Final Report

Residential Subdivision, 42-44 Ponds Drive, Lara, Victoria:

Aboriginal Cultural Heritage Management Plan

Number 14191

Sponsor

Angelo Martucci

12 August 2016

Ecology and Heritage Partners Pty Ltd

Cultural Heritage Advisor

Alison O'Connor

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

16th August 2016

Aboriginal Heritage Act 2006
Section 65

Cultural Heritage Management Plan – Notice of Approval

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

Residential Subdivision, 42-44 Ponds Drive, Lara, Victoria

Cultural Heritage Management Plan number: 14191

Sponsor: Angelo Martucci

Cultural Heritage Advisor: Alison O'Connor

Authors: Alison O'Connor

Cover Date: 12th August 2016

Pages: Cover Page, i-xiii 1-94

Received for Approval: 19th July 2016

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

Katrina Thomas
RAP Manager
Wathaurung Aboriginal Corporation
trading as: Wadawurrung

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

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Residential Subdivision, 42-44 Ponds Drive, Lara, Victoria:

Aboriginal Cultural Heritage Management Plan

Number: 14191

ACTIVITY SIZE:	Small
ASSESSMENT:	Complex
SPONSOR:	Angelo Martucci
CULTURAL HERITAGE ADVISORS:	Alison O'Connor
AUTHORS:	Alison O'Connor
DATE:	12 August 2016

Cover Photo: Activity area facing west, showing residence in background

(Photo by Ecology and Heritage Partners Pty Ltd)

ACKNOWLEDGEMENTS

We thank the following people and organisations for their contribution to the project:

- Angelo Martucci for project and site information.
- Tract Consultants for project and site information.
- Wathaurung Aboriginal Corporation for assistance in the field, cultural heritage information and evaluation of the report.
- Aboriginal Victoria.

DOCUMENT CONTROL

Activity	Residential Subdivision
Address	42-44 Ponds Drive, Lara
Project number	7805
Project manager	Alison O'Connor
Report author(s)	Alison O'Connor
Report reviewer	Oona Nicolson and Meredith Filihia
Other EHP staff	N/A
Mapping	Monique Elsley
File name	7805_EHP_42-44PondsDrive_Lara_CHMP_14191_RAPComments_11082016
Client	Angelo Martucci
RAP	Wathaurung Aboriginal Corporation
Bioregion	Victorian Volcanic Plains
CMA	Corangamite
Council	Geelong City Council

Report versions	Comments	Comments updated by	Date submitted
Draft v1	Draft for QA Review	Alison O'Connor	29.04.2016
Draft v2	Draft to Client for Comment	Alison O'Connor	02.04.2016
Final v1	Final to RAP for Evaluation	Alison O'Connor	19.07.2016
Final v2	RAP Comments	Alison O'Connor	12.08.2016
Final v2	Final Approved CHMP	Alison O'Connor	16.08.2016

Protocols for Handling Sensitive Information

Some of the information contained within this Cultural Heritage Management Plan (CHMP) is culturally sensitive. Before releasing the contents of this CHMP to the public, permission should be sought from the relevant authorities and communities.

Disclaimer

Although Ecology and Heritage Partners Pty Ltd have taken all the necessary steps to ensure that an accurate document has been prepared, the company accepts no liability for any damages or loss incurred as a result of reliance placed upon the report and its contents.

ABBREVIATIONS

See Glossary (Appendix 7) for explanation of some of these terms.

Acronym	Description
Act, the	*Aboriginal Heritage Act 2006*
AHHA	Aboriginal and Historical Heritage Assessment
CHA	Cultural Heritage Advisor
CHL	Commonwealth Heritage List
CHMP	Cultural Heritage Management Plan
CMA	Catchment Management Authority
DELWP	Department of Environment Land Water and Planning (Victoria)
DoE	Department of the Environment (Commonwealth)
DPC	Department of the Premier and Cabinet (Victoria)
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999*
EVC	Ecological Vegetation Class
HV	Heritage Victoria
LDAD	Low Density Artefact Distribution
AV	Aboriginal Victoria
PMST	Protected Matters Search Tool
RAP	Registered Aboriginal Party
Regulations, the	*Aboriginal Heritage Regulations 2007*
RTH	Radial Test Hole
SGD	Significant Ground Disturbance
SLV	State Library of Victoria
STH	Shovel Test Hole
STP	Stratigraphic Test Pit
T/O	Traditional Owner/s
VAHR	Victorian Aboriginal Heritage Register
VCAT	Victorian Civil and Administrative Tribunal
VHI	Victorian Heritage Inventory
VHR	Victorian Heritage Register
Wathaurung	Wathaurung Aboriginal Corporation

EXECUTIVE SUMMARY

Introduction

Ecology and Heritage Partners Pty Ltd was commissioned by Tract Consultants, on behalf of the Sponsor (Angelo Martucci), to prepare a complex Cultural Heritage Management Plan (CHMP) for the proposed residential subdivision in Lara, Victoria (City of Greater Geelong) (Map 1).

The Activity

The proposed activity is a residential development and subdivision comprising up to four townhouses. Map 3 shows a concept plan of the proposed townhouse development which is subject to change as an outcome of the upcoming planning assessment process with Greater Geelong City Council. Each of the allotments may contain a two-storey townhouse, concrete driveway, garage and landscaping. The buildings and driveway will be suspended on a number of pier footings (2000 mm deep with a 600 mm diameter). The activity area will be prepared via mechanical scraping to level the land and the installation of underground services to a maximum depth of 2 m.

The activity area comprises two separate Greater Geelong planning zones; General Residential Zone to the south in the location of the existing residential building and Urban Floodway Zone to the north within the location proposed townhouses (Figure 1).

As part of the Sponsor's submission to Council for the development and subdivision of the northern section of the activity area, the Sponsor we will be seeking the rezoning of the land from the Urban Floodway Zone to the General Residential Zone (Appendix 3). The rezoning will also (partially) apply a Special Building Overlay (Appendix 4).

The Activity Area

The activity area is located in Lara, Victoria (City of Greater Geelong). The activity area is approximately 0.20 ha in size and is bounded to the north by Hovells Creek, to the east by residential development, to the west by residential development and horse paddocks and to the south by Ponds Drive (Map 2).

Reasons for Preparing this CHMP

This CHMP has been prepared in accordance with Part 4 of the Victorian *Aboriginal Heritage Act 2006* and is required by the Victorian *Aboriginal Heritage Regulations 2007* (s.47). The specific Regulations which trigger the requirement for this plan are (Map 2):

- Under r.23, the activity area is within an area of cultural heritage sensitivity as it is located within 200 m of a waterway, namely Hovells Creek;
- Under r.46, the proposed activity is a high impact activity as it involves the subdivision of land;
- Part or all of the activity area has not been subject to previous significant ground disturbance as defined by the *Aboriginal Heritage Regulations 2007* (r.4).

Methods

The assessments undertaken as part of this CHMP were a background review (desktop assessment), a field survey (standard assessment) and a subsurface excavation (complex assessment). The desktop assessment consisted of reviews of relevant heritage registers and databases, previous archaeological publications and unpublished reports, and a review of the environmental context of the activity area, culminating in a predictive statement regarding the likelihood of Aboriginal cultural heritage occurring in the activity area.

The standard assessment consisted of a ground surface survey of the activity area by qualified archaeologists, in conjunction with representatives of the RAP, to discover any Aboriginal cultural heritage visible on the ground surface and to identify any areas of Aboriginal cultural heritage likelihood (areas that have landforms that are considered likely to contain subsurface Aboriginal archaeological deposits).

The complex assessment consisted of a subsurface testing program designed to adequately test the landforms and the area of Aboriginal cultural heritage likelihood identified in the standard assessment. The testing program consisted of a single 1 x 1 m stratigraphic test pits (STPs) to determine the stratigraphic profile of the landform within the activity area. A series of shovel test holes, each measuring 500 x 500 mm, were placed at intervals along a series of transects. The purpose of the STHs was to test for presence or absence of Aboriginal cultural heritage in the areas of likelihood or for subsurface deposits within Aboriginal sites identified in the standard assessment.

Results

Desktop Assessment

The search identified a total of 34 registered Aboriginal sites within a 2 km radius of the activity area. These sites comprise a total of 63 site components (Table 6). Most of the sites in close proximity are located within the floodplains of the Hovells Creek Gully, suggesting that this area is the most archaeologically sensitive in the region. There are no sites recorded in close proximity to the activity area on the volcanic plains south of Hovells Creek.

Standard Assessment

The standard assessment was undertaken on 30 March 2016 by Alison O'Connor, with Chloe Clarke and John Clarke representing the Wathaurung Aboriginal Corporation.

The area subjected to pedestrian survey was 0.10 ha (50%), the ground surface visibility was generally poor with areas of ground surface exposure identified within patches of erosion in the backyard. Approximately half of the activity area is covered by a residential building and associated driveway. An area of Aboriginal likelihood was identified towards the northern end of the activity area, close to Hovells Creek.

Complex Assessment

The complex assessment was conducted on 30 March 2016 by Alison O'Connor, with Chloe Clarke and John Clarke representing the Wathaurung Aboriginal Corporation.

A single stratigraphic test pit (1 x 1 m) and four shovel test holes (500 x 500 mm) were excavated (Map 10). The floodplain landform of the activity area demonstrated a disturbed character with clay fill material

identified immediately beneath the silty vegetation layer, overlying natural grey-brown compacted clay at 220-350 mm depth. The clay also gradually changed in colour from a medium brown to a medium grey-brown with depth. The stratigraphy in all STHs conforms generally to the STP albeit with marked variations in the depth of the base clays.

Aboriginal Cultural Heritage in the Activity Area

No Aboriginal cultural heritage was identified in the activity area.

The Management Recommendations and Contingency Plans in Part 2 of this CHMP must be adhered to at all times.

Summary of Management Recommendations

These recommendations become requirements once this CHMP is approved.

No Aboriginal cultural heritage was identified during the assessment of the activity area and, no areas likely to contain Aboriginal cultural heritage are present within the activity area, therefore there are no specific cultural heritage management requirements.

Management Recommendations

Although there was no Aboriginal cultural heritage or any areas of Aboriginal cultural heritage likelihood identified during the assessment, the following recommendations were included at the request of the Wathaurung Aboriginal Corporation. The aim of these recommendations is to provide the RAP with certainty that the extent of the proposed works will not impact on any Aboriginal cultural heritage that may be present within the activity area.

Recommendation 1: Cultural Awareness Induction

A Cultural Heritage Induction Booklet containing Part 2 of this CHMP and all relevant maps must be produced by a Cultural Heritage Advisor. All employees and contractors involved in ground disturbing works in the activity area must attend a Cultural Heritage Induction presented by a RAP representative and Cultural Heritage Advisor prior to the commencement of the activity. The RAP must be provided at least two weeks' notice of the requirement to present the cultural awareness induction. Costs of any such induction must be borne by the Sponsor.

Recommendation 2: Provisions for Aboriginal People to Visit Cultural Heritage Places within the Activity Area

Access to the activity area must be provided to representatives of the Wathaurung Aboriginal Corporation before, during and after construction for the purpose of ensuring compliance with the CHMP. The representatives of the Wathaurung Aboriginal Corporation must comply with all occupational health and safety requirements of the activity area.

Contingency Plans

In accordance with Section 61 of the *Aboriginal Heritage Act 2006*, a CHMP must consider contingency plans in relation to disputes, delays and other obstacles that may affect the conduct of the activity. The contingencies listed below are presented in Part 2, of this CHMP:

- Section 61 Matters;
- Regarding Dispute Resolution;
- Discovery of Aboriginal Cultural Heritage / Isolate or Dispersed Artefacts;
- Discovery of Aboriginal Cultural Heritage / Other Cultural Heritage;
- Unexpected Discovery of Human Remains;
- Reporting the Discovery of Aboriginal Cultural Heritage During the Activity;
- Removal, Curation, Custody and Management of Aboriginal Cultural Heritage (Artefacts) Discovered During the Activity; and
- Compliance with the Cultural Heritage Management Plan.

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PART 1
CULTURAL HERITAGE ASSESSMENT

1 INTRODUCTION

1.1 Background and Scope of Works

Ecology and Heritage Partners Pty Ltd was commissioned by Tract Consultants, on behalf of the Sponsor (Angelo Martucci), to prepare a complex Cultural Heritage Management Plan (CHMP) for the proposed residential subdivision in Lara, Victoria (City of Greater Geelong) (Map 1).

The project brief agreed upon by Ecology and Heritage Partners Pty Ltd and the Sponsor (Angelo Martucci) is as follows:

- Review the relevant heritage databases (e.g. Victorian Aboriginal Heritage Register [VAHR] at the Aboriginal Victoria [AV], Local Government Heritage Overlays, Heritage Victoria Inventory and Register, National Trust) and other relevant available literature;
- Provide a brief review of land use for the activity area;
- Conduct a site assessment by a qualified Cultural Heritage Advisor to identify any Aboriginal place[1] within the activity area;
- Identify and provide a series of maps as required for a CHMP showing any Aboriginal place or areas likely to contain Aboriginal cultural heritage, such as archaeological sites;
- Provide information in relation to any implications of Commonwealth and State environmental legislation and Government policy associated with the proposed development;
- Discuss any opportunities and constraints associated with the activity area;
- Liaise with the key stakeholders; and
- Produce a CHMP suitable for evaluation by the appropriate evaluation party.

1.2 Name of Sponsor

The Sponsor of this CHMP is Angelo Martucci who is the landowner of the activity area and does not have an Australian Business Number.

1.3 Name of Owner and Occupier of the Activity Area

The activity area is owned and occupied by Angelo Martucci.

1.4 Location of Activity Area

The activity area is located in Lara, Victoria (Map 2).

[1] Note: the terms used in this report, Aboriginal place, Aboriginal cultural heritage and archaeological site, are used interchangeably and essentially are referring to an Aboriginal place that is an archaeological site.

The cadastral details of the activity area are as follows:

- Property PFI 152461056, 2 PS 431989 (42-44 Ponds Drive Lara, Victoria, 3212)

A more detailed description of the activity area is contained within Section 2.

1.5 Reasons for Preparing the CHMP

This CHMP has been prepared in accordance with Part 4 of the Victorian *Aboriginal Heritage Act 2006* and is required by the Victorian *Aboriginal Heritage Regulations 2007* (s.47). The specific Regulations which trigger the requirement for this plan are (Map 2):

- Under r.23, the activity area is within an area of cultural heritage sensitivity as it is located within 200 m of a waterway, namely Hovells Creek;
- Under r.46, the proposed activity is a high impact activity as it involves the subdivision of land;
- Part or all of the activity area has not been subject to previous significant ground disturbance as defined by the *Aboriginal Heritage Regulations 2007* (r.4).

This CHMP does not contain detailed information regarding non-Aboriginal historical heritage issues relating to the activity area.

1.6 Notice of Intent to Prepare a Cultural Heritage Management Plan

Under s.54 of the *Aboriginal Heritage Act 2006*, the Sponsor of a CHMP must give notice of their intention to prepare a CHMP.

In accordance with s.54(1)(a) of the *Aboriginal Heritage Act 2006*, the Sponsor submitted a Notice of Intent to prepare a Cultural Heritage Management Plan (NOI) to the RAP for the activity area, the Wathaurung Aboriginal Corporation, on 15 March 2016. A copy of this NOI is attached in Appendix 1. The RAP responded to this NOI on 16 March 2016 and indicated that they would evaluate this CHMP (#14191). A copy of this response is attached in Appendix 1.

As the Sponsor is also the owner/occupier of the activity area a formal notification under s.54(1)(c) of the *Aboriginal Heritage Act 2006* was not required.

1.7 Registered Aboriginal Parties

The RAP for the activity area is the Wathaurung Aboriginal Consultation.

Details of all consultation undertaken with the RAP for the purposes of preparing this CHMP are contained in Section 4.

1.8 Native Title

There are currently no Native Title claims or determinations over the activity area and as the activity area comprises privately owned land Native Title has been extinguished.

1.9 Name of Cultural Heritage Advisors

The Cultural Heritage Advisor and author of this CHMP is Alison O'Connor. The quality assurance review was undertaken by Oona Nicolson (Director/Principal Heritage Advisor). The field work was undertaken by Alison O'Connor (Senior Archaeologist/Cultural Heritage Advisor). Mapping was provided by Monique Elsley (GIS Coordinator).

Alison O'Connor

Alison is a senior archaeologist at Ecology and Heritage Partners Pty Ltd with over eight years of experience in Australian archaeology. Alison completed her archaeology degree with Honours at La Trobe University in 2008. Her thesis focused on historical archaeology, in particular the analysis of nineteenth-century ceramics. Alison was trained in artefact analysis during her undergraduate studies at La Trobe University. Alison has been involved in historical excavations since 2006 and has supervised many historical excavations within inner Melbourne. Alison is an experienced field supervisor and has overseen the investigation and salvage of large and complex archaeological sites. In regards to Aboriginal Cultural Heritage Management Plans, Alison specializes in the management of large residential subdivisions in the outer western suburbs of Melbourne.

As a consultant Alison has conducted Cultural Heritage Management Plans, historical due diligence assessments, desktop assessments, survey and excavation reports, including the assessment of dry stone walls and household sites. In addition, she has built professional relationships working with Heritage Victoria and the Office of Aboriginal Affairs Victoria as well as consulting with various clients. Alison has a positive history of consulting with Registered Aboriginal Parties and Traditional Owner groups in Victoria.

Alison has shown commitment to the profession through her involvement in the La Trobe University Colloquium where she has presented the results of her excavations at Evansdale historical excavation in 2012 and the Lonsdale Street historical excavation in 2013. Alison has also produced papers for the Excavation, Surveys and Heritage Management in Victoria journal (La Trobe University) regarding the historical excavations at the Evansdale Farm Complex, Truganina (vol. 2) and 612-622 Lonsdale Street, 593-599 Little Lonsdale Street and 5-11 Altson Lane, Melbourne (vols.3 & 4).

- Bachelor of Archaeology (Honours), La Trobe University, Vic (2009).

Monique Elsley

Monique has extensive experience with ArcGIS desktop software for the production of mapping products and data analysis. Her first stint in the spatial industry was as a Cartographer at Lonely Planet Publications, in 2006 - 2007. Responsibilities included creating maps for and assisting with the finalisation of regional and city maps for soon to be released guidebooks, and updating the existing database with information obtained from aerial imagery and provided by authors. Following this, Monique gained employment as a Geomatics Research Scientist at the Department of Primary Industries from 2007 – 2009, and again in 2010 - both in a full-time and part-time capacity. Her work involved producing GIS data layers and maps for various projects, analysing results, undertaking a literature review, and contributing to technical reports and journals. Projects she was involved in focussed on climate change adaptation, Victorian land use and developing agricultural ecological zones. Most recently, whilst completing her PhD, Monique undertook casual lecturing and tutoring roles at RMIT. This included developing materials for a new practical exercise with the aim of

teaching students how to produce quality maps using ESRI's ArcGIS software. Her formal qualifications include:

- Doctor of Philosophy, RMIT (2013);
- Bachelor of Applied Science (Geospatial Science) (Honours), RMIT (2008); and
- Bachelor of Applied Science (Multimedia Cartography), RMIT (2007).

Oona Nicolson

Oona Nicolson is a Director and the Principal Heritage Advisor at Ecology and Heritage Partners Pty Ltd. She is a heritage specialist with over 20 years of experience in the archaeological consulting sector, working in Victoria, South Australia, New South Wales and Tasmania. Oona regularly appears before VCAT and independent panels as an Expert Witness in the areas of Aboriginal and historical heritage. Oona has extensive experience in over 800 projects with a wide variety of Agents.

Oona's skills include project management, peer reviews, background research and due diligence assessments, archaeological survey, subsurface testing and salvage excavation, Aboriginal and non-Aboriginal site identification, recording and photography, site significance assessment, development of recommendations to mitigate the impact of development upon Aboriginal and non-Aboriginal historical heritage, flaked stone artefact and historical artefact recording and interpretation, communication and consultation with regulatory bodies (AV and HV), Agents, landowners, RAPs and community representatives, preparation of conservation management plans, expert witness statements, Permits and Consents to Disturb for Heritage Victoria, Historical Heritage Assessments and, desktop, standard and complex Aboriginal CHMPs. Her formal qualifications and memberships include:

- Bachelor of Arts (Honours in Archaeology; First Class), Flinders University (1996);
- Bachelor of Arts (Australian Archaeology and Australian Studies), Flinders University (1995);
- Current Archaeology (Alternate) Member of the Victorian Heritage Council;
- Maritime Archaeology Certificate: Part 1 (Part 2 pending), AIMA and NAS (U.K.);
- Australian Association of Consulting Archaeologists Inc. AACAI (Full Member and past National President);
- Member, Australian Archaeological Association (AAA);
- Fellow of the Victorian Planning and Environmental Law Association;
- Accredited UDIA EnviroDevelopment Professional (Accredited August 2012)
- UDIA Urbanisation and Infrastructure Committee; and
- Heritage member of the South Australian Chamber of Mines and Energy (SACOME) Sustainability and Development Committee.

1.10 Heritage Legislation

An overview of the *Aboriginal Heritage Act 2006*, the Commonwealth *Native Title Act 1993*, the Victorian *Planning and Environment Act 1987* and the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* is included in Appendix 2. This legislation is subordinate to the Victorian *Coroners Act 2008* in relation to the discovery of human remains.

1.11 Report Review and Distribution

Copies of this CHMP will be lodged with the following organisations:

- Angelo Martucci;
- Tract Consultants Pty Ltd;
- Wathaurung Aboriginal Corporation; and
- Aboriginal Victoria.

2 ACTIVITY

2.1 Extent of Activity Area

The activity area is located in Lara, Victoria (City of Greater Geelong). The activity area is approximately 0.20 ha in size and is bounded to the north by Hovells Creek, to the east by residential development, to the west by residential development and horse paddocks and to the south by Ponds Drive (Map 2).

2.2 Activity Description

2.2.1 The Activity

The proposed activity is a residential development and subdivision comprising up to four townhouses. Map 3 shows a concept plan of the proposed townhouse development which is subject to change as an outcome of the upcoming planning assessment process with Greater Geelong City Council. Each of the allotments may contain a two-storey townhouse, concrete driveway, garage and landscaping. The buildings and driveway will be suspended on a number of pier footings (2000 mm deep with a 600 mm diameter). The activity area will be prepared via mechanical scraping to level the land and the installation of underground services to a maximum depth of 2 m.

The activity area comprises two separate Greater Geelong planning zones; General Residential Zone to the south in the location of the existing residential building and Urban Floodway Zone to the north within the location proposed townhouses (Figure 1).

As part of the Sponsor's submission to Council for the development and subdivision of the northern section of the activity area, the Sponsor we will be seeking the rezoning of the land from the Urban Floodway Zone to the General Residential Zone (Appendix 3). The rezoning will also (partially) apply a Special Building Overlay (Appendix 4).

2.2.2 Potential Impacts to Aboriginal Cultural Heritage

The proposed construction of four town houses, including the installation of underground services, will impact buried land surfaces or Aboriginal cultural heritage material, if present within the activity area.

Figure 1: Map from planning schemes online showing activity area (Greater Geelong Planning Scheme 2016).

3 DOCUMENTATION OF CONSULTATION

3.1 Consultation and Participation in Relation to the Assessment

The following representatives of the Wathaurung Aboriginal Corporation participated in consultation in relation to the assessment:

- Katrina Thomas (RAP Manager); and
- Simone Werts (Administration Officer).

The details of all consultation undertaken in relation to the assessment are presented in Table 1.

3.2 Participation in the Conduct of the Assessment

The following representatives of the Wathaurung Aboriginal Corporation participated in the fieldwork conducted as part of the assessment, including the survey and subsurface testing program conducted on 30 March 2016:

Table 1: Consultation in Relation to the Assessment

Date	Participants			Details and Outcomes of Consultation
	CHA	RAP	Sponsor	
15.03.2016	Alison O'Connor	Simone Werts	Angelo Martucci	Notice of Intent (NOI) A NOI was submitted to the RAP by Adrienne Ellis. The CHA was later changed to Alison O'Connor. The RAP responded on 16.03.2016 to advise that they would evaluate the CHMP.
29.03.2016	Alison O'Connor	Katrina Thomas	-	Meeting Project inception meeting held. An excavation methodology comprising a single 1 x 1 m stratigraphic test pit and several shovel test holes spread across the activity area was agreed upon.
30.03.2016	Alison O'Connor	Chloe Clarke John Clarke	-	Survey and Subsurface Testing A single 1 x 1 m test pit and four shovel test holes were conducted within the activity area. The RAP field representatives were satisfied with the amount of testing and the depth of testing.

Date	Participants			Details and Outcomes of Consultation
	CHA	RAP	Sponsor	
26,04.2016	Alison O'Connor	Katrina Thomas	-	Meeting Meeting held to discuss results of the survey and subsurface testing methodology. Katrina appeared satisfied by the amount of testing conducted and requested that recommendations including a cultural heritage induction and RAP access to Aboriginal places were included in the CHMP.

