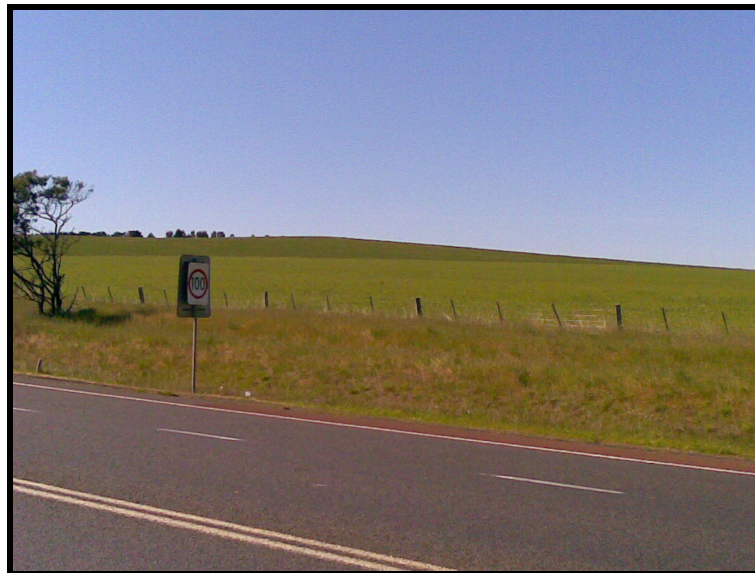


**PRINCES HIGHWAY WEST DUPLICATION:
WAURN PONDS TO WINCHELSEA
DESKTOP AND STANDARD ASSESSMENT
ONLY**



Name and Location of Activity: Princes Highway West Duplication: Waurn Ponds To Winchelsea

Sponsor: VicRoads

Cultural Heritage Advisor: Zvonka Stanin

Plan Author(s): Zvonka Stanin

Report Date: 6/2/2009

Information regarding specific locations of new and existing Aboriginal heritage sites have been suppressed in this report in order to protect the cultural heritage values of the respective sites. For further information please contact the Cultural Heritage Registrar at Aboriginal Affairs Victoria.

EXECUTIVE SUMMARY

The following investigation is part of a broad preliminary assessment of both Aboriginal and non-Aboriginal cultural heritage values for the Princes Highway West Duplication from Waurn Ponds to Winchelsea. This preliminary assessment however, focuses on Aboriginal heritage values. This preliminary assessment will assist VicRoads to ensure that the project is undertaken in a manner consistent with the principles of Ecologically Sustainable Development and relevant State and Commonwealth Legislation.

Parts of the assessment relating to Aboriginal cultural heritage are to be included into a Cultural Heritage Management Plan (CHMP). The preparation of a CHMP is a mandatory requirement under the *Aboriginal Heritage Act 2006*, because of the following:

- The project is a ‘high impact activity’ [Regulation 44 (1) (e), Aboriginal Heritage Regulations 2007], part of which falls within an area of ‘cultural heritage sensitivity’, i.e. within 200m of a named waterway (with a name registered under the *Geographic Place Names Act 1998*) [Regulation 23 (1)] and within 50 metres of a registered ‘cultural heritage site’ [Regulation 41].

An assessment of non-Aboriginal heritage values is included in a separate report to be submitted to Heritage Victoria.

The Activity

This project involves the duplication of the Princes Highway West from Waurn Ponds to Winchelsea and includes the following;

- Construction of a new carriageway to ‘M’ Road standard,
- Regrading substandard sections of the existing carriageway,
- Intersection improvements including the construction of at grade intersections at major cross roads,
- Construction of a new bridge structure over the Geelong-Warrnambool railway line,
- Associated drainage works and service relocation.

Results

Aboriginal cultural heritage values

Desktop Assessment:

- The potential for scarred trees and other Aboriginal cultural heritage values was mostly found to be low, due to road development and wide-spread vegetation removal over the last 150 years.
- A search of the Victorian Aboriginal Heritage Register found, that there was only one Aboriginal cultural heritage value registered within the Activity Area. This was a scarred tree (7822 - 0108), located at [REDACTED], Winchelsea. The tree is culturally significant and is of moderate scientific significance, local historical value and representative of a range of Aboriginal material in the region.
- The Activity Area comprises landforms that are not areas of cultural sensitivity under the Aboriginal Heritage Act or in general; rolling hills located some distance from waterways. The

potential for Aboriginal cultural heritage values is moderate in sections of the Activity Area closer to waterways - along several unnamed ephemeral tributaries near Drayton's Road, in Winchelsea, Lakes Dubbin and Modewarre - in the form of surface and shallow sub-surface artefacts scatters.

Standard assessment:

The standard assessment involved a pedestrian survey of both Aboriginal and non-Aboriginal cultural heritage within sections of the Activity Area. It was based on a judgemental sampling strategy as (described in Burke and Smith 2004: 67-68), accompanied by a drive-through survey.

The pedestrian survey confirmed the location of the scarred tree that was previously registered on the Victorian Aboriginal Heritage Register (██████████ 7721-0108) and another tree ██████████ (██████████ 7721-0935).

Limitations of the assessment of Aboriginal cultural heritage values and implications for further assessment

The standard assessment identified archaeological sites in surface contexts and did not involve any subsurface testing for buried deposits (complex assessment). However surface visibility was poor in many sections of the Activity Area, including areas that are generally excepted as being sensitive for Aboriginal cultural heritage values; ie. in close proximity to water. Thus, it was generally not sufficient to determine the probability for Aboriginal cultural heritage within these sections of the Activity Area.

Given these limitations, several sections of the Activity Area were identified for further sub-surface testing for Aboriginal cultural heritage values (Complex Assessment Recommended in Table 6, see also Map 3, page). Notably; Aboriginal cultural heritage is expected in:

- sections of the Activity Area closest to known waterways, or in proximity to other registered sites.

Other less sensitive landforms should also be tested as a control measure.

Management Recommendations

The Princes Highway West Duplication, Waurn Ponds to Winchelsea, will be conducted in a way that avoids and minimises harm to cultural heritage.

Preliminary recommendations to manage harm or disturbance to Aboriginal cultural heritage sites are presented in Table 14. However, final cultural heritage management processes to be applied and initiatives to be implemented in relation to the activity will be outlined in:

- a Cultural Heritage Management Plan (for Aboriginal cultural heritage values, in accordance with the *Aboriginal Heritage Act* 2006). It is expected that the preparation of the CHMP will entail further testing of sub-surface deposits (Complex Assessment). A copy if the Notice of Intent to complete the CHMP is included in Appendix A.

As noted previously (Division 1) this desktop and standard assessment is preliminary.

Table 10 Minimisation of harm of Aboriginal Cultural Heritage

Site No.	Impact and Potential to Minimise Harm
7721-0108	Intersection widening- site extent must be avoided / arborist report may be required to assess potential damage if site cannot be avoided; requires consultation with the Surf Coast Shire
7721-0935	Intersection widening- site extent must be avoided / arborist report may be required to assess potential damage if site cannot be avoided

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PRINCES HIGHWAY WEST DUPLICATION, WAURN PONDS TO WINCHELSEA CULTURAL HERITAGE REPORT – DESKTOP & STANDARD ASSESSMENT

PART 1

RESULTS OF CULTURAL HERITAGE ASSESSMENT

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The Activity

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- Construction of a new bridge structure over the Geelong-Warrnambool railway line,
- Associated drainage works and service relocation.

The Activity Area

The length of the study area is approximately 23 kilometres in length defined as the Princes Highway West from Draytons Road, Waurn Ponds to Worland Street, Winchelsea. The width of the study area varies along the route and comprises the existing highway reservation as well as additional land abutting the existing reservation that has been defined for the duplication of the highway. The width varies to a maximum of approximately 75m. Refer to layout plans for the duplication of the highway that include a photographic base covering the Study Area (attached as a CD, listed in Appendix E) for

further details.

- Please note that as part of this project, the possibility of a truck parking / rest area is being investigated along the route but is not indicated on the current study area plans shown in Appendix E. This additional area of study (approximately 1 to 2 Ha) will be advised once the study has commenced and shall be included in the tender price.

Other information

The majority of the adjacent land has been highly disturbed as it has and is still being used for grazing/farming however, there are some areas of high conservation land where the ground is less disturbed.

DIVISION 1

DESKTOP ASSESSMENT

This stage of assessment involved the completion of a Desktop Assessment to identify Aboriginal cultural heritage issues and constraints affecting the Activity Area. The Desktop Assessment involved minimal consultation with cultural heritage stakeholders outside of researching existing registers and heritage report information.

1. PERSONNEL AND ASSESSMENT METHODOLOGY

1.1. Cultural Heritage Advisor

The Cultural Heritage Advisor for this assessment is Zvonka Stanin who has a Bachelor of Arts (Honours) degree in archaeology and seven years experience in archaeological survey and excavation of both Aboriginal and non-Aboriginal cultural heritage within Victoria and southern New South Wales. Paul Bazalicki did the mapping of the activity and survey areas. Jasma Walker did the background research at Aboriginal Affairs Victoria (AAV) and Heritage Victoria (HV). Maya Salim of VicRoads, Catherine Webb (Phd) and Zvonka Stanin (Terraculture Pty Ltd) undertook the editing of this assessment.

1.2. Desktop Assessment Methodology

The Desktop Assessment into the Aboriginal and non-Aboriginal cultural heritage present in the Activity Area was conducted between 1 September and 21 October 2008. A search of the Victorian Aboriginal Heritage Register and other registers took place on the 1 October and was completed by Jasma Walker.

This investigation was undertaken by searching relevant Commonwealth, State and local registers for any known heritage sites or places in the Activity Area, which includes:

- Aboriginal Heritage Register (Aboriginal Affairs Victoria);

Background research was also undertaken into the cultural heritage context and environmental history of the Activity Area. This involved reviewing existing information on the Activity Area including:

- Any reports from previous heritage surveys undertaken in or within the vicinity of the study area or on any relevant cultural heritage matters;
- Any published works about cultural heritage in the relevant geographic region;
- Any historical and ethno-historical accounts of Aboriginal occupation of the relevant geographic region; and
- Any relevant community submissions received by VicRoads.

Further information was sought regarding:

- Details of any efforts made by the Heritage Advisor to consult with any cultural heritage stakeholders in the study area (there are no Registered Aboriginal Parties for the area);
- A summary of any information provided by a representative of a relevant registered Aboriginal party or other person about the cultural heritage in the Study Area; and
- Details of any obstacles encountered in completing the assessment.

2. RESULTS OF DESKTOP ASSESSMENT

2.1. Physical Background

The following section provides background information on the physical context of the Activity Area. This information is used to model past human use of the landscape and the potential for archaeological remains or other types of heritage in the area.

Extending between Waurn Ponds and Winchelsea, from the municipalities of City of Greater Geelong to the Surf Coast Shire, the Activity Area crosses three parishes in the County of Grant and several small towns, as follows:

City of Greater Geelong

- From Drayton Road, Waurn Ponds to Pettavel Road, Pettavel in the Parish of Duneed.

Surf Coast Shire

- From Pettavel Road, Pettavel, in Parish of Duneed to Lot TP344300, Mount Moriac, Parish of Modewarre;
- From Mount Moriac (as above), Parish of Modewarre to Mt Pollack Road, Buckley, Parish of Lake Lake Wollard; and
- From Buckley to Winchelsea, Parish of Lake Lake Wollard.

The Activity Area is located in the centre of the Corangamite Catchment Management Authority (CCMA) region. It comprises three broad geomorphic divisions including the Western uplands, Western Plains and Southern Plains (Robinson et al 2003: ii); totalling almost 13 350 km of south-western Victoria. The Activity Area forms only a small part of the CCMA's Western Plains division and it crosses over the Otway Plain (between Considines Road and Buckley Roads).

2.1.1. Climate and Rainfall

The Corangamite in general has a temperate climate with cold to mild winters and hot summers. Average rainfall is spread relatively evenly throughout the year, but achieved its highest in July. Summer temperatures are hot to warm but are ameliorated by close proximity to Port Phillip Bay. Mean maximum temperatures of 24.9°C are reached in February. Winter temperatures are cold with the lowest winter mean minimum temperature of 5.4°C normally occurred in July (Bureau of Meteorology 2008).

2.1.2. Flora and Fauna

Today, the central Western Plains are characterised by cultivated paddocks, interspersed with historical garden remnants to cypress avenue wind-breaks. Some may date to the nineteenth century, but little remains of the vegetation that dominated the Western plains in this area prior to European arrival. The western part of the Activity Area, would have comprised of the dominant of Plains Grassy Woodlands (Plains Woodlands or Forests), with grassy woodlands located on the lower slopes and hills of the Otway Plain. Grassy woodland would have also characterised the eastern section of the Activity Area within the Parish of Duneed. Plains Grassland and Chenopod Grasslands are common around the clay soils near Pettavel Road (EVC 1750 layer; DPI website Nov 2008).

2.1.3. Regional Geology and Geomorphology

The Activity Area falls within the Geelong and Colac Geological map sheets (Department of Mines 1:63,360 map sheet). Spencer Jones, who presents the explanatory note for the Geelong mapsheet, stated that:

“Broadly speaking the area is a plain, consisting of extensive basalt flows overlying and partly blanketing flat-lying Tertiary sediments. This plain has been broken into several units by block faulting and is dominated by the raised Barrabool Hills fault block or horst, which exerts a controlling influence on the outcrop geology and drainage pattern. The Rowsley Fault and Lovely Banks Monocline, both orientated broadly north-south are part of the major fault system which forms the western side of the Port Phillip Sunklands or graben. These structures progressively step down the plain level of the country from northwest to the east across the Geelong standard sheet area” (Spencer Jones 1970: 7).

Online geological/geomorphological mapping (DPI website Nov 2008 - sourced from Vandenberg 1997 Queenscliff SJ 55-9 Edition 2, 1:250 000 Geological Map Series) - indicate that the Activity Area comprises a range of geological units extending over a landscape dominated by gently inclined flat, undulating ground with low rises throughout.

From Drayton Road to just west of Pettavel Road, the Activity Area samples basalt that is part of the Quarternary Newer Volcanics, associated with Mount Duneed. A former volcano, Mount Duneed is a low hill (~300m above sea level) surrounded by Plio-Pleistocene lava flows and located south-east of the Activity Area. The Jan Juc Formation, which dominates most of Waurn Ponds, is briefly sampled just west of Pettavel Road. To its west, is the Eumeralla Formation. It extends as far as Mount Moriac and comprises Early Cretaceous sediments including conglomerates, coarse sandstones and mudstones. Further details are provided in Table 1.

Table 1: Geology / Geomorphology of the Activity Area

Geological Unit	Unit Type (subtype)	Unit Name	Age	Classification / Environment	Lithological Description
1	Rock unit	Newer Volcanic Group	Quaternary (Holocene) to Neogene (Pliocene)	Sedimentary (Non-Marine / Colluvial)	Extrusive: tholeiitic to alkaline basalts, minor scoria and ash
2	Rock Formation	Jan Juc Formation	Palaeogene (Oligocene)	Sedimentary (Marine)	Marine: marl, clay, silt, glauconitic
3	Rock Formation	Eumeralla Formation	Cretaceous (Early Cretaceous)	Sedimentary (Non-Marine (Alluvial))	Fluvial, braided stream deposits: volcanolithic sandstone, siltstone, mudstone, with feldspar and quartz grains, fine to medium grained
4	Rock Formation	Unnamed alluvium	Quaternary (Holocene)	Sedimentary (Non-Marine (Alluvial))	Fluvial: alluvium, gravel, sand, silt
5	Rock Formation	Moorabool Viaduct Sand	Neogene (Pliocene) to Neogene (Miocene)	Sedimentary (Marine)	Gravel, sand, silt
6	Rock Formation	Unnamed colluvium	Quaternary (Holocene)	Sedimentary (Non-Marine (Colluvial))	Fluvial: "gully" alluvium, colluvium: gravel, sand, silt

Hydrology

According to Catchment Information Mapping (DPI website Nov 2008) the Activity Area does not impinge upon any significant wetlands or floodways; despite the proximity of Lake Dubbin and Lake Modewarre. The area is relatively dry with one in 100 year flood occurring only between Wainwrights Road and Buckley School Road in the west. Any creeks are tributary and ephemeral.

The best known waterway within the Activity Area is the modified natural drainage system (a tributary of Waurn Ponds Creek) that dissects the northern (and middle) boundary of the Activity Area adjacent to the Princes Highway and Drayton Road. Waurn Ponds Creek itself is approximately 16 km long and commences in the Barrabool Hills near Mount Moriac. It flows west to east towards Barwon River to

later join it at Marshall.

The Activity Area is situated adjacent to several lakes including Lake Dubbin (< 500 m) and Lake Modewarre (< 2 km), south of Waltons Road at Buckley. Furthermore, the name of Parish of Lake Wollard betrays its origins as an ancient waterway; its most recognisable remnant being Lake Corangamite, near Colac (to the west of the Activity Area).

Soils

Soil types within the central Western Plains reflect its diverse geological base. As an example, early Parish maps depicted a range of soil types from light soils timbered with gum to rich loamy soils suitable for cultivation. A more up to date reference for the soils within the Activity Area can be sourced via general surveys of soils within the Otway region by Pitt (1981), Maher and Martin (1987) and through the DPI website (Robinson et al. 2003, sourced in November 2008).

2.2. Historical Background

The following section provides background information on the history of Aboriginal and European settlement within the Activity Area. Its purpose is to provide a historical context for the field investigation.

2.2.1. Aboriginal Pre-Contact History

Europeans began to make written observations on the Aboriginal people of the Western Plains in 1802, when explorers began to chart the entrance of Port Phillip Bay. However, most of the text relates to 1836 onwards when there was a permanent European presence. Clark (1990) collated the primary sources of this ethnohistory in his reconstruction of traditional language boundaries in western Victoria. These sources include journal entries and government correspondence produced by explorers such as Matthew Flinders and Charles Grimes, as well as settlers and missionaries, particularly G.A. Robinson, the Chief Aboriginal Protector.

Aboriginal Pre-Contact History

William Buckley - an escaped convict from an aborted 1803 settlement at Sorrento - was adopted by the *Wada wurrung* people and lived with them until July 1834. As recorded by Morgan (1852), Buckley's reminiscences have become an important source of historical data on the Aboriginal clans in the *Wada wurrung* area. Excluding Morgan (1852), most of the historical data for the early contact period refers to specific events, usually involving contact and conflict between settlers and the local Aboriginal clan.

There is little historic data from this period. However it could be assumed that at least some clans continued to live in traditional ways, and this could be useful to understand how the *Wada wurrung* peoples lived in earlier pre-contact times. Corris (1968) cited in Clark (1990) believes "*(that) there is so little known about the social organisation of the 'Wada wurrung' bespeaks the rapidity with which they were physically destroyed by settlers seeking undisputed possession of their land*" (Clark 1990: 277).

The *Wada wurrung* Language Group

Following Clark (1990), at the time of European contact Geelong was part of the *Wada wurrung* language area. The *Wada wurrung* territory extended along the coast from Painkalac Creek at Aireys Inlet east into Port Phillip Bay to the Werribee River. It extended north as far as Fiery and Mt Emu creeks.

The social and spatial organisation of traditional Aboriginal societies have been the subject of considerable debate. It is considered by most that Aboriginal societies were organised according to local descent groups called clans (ie. various authors cited in Clark 1990). Clans were the "*landowning, land renewing and land sustaining unit of Aboriginal society*" (Clark 1990: 4, 5). Clans occupied estates or home country. The area of land over which the clan hunted and gathered has been called the range, as explained by Clark "*...the tract or stretch of country identifiable as the economic*

range, normally included the estate and was thus owned by clans. The band seasonally occupied and utilised various parts of the range in a settlement pattern that was a response to the group's habitat" (Clark 1990: 4, 5).

He goes on to state that:

"the clans within a language grouping are capable of being distinguished on the basis of differing linguistic and cultural characteristics" (Clark 1990: 9).

Clark suggests there were twenty-seven *Wada wurrung* clans at the time of European contact:

"I have been able to reconstruct 27 'Wada wurrung' clans. using Lourandos' (1977) estimates that clan sizes ranged from between 40 to 60, this would give a 'Wada wurrung' population of between 1080 and 1620 at the time of contact. Dawson (1991) estimated clan sizes were 120, and this would give 'Wada wurrung' a population of 3240. The real figure was probably somewhere between 1620 and 3240" (Clark 1990: 307).

Wada wurrung clans were patrilineal and organised into moieties belonging to either the *Waa* (crow) or *Bunjil* (eaglehawk) moiety. Marriage partners were required to belong to different moieties (Clark 1990: 276-7). The *Wada wurrung* clans who lived on the coast were the first to come into direct contact with Europeans. The clan that occupied the areas around Geelong, the *Wada wurrung balug*, was probably the next to have direct contact with the white explorers and continued to have the same between 1802 and 1835.

The *Wada wurrung balug* Territory

The Activity Area was probably in the territory of the *Wada wurrung balug* as this included *"the country between the Barwon and Werribee Rivers"* (Massola 1969: 66, in Clark 1990: 330). The clan location is given as the Barrabool Hills (Clark 1990: 333). The clan moiety was *Bunjil*. It is thought that the *Wada wurrung balug* was the clan who adopted William Buckley in 1803 (Clark 1990: 331). Robinson considered that the *Wada wurrung balug* exercised considerable influence over other clans in the eastern section of the Western District.

Located around Geelong, the *Wada wurrung balug* was highly exposed to Europeans in the early days of Victorian settlement, and members of the clan were being employed by settlers to collect stray stock and cut wood from as early as about 1839 (Clark 1990: 331-332). This contact led to the rapid demise of traditional lifeways and indeed to the *Wada wurrung balug* clan. Recorded to number 300 people in 1837, by 1853 there were only 17 surviving clan members. The survivors refused to occupy a reserve set up along the Barwon River at Buntingdale, as it was not in their territory (Clark 1990: 293, 332). According to Brownhill, the *"last full-blood male of the clan"* reportedly died in 1885 (Brownhill 1955, in Clark 1990: 333).

The Activity Area may occupy the former territory of the *Gerarlture* clan who settled land west of Lake Modewarre (Wedge 1836 in Croll and Wettenhall 1937: 27).

2.2.2. Aboriginal Post-Contact History

The presence of *Wada wurrung* people on land comprising the present day municipalities of City of Greater Geelong and the Surf Coast Shire, continued to be written about throughout the latter 19th century - mostly in government correspondence – and until being forced onto mission stations such as at Buntingdale or until their integration into the broader community. As an indication of their decline Clark records:

"Fyans noted that when he arrived in the Geelong district in 1837 he was ordered to assemble all the Aboriginal population to receive gifts. Assisted by William Buckley all the Aborigines within 30 miles of Geelong were assembled, amounting to 297 men, women and children. Each received a blanket and a portion of flour. In 1858 Fyans considered that no more than 20 of these 297 people were alive" (Clark 1990: 299).

In 1861, the *Wada wurrung* survivors were gathered onto a parcel of land at Mt Duneed, the Duneed Reserve, on which a 'shelter hut' had been installed (Clark 1990: 300). The remnant population, which around this time appeared to have numbered eleven people, were encouraged to stay at the Duneed Reserve and were prohibited from staying in the Geelong Township after sundown. There are considerable historic details on the fate of particular individuals. According to Clark the last "*full blood*" *Wada wurrung* *balug* was known as "*King Billy....whose Aboriginal name was 'Waurun Bunyip' or 'Worm Banip' died at the Geelong hospital on the 11th of November 1885*" (Clark 1990: 306). In relation to other *Wada wurrung* clans Clark records the demise of Billy Leigh of the *Yaawang* (You Yangs):

"Billy Leigh, purported to be the last of the 'Yaawang' (sic 'Yaawang') clan, died on the 9th of August 1912. Billy had been adopted by Fredrick Armytage and his wife, the owners of Wooloomanata Station. He was baptized and confirmed in the Trinity Church of England in Lara, and when he died the Armytages erected a memorial above his grave in the eastern cemetery in Geelong" (Clark 1990: 335).

2.2.3. Non-Aboriginal Post-Contact History

The non-Aboriginal history of the Activity Area has been documented broadly in a number of published and unpublished texts, including Wynd (1971, 1979), Wild (1950), Anderson (1994), Rowe and Huddle (1998-2000) and the Port of Geelong Authority (1959). Wynd's 1992 account of the Barrabool Shire ('Barrabool; Land of the Magpie' 1992) - the primary antecedent of the current municipality of Surf Coast Shire in particular - provides the main source of information for the history of settlement along the Princes Highway east of Winchelsea. This and other sources have been brought together in the recent revision of the Surf Coast Heritage Study Stage 2 (Kellaway and Rowe 2008) which - following on from Wynd - cites the influence of the Western district land boom in the 1860s and the formation of the County Roads Board for the development of the highway. The following summaries are based primarily on these latter studies.

