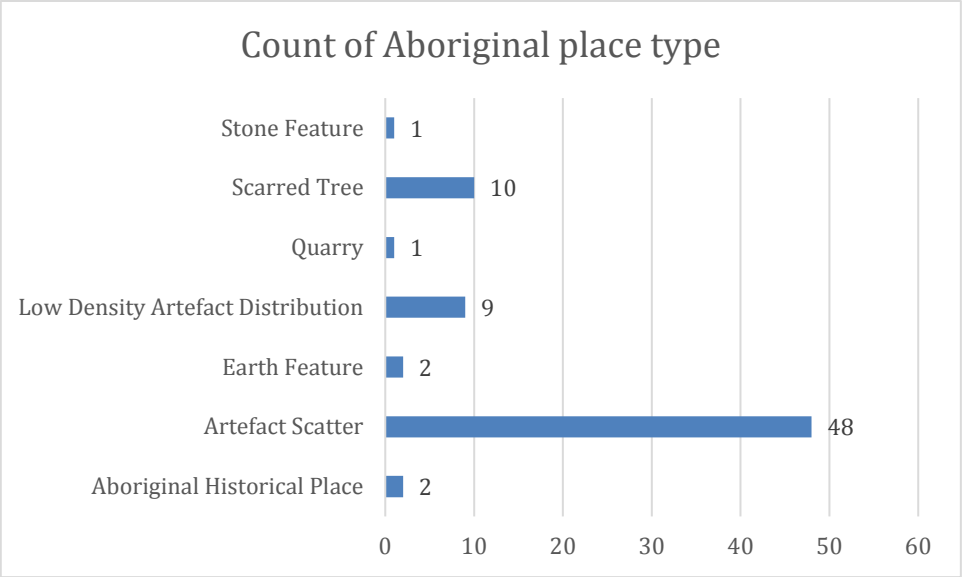


Figure 1 Aboriginal place types within the geographic region

There is a one Aboriginal historical reference within the northern most aspect of the Activity Area at Belgrave Station. The **Belgrave Boomerang Factory 2.3-13** was a boomerang factory named 'Aboriginal Enterprises' operated by Bill Onus from 1952, a prominent Aboriginal political activist and entrepreneur (Howie-Willis, 1994). The shop worked to rebuild cultural pride in the Aboriginal community, providing training and employment, and also providing political education for Indigenous youths. It was the first boomerang factory producing Aboriginal art and artefacts for the tourist industry (Howie-Willis, 1994). Onus was a member of the Aborigines Progressive Association (APA), the president of the Australian Aborigines League (AAL) and named Melbourne's new civic annual festival 'Moomba' (Howie-Willis, 1994).

There are no Aboriginal places located within the Activity Area. There are five Aboriginal places within 1 kilometre of the Activity Area that include one scarred tree, three artefact scatters, and one object collection.

The object collection (VAHR 7922-0949) consists of flaked and ground stone that was donated to Emerald Museum by two separate donors. One of the artefacts was located at Avonsleigh in the garden of a private residence during the 1990s and consists of a large basalt core hand held cutting implement. The other artefact was located on the north-eastern side of the lower part of Johns Hill, above Monkey Dung Creek in the 1940s. This artefact consists of a greenstone axe head.

An additional preliminary Aboriginal place (Preliminary Report Project No. 9981) has been recorded 77 metres to the north of the eastern terminus of the Activity Area. A scar tree, grinding bowl and stone arrangement were recorded at this location. At the time of writing, no further details regarding this Aboriginal place have been made public.

Gembrook 2 (VAHR 8022-0002) is an artefact scatter located c. 100 metres to the south of the Activity Area, the proposed Gembrook workshop area and to the west of Main Street, Gembrook. Recorded in 1981, this surface artefact scatter consists of a quartz chipped stone flakes of an unspecified number. The artefact scatter was noted to be a very diffuse lithic scatter that had been truncated by ploughing. The preservation of the artefacts was recorded as very poor but some materials left. No recommendations were noted on the site card for the Aboriginal place.

Gembrook 1 (VAHR 8022-0001) is an artefact scatter located c. 390 metres to the north-west of the Activity Area and the proposed Gembrook workshop location, and to the north of the Belgrave-Gembrook Road. Recorded in 1981, this surface artefact scatter consists of a grinding stone and an unspecified number of

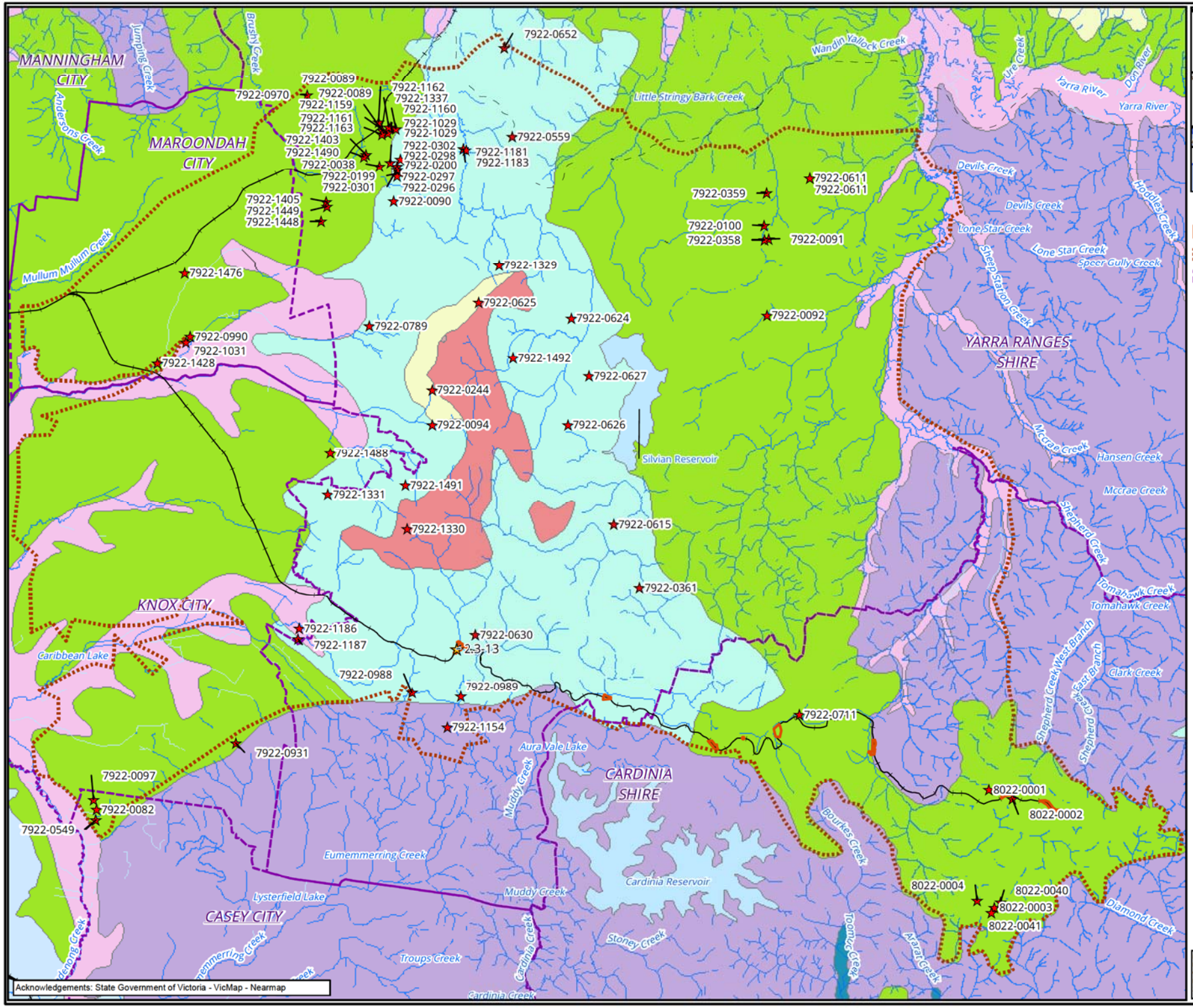
chipped stone artefacts. The preservation of the artefacts was recorded as very poor but with some materials left in situ. No recommendations were noted on the site card for the Aboriginal place.

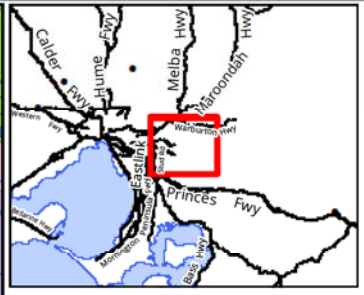
Coles Ridge Rd Track (VAHR 7922-0630) is a scarred tree located c. 430 metres to the north-east of the Activity Area at Belgrave Station on Coles Ridge Road Track, to the west of a tributary of Monbulk Creek. The tree is of an unknown species and the scar measures 82 centimetres long and 15 centimetres wide and was thought to most likely be Aboriginal in origin. It was recommended that the tree be protected from clearance and maintenance of Coles Ridge Road Track.

Wattle Creek 1 (VAHR 7922-0711) is a surface artefact scatter located c. 630 to the north-eat of the Activity Area and Lakeside Station, and to the north of Wattle Creek. The artefact scatter was noted by banksmen during construction works for the installation of a sewage pipeline for the Emerald District. The artefacts consisted of one fragmented silcrete flake and one quartz angular fragment. No further disturbance or artefacts were noted. The preceding archaeological survey of the area found no Aboriginal cultural heritage material largely due to poor ground surface visibility (Murphy, 1995).

Summary

A number of stone artefact scatters have been recorded in both surface and subsurface contexts. Those identified on the surface were found in areas of pasture that had been subject to ploughing. The stone material largely consisted of quartz and silcrete with one basalt, greenstone grinding stone. Of note, only one of the artefact scatters (VAHR 7922-0711) was found within 200 metres of a waterway (Wattle Creek). In situ surface deposits are unlikely considering the construction of the railway would have truncated any surface cultural heritage material. There is some potential for further stone artefacts to be present in areas of undisturbed soil. The previously recorded scarred trees were found on the banks of Monbulk Creek indicating that there is further potential for scarred trees to be present within areas of mature, remnant vegetation within close proximity to waterways in the Activity Area.





Legend

- Activity Area
- Geographic region
- Local government area
- VAHR place
- Historical place

Geomorphological units

- *1.2.1 Moderate elevation plateaux and broad ridges*
- *1.3.1 Low relief landscapes at low elevation*
- *1.3.3 Low elevation terraces fans and floodplains*
- *1.4.2 Prominent summits between 500 and 1200 m*
- *1.4.3 Escarpments and gorges*
- *1.4.4 Deeply dissected ridge and valley landscapes*
- *1.4.5 Moderately dissected ridge and valley landscapes*
- *7.1.1 Coastal plains with ridges and dunefields*
- *7.1.2 Alluvial plains*

Map 3 Geographic region including the Activity Area

0 1,000 2,000 3,000 4,000 5,000

Metres

Scale: 1:100,000 @ A3

Coordinate System: GDA 1994 MGA Zone 55

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Legend

- Activity area
- Parcel boundary
- Local government area
- Historical place

Map 3.1 Historical Place - Belgrave Station

0 10 20 30 40 50

Metres
Scale: 1:1,500 @ A3
Coordinate System: GDA 1994 MGA Zone 55

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Legend

- Activity area
- Parcel boundary
- Local government area
- VAHR place

Map 3.7 VAHR place - Gembrook Engineering workshop

0 10 20 30 40 50

Metres
Scale: 1:1,000 @ A3
Coordinate System: GDA 1994 MGA Zone 55

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5.4 Previous assessment work in the geographic region

A search of the VAHR identified a total of 83 previous archaeological assessments undertaken within the geographic region (Table 5). The most prevalent assessment type within the geographic region is Complex Assessment CHMP (n=44) that consists of over half (53%) of the assessments undertaken within the geographic region, followed by survey (n=22) at 27%.

Table 5 Archaeolgoical assessment types within the geographic region.

Report type	Total number	Percentage
CHMP Complex Assessment	44	53
Survey	22	27
Desktop or Paper or Due Diligence or Other	10	12
CHMP Desktop Assessment	3	4
CHMP Standard Assessment	2	2
Test Excavation	2	2
Total	**83**	**100.0**

Several archaeological surveys have been undertaken that include aspects of the present Activity Area. A further four Complex Assessments CHMP have been undertaken within 1 kilometre of the Activity Area that share a similar geographic region and environmental context.

Regional Assessments

Du Cros (1988) conducted an archaeological survey of the Upper Yarra Valley and Dandenong Ranges, which was one of the first systematic studies undertaken in the region. The study was aimed at identifying and recording Aboriginal places and to generate a predictive model of Aboriginal land use that could be used to predict Aboriginal place locations. The Activity Area was divided into two sections based on topography and land use: the Eastern Zone which was forest uplands, and the Western Zone which was mostly privately owned rural/urban land. The two zones were further subdivided into three landscape units based on topography, geology, soil formation, vegetation, fauna and hydrology. The Eastern Zone subunits consisted of mountain ridges, mountain slopes, major rivers and creeks and the Western Zone consisted of floodplains, undulating terrain and hills. Du Cros made the following predictions regarding the zones:

The Eastern Zone:

- Aboriginal campsites will more likely be found on well-drained, level to gently sloping ground, near resource-rich zones that includes swamps, river flats and the junctions of major waterways
- Smaller campsites will more likely be found on ridgetops with larger campsites near the aforementioned resource rich areas
- Quarries will occur in areas with stone suitable for artefact manufacture
- Grinding grooves will most likely occur in sandstone outcrops
- Scarred trees will most likely be found beside waterways and in resource rich areas, and likely to be found in the vicinity of campsites

The Western Zone

- Areas of archaeological sensitivity are those landforms including the Yarra River flats for subsurface and surface sites as well as scarred trees, especially in areas of elevated ground overlooking water sources
- Further areas of archaeological potential are sections of undulating terrain that are well drained and in close proximity to resource rich areas
- Creeks and watercourses in the hills may contain scarred trees, with stone artefacts located on river flats or well drained ground in close proximity to permanent water. Smaller artefact scatters will most likely be found on ridge tops.

Local Assessment

An archaeological survey (Report No. 790) was undertaken by **Murphy** (1995) of the Belgrave to Cockatoo corridor prior to the proposed installation of a sewer pipeline within the Emerald District that encompasses the majority of the present Activity Area. No Aboriginal cultural heritage material was identified during the survey. This was due to poor ground surface visibility and previous levels of disturbance within the Activity Area. Background information on Aboriginal places within the Dandenong Ranges indicate that isolated artefacts, artefact scatters and scarred trees are likely to occur within the area along ridge lines, hill tops and creek lines. Cockatoo Creek and the lower reaches of Wattle Creek were considered to be of moderate archaeological potential. Seven historical sites were identified during the study. These included the Nobelius Packing Shed and Siding (H7922-0161), the Emerald Railway Station (H7922-0162), a 1953 landslide site (H7922-0163), the Carlota Tye Memorial Church (H7922-0164), the site of *Yanakie* homestead (H7922-0165), the narrow gauge timber trestle bridge over Belgrave (H7922-0166) and a log loading siding (H7922-0167). With the exception of the Carlotta Tye Memorial Church, all sites identified during the study were associated with the Puffing Billy railway line.

A heritage study (Report No. 1428) of the Intergas expansion project was undertaken by **Lane** (1999) that included land between Pakenham and Gembrook as well as Tyers and Drouin West. The northern terminus of the Pakenham to Gembrook area is located within the present Activity Area. The ground surface visibility within the Pakenham to Gembrook area was poor; however, three isolated artefacts were identified (VAHR 8021-0127, 8022-0040 and 0041), all of which are located outside of the present Activity Area. VAHR 8021-0027 is located 12 kilometres to the south of the present Activity Area, outside of the present geographic region. These quartzite and silcrete flakes were recorded on the eastern edge of a small dam situated in low lying, relatively flat ground. VAHR 8022-0040 is a quartzite flaked piece/core and possible quartz core that were recorded on slightly sloping land near the bank of Gembrook Creek, 2.9 kilometres to the south of the present Activity area. VAHR 8022-0041 consists of a small quartz flake located in a paddock on a small track along a fenceline, 3.4 kilometres to the south of the present Activity Area. It was recommended that disturbance to the vicinity of the recorded Aboriginal places was to be avoided. Two historic places were also noted during the survey: the grounds and curtilage of the *Goronga* property as well as the reconstructed Puffing Billy Railway Line. The following observations were made for the Gembrook Creek to Orchard Road Gembrook area, within the present Activity Area:

- Ground surface visibility was 0-50%
- The area consisted of undulating land, with steep slopes in places
- Some of the paddocks were under crop while others were covered with thick pasture grasses
- The proposed pipeline route intercepts with the reconstructed Puffing Billy Railway line

Freslov and Lewis (2002) undertook an archaeological survey (Report No 1708) of an area between Emerald Lake, Emerald and Wright Road, Avonsleigh as part of the Emerald-Cockatoo Transfer Main 42 metres to the north of the current Activity Area at Lakeside. The background study indicated that although there are few

Aboriginal places found within the area, ridge lines, hill tops and creek corridors have the highest potential to contain cultural heritage material. The Activity Area was divided into three areas: Wright Road Creek Crossing, Wattle Creek terrace and Wattle Creek benched Area. Due to poor ground surface visibility, the actual area of ground survey totalled 2% of the total area. No new Aboriginal places were recorded during the survey. The steeply incised creek crossing at Wattle Creek had been highly disturbed and quite steep, and therefore thought unlikely to contain Aboriginal cultural heritage material. The open, gently sloping creek terrace at Wattle Creek was also highly disturbed but was considered to be the area most likely to contain archaeological material. The Wattle Creek benched wooded area linking to Emerald Lake was also highly disturbed with an easement running along an artificial bench in the steep creek sides. It was thought unlikely for Aboriginal cultural heritage material to be present within this area. Due to the very low effective survey coverage, the survey could not rule out the possibility for Aboriginal places within the Activity Area. Therefore, monitoring works during the removal of vegetation and the topsoil stripping to depths of 300 millimetres was recommended within the Wattle Creek terrace. The subsequent monitoring works identified one isolated artefact, Wattle Creek 1 (VAHR 7922-0711), located 640 metres to the north-east of the present Activity Area. Recommendations for this artefact were not mentioned within the survey report or on the site card for the Aboriginal place.

Athanasiadis (2009) prepared a Complex CHMP (10457) in advance of sewer alignments within the vicinity of Cockatoo Creek, located c. 1.4 kilometres to the south of the present Activity Area at Cockatoo. The desktop assessment found no Aboriginal places within the Activity Area and limited recorded Aboriginal places within a wider 5 kilometre radius. The most likely place type was considered to be low density stone artefact scatters, scarred trees or mounds within areas that retain intact landforms and remnant vegetation. No Aboriginal cultural heritage material was identified during the Standard Assessment largely due to poor ground visibility and the level of disturbance due to the construction of a road. During the Complex Assessment one 1x1 metre test pit and one 20x20 centimetre shovel test pit was excavated. No Aboriginal cultural heritage material was identified during the Complex Assessment. The soil profile in both the test pit and shovel test pit was minimal with little topsoil (with varying depths of 0-15 centimetres) overlying compact fill noted at 15-35 centimetres. The assessment concluded that while it was considered probable that Aboriginal cultural heritage material may be present within Cockatoo, such material will most likely be present in extremely low densities across the landscape and most likely not in situ. As no Aboriginal cultural heritage material was recorded within the Activity Area, no specific mitigation measures were recommended.

Myers, Paynter and Mirams (2013) undertook a Complex CHMP (12321) prior to the construction of a footpath from Stoney Road, Belgrave to Charles Street, 150 metres to the south of the present Activity Area at Belgrave-Gembrook Road, Belgrave. The desktop assessment concluded that landforms such as hills, creek floodplains and areas of remnant vegetation have the most potential for surface and subsurface Aboriginal places. Stone structures may be present in areas where there are outcrops, rock shelters or overhangs. No Aboriginal cultural heritage material was identified during the Standard Assessment largely due to poor ground surface visibility, and it was concluded that the construction of the road and subsurface installation of services had heavily disturbed much of the Activity Area.

The Belgrave-Gembrook Road to Puffing Billy Trestle Table was surveyed and the following existing conditions were noted:

- The Belgrave-Gembrook Road consists of a sealed road with asphalt
- The Belgrave-Gembrook Road cuts into a hill slope with a small CFA access road present leading up to the Puffing Billy Trestle that is cut into a steep slope (up to 2 metre cut)
- A high pressure gas pipeline is present along the Belgrave-Gembrook Road

- Large amounts of ground disturbance were noted immediately around the Trestle bridge with stabilising works. A historic photo shows the ground surrounding the trestle at a much higher level than it currently is
- There are very small areas of natural ground surface with less disturbance close to Monbulk Creek crossing on the flatter floodplain area.

The Complex Assessment comprised of two 1x1 metre test pits and 20 40x40 centimetre shovel test pits, excavated in areas and landforms of higher potential. Closest to the present Activity Area was shovel test pit 16, located c. 15 metres to the east of the Puffing Billy Railway line and trestle bridge, on the north side of Greenwell Road directly adjacent to the road cutting and drainage channel. The soil stratigraphy in this area consists of brown moderately compacted clayey silt to a depth of 60 millimetres with gravel inclusions, overlying orange firm clay noted at a depth of 60 millimetres. Soil deposits across the area were noted as very shallow, ranging in depth between 60-460 millimetres. In most cases, the topsoil had been removed leaving shallow or no overlying soil on clay. No Aboriginal cultural heritage material was identified during the Complex Assessment. The Complex Assessment concluded that the whole of the Activity Area has been heavily disturbed. Areas that were considered to be less disturbed also contained evidence of high levels of disturbance as well as very shallow soils. Ground disturbance was largely caused by the excavation for road cuttings and services, as well as walking tracks and the clearance of vegetation.

Mathews and Albrecht (2017) undertook a Complex CHMP (14731) prior to the installation of a telecommunications cable as part of the NBN project, located 1.3 kilometres to the north of the present Activity Area in Menzies Creek. The desktop assessment concluded that surface and subsurface disturbance will most likely be present across the majority of the Activity Area given its location within road shoulders and roadways. However, there was some potential for Aboriginal cultural heritage material to be present traversing landforms. The Standard Assessment found no Aboriginal cultural heritage material largely due to poor ground surface visibility. One landform, undulating hills, was identified within the Activity Area that was divided into two investigation areas: flat to gently inclined land and sloping land that were further investigated during the Complex Assessment. A total of one 1x1 metre test pit and seven 50x50 centimetre shovel test pits were excavated across the Activity Area during the Complex Assessment. No Aboriginal cultural heritage material was identified. Soils stratigraphy revealed a soil profile of varying depth with clays typically recorded at depths around 440-800 millimetres. Evidence of ground disturbance was noted in the upper profile. Some of the deeper parts of the soil profile showed limited signs of ground disturbance. As no Aboriginal cultural heritage material was recorded within the Activity Area, no specific mitigation measures were recommended.