3.3 Consultation in Relation to the Recommendations

The following representatives of the Wathaurung Aboriginal Corporation participated in consultation in relation to the recommendations:

- Katrina Thomas (RAP Manager).

Table 2: Consultation in Relation to the Recommendations

Date	Participants			Details and Outcomes of Consultation
	CHA	RAP	Sponsor	
26.04.2016	Alison O'Connor	Katrina Thomas	-	Meeting Meeting held to discuss results of the survey and proposed subsurface testing methodology. Katrina appeared satisfied by the amount of testing conducted and requested that recommendations including a cultural heritage induction and RAP access were included in the CHMP.

3.4 Summary of Outcomes of Consultation

The RAP field representatives were satisfied with the number of shovel test holes excavated across the activity area and the depth of clay reached during excavation. Due to the shallow depth of the sterile clay, ranging between 50 – 80 mm, the Cultural Heritage Advisor (Alison O'Connor) suggested excavating a sondage in the north west corner of the 1 x 1 m stratigraphic test pit to confirm the depth for CHMP evaluation. The excavation of the sondage confirmed the presence of clay, although the clay changed from a mottled medium brown to a grey brown colour with depth. The RAP manager, Katrina Thomas, was satisfied with the outcome of the complex assessment and recommended a cultural heritage induction and RAP access to Aboriginal places as an outcome of the CHMP process.

4 DESKTOP ASSESSMENT

The desktop assessment includes research into information relating to Aboriginal cultural heritage in or associated with the activity area.

4.1 Environmental Context

Environmental factors influence how land may have been used in the past. This section reviews the environmental context of the activity area to gain an understanding of environmental factors relevant to Aboriginal cultural heritage.

4.1.1 Geographic Region

The geographic region defined for this report is the Hovells Creek catchment (Map 4). The region includes flat volcanic plains and plains with low rises, as well as some highly disturbed areas from commercial, residential and industrial use. The region (and the activity area itself) forms part of the Victorian Volcanic Plains bioregion (VVP) (DEWLP 2016a). This geographic region shows broadly similar environmental characteristics that may influence Aboriginal occupation patterns. Therefore it is relevant to any Aboriginal cultural heritage that may be present within the activity area.

4.1.2 Geology, Geomorphology and Soils

Geology

The VVP is dominated by Cainozoic volcanic deposits across an extensive flat to undulating basaltic plain and characterized with stony rises, old lava flows, numerous volcanic cones and old eruption points, with shallow saline and freshwater lakes throughout the region (DEWLP 2016b).

The valley of Hovells Creek is incised through quaternary deposits of limestone, sand and gravel, known as 'Lara Limestone', which lies above the Newer Volcanics basalt (Map 5). This freshwater limestone was deposited over the Newer Volcanics, in lakes that formed from the damming of streams by the newly erupted lavas. The lakes have since drained and Hovells Creek has incised a valley exposing the limestone and underlying sediments. According to Abele (1977: 48) the limestone deposits are early to middle Pleistocene (1.8 Mya to 130 kya), and therefore pre-date the known Aboriginal occupation of Australia.

According to DEWLP (2016c), upstream from the Princes Highway bridge, as far north as the Melbourne-Geelong Railway bridge, the limestone is overlain directly by deposits of marine and estuarine shells, which have accumulated on benches eroded into the limestone on the lower valley slopes. A radiocarbon date of the marine shells returned a value of 5,629 – 5,690 years. The limestone surface on which the marine shells rest has been bored by the marine *mollusc Venerupis*, and paired shells occur in place in the burrows. It is therefore possible that the benches originated as shore platforms that are now 2 m above present sea level. The radiocarbon date of the shells is evidence that a mid-Holocene sea level 2-3 m above the present level was responsible for the erosion of the limestone benches and the accumulation of the shell beds.

This area is one of a small number of dated Holocene shell deposits on the Victorian coast that suggests a mid-Holocene sea level some metres above the present sea level. Therefore the site is significant for its contribution to understanding the chronology of recent sea level changes. DEWLP (2016c) considers management of the lower valley slopes of Hovells Creek (within La1 to La3) should be reserved for low intensity uses and that the slopes should not be regraded. Artificial channelling, dredging, widening or filling of the creek should not occur.

Whilst this site is downstream of the activity area, its proximity to the activity area means that the same geological attributes may also occur in the Hovells Creek gully portion of the activity area. Consequently, it is possible that marine-derived shell, lying above the Lara Limestone deposits, will also occur. The mid-Holocene radiocarbon date of the marine shells means that they were deposited during the period of Aboriginal occupation of the area.

Soils

The low-lying areas of the VVP such as the lands within the activity area generally consist of calcareous sodic texture contrast soils grading to yellow acidic earths (Chromosols, Sodosols and Dermosols) as well as comprising grey cracking clay Vertosols in the lowest regions. The geology of the level plains comprises recent clays, sand and gravel with minor Quaternary basalt found in the east. This landscape has been vulnerable to marine inundations previously in geologic time. This is reflected in the abundance and occurrence of carbonate fragments at the surface of cultivated land (DEWLP 2016b).

The Chromosols of the texture contrast soils reflect a clear and abrupt textural change at the B2 horizon and are often brightly coloured and fairly acidic, whilst the Sodosols have this change occurring between the A and B horizons in general (and are not often strongly acidic). The Dermosols of the texture contrast soils generally have a more structured B2 horizon with greater cementation of particles and lack a strong contrast between the A and B horizons. The Vertosols of the cracking clays reflect their locations on the lower, poorly-drained parts of the VVP, with characteristic swelling in wet conditions and drying/cracking in dry conditions (DEWLP 2016b).

The undulating plains of the VVP, which can be found within the activity area, have deep regolith profiles developed on Quaternary basalt within the Western Plains. These plains comprise very gentle slopes with alkaline red texture contrast soils. The texture contrast soils of the undulating plains generally consist of alkaline red texture contrast soils (clay loam and light clay) and alkaline cracking clays. These soils occur on basic volcanic deposits including ash deposits in slightly better drained areas and slightly stony plains in the drier eastern part of the volcanic plains (where they are sodic soils with many strongly sodic occurrences). The soils in the drier areas have a dark structured clay loam sharply changing to hard-setting red heavy clay. Basalt inclusions generally increase with depth, and calcareous material may be present in the lower subsoil.

The soil types within the activity area would have supported a range of vegetation types in the past, and the soil composition is important for understanding the ways in which various artefacts may have been preserved, both in relation to artefact survivability (acidic content) and their ability to remain in situ (movement within soils due to swelling/shrinking) (DEWLP 2016b).

4.1.3 Landforms and Hydrology

According to DEWLP (2016b) the geomorphological unit within the VVP where the activity area lies is classified as 'Plains and plains with low rises (Duck Hole Plain, Irrewillipe, Hanson Plain). This region consists of undissected sand plains present as a 'window' through the basalt plains of the VVP, throughout the generally flat landscapes and very gentle low rises that characterize the area. Although the activity area is present within these low-lying flat plain areas, the likelihood of the sand plains being present is considered low.

The township of Lara lies on landforms characterised by flat to undulating plains with occasional hills formed by extinct volcanoes that were active during the Pliocene and Pleistocene epochs (5 mya to 10 kya). The activity area is located on the edge of one of these broad plains, where it meets the shallow valley of Hovells Creek.

4.1.4 Paleoenvironment and Climate

Environmental factors influence how land may have been used in the past. This section reviews the environmental context of the activity area to gain an understanding of environmental factors relevant to Aboriginal cultural heritage.

It was previously thought that the geology of Port Phillip Bay had remained relatively unchanged for the past 10,000 years. Scientists estimated that Tasmania and the Bass Strait islands was joined to mainland Australia until around 14,000 BP, when the sea level was approximately 50 m below present levels (Lambeck and Chappell 2001). The Australian coastline experienced a drop in sea level at the peak of the last Ice Age around 20,000 years ago. Until recently, it was thought that Port Phillip Bay was flooded by rising sea levels around 8,000 years ago (Holdgate et al. 2001). However, new geological evidence suggests that the bay was first formed by rising sea levels at the end of the last Ice Age, but then began drying out and shrinking approximately 2800 years ago. Port Phillip Bay was at its smallest extent approximately 1,000 years ago, until it underwent catastrophic ocean flooding, according to local Aboriginal legend. According to Holgate's latest research, the bay entrance was cut off from the Bass Strait by sand and silt. With no water feeding into the bay, it became nothing more than a small salty lake. Evidence of the bay's maximum shrinkage approximately 1,000 years ago can be seen on the bay floor today, in the form of river channels that formed on the dry bay floor and extended to the blockage of sand and silt across the Nepean Bay Bar area. When water was able to flow through the clogged bay entrance, it may have occurred rapidly, most likely in the form of a great flood. According to Aboriginal tradition, a sudden, large flood occurred (Holdgate et al. 2001).

At the end of the last Ice Age, vegetation around the Port Phillip Bay area would have consisted of a thin and broken band of woodland stretching along the eastern and south eastern coast (D'Costa and Kershaw 1997). It is thought that dry and windy climatic conditions probably reduced the woodlands to a few localised sites with favourable conditions (Adams and Faure 1997). During the height of the bay's exposure, the bay would have been a fairly barren grassland and salt bush landscape. This landscape would have been an ideal Aboriginal hunting ground for kangaroos and emu. As the township of Lara is located close to the current extent of Port Phillip Bay, the use of the Lara region by Aboriginal people in the past would have been directly related to the changing use of the bay region leading up to, and following, the bay's flooding.

The climate of Lara is characterised by warm summers and cold winters; temperatures range between an average maximum of 26.2°C and minimum of 11.6°C in summer to an average maximum 15.5°C and minimum 5°C in winter. Rainfall varies between a maximum of 51 mm in October and 28.3 mm in March, with annual average rainfalls of 459.3 mm (BOM 2016).

4.1.5 Aboriginal Land Use and Anthropogenic Change

As numerous studies have sought to demonstrate; the pre-European Australian landscape was a product of Aboriginal land management, not a passive field for Aboriginal habitation.

Gammage (2012: 46) notes that early European settlers were amazed at the 'park-like' character of the landscape west of Melbourne, a character established through regular fire management. In regard to the current geographic area he suggests the stretch of land depicted between the You Yangs and Mt Macedon depicted in Hoddle's *View from Batman's Hill* (1840) represents a vast stretch of land with "no stumps and barely a tree, and those distant few are in lines." Gammage argues this was an anthropogenic vista of open grasslands and "the greenness of the country proceeds from its having been recently burnt and some heavy rains falling since". He further surmises "this land may have been sheet-burnt regularly to expose Yam Daisy, which grew in millions here. Perhaps the yellow streaks in Hoddles's painting depict them" (Gammage 2012: 46).

Likewise, Presland (2008: 119-120) has noted the extensive burning regimes practiced in the grasslands west of Melbourne: "in grassland areas, firing led to new growth, which attracted game and, carried out at the right time of year, promoted higher yields in some tuber-bearing plants. Aboriginal targeting of specific plants for food, for example Murnong Microseris lanceolata, would most likely have had an impact on such species" (Presland 2008: 119).

> *Regular burning by Aborigines almost certainly kept large parts of the Melbourne area, particularly to the west of the Maribynong River and in the north, clothed with a structure of grassland…. Similar results almost certainly defined smaller-scale changes such as the assisted growth of particular plants. The range of plants such as Murnong may have been extended to some degree but it still only occurred within the areas that provided its preferred habitat. It remained a plant of the plains and dry foothills; the actions of Aboriginal people did not lead to it growing in damp river valleys or swampy locations.*

4.1.6 Late Holocene Vegetation

According to the Department of Environment, Water, Land and Planning's (DEWLP) Ecological Vegetation Classes (EVCs), the poorly-drained clayey soils and red texture contrast soils (of the undulating plains) of the VVP bioregion would have historically supported vegetation classified as Plains Grassy Woodlands (EVC55) (DEWLP 2016). This vegetation class would have consisted of an open, eucalypt woodland with large trees such as River Red Gums and a sparse shrub layer over a species-rich grassy and herbaceous ground layer such as Common Rice-flower (*Pimelea humilis*), Kangaroo Grass (*Themeda triandra*), Kidney-weed (*Dichondra repens*) and Supple Spear-grass (*Austrostipa mollis*) (DEWLP 2016).

Closer to Hovells Creek, the poorly-drained soils of the creekline would have historically supported vegetation classified as Creekline Grassy Woodlands (EVC68) (DEWLP 2016). This vegetation class would have consisted of Eucalypt-dominated woodland with occasional scattered shrub layer over a mostly

grassy/sedgy to herbaceous ground-layer. Shrub species may have included Common Rice-flower (*Pimelea humilis*) and Golden Wattle (*Acacia pycnantha*), and grassy/herbaceous species may have included Firebreed variants (*Senecio spp*.) and St John's Wort (*Hypericum gramineum*). The vegetation class occurs on low-gradient ephemeral to intermittent drainage lines, typically on fertile colluvial/alluvial soils. These minor drainage lines can include a range of graminoid and herbaceous species such as Common Tussock-grass (*Poa labillardierei),* Common Reed (*Phragmites australis*) and Rush (*Juncus spp*.), tolerant of waterlogged soils.

These types of vegetation would have been utilised by Aboriginal people in the area for the creation of spears, clothing and vessels, and would have supported a range of game that could be hunted for food.

4.1.7 Traditional Resources

Before European arrival, the area was being occupied by Aboriginal people; hunting and gathering would have been common activities occurring throughout this area, and the region would have provided people with food resources especially around the Hovells Creek area and its tributaries; fresh water supplies would have been accessible also.

The creek environs are home to significant animal species such as the Growling Grass Frog and the Striped Legless Lizard, as well as migratory birds. Native vegetation along the creek including Red River Gum and White Mangroves would have provided important timber resources and eel habitat. Native reptiles, including the Tiger snake, Eastern Blue-tongued Lizard, Common snakeneck turtle and Eastern brown snake have been recorded along the creek. Numerous native birds have been recorded in the catchment. Those of economic value to Aboriginal hunter-gatherers would have included Pacific Black Duck, Australian Pelican, Australian Ibis, Great Egret and the Sulphur-crested Cockatoo.

Kangaroos and wallabies would also have been abundant in the level plains of the Geographic area. Platypus are also endemic to the Hovells Creek catchment geographic region. As noted above the rich riparian habitat and vegetation of the Creek valley would have provided bountiful food and tool resources for Indigenous people. Native vegetation, fresh water, fish, shellfish, water birds and small mammals would have provided a ready resource within this landscape. Consequently, all of these plants and animals would have made the area an attractive location for Aboriginal communities to camp for extended periods.

4.1.8 Post-Contact Land Use History

Lara is a growing residential town located in a rural setting between Melbourne and Geelong, north east of Geelong across Corio Bay. The explorers Hume and Hovell arrived at Lara on 16 December 1824, believing that they had reached Westernport Bay (Victorian Places 2016). Hovells Creek is the main waterway within Lara, which drains into Limeburners Bay within the Corio Bay coastline. Hovells Creek was first called Duck Ponds Creek when the area was settled in the 1840s, and the place where Lara was laid out was known as Duck Ponds. The name described the nature of the waterway and the plentiful fowl found there, including the location of Lara Lake which was approximately 15 ha in size. In 1853, the town was also referred to as Lara, and the names co-existed with the Hovells Creek post office until the 1870s. The local school, which opened in 1866, was named Lara Lake, the railway station was Duck Ponds and the government named the town Hovells Creek in 1872. Two years later, after local petitioning, the name Lara was settled on (Victoria Places 2016).

In 1903 the Australian handbook described Lara as a small rural town with a thriving lime burning industry:

LARA (formerly called DUCKPONDS) (38° 1′ S. lat., 144° 29′ E. long.), in the county and electoral district of Grant, shire of Corio, and police district of Geelong, postal township on Hovell's Creek, with telegraph and railway station on the Geelong and Melbourne Railway, fares, 5s.8d. and 3s. 10d., return 8s. 8d. and 5s. 9d., 35¾ miles SW. of Melbourne, and 10 miles from Geelong. It lies 52 feet above sea-level. Two State schools (Nos. 769 and 2,107), hotel, shire hall, Protestant hall, Anglican, Wesleyan, and Primitive Methodist churches, and I.O.R. society are here. The district contains a number of extensive grazing properties, and numerous dairy and agricultural farms. Area of shire, 243 square miles. Population, 2,267; ratepayers, 647; dwellings, 428; rate 1s.; net ratable value of property, £32,991; 8,923 acres under cultivation. There are numerous limekilns, which supply largely Melbourne, Ballaarat, and Castlemaine. You Yang and Forest plantations in district. Water from wells. Population of district about 450.

Figure 2: Excerpt describing Lara from the Australian handbook (1903) (Victorian Places 2016).

The activity area itself has been historically used as farm land throughout the twentieth century and was likely subject to a mix of agricultural activities such as ploughing and farming activities such as cattle and sheep grazing. It is also possible that horses were also once kept on the property as horse paddocks are located to the west of the activity area. The activity area is currently used as residential land comprising a house which appears to have been constructed on the property within the last decade, including the construction of a concrete driveway and installation of associated underground services. The backyard is landscaped and includes garden beds and a shipping container along the eastern boundary.

4.2 Aboriginal Context

The following section reviews the Aboriginal context of the activity area and includes; an examination of historical and ethnohistorical sources, previously recorded Aboriginal archaeological site types and locations in the geographic region of the activity area and, archaeological studies undertaken in the area. Together, these sources of information can be used to formulate a predictive site model concerning what types of sites are most likely to occur in the activity area, and where these are most likely to occur.

4.2.1 Archaeological Research

Archaeological evidence suggests that Aboriginal peoples had occupied all of Australia's environmental zones by 40,000 years BP. Pleistocene archaeology of the Port Phillip Bay and Hinterland area documents human occupation dating back at least 40,000 years. The oldest dated archaeological site in Victoria occurs at Keilor in Melbourne. Charcoal from a hearth excavated in 1973 has been dated to 31,000 years BP (Flood 1995: 286). More recently research at the Bend Road site in Melbourne's southeast has dates extending back to

30–35,000 BP (Hewitt and Allen 2010). The archaeological record of the Greater Melbourne area includes a rich record of artefact scatters, scarred trees and stone arrangements that documents Aboriginal life dating from the Pleistocene through to the immediate pre-European past. Most of these sites point to important relationships between sites and landscapes and resources within the immediate area.

4.2.2 History and Ethnohistory

Historically, the activity area lay within the boundaries of the *Wadawurrung* language group. This group consisted of many tribes of Aboriginal people held together by common language and beliefs, and is discussed in detail below.

The *Wadawurrung/Watha wurrung* language was one of the five primary languages spoken in south-western Victoria. The *Wadawurrung* people are part of the greater Kulin nation surrounding Port Phillip and Western Port Bays (Clark 1990), with an area that is bounded to the east by the Werribee River, to the south by Port Phillip Bay and Bass Strait, to the west by various watercourses and roadways including Painkallac Creek at Aireys Inlet, Salt Creek at Woorndoo Upper and Fiery Creek to the west of Beaufort and the ridgeline of the Great Dividing Range to the north (J. Young, pers. comm. 7 May 2013).

Linguistically, the *Wadawurrung* were most similar to the *Djadja wurrung* to the north and the *Woi wurrung*, *Bun wurrung* and *Daung wurrung* to the east (Clark 1990: 276). Collectively these five groups form the Kulin Nation, who shared similarities in language, customs, and some traditions. It appears that the *Wadawurrung* were genetically related to the other four Kulin groups, but diverged enough in terms of language, their burial practices and distinctive facial and body markings at corroborees (Clark 1990: 276-277) to be a separate tribal group. Their traditional land includes both coastal and inland environments, and thus the *Wadawurrung* interacted with neighbouring clans along their western boundary (*Gulidjan* and *Djargurd wurrung*), whose speech was essentially the same, as well as various clans belonging to other Eastern Kulin groups, such as the *Woi wurrung* (Wurundjeri), and the Bun wurrung to the east, the *Dja Dja wurrung* to the north.

The *Wadawurrung* and their eastern and northern neighbours shared a patrilineal form of moiety system. The Kulin social world was divided into either one of two moieties; the *Waa* (crow) or B*unjil* (eaglehawk) moieties (Clark 1990: 276). Marriage was always across the moieties, with a *Waa* person having to marry a *Bunjil* person, preferably from a distant clan group (Barwick 1984: 104-105). In some instances, members of the *Wadawurrung* clans intermarried with the matrilineal clans of the *Gulidjan, Djab wurrung*, and the *Djargurd wurrung,* although in many instances, these practices ended in inter-clan hostility.

Land Tenure

The *Wadawurrung* were divided into 25 or 26 clans, each of which was responsible for a specific area of land within the wider *Wadawurrung* territory, with group sizes between 40 to 60 people. According to Clark (1990: 311) and Presland (2010: 28-29), each of these clans occupied a distinctive geographical area and belonged to one of the two moieties. *Wadawurrung* groups that belong to the *Waa* moiety include the *Beerekwart balug* (Mount Emu), *Bengalat balug* (Indented Head), *Carninje balug* (Emu Hill station, Lintons Creek), *Corrin corringer balug* (Carranbulluc), *Moner balug* (Trawalla station, Mount Emu Creek), and the *Tooloora balug* (Mount Warrenheip, Lal Lal Creek, west branch of Moorabool River).

Clans of the *Bunjil* moiety include the *Burrumbeet balug* (Lakes Burrumbeet and Learmonth), *Keyeet balug* (Mount Buninyong), *Marpeang balug* (Blackwood, Myrniong, Bacchus Marsh), *Moijerre balug* (Mount Emu Creek), *Peerickelmoon balug* (near Mount Misery), *Wadawurrung balug* (Barrabool Hills), and the *Wongerrer balug* (head of Woady Yallock Creek).

Clans of unknown moiety association include the *Barere barere balug* (Colac and Mount Bute stations), *Borogundidj* (Yarrowee River), *Carringum balug* (Carngham), *Corrac balug* (Commeralghip station and Kuruc-a-ruc Creek), *Gerarlture* (west of Lake Modewarre), *Neerer balug* (between Geelong and the You Yangs), *Pakeheneek balug* (Mount Widderin), *Woodealloke gundidj* (Wardy Yallock River, south of Kuruc-a-ruc Creek), *Worinyaloke balug* (west side of Little River), and the *Yaawangi* (You Yang Hills).

The clan which would have historically been responsible for the activity area was the *Wadawurrung balug*. This clan was of the *Bunjil* Moiety and is one of the best-known of the *Wadawurrung* clans, due to their close location to the settlement at Geelong.

Nowadays, descendants of a *Wadawurrung* woman named 'Queen Mary' and her son John Robinson (*aka* Robertson) are identified as members of the Wathaurung Aboriginal Corporation (the Wathaurung).

Resources

The mainstays of the Aboriginal diet were plants and roots. One of the most important foods was called Murnong (*Microseris lanceolata*), a tuber that resembled a dandelion, also known as Yam Daisy or Native Dandelion. Other roots that were also cooked by boiling them in hot water include potatoes (Milkmaids: *Burchardia umbellata*), tarook (Blushing bindweed) and puewon (Bulbine lily). In a similar fashion to other Kulin clans, especially the *Wurundjeri*, the *Wadawurrung* used sharp sticks *(karni)* to dig roots out, separate bulbs and aerated the soil. Other commonly utilised plants and fruits included watercress (Boyungkaal: Nasturtium officinal**)**, Warrigal Cabbage (New Zealand Spinach, Captain Cook's Lettuce: *Terragonia tetragoniodes*) and native raspberry (*Rubus parvifolius*), all of which can be eaten either fresh or used as a flavour enhancer. Other plants consumed all over Australia were also utilised by the *Wadawurrung*, including aquatic plants such as the water ribbons (*Triglochin procera*) (Gott and Conran 1991: 9).

The coastal and riverine *Wadawurrung* clans had access to a wide variety of fish, including mullet, whiting, flounder, flathead, salmon, trevally, tommy-rough and many other species were speared and netted, particularly along tidal flats and in estuaries. Shellfish and seafood were also exploited including abalone (*Haliotis* sp.), turbot (gastropod) and pipi shell (*Paphies australis*). Finally, all mammals present were probably target species for hunting. Birds and eggs were also taken, along with lizards and insects.

When the *Wadawurrung* were migrating to the north where there are fewer freshwater streams, women used to collect water from freshwater wells. These wells are natural depressions on rocks, of which there are still some in use, one located near the Werribee River (about a mile from its mouth), and one more located on Big Rock in the You Yangs (Presland 2010: 62-63).

Presumably the *Wadawurrung* along with the *Girai wurrung* clans gathered at Lake Bolac with local *Djab wurrung* clans in early Autumn to take advantage of the annual migratory season of eels (*Anguilla australis*) (Clark 1990: 276).

