SUBDIVISION OF LAND, 621 BURWOOD HIGHWAY, KNOXFIELD

Sponsored by Development Victoria

20th February 2018

Prepared by Heritage Advisors & Authors

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SUBDIVISION OF LAND 621 BURWOOD HIGHWAY KNOXFIELD CULTURAL HERITAGE MANAGEMENT PLAN 15226

Activity Size	Medium (r.68 <i>Aboriginal Heritage Regulations 2007</i>)
Assessment Type	Cultural Heritage Management Plan
Sponsor	Development Victoria (ABN 61 868 774 623)
Heritage Advisors	
Authors	
Completed	20 th February 2018

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EXECUTIVE SUMMARY

This cultural heritage management plan (CHMP) has been commissioned by Development Victoria (ABN 61 868 774 623). The activity is a subdivision of land and the sponsor is Development Victoria. This CHMP is required by the *Aboriginal Heritage Regulations 2007*. Part of the Activity Area is an area of cultural heritage sensitivity and the activity is a high impact activity (r.6 *Aboriginal Heritage Regulations 2007*). The area of cultural heritage sensitivity is land within 200m of a waterway (Blind Creek) (r.23 *Aboriginal Heritage Regulations 2007*). The activity is a high impact activity being a subdivision of land (r.46 *Aboriginal Heritage Regulations 2007*). The heritage advisors and authors of this plan are

The Activity Area is located at 621 Burwood Highway Knoxfield, approximately 25km southeast of Melbourne and comprises 19.2 hectares (**Map 1**). The cadastral information is shown in **Table 1** (**Section 1.3**). The land is situated on a gently north sloping floodplain southeast of Melbourne. The Activity Area is bounded by Blind Creek to the north, residential land to the northeast, industrial land to the west, Fairhills High School to the east, Burwood Highway to the south and Public Use land to the southwest.

The activity is a subdivision of land for primarily residential and mixed use purposes. A Preliminary Concept Plan is available for the activity showing future development for mixed use, residential, waterway/drainage/retardation and public open space (**Map 2**). The Activity Area is currently subject to Schedule 7 (Public Use Zone) of the Knox Planning Scheme (**Appendix 10**). The Activity Area is the subject of a request for an amendment to the Knox Planning Scheme sponsored by Development Victoria. The amendment seeks to rezone the subject land to Schedule 2 (General Residential Zone) of the Knox Planning Scheme (**Appendix 11**). This CHMP is not a requirement for the request for an amendment.

A *Notice of Intent to Prepare a Cultural Heritage Management Plan* (NoI) was submitted to Aboriginal Victoria (AV) on 22 August 2017. AV notified the Sponsor that they will evaluate the CHMP when completed and that the plan has been allocated plan number 15226. Knox City Council was also notified (Appendix 1).

There is no RAP responsible for the Activity Area. The Boon Wurrung Foundation Ltd (BWFL), the Bunurong Land Council Aboriginal Corporation (BLCAC) and Wurundjeri Land and Compensation Cultural Heritage Council Aboriginal Corporation (WLaCCHCAC) are considered by the Victorian Aboriginal Heritage Council (VAHC) to be the relevant Traditional Owner groups (TOs) in relation to the activity area. The TOs were consulted in regards to the results and Conditions of the CHMP (Section 10).

PART 1 – ASSESSMENT

DESKTOP ASSESSMENT (SECTION 5)

The desktop assessment reviewed the relevant geographic region (Section 5.2); Registered Aboriginal Places (Section 5.4); reports and published works (Section 5.5); history and ethnohistory (Section 5.6); landforms and geomorphology, including geology, soils and environment (Section 5.7); landuse history (Section 5.8) and strategic values (Section 5.9). The following summary of the desktop assessment was used to identify areas of archaeological potential and likely site-types within the Activity Area (Section 5.10):

- Approximately 12.5% of the geographic region has been subject to archaeological survey. Therefore current site prediction models for this region are conjectural;
- Blind Creek is the dominant resource value within the geographic region and provided potable water, flora and fauna, shade and a route of movement across the landscape;
- There are no known stone sources within the Activity Area;
- Pre-contact vegetation has been cleared and Aboriginal scarred trees are unlikely to be present;
- Earth features, stone features, Aboriginal Ancestral Remains, quarries, rock art or freshwater shell middens are the least likely place types to be present;
- Stone artefact scatters and low density artefact distributions (LDADs) are the most likely site type to be present;
- The Activity Area was subject to a cultural heritage statement by Jones (2015). No Aboriginal or historical places were recorded in the Activity Area. The report deemed a mandatory CHMP was required based on the absence of significant ground disturbance and the presence an area of cultural heritage sensitivity.
- Regional attributes for stone artefact scatters and LDADs are:
 - o Location: there is a weak correlation between artefact distribution and waterways with artefact scatters found up to 1km from water sources.
 - o Raw material: dominated by silcrete followed by quartz, quartzite, volcanics and other minor raw materials.
 - o Primary form: dominated by flakes followed by tools and cores.
 - o Artefact depth: to a maximum 40cm depth.
 - o Date: Late Holocene (<5,000 years BP).
- The majority of the Activity Area has been subject to European land use activities including vegetation clearance, ploughing, orchards and construction of infrastructure (dam, buildings associated with a Horticultural Research Station, roads, tracks, fences, drainage channels and water bores etc).

Based on review of relevant background information, the following site prediction model has been generated for the Activity Area.

EXECUTIVE SUMMARY

Desktop Assessment Areas of Archaeological Potential (See in report Table 8 & Map 7)

Landform / Location	Archaeological Potential	Details
Floodplain Unlikely / Very Low		The floodplain was subject to seasonal inundation and would have been an unsuitable location for camping. The archaeological potential of the floodplain is very low. However, stone artefacts can be found on any landform in Victoria and the presence of isolated stone artefacts or LDADs cannot be entirely discounted. If present, stone artefacts may be found to a maximum depth of 40cm.
Slope	Unlikely / Very Low	The slope was likely subject to periodic flooding and has a very low sensitivity for stone artefacts. However, the presence of isolated stone artefacts or LDADs cannot be entirely discounted. Stone artefacts may be found to a maximum depth of 40cm.
Upper Hill Slope	Low to Moderate	Upper hill slopes can be sensitive for stone artefacts. Stone artefacts may be found to a maximum depth of 40cm.
Entire Activity Area	None All other place types	Earth features, Aboriginal Ancestral Remains, quarries, rock art and stone features are unlikely to be present.

The desktop assessment has demonstrated that Aboriginal cultural heritage is potentially present in the Activity Area.

STANDARD ASSESSMENT (SECTION 6)

The standard assessment was conducted on 13 September 2017 by (AAT), (BWFL) and (BLCAC). The Activity Area was divided into three survey areas based on landform (Map 8).

No surface artefacts were found during archaeological ground surveys (Map 8)

COMPLEX ASSESSMENT (SECTION 7)

Fieldwork was conducted on 5, 6, 9 and 10 October 2017 by (AAT), (AAT), (AAT), (AAT), (BWFL), (BWFL), (BWFL) and (excavator operator). A total of three test pits and 19 mechanical trenches were excavated. Test pit and mechanical trench details are presented in **Appendix 4**, including the coordinates of all subsurface testing locations. A total area of 45m² was excavated. No Aboriginal cultural heritage materials were recovered from archaeological excavations.

The complex assessment identified the following:

- A total area of 45m² was excavated comprising three test pits and 19 mechanical trenches; and
- No Aboriginal cultural heritage materials were recovered from archaeological excavations in the Activity Area.

EXECUTIVE SUMMARY

ABORIGINAL CULTURAL HERITAGE (SECTION 8)

No Aboriginal cultural heritage materials were recovered from archaeological excavations in the Activity Area.

IMPACT ASSESSMENT (SECTION 9)

The impact of the activity on Aboriginal cultural heritage was assessed and Section 61 matters in the *Aboriginal Heritage Act 2006* considered.

The assessment found no Aboriginal cultural heritage or areas likely to contain Aboriginal cultural heritage; therefore, there is no requirement to consider avoidance, minimisation or management of Aboriginal cultural heritage places. The activity is considered unlikely to harm any Aboriginal cultural heritage.

Contingency Plan

The Contingency Plan in **Section 11** must be adopted in the case Aboriginal cultural heritage is discovered during the course of the activity and in relation to any disputes, delays and other obstacles that may affect the conduct of the activity.

Custody and Management of Aboriginal Cultural Heritage

No Aboriginal cultural heritage was found during the assessment; therefore, there are no custody and management issues. Any Aboriginal cultural heritage found during the conduct of the activity must be dealt with according to the Contingency Plan (Section 11).

Cumulative Impact

The Aboriginal cultural heritage in the region is being impacted by expanding residential development. Aboriginal cultural heritage is being discovered and managed by CHMPs taking into consideration subdivision and development activity. This process has resulted on the one hand in an increase in our cumulative knowledge of the Aboriginal cultural heritage values of the region, and the preservation of parts of these values, but on the other hand, the destruction and loss of part of these values.

The activity has no negative impact on Aboriginal cultural heritage. The activity has a positive impact due to its further archaeological investigation of this landform in the geographic region.

PART 2 – CULTURAL HERITAGE CONDITIONS

SPECIFIC MANAGEMENT CONDITIONS (SECTION 10)

10 CONDITIONS

Condition 1: Compliance

Prior to the commencement of the activity, the sponsor or their agent must ensure that the following Conditions are noted on all relevant work plans and schedules to facilitate compliance. A compliance checklist is in **Appendix 8**.

Condition 2: CHMP to Remain Onsite

The sponsor or their agent must ensure an approved copy of Part 2 of this CHMP is supplied to the Contractor or person(s) responsible for the conduct of the activity and the approved CHMP must remain or be available onsite for the duration of the activity.

Condition 3: Aboriginal Cultural Heritage Induction

The Contractor must provide an Aboriginal cultural heritage induction for construction personnel performing ground disturbing activities in the Activity Area. The induction must include information relating to the identification of stone artefacts and deposits that may occur as well as a summary of the CHMP. Those personnel who will be working permanently within the Activity Area must attend this induction. This will take the form of a short induction (up to 60 minutes) explaining Aboriginal cultural heritage, and the provision of a booklet / pamphlet (Condition 3) and AV mini-posters. The booklet explaining Aboriginal cultural heritage has to be created for the project. Contractors who are not permanent are required to attend an onsite toolbox meeting provided by the chief contractor, regarding Aboriginal cultural heritage within the Activity Area and must be provided with a booklet / pamphlet (Condition 3), which includes the identification of artefacts, at the start of their time within the Activity Area. These contractors must be made aware of Aboriginal cultural heritage management requirements during toolbox meetings. AV mini-posters must be displayed on the information boards of site sheds for the duration of the activity.

Condition 4: Contingency Plan in the Event that Suspected Aboriginal Heritage is identified

The Contingency Plan presented in **Section 11** must be adopted.

Condition 5: Costs

The cost of the above Conditions must be borne by the Sponsor, their agent or contractor.

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ABBREVIATIONS

AAT Archaeology at Tardis Pty Ltd

ACHRIS Aboriginal Cultural Heritage Register and Information Services

AV Aboriginal Victoria

BLCAC Bunurong Land Council Aboriginal Corporation

BP Years Before Present (1950)
BWFL Boon Wurrung Foundation Limited
CHMP Cultural Heritage Management Plan
dGPS Differential Global Positioning System
DPC Department of Premier and Cabinet
EVC Ecological Vegetation Classes
HCO Holocene Climatic Optimum

Ka Thousand years ago

LDAD Low Density Artefact Distribution

LGM Last Glacial Maximum

Ma Million years ago

MGA Map Grid Australia

MT Mechanical Trench

Nol Notice of Intent to Prepare a Cultural Heritage Management Plan

OSL Optically Stimulated Luminescence

PCP Project Concept Plan
RAP Registered Aboriginal Party

SU Stratigraphic Unit

TOG Traditional Owner Group

TP Test Pit

VAHC Victorian Aboriginal Heritage Council
VAHR Victorian Aboriginal Heritage Registry

VRO Victorian Resources Online

WLaCCHCAC Wurundjeri Land and Compensation Cultural Heritage Council Aboriginal

Corporation

^{*}Throughout this report several technical terms are used that may not be familiar to some readers. An extensive glossary has been included as Appendix 2 and should be referenced for an explanation of terms.

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PART 1 - ASSESSMENT

1 INTRODUCTION

This cultural heritage management plan (CHMP) has been commissioned by Development Victoria (ABN 61 868 774 623). The activity is a subdivision of land. The subdivision of land is for the purpose of residential and mixed-use development (**Maps 1 and 2**).

1.1 Reasons for Preparing this CHMP

This plan is required by the *Aboriginal Heritage Regulations 2007*. Part of the Activity Area is an area of cultural heritage sensitivity and the activity is a high impact activity (r.6 *Aboriginal Heritage Regulations 2007*) (**Map 3**):

6 When a cultural heritage management plan is required

A cultural heritage management plan is required for an activity if - (a) all or part of the Activity Area for the activity is an area of cultural heritage sensitivity; and (b) all or part of the activity is a high impact activity.

Part of the Activity Area is an area of cultural heritage sensitivity being land within 200m of a waterway (Blind Creek, **Map 3**) (r.23 *Aboriginal Heritage Regulations 2007*):

23 Waterways

(1) ..., a waterway or land within 200 metres of a waterway is an area of cultural heritage sensitivity.

The activity is a high impact activity being a subdivision of land (r.46 *Aboriginal Heritage Regulations 2007*):

46 Subdivision of Land

The subdivision of land into three or more lots is a high impact activity if—

- a) the planning scheme that applies to the activity area in which the land to be subdivided is located provides that at least three of the lots may be used for a dwelling or may be used for a dwelling subject to the grant of a permit; and
- (b) the area of each of at least three of the lots is less than eight hectares.

1.2 Notice of Intent to Prepare a Cultural Heritage Management Plan (NoI)

A Notice of Intent to Prepare a Cultural Heritage Management Plan (NoI) was submitted to Aboriginal Victoria (AV) on 22 August 2017. AV notified the Sponsor that they will evaluate the CHMP and that the CHMP has been allocated CHMP number 15226. Knox City Council was also notified (Appendix 1).

1.3 Location of the Activity Area

The Activity Area is located at 621 Burwood Highway Knoxfield, approximately 25km southeast of Melbourne (**Map 1**). The land is an irregular shape with maximum dimensions measuring 760m in length and 470m in width. The area comprises a total of 19.2 hectares. The Activity Area cadastre is presented in **Table 1**.

Table 1 Activity Area Cadastre

Landowner / Occupier	Address	Parcel	Parish
Crown Land	621 Burwood Highway, Knoxfield	Crown Allotment 2258 Subject Land	Scoresby

1.4 Sponsor

The Sponsor is Development Victoria (ABN 61 868 774 623).

1.5 Heritage Advisors

Archaeology At Tardis Pty Ltd (AAT) heritage advisors (project manager) and (project archaeologist) authored this CHMP. Contributions to reporting were also completed by Their qualifications and experience are summarised in **Appendix 7**.

1.6 Owners and Occupiers

The land is Crown Land and managed by Department of Economic Development, Jobs, Transport and Resources.

1.7 Registered Aboriginal Party (RAP)

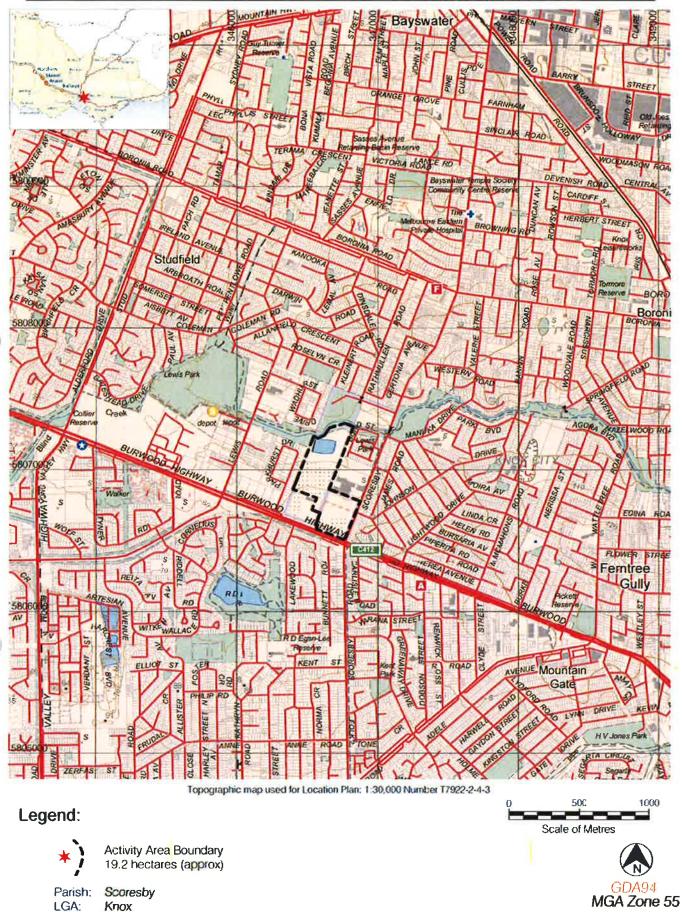
There is no RAP responsible for the Activity Area.

1.8 Registered Aboriginal Party and CHMP Evaluation

There is no RAP to elect to evaluate the CHMP. The Secretary, Department of Premier and Cabinet (DPC) will evaluate the plan.

1.9 Activity Advisory Group

No Activity Advisory Group was appointed for this CHMP.



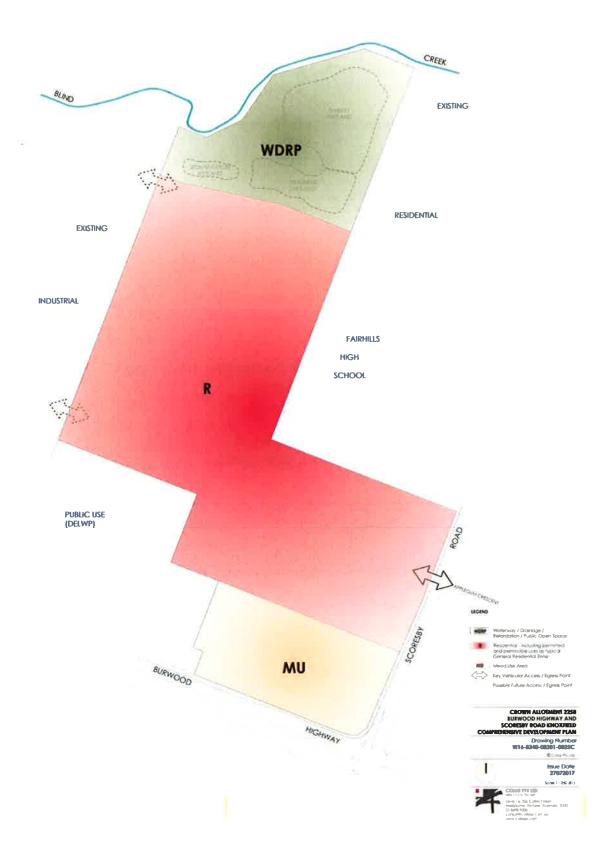
Map 1 Activity Area Location

2 ACTIVITY DESCRIPTION

The activity will be the subdivision of land at 621 Burwood Highway, Knoxfield. The activity will include the construction of residential housing, mixed use development and associated structures, new roads, and the installation of underground services (Map 2). The Activity Area is currently subject to Schedule 7 (Public Use Zone) of the Knox Planning Scheme (Appendix 10). The Activity Area is the subject of a request for an amendment to the Knox Planning Scheme sponsored by Development Victoria. The amendment seeks to rezone the subject land to Schedule 2 (General Residential Zone) of the Knox Planning Scheme (Appendix 11). This CHMP is not a requirement for the request for an amendment.

The purpose of seeking an amendment is to allow land to be subdivided for residential and mixed use development. The amendment also provides for ecological protection of environmentally significant northern parts of the Activity Area which are subject to periodic inundation these areas will be used for; waterway, drainage, retardation and public open space – Map 2 (section; WDRP). These northern parts of the Activity Area largely correspond with an area of cultural heritage sensitivity, that being land within 200m of Blind Creek (Maps 2 and 3). Maintaining this land as public open space and for water management purposes enhances protection afforded to land within the area of cultural heritage sensitivity. The larger central portion of the Activity Area will be subdivided for residential purposes see – Map 2 (section; R). It is anticipated that the southern portion of the Activity Area with frontages on Burwood Highway and Scoresby Road will be subdivided for mixed use development – Map 2 (section; MU).

The Preliminary Concept Plan (Map 2) has been supplied for illustrative purposes only. Final and precise depths of cut and fill, and founding depths of utilities and buildings are dependent on final building designs following development, building regulations and engineering designs and cannot be provided here. Although detailed information on the depth of the impact of any construction below the contemporary land surface associated with the activity is not yet available, all subsurface deposits with any potential for Aboriginal cultural heritage will be harmed (that is, geological deposits formed within 50ka during the period of inferred human occupation of southeast Australia).



Map 2 Preliminary Concept

3 EXTENT OF THE ACTIVITY AREA

The Activity Area is a 19.2 hectare project at 621 Burwood Highway, Knoxfield. The Activity Area cadastre is presented in **Appendix 3**. The Activity Area is bounded by Blind Creek to the north, residential land to the northeast, industrial land to the west, Fairhills High School to the east, Burwood Highway to the south and Public Use land to the southwest (**Map 1**).