Burch (2017) undertook a CHMP (14810) at Belgrave Lake Park, 33-41 Park Drive Belgrave and Park Drive, Belgrave, prior to drainage improvement works within the area, located c. 990 metres to the south of the current Activity Area in Belgrave. The desktop assessment concluded that it is likely that Aboriginal cultural heritage material may be present within the Activity Area due to the proximity of Monbulk Creek; however, this is tempered with past land use history. No Aboriginal cultural heritage places were identified during the Standard Assessment. However, two areas of archaeological potential were identified in areas of less ground disturbance. One 1x1 metre test pit and six 50x50 centimetre shovel test pits were excavated across the Activity Area. No Aboriginal places were identified during the Complex Assessment. The Complex Assessment concluded that the majority of the Activity Area has been disturbed and introduced fill was brought in as a result of landscaping and road construction works.

Summary of previous archaeological reports

Previous assessments undertaken within the vicinity of the Activity Area and within the wider geographic region have determined that the most likely place type to be identified are likely to be stone artefact scatters, scarred trees or mounds within areas that retain intact landforms and remnant vegetation. Poor ground surface visibility and ground disturbance has had a negative effect on any underlying in situ cultural heritage

material. Large areas of ground within the Activity Area have been disturbed by the construction of the railway, installation of services and infrastructure. However, several surface finds (VAHR 8021-0027, 8022-0040 & 0041) were identified in areas of ground disturbance such as dams and trackways. One subsurface find (VAHR 7721-0711) was identified in an area of noted ground disturbance during the vegetation and topsoil stripping of the first 300 millimetres of ground around the Wattle Creek terrace. This indicates that although there is previous ground disturbance there is some potential, albeit low, that there may still be cultural heritage material within the present Activity Area in areas of less ground disturbance. There is potential for scarred trees to be present within the vicinity of creeks and other waterways in areas of remnant native vegetation.

Table 6 Testing strategies of CHMPS within 10 kilometres of the Activity Area

AV Report No.	Location	Testing Method	Results	VAHR No.	Mitigation	Impact
12321	East Victorian dissected uplands; located 150 metres from current Activity Area at Belgrave-Gembrook Road, Belgrave	2 test pits (1x1m) 20 shovel test pits (50x50 cm)	No Aboriginal cultural heritage material identified.	NA	None	NA
14731	Moderately dissected ridge and valley landscapes of the Eastern uplands	1 test pit (1x1m) 7 shovel test pits (50x50cm)	No Aboriginal cultural heritage material identified.	NA	None	NA
14810	Deeply dissected ridge and valley landscapes of the Eastern Uplands	1 test pit (1x1m) 6 shovel test pits (50x50cm)	No Aboriginal cultural heritage material identified.	NA	None	NA
10457	Steep-sided valleys separated by high narrow ridges covered in native forests of the Eastern Uplands	1 test pit (1x1m) 1 shovel test pits (20x20cm)	No Aboriginal cultural heritage material identified.	NA	None	NA
790	Relatively flat land that varies from highly developed areas to native forest	Pedestrian survey	No Aboriginal cultural heritage material identified.	NA	None	NA
1780	Creek corridor of Wattle Creek between Emerald Lake and Wright Road, Avonsleigh	Pedestrian survey and monitoring of works in sensitive areas	Isolated artefact	7922-0711	Unknown	Unknown
1428	Low lying valley	Pedestrian survey	3 isolated artefacts	8021-0027 8022-0040 8022-0041	Avoidance to vicinity of Aboriginal places	Possibly in situ

5.5 Historical and ethno-historical accounts in the geographic region

For the purposes of this assessment, information about Aboriginal Victorian pre and post contact history has been sourced from nineteenth and twentieth century primary and secondary ethnographic/historical records.

5.5.1 Ethno-historical accounts of Aboriginal people

Linguistic boundaries and social organisation

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

Aboriginal groups mapped natural features as boundaries for their ranges, estates and economic territories. The Activity Area lies within the boundaries of the language group *Woi wurrung* (Barwick D. , 1984).

Land ownership and access rights or responsibilities centred on the smaller named groups that formed the broader language grouping. These groups are often called 'clans' or 'local descent groups', however as (Wesson, 2000, p. 8) reasons, they are better described as 'named groups', as the membership structure of these groups, and their degree of division from other groups, could vary. In most instances, primary allegiance was owed to this named group, although this could vary according to context and location. Commonly, named groups were led by senior elders who exercised internal political and religious authority, as well as being recognised as their spokesperson when dealing with other groups (Atkinson & Berryman, 1983). Particularly influential group leaders could also assume authority over the leaders of other culturally affiliated groups (Wesson, 2000). The named group who occupied the Activity Area were the *Wurundjeri balug* that occupied the area around Mt Macedon extending to Dandenong. The *Wurundjeri balug* consisted of two patrilines that occupied adjacent localities: the *Wurundjeri willam* held the Yarra River from its northern sources at Mount Bawbaw to its junction with the Maribyrnong River, and the *Bulug willam* held the ranges and swamps south of the Upper Yarra, extending to the Koo-Wee-Rup Swamp and the Latrobe River (Clark, 1990, pp. 384-385).

Social activity involving neighbouring named or socio-dialectical groups was usually held in warmer periods, held at the intersection of group boundary's and arranged by a person assigned of the responsibility of travelling between groups to organise the time, place, and events of the meeting. This person could speak a number of different dialects and acted as intermediaries in negotiations between the groups. Activities would include sports and dancing, with up to 500 men, women and children attending (Atkinson & Berryman, 1983).

The succession or inheritance of lands and named-group estates could occur in a number of ways. Individuals and groups could inherit lands from their father, their mother, through their birthplace, conception place, the burial place of their ancestors, and through totemic connections (Wesson, 2000). Access rights also crossed generations and marriage partners. Howitt (1904, p. 311) wrote that:

> The right to hunt and to procure food in any particular tract of country belonged to the group of people born there, and could not be infringed by others without permission. But there were places which such a group of people claimed for some special reason, and in which the whole of the tribe had interest. Such a place was the stone quarry at Mt. William near Lancefield, from which the material for making tomahawks was procured. The family proprietorship in the quarry had wide ramifications... when neighbouring groups wished for some stone they sent a messenger to Bill-billeri saying that they would send goods in exchange for it, for instance, skin-rugs.

People would often travel or reside in the territory of another named-group so that they could fulfil religious or family obligations, or exercise the privilege, granted to them by family or moiety associations, of exploiting the resources of another estate (Barwick D. , 1984). For daily activities and the exploitation of local estates,

people are thought to have travelled in small residential units or extended family groups - often termed bands (Wesson, 2000).

Moiety affiliation

A further level of social organisation was moiety affiliation. Membership to a named group is variably defined by a localised matrilineal or patrilineal descent group, with female member of the group partnering with men outside of their group (exogamous) and across moiety lines; however they maintained an identity of belonging to their father's group. Men then had to adhere to certain duties such as providing food to their father-in-law. Social engagement could be influenced by appropriate conduct between family members, for example men had avoidance behaviours they had to adhere to in the presence of their mother-in-law, and there were other speech or special duties which were expected in family relationships (Atkinson & Berryman, 1983).

The *Wurundjeri balug*, and the two patrilines, were of the *waa* moiety (Clark, 1990, pp. 384-386).

Religion

Knowledge of Aboriginal religion was recorded and maintained through visual and oral tradition which ensured the maintenance of social structures through generations. Such knowledge was not always readily shared with non-Indigenous social observers and as such limited written versions from early settlers, explorers or government employees exist for Victoria. Ceremonies were occasionally performed to entertain Europeans however the meaning behind these performances was never fully explained (Robinson, 1840). Private ceremonies and locations, such as age initiations were actively kept secret (Presland, 1994).

Economy and resource utilisation

Certain individuals within Aboriginal groups had responsibilities assigned to them for the management of natural resources. Anthropogenic manipulation of the environment was observed by the first Europeans within northern Victoria, for example fire regimes which cleared tracks also aided in hunting and dissuaded settlers for entering Aboriginal territory (Atkinson & Berryman, 1983).

Canoes were cut from the bark of river red-gums and box trees with stone axe heads in spring to early summer, shaped over a fire, seasoned in the sun, then the end blocked with clay (Edwards R. , 1975). Hooped nets made from fibre were used to catch crayfish, yabbies and fish, while cross-line nets were strung low above the water for catching ducks or below the water to catch schools of fish (Gott & Conran, 1991). Line nets were also used to catch emus and kangaroos; a strategically placed group of people drove the animals towards the nets. Reed spears with hafted bone, carved barbs, stone pieces or hardened wooden points set into the head were used for catching larger marsupials. Oven mounds (cooking pits), were then constructed to bake the game or large volumes of vegetables (Atkinson & Berryman, 1983).

5.5.2 Historical accounts of Aboriginal people

Most of the information regarding the *Bulug William* was derived from the papers of George Augustus Robinson. The clan head at the time of European settlement was Mooney who helped guide Batman's 1835 party to a winter camp where the treaty was negotiated (Clark, 1990, p. 386).

At least one ritual site is derived from ethnographic evidence close to the Activity Area. The site is known by Europeans as *Bald Hill* and was first recorded by Howitt in 1904 as a rock close to Dandenong where Ngaruk-Willan, clansmen of the Wurundjeri, would place leafy boughs when going hunting in order to ensure a good kangaroo catch. Howitt mentioned two rocks near Dandenong that were said to represent Djurt-djurt and Thara, the sons of Bunjil to which fresh, leaf less boughs were left in order to ensure a plentiful supply of kangaroos. Massola (1961, 1971 as cited in Dean 1998) described Bald Hill as being close to Wellington road,

Clematis, south of the present Activity Area, and that this area was a flat topped prominent hill on which there was a natural rock formation (Dean, 1998).

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

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

In 1863, the Coranderrk Aboriginal Station was established in present day Healesville. By 1875 the Station was self-supporting. However, greedy settlers wanted the land that the station was located on and between 1874 and 1886 the residents had to fight for their home. By the turn of the century, the station was in decline and finally closed in 1923. Following this, most of the land was leased out for grazing although 50 acres were retained for 9 elderly Aboriginal people that were not forced to move on (Barwick D. , 1998).

William Townsend (Bill) Onus, was an Aboriginal political activist and entrepreneur who moved to Melbourne in 1946 from Cumeroogunga Aboriginal reserve in New South Wales. Onus, along with his brother Eric and Douglas Nicholls, revived the Australian Aborigines League. During the mid-1940s the League spoke at many public rallies, community groups and the radio to promote Aboriginal rights and liberties (Howie-Willis, 1994). Onus became disillusioned by politics and focused more on his business interests by the 1950s, spending more of this time producing boomerangs, woomeras, fabrics and greeting cards with Aboriginal motifs from his shop and small boomerang factory in Belgrave (historical reference 2.3-13, Belgrave Boomerang Factory), within the current Activity Area (Howie-Willis, 1994).

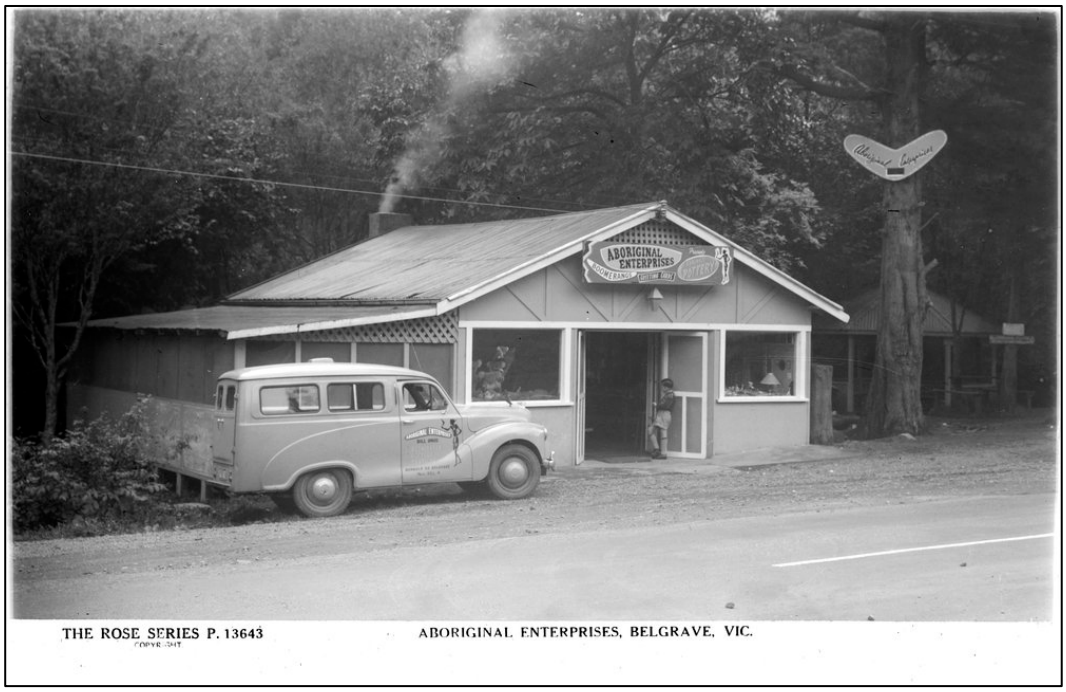


Plate 1 Bill Onus' shop and Boomerang factory, Belgrave (Rose Stereograph Co., 1954)

5.6 Landforms and/or geomorphology of the Activity Area

The Activity Area is located within the Eastern uplands geomorphological division. The Eastern Uplands are centred on the main divide in eastern Victoria that separates streams draining north to the Murray-Darling Basin from those flowing southwards to the sea. A number of rivers drain this region to the north and south, including the Yarra River, the main river that drains the south-western aspect of the region that flows into Port Phillip Bay.

The eastern half of the Activity Area is located within *Low relief landscapes at low elevation (Cann River south, Silvan, Templestowe)* geomorphological unit 1.3.1. Within this geomorphological unit is a dissected plateau-like surface of hills that extends from the eastern suburbs of Melbourne around Mt Dandenong to the NSW border (State of Victoria Agriculture Victoria, 2017).

The western half of the Activity Area is located within the *Deeply dissected ridge and valley landscapes (headwaters of major rivers such as Wonnangatta, King and Kiewa Rivers, Mt Coopracambra),* geomorphological unit 1.4.4. This landscape is the result of more mature end of a range of processes that formed and are still active in steeper, more deeply dissected landscapes located elsewhere within the Eastern Uplands. High and narrow topped ridges form the divides between major streams and side slopes that extend to steeply graded streams. The major streams are deeply incised within this geomorphological unit, interlocking with V-shaped spurs and tributary valleys. The soils within this geomorphological unit vary from red and brown Dermasols on the moister, more stable slopes to poorly structured Kandosols on the drier slopes. The soils on steeper slopes are usually shallow with many stone inclusions (State of Victoria Agriculture Victoria, 2017).

The underlying geology of the Activity Area is of the Ferny Creek Rhyodacite geological unit that formed during the late Devonian period and marked the end of the volcanic activity in the Dandenong ranges (Vandenberg, 1979). This geological unit consists of igneous rock including biotite-hypersthene and recrystallised rhyodacite ignimbrite (GeoVic, 2017). The soils resulting from the Ferny Creek Rhyodacite formation are orange clay loams (Lorimer, 2010).

5.7 Land use history of the Activity Area

The Dandenong Ranges were quickly settled following European contact with squatting runs being established during the 1830s. The Activity Area is located within the boundaries of what were the Cardinia and Woori Yallock runs. The Cardinia Creek 108 run was gazetted in October 1848 by Robert Henry and consisted of 5,120 acres of land. In 1851 the run passed on to Terence O'Connor (Spreadborough, R. and H. Anderson, 1983). The Woori Yallock run was established by c. Porter in 1861 but was forfeited by 1863. The run was held by James Batchelor in 1864, by auction and was again forfeited in 1865 (ibid).

The discovery of gold provided further impetus to settle the area. Gold was discovered in Emerald in 1858. The diggings consisted of alluvial sediments that surrounded Emerald and other local creeks. However, the yields from these alluvial workings were smaller than those in other areas throughout Victoria. Named after a murdered prospector, Emerald began as a rudimentary miner's encampment and expanded to provide settlers farming land (Winsanreid, 1988).

Other industries were soon exploited. The Dandenong Ranges contained a natural timber resource that was used as piles for wharf construction. The eucalyptus trees also provided oils which were distilled and exported (Monash University, 2015(a)). By the 1880s, large forested areas around Menzies Creek and Clematis had been cleared that further enabled the land to be opened up for agricultural pursuits. The first lands sales at Menzies Creek occurred in 1878 (Coulson, 1958). Further agricultural development was encouraged by the completion of a narrow gauge railway line from Upper Fern Tree Gully to Gembrook in 1900 (Plate 2). This line soon attracted tourists from Melbourne to the area.

Plate 2 Plan of line east of original Belgrave Station (State Library Victoria)

In the 1900's there were more than 20 sawmills operating in the Gembrook area, connected to the railway by timber tramways. The Ranges Hotel in Gembrook was built in 1901 for the growing population, as well as the growing number of tourists (Monash University, 2015(b)).

Carl Axel Nobelius established his own nursery business at Emerald in 1892 having previously worked in a south Yarra Nursery. Nobelius initially concentrated on establishing a small orchard, but then began raising nursery stock and trading as 'Gembrook Nurseries', supplying fruit trees on a 'wholesale' basis. The arrival of the railway greatly assisted his business, and he constructed a siding and packing shed adjacent to the line in 1904 (Heritage Victoria, 2012). Beneath the packing shed was a fumigation chamber. The property was divided up and sold on Nobelius's death in 1921, but his sons repurchased part of the land and continued the business, which continued to operate under various owners up to 1981. In 1988 the 'Nobelius Heritage Park' was created from part of the estate and in 1993 the 'Emerald Museum' was opened (Emerald Museum, 2017).

As the railhead, Gembrook became a centre for shipping sawn timber from the many sawmills in the district, with a series of timber railed narrow gauge tramways feeding onto the station yard, and platforms between them and the VR line for transferring loads (Plate 3, Plate 4 and Plate 5) (McCarthy, 1987).

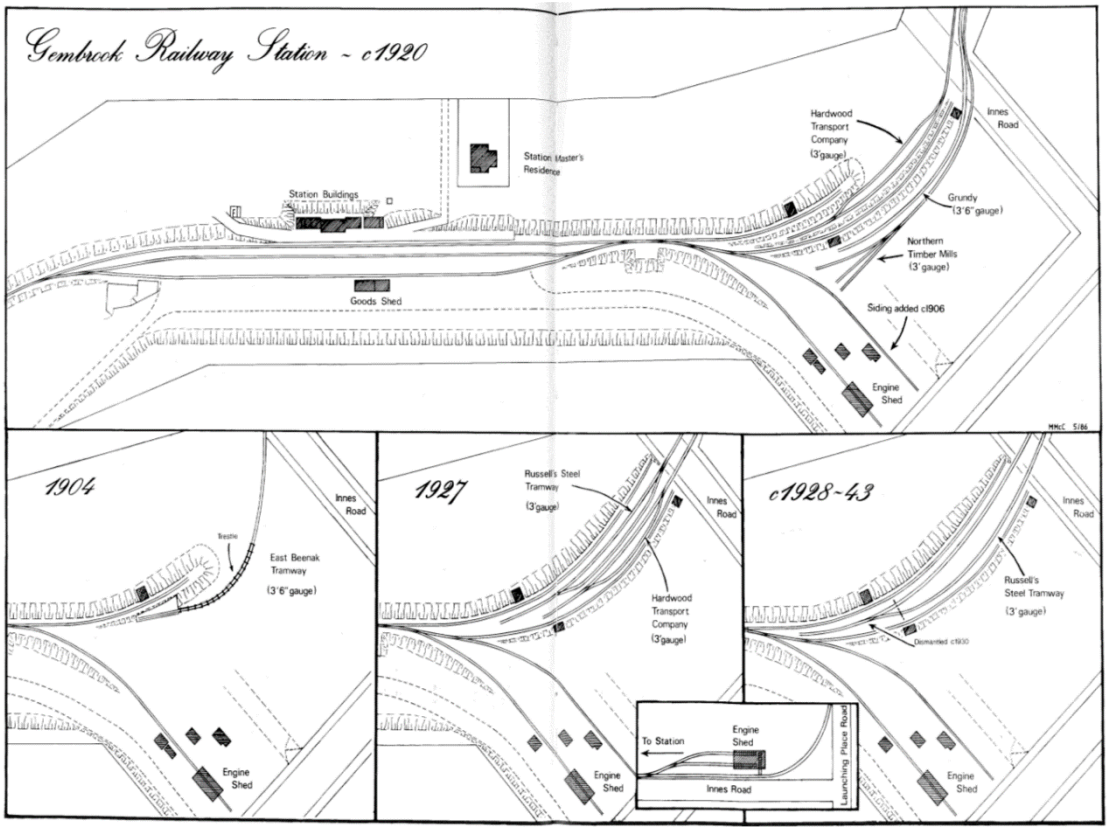


Plate 3 Plans of Gembrook Station ground 1904-1943 showing changes) (McCarthy, 1987, pp. 32-33)

Plate 4 Gembrook Station 1900 (Casey Cardinia Heritage, 2015)

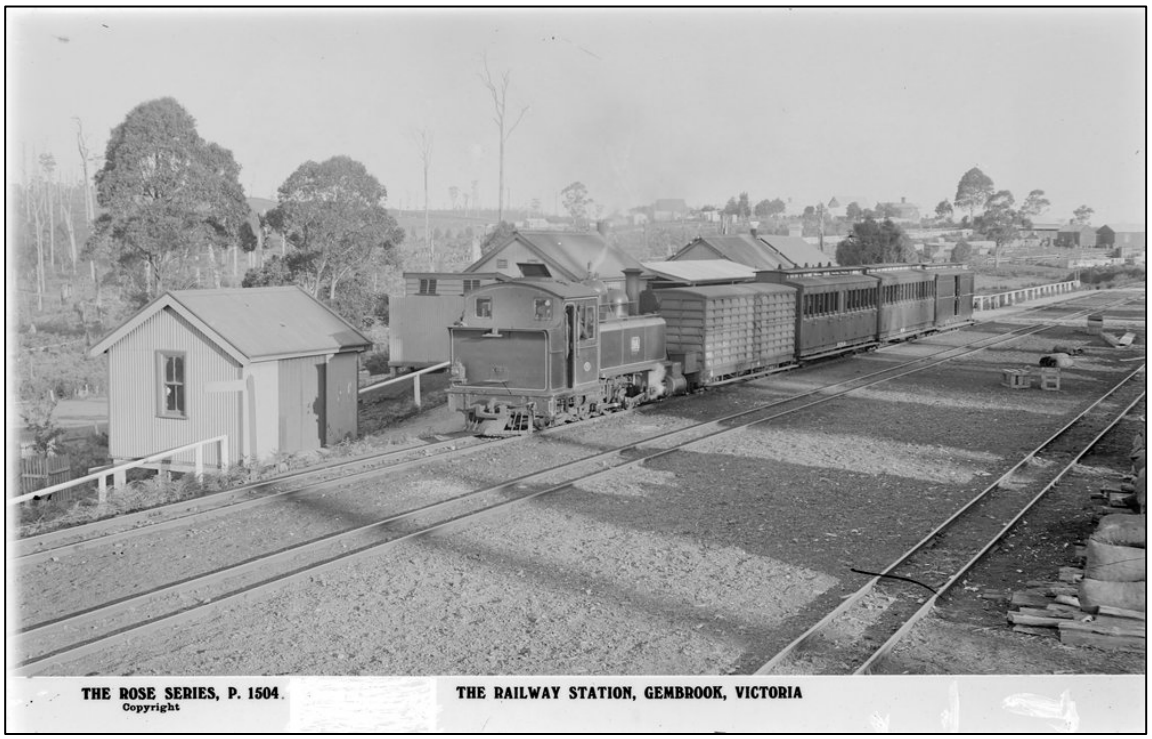


Plate 5 Gembrook Station 1940s (State Library Victoria)

From the 1930s, the railway line became less profitable, as steep grades and tight curves limited loads, and transshipment at Upper Ferntree Gully added extra expense. Bush fires in 1926 and 1939 which destroyed many of the timber mills, and gradual improvements to roads and the introduction of a competing Victorian

Railways bus service, saw a decline in traffic on the line and it was closed on 30 April 1954 after a landslide blocked part of the line the previous year (Vines, 2016).

