AN OVERVIEW OF THE ABORIGINAL ARCHAEOLOGY WITHIN THE "CASEY FOOTHILLS" NARRE WARREN NORTH AND HARKAWAY VICTORIA

A REPORT TO THE CITY OF CASEY

OCTOBER 1996

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ABSTRACT

This report outlines the results of an archaeological desktop study of the "Casey Foothills", and has been commissioned by the City of Casey. The study area, which encompasses Narre Warren North and Harkaway, is located 40 kilometres south east of Melbourne (Figure 1) and comprises approximately 2,500 hectares of the Dandenong Ranges Foothills. This study reviews the Aboriginal cultural heritage of the area, and supplemented by a vehicle reconnaissance, produces a predictive Aboriginal archaeological assessment.

The study area lies on the border of two former distinct but related Aboriginal language groups the <u>Woiwurung</u> and the <u>Bunurong</u>. This border was shared by two clans of the language groups, the <u>Balukwillam</u> (<u>Woiworung</u>) and the <u>Mayone-bulluk</u> (<u>Bunurong</u>). Any sites located within the study area are potentially places where these two groups may have met. Today the Wurundjeri Tribe, Land Compensation and Cultural Heritage Council Incorporated are the cultural custodians for these former clan estates.

Prior to this investigation, no previous archaeological studies have been undertaken, and no archaeological sites have been recorded within the study area. The consultant and Mr Robert Mullins, a member of the Wurundjeri Tribe, Land, Compensation and Cultural Heritage Council Incorporated, reviewed the study area on Wednesday the 2nd of October, 1996. During the vehicle reconnaissance, one isolated artefact occurrence was located (AAV 7922/563) on the upper reaches of Cardinia Creek, and has been provisionally assessed as being of low scientific significance (section 5).

A total of 30 Aboriginal archaeological sites have been previously recorded within a 10 kilometre radius of the study area. These sites comprise 7 isolated artefact occurrences (AAV 7921/192,193,195, 204,212,219,220) 17 surface scatters of stone artefacts (AAV 7921/189,191,194,200,205,208,209,211,229,230,232,233,234,235,239,244, 244) and 6 scarred tree sites (AAV 7921/180,190,196,206,207,236) (Appendix 3 - Glossary). These sites are predominantly located along Cardinia Creek to the east and south of Berwick, and were recorded by Smith (1989) during a study of the Berwick Pakenham Corridor (Figure 4).

Based on the Aboriginal archaeological background, ethnographic data and the results of the vehicle reconnaissance, the site types considered likely to occur within the study area are; scarred trees, surface scatters of stone artefacts and isolated artefact occurrences. Also possible within the study area are grinding grooves sites on granite outcrops which occur on some hill tops. There is historical evidence for the existence of a ceremonial/social site within the Harkaway area. Most sites within the study area are likely to be located within 100 metres of a watercourse and on level to undulating ground. The dominant raw material types that are likely to be found within any stone artefact site are chert and quartz. Though quartz is a locally available stone material, there are no silcrete or chert sources within or near to the

study area. It is unlikely that any human burial remains exist within the study area.

Due to the paucity of recorded Aboriginal archaeological sites within the study area, surface scatters of stone artefacts, freshwater shell middens, and scarred tree sites recorded during a subsequent archaeological site survey would be provisionally assessed as being of moderate to high significance. Ceremonial\social gathering sites or human burial remains would be considered as being of extremely high scientific significance.

Two landforms have been identified during this study as being archaeologically sensitive for Aboriginal sites. Hill tops and areas containing remnant stands of swamp and messmate gum have been provisionally assessed as being of moderate archaeological sensitivity, and creek banks to the break of slope have been provisionally assessed as being of high archaeological sensitivity (Figure 5). Prior to any major land use changes in these areas, these types of landforms should be subject to further archaeological investigation in the form of an intensive ground surface survey.

Based on the findings of this study, the recommendations made in this report are (section 11):

- 1: That a detailed systematic archaeological survey be undertaken of the study area known as the "Casey Foothills" by a qualified archaeologist and member of the Wurundjeri Tribe, Land Compensation and Cultural Heritage Council Incorporated.
- 2. An archaeological site survey of the study area should target areas identified during this background study as being moderately or highly archaeologically sensitive. Adequate time should be allowed for an effective survey coverage of the study area (minimum 2 weeks). The effectiveness of any archaeological site survey is largely dependent on the amount of visible ground surface. Ideally, an archaeological site survey of the study area should be undertaken during late summer to take advantage of higher ground surface visibility associated with drier conditions.
- 3. Attempts should be made by the archaeologist conducting the survey to identify the exact location of the ceremonial/social grounds referred to in historical documents. Prior to the survey, local publicity should be sought, to encourage residents to make available any artefacts they may possess which originate from the study area for recording. The National Museum Of Victoria's artefact collection for the study area should also be reviewed and taken into account during the archaeological analysis of the study area.
- 4. Throughout any archaeological site survey of the study area consultation must take place with the Wurundjeri Aboriginal community and with Aboriginal Affairs Regional Site Officer.