Conflict

It has been reported that during the 1830s the *Wadawurrung*, particularly the *Wadawurrung balug*, were 'at enmity' with both the *Dgargurd wurrung* and the *Gulidjan* clans as a result of disputes related to marriage arrangements (Robinson journal 7.04.1840, in Clark 1990:275). This 'war' was the result of *Djargurd wurrung* and *Wadawurrung* men competing for *Gulidjan* women. During the early years of the Buntingdale mission, it was reported that the *Wadawurrung* and the *Djargurd wurrung* clashed several times as they competed for superiority within the mission (Clark 1990: 275).

Shortly after the first contact with the Europeans, the clan populations diminished rapidly. Contact between the *Wadawurrung* and European people first occurred in 1802, when Matthew Flinders and his party made their way to the nearby You Yangs. By 1803 contact between European explorers and *Wadawurrung* people had turned violent on at least one occasion, whereby one or two *Wadawurrung* were killed and several others were injured (Clark 1990: 277). Violent encounters between Aboriginal people and settlers continued through the late 1830s and early 1840s. By 1841 some of the clans had rapidly declined and by 1849 one report estimated that the number of Aborigines in the Geelong region had been reduced to 25% of their 1836 population. Restricted access to resources, disease, inter-tribe hostility and European extermination were cited as the main causes (Clark 1990: 308).

Religion

The basic unit of *Wadawurrung* social organisation was the clan, a group based on kinship through the male line with a shared religious identity (Barwick 1984: 105-6). The clan was a land-owning unit whose territory was defined by ritual responsibilities (Barwick 1984: 106). The common spiritual identities resulted in the larger tribal groups also being intimately interconnected. The basis of the *Wadawurrung* religious identity is totemism, which is likened to the Dreamtime – the time of creation when the ancestral being roamed the land, creating people and naming the animals and plants.

Wadawurrung society is divided into two groups, called moieties, each with specific Totemic Beings belonging to it. Every person belongs to one or the other moiety (*Bunjil* the eaglehawk or *Waa* the crow) (Barwick 1984: 105-6). Clan moiety in *Wadawurrung* society is patrilineal. For the members of this unit, the clan, the totem is a symbol of membership of the unit. It is recognised for the members of this clan and those of other clans. This totem has strong territorial and mythological ties associated with it, and it is believed that it can warn them of approaching danger.

Ritual and Magic

The *Wadawurrung* beliefs system is shared with the other Kulin clans; however, the ethnographic information regarding the *Wadawurrung* is scarce. All Kulin groups believe in black magic and the curative powers of medicine-men or witchdoctors. A peculiar practice by the *Wadawurrung* was to put the rough cones of the She-oak (*Casuarina quadrivalvis*) into a man's fire, so that the smoke might blow into his eyes and blind him (Howitt 2001: 366).

In terms of disposal of the dead, the *Wadawurrung* from the Barrabool Hills (the Wathawurrung balug) and those from around Port Phillip practiced the inhumation of their dead as a symbol of respect. This practice is in sharp contrast to that of neighbouring clans from the *Woi wurrung* (such as the *Gunung willam balug*) who practice cremation (Howitt 2001: 458). Different disposal practices are one of the cultural differences

between the *Wadawurrung* and their neighbours that set them apart, as mentioned earlier (Clark 1990: 276-277).

However, being part of the larger Kulin sub-group, the *Wadawurrung* share some ritual practices, included cannibalism. Cannibalistic practices have been documented, including the ceremonial consumption of human flesh and/or blood, not only from enemies, but also from relatives. The connotations of these two practices are different, with the former being more a sign of revenge, and the latter mostly ceremonial. In 1837 some members of the *Wadawurrung* killed an old man and a child and brought with them on the ends of their spears portions of their flesh, which they ate with great exultation (Howitt 2001: 752).

European Settlement

From the 1830s, European settlement of the coast, as well as settlement of the inland by explorers and overlanders from NSW, resulted in Aboriginal people experiencing displacement from their lands and massive changes in their way of life. The encroachment onto Aboriginal land by pastoralists resulted in numerous conflicts, reduction in the availability of food resources and the introduction of new diseases. Despite the upheavals, Aboriginal people tried to maintain some of their traditions, with some ceremonies such as initiations and occasionally corroborees observed by settlers. In many places Aboriginal people became part of the new colonial life, finding work as shepherds, stockriders, shearers, bark cutters and domestic servants.

By the 1850s the *Wadawurrung* had suffered a massive decrease in numbers (Clark 1990: 298). Between 1837 and 1852 the *Wadawurrung balug* population went from 300 people to nine women, seven men and one child as the result of disease and conflict. Many of the clans were also driven away from the heavily settled areas of Geelong and Melbourne to the north and west. Widespread conflict led to a system of official protectorates (1835-1849), reserves and rations depots aimed at providing protection and supplies to displaced Aboriginal people. In 1839 the Aboriginal Protectorate Scheme was introduced in Victoria. Four Assistant Protectors were appointed under a Chief Protector, George Augustus Robinson. The role of the protectorates was to provide food, shelter and medical supplies, record cultural and population information and to indoctrinate Aboriginal peoples in to the western European cultural and economic systems. Aboriginal reserves and stations were established across Victoria and Aboriginal peoples were encouraged to move to them (Clark 1990: 311-329). *Wadawurrung* clans moved to the reserves and stations set up at Wesleyan Mission Station and Buntingdale Station (Clark 1990: 293). The Protectorate was largely unsuccessful and was disbanded in 1849.

The Central Board for the Protection of the Aborigines was founded in 1860 to provide an administrative structure to manage Aboriginal people in Victoria. This involved local reserves and local guardians who operated Honorary Correspondent Depots, distributing food and clothing to local Aboriginal people (Clark 1990: 301). By the end of 1861 three reserves were established for the *Wadawurrung*; Steiglitz, Karngun, and Mt. Duneed (Clark 1990: 300). In addition a rations station was established at Stockyard Hill in 1860, which operated until 1874. Between 1901 and 1906, all three reserves were handed back to the Department of Lands as they were no longer required due to the decrease in Aboriginal population (Clark 1990: 307).

While many Aboriginal people lived on the missions and government stations, a significant number of people worked and lived on farms and pastoral stations. Some Aboriginal people farmed the land on smallholdings, or worked in industries such as fishing, goldmining and logging. People outside the reserves sometimes

gathered together in camp sites on the outskirts of towns. They were also involved in sports such as cricket, football and athletics.

Today the descendants of the *Wadawurrung* are represented by the RAP for the activity area, the Wathaurung Aboriginal Corporation.

Oral History

The Wathaurung Aboriginal Corporation did not offer any oral histories relating to the activity area for inclusion in this report.

4.3 Database Searches

The following database searches were conducted:

4.3.1 Victorian Aboriginal Heritage Register

A search of the Victorian Aboriginal Heritage Register (VAHR) was conducted on 29 March 2016 for sites within a 2 km radius of the activity area. Searching an area with this radius ensured that a relevant and representative sample of information was obtained. The search identified a total of 34 registered Aboriginal sites within a 2 km radius of the activity area. These sites consist of a total of 63 site component types (Table 4).

Table 3 shows that stone artefact sites, either isolated artefacts or artefact scatters, account for all but one of the site component types in the search area and are by far the most prevalent site type in the region (n=97%). It should also be noted that the proportion of isolated finds and artefact scatters is roughly equal, although there are slightly more isolated finds indicating that this is the most likely type of site to be found in the region.

Most of the sites in close proximity are located within the floodplains of the Hovells Creek Gully, suggesting that this area is the most archaeologically sensitive in the area. There are no sites recorded in close proximity to the activity area on the volcanic plains south of Hovells Creek. One site is recorded on the volcanic plains west of Hovells Creek and a large number of sites have been found on the plains landform in the new residential estates to the west of Lara (Map 8). Therefore, although no sites have been found on the plains landforms in or around the activity area, it is more likely the result of limited archaeological investigations when that area was developed rather than the lack of archaeological sites. The number of sites located at considerable distances from reliable water indicates that the volcanic plains landforms in the activity area may contain Aboriginal material in areas that have not been highly disturbed.

Table 3: Summary of Previously Identified Aboriginal Site Component Types within the Geographic Region

Site Component Type	Quantity	Percentage (%)
Aboriginal Burials	1	2
Artefact Scatters	29	46
Low Density Artefact Distribution	32	51
Object Collection	1	2

Site Component Type	Quantity	Percentage (%)
Total	63	100

Table 4: List of Previously Identified Sites within the Geographic Region

VAHR Number / Component	Site Name	Component Type	Within Activity Area?
7721-0094-1	Lara Burial	Aboriginal Ancestral Remains (Burial)	No
7721-0094-2	Lara Burial	Artefact Scatter	No
7721-0104-1	Hovell Ck At Lara	Artefact Scatter	No
7721-0106-1	Forest Road 1	Artefact Scatter	No
7721-0355-1	Investigator Ave 1	Artefact Scatter	No
7721-0357-1	Darcys Lane 1	Artefact Scatter	No
7721-0358-1	Darcys Lane 2	Artefact Scatter	No
7721-0359-1	Darcys Lane 3	Artefact Scatter	No
7721-0360-1	Darcys Lane 4	Artefact Scatter	No
7721-0423-1	Lara-Colac 16	Artefact Scatter	No
7721-0509-1	Buckingham St 1	Artefact Scatter	No
7721-0510-1	Buckingham St 2	Artefact Scatter	No
7721-0532-1	Hovells Creek Rail Reserve 1	Artefact Scatter	No
7721-0533-1	Hovells Creek Rail Reserve 2	Artefact Scatter	No
7721-0534-1	Hovells Creek Rail Reserve 3	Artefact Scatter	No
7721-0535-1	Hovells Creek Rail Reserve 4	Artefact Scatter	No
7721-0538-1	Serendip Ia 4	Artefact Scatter	No
7721-0642-1	Grand Park Estate 1	Artefact Scatter	No
7721-0643-1	Grand Park Estate 2	Artefact Scatter	No
7721-0644-1	Grand Park Estate 3	Artefact Scatter	No
7721-0645-1	Grand Park Estate 4	Artefact Scatter	No
7721-0653-1	Grand Park Estate 12	Artefact Scatter	No
7721-0821-1	Caddys Rd 1	Artefact Scatter	No
7721-0893-1	Station Lake Rd 1	Artefact Scatter	No
7721-0894-1	Station Lake Rd 2	Artefact Scatter	No
7721-1216-1	Manzeene Avenue Ia 1	Artefact Scatter	No
7721-1207-1	Kees Road Ia 1	Artefact Scatter	No
7721-1213-1	Canterbury Rd West Ia	Artefact Scatter	No
7721-1230-1	Station Lake Road Ldad1	Low Density Artefact Distribution	No
7721-1233-1	Hovells Creek Object Collection 1	Object Collection	No
7721-1236-1	Caddys Road 2	Low Density Artefact Distribution	No

7721-1236-2	Caddys Road 2	Low Density Artefact Distribution	No
7721-1237-1	Caddys Road 3	Artefact Scatter	No
7721-1236-3	Caddys Road 2	Low Density Artefact Distribution	No
7721-1236-4	Caddys Road 2	Low Density Artefact Distribution	No
7721-1236-5	Caddys Road 2	Low Density Artefact Distribution	No
7721-1236-6	Caddys Road 2	Low Density Artefact Distribution	No
7721-1236-7	Caddys Road 2	Low Density Artefact Distribution	No
7721-1236-8	Caddys Road 2	Low Density Artefact Distribution	No
7721-1236-9	Caddys Road 2	Low Density Artefact Distribution	No
7721-1236-10	Caddys Road 2	Low Density Artefact Distribution	No
7721-1236-11	Caddys Road 2	Low Density Artefact Distribution	No
7721-1250-1	Canterbury Road West Ldad	Low Density Artefact Distribution	No
7721-1250-2	Canterbury Road West Ldad	Low Density Artefact Distribution	No
7721-1250-3	Canterbury Road West Ldad	Low Density Artefact Distribution	No
7721-1250-4	Canterbury Road West Ldad	Low Density Artefact Distribution	No
7721-1250-5	Canterbury Road West Ldad	Low Density Artefact Distribution	No
7721-1250-6	Canterbury Road West Ldad	Low Density Artefact Distribution	No
7721-1250-7	Canterbury Road West Ldad	Low Density Artefact Distribution	No
7721-1250-8	Canterbury Road West Ldad	Low Density Artefact Distribution	No
7721-1250-9	Canterbury Road West Ldad	Low Density Artefact Distribution	No
7721-1250-10	Canterbury Road West Ldad	Low Density Artefact Distribution	No
7721-1250-11	Canterbury Road West Ldad	Low Density Artefact Distribution	No
7721-1250-12	Canterbury Road West Ldad	Low Density Artefact Distribution	No
7721-1250-13	Canterbury Road West Ldad	Low Density Artefact Distribution	No
7721-1250-14	Canterbury Road West Ldad	Low Density Artefact Distribution	No
7721-1250-15	Canterbury Road West Ldad	Low Density Artefact Distribution	No
7721-1314-1	Hovells Creek Ldad	Low Density Artefact Distribution	No
7721-1314-2	Hovells Creek Ldad	Low Density Artefact Distribution	No
7721-1314-3	Hovells Creek Ldad	Low Density Artefact Distribution	No
7721-1314-4	Hovells Creek Ldad	Low Density Artefact Distribution	No
7721-1314-5	Hovells Creek Ldad	Low Density Artefact Distribution	No
7721-1313-2	Hovells Creek As	Artefact Scatter	No

4.3.2 Local Council

The activity area is located within, and is governed by, the City of Greater Geelong Planning Scheme. Planning schemes set out policies and provisions for the use, development and protection of land.

The Heritage Overlay of the City of Greater Geelong Planning Scheme was examined. No Aboriginal heritage places listed on the Heritage Overlay are present within the activity area.

4.3.3 Previous Archaeological Investigations

Localised and regional archaeological investigations have established the general character of Aboriginal sites located within the same geographic region as the activity area. This information, together with an environmental context, histories of land use and, historical and ethnohistorical sources, can be used to form the basis for a site prediction statement.

Toscano (2015) conducted a complex CHMP for part of 131 Flinders Avenue and 21 Caddys Road, Lara for a proposed residential subdivision. The desktop assessment concluded that low density artefact distributions are likely to occur in the area. No surface artefacts were identified during the standard assessment due to poor ground surface visibility. The complex assessment comprised two 1 x 1 m stratigraphic test pits and twenty 500 x 500 mm shovel test pits. The soil profile was generally shallow and no artefacts were identified. A cultural heritage induction was one of the recommendations made as an outcome of the CHMP process.

Stone (2014) conducted a complex CHMP for O'Hallorans Road Rising Main, Lara West. The desktop assessment concluded that low density artefact distributions are likely to occur in the area. No surface artefacts were identified during the standard assessment due to poor ground surface visibility. The complex assessment comprised a single 1 x 1 m stratigraphic test pit and thirty-two 500 x 500 mm shovel test pits spaced at 50 m intervals. The soil profile was generally shallow and no artefacts were identified. A cultural heritage induction was one of the recommendations made as an outcome of the CHMP process.

Orr (2014) conducted a complex CHMP for proposed drainage works at Caddy's Road, Lara. The desktop assessment concluded that low density artefact distributions are likely to occur in the area. No surface artefacts were identified during the standard assessment due to poor ground surface visibility. The complex assessment comprised a single 1 x 1 m stratigraphic test pit and seven 500 x 500 mm shovel test pits spaced at 25 m intervals. The soil profile was generally shallow and no artefacts were identified. A cultural heritage induction was one of the recommendations made as an outcome of the CHMP process.

Weaver (1998) conducted an archaeological survey on the western side of Hovells Creek, south of Investigator Avenue, for a proposed residential subdivision. One new site was found, VAHR 7721-0355 (Investigator Ave 1), consisting of over 300 surface stone artefacts. Weaver recommended that the artefacts from this site be retained by the Wathaurong Aboriginal Cooperative, and a permit to disturb/destroy parts of the site where harm could not be avoided be sought prior to the activity.

Chamberlain and Myers (2008) prepared a complex CHMP for a townhouse development at 48-58 Station Lake Road, immediately west of Hovells Creek, about 50 m west of the activity area. They found two new Aboriginal archaeological sites: VAHR 7721-0893 (Station Lake Road 1) and VAHR 7721-0894 (Station Lake Road 2). To minimise harm to the sites from the activity, they recommended modifications to the housing design (including raising the buildings), salvage excavation and retention of excavated spoil.

A summary of archaeological reports relevant to the geographical region of the activity area appears below (Table 5).

Table 5: Archaeological Reports Relevant to the Activity Area

Author, Date, Report #	Description and Location	Results
Weaver, F. 1998 #625	An archaeological survey was undertaken for a proposed residential subdivision south of Hovells Creek, Lara.	One new site was found, consisting of over 300 surface stone artefacts (Investigator Ave 1, VAHR 7721-0355). It was recommended that the artefacts from this site be retained by the Wathaurong Aboriginal Cooperative Ltd, and a permit to disturb/destroy parts of the site where harm could not be avoided be sought prior to the activity.
Black, C.F. 1984 #728	A report on the history of the occupying tribes of Melbourne and Geelong (Wathaurung, Kurung, Wurundjeri, Taungurong and Bunurong), and other Aboriginal people in the study area.	This report examines previous archaeological surveys and historical documents to include information on tribal areas, ethnographic and demographic information, current land use of the area by Aborigines, and Aboriginal archaeological sites.
du Cros & Associates. 1995 #780	Proposed chemical storage facility, Point Lillias. Survey coverage of 364,365m2 of a total survey area of 502,000m2.	Two registered shell middens and two new isolated artefacts were recorded. Recommendations were for fencing and protection of shell middens, consent to disturb for artefacts, and further testing in some areas with a consent to disturb requested if artefacts found.
du Cros, H & Rhodes, D. 1998 #1320	This report aimed to provide an overview and assessment of waterways and floodplains for The Waterways and Drainage Group within Melbourne Water to understand the impact on cultural heritage.	The predictive models provided in this report illustrate that waterways and floodplains in and around Melbourne should still be considered highly likely to yield evidence of Aboriginal occupation. Site types considered common are surface artefact scatters, isolated artefacts and scarred trees. Rarer site types are fresh water middens, burials and quarries.
Marshall, B. 1998 #1374	An archaeological survey was undertaken for a proposed residential development at the corner of Forest Road and Canterbury Road, Lara.	Four new Aboriginal archaeological sites were identified by the survey, three of which lie within 2 km of the current study area; Darcys Lane 1, 2 and 4 (VAHR 7721-0357, 7721-0358 and 7721-0360 respectively). These sites were all regarded to be of low significance, and it was recommended the artefacts be collected prior to any works being undertaken in the area.
Newby, J. and Muir, S. 1999 #1471	A preliminary investigation of the Princes Highway West road reserve from Altona North to Geelong.	Five new Aboriginal sites were recorded: artefact scatter VAHR 7721-0412 west of Hovells Creek; artefact scatter on a bank of Little River VAHR 7822-1073; artefact scatter VAHR 7822-1074 on west bank of Little River; isolated artefact VAHR 7822-1075 adjacent to Laverton Swamp; artefact scatter VAHR 7822-1076 on east bank of Little River.
TerraCulture 2000 #1767	An archaeological survey of the proposed Lara to Little River water pipeline route.	An artefact scatter was found along a section of road reserve on a stony rise (VAHR 7722-0254). Eight artefacts were found on exposed areas between large basalt boulders.
Marshall, B.	An archaeological survey was undertaken for a residential	No new Aboriginal archaeological sites were identified during the assessment, and it was considered unlikely that subsurface

Author, Date, Report #	Description and Location	Results
2001 #2089	subdivision at Wongalea Drive, Lara.	archaeological deposits would be present.
Marshall, B. 2002 #2106	An archaeological survey was undertaken across a parcel of land to be developed into a housing estate.	Two new Aboriginal archaeological sites were identified by the survey; Buckingham Street 1 (VAHR 7721-0509) and Buckingham Street 2 (VAHR7721-0510). These sites were both surface isolated artefact finds. A Consent to Disturb these sites was recommended, in addition to site monitoring at the time of development to determine if further artefacts were present.
Schell, P. 2003a #2249	An archaeological survey was undertaken at a parcel of land at 62-72 Bates Road, Lara	One new Aboriginal archaeological site was identified during the survey; Bates Road 1 (VAHR 7721-0564). A Consent to Disturb the site was recommended prior to any works being done within the area surveyed.
Schell, P. 2003b #2252	An archaeological assessment was undertaken for an area on Flinders Avenue, north of the current study area	No new or existing Aboriginal archaeological sites were identified within the area, and the area was determined to have little Aboriginal archaeological potential.
Collins, S. & Paynter, N. 2004 #2989	An archaeological survey was undertaken for a parcel of land on Canterbury Road East.	One new Aboriginal archaeological site was identified: Canterbury Road East 1 (VAHR 7721-0756). It was recommended that subsurface testing be undertaken in the area prior to any ground disturbance works in the region.
Mathews, D. Feldman, R. & Chandler, J. 2007 #4084	Subsurface testing within the proposed pipeline project situated on the western plains between Melbourne and Geelong.	17 registered sites occur in the area, an area covering 30m wide by 58 km long. The outcome demonstrated a broad distribution of diffuse stone artefacts across the landscape, with higher concentrations in certain location, such as adjacent to drainage lines. Werribee and Little Rivers and their tributaries are the main areas of archaeological sensitivity identified in the study area.
Marshall, B. 2008 #10241	A complex CHMP was undertaken prior to housing construction for Stages 1 and 2 of the Grand lakes housing estate, Lara	One artefact was identified in close proximity to previously recorded (and salvaged) Aboriginal archaeological site Grand Park Estate 3 (VAHR 7721-0644). This artefact was included in the site's registration, and collection of the artefacts within the site boundaries in their activity area was recommended prior to construction works commencing.
Chamberlain, M. and Myers, S. 2008 #10393	A complex CHMP was undertaken for a townhouse development at 48-58 Station Lake Road.	Two new Aboriginal archaeological sites were identified during the assessment: Station Lake Road 1 (VAHR 7721-0893) and Station Lake Road 2 (VAHR 7721-0894). Several management measures were put in place to minimise harm to the sites during the proposed works, including modifications to the housing, salvage excavation and retention of excavated spoil.
Marshall, B. and Toscano, M. 2008 #10413	A complex CHMP was undertaken for the 'Grand Lakes' housing estate, between Canterbury Road West and Buckingham Streets, Lara.	Ten Aboriginal archaeological sites were identified within the CHMP activity area, of which one (Grand Park Estate 3, VAHR 7721-0644) lies within 2 km of the current study area. Collection of the artefacts from these sites, and the demarcation of the site areas so they would not be disturbed by the activity, was recommended.
Light, A. and Albrecht, M. 2012 #12061	A CHMP for a proposed residential development at Manzeene Avenue, Lara.	Two isolated artefact sites were identified during the standard assessment (VAHR 7721-1216 and 7721-1207). Both sites were found in areas of exposure. The complex assessment did not reveal further Aboriginal cultural material.
Toscano, M. 2012	Proposed residential subdivision at 50-68	No sites were identified during the standard assessment. An isolated artefact was found during the complex assessment, within a disturbed

Author, Date, Report #	Description and Location	Results
#12099	Canterbury Road West, Lara.	context (VAHR 7721-1213).

4.4 Aboriginal Archaeological Site Prediction Statement

The following site prediction statement[2] has been formulated from the review of previous assessments. The statement presented is based on a site type approach. (For further information on site types see AV 2016).

The review of the previously recorded Aboriginal archaeological sites and previous archaeological investigations within the search area indicates that the site types most likely[3] to occur in the activity area are stone artefact scatters and isolated artefacts. Site types considered unlikely to occur in the activity area are scarred trees, shell middens, mounds, quarries, stone arrangements and Aboriginal burials.

Stone Artefact Scatters are considered likely to occur in the activity area.

Stone tools were made by hitting one piece of stone, called a core, with another called a 'hammerstone', often a pebble. This would remove a sharp fragment of stone called a flake. Both cores and flakes could be used as tools. New flakes were very sharp, but quickly became blunt during use and had to be sharpened again by further flaking, a process called 'retouch'. A tool that was retouched has a row of small flake scars along one or more edges. Retouch was also used to shape a tool.

Not all types of stone could be used for making tools. The best types of stone are rich in silica, hard and brittle. These include quartzite, chert, flint, silcrete and quartz. Aboriginal people quarried such stone from outcrops of bedrock, or collected it as pebbles from stream beds and beaches. Many flaked stone artefacts found on Aboriginal sites are made from stone types that do not occur naturally in the area. This means they must have been carried over long distances.

Stone tools are the most common evidence of past Aboriginal activities in Australia. They occur in many places and are often found with other remains from Aboriginal occupation, such as shell middens and cooking hearths. They are most common near rivers and creeks. It is easier to find them where there is limited vegetation or where the ground surface has been disturbed, for example by erosion.