The salient prominent structures and works in, and natural features of, the Activity Area are (Map 4):

(1) Natural Features

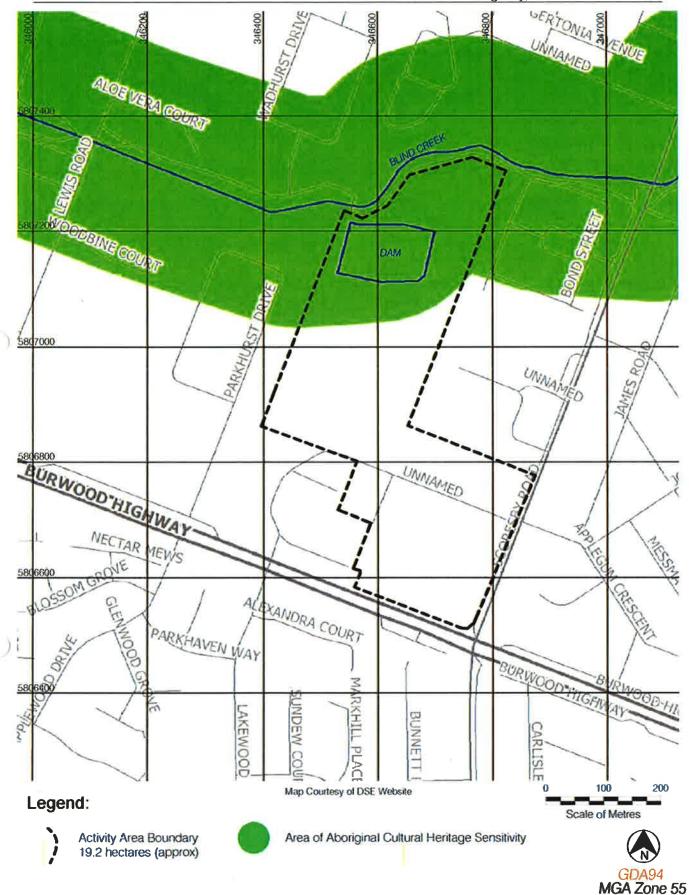
- Gently sloping floodplain;
- · Creek banks; and
- Upper Hill Slope.

(2) Structures and Works

- Orchards:
- Farm dam;
- Footprint of demolished research and quarantine facility; and
- Research and quarantine facility tracks.

3.1 Relevant Local Municipality

The relevant local municipality is the Knox City Council.



Map 3 Statutory Areas of Aboriginal Cultural Heritage Sensitivity



Map 4 Extent of Activity Area: Aerial Photograph

4 DOCUMENTATION OF CONSULTATION

There is no Registered Aboriginal Party (RAP) for the Activity Area. The Boon Wurrung Foundation Ltd (BWFL), the Bunurong Land Council Aboriginal Corporation (BLCAC) and Wurundjeri Land and Compensation Cultural Heritage Council Aboriginal Corporation (WLaCCHCAC) are recognised as representing Traditional Owner Groups (TOGs) in this area by the Victorian Aboriginal Heritage Council (VAHC).

When evaluating this CHMP, the Secretary is required to consult with, and consider the views of, any Aboriginal person or Aboriginal body that the Secretary considers relevant to the application (s.65(3) *Aboriginal Heritage Act 2007*).

4.1 Consultation in Relation to the Assessment

The BWFL, BLCAC and WLaCCHCAC have been informed that a CHMP has been commissioned for the Activity Area, and a request made for any relevant information regarding the oral tradition, Aboriginal cultural heritage or specific cultural significance, including significance in accordance to Aboriginal tradition, of the Activity Area.

The following were also consulted:

- Aboriginal Cultural Heritage Register and Information System (ACHRIS);
- National Trust Register;
- Australian Heritage Database;
- State Library of Victoria; and
- Land Managers.

4.2 Participation in the Conduct of the Assessment

BWFL and BLCAC representatives participated in the standard and complex assessments (**Table 2**).

Table 2 Traditional Owner Group Representation & Participation

Name	Date	Organisation	Function
	13.9.17 5 & 6.10.17	BWFL	Field Representative – standard & complex assessment
	13.9.17	BLCAC	Field Representative – standard assessment
	10.10.17	BWFL	Field Representative – complex assessment
	5, 6, 9 & 10.10.17	BLCAC	Field Representative complex assessment
	9.10.17	BWFL	Field Representative – complex assessment

4.3 Consultation in Relation to the Conditions

The BWFL, BLCAC and WLaCCHCAC were requested to supply in writing any relevant information regarding the oral tradition, Aboriginal cultural heritage or specific cultural significance, including significance in accordance to Aboriginal tradition, of the known sites within the Activity Area.

Copies of the draft conditions and related maps were provided to BWFL, BLCAC and WLaCCHCAC prior to submission and a request made for comments on the complex assessment and draft recommendations.

No formal response had been received from BWFL or BLCAC prior to submission. responded on behalf of WLaCCHCAC elders to advise that their preference is that inductions are undertaken by Traditional Owners and the Heritage Advisor, rather than 'the contractor'.

Cultural heritage information was also sought from each of the Aboriginal community representatives who participated in the assessment.

4.4 Summary of Consultation Outcomes

The consultation outcomes are:

- All relevant stakeholders and databases were consulted and reviewed;
- The complex assessment methodology was discussed with the BLCAC and BWFL representatives; and
- BLCAC, BWFL and WLaCCHCAC were provided with the results of the assessment.

5 DESKTOP ASSESSMENT

The aim of the desktop assessment is to use environmental, historic and existing cultural heritage information to formulate an Aboriginal cultural heritage sensitivity model hereafter referred to as the *model* for the Activity Area. This model is used to identify:

- Whether it is reasonably possible that Aboriginal cultural heritage is present;
- General locations of Aboriginal cultural heritage sensitivity;
- Whether there is potential for the activity to impact Aboriginal cultural heritage;
- The depth under the contemporary ground surface any Aboriginal cultural heritage may be buried; and
- Details of potential heritage such as content, context, condition and significance.

The model is used to formulate the aims and methodology of any subsequent assessment in order to test the predicted archaeological sensitivity. The results of any assessment are discussed and interpreted according to the model.

5.1 Victorian Aboriginal Heritage Registry Access and Search

The Aboriginal Cultural Heritage Register and Information System (ACHRIS) was accessed for reports and places from 23rd August 2017 until the CHMP was submitted for evaluation.

5.2 Relevant Geographic Region

The relevant geographic region is defined as land within 5km of the Activity Area boundary (Map 5). This geographic region contains a representative sample of landform features and Aboriginal cultural heritage relevant to understanding and evaluating Aboriginal cultural heritage in the Activity Area. In addition, information from outside the relevant geographic region is discussed where it can contribute to further contextualising and evaluating the attributes of Aboriginal cultural heritage that may be present in the Activity Area.

5.3 Map showing the Relevant Geographic Region

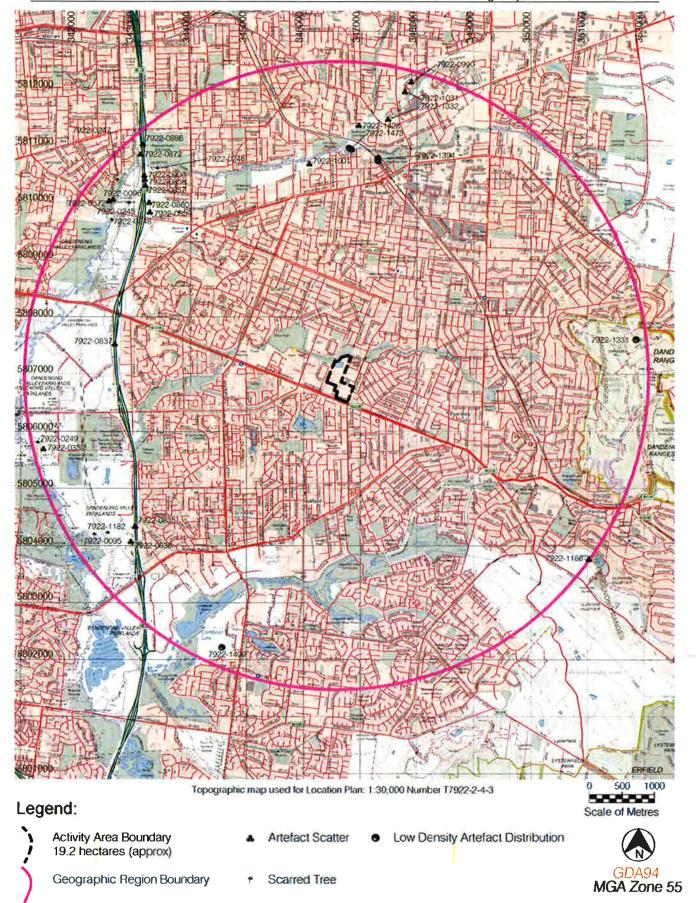
The boundary of the relevant geographic region and previously recorded cultural sites is shown in **Map 5**.

5.4 Registered Aboriginal Places in the Relevant Geographic Region

There are no Aboriginal places in the Activity Area or within 200m of its boundaries.

There are 30 Aboriginal places within the geographic region (**Table 3, Map 5, Appendix 6**). Places are dominated by artefact scatters and low density artefact distributions (LDADs) (n=23) followed by scarred trees (n=7). No other place types are registered in the geographic region.

The place-types within the geographic region are shown in **Table 3. Appendix 6** lists the site types and description of previously registered sites within the geographic region.



Map 5 Registered Aboriginal Places and Geographic Region

Table 3 Place-types within the relevant Geographic Region

Place-Type	Number
Stone Artefact Scatter	23
Scarred Tree	7
Total Registered Places	30

Stone Artefact Scatters and LDADs in the Geographic Region

The attributes of stone artefacts found at Aboriginal cultural sites in the geographic region are described below.

Artefact Primary Form

Primary artefact form is dominated by flakes (67%), followed by angular fragments (14%), tools (10%) and cores (9%). Tools include scrapers, retouched flakes and blades, geometric microliths, points, scrapers, and backed blades. Cores include uni-directional, multi-directional and blade cores. The percentage of tools and cores appears to be higher than that typically encountered in similar regions throughout Victoria.

Artefact Raw Materials

Raw material is dominated by silcrete (73%) and quartz (12%), followed by quartzite (6%), hornfels (3%) and other materials (3%) (**Table 4**). Geological sources of silcrete, quartz, quartzite and hornfels are found in the geographic region (**see Section 5.7**) and were locally available. Greenstone is known to have been traded widely throughout Victoria, in particular, from Mount William (**McBryde 1984**). The proportions of raw material types in the geographic region are highly typical of Victoria.

Artefact Depth

Subsurface artefacts were recorded for 18 places. Artefacts were found to a maximum 40cm depth on slope and terrace landforms. Subsurface artefacts on plain and floodplain landforms were found at 0-20cm depth. Subsurface artefact scatters on slope and terrace landforms contained on average 49.8 stone artefacts whereas those on plain and floodplain landscapes contained on average 4 artefacts.

Artefact Scatter Extent, Density & Proximity to Waterways

The site extent was recorded for 16 artefact scatters. Artefact scatters are typically small with occasional large site extents; the largest measures approximately 8,000m² (VAHR 7922-0857). The difference in extent sizes is reflected in the mean (6727.06m²) and median (32.5m²). Artefact density is also typically very low with an average of 0.42 and median of 0.11 per m².

There is a strong correlation between artefact distribution and waterways in the geographic region. The majority of artefact scatters are recorded on plains (n=6) and slopes (n=6) followed by terraces (n=5), floodplains (n=3) and swamps (n=1). Two

artefact scatters were not recorded for landform. This pattern is likely to reflect the extensive development that has occurred away from waterways and consequently no assessment has been completed. The nature of existing development means that only the waterway margins have been available for survey (Map 6).

Artefact Scatter and LDAD Condition and Scientific Significance

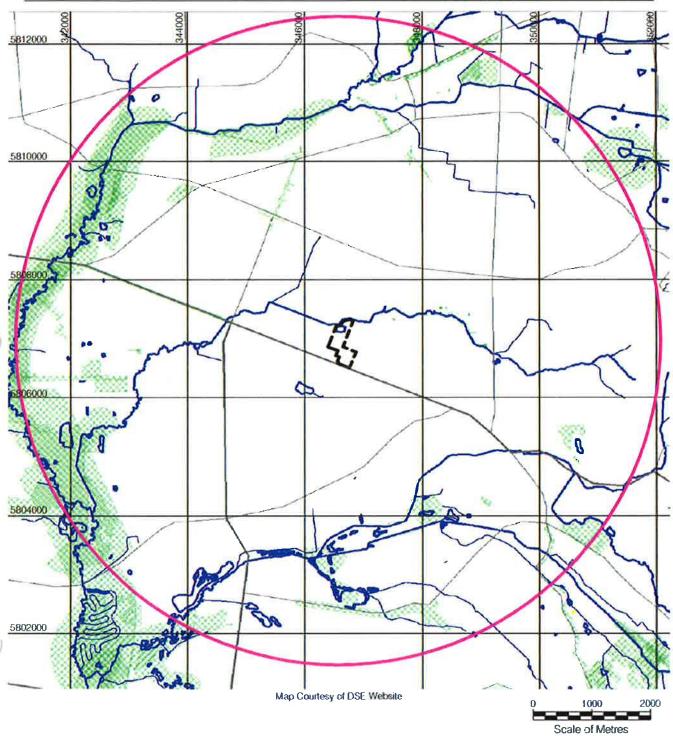
Site condition and preservation information indicates that artefact scatters and LDADs are in fair to good condition (56%) or destroyed to poor condition (31%). It is anticipated that some previously recorded sites have been destroyed by development. When rated for scientific significance, nine have been assessed as having low significance and four have moderate significance. Sites of high significance have not been identified within the geographic region. Many Aboriginal places (n=10) were not assessed for scientific significance.

Table 4 Summary of Artefact Scatter Place Attributes within the Geographic Region

Attribute	Details	
Artefact data classes	Flakes (n=67, 67%), tools (n=10, 10%), cores (n=9, 9%)	
Place Type	Stone artefact scatter (n=23), scarred trees (n=7)	
Artefact raw materials	Silcrete (n=75, 73%), quartz (n=13, 12%), quartzite (n=6, 6%), glass (n=4, 4%), Hornfels (n=3, 3%), crystal quartz (n=1, 1%), chert (n=1, 1%)	
Number of artefacts per place	Average=13; Median=3	
Place extent	Average=6727 m ² ; Median=32.5m ²	
Landform	Plains (n=6, 26%), slopes (n=6, 26%), terraces (n=5, 22%), floodplains (n=3; 13%), swamps (n=1, 4%), not recorded (n=2, 8%)	
Distance from waterways	Strong correlation between Aboriginal place locations and proximity to permanent waterways.	
Scientific significance	13 recorded for scientific significance. Low (n=9, 69%), followed by moderate (n=4, 31%)	
Depth of Artefacts	Artefact scatters occur as surface and subsurface scatters ranging between 0-40cm depth	

Scarred Trees

The seven cultural scars are recorded on Manna Gums. Approximately half of the trees were in good health at the time of recording. Ethnographically recorded scar function includes bark that has been removed for shields and shelters. The majority (n=4) of tree scars were considered to be of probable or definite Aboriginal origin. Recorded scarred trees are located on the floodplain.



Legend:

Activity Area Boundary

Geographic Region Boundary



Previous Archaeological Survey Total Area = 1183 ha 12.47% (approx) of Geographic Region



Map 6 Areas of Previous Archaeological Survey Within the Geographic Region

Implications

Registered places show that artefact scatters are found on plains, slopes, floodplains/terraces and along creek lines however, the data suggests a strong association between waterway/wetland resources and cultural activity. Although there have been very few surveys away from waterways in the geographic area, it appears likely that cultural activities were less frequent and more transient on plains and floodplains. Sites located close to waterways are larger than those on plains and floodplains. Artefact scatters on slopes and terraces also have greater artefact densities (m²) suggesting these places were more often frequented. Previous surveys also show that cultural scars may be found on mature Manna Gums in areas where remnant indigenous vegetation remains.

5.5 Reports and Published Works in the Relevant Geographic Region

Map 6 shows areas within the geographic region that have received previous survey coverage, which totals approximately 12%. This is a fairly low level of survey coverage, and as can be seen, is limited to Dandenong Valley waterways and wetlands. Therefore, the archaeological potential of Blind Creek and land away from waterways is poorly recorded. This CHMP is the first assessment of land adjacent to Blind Creek.

A review of reports and published works about Aboriginal cultural heritage detailed in **Section 5.5** is used to determine relationships between Aboriginal cultural heritage places, strategic values, geology, landforms and soil profiles in the geographic region. These investigations provide an insight into Aboriginal cultural heritage place patterning relevant to the Activity Area. This evidence informs the predictive desktop model presented in **Section 5.10.**

Regional Investigations

There are several regional investigations within the geographic region. Only those most relevant to the Activity Area are summarised below:

Snoek (1987) undertook the first archaeological survey of Dandenong Creek, located approximately 4.4km northwest of the Activity Area. The report describes an archaeological survey conducted for the Dandenong Valley Authority, in advance of the development of a Metropolitan Park along the confines of Dandenong Creek. The survey area extended from the headwaters of Dandenong Creek to Police Paddocks near Dandenong. The areas surveyed were within a boundary area between the traditional lands of *Woiworung* and *Bunurong* people. During the survey nine Aboriginal archaeological sites were identified. Sites consisted of six isolated stone artefacts and three scarred trees. All sites are located within 200m of Dandenong Creek. One of Snoek's (1987) survey units referred to as 'Koomba Park Boronia Road to Burwood Highway', covered the intersection of Blind Creek and Dandenong Creek, west of the Activity Area. One scarred tree was identified at the intersection (VAHR 7922-0095).

Poor ground surface visibility (<5%), thick vegetation, soil erosion, sedimentation and post contact land disturbance, such as gravel paths and changes to the creek's alignment were contributing factors limiting survey effectiveness. Due to the low number of archaeological sites recorded during the survey, **Snoek (1987)** based predictions for the probability of Aboriginal sites being located in the area mainly on historical information. Historical

accounts cited in **Snoek's (1987)** report describe Aboriginal camps being located in close proximity to Dandenong Creek. In one account, a local resident named describes Aboriginal women 'busily' stripping sheets of bark from trees and constructing shelters as a storm approached. **Snoek (1987**:29) predicts that there is likely a correlation between waterways and Aboriginal cultural sites in the area and that further sites would likely be uncovered if vegetation along waterways was removed.

Small Scale Investigations and Cultural Heritage Management Plans

Thirty-four CHMP investigations completed in the geographic region are listed on ACHRIS. There are no previous assessments or CHMPs within 200m of the Activity Area. CHMPs that are in closest proximity to the Activity Area are summarised in **Table 5**. There is also one small scale investigation that is of direct relevance to the Activity Area (**Hyett and Webb 2007**). The small scale investigation and CHMPs that are relevant to the current activity area are discussed in detail below. CHMPs in the geographic region have the following characteristics:

- Most CHMPs (n=29) have conducted complex assessments; four conducted only standard assessments and one a desktop;
- No CHMPs have conducted radiometric dating; and
- Areas of archaeological potential identified in assessments include creeks, waterways and previously registered Aboriginal places.

Hyett and Webb (2007) conducted a cultural heritage assessment in advance of a Melbourne Water Project Concept Plan (PCP) for a section of Blind Creek. The study area comprised the frontage of the drainage reserve along both sides of a 2.5km reach of Blind Creek between Dorset and Scoresby Roads at the interface of Boronia and Ferntree Gully. The study area is located 248m east of the current Activity Area. The Blind Creek section included both natural (open) creek sections and piped (enclosed) sections. A site inspection found no cultural heritage sites although the report noted that creek banks retained potential to contain heritage sites. The study area included disturbed and undisturbed land. Ground disturbance was evident along Blind Creek and considered likely to continue in to the Activity Area thus reducing the potential of undisturbed Aboriginal cultural heritage sites being present. No Aboriginal sites were located in the study area and the area was assessed as having low archaeological sensitivity.

Activity Area Specific Investigations

Jones (2015) completed a cultural heritage statement for the Activity Area. No ground survey or sub-surface testing was undertaken. The statement found that the Activity Area had been used for agricultural purposes since the early-mid 20th century to the early 21st century. From the 1950s the Activity Area was used for the Scoresby Horticultural Research Station which ceased operation in 2013. Jones (2015) conducted a search of both statutory and non-statutory registers for existing heritage listing. No Aboriginal or historical places were recorded in the Activity Area. The report deemed a mandatory CHMP was required based on the absence of significant ground disturbance in some areas of cultural heritage sensitivity.

Table 5 Summary of CHMP Investigations relevant to the Activity Area

Report	Areas of Cultural Sensitivity Identified	Expected Aboriginal Place Types	Area Excavated During Assessment	Aboriginal Places Identified	Landform	Depth	Distance from Activity Area
(Barker 2010) CHMP 11252	Areas along water courses (Ferny Creek) Elevated land overlooking wetlands Margins of the floodplain	Artefact scatters Scarred trees	21.05m²	Artefact Scatters VAHR 7922-1186 VAHR 7922-1187	Flat alluvial rise Crest of a hill	5-30cm	4438m southeast
(Dudley & McAlistair 2011) CHMP 11654	Land within 150m of Blind Creek	Artefact scatters Isolated artefacts	2.12m²	None	n/a	n/a	1971m northeast
(Dugay-Grist & McAlister 2012) CHMP 11730	Creek lines (Dandenong Creek)	LDADs Scarred trees	None – Standard assessment only	None	n/a	п/а	1904m northwest
(Murphy & Green 2012) CHMP 12103	Floodplain	LDADs	1.75m²	None	n/a	ń/a	666m northeast
(Green 2012) CHMP 12132	Alluvial terraces Land within 200m of a waterway	Isolated artefacts LDADs Scarred trees	2.12m²	None	n/a	п/а	3168m west
(Orr & Butler 2015) CHMP 13743	Blind Creek	LDADs	1.64m²	None	n/a	n/a	1623m east
(Burch 2016) CHMP 13957	Land within 200m of Blind Creek	Artefact scatters Isolatec artefacts	2.12m²	None	n/a	n/a	1484m east
(Patton & Fiddian 2016) CHMP 14114	Land within 200 m of Blind Creek and creek lines	Artefact scatters Isolatec artefacts	1.96m²	None	n/a	n/a	219 m east
(Patton & Fiddian 2017) CHMP 14857	Land within 200m of Blind Creek and creek lines	Artefact scatters Isolatec artefacts	1.75m²	None	п/а	n/a	1784m east

Archaeology At Tardis heritage advisors

5.6 History and Ethnohistory in the Relevant Geographic Region

The information used to establish pre-settlement Aboriginal spatial organisation is mostly based on observations made by Europeans during the initial period of contact and subsequent settlement of the geographic region. Early historical accounts of Aboriginal land use within and surrounding the Activity Area are scant, with most information provided by American Strategy of the Port Philip District, (A detailed study of the ethnography and historical literature has been presented in Snoek (1987) and Rhodes (1989; 1990; 1993).