Early History 1800-1835

James Grant in 1800 and John Murray in 1802 had explored the Victorian coastline east of Cape Otway and up to Port Phillip Bay. However it was not until mid-1802 that Corio Bay itself was discovered. It was then that Matthew Flinders entered Port Phillip Bay, named and camped at Indented Head, before rowing across Corio Bay and climbing the You-Yangs, to gain a view of what he considered a pleasing and fertile country. Flinders briefly encountered members of the *Wada wurrung*. Port Phillip Bay was surveyed on foot by Charles Grimes the following year. From this time to 1824, the only European to visit the area was William Buckley.

In 1824 Hume & Hovell traversed the north shore of Corio Bay between Point Wilson and Hovells Creek, where they learned from a *Wada wurrung* party that the name of the bay was Jillong. Ten years later, due to serious limitations on available land in Van Diemens Land, leaders of the Port Phillip Association, Batman and Fawkner, made inroads into the settlement of the Bay. In 1835 Batman once again set up a base camp for exploration at Indented Head and traversed the area around Geelong on his way to the You Yangs.

1836-1850

In 1836 the first wave of squatters arrived in near Geelong. In 1837, in response to a petition from local settlers wanting protection from the Aborigines, the Governor of the colony, Governor Bourke, appointed Captain Foster Fyans to the Magistracy and "*instructed the Surveyor General of New South Wales to lay out two townships in Geelong - one near the bay and the other near the river*" (cited in Kaskadanis 2008: 19). Hoddle reserved the land at the junction between the Moorabool and Barwon Rivers for this town but the bridge further upstream became the focus of the settlement. Fyans was also appointed to issue pasturing licenses in the area, the first official recognition that Geelong existed. A town was surveyed between the Barwon River and Corio Bay and the town of Geelong officially came into existence on 26th October 1838. However, the first sale of town lots was not held until February 1839. Large parcels of land were purchased from the Crown from 1840 onwards.

Shires and Local Councils

- Greater City of Geelong (former Barrabool Shire)

The municipality of Waurn Ponds and Pettavel are located in the City of Greater Geelong, which stretches from the Barwon River to the north, to Lorne along the Great Ocean Road in the south. These settlements were located predominantly along major waterways such as the Barwon River and local creeks including Waurn Ponds Creek and Thompson Creek. The most attractive land within the Barrabool shire was located along Waurn Ponds Creek, with land to the southwest considered too rough to settle (Wynd 1992: 9):

John Charles Dark was one of the earliest pastoralists in the Barrabool Shire area. He developed a sheep run in 1836 near today's Pollocksford. A surveyor who had worked in Tasmania prior to coming to Port Philip Bay, Dark left the area a year later but was rapidly followed by Captain Frederick Dewing and William Roadknight, who settled to the east of Pollocksford along the Barwon River (Wynd 1992: 7-8).

The introduction of squatters into the area was characterised by the occupation of large pastoral runs close to major rivers and creeks. By 1842 most of the available land within the Barrabool Shire was occupied, with squatters who then expanded further south to areas previously deemed unappealing, predominantly scrub land (Pescott 1985: 28). Dr. Alexander Thompson settled in the area in late 1836. He developed 'Thompson's Old Station', which was close to the junction of the Barwon and Moorabool rivers. By 1840, he moved south of the township of Geelong, purchased 640 acres of land east of the Barwon River and built a homestead he named 'Kardinia'. He also took up another pastoral run extending south from the Barwon River to Spring Creek.

- Parish of Duneed

The first sale of the divided lots within the Parish of Duneed occurred in 1840 and continued until the mid 1850s. The sale was of 25 blocks of varying sizes of land in the newly defined Barrabool Shire, which was located between the Barwon River and Waurn Ponds Creek. The land in the Barrabool hills proved popular. The Shire was slowly divided into eight parishes, although by 1847 only the parishes of Barrabool, Duneed, Modewarre, and Gnarwarre were mapped and proclaimed. The remaining shires were slowly divided up and sold over the next 30 years. A census for the Parish of Barrabool in 1854 showed a total population of 857 and commented on the variety of immigrant populations inhabiting the area (Wynd 1992: 16).

This shift in land ownership and sale put considerable pressure on squatters in the area who were forced to relinquish the land or buy it from the government. Much of the land within the Parish of Barrabool was bought by speculators and subsequently sold or leased to settlers and pastoralists. The land associated with the chain of ponds between the Barwon River and Waurn Ponds was predominantly agricultural, with large farms located on both sides of the Barwon River. Barrabool maintained a reputation as a farming area where it was common to subdivide larger farms into smaller holdings to maintain agricultural growth and development in wheat, oats, and hay production (Wynd 1992: 21-22).

- Parish of Modewarre

Wynd (1992: 94) writes that to the west of Duneed lied Modewarre Parish, "*large part of which is occupied by the lake of the same name*".

Primarily a pastoral centre, in the late 1850s Modewarre was the focus of two small communities, Laketown (later changed to Buckley) and the eponymous Modewarre (also Layard). The name Buckley is likely to derive from the pioneering Buckley family, who first settled in Modewarre at a property called 'Westbank' (Wynd 1992: 204).

- Parish of Lake Lake Wollard (including parts of the former Shire of Winchelsea)

Parish of Lake Lake Wollard is dominated by the town of Winchelsea, the history of which had been summarised in Kellaway and Rowe 2008 'Surf Coast Shire Heritage Study 2B 2007-2008' (Kellaway

and Rowe 2008). The study combined some of the major texts relating to the township (Kiddle 1961, Koster and Lloyd 1990 and Gregory et al. 1985 for full reference see original) into the following discussion:

“By 1837, settlement on the Barwon River within the former Shire of Winchelsea had been well established. Those in possession of significant landholdings included: The Derwent Company, Thomas and S.L. Learmonth, John Highett and William Harding, Hugh Murray, G.T. Lloyd, G.A. Anstey, A. Morris and W. Carter, the Austin brothers Thomas, Josiah and Solomon, Henry Hopkins, C. Armytage and Sons, and Thomas Ricketts. As a result of the European settlement of the land came the establishment of overland trade routes.

The transportation of provisions between the fledgling towns, centres and pastoral stations in Victoria witnessed the development of country stores. The rapid progress of Geelong and the Western District at this time brought about the beginnings of a settlement on the Barwon River now known as Winchelsea, on the route between Geelong and Colac. was in December 1842 when Charles Beal, accompanied by P.N. Trebeck, founded the township of Winchelsea which they originally called ‘The Barwon’. It was situated near a natural ford in the Barwon River. There, they built the Barwon Hotel and the first general store (sic).

The township of Winchelsea was first surveyed and laid out by A.J. Skene on 4 December 1850 to 1851, Governor Latrobe, then Superintendent, submitted the name of ‘Winchelsea’ for approval. It was named after the English port of Winchelsea. The township was laid out on the western bank of the River, with some suburban residential allotments on the opposite bank (sic). Settlement soon developed, particularly after the construction of the timber bridge over the Barwon in c.1851 when the volume of bullock drays and other traffic increased. In 1867, this bridge was replaced by the existing bluestone bridge” (Kellaway and Rowe 2008: 51-52).

It is likely that transport in the Winchelsea area in the early settlement period involved travelling along bullock tracks, many of which are still in use today. The former ‘Barwon’ or ‘Austin’s Ford’ provided a natural stopping place along the route between Geelong and Warrnambool Colac Road. This road was actually a rough track that followed Waurn Pond’s Creek, and as a main route to Colac, it was one of the first tracks to receive attention. By 1858 the Colac Road, whilst still being a track, was receiving regular maintenance. During the mid 1800s, funds from ratepayers were insufficient to improve roads and to construct bridges. A toll system was put in place during the 1860s to pay for major bridges and road works (Kellaway and Rowe 2008:52). Also according to the Surf Coast Shire Heritage Study:

“From the mid 19th century, Winchelsea became an early centre for commerce, education, postal services and social activities; the home of station hands, shearers and some tradesmen who worked for the numerous graziers and farmers that constituted the outlying population; the retirement location for a number of people from the land; and the place of residence of the population providing the support infrastructure - including bankers, store keepers, hotel keepers, teachers and employees of the Winchelsea Shire. The late 19th and early 20th centuries witnessed further developments in the town. St. John the Baptist Roman Catholic Church was built in 1892-3 (the Anglican church had established itself at Winchelsea over 45 years earlier in 1846), while the original public library behind the Barwon Hotel was replaced with a new building on the triangular block on the Geelong side of the bridge in 1894. In 1908, the Winchelsea Shire Hall was replaced with a commodious new building. In 1914, the Winchelsea Water Works Trust was constituted. After the Great War a substantial grandstand was erected at the Eastern Reserve in 1923 as a functional memorial to the people of Winchelsea and district who served in the armed services.

...By the mid 20th century, the steady progress in the evolution and development of Winchelsea had slowed. This resulted from the opening of the Great Ocean Road (initially between Torquay and Eastern View from 1922), drawing the passing tourist trade away from Winchelsea. The rapid decline of the town as a stopping place also resulted from technological advances in vehicular transport, with the ability of motor cars and truck to travel great distances without the need for roadside stops. A small increase in the population came in the 1950s, when Housing Commission homes were built for employees of the nearby coal mine” (Kellaway and Rowe 2008:52).

2.2.4. Land Use History

While the broad history of Parishes within which the Activity Area is situated illustrate – for the most part - deceptively consistent land-use patterns (see also Table 2), a detailed land-use history of the many allotments that make up the Activity Area is highly complex; and not within the scope of this assessment. The following discussion is, therefore, largely based on Wynd’s (1992) description of the towns developed directly on the Princes Highway, and set against Anderson’s (1994) history of Victorian roads. Current conditions and other land-use details, according to chainage (based on VicRoads layout plans, Appendix C) are provided in Table 3.

Table 2 Broad chronological summary of land-use, associated activities and effects on archaeological deposits throughout various historical time periods

Time Period	Land-use	Activities	Effects on archaeological deposits
1830s	Establishment of squatters runs	Cattle and sheep grazing	Disturbance of surface artefacts only. Minimal vegetation removal would have occurred. No building construction.
1840	Government land sales commence	Continuation of grazing	Little additional disturbance.
1840s	Further subdivision	Small farms	Minimal disturbance through farming activity, such as fencing.
1850s	Cropping predominates in region	Ploughing	Disturbance of deposits within the plough zone. Erosion likely to be initiated in areas.
1850s	Beginning of vineyards in region	Cultivation	Several vineyards apparent in vicinity of road alignment, at Pettavel Road (Wynd 1992: Fig 4.1). Deep disturbance of sediments would result.
1880s	End of vineyards, decline of cropping, return to animal husbandry including dairying	Construction of animal enclosures, buildings and other facilities for dairying etc. small town infrastructure	Continued disturbance of sediments; to varying depths .
1840s onwards	Road construction	Construction, reconstruction, road widening, provision of drainage of several roads throughout area including	Disturbance of sediments, particularly after bituminisation and the construction of modern roads.

Princes Highway West

Starting out as a series of dirt tracks in the 1850s, Princes Highway West was the first major inland link between Geelong and the Western District.

Separated by ocean and sparsely populated, Western District’s prime attraction was whaling, with the Henty brothers first establishing whaling stations at Port Fairy and Portland in the early 1830s. Mitchell’s account of his exploration of the Western interior in ‘Australia Felix’ stimulated overland exploration, and by the mid 1840s, squatters occupied most of the Western District (MHSBC 1985).

The general demand for livestock and farm produce in the colony as a result of the Goldrush, contributed to development of the Western District from the 1850s onwards and increased demand for new routes between the interior and coast. Bush tracks first developed between older centres such as Hamilton, Portland and Geelong (MHSBC 1985: 20), with subsequent establishments of several major roads; including the Princes Highway West between Geelong and Warrnambool.

In his history of Victorian roads, Anderson (1994: 72) writes that the construction of the Princes Highway West (also known as *Melbourne Road West*) featured uniform construction that was far less turbulent than that of its eastern section. However, until the advent of the CRB (Country Roads Board in 1913) the road was in places a “*little more than a dirt track*” (Anderson 1994: 72). By 1913, the road was of an acceptable standard. Anderson’s reading of the First Annual Report of the Board for example, suggests that “*clearly the roads in the western section of what would later become the Princes Highway were either already in good condition or could be brought up to an acceptable standard with relative ease*” (Andersons 1994: 73). The Report also noted the “*massive bluestone bridges and culverts*” in relation of the south-west Victoria.

Today, much of what appears on the highway is the result of improvements made in the 20th century as

the “Princes Highway came in for its fair share of funding and reached standards of design and construction equalled to any road in the country” (Anderson 1994: 74). Current conditions include wide reserves, road-side drainage, and wide crossings linking the location of several historic townships, some of which are no longer in existence.

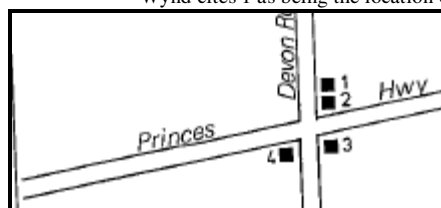
Clifford, Parish of Duneed

Wynd (1992: 83) writes that Clifford was established strategically around the Cape Otway/Devon Roads and the Princes Road as early as 1853 and it “soon had a school/church, hotel, store and smithy”. The four buildings situated within the vicinity of the intersection, are as follows:

- The Church of England (1853 - closing in 1875);
- The Store/ Post Office (ref. 1869);
- Hotel (ref. 1871-1877 destroyed by fire);
- Blacksmith (1872).

By the year 1890, all of the people living in the town were listed as farmers; suggesting that the town was no longer in existence. Current conditions appear to confirm this with aerial photographs indicating that the Princes Highway here has been considerably altered from the small road it would have been in the 1870s. A passing lane has been introduced and there’s a deviation to the northeast. A private residence has also been constructed in the northwest corner of the intersection.

Figure 1 Detail from Figure 5.7 in Wynd 1992: 83, showing the approximate location of places mentioned in the text. Wynd cites 1 as being the location of the Store 2. Clifford Hotel 3. Church of England 4. Smithy



Mount Moriac, Parish of Duneed

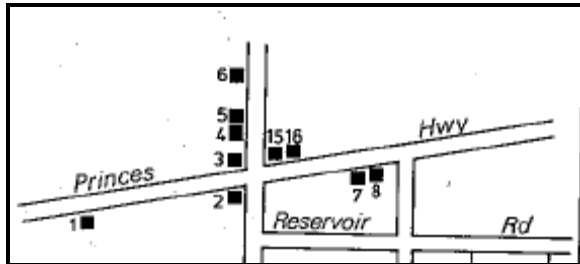
Mount Moriac is the most western hamlet in the Parish of Duneed. It expanded around a church school constructed in 1853. Originally a hut with a thatched roof, by the 1860s the school was expanded to become the Mount Moriac Catholic Church (St Patricks), which is located across 1170 Princes Highway. Wynd’s (1992: 84-88) history of the town refers to several other features historically associated with the Activity Area, including:

- The Mount Moriac Church School (1860 – closed 1875, rebuilt in original position in 1853);
- Duneed/Mount Moriac Hotel (1855- after 1890s rebuilt, to present);
- Blacksmith (ref. 1861 – 1900s, one of a number of smiths in the town);
- Mount Moriac State School (1875- rebuilt in another location in 1968);
- Police Barracks (ref. 1869);
- The Parish Hall (probably 1903 – 1962 – replaced by a new building);
- The store (one of several recorded in town: see photo of Moriac in Wynd 1992: 87).

Mount Moriac was the centre of thriving farming population for most of the 19th century. However, the opening of the Colac railway in 1877 and the establishment of Moriac Station some kilometres away led to a decrease in population. By the 20th century the town began to fully decline.

Despite this, the town boasts the remnants of several older buildings, including the Mount Moriac Hotel and weatherboard homes (for example, 1170 Princes Highway, the Hoveys, see Murphy 2000). Furthermore, while a petrol station might have been built over the remains of one of the local blacksmith’s shop, historical artefacts continued to be collected from the location. The Hovey family, who are long term residents and current land owners of the neighbouring property, have also noted historical rubbish on their own adjacent allotment. It has been suggested that the rubbish is part of the remains of a 19th century dwelling owned by the Gower family (Ms Hovey pers. comm.).

Figure 2 Detail from Figure 5.8 in Wynd 1992: 84, showing the approximate location of places near the Princes Highway Activity Area. Wynd refers to 1. as being the location of the St. Patricks Church., 2. Duneed/Mount Moriac Hotel 3. Smithy 4. Shire Hall 5. Church of England 6. Bible Christian Methodists Chapel 7. Police Barracks 8. Mount Moriac State School 15. Hall 16. Store



Laketown (now Buckley), Parish of Modewarre

Laketown was the northern most of the two communities that sprung around Lake Modewarre in the 1860s. Three former buildings appeared to have been situated within the Princes Highway alignment between Considines and Waltons Road (Figure 3, as depicted on a copy of the 1861 Parish Plan held at the National Library of Australia). These include:

- the State School (marked as S.S.);
- the Post Office (P.O.);
- a note referring to 'Hotel, Mt Moriac'; however the note is clearly erroneous and seems to be referring to the Mount Moriac Hotel located several kilometres to the east.
- and another feature, located within the property of James C. Wallace, west of Considines Road.

The features are also described in Wynd's brief history of Barrabool (1992: 94, Figure 2), including the Lady of the Lake Hotel (1854, destroyed by fire in 1965). The Hotel is likely to have been situated just north of the Princes Highway (Figure 4).

Figure 3 Known Aboriginal cultural heritage sites within or near the Princes Highway, Waurm Ponds to Winchelsea Activity Area (Victoria. Dept. of Crown Lands and Survey. Modewarre, County of Grant, part of cartographic material marked as 1891. MAP RM 2741/303 within the catalogue.nla.gov.au 10/11/2008)

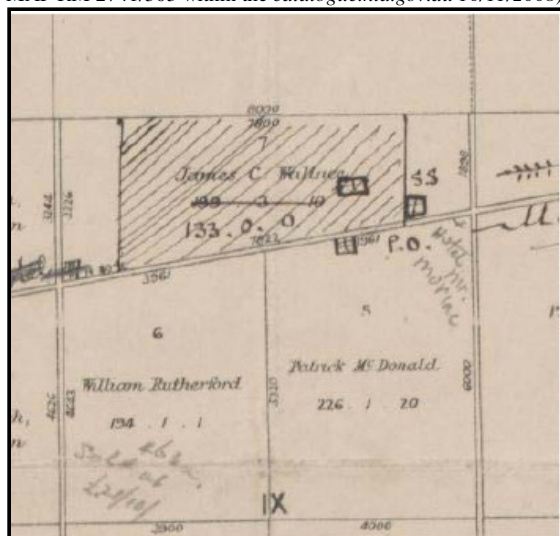


Figure 4 Detail from Figure 5.11 in Wynd 1992: 94, showing the approximate location of places mentioned in the text. Wynd cites 1 as being the location of the Mount Moriac National School, 2. Laketown School and 3. Lady of the Lake Hotel.

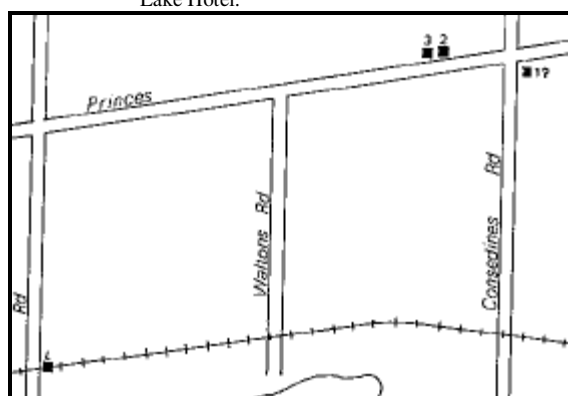


Table 3 Current land-use, according to chainage; utilities are depicted in the VicRoads layout plans (Appendix C)

Areas	Current Land-use	Landform	Potential Survey
86.7 – 87.4 km	Road reserve and private landholdings: crossing roads and dams	Creek; vegetation	Yes – creek line; testing
87.3 - 88.1 km	Road reserve and private landholdings: crossing roads and dams; private driveway to Pettavel winery	Grazing land; some trees	Yes - entrance to Pettavel winery
88.1 – 88.8 km	Road reserve and private landholdings: crossing roads and dams; private driveway and roads	Possible drainage channel; irrigation only	None
88.8 – 89.5 km	Road reserve and private landholdings: crossing roads and dams; private driveway and roads	As above;	Yes
89.5 – 90.2 km	Grassland flats	Grassland flats	Yes: Cape Otway Road
90.2 – 90.9 km	Road reserve and private landholdings: crossing roads and dams; private driveway and roads	Gentle rise; old cypress avenues – wind breaks	Yes: check two areas over private land
90.9 – 91.6 km	Road reserve and private landholdings: crossing roads and dams; private driveway and roads	Gentle rise	Road reserve for testing
91.6 – 92.3 km	Road reserve and private landholdings: crossing roads and dams; private driveway and roads; Simmonds Road	Gentle rise	None
92.3 – 93.0 km	Road reserve and private landholdings: crossing roads and dams; private driveway and roads; Evans Road	Hill	Old School; Arthur Streeton Memorial; Yes
93.0 – 93.7 km Big Road Reserve	Road reserve and private landholdings: crossing roads and dams; private driveway and roads; Hendy Main Road – hotel on corner; heavily disturbed	Hills slope and perhaps old water channel	Yes; but disturbed
93.7 – 94.4 km	Road reserve and private landholdings: crossing roads and dams; private driveway and roads; Hendy Main Road – hotel on corner; heavily disturbed	Big road reserve: old gate posts; hill; St Patricks – Mount Moriac	Yes – likely historical
94.4 – 95.1 km	Road reserve and private landholdings: crossing roads and dams; private driveway and roads; Hendy Main Road – hotel on corner; heavily disturbed	Cropped; flat land	No
95.1 – 95.8 km	As above	Hill in south; possible creek	Yes; northern reserve
95.8 – 96.5 km	As above	Flat land	No
96.5 - 97.2 km	As above; grand gate	Old stump; flat land;	No
97.2 – 97.9 km	As above; Channel Crossing: Considines Road	Creek Crossing	Yes;
97.9 – 98.6 km	As above	Flat land	No
98.6 – 99.3 km	As above : Waltons Road	Flat land	Historical well: Yes- Watson Road
99.3 – 100 km	As above:	Flat Land: eucalyptus no scar	No
100.0 – 100.7 km	As above	Flat land; some cropping	No
100.7 – 101.4 km	As above; over Buckley Road	Flat land: some cropping	No

Table 3 Current land-use, according to chainage; utilities are depicted in the VicRoads layout plans (Appendix C)

Areas Area	Current Land-use	Landform	Potential Survey
101.4 – 102.1 km	As above	Plain; Possible quarry ?	Yes
102.1 – 102.8 km	As above; Mt Pollock Road	Plain, gentle rise Some eucalyptus	Yes
102.8 – 103.5 km	As above: close to Lake Dubbin	Old avenue of trees; hill slope – close to sensitive area?	No: next area
103.5 – 104.2 km	As above: historical gates	Historical gates: hill; lake	Yes: several areas
104.2 – 104.9 km	As above:	Lower slopes of hill	No
104.9 – 105.6 km	As above; reservoir or channel over Wainwright Lane; new pine plantation	Flat land: lower slopes of the hill	Yes: testing west of the plantation
105.6 – 106.3 km	As above: Buckley School Road & Melbourne _Warrnambool Railway ; big intersection	Regenerated area; flat land	Yes
106.3 – 107. 0 km	As above: railway overpass	Floodplain	Yes
107.0 – 107.7 km	As above; old animal coral and avenue of cypress trees	Hillside: flat area scarred tree area; check tree	Yes
107.7 - 108.4 km	Road crossing	Lower hill side	No
108.4 – 109.1 km	As above	Flat Land	Yes: Collins Street
109.1 – 109.8 km	As above: Worland Street	Creek drainage and crossing	Yes: checkout reserve between Lennox Street and Worland

2.3. Previous Archaeological Assessments

There has been only one previous archaeological assessment that includes the current Activity Area (Murphy 2000); so for the purpose of this review, a selected number of reports are also considered. The focus of these reports is on adjacent areas and/or local areas which sample a similar landform.