At the same time as the line was closed, the Country Roads Board awarded contracts in 1954 to J. Howard & Co. to build a new concrete arch bridge at the Gembrook Road over the tracks. This was an experimental design by the Country Roads Board employing pre-cast reinforced-concrete arch ribs. The initial plans appear to have been drawn up in 1952 (Vines, National Trust Study of Victoria's Concrete Road Bridges National Trust of Australia (Victoria), 2008).In September 1957, the Victorian Railways announced that the narrow gauge service would cease operating between Upper Ferntree Gully and Belgrave to enable conversion of this section into an extension of the electrified suburban train system. The suburban railway was extended to Belgrave between 1958 and 1962 (Vines, 2016).

Public interest in preserving the narrow gauge railway resulted in the formation of the Puffing Billy Preservation Society with Harold Hewett elected President in 1955 (Puffing Billy Preservation Society, 2013). The society volunteers worked to bypass the landslide with the assistance of the Citizens' Military, and reopened the line as a heritage tourist railway to Menzies Creek in 1962 (Plate 7), extended this to Emerald in 1965, to Lakeside (in Emerald Lake Park) in 1975 and finally to Gembrook in October 1998.

The Emerald Tourist Railway Board was formed in the mid-1970s to manage operation, maintenance and development of the tourist railway, taking over this function from the Victorian Railways (Puffing Billy Preservation Society, 2013). As a consequence new maintenance facilities had to be provided. New buildings were erected for storing rolling stock and maintaining locomotives, and additional land had to be purchased to house these. Further earthworks were required to provide the sidings and building sites. Transfer of rolling stock was carried out at a ramp at the north end of Belgrave Station (Plate 6).

In the 1980s, increased passenger numbers and additional operations meant that the 1960s station was inadequate, and so a larger station site was created below the track level at the present location. The original station building was moved again, and a new two story station building was erected (Russell, 2009).

Plate 6 Transfer ramp at end of Belgrave MET station May 1962 (Photo John Thompson)

Plate 7 Belgrave Station on the opening day 28 July 1962, showing relocated original station building, new loco shed and coal stage (Photo John Thompson)

In 2016 a report was commissioned by Puffing Billy Railway to provide information and advice on cultural heritage values and potential impacts in relation to the draft Puffing Billy Railway Master Plan (Vines, 2016).

5.7.1 Belgrave

The original Belgrave Station was located at the site of the present metropolitan suburban station on the south side of the Belgrave Gembrook Road (Plate 8 and Plate 9). The station building was initially moved by the Puffing Billy Preservation Society to the opposite side of the road, with a small engine shed and coal stage constructed opposite by about 1962 (Puffing Billy Preservation Society, 2013).

Plate 8 Original Belgrave Station (Photo National Museum Australia, 1986)

Plate 9 Belgrave Station 1955 (Stamford, 2011)

Subsequent enlargement of the platforms and station ground required extensive earth works with a new cutting west of the original track from the current station and cut and fill on both sides of the line to the north to provide the maintenance and rolling stock storage areas. The Puffing Billy Preservation Society used a variety of small sheds and portable buildings, and erected timber engine and carriage sheds, workshops and stores as their collection of locomotives and rolling stock increased, and they required more space (Vines, 2016). Areas of parking and sealed roads are located in the station precinct, which are likely to have been levelled before crushed rock applied.

5.7.2 Menzies Creek

Menzies Creek Station was originally a simple low pitched skillion roofed, timber and corrugated iron waiting shed with a flat verandah awning and platform (Plate 10), before likely being incorporated into the current structure (Vines, 2016).Several sidings were located on the north side of the station and a stationmaster's residence is located near the level crossing on School Road. Its location within the original railway reserve strongly indicates it is an early and original railway building. A goods shed opposite the station is likely a modern reconstruction. Areas of parking and sealed roads are located in the station precinct, which are likely to have been levelled before crushed rock applied.

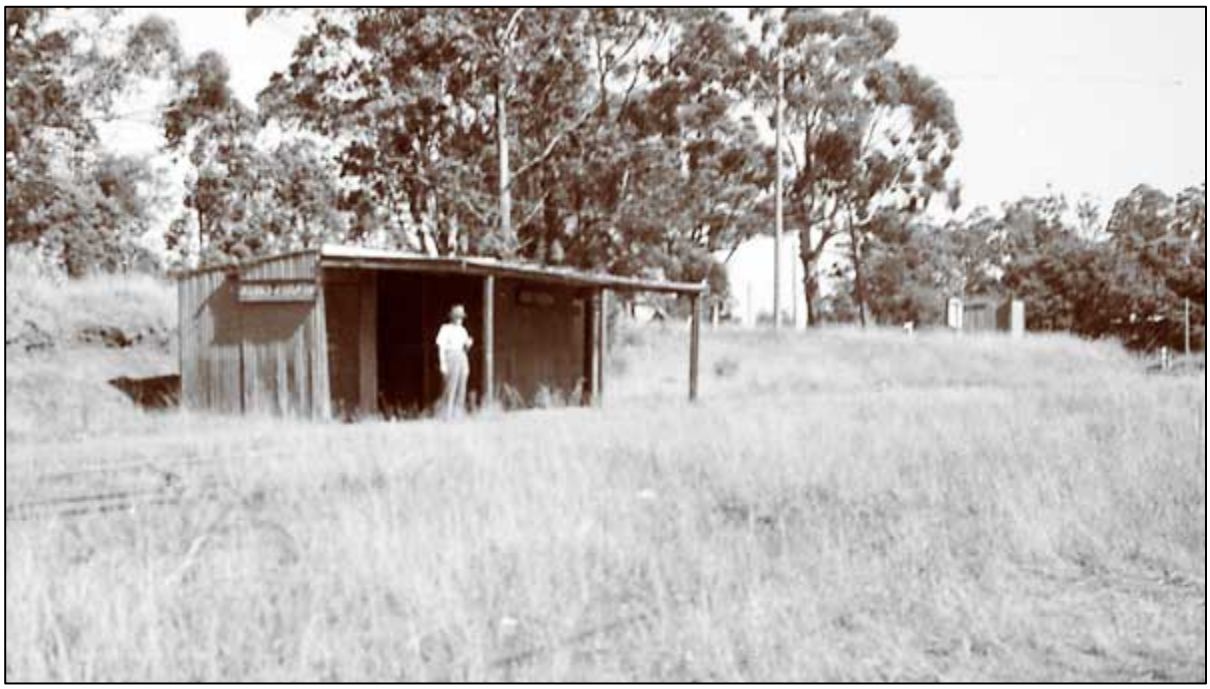


Plate 10 Menzies Creek Station c.1955 (Stamford, 2011)

5.7.3 Emerald

Emerald Station is possibly the most intact on the line, with at least part of the original building surviving in its original location (Plate 11). The Emerald Station building is a gabled roofed timber and corrugated iron structure, which at least in part, is an original structure dating from 1900 (Vines, Puffing Billy Railway, Victoria: Cultural Heritage Assessment, 2016). It has apparently been modified and extended (Vines, Puffing Billy Railway, Victoria: Cultural Heritage Assessment, 2016). The northern part of the Emerald Station ground is included on the Cardinia Heritage Overlay (HO 176). A former shed to the north end of the station has been demolished while two corrugated iron sheds south of the station building are also early structures. The other workshops and locomotive sheds on the north side of the line are all modern buildings. A small, possibly original Victorian Railways portable shed is located behind the locomotive shed. A loading platform and stockyards were located on the north side of the line near Kilvington Road; however, the current structures

are apparently reconstructed using elements from the Wonthaggi saleyards. A residence may have been located just south of the station. The turntable at the northwest of the yard was installed in the 1990s, but incorporates components from an early Victorian Railways turntable ex-Newport Workshops.

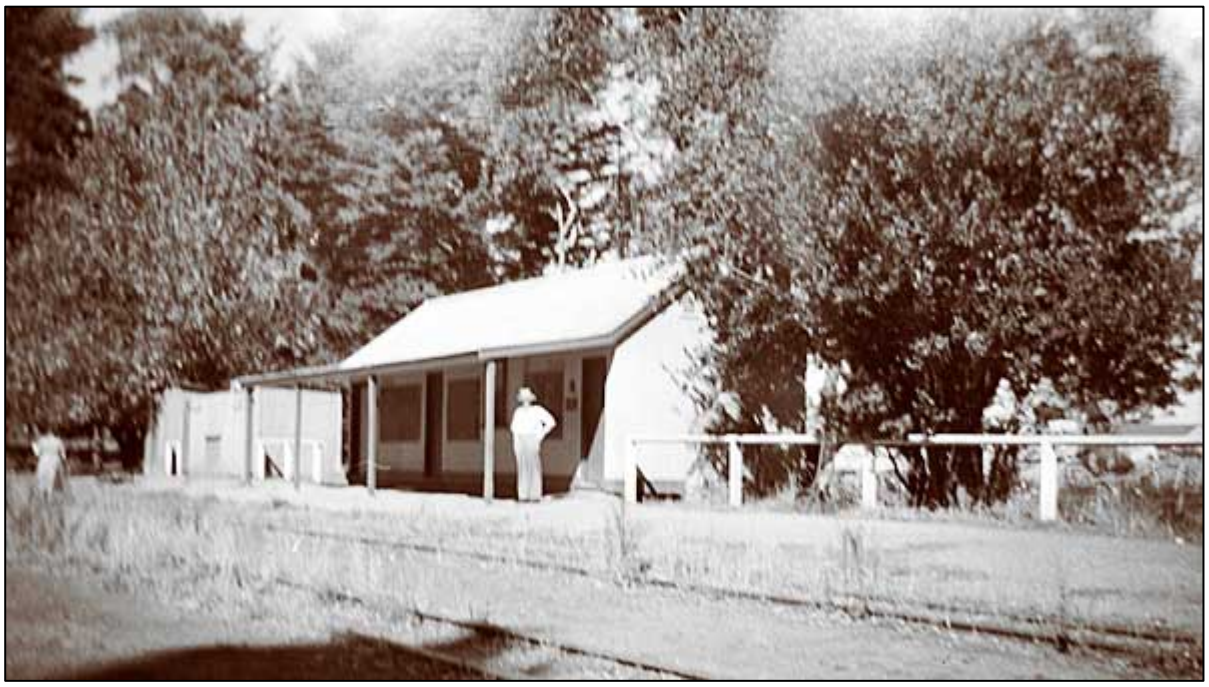


Plate 11 Emerald Station c.1955 (Stamford, 2011)

5.7.4 Nobelius

The Nobelius Packing Shed and siding were built around 1904 and comprise a two story timber structure with a separate siding on an elevated site, with a large retaining wall extending west of the shed and brick chimney on the north east corner (Plate 12) (Vines, 2016). The Packing Shed is currently used for special events with the Puffing Billy Railway.

Plate 12 Nobelius packing shed and siding c.1955 (Photo Frank Stamford)

5.7.5 Lakeside

Lakeside Station opened in 1944 to serve the Emerald Lake Park. This was the terminus of the tourist railway until the extension to Gembrook was completed in 1998. It comprises two platforms with modern station buildings on the east side, island platform waiting shelters, elevated water tanks and unique 'wig-wag' level crossing warning signal. The Kiosk at Emerald Lake Park was constructed in the 1950s, to meet the demands of the additional visitors, and followed a simple modern style. It has subsequently been extended and enlarged. Other landscaping and rustic shelters are located adjacent to the Puffing Billy Railway station.

Large areas of parking and sealed roads are located in the station precinct, which are likely to have been levelled before crushed rock applied.

Plate 13 Lakeside Station c.1955 (Stamford, 2011)

Plate 14 Emerald Lake Kiosk in 1960s (State Library Victoria)

5.7.6 Cockatoo Station

Cockatoo Station grounds comprise a reconstructed platform and small shed understood to have come from another Victorian Railways station (Plate 15).

Plate 15 Cockatoo Station c.1955 (Stamford, 2011)

5.7.7 Gembrook workshops

The land in which the proposed Gembrook engineering workshops are located was listed in 1892 parish plans as being owned by James Leckey Jnr (Department of Lands and Survey , 1892). It is likely that Leckey had a licence which allowed timber to be cut off the block. It is probably the property was farmed after this time.

No buildings can be seen on the 1945 aerial, however the land was cleared and ploughed (Department of Environment, Land, Water and Planning, 2016). A certificate of title dated 26 March 1957 indicates Thomas Stephen Williams, Kevin Joseph Williams and James Anthony Williams of Gembrook Sawmillers purchased the property. The property was kept in the Williams family until recently.

The proposed Gembrook workshops area is currently occupied by a landscape and soil supplier and does not appear to have any heritage values related to the Puffing Billy Railway. An early 20th century timber building on the site may have been relocated here (Plate 16).

Plate 16 Possible relocated early 20th century building at proposed Gembrook workshops site (Gary Vines 2016)

5.7.8 Gembrook Station ground

Gembrook Station ground includes an extensive area with a deep excavated cutting on the south side and a high embankment on the north (Plate 17). A small reconstructed station building is located on the original platform site at the north of the yard, while a much larger modern building is located on the southern end of the yard on Belgrave-Gembrook Road. Adjacent to this is an inspection pit, where loco firebox ash is raked out and a water tank which is the site of the former engine shed. A number of other buildings were located near the original station, including a goods shed and stationmaster's residence, while to the east, a complex set of sidings for a series of timber tramways connected with the line. A substantial earth embankment marks this location. This is the terminus for the Puffing Billy Railway. Areas of parking and sealed roads are located in the station precinct, which are likely to have been levelled before crushed rock applied.

Plate 17 Gembrook Station c.1955 (Photo Frank Stamford)

A Dial Before You Dig search was undertaken on 17 July 2017 in order to determine if any underground services are located within the Activity Area. The following assets and services are located within the Activity Area:

- VicTrack assets are located within the Activity Area at the corner of Bayview and Belgrave-Gembrook Road.
- Melbourne Water has a water supply main that passes through the Activity Area parallel to Menzies Road, Menzies.
- Southeast Water has a water and sewer main present that passes through the Activity Area at Old Monbulk Road, adjacent to Caporn Avenue, Belgrave. Another water main passes through the Activity Area around Belgrave-Gembrook Road, Belgrave and a sewer main at Long Pockitt Lane, Belgrave.
- A high pressure APA gas main is located running through the Activity Area parallel to Belgrave-Gembrook Road, to the east of Orchard Road at Gembrook.
- Yarra Valley Water has several water and sewer assets located throughout the Activity Area. An offset water main is located along Colombo Road. A sewer main is located around Long Pockitt Lane, School Road, at several locations parallel to Belgrave-Gembrook road, through most of the Activity Area in Emerald parallel to the Belgrave-Gembrook Road and Packenham Road. Asbestos water mains are

located on School Road, Menzies Creek, Belgrave-Gembrook Road, Wright Road and at the intersection of Beaconsfield-Emerald Road and Crichton, and at Packenham Road.

The installation of water and sewer mains will have had an adverse negative effect on any underlying cultural heritage material due to the depth of excavation for the laying of services.

Summary of land use history

After European settlement of the Belgrave to Gembrook area, large swaths of the land were used for mining, logging, grazing and agricultural purposes. These land use practices are likely to have an impact on any in situ cultural heritage material. Grazing animals can cause erosion that could lead to the truncation or destruction of any in situ cultural heritage material. Pastoralists would have also cleared trees in the area for the grazing animals that would also led to erosion and drainage issues within an area.

The Puffing Billy Railway has been in operation since 1900, with stations more or less in their original positions and the railway line following its original alignment. As such, many of the buildings are modern reconstructions with assets installed to service the buildings. Associated parking areas, roads and landscaping have also disturbed the Activity Area.

The biggest modern threat to in situ cultural heritage material would have occurred during the construction of the railway with its associated buildings, rail line and installed services. The areas of highest archaeological potential will be areas of mature remnant vegetation as well as undeveloped and/or less disturbed land within the station grounds.

5.8 Conclusions from the Desktop Assessment

Background research has confirmed that the Activity Area does not contain any registered Aboriginal places. One historical place, a boomerang factory is located within the Activity Area, developed by Aboriginal political activist Bill Onus during the 1950s. There are five Aboriginal places within 1 kilometre of the Activity Area. These include three artefact scatters (VAHR 7922-0711, 8022-0001, 8022-0002), one scarred tree (7922-0630) and one object collection.

Previous archaeological assessments undertaken within the vicinity of the Activity Area have shown that large areas have been heavily disturbed due construction such as roads, residential development and railways, as well as the installation of services. Despite the disturbed areas, cultural heritage material has been identified in areas of disturbance, such as trackways and dams, or subsurface in areas of less disturbed ground.

The Activity Area has likely been subject to pastoral land use activities since the mid-19th century and is likely to have been subject to ploughing logging and mining practices. Historic land use activities such as agriculture and alluvial mining could have destroyed or truncated any subsurface Aboriginal cultural heritage sites if present. The construction of the railway as well as the associated infrastructure and services would have impacted greatly on underlying in situ Aboriginal cultural heritage material.

5.8.1 Prediction model

Based on the above review of the geographic region, including its environment, recorded Aboriginal places, previous archaeological assessments and information on the activities of Aboriginal people, a place prediction model has been developed. The place prediction model identifies key points for consideration.

Therefore the following Aboriginal place types likely to be found within the study area are:

- Artefact distributions consisting of one or more stone artefacts are associated with tool production, domestic activities and resource procurement. Scatters and isolated finds are most likely to occur on river or creek flats, terraces or slopes within 200 metres of major water courses. The Activity Area is

within 200 metres of Clematis Creek, Monbulk Creek, Hardys Creek, Menzies Creek, Wattle Creek, and Cockatoo Creek. Previous archaeological assessments (Murphy 1995, Freslov and Lewis 2002) have identified that Cockatoo Creek and the Wattle Creek terrace are considered to be areas of some archaeological potential due to areas of less ground disturbance. Slopes between Menzies Creek Station and Belgrave Gembrook Road were also identified as having some potential to contain Aboriginal archaeological potential (Vines, 2016).

- Scarred trees represent cultural modifications of trees to obtain the bark for use as shelters, canoes and shields. Widespread removal of native forest has resulted in little remnant vegetation; however, scarred trees may occur where remnant vegetation exists. Two scarred trees (VAHR 7922-0630 & 7922-0989) have been recorded within 1 kilometre of the Activity Area in close proximity to Monbulk Creek. Areas of native remnant vegetation have been noted by Vines (2016) east of Belgrave Station on either side of Old Monbulk Road and east of Lakeside Station between the access roads and car park areas. Therefore there is some potential for scarred trees to be present within these areas.

The following place types are considered to have low potential to be identified with the Activity Area:

- Earth features and mounds can include evidence of occupation such as charcoal, burnt clay, lithic material, animal bones and shells. They are usually identified in preserved landscapes where the material has been covered by successive deposits of alluvium and elevated ridges or rises, or within proximity to water sources. Two earth features have been identified in the wider geographic region. VAHR 7922-0089, located 16 kilometres to the north and VAHR 7922-0611 located 15 kilometres to the north of the present Activity Area in areas of less ground disturbance than the current Activity Area, but have still been affected by recreational activities and residential development. The construction of the railway with its associated infrastructure and the installation of services would have most likely destroyed any earth features present within the Activity Area.
- Quarries consist of negative flaking scars on rocky outcrops where Aboriginal people procured their lithic resources. One quarry was recorded within 1 kilometre of the Activity Area. Lilydale Quarry 1 (VAHR 7922-1029) consists of a prominent round-topped stony rise on the south side of the existing Lilydale Quarry, located 15 kilometres to the north of the Activity Area. This place is an Aboriginal silcrete source that occupies a well-defined landform. No other quarry sites have been recorded within the larger geographic region. Many of the landforms were altered or removed during more modern land use practices such as the construction of railway that would have removed any quarries if present. Therefore there is low potential for quarries to be within the Activity Area
- Stone arrangements are places where Aboriginal people have positioned stones deliberately to form shapes or patterns. The purpose of these arrangements is often unknown. One stone arrangement (VAHR 7922-0090), located 13 kilometres north of the Activity Area, has been recorded within the geographic region. This Aboriginal place consisted of large blocks of mudstone in a circular pattern that was reported destroyed in 1991 with the rocks being removed for garden rock (Du Cros, 1988). The construction of the railway with its associated infrastructure and the installation of services would have most likely destroyed any earth features present within the Activity Area. There is therefore low potential for stone arrangements to be present within the Activity Area.
- Burials of human remains can occur where the subsurface deposit is suitable for digging, with soft soil and sand being the most probable. If burials were present, they would most likely be located in the softer sands around water courses and waterbodies. No burials have been recorded within the larger geographic region. Therefore there is a low potential for burials to be found within the study area.

- Rock art includes stencils, prints and drawings in rock shelters and engravings in limestone caves. As there are no caves, overhangs or any other appropriate medium which would have provided opportunity to create rock art, it is not likely that rock art will be recorded within the Activity Area.
- Shell middens contain the remains of consumed shellfish are located in coastal areas or associated with inland waterways. If present, shell middens will be located closer to major waterways. No shell middens have been recorded within the wider geographic region. As numerous archaeological assessments have been undertaken on either side of Monbulk Creek, Wattle Creek and Cockatoo Creek and no shell middens have been recorded; there is a low potential for shell middens to be present within the Activity Area.