The Aboriginal people of the Port Phillip region of Victoria belonged to the language area known as *Woi wurrung*. Prior to the arrival of Europeans, the *Woi wurrung* occupied an area which extended from the Werribee River in the south west, Mount Macedon in the north west, Mount William in the Great Divide to the north, Port Phillip Bay in the south and across to Mount Baw Baw in the east (**Barwick 1984**). This group of people had common language and social practices, and at the time of contact, were thought to have comprised seven clans, each with their own clan estate land. At the time of European settlement, the Knoxville region is described as being within the *Woi wurrung* language area.

Members of the *Woi wurrung* intermarried with, and had language ties with *Kulin* people who inhabited areas around Melbourne and extending to central and western Victoria. At the time of European contact, the *Kulin* was made up of the *Bunurong*, *Woi wurrung*, *Jajowrong*, *Taunguong* and *Wathaurung* tribes (**Presland 1994**: 40).

European contact with the *Bunurong* and *Woi wurrung* tribes along the coast was initially by sealers and whalers frequenting Bass Strait from the late 1790's. During that time, Aboriginal women were kidnapped from both Tasmania and the mainland for use as labourers and concubines, with such interactions often resulting in hostile confrontations. The missionary Langhorne (**Thomas ML**: 61) mentioned that tribes of the Western Port area had the 'occasional affray' with sealers and he believed that this early contact had greatly reduced their numbers.

Intermarriage and exchange of goods between the *Kulin* tribes is known to have occurred (McBryde 1978). Kulin people often met for inter-clan gatherings, such as that recorded in 1844 when groups of *Woi wurrung* people were camped on the site of the future M.C.G., and a group of *Bunurong* were camped on the site of the future Government House (Presland 1994: 47). Greenstone from the Mt William quarries in the *Woi wurrung* territory appears to have been transported or traded into many of the *Woi wurrung* language areas (McBryde 1984). Within the *Kulin*, some tribes were more likely to exchange wives or maintain social interactions with certain other tribes. The *Woi wurrung* had ceremonial links with, and most often married, members of *Taungurong*, *Bunurong* and *Wathaurung* tribes (Gaughwin 1981: 59). However, marital alignments did not prevent warfare between the tribes (Thomas ML 1, 23 March 1839).

The clan whose territory included the present Activity Area is the *Wurundjeri balug* who comprised two patrilines occupying adjacent localities; the *Wurundjeri willam* on the Yarra River and north to Mt Baw Baw, and the *Baluk willam*, extending south to Dandenong, Cranbourne and swamps at the head of Western Port Bay (**Clark 1990**: 384). The present Activity Area would have included the traditional lands of the *Baluk willam*, meaning,

"Swamp dwellers" (Clark 1990: 386). The clan head at the time of European contact was who is claimed to have guided Batman's June 1835 party to a winter camp where the "Treaty" was negotiated. Nowas a member of the Native Police Corps. The Baluk willam clan belonged to the 'waa' moiety (Barwick 1984).

Dandenong Creek north of the Activity Area and surrounding hills were the approximate location for three clan boundaries and it is highly probable that reciprocal hunting and gathering rights operated in this area. Sullivan records that groups of Bunurong people hunted lyrebirds in the ranges northeast of their clan territory (Sullivan, 1981: 24). Snoek (1987) also notes that the Balluk willam moved between Dandenong Creek in summer and the Dandenong Ranges in winter to hunt Lyrebirds. Further evidence to suggest shared hunting grounds is provided by Coulson who noted: 'Blacks from the Western Port and Yarra Yarra tribes were frequently seen in the Dandenongs during the summer months, hunting in the forest for wallaby, possum and native bear' (Coulson, 1959; 10). Members of Aboriginal clans rarely numbered more than thirty during their day to day activities, only forming large groups for certain social functions or to exploit abundant seasonal food resources. Eels were obtained during autumn from locations such as the Carrum Swamp and other wetland areas along the Dandenong Creek and nearby waterways such as Monbulk Creek. Exploitation of the low-lying flood plain areas and creek banks would have been greatest during summer. During the winter months when the flood plains would often have been inundated, higher ground would have been preferred for campsite locations (Rhodes 1993).

5.7 Landform and Geomorphology in the Activity Area

Geology

Geological unit: Humevale Siltstone (Dxh)

Age: Palaeozoic: Early Silurian-Early Devonian (444-393 Ma BP)

Early Silurian-Early Devonian (444-393 Ma BP) deep marine sediments of the Humevale Siltstone outcrop across the central and southern parts of the Activity Area (Figure 1) (GAASC 2017; Welch *et al.* 2011). The Humevale Siltstone consists of monotonous, thinly-bedded siltstones, with rare, thin interbeds of coarser sandstone (Vandenberg 1973; VandenBerg *et al.* 2000). These sediments accumulated horizontally along the floor of an ancient deep sea over a long period of time, and may be up to 2700m thick (GAASC 2017; Welch *et al.* 2011). The Humevale Siltstone was heavily deformed in the Middle Devonian (385–380 Ma BP) due to tectonic stresses, and the once-horizontal beds are commonly found folded and warped (VandenBerg 1973). The soil profile that has developed on the Humevale Siltstone is typically composed of a mid-grey brown clayey silt A₁ horizon overlying a light grey brown sandy silt A₂ horizon (Figure 1) (Northcote *et al.* 1975). A mottled, mid grey brown clay commonly forms the underlying B horizon (Northcote *et al.* 1975). Vein quartz rubble weathering out of the underlying bedrock typically accumulates at the base of the A₂ horizon, along with ironstone concretions (Northcote *et al.* 1975).

Geological unit: Alluvium (Qa1)

Age: Quaternary: Pleistocene-Holocene (2.6-0.001 Ma BP)

Northern parts of the Activity Area are underlain by Pleistocene-Holocene age (2.6-0.001 Ma BP) stream alluvium deposited by Blind Creek (Figure 1) (Welch et al. 2011). Gravel, sand and silt are all present in the alluvium, and represent material eroded from the surrounding Humevale Siltstone bedrock ridges and Devonian volcanic rocks further upstream to the east (Welch et al. 2011). The soil profile that has developed on the alluvium is similar to the Humevale Siltstone profile, except it is not as well-developed due to the younger age of the alluvial sediments (Figure 1) (Northcote et al. 1975). In addition, boundaries between soil horizons are expected to be less well defined than they are within the more mature Humevale Siltstone soil profile. Rounded vein quartz clasts, transported by Blind Creek during high flow periods, are possible inclusions within the alluvium soil profile.

Geomorphology & Landform

The Activity Area is located within the Eastern Uplands geomorphic division of Victoria, on top of low relief landscapes at a low elevation, and alluvial terraces, fans and floodplains of the local streams (Figure 2; Table 6) (Joyce et al. 2003; VRO 2017a; VRO 2017b). Old rocks of Palaeozoic age (541-252 Ma BP) dominate the geology of the uplands, and often form land surfaces that show evidence of extensive, long-term weathering and erosion, such as low rounded drainage divides (Welch et al. 2011). The Eastern Uplands are thought to have been formed during the breakup of the Gondwana supercontinent in the mid-Cretaceous (~95 Ma), where the rifting of Antarctica away from Victoria triggered significant, widespread uplift of the land bordering the coast (Joyce et al. 2003). Streams have since eroded through parts of the uplifted plateau as they react to changes in regional base level (i.e. the level to which a stream can erode down to - usually determined by sea level, and/or regional tectonism). Deeply-dissected, narrow valleys dominate the higher elevation landscapes east of the Activity Area, where streams have had greater gravitational potential energy to cut down through the landscape. In contrast, broader valleys with less relief are present across the lower elevation landscape of the Activity Area and its surroundings. These broader valleys often house streams that have reached stability in their gradient, and have been infilled with alluvial sediments derived from the slow, constant erosion of the surrounding bedrock ridges (VRO 2017b). Relief across the Activity Area does not exceed 25m, and is at a maximum where the bedrock ridges contrast the low-lying alluvial floodplains.

The drainage of the region is represented by a well-developed dendritic drainage system, with multiple feeder streams on the surrounding bedrock ridges draining into a primary trunk stream. Stream channels commonly meander about the flatter parts of the landscape, but are more linear at higher elevations. The closest named watercourse to the Activity Area is Blind Creek, which flows east to west along the northern boundary of the Activity Area (**Figure 2**). Other local streams include Corhanwarrabul Creek ~2.2km southeast of the Activity Area and Monbulk Creek ~ 3km to the southeast (**Figure 2**).

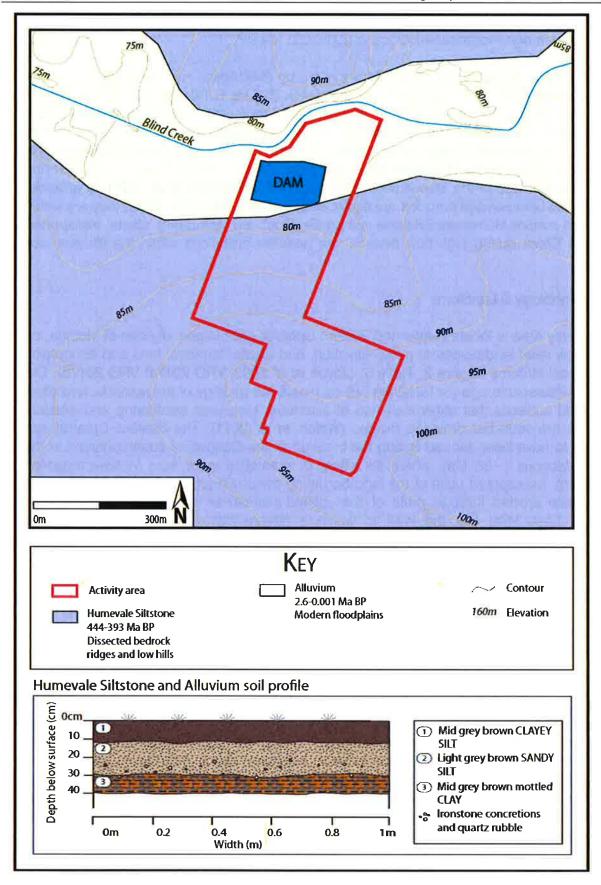


Figure 1 Landscape, Geology and Expected Soil Profiles of the Activity Area (Northcote *et al.* 1975; Welch *et al.* 2011)

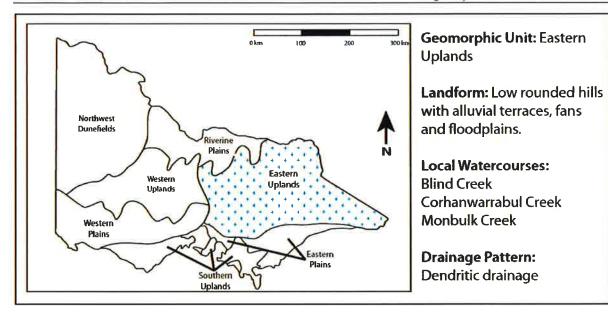


Figure 2 Activity Area Geomorphological Information (Joyce et al. 2003)

Table 6 Relevant geomorphological history of activity area (Cas *et al.* 2003; Cupper *et al.* 2003; Dodson & Mooney 2002; GAASC 2017; Holdgate & Gallagher 2003; Joyce *et al.* 2003; O'Sullivan *et al.* 1999; O'Sullivan *et al.* 2000; VandenBerg 1973; VandenBerg *et al.* 2000; White & Mitchell 2003; Welch *et al.* 2011)

Time period	Geological event	Effect
Early Silurian-Early Devonian (444-393 Ma BP)	- Deep Marine Conditions	Most of Victoria was covered by a deep ocean, and deep marine sediments of the Humevale Siltstone were continually deposited along the ocean floor. Underwater slope failures (turbidites) occurred regularly, and are responsible for the beds of coarser sandstone within the otherwise fine-grained Humevale Siltstone.
Middle Devonian (385- 380 Ma BP)	- Regional tectonism	Sedimentary rock beds of Victoria were majorly deformed and folded during a period of crustal shortening and thickening. The cause of this deformation is relatively unknown, but is thought to be related to tectonic plate collision. A long period of weathering and erosion then persisted for several hundred million years.
Middle-Late Cretaceous (95-75 Ma BP)	- Break up of Gondwana supercontinent - Significant uplift of a broad belt of land bordering the coast	Most of the Eastern Uplands, Western Uplands and Southern Uplands formed when Antarctica rifted away from Victoria during the breakup of Gondwana. Rapid cooling of rocks within the uplands at this time reveals a significant episode of uplift in the Eastern Uplands, followed by the rapid removal of at least 1.5 km of rock over a period of just 20 Ma. Streams rejuvenated by the uplift began incising into the uplifted plateau, carving deep, narrow valleys into the landscape.

Late Pleistocene (120ka-18ka BP)	 Sea level retreat Last Glacial Maximum (LGM) 	Sea levels retreated from their height during the Last Interglacial period (3-4m above current levels) in the lead up to the LGM, which occurred at 26-18ka BP. Sea levels dropped 100-120m lower than at present, facilitating deep stream incision into the Eastern Uplands landscape. Climates became cool and dry, and vegetation cover decreased, which increased erosion rates.
Early-Mid Holocene (10-6 ka BP)	- Holocene Climatic Optimum (HCO)	After the LGM, temperatures, weathering rates and precipitation increased. Sea levels increased to 1-3m above present levels in the lead up to the Holocene Climatic Optimum (HCO). Stream discharge was high, and alluvial sediments were regularly deposited across stream floodplains in the lower-elevation parts of the Eastern Uplands.
Middle-Late Holocene (5-0ka BP)	- Arid expansion	Aridification of the environment increased, and sea levels lowered. Erosion and river incision into the landscape increased in response to climatic and sealevel processes.
Recent (0.02 ka BP - Present)	- European settlement	Erosion and sedimentation increased dramatically compared to pre-Contact levels in response to human-induced clearing of the land. Fire regimes, drainage patterns & soil organic content also changed substantially as agriculture expanded across the landscape.

5.8 Land Use History of the Activity Area

The Activity Area is situated within the Parish of Scoresby (Figure 3). At that time of survey the vegetation is described as; 'pasture chiefly sword grass and hop scrub' (Victoria. Dept. of Crown Lands and Survey 1861). Scoresby and the surrounding region has been occupied since the 1830s and 1840s when the first European settlers of Victoria arrived and established large pastoral runs (Spreadborough & Anderson, 1983: 273). The area was named after William Scoresby, an Arctic explorer who visited Victoria in 1856 and carried out terrestrial magnetism experiments around Scoresby (Coulson 1968; Winzenried 1984). The Parish of Scoresby was first surveyed in 1857 and in 1861 by M. Callanan for the Department of Lands and Surveys (State Library of Victoria 2017) (Figure 3). The Activity Area formed part of Crown Allotment 2258 (State Library of Victoria 2017).

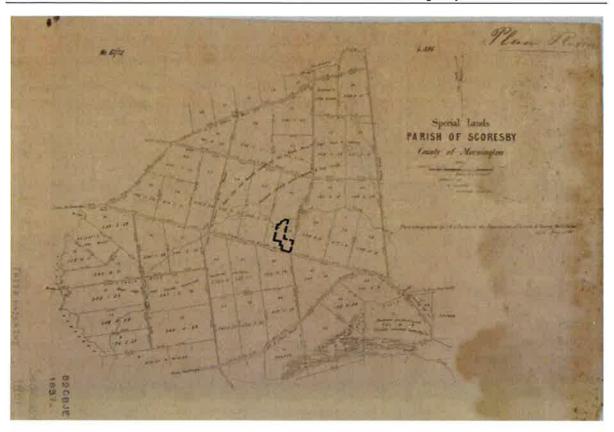


Figure 3 1861 Scoresby Parish Plan (Victoria. Dept. of Crown Lands and Survey)

(Victoria. Dept. of Crown Lands and Survey) Special lands, Parish of Scoresby, County of Mornington [cartographic material] / surveyed by M. Callanan, Assistant Surveyor; photolithographed by J. W. Osborne at the Department of Lands and Survey, Melbourne, 14th May 1861.

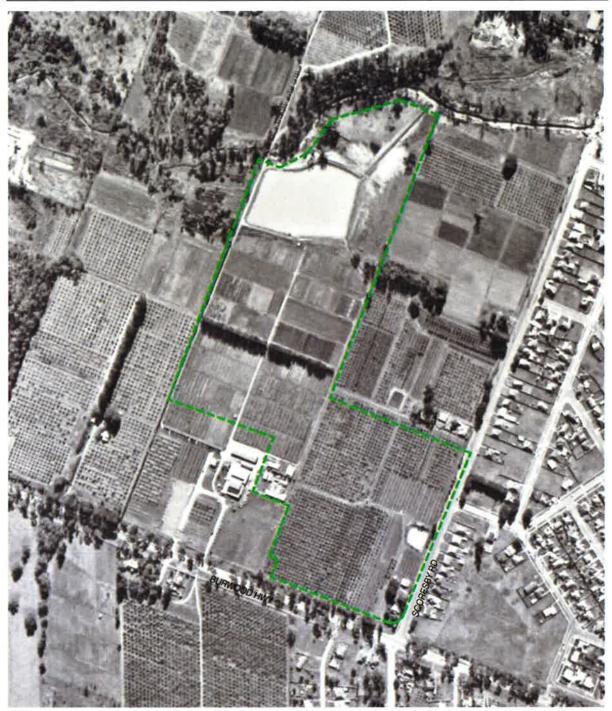
From the 1860s onwards the main industries in the area were grazing, timber felling and orcharding. The Scoresby area largely comprised swamp land fed by creeks and drainage channels which ran from Mt Dandenong. Despite the swampland conditions, the land provided useful pasture for grazing activities. The swamplands were later drained and the newly accessible alluvial landscape was used for market gardens which were prevalent in the area after World War One (Coulson 1968; Winzenried 1984). By the 1930s, urban development was underway with the construction of halls, stores and a motor garage. During the late 1950s, market gardens commenced being subdivided for residential development (Couson 1968; Winzenried 1984).

Prior to 1950 the Activity Area had been used for agricultural purposes including cattle grazing and crop production, with fruit plants occupying much of the land (Nazario 2016). From the 1950s onwards, the Activity Area had been used as the Scoresby Horticultural Research Station (Jones 2015: 4).



Photo 1 Horticultural Research Station and Orchards, Scoresby, 1965 (John Young Collection)

Structures associated with the Horticultural Research Station can be observed in a 1965 aerial photograph (Photo 1). The Activity Area was divided in to sections and planted with orchards. An aerial photograph taken in 1969 (Photo 2) shows intensive ploughing and orchards in the southern slightly elevated sections of the Activity Area. The absence of orchards in northern sections of the Activity Area suggests that lower areas of the site were less well drained and not suitable for orchards. Infrastructure development in the Activity Area includes a dam which was built in the 20th century in the northern section of the Activity Area as well as commercial structures in the southern and eastern sections of the Activity Area (Jones 2015: 4). Significant ground disturbance was also caused by a channel cut to connect Blind creek with the Dam (Photo 2), by 2005 the channel had been filled in and is no longer apparent (Photo 3). In 1995 a plant quarantine facility was added to the research station and in 2013 the station ceased to function (Nazario 2016: 16) (Photo 3). The entire Activity Area therefore has been subject to significant prior disturbance. Currently the Activity Area is characterised by ploughed fields and vacant grassland (Photo 4).



Scoresby Research Station Project, Run 1, Frame 9, Date: 27-05-1969

Scale of Metres

Legend:

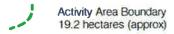






Photo 2 1969 Aerial Image of Activity Area



Legend:

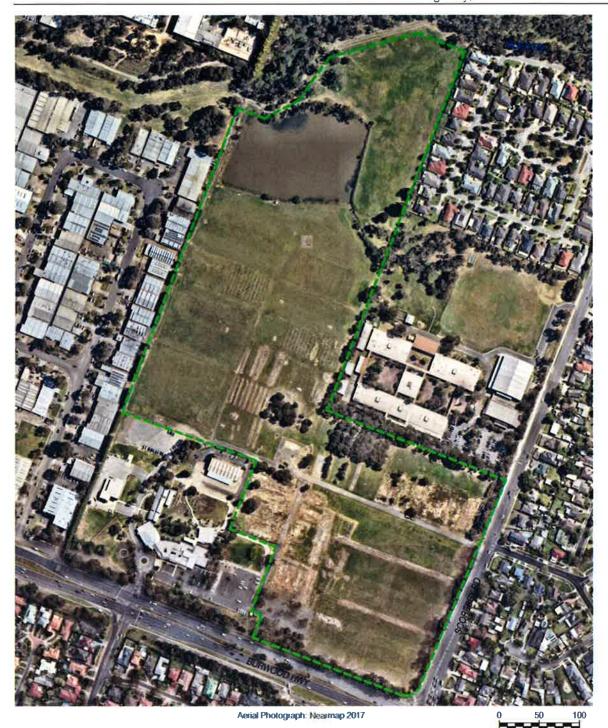




Scale of Metres



Photo 3 2005 Aerial Image of Activity Area



Legend:





Scale of Metres

Photo 4 2017 Aerial Image of Activity Area

Historical land use for this location can be summarised as:

- Initial vegetation clearance;
- Cropping and grazing;
- Orcharding;
- Removal of orchards:
- Construction of a dam:
- Construction of buildings associated with the Horticultural Research Station; and
- Demolition and removal of buildings.

5.9 Strategic Values

The Activity Area lies predominately within the Gippsland bioregion. There are various strategic values within this bioregion that would have influenced Aboriginal camp location, such as water courses, flora, fauna and stone sources in the region. The following information was gathered from Department of Environment, Land, Water and Planning (DELWP 2017).

Hydrology

Blind Creek is approximately 18m north of the Activity Area. Other waterways in the geographic region include Dandenong and Bungalook Creeks to the north and Corhanwarrabul and Monbulk Creeks to the south. These waterways would have provided local sources of potable water as well as flora and fauna resources for Aboriginal people.

Flora

Ecological Vegetation Classes (EVC) relevant to the Activity Area within the Gippsland bioregion include:

- Valley Heathy Forrest (EVC 127); and
- Swampy Woodland (EVC 937)

Prior to 1800, the Activity Area comprised largely Valley Heathy Forrest (EVC 127). This EVC is characterised by low, open forests up to 15m in height with an understorey of sedges, grasses and shrubs. The tree canopy was dominated by eucalypt species including Yellow Box (*E. melliodora*), Bundy (*E. goniocalyx s.l.*), Silverleaf Stringybark (*E. cephalocarpa s.l.*) and Messmate Stringybark (*E. obliqua*). Species typical of the understorey included Common Heath (*Epcris impressa*), Narrow-leaf Bitter-pea (*Daviesia leptophylla*), Kangaroo Grass (*Themeda triandra*) and Common Apple-berry (*Billardiera scandens*) (**DSE 2017**).