Murphy 2000

Murphy (2000) conducted a survey for a proposed duplication of about 11 kilometres of the Princes Highway between Anglesea Road, Waurm Ponds and Hendy Main Road, Mount Moriac. For much of this area the Princes Highway runs parallel to Waurm Ponds Creek, crossing it near the Anglesea Road turn off and again further west near Bogans Lane at Mount Duneed. As a result of this survey several Aboriginal archaeological sites were recorded (Victorian Aboriginal Heritage Register [VAHR] Site numbers 7721-0443, -0444 and -0445), all surface stone artefact scatters.

Murphy's assessment also included a desktop and standard assessment of non-Aboriginal cultural heritage along the route, including a desktop of all of the sites mentioned in Wynd (1992). In conclusion she noted:

- that the previously identified sites of St Patrick's Church, Mt Moriac Estate and Mt Moriac Hotel were all located outside the study area;
- a group of old oak/trees and two old cypress trees at end of Pettavel Road (chainage 85,980) should be retained;
- a weatherboard house at 1170 Princes Highway should be retained; and
- that no archaeological evidence was located of the documented sites: Clifford Blacksmith, Mt Moriac State School, Mt Moriac Hall, Mt Moriac Store, and the Mt Moriac blacksmith. No further investigation was recommended for these sites however, if any evidence of these sites was to be exposed then a suitable qualified archaeologists should be called on site to access, record and manage the remains.

Parish of Duneed

Marshall 1999

At the southern end of Highton between the Princes Highway and Augustines Drive, Marshall (1999) undertook a survey for Aboriginal archaeological sites in an area proposed for residential subdivision. The subject land was a grassed paddock with a minor drainage line (a tributary of Waurn Ponds Creek) at the southern end with two low but prominent hills at the southwestern and southeastern ends. A single Aboriginal artefact (VAHR Site 7721-0434) was found on the former hill near the ruins of an old dairy.

Rhodes 1999

On the western side of Pigdons Road, Rhodes recorded Aboriginal stone artefacts (VAHR Site 7721-0419) at the location of a proposed Koorie Residential College [REDACTED]. The location of the proposed college is relatively close to [REDACTED] Waurn Ponds Creek. Rhodes originally recorded two artefacts in an area that was heavily disturbed and considered that these were remnants of a larger scatter site that had been dispersed. Several more artefacts were located during earthworks; these were found near the interface of a black loamy soil and the clay subsoil between depths of 30-40cm.

Marshall 2000

In 2000, Marshall undertook a survey of the alignment for the Moriac to Anglesea, commencing approximately 5 km south of the Activity Area at Mount Moriac. The alignment largely comprised ploughed paddocks adjacent to road reservations, within an undulating hill landform adjacent to dry gullies and shallow tributaries – as well as a small creek (Thompsons) similar to that which is located within the Activity Area. Eight locations along the alignment were chosen for a detailed survey and no Aboriginal cultural heritage was located at the time. Marshall concluded while visibility was a factor – given the nature of the previous and current land use – the chances of Aboriginal archaeological material occurring along the route are low.

Weaver 2001

Weaver (2001) reports on an archaeological survey of proposed residential subdivision (10 ha) on the eastern side of Ghazeeopore Road between Monterey Drive and Waurn Ponds Creek. A single Aboriginal archaeological site was found during the survey. VAHR Site 7721-0461 was an isolated artefact site consisting of four pieces of stone [REDACTED]. Weaver states that 'Aboriginal archaeological sites could be located anywhere on the floodplain of the Waurn Ponds Creek' (Weaver 2001: 8). However, no artefacts were found along the banks of the creek where there was good ground exposure and much of the subject land was covered with fill.

Andrew Long and Associates 2001

The Waurn Ponds Valley Parklands – Pioneer Reserve was surveyed as part of the development of three new baseball diamonds and associated facilities. This reserve is on the southern side of the Princes Highway on both sides of Waurn Ponds Creek. The small tributary mentioned above (Marshall's investigations at Highton) meets the main channel of Waurn Ponds Creek at this reserve.

A survey of the development area by Andrew Long and Associates (2001) resulted in the recording of three isolated artefact sites (7721-0454-0456). The first of these was located on Waurn Ponds Creek and the other two approximately 50m from this creek or the noted tributary. While limited subsurface testing in the form of shovel test pits did not yield any additional artefacts, excavations associated with the construction of the baseball diamonds have uncovered hundreds of artefacts recovered from sandy deposits.

Additional archaeological investigations in the Activity Area were undertaken by Marshall and Hyett (2007) and the cultural heritage assessment of the relocation of the Baseball Centre by Marshall (2007) (see below).

Marshall 2002a

Marshall (2002a) undertook an archaeological survey and subsurface testing of the 'Claremont', Ghazepore Road, Waurn Ponds property prior to its development as a housing sub-division. Despite excellent views over the Waurn Ponds valley, no Aboriginal or historical archaeological sites or places were located.

Marshall 2002b

TerraCulture conducted and reported on an archaeological investigation of the Bunnings Greenfield development located at the intersection of Pigdons Road and the Princes Highway (Marshall 2002b). This investigation involved a foot survey followed by subsurface testing in the form of rotary hoe transects, and the sieving of sediments dug by the hoe. This initial investigation resulted in the location of 31 Aboriginal artefacts, largely concentrated in the northwestern corner of the development area. On these artefacts, the report noted that:

"Generally, the low recovery rates from the test points where a sample of ground was sieved, indicates that the artefact scatter has a low density. However, increasing the number of test points and the amount of sieved ground is likely to result in the recovery of further material" (Marshall 2002b: 16)

However, Marshall also concluded:

"The stone artefacts may represent part of the original distributions for sites registered on the low hills to the north of the survey area, on the northern side of the Princes Highway. Alternatively, they may belong to sites more closely associated with the creek that were once more bounded, and have become dispersed through ploughing and other rural activity. Either way, on present evidence it is highly likely that stone artefacts occur in changing densities across the entire survey area" (Marshall 2002b: 16).

As a result, Marshall recommended that the depth and contents of the artefact bearing deposits noted during the initial investigations be further documented via manually dug test pits. Consequently, five 1 x 1 metre test pits were excavated on the crest and flanks of a low rise on the northwestern side of the development area.

The test pits revealed that the surface grass overlay a loose brown silty soil containing grass roots. This soil became progressively firmer with increasing depth and beneath the grass roots became extremely compact, breaking off in large lumps that were difficult to crumble. Stone artefacts occurred randomly throughout this silty soil layer, with the majority in the upper, softer layers. These layers appear to constitute a 'plough-zone', within which archaeological material has been disturbed and dispersed. Yellowish-brown clay underlaid the silty sediments and this was devoid of artefactual stone.

Marshall and Paynter 2003

Marshall and Paynter (2003) undertook an archaeological survey and subsequent subsurface investigations at a property on the corner of Rossack Drive and Princes Highway, Waurn Ponds. Given the high numbers of artefacts recovered from the nearby Bunnings land, similar densities of material were expected here. However, relatively few artefacts were recovered, mostly towards the southern end near Waurn Ponds Creek. These artefacts were registered with AAV as two separate sites, designated VAHR numbers 7721-0576 and 7721-0604.

Marshall 2007

TerraCulture Pty Ltd conducted an archaeological survey at a section of the Pioneer Road reserve on the opposite (Eastern) bank of Waurn Ponds Creek to the Leisurelink Aquatic site, Grovedale (see Marshall and Hyett 2007). This assessment was required for the construction of a new baseball field to allow the complex within the subject land to be removed for the construction of the new Aquatic Centre.

Two new Aboriginal archaeological sites were recorded during the survey. Site cards were submitted to

AAV for the two sites but they did not appear on a search of the site registry. Both sites were low-density artefact scatters in a disturbed context and both were damaged or removed during construction of the new baseball field under Consents to Disturb issued by the *Wathaurong* Aboriginal Co-operative Ltd.

Marshall and Hyett 2007

Following Andrew Long and Associates (2001) cultural heritage assessment of the Geelong Regional Baseball Centre (see above), TerraCulture Pty Ltd prepared a Cultural Heritage Management Plan (AAV No. 10039) for the proposed Waurm Ponds Leisurelink Aquatic Centre at the corner of Colac Road and Pioneer Road at Waurm Ponds (formerly the Geelong Regional Baseball Centre).

A Complex Assessment was undertaken in the Activity Area but no Aboriginal cultural heritage material or features were found. This was attributed to the fact that the Activity Area was significantly disturbed during the construction of the baseball complex. No further archaeological investigations were required.

Geelong Ring Road – Section 3: Cultural Heritage Management Plan (Webb, Butcher and Cooper 2007)

Many of the archaeological investigations for this Cultural Heritage Management Plan (CHMP) were conducted prior to the introduction of the *Aboriginal Heritage Act 2006*. The primary investigations were conducted in preparation for an Environmental Effects Statement that was completed in 2005 and comprised:

- a desktop assessment of known archaeological values and previous archaeological investigations;
- a standard assessment that included two stages of fieldwork investigations involving pedestrian survey (a preliminary and a later detailed assessment); and
- a complex Assessment that included three zones of subsurface testing (between Hamilton Highway and Barrabool Road, between Barrabool Road and Princes Highway and between Princes Highway and Pigdons Road).

Additional testing was conducted in October 2007, as part of the CHMP to ensure that it met the requirements of the *Aboriginal Heritage Act 2006*.

During the Desktop Assessment, 18 Aboriginal archaeological sites within approximately one kilometre of Section 3 of the Geelong Ring Road were known and listed on the Victorian Aboriginal Heritage Register. One of these sites (VAHR 7721-0504) was located on the alignment, and thus likely to be affected by the construction of the Geelong Ring Road, Section 3.

During the Standard Assessment, two additional archaeological sites which were likely to be affected by the construction of Section 3 of the Geelong Ring Road were located and registered with the Victorian Aboriginal Heritage Register (VAHR site numbers 7721-0605 and 7721-0606). During the Complex Assessments, twelve additional archaeological sites were located on the alignment. These are VAHR site numbers 7721-0801, 7721-0804, 7721-0805, 7721-0844, 7721-0845, 7721-0846 and 7721-0858 – 0863. In total, the investigation identified fifteen Aboriginal archaeological sites that were to be impacted by the Geelong Ring Road project. No Aboriginal Historical Places were identified at the time.

Section 4A of the Geelong Ring Road, Waurm Ponds: Cultural Heritage Management Plan (Kaskadanis 2008)

TerraCulture Pty Ltd was commissioned by VicRoads (Geelong Ring Road Project) to prepare a management plan for the proposed Section 4A of the Geelong Ring Road at Waurm Ponds, approximately 500 metres west of the current Grovedale Activity Area. A search of the Victorian Aboriginal Heritage Register found that there are more than 23 Aboriginal archaeological sites within a 1 km radius of the Section 4A Geelong Ring Road Activity Area. Eight of these sites are within 500 metres of the Activity Area; all of which are stone artefact scatters. One previously registered artefact scatter, VAHR 7721-0434 is located in the Activity Area, an isolated artefact on a hill found beneath a

cypress tree.

The results of the complex assessment in the Activity Area found three new stone artefact scatters (VAHR site numbers 7721-0847, 7721-0848 and 7721-0849). All three sites are located to the north of the Princes Highway on higher ground, generally above the 40-metre contour. No Aboriginal cultural heritage material was located near Waurn Ponds Creek. This was attributed to previous significant ground disturbance such as the construction of the Princes Highway, bridges and existing services such as gas, water, sewer, power, overhead power lines, and telecommunications which lied under filled areas.

Results of the artefact analysis indicate that the composition of the overall artefact assemblage includes mostly flaking debris and broken flakes with a smaller proportion of complete flakes and cores. VAHR site numbers 7721-0847, 7721-0848 and 7721-0849 are not considered to be recovered from *in situ* deposits, as the artefact scatters have experienced some degree of ground disturbance such as historical land-use practices (e.g. clearance of native vegetation, ploughing / grazing activities).

Marshall, Kaskadanis and Toscano 2008

In September 2008 Marshall, Kaskadanis and Toscano completed a Cultural Heritage Management Plan (VAHR number 10174) for the proposed construction of the Waurn Ponds Shopping centre. The proposed Activity Area for the shopping centre was located on the same parcel of land as that of the current Activity Area. A complex assessment was conducted via eighteen 50cm x 50cm pits, eleven 1m x 1m test pits, one 2m x 2m pit and fifteen mechanical trenches. Two new Aboriginal cultural heritage places were found both in a surface and subsurface context (VAHR site numbers 7721-0869, 7721-0895) during the complex assessment. These were found on slightly higher ground, in a silty/sandy deposit. Salvage was recommended for these sites before the commencement of the activity.

The southern most extent of the Shopping Centre Activity Area was reserved as a buffer zone for the construction of the centre. This buffer zone, approximately 1.974ha, overlapped with the northern most extent of the Waurn Ponds Retirement Village. Six test pits, including one 1m x 1m pit and five 2m mechanical trenches, were excavated within this area. The stratigraphy for all these pit was uniform with a thin vegetation layer over dark hard pan clay. No Aboriginal cultural heritage was found within this buffer zone.

Parish of Modewarre

The absence of previous assessments within the Parish of Modewarre, most likely due to the lack of urban development within the Parish, means that reference material is based on landform comparison; but it also reflects the generally low potential for Aboriginal cultural heritage in the area. The major exception is Lake Modewarre, which is incidentally the more developed part of the Parish.

Parish of Lake Lake Wollard

There have been several previous archaeological assessments in the Winchelsea area, conducted as a response to the planning requirements for specific developments. While there have been no studies relating specifically to historical sites, most of these studies have been about, both, Aboriginal and historical cultural heritage assessment. Relevant studies are summarised below:

Weaver 1995

Weaver conducted a desktop study for the proposed route of an optical fibre cable between Winchelsea and Winchelsea South. The route crossed the Barwon River and ran parallel to a creek. Weaver nominated four locations as probably sensitive for Aboriginal archaeological sites, however it is not known whether these areas were subject to further investigation.

Brown and Lane 1996

Brown and Lane surveyed the route of the South Western Natural Gas Pipeline between Lara and Colac and assessed the crossing at the Barwon River, northwest of Winchelsea. During construction of

this pipeline a large quantity of Aboriginal artefactual stone was uncovered. Lane recorded this material as six separate sites (VAHR site numbers 7621-0050, 7621-0052, 7621-0054, 7621-0064-65).

Amorosi 1998

Amorosi documented a collection of stone artefacts gathered by Koenig, which includes a large quantity of material from local sites at Winchelsea. This collection, currently held by the Winchelsea Historical Society, contains a wide range of formal and non-formal tool types, many of which were probably collected from locations along the Barwon River. Amorosi notes that few of the artefacts are provenanced to specific locations, which according to her, makes the Koenig collection of limited value in reconstructing the composition of surface sites in the Winchelsea area.

Marshall 2000b

Marshall undertook surveys of two recreation reserves in Winchelsea for the Surf Coast Shire. These reserves are Winchelsea Common, to the east of and at a distance from the Barwon River; and Naphine Reserve, which included the eastern and part of the western banks of the Barwon River. Marshall surveyed both areas thoroughly and while visibility was fair (up to 50%) in the Winchelsea Common, no Aboriginal archaeological sites were found and it was determined that none of the scarring on the abundant Red Gum trees in the common was due to Aboriginal activity. In contrast, visibility was very poor along the banks of the Barwon River. Nevertheless, two Aboriginal stone artefact sites were located (VAHR site numbers 7762-0081-0082) and both occurred in the disturbed contexts on the terrace of the eastern side of the river.

Marshall concluded that the Winchelsea Common was probably not sensitive for Aboriginal archaeological sites, while he predicted that given greater surface visibility, more artefacts would be found at Naphine Reserve.

Marshall 2005

In 2005, Marshall undertook a survey of a Teleta Estate, in Worland Street in Winchelsea for both historical and Aboriginal cultural heritage values. On the basis of land use history, ground conditions, and owing to its distance to the Barwon River, Marshall considered the Estate paddock - which had been cultivated at the time - not to be sensitive for Aboriginal archaeological sites. No archaeological sites were located during survey.

Regional Surveys

In broad terms, the low potential for Aboriginal archaeological sites away from waterways such as the Barwon River, has been demonstrated by Richards and Jordan (1999), who investigated the drainage basin as part of AAV's statewide survey program. The Activity Area falls within the boundaries of the Barwon River drainage basin but was not included in any of the three sample areas at Inverleigh, on the Bellarine Peninsula and along the Upper Barwon. Along the Barwon River at Inverleigh, 18 kilometres north of Winchelsea, Richards and Jordan recorded four Aboriginal stone artefact sites within a single 100 m² area. For the Inverleigh study area as a whole, Richards and Jordan discovered 55 previously unrecorded sites and found that:

“Site density is high up to 300m from permanent sources of fresh water and up to 200m from seasonal sources of freshwater. At greater distances from permanent or seasonal water a relatively low, but constant archaeological density of present” (Richards and Jordan 1999:113).

2.4. Registered Aboriginal Archaeological and Historic Sites and Places

Maps and plans showing the location of the cultural heritage sites and places described below can be found in Parts 7 and 8 of this Plan.

2.4.1. Aboriginal Sites and Places

A search of the Victorian Aboriginal Heritage Register (VAHR) has found that, there is one registered Aboriginal archaeological site within the Activity Area (Table 4). This site is the Winchelsea Scarred

Tree (7721-0108) recorded by Lawrie Canole in 1986, as part of a local survey for the Victorian Archaeological Survey (the predecessor to Aboriginal Affairs Victoria).

The site is located [REDACTED], near [REDACTED] Princes Highway, Winchelsea [REDACTED]
[REDACTED]

- The importance of the tree - a very mature *Eucalyptus camaldunesis* (River Red Gum) - has also been acknowledged by the Surf Coast Shire. It is registered on the Shire’s Heritage Overlay as place number H033. A Shire plaque commemorates its importance, describing it as a “300 Year – Old Tree” (but does not mention its relevance to Aboriginal people); and
- The tree has also been marked on local Winchelsea Heritage Trail maps.

Eight other archaeological sites are located within 500 metres of the road. The majority of these represent surface artefact scatters located largely in association with the banks of Waurn Ponds. Another six archaeological sites are located between 500 metres to two kilometres away from the Activity Area and these are also mostly artefact scatters, generally located close to watercourses.

It should also be noted that while the co-ordinates for the scatter 7721-0899 are known (Geelong Ring Road Pettavel), no further information could be gained from the VAHR at the time of the assessment. On the basis of the co-ordinates it should be assumed that the site is located outside the Activity Area.

Aboriginal Historical Places

There are no Aboriginal Historical places registered within the Activity Area.

These results are summarised in the Table 4 below:

Table 4 Known Aboriginal cultural heritage sites within or near the Princes Highway, Waurn Ponds to Winchelsea Road Duplication Activity Area

Aboriginal Heritage Site No.	Site Name	Site Type	Proximity to Activity Area
7721-0108	[REDACTED]	Scarred Tree	within the Activity Area
7721-0419	[REDACTED]	Artefact Scatter	250-500 m
7721-0443	[REDACTED]	Artefact Scatter	250-500 m
7721-0444	[REDACTED]	Artefact Scatter	250-500 m
7721-0455	[REDACTED]	Artefact Scatter	250-500 m
7721-0445	[REDACTED]	Artefact Scatter	250-500 m
7721-0456	[REDACTED]	Artefact Scatter	250-500 m
7721-0529	[REDACTED]	Artefact Scatter	250-500 m
7721-0898	[REDACTED]	Artefact Scatter	Within the Blue Circle Quarry , north of the Creek and within 100 metres
7721-0628	[REDACTED]	Scarred Tree	Approximately, 200 m south of the Activity Area
7721-0899	[REDACTED]	Artefact Scatter	100 m opposite Pettavel Road entrance
7621-0052	[REDACTED]	Artefact Scatter	1-2 km
7621-0053	[REDACTED]	Artefact Scatter	1-2 km
7621-0082	[REDACTED]	Artefact Scatter	1-2 km
7621-0081	[REDACTED]	Artefact Scatter	1-2 km
7721-0767	[REDACTED]	Artefact Scatter	1-2 km
7721-0635	[REDACTED]	Artefact Scatter	500-1000m

More detailed information on the sites identified during the Desktop Assessment that will be impacted

by the Project is provided in the table below:

Table 5 Known Aboriginal cultural heritage sites that will be impacted by the Project

Aboriginal Heritage Site No. and Name	Coordinates (MGA Zone 55)	Site Dimensions (L x W x Depth) (m)	Cultural Material & Context	Cadastral Information
7721-0108 [REDACTED]	[REDACTED] (recorded incorrectly) – correct co-ordinates see survey [REDACTED]	9 metre radius	Scarred Tree and Associated Plaque	VicRoads Reserve, Surf Coast Shire, [REDACTED] Parish of Lake Lake Woollard, County of Grant

Implications for Aboriginal cultural heritage

The desktop assessment indicates that the Activity Area contains few landforms that are generally considered by archaeologists to be sensitive for Aboriginal archaeological sites. Land located in close proximity - generally within 200 metres - of Waurin Ponds, Lake Dubbin and - to a lesser extent smaller, ephemeral tributaries – may be considered to be sensitive. This is largely due to the number of previously recorded sites identified close to waterways. Archaeologists also generally agree that, in the absence of mature trees (caves or rock shelters), the most likely site to occur within landforms in close proximity to water, will be low density stone artefact scatters on the ground surface.

The potential for subsurface archaeological material – particularly with regard to deeper silt deposits associated with creek and lake landforms – should also be considered. However, any potential for Aboriginal cultural heritage values is subject to prior significant ground disturbance. The history of land-use for the Activity Area, as noted, indicates significant ground disturbance over large sections of the area as a result of road-works and the provision of services over many decades. Most road reserves have been ‘dressed’, cross over private drive-ways and have road side-drainage (see VicRoads layout plans in Appendix C). Most of the landform sampled by the Activity Area features Victoria’s historical heritage (see below) and modern construction:

- The construction and improvements to the roadway/s, and associated utilities over the last 150 years would have included random amounts of soil removal, stabilisation, compaction and stockpiling within the road reserves;
- The construction/modification and subsequent destruction of buildings; construction of dams and other agricultural structures;
- The introduction of irrigation channels;
- Widespread clearing of native vegetation for pasture.

These modifications were likely to have covered over or destroyed earlier Aboriginal or historical cultural heritage; including features such as scarred trees. Furthermore, they would have an adverse affect on the ground integrity, vegetation, hydrology and wider environment of the Activity Area - and therefore the survival and intactness of Aboriginal archaeological material within the Activity Area in general.

STANDARD ASSESSMENT

This stage of assessment involved a detailed field survey, by foot, of the specified Activity Area to locate sites of cultural heritage significance and areas of potential sensitivity, and to identify any cultural heritage constraints affecting the Activity Area.

3. PERSONNEL AND ASSESSMENT METHODOLOGY

3.1. Cultural Heritage Advisor

Zvonka Stanin, John Hyett and Luke Falvey (Terraculture Pty Ltd) were involved in finding, discovering, researching and/or documenting the Aboriginal cultural heritage of the Activity Area. Zvonka Stanin (Bachelor of Archaeology) is the cultural heritage advisor on the project.

3.2. Other Personnel

Richard and Burt Fagan, of the *Wathaurung Aboriginal Corporation Pty Ltd* and Malcolm Morgan, of the *Wathaurung Traditional Owners Authorising Group Pty Ltd* were involved in finding and discovering the Aboriginal cultural heritage of the Activity Area.

3.3. Standard Assessment Methodology

The Standard Assessment, in the form of foot survey, was conducted on Friday, 11 & 28 October 2008 (focusing on non-Aboriginal cultural heritage) and throughout the week of 21 to 24 October 2008 (focusing on Aboriginal cultural heritage).

Given the length of the alignment and current conditions, the survey of Aboriginal cultural heritage survey was based on a judgemental sampling strategy as described in Burke and Smith 2004: 67-68, accompanied by a drive-through survey.

As the majority of the Activity Area was not an area of cultural sensitivity, the drive through survey was aimed at identifying the potential for detailed survey, including an examination of the landform, surface visibility and to locate any surface structures.

The pedestrian survey was aimed at detailed examination of the landform, ground surface conditions and at identifying known and additional Aboriginal sites and cultural heritage. Sampled sections were chosen on the basis of representativeness - focusing on landform, proximity to water and visibility. Each sample was surveyed for both Aboriginal (and non-Aboriginal cultural heritage) and walked in closely spaced transects (2 metres apart, see Burke and Smith 2004: 67-68). The following information was collected during the survey:

- information regarding surface exposure and ground surface visibility were collected and all of the sections along the route that were walked through; and
- notes, GPS (MGA GDA 94) coordinates and photographs were taken in order to illustrate prior ground disturbance, as well as changes in aspect or landform (approximately every 50-100 metres); and
- the presence of Aboriginal archaeological sites, their contents, GPS location and approximate extent was recorded.