The results of the background review have indicated there is a potential for unidentified Aboriginal cultural heritage material within the Activity Area. For completion of this CHMP, it is therefore necessary to undertake a Standard Assessment to assess the presence of potential unidentified Aboriginal cultural heritage and the sensitivity of landforms within the Activity Area to contain such material.

6 Standard Assessment

6.1 Aims

The aims of the Standard Assessment are to:

- identify and record any surface Aboriginal cultural heritage material
- identify landforms with the potential for subsurface Aboriginal cultural heritage material
- assess whether a Complex Assessment is required.

6.2 Methodology

The Standard Assessment was completed on 4 September 2017. The ground survey was supervised by Leah Tepper, Biosis Pty Ltd with the participation of Shane Nicholson (WLaCCHCAC). Bret Butler (Puffing Billy Railway) also attended the Standard Assessment, explaining at each survey unit the proposed developments and impacts. A representative from BLCAC was invited to participate in the assessment but did not attend.

For the purpose of the Standard Assessment, the Activity Area was divided into eight survey units, based on the areas of proposed development (Table 7 and Map 4)

Table 7 Description of survey units in the Activity Area

Survey Unit	Land Use	Areas of potential	Size
Survey Unit 1	Belgrave Station	Area of undisturbed soils	4.138 ha
Survey Unit 2	Menzies Creek Station	No areas of archaeological potential.	2.025 ha
Survey Unit 3	Emerald Station	No areas of archaeological potential.	3.377 ha
Survey Unit 4	Nobelius Packing Shed	No areas of archaeological potential.	0.2827 ha
Survey Unit 5	Lakeside Station	No areas of archaeological potential.	5.341 ha
Survey Unit 6	Cockatoo Station	No areas of archaeological potential.	3.569 ha
Survey Unit 7	Gembrook Engineering Workshop	No areas of archaeological potential.	2.609 ha
Survey Unit 8	Gembrook Station	No areas of archaeological potential.	5.320 ha

The Standard Assessment was completed by traversing the Activity Area on foot with 1 metre spacing's between participants where the landscape allowed. Full survey coverage of the Activity Area was undertaken and views of the Activity Area were recorded using digital photography. Field notes were also taken recording ground conditions, the vegetation type and landform. Very poor visibility was encountered across the Activity Area.

Soil and sediment testing to assist in resolving levels of disturbance was completed with a 120 millimetre auger. Each auger probe was excavated until a sterile layer was reached and 100 per cent of excavated soil was screened through 5 millimetre hand sieves. An auger probe log was recorded with stratigraphic details

including soil colour (Munsell), pH and description (Appendix 5). Each auger probe was spatially recorded using a Topcon GRS-1 DGPS and later post-processed to sub one metre accuracy (Map 4).

Mature indigenous trees were inspected to determine if scars, carvings or other modifications were present and likely artefacts were inspected with a 10x hand lens for evidence of human modification.

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

6.3 Results

6.3.1 Survey Unit 1 – Belgrave Station

SURVEY UNIT	**Survey Unit 1 – Belgrave Station**
Map 4.1	**Length of survey unit:** 4.138 ha
Survey date:	4 September 2017
Photographs:	18-31
SURVEY TEAM	
Biosis Heritage Advisor	Leah Tepper
Traditional Owner	Shane Nicholson (WLaCCHCAC)
METHODOLOGY	
Survey method:	Pedestrian traverse
Conditions/ constraints:	Very poor surface visibility was encountered across Survey Unit 1. Large cuttings for the railway track as well as scraping and raising of sections resulted in limited room to walk in areas, especially in the southern extent of the survey unit.

SURVEY UNIT	Survey Unit 1 – Belgrave Station
ATTRIBUTES	
Description of survey unit:	Survey Unit 1 is the first station of the Puffing Billy Railway. A large concrete raised platform is present in the southern extent of the survey unit, with several station buildings on it (Plate 18 and Plate 19). Locomotive workshops and staffrooms are situated on levelled grounds to the north of the survey unit with train tracks, concrete areas and gravelled roads linking them (Plate 20). There are stockpiles of coal and other rail equipment in these areas, and ballast and tracks cover the majority of them (Plate 21). Various support buildings, volunteer buildings and water tanks are located in the central extent of the survey unit (Plate 22, Plate 23 and Plate 24). Ballast is spread across the majority of the survey unit and significant cut and ill has occurred (Plate 25). Clematis Creek runs north-west to south-east through Survey Unit 1. Clematis Creek is a regenerated waterway which is looked after by Friends of Clematis Creek. It was used as a dumping ground for rubbish prior to its regeneration in 2002, and runs through a large concrete culvert below the railway (Plate 26). In the cuttings, bedrock of Rhyodacite are apparent as well as occasional basalt floaters. Concrete car parking areas and bus turn around areas are present in the south-east of the survey unit. The areas surrounding these car parks have been heavily landscaped (Plate 27). Adjacent to the bus turn around area is an area used informally for car parking, which has resulted in low vegetation. Services are present through the survey unit, particularly along the rail corridor and within the station precinct area. Infrastructure pits can be seen across the survey unit.
Slope:	The landscape slopes from north-west to south-east, with substantial areas of cutting following the alignment of the railway altering the natural slope of the land
Landform:	Steep slopes which have been heavily modified by cut and fill.
Soil:	Moist humic silty clay overlying sticky clays.
Proximity to fresh water:	Clematis Creek runs north-west to south-east through Survey Unit 1.
Vegetation:	Eucalypt varieties, planted agricultural grasses, introduced trees and weeds.
Mature trees:	Eucalypts, including immature examples. None with cultural scars.
Caves or rock shelters:	None.
Previous and current land use:	Railway corridor.

SURVEY UNIT	Survey Unit 1 – Belgrave Station
Prior ground modifications:	Clearance activities; scraping and laying of fill, cutting, laying of ballast and railway track, installation of assets, levelling, construction of building and landscaping.
Ground surface visibility:	Very poor (5%) due to buildings, rail, ballast and grass cover (Plate 28). Areas of ground exposure were apparent around fence lines and makeshift car parking area.
Auger Probe	Two manual augers were undertaken in Survey Unit1. The first was excavated in the proposed siding area on an embankment to the north of the existing railway alignment in the north-east of the survey unit, with the other placed on a proposed car park area in the south-east of the survey unit. Both were found to contain generally intact soils of silty clay overlaying clay. Auger probe 2 was terminated when it hit a rock. Plate 30 to Plate 31 shows the auger location areas. Both areas contained more intact looking vegetation.

ASSESSMENT OF ARCHAEOLOGICAL POTENTIAL

Two areas of undisturbed soils were located in Survey Unit 1 (Plate 30 and Plate 31). The location of undisturbed soils indicate potential for remnant cultural heritage material to be identified due to its proximity to Clematis Creek and should be further investigated via subsurface testing.

The waterways traversed by the railway line have been impacted by the construction of the rail and have subsequently been rehabilitated. Intact soils were detected in the north-east and south-east extents of the survey unit.

All mature trees in proximity to the Activity Area were inspected for cultural scars. No cultural scars were detected on trees in this survey unit.

ABORIGINAL PLACES FOUND

VAHR Name/ No.:	N/A

Plate 18 Belgrave Station building, facing west (L. Tepper 4/9/17)

Plate 19 Belgrave Station platform, facing north (L. Tepper 4/9/17)

Plate 20 Area of disturbance within the north-western extent of the Survey Unit 1 (L. Tepper 4/9/17)

Plate 21 Ballast and tracks within survey unit, facing west (L. Tepper 4/9/17)

Plate 22 Area of proposed building in the northern aspect of the survey unit with concrete, cuttings and services (L. Tepper 4/9/17)

Plate 23 Proposed building location in the north of the survey unit, facing east (L. Tepper 4/9/17)

Plate 24 Proposed building location in the north of the survey unit, facing east (L. Tepper 4/9/17)

Plate 25 Area of cut and fill below ballast and railway tracks, facing west (L. Tepper 4/9/17)

Plate 26 Re-established Clematis Creek, facing north-west (L. Tepper 4/9/17)

Plate 27 Area of proposed car park showing cutting in the centre of the survey unit, facing north (L. Tepper 4/9/17)

Plate 28 Typical ground surface visibility within Survey Unit 1 (L. Tepper 4/9/17)

Plate 29 Area of proposed siding, facing north-east (L. Tepper 4/9/17)

Plate 30 Auger 1 location and area of archaeological potential, facing east (L Tepper 4/9/17)

Plate 31 Location of Auger 2 and area of archaeological potential, facing north-east (L. Tepper 4/9/17)

6.3.2 Survey Unit 2 – Menzies Creek Station

SURVEY UNIT	**Survey Unit 2 – Menzies Creek Station**
Map 4.2	**Length of survey unit:** 2.025 ha
Survey date:	4 September 2017
Photographs:	32-41
SURVEY TEAM	
Biosis Heritage Advisor	Leah Tepper
Traditional Owner	Shane Nicholson (WLaCCHCAC)
METHODOLOGY	
Survey method:	Pedestrian traverse
Conditions/ constraints:	Very poor surface visibility was encountered across Survey Unit 2. Rains caused clay ground surfaces within the southern aspect of the survey unit to pool with water.

SURVEY UNIT	Survey Unit 2 – Menzies Creek Station
ATTRIBUTES	
Description of survey unit:	Survey Unit 2 is the second station of the Puffing Billy Railway. The station comprises of an asphalt island platform with several station buildings, with a building proposed on the platform (Plate 32, Plate 33 and Plate 34). The station is located in the centre of the survey unit, with the railway crossing from west to south-east. A toilet block is located to the south-east of the platform. To the south of the survey unit, a large prefab corrugated metal workshop with a concrete base is located along with an open corrugated metal storage shed (Plate 35). A proposed building is located adjacent to this warehouse, over the footprint of the storage shed. The exposed ground in this area revealed bluestone gravels and clay fill, which had begun to pool with water (Plate 36). A gravel driveway leads into the workshop area from School Road to the south. Telecommunications and other assets are located along School Road in the area proposed for car parking (Plate 37). To the north of Survey Unit 2, a steep man-made slope leads from the levelled train station area toward Belgrave-Gembrook Road. This area is used for stockpiling steel, old sleeper timber and ballast (Plate 38 and Plate 39). Exposed soils showed red clay fill with glass, ballast and gravel inclusions (Plate 40). The toilet septic system is located in this area. Ballast is spread across the of the survey unit, particularly within the central aspects. Menzies Creek is located 50 metres north of the survey unit, across Belgrave-Menzies Road. However, the construction of the road and the creation of embankments by cutting and levelling has altered the natural topography of the survey unit.
Slope:	The landscape slopes from south-west to north-west towards Menzies Creek, with substantial areas of cutting following the alignment of the railway altering the natural slope of the land
Landform:	Steep slopes trending to the south which have been heavily modified by cut and fill.
Soil:	Exposed soils revealed red clay fill.
Proximity to fresh water:	Menzies Creek is located 50 metres to the north of Survey Unit 2 and is separated from the survey unit by Belgrave-Gembrook Road which runs east-west. Compared to the land within private property to the north of Menzies Creek, the amount of land modification was apparent.
Vegetation:	Eucalypt varieties, planted agricultural grasses, introduced trees and weeds.
Mature trees:	Eucalypts, including immature examples. None with cultural scars.
Caves or rock shelters:	None.

SURVEY UNIT	Survey Unit 2 – Menzies Creek Station
Previous and current land use:	Railway corridor.
Prior ground modifications:	Clearance activities; scraping and laying of fill, cutting, laying of ballast and railway track, installation of assets, levelling, construction of building and landscaping.
Ground surface visibility:	Very poor (5%) due to buildings, rail, ballast, stockpiling and grass cover. Areas of ground exposure were apparent around deflated ballast and in grassed areas (Plate 41).
Auger Probe	No manual augers were undertaken at Menzies Creek Station.
ASSESSMENT OF ARCHAEOLOGICAL POTENTIAL	
No areas of archaeological potential were identified in this survey unit. All mature trees in proximity to the Activity Area were inspected for cultural scars. No cultural scars were detected on trees in this survey unit.	
ABORIGINAL PLACES FOUND	
VAHR Name/ No.:	N/A

Plate 32 Facing towards Menzies Creek Station and toilet block, facing west (L. Tepper 4/9/17)

Plate 33 Platform and station buildings, facing west (L. Tepper 5/9/17)

Plate 34 Railway tracks, ballast and associated buildings, facing west (L. Tepper 4/9/17)

Plate 35 Large workshop on concrete pad in the south of the survey unit, facing west (L. Tepper 4/9/17)

Plate 36 Workshop and proposed building location in the south of the survey unit, facing east (L. Tepper 4/9/17)

Plate 37 Proposed car parking area in the south of the survey unit (L. Tepper 4/9/17)

Plate 38 Area used for stockpiling in the north-east of the survey unit, facing west (L. Tepper 4/9/17)

Plate 39 Stockpiling area and cutting in the north of the survey unit, facing west (L. Tepper 4/9/17)

Plate 40 Exposed area of clay fill in the north of the survey unit, facing east (L. Tepper 4/9/17)

Plate 41 Ground surface visibility within the survey unit (L. Tepper 4/9/17)

6.3.3 Survey Unit 3 – Emerald Station

SURVEY UNIT	Survey Unit 3 – Emerald Station
Map 4.3	**Length of survey unit:** 3.037 ha
Survey date:	4 September 2017
Photographs:	42-53
SURVEY TEAM	
Biosis Heritage Advisor	Leah Tepper
Traditional Owner	Shane Nicholson (WLaCCHCAC)
METHODOLOGY	
Survey method:	Pedestrian traverse
Conditions/ constraints:	Very poor surface visibility was encountered across Survey Unit 3. Large cuttings for the railway track as well as scraping and raising of sections resulted in limited room to walk in areas, especially in the southern extent of the survey unit.
ATTRIBUTES	
Description of survey unit:	Survey Unit 3 is bisected by the railway tracks and consists of a raised concrete platform with a station building in its western aspect (Plate 42). Various associated buildings are located to the east of the railway track. These metal corrugated buildings contain equipment and trains, and rolling stock is positioned beside these buildings (Plate 43). A large gravel graded track continues from Puffing Billy Place Road and connects to the storage sheds in the north of the study area (Plate 44). The north of the survey unit contains a turntable (Plate 45). The proposed building in this area is over the footprint of a corrugated metal storage shed and graded gravel road. A small toilet block and sewerage system is located to the south of the station building in heavily landscaped gardens (Plate 46). Land has been levelled in this area. East of this are various services (Plate 47). The railway has cut into the slope of the land as shown in Plate 48. A large workshop and stockpiling area is located in the south-east of the survey unit. The stockpiling area is fenced off, and we were unable to gain access to it. From the outside, barely any ground surface was visible due to the piles of equipment (Plate 49). The proposed building in this section will cover the footprint of this building. Connected to the workshop are replica stock pens, which conversations with Bret Butler revealed had been used to agist a horse (Butler, B, pers. comm) (Plate 50). Areas around the fenceline exposed clays with no topsoil and gravel inclusions (Plate 51). To the north of the workshop is Emerald Station Reserve, a levelled and grassed reserve

SURVEY UNIT	Survey Unit 3 – Emerald Station
	with playground equipment. Plate 52 shows logs within the reserve surrounded by more exposed clay soils with gravel inclusions. Ballast or bluestone gravel is spread across the majority of the survey unit, particularly within the rail corridor and the northern aspect. Services are present through the survey unit, particularly along the rail corridor and within the station precinct area, including the toilet buildings.
Slope:	The landscape slopes from north-east to south-west with substantial areas of cutting and levelling following the alignment of the railway altering the natural slope of the land
Landform:	Gently undulating land which has been heavily modified by cut and fill.
Soil:	Clay with gravel inclusions.
Proximity to fresh water:	Wattle Creek, the closest waterway, is located 1 kilometre to the north-east of Survey Unit 3.
Vegetation:	Eucalypt varieties, planted agricultural grasses, introduced trees and weeds.
Mature trees:	Eucalypts, including immature examples. None with cultural scars.
Caves or rock shelters:	None.
Previous and current land use:	Railway corridor.
Prior ground modifications:	Clearance activities; scraping and laying of fill, cutting, laying of ballast and railway track, installation of assets, levelling, construction of building and landscaping.
Ground surface visibility:	Very poor (3%) due to buildings, rail, ballast and grass cover. Areas of ground exposure were apparent around fence lines (Plate 53).
Auger Probe	No manual augers were undertaken in Survey Unit 3.
ASSESSMENT OF ARCHAEOLOGICAL POTENTIAL	
No areas of archaeological potential were identified in this survey unit. All mature trees in proximity to the Activity Area were inspected for cultural scars. No cultural scars were detected on trees in this survey unit.	
ABORIGINAL PLACES FOUND	
VAHR Name/ No.:	N/A

Plate 42 Emerald Station building and platform, facing south-east (L. Tepper 4/9/17)

Plate 43 Emerald Station workshops, facing south (L. Tepper 4/9/17)

Plate 44 Gravel driveway leading from Puffing Billy Place to the workshops, facing south (L. Tepper 4/9/17)

Plate 45 Turntable in the north of the survey unit, facing north-west (L. Tepper 4/9/17)

Plate 46 Toilet block and sewerage system, facing north-west (L. Tepper 4/9/17)

Plate 47 Various assets located in the eastern aspect of the survey unit, facing north-east (L. Tepper 4/9/17)

Plate 48 Cut along the western aspect of the railway line, facing north (L. Tepper 4/9/17)

Plate 49 Warehouse and stockpiling area in the south-east of the survey unit, facing south-west (L. Tepper 4/9/17)

Plate 50 Stockpen in the south-east of the survey unit, facing west (L. Tepper 4/9/17)

Plate 51 Area of exposed ground around the fenceline of the stockpens, facing west (L. Tepper 4/9/17)

Plate 52 Logs and areas of exposed ground in the south-east of the survey unit in Emerald Station Reserve, facing south (L. Tepper 4/9/17)

Plate 53 Ground surface visibilty in Survey Unit 3 (L. Tepper 4/9/17)

6.3.4 Survey Unit 4- Nobelius Packing Shed

SURVEY UNIT	**Survey Unit 4 – Nobelius Packing Shed**
Map 4.4	**Length of survey unit:** 0.2827 ha
Survey date:	4 September 2017
Photographs:	54-62
SURVEY TEAM	
Biosis Heritage Advisor	Leah Tepper
Traditional Owner	Shane Nicholson (WLaCCHCAC)
METHODOLOGY	
Survey method:	Pedestrian traverse
Conditions/ constraints:	Extremely poor surface visibility was encountered across Survey Unit 4.
ATTRIBUTES	
Description of survey unit:	Survey Unit 4 comprises of a large packing shed and siding. The packing shed is a large two storey construct with a verandah which opens on to a concrete platform (Plate 54 and Plate 55). A ramp and railing has been constructed on the western side of the packing shed platform and leads to a road (Plate 56 and Plate 57). A wide gravel road crosses the survey unit from east to west, and a gravel carpark area is located in the eastern aspect. The direction of the railway is parallel to the road. Two landscaped gardens are present on the eastern and western sides of the packing shed (Plate 58 and Plate 59). These have been built up using mulch and have been plated with various exotic tree and plant species (Plate 60). The gardens are contained by bluestone and timber retaining walls. Assets are present in the western garden bed. The proposed extension of the packing shed is located within this garden bed (Plate 61). As with the other survey units, ballast or bluestone gravel is spread across the majority of the survey unit, particularly within the rail corridor and the road. The packing shed and nursery are listed on the Victorian Heritage Register. Services are present through Survey Unit 4, particularly along the rail corridor and within the western garden bed.
Slope:	The landscape slopes from south-west to north-east with substantial areas of cutting and levelling following the alignment of the railway and the historical use of the nursery altering the natural slope of the land.

SURVEY UNIT	Survey Unit 4 – Nobelius Packing Shed
Landform:	Steep slopes trending to the north which has been heavily modified by cut and fill activities.
Soil:	Unknown
Proximity to fresh water:	Wattle Creek, the closest waterway, is located 430 metres to the east of Survey Unit 4.
Vegetation:	Eucalypt varieties, planted agricultural grasses, introduced trees, exotic plants, native plants and weeds.
Mature trees:	Eucalypts, including immature examples. None with cultural scars.
Caves or rock shelters:	None.
Previous and current land use:	Railway corridor and nursery.
Prior ground modifications:	Clearance activities; scraping and laying of fill, cutting, laying of ballast and railway track, installation of assets, levelling, construction of building and significant landscaping.
Ground surface visibility:	Non-existent (0%) due to buildings, rail, ballast, mulch and grass cover (Plate 62). Areas of ground exposure were apparent within garden beds.
Auger Probe	No manual augers were undertaken in Survey Unit 4.
ASSESSMENT OF ARCHAEOLOGICAL POTENTIAL	
No areas of archaeological potential were identified in this survey unit. All mature trees in proximity to the Activity Area were inspected for cultural scars. No cultural scars were detected on trees in this survey unit.	
ABORIGINAL PLACES FOUND	
VAHR Name/ No.:	N/A

Plate 54 Western view of the Nobelius Packing Shed, facing east (L. Tepper 4/9/17)

Plate 55 Verandah, siding and railway track facing west (L. Tepper 4/9/17)

Plate 56 Siding and railway track facing east, showing stepped cutting (L. Tepper 4/9/17)

Plate 57 Ramp and siding to the west of the packing shed (L. Tepper 4/9/17)

Plate 58 Landscaped garden bed on the eastern side of the packing shed (L. Tepper 4/9/17)

Plate 59 Gravel road and landscaped nursery to the north of the survey unit, facing west (L. Tepper 4/9/17)

Plate 60 Garden bed on the eastern side of the packing shed (L. Tepper 4/9/17)

Plate 61 Services within garden bed, facing south (L. Tepper 4/9/17)

Plate 62 Typical ground surface visibility in the survey area (L. Tepper 4/9/17)

6.3.5 Survey Unit 5 – Lakeside Station

SURVEY UNIT	**Survey Unit 5 – Lakeside Station**
Map 4.5	**Length of survey unit:** 5.341 ha
Survey date:	4 September 2017
Photographs:	63-70
SURVEY TEAM	
Biosis Heritage Advisor	Leah Tepper
Traditional Owner	Shane Nicholson (WLaCCHCAC)
METHODOLOGY	
Survey method:	Pedestrian traverse
Conditions/ constraints:	Very poor surface visibility was encountered across Survey Unit 5 due to the amount of sealed roads, car parks and paths.
ATTRIBUTES	
Description of survey unit:	The railway track within Survey Unit 5 is a dog leg shape which runs through the survey unit from north-east to south. The Lakeside Station platform comprises a long, concrete island platform with several station buildings on the platforms (Plate 63). A series of sealed roads which split from Emerald Lake Road winds through the majority of the survey unit, with larger sealed parking bays in the central and eastern aspects of the survey unit. Sealed paths lead from the carpark and road to the station buildings (Plate 64 and Plate 65). Landscaped gardens planted with a mix of native and exotic vegetation are located between the winding road and parking bays (Plate 66). Above ground power poles are located within the garden beds, as are stormwater drains and other services (Plate 67 and Plate 68). Small bluestone retaining walls also line the garden beds, and fresh mulch had been placed in some of the beds. The survey unit has been subject to cutting, levelling and grading, significantly around the railway alignment, but also along the roads, parking areas and paths. The prosed building location is within a road, pathway and car parking area with some garden beds, and the proposed road locations follow landscaped garden beds. Exposed ground is present within garden beds, revealing no topsoil and clay soils (Plate 69). Sealed roads make up the majority of the surfaces within Survey Unit 5. Ballast is spread across some of the survey unit, particularly within the rail corridor.