Artefact scatters are the material remains of past Aboriginal people's activities. Scatter sites usually contain stone artefacts, but other material such as charcoal, animal bone, shell and ochre may also be present. No two scatters are exactly the same.

Artefact scatters can be found wherever Aboriginal occupation has occurred in the past. Aboriginal campsites were most frequently located near a reliable source of fresh water, so surface scatters are often found near rivers or streams where erosion or disturbance has exposed an older land surface.

Low Density Artefact Distributions are considered likely to occur in the activity area.

[2] The term 'site prediction statement' is sometimes referred to as 'site prediction model'. Ecology and Heritage Partners Pty Ltd prefers the term 'statement' as it is more accurate; 'statistical modelling' is a rigorous and comprehensive process using empirical data.

[3] Likely is an assessment of site types with a 50% or more likelihood of occurring; Unlikely is an assessment of site types with less than 50% likelihood of occurring.

Low density artefact distributions are stone artefact sites that comprise less than 10 artefacts in a 10 x 10 m area and where artefact clusters are all contained within a single 1:100,000 scale mapsheet. LDADs can occur singly and may occur anywhere in the landscape. Surface artefacts may be indicative of further subsurface archaeological deposits. This site type can be found anywhere within the landscape, however, they are more likely to occur within contexts with the same favourable characteristics for stone artefact scatter sites.

Scarred Trees are considered unlikely to occur in the activity area.

Aboriginal people caused scars on trees by removing bark for various purposes.

The scars, which vary in size, expose the sapwood on the trunk or branch of a tree. Scarred trees are found all over Victoria, wherever there are mature native trees, especially box and red gum. They often occur along major rivers, around lakes and on flood plains.

Shell Middens are considered unlikely to occur in the activity area.

Shell middens may occur in both freshwater and coastal contexts. Shell middens are accumulations of shell produced by Aboriginal people collecting, cooking and eating shellfish. Shell middens often contain evidence of cooking such as charcoal, ash, fire-stones, burnt earth or burnt clay. Sometimes they also contain animal bones, fish bones, stone tools and Aboriginal burials.

Freshwater shell middens are found along river banks and flood plains, near swamps and lakes, and in sand dunes. They are sometimes found in dry areas, where fresh water was once present. Freshwater shell middens usually occur as fairly thin layers or small patches of shell. The shells usually come from both the freshwater mussel (*Velesunio ambiguus*) and river mussel (*Alathyria jacksoni*). The shells may be the remains of just one meal or hundreds of meals eaten over thousands of years.

Freshwater mussel shells may also be found in Aboriginal oven mounds, but usually only in small quantities. Middens may be visible as scatters of broken mussel shell, exposed along vehicle tracks. If you look closely, you may find mussel shells buried in the surrounding soil. Middens are also commonly visible as scatters of mussel shell eroding down the slopes of dunes. Again, the scatters can usually be traced up the dune to the buried shell layer. Shell fragments in the upcast from rabbit burrows in dunes may also indicate a midden.

Shell middens are also found in many areas along the Victorian coast. They can be located in sheltered positions in the dunes, coastal scrub and woodlands, within rockshelters, or on exposed cliff tops with good vantage points. They can occur near rocky or sandy shores and also close to coastal wetlands, inlets, estuaries, bays and river mouths. Coastal shell middens are found as layers of shell exposed in the sides of dunes, banks or cliff tops, or as scatters of shell exposed on eroded surfaces. They range in size from a few metres across to many hundreds of metres and can consist of a thin, single layer, or multiple layers forming a thick deposit.

Mounds are considered unlikely to occur in the activity area.

Aboriginal mounds are places where Aboriginal people lived over long periods of time. Mounds often contain charcoal, burnt clay or stone heat retainers from cooking ovens, animal bones, shells, stone tools and, sometimes, Aboriginal burials.

Mounds usually occur near rivers, lakes or swamps but occasionally some distance from water. They are also found on dunes and sometimes among rock outcrops on higher ground.

Quarries are considered unlikely to occur in the activity area.

Aboriginal quarries are the sites where Aboriginal people took stone from rocky outcrops to make chipped or ground stone tools for many different purposes. Not all types of stone were suitable for making tools, so an outcrop of good stone that could be easily quarried was a valuable resource. Aboriginal people quarried different types of stone, each with its own special value and use. Stone tools were made from greenstone, silcrete, quartz, quartzite, basalt and chert. Pigments were made from quarried ochre, and grinding tools were made from sandstone.

Some quarries are small, consisting of just a single protruding boulder. Other quarries incorporate many outcrops and areas of broken stone that can cover thousands of square metres.

Stone Arrangements are considered unlikely to occur in the activity area.

Aboriginal stone arrangements are places where Aboriginal people have positioned stones deliberately to form shapes or patterns. The purpose of these arrangements is unknown because their traditional use ceased when European settlement disrupted Aboriginal society. They were probably related to ceremonial activities.

Stone arrangements occur where there are plenty of boulders, such as volcanic areas, and where the land could support large bands of people. Surviving stone arrangements are rare in Victoria, and most are in the western part of the State.

Stony Rises are considered unlikely to occur in the activity area.

Stony Rises are a geological formation that emerges from the smooth lava fields of the western plains of Victoria, a fertile region that for tens of thousands of years supported the lives of its indigenous Aboriginal people. Stony Rises occur in a number of forms but generically comprise loosely consolidated rocks and boulders elevated above the surrounding plain. Ephemeral lakes occur at low points often adjacent to the Stony Rises, and are often interspersed with low-lying, poorly-drained plains (Joyce 2003). Stony rises provided vantage points to local Aboriginal tribes across the tribal territory.

Stony Rises are considered an area of Aboriginal archaeological sensitivity as they are likely to contain stone artefact sites. Stony Rises are known to be the site of Aboriginal stone huts and stone circle arrangements, and can also contain hearth sites. Previous studies have shown a tendency for stone artefacts located in surface and/or subsurface contexts on stony rises. Artefact distribution patterns commonly comprise isolated stone artefacts and diffuse low density artefact scatters occurring across the volcanic plans, with moderate to higher densities of stone artefacts occurring on stony rises and that only occasional isolated stone artefacts may occur away from stony rises. The most significant sites are located on the stony sites near watercourses. Scarred trees may occur where mature native vegetation is located in proximity to former swamps.

Aboriginal Burials are considered unlikely to occur in the activity area.

Aboriginal burials are normally found as clusters of human bones eroding from the ground, or exposed during ground disturbance. Aboriginal customs for honouring and disposing of the dead varied greatly across Victoria, but burial was common. Aboriginal burial sites normally contain the remains of one or two people, although cemeteries that contain the remains of hundreds of people buried over thousands of years have

been found. Sometimes the dead person was buried with personal ornaments and artefacts. Charcoal and ochre are also often found in burial sites.

Although Aboriginal burials are quite rare in Victoria, they have been found in almost every kind of landscape, from coastal dunes to mountain valleys. They tend to be near water courses or in dunes surrounding old lake beds. Many burials have been found on high points, such as dune ridges, within surrounding flat plains. They are often near or within Aboriginal occupation sites such as oven mounds, shell middens or artefact scatters.

Aboriginal mortuary trees are considered unlikely to occur in the activity area.

Accounts of Aboriginal mortuary trees are contained in newspaper reports (Mount Ararat Advertiser 1858), ethnohistorical accounts (Bride 1983[1898]: 322), oral history (Ron Howlett, personal communication 2003), and unpublished diaries (Johns 1877). These accounts describe the following treatment of Aboriginal human remains: the corpse was allowed to decompose. Later, the remains were recovered and sometimes the bones of limbs were distributed among relatives to be kept as relics. Then, postcranial remains were bundled and placed in a hollow tree, sometimes with the skull. On other occasions, the skull was deposited in a hollow tree while postcranial remains were given to a relative for placement at a later date, possibly also in a hollow tree (article: 70).

The Chief Protector of Aborigines, George Augustus Robinson, recorded several different forms of treatment of the dead by the northern Djab Wurrung clans in his 1841 journal (Clark 1987: 15, 1998: 335, 368), including placement in trees. The ethnographic record for southwestern Victoria also indicates that while low-ranking individuals were usually placed in simple burials, higher-ranking individuals were subject to more complex rituals that included placement in trees (Dawson 1881: 62–66; Howitt 1996 [1904]: 455–457; article: 63).

The study of the Moyston Mortuary Tree and references to additional mortuary trees within the region demonstrate a local pattern of mortuary practices in southwestern Victoria. While burials in lunettes, earth mounds, and sand dunes are more common in the region, more complex practices also existed in southwestern Victoria in the late pre-contact to early post-contact periods (Sprague 2005: 70; article: 69-71).

4.5 Desktop Assessment – Summary of the Results and Conclusions

The desktop assessment determined that Aboriginal sites are likely to occur within the activity area. Stone artefact scatters and isolated artefacts are the most likely site type to occur based on previous archaeological studies, with a slight change of Aboriginal burials occurring. The desktop assessment has revealed that the majority of the previously recorded sites within the 2 km search radius have been identified in close proximity to Hovells Creek. This is due to the vantage point of the Hovells Creek Valley, which overlooks the creek. This vantage point and the nearby water source would have provided an ideal seasonal camping location. Although the activity area has been disturbed by past residential development, it is possible that stone artefacts (waste flakes associated with stone tool knapping and utilised/discarded tools from hunter-gatherer activities) will be present in the activity area.

5 STANDARD ASSESSMENT

The standard assessment includes a ground survey of the activity area to detect the presence of Aboriginal cultural heritage in or associated with the activity area.

The activity area was surveyed on 30 March 2016 by Alison O'Connor (Senior Archaeologist/Cultural Heritage Advisor), with Chloe Clarke and John Clarke representing the Wathaurung Aboriginal Corporation.

A summary of the archaeological survey attributes appears in Appendix 5.

5.1 Methodology of the Standard Assessment

The survey took the form of a pedestrian survey in which three participants walked 2 m apart across the entire activity area in transects targeting areas of increased or isolated exposure (Map 9). The activity area was assessed for the presence of any mature native trees that may have cultural scarring. The geomorphological character of the activity area was surveyed for evidence of caves, cave entrances and/or rock shelters.

5.2 Visibility, Exposure and Coverage

5.2.1 Ground Surface Visibility

Ground surface visibility (GSV) varied throughout the activity area. The activity area comprised generally poor visibility due to grass coverage and the location of the existing house and concrete driveway (Plates 1-5). Patches of ground service exposure were observed during the survey throughout the activity area. These patches of visibility revealed medium brown soil mixed with bluestone chips (Plate 6).

5.2.2 Effective Survey Coverage

Effective survey coverage calculations are based on the percentage of ground surface exposure and, provide a measure for the 'detectability' of artefacts and the level of survey sampling effort within each landform in the activity area. The calculation assesses the level of average GSV across the activity area in each landform, the extent of isolated exposures with higher or lower GSV than the average and, a calculation of the area within each landform surveyed.

An overview of the effective survey coverage in each landform within the activity area is provided in Table 6.

Table 6: Effective Survey Cover Calculations within the Activity Area.

Landform	Total Area (Ha)	Average Landform GSV (%)	Area of Activity Area Surveyed (ha)	Percentage of Activity Area Surveyed (%)	Effective Survey Coverage (%)
Floodplain	0.10	1	0.10	100	0.05
Disturbed Areas	0.10	0	0.00	0	0
Total	**0.20**	**0.5**	**0.10**	**50**	**0.025**

5.2.3 Limitations of the Standard Assessment

The survey was limited by poor ground surface visibility due to location of the existing house and driveway as well as grass coverage across the backyard of the activity area.

5.3 Results of the Standard Assessment

The activity area comprised an existing brick house and concrete driveway to the south, a landscaped backyard which is the location of the proposed activity and a shipping container located to the east. Hovells Creek is located approximately 30 m north of the activity area.

5.3.1 Landforms

The survey confirmed the landform identified during the desktop assessment (Table 6). The floodplain of Hovells Creek characterised the activity area.

5.3.2 Aboriginal Cultural Heritage Identified during the Standard Assessment

No Aboriginal cultural heritage material was identified during the standard assessment.

There are no mature native trees present within the activity area.

There are no caves, cave entrances or rock shelters present within the activity area.

5.3.3 Areas of Aboriginal Cultural Heritage Likelihood

One area of Aboriginal cultural heritage likelihood was identified during the standard assessment (Map 9).

- Hovells Creek floodplain in backyard of the activity area.

5.3.4 Previous Ground Disturbance

Several areas of previous ground disturbance were identified during the standard assessment (Map 9).

- Construction of existing house;
- Concrete driveway;
- Landscaping; and
- Residential underground services.

Plate 1: Activity area facing north west showing patches of ground surface exposure.

Plate 2: Activity area facing west.

Plate 3: Activity area facing east showing blue shipping container.

Plate 4: Activity area facing south west showing landscaping.

Plate 5: Activity area facing south showing location of existing house.

Plate 6: Close up of the ground surface showing fill material within activity area.

5.4 Standard Assessment – Summary of Results and Conclusions

A pedestrian survey was conducted across the activity area targeting areas of ground surface exposure, such as along the fence line and patches of erosion. The activity area has been subject to past residential development associated with the construction of the existing house. Activities such as the clearance of native vegetation as well as the historically more recent preparation of the activity area for residential subdivision, including installation of underground services, have impacted the original landscape of the activity area and resulted in the erosion of topsoil contexts.

No mature native trees were located within the activity area and there are no caves, cave entrances or rock shelters present within the activity area.

No Aboriginal cultural heritage places were identified during the standard assessment.

The activity area was considered to be an area of Aboriginal likelihood, in terms of the likelihood of identifying subsurface Aboriginal cultural heritage places, due to the close proximity to Hovells Creek. A subsurface testing program was then required to test the area of Aboriginal likelihood for stone artefact scatters, which are the most common site type in the geographic region.

6 COMPLEX ASSESSMENT

The complex assessment involves excavation (subsurface testing) in the activity area to uncover or discover Aboriginal cultural heritage.

The subsurface testing program was conducted on 30 April 2016 by Alison O'Connor (Senior Archaeologist/Cultural Heritage Advisor), with Chloe Clarke and John Clarke representing the Wathaurung Aboriginal Corporation. Alison O'Connor (Senior Archaeologist/Cultural Heritage Advisor) supervised the excavations.

A summary of the archaeological survey attributes appears in Appendix 5.

6.1 Aims of the Complex Assessment

The aims of the complex assessment were:

- To detect the possible presence of Aboriginal cultural heritage in the activity area due to poor GSV during the standard assessment; and
- To detect the possible presence of Aboriginal cultural heritage in areas of Aboriginal archaeological sensitivity within the activity area.

6.2 Methodology of the Complex Assessment

One stratigraphic test pit (STP), measuring 1 x 1 m, was excavated in the landform identified in the activity area (Table 7, Map 9). The STP was excavated by hand in 100 mm units ("spits") using hand tools, until the base clays were reached. The base layer was excavated a further 300 mm to confirm culturally sterile soil. All soil removed from the pit was sieved through 5 mm mesh and the spoil stored within 1 m of the pit before replacing once the pit was recorded.

Photographs were taken and dumpy levels were recorded at the ground surface and at the base of each spit. At the conclusion of the excavation, scaled section drawings were recorded for one soil profile in each pit (arbitrarily taken to be the north section), with each soil context (stratum) shown. Samples were taken of each context and analysed for texture, colour and pH. A photograph was also taken of the north section of the STP.

In addition, a stratigraphic description of each shovel test hole (see below) was also recorded and compared to the stratigraphy recorded in the STPs.

6.2.1 Subsurface Testing

A total of four shovel test holes (STHs), each measuring 500 x 500 mm, were excavated across the activity area (Table 8; Map 10). The STHs were positioned to test the area of Aboriginal likelihood identified in the standard assessment. The purpose of the STHs was to test for presence or absence of Aboriginal cultural

heritage in the areas of likelihood or for subsurface deposits within Aboriginal sites identified in the standard assessment.

All soil removed from the test holes was sieved through 5 mm mesh and the spoil stored within 1 m of the pit before replacing once the pit was recorded.

The presence or absence of artefacts was recorded for each STH, which then informed the site extent for registered Aboriginal sites. The stratigraphy of each STH was recorded for comparison against the relevant STP for that landform (soil samples were taken and analysed at the CHAs office).

6.2.2 Limitations of the Complex Assessment

The disturbed subsurface deposits within the activity area comprised compacted fill material which made excavation difficult.

6.3 Results of the Complex Assessment

6.3.1 Stratigraphy

The stratigraphic profile of each landform, as defined by the STP, is as follows (Table 7).

Floodplain

The floodplain landform of the activity area demonstrated a disturbed character with clay fill material identified immediately beneath the silty vegetation layer, overlying natural grey-brown compacted clay at 400 mm depth. The clay also gradually changed in colour from a medium brown to a medium grey-brown with depth. The stratigraphy in all STHs conforms generally to the STP albeit with marked variations in the depth of the base clays (200-350 mm).

The coordinates of all stratigraphic test pits excavated within the activity area appear in Table 7 and Appendix 6.

6.3.2 Subsurface Testing

A total of four shovel test holes (STH) measuring 500 x 500 mm, were excavated across the small activity area (Table 8 and Map 10).

The coordinates of all shovel test pits excavated within the activity area appear in Appendix 6.

Table 7: Stratigraphic Test Pits Excavated within the Activity Area (Map 10).

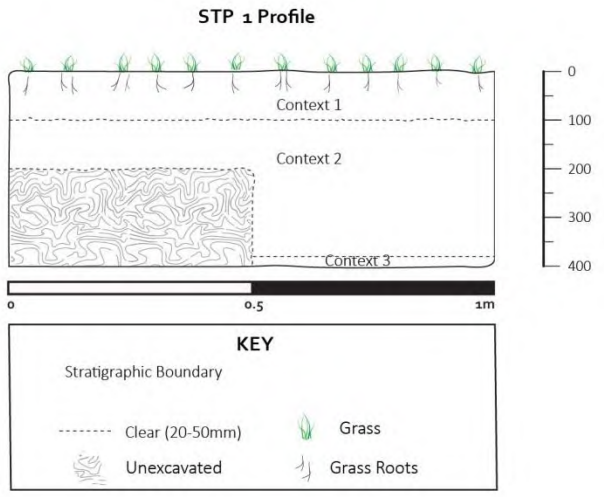
STP (SW) Coordinates (GDA 94, Zone 55)	Stratigraphic Profile	Stratigraphic Description
	STP01 – Floodplain Landform	
EE271629.78 N5788993.7	 **Figure 3:** Stratigraphic Profile of STP01	Context 1: 0 to 120 mm: medium brown silt. Grass root inclusions. No artefacts. Munsell 10 YR 3/2. pH 6. Context 2: 200 to 380 mm: Medium brown cemented clay fill with bluestone and glass inclusions. No artefacts. Munsell 10 YR 3/2. pH 6. Context 3 (Base): 380 to 400 mm: Textures/colours. Inclusions. Light grey natural compacted clay. No artefacts. Munsell 10 YR 3/2. pH 6.
Location & Size	**STP Photograph**	**Site Name and Assemblage Details**
1 x 1 m, Located towards the centre of the backyard.	 **Plate 7:** Stratigraphy of STP01 north section	No artefacts present.

Table 8: Shovel Test Holes Excavated within the Activity Area (Map 10).

STH Descriptions: Stratigraphy and Inclusions			
STH 1	**STH 3**	**STH 3**	**STH 4**
Context 1: 00 to 20 mm – medium brown silt layer. Grass root inclusions. Munsell 10 YR 3/2, pH 6.	*Context 1*: 00 to 20 mm – medium brown silt layer. Grass root inclusions. Munsell 10 YR 3/2, pH 6.	*Context 1*: 00 to 20 mm – medium brown silt layer. Grass root inclusions. Munsell 10 YR 3/2, pH 6.	*Context 1*: 00 to 100 mm – medium brown silt layer. Grass root inclusions. Munsell 10 YR 3/2, pH 6.
Context 2: 20 to 350 mm – medium brown mottled clay with bluestone and glass inclusions.. Munsell 10 YR 3/2, pH 6.	*Context 2*: 20 to 200 mm – medium brown mottled clay with bluestone and glass inclusions.. Munsell 10 YR 3/2, pH 6.	*Context 2*: 20 to 350 mm – medium brown mottled clay with bluestone and glass inclusions.. Munsell 10 YR 3/2, pH 6.	*Context 2*: 100 to 320 mm – medium brown mottled clay with bluestone and glass inclusions.. Munsell 10 YR 3/2, pH 6.
Context 3 (Base): 350 to 370 mm – medium grey-brown dry clay. Munsell 10 YR 3/2, pH 6.	*Context 3 (Base)*: 200 to 220 mm – medium grey-brown dry clay. Munsell 10 YR 3/2, pH 6.	*Context 3 (Base)*: 350 to 370 mm – medium grey-brown dry clay. Munsell 10 YR 3/2, pH 6.	*Context 3 (Base)*: 320 to 350 mm – medium grey-brown dry clay. Munsell 10 YR 3/2, pH 6.
No artefacts present	*No artefacts present*	*No artefacts present*	*No artefacts present*

6.4 Complex Assessment – Summary of Results and Conclusions

A total of four shovel test holes (STH) measuring 500 x 500 mm, were excavated across the activity area (Table 8 and Map 10). One stratigraphic test pit (STP), measuring 1 x 1 m, was excavated within the floodplain landform identified in the activity area and targeted the area of Aboriginal cultural heritage sensitivity identified close to Hovells Creek in the desktop and standard assessments (Map 10).

The floodplain landform of the activity area demonstrated a disturbed character with clay fill material identified immediately beneath the silty vegetation layer, overlying natural grey-brown compacted clay at 220-350 mm depth. The clay also gradually changed in colour from a medium brown to a medium grey-brown with depth. The stratigraphy in all STHs conforms generally to the STP albeit with marked variations in the depth of the base clays.

The following past ground disturbances listed below likely contributed to the truncated nature of the topsoil within the activity area:

- Preparation of the activity area for subdivision when the existing house was constructed;
- Construction of existing house and concrete driveway; and
- Installation of underground services throughout the activity area.

Activities such as the clearance of native vegetation and past residential development would have modified the original landscape of the area. This type of past disturbance would have contributed to the thin nature of the topsoil and the shallow occurrence of the underlying B horizon, encountered at a maximum depth of 350 mm. Given the geomorphological formation of the landscape, the land use history of the activity area and the deeply weathered and sterile nature of the subsoil (B horizon), the likelihood of identifying artefacts recovered from their primary context (in situ) is low, as the sub-surface soils have been reworked overtime by a range of post depositional processes and are therefore not likely to reflect any spatial or temporal site patterning. Due to past disturbances to the landscape, no Aboriginal cultural heritage material was identified within the activity area.

The results of the complex assessment confirmed that high density artefact scatters are unlikely to be identified within the activity area. The complex assessment testing coverage was sufficient to determine the nature of the stratigraphy and the presence / absence of Aboriginal cultural heritage material across the activity area, and therefore no further subsurface testing is required.

7 CONSIDERATION OF SECTION 61 MATTERS – IMPACT ASSESSMENT

7.1 Section 61 Matters

7.1.1 Avoidance of Harm

This section is not applicable as Aboriginal cultural heritage was not identified within the activity area.

7.1.2 Minimisation of Harm

This section is not applicable as Aboriginal cultural heritage was not identified within the activity area.

7.1.3 Management Measures

This section is not applicable as Aboriginal cultural heritage was not identified within the activity area.

These management measures are discussed in detail in Section 8.2.

7.2 General Requirements

7.2.1 Requirement for Contingency Plans

In accordance with Clause 13(1) Schedule 2 of the *Aboriginal Heritage Regulations 2007*, the CHMP must contain contingency plans for:

- The matters referred to in Section 61 of the *Aboriginal Heritage Act 2006*;
- The resolution of any disputes between the Sponsor and relevant Registered Aboriginal Party in relation to the implementation of the CHMP or the conduct of the activity;
- The discovery of Aboriginal cultural heritage during the activity;
- The notification of the discovery of Aboriginal cultural heritage during the carrying out of the activity;
- The management of Aboriginal cultural heritage found during the activity; and
- Reviewing compliance with the CHMP and mechanisms for remedying non-compliance.

7.2.2 Requirement for Arrangements for the Custody and Management of Aboriginal Cultural Heritage (Artefacts)

No Aboriginal artefacts were discovered during this CHMP, therefore there is no requirement for custody and management arrangements for Aboriginal cultural heritage.

7.3 Section 61 Matters - Significance

This section is not applicable as Aboriginal cultural heritage was not identified within the activity area.

PART 2
CULTURAL HERITAGE MANAGEMENT RECOMMENDATIONS

Note: These recommendations become compliance requirements once this Cultural Heritage Management Plan is approved.