There were no caves or rock shelters within the Activity Area. All ground surfaces, including asphalt surfaces, as well as native vegetation, were also inspected.

Limitations of the Assessment

The assessment is based on the presence of archaeological sites in surface contexts and did not involve any subsurface testing for buried deposits (Complex Assessment). Surface visibility also varied across the surveyed areas, reducing the actual extent of actual survey coverage even further (>50%). However

the assessment of landform, vegetation and prior documentary evidence, was sufficient to determine the probability for archaeological sites within most of the Activity Area.

4. CONSULTATION DURING ASSESSMENT

The *Aboriginal Heritage Act 2006* (the Act) requires consultation with any Registered Aboriginal Parties (RAPs) registered under the Act. There are no RAPs for the area investigated as part of the assessment for Aboriginal cultural heritage values.

Both the *Wathaurong Traditional Owners Authorising Group* and the *Wathaurong Aboriginal Corporation* have individually lodged an application to become a RAP for this area and therefore were contacted and/or consulted regarding the Aboriginal cultural heritage assessment.

The Cultural Heritage Advisor, on behalf of VicRoads recorded the date, name and organisation and details of any correspondence and/or consultation with Aboriginal Affairs Victoria, the Sponsor, RAP (or local Aboriginal Community), as below:

- The *Wathaurong Aboriginal Corporation* and *Wathaurong Traditional Owners Authorising Group Pty Ltd* were invited to participate in the foot survey of the Princes Highway (Waurm Ponds to Winchelsea) Activity Area;
- Burt and Richard Fagan of the *Wathaurong Aboriginal Corporation* and Malcolm Morgan of the *Wathaurong Traditional Owners Authorising Group Pty Ltd* participated in the foot survey of the Princes Highway (Waurm Ponds to Winchelsea) from 21 to 24 October 2008; and
- Both noted that, due to poor visibility, it was not possible to conclusively state that there are no Aboriginal cultural heritage values in the Activity Area – other than those already registered on the VAHR - and recommended further complex assessment; and
- Furthermore, both noted that any scarred trees in the Activity Area (ie. 7822-0108) must be retained in their present condition.

5. RESULTS OF STANDARD ASSESSMENT

It should be noted that while the pedestrian survey focused on Aboriginal cultural heritage values, the majority of the targeted areas were also places where historical artefacts were common; reflecting the emphasis on water and other elements of importance for both Aboriginal and European settlers.

Drive through survey

The drive-through inspection demonstrated the general uniformity of the landform and some of the major disturbances along the highway. These included stockpiling and mounding of fill along long tracts of road reserve, as well as extensive drainage throughout. The drive-through survey also identified areas of native versus imported vegetation and any potential for scarred trees.

Apart from this, the majority of the Activity Area was found to be either under crop (private allotments), or covered by long grass (road reserves) and visibility was therefore generally poor. Visibility was best close to the roadways, at intersections and across drive-ways, but these sections were found to be highly disturbed and generally contained imported fill which was easily identified.

Pedestrian survey of sampled sections of the Activity Area

Based on the results of the drive-through, the pedestrian survey targeted twenty two sections (referred to by S prefix throughout the report) of the Activity Area for a more detailed inspection. The targeted areas included:

- a range of landforms and aspects (creek: S1,S6: hill slope: S2, S4, S6, S16, lower hill slope: S5, top of hill: S7, S9 flat plain: S15, S13, S18, S19);
- proximity to known sites (S1, S2, S21, S16);
- native vegetation (S20, S22 and S10 in particular);
- proximity to water (S10, S8, S9, S22, S20, S13, S16, 17);

- historical research (S3, S11, S15, S6, S7, S12, S13).

The results are presented in detail in Table 8, sorted into Sections corresponding to VicRoads layout plans (see Map 3 and 4, and Appendix E). Approximate road chainage is also noted whenever possible. Aboriginal cultural heritage sites are marked by the prefix VAHR (Victorian Aboriginal Heritage Register).

While this is not an assessment of non-Aboriginal heritage values, it should be noted that a whole range of historical sites were recorded in the these are also included in the Table, as the presence of these sites often marked a location of specific land-use/prior significant ground disturbance. Non-Aboriginal cultural heritage is marked by the prefix H, for sites that will be placed on the Heritage Inventory and D for sites that are D listed (a summary of Legislative Protection non-Aboriginal cultural heritage is listed Appendix D). Sites marked as N refer to places and locations that require further assessment.

Maps and detailed plans showing the location and extent of all identified cultural heritage sites and places can be found in the Gazetteer and Parts 7 and 8 of this Plan.

Photographs or digital images of all identified cultural heritage can be found in Part 6 of this Plan.

Table 6 Pedestrian Survey Conditions within or near the Princes Highway (Waurm Ponds to Winchelsea) Activity Area
(Complex Assessment Recommended– see limitations and discussion in regards to complex assessment)

S	Chainage (km) - refer to layout plans	Ground Surface	Landform and Vegetation	Visibility	Aboriginal Cultural Heritage	Non-Aboriginal Cultural Heritages
S1	86.7 – 87.4 km	Road reserve: prior significant ground disturbance – due to services, grading, redistribution of soil, mounding, possible quarrying, road fill, stockpiling and road crossings, showing limestone substrate, rabbit activity Private: grading, short grass, natural landform near creek, rabbit activity	Creek; proximity to Aboriginal sites and water; native trees; regenerated; short grass in PR and long in RR	Poor <50 % in RR Good 50 - 75% in PR	None - creek line; Complex Assessment Recommended	None
S2	87.4 - 88.1 km	Road reserve – as above Nearby artefact scatter 7721-0899 could not be relocated at this time; co-ordinates outside Activity Area	Low hill; grassed; short grass	Good 50 - 75%	None Complex Assessment Recommended	None
S3	90.2 – 90.9 km	Road reserve – as above Private: eucalyptus revegetation, grading, short grass, rabbit activity	Base of hill; plain; grassed	Poor <50 %	None	Location of former Clifford Township (N1)
S4	90.9 – 92.3 km	Road reserve – as above	Base of hill; grassed	Poor <50 %	None	None
S5	92.3 – 93.0 km	Road reserve- as above Private (VicRoads allotment): historical disturbance, construction and removal of buildings	Base of hill; grassed, cypress	Good 50 - 75%	None	Mount Moriac Primary School and Police Station Complex (N1), Arthur Streeton Memorial (N2)
S6	93.0 – 93.85 km	Road reserve: prior significant ground disturbance – due to road cuts services, grading, redistribution of sediments and historical structures Private (VicRoads allotment): historical disturbance, construction and removal of buildings	Proximity to water; ephemeral creek drainage line; hill slope Grassed, cypress	Good 50 - 75%	None Complex Assessment Recommended	Former Mt Moriac Blacksmiths Shop site H7721-0437 Mt Moriac House site H7721-0433: Location of former 19 th century structures, with no surface remains showing (N4); some standing (N5)

Table 6 cont1 Pedestrian Survey Conditions within or near the Princes Highway (Waurm Ponds to Winchelsea) Activity Area
(Complex Assessment Recommended– see limitations and discussion in regards to complex assessment)

S	Chainage (km) - refer to layout plans	Ground Surface	Landform and Vegetation	Visibility	Aboriginal Cultural Heritage	Non-Aboriginal Cultural Heritages
S7		Road reserve: prior significant ground disturbance – due to road cuts, services, grading, redistribution of soil, mounding, road fill, and road crossings, rabbit activity Private (VicRoads allotment): historical disturbance, construction and removal of buildings	Grassed, cypress – new avenue	Good 50 - 75%	None	St Patrick's Church (N6) Gate Posts (N7)
S8	94.4 – 95.1 km	Road reserve: prior significant ground disturbance – due to road cuts, services, grading, redistribution of soil, mounding, stockpiling and road crossings, rabbit activity Private (VicRoads allotment): historical disturbance, construction and removal of buildings	Top of hill in close to proximity to water; grassed and cypress cluster	Good 50 – 60 %	No Complex Assessment Recommended	Mount Moriad Bluestone Ruins Site H722-0436
S9	95.1 – 95.8 km	Road reserve: prior significant ground disturbance – due to road cuts, services, grading, redistribution of soil, mounding, stockpiling and road crossings, rabbit activity Private: historical disturbance, irrigation channel	Hill slope modified; close to modified natural drainage; cypress avenue around irrigation channel	Good 50 – 60 %	None	None
S10	█ – █ km	Road reserve: prior significant ground disturbance – due to road cuts, services, grading, redistribution of soil, mounding, stockpiling and road crossings, rabbit activity Private: historical disturbance, irrigation channel – █ deep cuts to 2 metres in depth	Plain, proximity to modified natural drainage	Poor 30 - 50 %	Scarred Tree 7721-0935 Complex Assessment Recommended	Artefact Scatter at █ █ H7721-0431
S11	97.9 – 98.6 km	As above - Road Reserve and private Private: historical disturbance	Plain: cypress avenue; other exotics	Poor 30 - 50 %	None	Former Laketown School B094, 1600 Princes Highway
S12	98.6 – 99.3 km plain, within 1 kilometre of major Lake (Modewarre)	Road reserve: prior significant ground disturbance – due to road cuts, services, grading, redistribution of soil, mounding, stockpiling and road crossings, rabbit activity Private: historical disturbance	Plain within 1 km of major waterway; native vegetation eucalyptus – no scarring	Good 50 – 80 %	None	Bluestone remains, brick structure; Lady of the Lake Hotel H7721-0434
S13	99.3 – 100 km	As above	Some – eucalyptus – no scarring, cypress avenues and gardens	Poor 30 - 50 %	None	Location of several standing structures including well, barn and standing buildings; potentially dating to 1860 (N8)
S14	101.4 – 102.1 km	Road reserve: services, grading, redistribution of soil, mounding, stockpiling and road crossings, rabbit activity Private: historical disturbance, including quarry, otherwise grazing land	Plain: non-native trees and grassland	Good 50 – 80 %	None	Princes Quarry H7721-0435

Table 6 cont2 Pedestrian Survey Conditions within or near the Princes Highway (Waur Ponds to Winchelsea) Activity Area
(Complex Assessment Recommended– see limitations and discussion in regards to complex assessment)

S	Chainage (km) - refer to layout plans	Ground Surface	Landform and Vegetation	Visibility	Aboriginal Cultural Heritage	Non-Aboriginal Cultural Heritages
S15	102.1 – 102.8 km	As above; private land mainly grazing	Some eucalyptus; no scarring	Poor 30 - 50 %	None	None
S16	102.8 – 103.5 km	As above: close to Lake Dubbin	Plain; lower hill slope, drainage; introduced vegetation, grassland cypress	Poor 30 - 50 %	None	Location of gates and cypress avenue at Princes Highway, possibly 19 th century (N9)
S17	103.5 – 104.2 km	Road reserve: prior significant ground disturbance – due to road cuts, services, grading, redistribution of soil, mounding, stockpiling and road crossings, rabbit activity Private: plantation, proximity to channel, natural drainage	Plain; within 1 km of Lake Dubbin and natural drainage; some mature Eucalyptus; cypress avenue on northern side	None	None Complex Assessment Recommended	None
S17	104.9 – 105.6 km	As above; reservoir or channel over new plantation Private: tree plantation, proximity to channel, natural drainage	Lower hill slopes; grassed, large eucalyptus immediately north of Activity Area	Good visibility >50% within plantation to none	None Complex Assessment Recommended	None
S18	105.6 – 106.3 km	Road reserve: prior significant ground disturbance – due to road cuts, services, grading, redistribution of soil, mounding, stockpiling and road crossings, rabbit activity Private: historical disturbance	Floodplain to low hill slopes; eucalyptus and box; regenerated	20-70% visibility	None Complex Assessment Recommended	None
S19	106.3 – 107.0 km	Road reserve: prior significant ground disturbance – due to road cuts, services, grading, redistribution of soil, mounding, stockpiling and road crossings, rabbit activity Private: under crop	Artificial land form (part of rail and road approach) and floodplain	None	None Complex Assessment Recommended	Fruit Tree – Road Reserve
S20	107.0 – 107.7 km	Road reserve: prior significant ground disturbance – due to road cuts, services, grading, redistribution of soil, mounding, stockpiling and road crossings, rabbit activity, cypress planting Private: Cultivated, includes old coral and avenue of trees	Plain: under crop, some native trees remaining; none modified by Aboriginal people; cypress avenue	Poor 30 - 50 %	None Complex Assessment Recommended	Coral appears to be late 20 th century: recent
S21	█ – █ km S19	Road reserve: prior significant ground disturbance – due to road cuts, services, grading, redistribution of soil, mounding, stockpiling and road crossings, rabbit activity, cypress planting Private: Cultivated	Lower hill slope; grassed and cypress avenue,	Poor 30 - 50 %	Winchelsea Scarred Tree 1 7822-0108	None
S22	109.1 – 109.8 km S20	Road reserve: prior significant ground disturbance – due to road cuts, services, grading, redistribution of soil, mounding, stockpiling and road crossings, rabbit activity, cypress planting Private: Cultivated	Plain, close proximity to natural drainage, some eucalyptus adjacent to road side; no scarring	Good 50 – 80 %	None Complex Assessment Required	Winchelsea Barrel Culvert H033 as above & D7721-0432

Limitations of the assessment of Aboriginal cultural heritage values

The standard assessment identified archaeological sites in surface contexts and did not involve any subsurface testing for buried deposits (complex assessment). However surface visibility was poor in sections of the Activity Area that are in close proximity to water. Thus, it was generally not sufficient to determine the probability for Aboriginal cultural heritage within these sections of the Activity Area.

5.1.1. Aboriginal Sites and Places

The location of one Aboriginal place was confirmed within [REDACTED] Winchelsea, near the [REDACTED] Princes Highway. The place, being a scarred tree - as noted previously - is registered on the Victorian Aboriginal Heritage Register as [REDACTED] (7721-0108).

During this survey, the full extent of this Aboriginal Place was found to be 18 metres in radius (twice the radius of the drip line, in accordance with AAV standards). This extent also includes the commemorative plaque, as erected by the Surf Coast Shire.

A second scarred tree was located [REDACTED] (7721-0935). The full extent of this Aboriginal place is 14 metres and as a result, will be impacted on by the activity.

These results are summarised in the table below:

Table 7 Identified Aboriginal cultural heritage sites within or near the Princes Highway Duplication, Waurm Ponds to Winchelsea Activity Area

Victorian Aboriginal Heritage Register Site No.	Site Name	Site Type	Proximity to Activity Area
7721-0108	[REDACTED]	Scarred Tree	Within Activity Area
7721-0935	[REDACTED]	Scarred Tree	Within Activity Area

More detailed information on the sites identified during the Standard Assessment that will be impacted by the Project is provided on the Site Cards (see Gazetteer) and Table 8 below:

Table 8 Identified Aboriginal cultural heritage sites that will be impacted by the Project

Victorian Aboriginal Heritage Register Site No.	Site Name	Coordinates (MGA Zone 55)	Site Dimensions (L x W x Depth) (m)	Cultural Material & Context	Cadastral Information
7721-0108	[REDACTED]	[REDACTED] [REDACTED]	9 metre radius (to drip line) 18 metres buffer (final site dimensions)	Aboriginal Scarred Tree <i>Eucalyptus camaldulensis</i> , River Red Gum; (Surf Coast Shire plaque);	VicRoads Road Reserve, [REDACTED] Winchelsea, Parish of Lake Lake Woollard, County of Grant
7721-0935	[REDACTED]	[REDACTED] [REDACTED]	7 metre radius (to drip line) 14 metre buffer (final site dimensions)	Aboriginal Scarred Tee	VicRoads Road Reserve, [REDACTED] [REDACTED] Buckley, Parish of Modewarre, County of Grant

Note Regarding Recommendations for Complex Assessment (Subsurface testing) in Table 6

Given the limitations of the pedestrian survey, in terms of visibility, several sections of the Activity Area were identified for further sub-surface testing for Aboriginal cultural heritage values (Complex Assessment Recommended in Table 6, see also Map 3). Notably; Aboriginal cultural heritage is expected in:

- sections of the Activity Area closest to known waterways, or in proximity to other registered sites.

DIVISION 3

CONCLUSIONS

6. CULTURAL HERITAGE SIGNIFICANCE – ABORIGINAL CULTURAL HERITAGE VALUES

6.1. Scientific Significance

In cultural heritage terms, Aboriginal archaeological sites are non-renewable and for most areas of Victoria they are the only sources of historical information on the former Aboriginal occupants before the advent of European settlement. The scientific significance of Aboriginal archaeological sites can be discussed according to a number of measurable features, as well as the potential to provide archaeological data of research or educational value. Some archaeological sites by their artefactual contents or antiquity automatically attain a high degree of significance. For other archaeological sites, significance is based on the value of these sites as representative examples of particular types within a given area, however defined. The criteria used to assess scientific significance are not standards that can necessarily be measured in a scientific fashion. They are relative estimates based on the current state of knowledge of the archaeology within the general region.

In assessing the degree of significance of an archaeological site, the Heritage Collections Council (2001: 11) suggests that five issues: provenance, representativeness, rarity, condition and interpretive potential should be addressed. Table 13 considers these and other measures with regard to [REDACTED] (7721-0108) [REDACTED] (7721-0935).

Table 9 Significance of the Aboriginal cultural heritage sites that will be impacted by the Project

VAHR Site Number	Site Name	Site Type	Preservation and Contents				Site Representativeness	Scientific Significance
			Subsurface (buried) deposits	In situ Deposits	Integrity	Contents	Locally	
7721-0108	[REDACTED]	Scarred Tree	NA	NA	excellent	NA	Local	Medium to High
7721-0935	[REDACTED]	Scarred Tree	NA	NA	medium	NA	Local	Medium

6.2. Aboriginal Cultural Significance

Statement of Significance from the Wathaurong Aboriginal Co-operative

From: Mr Trevor Edwards, Chairperson Wathaurong Traditional Owners Authorising Group, CEO Wathaurong Aboriginal Co-Operative Ltd:

- 1. The Wathaurong Traditional Owners Authorising Group are acknowledged as the Guardians and the living Custodians of all Aboriginal sites within their designated boundary area.*
- 2. It is acknowledged that all Aboriginal sites are important as they provide a direct cultural link to past generations of Aboriginal people who nurtured and cared for land which current generations of Aboriginal people continue to embrace through their Dreamtime Spirits and other living Wathaurong stories.*
- 3. It is understood that Wathaurong Traditional Owners Authorising Group members regard the current focus on stone tools and other artefacts and sites to be a European approach to Aboriginal cultural heritage as it is clear that an identified locality of a place has more importance than the artefacts located on or in it – it also has a spiritual connection with the land itself.*
- 4. Where an Aboriginal cultural heritage site is identified and recorded, it is acknowledge that the natural context of the site and its physical aspects are still an integral and living aspect of Aboriginal cultural heritage which extents beyond the physical limitations of the archaeological site to the spiritual connection Wathaurong people still have to the land itself today.*

Statement of Significance from the Wathaurung Aboriginal Corporation

From Mr Bryon Powell, Chairperson Wathaurung Aboriginal Corporation:

"All sites within the Wathaurung area are significant in cultural terms as they are a tangible link to our past and a non-renewable source of information about the lifestyle of our ancestors.

The cultural significance afforded to the sites by the Aboriginal community must be given a higher standing than the scientific rating as the scientific rating is based on a European perspective without due regard to the value of the Aboriginal culture as a whole.

Non-Aboriginal people want site specific comments on significance. When a cultural groups whole identity, history and heritage is under constant 'managed destruction', it is extremely difficult to be 'site specific'. Since invasion, the only thing that whitefellas have wanted to do is to categorise and rank our culture in order to destroy it more easily or with a little less conscience."

7. CONCLUSIONS

7.1. Cultural Heritage Values in the Activity Area

Aboriginal cultural heritage values

Desktop Assessment:

A search of the Victorian Aboriginal Heritage Register found, that, despite prior surveys of almost half the Activity Area (Murphy 2000, Waurm Ponds to Mount Moriac), there was only one Aboriginal cultural heritage value registered within the Activity Area. This was a scarred tree (7822 - 0108), located at [REDACTED] Winchelsea. The tree is culturally significant and is of moderate scientific significance, local historical value and representative of a range of Aboriginal material in the region.

While the absence of other identified heritage values was partly a product of poor visibility, it was found that the Activity Area comprises landforms that are not areas of cultural sensitivity under the Aboriginal Heritage Act or in general; rolling hills located some distance from waterways. The potential for Aboriginal cultural heritage values is moderate in sections of the Activity Area closer to waterways - along several unnamed ephemeral tributaries near Drayton's Road, in Winchelsea, Lakes Dubbin and Modewarre - in the form of surface and shallow sub-surface artefacts scatters. However even along these sections, any cultural heritage values within the road reserve - where the extent of prior significant ground disturbance is greatest - are less likely to be *in situ* and are likely to have little stratigraphic integrity.

The potential for scarred trees and other Aboriginal cultural heritage values was found to be low, due to wide-spread vegetation removal over the last 150 years.

Standard assessment:

The standards assessment involved a pedestrian survey of both Aboriginal and non-Aboriginal cultural heritage within sections of the Activity Area. It was based on a judgemental sampling strategy as (described in Burke and Smith 2004: 67-68), accompanied by a drive-through survey.

The location of one Aboriginal place was confirmed within [REDACTED] Winchelsea, near the [REDACTED] Princes Highway. The place, being a scarred tree, is registered on the Victorian Aboriginal Heritage Register (7721-0108), but also includes a brass plaque memorial erected by the Surf Coast Shire. The extent of the site is 18 metres radius.

A second scarred tree was located [REDACTED] (7721-0935). This Aboriginal place extend for 14 metres (twice the radius of the drip line, in accordance AAV guidelines) and as such, will be impacted on by the activity.

Limitations of the assessment of Aboriginal cultural heritage values and implications for further assessment

The standard assessment identified archaeological sites in surface contexts and did not involve any

subsurface testing for buried deposits (complex assessment). However surface visibility was poor in many sections of the Activity Area, including areas that are generally excepted as being sensitive for Aboriginal cultural heritage values; ie. in close proximity to water. Thus, it was generally not sufficient to determine the probability for Aboriginal cultural heritage within these sections of the Activity Area.

Given these limitations, several sections of the Activity Area were identified for further sub-surface testing for Aboriginal cultural heritage values (Complex Assessment Recommended in Table 6, see also Map 3, page). Notably; Aboriginal cultural heritage is expected in:

- sections of the Activity Area closest to known waterways, or in proximity to other registered sites.

Other less sensitive landforms – middle hill slopes and plains away from water - should also be tested as a control measure.

7.2. Minimisation of Harm to Cultural Heritage- Preliminary Recommendations

The Princes Highway West Duplication, Waurm Ponds to Winchelsea, will be conducted in a way that avoids and minimises harm to cultural heritage.

Preliminary recommendations to manage harm or disturbance to Aboriginal cultural heritage sites are presented in Table 14. However, final cultural heritage management processes to be applied and initiatives to be implemented in relation to the activity will be outlined in:

- a Cultural Heritage Management Plan (for Aboriginal cultural heritage values, in accordance with the *Aboriginal Heritage Act 2006*). It is expected that the preparation of the CHMP will entail further testing of sub-surface deposits (Complex Assessment). A copy of the Notice of Intent to complete the CHMP is included in Appendix A.

As noted previously (Division 1) this desktop and standard assessment is preliminary.

Table 10 Minimisation of harm of Aboriginal Cultural Heritage

Site No.	Impact and Potential to Minimise Harm
7721-0108	Intersection widening- site extent must be avoided / arborist report may be required to assess potential damage if site cannot be avoided; requires consultation with the Surf Coast Shire
7721-0935	Intersection widening- site extent must be avoided / arborist report may be required to assess potential damage if site cannot be avoided

PART 6

REFERENCES

Amorosi, L. 1998.

W. L. Koenig Collection. Documentation of Stone Artefacts from a private collection.

Anderson, W. K. 1994.

Roads for the People, A History of Victoria's Roads. VicRoads, Melbourne.

Andrew Long and Associates 2001.

Geelong Regional Baseball Centre Cultural Heritage Assessment. Unpublished Report.

Brownhill, W.R. 1955.

The History of Geelong and Corio Bay. Melbourne.

Brown, S & S. Lane 1996.

South Western Natural Gas Pipeline Project Lara to Colac Section: An Archaeological Survey. Report to gas Transmission Corporation.

Burke, H. and Smith, C. 2004.

The Archaeologist's Field Handbook. Crows Nest: Allen & Unwin.

Clark, I.D. 1990.

Aboriginal Languages and Clans: an historical atlas of western and central Victoria, 1800-1900. *Monash Publications in Geography* No. 37.