SURVEY UNIT	Survey Unit 5 – Lakeside Station
Slope:	The landscape slopes from south-east to north-west towards Wattle Creek, with substantial areas of cutting and levelling following the alignment of the railway altering the natural slope of the land.
Landform:	Steep slopes trending to the north which has been heavily modified by cut and fill activities, particularly around the roads and railway station.
Soil:	Red clay
Proximity to fresh water:	Wattle Creek, the closest waterway, is located 51 metres to the north of Survey Unit 5. The area of CHS associated with Wattle Creek encompasses the northern half of the survey unit.
Vegetation:	Eucalypt varieties, planted agricultural grasses, introduced trees, exotic plants, native plants and weeds.
Mature trees:	Eucalypts, including immature examples. None with cultural scars.
Caves or rock shelters:	None.
Previous and current land use:	Railway corridor and parklands.
Prior ground modifications:	Clearance activities; scraping and laying of fill, cutting, laying of ballast and railway track, installation of assets, levelling, construction of building and significant landscaping.
Ground surface visibility:	Very poor (2%) due to sealed roads, paths and car parks, buildings, rail, ballast, mulch and vegetation. Areas of ground exposure were apparent within garden beds and next to pathways (Plate 70).
Auger Probe	No manual augers were undertaken in this survey unit.
ASSESSMENT OF ARCHAEOLOGICAL POTENTIAL	
No areas of archaeological potential were identified in this survey unit. All mature trees in proximity to the Activity Area were inspected for cultural scars. No cultural scars were detected on trees in this survey unit.	
ABORIGINAL PLACES FOUND	
VAHR Name/ No.:	N/A

Plate 63 Lakeside Station island platform, facing north (L. Tepper 4/9/17)

Plate 64 Winding sealed road and car parking, facing south-east (L. Tepper 4/9/17)

Plate 65 Road and path in the survey unit, facing south-west (L. Tepper 4/9/17)

Plate 66 Garden bed within the survey unit, facing east (L. Tepper 4/9/17)

Plate 67 Services located within the survey unit, facing north (L. Tepper 4/9/17)

Plate 68 Drain located within survey unit (L. Tepper 4/9/17)

Plate 69 Exposed clays adjacent to path (L. Tepper 4/9/17)

Plate 70 Typical ground surface visibility within the survey unit (L. Tepper 4/9/17)

6.3.6 Survey Unit 6 – Cockatoo Station

SURVEY UNIT	Survey Unit 6 – Cockatoo Station
Map 4.6	**Length of survey unit:** 3.563 ha
Survey date:	4 September 2017
Photographs:	71-78
SURVEY TEAM	
Biosis Heritage Advisor	Leah Tepper

SURVEY UNIT	Survey Unit 6 – Cockatoo Station
Traditional Owner	Shane Nicholson (WLaCCHCAC)
METHODOLOGY	
Survey method:	Pedestrian traverse
Conditions/ constraints:	Very poor surface visibility was encountered across Survey Unit 6 due to the amount of ballast and grass coverage.
ATTRIBUTES	
Description of survey unit:	Survey Unit 6 consists of a small station building on a small raised platform, which is of a lower profile than other stations (Plate 71). The Mcbride Street and Pakenham Road intersection crosses the survey unit in its southern extent. The railway track bisects the survey unit from north to south and a second track is adjacent to it. An informal gravel road runs parallel on the eastern side of the tracks on which piles of bluestone gravel, timber and other rubbish is located (Plate 72). Water was seen to be pooling within the bluestone gravel driveway, suggesting clay soils were underneath (Plate 73). Grass is growing between the ballast on the siding track, showing the track had not been used in some time (Plate 74). The ballast has deflated considerably around this track. There is a considerable amount of grass coverage on the platform as well as ballast (Plate 75). A lever to control train movement is south of the station building is a new addition and has been contained within bluestone gravel (Plate 76). The proposed building development are is located on the northern extent of the platform in an area of grass and ballast (Plate 77). Exposed ground is present in patches on the station platform, revealing clays with substantial ballast and gravel inclusions (Plate 78). Ballast and bluestone is spread across some of the survey unit, particularly within the rail corridor and on its eastern aspect.
Slope:	The landscape slopes from east to west towards Cockatoo Creek, with substantial areas of cutting and levelling following the alignment of the railway altering the natural slope of the land.
Landform:	Steep slopes trending to the west which have been modified by cut and fill activities, particularly around the roads and railway station. A substantial cut is located along the western extent of the survey unit.
Soil:	Clays with bluestone and ballast inclusions.
Proximity to fresh water:	Cockatoo Creek, the closest waterway, is located 85 metres to the west of Survey Unit 6. The area of CHS associated with Cockatoo Creek encompasses the majority of the survey unit, bar the easternmost extent.

SURVEY UNIT	Survey Unit 6 – Cockatoo Station
Vegetation:	Eucalypt varieties, planted agricultural grasses, introduced trees, exotic plants, native plants and weeds.
Mature trees:	Eucalypts, including immature examples. None with cultural scars.
Caves or rock shelters:	None.
Previous and current land use:	Railway corridor.
Prior ground modifications:	Clearance activities; scraping and laying of fill, cutting, laying of ballast and railway track, installation of assets, levelling, construction of building and significant landscaping.
Ground surface visibility:	Very poor (2%) due to gravel, buildings, rail, ballast and grasses. Areas of ground exposure were apparent on the station platform, particularly in the northern half in random sections (Plate 78).
Auger Probe	No manual augers were undertaken in this survey unit.
ASSESSMENT OF ARCHAEOLOGICAL POTENTIAL	
No areas of archaeological potential were identified in this survey unit. All mature trees in proximity to the Activity Area were inspected for cultural scars. No cultural scars were detected on trees in this survey unit.	
ABORIGINAL PLACES FOUND	
VAHR Name/ No.:	N/A

Plate 71 View of Cockatoo Station facing south (L. Tepper 4/9/17)

Plate 72 Stockpiles of bluestone gravel and timber on the informal road to the east of the station building, facing north (L. Tepper 4/9/17)

Plate 73 Areas of pooled water on the informal road (L. Tepper 4/9/17)

Plate 74 Grasses growing between ballast on the siding track (L. Tepper 4/9/17)

Plate 75 Station platform facing north, showing grass coverage (L. Tepper 4/9/17)

Plate 76 Lever on the station platfrom, facing south-west (L. Tepper 4/9/17)

Plate 77 Northernmost end of the station platform, facing north (L. Tepper 4/9/17)

Plate 78 Ground surface visibilty in the survey unit (L. Tepper 4/9/17)

6.3.7 Survey Unit 7 – Gembrook Engineering Workshops

SURVEY UNIT	Survey Unit 7 – Gembrook Engineering Workshop
Map 4.7	**Length of survey unit:** 2.609 ha
Survey date:	4 September 2017
Photographs:	79-86
SURVEY TEAM	
Biosis Heritage Advisor	Leah Tepper

SURVEY UNIT	Survey Unit 7 – Gembrook Engineering Workshop
Traditional Owner	Shane Nicholson (WLaCCHCAC)
METHODOLOGY	
Survey method:	Pedestrian traverse
Conditions/ constraints:	Very poor surface visibility was encountered across Survey Unit 7 due to the amount of grass and vegetation coverage as well as equipment and shipping containers.
ATTRIBUTES	
Description of survey unit:	Two access driveways to Survey Unit 7 connect the proposed workshop area with Belgrave-Gembrook Road which bounds the area to the north (Plate 79). Multiple gravel driveways are located within the property and have been cut into the landscape as seen in Plate 80. The survey unit is currently being used for soil supplies and a storage area of large shipping containers, buildings, earthmoving equipment and makeshift fencing (Plate 81 and Plate 82). Multiple services are located within the survey unit. A large telecommunications tower and associated equipment is positioned in the south-eastern extent in a fenced off area (Plate 83). Large piles of fill are located within Survey Unit 7. As they are fully vegetated, it is clear they have been there for a significant period of time. Plate 84 shows the height of a pile of grassed fill. The majority of the survey unit is grasses by agricultural grasses and long weeds. The property has been extensively cleared, more so than the previously surveyed units. No eucalypt species are present, the only native species being some wattle trees along the rail corridor. Gravels are spread across some of the survey unit, particularly within the central aspect.
Slope:	The landscape slopes from north to south towards Cockatoo Creek. However considerable cuttings and landscaping has caused the survey unit to be quite undulating before sloping towards the north where the railway track is located.
Landform:	Slopes trending to the south which have been highly modified by cut and fill activities within the entirety of the survey unit.
Soil:	Clay fill with gravel, glass, brick, charcoal and ash inclusions.
Proximity to fresh water:	Survey Unit 7 is located approximately 674 metres south of Shepherd Creek West Branch and 787 metres north of Cockatoo Creek.
Vegetation:	Pine trees, wattle trees, introduced shrubs, planted agricultural grasses and weeds.

SURVEY UNIT	Survey Unit 7 – Gembrook Engineering Workshop
Mature trees:	No eucalypt species within the survey unit.
Caves or rock shelters:	None.
Previous and current land use:	**Previous:** Saw mills and railway corridor **Current:** Landscaping/soil supplier and railway corridor.
Prior ground modifications:	Clearance activities; scraping and laying of fill, cutting, laying of ballast and railway track, installation of assets, levelling and construction of buildings.
Ground surface visibility:	Very poor (2%) due to vegetation, gravel, buildings, equipment, rail and ballast (Plate 86). Areas of ground exposure were apparent within the southern aspect of the survey unit.
Auger Probe	One manual auger was undertaken in Survey Unit 7. The auger was excavated in the proposed building area in the southern extent of the survey unit in an area which appeared to be least disturbed (Plate 85 and Plate 86). A large pile of fill was located to the north of the auger location. The auger revealed highly disturbed contents: clay fill with gravel, charcoal, brick and ash inclusions, which continued to a depth of 700 millimetres when natural clay was reached.
ASSESSMENT OF ARCHAEOLOGICAL POTENTIAL	
No areas of archaeological potential were identified in this survey unit. All mature trees in proximity to the Activity Area were inspected for cultural scars. No cultural scars were detected on trees in this survey unit.	
ABORIGINAL PLACES FOUND	
VAHR Name/ No.:	N/A

Plate 79 Gembrook Workshop site facing south-east showing sheds and equipment (L. Tepper 4/9/17)

Plate 80 Gravel driveway, equipment and storage containers facing north (L. Tepper 4/9/17)

Plate 81 Concrete wall and stockpiles of timber, facing south-east (L. Tepper 4/9/17)

Plate 82 **Corrugated metal fence and gravel driveway, facing south (L. Tepper 4/9/17)**

Plate 83 **Telecommunications tower within the south-west extent of the survey unit, facing north-west (L. Tepper 4/917)**

Plate 84 **Grassed area and pile of fill adjacent to the train track in the southern aspect of the survey unit, facing north (L. Tepper 4/9/17)**

Plate 85 Area manual auger was excavated within, facing east (L. Tepper 4/9/17)

Plate 86 Typical ground surface visibilty within Survey Unit 7 in auger location (L. Tepper 4/9/17)

6.3.8 Survey Unit 8 – Gembrook Station

SURVEY UNIT	Survey Unit 8 – Gembrook Station
Map 4.8	**Length of survey unit:** 5.320 ha
Survey date:	4 September 2017
Photographs:	87-97
SURVEY TEAM	

SURVEY UNIT	Survey Unit 8 – Gembrook Station
Biosis Heritage Advisor	Leah Tepper
Traditional Owner	Shane Nicholson (WLaCCHCAC)
METHODOLOGY	
Survey method:	Pedestrian traverse
Conditions/ constraints:	Very poor surface visibility was encountered across Survey Unit 8 due to the amount of gravel and ballast coverage.
ATTRIBUTES	
Description of survey unit:	Within Survey Unit 8, two railway tracks run north-west to south and terminate at the southern end of the platform (Plate 87). Survey Unit 8 comprises of a long raised platform, of which the north-western portion dates to the original use of Gembrook Station, and newer station buildings to the south. A small waiting shed is located in the north-east of the platform on gravels, with multiple assets in close proximity to it (Plate 88 and Plate 89). Short patches of grasses surround the wait shed. Gembrook Station has been raised and levelled, evidenced by the steep embankments to the north-east of the platform (Plate 90). A high amount of planted introduced trees line the sloping embankment. Stockpiling of material is present in this area (Plate 91). A large, levelled area covered in gravel is located adjacent to the station platform on the opposite side of the railway tracks. This area is used as a temporary event location during activities such as Day Out with Thomas when a marquee is erected. This gravelled area can be seen in Plate 92. A large island platform is located in the south of Survey Unit 8, where modern station buildings stand and the railway track splits into two (Plate 93). An underground inspection pit and water tank stand to the west of the station building. The inspection pit it surrounded by ballast and gravels and small patches of grass are located on the platform (Plate 94). Further west of the station building is a large, flat, gravelled car parking area which is surrounded by timber fencing (Plate 95). Power poles are also located within the car parking area. Gravels are spread across the majority of Survey Unit 8, particularly within the central aspect and platforms.
Slope:	The landform is generally flat, but slopes gently to the north towards Shepherd Creek West Branch.
Landform:	Flat to gentle slopes trending to the north which have been modified by cut and fill activities within the entirety of the survey unit.
Soil:	Red clays with no topsoil.

SURVEY UNIT	Survey Unit 8 – Gembrook Station
Proximity to fresh water:	Survey Unit 8 is located approximately 330 metres south of Shepherd Creek West Branch.
Vegetation:	Pine trees, eucalypt species, wattle trees, introduced shrubs, and planted agricultural grasses and weeds.
Mature trees:	Eucalypts, including immature examples. None with cultural scars.
Caves or rock shelters:	None.
Previous and current land use:	Railway corridor and JAC Russell Park
Prior ground modifications:	Clearance activities; scraping and laying of fill, cutting, laying of ballast and railway track, installation of assets, levelling and construction of buildings and car parks.
Ground surface visibility:	Very poor (2%) due to vegetation, leaf litter, gravel, buildings, carpark, rail and ballast (Plate 96). Areas of ground exposure were apparent within the eastern aspect of the survey unit.
Auger Probe	One manual auger was undertaken in Survey Unit 8. The auger was excavated in the proposed building area in the central aspect of the survey unit in an area which was able to be accessed closest to the proposed building location, and where the level of disturbance was unclear (Plate 97). A large pile of fill was located to the north of the auger location. The auger revealed red clay fill with gravels and glass inclusions, which continued to a depth of 650 millimetres when natural clay was reached.
ASSESSMENT OF ARCHAEOLOGICAL POTENTIAL	
No areas of archaeological potential were identified in this survey unit. All mature trees in proximity to the Activity Area were inspected for cultural scars. No cultural scars were detected on trees in this survey unit.	
ABORIGINAL PLACES FOUND	
VAHR Name/ No.:	N/A

Plate 87 Railway tracks approaching Gembrook Station, facing south-east (L. Tepper 4/9/17)

Plate 88 Original Gembrook Station platform and reconstrcuted wait shed with assets, facing north-west (L. Tepper 4/9/17)

Plate 89 Waiting shed and subsurface assets within the north-western aspect of the survey unit (L. Tepper 4/9/17)

Plate 90 Major cuttings and assets facing south-east (L. Tepper 4/9/17)

Plate 91 Stockpile of gravel in the survey unit (L. Tepper 4/9/17)

Plate 92 Railway tracks and temporary event space in the rear, facing south-west (L. Tepper 4/9/17)

Plate 93 Railway tracks, platform and station buildings in the southern extent of the survey unit facing south (L. Tepper 4/9/17)

Plate 94 Underground inspection pit and station buildings in the south of the survey unit, facing east (L. Tepper 4/9/17)

Plate 95 Gravel carparking area defined from rail corridor by wooden fences, facing north (L. Tepper 4/9/17)

Plate 96 Typical ground surface visibility within Survey Unit 8 (L. Tepper 4/9/17)

Plate 97 Manual auger area in the central area of Survey Unit 8, facing south-east (L. Tepper 4/9/17)

6.3.9 Landforms

The natural gradient of the land across the Activity Area varies from steep slopes to flat or gently undulating landscapes. However significant cutting and embankments have altered the natural appearance of the Activity Area, creating flat surfaces for the train and buildings to be built into. Some areas with roads were also graded.

6.3.10 Previous ground disturbance

A great amount of disturbance has occurred to the Activity Area due to the construction of the Puffing Billy Railway. All of the eight survey units were highly disturbed with the entire alignment of the rail corridor substantially altered by cut and fill activities, as well as the construction of buildings, installation of assets, road construction including the levelling and grading of most of the roads, landscaping including the construction of garden beds and paths, the rehabilitation of Clematis Creek and the construction of culverts. Ballast and gravels were present throughout the Activity Area in areas outside the rail alignment, and large spoil heaps were apparent in Survey Unit 7.

Throughout the entirety of the Activity Area the natural vegetation has been stripped as a result of railway use and earlier pastoral clearing.

Manual augers conducted in Survey Units 7 and 8 revealed clay fill with rubbish overlaying the natural clay base. It is clear the topsoil and other soils have been scraped away during one of the many landscape modification processes.

6.3.11 Ground surface visibility

A number of factors hinder the identification of surface Aboriginal cultural heritage material. Ground surface visibility (GSV) can be defined as how much of the ground surface is visible and what other factors (such as vegetation, gravels or leaf litter) may limit the detection of Aboriginal cultural heritage material (Burke & Smith, 2004). The higher the level of GSV, the more easily Aboriginal cultural heritage material can be identified; therefore an Activity Area with a good GSV will enable a better representation of Aboriginal cultural heritage material than an Activity Area where the ground surface is obscured (Ellender & Weaver, 1994).

Overall, GSV in the Activity Area was extremely poor across the entirety of the Activity Area, mainly due to the rail infrastructure and associated buildings. Vegetation and sealed roads also hindered visibility particularly in survey units 5 and 7. Areas with exposed ground surface were few and far between, however soils could be seen in eroded areas, garden beds and pathways.

6.3.12 Mature indigenous tree species

No mature, suitable species of indigenous tree that might show cultural modification by Aboriginal people were recorded within the Activity Area.

6.3.13 Caves, rock shelters and cave entrances

No caves, rock shelters or cave entrances were located in the Activity Area.

6.3.14 Area of archaeological potential

Two areas of archaeological potential were identified within Survey Unit 1, at Belgrave Station (Plate 30 and Plate 31). These areas were defined by the lack of visible disturbance noted on the ground surface, and the results of auger probe testing which identified natural soils at the locations in comparison to the surrounding survey unit.

No specific oral history relating to the Activity Area was given by the Wurundjeri field representative, however Shane Nicholson noted that given the cold climate and location of the Activity Area, the Activity Area is unlikely to have been the location of a campsite as many more appropriate, higher landscapes were available nearby.

6.3.15 Aboriginal places

No Aboriginal places were located as part of the Standard Assessment.

6.4 Conclusions from the Standard Assessment

The Standard Assessment involved a ground survey of eight Survey Units which make up the Activity Area (Map 4). The survey assessed landforms, ground conditions, current and previous land use, disturbances, and the potential for subsurface cultural heritage. It examined all mature indigenous trees within and adjacent to the Activity Area for possible cultural scars. No caves or rock shelters occur in the Activity Area.

The landform within the Activity Area remained consistent; steep slopes to gently undulating landscapes. The landscape tended to slope towards nearby waterways in each survey unit. Clearance to accommodate the railway track has stripped most of the natural vegetation cover, leaving some remnant Eucalypts. However,

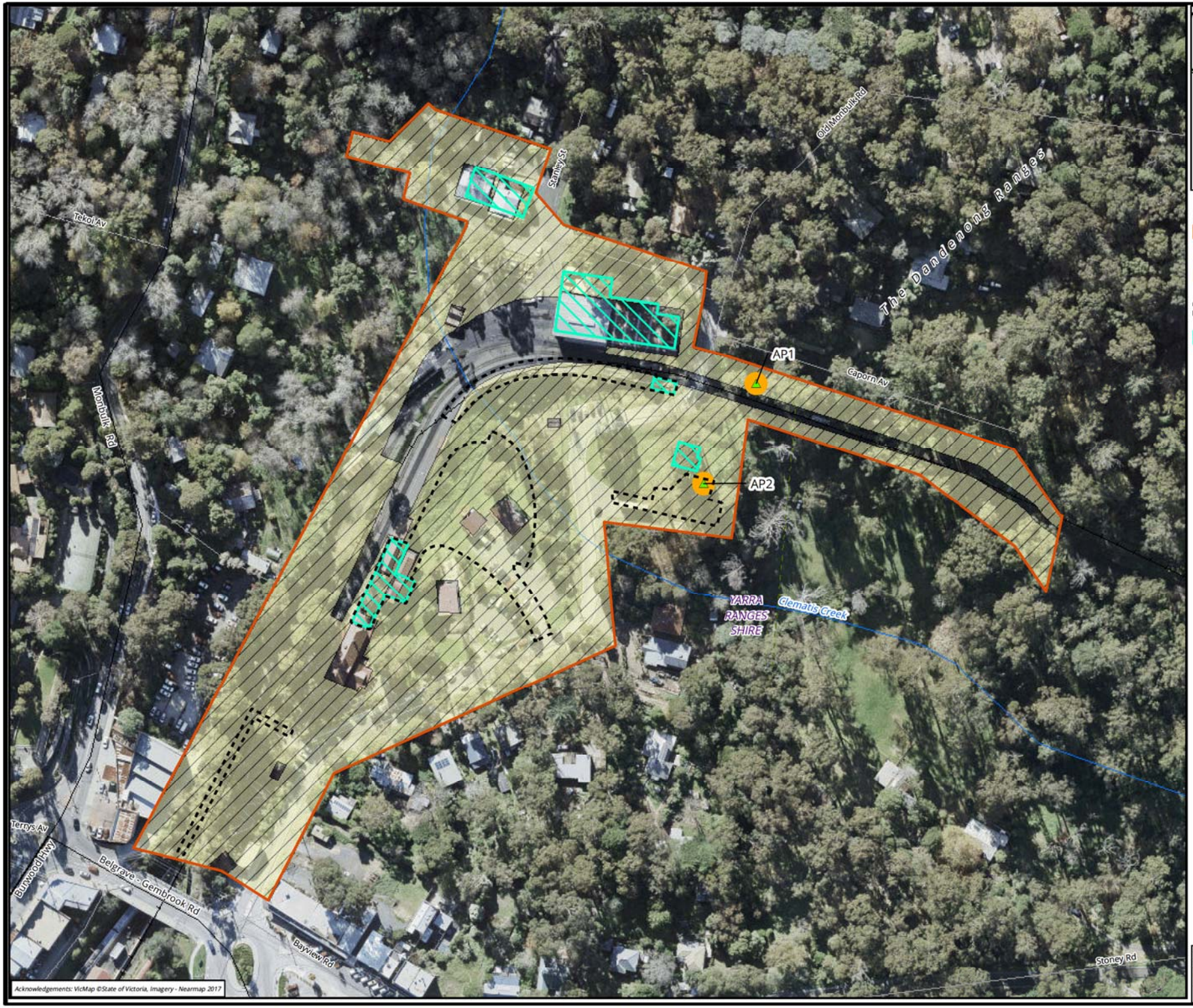
the majority of trees were not of suitable maturity for cultural scarring. Agricultural grasses and planted shrubs as well as weed species restricted coverage of the survey across all survey units. The natural undulations of the Activity Area have been altered, with earth excavated to form cuttings in some areas of the railway, while in other locations earth has been deposited to raise embankments. Spoil from within the Activity Area was found to remain in Survey Units 7 along with evidence of mechanical scraping. Assets such as telecommunication, power and drainage assets were located at various points along the Activity Area.