Swampy Woodland (EVC 937) occurs primarily on swamp deposits and on poorly drained and waterlogged soils. Swampy Woodland is characterised by open eucalypt woodland up to 15m in height. The understorey is dominated by tussock grasses, sedges and rich herbs. The tree canopy is dominated by eucalypt species including Swamp Gum (*E. ovata*), Mealy Stringybark (*E. cephalocarpa s.s.*), Narrow-leaf Peppermint (*E. radiata s.l.*), Messmate Stringy Bark (*E. obliqua*). Species typical of the understorey include Prickly Teatree (*Leptospermum continentale*), Swamp Mazus (*Mazus pumilio*), Red-fruit Saw-sedge (*Gahnia sieberiana*) and Slender Tussock-grass (*Poa tenera*) (**DSE 2017**).

The Activity Area would have been of moderate strategic value for Aboriginal people as it contained a permanent water source and associated aquatic resources.

Fauna

Hunting was a male-dominated activity, with open forests and woodlands favoured for their supply of kangaroo, emu, numerous reptiles, mammals and birds. Apart from spearing, game was procured using fire drives, decoys and noose snares. In forested country, possums were obtained by men using a stone axe to notch footholds in a tree to reach the nest and dispatch the animal with a club.

Blind Creek would have provided fresh water and aquatic species, such as fresh water fish, eels, crustaceans and waterfowl. It is possible that stone or fibre traps for fish and eels were constructed and placed along Blind Creek.

Stone Sources

Common stone sources available for lithic tool production in the region include quartz, quartzite, silcrete and hornfels (Table 7) (Welch et al. 2011). Vein quartz can be sourced from outcrops of Early Silurian-Early Devonian (444-393 Ma BP) bedrock in and within areas surrounding the Activity Area, which feature abundant quartz veins (VandenBerg et al. 2000). Quartzite may also occur as localised beds within this bedrock, having formed when tectonic stresses pressurised and heated the bedrock sediments in the Middle Devonian (385-380 Ma BP). Silcrete nodules can form within sub-basaltic sediments underneath Newer and Older Volcanic Group basalt flows, due to chemical weathering of the overlying basalt by acidic rainwater (Webb 1995; Webb & Golding 1998; Joyce et al. 2003). Locations where these underlying sediments have become exposed through erosion offer likely sources of silcrete. Sources of silcrete may also occur within Early Silurian-Early Devonian bedrock, in places where weathering has coated the rocks with a siliceous coating through a process known as silicification. Hornfels can be sourced from outcrops of this Early Silurian-Early Devonian bedrock surrounding Devonian (420-358 Ma BP) granite intrusions, which were transformed into hornfels by the heat given off by the granite as it cooled. Erosion has then exposed the once-buried hornfels, providing potential stone sources for lithic tool production.

Table 7 Stone Sources – Source Locations and Geological Units (VandenBerg *et al.* 2000; Welch *et al.* 2011)

Stone source	Geological unit	Location in relation to Activity Area
Quartz (vein quartz & crystal quartz)	Silurian-Early Devonian bedrock	Locally sourced from the Activity Area and geographic region: Eastern Uplands region: Knoxfield area, Studfield area, Ferntree Gully area
Quartzite	Silurian-Early Devonian bedrock	Locally sourced from the Activity Area and geographic region: Eastern Uplands region: Knoxfield area, Studfield area, Ferntree Gully area
Hornfels	Silurian-Early Devonian bedrock surrounding granite	2.3km+ to NE, E, SE & S of Activity Area, Eastern Uplands region: Ferntree Gully area, Boronia area, Lysterfield area
Silcrete	Silurian-Early Devonian bedrock: Sub-basaltic sediments	Locally sourced from the Activity Area and geographic region: Eastern Uplands region Knoxfield area, Studfield area, Monbulk area

5.10 Areas of Archaeological Potential

The desktop information summarised below is used to identify areas of archaeological potential within the Activity Area (**Table 8, Map 7**):

- There are no previously recorded Aboriginal places;
- Blind Creek would have been a local resource providing potable water and local flora and fauna;
- Stone artefact scatters and low density artefact distributions are the most likely place-types to be present;
- All other place-types (earth features, Aboriginal Ancestral Remains, quarries, rock art, scarred trees & stone features) are unlikely to be present;
- Previous land use has likely disturbed and / or destroyed artefact scatters within the Activity Area;
- If stone artefact scatters are found during the assessment they may have the following attributes:
 - Raw material: dominated by silcrete, followed by quartz, quartzite, hornfells and other materials;
 - o Primary forms: dominated by flakes, angular fragments, tools and cores;
 - Extent and density: small numbers of artefacts at low densities in small site extents;
 - o Artefact depth: artefacts may be found up to 40cm depth, with highest concentrations between 10cm-25cm depth.

Table 8 Areas of Archaeological Potential

Landform / Location	Archaeological Potential	Details
Floodplain	Unlikely / Very Low	The floodplain was subject to seasonal inundation and would have been an unsuitable location for camping. The archaeological potential of the floodplain is very low. However, stone artefacts can be found on any landform in Victoria and the presence of isolated stone artefacts or LDADs cannot be entirely discounted. If present, stone artefacts may be found to a maximum depth of 40cm.
Slope	Unlikely / Very Low	The slope was likely subject to periodic flooding and has a very low sensitivity for stone artefacts. However, the presence of isolated stone artefacts or LDADs cannot be entirely discounted. Stone artefacts may be found to a maximum depth of 40cm.
Upper Hill Slope	Low to Moderate	Upper hill slopes can be sensitive for stone artefacts. Stone artefacts may be found to a maximum depth of 40cm.
Entire Activity Area	None All other place types	Earth features, Aboriginal Ancestral Remains, quarries, rock art and stone features are unlikely to be present.

5.11 Conclusions

The desktop assessment has demonstrated that within the activity area!

- Includes areas of cultural heritage sensitivity as defined in the Aboriginal Heritage Regulations 2007 (Regulation 23 – land within 200m of a named waterway – Blind Creek);
- There are no previously registered Aboriginal heritage places.
- There are no previously registered Aboriginal heritage places within 50m;
- There are 30 Aboriginal cultural heritage places within the geographic region (Map 5, Appendix 6);
- Site types which have been previously recorded in the geographic region are: isolated stone artefacts, stone artefact scatters, low density artefact distributions (n=23, 77%) and scarred trees (n=7, 23%);
- Soil profiles will likely be shallow clayey silts and sandy silt (0-40cm approx.), overlying mid-grey brown mottled clay;
- The most likely site type will be low density stone artefact distributions in a surface or sub-surface context, and the artefacts will likely be made of silcrete, quartz or quartzite;
- Due to historic vegetation removal, there is no possibility for Aboriginal scarred trees to exist; and
- The Activity Area has been significantly disturbed through clearing of trees, grazing, planting and removal of orchards, dam construction, building construction and infrastructure development. These activities will likely have impacted the integrity of any archaeological sites. There is limited potential for an archaeological site to have high integrity.
- It is however reasonably possible that previously disturbed Aboriginal cultural heritage is present.
- A standard assessment is required (r.58 (1) Aboriginal Heritage Regulations 2007).



Map 7 Desktop Assessment Areas of Archaeological Potential

6 STANDARD ASSESSMENT

The specific aims of the survey are to identify and investigate the following:

- All ground surfaces in the Activity Area;
- Inspect areas of high ground surface visibility for targeted detailed surface inspection ("micro-survey");
- Assess levels of ground disturbance;
- Any surface or obtrusive cultural heritage places, if present;
- Areas of cultural heritage sensitivity;
- Landform patterns and elements;
- Areas of proposed activities that would result in significant ground disturbance; and
- Test the site prediction model generated by the desktop assessment.

6.1 Fieldwork Participants

The standard assessment was conducted on 13 September 2017 by (AAT), (BWFL) and (BLCAC).

6.2 Methodology

A pedestrian ground survey was conducted in a systematic manner and in accordance with proper archaeological practice (Burke & Smith 2004: 66-69). All areas were examined to determine areas of good ground surface visibility and / or high potential archaeological sensitivity for Aboriginal cultural materials. Survey participants walked linear transects 2m apart examining all visible ground surfaces and comprehensively surveying all landform patterns, elements and attributes. Detailed notes were taken including description of landform elements, ground surface visibility, ground surface disturbance, geology, geomorphology, vegetation, water sources and areas of archaeological potential (Burke & Smith 2004: 69-80). Photographs were also taken.

Ground surface visibility refers to the amount of ground surface that is clearly visible for inspection. The greater the ground surface visibility, the more effective are surface surveys. Examples of high surface visibility are vehicular and pedestrian tracks, dune blow outs (100% per m²); and examples of poor visibility are areas of heavy vegetation cover (0-10% per m²). Unfortunately, it is often the case that highly visible Aboriginal cultural heritage places are also often highly disturbed. High ground surface visibility is therefore often related to the amount of disturbance that has occurred. This disturbance may be manmade (such as drainage lines, vehicle tracks), caused by stock (overgrazing, tracks), or due to natural processes (erosion by wind or water). The level of ground surface visibility is typically assessed as follows:

0%	No visible ground surface
0 – 10%	Very poor
10 – 30%	Poor
30 – 50%	Fair
50 – 70%	Good
70 – 90%	Very good
90 – 100%	Excellent



Legend:



Activity Area Boundary



Survey Area 1 ESC:1% Floodplain



Survey Area 3 ESC: 10% Hill top







6.3 Survey Areas, Aboriginal Places & Effective Survey Coverage

The Activity Area was divided into three survey areas based on landform (**Table 9**; **Map 8**). Details on ground surface visibility, disturbances and effective survey coverage are in **Section 6.5**.

Table 9 Survey Areas (Map 8)

Survey Area	Description
Survey Area 1	Floodplain Low lying floodplain in the northern section of the Activity Area.
Survey Area 2	Slope Undulating slope between the low lying floodplain and the upper hill slope in Survey Area 3.
Survey Area 3	Upper Hill Slope Elevated location potentially suitable for Aboriginal occupation at most times of the year.

6.4 Ground Surface, Mature Trees, Caves, Rock Shelters or Cave Entrances

The survey examined the ground surface of the Activity Area. Mature trees were examined to determine the presence or absence of cultural scars. No caves, rock shelters or cave entrances were identified.

6.5 Obstacles

No obstacles were encountered in completing the standard assessment although generally poor ground surface visibility hindered the identification of surface stone artefacts if they were present (**Table 10**). Despite this, the survey was able to identify areas of archaeological potential.

6.6 Results and Discussion

No Aboriginal cultural heritage was found during archaeological ground surveys (Map 8).

Table 10 Survey Area, Ground Surface Visibility & Effective Survey Coverage

Survey Area	Landform	Ground Surface Visibility	Effective Survey Coverage
SA1	Floodplain	0-25%	<1%
SA2	Slope	0-25%	<5%
SA3	Upper Hill Slope	0-25%	10%

Survey Area 1 - Floodplain

Ground surface visibility was typically very poor at the time of surveys (**Photos 5 – 6**). The overall effective survey coverage was <1% per m^2 . The floodplain contains deposits of fill originating from the construction of a dam, a channel connecting the dam to Blind Creek and ground water bores. No Aboriginal cultural heritage was found and based on land

form and geographic location, the floodplain in Survey Area 1 is assessed as having very low potential for stone artefact assemblages (**Table 11**).



Photo 5

Survey Area 1: view from floodplain with dam in the background, facing east.



Photo 6

Survey Area 1: view showing drainage channel disturbance, facing east.

Survey Area 2 - Slope

Survey Area 2 is an undulating slope south of the floodplain in Survey Area 1. Sections of the slope have been extensively modified since European occupation (**Photos 7-11**). Modifications include construction of a road, farm tracks and drains as well as the construction and demolition of buildings and deposition of fill. Although likely subject to

periodic flooding prior to European occupation, the slope is better drained than the floodplain in Survey Area 1 and has been extensively ploughed and planted with orchards (**Photos 2 and 3**). Disturbance is extensive and evidence of unmodified ground surfaces is minimal which adds to the conclusion based on land form that Survey Area 2 has very low archaeological potential (**Table 11**).



Photo 7

Survey Area 2: view of floodplain, facing northeast.



Photo 8

Survey Area 2: view of floodplain, facing north.



Photo 9
Survey Area 2: exposed fill.



Photo 10

Survey Area 2: view showing road and ground surface disturbance, facing northeast.



Photo 11

Survey Area 2: view showing road and ground surface disturbance, facing east.

Survey Area 3 - Upper Hill Slope

Survey Area 3 is an upper hill slope above the floodplain and slope in Survey Areas 1 and 2 (**Photos 12 and 13**). There is some evidence of horticultural activities on the upper hill slope but otherwise ground surfaces appear to be generally undisturbed. The upper hill slope is an elevated location that was likely a more suitable Aboriginal camp location than lower areas to the north and closer to Blind Creek (Survey Areas 1 and 2). No Aboriginal cultural heritage was found during the survey. Although the area has greater potential to have been a camping location than the floodplain (Survey Area 1) and slope (Survey Area 2), the upper hill slope is >700m from Blind Creek and is assessed as having low to moderate potential for containing subsurface stone artefacts (**Table11**). This location provides level campsites, predictably dry soils and close proximity to potable water.



Photo 12

Survey Area 3: view from the upper hill slope, facing east.



Photo 13

Survey Area 3: view showing drainage channel disturbance, facing south.

6.7 Areas of Archaeological Potential

Based on the desktop and standard assessments (**Sections 5-6**), the Activity Area has been assessed as having areas of archaeological potential for subsurface stone artefacts. Other archaeological place-types are considered unlikely to be present.

Table 11 Standard Assessment Areas of Archaeological Potential (Map 8)

Landform / Location	Archaeological Potential	Details
Floodplain	Very Low Stone artefacts	The low lying floodplain has been subject to seasonal inundation and would have been unsuitable for camping. No stone artefacts were found during the standard assessment. However, stone artefacts can be found on any landform in Victoria and the presence of isolated stone artefacts or LDADs although very unlikely cannot be entirely discounted. If present, stone artefacts may be found to a maximum depth of 40cm.
Slope	Very Low Stone artefacts	No stone artefacts were found during the standard assessment. The presence of isolated stone artefacts or LDADs although very unlikely cannot be entirely discounted. If present, stone artefacts may be found to a maximum depth of 40cm
Upper Hill Slope	Low Stone artefacts	The upper hill slope is >700m from Blind Creek and is a potential Aboriginal camp site location at most times of the year. For this reason, subsurface isolated stone artefacts or LDADs may be found.
Entire Activity Area	None All other place types	Based on the evidence from the desktop and standard assessments, earth features, Aboriginal Ancestral Remains, quarries, rock art, scarred trees, freshwater shell middens and stone features are considered highly unlikely to be present.

6.8 Conclusions from the Standard Assessment

The standard assessment has demonstrated the following (Map 8):

- No Aboriginal cultural heritage places were identified during the standard assessment;
- Floodplain (Survey Area 1) has very low archaeological potential;
- Slope (Survey Area 2) has very low archaeological potential;
- The Upper Hill Slope (Survey Area 3) has low to moderate archaeological potential for LDADs;
- A complex assessment is required to test the predictions of archaeological potential for the area.

7 COMPLEX ASSESSMENT

7.1 Aims and Methodology

The aims of subsurface testing were:

- To determine the presence or absence of Aboriginal cultural heritage;
- To determine the stratigraphy and general subsurface nature of the Activity Area;
- To determine the extent, nature and significance of any Aboriginal cultural heritage;
- To test according to proper archaeological practice;
- Investigate areas of likely archaeological potential on the upper hill slope;
- To conduct controlled testing for archaeological materials in all parts of the Activity Area so as to test the site prediction model; and
- To identify the extent of the fill and / or disturbance recorded in the standard assessment.

7.2 Fieldwork Participants



7.3 Fieldwork Supervisor

The fieldwork was supervised by trained and suitably qualified archaeologist (AAT) (Appendix 7).

7.4 Methodology

Test pits measuring 1x1m (n=3) were excavated by hand and recorded in 5cm arbitrary layers and stratigraphic units. Each landform received a 1x1m test pit to establish stratigraphy prior to the excavation of mechanical trenches. Hand tools including long-handled spades, picks, hand spades, hand picks, trowels and brushes were used where appropriate. All hand tools were used in a controlled manner removing sediments in thin layers (generally 1-2.5cm) keeping sections at 90° at all times. All sediments were sieved using 5mm mesh. Excavations ceased when geological horizons were reached which are known to have no cultural heritage potential.

In addition to the three test pits, 19 trenches measuring 2x1m, and one trench measuring 4x1m where mechanically excavated and sieved (**Photos 17-19**). Trenches were excavated using a mechanical excavator with a flat edged trimming bucket 1.0m wide. The excavator was used in a controlled manner removing sediments in thin layers (generally 3-5cm) keeping sections at 90° at all times.

Test pits and mechanical transects were recorded with a dGPS using GDA94 MGA coordinates and marked onto an activity area plan. Detailed notes were recorded for each test pit and mechanical transect including stratigraphy, sediment descriptions, pH levels, disturbance, and presence (or absence) of archaeological materials (**Appendix 4**). Photos

were taken of each excavation including detailed views of stratigraphic profiles using standard range poles marked with 20cm intervals.

7.5 The Stratigraphy and General Subsurface Nature of the Activity Area

Test Pit 1 (1x1m) illustrates the stratigraphy and general subsurface nature of the SA3 (**Photo 14, Figure 4**). The test pit was excavated on the upper hill slope in Survey Area 3 in an area that exhibited the least amount of surface disturbance. The excavation revealed three stratigraphic units (SUs). SU1 contains brown-grey silty topsoil from 0-10cm depth. SU2 contains light-grey silty clay fill from 10-40cm depth. SU3 contains basal orange clay. Excavation ended in SU3 at 50cm depth.

Test Pit 2 (1x1m) located on the slope in Survey Area 2 contained heavily compacted silt-clay fill indicative of ground disturbance to 15cm depth. The excavation ended in basal orange clay at 15cm depth (**Photo 15, Figure 5**). Test Pit 3 (1x1m) located on the floodplain in Survey Area 1 contained heavily compacted silt-clay fill indicative of ground disturbance to 20cm depth. The excavation ended in basal orange clay at 20cm depth (**Photo 16, Figure 6**).



Photo 14

TP1 Complete/Finish level

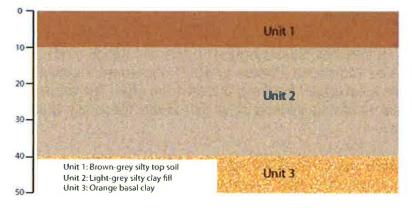


Figure 4 TP1 Stratigraphy South Section



Photo 15

TP2

Complete/Finish level

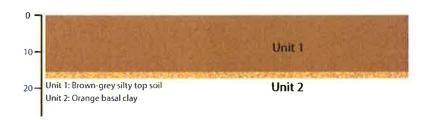


Figure 5 TP2 Stratigraphy South Section



Photo 16

TP3

Complete/Finish level

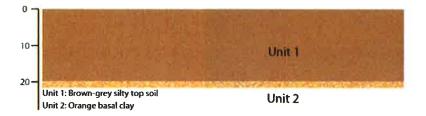


Figure 6 TP3 Stratigraphy South Section



Photo 17

MT1, 1m x 2m trench on the Floodplain (Survey Area 1)



Photo 18

MT12, 1m x 2m trench on the Slope (Survey Area 2)



Photo 19

MT2, 1m x 2m trench on the Slope (Survey Area 2)

7.6 Subsurface Testing Location Map

Subsurface testing locations are shown in Map 9.

7.7 Excavation Details

A total of three test pits $(1m \times 1m)$ and 18 mechanical trenches $(19=1m \times 2m; 1=1m \times 4m)$ were excavated. Excavation details are presented in **Appendix 4**, including the coordinates of all subsurface testing locations.

7.8 Obstacles

Up to approximately 20cm of fill was encountered on parts of the floodplain. The fill limited the number of controlled hand excavation that could occur; however, since the floodplain was considered to have extremely low to no archaeological potential and this obstacle is not considered to have significantly constrained the assessment in determining the archaeological potential of the Activity Area.

7.9 Results of the Subsurface Testing

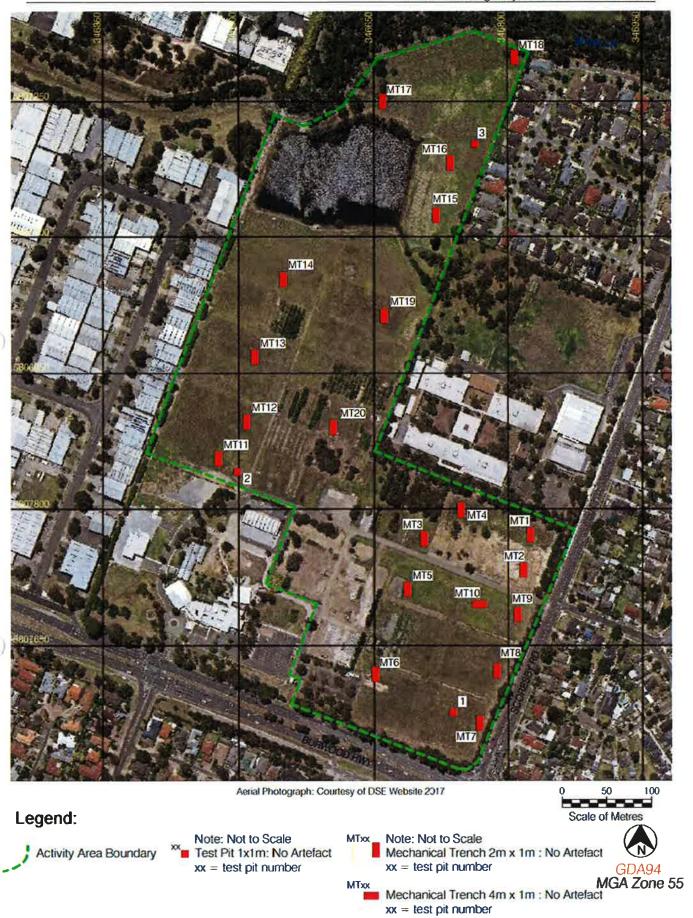
A total area of 45m^2 was excavated and all excavated materials were sieved using 5mm mesh. No Aboriginal cultural heritage material was identified during the complex assessment.