Corris, P. 1968.

Aborigines and Europeans in Western Victoria. Canberra: Australian Institute of Aboriginal Studies.

Croll, R. H. and Wettenehall, R. H 1937.

Alexander Thompson, a pioneer of Melbourne and founder of Geelong, Robertson and Mullins, Melbourne.

Department of Mines 1970.

1:63,360 Geelong Geological Map, Mines Department, Victoria.

Gregory, E. B. Gregory, M. L and Koenig, W. L. 1985

Coast to Country: Winchelsea, A history of the Shire, Hargreen Publishing Co in conjunction with the Shire of Winchelsea, North Melbourne 1985.

Kaskadanis, C. 2008

Section 4A of the Geelong Ring Road, Waurn Ponds: Cultural Heritage Management Plan. A CHMP prepared for VicRoads (Geelong Ring Road Project). AAV management plan no. 10011.

Kellaway and Rowe 2008

Surf Coast Shire Heritage Study 2B 2007-2008, Unpublished Report for the Surf Coast Shire, Heritage Victoria. Includes heritage citation for Place Number B094 (Former Laketown School).

Kiddle, M. 1961

Men of Yesterday; as social history of the western district of Victoria, Melbourne University Press, 1961.

Koster, J. and Lloyd L. 1990

Austins Ford – Barwon – Winchelsea Time Line 1835 – 1990, Winchelsea and District Historical

Society Inc. Winchelsea.

Lourandos, H. 1977.

'Aboriginal Spatial Organization and Population: South Western Victoria Reconsidered' in *Archaeology and Physical Anthropology in Oceania* 12: 202 – 225.

Maher, J.M. and Martin, J.J. 1987.

[Soils and Landforms of South-Western Victoria. Part 1. Inventory of Soils and their Associated Landscapes.](#) Research Report Series No. 40. Department of Agriculture and Rural Affairs.

Marshall, B. 1999.

An Aboriginal archaeological survey at Highton, proposed amendments R249 and R250. Unpublished report to a private developer.

Marshall, B. 2000.

An Aboriginal archaeological survey of the Moriac to Anglesea Pipeline. Unpublished Report.

Marshall, B. 2000b.

An Aboriginal archaeological survey of the Winchelsea Common Napthine Reserve at Winchelsea. Unpublished Report.

Marshall, B. 2002a.

An archaeological investigation at 'Claremont' Ghazepore Road, Waurn Ponds. Unpublished Report.

Marshall, B. 2002b.

Archaeological Investigations of a proposed Bulky Good Retailing Development Site at Waurn Ponds. Unpublished report to Stokes Planning Pty Ltd and First State Development Pty Ltd.

Marshall, B. 2005.

Teleta Estate, 7 Worland Street Winchelsea Archaeological Survey. A Report prepared for Vautier-Phipps Pty Ltd.

Marshall, B. 2007.

An Archaeological assessment at the Geelong and East Belmont Saints Baseball Clubs on Pioneer Road Grovedale. Unpublished Report.

Marshall, B. and N. Paynter 2003.

An Archaeological Investigation at Rossack Drive, Waurn Ponds. Unpublished Report.

Marshall, B. and J. Hyett 2007.

Leisurelink Aquatic Site, Waurn Ponds: Cultural Heritage Management Plan. AAV Management Plan No: 10039.

Marshall, B, C. Kaskadanis and M, Toscano 2008

Proposed Shopping Centre at Waurn Ponds . AAV Cultural Heritage Management Plan.

Massola, A.S. 1969.

Journey to Aboriginal Victoria. Adelaide: Rigby.

Morgan, J. 1852.

The Life and Adventures of William Buckley. Heinemann, London and Melbourne.

Murphy, A. 2000.

Princes Highway Duplication, archaeological survey. Unpublished report for VicRoads.

Pitt, A.S. 1981.

[A Study of the Land in the Catchments of the Otway Ranges and Adjacent Plains.](#) Tech. Comm. #14. Soil Conservation Authority, Victoria.

Port of Geelong Authority, 1959.

Abridged general history of the Port prior to and since the incorporation of the Trust in 1905.

Rhodes, D. 1999.

Archaeological survey of a proposed Koorie residential college site, Deakin University.

Richards, T & J. Jordan 1999.

Aboriginal archaeological investigations in the Barwon Drainage Basin. Occasional Report No 50. Aboriginal Affairs Victoria.

Robinson, N; Rees, D; Reynard, K; MacEwan, R; Dahlhaus, P; Imhof, M; Boyle, G and Baxter, N. 2003.

A Land Resource Assessment of the Corangamite Region. Department of Primary Industries

Rowe D. and Huddle L. 2000.

Greater Geelong Outer Heritage Study. Prepared for the City of Greater Geelong, Geelong.

Spencer Jones, D. 1970.

Explanatory notes on the 1: 63 360- Geelong Geological Map. *Geological Survey Report* Number 1970/1. Mines Department, Victoria.

VandenBerg, A.H.M. 1997.

1:250,000 Geological Map Series, Queenscliff, SJ 55-09. Edition 2. May 1997. Victoria: Geological Survey of Victoria.

Weaver, F. 1995.

Telecom optical fibre cable route Maude-Anakie, Winchelsea-Winchelsea South and Yeodene-Barwon Downs: Archaeological Desktop Study. Report to Telecom Australia.

Weaver, F. 2001.

Ghazepore Road, Waurn Ponds Victoria: Proposed residential development survey for Aboriginal and historic archaeological sites.

Webb, C., Butcher, L. and Cooper, S. 2007.

Geelong Ring Road – Section 3. Cultural Heritage Management Plan. AAV Management Plan No. 10097. Sponsor: VicRoads (Geelong Ring Road Project).

Wild, D. 1950.

The tale of a city: Geelong 1850 -1950. F. W. Cheshire, Melbourne.

Wynd, I. 1971.

Geelong – The Pivot. Cypress Books, Melbourne.

Wynd, I. 1979.

Case Study of Geelong. Deakin University Open campus program, School of Humanities, Deakin University.

Wynd, I. 1992.

Barrabool – Land of the Magpie. Barrabool Shire, Torquay.

Legislation and Regulations

Aboriginal Heritage Act 2006 (State)

Aboriginal Heritage Regulations 2007 (State) version 28 May 2007

Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Cth) (Repealed)

Other

Mortlake Historical Society Book Committee (MHSBC) 1985

Pastures of Peace: a tapestry of Mortlake, Shire of Mortlake, Mortlake.

LCC 1997

Land Conservation Council 1997, *Historic Places Special Investigation, South – Western Victoria, Final Recommendations*

Websites

Bureau of Meteorology 2008

'Monthly Climate Statistics for Geelong (Norlane)' [Accessed online 2nd November 2008].
http://www.bom.gov.au/clim_data/cdio/tables/text/IDCJCM0035_087117.csv

DPI website Nov 2008

Department of Primary Industries 2008

'Explore Victoria Online – GeoVic' [Accessed online 2nd April 2008].
<http://www.dpi.vic.gov.au/dpi/nrenmp.nsf/childdocs/-E81608BE1FA6A9794A256A80000A3D6A-91C40A3DD52CC00DCA256ED1000CF641?open>

Maps

Victoria. & Bone, Charles. & Philp, James B., & Skene, A. J. 1855, *Allotments in the Parish of Lake Lake Wollard [cartographic material] / Charles Bone Temporary Assistant Surveyor June 29th 1855; J. B. Philp lith* <<http://nla.gov.au/nla.map-nk2456-232>>

Parish of Modewarre, Victoria. Dept. of Crown Lands and Survey. Modewarre, County of Grant [cartographic material 1891. MAP RM 2741/303 - located in *catalogue.nla.gov.au* 10/11/2008)

GLOSSARY

Glossary of Terms

The following glossary presents definitions for words and terms that may have been used in the preceding TerraCulture report. Archaeological site types or specific stone artefact types that have counterparts elsewhere in the world are usually defined according to their known or inferred use in Aboriginal Australia. The definitions of some terms are based on common usage or convention rather than literal meaning. Italicised words within any definition have also been separately defined.

Aboriginal: Referring to indigenous people and their descendants who occupied Australia at the time of European colonisation.

Aboriginal Archaeology: The scientific study of the material remains of past indigenous peoples. Aboriginal archaeology covers both the *pre-contact* (also known as prehistoric) and the *post-contact* period.

Aboriginal Archaeological Site: A location with material evidence of past activity by indigenous people. Activities such as the manufacture and use of stone artefacts have a recognisable archaeological signature. Other activities will have little or no material consequences and are regarded as being archaeologically invisible.

Aboriginal Archaeological Site Types: Aboriginal archaeological sites can be classified into generic types according to their context, fabric and probable function. Aboriginal Affairs Victoria currently recognises some 10-site types including stone artefact scatters, shell middens and scarred trees.

Aboriginal Artefact Scatter: A collection of Aboriginal artefacts usually distributed across the surface of the ground. Stone artefacts are a common component and can be found in association with organic remains, shell, ochre and charcoal. Artefact scatters are the material remains of past Aboriginal use of a location and are generally referable to technological and economic behaviour. They are also called surface scatters.

Aboriginal Burial: Aboriginal interment consisting of human skeletal remains. Aboriginal burials occur in a wide range of forms and physical contexts and may be found with grave goods.

Aboriginal Historic Place: Aboriginal historic places are the locations of events, places or place names that were recorded in historical documents or in oral tradition during the *post contact period*. Unlike Aboriginal archaeological sites, Aboriginal historic places do not necessarily retain any physical evidence of any former structures, activities or specific events.

Anvil: A flat stone used as a platform in the manufacture of stone artefacts (bi-polar flaking) or in the processing of foods, ochre and other materials. With bipolar flaking the *core* is rested on the anvil and struck with a *hammer stone* creating a *flake*. Use leaves small circular depressions (pitting) on the anvil surface usually towards the centre. Anvil stones are often recovered as broken halves; the break being across the centre line of the stone where there has been most wear.

Archaeology: Conventionally, the scientific study of the material remains of past human activity.

Artefact: Any object created or modified by humans.

Artefact Scatter: A collection of artefacts usually distributed across the surface of the ground.

Assemblage: Archaeological term used to describe a collection of artefacts associated by a particular place or time and assumed to have been generated

by a single group of people. An assemblage can be made from different *artefact* types.

Axe Blank: A stone that has been shaped through the removal of *flakes* but not yet sharpened.

Axe Grinding Groove: Oval shaped indentations in stony outcrops that are the result of grinding during the manufacturing and sharpening of *ground edge* axes. These indentations are usually but not exclusively formed in sandstone outcrops and can occur singly or in multiples. Axe-grinding grooves are typically found close to water, which appears to have been used to maintain the sandstone's abrasiveness.

Backed Blade: A stone blade that has been retouched along one of its lateral margins to prepare the edge for hafting.

Basalt: Igneous volcanic rock that can be used to make *stone artefacts*. Basalt is common in western Victoria where there has been recent volcanic activity.

Before Present (BP): referring to years before present, which for radiocarbon dating is arbitrarily fixed at 1950.

Bi-polar Flaking: The process of manufacturing stone artefacts through the use of a hammer and anvil. A *core* is struck with a hammerstone while resting on an anvil, detaching angular *flakes* that display bruising or crushing at either end.

Blade: A *flake* that is at least twice as long as it is wide.

Bulb of Percussion: A rounded protrusion on the interior surface of a *flake* caused when the *core* is struck with the *hammerstone*. The bulb is located below the striking platform and allows the identification of the orientation of the flake. The bulb of percussion is often considered the best evidence for a human agency in the manufacture of a stone flake.

Bulbar Scar: A small scar or removal of stone on the *bulb of percussion*.

Ceramics: Generic term used to describe *historical* artefacts that are made from ceramic material.

Chert: A hard fine-grained sedimentary rock high in silica and commonly used in the manufacture of stone artefacts.

Civic: A term used to describe historic structures or material culture relating to past government or public activity e.g. town hall, public parks or gardens.

Classification: The ordering of archaeological material according to age, type, fabric or other criteria.

Coastal Flint: Geologically, flint is a type of chert. A coastal form is found in limestone reefs along the Victorian and South Australian coastlines and is often detached as nodules on the roots of kelp and subsequently washed up on beaches. The appearance of the flint varies but is often fine grained with larger white intrusions and a thick outer *cortex* or crust and is blue to cream in colour. Coastal flint is often the dominant rock type in stone artefact sites on or near the Victorian coast.

Contact Site: General term used to describe an *Aboriginal archaeological site* that shows the use of European (non-indigenous) materials such as artefacts made with glass, metal or ceramic. Contact sites are usually considered to be the result of activities performed at or before the time of permanent European settlement.

Context: Refers to the place of artefacts or archaeological features with regards to time and space.

Core: A piece of stone from which other stone artefacts are made. In *freehand flaking* the *core* would be struck with a *hammerstone* removing *flakes* and other fragments of stone often referred to as *debitage*.

Core Tool: A *core* displaying signs of use.

- Core Tool and Scraper Tradition:** Aboriginal stone artefacts belonging to the core tool and scraper tradition include core tools, large steep edged scrapers, round flat scrapers and notched implements. These assemblages are believed to pre-date the *Small Tool Tradition*.
- Cortex:** The weathered external surface of a stone. Cortex often identifies the origins and original form of flaked stone, e.g. river pebbles.
- Cultural Heritage:** The consequences of humanity including its relationship with the natural environment that are ascribed significance and considered to be worth preserving.
- Debitage:** Fragments of stone that are generated during the manufacture and maintenance of *stone artefacts*. These fragments may or may not display the typical characteristics of flaked stone.
- Deposit:** A term used to describe buried archaeological material.
- Desktop Study:** Investigation of the known or potential cultural heritage values according to the landform type, historical records and other archival material and the results of previous archaeological investigations.
- Domestic Assemblage:** A collection of historical artefacts generated by or associated directly with past household activity e.g. *ceramic* plates, bottles and cutlery, food refuse.
- Dry Stone Wall:** A wall that has been constructed using stone without any binding material. Dry stone walls take on many different forms and vary according to stone type and function. In western Victoria they are assembled with basalt stones collected from the surface of paddocks.
- Excavation:** The systematic removal of archaeological deposits using archaeological techniques.
- Fabric:** A synonym for original material.
- Feature:** A notable formation or structure (conventionally immovable) discovered during *excavation*.
- Fish trap:** A structure made from stone, wood or reeds intended to guide fish or eels into a confined space to be collected or speared. Often constructed perpendicular to the main channel of a creek or river, or in the intertidal zone of estuaries, bays and oceans.
- Flake:** A piece of stone detached by percussion or pressure from a *core*. The flake will usually display characteristic features such as a *platform* and *bulb of percussion*. The *core* will display a negative flake scar. These features assist in distinguishing between stone that has been altered through human agency and that which has been naturally shaped.
- Flake Tool:** A flake that has been shaped through the removal of other smaller flakes (*retouched*) or shows evidence of use (*use wear*).
- Freehand Flaking:** A technique of manufacturing or shaping stone artefacts whereby a hand-held stone is hit directly with the hammerstone, also handheld.
- Grinding Stone:** Stone with a flat surface used as a mortar in the processing of food or other hard materials through pounding, crushing or grinding. Grinding stones are identifiable by the presence of wear in the form of shallow depressions and pitting.
- Ground Edge Axes:** Stone axes that are commonly oval or round in shape and that have edges formed by grinding and sharpening. Ground edge axes were attached (hafted) to wooden handles using resin or other binding material. Axes from Mount William a large quarry near Lancefield in Victoria are known to have been traded in the form of *axe blanks* over long distances (see *axe grinding groove and axe blanks*).
- Ground Exposure:** A measure of the quantity of sediment that would normally be buried beneath a modern land surface.
- Ground Visibility:** A term used to describe the area of the ground's surface that is visible during archaeological field surveys. Effective ground visibility refers to the actual area of ground visible during a field survey calculated as the area of ground inspected multiplied by the percentage of ground visibility.
- Hafting:** The process of attaching a stone artefact onto a wooden handle.
- Hammerstone:** A stone that has been used to strike a *core* to create a *flake*, often causing pitting or other wear on the stone's surface.
- Hearth:** Fireplace often recognised archaeologically through the presence of charcoal or burnt (discoloured) ground. Historical hearths are usually associated with brick or stone structures.
- Historical Archaeological Site:** The material remains or other physical evidence of activity associated with the *post-contact* period; including portable artefacts and structural features of former buildings.
- Historical Archaeology:** The study of artefacts and archaeological features relating to the post-contact period.
- Holocene:** The geological period covering the last 10,000 years BP.
- Hornfels:** A metamorphic rock, hard and fine-grained.
- Industry:** A single class of artefacts that are consistent in their form and that can be credited to a single group of people.
- Industrial Archaeology:** *Archaeology* concerned with the material consequences of industrial activity.
- In situ:** In its original place.
- Layer:** A recognisable band of material of varying thickness.
- Limestones:** Carbonate-rich sedimentary rocks that are formed through the accumulation of organic remains.
- Manuport:** An object that is unmodified but has been transported to its find location by humans.
- Makers Marks:** Marks that have been etched, engraved or printed onto the surface of mass manufactured goods, including glasswares and ceramics.
- Maritime Archaeology:** The archaeological investigation of shipwrecks, piers, jetties and other maritime structures.
- Microliths:** Small stone artefacts. In Australia microliths such as *backed blades* are often associated with *assemblages* from the late prehistoric period after ca 6000 years BP.
- Monitoring (see watching brief)**
- Mound:** Aboriginal mounds consist of ground that is artificially elevated above the natural levels. Thought to be a consequence of repeated occupation at the same location particularly through the use of earth ovens, mounds can contain a wide range of artefactual material including burials. Mounds that have all but been destroyed are recognisable through changes in the colour and composition of the ground, especially the presence of charcoal.
- Platform:** Face of core that is struck by a *hammerstone*, leaving remnants on both the *core* and the resultant *flake*.
- Pleistocene:** The geological period equivalent to the last ice age and preceding the *Holocene* from ca 2 million to 10,000 years ago. The late Pleistocene commonly refers to the last 40,000 years BP.
- Post-contact Period:** The time after contact between Aboriginal peoples and Europeans. Also referred to as the historic period. In Victoria the post-contact period begins in early 1800s.

Posthole: A hole that has been dug into the ground to house a post. Postholes are often filled with stone or other packing material (more recently concrete).

Post Deposition: After deposition; term commonly used with reference to factors affecting the preservation of artefacts and archaeological features.

Pre-contact Period: The time period before contact between Aboriginal peoples and Europeans. In Victoria this ends with permanent European settlement.

Quartz: A hard mineral that varies from white to blue in colour and in transparency from opaque to clear.

Quartzite: A metamorphic rock formed through the 'recrystallisation of quartz rich sandstone'.

Radiocarbon Dating: Radiometric dating technique for establishing the age of organic (carbon) remains based on the rate of decay of the radioactive isotope carbon 14 (C14).

Retouch: Secondary modifications to stone artefacts such as trimming or resharpening. Retouch often indicates use of a stone *flake* and therefore its identification of an actual tool (cf waste flake)

Rock Art, Aboriginal: Aboriginal artworks on rock surfaces such as paintings, stencils, etchings and engravings.

Rock Well Aboriginal: A natural depression that may have been augmented through the removal of rock and from which water was collected.

Ruin: what remains of a former historic structure.

Salvage Excavation: The systematic documentation and recovery of an archaeological site prior to its destruction. Also known as rescue archaeology.

Sandstone: Sedimentary rocks that consist mostly of quartz.

Scarred Trees, Aboriginal: Trees that were used as a source of bark to make canoes and other items. Bark was cut using a stone axe and then levered from the sapwood leaving a scar. The bark around the edge of this scar is called regrowth. Natural scarring is common on some trees and is often difficult to distinguish from scars made by Aborigines during the *pre-contact period*.

Scarred Trees, Historic: Bark continued to be used by Aborigines and Europeans alike during the post-contact period for roofing, trail blazes, mile markers etc.

Scraper: A stone tool made on a *flake* or *core* with steep *retouch* along one or more edges.

Shell Middens (Marine or Coastal and Freshwater): The remains of shellfish that were gathered and eaten by Aboriginal people. They may also contain other stone artefacts, charcoal and ash, and the bones of vertebrate prey. *Burials* are also known to occur in shell midden deposits. Aboriginal shell middens are often confused with natural shell deposits.

Shipwreck: The remains of a ship.

Silcrete: A highly silicious rock formed by the replacement of a parent rock (commonly sandstone) by silica in solution.

Small Tool Tradition: Aboriginal stone artefacts belonging to the small tool tradition are characterised by heavily retouched *microliths* and backed implements and are presumed to be a mid to late *Holocene* development.

Spit: arbitrary quantity of excavated ground.

Stratigraphy: A geological term used to describe the sequence of vertical *layers* and *deposits* that comprise an archaeological site.

Stone Arrangement, Aboriginal: Locations where Aboriginal people have positioned rocks to form shapes or patterns. In Victoria, stone arrangements are an uncommon site type.

Stone Artefacts, Aboriginal: Stones that have been modified or used by Aboriginal people.

Stone Quarry, Aboriginal: Sources of stone used for the purpose of manufacturing stone artefacts.

Subject Land: The area that is under investigation. Also referred to as the study area.

Subsurface Testing: The testing for buried archaeological material through manual or mechanical excavation.

Survey, Pedestrian: The act of looking for archaeological material. Also known as foot survey.

Taphonomy: The study of how archaeological sites are formed.

Toe Holds, Aboriginal: Small scars on the trunks and branches of trees which are a result of the removal of bark to form notches to facilitate climbing.

Usewear: The wear displayed on the surface of an artefact as a result of its use.

Waste Flake: An unmodified and unused *flake*.

Watching Brief: The monitoring of earthworks or other forms of disturbance at the location of a known archaeological site or of a landform considered sensitive for artefacts or other archaeological material. A watching brief is often a condition of a grant of Consent to disturb or destroy an archaeological site. Also known as monitoring.

Windscreen Survey: Field survey based on observations made from a vehicle. Also known as a drive-through survey (cf pedestrian survey).

References

Aboriginal Affairs Victoria

Site Identification Mini Posters No's 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14, 15.

Bray, W and D. Trump. 1982

The Penguin Dictionary of Archaeology. Second Edition. Penguin Books, England.

Champion, S. 1980

A Dictionary of Terms and Techniques in Archaeology. Phaidon Press, Great Britain.

Flood, J. 1995

Archaeology of the Dreamtime: The story of prehistoric Australia and its people. Revised Edition. Angus and Robertson, Australia.

Frankel, D. 1995

Remains to Be Seen; Archaeological Insights into Australian Prehistory. Longman Press, Australia.

Orser, C. E. Jnr and B. M. Fagan (1995)

Historical Archaeology. Harper Collins College Publishers, New York.

Ville, G. 1971

Concise Encyclopaedia of Archaeology from the Bronze Age. Collins Books, Glasgow.