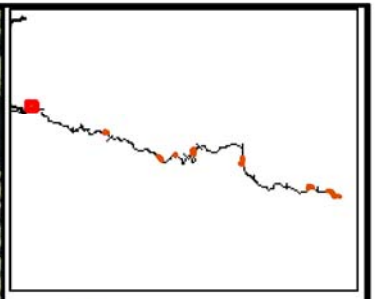
Surface visibility was consistently poor across all survey units. Grassed areas provided poor visibility, as did areas with coverings of ballast and gravel. The ballast beneath the tracks had deflated considerably, spreading crushed rock beyond the railway track shoulder and impeding visibility in Survey Unit 6.

No Aboriginal cultural heritage was located within the Activity Area.

Areas of surface exposure occurred within grasses areas or in areas adjacent to the railway. In these areas of improves ground surface exposure soils were generally reddish clay with ballast and gravel inclusions. Manual auger testing in survey units 7 and 8 contained similar soils as well as clay fill. Auger testing in Survey Unit 1 – Belgrave Station revealed silty clays overlaying clays suggesting remnant natural soils remain within the eastern extent of the survey unit in areas where no buildings are located.

The presence of undisturbed soils indicate potential for remnant in situ cultural heritage deposits. As the Activity Area contains an area where a Standard Assessment has not resolved the potential for Aboriginal archaeological material to be identified within the Activity Area, it is therefore necessary to undertake a Complex Assessment.





Legend

- Activity Area
- Areas surveyed
- Area of archaeological potential
- Proposed carparks/pathways
- Proposed buildings (not finalised)
- Auger Probe - no artefacts

Map 4.1 Results of the Standard Assessment - Belgrave Station

0 10 20 30 40 50

Metres
Scale: 1:1,500 @ A3
Coordinate System: GDA 1994 MGA Zone 55

N

biosis

Biosis Pty Ltd
Albury, Ballarat, Melbourne,
Newcastle, Sydney, Wangaratta & Wollongong

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Date: 16 November 2017,
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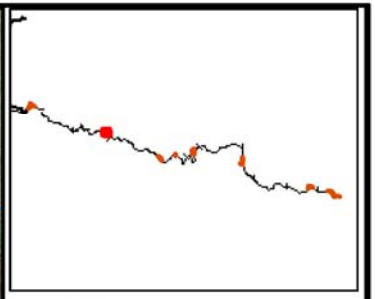

Legend

- Activity Area
- Areas surveyed
- Proposed carparks/pathways
- Proposed buildings (not finalised)

Map 4.2 Results of the Standard Assessment - Menzies Creek Station

0 10 20 30 40 50

Metres
Scale: 1:1,000 @ A3
Coordinate System: GDA 1994 MGA Zone 55

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Date: 16 November 2017,
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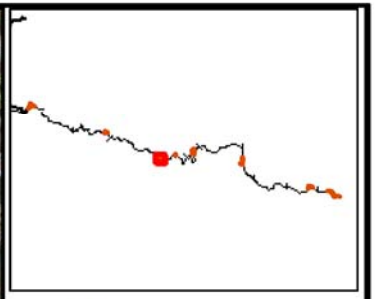

Legend

- Activity Area
- Areas surveyed
- Proposed carparks/pathways
- Proposed buildings (not finalised)

Map 4.3 Results of the Standard Assessment - Emerald Station

0 10 20 30 40 50

Metres
Scale: 1:1,500 @ A3
Coordinate System: GDA 1994 MGA Zone 55

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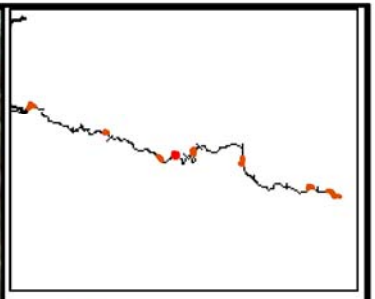

Legend

- Activity Area
- Areas surveyed
- Proposed buildings (not finalised)

Map 4.4 Results of the Standard Assessment - Nobelius Packing Shed

0 5 10 15 20 25

Metres
Scale: 1:500 @ A3
Coordinate System: GDA 1994 MGA Zone 55

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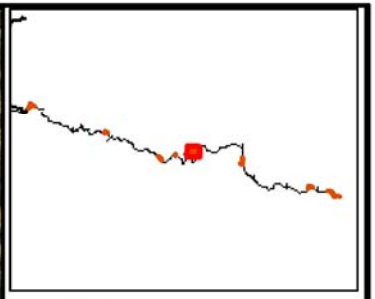

Legend

- Activity Area
- Areas surveyed
- Proposed carparks/pathways
- Proposed buildings (not finalised)

Map 4.5 Results of the Standard Assessment - Lakeside Station

0 20 40 60 80 100

Metres

Scale: 1:2,000 @ A3

Coordinate System: GDA 1994 MGA Zone 55

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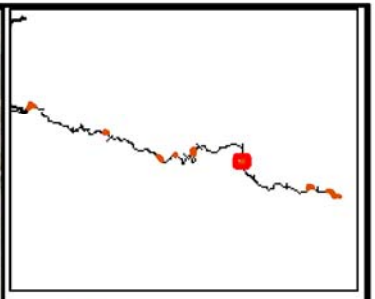

Legend

- Activity Area
- Areas surveyed
- Proposed carparks/pathways
- Proposed buildings (not finalised)

Map 4.6 Results of the Standard Assessment - Cockatoo Station

0 20 40 60 80 100

Metres
Scale: 1:2,000 @ A3
Coordinate System: GDA 1994 MGA Zone 55

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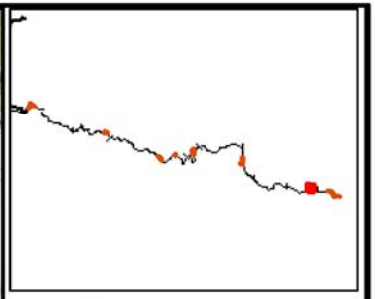

Legend

- Activity Area
- Areas surveyed
- Proposed buildings (not finalised)
- VAHR places
- Auger Probe - no artefacts

Map 4.7 Results of the Standard Assessment - Gembrook Engineering workshop

0 10 20 30 40 50

Metres
Scale: 1:1,000 @ A3
Coordinate System: GDA 1994 MGA Zone 55

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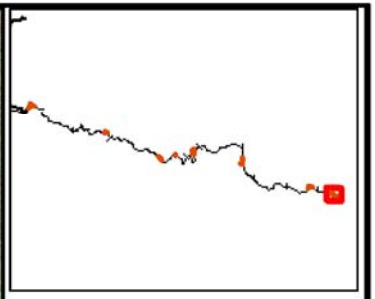

Legend

- Activity Area
- Areas surveyed
- Proposed buildings (not finalised)
- Temporary event fixtures
- Auger Probe - no artefacts

Map 4.8 Results of the Standard Assessment - Gembrook Station

0 25 50 75 100 125

Metres
Scale: 1:2,500 @ A3
Coordinate System: GDA 1994 MGA Zone 55

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7 Complex Assessment

7.1 Aims

The aims of the Complex Assessment are to:

- Investigate the areas of intact soil deposits which have archaeological potential for in situ deposits of cultural heritage material
- Identify and record any subsurface Aboriginal cultural heritage material
- Ascertain the nature and extent of any Aboriginal places.

7.2 Methodology

The Complex Assessment was completed on 18 September 2017. The subsurface testing was supervised by Leah Tepper, Biosis Pty Ltd with the involvement of Shane Nicholson (WLaCCHCAC), Eric Edwards (BLCAC) and James Hughes (BWF).

All subsurface testing was conducted in line with AV's (2016) practice note on subsurface testing.

The stratigraphy and general subsurface nature of the Activity Area was determined by controlled excavation one 1x1 metre test pit and a series of five 500x500 millimetre shovel test pits. The test pit was located so as to assess the least disturbed area identified during the Standard Assessment.

The shovel test pits were excavated at 20 metre intervals along a narrow corridor adjacent to the railway track. The width of the corridor was too restrictive to allow the excavation of a test pit without causing soils to fall onto the railway track. The shovel test pit transect permitted the finer scale sampling of variations within the areas of archaeological potential and to determine if the landscape was indeed one landform.

The test pit and shovel test pits was excavated with trowel, hand pick and shovel in arbitrary 100 millimetre spits. Each test pit was excavated until a sterile layer was reached and 100 per cent of excavated soil was screened through 5 millimetre hand sieves. A test pit log and shovel test pit log was recorded with stratigraphic details including soil colour (Munsell), pH and description (Appendix 5). Each test pit and shovel test pit was spatially recorded using a Topcon GRS-1 DGPS and later post-processed to sub one metre accuracy (Map 5 and Appendix 5). Each test pit was backfilled at the completion of excavation.

Following the completion of the subsurface testing, discussions were held with the Traditional Owners to establish cultural heritage management requirements for the Activity Area.

7.3 Results

7.3.1 Test pits

Test Pit 1 was located in the south-eastern portion of Survey Unit 1 – Belgrave Station within the west of the Activity Area. The field team discussed the most appropriate location for the test pit within the proposed car park area and it was concluded due to obvious disturbance and tree coverage, a position in a flatter area on a mid-slope was chosen (Plate 98).

Plate 98 Location of Test pit 1 with rolling stock in the background, facing north (L. Tepper 18/9/17)

To determine the stratigraphy of the Activity Area, it was decided that excavation would continue below the proposed depths of impact to reach a sterile layer.

Four stratigraphic layers were identified in Test pit 1, with excavation ceasing at 610 millimetres (Plate 99 and Plate 100). A horizon comprised of black moist, friable silty clay with dense grasses and rootlets. Frequent small charcoal nodules and plastic fragment inclusions were consistent across this profile. At 80 millimetres this merged into more moist silty clay which was brown in colour, with charcoal and plastic inclusions present in lower amounts. Below this, moist silty clay soils continued but became lighter in colour. Multiple holes and burrows were found at depths of between 210-420 millimetres, most likely from yabbies which are known to be in the vicinity. Excavation ceased at a depth of 610 millimetres when a compact brown sticky, plastic clay was reached. This became too difficult to excavate, and it was determined that the clay was sterile.

No Aboriginal cultural heritage was identified in Test pit 1.

Plate 99 Test pit 1, facing north (L. Tepper 18/9/17)

Plate 100 Stratigraphy of Test pit 1, north wall (L. Tepper 18/9/17)

7.3.2 Shovel test pits

A transect of shovel test pits were positioned along the proposed siding location (Plate 101). The shovel test pits were ideally positioned with 20 metre spacing's, however due to dense vegetation this was very restrictive. Instead shovel test pits were placed opportunistically, with 15 metres between shovel test pits 1 and 2 and 35 metres between shovel test pit 2 and 3. Further shovel test pits could not be excavated due to the width of the corridor narrowing and vegetation density increasing (Plate 102). Small stockpiles of ballast were avoided.

Plate 101 Location of the shovel test pit transect, facing east (L. Tepper 18/9/17)

Plate 102 Shovel test pit 3 location, facing west showing dense vegetation (L. Tepper 18/9/17)

A total of three 500x500 millimetre shovel test pits were excavated, all with varying soil profiles.

Shovel test pit 1 was the westernmost testing location, and was located in the widest available area. The first horizon consisted of friable, moist silty clay with substantial amounts leaf litter and frequent rootlets and ballast inclusions. Underneath at 50 millimetres, compact silty clay with frequent rootlets and small charcoal inclusions were present. At 300 millimetres, compact brown sticky, plastic clay was reached. Excavation ceased at this depth as it was deemed this clay was the basal layer.

Shovel test pit 2 was excavated approximately 15 metres east of shovel test pit 1. The entirety of shovel test pit 2 comprised of ballast and silty fill. A crowbar was used, however no natural soils were located and excavation ceased at 350 millimetres. It is highly likely the fill was introduced during the construction and maintenance of the rail corridor.

Shovel test pit 3 was excavated 35 metres east of shovel test pit 2. A closer location to shovel test pit 2 could not be found, as dense vegetation and tree ferns caused access problems. As with shovel test pit 1, compact silty clay with substantial amounts leaf litter and frequent rootlets and ballast inclusions overlay compact sticky clay at 100 millimetres. A large basalt rock was located in the centre of the shovel test pit at 50 millimetres. Excavation ceased at the sterile clay horizon at 120 millimetres.

A lack of topsoil was identified in shovel test pits 2 and 3, showing the modification which has occurred

Plate 103 Shovel test pit 3 showing basalt rock, facing north (L. Tepper 18/9/17)

7.3.3 Aboriginal places

No new Aboriginal places were recorded during the course of the assessment.

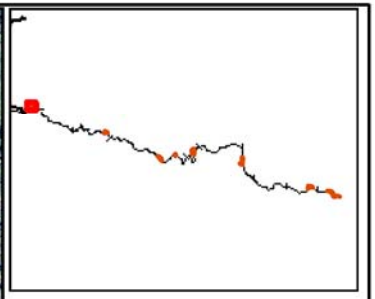
7.4 Conclusions from the Complex Assessment

To substantiate the results of the Desktop and Standard Assessments, the Complex Assessment subsurface testing program was designed to test the subsurface integrity at the western end of the Activity Area at Belgrave Station within the impact area where two areas of archaeological potential were identified.

The area of less disturbance identified during the Standard Assessment was excavated using a programme of test pits and shovel test pits. One 1x1 metre test pit and three 50x50 centimetres shovel test pits were excavated across the eastern aspect of Survey Unit 1, with silts overlaying clays recorded to depths of between 120 to 520 millimetres. Disturbances were noted during subsurface testing, more substantially in the shovel test pit transects of which one comprised entirely of fill. The disturbances found across the Activity Area are the result of the construction, landscape modification and continued maintenance of the Puffing Billy Railway. The test pit contained the most intact soils, however plastic rubbish was recorded at depths of up to 210 millimetres. Very little topsoil was located in both testing locations, also indicating the level of disturbance. As demonstrated by previous assessments, it is likely that works associated with the Puffing Billy Railway, as well as earlier historic clearing and logging of the land, has greatly modified the landscape, and therefore minimised the likelihood of finding Aboriginal cultural heritage material within the Activity Area.

The Complex Assessment therefore confirmed the extent of the visible surface disturbances and alterations identified in the Desktop and Standard Assessments, and the persistence of these activities within the subsurface profile. This was evidenced by various rubbish materials such as ballast and plastics occurring at depths between 0-350 millimetres recorded in the test pit and shovel test pits.

No Aboriginal cultural heritage material was identified during the Complex Assessment. The likelihood of further cultural heritage material in the Activity Area is very low due to the disturbance that has occurred across a majority of the Activity Area. It is unlikely that artefacts remain in intact contexts across the Activity Area.



Legend

Activity Area

Subsurface testing - no artefacts

Shovel Test Pit

Test Pit

Map 5 Results of the Complex Assessment - Belgrave Station

0 10 20 30 40 50

Metres

Scale: 1:1,500 @ A3

Coordinate System: GDA 1994 MGA Zone 55

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Matter: 24777,
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8 Consideration of Section 61 matters – Impact Assessment

In accordance with Section 61 of *the Aboriginal Heritage Act 2006*, a CHMP must consider contingency plans in relation to disputes, delays and obstacles that may affect the conduct of the activity and relating to the custody and management of Aboriginal cultural heritage during the course of the activity. The contingencies are presented in full in Section 10.

A CHMP must also consider whether the activity will be conducted in a way that avoids harm to Aboriginal cultural heritage. As no Aboriginal cultural heritage was located during this assessment, no specific measures are required for the management of Aboriginal cultural heritage places.

As a highly visible public tourist site, Puffing Billy Railways has indicated that they wish to take a conservative approach to demonstrating project compliance and managing environmental risk. While no Aboriginal cultural material has been identified in the Activity Area and potential for Aboriginal heritage is low, the Sponsor has requested that the CHMP include appropriate conditions to manage risk and demonstrate compliance with the CHMP conditions.

Of the activities planned, deeper excavation works for serving/inspection pits at the Gembrook Station precinct for the construction of the Gembrook locomotive shed is the only activity that is likely to encounter unexpected Aboriginal material (Map 4.8). While the risk of harm to Aboriginal heritage has been assessed by the CHMP as very low, the Sponsor has requested that these particular activities be managed to further reduce risk.

In this instance, cultural heritage inductions for key contractors undertaking ground penetrating works and compliance inspections are recommended. Inductions will ensure that contractors are aware of the CHMP contingency plans and actions required if unexpected cultural material is encountered, while compliance inspections will allow the Sponsor to demonstrate compliance with CHMP conditions.

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

As there was no Aboriginal cultural heritage material located, there are no cumulative impacts.

PART 2 – CULTURAL HERITAGE MANAGEMENT CONDITIONS

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

9 Specific cultural heritage management requirements for the RAP area

This section sets out a series of management measures developed in accordance with the requirements of Section 61 of the Aboriginal Heritage Act 2006. These recommendations have been developed after consultation with the RAP.

9.1 Condition 1 – Copy of the Cultural Heritage Management Plan

A copy of this approved Cultural Heritage Management Plan (management plan) must be held onsite at all times.

9.2 Condition 2 – Cultural heritage induction

A cultural heritage induction must be conducted with all contractors involved in ground disturbing works by representatives of the Wurundjeri Land Council immediately **prior to the commencement of ground disturbance activities at the Gembrook locomotive shed site** (Map 4.8). A Heritage Advisor/archaeologist must be present. The induction must include:

- a brief history of the Aboriginal occupation of the Activity Area and the broader region;
- a summary of the archaeological investigations conducted within the Activity Area;
- specific details of all Aboriginal Places and Heritage located during the CHMP assessment;
- a summary of the conditions and contingencies contained within the CHMP; and
- the obligations of site workers/contractors and Sponsors under the Victorian *Aboriginal Heritage Act 2006*.

The main aim of the cultural heritage induction is:

- to explain the procedures outlined in the CHMP;
- show the site contractors examples of the most likely Aboriginal cultural heritage material to be located within the Activity Area; and
- explain the procedure outlined in the Contingency Plan section of the CHMP in the unlikely event that this material is uncovered by them during the course of construction works.

Copies of the CHMP conditions and contingencies are to be circulated among all attendees by the Heritage Advisor during the Cultural Heritage induction session.

A notification period of at least 2 weeks must be provided to the RAP to present a cultural heritage induction.

Inductions are to be undertaken immediately prior to the commencement of ground disturbance activities within the Gembrook locomotive shed site.

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

9.3 Condition 3 – Compliance inspection

The Sponsor in conjunction with the Wurundjeri Council have determined that to manage risk a maximum of 1 site inspection will be undertaken by Wurundjeri representatives at the **Gembrook locomotive shed site** (Map 4.8) following ground disturbance works and prior to constructions works in order to audit the works and ensure that they comply with the conditions and contingency plan contained within this CHMP. A heritage advisor/archaeologist may also attend this inspection if necessary.

A notification period of at least 2 weeks must be provided to the RAP to undertake an inspection. A worker Request Form must be filled out and sent to the Wurundjeri Council to book a Wurundjeri representative in for the inspection/s.

The cost of the inspection(s) must be met by the Sponsor, transferred title owner or the site contractor/s.

A Wurundjeri representative will conduct each inspection and fill out where relevant the compliance checklist attached as Appendix 6 to this CHMP. If Aboriginal cultural heritage material is found as a result of the inspection, the contingency for the unexpected discovery of Aboriginal cultural heritage material must be implemented (Section 10.3).

If the inspection reveals suspected non-compliance of the CHMP, then the procedure outlined in Section 10.5 will be initiated. If the inspection reveals a suspected breach of the Victorian Aboriginal Heritage Act 2006, then these actions must be reported to Aboriginal Victoria immediately and an Authorised Officer may be called out and/or a Stop Order may be issued by Aboriginal Victoria.

9.4 Condition 4 – Protocol for handling sensitive information

With the exception of publicly available information, there shall be no communication or public release of information concerning Aboriginal cultural heritage without the written permission of the Registered Aboriginal Party. No onsite photographs or information concerning Aboriginal cultural heritage is to be circulated to the media or via social media without the written permission of the Registered Aboriginal Party.

9.5 Condition 5 – Communication

The Sponsor and Site Supervisor and any relevant personnel involved with supervision of works for the Activity must read the approved cultural heritage management plan and be aware of the legal conditions and contingency plans concerning Aboriginal cultural heritage within the Activity Area. The Sponsor and Site Supervisor or other relevant personnel must be responsible for implementing any conditions contained within the cultural heritage management plan.

Where possible, the Sponsor and the Registered Aboriginal Party shall ensure that all communication and correspondence is responded to within 5 working days.

Contact details for representatives of the Sponsor and the Registered Aboriginal Party are as follows:

Sponsor

Puffing Billy Railway
Contact: Bret Butler
Address: P.O Box 451 Belgrave, VIC 3160
Phone: 0455 020 569
Email: bret.butler@pbr.org.au
ABN: 99 299 638 143

Registered Aboriginal Party

Contact Name: Alexander Parmington
Contact Position: Manager, Cultural Heritage Unit
Wurundjeri Land and Compensation Cultural Heritage Council Aboriginal Corporation
Postal address: 1st Floor Providence Building, Abbotsford Convent, 1 St Heliers Street, Abbotsford VIC 3067
Office Telephone: (03) 8673 0901
Email: alex@wurundjeri.com.au

10 Contingency plans for the RAP area

This section contains a strategy to manage cultural heritage found during the course of the Activity and manage any disputes, delays or obstacles. The contingency plans provide a structured framework in which to refer to during the Activity.