8 SPECIFIC CULTURAL HERITAGE MANAGEMENT REQUIREMENTS

8.1 Recommendations in Relation to the Management of Aboriginal Places

No Aboriginal cultural heritage was identified during the assessment of the activity area and, no areas likely to contain Aboriginal cultural heritage are present within the activity area, therefore there are no specific cultural heritage management requirements.

8.2 Management Recommendations

Although there was no Aboriginal cultural heritage or any areas of Aboriginal cultural heritage likelihood identified during the assessment, the following recommendations were included at the request of the Wathaurung Aboriginal Corporation. The aim of these recommendations is to provide the RAP with certainty that the extent of the proposed works will not impact on any Aboriginal cultural heritage that may be present within the activity area.

Recommendation 1: Cultural Awareness Induction

A Cultural Heritage Induction Booklet containing Part 2 of this CHMP and all relevant maps must be produced by a Cultural Heritage Advisor. All employees and contractors involved in ground disturbing works in the activity area must attend a Cultural Heritage Induction presented by a RAP representative and Cultural Heritage Advisor prior to the commencement of the activity. The RAP must be provided at least two weeks' notice of the requirement to present the cultural awareness induction. Costs of any such induction must be borne by the Sponsor.

Recommendation 2: Provisions for Aboriginal People to Visit Cultural Heritage Places within the Activity Area

Aboriginal people are permitted to visit cultural heritage places within the activity area which are located on public land.

Access to the activity area must be provided to representatives of the Wathaurung Aboriginal Corporation before, during and after construction for the purpose of ensuring compliance with the CHMP. The representatives of the Wathaurung Aboriginal Corporation must comply with all occupational health and safety requirements of the activity area.

9 CONTINGENCY PLANS

9.1 Contingency Regarding Section 61 Matters

Under the *Aboriginal Heritage Regulations 2007* (Schedule 2[13]), a CHMP must contain contingency plans for the matters referred to in Section 61 of the *Aboriginal Heritage Act 2006*. This CHMP contains contingency plans which are specific to the activity and activity area described within this CHMP. If changes to the activity or the activity area which require statutory authorisation occur following the approval of this CHMP, it is likely that the Sponsor will have to prepare and submit a new CHMP which contains new recommendations and contingency plans appropriate for the changed activity, activity area and results of the archaeological investigations.

9.2 Contingency Regarding Dispute Resolution

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

Disputes may occur at various stages during the activity. Procedures for dispute resolution aim to ensure that all parties are fully aware of their rights and obligations, that full and open communication between parties occurs and those parties conduct themselves in good faith.

9.2.1 Authorised Project Delegates

For the purposes of dispute resolution for this activity, the following people will act as Authorised Project Delegates (APDs) for each party:

- *The RAP*: Katrina Thomas, Wathaurung Aboriginal Corporation, telephone (03 4308 0420)
- *The Sponsor*: Rita Moore, PSCA (Residential Subdivision), telephone (1300 767 893)

Any change in personnel appointed as the APDs in one party will be promptly notified to all other parties.

9.2.2 Dispute Resolution Procedures

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

Informal Dispute Resolution

- The party raising the dispute must complete a Dispute Notification Form (included below) and email or fax a copy to all parties listed in Section 9.2.1. above.
- Project delegates (as listed above) of each party (RAP and Sponsor) must attempt to negotiate a resolution to any dispute related to cultural heritage management of the activity area within 48 hours of written notice being received that a dispute between parties is deemed to exist. If the

project delegates cannot reach an agreement, representatives of both parties must meet to negotiate a resolution to an agreed schedule.

- If representatives of the relevant parties fail to reach an agreement, an independent mediator must be initially sought to assist in resolving the dispute. A timeframe for the independent mediator must be agreed upon by both parties. If an independent mediator cannot be agreed on, mediation shall be effected by a mediator nominated upon the application by either party, by the Victorian Chapter of the Institute of Arbitrators and Mediators or the Dispute Settlement Centre of Victoria.
- If the matter remains unresolved after mediation the Parties shall seek to agree upon the appointment of an independent arbitrator to hear and resolve the matter. In the absence of agreement as to an arbitrator, arbitration shall be effected by an arbitrator nominated upon the application by either Party by the Victorian Chapter of the Institute of Arbitrators and Mediators, or, failing such nomination within 28 days, appointed with the provisions of the *Commercial Arbitration Act (Vic) 1984*.
- A reference to arbitration under this Clause shall be deemed to be a reference to arbitration within the meaning of the laws relating to arbitration in force in the State of Victoria. The arbitrator shall have all the powers conferred by those laws. The arbitrator's decision shall be final, subject to any rights of appeal under the *Commercial Arbitration Act (Vic) 1984*.
- The procedures concerning mediation and arbitration, including payment of costs, shall be agreed between the Parties.
- These arrangements do not preclude any legal recourse open to the Parties being taken but the Parties agree the above avenues will be exhausted before such recourse is made.

In order to facilitate the above procedure:

- The Party with the grievance must notify each other Party of the problem at the earliest opportunity;
- Throughout all stages of the procedure all relevant facts must be clearly identified and recorded;
- All disputes will be jointly investigated; and
- Sensible time limits must be allowed for completion of the various stages of discussion. However, the parties must cooperate to ensure that the dispute resolution procedures are carried out as quickly as possible.

Without prejudice to either party, and except where a bona fide safety issue is involved, and/or when the nature of the work or the area affected by the work concerns the matter in dispute, Work should continue in accordance with this Plan while matters in dispute between them are being negotiated in good faith. No party shall be prejudiced as to final settlement by the continuance of work in accordance with this procedure.

Any corrective or remedial activities required by a resolution to a dispute under this Clause (e.g. repairing damage to sites) will be overseen by representatives from the Wathaurung and will take place in accordance with their instructions.

DISPUTE RESOLUTION NOTIFICATION FORM

Cultural Heritage Plan No

Relevant Party Making the Dispute:

Contact Person:

Date:

Nature of the Dispute:

Proposed Meeting Time/Date & Place:

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

Party to Agreement	Name of Delegate	Fax	Postal Address	Email	Contacted (√)
RAP	Katrina Thomas (Wathaurung Aboriginal Corporation)	(03) 4308 0421	PO Box 734 Ballarat VIC 3353	katrina@wathcorp.com.au	
The Sponsor					
Site Supervisor					
CHA					

9.3 Contingency Regarding the Discovery of Aboriginal Cultural Heritage

9.3.1 Unexpected Discovery of Aboriginal Cultural Heritage

It is unlikely that previously unknown Aboriginal cultural heritage will be discovered within the activity area during the activity. However, if a person discovers or suspects that they have discovered Aboriginal cultural heritage during the activity, the following contingency plan must be followed:

- The person in charge or site manager of the activity within the activity area must be notified immediately;
- The person in charge or site manager must immediately suspend all activities and works at the location of the discovery and within 15 m of the extent of the Aboriginal cultural heritage;

- Within a period of two business days, the person in charge or site manager must engage an appropriately qualified and experienced Cultural Heritage Advisor and inform them of the discovery;
- The Cultural Heritage Advisor must be engaged to assess the discovered Aboriginal cultural heritage in consultation with the RAP, record the cultural heritage material and update or complete new site cards for the discovered Aboriginal cultural heritage;
- The Cultural Heritage Advisor must be engaged to catalogue and analyse all discovered cultural heritage;
- The Cultural Heritage Advisor must notify AV of the discovery by lodging either a new or updated VAHR site record card within a timely manner.
- Work in the excluded area may recommence provided:
    - The discovered Aboriginal cultural heritage has been identified, inspected and recorded by a Cultural Heritage Advisor;
    - The Sponsor has taken appropriate measures to avoid harming the Aboriginal cultural heritage, including appropriate protection measures as agreed upon by the Sponsor and the RAP;
    - If the Sponsor cannot avoid harming the Aboriginal cultural heritage, the Sponsor has taken appropriate measures to minimise harm to Aboriginal cultural heritage, including appropriate protection measures as agreed upon by the Sponsor and the RAP;
    - The Cultural Heritage Advisor has undertaken the appropriate salvage excavations or collections; and
    - New or updated VAHR site record cards have been completed and forwarded to AV.
- Notwithstanding the above, the Sponsor must make every effort to avoid or minimise harm to Aboriginal cultural heritage.
- The RAP must be involved in all stages of the decision-making process.
- Failure of parties to reach an agreed course of action in this manner will be classed as a dispute under this agreement and the contingency plan in this CHMP regarding dispute resolution must be followed.

9.3.2 Unexpected Discovery of Human Remains

Under Section 4 of the *Coroners Act 2008*, if the body of a deceased person is found in Victoria (s.4[1][a]) and the identity of the deceased is unknown (s. 4[2][g]) then the death is reportable and under Section 12 of the *Coroners Act 2008* there is an obligation to report death. If any suspected human remains are found during any activity, works must cease. The media must not be contacted under any circumstances. The State Coroner's Office on 1300 309 519 and Victoria Police on 03 9684 4387 should be notified immediately (s.12[1]). 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 five-step contingency plan. Any such discovery within the activity area must follow these steps.

1. Discovery:

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

2. Notification:

- Once suspected human skeletal remains have been found, the State Coroner's Office on 1300 309 519 and Victoria Police on 03 9684 4387 must be notified immediately;
- If there is reasonable grounds to believe that the remains could be Aboriginal, the DELWP State Control Centre must be immediately notified on 1300 888 544;
- The media must not be contacted under any circumstances;
- All details of the location and nature of the human remains must be provided to the relevant authorities; and
- If it is confirmed by these authorities that the discovered remains are Aboriginal skeletal remains, the person responsible for the activity must report the existence of the human remains to the Secretary, DPCD[4], in accordance with s.17 of the *Aboriginal Heritage Act 2006*.
- The person responsible for the activity must ensure that the media is not notified of the discovery of any Aboriginal skeletal remains.

3. Impact Mitigation or Salvage:

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

4. Curation and Further Analysis:

- The treatment of salvaged Aboriginal human remains must be in accordance with the direction of the Secretary.

5. Reburial:

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

[4] In 2013, DPCD was disbanded and AV was transferred to the jurisdiction of the Department of Premier and Cabinet (DPC); however the wording within the *Aboriginal Heritage Act 2006* still refers to DPCD. For practical purposes, reporting will occur directly through AV.

9.4 Reporting the Discovery of Aboriginal Cultural Heritage during the Activity

Where Aboriginal cultural heritage is identified during an activity, the Sponsor is responsible for notifying and engaging an appropriately qualified and experienced Cultural Heritage Advisor of the discovery (Section 9.5). The Cultural Heritage Advisor is responsible for investigating, reporting, and facilitating an appropriate outcome in accordance with the above contingency plans. The Cultural Heritage Advisor must notify AV of the discovery by lodging either a new or updated VAHR site record card within a timely manner.

Under s.24 of the *Aboriginal Heritage Act 2006*, where Aboriginal cultural heritage is identified during an activity, the person in charge of the works is responsible for notifying the Secretary of DPCD of the discovery by lodging either a new or updated VAHR site record card within a timely manner. To facilitate this, the Sponsor must engage an appropriately qualified and experienced Cultural Heritage Advisor (Section 9.3.1) to investigate, report, and facilitate an appropriate outcome in accordance with the above contingency plans, in consultation with the RAP.

9.5 Contingency for the Removal, Curation, Custody and Management of Aboriginal Cultural Heritage (Artefacts) Discovered During the Activity

Should any Aboriginal cultural heritage be discovered during the activity, the custody of the Aboriginal cultural heritage must comply with the *Aboriginal Heritage Act 2006* and be assigned in the following order of priority, as appropriate:

- Any relevant RAP for the land from which the Aboriginal cultural heritage has been salvaged;
- Any relevant registered native title holder for the land from which the Aboriginal cultural heritage has been salvaged;
- Any relevant native title party (as defined in the *Aboriginal Heritage Act 2006*) for the land from which the Aboriginal cultural heritage has been salvaged;
- Any relevant Aboriginal person or persons with traditional or familial links with the land from which the Aboriginal cultural heritage has been salvaged;
- Any relevant Aboriginal body or organisation which has historical or contemporary interests in Aboriginal heritage relating to the land from which the Aboriginal cultural heritage has been salvaged;
- The owner of the land from which the Aboriginal cultural heritage has been salvaged; and
- The Museum of Victoria.

It should be noted that any Cultural Heritage Advisor engaged to investigate any Aboriginal cultural heritage should be able to retain initial custody of Aboriginal cultural heritage for a reasonable period of time for the purposes of analysis. In accordance with the *Aboriginal Heritage Act 2006*, during the period that the Cultural Heritage Advisor has custody of the Aboriginal cultural heritage, the Cultural Heritage Advisor must:

- Label and package collected artefactual material with reference to provenance; and
- Arrange storage of the material in a secure location together with copies of the catalogue, assessment documentation, management plan and results of the analysis.

Following the repatriation of Aboriginal cultural heritage held by the Cultural Heritage Advisor to any of the above people or groups (except Museum Victoria), should any of the above people or groups wish to rebury the Aboriginal cultural heritage, the following must take place:

- The site record card must be updated, including an object collection component form;
- The reburial location must be known, relocatable and in an area which is protected from future development or disturbance;
- Where possible, the Aboriginal cultural heritage should be reburied within the boundaries of the Aboriginal archaeological site from which the Aboriginal cultural heritage was originally collected or excavated;
- Artefacts must be reburied in a durable container which may or may not be open bottomed to allow contact between the artefacts and the soil whilst allowing the reburied material to be readily identified as such; and
- An additional enclosed durable container must be buried next to the artefacts, which contains copies of all documentation relating to the artefacts, including a copy of the relevant site card, artefact database and any other relevant documentation.

Aboriginal cultural material recovered/collected during the course of the assessment or activity, must be returned to the custody of the RAP. If reburial of artefacts is agreed as a management recommendation, the location for reburial must also be agreed to by the RAP and the following must occur:

- A reburial location should be identified in the activity area, and this location must be in an area that is protected from future development or disturbance;
- Once reburied, the reburial location must be recorded to sub-metre accuracy by a CHA and be relocatable;
- Flagging tape should be laid within the hole, at a depth of 30 cm above the reburied cultural material to identify that cultural material is buried below the flagging tape;
- The relevant VAHR site record card must be updated and a 'collection' component form must be completed by the CHA and lodged with AV;
- Cultural material to be reburied must be placed in a durable container manufactured by WAC;
- A separate container is to be manufactured for each Aboriginal Place to be reburied;
- Where an Aboriginal Place is comprised of a large amount of cultural material it will be necessary to manufacture a number of containers to rebury the cultural material;
- The contents of the container/s must include the cultural material to be reburied, a catalogue of the cultural material to be reburied both on paper and on an archive quality storage medium, a copy of

the relevant sections of the CHMP under which the reburial is being performed, and a handful of soil from the Aboriginal Place from which the cultural material originated;

- A smoking ceremony must be performed prior to the reburial of cultural material; the reburial must be attended by Wadawurrung Representatives; and
- The cost of the manufacture of the container, the analysis and preparation of the cultural material for reburial, smoking ceremony and Wadawurrung Representatives attendance at the reburial must be borne by the Sponsor.

9.6 Compliance with the Cultural Heritage Management Plan

9.6.1 Reviewing Compliance with the Cultural Heritage Management Plan

The *Aboriginal Heritage Act 2006* requires that the recommendations and contingency plans contained within an approved CHMP are complied with. Any action carried out contrary to the recommendations and contingency plans contained within an approved CHMP which harms Aboriginal cultural heritage is an offence.

If it is suspected that the recommendations or contingency plans of the approved CHMP have been contravened, under Section 80 of the *Aboriginal Heritage Act 2006*, the Minister for Aboriginal Affairs may order a Cultural Heritage Audit. Once a Cultural Heritage Audit has been ordered, the Sponsor will be issued with a Stop Order which requires the activity to immediately cease (s. 88). A Stop Order can also be issued in any instance where an activity is harming, is likely to harm, or may harm Aboriginal cultural heritage, regardless of whether the Minister has ordered a Cultural Heritage Audit (s. 87).

The following checklist has been developed to assist the Sponsor in reviewing compliance with the CHMP. If, at any point prior to or during the proposed activity, any of the questions below cannot be answered positively, it is possible that the CHMP is not being complied with. Should this occur, any and all parties are advised to seek the advice of a Cultural Heritage Advisor.

Prior to the commencement of the activity:

- Has the CHMP been approved?
- Have all the management recommendations in this CHMP been carried out?
- Have any and all parties been inducted or trained in regards to Part 2 of the approved CHMP?

If any changes have been made to the activity or activity area:

- Has the Sponsor obtained a new approved CHMP?
- Have all required statutory authorisations been obtained?

If Aboriginal cultural heritage is discovered during the activity:

- If the Aboriginal cultural heritage is discovered during the activity, have all works ceased within 15 m of the Aboriginal cultural heritage?

- Has the discovered Aboriginal cultural heritage been identified, inspected and recorded by a Cultural Heritage Advisor?
- Has the Cultural Heritage Advisor completed new or updated VAHR site record cards and forwarded these to AV?
- Has the Sponsor taken appropriate measures to avoid harming the Aboriginal cultural heritage, including appropriate protection measures as agreed upon by the Sponsor and the RAP?
- If the Sponsor cannot avoid harming the Aboriginal cultural heritage, has the Sponsor taken appropriate measures to minimise harm to Aboriginal cultural heritage, including appropriate protection measures as agreed upon by the Sponsor and the RAP?
- If appropriate salvage excavations are required, have these been undertaken and reported upon within 120 days?
- Has the removal, curation, custody and management of the Aboriginal cultural heritage been undertaken in accordance with the contingency plan outlined in this CHMP?

If human remains have been discovered during the activity:

- Has all activity in the vicinity of the discovery ceased immediately?
- Have the remains been left in place and protected from harm?
- Have Victoria Police and the Coroner's Office been notified?
- If there are reasonable grounds to believe that the remains may be Aboriginal, has the Coronial Admissions and Enquiries hotline been notified?
- If it is confirmed by these authorities that the remains are Aboriginal skeletal remains, has the Secretary of DPCD been notified?
- Has the appropriate impact mitigation or salvage strategy (as determined by the Secretary of DPCD) been implemented?
- Have the salvaged Aboriginal human remains been treated in accordance with the direction of the Secretary of DPCD?
- Has a suitable experienced and qualified Archaeologist been engaged to document any reburial site(s) and have all details of the reburial been provided to AV?
- Is the reburial site(s) clearly marked?
- Have appropriate management recommendations been implemented to ensure that the remains are not disturbed in the future?

If non-compliance with this CHMP is suspected by any and all parties, it is recommended that AV and an appropriately qualified and experienced Cultural Heritage Advisor are contacted immediately. Any non-compliance is to result in a stop work until a meeting is conducted to discus non-compliance and agree on a process moving forward. The stop work applies even if the non-compliance has not resulted in harm to Aboriginal cultural heritage.

Under Sections 27 and 28 of the *Aboriginal Heritage Act 2006*, harming Aboriginal cultural heritage and doing an act likely to harm Aboriginal cultural heritage, knowingly or unknowingly, is unlawful.

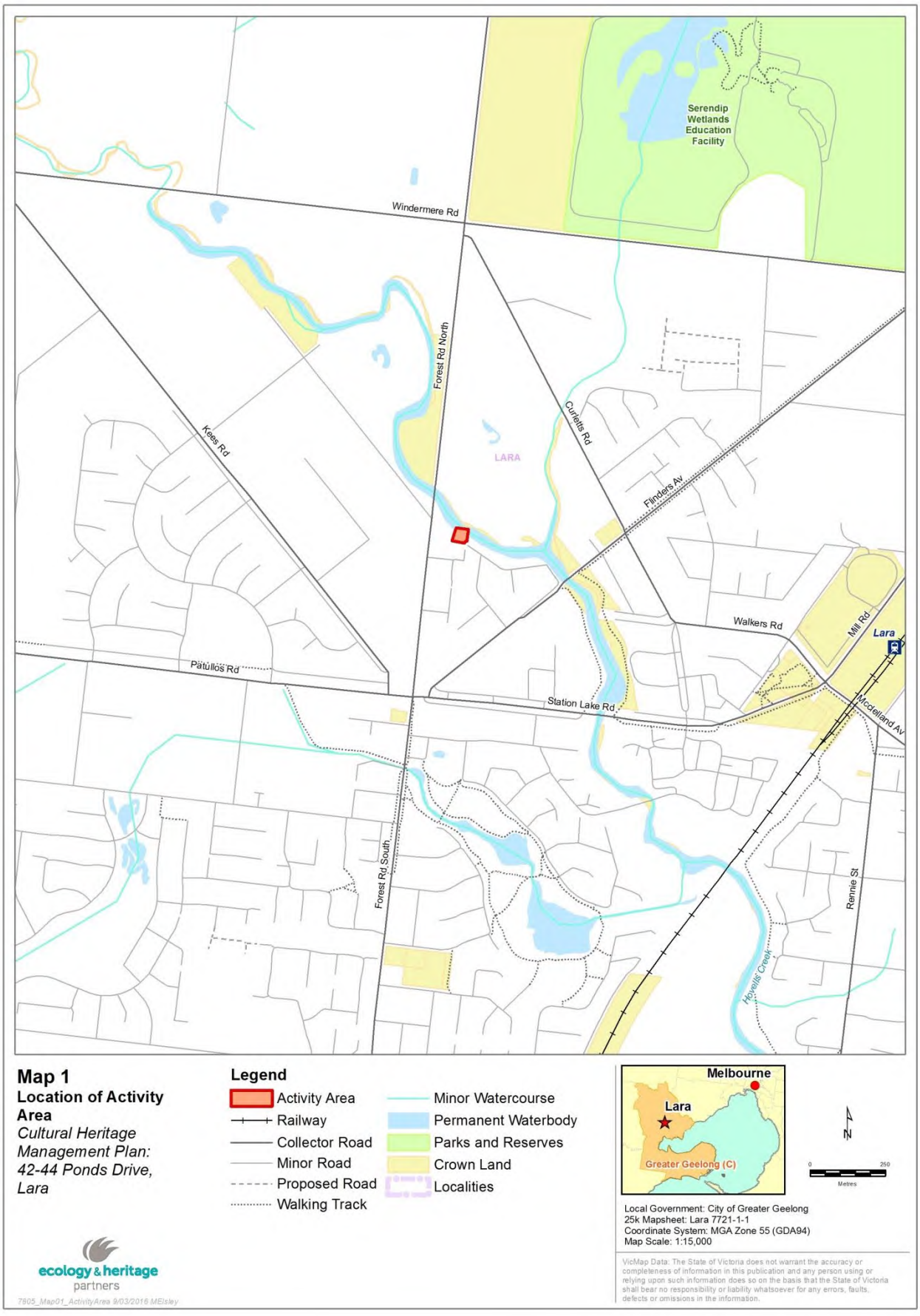
9.6.2 Remedying Non-Compliance with the Cultural Heritage Management Plan

If non-compliance with the CHMP has occurred or is suspected, then a meeting must be held between the Sponsor, the RAP and the Cultural Heritage Advisor to discuss the non-compliance and to develop a strategy to remedy the issue.

Under Section 81 of the *Aboriginal Heritage Act 2006*, a Cultural Heritage Audit can be ordered by the Minister if non-compliance with an approved CHMP is suspected. If the Secretary of DPCD directs a Sponsor to engage a Cultural 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 recommendations in the approved CHMP;
- Recommend arrangements for the access of inspectors to the location at which the activity is being carried out; and
- Recommend other measures in relation to the conduct of the activity to avoid or minimise harm to Aboriginal cultural heritage.