PHOTOGRAPHS



Plate 1 Typically good visibility near roadways, Cape Otway Road



Plate 2 Eucalyptus plantation, Wainwrights Lane, Lot 1 on TP 611989W



Plate 3 Typical visibility in road reserves; note the long grass



Plate 4 VAHR site number 7721-0935, [redacted]

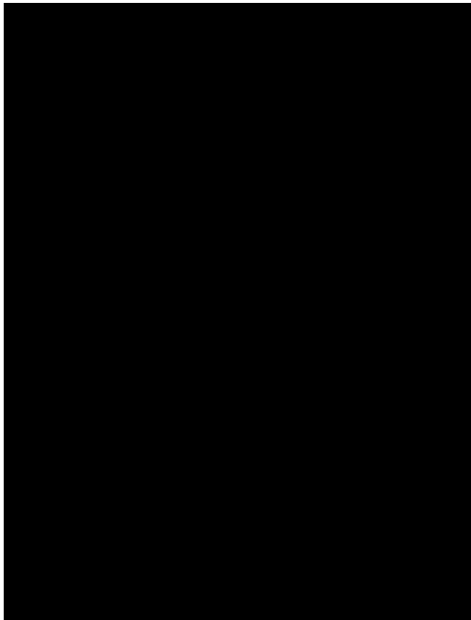


Plate 5 VAHR number 7721-0108, [redacted]
[redacted]

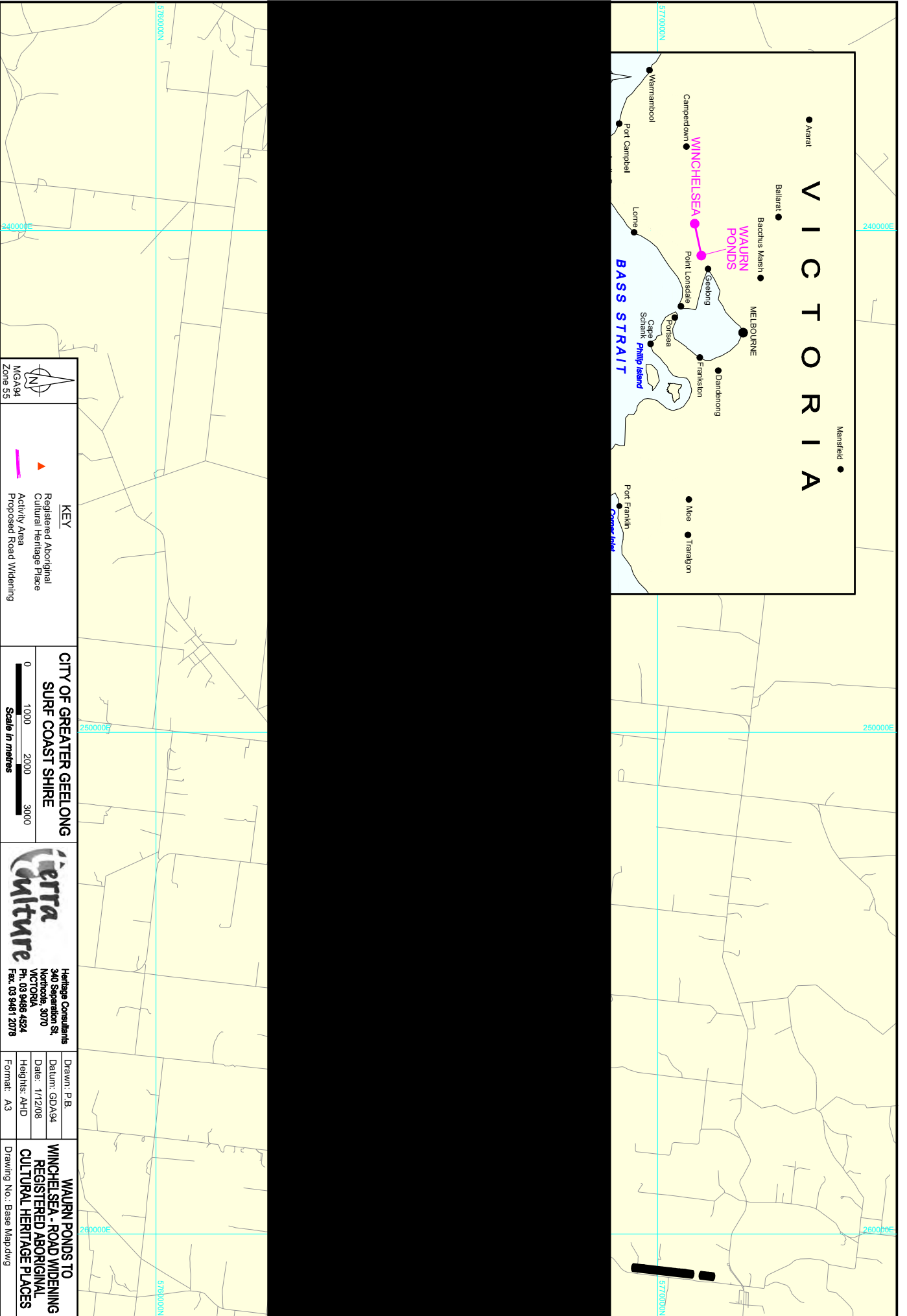
PART 7

MAPS

MAP 1 – Showing Activity Area and Registered Aboriginal Places

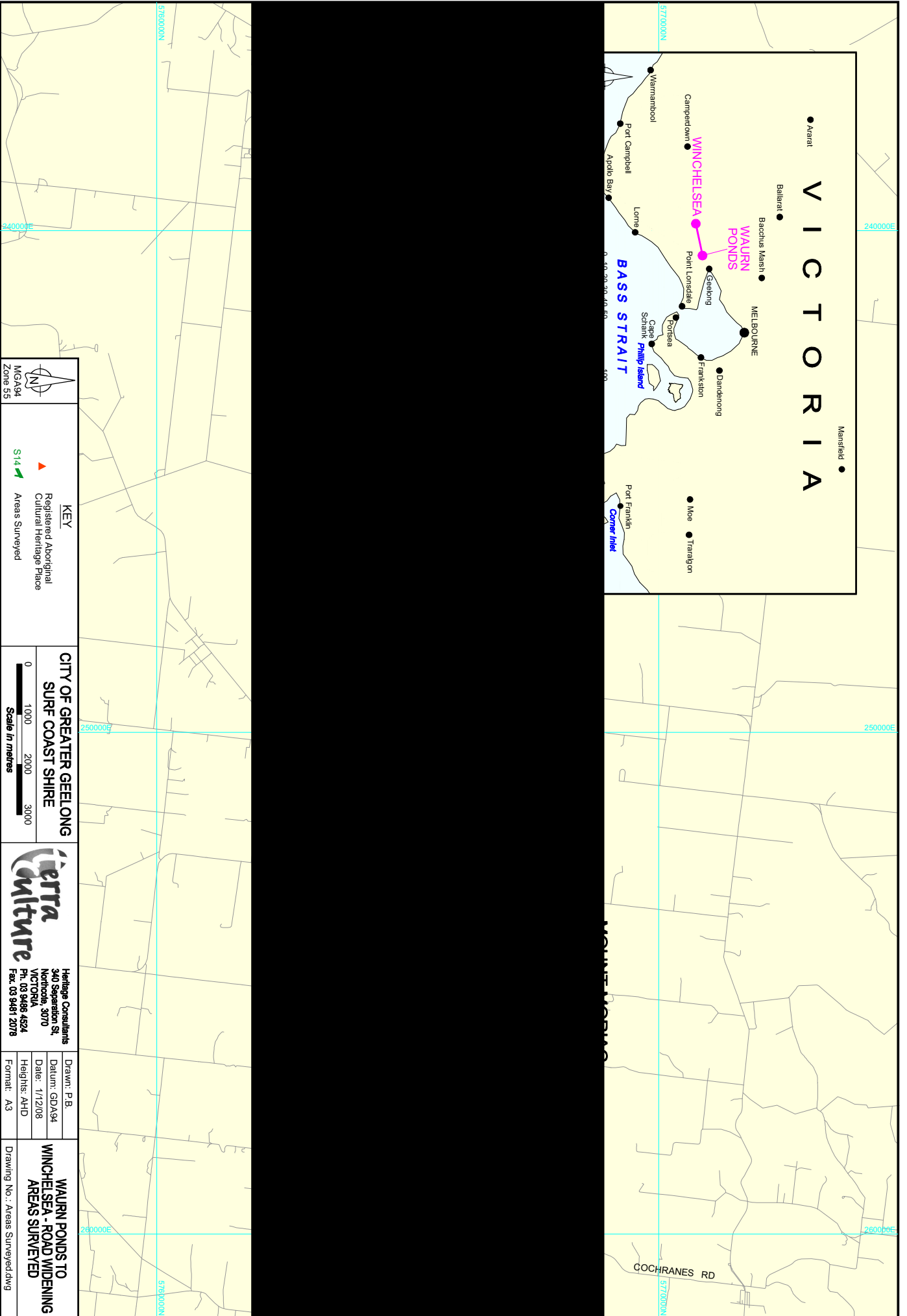
MAP 2 – Showing Areas Surveyed

MAP 3 – Showing Aboriginal cultural heritage sites

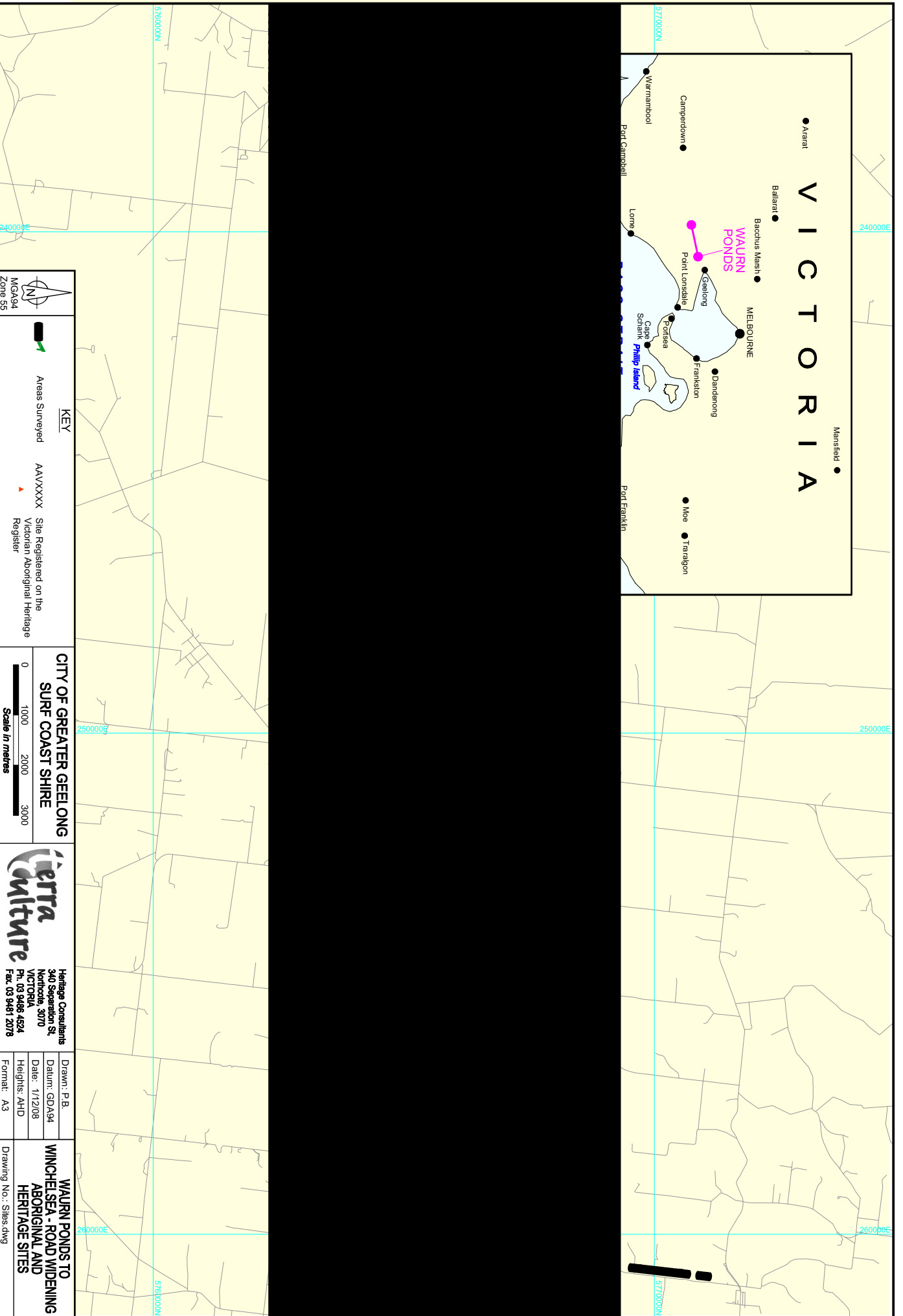


MAP 1: Showing Activity Area and Registered Aboriginal Cultural Heritage Places.

<p>KEY</p> <p>Registered Aboriginal Cultural Heritage Place</p> <p>Activity Area</p> <p>Proposed Road Widening</p>	<p>CITY OF GREATER GEELONG</p> <p>SURE COAST SHIRE</p> <p>0 1000 2000 3000</p> <p>Scale in metres</p>	<p>terra <i>culture</i></p> <p>Heritage Consultants 340 Separation St, Northcote, 3070 VICTORIA Ph. 03 9486 4524 Fax. 03 9481 2078</p>	<p>Drawn: P.B. Datum: GDA94 Date: 1/12/08 Heights: AHD Format: A3</p>	<p>WAURN PONDS TO WINCHELSEA - ROAD WIDENING REGISTERED ABORIGINAL CULTURAL HERITAGE PLACES</p> <p>Drawing No.: Base Map.dwg</p>



MAP 2: Showing Areas Surveyed.



MAP 3: Showing Aboriginal Cultural Heritage places

PART 8

GAZETTEER

The following is a Site Gazetteer of all Cultural Heritage found, discovered and/or subject to investigation in the Activity Area indexed by the relevant register numbers.

The following includes:

- Copies of all site cards relevant to the identified Cultural Heritage;
- A full cadastral description of the land where that cultural heritage is located; and
- A detailed plan of each heritage place found in the Study Area

SITE GAZETTEER - ABORIGINAL CULTURAL HERITAGE

The following is the gazetteer of the Aboriginal archaeological sites located within the Princes Highway, Waurin Ponds to Winchelsea Activity Area.

Site Name	Site Number	Site Type	Grid Co-ordinates GDA94	
			Easting	Northing
██████████	7721-0108	Scarred Tree (and Associated Plaque)	██████████	██████████
██████████	7721-0935	Scarred Tree	██████████	██████████

Cadastral Details (7721-0108): Part of Government Road, ██████████ Surf Coast Shire, Parish of Lake Lake Wollard, County of Grant

Cadastral Details (7721-TBA): Part of Government Road, ██████████ Surf Coast Shire, Parish of Modewarre, County of Grant

SITE CARDS

VICTORIAN ABORIGINAL PLACE

PLACE INSPECTION FORM

HERITAGE REGISTER NAME [redacted]

HERITAGE REGISTER NUMBER 7 7 2 1 - 0 1 0 8

COMPONENT Scarred Tree

Updated Primary Grid Coordinates* E [redacted] N [redacted] *All grid coordinates must be presented with reference to the MGA94 datum [] Zone 54 [x] Zone 55

Please note on location map/context and extent plans where Primary Grid Coordinate reading was taken

LAND STATUS: [x] Crown [] Private

DATE OF INSPECTION

1 1 - 1 0 - 2 0 0 8

RELEVANT CULTURAL HERITAGE MANAGEMENT PLAN NUMBER (IF ANY)

[] [] [] [] [] If this Aboriginal heritage place was previously subject to a CHMP - state the number of that plan

INSPECTION CONDUCTED BY:

LAND OWNER/MANAGER

Name zvonka stanin
Business terraculture pty ltd
Address 340 separation street northcote
State VIC Post Code 3070
Phone: (03) 9486 4524
Fax: (03)
E-mail:

Name co Maya Salim
Business VicRoads
Address 444 Princes Highway Corio
State VIC Post Code 3214
Phone: (03) 5274 6862
Fax: (03) 5274 6801
E-mail: maya.salim@roads.vic.gov.au

INDIVIDUALS PRESENT DURING INSPECTION

Table with 3 columns: Name, Function, Organisation. Rows include Zvonka Stanin (Heritage advisor, Terraculture Pty Ltd), John Hyett (Heritage advisor, Terraculture Pty Ltd), Richard Fagan (Community representative, Wathaurang Aboriginal Corporation), and Malcolm Morgan (Community representative, Wathaurang Traditional Owners Authorising Group).

PRESENT CONDITION ASSESSMENT

(Overall condition of heritage site and surrounds)

[x] Excellent (80-100% intact) [] Fair (40-60% intact) [] Very poor (<20% intact) Area is: [x] Stable
[] Good (60-80% intact) [] Poor (20-40% intact) [] Destroyed [] Eroding
[] Aggrading

IMPACTS AFFECTING SITE

Actual: vehicular traffic and parking
Potential: Road development - Princes Highway Duplication, Waurrn Ponds to Winchelsea

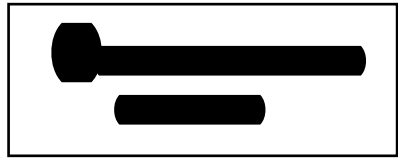
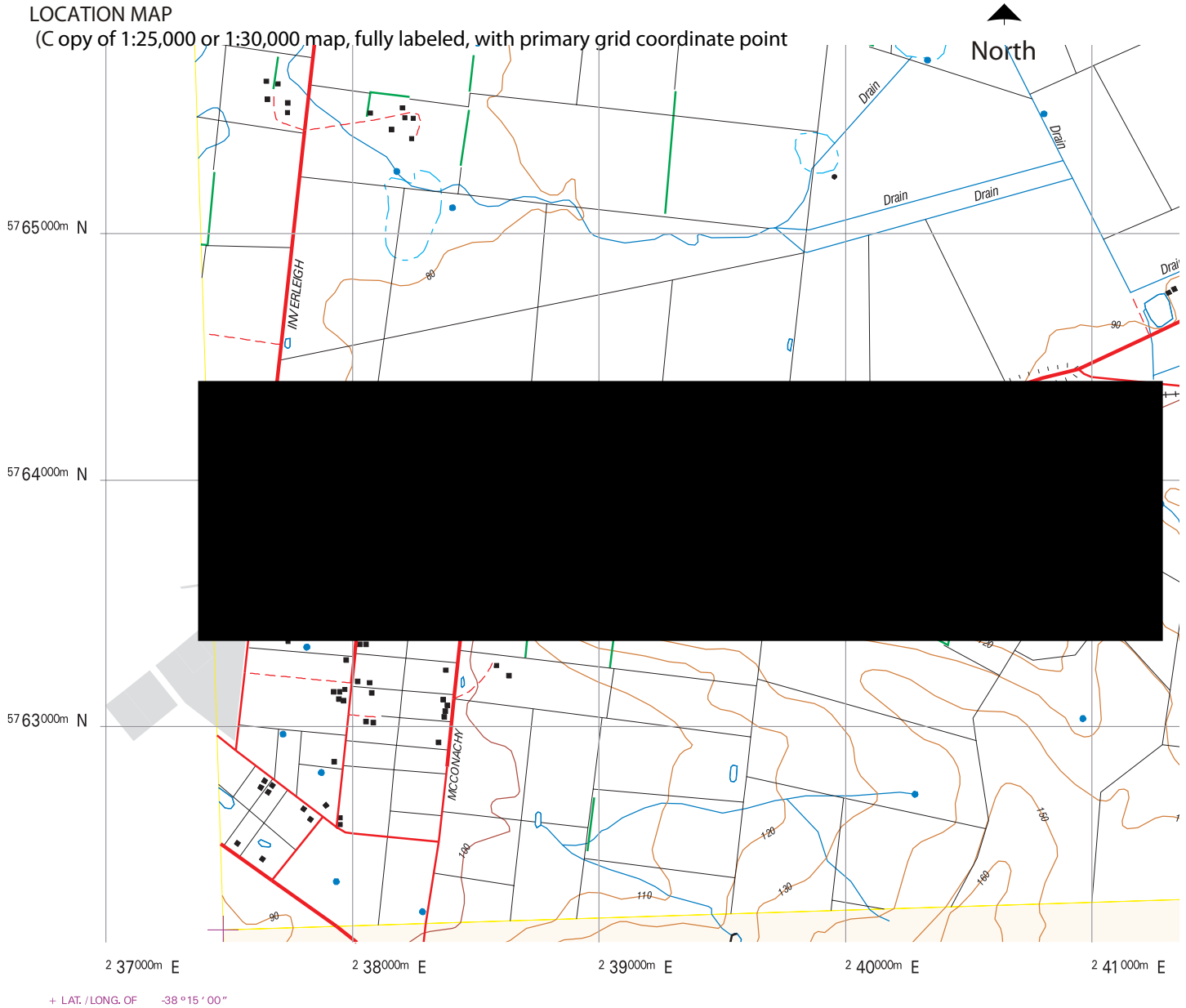
MANAGEMENT RECOMMENDATIONS / ACTIONS TAKEN

Tree is healthy and locally well documented - SurfCoast Shire has erected a plaque next to the tree showing its importance.

[x] Site Photographed [] Material Collected [] Other

LOCATION MAP

(Copy of 1:25,000 or 1:30,000 map, fully labeled, with primary grid coordinate point



1:25,000 or 1:30,000 Map Sheet Name and Number Mount Pollock 7721-4-3

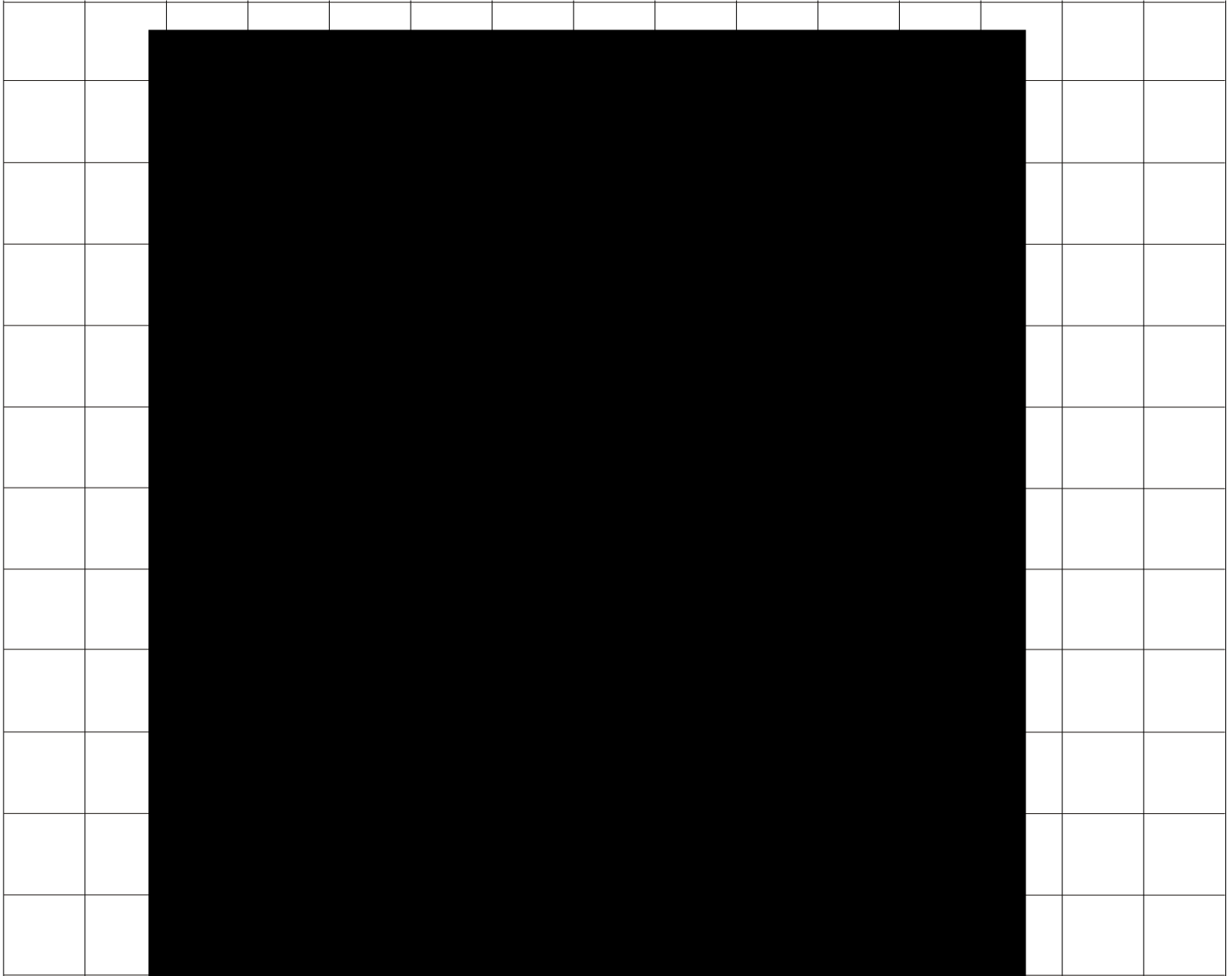
DESCRIBE HOW TO LOCATE PLACE

(Start at known point - eg nearest town)

Handwritten description area consisting of several horizontal lines. The first three lines contain blacked-out text, while the remaining lines are empty.

PRESENT PLACE CONTEXT PLAN

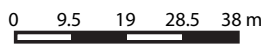
(Show areas of damage, if any. Indicate location of Primary Grid Coordinate Point and any reference points - if possible at this scale).