10.1 Matters referred to under Section 61 (avoiding or minimising harm)

Clause 13(1) Schedule 2 of the Regulations requires that the management plan must contain a contingency plan for the matters referred to in Section 61 of the Act. Section 61 of the Victorian *Aboriginal Heritage Act 2006* requires consideration of:

- Whether the Activity will be conducted in a way that avoids harm to Aboriginal cultural heritage
- 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
- Any specific measures required for the management of Aboriginal cultural heritage likely to be affected by the Activity, both during and after the Activity
- Any contingency plans required in relation to disputes, delays and other obstacles that may affect the conduct of the Activity
- Conditions relating to the custody and management of Aboriginal cultural heritage during the course of the Activity.

10.2 Proposed changes to conduct of the Activity

If any proposed changes to an Activity require a statutory authorisation (for example, an amendment to the planning permit application) the Sponsor must determine if a new Cultural Heritage Management Plan is required.

The Sponsor must refer any proposed changes to the Activity, including proposed changes that require works outside of the Activity Area, to a Heritage Advisor for guidance on cultural heritage conditions.

10.3 Management of cultural heritage found during the Activity

Clause 13(1) Schedule 2 of the Regulations requires that the CHMP must contain a contingency plan for the management of Aboriginal cultural heritage found during the Activity.

10.3.1 Unexpected discovery of human remains

If any suspected human remains are found during any Activity, **works must cease**. The Victorian Police and the State Coroner's Office should be notified immediately. If there are reasonable grounds to believe that the suspected human remains are Aboriginal Ancestral Remains, the **CA & E hotline** must be contacted on **1300 888 544**.

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.
- The remains must be left in place, and protected from harm or damage.

2) *Notification:*

- Once suspected human skeletal remains have been found, the 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.
- 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 (the Council) in accordance with section 17 of the Act.
- Do not contact the media.
- Do not take any photographs of human remains without the express request of the Coroner's Office, Victoria Police or AV.
- Do not circulate information or photographs via social media.

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 Act.
- An appropriate impact mitigation or salvage strategy as determined by the 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 Council.

5) *Reburial:*

- Any reburial site(s) must be fully documented by an experienced and qualified archaeologist, clearly marked and all details provided to AV.
- Appropriate management measures must be implemented to ensure the remains are not disturbed in the future.

Note: The Sponsor may consider incorporating a contingency plan to reserve an appropriate area for repatriation and reburial of any recovered Aboriginal Ancestral Remains that may be discovered during the Activity. This may assist the Victorian Aboriginal Heritage Council in determining an appropriate course of action.

10.3.2 Unexpected discovery of Aboriginal cultural heritage other than Aboriginal ancestral remains

The Sponsor must at all times avoid unlawful harm to Aboriginal cultural heritage. The following steps must be taken by the Sponsor as a minimum if suspected previously unrecorded Aboriginal cultural heritage is identified during the Activity:

1) All works must cease and temporary safety webbing or fencing erected without ground disturbance at a distance of 10 metres (buffer zone) around the location of the suspected Aboriginal cultural heritage, with signage displayed clearly identifying the location as a 'No-Go-Zone'. The suspected Aboriginal cultural heritage must not be removed. Work may continue in other parts of the Activity Area outside of the buffer zone.
2) A suitably qualified Heritage Advisor and the RAP must be notified of the discovery by the Sponsor or site supervisor within two working days.
3) A Heritage Advisor and a RAP representative must inspect the reported discovery as soon as possible to determine if it is Aboriginal cultural heritage. If the reported discovery is determined not to be Aboriginal cultural heritage by the Heritage Advisor and the RAP representative, the Activity may recommence.
4) If the reported discovery is confirmed to be Aboriginal cultural heritage by the Heritage Advisor and the RAP representative, a decision or condition as to the management of the Aboriginal cultural heritage must be made within three working days by the Heritage Advisor in consultation with the Sponsor and RAP representative.
5) S.61 matters relating to harm avoidance or minimisation measures must be explored by the Heritage Advisor in consultation with the RAP and the Sponsor. If agreement is not reached between the RAP and the Sponsor in regard to the management and protection of the Aboriginal cultural heritage, this will be classed as a dispute. The procedure for resolution of any disputes between the Sponsor and the RAP in relation to the implementation of the management plan or the conduct of the Activity must be followed.
6) If harm to the Aboriginal cultural heritage cannot be avoided, then a program of salvage must be conducted by a suitably experienced and qualified archaeologist prior to the Activity proceeding, with the following conditions:

- The methodology and extent of any salvage excavation must be agreed to by the RAP.
- The RAP must be invited to participate in the salvage program.
- Any archaeological salvage collection, excavation, or sub-surface testing must be:
  - culturally appropriate
  - using standard archaeological equipment including a differential GPS unit to record position and extent of Aboriginal cultural heritage, and archaeological excavations

- consider the significance of the Aboriginal cultural heritage in relation to the known archaeological and cultural heritage significance of existing sites in the region surrounding the Activity Area
- carried out in accordance with best archaeological practice, AV guidelines and standards.

- An archaeological report detailing the methodology, analyses, interpretation, and results of any archaeological recovery, testing and dating must be prepared and provided to the Sponsor, the RAP and AV.

7) Agreement as to the process to be followed to manage the Aboriginal cultural heritage and how to proceed with Activity must be made within a period not exceeding three working days by RAP, the Heritage Advisor and the Sponsor.
8) AV must be notified by the Heritage Advisor of the discovery of Aboriginal cultural heritage through the submission of the appropriate Victorian Aboriginal Heritage Registry forms and (if applicable) a salvage excavation report.
9) The RAP may notify the Heritage Advisor, who may then advise the Sponsor or the Site Supervisor when any suspended Activity works can proceed. In general, the Activity may recommence:

- When the appropriate management and protective measures have been taken.
- Where the relevant Aboriginal cultural heritage records have been updated and/or completed.
- Where all parties agree there is no prudent or feasible course of action or
- Upon reaching resolution of a dispute.

The Heritage Advisor, the Sponsor and the RAP must ensure that the above steps are followed and that legal obligations and conditions are complied with at all times.

10.3.3 Management of Aboriginal cultural heritage

It is the responsibility of the Heritage Advisor to ensure that all Aboriginal cultural heritage recovered from the Activity Area is fully documented, catalogued, bagged, and labelled (with details, reference to provenance and project), packaged and securely stored with copies of the catalogue and assessment documentation. The Aboriginal Victoria (AV) must be advised of this through completion and submission of relevant Victorian Aboriginal Heritage Register forms to the Heritage Registrar, AV, by the Heritage Advisor.

Once any scientific analysis of any cultural heritage has been completed, the Aboriginal objects and cultural heritage material recovered from the assessment, implementation, salvage and Activity phases must be returned to the RAP within six (6) months of the completion of the Activity. The RAP must be the custodian of this material and may choose to rebury it in the Activity Area. If the RAP chooses to rebury the Aboriginal cultural heritage it must be done in accordance with the RAP's procedure for the Reburial of Aboriginal Cultural Heritage.

10.3.4 Notification in accordance with the act of the discovery of Aboriginal cultural heritage

Clause 13(1) Schedule 2 of the Regulations requires that the management plan contains a contingency plan for the notification, in accordance with the Act, of the discovery of Aboriginal cultural heritage during the carrying out of the Activity.

In accordance with Section 24 of the Aboriginal Heritage Act 2006 'Reporting discovery of Aboriginal places and objects', if a person discovers an Aboriginal place or object; and the person knows that the place or object is an Aboriginal place or object the person must report the discovery to the Secretary as soon as practicable unless, at the time of making the discovery, the person had reasonable cause to believe that the Register contained a record of the place or object.

If a discovery of an Aboriginal place or object is made in the course of works being carried out on any land, the person in charge of the works is deemed for the purposes of Section 24 of the *Aboriginal Heritage Act 2006* to be the person who discovered the place or object.

10.4 Resolution of any disputes between the Sponsor and the RAP in relation to the implementation of the management plan or the conduct of the Activity

Clause 13(1) Schedule 2 of the Regulations requires that the management plan must contain a contingency plan for the resolution of any disputes between the Sponsor and relevant RAP in relation to the implementation of an approved management plan or the conduct of the Activity.

Disputes may arise at various stages of 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 that 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 dispute resolution procedure is recommended:

- All disputes will be jointly investigated and documented by both the RAP and the Sponsor.
- Where a breach of the management plan conditions is identified, the RAP and the Sponsor will agree to a suitably appropriate corrective method to remedy the breach by organising a meeting to attempt to resolve the dispute.
- The issue/s in dispute must be clearly understood and stated by the authorised representatives of the RAP and Sponsor at the meeting.
- If sought and agreed to by the RAP and Sponsor, third party mediation may be held during the meeting.
- Any correction or remedial activities required must be:
  - recorded in writing and signed off by the authorised representatives of the RAP and Sponsor,
  - supervised by an authorised RAP representative, and
  - occur in accordance with the RAP representative's instructions.
- The Sponsor, site supervisor, contractor and any relevant personnel will not undertake any such correction or remedial activities without receiving the written consent of the RAP.
- The dispute resolution must be recorded in writing and signed by both parties.
- The RAP will strive to minimise delays to work schedules while not compromising Aboriginal cultural heritage, places or values.
- Issues directly related to cultural heritage management will be handled through the following dispute resolution mechanism:
  - Authorised representatives of the RAP and the Sponsor will attempt to negotiate a resolution to any dispute related to the cultural heritage management of the Activity Area within two working days of a notice being received that a dispute between the parties is deemed to exist.
  - If the authorised representatives of the parties do not reach agreement, alternative representatives of both parties will meet to negotiate a resolution to an agreed schedule.

The dispute resolution process does not preclude any legal recourse open to the parties being taken but the parties agree the above resolution mechanism will be implemented before such recourse is made.

For the purpose of dispute resolution the following persons will represent the parties:

Sponsor

Puffing Billy Railway
Contact: Bret Butler
Address: P.O Box 451 Belgrave, VIC 3160
Phone: 0455 020 569
Email: bret.butler@pbr.org.au
ABN: 99 299 638 143

Registered Aboriginal Party (Gembrook Station Precinct)

Contact Name: Alexander Parmington
Contact Position: Manager, Cultural Heritage Unit
Wurundjeri Land and Compensation Cultural Heritage Council Aboriginal Corporation
Postal address: 1st Floor Providence Building, Abbotsford Convent, 1 St Heliers Street, Abbotsford VIC 3067
Office Telephone: (03) 8673 0901
Email: alex@wurundjeri.com.au

Any change in personnel appointed as Authorised Project Delegate in one party will be promptly notified to all other parties.

10.5 Reviewing compliance with the Management Plan and mechanisms for remedying non-compliance

In order to ensure that there is compliance with the Cultural Heritage Management Plan, a compliance checklist must be developed by the Heritage Advisor for use by the Sponsor. The compliance checklist includes those matters addressed in the management plan with which the Sponsor must comply. The compliance checklist should be used as a reference in the event that compliance with the plan is questioned.

Part 6 of the Victorian *Aboriginal Heritage Act 2006* makes provision for the conduct of cultural heritage audits. The Minister may require an audit if the Sponsor of a management plan has, or is likely to, contravene the conditions of the management plan or the conditions of a permit, or if the impact of the Activity on cultural heritage is deemed to be greater than that determined at the time the plan was prepared. The audit must be conducted by, or under the direction of, an Authorised Officer. Under S.88 of the Act, if an audit is ordered, a stop order for the Activity will be issued until the audit has been completed.

The report of a cultural heritage audit may identify any contravention of an approved management plan, recommend amendments to a plan and other measures in relation to an Activity to protect Aboriginal cultural heritage. It may also result in amendments to an approved plan.

If a stop order has been issued in relation to an Activity it operates for 30 days or for a period of time specified in the order, or until it is revoked (under the terms of s.93). A stop order may be revoked by the Minister, Aboriginal Heritage Officers or by the Authorised Officer who issued it. Under s.95 of the Act it is an indictable offence to engage in any conduct in contravention of a stop order and monetary penalties also apply.

10.5.1 Non-compliance with management requirements and contingency plans

It is RAP policy that all non-compliance issues must result in a stop works until such a time as a meeting can be held between the RAP, the Sponsor and a suitably qualified Heritage Advisor. The purpose of the meeting is to discuss the process and address non-compliance issues. A stop works measure must be implemented even if the non-compliance has not resulted in harm to Aboriginal cultural heritage.

10.5.2 Salvage resulting in change to nature, extent and significance of Aboriginal Place

If during a salvage excavation of an Aboriginal Place the extent, nature and significance of the Aboriginal Place changes in the opinion of the RAP, AV must be contacted to undertake a cultural heritage audit in accordance with S.81 of the Victorian *Aboriginal Heritage Act 2006* which states that the Minister may order a cultural heritage audit to be carried out if, on the advice of the Secretary, the Council, or an Aboriginal Heritage Officer or an Authorised Officer, if the Minister reasonably believes that '(c) the impact on Aboriginal cultural heritage of an Activity to which an approved cultural heritage management plan or a cultural heritage permit applies will be greater than that determined at the time the plan was approved or the permit was granted'.

The purpose of the cultural heritage audit must be to determine if, given the change in extent, nature and significance of the Aboriginal Place, the Cultural Heritage Management Plan as approved permits harm to the Aboriginal Place and to have the Sponsor consider Section 61 matters in relation to avoidance or minimisation of harm.

If the extent, nature and significance of the Aboriginal Place changes considerably as a result of a salvage excavation, the Sponsor must consider Section 61 matters in relation to avoidance or minimisation of harm to the Aboriginal Place.

10.5.3 Limited interim retention of Aboriginal cultural heritage by Heritage Advisor

A suitably qualified Heritage Advisor must be engaged to investigate the discovery of Aboriginal cultural heritage and is permitted to retain custody of Aboriginal cultural heritage for the purposes of analyses for an interim period up to six (6) months only.

Before or upon expiry of this period, any Aboriginal cultural heritage must be returned to the owner of that heritage, together with a copy of any relevant catalogue and report.

Permanent Custody Arrangements must be made before and no later than the expiry of the six month custody period permitted to the Heritage Advisor. Arrangements for the permanent custody of any Aboriginal cultural heritage must be carried out and completely finalised.

10.5.4 Assignment of Custody of Aboriginal cultural heritage

If Aboriginal cultural heritage (with the exception of Aboriginal human remains or secret or sacred objects) is discovered before, during or after the Activity, responsibility for the custody of Aboriginal cultural heritage must comply with the conditions established by the Act and be assigned according to the following order of priority, as appropriate:

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

6 the owner of the land from which the Aboriginal heritage is salvaged

7 Museum Victoria.

11 Specific cultural heritage management requirements for the non-RAP area

11.1 Condition 1 – Copy of the Cultural Heritage Management Plan

A copy of this approved Cultural Heritage Management Plan (management plan) must be held onsite at all times.

12 Contingency plans in the non-RAP area

12.1 Reviewing compliance

Compliance with the conditions of an approved CHMP is a requirement of the *Aboriginal Heritage Act 2006*. A compliance checklist is included in Appendix 6. Any action carried out contrary to the conditions and provisions of an approved CHMP which causes harm to Aboriginal cultural heritage is an offence.

In the instance that the conditions of a CHMP have been contravened resulting in harm being caused to Aboriginal cultural heritage, the Minister for Aboriginal Affairs may order a Cultural Heritage Audit under Section 81 of the *Aboriginal Heritage Act 2006*. Should a Cultural Heritage Audit be ordered, a Stop Order requiring the activity to cease immediately will also be issued to the Sponsor (under Section 88 of the *Aboriginal Heritage Act 2006*).

Should any and all parties have any concerns regarding non-compliance with the CHMP they will consult with the Sponsor's heritage advisor in the first instance. If it appears that there is a breach of the CHMP, then notification must be made to Aboriginal Victoria. Under Section 81 of the *Aboriginal Heritage Act 2006*, a Cultural Heritage Audit can be ordered by the Minister if non-compliance is suspected. If the Secretary, DPC directs a Sponsor to engage a heritage advisor to conduct a Cultural Heritage Audit, the Sponsor must comply with the direction. The report of a Cultural Heritage Audit may:

- Identify non-compliance with an approved CHMP
- Recommend amendments to the conditions in the approved CHMP
- Recommend arrangements for the access of inspectors to the location at which the activity is being carried out
- Recommend other measures in relation to the conduct of the activity to avoid or minimise harm to Aboriginal cultural heritage.

It should be noted that under Sections 27 and 28 of the *Aboriginal Heritage Act 2006*, harming, or doing an act likely to harm Aboriginal cultural heritage is unlawful, except under the authority of a Cultural Heritage Permit or a CHMP. A range of penalties apply.

Where non-compliance with the CHMP is identified, the following actions must be taken:

- Where the non-compliance harms or is likely to harm Aboriginal cultural heritage, the Sponsor shall provide notice of the non-compliance to Aboriginal Victoria within 24 hours of identifying the non-compliance. A copy of the proposed and/or implemented actions for any non-compliance shall be provided to the relevant heritage advisor and Aboriginal Victoria within one week of identifying the non-compliance
- Where the non-compliance has not and will not harm Aboriginal cultural heritage, the Sponsor shall provide a copy of the proposed and/or implemented actions for the non-compliance to the relevant heritage advisor within two weeks of identifying the non-compliance.

12.2 Management of Aboriginal cultural heritage found during the activity

The processes outlined below include the notification of the identification of Aboriginal cultural heritage found during the activity.

12.2.1 Unexpected discovery of human remains

If suspected human remains are discovered, you must contact the Victoria Police and the State Coroner's Office immediately. If there are reasonable grounds to believe that the remains are Aboriginal, the Coronial Admissions and Enquiries hotline must be contacted on 1300 888 544. This advice has been developed further and is described in the following 5 step contingency plan. 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.
   - The remains must be left in place, and protected from harm or damage.
2. Notification
   - Once suspected human remains have been found, the Coroners Office and Victoria Police must be notified immediately
   - If there is reasonable grounds to believe that the remains are Aboriginal Ancestral Remains, the Coronial Admissions and Enquiries hotline must be contacted on 1300 888 544
   - All details of the location and nature of the human remains must be provided to the relevant authorities
   - If it is confirmed by these authorities that the discovered remains are Aboriginal Ancestral Remains, the person responsible for the activity must, as soon as practicable, report the existence of the Aboriginal Ancestral Remains 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 Section18(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 the VAHR
   - Appropriate management measures must be implemented to ensure that the remains are not disturbed in the future.

12.2.2 Unexpected discovery of other Aboriginal cultural heritage

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

1. Discovery

- If suspected Aboriginal cultural heritage is identified, all activity within a 10 metre buffer must stop. The activity can proceed outside the buffer.
- The Aboriginal cultural heritage must be left in place, and protected from harm. The 10 metre buffer must have temporary fencing and signage indicating that it is a no go zone.

2 Notification

- The person who identified the suspected Aboriginal cultural heritage must notify the person in charge of works.
- The person in charge of the activity must notify a heritage advisor of the identification of Aboriginal cultural heritage within one working day if its discovery.
- The heritage advisor will notify the Secretary, DPC of the identification of Aboriginal cultural heritage material within one working day of their notification in accordance with Section 24 of the *Aboriginal Heritage Act 2006.*

3 Impact Mitigation or Salvage

- Where the Aboriginal cultural heritage does not meet the threshold for registration as an artefact scatter or multi-component Aboriginal place, the Aboriginal cultural heritage can be recorded and collected by a heritage advisor. Works may continue after the collection has been implemented.
- Where the Aboriginal cultural heritage does meet the threshold for registration as an artefact scatter or multi-component Aboriginal place, harm should be avoided. If this is not possible, an appropriate impact mitigation or salvage strategy as determined by the Secretary, DPC in accordance with relevant Aboriginal Victoria guidelines and practice notes must be implemented by the Sponsor. The strategy will be informed by the extent, nature and significance of the Aboriginal cultural heritage. Works may continue after the strategy has been implemented.

4 Curation, further analysis and registration

- The treatment of salvaged Aboriginal cultural heritage must be in accordance with the direction of relevant Aboriginal Victoria guidelines and practice notes.
- All details of the location and nature of the Aboriginal cultural heritage must be provided to the VAHR within one month of notification.

5 Reburial, if required

- Any reburial must be undertaken and documented by a heritage advisor and all details provided to the VAHR.
- Appropriate management measures must be implemented to ensure that the Aboriginal cultural heritage is not disturbed in the future.

12.3 Custody of Aboriginal cultural heritage discovered during works

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

1 any relevant RAP for the land from which the Aboriginal heritage is salvaged

2 any relevant registered native title holder for the land from which the Aboriginal heritage is salvaged

3 any relevant native title party (as defined in the Act) for the land from which the Aboriginal heritage is salvaged

4 any relevant Traditional Owner or Owners of the land from which the Aboriginal heritage is salvaged

5 any relevant Aboriginal body or organisation which has historical or contemporary interests in Aboriginal heritage relating to the land from which the Aboriginal heritage is salvaged

6 the owner of the land from which the Aboriginal heritage is salvaged

7 Museum Victoria.

Traditional Owners (Bunurong Land Council Aboriginal Corporation)

Contact Name: Dan Turnbull
Contact Position: CEO
Bunurong Land Council Aboriginal Corporation
Postal address: PO Box 4128, Frankston Heights VIC 3199
Office Telephone: (03) 0499 222 331
Email: manager@bunuronglc.org,au

Traditional Owners (Boon Wurrung Foundation)

Contact Name: Gheran Steel
Contact Position: CEO and Operations
Boon Wurrung Foundation Pty Ltd
Postal address: South Melbourne Town Hall, 208 – 220 Bank Street, South Melbourne, Victoria 3205
Office Telephone: (03) 9682 9578
Email: fieldreps@boonwurrung.org.au

Traditional Owners (Wurundjeri Land and Compensation Cultural Heritage Council Aboriginal Corporation)

Contact Name: Alexander Parmington
Contact Position: Manager, Cultural Heritage Unit
Wurundjeri Land and Compensation Cultural Heritage Council Aboriginal Corporation
Postal address: 1st Floor Providence Building, Abbotsford Convent, 1 St Heliers Street, Abbotsford VIC 3067
Office Telephone: (03) 8673 0901
Email: alex@wurundjeri.com.au

References

Aboriginal Affairs Victoria. (2008). *Standards for Recording Victorian Aboriginal Heriatge Places and Objects.* Melbourne: State of Victoria Department of Planning and Community Development.