MAPS


Serendip Wetlands Education Facility
Windermere Rd
Forest Rd North
Curletts Rd
Kees Rd
LARA
Flinders Av
Walkers Rd
Mill Rd
Lara
Pattullos Rd
Station Lake Rd
Mcclelland Av
Forest Rd South
Rennie St
Hovells Creek
Map 1
Location of Activity Area
Cultural Heritage Management Plan: 42-44 Ponds Drive, Lara
Legend
Activity Area
Railway
Collector Road
Minor Road
Proposed Road
Walking Track
Minor Watercourse
Permanent Waterbody
Parks and Reserves
Crown Land
Localities
Melbourne
Lara
Greater Geelong (C)
N
0
250
Metres
Local Government: City of Greater Geelong
25k Mapsheet: Lara 7721-1-1
Coordinate System: MGA Zone 55 (GDA94)
Map Scale: 1:15,000
VicMap Data: The State of Victoria does not warrant the accuracy or completeness of information in this publication and any person using or relying upon such information does so on the basis that the State of Victoria shall bear no responsibility or liability whatsoever for any errors, faults, defects or omissions in the information.
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7805_Map01_ActivityArea 9/03/2016 MElsley


Howells Creek
2\PS431989
Ponds Dr
Hailar Lane
Map 2
Extent of Activity Area and Aboriginal Cultural Heritage Sensitivity
Cultural Heritage Management Plan: 42-44 Ponds Drive, Lara
Legend
Activity Area
Areas of Aboriginal Cultural Heritage Sensitivity
Contour (10m)
Minor Watercourse
Property boundaries
2\PS431989 = Parcel SPI
Melbourne
Lara
Greater Geelong (C)
N
0
10
Metres
Local Government: City of Whittlesea
25k Mapsheet: Whittlesea 7922-4-4
Coordinate System: MGA Zone 55 (GDA94)
Map Scale: 1:500
VicMap Data: The State of Victoria does not warrant the accuracy or completeness of information in this publication and any person using or relying upon such information does so on the basis that the State of Victoria shall bear no responsibility or liability whatsoever for any errors, faults, defects or omissions in the information.
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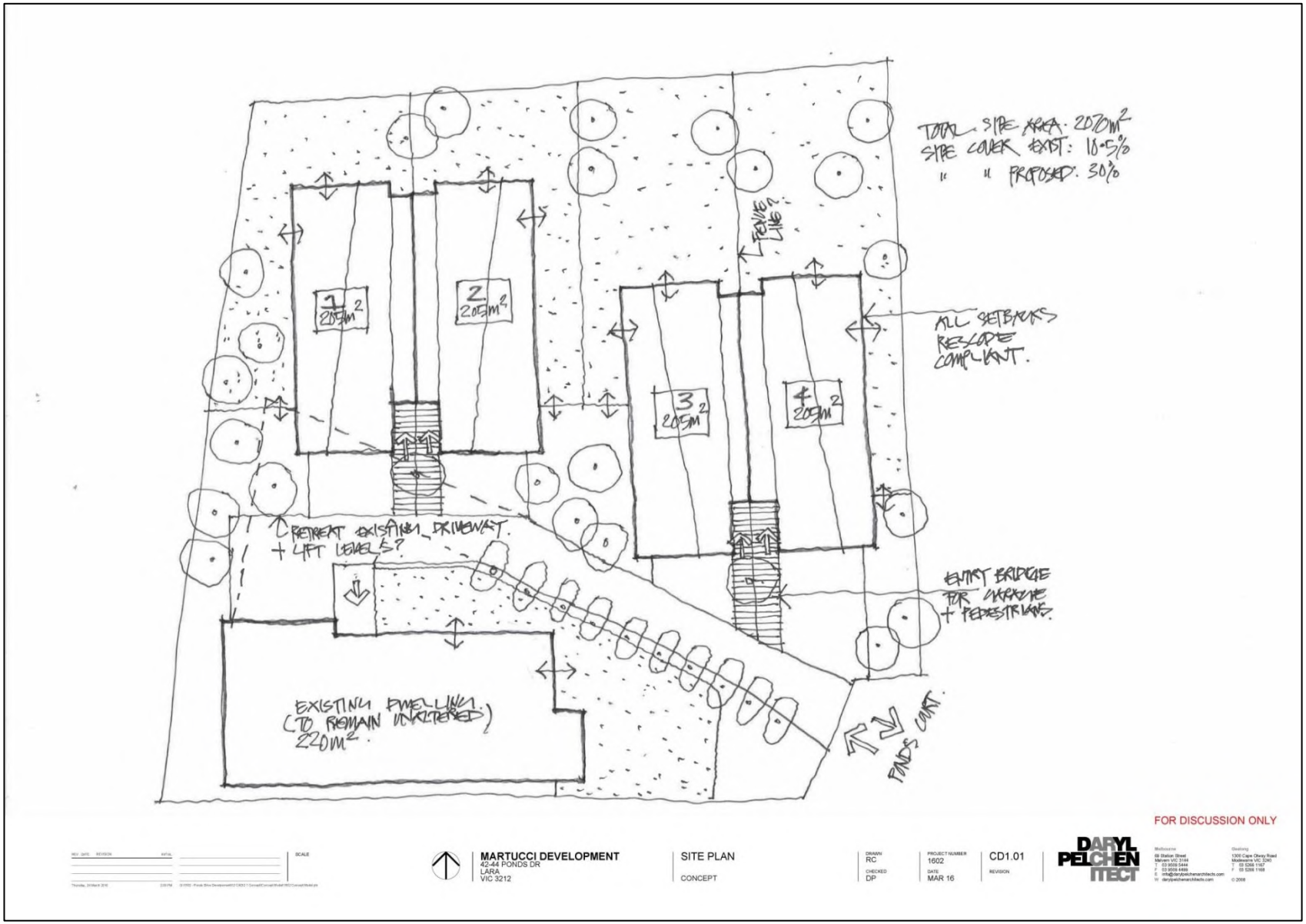
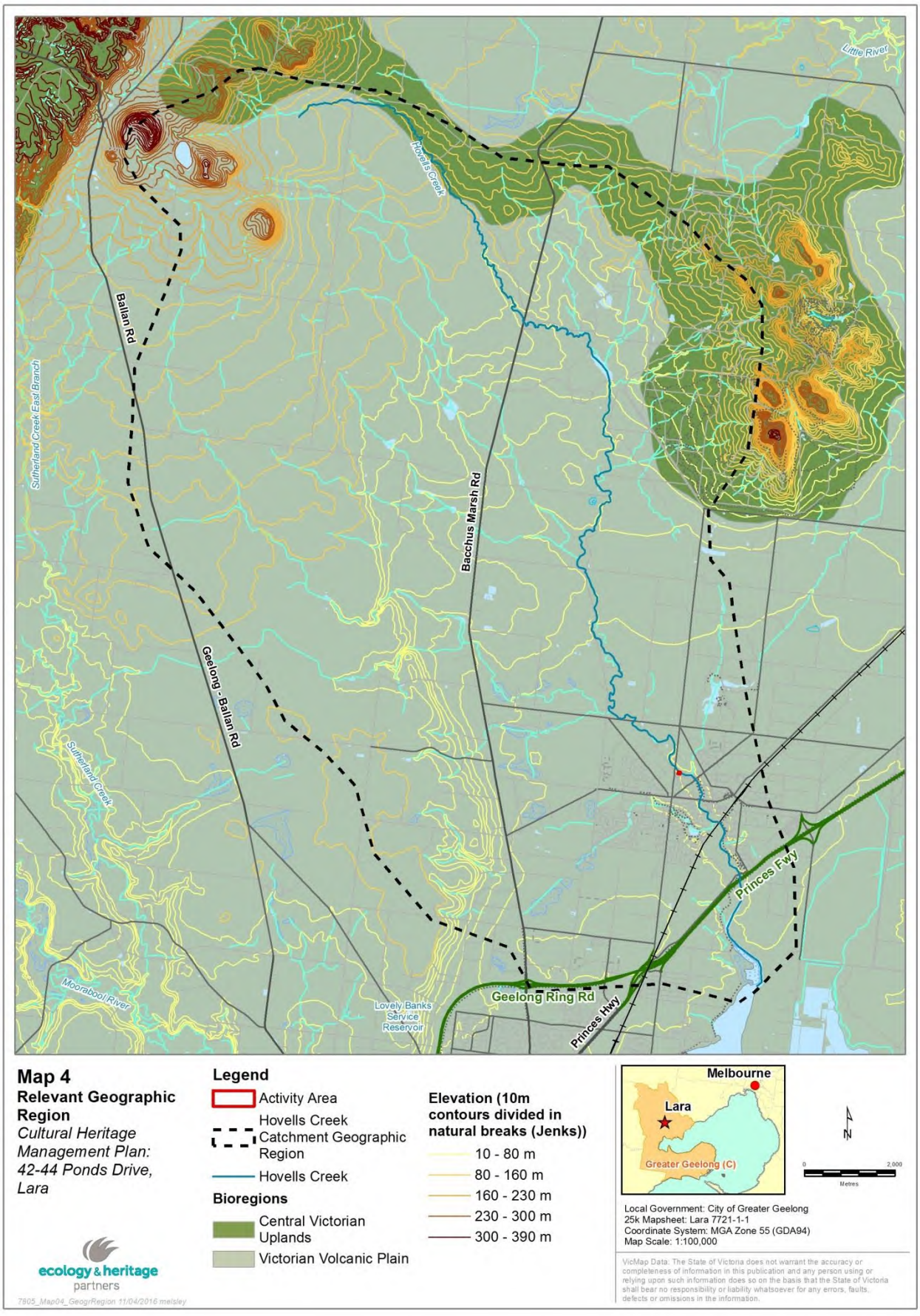
7805_Map02_Extent 9/03/2016 MElsley



Map 3: Proposed Development Plan


Little River
Hovells Creek
Ballan Rd
Sutherland Creek East Branch
Bacchus Marsh Rd
Geelong - Ballan Rd
Sutherland Creek
Princes Fwy
Moorabool River
Lovely Banks Service Reservoir
Geelong Ring Rd
Princes Hwy
Map 4
Relevant Geographic Region
Cultural Heritage Management Plan: 42-44 Ponds Drive, Lara
Legend
Activity Area
Hovells Creek Catchment Geographic Region
Hovells Creek
Bioregions
Central Victorian Uplands
Victorian Volcanic Plain
Elevation (10m contours divided in natural breaks (Jenks))
10 - 80 m
80 - 160 m
160 - 230 m
230 - 300 m
300 - 390 m
Melbourne
Lara
Greater Geelong (C)
N
0
2,000
Metres
Local Government: City of Greater Geelong
25k Mapsheet: Lara 7721-1-1
Coordinate System: MGA Zone 55 (GDA94)
Map Scale: 1:100,000
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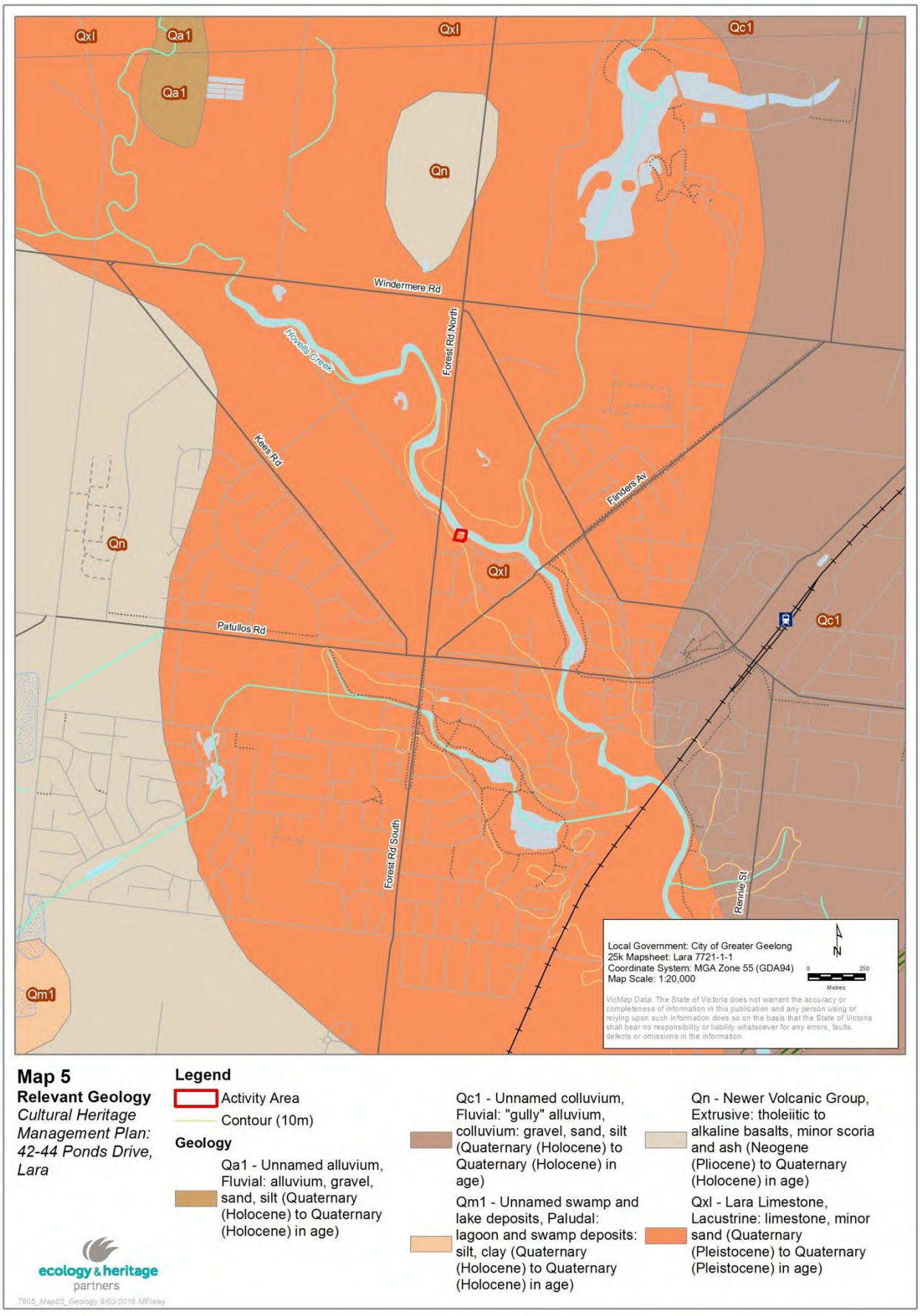
7805_Map04_GeogrRegion 11/04/2016 melsley



Map 5
Relevant Geology
Cultural Heritage Management Plan: 42-44 Ponds Drive, Lara

Legend

Activity Area

Contour (10m)

Geology

Qa1 - Unnamed alluvium, Fluvial: alluvium, gravel, sand, silt (Quaternary (Holocene) to Quaternary (Holocene) in age)

Qc1 - Unnamed colluvium, Fluvial: "gully" alluvium, colluvium: gravel, sand, silt (Quaternary (Holocene) to Quaternary (Holocene) in age)

Qm1 - Unnamed swamp and lake deposits, Paludal: lagoon and swamp deposits: silt, clay (Quaternary (Holocene) to Quaternary (Holocene) in age)

Qn - Newer Volcanic Group, Extrusive: tholeiitic to alkaline basalts, minor scoria and ash (Neogene (Pliocene) to Quaternary (Holocene) in age)

Qxl - Lara Limestone, Lacustrine: limestone, minor sand (Quaternary (Pleistocene) to Quaternary (Pleistocene) in age)

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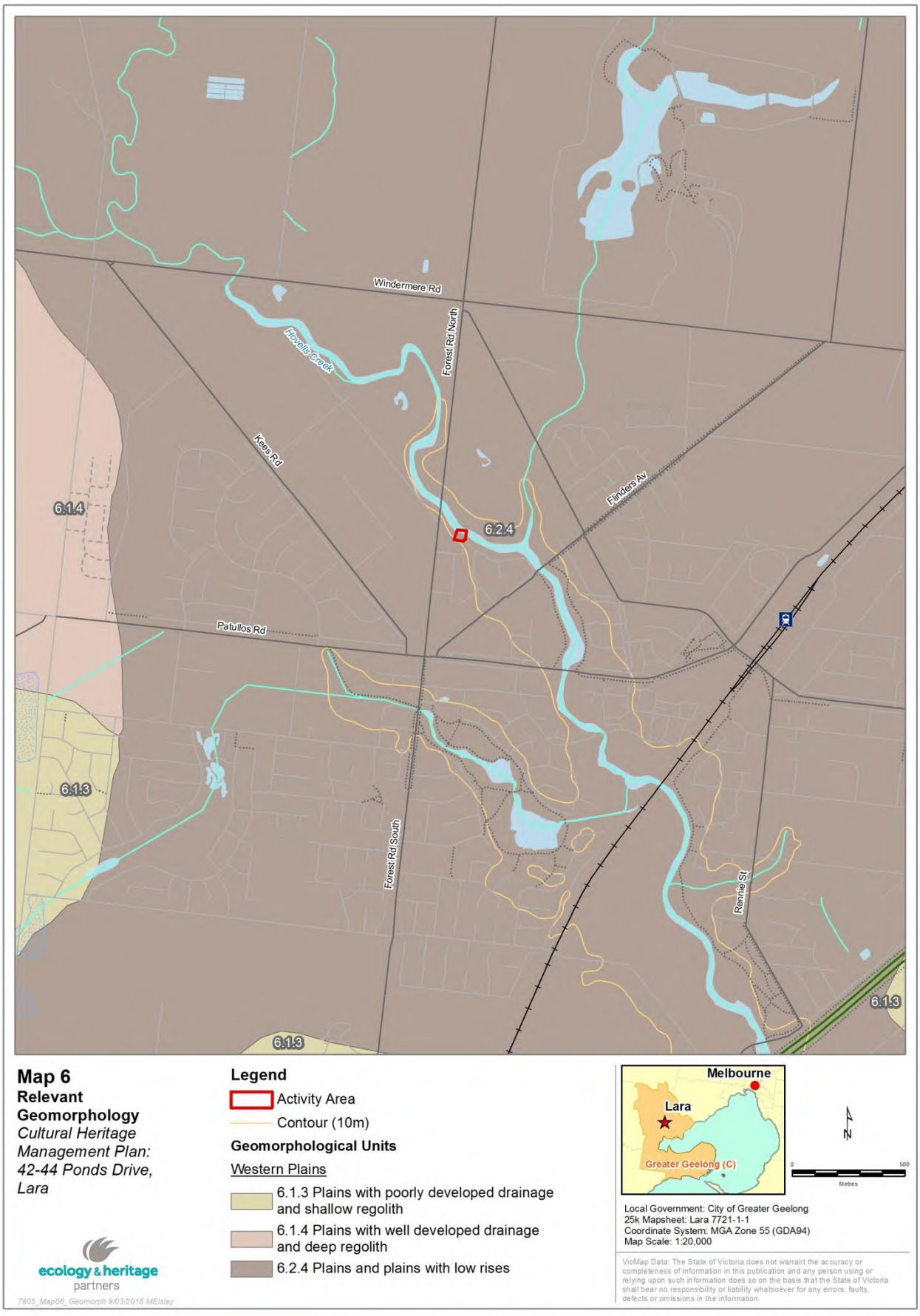
7805_Map05_Geology 9/03/2016 MElsley


Windermere Rd
Howells Creek
Forest Rd North
Kees Rd
Flinders Av
6.1.4
6.2.4
Patullos Rd
6.1.3
Forest Rd South
Rennie St
6.1.3
6.1.3
Map 6
Relevant Geomorphology
Cultural Heritage Management Plan: 42-44 Ponds Drive, Lara
Legend
Activity Area
Contour (10m)
Geomorphological Units
Western Plains
6.1.3 Plains with poorly developed drainage and shallow regolith
6.1.4 Plains with well developed drainage and deep regolith
6.2.4 Plains and plains with low rises
Melbourne
Lara
Greater Geelong (C)
N
0
500
Metres
Local Government: City of Greater Geelong
25k Mapsheet: Lara 7721-1-1
Coordinate System: MGA Zone 55 (GDA94)
Map Scale: 1:20,000
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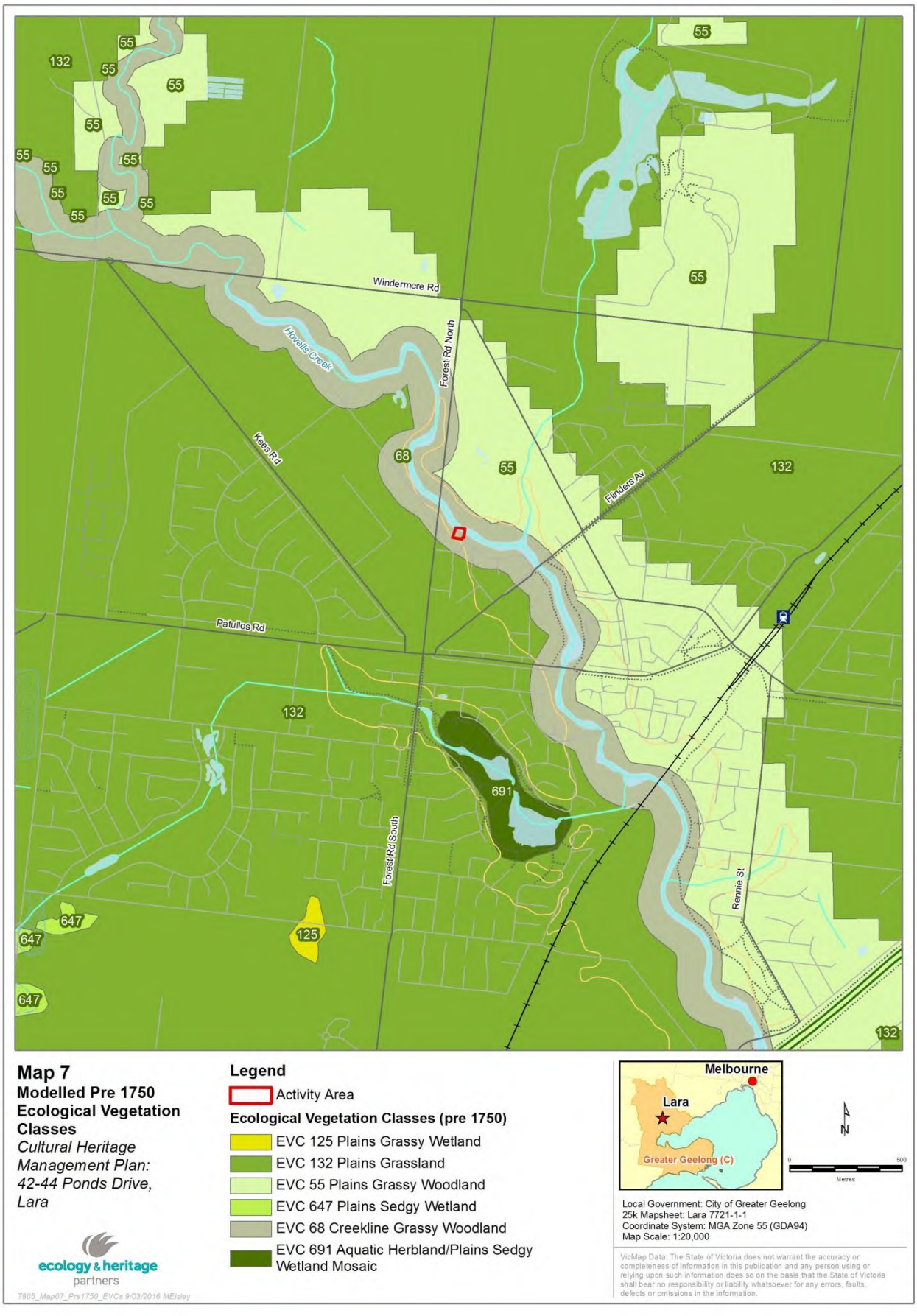
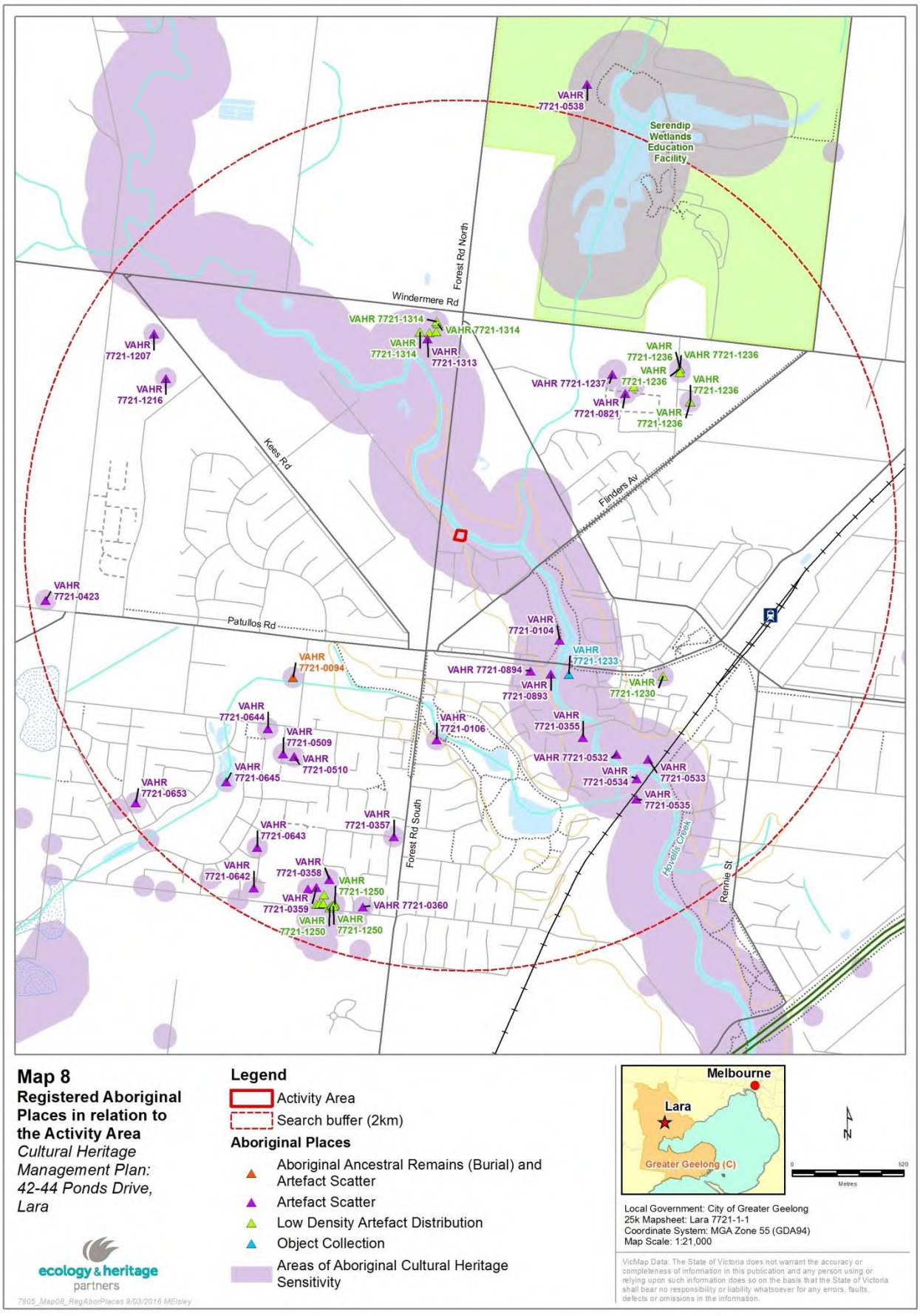
7805_Map06_Geomorph 9/03/2016 MElsley


55
132
55
55
55
55
55
55
55
55
55
55
55
55
55
Windermere Rd
Hovells Creek
Forest Rd North
Kees Rd
68
55
132
Flinders Av
Patullos Rd
132
691
Forest Rd South
Rennie St
647
647
647
125
132
Map 7
Modelled Pre 1750 Ecological Vegetation Classes
Cultural Heritage Management Plan: 42-44 Ponds Drive, Lara
ecology & heritage partners
7805_Map07_Pre1750_EVCs 9/03/2016 MElsley
Legend
Activity Area
Ecological Vegetation Classes (pre 1750)
EVC 125 Plains Grassy Wetland
EVC 132 Plains Grassland
EVC 55 Plains Grassy Woodland
EVC 647 Plains Sedgy Wetland
EVC 68 Creekline Grassy Woodland
EVC 691 Aquatic Herbland/Plains Sedgy Wetland Mosaic
Melbourne
Lara
Greater Geelong (C)
N
0
500
Metres
Local Government: City of Greater Geelong
25k Mapsheet: Lara 7721-1-1
Coordinate System: MGA Zone 55 (GDA94)
Map Scale: 1:20,000
VicMap Data: The State of Victoria does not warrant the accuracy or completeness of information in this publication and any person using or relying upon such information does so on the basis that the State of Victoria shall bear no responsibility or liability whatsoever for any errors, faults, defects or omissions in the information.