LEGEND

	Road boundary		Private property	7721-0108 - drip line - full extent (drip line x 2)
	Drive ways		Property boundaries	
	Primary co-ordinate		Road reserve - current	

Scale = 1: 772



Reference Points:

Reference Point 1

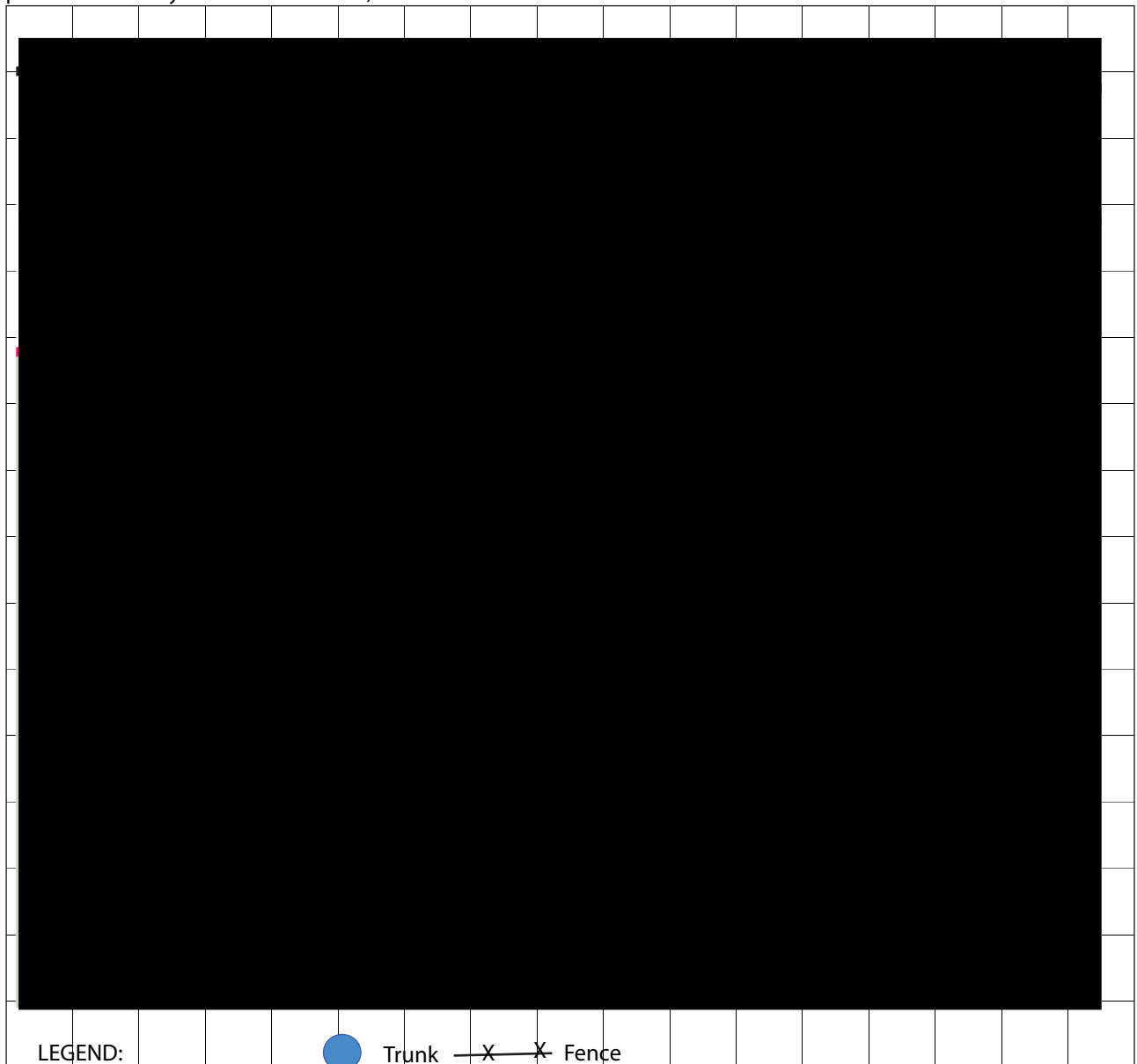
Reference Point 2

Reference Point 3

Reference Point 4:

PRESENT PLACE EXTENT PLAN

(Show areas of damage, if any. Indicate location of Primary Grid Coordinate Point and present boundary extent of the Place).



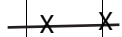
LEGEND:

■ SurfCoast Shire plaque

□ Road reserve



Trunk



Fence



Road



Site boundary

0 9 18 22.5 m

ADDITIONAL INFORMATION

This site is the Winchelsea Scarred Tree (7721-0108) recorded by Lawrie Canole as part of a 1986 Victorian Archaeological Survey (the predecessor to Aboriginal Affairs Victoria).

[Redacted text]

[Redacted text]

IDENTIFY ADDITIONAL MATERIAL (sketches, statements, images etc.)

- SurfCoast Shire brass plaque located 4 metres to the southwest of the trunk, acknowledging the importance of the tree - however with no reference to Aboriginal communities.
- within the plaque, the tree is described as a 300 Year – Old Tree, further confirming its importance
- the tree has also been marked on local Winchelsea Heritage Trail maps

Place Extent Measurements for [REDACTED]

FROM	TO	Distance	Azimuth	X	Y
1	2	9 metres	0 deg	[REDACTED]	[REDACTED]
2	3	18 metres	360 deg		

Complete circle – 18 metre radius .

Victorian Aboriginal Heritage Register Form for the purposes of the Aboriginal Heritage Act 2006

This form, approved by the Secretary, Department for Planning and Community Development, specifies the format in which assessment document relating to Aboriginal cultural heritage must be presented.

VICTORIAN ABORIGINAL
HERITAGE REGISTER RECORD

HERITAGE
REGISTER
NAME:



HERITAGE
REGISTER
NUMBER:

					-					
--	--	--	--	--	---	--	--	--	--	--

Office Use Only

RECORDER INFORMATION

Name Zvonka Stanin
 Business Terraculture Pty Ltd
 Address 340 Separation Street
Northcote
 State VIC Post Code 3070
 Phone: (03) 9486 4524
 Fax: (03) 9481 2078
 E-mail: zvonka@terraculture.com

RECORDER TYPE

- | | |
|--|--|
| <input type="checkbox"/> Aboriginal community | <input type="checkbox"/> Cultural Officer |
| <input type="checkbox"/> Aboriginal Affairs Victoria staff | <input checked="" type="checkbox"/> Heritage Advisor |
| <input type="checkbox"/> Other _____ | <input type="checkbox"/> Researcher |
| | <input type="checkbox"/> Student |

DATE RECORDED

2	3
---	---

 -

1	0
---	---

 -

2	0	0	8
---	---	---	---

REASON FOR RECORDING:

- CHMP Cultural Heritage Permit Heritage Assessment
 Opportunistic Find Research Other (specify) _____

CULTURAL HERITAGE MANAGEMENT PLAN NUMBER (if any)

--	--	--	--	--

Issued to the sponsor of a CHMP by AAV

PERMIT NUMBER (if any)

--	--	--	--	--	--	--	--	--	--	--	--

INFORMATION FROM THE RELEVANT REGISTERED ABORIGINAL PARTY/ COMMUNITY ABOUT THE SITE (If any - identify informant as appropriate)

RAP/ Community organisation Wathaurong Aboriginal Corporation & Wathaurong Traditional Informant's Name Bonnie Fagan and Malcolm Morgan (respect.) Owners Authorising Group
 Address For Corporation refer to Mr. Bryon Powell Phone: 0421 158 944
For Authorising Group refer to Mr. Trevor Edwards, Phone: (03) 5277 0044
 State VIC Postcode _____
 Phone: () _____
 Fax: () _____
 E-mail: bpowell6@optusnet.com.au & admin@wathaurong.org.au

COMPOSITION OF RECORD

- MULTI-COMPONENT SINGLE
- Total Number of Components 1
- Total number of Record Forms (including this form) 2

NUMBER AND TYPE OF COMPONENT OR OBJECT COLLECTION FORMS ATTACHED TO MAIN FORM

- | | | | |
|--|---|--|--|
| <input type="checkbox"/> Aboriginal Historic Place | <input type="checkbox"/> Artefact Scatter | <input type="checkbox"/> Quarry | <input type="checkbox"/> Shell Midden |
| <input type="checkbox"/> Aboriginal Intangible Place/ Consultation | <input type="checkbox"/> Earth Feature | <input type="checkbox"/> Rock Art | <input type="checkbox"/> Stone Feature |
| <input type="checkbox"/> Aboriginal Object Collection | <input type="checkbox"/> Human Remains | <input checked="" type="checkbox"/> Scarred Tree | |

Note: All relevant component forms must be fully completed and attached to this cover sheet.

THREAT TO PLACE

Development: Imminent Likely Unlikely Already occurred

Specify: The tree is located adjacent to imminent road works

Possible date of threat: January/February 2008

LOCATION

1:25,000 map name and number for Place location

Mount Moriac 7721- 4 - 2

Primary Grid Coordinates:*



Easting



Northing

* Coordinates must be presented using MGA/ GDA 94 datum

Zone 54 55

Specify how coordinates were derived:

- GPS (specify type): Uncorrected Differential RTK
- Direct survey using survey marks Surveyor's report
- Reference points (specify): Triangulation Trilateration
- Map Sheet Reading
 - 1:25,000 map sheet 7721-4-2 1:100,000 map sheet _____
 - 1:30,000 map sheet _____ Other (specify) _____
- Estimated accuracy of grid coordinate +/- 3 m Metres

Additional map/s: _____

Air photo: _____

LAND TENURE

Land Status:

Crown Private

- Allotment, Section, Plan #, Parish (Mandatory)
- Volume/ Folio
- Property address

Parish of Modewarre, County of Grant

Government Road Reserve, Considines Road

Tenure type:

- Commonwealth Company
- State government Individual
- Parks Victoria Catchment/Water Authority (specify) _____
- Local government Other (specify) _____
- Road reserve

Land owner/manager

Name VicRoads

Address 444 Princes Highway

(Not PO Box) Corio

Telephone # 03 5274 6862

State VIC Postcode 3214

Email: maya.salim@roads.vic.gov.au

Information from land owner/manager about the site (if any)

Please speak to Ms. Maya Salim

ACCESS

Access Requirements

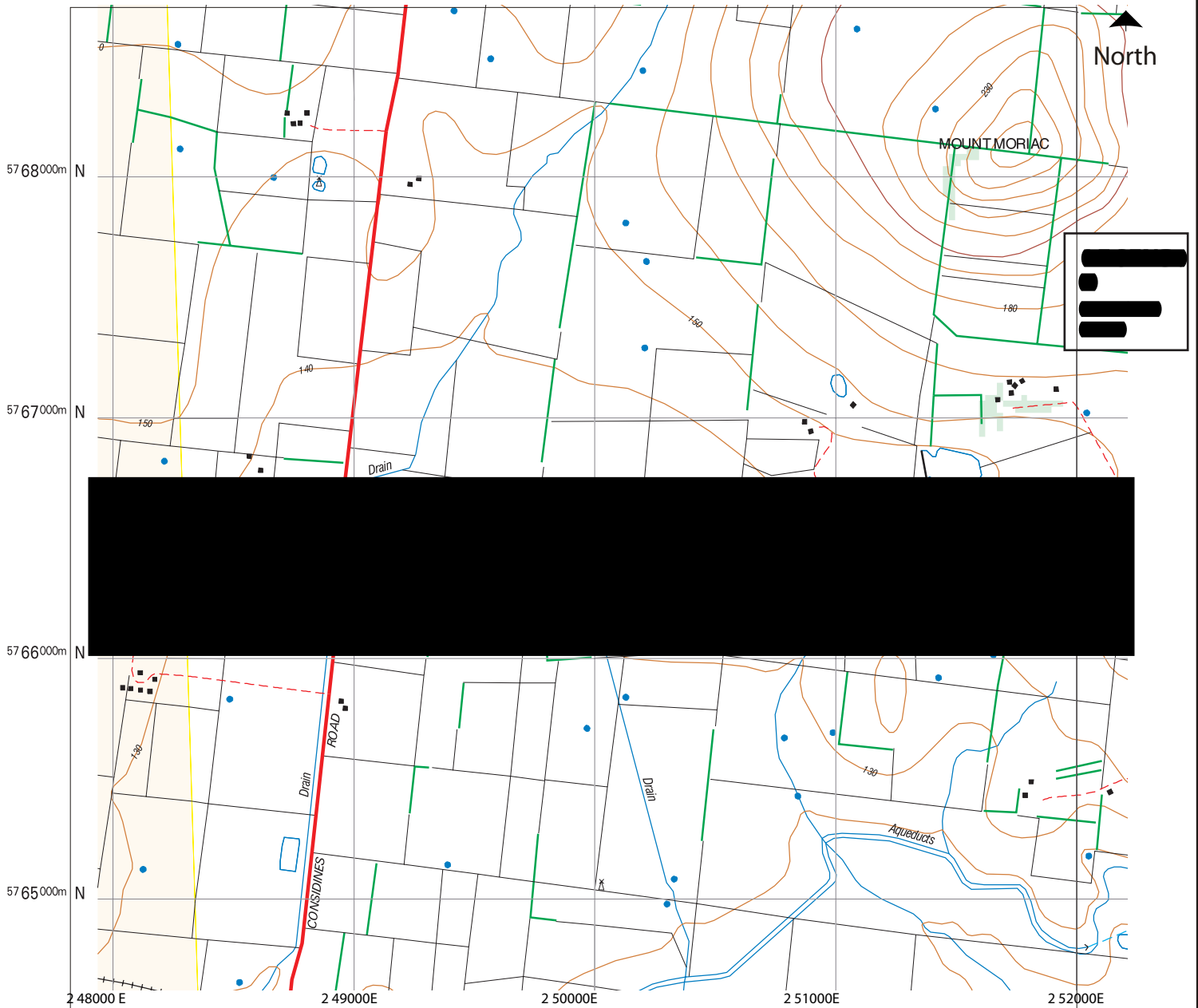
- 4WD required
- 4WD required if wet
- >30 minute walk from nearest road
- Accessible with non-4WD vehicle
- Other _____
- No difficulties

Access Restrictions

- Contact Registered Aboriginal Party
- Contact Aboriginal community
- Contact owner
- Contact land manager
- Guide required
- Guide desirable
- Other ⁵³ _____
- No restrictions known

LOCATION MAP

(C copy of 1:25,000 or 1:30,000 map, fully labeled, with primary reference point clearly marked as a cross)



Topographic map used for Location Plan : 1:25,000 Number: 7721-4-2
 1:30,000 Name: Mount Moriac

DESCRIBE HOW TO REVISIT THE PLACE
 (Start at known point - eg nearest town)

DESCRIBE THE PLACE LOCATION











The scarred tree is located within remnant woodland (gum) next to an irrigation channel; the latter which may represent an earlier natural drainage course.

Add additional pages as appropriate).
 Number of pages added.


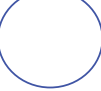
List additional information included. _____



LEGEND

-  Road boundary
-  Drive ways
-  Primary co-ordinate
-  Recent planting
-  Private property
-  Property boundaries
-  Road reserve - current
-  Native trees - mature
-  Reference Point
-  Water Channel

Scarred Tree extent

-  - drip line
-  - drip line x 2 (final extent)

Scale = 1: 3000

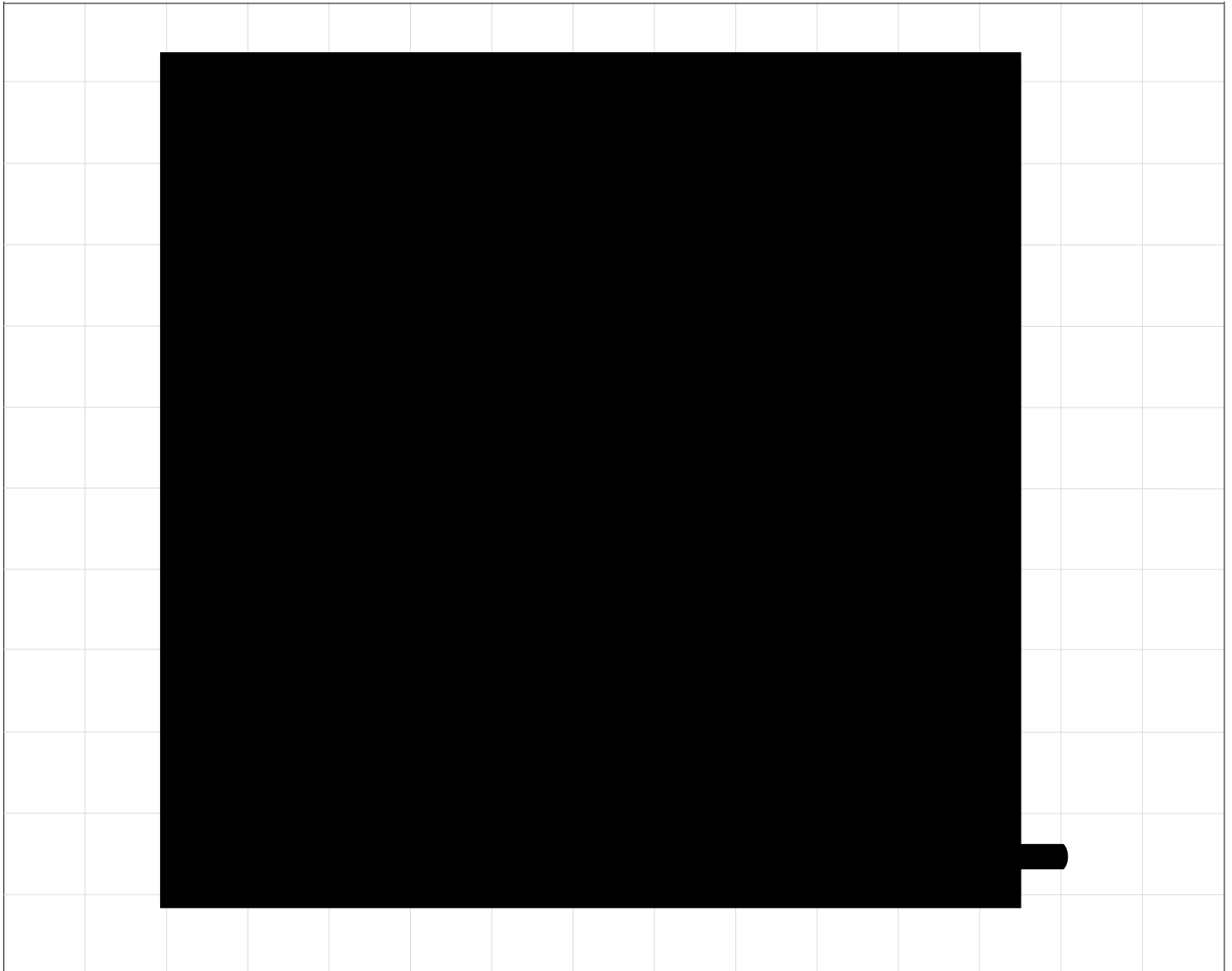


Reference Points:	Easting	Northing	Zone	Bearing °	Distance (m)	Description of Reference Point
Reference Point 1						
Reference Point 2						
Reference Point 3						
Reference Point 4						
Reference Point 5						
Reference Point 6						













- Bearing ° Magnetic/ Compass
 True
 Grid

Add additional pages as appropriate).
 Number of pages added.

List additional information included. _____



LEGEND x 1

	Road boundary		Private property		Gradient		Scarred Tree extent - drip line x 2 (final extent)
	Drive ways		Informal carpark		Road reserve - current		Reference Point
	Primary co-ordinate		Recent planting		Native trees - mature		Water Channel

Scale = 1: 1000 0 10 20 30 40 metres



Attach Place Extent Survey Data Spreadsheet

Place Extent Description and Interpretation:

[Redacted text block consisting of several horizontal black bars covering the description and interpretation section.]

Add additional pages as appropriate).
Number of pages added.

List additional information included.

Place extent survey data spreadsheet
also = survey extent

ENVIRONMENTAL SETTING

Landforms Inland (>1km from present coast) Coastal (<1km from present coast)

Land Systems - Altitude (elevation)

- Alpine (>1500m) Foothill (300-<900m)
 Sub-alpine (1200 - 1500m) Lowland (0 - <300m)
 Montane (900 - < 1200m)

Land Systems -Climatic Zones

- Alpine Cool Maritime Warm
 Sub-alpine Frost Hollow Semi-arid Temperate

Place Setting Slope

- Level/ Flat Ground (<0.5 °) Steep (19° - 30°)
 Very Gently Inclined (0.5 ° - 1.5 °) Very Steep (31° - 45°)
 Gently Inclined (1.6 ° - 5.5 °) Precipitous (46° - 72°)
 Moderately Inclined (5.6 ° - 18°) Cliff (>72°)

- Lower slope Middle slope
 Upper slope Crest

Aspect 0° - 360°

Locality Environment Landform

- | | | | | | | |
|---|---|--|---|--|---------------------------------------|-------------------------------------|
| <input type="checkbox"/> Alluvial Terrace | <input type="checkbox"/> Creekline | <input type="checkbox"/> Floodway | <input type="checkbox"/> Lake | <input type="checkbox"/> Playa | <input type="checkbox"/> Slope | <input type="checkbox"/> Swamp |
| <input type="checkbox"/> Berm | <input type="checkbox"/> Depression | <input type="checkbox"/> Floodway Pond | <input type="checkbox"/> Lake-bed | <input type="checkbox"/> Ridge | <input type="checkbox"/> Snow Patch | <input type="checkbox"/> Table-land |
| <input type="checkbox"/> Billabong | <input checked="" type="checkbox"/> Drainage-line | <input type="checkbox"/> Gallery | <input type="checkbox"/> Lagoon | <input type="checkbox"/> Riparian | <input type="checkbox"/> Soak | <input type="checkbox"/> Valley |
| <input type="checkbox"/> Blocked Coastal Stream | <input type="checkbox"/> Dune | <input type="checkbox"/> Gilgai | <input type="checkbox"/> Lava Plain | <input type="checkbox"/> Rise | <input type="checkbox"/> Spray Zone | <input type="checkbox"/> Verge |
| <input type="checkbox"/> Bog/Mossbed | <input type="checkbox"/> Escarpment | <input type="checkbox"/> Gypseous Plains | <input type="checkbox"/> Low Rises | <input type="checkbox"/> Riverine | <input type="checkbox"/> Spring | <input type="checkbox"/> Wetland |
| <input type="checkbox"/> Cinder Cone | <input type="checkbox"/> Estruaine | <input type="checkbox"/> Gully | <input type="checkbox"/> Lunette | <input type="checkbox"/> Rocky Outcrop | <input type="checkbox"/> Stoney Knoll | |
| <input type="checkbox"/> Claypan | <input type="checkbox"/> Fen | <input type="checkbox"/> Hillcrest | <input type="checkbox"/> Marsh | <input type="checkbox"/> Scoria Cone | <input type="checkbox"/> Stony Rise | |
| <input type="checkbox"/> Coast/Coastal | <input type="checkbox"/> Flats | <input type="checkbox"/> Hill | <input type="checkbox"/> Meadow | <input type="checkbox"/> Scree-slope | <input type="checkbox"/> Stream | |
| | <input type="checkbox"/> Floodplain | <input type="checkbox"/> Headland | <input type="checkbox"/> Perched | <input type="checkbox"/> Shell Beach | <input type="checkbox"/> Stream Bank | |
| | | <input type="checkbox"/> Inland | <input checked="" type="checkbox"/> Plain | <input type="checkbox"/> Sink-hole | <input type="checkbox"/> Swale | |

Water

- Fresh Salt/Brackish No local source Permanent Temporary/ prone to flooding
 Coastal Highly localised (springs, soaks, etc) Lakes/Swamps Rivers/Creeks

Name of nearest fresh water source: Modified drainage channel

Previous + Current Land Use(s) (Indicate P [previous] and C [current] in appropriate box)

- Agricultural Cultivated Grazed Recreation Urban
 Alpine park Developed Parkland Reserve Other _____
 Cleared Forestry Plantation Undeveloped

Soils /Sediments Edaphic (Moisture) Damp Dry Wet

Texture Edaphic (Soil) Clay Laterite Loams Peat Sands Silt

Texture Class Sand Clayey (Loamy) Sand Sandy Loam Loam Silty Loam Sandy Clay Loam
 Silty Clay Loam Clay Loam Sandy Clay Silty Clay Clay

Excavated areas only

Colour Munsell Chart colour # and name: _____ pH Reading _____
 Colour Pattern Description: _____

Structure Shape Platy Prismatic Columnar Blocky Nut Granular Crumb
 Size Fine Medium Course

Consistence Consistence Dry Moist Loose Soft/ Friable Hard/ Firm Extremely Hard
 Cementation Weakly Cemented Strongly Cemented Indurated

Vegetation

- Vegetation Condition
 Agricultural Exotic Remnant native vegetation Modified native vegetation
 No vegetation/Bare land Urban

Ground surface exposure 40-100 % (Percentage of ground surface visible).