No artefacts were found during excavations. No suitable materials or sediments were encountered that could be submitted or used for dating purposes (C14 or OSL), or to assist in environmental analyses.

7.10 Conclusions from the Subsurface Testing

The conclusions from the complex assessment are as follows:

- No Aboriginal cultural heritage materials were recovered;
- The lack of archaeological materials recovered suggests that the Activity Area was not subject to intensive Aboriginal land use or cultural activity;
- Large parts of the Activity Area are significantly disturbed. Clay fill containing building rubble, plastic and pieces of brick was found down to 40-50cm depth in 17 of 20 excavation trenches;
- The Activity Area has been demonstrated as unlikely to contain Aboriginal cultural heritage.



Map 9 Subsurface Testing Locations

8 ABORIGINAL CULTURAL HERITAGE

No Aboriginal cultural heritage materials were recovered from archaeological excavations in the Activity Area.

9 CONSIDERATION OF SECTION 61 MATTERS - IMPACT ASSESSMENT

The impact of the activity on Aboriginal cultural heritage was assessed and Section 61 matters in the *Aboriginal Heritage Act 2006* considered.

The assessment found no Aboriginal cultural heritage or areas likely to contain Aboriginal cultural heritage; therefore, there is no requirement to consider avoidance, minimisation or management of Aboriginal cultural heritage places. The activity is considered unlikely to harm any Aboriginal cultural heritage.

9.1 Contingency Plan

A Contingency Plan is required to manage potential issues including:

- specific measures in the unlikely event that any Aboriginal cultural heritage will be unexpectedly discovered during the activity;
- any disputes, delays and other obstacles that may affect the conduct of the activity;
- reviewing compliance with the cultural heritage management plan and mechanisms for remedying non-compliance;
- the notification of the discovery of Aboriginal cultural heritage during the carrying out of the activity; and requirements relating to the custody and management of any Aboriginal cultural heritage found during the course of the activity.

The Contingency Plan is presented in Section 11.

9.2 Custody and Management of Aboriginal Cultural Heritage

No Aboriginal cultural heritage was found during the assessment; therefore, there are no custody and management issues. The contingency plan (**Section 11**) presents the custody and management procedures in the unlikely event Aboriginal cultural heritage is found during the conduct of the activity.

9.3 Cumulative Impact

The Aboriginal cultural heritage in the region is being impacted by expanding residential development. Aboriginal cultural heritage is being discovered and managed by CHMPs taking into consideration subdivision and development activity. This process has resulted on the one hand in an increase in our cumulative knowledge of the Aboriginal cultural heritage values of the region, and the preservation of parts of these values, but on the other hand, the destruction and loss of part of these values.

The activity has no negative impact on Aboriginal cultural heritage. The activity has a positive impact due to its further archaeological investigation of this landform in the geographic region.

PART 2 – CULTURAL HERITAGE MANAGEMENT CONDITIONS

10 SPECIFIC CULTURAL HERITAGE MANAGEMENT CONDITIONS

These conditions become compliance requirements once the Cultural Heritage Management Plan is approved.

Based on the findings of this report the following conditions are made:

Condition 1: Compliance

Prior to the commencement of the activity, the sponsor or their agent must ensure that the following Conditions are noted on all relevant work plans and schedules to facilitate compliance. A compliance checklist is in **Appendix 8**.

Condition 2: CHMP to Remain Onsite

The sponsor or their agent must ensure an approved copy of Part 2 of this CHMP is supplied to the Contractor or person(s) responsible for the conduct of the activity and the approved CHMP must remain or be available onsite for the duration of the activity.

Condition 3: Aboriginal Cultural Heritage Induction

The Contractor must provide an Aboriginal cultural heritage induction for construction personnel performing ground disturbing activities in the Activity Area. The induction must include information relating to the identification of stone artefacts and deposits that may occur as well as a summary of the CHMP. Those personnel who will be working permanently within the Activity Area must attend this induction. This will take the form of a short induction (up to 60 minutes) explaining Aboriginal cultural heritage, and the provision of a booklet / pamphlet (Condition 3) and AV mini-posters. The booklet explaining Aboriginal cultural heritage has to be created for the project. Contractors who are not permanent are required to attend an onsite toolbox meeting provided by the chief contractor, regarding Aboriginal cultural heritage within the Activity Area and must be provided with a booklet / pamphlet (Condition 3), which includes the identification of artefacts, at the start of their time within the Activity Area. These contractors must be made aware of Aboriginal cultural heritage management requirements during toolbox meetings. AV mini-posters must be displayed on the information boards of site sheds for the duration of the activity.

Condition 4: Contingency Plan in the Event that Suspected Aboriginal Heritage is identified

The Contingency Plan presented in **Section 11** must be adopted.

Condition 5: Costs

The cost of the above Conditions must be borne by the Sponsor, their agent or contractor.

11 CONTINGENCY PLAN

This Contingency Plan is required to manage the following potential issues. The Contractor must ensure that the relevant Contingency Plan is followed. To assist in this aim, a checklist has been provided (**Appendix 8**).

11.1 Changes to Section 61 Matters or the Activity

If changes to the activity require a statutory authorisation (e.g. an amendment to the planning permit), the Contractor must either prepare and submit an amendment CHMP, or a new CHMP, for approval (section 52(1) of the Act). A decision maker must not grant a statutory authorisation for the activity if the activity would be inconsistent with the approved CHMP (s.52(3) Aboriginal Heritage Act 2006).

Similarly, if changes to the activity are inconsistent with this CHMP, the Contractor must either prepare and submit an amendment CHMP, or a new CHMP, for approval. Actions which are considered as inconsistent to an approved plan are described in Part 6 (81(1)(a)(c)) of the *Aboriginal Heritage Act 2006*, that is, the Contractor has (a) contravened or is likely to contravene the conditions in the plan or (b) the impact on Aboriginal cultural heritage will be greater than that determined at the time the plan was approved.

The Minister for Aboriginal Affairs may order an Audit on advice from an authorised officer, the Secretary to the DPC, or the Aboriginal Heritage Council, and if the Minister reasonably believes that the activity has contravened or is likely to contravene, the conditions of an approved CHMP or the impact on Aboriginal heritage is greater than was expected at the time when the CHMP was approved.

The Minister must issue a stop order if he or she orders an Audit. The Stop Order remains in force until revoked by the Minister. However, conditions contained in an approved Audit override the conditions of a stop order.

An Audit must be conducted by, or under the direction of an authorised office appointed under the Act and the Secretary, DPC may direct the proponent of a development or an activity to engage a Heritage Advisor to conduct the Audit. The cost of the Heritage Advisor is borne by the Contractor, and will be refunded by the Sectary if no contravention of the CHMP is discovered (Section 83(6) of the Act).

If the custody and management arrangements established by the CHMP must change, then any Aboriginal cultural heritage should be returned to the 'owner' of that heritage.

11.2 Dispute Resolution between the RAP and the Contractor

As there is no RAP currently appointed for the Activity Area or to evaluate the CHMP, contingency plans for dispute resolution in relation to the implementation of the CHMP or the conduct of the activity is not applicable.

11.3 Management of Aboriginal Cultural Heritage Discovered during the Activity

This contingency plan includes discovery, notification, evaluation, Section 61 matters and reporting procedures. This contingency plan must be followed if any cultural heritage that is not previously registered is discovered during the activity. In the Activity Area unexpected cultural heritage comprises:

- 1. Aboriginal Ancestral Remains (see Section 11.3.1).
- 2. Stone artefact scatters that contain cultural heritage attributes which, when assessed, are below the analytical threshold of moderate scientific significance (see **Section 11.3.2**).
- 3. Stone artefact scatters that contain cultural heritage attributes which, when assessed, equal or exceed the analytical threshold of moderate scientific significance (see **Section 11.3.2**).
- 4. All other place-types not mentioned above (see **Section 11.3.2**).

11.3.1 Discovery of Aboriginal Ancestral Remains

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

1. Discovery:

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

2 Notification

- If suspected Aboriginal Ancestral Remains have been found, the State Coroner's Office and Victoria Police must be notified immediately;
- If there is reasonable grounds to believe that the remains are Aboriginal Ancestral Remains, the Coronial Admissions and Enquiries hotline must be immediately notified on 1300 888 544:
- All details of the location and nature of the Aboriginal Ancestral Remains must be provided to the relevant authorities;
- If it is confirmed by these authorities that the discovered remains are Aboriginal Ancestral Remains; the person responsible for the activity must report the existence of them to the Victorian Aboriginal Heritage Council in accordance with section 17 of the Aboriginal Heritage Act 2006.

3 Impact Mitigation or Salvage:

• The Victorian Aboriginal Heritage Council, after taking reasonable steps to consult with any Aboriginal person or body with an interest in the Aboriginal Ancestral

- Remains, will determine the appropriate course of action as required by section 18(2)(b) of the *Aboriginal Heritage Act 2006*;
- An appropriate impact mitigation or salvage strategy as determined by the Victorian Aboriginal Heritage Council must be implemented by the Contractor.

4 Curation and Further Analysis:

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

5 Reburial:

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

11.3.2 Management of Other Aboriginal Cultural Heritage

- 1. A person making such a discovery will immediately suspend any relevant works at the location and within a 10m radius of the relevant place extent.
- 2. The person shall immediately notify the nominated Project Delegate for the Contractor.

Project Delegate

Project Manager Development Victoria Level 9, 8 Exhibition Street Melbourne, VIC 3000 Ph 03 8317 3495

- 3. The Contractor's Project Delegate will notify a heritage advisor on the day of the discovery, and if necessary to prevent any further disturbance, the location will be isolated by a fence, safety webbing or other suitable barrier and works may recommence outside this 10m area of exclusion.
- 4. The heritage advisor will evaluate the Aboriginal cultural heritage. The heritage advisor will determine if it is part of an already known place or should be registered as a new place. The heritage advisor must report the discovery to the Secretary by updating and / or completing place records. In addition, the heritage advisor must assess the Aboriginal cultural heritage and based on that assessment determine potential management strategies.
- 5. The heritage advisor will facilitate the involvement of the RAP or relevant Traditional Owner Groups, where they choose to participate, in the onsite investigation and assessment of significance of the Aboriginal cultural heritage.
- 6. If the Aboriginal cultural heritage is assessed by the heritage advisor, in consultation with the RAP or relevant Traditional Owner Groups, where they choose to participate, as a place with below moderate scientific significance or no specific

cultural significance, then after recording the material, no further management is required and works may proceed. The heritage advisor must submit relevant documentation to the Victorian Aboriginal Heritage Register.

- 7. If Aboriginal cultural heritage that is deemed to have greater significance is discovered, the heritage advisor in consultation with the RAP or relevant Traditional Owner Groups, where they choose to participate, and the Contractor, must explore all options to avoid impact to the Aboriginal cultural heritage. If impact is unavoidable, then it must be minimised where possible and salvage excavation of the Aboriginal cultural heritage undertaken to minimise impact, if considered appropriate by the heritage advisor. In consultation with the RAP or relevant Traditional Owner Groups, where they choose to participate, salvage excavation methodology must be carried out in accordance with proper archaeological practice taking into account occupational health and safety issues. After recording the material works may proceed. The heritage advisor must complete the appropriate Victorian Aboriginal Heritage Registry forms and submit a report to AV detailing the results of excavations. If Aboriginal Ancestral Remains are discovered the contingency in **Section 11.3.1** must be followed.
- 8. Within a period not exceeding three (3) working days a decision must be made by the heritage advisor in consultation with the RAP or relevant Traditional Owner Groups, where they choose to participate, and the Contractor, as to the process to be followed to manage the Aboriginal cultural heritage in a culturally appropriate manner, and how to proceed with the works.

Failure of parties to reach an agreed course of action in this manner will be classed as a Dispute under this agreement;

- 9. Work may recommence within the 10m radius exclusion zone:
 - When the appropriate protective measures have been taken;
 - Where the relevant Aboriginal cultural heritage records have been updated and / or completed;
 - Where all parties agree there is no prudent or feasible course of action; or
 - Once any relevant dispute has been resolved.
- 10. Where relevant, the cultural heritage advisor, Contractor and RAP or relevant Traditional Owner Groups, where they choose to participate, will ensure that the above steps are followed and that legal obligations and requirements are complied with at all times.
- 11. The custody of Aboriginal cultural heritage (with the exception of Aboriginal Ancestral Remains or secret or sacred objects) discovered during or after an activity should comply with the requirements established by the Act and be assigned according to the following order of priority, as appropriate;
 - any relevant RAP for the land from which the Aboriginal heritage is salvaged:
 - any relevant registered native title holder for the land from which the Aboriginal heritage is salvaged;

- any relevant native title party (as defined in the Act) for the land from which the Aboriginal heritage is salvaged;
- any relevant Traditional Owner or Owners of the land from which the Aboriginal heritage is salvaged;
- any relevant Aboriginal body or organisation which has historical or contemporary interests in Aboriginal heritage relating to the land from which the Aboriginal heritage is salvaged;
- the owner of the land from which the Aboriginal heritage is salvaged;
- Museum Victoria.

11.4 Notification of the Discovery of Aboriginal Cultural Heritage found during the Activity

The notification of the discovery of Aboriginal cultural heritage is dealt with in **Section 11.3** above. Please note that there is different notification procedures for the discovery of Aboriginal Ancestral Remains (**Section 11.3.1**, **point 2**) compared to all other Aboriginal cultural heritage (**Section 11.3.2**, **point 2**).

11.5 Reviewing Compliance with the CHMP and Mechanisms for Remedying Non-Compliance

A review of compliance with this plan can be undertaken at any time by project delegates representing the Contractor and AV, or an agreed independent reviewer, to ensure that all parties are complying with the terms of the plan. A checklist is provided in **Appendix 8**.

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APPENDIX 1 - CHMP DOCUMENTATION



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.

Sponsor:	Development Victoria		
ABN/ACN:			
Contact Name:			
Postal Address	Level 9, 8 Exhibition St	reet, Melbourne VIC 3000	×
Business Number:		Mobile:	
Email Address:	o-	_	
ponsor's age n	t (if relevant)		
Company:			
Contact Name:	W		
Postal Address			
Business Number:		Mobile Mobile	:
Email Address:	2		
Project Name:	621 Burwood Highway,	ed activity and loca	ition
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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? Subdivision
Is any part of the activity an area of cultural heritage sensitivity, as listed in the regulations? Yes Other Reasons (Voluntary)
An Environmental Effects Statement is required
A Cultural Heritage Management Plan is required by the Minister for Aboriginal Affairs.
SECTION 6 - List the relevant registered Aboriginal parties (if any)
This section is to be completed where there are registered Aboriginal parties in relation to the management plan.
SECTION 7A - List the relevant Aboriginal groups or Aboriginal people with whom the Sponsor intends to consult (if any)
This section is to be completed only if the proposed activity in the management plan is to be carried out in an area where there is no Registered Aboriginal Party.
Boon Wurrung Foundation Limited Bunurong Land Council Aboriginal Corporation
SECTION 7B - Describe the intended consultation process (if any)
This section is to be completed only if the proposed activity in the management plan is to be carried out in an area where there is no Registered Aboriginal Party.
TOGs will be consulted with regards to the preparation of the plan, and be invited to participate in
SECTION 8 – State who will be evaluating this plan (mandatory) The plan is to be evaluated by:
A Registered Aboriginal Party AND / OR
The Secretary AND / OR
The Council
SECTION 9 – Preliminary Aboriginal Heritage Tests (PAHTs) List the Reference Number(s) of any PAHTs conducted in relation to the proposed activity:
SECTION 10 - Notification checklist
Ensure that any relevant registered Aboriginal party/ies is also notified. A copy of this notice with a map attached may be used for this purpose. (A registered Aboriginal party is allowed up to 14 days to provide a written response to a notification specifying whether or not it intends to evaluate the management plan.)
Submitted on: 22 Aug 2017



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

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

Submitted on: 22 Aug 2017



Notice of Intent to Prepare CHMP 15226

1 message

22 August 2017 at 13:44

To whom it may concern,

This is a formal automated response indicating that, on 22-Aug-2017, the Secretary, Department of Premier and Cabinet received a Notice of Intent to Prepare a Cultural Heritage Management Plan (CHMP) for:

Development Victoria - 621 Burwood Highway, Knoxfield

The notification has been allocated the AV Project Number:

CHMP Plan ID. 15226

Please quote this number when making any future enquiries to AV regarding this project.

If your activity lies within the boundaries of a registered Aboriginal party you must also notify this organisation of your intention to prepare the CHMP (if you have not already done so). Further information about registered Aboriginal parties can be found at:

http://www.dpc.vic.gov.au/index.php/aboriginal-affairs/registered-aboriginal-parties

The information relating to your development has been entered by your cultural heritage advisor. If you detect an error in the information, please email VAHR@dpc.vic.gov.au with the correct information and quoting the CHMP Plan ID.

Please provide additional notification provisions (as set out below) to VAHR@dpc.vic.gov.au.

Additional Notification Provisions:

- 1. Ensure any municipal council, whose municipal district includes an area to which the cultural heritage management plan relates, is notified. You may provide a copy of your Notice of Intent for this CHMP, to the relevant municipal council, for this purpose.
- 2. List the relevant Aboriginal groups or Aboriginal people with whom the Sponsor intends to consult (if any). This section is to be completed only if the proposed activity in the management plan is to be carried out in an area where there is no Registered Aboriginal Party. Consultation is for the purpose of obtaining an adequate assessment of the existence and significance of Aboriginal cultural heritage. Traditional Owner groups, inclusively representing individual Traditional Owners, are more likely to be the relevant bodies with which to consult in preparing a CHMP. Sponsors should endeavour to consult accordingly. This information may also assist the Secretary in determining whether to appoint an Activity Advisory Group for the activity and who to appoint to that group.

80220017

Tardis Eriterprises Mail - CHMP 15226 - 621 Europout Highway, Knowleid



CHMP 15226 - 621 Burwood Highway, Knoxfield

1 message

22 August 2017 at 13:51

No Whom It May Concern,

We will be conducting a cultural heritage management plan for 621 Burwood Highway, Knoxfield.

Please find attached the Notice of Intent form sent to Aboriginal Victoria (AV) for your records, as requested by AV.



www.satarois.com.au

Google Plus: https://plus.google.com/11505906/1016002903979

Twiller: @ArchAtTanis

"This e-mail and any files transmitted with it are confidential and are intended solely for the use of the individual or entity to whom it is addressed. If you are not the intended recipient or the person responsible for delivering the e-mail to the intended recipient, be advised that you have received this e-mail in error and that any use, dissemination, forwarding, printing, or copying of this e-mail and any file attachments is strictly prohibited. If you have received this e-mail in error, please immediately notify us by telephone at (03) 9769 7765 or by reply e-mail to the sender. You must destroy the original transmission and its contents."

2 attachments



herNoticeOfIntentForm-22Aug2017-014454814.pdf

APPENDIX 2 - GLOSSARY

Aeolian Sediments: Wind-borne, wind-blown or wind-deposited material, usually sand, but also silt and clay. **Alluvium**: Sedimentary unconsolidated deposits lain down through the action of running water. Usually found in or near rivers and floodplains. It is usually applied to coarser sediments such as sands and gravels, but sometimes to finer particles such as silt and clay.

Anvil: A portable flat stone, usually a river pebble, which has been used as a base for working stone. Anvils that have been used frequently have a small circular depression in the centre where cores were held while being struck. An anvil is often a multifunctional tool used also as a grindstone and hammer stone.

Archaeological Site: A place/location of either Aboriginal or non-Aboriginal origin. Aboriginal archaeological sites have been formed prior to the European settlement of Australia, and may be in any of the forms outlined above.

Artefact: Any product made by human hands or caused to be made through human actions.

Artefact Horizon: A discernible horizontal distribution of artefacts within a natural soil horizon. An artefact horizon has generally suffered a degree of post depositional disturbance that has affected the spatial and temporal integrity of the deposits and associated artefact assemblage.

Artefact Scatter: A scatter of cultural material, most commonly stone artefacts. Artefact scatters are often the only physical remains of places where Aboriginal people have camped, prepared and eaten meals and worked stone material.

Basalt: Fine-grained, hard, but easily weathered dark-grey igneous rock formed by the cooling of lava.

Bedrock: Solid rock at the surface or rock at depth that has been undisturbed by weathering.

Blade: A long parallel sided flake from a specially prepared core. Blade flakes are twice as long as they are wide.

Bipolar: A core or a flake, which, presumably, has been struck on an anvil. That is, the core from which the flake has been struck has been rotated before the flake has been struck off. Bifacial platforms tend to indicate that the flake has come off a heavily worked core.

Broken Flake: Defined by the part of the flake remaining, ie proximal (where the platform is present), medial (where neither the platform nor termination is present), or distal (where the termination is present).

Calcareous: A sediment containing calcium carbonate in concentrations of up to 50%.

Coffee Rock: A term used to describe a hardened iron- and organic-rich cemented deposit that when wet, resembles coffee grains. It is usually found in sandy soils that have a source of iron and organic matter.

Colluvium: An unconsolidated mixture of weathered material (gravel, sand, silt and clay) transported downslope by the force of gravity.

Complete Flake: An artefact exhibiting a ventral surface (where the flake was originally connected to the core), dorsal surface (the surface that used to be part of the exterior of the core, platform and/or flake scar).

Core: An artefact from which flakes have been detached using a hammer stone. Core types include blade, single platform, multiplatform and bipolar forms. These artefacts exhibit a series of negative flake scars, each of which represents the removal of a flake. Core types are as follows:

- *Unidirectional cores* These cores have scars originating from a single platform, and all the flakes struck from the core have been struck in the same direction from that platform.
- Bidirectional cores These cores have two platforms, one opposite the other; flakes have been struck from each of the platforms, and thus from opposite directions.
- Bifacial cores These kinds of core have a single platform, but the flakes struck from it have been
 detached from two core faces.
- Multidirectional cores These cores have two or more platforms and there is no clear pattern, either
 in the orientation of the platforms or in the orientation of the scars resulting from the striking of flakes
 from those platforms.
- Bipolar core Nodules or cobbles that are flaked using an anvil. The resulting artefacts exhibit crushing on their proximal, distal and often their lateral margins, where they have been rotated.