VAHR 7721-0538
Serendip Wetlands Education Facility
Forest Rd North
Windermere Rd
VAHR 7721-1314
VAHR 7721-1314
VAHR 7721-1314
VAHR 7721-1313
VAHR 7721-1207
VAHR 7721-1216
VAHR 7721-1236
VAHR 7721-1236
VAHR 7721-1237
VAHR 7721-1236
VAHR 7721-1236
VAHR 7721-0821
VAHR 7721-1236
Kees Rd
Flinders Av
VAHR 7721-0423
Patullos Rd
VAHR 7721-0104
VAHR 7721-1233
VAHR 7721-0094
VAHR 7721-0894
VAHR 7721-0893
VAHR 7721-1230
VAHR 7721-0644
VAHR 7721-0509
VAHR 7721-0106
VAHR 7721-0355
VAHR 7721-0510
VAHR 7721-0532
VAHR 7721-0645
VAHR 7721-0534
VAHR 7721-0533
VAHR 7721-0653
VAHR 7721-0535
VAHR 7721-0357
VAHR 7721-0643
Forest Rd South
Hoveills Creek
VAHR 7721-0358
VAHR 7721-0642
VAHR 7721-1250
VAHR 7721-0359
VAHR 7721-0360
VAHR 7721-1250
VAHR 7721-1250
Rennie St
Map 8
Registered Aboriginal Places in relation to the Activity Area
Cultural Heritage Management Plan: 42-44 Ponds Drive, Lara
Legend
Activity Area
Search buffer (2km)
Aboriginal Places
Aboriginal Ancestral Remains (Burial) and Artefact Scatter
Artefact Scatter
Low Density Artefact Distribution
Object Collection
Areas of Aboriginal Cultural Heritage Sensitivity
Melbourne
Lara
Greater Geelong (C)
N
0
520
Metres
Local Government: City of Greater Geelong
25k Mapsheet: Lara 7721-1-1
Coordinate System: MGA Zone 55 (GDA94)
Map Scale: 1:21,000
VicMap Data: The State of Victoria does not warrant the accuracy or completeness of information in this publication and any person using or relying upon such information does so on the basis that the State of Victoria shall bear no responsibility or liability whatsoever for any errors, faults, defects or omissions in the information.
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7805_Map08_RegAborPlaces 9/03/2016 MElsley


Ponds Dr
Map 9
Standard Assessment - Results
Cultural Heritage Management Plan: 42-44 Ponds Drive, Lara
Legend
Activity Area
Area of Aboriginal Likelihood
Melbourne
Lara
Greater Geelong (C)
N
Metres
Local Government: City of Whittlesea
25k Mapsheet: Whittlesea 7922-4-4
Coordinate System: MGA Zone 55 (GDA94)
Map Scale: 1:300
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7805_Map09_Results 22/04/2016 melsley


STH 02
STH 01
STH 03
STP 01
STH 04
Ponds Dr
Map 10
Complex Assessment - Testing Locations
Cultural Heritage Management Plan: 42-44 Ponds Drive, Lara
Legend
Activity Area
Testing locations
Stratigraphic Test Pit
Shovel Test Hole
Melbourne
Lara
Greater Geelong (C)
N
Metres
Local Government: City of Whittlesea
25k Mapsheet: Whittlesea 7922-4-4
Coordinate System: MGA Zone 55 (GDA94)
Map Scale: 1:300
VicMap Data: The State of Victoria does not warrant the accuracy or completeness of information in this publication and any person using or relying upon such information does so on the basis that the State of Victoria shall bear no responsibility or liability whatsoever for any errors, faults, defects or omissions in the information.
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7805_Map10_TestLoc 11/04/2016 melsley

APPENDICES

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:	Angelo Martucci		
ABN/ACN:			
Contact Name:	Angelo Martucci		
Postal Address	42-44 Ponds Drive, Lara 3212		
Business Number:	0428 786 019	Mobile:	
Email Address:	amartucci@bigpond.com		

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:	Residential Subdivision, 42-44 Ponds Drive, Lara
Municipal district:	Greater Geelong City Council

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

Dwellings (3+)

SECTION 3 - Cultural Heritage Advisor

Alison OConnor	Ecology & Heritage Partners	aoconnor@ehpartners.com.au
Name	*Company*	*Email address*

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

Start Date:	15-Mar-2016	Finish Date:	24-Jun-2016

Submitted on 15 Mar 2016

Department of Planning and Community Development

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

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

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

Dwellings (3+)

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 Mister 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.

Wathaurung Aboriginal Corporation

SECTION 7 - Notification checklist

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

In addition to notifying the Deputy Director and any relevant registerd Aboriginal party/s, 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.

Submitted on 15 Mar 2016

ecology & heritage
partners

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

16th March 2016

Angelo Martucci
42-44 Ponds Drive
LARA VIC 3212

To Whom It May Concern,

NOTICE OF INTENT TO PREPARE A CULTURAL HERITAGE MANAGEMENT PLAN

I am writing to acknowledge your written notice of intention to prepare a management plan, received on the 16th March 2016, for the Dwellings – 42-44 Ponds Drive, Lara project.

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

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

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

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

One post-investigation meeting to develop appropriate management recommendations.

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

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

For further information regarding this advice, please contact

Katrina Thomas on:
0457 008 616
katrina@wathcorp.com.au
Yours sincerely,

Katrina Thomas
RAP Manager
Wathaurung Aboriginal Corporation
trading as: Wadawurrung

99 Main Street East
BALLARAT VIC 3350

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

Appendix 2: Heritage Legislation

A2.1 Victorian *Aboriginal Heritage Act 2006*

The *Aboriginal Heritage Act 2006* protects Aboriginal cultural heritage in Victoria. A key part of the legislation is that Cultural Heritage Management Plans (CHMPs) are required to be prepared by Sponsors (the developer) and qualified Cultural Heritage Advisors in accordance with the *Aboriginal Heritage Act 2006* and the accompanying *Aboriginal Heritage Regulations 2007*. A CHMP is the assessment of an area (known as an 'activity area') for Aboriginal cultural heritage values, the results of which form a report (the CHMP) which details the methodology of the assessment and sets out management recommendations and contingency measures to be undertaken before, during and after an activity (development) to manage and protect any Aboriginal cultural heritage present within the area examined.

The preparation of a CHMP is mandatory under the following circumstances:

- If the *Aboriginal Heritage Regulations 2007* require a CHMP to be prepared (s. 47);
- If the Minister of Aboriginal Affairs Victoria requires a CHMP to be prepared (s. 48); or
- If an Environmental Impact Statement (EIS) is required by the *Environment Effects Act 1978* (s. 49).

The *Aboriginal Heritage Regulations 2007* require a CHMP to be prepared:

- If all or part of the proposed activity is a 'high impact activity'; and
- If all or part of the activity area is an area of 'cultural heritage sensitivity'; and
- If all or part of the activity area has not been subject to 'significant ground disturbance'.

The preparation of a CHMP can also be undertaken voluntarily. Having an approved CHMP in place can reduce risk for a project during the construction phase by ensuring there are no substantial delays if sites happen to be found. Monitoring construction works is also rarely required if an approved CHMP is in place.

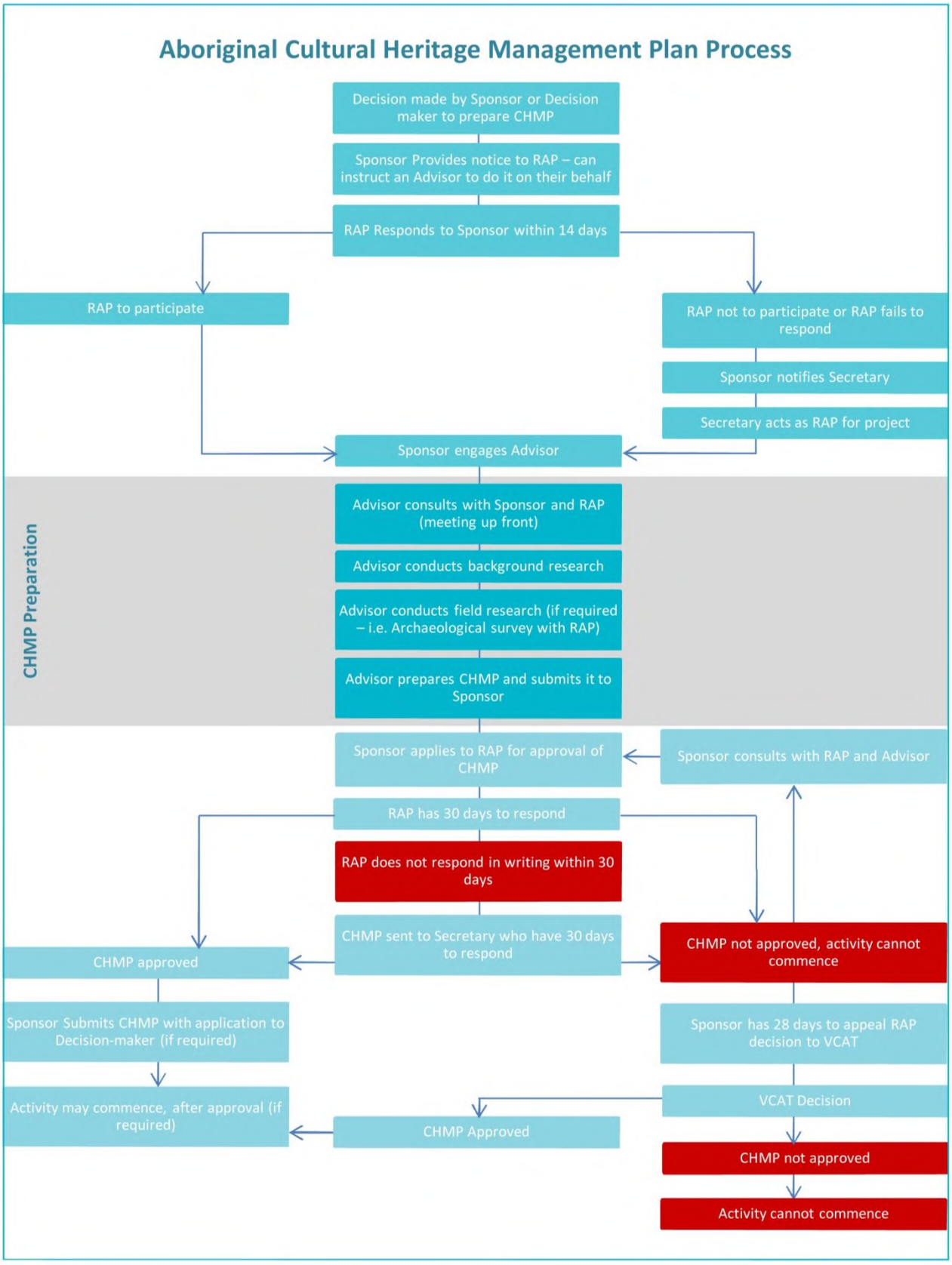
Approval of a CHMP is the responsibility of the Registered Aboriginal Party who evaluates the CHMP and then it is lodged with the Secretary of the Department of Planning and Community Development (DPCD) to take affect or, the Secretary of the DPCD (AV).[5] They will be examining the CHMPs in detail with key points including:

- Addressing whether harm to heritage can be avoided or minimised;
- All assessments (including test excavations) must be completed before management decisions are formulated; and
- Survey and excavation must be in accordance with proper archaeological practice and supervised by a person appropriately qualified in archaeology.

There are three types of CHMPs that may be prepared (*The Guide to preparing a CHMP* 2010). These are:

- Desktop; Standard; and Complex.

[5] In 2013, The DPCD was abolished and AV was transferred to the Department of the Premier and Cabinet (DPC). However the wording within the Act still retains reference to the Secretary of DPCD


Aboriginal Cultural Heritage Management Plan Process
Decision made by Sponsor or Decision maker to prepare CHMP
Sponsor Provides notice to RAP – can instruct an Advisor to do it on their behalf
RAP Responds to Sponsor within 14 days
RAP to participate
RAP not to participate or RAP fails to respond
Sponsor notifies Secretary
Secretary acts as RAP for project
Sponsor engages Advisor
CHMP Preparation
Advisor consults with Sponsor and RAP (meeting up front)
Advisor conducts background research
Advisor conducts field research (if required – i.e. Archaeological survey with RAP)
Advisor prepares CHMP and submits it to Sponsor
Sponsor applies to RAP for approval of CHMP
Sponsor consults with RAP and Advisor
RAP has 30 days to respond
RAP does not respond in writing within 30 days
CHMP sent to Secretary who have 30 days to respond
CHMP not approved, activity cannot commence
CHMP approved
Sponsor Submits CHMP with application to Decision-maker (if required)
Sponsor has 28 days to appeal RAP decision to VCAT
Activity may commence, after approval (if required)
CHMP Approved
VCAT Decision
CHMP not approved
Activity cannot commence

A desktop CHMP is a literature review. If the results of the desktop show it is reasonably possible that Aboriginal cultural heritage could be present in the activity area, a standard assessment will be required.

A standard assessment involves a literature review and a ground survey of the activity area. Where the results of ground survey undertaken during a standard assessment have identified Aboriginal cultural heritage within the activity area, soil and sediment testing, using an auger no larger than 12 cm in diameter, may be used to assist in defining the nature and extent of the identified Aboriginal cultural heritage (Regulation 59[4]).

Where the results of ground survey undertaken during a standard assessment have identified Aboriginal cultural heritage within the activity area or areas which have the potential to contain Aboriginal cultural heritage subsurface, a complex assessment will be required. A complex assessment involves a literature review, a ground survey, and subsurface testing. Subsurface testing is the disturbance of all or part of the activity area or excavation of all or part of the activity area to uncover or discover evidence of Aboriginal cultural heritage (Regulation 62[1]).

It is strongly advised that for further information relating to heritage management (e.g. audits, stop orders, inspectors, forms, evaluation fees, status of RAPs and penalties for breaching the Act) Sponsors should access the AV website (http://www.aboriginalaffairs.vic.gov.au/).

The flow chart above also assists in explaining the process relating to CHMPs.

A2.2 Commonwealth *Native Title Act 1993*

Native Title describes the rights and interests of Aboriginal and Torres Strait Islander people in land and waters, according to their traditional laws and customs. In Australia, Aboriginal and Torres Strait Islander people's rights and interests in land were recognised in 1992 when the High Court delivered its historic judgment in the case of Mabo v the State of Queensland. This decision overturned the legal fiction that Australia upon colonisation was terra nullius (land belonging to no-one). It recognised for the first time that Indigenous Australians may continue to hold native title.

Native Title rights may include the possession, use and occupation of traditional country. In some areas, native title may be a right of access to the area. It can also be the right for native title holders to participate in decisions about how others use their traditional land and waters. Although the content of native title is to be determined according to the traditional laws and customs of the title holders, there are some common characteristics. It may be possessed by a community, group, or individual depending on the content of the traditional laws and customs. It is inalienable (that is, it cannot be sold or transferred) other than by surrender to the Crown or pursuant to traditional laws and customs. Native Title is a legal right that can be protected, where appropriate, by legal action.

Native Title may exist in areas where it has not been extinguished (removed) by an act of government. It will apply to Crown land but not to freehold land. It may exist in areas such as:

- Vacant (or unallocated) Crown land;
- Forests and beaches;
- National parks and public reserves;

- Some types of pastoral leases;
- Land held by government agencies;
- Land held for Aboriginal communities;
- Any other public or Crown lands; and/or
- Oceans, seas, reefs, lakes, rivers, creeks, swamps and other waters that are not privately owned.

Native Title cannot take away anyone else's valid rights, including owning a home, holding a pastoral lease or having a mining lease. Where native title rights and the rights of another person conflict the rights of the other person always prevail. When the public has the right to access places such as parks, recreation reserves and beaches, this right cannot be taken away by Native Title. Native Title does not give Indigenous Australians the right to veto any project. It does mean, however, that everyone's rights and interests in land and waters have to be taken into account.

Indigenous people can apply to have their native title rights recognised by Australian law by filing a native title application (native title claim) with the Federal Court. Applications are required to pass a test to gain certain rights over the area covered in the application. The Native Title Tribunal (NNTT) was established to administer application processes. Once applications are registered, the NNTT will notify other people about the application and will invite them to become involved so all parties can try to reach an agreement that respects everyone's rights and interests. If the parties cannot agree, the NNTT refers the application to the Federal Court and the parties argue their cases before the Court.

As a common law right, native title may exist over areas of Crown land or waters, irrespective of whether there are any native title claims or determinations in the area. Native Title will therefore be a necessary consideration when Government is proposing or permitting any activity on or relating to Crown land that may affect native title[6].

A2.3 Victorian *Planning and Environment Act 1987*

All municipalities in Victoria are covered by land use planning controls which are prepared and administered by State and local government authorities. The legislation governing such controls is the *Planning and Environment Act 1987*. Places of significance to a locality can be listed on a local planning scheme and protected by a Heritage Overlay (or other overlay where appropriate). Places of Aboriginal cultural heritage significance are not often included on local government planning schemes.

A2.4 Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) provides a national framework for the protection of heritage and the environment and the conservation of biodiversity. The EPBC Act is administered by the Australian Government Department of the Environment (DoE). The Australian Heritage Council assesses whether or not a nominated place is appropriate for listing on either the National or Commonwealth Heritage Lists and makes a recommendation to the Minister on that basis. The

[6] The information in this section was taken from the Department of Sustainability and Environment, Fact Sheet on Native Title, 2008

Minister for the Environment, Water, Heritage and the Arts makes the final decision on listing. DoE also administers the Register of the National Estate.

The objectives of the EPBC Act are:

- To provide for the protection of the environment, especially those aspects of the environment that are matters of national environmental significance;
- To promote ecologically sustainable development through the conservation and ecologically sustainable use of natural resources;
- To promote the conservation of biodiversity;
- To provide for the protection and conservation of heritage;
- To promote a cooperative approach to the protection and management of the environment involving governments, the community, land-holders and indigenous peoples;
- To assist in the cooperative implementation of Australia's international environmental responsibilities;
- To recognise the role of indigenous people in the conservation and ecologically sustainable use of Australia's biodiversity; and
- To promote the use of indigenous peoples' knowledge of biodiversity with the involvement of, and in cooperation with, the owners of the knowledge.

A2.5 Victorian *Coroners Act 2008*

The Victorian *Coroners Act 2008* requires the reporting of certain deaths and the investigation of certain deaths and fires in Victoria by coroners to contribute to the reduction of preventable deaths. Of most relevance to heritage is the requirement for any “reportable death” to be reported to the police (s. 12[1]). The *Coroners Act 2008* requires that the discovery of human remains in Victoria (s. 4[1]) of a person whose identity is unknown (s. 4[g]) must be reported to the police.

Appendix 3: General Residential Zone

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32.08 GENERAL RESIDENTIAL ZONE

01/07/2014
VC116

Shown on the planning scheme map as **GRZ, R1Z, R2Z or R3Z** with a number (if shown).

Purpose

To implement the State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies.

To encourage development that respects the neighbourhood character of the area.

To implement neighbourhood character policy and adopted neighbourhood character guidelines.

To provide a diversity of housing types and moderate housing growth in locations offering good access to services and transport.

To allow educational, recreational, religious, community and a limited range of other non-residential uses to serve local community needs in appropriate locations.

32.08-1 Table of uses

01/07/2013
V8

Section 1 - Permit not required

Use	Condition
Animal keeping (other than Animal boarding)	Must be no more than 2 animals.
Bed and breakfast	No more than 10 persons may be accommodated away from their normal place of residence. At least 1 car parking space must be provided for each 2 persons able to be accommodated away from their normal place of residence.
Dependent person's unit	Must be the only dependent person's unit on the lot.
Dwelling (other than Bed and breakfast)	
Home occupation	
Informal outdoor recreation	
Medical centre	The gross floor area of all buildings must not exceed 250 square metres. Must not require a permit under clause 52.06-3. The site must adjoin, or have access to, a road in a Road Zone.
Minor utility installation	
Place of worship	The gross floor area of all buildings must not exceed 250 square metres. The site must adjoin, or have access to, a road in a Road Zone.
Railway	
Residential aged care facility	

Use	Condition
Tramway	
Any use listed in Clause 62.01	Must meet the requirements of Clause 62.01.

Section 2 - Permit required

Use	Condition
Accommodation (other than Dependent person's unit, Dwelling and Residential aged care facility)	
Agriculture (other than Animal keeping, Animal training, Apiculture, Horse stables and Intensive animal husbandry)	
Animal keeping (other than Animal boarding) – if the Section 1 condition is not met	Must be no more than 5 animals.
Car park	Must be used in conjunction with another use in Section 1 or 2.
Car wash	The site must adjoin, or have access to, a road in a Road Zone.
Community market	
Convenience restaurant	The site must adjoin, or have access to, a road in a Road Zone.
Convenience shop	
Food and drink premises (other than Convenience restaurant and Take away food premises)	
Leisure and recreation (other than Informal outdoor recreation and Motor racing track)	
Place of assembly (other than Amusement parlour, Carnival, Circus, Nightclub, and Place of worship)	
Plant nursery	
Service station	The site must either: ▪ Adjoin a commercial zone or industrial zone. ▪ Adjoin, or have access to, a road in a Road Zone. The site must not exceed either: ▪ 3000 square metres. ▪ 3600 square metres if it adjoins on two boundaries a road in a Road Zone.
Store	Must be in a building, not a dwelling, and used to store equipment, goods, or motor vehicles used in conjunction with the occupation of a resident of a dwelling on the lot.
Take away food premises	The site must adjoin, or have access to, a road in a Road Zone.

Use	Condition
Utility installation (other than Minor utility installation and Telecommunications facility)	
Any other use not in Section 1 or 3	

Section 3 – Prohibited

Use
Amusement parlour
Animal boarding
Animal training
Brothel
Cinema based entertainment facility
Horse stables
Industry (other than Car wash)
Intensive animal husbandry
Motor racing track
Nightclub
Office (other than Medical centre)
Retail premises (other than Community market, Convenience shop, Food and drink premises, Plant nursery)
Saleyard
Stone extraction
Transport terminal
Warehouse (other than Store)

32.08-2 Subdivision

01/07/2013
V8

Permit requirement

A permit is required to subdivide land.