Vegetation Community Type (Structure)

- | | | | | |
|------------------------------------|---------------------------------------|-------------------------------------|------------------------------------|--|
| <input type="checkbox"/> Forest | <input type="checkbox"/> Herbland | <input type="checkbox"/> Rainforest | <input type="checkbox"/> Sedgeland | <input checked="" type="checkbox"/> Woodland |
| <input type="checkbox"/> Grassland | <input type="checkbox"/> Mallee | <input type="checkbox"/> Reedbed | <input type="checkbox"/> Shrubland | Aquatic Vegetation <input type="checkbox"/> Emergent |
| <input type="checkbox"/> Heathland | <input type="checkbox"/> Mixed Forest | <input type="checkbox"/> Samphire | <input type="checkbox"/> Thicket | <input type="checkbox"/> Floating |
| | | <input type="checkbox"/> Scrub | <input type="checkbox"/> Tussock | <input type="checkbox"/> Submerged |

Major Vegetation Types (Generic Names)

- | | | | | |
|---|--|------------------------------------|---|--------------------------------------|
| <input type="checkbox"/> Banksia | <input type="checkbox"/> Cane Grass | <input type="checkbox"/> Ironbark | <input type="checkbox"/> Pomaderris | <input type="checkbox"/> Sweet Grass |
| <input type="checkbox"/> Black Box | <input type="checkbox"/> Coast Banksia | <input type="checkbox"/> Lignum | <input type="checkbox"/> Red Gum | <input type="checkbox"/> Tea Tree |
| <input type="checkbox"/> Blackthorn | <input type="checkbox"/> Fern | <input type="checkbox"/> Mangrove | <input type="checkbox"/> Salt Paperbark | |
| <input checked="" type="checkbox"/> Box | <input type="checkbox"/> Gahnia | <input type="checkbox"/> Melaleuca | <input type="checkbox"/> Spike-sedge | |

ADDITIONAL INFORMATION

Scarred tree is associated with native vegetation - but 1770s EVCs indicate grassland, minor drainage line?
 Soil profile based is questionable, as only surface inspection; refer to specific soil studies.

**RECENT DISTURBANCE/
CONDITION ASSESSMENT**
(Overall condition of heritage site and surrounds)

- Excellent (80-100% intact)
- Good (60-80% intact)
- Fair (40-60% intact)
- Poor (20-40% intact)
- Very poor (<20% intact)
- Destroyed

- Area is: Aggrading
 Eroding
 Stable

IMPACTS AFFECTING HERITAGE SITE

- None
- Deflation
- Exfoliation
- Fire
- Gully Erosion
- Landslip
- Moss/Lichen
- Other _____
- Native Animal
- Overgrazing
- Pedestrian
- Rabbit Damage
- Other Burrow or Digging
- Scientific Investigation
- Sheet Erosion
- Stock Rubbing
- Stock Trampling
- Vandalism
- Vehicular
- Visitation
- Water
- Wind

SUMMARY SITE DESCRIPTION AND MANAGEMENT RECOMMENDATIONS (If any)

CURRENT MANAGEMENT

None known

- Cultural Heritage Management Plan
- Cultural Heritage Audit
- Informal (specify) _____
- Management Works Implemented
- Victorian Heritage Register (specify) _____
- Victorian Heritage Inventory (specify) _____
- Heritage Overlay (specify) _____
- National Estate (specify) _____
- National Trust (specify) _____
- Cultural Heritage Permit
- Cultural Heritage Agreement
- Interim Protection Declaration
- Ongoing Protection Declaration
- Stop Order
- Inspection program (specify) _____
- Other _____

DOCUMENTATION

- Photographs Digital Images Slides Negatives
- Survey/ Excavation Methods Form

Electronic copies of digital photographs should be provided to AA V after the Heritage Register Number is issued by the Heritage Registrar.

Artefacts Collected
(If collected, complete an Artefact Collection Component Form)

Data Published
References _____

Place Dated Dates _____

(Include method, lab number, age determination, error and material)

Spatial Data Supplied: Projected T o MGA 94

- Gps Data Waypoints Routes Tracks
- Gis Data Cad (*.dxf) Mapinfo File (*.map) Shape file (*.shp)

Declaration:

I declare that the information in this form and its attachments is true and correct to the best of my knowledge

Signed: _____
Date signed: _____

Office Use Only

- Heritage Registry Files
- Archives (in secondary storage)
- AAV File Number _____
- Report Number/s _____

Place Extent Measurements for [REDACTED] [REDACTED]

FROM	TO	Distance	Azimuth	X	Y
1	2	7 metres	0 deg	[REDACTED]	[REDACTED]
2	3	14 metres	360 deg		

Complete circle – 14 metre radius

Checklist

- All Place Fields Completed?**
- Place Location Map**
 - Landvic Map/ Parcel Information Map (optional)
- Place Context Plan**
 - Reference Points Included (at least 3)
 - Aerial Images (optional)
- Place Extent Plan**
 - Place Extent Survey Measurement Table
- Component Forms**
- Archaeological Survey/ Excavation Attributes Form**
- Electronic Spatial Data**
 - GPS Waypoints/ Routes/ Tracks
 - GIS Data (if available)
- Photographs (hardcopies)**
- Place Dating Technique** (official documentation from dating laboratory)
- Copies of associated publications** (if available)
- Place Inspection Form** (if required)
- Object Collection Form** (if required)

VICTORIAN ABORIGINAL PLACE COMPONENT FORM

SCARRED TREE

HERITAGE REGISTER NAME [REDACTED] Tree 1

HERITAGE REGISTER NUMBER 7721 - [REDACTED]

Grid Coordinates* E [REDACTED] N [REDACTED]

*All grid coordinates must be presented with reference to the MGA94 datum Zone 54 Zone 55

- Casuarina Black box Cypress pine Grey box Swamp gum Yellow box Other gum Stringybark Uncertain Mallee Other Box (non-specific)

Condition

- Good health Dead (standing) Destroyed
 Poor health (dying) Fallen Removed
 Natural deterioration evident?

Total Number of Scars (Include toe-holds in total count) 1

Number of Toe-holds

Girth at 1.5m high 2.13 m

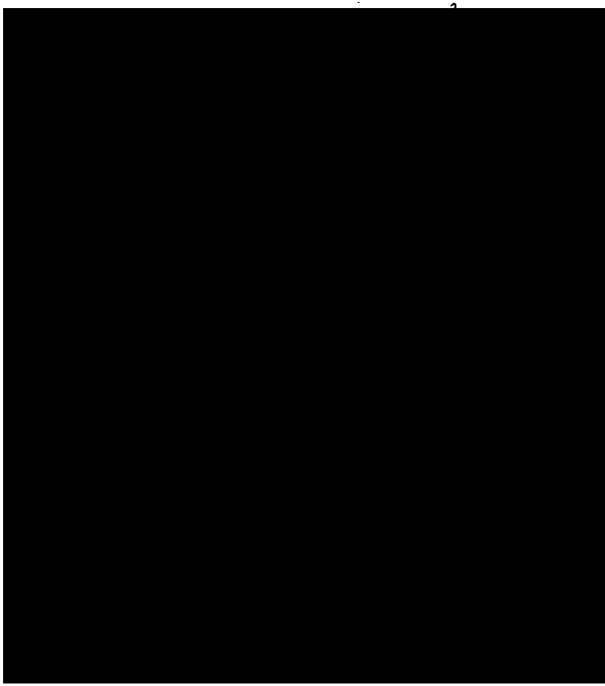
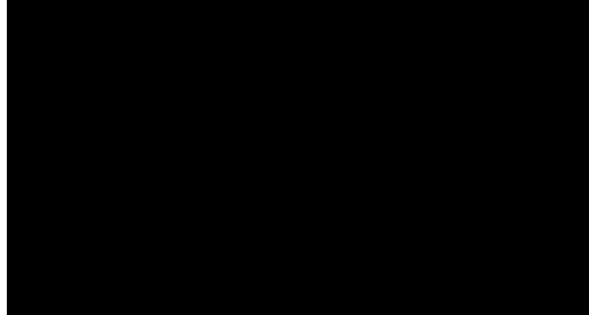

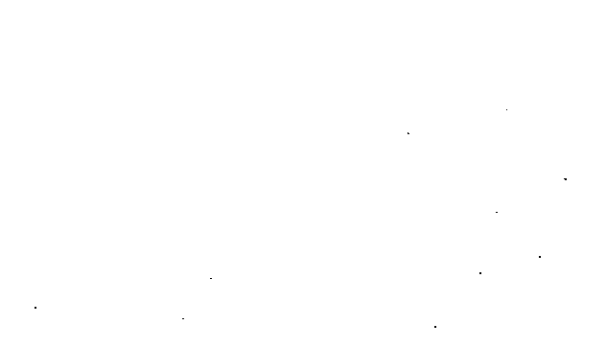

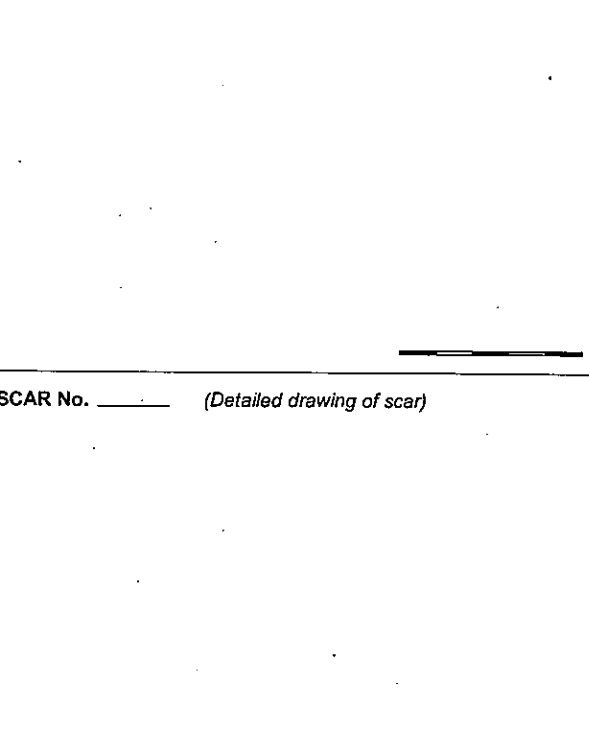
DESCRIPTION OF SCAR(S)

Please indicate if the dimensions have been estimated (E)

SCAR NUMBER →	1	2	3	4	5
Length	<u>.36</u> m	_____ m	_____ m	_____ m	_____ m
Width	<u>.075</u> m	_____ m	_____ m	_____ m	_____ m
Height above ground	<u>.26</u> m	_____ m	_____ m	_____ m	_____ m
OVERGROWTH					
Top	<u>.02</u> cm	_____ cm	_____ cm	_____ cm	_____ cm
Middle (left)	<u>.02</u> cm	_____ cm	_____ cm	_____ cm	_____ cm
Middle (right)	<u>.02</u> cm	_____ cm	_____ cm	_____ cm	_____ cm
Bottom	<u>.02</u> cm	_____ cm	_____ cm	_____ cm	_____ cm
SCAR ORIENTATION					
Degrees	<u>EAST</u>				
ORIGIN OF SCAR					
Highly Likely Aboriginal	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Definitely Aboriginal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If there is doubt that the scar is of Aboriginal in origin, then it can not be placed on the Victorian Aboriginal Heritage Register					
TYPE OF SCAR					
Bark removed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Heart-wood removed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Resource extraction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Carved tree	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (Specify)	_____	_____	_____	_____	_____
SCAR PRESERVATION					
Excellent	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Good	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fair	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Poor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Very poor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Destroyed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AXE-MARKS (Number)					
AXE-MARK METHOD					
Stone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Steel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unidentified origin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TYPE OF AXE-MARKS					
Parallel (linear)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Parallel (curved)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Linear (singular)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Criss-cross	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Random	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
STEM REGROWTH PRESENT	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N

SKETCHES

(Show relationship of multiple scars, overgrowth, axe-marks, toe holds etc. Number scars according to the descriptions on front. Draw cross-sections of scar, if possible. Show scale values)

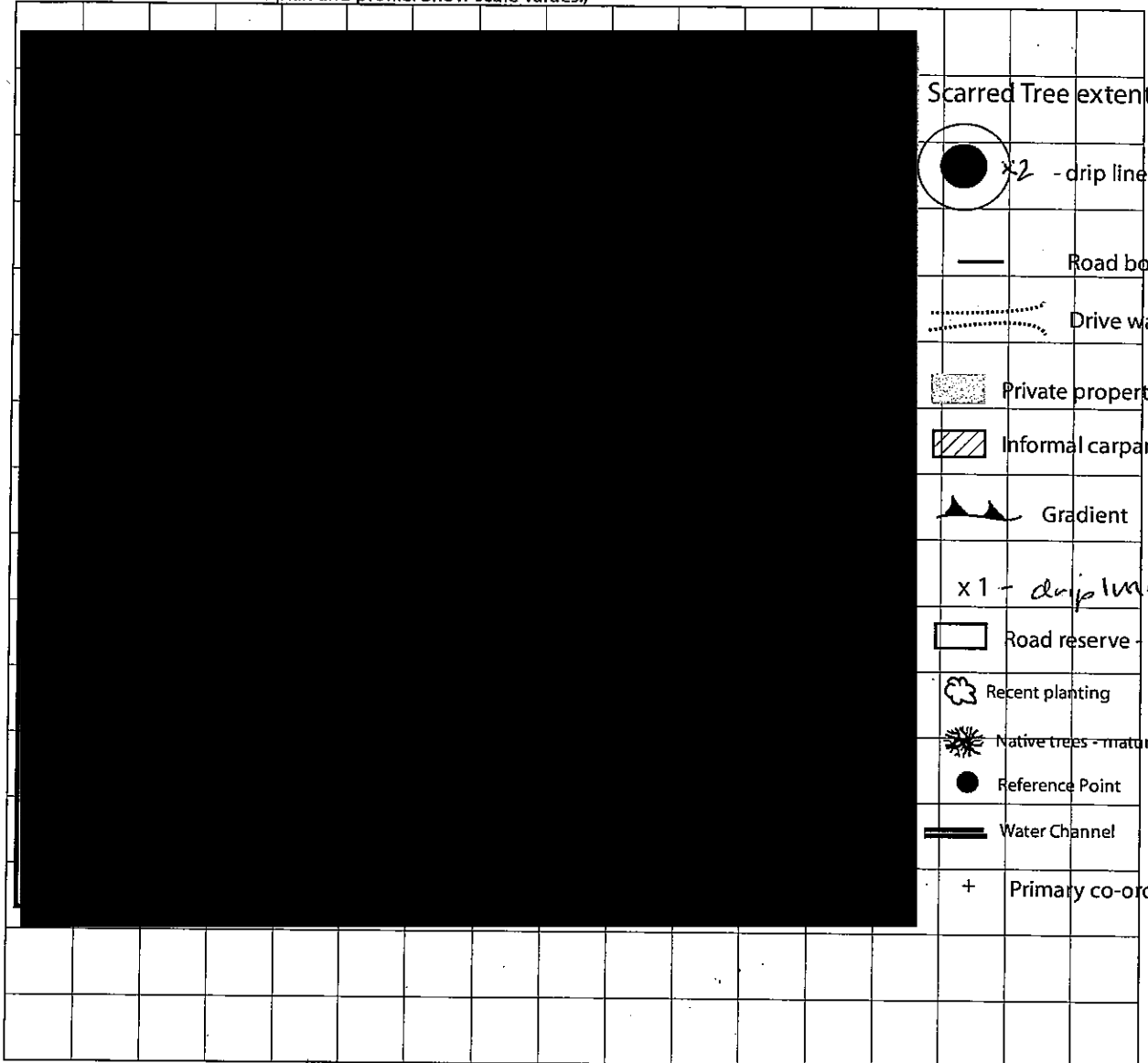
<p>TREE View from <u>90°</u></p>  <p>0 40 80 100 cm</p>	<p>SCAR No. <u>1</u> (Detailed drawing of scar)</p>  <p>0 30 cm</p>
<p>TREE View from _____°</p>  <p>0 40 80 100 cm</p>	<p>SCAR No. _____ (Detailed drawing of scar)</p> 
<p>TREE View from _____°</p>  <p>0 40 80 100 cm</p>	<p>SCAR No. _____ (Detailed drawing of scar)</p> 

ADDITIONAL INFORMATION

TREE HAS BEEN PARTIALLY WOUND OFF ABOVE SCAR,
HAS COPPING.

COMPONENT PLAN

(Show relationship between components and label accordingly.
Use same horizontal scale for plan and profile. Show scale values.)



Scale = 1: ¹²⁵⁰~~1000~~

Note: Site/Component Extent for scarred trees = 2 x canopy extent or the extent of root system if the tree is dead

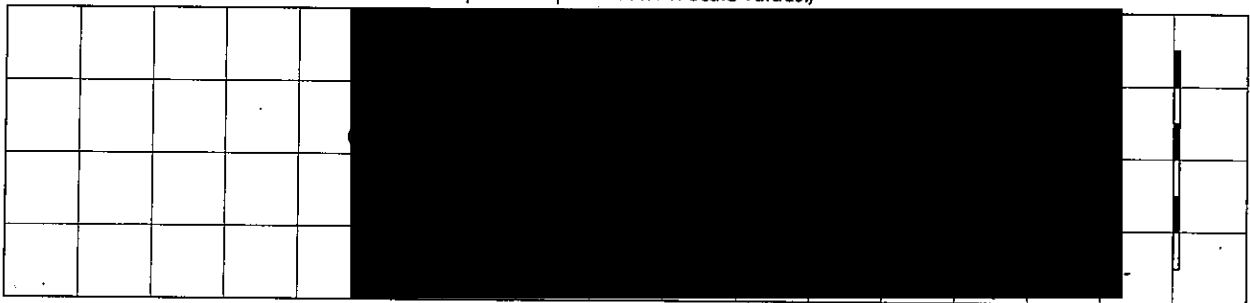
0

40 metres



COMPONENT PROFILE

(Do not excavate. Use same horizontal scale for plan and profile. Show scale values.)



Depth/Height _____ m

ADDITIONAL INFORMATION

PART 9

APPENDICES

Appendix A: Notices and Correspondence

- Notice of Intent to prepare a CHMP

Appendix B: VicRoads Brief – Desktop and Standard Assessment

Appendix C: VicRoads Layout Plans for the Activity Area (presented as CD)

APPENDIX A

Notices and Correspondence

The following documents are appended to the report:

- The Notice of Intention to Prepare a Management Plan provided by VicRoads to various Parties under s.54 of the *Aboriginal Heritage Act*;

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").

SECTION 1 – Sponsor Information

Name of Sponsor: ROADS CORPORATION (Contact: Andrew Peppinkhouse)
 Business Name: VICROADS
 Postal Address: 444 PRINCES HIGHWAY CORIO 3214
 Telephone Number: (03) 5274 6800 Fax number: (03) 5274 6801
 Mob: _____
 Email Address: andrew.peppinkhouse@roads.vic.gov.au

SECTION 2 – Description of proposed activity and location

- Clearly identify the project name (if applicable),
- Clearly identify the proposed activity and its extent in respect to the area for which the plan is to be prepared (attach a copy of a title search and indicate street address where applicable).
- Attach a map (to scale, with a north arrow and indicating the municipal district - if any) that clearly identifies the area and boundaries in respect of which the cultural heritage management plan is to be prepared.

PROJECT NAME: DUPLICATION OF PRINCES HIGHWAY - WAURN PONDS TO WINCHELSEA

PROPOSED ACTIVITY: VICROADS INTENDS TO DUPLICATE THE EXISTING PRINCES HIGHWAY BETWEEN WAURN PONDS AND WINCHELSEA. THESE WORKS WILL UPGRADE THE EXISTING ROAD TO AN 'M' STANDARD RURAL HIGHWAY WITH TWO LANES IN EACH DIRECTION SEPARATED BY A WIDE MEDIAN AND WITH SEALED SHOULDERS.

THE CULTURAL HERITAGE MANAGEMENT PLAN WILL ADDRESS THE CONSTRUCTION OF THE ~~THE~~ NEW CARRIAGEWAY AND WILL INVOLVE A COMPLEX ASSESSMENT OF THE RESERVATION, AS SHOWN ON THE ATTACHED PLANS.

A DESKTOP AND STANDARD ASSESSMENT HAS ALREADY BEEN UNDERTAKEN FOR THESE WORKS.

SECTION 3 – Expected start and finish date for the cultural heritage management plan

Start date: 01 / 01 / 2009 Finish date: 01 / 01 / 2010

SECTION 4 – Contact details for land owner/manager (where different to sponsor).

THERE ARE MULTIPLE AND NUMEROUS LAND OWNERS FOR THIS PROJECT.
ALL LANDOWNERS HAVE BEEN CONTACTED AND ADVISED OF PROJECT ACTIVITIES AND STUDIES
A FULL LIST OF LANDOWNER DETAILS IS AVAILABLE AT THE PROJECT OFFICE.

SECTION 5 – List the relevant registered Aboriginal parties (if any)

This section should only be completed where there is a registered Aboriginal party in relation to the Plan

SECTION 6 – Signature of Sponsor

I certify that to the best of my knowledge and belief that the information supplied is correct and complete.

Signed:



[Sponsor]

Date: 3 / 12 / 08

SECTION 7 – Checklist



Ensure appropriate attachment/s are completed and attached to this notification (see section 2 of this form).

Please ensure this notice and all attached items are sent to the:

Deputy Director

Aboriginal Affairs Victoria

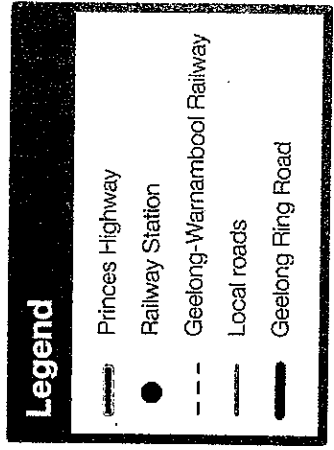
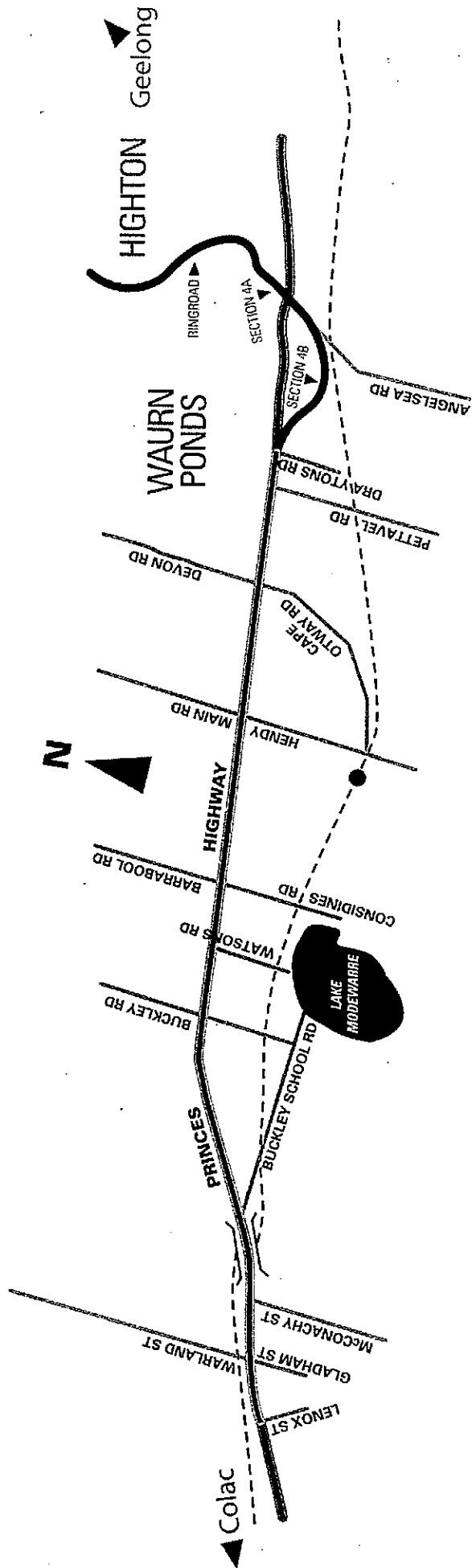
Department for Victorian Communities

GPO Box 2392

MELBOURNE VIC 3001

Notes:

- Ensure that any relevant registered Aboriginal party/s are also notified. A registered Aboriginal party is allowed up to 14 days to provide a written response to a notification specifying whether or not it intends to evaluate the management plan.
- In addition to notifying the Deputy Director and any relevant registered Aboriginal party/s, a sponsor must also notify any owner and/or occupier of any land within the area to which the management plan relates.



APPENDIX B

VicRoads Brief

Available upon request from VicRoads Geelong Ring Road Project Office

APPENDIX C

VicRoads Layout Plans – appended as separate CD