Cultural Heritage: Something that is inherited or passed down because it is appreciated and cherished. Categories of cultural heritage include; built structures and their surrounds, gardens, trees; cultural landscapes; sites; areas; precincts; cemeteries; ruins and archaeological sites; shipwrecks; sites of important events; commemorative sites; contents of buildings and significant relics, objects artefacts and collections of objects.

Burials: Burial places may occur in association with campsites, in mounds or shell middens or in specific burial grounds that lack any other cultural material. Softer ground was chosen for burials, and any sandy area can be expected to contain burials. Burial places can contain one or a number of individuals. Burials places and cemeteries are a common archaeological place type in the sand country adjoining the Murray River, though are a rare feature in the southern part of Victoria.

Contact Place: These are places relating to the period of first contact between Aboriginal and European people. These places may be associated with conflict between Aboriginal people and settlers, mission

stations or reserves, or historic camping places. The artefact assemblage of contact places will often include artefacts manufactured from glass.

Ferruginous: Rocks or soils containing a large percentage of iron.

Ferruginisation: The process by which iron minerals move in the sediment and/or regolith, staining and cementing the substrate to form a hard, iron-rich layer.

Fluvial: Referring to rivers and their processes. E.g. stream erosion and deposition.

Granite: A coarse-grained intrusive igneous rock, usually comprised of quartz, feldspar and micas.

Groundwater: Water that lies within the saturated zone of rock and soil. It moves between pore spaces, cavities and fractures in the sediment and rock under the influence of gravity. Groundwater can transport trace minerals and elements dissolved in the water.

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

High Integrity Occupation Deposit: The laying down of deposits by human activities that bury artefacts to form distinct stratigraphic entities such as layers (eg dense lens of stone artefacts & bone between environmental deposits, stratified shell deposits) or features (hearths, occupation mounds). High integrity occupation deposits have a high degree of spatial and temporal integrity.

Holocene Period: The time from the end of the Pleistocene Ice Age (c 10,300 BP) to the present day.

Hydrothermal Quartz: Also known as milky quartz. Formed by the intrusion of hydrothermal water containing dissolved silica and other minerals into folded bedrock (commonly metasediments). The hydrothermal water reaches a natural trap such as an anticlinal fold or a fault before cooling, allowing the silica to precipitate into quartz.

Igneous: Rocks that have formed through the crystallisation of magma.

Intrusion: The act of an intrusive igneous rock rising up through the Earth's crust and breaking through the lower levels of the bedrock.

Iron Staining: Where a crust of iron oxide enriched clay coating precipitates on the surfaces of individual sediment grains, giving an orange-red-yellow stain to the sediment or soil as a whole.

Last Glacial Maximum: A period of cold, dry conditions on Earth when the ice caps on the polar regions were at their largest extent. This period lasted between approximately 18-24 ka BP.

Lava: Molten material extruded from a volcano or fissure in the Earth's surface.

Lithic: Anything made of stone.

Metamorphism: The process by which rocks are transformed by discernibleation due to increased heat and/or pressure in the Earth's crust. Metamorphism can be either on a regional scale or on a contact scale.

Occupation Surface: A distinct layer or interface between depositional strata upon which human activities were carried out and artefacts/features deposited. Most commonly this may be a prior land surface (eg soil horizon) that has been subsequently buried by later environmental deposits (eg dune deposits).

Pisolith: Hard, iron-cemented spherical particles of sediment (usually sand). These range in size from 3mm to 6mm.

Pleistocene: The geological period corresponding with the last or Great Ice Age. The onset of the Pleistocene is marked by an increasingly cold climate. The date for the start of the Pleistocene is not well established, and estimates vary from 3.5 to 1.3 million years ago. The period ends with the final but gradual retreat of the ice sheets, which reached their present conditions around 10,300 BP.

Raw Material: Organic or inorganic matter that has not been processed by people.

Regolith: An incoherent mantle of varying thickness that lies above fresh rock. This is usually the decomposed, weathered and broken up derivative of the fresh bedrock. The soil profile lies above this layer.

Scarred Tree: Scars on trees may be the result of removal of strips of bark by Aboriginal people for the manufacture of utensils, canoes or for shelter; or resulting from small notches chopped into the bark to provide toe and hand holds to climber after possums, koalas and/or views of the surrounding area. A scar made by humans as opposed to naturally made by branches falling off, *etc.* is distinguished by the following criteria: symmetry and rounded ends, scar does not extend to the ground, some re-growth has occurred around the edges of the scar, and no holes or knots present in the heartwood.

Scoria: Pyroclastic volcanic rock containing numerous gas pockets and spaces. Colour ranges from redbrown to black.

Sensitivity: Based on collated existing data and place inspection an area or specific place may contain sensitivity for extant or archaeological deposits. Background research will present the most likely place types, contents and state of preservation.

Siliceous: Rocks and sediments that contain an abundance of silica.

Stony Rise: Irregular, hummocky and stony ground formed on younger lava flows. Caused by uneven cooling and slumping of basalt flows.

Swale: A linear depression that runs between two ridges. This is usually applied to dune environments where the swale is located between two dune ridges and is occupied by a swampy environment.

Terrace: A gently sloping or flat step-like structure usually associated with a fluvial environment and bounded by steeper slopes on the outer margins. Streams commonly flow along terraces. Terraces can be paired or unpaired according to the depositional environment.

Uplift: Upward surface movement attributed to faulting or movement of the continental plates.

Visibility: Refers to the degree to which the surface of the ground can be observed. It is generally expressed in terms of the percentage of the ground's surface visible for an observer on foot (Bird 1992). For example 10% visibility equates to 10cm² per 1 m² of ground surface that is not covered by vegetation or soil deposit. The following applies to descriptions of ground surface visibility within this report.

0%	No visible ground surface	50 – 70%	Good
0 – 10%	Very Poor	70 – 90%	Very Good
10 – 30%	Poor	90 – 100%	Excellent
00 500/	F :		

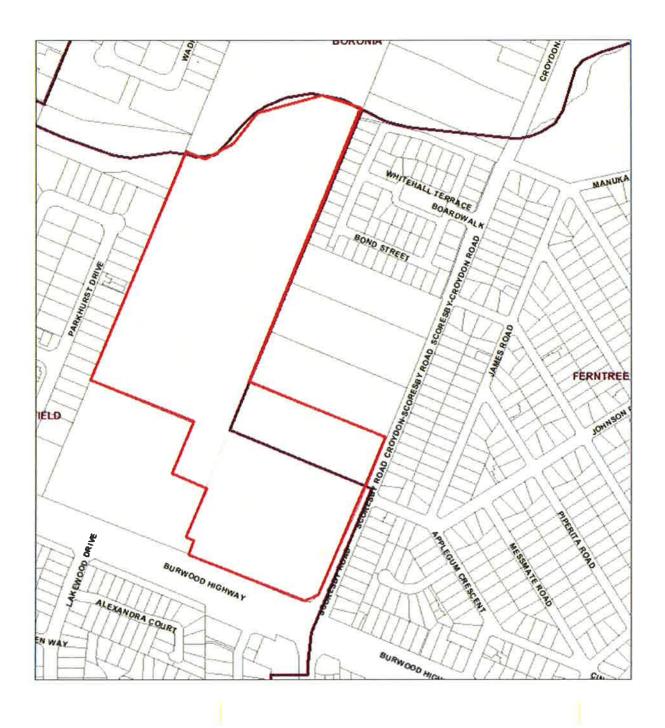
30 – 50% Fair

Weathering: The process by which fresh rock degrades/breaks down at or near the surface. This process modifies rock chemically, organically, and/or physically, whereby a mantle of waste known as regolith will remain *in situ* until it is eroded away.

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APPENDIX 3 – CADESTRA



APPENDIX 4 - EXCAVATION INVENTORY

A S	Easting1	TP Easting ¹ Northing ¹ Extent ² Depth ³ Arts ⁴	Extent	Depth ³	Arts4	Distribution ⁵ Landform	Landform	Profile Description	ЬН
TP1	TP1 346739.5		5806567.3 100×100	90	0	×	Upper Hill Slope	[1] 0-10cm brown-grey silty topsoil [2] 10-40cm light-grey silty clay fill [3] 40-50cm orange clay	6 6.5 6
TP2	TP2 346499.3	5806841.7	5806841.7 100×100	15	0		Slope	[1] 0-15cm heavily compacted silt-clay fill [2] 15cm basal clay	i i
TP3	TP3 346764.3		5807203.7 100×100	20	0	ï	Floodplain	[1] 0-20cm heavily compacted silt-clay fill [2] 20cm basal clay	ï

1. SW corner, GDA94 MGA Zone 55 coordinates; 2. Extent in cm (length x width); 3. Finishing depth of excavation in cm; 4. Number of artefacts; 5. Depth of artefacts in cm. C=Crest, D=dune, H=hillock, GR=gentle rise, LS=lower slope, MS=middle slope, P=ploughing, VC=vegetation clearance, ST=stock trampling, OR=occasional roots, UH=undulating hills, US=upper slope

Northing¹ Extent Depth³ Arts⁴ Start: 5806772.0 100 x 200 120 0	Extent Depth Arts4	Depth³ Arts⁴	3 Arts ⁴		Dis	Distribution ⁵	Landform	Profile Description [1] 0-25cm grey-brown clayey silt fill [2] 25-45cm brown clayey silt fill containing pieces of brick and plastic
End: 346824.9 End: 5806770.0 Start: 346817.3 Start: 5806733.2 100 x 200 140 0 End: 346817.3 End: 5806731.2	100 × 200		140 0	0		na	Slope	[3] 45-100cm orange-brown clay fill [4] 100-120cm orange clay [1] 0-140cm orange clay fill
Start: 346707.0 Start: 5806767.9 100 x 200 50 0 End: 346707.0 End: 5806765.9	100×200		50 0	0		na	Slope	[1] 0-10cm brown-grey silty topsoil [2] 10-40cm light-grey silty clay fill [3] 40-50cm orange clay
Start: 346748.1 Start:5806799.7 100 x 200 50 0 End: 346748.1 End: 5806797.7	100 × 200		50 0	0		na	Slope	[1] 0-50cm orange clay fill
Start: 346688.1 Start: 5806712.2 100 x 200 50 0 End: 346688.1 End: 5806710.2	100 x 200		50 0	0		na	Slope	[1] 0-50cm orange clay fill
Start: 346652.3	100 × 200		20 0	0		па	Upper Hill Slope	[1] 0-10cm brown-grey silty topsoil[2] 10-40cm light-grey silty clay fill[3] 40-50cm orange clay

9.1 Startt 5806564.6 100 x 200 70 0 na Upper Hill Slope 8.0 Startt 58065624.6 100 x 200 50 0 na Upper Hill Slope 8.0 End: 5806684.6 100 x 200 50 0 na Upper Hill Slope 9.6 Startt 5806684.6 100 x 200 50 0 na Upper Hill Slope 8.7 Startt 5806895.5 100 x 200 50 0 na Slope 8.2 End: 5806895.1 100 x 200 50 0 na Slope 8.2 End: 5806896.5 100 x 200 50 0 na Slope 8.2 End: 5806896.5 100 x 200 50 0 na Slope 8.9 Start: 5806896.6 100 x 200 50 0 na Slope 8.9 Start: 5806896.6 100 x 200 50 0 na Floodplain 8.9 End: 5807724.9 100 x 200 50 0 na Floodplain </th <th>Faction</th> <th>Northing1</th> <th>Extents</th> <th>Donth³</th> <th>Arto4</th> <th>Dietribution5</th> <th>l proform</th> <th>Profile Desortistion</th>	Faction	Northing1	Extents	Donth ³	Arto4	Dietribution5	l proform	Profile Desortistion
Start: 5806564.6 End: 5806564.6 End: 58065621.8 End: 58066621.8 End: 58066621.8 End: 58066621.8 End: 58066621.8 End: 5806682.6 End: 5806682.6 End: 5806682.6 End: 5806682.6 End: 5806682.6 End: 5806882.6 End: 5806882.6 End: 5806882.6 Inox 200 40 0 na Slope End: 5806882.6 Inox 200 50 0 na Slope Start: 5806882.6 Inox 200 50 0 na Slope End: 5806882.0 Inox 200 50 0 na Slope End: 5806882.0 Inox 200 50 0 na Slope End: 5806882.0 Inox 200 40 0 na Slope End: 5806882.0 Inox 200 40 0 na Slope End: 5807052.1 Inox 200 30 0 na Floodplain End: 5807122.9 Inox 200 150 0 na Floodplain End: 5807122.9 Inox 200 150 0 na Floodplain Start: 5807122.9 Inox 200 150 0 na Floodplain End: 5807122.9 Inox 200 150 0 na Floodplain End: 5807123.9 Inox 200 150 0 na Floodplain Start: 5807280.7 Inox 200 150 0 na Floodplain End: 5807280.7 Inox 200 150 0 na Floodplain Start: 5807280.7 Inox 200 150 0 na Floodplain End: 5807280.7 Inox 200 150 0 na Floodplain Start: 5807280.7 Inox 200 150 0 na Floodplain End: 5807280.7 Inox 200 150 0 na Floodplain Start: 5807280.7 Inox 200 150 0 na Floodplain End: 5807280.7 Inox 200 150 0 na Floodplain Inox 200 150 0 na Floodpl	Lasming	Building	ראופוור	Depart	2	Distribution	Laidio	Tionie Description
Start: 5806621.8	Start: 346769.1 End: 346769.1	Start: 5806564.6 End: 5806562.6	100 x 200	70	0	па	Upper Hill Slope	[1] 0-30cm gravel and brick fill containing glass [2] 30-50cm light-brown compacted silty clay containing tree roots [3] 50-70cm orange clay
Start: 5806684.6 End: 5806682.6 100 x 200 50 0 na Upper Hill Slope Start: 5806695.5 End: 5806695.5 End: 5806695.5 End: 5806695.5 End: 5806695.6 100 x 400 50 0 na Slope Start: 5806895.1 End: 5806896.6 100 x 200 50 0 na Slope Start: 5806896.2 End: 5806894.6 End: 5806896.2 100 x 200 50 0 na Slope Start: 5807054.1 End: 5807052.1 End: 5807122.9 End: 5807180.8 End: 5807180.8 End: 5807290.7 100 x 200 70 0 na Hoodplain Start: 5807299.3 End: 5807299.3 End: 5807299.3 End: 5807297.3 100 x 200 150 0 na Hoodplain	Start: 346788.0 End: 346788.0	Start: 5806621.8 End: 5806619.8	100 × 200	50	0	па	Upper Hill Slope	[1] 0-15cm brown-grey silty clay topsoil [2] 15-40cm brown-grey silty clay fill containing gravel and plastic [3] 40-50cm orange clay
Start: 5806695.5 100 x 400 50 0 na Slope End: 5806695.5 100 x 200 40 0 na Slope Start: 5806895.1 100 x 200 50 0 na Slope Start: 5806896.2 100 x 200 50 0 na Slope Start: 5806966.2 100 x 200 40 0 na Slope Start: 5807054.1 100 x 200 40 0 na Floodplain Start: 5807122.9 100 x 200 70 0 na Floodplain Start: 5807182.8 100 x 200 150 0 na Floodplain Start: 5807290.7 100 x 200 150 0 na Floodplain Start: 5807299.3 100 x 200 150 0 na Floodplain	Start: 346810.6 End: 346810.6	Start: 5806684.6 End: 5806682.6	100 x 200	50	0	Па	Upper Hill Slope	[1] 0-15cm brown-grey silty clay topsoil [2] 15-40cm brown-grey silty clay fill containing gravel and plastic [3] 40-50cm orange clay
Start: 5806856.1 End: 5806854.1 Start: 5806854.1 Start: 5806896.6 End: 5806894.6 End: 5806896.2 End: 5806966.2 End: 5806966.2 End: 5806966.2 In0x200 50 na Slope Start: 5806966.2 End: 5806966.2 End: 5807054.1 End: 5807054.1 End: 5807052.1 In0x200 40 0 na Slope Start: 5807054.1 End: 5807124.9 End: 5807122.9 End: 5807180.8 End: 5807180.8 End: 5807280.7 In0x200 70 0 na Floodplain Start: 5807180.8 End: 5807290.3 Ind: 5807290.3 End: 5807297.3 End: 5807297.3 End: 5807297.3 End: 5807297.3 End: 5807297.3 Individual End: 5807297.3 End: 5807297.3 End: 5807297.3 Individual End: 5807297.3 End: 5807297.3 End: 5807297.3 Individual End: 5807297	Start: 346768.7 End: 346772.7	Start: 5806695.5 End: 5806695.5	100 x 400	50	0	па	Slope	[1] 0-15cm brown-grey silty clay topsoil[2] 15-40cm brown-grey silty clay fill containing gravel and plastic[3] 40-50cm orange clay
Start: 5806896.6 End: 5806894.6 End: 5806894.6 End: 5806894.6 End: 5806894.6 Start: 5807054.1	Start: 346478.2 End: 346478.2	Start:5806856.1 End: 5806854.1	100 x 200	40	0	na	Slope	[1] 0-30cm orange clay fill [2] 30-40cm orange clay
Start: 5806966.2 End: 5806966.2 End: 5807054.1 End: 5807052.1 End: 5807124.9 End: 5807122.9 End: 5807122.9 End: 5807122.9 Start: 5807128.8 End: 5807180.8 End: 5807290.3 Too x 200 Too Na Floodplain 0 na Floodplain Slope Start: 5807124.9 End: 5807122.9 End: 5807122.9 Start: 5807250.7 Too x 200 Too Na End: 5807299.3 Too x 200 Too Na Floodplain 0 na Floodplain Floodplain	Start: 346509.8 End: 346509.8	Start: 5806896.6 End: 5806894.6	100 x 200	50	0	na	Slope	[1] 0-40cm silty clay fill [2] 40-50cm orange clay
Start: 5807054.1 End: 5807124.9 End: 5807122.9 Start: 5807122.9 Start: 5807182.8 End: 5807182.8 End: 5807182.8 To0 x 200 40	Start: 346518.9 End: 346518.9	Start:5806968.2 End: 5806966.2	100 x 200	20	0	na	Slope	[1] 0-40cm silty clay fill [2] 40-50cm orange clay
Start: 5807122.9 End: 5807122.9 End: 5807229.3 100 x 200 30 0 na Floodplain Start: 5807180.8 End: 5807250.7 End: 5807299.3 End: 5807297.3 100 x 200 150 0 na Floodplain	Start: 346550.7 End: 346550.7	Start: 5807054.1 End: 5807052.1	100 × 200	40	0	na	Slope	[1] 0-30cm silty clay fill [2] 30-40cm orange clay
Start: 5807180.8 End: 5807250.7 100 x 200 70 0 na Floodplain Start: 5807250.7 End: 5807299.3 End: 5807297.3 100 x 200 150 0 na Floodplain	Start: 346720.7 End: 346720.7	Start: 5807124.9 End: 5807122.9	100 x 200	30	0	na	Floodplain	[1] 0-30cm disturbed silty clay fill containing plastic pipe and building rubble
Start: 5807250.7 100 x 200 150 0 na Floodplain Start: 5807299.3 100 x 200 100 0 na Floodplain	 Start: 346736.9 End: 346736.9	Start: 5807182.8 End: 5807180.8	100 x 200	20	0	na	Floodplain	[1] 0-20cm orange silty clay [2] 20-70cm orange clay
Start: 5807299.3 100 × 200 100 0 na Floodplain End: 5807297.3	 Start: 346660.8 End: 346660.8	Start: 5807250.7 End: 5807248.7	100 x 200	150	0	na	Floodplain	[1] 0-150cm silty orange clay
	 Start:346808.3 End: 346808.3	Start: 5807299.3 End: 5807297.3	100 × 200	100	0	na	Floodplain	[1] 0-20cm grey silty clay [2] 20-100cm grey clay [3] 100cm orange-white clay

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표 %	Easting ¹	Northing ¹	Extent	Depth ³	Arts4	Arts ⁴ Distribution ⁵	Landform	Profile Description
19	Start: 346662.2 End: 346662.2	Start: 346662.2 Start: 5807013.5 End: 346662.2 End: 5807011.5	100 x 200	45	0	na	Slope	[1] 0-45cm silty clay fill containing plastic and glass
20	Start: 346606.1 End: 346606.1	Start: 5806890.7 End: 5806888.7	100 × 200	09	0	na	Slope	[1] 0-40cm silty clay fill containing plastic and glass [2] 40-60cm orange clay

Mechanical Trench 2 (1m x 2m)



Mechanical Trench 2 (1m x 2m)



Mechanical Trench 1 (1m x 2m)



Mechanical Trench 9(1m x 2m)



Mechanical Trench 4 (1m x 2m)



Mechanical Trench 17 (1m x 2m)



Mechanical Trench 17 (1m x 2m)



APPENDIX 5 - SCIENTIFIC SIGNIFICANCE ASSESSMENT

Although no stone artefacts or artefact scatters were found during archaeological ground surveys or sub-surface investigations in the present study, it is important to note that stone artefacts may be uncovered in the Activity Area during the activity phase of the project. Therefore, criteria used for assessing the potential scientific significance of stone artefact finds are discussed below.

Artefact Scatters

The stone artefact scatter is a common place-type found in Victoria and consequently comprises a high proportion of places recorded on ACHRIS. Scientific significance is assessed in this investigation by the examining the following criteria.

Average Artefact Density

Places with higher average artefact densities per m² contain larger amounts and more varied information. Higher artefact densities usually represent more intensive and varied human behaviour. For example, focussed Aboriginal activity, such as longer-term campsites, will generally leave high concentrations of cultural material. In contrast, Aboriginal people traversing the landscape, dropping or otherwise discarding stone artefacts on a regular basis will often leave a very low density of artefacts. This is considered to represent *background cultural noise* or *background archaeological noise* and is identified by artefact densities with less than five artefacts per m². The higher the density of stone artefacts within a place, the higher its scientific significance.

Formal artefact density calculations for place scientific significance assessments are based on the results of hand excavated test pits. Once place boundaries are known the average artefact density is calculated by dividing the number of recorded artefacts by the extent of the area excavated (m²). The density scale is based on consulting experience and benchmarking conducted on various known places (e.g. VAHR 7921-0735, VAHR 7921-0736 & VAHR 7921-0769) which have been excavated using proper archaeological practice and have different levels of scientific significance (e.g. VAHR 7921-0735 & VAHR 7921-0736 having *very high* scientific significance). It is envisaged that additional benchmark data from the VAHR will be available in the future in order to refine the average artefact density classes used in this scientific significance assessment framework.