Aboriginal Victoria. (2016). *Practice Note: Suburface Testing.* Melbourne: Aboriginal Victoria.

Athanasiadis, H. (2009). *Cockatoo Backlog Sewerage Project, Cockatoo.* Northcote: Terraculture Heritage Consultants.

Atkinson, W., & Berryman, A. (1983). *Aboriginal Association with the Murray Valley Study Area.* Victoria: La Trobe University.

Barwick, D. (1984). Mapping the Past. An Atlas of Victorian Clans 1835-1904. *Aboriginal History, 8*, 100-131.

Barwick, D. (1998). *Rebellion at Coranderrk, Aboriginal History Monograph 5.* Canberra: Aboriginal History Inc.

Bowdler, S. (1981). Unconsidered trifles? Culture resource management, environmental impact statements and archeological research in New South Wales. *Australian Archaeology, 12*, 123-133.

Broome, R. (2005). *Aboriginal Victorians. A History Since 1800.* Crows Nest: Allen and Unwin.

Burch, J. (2017). *Drainage Improvements, Belgrave Lake Park and Park Drive, Belgrave, Victoria: CHMP 14810.* Jem Archaeology.

Burke, H., & Smith, C. (2004). *The Archaeologist's Field Handbook.* Sydney: Allen and Unwin.

Casey Cardinia Heritage. (2015). *Fern Tree Gully and Gembrook line or the Puffing billy railway line*. Retrieved from Casey cardinia - links to our past: http://caseycardinialinkstoourpast.blogspot.com.au/search/label/Fern%20Tree%20Gully%20and%20Gembrook%20Railway%20line

Clark, I. (1990). *Aboriginal Languages and Clans. An Historial Atlas of Western and Central Victoria.* Melbourne: Monash University.

Coulson, H. (1958). *Story of the Dandenongs: 1838-1958.* Melbourne: F.W. Chesire.

Dean, C. (1998). *The religions of pre-contact Victorian Aborigines.* Geelong: Gamahucher Press.

Department of Environment, Land, Water and Planning. (2016). *Photo Mosaics*. Retrieved from Land Channel: http://services.land.vic.gov.au/maps/photomaps.jsp

Department of Environment, Land, Water and Planning. (2017, July). *Bioregions and EVC Benchmarks*. Retrieved from Victoria State Government: https://www.environment.vic.gov.au/biodiversity/bioregions-and-evc-benchmarks

Department of Lands and Survey . (1892). Gembrook, Counties of Evelyn and Mornington. Melbourne: Department of Lands and Survey .

Du Cros, H. (1988). *An Archaeolgocial Survey of the Upper Yarra Valley and Dandenong Ranges.* Canberra: Anutech Pty Ltd.

Edwards, R. (1975). *Aboriginal Bark Canoes of the Murray Valley.* Adelaide: South Australia Museum.

Edwards, W. (1988). *An Introduction to Aboriginal Socienties.* South Melbourne: Thomson Social Science Press.

Ellender, I., & Weaver, F. (1994). *An Archaeological Survey of Port Philip Bay.* Melbourne: Victorain Archaeological Survey.

Emerald Museum. (2017). *History of Nobelius' Gembrook Nuseries*. Retrieved from Emerald Museum & Nobelius Heritage Park: http://www.emeraldmuseum.org.au/history-of-nobelius-gembrook-nursery

Freslov, J., & Lewis, K. (2002). *An Aborigianl Archaeolgocial Heritage Values Impact Assessment of the Installation of the Transfer Main between Emerald Lake Road, Emerald and Wright Road, Avonsleigh.* Perspectives Heritage Solutions.

GeoVic. (2017, July). *Explore Victorian Online*. Retrieved from Earth Resources: http://er-info.dpi.vic.gov.au/sd_weave/anonymous.htm

Gott, B., & Conran, J. (1991). *Victorian Koorie Plants.* Hamilton: Aboriginal Keeping Place.

Heritage Victoria. (2012). *Former Nobelius Nursery, Packing Shed and Railway Siding.* Melbourne: Heritage Victoria.

Holdaway, S., & Stern, N. (2004). *A Record in Stone.* Melbourne: Museum Victoria.

Howie-Willis, I. (1994). *The Encyclopedia of Aboroginal Australia: Aboriginal and Torres Strait Islander History, Society and Culture* (Vol. 2). (D. Horton, Ed.) Canberra: Aboriginal Studies Press for the Australian Institute of Aboriginal and Torres Strait Islander Studies.

Howitt, A. (1904). *The Native Tribes of South East Australia.* Canberra: Aboriginal Studies Press.

Lane, S. (1999). *Intergas Expansion Project Heritage Study.* Campbell ACT: Heritage Consulting Australia Pty Ltd.

Lorimer, G. S. (2010). *Sites of Biological Significance in Knox.* Melbourne: Knox City Council.

Marquis-Kyle, P., & Walker, M. (1992). *The Illustrated Burra Charter: Making Good Decisions about the Care of Important Places.* Brisbane: Australia ICOMOS.

Mathews, D., & Albrecht, M. (2017). *NBN Project 3EML-2- Emerald CHMP 14731.* Fitzroy: Andrew Long and Associates.

McCarthy, M. (1987). *Bellbrakes, Bullocks and Bellmen: A sawmilling and tramway history of Gembrook 1885-1985.* Light Railways Research Society of Australia.

Monash University. (2015(a)). *Victorian Places*. Retrieved from Emerald: http://www.victorianplaces.com.au/emerald

Monash University. (2015(b)). *Gembrook*. Retrieved from Victorian Places: http://www.victorianplaces.com.au/gembrook

Murphy, A. (1995). *An Archaeolgoical Survey of the Emerald-Cockatoo Waste Water Strategy, Victoria.* Melbourne: du Cros and Associates.

Myers, S., Paynter, N., & Mirams, S. (2013). *Footpath Construction, Stoney Road Belgrave to Charles Street Selby: CHMP 12321.* Melbourne: ArchLink.

Pearson, M., & Sullivan, S. (1995). *Looking after Heritage Places. The basics of heritage planning for managers, landowners and administrators.* Melbourne: Melbourne University Press.

Photo National Museum Australia. (1986). *Train leaving Belgrave*. Retrieved from National Library of Australia: http://collectionsearch.nma.gov.au/?object=34199

Presland, G. (1994). *Aboriginal Melbourne: The Lost Land of the Kulin People.* Ringwood: McPhee Gribble Publishers.

Puffing Billy Preservation Society. (2013). *Puffing Billy is Reborn*. Retrieved from Puffing Billy Preservation Society: http://puffingbilly.com.au/en/puffing-billy-preservation-society/railway-history-heritage/puffing-billy-reborn/

Robinson, G. A. (1840). *Journals of George Augsuts Robinson January - March 1840.* (G. Presland, Ed.) Victoria: Records of the Victorian Archaeological Survey.

Rose Stereograph Co. (1954). Aboriginal Enterprises, Belgrave, Vic. State Library of Victoria.

Rosenfeld, A. (1988). *Rock art conservation in Australia. Special Australian Heritage Publication Series 2.* Canberra: Australian Government Publishing Service.

Russell, B. (2009). *Upper Fern Tree Gully to Gembrook Railway*. Retrieved from Bill Russell's Victorian Government Narrow Gauge Railway: http://www.members.optusnet.com.au/narrow.gauge/belgyd.html

Spreadborough, R. and H. Anderson. (1983). *Victoria Squatters.* Red Rooser Press.

Stamford, F. (2011). Puffing Billy in the 1950s. Retrieved 2017, from http://members.ozemail.com.au/~telica/Puffing_Billy_in_the_1950s.html

State of Victoria Agriculture Victoria. (2017, July). *1.3.3 Terraces, fans and floodplains (Kiewa Valley, Wonnangatta Valley)*. Retrieved from Victorian Resources Online: http://vro.agriculture.vic.gov.au/dpi/vro/vrosite.nsf/pages/landform_geomorphological_framework_1.3.3

State of Victoria Agriculture Victoria. (2017, July). *1.4.4 Deeply dissected ridge and valley landscapes (headwaters of major rivers such as the Wonnangatta, King and Kiewa Rivers, Mt Coopracambra)*. Retrieved from Victorian Resources Online: http://vro.agriculture.vic.gov.au/dpi/vro/vrosite.nsf/pages/landform_geomorphological_framework_1.4.4

Vandenberg, A. (1979). *Geological Survey Report. Explanatory Notes on the Ringwood 1:63,360 Geological Map.* Department of Minerals and Energy.

Vines, G. (2008). *National Trust Study of Victoria's Concrete Road Bridges National Trust of Australia (Victoria).*

Vines, G. (2016). *Puffing Billy Railway, Victoria: Cultural Heritage Assessment.* Melbourne: Biosis Pty Ltd.

Wesson, S. (2000). *Historical Atlas of the Aborigines of Eastern Victoria and Far Southeastern New South Wales.* Melbourne: Monash University.

Winsanreid, A. (1988). *The Hills of Home: A Bicentennial History of the Shire of Sherbrooke.* Belgrave: Bicentennial Committee of Sherbrooke Shire Council.

Appendices

Appendix 1 Notice of intention to prepare a CHMP

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

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

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

SECTION 1 - Sponsor information

Sponsor:	Puffing Billy Railway		
ABN/ACN:	99299638143		
Contact Name:	Bret Butler		
Postal Address	P.O Box 451 Belgrave Vic 3160		
Business Number:	03 5968 6257	Mobile:	0455 020 569
Email Address:	bret.butler@pbr.org.au		

Sponsor's agent (if relevant)

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

SECTION 2 - Description of proposed activity and location

Project Name:	Puffing Billy Railway Upgrade
Municipal district:	Yarra Ranges Shire Council

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

Car park

SECTION 3 - Cultural Heritage Advisor

Name	Company	Email address
Leah Tepper	Biosis	ltepper@biosis.com.au

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

Start Date:	05-Jul-2017	Finish Date:	05-Jul-2018

Submitted on: 05 Jul 2017

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?

Car park

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

☐ Other Reasons (Voluntary)

☐ An Environmental Effects Statement is required

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

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.

Wurundjeri Tribe Land & Compensation Cultural Heritage Council Inc

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.***

Wurundjeri Tribe Land & Compensation Cultural Heritage Council Inc

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.***

Involve WTLCCHC in consultation and evaluation process, will be consulting with AV on a joint evalua

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: Wurundjeri Tribe Land & Compensation Cultural Heritage Council Inc

☑ 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: 05 Jul 2017

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.

Appendix 2 Notice to evaluate the CHMP

From:	Rapofficer
To:	bret.butler@pbr.org.au
Cc:	Leah Tepper; Alex Parmington; Catherine La Puma
Subject:	Wurundjeri Notice of Intent Response: CHMP 15134 - Puffing Billy Railway Upgrade
Date:	Thursday, 6 July 2017 11:49:36 AM
Attachments:	CHMP_Evaluation_Checklist 2017.docx Detail regarding to avoid avoidance or minimisation harm to Aboriginal cultural heritage.pdf Payment to Wurundjeri for Applications for Approval of CHMPs.pdf Request for Wurundjeri Council Field Representative.doc Request for Wurundjeri Council Heritage Meeting.docx Wurundjeri Artefact Repatriation Policy 2017.pdf Wurundjeri Council Cultural Heritage Managment Plan Consultation Flowchart - Updated Jan 2017.pdf Wurundjeri Council Management Policies ~ Update No. 8.pdf Wurundjeri Rain and Heat Policy 2016.pdf Wurundjeri RAP Fees ~ 2017.pdf

Dear Bret,

CHMP 15134 - Puffing Billy Railway Upgrade

Your notification has been accepted and the Wurundjeri Council advises that it intends to evaluate this plan when complete, in accordance with Division 4, Section 55 of the *Aboriginal Heritage Act* 2006. We also advise that during the preparation of this plan, the Wurundjeri Tribe Land & Compensation Cultural Heritage Council Inc. wishes to:

- Consult with you in relation to the assessment of the area for the purposes of the plan
- Participate in the conduct of the assessment
- Consult with the sponsor in relation to the conditions to be included in the plan.

Please note that before any fieldwork program commences it will be necessary for your heritage advisor to participate in a Project Establishment Meeting at the Wurundjeri Council office to discuss the project. It is preferable for the project sponsor to attend the Project Establishment Meeting as well. As the Project Establishment Meeting provides an opportunity for all parties to clarify the aims of the CHMP and methodology for any fieldwork program, it is helpful if you and/or your heritage advisor can bring along the following information to expedite these discussions:

- Aerial photo of the Activity Area
- A clear map of the Activity Area
- Aboriginal site location data within the geographic region
- Site cards of any sites already recorded in the Activity Area.

If you require any additional information about this advice, please contact Alexander Parmington by telephone on 03 9416 2905 or by email: alex@wurundjeri.com.au

We look forward to meeting with you soon to discuss the project.

Yours sincerely,

Helen Officer
Rap Administration Officer
Cultural Heritage Unit
Wurundjeri Tribe Land & Compensation Cultural Heritage Council Incorporated
1st Floor Providence Building | Abbotsford Convent
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Appendix 3 Glossary

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

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

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

5 What is an Aboriginal place?

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

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

(a) an area of land;

(b) an expanse of water;

(c) a natural feature, formation or landscape;

(d) an archaeological place, feature or deposit;

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

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

(g) a building or structure.

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

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

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

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

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

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

Burial place: usually a subsurface pit containing human remains and sometimes associated artefacts.

Contact place: see 'Aboriginal historical archaeological place'.

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

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

Cortical: refers to the cortex.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Appendix 4 Significance assessment criteria

Assessing the heritage significance of an Aboriginal place is undertaken to make decisions about the best way to protect and manage the place. The assessment of significance can be complex and include a range of heritage values. The heritage values are broadly defined in the Burra Charter, the set of guidelines on cultural heritage management and practice prepared by the Australia International Council on Monuments and Places, as the 'aesthetic, historic, scientific or social values for past, present or future generations' (Marquis-Kyle & Walker, 1992, p. 21). Many Aboriginal places also have significance to a specific Aboriginal community.

Although there are no formal guidelines for the assessment of significance of Aboriginal archaeological places in Victoria, the definition of 'cultural heritage significance' under Section 4 of the *Aboriginal Heritage Act 2006* includes:

- Archaeological, anthropological, contemporary, historical, scientific, social or spiritual significance; and
- Significance in accordance with Aboriginal tradition.

Scientific significance is based on the capacity of Aboriginal places to provide us with historical, cultural or social information. The following evaluation will assess the scientific significance of the Aboriginal places recorded during this CHMP. The scientific significance assessment methodology outlined below is based on scores for research potential (divided into place contents and place condition) and for representativeness. This system is derived from Bowdler (1981).

Place contents refer to all cultural materials and organic remains associated with human activity at a place. Place condition refers to the degree of disturbance to the contents of a place at the time it was recorded. The representativeness of an Aboriginal place is assessed by whether the place is common, occasional, or rare in a given region. It is noted that assessments of representativeness are subjectively biased by current knowledge of the distribution and number of Aboriginal places and varies from place to place depending on the extent of archaeological research.

The determination of cultural significance for an Aboriginal place is expressed as a statement of significance. Nomination of the level of value—high, moderate, low or not applicable—for each relevant category is presented in Table 8.

The scientific significance assessment for scarred trees varies from the significance assessment outlined above because a scarred tree has no place contents rating (a tree either is, or is not, a scarred tree). The place condition and representativeness ratings used for scarred trees are indicated in Table 9 and overall scientific significance ratings for scarred tree places are based on a cumulative score for place condition and representativeness.

Representativeness refers to the regional distribution of scarred trees and is assessed on whether the place is common, occasional or rare in a given region. Representativeness should take into account the type and condition of the scar(s)/tree and the tree species involved. Scarred tree criteria is presented in Table 9.

Table 8 Scientific significance assessment criteria

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

Table 9 Scarred tree scientific significance assessment criteria

Place Condition	Representativeness	Overall Significance
1 - Poorly preserved tree scar	**1** - Common occurrence	**1 - 2** - Low
2 - Partly preserved tree scar	**2** - Occasional occurrence	**3 - 4** - Moderate
3 - Well preserved example of a scarred tree	**3** - Rare occurrence	**5 - 6** - High

Appendix 5 Subsurface testing table

Table 10 Auger probe log

Auger No.	Location	Layer (mm)	Description	Munsell	PH	Artefacts
1	E 355702.8721 N 5803271.058	0-100	Moist, friable silty clay with a small tree root and frequent leaf litter.	7.5YR 2.5/1 Black	6	-
		100-230	Moist silty clay.	7.5YR 2.5/1 Black	6	-
		230-350	Moist silty clay with frequent charcoal flecks.	7.5YR 4/2 Brown	6	-
		350-660	Moist silty clay with charcoal flecks	7.5YR 6/4 Light brown	6	-
		660-680	Compact, sticky plastic clay.	7.5YR 4/6 Strong brown	6	-
2	E 355680.3943 N 5803227.973	0-340	Moist, friable silty clay. Terminated at basalt floater.	7.5YR 2.5/1 Black	6.5	-
3	E 371143.8355 N 5798975.508	0-700	Fill- clay with frequent gravel, glass, brick and charcoal inclusions.	2.5YR 3/6 dark red	5	-
		700+	Compact, sticky plastic clay.	7.5YR 4/6 Strong brown	6	-
4	E 372582.2514 N 5798564.009	0-650	Fill- clay with frequent gravels and glass fragment inclusions	2.5YR 3/6 dark red	6	-
		650+	Compact, sticky plastic clay.	7.5YR 4/6 Strong brown	6	-

Table 11 Test Pit log

Test Pit no.	Location	Layer (mm)	Description	Munsell	PH	Artefacts
1	E 355683.8351 N 5803233.511	0-80	Moist, friable silty clay with frequent and dense grass and rootlets. Frequent small charcoal inclusions and fragments of plastic.	7.5YR 2.5/1 Black	5.5	-
		80-210	Moist silty clay with frequent small charcoal and plastic fragments. Merging context.	7.5YR 4/2 Brown	6	-

		210-420	Moist silty clay with yabby burrows in north and eastern walls. Merging context.	7.5YR 6/3 Light brown	6	-
		420-510	Moist silty clay, undulating context.	7.5YR 6/4 Light brown	6	-
		510-520	Compact, sticky plastic clay.	7.5YR 4/6 Strong brown	6	-

Table 12 Shovel test pit log

Shovel test pit no.	Location	Layer (mm)	Description	Munsell	PH	Artefacts
1	E 355700.0028 N 5803271.02	0-50	Moist, friable, silty clay with frequent leaf litter, rootlets and ballast inclusions.	7.5YR 2.5/1 Black	6	-
		50-300	Compact silty clay with frequent rootlets and small charcoal inclusions.	7.5YR 4/2 Brown	6	-
		300-310	Compact, sticky plastic clay.	7.5YR 4/6 Strong brown	6	-
2	E 355710.7717 N 5803267.438	0-350	Fill- silt with ballast inclusions (70%)	7.5YR 6/3 Light brown	5	-
3	E 355729.8674 N 5803261.939	0-100	Compact silty clay with frequent rootlets and small charcoal inclusions. Large basalt rock at 50 millimetres in centre.	7.5YR 4/2 Brown	6	-
		100-120	Compact, sticky plastic clay. Large basalt rock continued.	7.5YR 4/6 Strong brown	6	-

Appendix 6 Compliance checklist - RAP area

Table 13 Compliance checklist – RAP area

Compliance Review Checklist		Yes	No
Prior to the commencement of the activity			
Has the CHMP been approved?			
Is a copy of the CHMP located on site at all times during the Activity for the entire Activity Area?			
Has a notification of the commencement of works at the Gembrook locomotive shed site been sent to the RAP?			
Have all personnel involved in ground disturbance works at the Gembrook locomotive shed site been inducted or trained with regard to the requirements contained within the CHMP, particularly the contingency plans?			
Has one compliance inspection been completed by the RAP during top soil stripping at Gembrook locomotive shed site?			
Discovery of Aboriginal cultural heritage during the activity			
Has any Aboriginal cultural heritage been discovered during the activity? If yes, have the following been undertaken:			
	Have all works ceased within 10 metres of the discovery location(s)?		
	Has the exposed Aboriginal cultural heritage been protected by a suitable barrier (e.g. fencing) with signage?		
	Has a heritage advisor and RAP been notified within two working days of the discovery?		
	Has a decision or condition as to the management of the Aboriginal cultural heritage been made within three working days by the heritage advisor in consultation with the Sponsor and RAP representative?		
	Has the heritage advisor completed new or updated Aboriginal place record(s) for the VAHR?		
	Has an appropriate mitigation or salvage strategy been developed and implemented?		
Discovery of human remains during the activity			
Have any actual or suspected human remains been discovered during the activity? If yes, have the following been taken:			
	Has all works ceased within vicinity of the discovery location?		
	Have the human remains been protected by a suitable barrier (e.g. fencing)?		
	Have Victoria Police and the Coroner's Office been notified?		

Compliance Review Checklist		Yes	No
	If there are reasonable grounds to believe that the remains may be Aboriginal Ancestral Remains, have the Coronial Admissions and Enquiries hotline been contacted?		
	If it is confirmed by these authorities that the remains are Aboriginal Ancestral Remains, has the Victorian Aboriginal Heritage Council been contacted?		
	Has an appropriate mitigation or salvage strategy been developed and implemented?		

Appendix 7 Compliance checklist – Non RAP area

Table 14 Compliance checklist – Non RAP area

Compliance Review Checklist		Yes	No
Prior to the commencement of the activity			
Has the CHMP been approved?			
Is a copy of the CHMP located on site at all times during the Activity for the entire Activity Area?			
Discovery of Aboriginal cultural heritage during the activity			
Has any Aboriginal cultural heritage been discovered during the activity? If yes, have the following been undertaken:			
	Have all works ceased within 10 metres of the discovery location(s)?		
	Has the exposed Aboriginal cultural heritage been protected by a suitable barrier (e.g. fencing) and signage?		
	Has a heritage advisor been notified within one working day of the discovery?		
	Has the heritage advisor notified the Secretary, DPC of the discovery?		
	Has the heritage advisor completed new or updated Aboriginal place record(s) for the VAHR?		
	Has an appropriate mitigation or salvage strategy been developed and implemented?		
Discovery of human remains during the activity			
Have any actual or suspected human remains been discovered during the activity? If yes, have the following been taken:			
	Has all works ceased within vicinity of the discovery location?		
	Have the human remains been protected by a suitable barrier (e.g. fencing)?		
	Have Victoria Police and the Coroner's Office been notified?		
	If there are reasonable grounds to believe that the remains may be Aboriginal Ancestral Remains, have the Coronial Admissions and Enquiries hotline been contacted?		
	If it is confirmed by these authorities that the remains are Aboriginal Ancestral Remains, has the Victorian Aboriginal Heritage Council been contacted?		
	Has an appropriate mitigation or salvage strategy been developed and implemented?		