An application to subdivide land, other than an application to subdivide land into lots each containing an existing dwelling or car parking space, must meet the requirements of Clause 56 and:

- Must meet all of the objectives included in the clauses specified in the following table.
- Should meet all of the standards included in the clauses specified in the following table.

Class of subdivision	Objectives and standards to be met
60 or more lots	All except Clause 56.03-5.
16 – 59 lots	All except Clauses 56.03-1 to 56.03-3, 56.03-5, 56.06-1 and 56.06-3.
3 – 15 lots	All except Clauses 56.02-1, 56.03-1 to 56.03-4, 56.05-2, 56.06-1, 56.06-3 and 56.06-6.
2 lots	Clauses 56.03-5, 56.04-2, 56.04-3, 56.04-5, 56.06-8 to 56.09-2.

32.08-3 Construction and extension of one dwelling on a lot

01/07/2013
V8

Permit requirement

A permit is required to construct or extend one dwelling on:

- A lot of less than 300 square metres.
- A lot of between 300 square metres and 500 square metres if specified in a schedule to this zone.

A permit is required to construct or extend a front fence within 3 metres of a street if:

- The fence is associated with one dwelling on:
  - A lot of less than 300 square metres, or
  - A lot of between 300 and 500 square metres if specified in a schedule to this zone, and
- The fence exceeds the maximum height specified in Clause 54.06-2.

A development must meet the requirements of Clause 54.

No permit required

No permit is required to:

- Construct or carry out works normal to a dwelling.
- Construct or extend an out-building (other than a garage or carport) on a lot provided the gross floor area of the out-building does not exceed 10 square metres and the maximum building height is not more than 3 metres above ground level.

32.08-4 Construction and extension of two or more dwellings on a lot, dwellings on common property and residential buildings

22/08/2013
VC104

Permit requirement

A permit is required to:

- Construct a dwelling if there is at least one dwelling existing on the lot.
- Construct two or more dwellings on a lot.
- Extend a dwelling if there are two or more dwellings on the lot.
- Construct or extend a dwelling if it is on common property.
- Construct or extend a residential building.

A permit is required to construct or extend a front fence within 3 metres of a street if:

- The fence is associated with 2 or more dwellings on a lot or a residential building, and
- The fence exceeds the maximum height specified in Clause 55.06-2.

A development must meet the requirements of Clause 55. This does not apply to a development of five or more storeys, excluding a basement.

A permit is not required to construct one dependent person's unit on a lot.

Transitional provisions

Despite the amendments made to Clause 55 by Amendment VC100, Clause 55 does not apply to:

- an application to construct or extend a development of four or more storeys made before the approval date of the planning scheme amendment that introduces those amendments into the planning scheme; and
- an application under section 69 of the Act to extend a permit to construct or extend a development of four or more storeys granted on or before the approval date of Amendment VC100.

32.08-5 Requirements of Clause 54 and Clause 55

01/07/2013
V8

A schedule to this zone may specify the requirements of:

- Standards A3, A5, A6, A10, A11, A17 and A20 of Clause 54 of this scheme.
- Standards B6, B8, B9, B13, B17, B18, B28 and B32 of Clause 55 of this scheme.

If a requirement is not specified in a schedule to this zone, the requirement set out in the relevant standard of Clause 54 or Clause 55 applies.

32.08-6 Buildings and works associated with a Section 2 use

01/07/2013
V8

A permit is required to construct a building or construct or carry out works for a use in Section 2 of Clause 32.08-1.

32.08-7 Maximum building height requirement for a dwelling or residential building

01/07/2013
V8

The maximum height of a building used for the purpose of a dwelling or residential building must not exceed the building height specified in a schedule to this zone.

This does not apply to:

- An extension of an existing building that exceeds the specified building height, provided that the extension does not exceed the existing building height.
- A building which exceeds the specified building height for which a valid building permit was in effect prior to the introduction of this provision.

If no building height is specified, the requirement set out in the relevant standard of Clause 54 and Clause 55 applies.

32.08-8 Application requirements

01/07/2013
V8

An application must be accompanied by the following information, as appropriate:

- For a residential development of four storeys or less, the neighbourhood and site description and design response as required in Clause 54 and Clause 55.
- For residential development of five or more storeys, an urban context report and design response as required in Clause 52.35.
- For an application for subdivision, a site and context description and design response as required in Clause 56.
- Plans drawn to scale and dimensioned which show:
  - Site shape, size, dimensions and orientation.
  - The siting and use of existing and proposed buildings.

- Adjacent buildings and uses.
- The building form and scale.
- Setbacks to property boundaries.

- The likely effects, if any, on adjoining land, including noise levels, traffic, the hours of delivery and despatch of good and materials, hours of operation and light spill, solar access and glare.
- Any other application requirements specified in a schedule to this zone.

If in the opinion of the responsible authority an application requirement is not relevant to the evaluation of an application, the responsible authority may waive or reduce the requirement.

32.08-9 Exemption from notice and review

01/07/2013
V8

Subdivision

An application to subdivide land into lots each containing an existing dwelling or car parking space is exempt from the notice requirements of Section 52(1)(a), (b) and (d), the decision requirements of Section 64(1), (2) and (3) and the review rights of Section 82(1) of the Act.

32.08-10 Decision guidelines

01/07/2013
V8

Before deciding on an application, in addition to the decision guidelines in Clause 65, the responsible authority must consider, as appropriate:

General

- The State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies.
- The purpose of this zone.
- Any other decision guidelines specified in a schedule to this zone.

Subdivision

- The pattern of subdivision and its effect on the spacing of buildings.
- For subdivision of land for residential development, the objectives and standards of Clause 56.

Dwellings and residential buildings

- For the construction and extension of one dwelling on a lot, the objectives, standards and decision guidelines of Clause 54.
- For the construction and extension of two or more dwellings on a lot, dwellings on common property and residential buildings, the objectives, standards and decision guidelines of Clause 55.
- For a development of five or more storeys, excluding a basement, the Design Guidelines for Higher Density Residential Development (Department of Sustainability and Environment 2004).

Non-residential use and development

- Whether the use or development is compatible with residential use.
- Whether the use generally serves local community needs.
- The scale and intensity of the use and development.
- The design, height, setback and appearance of the proposed buildings and works.
- The proposed landscaping.
- The provision of car and bicycle parking and associated accessways.
- Any proposed loading and refuse collection facilities.
- The safety, efficiency and amenity effects of traffic to be generated by the proposal.

32.08-11 Advertising signs

01/07/2013
V8

Advertising sign requirements are at Clause 52.05. This zone is in Category 3.

Notes: *Refer to the State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement, for strategies and policies which may affect the use and development of land.*

Check whether an overlay also applies to the land.

Other requirements may also apply. These can be found at Particular Provisions.

Appendix 4: Special Building Overlay

44.05 SPECIAL BUILDING OVERLAY

15/09/2008
VC49

Shown on the planning scheme map as **SBO** with a number (if shown).

Purpose

To implement the State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies.

To identify land in urban areas liable to inundation by overland flows from the urban drainage system as determined by, or in consultation with, the floodplain management authority.

To ensure that development maintains the free passage and temporary storage of floodwaters, minimises flood damage, is compatible with the flood hazard and local drainage conditions and will not cause any significant rise in flood level or flow velocity.

To protect water quality in accordance with the provisions of relevant State Environment Protection Policies, particularly in accordance with Clauses 33 and 35 of the State Environment Protection Policy (Waters of Victoria).

44.05-1 Buildings and works

15/09/2008
VC49

A permit is required to construct a building or to construct or carry out works, including:

- A fence.
- Roadworks.
- Bicycle pathways and trails.
- Public toilets.
- A domestic swimming pool or spa and associated mechanical and safety equipment if associated with one dwelling on a lot.
- A pergola or verandah, including an open-sided pergola or verandah to a dwelling with a finished floor level not more than 800mm above ground level and a maximum building height of 3 metres above ground level.
- A deck, including a deck to a dwelling with a finished floor level not more than 800mm above ground level.
- A non-domestic disabled access ramp.

This does not apply:

- If a schedule to this overlay specifically states that a permit is not required.
- To flood mitigation works carried out by the responsible authority or floodplain management authority.
- To the following works in accordance with plans prepared to the satisfaction of the responsible authority:
  - The laying of underground sewerage, water and gas mains, oil pipelines, underground telephone lines and underground power lines provided they do not alter the topography of the land.
  - The erection of telephone or power lines provided they do not involve the construction of towers or poles designed to operate at more than 66,000 volts.
- To landscaping, driveways, vehicle cross overs, footpaths or bicycle paths if there is no significant change to existing surface levels, or if the relevant floodplain management authority has agreed in writing that the flowpath is not obstructed.

- To roadworks and associated works if this is limited to resurfacing the existing road or the relevant floodplain management authority has agreed in writing that the flowpath is not obstructed.
- To an extension of less than 20 square metres in floor area to an existing building (not including an out-building), where the floor levels are constructed to at least 300mm above the flood level or if the relevant floodplain management authority has agreed in writing that the flowpath is not obstructed.
- To an upper storey extension to an existing building.
- To an alteration to an existing building where the original building footprint remains the same and floor levels are constructed to at least 300mm above flood level.
- To an out-building (including replacement of an existing building) if the out-building is less than 10 square metres in floor area and constructed to at least 150mm above the flood level or the relevant floodplain management authority has agreed in writing that the flowpath is not obstructed.
- To a replacement building (not including an out-building) if it is constructed to at least 300mm above the flood level and the original building footprint remains the same. The responsible authority may require evidence of the existing building envelope.
- To fencing with at least 25% openings and with the plinth at least 300mm above the flood level.
- To a replacement fence in the same location and of the same type and materials as the existing fence.
- To a pergola or an open deck area with unenclosed foundations.
- To a carport constructed over an existing carspace.
- To an in-ground swimming pool and associated security fencing, where the perimeter edging of the pool is constructed at natural surface levels and excavated material is removed from the flowpath.
- To a tennis court at existing surface level with fencing designed to minimise obstruction to flows.
- To an aviary or other enclosure for a domestic animal if it is less than 10 square metres in floor area at ground level.
- To open sided verandahs, open sided picnic shelters, barbeques and park furniture (excluding playground equipment) if there is less than 30mm change to existing surface levels.
- To radio masts, light poles or advertising signs on posts or attached to buildings.

44.05-2 Subdivision

19/01/2006
VC37

A permit is required to subdivide land.

44.05-3 Application requirements

19/01/2006
VC37

Unless otherwise agreed in writing by the relevant floodplain management authority, an application to construct a building or construct or carry out works must be accompanied by a site plan which shows, as appropriate:

- The boundaries and dimensions of the site.
- Relevant existing and proposed ground levels, to Australian Height Datum, taken by or under the direction or supervision of a licensed land surveyor.
- The layout, size and use of existing and proposed buildings and works, including vehicle parking areas.

- Floor levels of any existing and proposed buildings to Australian Height Datum.
- Cross sectional details of any basement entry ramps and other basement entries to Australian Height Datum, showing floor levels of entry and exit areas and drainage details.

Local floodplain development plan

If a local floodplain development plan has been developed for the area and has been incorporated into this scheme, an application must be consistent with the plan.

44.05-4 **Exemption from notice and review**

19/01/2006
VC37

An application under this overlay is exempt from the notice requirements of Section 52(1)(a), (b) and (d), the decision requirements of Section 64(1), (2) and (3) and the review rights of Section 82(1) of the Act.

44.05-5 **Referral of applications**

19/01/2006
VC37

An application must be referred to the relevant floodplain management authority under Section 55 of the Act unless in the opinion of the responsible authority, the proposal satisfies requirements or conditions previously agreed to in writing between the responsible authority and the floodplain management authority.

44.05-6 **Decision guidelines**

19/01/2006
VC37

Before deciding on an application, in addition to the decision guidelines in Clause 65, the responsible authority must consider, as appropriate:

- The State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies.
- Any local floodplain development plan.
- Any comments from the relevant floodplain management authority.
- The existing use and development of the land.
- Whether the proposed use or development could be located on flood-free land or land with a lesser flood hazard outside this overlay.
- The susceptibility of the development to flooding and flood damage.
- Flood risk factors to consider include:
  - The frequency, duration, extent, depth and velocity of flooding of the site and accessway.
  - The flood warning time available.
  - The danger to the occupants of the development, other floodplain residents and emergency personnel if the site or accessway is flooded.
- The effect of the development on redirecting or obstructing floodwater, stormwater or drainage water and the effect of the development on reducing flood storage and increasing flood levels and flow velocities.

Notes: *Refer to the* State Planning Policy Framework *and the* Local Planning Policy Framework, *including the* Municipal Strategic Statement, *for strategies and policies which may affect the use and development of land.*

Appendix 5: Archaeological Survey Attributes

ABORIGINAL CULTURAL HERITAGE PLACE ASSESSMENT:
ARCHAEOLOGICAL SURVEY AND EXCAVATION ATTRIBUTES FORM

Project Name: 42-44 Ponds Drive, Lara CHMP

Author/Consultant: Alison O'Connor

Cultural Heritage Management Plan #: 14191

Cultural Heritage Permit #: N/A

Survey Attributes

Survey Date: 30.03.2016	Ground Surface Visibility: 05%	
Actual Survey Coverage (m^2): .10	Effective Survey Coverage (m^2): 2	
Survey Spacing (m): 2	Transect Width (m): 3	Number in Crew: 3
Landform: Floodplain	Vegetation: Introduced	
Disturbance: Residential development		

Survey Method	Survey Design	Sample	Survey Type
☑ Pedestrian	☐ Opportunistic	☑ Area	☑ Surface
☐ Remote sensing (specify)	☐ Random	☐ Transect	
	☑ Systematic	☐ Locality	
	☐ Stratified	☐ Haphazard	
	☐ Other	☐ Other	

Excavation method

Excavation Date: 30.04.2016	Area Excavated: <1%	
Excavation Spacing (m): 3-10	Transect Width (m): N/A	Number in Crew: 3
Test Trench Size (m): 1 x 1 m / 0.5 m	Depth (m): 0.35	

Excavation Method		Excavation Design	Sample
☑ Manual	☑ Uncontrolled Excavation (e.g. shovel pit)	☐ Opportunistic	☐ Area
☐ Mechanical		☐ Random	☑ Transect
☐ Auger		☑ Systematic	☐ Locality
	☐ Monitoring	☐ Stratified	☐ Haphazard
	☑ Controlled Excavation	☐ Other	☐ Other

Appendix 6: Coordinates, Station, Back Site, Stratigraphic Test Pits and Shovel Test Holes

Table A4.1: Stratigraphic Test Pit (STP) Coordinates

STP01 Size (e.g. 1 x 1 m)	Easting (GDA 94, Zone 55)	Northing (GDA 94, Zone 55)	S/W Corner (m)	N/W Corner (m)	N/E Corner (m)	S/E Corner (m)
South / West Corner	E271629.7841	N 5788993.791				
Station 1	E271629.7841	N 5788993.791				
Surface			1532	1516	1520	1510
Base of spit 1			1602	1600	1605	1609
Sondage			1822	1818	1805	1821

Table A4.2: Shovel and Radial Test Hole Coordinates

Shovel Test Pit Number	Easting (GDA 94, Zone 55)	Northing (GDA 94, Zone 55)
1	271641.8975	5788997.66
2	271612.3173	5789001.958
3	271620.7967	5788993.439
4	271639.4357	5788976.168

Appendix 7: Glossary

Items highlighted in ***bold italics*** in the definition are defined elsewhere in the glossary.

Acronym	Description
Aboriginal Cultural Heritage Likelihood	An area assessed by a Cultural Heritage Advisor as having potential for containing either surface or subsurface Aboriginal archaeological deposits. This term is used in this report to differentiate between *legislated* ***areas of cultural heritage sensitivity*** and areas considered by an archaeologist to be sensitive.
Aboriginal Site	A location containing Aboriginal cultural heritage, e.g. ***Artefact scatter***, ***isolated artefact***, ***scarred tree***, ***shell midden***, whether or not the site is registered in the ***VAHR***, cf. ***Aboriginal cultural heritage place***.
Angular Fragment	An artefact which has technologically diagnostic features but has no discernible ventral or dorsal surface and hence is unidentifiable as either a flake or a core
Area Of Cultural Heritage Sensitivity	An area specified as an area of cultural heritage sensitivity in Division 3 or Division 4 of Part 2 of the *Aboriginal Heritage Regulations 2007*.
Artefact Scatter	Stone artefact scatters consist of more than one stone artefact. Activities associated with this site type include stone tool production, hunting and gathering or domestic sites associated with campsites. Stone artefacts may be flakes of stone, cores (flakes are removed from the stone cores) or tools. Some scatters may also contain other material such as charcoal, bone, shell and ochre.
Assemblage	The name given to encompass the entire collection of artefacts recovered by archaeologists, invariably classified into diagnostic items used to describe the material culture.
Backed	When one margin of a flake is retouched at a steep angle, and that margin is opposite a sharp edge. The steep margin is formed by bi-polar or hammer and anvil knapping. Also used to describe artefacts with backing, e.g. Backed artefact.
Backed Artefact	A class of artefact employed by archaeologists to describe artefacts which are backed. Sometimes divided into elouera, bondi point, microlith and geometric.
Bipolar	A flaking technique where the object to be reduced is rested on an anvil and struck. This process is identified by flakes with platform angles close to 90 degrees as well as apparent initiation from both ends. Some crushing may also be visible.
Burials	Aboriginal communities strongly associate burial sites with a connection to country and are opposed to disturbance of burials or their associated sites. General considerations for the presence of burial sites are the suitability of Subsurface deposits for digging purposes; with soft soil and sand being the most likely. They are more likely near water courses or in dunes near old lake beds or near the coast. Burials are often located near other sites such as oven mounds, ***shell middens*** or ***artefact scatters***.
Chert	A cryptocrystalline siliceous sedimentary stone.
CHMP	Cultural Heritage Management Plan. A plan prepared under the *Aboriginal Heritage Act 2006*.
Core	An artefact which has technologically diagnostic features. Generally this class of artefact has only negative scars from flake removal, and thus no ventral surface, however, for the purposes of this research core has been employed to encompass those artefacts which were technically flakes but served the function of a core (ie. The provider of flakes).
Cortex	The weathered outer portion of a stone, often somewhat discoloured and coarser compared with the unweathered raw material.
Decortications	The process of removing cortex from a stone (generally by flaking).

Acronym	Description
Deep Ripping	The ploughing of soil using a ripper or subsoil cultivation tool to a depth of 60 cm or more (see ***significant ground disturbance***).
DEWLP	**Department of Environment, Water, Land and Planning.** The Victorian State Government department responsible for management of natural heritage in Victoria.
DPC	**Department of the Premier and Cabinet**. The Victorian State Government department, of which **AV** is a part, responsible for management of Aboriginal cultural heritage in Victoria.
DoE	**Department of the Environment**. The Commonwealth Government department responsible for management of heritage sites on the World, National or Commonwealth Heritage lists.
Flake	An artefact which has technologically diagnostic features and a ventral surface.
High Impact Activity	An activity specified as a high impact activity in Division 5 of Part 2 of the *Aboriginal Heritage Regulations 2007*.
HV	**Heritage Victoria**. A division of ***DTPLI*** responsible for management of historical heritage in Victoria.
Isolated Finds Or Artefacts	Isolated finds refer to a single artefact. These artefacts may have been dropped or discarded by its owner once it was of no use. This site type can also be indicative of further subsurface archaeological deposits. These site types can be found anywhere within the landscape, however, they are more likely to occur within contexts with the same favourable characteristics for stone artefact scatter sites.
LDAD	**Low Density Artefact Distribution**. A category of ***Aboriginal Place*** type in the ***VAHR*** comprising single stone artefacts and/or distributions of multiple stone artefacts at concentrations of less than 10 artefacts in a 10 x 10 m area.
Manuport	An object which has been carried by humans to the site.
AV	**Aboriginal Victoria**. A division of ***DPC*** responsible for management of Aboriginal cultural heritage in Victoria.
Oriented Length	Dimension measured according to the following criteria: The length of the flake from the platform, at 90˚ to force indicators such as ring-crack, bulb of percussion, force ripples and striations, to the opposing end. Where there were an insufficient number of features present to take this measurement, such as when the flake was broken, this variable was not recorded (sometimes referred to as percussion length).
Oriented Thickness	Dimension measured at 90˚and bisecting the oriented width dimension. This was done from the ventral surface to the dorsal surface (sometimes referred to as percussion thickness).
Oriented Width	Dimension measured at 90˚and bisecting the oriented length dimension. This was done from one margin to the other. As this measurement and oriented thickness, both rely on oriented length, these were not recorded where the oriented length was not recorded (sometimes referred to as percussion width).
Procurement	The process of obtaining raw material for reduction.
Quarries	Stone quarries were used to procure the raw material for making stone tools. Quarries are rocky outcrops that usually have evidence of scars from flaking, crushing and battering the rock. There may be identifiable artefacts near or within the site such as unfinished tools, hammer stones, anvils and grinding stones.
Quartz	A crystalline form of silica.
RAP	**Registered Aboriginal Party**. An Aboriginal organisation with responsibilities relating to the management of Aboriginal cultural heritage for a specified area of Victoria under the *Aboriginal Heritage Act 2006*.
Raw Material	The kind of stone the artefacts were manufactured from.

Acronym	Description
Reduction	The process of removing stone flakes from another pieces of stone. Generally this is performed by striking (hard hammer percussion) one rock with another to remove a flake.
Registered Cultural Heritage Place	An Aboriginal site recorded in the ***VAHR***, cf. ***Aboriginal site***.
Retouch	Retouch is when a ***flake*** is removed after the manufacture of the original flake. This sequence can be observed when a flake scar is present and encroaches over the ventral surface and thus must have been made after the initial flake removal. Recorded whether retouch was absent or present on the artefact.
Rock Shelter	A concave area in a cliff where the cliff overhangs; or a concave area in a tor where the tor overhangs; or a shallow cave, where the height of the concave area is generally greater than its depth.
Scarred Trees	It is known that the wood and bark of trees have been used for a variety of purposes, such as carrying implements, shield or canoes. The removal of this raw material from a tree produces a 'scar'. The identification of a scar associated with aboriginal custom as opposed to natural scarring can be difficult. The scar should be of a certain size and shape to be identifiable with its product; the tree should also be mature in age, from a time that aboriginal people were still active in the area.
Significant Ground Disturbance	Disturbance of topsoil or surface rock layer of the ground or a waterway by machinery in the course of grading, excavating, digging, dredging or ***deep ripping***, but does not include ploughing other than ***deep ripping***.
Silcrete	A silicified sedimentary stone, often with fine inclusions or grains in a cryptocrystalline matrix. Because of the nature of the grains in silcrete (a hindrance in knapping/flaking predictability) the stone is sometimes heat treated. This exposure to heat can be identified by the presence of pot-lidding as well as a 'lustre' to the stone which is otherwise absent in the stones' natural state. Exposure to sufficient heat homogenises the stone matrix and improves the knapping (flake path) predictive potential (Crabtree & Butler 1964; Mandeville and Flenniken 1974; Purdy 1974; Domanski and Webb 1992; Hiscock 1993; Domanski *et al*. 1994). Similar to indurated mudstone, it has also been demonstrated that silcrete from the hunter valley often turns a red colour after being exposed to heat (Rowney 1992; Mercieca 2000).
Stone Arrangements	Stone arrangements are places where Aboriginal people have deliberately positioned stones to form shapes or patterns. They are often known to have ceremonial significance. They can be found where there are many boulders, such as volcanic areas and are often large in size, measuring over five metres in width.
Taphonomy	The study of the processes (both natural and cultural) which affect the deposition and preservation of both the artefacts and the site itself.
Technology	A form of artefact analysis which is based upon the knapping/ manufacturing process, commonly used to subsequently infer behaviour patterns, cultural-selection and responses to raw material or the environment.
Thumbnail scraper	A conceptual class of artefact employed to describe small rounded retouched flakes with steep margins (based on the classification by Mulvaney and Kamminga 1999).
VAHR	**Victorian Aboriginal Heritage Register**. A register of Aboriginal cultural heritage places maintained by ***AV***.
VHI	**Victorian Heritage Inventory**. A register of places and objects in Victoria identified as historical archaeological sites, areas or relics, and all private collections of artefacts, maintained by ***HV***. Sites listed on the VHI are not of State significance but are usually of regional or local significance. Listing on the ***VHR*** provides statutory protection for that a site, except in the case where a site has been "D-listed".
VHR	**Victorian Heritage Register**. A register of the State's most significant heritage places and objects, maintained by ***HV***. Listing on the VHR provides statutory protection for that a site.

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