Extent of Artefact Densities

Larger places are usually considered to have higher scientific significance than smaller ones because they generally contain more information. Furthermore, larger places were likely the focus of more intensive and varied Aboriginal behaviour. If places have artefact densities of 46 per m² or above, then they are likely to be assessed having at least moderate scientific significance (see below). Based on consulting experience and benchmarking (see *Average Artefact Density* above) a significant size threshold is notionally considered here to be at least 100m x 100m in extent (or 10,000m²).

Natural Soil Horizons

Natural formation processes may form natural soil layers or horizons by the laying down of sediments by natural agents such as wind and water (Isbell 2002; McKenzie et al. 2004; cf Schiffer 1972, 1976: 15-16, 1983). These horizons may be subsequently created or destroyed by various post-depositional processes. The process of soil profile genesis and development may bury artefacts but without forming obvious anthroposols or high integrity occupation deposits. Artefacts found within natural soil profiles habitually form artefact

horizons. The temporal and spatial integrity of artefact horizons will depend on the depositional and post-depositional formation processes of these deposits. Generally they have less temporal and spatial integrity than intact high integrity occupation deposits and, with all other criteria being equal, have less scientific significance.

Disturbance

Disturbance of Aboriginal cultural heritage places can take many forms and include both environmental and human agents not only at the time of deposition but also after places have been abandoned. Disturbance can be categorised as low, high or significant. Low disturbance is when archaeological deposits or features have little discernible disturbance so they are essentially intact and retain a high degree of spatial and temporal integrity. High disturbance is when agents have likely altered the temporal and spatial integrity to such an extent which has lowered their information potential and therefore scientific significance. Examples of high disturbance include deflation, native vegetation clearance, ploughing, rabbit burrowing, heavy stock trampling and stock rubs. Significant ground disturbance has altered the information potential of a place to such a degree that it has effectively destroyed the integrity of the place. Examples of significant ground disturbance include heavy natural erosion, or grading, excavating digging, dredging and deep ripping by machinery. The information potential remaining will essentially be the intrinsic attributes of the artefacts themselves.

Natural History Potential

Some places have environmental evidence that may span many thousands of years and therefore have the potential to answer significant research questions regarding natural history, climatic and environmental conditions. This evidence can be used to investigate human evolution and adaptation. Generally this evidence is rarely found in Victorian places and has high research potential and scientific significance.

Period and Number of Periods Represented

Most places contain stone tool assemblages attributed to the Australian Small Tool Tradition which may be dated 6,000 and 7,000 years ago (Hiscock & Attenbrow 2004). The landform and depositional context is also usually attributed to the period of latest landscape formation associated with present sea level stabilising 5,000 to 6,000 years BP (Marsden & Mallet 1975: 114-116; Bird 1993: 145; Douglas & Ferguson 1993: 387; Kershaw 1995: 669). Other periods, such as the Late Pleistocene and European Contact, are poorly represented in the archaeological knowledge base. Due to their rareness they are of high research interest and significance. Places with more than one period represented allow the investigation of cultural change, interaction and adaptation over a longer period of time. Based on the criteria of research potential and rarity, these places will have increased scientific significance.

High Integrity Occupation Deposits, Surfaces and / or Features

AV has no official definition of an occupation deposit or feature (r.61(6) Aboriginal Heritage Regulations 2007) but unofficially defines an occupation deposit as "anything that is indicative of human occupation e.g. a single artefact ..." (AV email 25.5.2009). This nominal definition of an occupation deposit takes no account of the depositional context of cultural material which is critical in understanding the archaeological record and the interpretation of past human behaviour – as pointed out by **Binford** (1964: 431) more than 45 years ago in the distinction between primary and secondary depositional context. Taking the above into account, and in contrast to the nominal definition of AV, a high

integrity occupation deposit can be defined as a deposit formed by the laying down of deposits (artefacts and / or sediments) by human activities that bury artefacts and form distinct *archaeological* stratigraphic entities such as layers (e.g. dense lens of stone artefacts & bone between natural soil horizons, stratified shell deposits) or features (e.g. hearths, occupation mounds). An occupation surface is a distinct layer or interface between depositional strata upon which human activities were carried out and artefacts / features deposited. Most commonly this may be represented by a prior land surface (e.g. soil horizon) that has been subsequently buried by natural soil horizons (e.g. dune deposits). High integrity occupation deposits, features and surfaces have a high degree of spatial and temporal integrity and therefore will have higher scientific significance than archaeological deposits with lower integrity (e.g. artefact horizons in environmental deposits).

Multiple Artefact Horizons, Stratified High Integrity Occupation Deposits, Surfaces and / or Features

Places with multiple artefact horizons, stratified high integrity occupation deposits, surfaces and / or features have the potential to investigate chronological change within places; often with greater time depth and chronological resolution compared to places with lower spatial and temporal integrity. They are rarer, have higher research potential, and therefore also have higher scientific significance. High integrity occupation deposits, surfaces and features will likely have higher scientific significance than artefact horizons.

Natural History Potential

Some places have environmental evidence that may span many thousands of years and therefore have the potential to answer significant research questions regarding natural history, climatic and environmental conditions. This evidence can be used to investigate human evolution and adaptation. Generally this evidence is rarely found in Victorian places and has high research potential and scientific significance.

Representativeness

Representativeness refers to the regional distribution of a particular place-type and its scientific significance. It is assessed to whether the place is common, rare or very rare in a given region. Assessments of representativeness are biased by current knowledge of the distribution and numbers of places in a region. Current knowledge varies from place to place, depending on the extent and quality of previous archaeological research. Consequently, a place that is assigned low scientific significance based on other queries, but is considered a rare occurrence, may only be regarded as such in terms of current knowledge of the regional archaeology. Its rareness may not necessarily increase the place significance to moderate or above. The representativeness used for Aboriginal cultural heritage places are:

- Common occurrence;
- Rare occurrence;
- Very rare occurrence.

Common places include the majority of stone artefact scatters. Typically such stone artefact scatters have the following attributes: below moderate artefact density class (≤45 artefacts per m²); date to the Late Holocene, and no evidence of high integrity occupation deposits or features, stratified or otherwise. Rare stone artefact scatters typically have the following attributes: moderate or above artefact density class (≥46 artefacts per m²); more

than one artefact horizon; more than one period of occupation (e.g. early and late Holocene); but may not have high integrity occupation deposits. Very rare stone artefact scatters typically have the following attributes: moderate or above artefact density class (≥46 artefacts per m2); high integrity occupation deposits, stratified or otherwise; and occupation from more than one period (e.g. late Pleistocene and late Holocene). Ensuring a representative sample of significant place-types is preserved provides opportunities for research questions and techniques not yet developed to be available for future archaeologists.

Stone artefact scatters identified during this investigation are rated according to the following queries and answers:

1. What is the average artefact density per metre?

Stone Artefact Density (per m²)*	Score	Density Class
1 – 4	0	Extremely low
5 – 15	1	Very low
16 – 30	2	Low
31 – 45	3	Low - moderate
46 – 60	4	Moderate
61 – 75	5	Moderate – high
76 – 90	6	High
91+	7	Very high

^{*}Minimum artefact size 10mm

- 2. If the average artefact density rates 46 artefacts per m^2 or above, is the density spatially extensive (more than 100m x 100m, 10,000m²)? No = 0, Yes = +1
- 3. Are artefacts within natural soil horizons? No = high integrity occupation deposits (see below), Yes = 0
- 4. Are the natural soil horizons disturbed? No = 0, Yes (high) = -1, Yes (significant) = -2
- 5. Are European Contact or Pleistocene / Early Holocene periods represented? No = 0, Yes = +1
- 6. Is more than one period represented? No = 0, Yes = +1
- 7. Are there high integrity occupation deposits, occupation surfaces and / or features? No = 0, Yes = +1
- 8. Are there multiple artefact horizons, stratified high integrity occupation deposits, occupation surfaces and / or features? No = 0, Yes = +1 (artefact horizons), Yes = +2 (high integrity occupation deposits, surfaces, features)
- 9. Is there an opportunity to research natural history (e.g. climate & environmental changes)? No = 0, Yes = +1
- 10. Is the place a common, rare or very rare occurrence? C = 0, Rare = +1, Very rare = +2

Artefact scatters are rated according to the following scores from the detailed list of queries above:

Score	Scientific Significance Rating
0	extremely low
1	very low
2	low
3	low – moderate
4	moderate
5	moderate – high
6	high
7+	very high

	621 Burwood Highway, Knoxfield – CHMP 15226
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APPENDIX 6 - PREVIOUSLY REGISTERED PL	ACES WITHIN THE GEOGRAPHIC REGION
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VAHR NO	PLACE NAME	PLACE TYPE
7922-0095	BLIND CREEK	SCARRED TREE
7922-0096	HEATHERDALE STREET	LDAD
7922-0245	DANDENONG CREEK 1	SCARRED TREE
7922-0246	DANDENONG CREEK 2	SCARRED TREE
7922-0247	DANDENONG CREEK 3	SCARRED TREE
7922-0248	DANDENONG CREEK 4	SCARRED TREE
7922-0249	DANDENONG CREEK 5	SCARRED TREE
7922-0352	NORTONS LANE 1	LDAD
7922-0572	KOOMBA PARK	LDAD
7922-0835	CHESTERFIELD 1	ARTEFACT SCATTER
7922-0836	CHESTERFIELD 2	ARTEFACT SCATTER
7922-0837	PUMPS 1	LDAD
7922-0857	WINTON 1	ARTEFACT SCATTER
7922-0858	WINTON 2	LDAD
7922-0859	WINTON 3	LDAD
7922-0860	WINTON 4	ARTEFACT SCATTER
7922-0872	HEATHERDALE CREEK 1	ARTEFACT SCATTER
7922-0886	HEATHERDALE CREEK 2	LDAD
7922-0900	WINTON 5	LDAD
7922-0990	HOSIE 1	ARTEFACT SCATTER
7922-1001	DANDENONG CREEK BAYSWATER IA	LDAD
7922-1031	BAYFIELD ROAD 2	LDAD
7922-1182	BLIND CREEK SCARRED TREE 1	SCARRED TREE
7922-1186	157 GLENFERN ROAD UPWEY 2	ARTEFACT SCATTER
7922-1331	DANDENONG RANGES 128	LDAD
7922-1332	BUNGALOOK CREEK AS	ARTEFACT SCATTER
7922-1394	BAYSWATER RAIL RESERVE LDAD	LDAD
7922-1428	BUNGALOOK CREEK AS 1	ARTEFACT SCATTER
7922-1473	DANDENONG CREEK LDAD 1	LDAD
7922-1499	STAMFORD PARK LDAD	LDAD

APPENDIX 7 AUTHOR & SUPERVISOR SUMMARY CVs

Qualifications

Bachelor of Arts (Prehistory) Master of Arts (Historic Archaeology)

Memberships

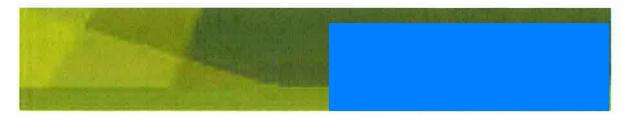
Australian Association of Consulting Archaeologist Inc.: President (VIC) Australian Anthropological and Archaeological Society: Member Australasian Society of Historic Archaeology: State Representative International Council on Monuments and Sites: Full International Member Cultural Heritage Advisor: Aboriginal Heritage Act 2006

Training & Workshop Attendance

First Aid (Level 2)
4WD Course
Industry Induction (Red Card)
2012 Holocene Sand Geomorphology (ANV)
2013 Natural and Cultural Scarred Trees (ANV)
2014 Human and Animal Skeletal (ANV)
2015 Volcanic Plans Geomorphology (MV)

Role Responsibilities

Director and Senior Heritage Advisor Project Supervision Resource Management and Technical Specialist Client Liaison Stakeholder Engagement Quality Controller Facilitator



Relevant Experience

For each Archaeology at Tardis project a's role has included:

- Initial and ongoing client contact;
- Preliminary background research and project familiarisation;
- Project scoping in response to clients development design;
- Principal consultation with all major stakeholders such as Office of Aboriginal Affairs Victoria, Heritage Victoria and Relevant Aboriginal Groups;
- Facilitation and co-ordination of stakeholder meetings;
- Undertake site visit during each component of the project;
- Review of research design and sub-surface testing strategies;
- Allocation of adequate and relevant resources to achieve quality and timeframes;
- Review of draft documents;
- Main participant in solving any issues that may arise; and
- Ensuring final documents have achieved Archaeology At Tardis high standard before submitting to the client/sponsor.



CALEUR MATORETIEDHRESTEATUR DA AGAN BRAN

Qualifications

Bachelor of Conservation, Biology and Ecology (Hons.) Diploma in Indigenous Archaeology

Memberships

Australian and New Zealand Geomorphology Group: Secretary Geological Society of Australia (Victoria Division): Exec. Committee Member Australasian Sedimentologist Group: Member Young Earth Scientists (YES) Network: Member Australasian Quaternary Association Inc (AQUA): Member

Training & Workshop Attendance

2015 5th International Alluvial Fans Conference: Speaker & Session Chair 2015 AACAI Geomorphology of the Victorian Volcanic Plains workshop: Organiser & Participant 2014 16th Australian and New Zealand Geomorphology Group Conference: Speaker 2012 34th International Geological Congress: Speaker 2011 AACAI Geomorphology workshop: Participant

Role Responsibilities

Geomorphological Landscape Assessments Small Cultural Heritage Assessments Historic Cultural Heritage Assessments Geoarchaeological Assessments Soil Disturbance Assessments Resource Management Client Liaison

Relevant Experience

CostaFox Pty Ltd - 415-425 Cooper Street, Epping (2017)

Project archaeologist responsible for completing Historic Cultural Heritage Assessment (HCHA) of an industrial development. The project involved a desktop assessment, survey, HCHA preparation and close consultation with the client.

Spiire - Thornhill Park, 2429-2675 Western Highway, Rockbank (2017)

Project archaeologist responsible for completing Dry Stone Wall Recording (DSWR) of dry stone walls to comply with a City of Melton planning permit. The project involved a desktop assessment, survey, DSWR preparation and close consultation with the client

East Gippsland Shire Council - Bairnsdale Stock Exchange (2017)

Geoarchaeologist responsible for completing the heritage, geomorphological and soil disturbance assessment of a rainwater harvesting installation and water treatment plan. The project involved a desktop heritage assessment, geomorphological site inspection including landscape analysis, soil disturbance report preparation and close consultation with the client.

Pennicott Wilderness Journeys - Wilsons Promontory Cruises, Tidal River (2017)

Heritage advisor responsible for completing legislative compliance assessment under the Aboriginal Heritage Act 2006. The project involved a desktop heritage assessment, including Native Title review, report preparation and close consultation with the client.

Overland Sun Farming Pty Ltd - Iraak Sun Farm (2016)

Heritage advisor responsible for completing legislative compliance assessment under the Aboriginal Heritage Act 2006. The project involved a desktop heritage assessment, report preparation and close consultation with the client.

Melbourne Water - Tootgarook Swamp (2016)

Geomorphologist responsible for completing the heritage, geomorphological and soil disturbance assessment of a large wetland system. The project involved a desktop heritage assessment, geomorphological site inspections including landscape analysis, soil disturbance report preparation and close consultation with the client.

Parsons Brinkerhoff - Bushfire Powerline Replacement Project - Chaplins Creasy (2016)

Geomorphologist and heritage advisor responsible for completing soil disturbance assessment of an underground power line alignment. The project involved a desktop heritage assessment, geomorphological site inspections including hand-augering, soil disturbance report preparation and close consultation with the client.

Parsons Brinkerhoff - Deer Park Powerline Connection (2015)

Geomorphologist responsible for completing soil disturbance assessment of a power line alignment. The project involved a desktop assessment, geomorphological site inspections including hand-augering, soil disturbance report preparation and close consultation with the client.

Places Victoria - Taylors Lakes (2015)

Geomorphologist and field supervisor responsible for completing soil disturbance assessment of a land subdivision. The project involved a desktop assessment, geomorphological site inspections including hand-augering, soil disturbance report preparation, sub-surface testing and close consultation with the client.

Herniman & Group Pty Ltd - Ebden Street, Kyneton (2015)

Geomorphologist responsible for completing soil disturbance assessment of a residential development. The project involved a desktop assessment, geomorphological site inspection including hand-augering, heritage letter preparation and close consultation with the client.

Melbourne Water - The Briars, Balcombe (2015)

Geomorphologist responsible for completing geomorphological assessment of wetlands and stream channels. The project involved a desktop assessment, geomorphological site inspection, heritage letter preparation and close consultation with the client.

Melbourne Water - Toolern Creek (2015)

Geomorphologist responsible for completing geomorphological assessment of eroding stream channel and adjacent stream banks. The project involved a desktop assessment, geomorphological site inspection, heritage letter preparation and close consultation with the client.

Melbourne Water - Tirhatuan Wetlands (2014)

Geomorphologist responsible for completing geomorphological and soil disturbance assessment of a large wetland system. The project involved a desktop assessment, geomorphological site inspections including landscape analysis, soil disturbance report preparation and close consultation with the client.

Dennis Family Homes - Montalto Subdivision (2014)

Geomorphologist and field assistant responsible for completing geomorphological assessment of activity area and for completing field testing. The project involved a desktop assessment, sub-surface testing and CHMP preparation.

Tract Consultants Pty Ltd - Elizabeth Street, Melbourne Historical Investigations (2013)

Field assistant responsible for completing historical investigations. The project involved a desktop assessment, historical excavations and management plan preparation.

APA Groups Gas Pipeline (2013-2014)

Geomorphologist and field assistant responsible for completing geomorphological assessment of pipeline route and for completing field testing. The project involved a desktop assessment, sub-surface testing and CHMP preparation.

SJB Planning - 'The Sisters' Point Nepean Road, Sorrento (2013)

Geomorphologist and field assistant responsible for completing geomorphological and past sea level assessment of Point Nepean coastline and completing field testing. The project involved a desktop assessment, geomorphological analysis of carbon dates and sediments, sub-surface testing and CHMP preparation.

Victorian Desalination Utilities Corridor - Salvage in Compliance with Approved CHMP (2012)

Geomorphologist and field assistant responsible for completing a comprehensive desktop geomorphological assessment of activity area and for completing field salvage.

Melbourne Water & GHD Pty Ltd - Toomuc Creek Retarding Basin (2012)

Geomorphologist and field assistant responsible for completing a comprehensive floodplain geomorphological assessment of the activity area and for completing field testing. The project involved a desktop assessment, sub-surface testing, hand-augering, sediment analysis and CHMP preparation.

Qualifications

Bachelor of Archaeology – Honours Certificate IV in Information Technology

Memberships

Cultural Heritage Advisor: Aboriginal Heritage Act 2006

Excavation Director: New South Wales

Training & Workshop Attendance
AACAI Human Skeletal Remains Workshop

ANU Shell Analysis Workshop

Role Responsibilities

Senior Heritage Advisor Resource Management

Client Liaison

Management & Reporting for Aboriginal and Historic Cultural Heritage requirements

Relevant Experience

Portland Industrial Land Strategy (2015)

Project archaeologist responsible for preparing a report to review both Aboriginal and historic cultural heritage values within the Portland region and to identify recorded heritage sites and to make predictive statements about the likelihood of the activity area possessing as yet undocumented heritage values. The primary focus of the report was to make preliminary recommendations to the client on constraints, issues and opportunities for land use and development within the region.

Toorak Road West, Toorak (2015)

Project archaeologist responsible for preparing an Aboriginal Cultural Heritage Management Plan that identified and managed Aboriginal cultural heritage values for a residential development within the recorded place extent of the Yarra Aboriginal Mission (c.1837 - 1839). The project involved desktop assessment, ground surface survey, CHMP preparation and close consultation with client, Sponsor, Aboriginal communities and the Office of Aboriginal Affairs Victoria.

RACV Cape Schanck Resort (2015)

Project archaeologist responsible for preparing an Aboriginal Cultural Heritage Management Plan that identified and managed Aboriginal cultural heritage values at the RACV Club Cape Schanck Resort. The project involved desktop assessment, ground



surface survey, sub-surface testing, CHMP preparation and close consultation with client, Sponsor, Aboriginal communities and the Office of Aboriginal Affairs Victoria.

Derrimut Drive, Derrimut - Dry Stone Wall Management Plan (2015)

Project archaeologist responsible for preparing a Dry Stone Wall Management Plan for a dry stone wall that runs perpendicular to Robinsons Road, Derrimut. The report provided an assessment and assessed the significance of the drystone wall within the activity area.

Waterstreets Hotel Albury NSW (2014)

Excavation Director responsible for preparing the monitoring methodology approved by the NSW Heritage Council under the NSW Heritage Act 1977. The project involved supervising all heritage works to ensure compliance with the S60 application and development consent, excavation monitoring, building feature recording, artefact analysis and report production.

Koo Wee Rup Gas Supply Main (2014)

Project archaeologist responsible for preparing an Aboriginal Cultural Heritage Management Plan that identified and managed Aboriginal cultural heritage values for the Koo Wee Rup gas supply main. The project involved desktop assessment, ground surface survey, sub-surface testing, CHMP preparation and close consultation with client, Sponsor, Aboriginal communities.

O'Herns Road, Epping - Dry Stone Wall Management Plan (2014)

Project archaeologist responsible for preparing a Dry Stone Wall Management Plan for a dry stone wall that runs parallel to O'Hern's, Epping. The report provided an assessment and assessed the significance of the drystone wall within the activity area.

Western Avenue, Tullamarine (2009 - 2014)

Project archaeologist responsible for preparing numerous Aboriginal Cultural Heritage Management Plans that identified and managed Aboriginal cultural heritage and historic heritage values for a proposed industrial development at Western Avenue, Tullamarine. The numerous projects involved desktop assessment, ground surface survey, sub-surface testing, HV report preparation, CHMP preparation and close consultation with client, Sponsor, Aboriginal community, the Office of Aboriginal Victoria and Heritage Victoria.

Eynesbury Precinct (2005 - 2014)

Project archaeologist responsible for preparing numerous Aboriginal Cultural Heritage Management Plans that identified and managed Aboriginal cultural heritage and historic heritage values at Eynesbury. The numerous projects involved desktop assessment, ground surface survey, sub-surface testing, HV report preparation, CHMP preparation and close consultation with client, Sponsor, Aboriginal community, the Office of Aboriginal Affairs Victoria and Heritage Victoria.

MLN 32 New 22kV Feeder, Melton (2013)

Project archaeologist responsible for preparing an Aboriginal Cultural Heritage Management Plan that identified and managed Aboriginal cultural heritage values for a proposed electricity feeder and power line, Melton. The project involved desktop assessment, ground surface survey, sub-surface testing, CHMP preparation and close consultation with client, Sponsor, Aboriginal communities.

Boneo Equestrian Park (2008 & 2013)

Project archaeologist responsible for preparing two Aboriginal Cultural Heritage Management Plans that identified and managed Aboriginal cultural heritage values at the Boneo Equestrian Park. The project involved desktop assessment, ground surface survey, sub-surface testing, CHMP preparation and close consultation with client, Sponsor, Aboriginal communities and the Office of Aboriginal Affairs Victoria. Management of a c. 6500 years BP Aboriginal shell midden was also required.

Tamhaven Drive, Swan Reach (2012)

Project archaeologist responsible for preparing an Aboriginal Cultural Heritage Management Plan that identified and managed Aboriginal cultural heritage values at the proposed Tamhaven Drive residential subdivision, Swan Reach. The project involved desktop assessment, ground surface survey, sub-surface testing, CHMP preparation and close consultation with client, Sponsor and Aboriginal community.

Qualifications

Doctor of Philosophy

Memberships

Australian Archaeological Association World Archaeological Congress Victorian Archaeological and Anthropological Society Australian Rock Art Research Association

Role Responsibilities

Senior Archaeologist responsible for research and authorship of Cultural Heritage Management Plans. Provide expert client advice on cultural heritage obligations under Victorian Heritage legislation. Provide expert client advice on matters related to Federal and State Native Title legislation.

Relevant Experience

Commissioned by Total (France): Oultural Heritage Surveys and author of the Project Cultural Heritage Technical Baseline Report compliant with PNG statutory regulations and IFC Standard 8 for areas potentially affected by proposed infrastructure developments in the Purari River delta and Orokolo Bay (PNG).

WAII Golpu Joint Venture Infrastructure Project (2015)
Cultural Heritage surveys and community consultations prior to infrastructure developments in Morobe Province PNG

Hood Bay Research Project (2015)

Director of archaeological surveys and excavations for the establishment of a joint research programme involving the University of Papua New Guinea, National Museum and Art Gallery of Papua New Guinea and Monash University Clayton.

InterOil LNG Pipeline Project (2012)

Preconstruction cultural heritage surveys for InterOil Ltd on the Kouri lowlands west of Kerema PNG.

APPENDIX 8 - COMPLIANCE CHECKLIST

COMPLIANCE CHECKLIST						
1 Conditions	Yes	No				
Have the Conditions been followed?						
Have the Conditions been noted on all work plans and schedules (Condition 1)?						
Has the sponsor or their agent ensured that an approved copy of Part 2 of this CHMP has been supplied to the Contractor or person (s) responsible for the activity (Condition 2)?	No.					
Is there an approved copy of Part 2 of this CHMP onsite (Condition 2)?						
Has the Aboriginal heritage induction been conducted (Condition 3)?						
Has the cultural heritage booklet / pamphlet been produced and distributed to contractors (Condition 3)?						
Has the Contingency Plan been adopted (Condition 4)?	,					
2 Suspected Aboriginal Ancestral Remains						
If suspected Aboriginal Ancestral Remains are found, has all activity within 10m ceased?						
Have the remains been left in place?						
Has the location been fenced to prevent any further disturbance?						
Has the Coroner's Office and Victoria Police been notified?						
If the remains are reasonably suspected to be Aboriginal Ancestral Remains, has the Coronial Admissions and Enquiries hotline been notified?						
If confirmed to be Aboriginal Ancestral Remains, has the Victorian Aboriginal Heritage Council been notified?						
As determined by the Council, has the mitigation or salvage strategy been implemented?						
If required has the reburial place been fully documented by an experienced and qualified archaeologist, clearly marked and all details provided to AV?						
Has a strategy been developed to ensure no further disturbance will occur to the remains?						
3 Discovery of Other Unexpected Cultural Material						
Has all activity within 10m ceased?						
Has the Heritage Advisor / RAP been advised within one working day?						
Has the Secretary (DPC) been notified (section 24 of the Act)?						
Has the find been left in place?						
Has the location been fenced to prevent any further disturbance?						
If required, has an appropriate mitigation / salvage strategy been developed?						
If required have the mitigation / salvage works been implemented?						
Have the salvaged finds been appropriately managed in consultation AV and RAP /Traditional Owner groups if they choose to participate?						
4 Changes to Activity						
Has statutory approval been obtained for any changes to the activity?						

621 Burwood Highw	av. Knoxfield –	CHMP 1	5226
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APPENDIX 9 - CORRESPONDENCE & CONSULTATION

Date	From	То	Item
22.08.17	StewartT AAT	VAHR AV	Nol submitted to AV
22.08.17	VAHR AV	Sponsor & AAT	AV issued CHMP number 15008
14.09.17	KarenK AAT	SonyaR Sponsor	Sponsor advised that standard assessment was completed and that the next step would require a complex assessment
27.09.17	StewartT AAT	BWFL	Request representative attendance for complex assessment
27.09.17	StewartT AAT	BLCAC	Request representative attendance for complex assessment
22.09.17	KarenK AAT	SonyaR Sponsor	Advising Complex assessment fieldwork booked for 5-6 and 9-10 October
13.10.17	KarenK AAT	SonyaR Sponsor	Email to advise results of subsurface testing
28.11.17	RobertS AAT	WLaCCHCAC	Advising CHMP was in progress and requesting information on cultural heritage values in the area and comment on CHMP conditions
07.12.17	AllisonQ AAT	SonyaR Sponsor	Draft issued
22.01.2018	LauraC AAT	VAHR AV	CHMP Submitted for Evaluation
20.02.2018	LauraC AAT	VAHR AV	CHMP Resubmission for Evaluation

APPENDIX 10 - KNOX PLANNING SCHEME SCHEDULE 7

03/12/2015 C133

SCHEDULE 7 TO THE DESIGN AND DEVELOPMENT OVERLAY

Shown on the planning scheme map as DDO7.

BORONIA STRUCTURE PLAN AREA

1.0 03/12/2015 C133

Design objectives

- To maintain views toward the Dandenong Ranges National Park from current and future public places on the western ridgeline of the study area, particularly the key views from Tormore Reserve and from Boronia Village.
- To recognise that within the Foothills areas the environmental and landscape significance outweighs the need for urban consolidation.
- To reinforce opportunities for terraced forms of development in the south-east section of the centre, where a multiplicity of views can be shared by residents.
- To visually offset increases in building height through substantial canopy planting of indigenous trees along nature strips, between buildings and the site's street frontage.
- To develop underutilised land along the railway line where higher scale development can be built without direct streetscape, amenity or overshadowing concerns.
- To establish Boronia as an environmentally sustainable centre incorporating best practice ecologically sustainable design principles.
- To ensure that residential development provides an outstanding level of architectural quality, incorporating materials and finishes reflective of the indigenous character of the area and achieving an outstanding rating of ecologically sustainable design principles.
- To ensure the interface between the public realm and new development has regard to the human scale and perceived safety of these environments through active edges and opportunities for passive surveillance.
- To recognise Boronia's heritage including buildings representative of significant periods of Boronia's development.
- To ensure quality design outcomes and 'inviting' environments for all members of the community.
- To design building heights and form with regard to the topographical form and characteristics of the local area.
- To ensure that new residential development provide for transitional built form between changes in building heights as shown at Map 1 of this schedule.

2.0 Buildings and works

03/12/2015 C133

A permit is not required:

- For routine buildings and works associated with railway activities.
- To extend an existing dwelling or construct buildings and works ancillary to a dwelling
 if the height of the building or works is less than 7.5 metres

Heights

New development should not exceed the maximum building height shown on map 1 to this Schedule (for all areas other than those shown as 9 metres).

A permit may be granted to vary the maximum building height shown on map 1 to this Schedule (for all areas other than those shown as 9 metres). Consideration will be given to the following:

- The effect of the slope of the ground.
- Whether a height variation will enable the provision of architectural features that add to the architectural quality of development.
- Whether a height variation will enable development of an outstanding architectural design that otherwise fulfils the design objectives in this schedule, and the Boronia Structure Plan Vision Statement.
- The impact of the development on views to the Dandenong Ranges.

New development within the areas shown as 9m - 2-3 storeys on Map 1 to this schedule must not exceed the maximum building height of 9 metres; a permit cannot be granted to vary this requirement.

Design standards

Consideration will be given to how new development addresses the following issues:

General:

- · Whether the development maximises any opportunities to improve the perceived safety of the public realm it interfaces, including the scale of development, provision of active edges and opportunities for passive surveillance.
- · Whether the development has highlighted key corners and points of entry into the centre through projected building forms.
- The opportunities to improve visual interest, including using art work along blank walls or to screen carparks, the use of building materials to provide contrast, colour, texture and variation.
- · New development, building refurbishments and works must exercise principles of ecologically sustainable design including solar orientation, shading, natural ventilation, minimisation of energy and water usage, adaptable design to provide flexibility in any future use, vegetation retention and landscaping.
- The identification and protection of intact examples of early built fabric, including builtings built during Boronia's significant periods of growth during the 1920s and the subsequent commercial development in the 1960s and 1970s.
- Within Established Residential Environs:
 - Apartments are not encouraged in these areas.
 - For properties which are also located within the Dandenong Foothills Policy area, development opportunities are limited in order to achieve the broader landscape objectives of the Dandenong Foothills Policy and provide for a transition in built form from the activity centre to the foothills.
 - New development within the Dandenong Foothills Policy area should consider and contribute to the characteristics of the foothills,
 - New development within these areas must provide a positive contribution to and respect the existing character of the local area,

KNOX PLANNING SCHEME

- Development should maintain the perception from the street of a single dwelling per lot.
- Within Dispersed Infill Residential:
- Development should maintain the perception from the street of a single dwelling per lot, particularly in areas proposed for 2 storeys or less.
- Within Increased Residential Density:
 - Townhouse and apartment style built form is encouraged within these areas where an outstanding level of architectural quality and incorporation of ecologically sustainable design principles can be demonstrated.
 - · Views to the foothills should be capitalised.

3.0 Colours & Materials

09/02/2012 C62

Encourage development within the Centre to utilise the colours and materials identified in the Boronia Structure Plan, in order to:

- Reinforce the emerging contemporary natural character of the Centre, including the naturalistic theme of the local area and the identified precinct areas.
- Take into consideration the existing landscape, the current use of colour in Boronia, and the proposed visions for the future growth and development as outlined in the Boronia Structure Plan.
- Enable colours along Dorset Road to be more adventurous and less controlled to suit this busy thoroughfare.
- Ensure buildings directly in front of views to the ranges within Boronia Village have natural and earth based tones.
- Incorporate natural robust, textured materials such as stacked stone and timber into new commercial buildings within the Southern Terraces precinct.
- Encourage more active and dynamic colours to reflect the retail and pedestrian activity within the Boronia Junction precinct.
- Utilise charcoal colours on facades to the north and east of Dorset Square with highlights of concrete tonings to the floating panels and blockwork to compliment the landscape view.
- Minimise the visibility and reflectivity of development within the Activity Centre from the adjoining National Park by incorporating non reflective materials and finishes in building design.
- Detail buildings and provide a level of visual interest through the use of contrast, texture and variation of materials.

4.0 Landscape Design

21/11/2013 C95

Landscape design must:

- Sustain references to the unique foothills setting incorporating indigenous species to improve biodiversity corridors and exotic horticultural values that are a part of the local area.
- Reinforce the bush boulevard landscape character along road and rail approach routes to Boronia.
- Maximise opportunities to strengthen landscape themes and incorporate substantial canopy planting in new development and the public realm.

- Incorporate planting to emphasise links and help with direction finding, using indigenous vegetation, and exotic horticultural values that are part of the local area.
- Reinforce the landscape values of the foothills within the Dandenong Foothills Policy area.

5.0 09/02/2012

Signage

Signage (including billboards) within the Activity Centre, and along approaches into the Centre, will be discouraged, with the exception of business identification and directional signage.

6.0 09/02/2012

Information to be submitted with a planning application

All applications must be accompanied with a neighbourhood and site description, design response and schedule of materials and colours which demonstrates how the proposed buildings and works achieve the design objectives.

7.0 De

Decision Guidelines

Before deciding on an application, the responsible authority must consider, as appropriate:

- The design objectives for the area.
- Knox City Council (2006) Boronia Structure Plan and addendum dated March 2012.

8.0

Expiry

03/12/2015

This control expires on 15 December 2019.

APPENDIX 11 - KNOX PLANNING SCHEME SCHEDULE 2

SCHEDULE 2 TO CLAUSE 37.02 COMPREHENSIVE DEVELOPMENT ZONE

Shown on the planning scheme map as CDZ2.

Crown Allotment 2258 Burwood Highway and Scoresby Road Knoxfield Land

The land has an area of approximately 19.21 hectares and is located abutting the northwest corner of Burwood Highway and Scoresby Road.

Purpose

- To provide for the land to be used and developed for residential, retail, commercial, natural systems, open space and associated uses.
- To ensure that the combination of uses, their density, and the scale and character of any development do not prejudice the amenity of surrounding areas.
- To ensure that development occurs in an orderly and staged manner.
- To provide for the enhancement of the flora and fauna habitats on the land.
 - To ensure that development does not adversely affect the floodplain, the waterway conditions, water quality or stream ecosystem of Blind Creek.

1.0 Table of Uses

Section 1 - Permit not required

Agriculture (other than Animal husbandry)

Apiculture

Must meet the requirements of the Apiary Code of Practice, May 1997

Art and craft centre

Must be located in the mixed use area shown on the Crown Allotment 2258 Comprehensive Development Plan.

Bed and Breakfast

No more than 6 persons may be accommodated away from their normal place of residence.

At least two car parking spaces must be provided

Betting agency

Must be located in the mixed use area shown on the Crown Allotment 2258 Comprehensive Development Plan.

Carnival

Must meet the requirements of A 'Good Neighbour" Code of Practice for a Circus or Carnival, October 1997.

Dependent person's unit

Must be the only dependent person's unit on the lot.

Display home

Dwelling (other than bed and breakfast)

Education centre

Must be located in the mixed use area shown on the Crown Allotment 2258 Comprehensive Development Plan.

Earth and energy resources industry

Must meet the requirements of clause 52.08-

Food and drink premises (other than

Hotel and Tavern)

Must be located in the mixed use area shown on the Crown Allotment 2258 Comprehensive Development Plan.

Home occupation

Indoor recreation facility

Must be located in the mixed use area shown on the Crown Allotment 2258 Comprehensive Development Plan.

Informal outdoor recreation

Medical centre

Must be located in the mixed use area shown on the Crown Allotment 2258 Comprehensive Development Plan.

Minor utility installation

Natural systems

Office

Must be located in the mixed use area shown on the Crown Allotment 2258 Comprehensive Development Plan.

Place of assembly (other than Carnival, Nightclub and Place of Worship)

Must be located in the mixed use area shown on the Crown Allotment 2258 Comprehensive Development Plan.

Place of Worship

Must be located in the mixed use area shown on the Crown Allotment 2258 Comprehensive Development Plan.

Postal Agency

Must be located in the mixed use area shown on the Crown Allotment 2258 Comprehensive Development Plan.

Residential hotel

Must be located in the mixed use area shown on the Crown Allotment 2258 Comprehensive Development Plan.

Retail premises (other than Department store and Supermarket)

Must be located in the mixed use area shown on the Crown Allotment 2258 Comprehensive Development Plan.

Road

Store

Must be located in the mixed use area shown on the Crown Allotment 2258 Comprehensive Development Plan.

Telecommunication facility

Buildings and works must meet the requirements of Clause 52.19.

Trade supplies

Must be located in the mixed use area shown on the Crown Allotment 2258 Comprehensive Development Plan.

Veterinary centre

Must be located in the mixed use area shown on the Crown Allotment 2258 Comprehensive Development Plan.

Any other use not in Section 1 or 3

Section 2 - Permit required

Accommodation (other than Dependent person's unit, Dwelling and Corrective institution)

Agriculture (other than Animal boarding, Animal keeping, Animal training, Apiculture, Horse stables and Intensive animal husbandry)

Animal keeping (other than Animal boarding)

Must be no more than four animals.

Child care centre

Hotel

Must be located in the mixed use area shown on the Crown Allotment 2258 Comprehensive Development Plan.

Industry (other than Abattoir, Materials recycling, Refuse disposal, Sawmill and Transfer station)

Must be located in the mixed use area shown on the Crown Allotment 2258 Comprehensive Development Plan.

Nightclub

Must be located in the mixed use area shown on the Crown Allotment 2258 Comprehensive Development Plan.

Service station

Must be located in the mixed use area shown on the Crown Allotment 2258 Comprehensive Development Plan.

Tavern

Must be located in the mixed use area shown on the Crown Allotment 2258 Comprehensive Development Plan.

Utility installation (other than Minor utility installation)

Warehouse (other than Store)

Must be located in the mixed use area shown on the Crown Allotment 2258 Comprehensive Development Plan.

Any other use not in Section 1 or 3

Section 3 - Prohibited

Animal boarding

Animal training Brothel Car wash (except as in Section 1)

Cinema based entertainment facility

Circus

Corrective institution

Crematorium

Extractive industry

Horse stables

Industry (other than Research and development centre and Service industry)

Intensive animal husbandry

Major sports and recreation facility

Motor racing track

Office (except as in Section 1)

Place of Worship (except as in Section 1)

Postal agency (except as in Section 1)

Retail premises (except as in Section 1)

Saleyard

Transport terminal

Veterinary centre - if the Section 1 condition is not met

2.0 Use of land

General requirements

A use must not detrimentally affect the amenity of the neighbourhood, including through the:

- Transport of materials, goods or commodities to or from the land.
- Appearance of any building, works or materials.
 - Emission of noise, artificial light, vibration, smell, fumes, smoke, vapour, steam, soot, ash, dust, waste water, waste products, grit or oil.

Comprehensive Development Plan

The use of land must be generally in accordance with the Crown Allotment 2258 Burwood Highway and Scoresby Road Knoxfield Comprehensive Development Plan incorporated pursuant to Clause 81 of the Knox Planning Scheme.

Exemption from notice and appeal

An application to use land 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 if it is generally in accordance with the Crown Allotment 2258 Burwood Highway and Scoresby Road Knoxfield Comprehensive Development Plan.

Decision guidelines

The following decision guidelines apply to an application for a permit under Clause 37.02, in addition to those specified in Clause 37.02 and elsewhere in the scheme which must be considered, as appropriate, by the responsible authority:

- The effect that existing uses may have on the proposed use.
- The drainage of the land, water quality, waterway and floodplain management.
- The availability of and connection to services.

- The effect of traffic to be generated on roads and orderly management of vehicular and pedestrian traffic.
- The protection and enhancement of the environmental qualities of Blind Creek.
- The preservation of the amenity of nearby residents.
- The interim use of those parts of the land not required for the proposed use.

3.0 Subdivision

Exemption from notice and appeal

An application to subdivide land 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.

Decision guidelines

The following decision guidelines apply to an application for a permit under Clause 37.02, in addition to those specified in Clause 37.02 and elsewhere in the scheme which must be considered, as appropriate, by the responsible authority:

- The interface with adjacent zones, especially the relationship with residential areas.
- Any natural or cultural values on or near the land.

4.0 Specific Provision - Dwellings on a lot less than 300 square metres

A permit is not required to construct or extend one dwelling on a lot with an area less than 300 square metres where a site is identified as a lot to be assessed against the Small Lot Housing Code via a restriction on title, and it complies with the Small Lot Housing Code incorporated pursuant to Clause 81 of the Knox Planning Scheme.

5.0 Buildings and works

General requirements

The staging of buildings and works must be to the satisfaction of the responsible authority.

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KNOX PLANNING SCHEME

Environmental Management Plan

Before the to the commencement of any building or works, a site construction and operation environmental management plan (the Environmental Management Plan) must be prepared to the requirements of Melbourne Water and to the satisfaction of the responsible authority. The Environmental Management Plan must be prepared in or after consultation with Melbourne Water.

The Environmental Management Plan may be amended at the request of or with the consent of the owner of the land. Any amendment must be to the satisfaction of the responsible authority and Melbourne Water.

Application requirements

The following application requirements apply to an application for a permit under Clause 37.02, in addition to those specified in Clause 37.02 and elsewhere in the scheme and must accompany an application, as appropriate, to the satisfaction of the responsible authority:

- A plan drawn to scale which shows:
 - The boundaries and dimensions of the site.
 - Adjoining roads.

- Relevant ground levels.
- · The layout of existing and proposed buildings and works.
- · Driveways and vehicle parking and loading areas.
- Proposed landscape areas.
- Elevation drawings to scale which show the colour and materials of all buildings and works.
- Construction details of all drainage works, driveways and vehicle parking and loading areas.
- A landscape plan.

Exemption from notice and appeal

An application to construct a building or construct or carry out works 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 if it is generally in accordance with the Crown Allotment 2258 Burwood Highway and Scoresby Road Knoxfield Comprehensive Development Plan.

Decision guidelines

The following decision guidelines apply to an application for a permit under Clause 37.02, in addition to those specified in Clause 37.02 and elsewhere in the scheme which must be considered, as appropriate, by the responsible authority:

- Any Environmental Management Plan prepared in accordance with this schedule.
- Any natural or cultural values on or near the land.
- Streetscape character.
- Built form.
- Landscape treatment.
- Interface with nearby areas.
- Parking and site access.
- Lighting.
- Stormwater discharge.
- The preservation of the amenity of nearby residents.
 - The protection and enhancement of the environmental qualities of Blind Creek including the protection of the water quality of these waterways.
- The orderly management of vehicular and pedestrian traffic.
- The visual impact of the building or works upon the area.
- The management of the floodplain and catchment.

6.0 Advertising signs

Advertising sign requirements are at Clause 52.05.

All land located within the residential area shown on the Crown Allotment 2258 Burwood Highway and Scoresby Road Knoxfield Comprehensive Development Plan is in Category 3.

All land located within the mixed use area shown on the Crown Allotment 2258 Burwood Highway and Scoresby Road Knoxfield Comprehensive Development Plan is in Category 1.

All land located within the drainage / watercourse / wetlands area shown on the Crown Allotment 2258 Burwood Highway and Scoresby Road Knoxfield Comprehensive