5. Copies of the archaeological site survey report "Casey Foothills" should be forwarded to the Heritage Services Branch, Aboriginal Affairs Victoria, the Australian Heritage Commission and the Wurundjeri Tribe, Land Compensation and Cultural Heritage Council Incorporated.

	C	ONTENTS	5	PAGE
	1.	INTROI	DUCTION	1
		1.1 1.2 1.3	Aims Consultation Study Area	1 2 2
	2	ENVIRO	NMENTAL DESCRIPTION	3
		2.1 2.2	Resources Available to Aboriginal People European Impact on the Study Area	4 5
	3	HISTOR	CICAL BACKGROUND	6
	4	ABORIG	SINAL BACKGROUND	6
gen		4.1 4.2 4.3	Ethnohistory Previous Archaeological Studies Implication for the Present Study	6 10 14
	5	ASSESS	MENT OF SCIENTIFIC SIGNIFICANCE	15
		5.1	Cultural Significance to Aboriginal Community	16
	6	ARCHAE	EOLOGICALLY SENSITIVE AREAS	17
	7 STATUTORY REQUIREMENTS			19
		7.1	Independent Review of Report	20
	8	RECOMM	MENDATIONS AND MANAGEMENT ISSUES	20
	٠.	8.1 8.2	Management Issues Specific Recommendations	20 21
	RE	FERENCE	ES	22

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TABLES (in text)

Scientific Significance Assessment for Aboriginal Archaeological Site AAV 7922/563	16
s	26
Form D	27 31 34
	38
The Study Area Location Early Settlements of the Study Area	39
` -	40
-	41
Previously Recorded Archaeological Sites	42
Archaeologically Sensitive Areas	43
	for Aboriginal Archaeological Site AAV 7922/563 S The Brief Form D Glossary The Study Area Location Early Settlements of the Study Area (from Spreadborough & Anderson 1983) Aboriginal Tribe and Clan Territories Previously Recorded Archaeological Sites

ACKNOWLEDGMENTS

The consultant would like to thank the following people for their assistance during the study:

Jamin Moon & Jane Keirce - Heritage Services Branch, Aboriginal Affairs Victoria

Lorna Benoiton - Senior Strategic Planner, City of Casey Bill Nicholson - Chairperson, Wurundjeri Tribe, Land Compensation and Cultural Heritage Council Incorporated.

Robert Mullins - Representative of the Wurundjeri Tribe, Land Compensation and Cultural Heritage Council Incorporated.

1 INTRODUCTION

This report outlines a desk-top study of the "Casey Foothills" (study area) and has been commissioned by the City of Casey. The study area encompasses Narre Warren North and Harkaway, an area of approximately 2,500 hectares and is located 40 kilometres south east of Melbourne (Figure 1). The study reviews the Aboriginal cultural heritage of the area, and supplemented by a vehicle reconnaissance, produces a predictive Aboriginal archaeological assessment.

All major and minor road routes within the study area were subject to a vehicle reconnaissance survey by the consultant and Mr Robert Mullins, a member of the Wurundjeri Tribe, Land Compensation and Cultural Heritage Council Incorporated on Wednesday 2nd of October, 1996. The study area has not been previously surveyed for archaeological sites, and no Aboriginal archaeological sites have been previously recorded. During the vehicle reconnaissance, one isolated artefact occurrence (AAV 7922/563) was located on the west bank of Cardinia Creek on Chadwick Road, Harkaway. This isolated artefact (AAV 7922/563) has been recorded and provisionally assessed as being of low scientific significance.

The significance of Aboriginal items, sites and places that comprise the cultural heritage record varies considerably, and can be measured depending primarily upon their historical, scientific, social, educational, economic and aesthetic values. However, the integrity and significance of cultural heritage items, sites and/or places can be jeopardised by natural (eg. erosion) and human (eg. development) activities. In the case of human activities, a range of State and Federal Legislation exists to assure preservation of elements and features of our cultural heritage.

It is the general policy of State heritage bodies to request developers, planners, private or otherwise, to underwrite independent cultural heritage assessments such as this document. Such assessments will ensure that the significance of cultural heritage sites and places are properly documented, preserved and managed. This preliminary report fulfils a range of social and legislative obligations relating to potential cultural heritage sites and places within the "Casey Foothills" study area.

1.1 Aims

The aims of this study are defined within the project brief (Appendix 1), and are summarised as:

- 1. To review all available Aboriginal archaeological material relating to the area.
- 2. To synthesise the background material, produce a summary of this information, and to generate a site prediction model for the area in report form.
- 3. Identify any archaeological areas or sites of significance which may require further investigation.

- 4. To establish the implications of the presence of any Aboriginal cultural heritage sites and places may have for the future proposed management and/or development of the study area.
- 5. Consult with the Aboriginal community in relation to cultural heritage matters.
- 6. Ensure that draft copies of the report are provided to the City of Casey and the relevant Aboriginal community (Wurundjeri) for discussion/confirmation prior to the final report being produced.
- 7. Produce a report using the findings in accordance with the guidelines of the Heritage Services Branch, Aboriginal Affairs Victoria (AAV). Copies of the report should be forwarded to the relevant Aboriginal community, Australian Heritage Commission (AHC), and AAV.

1.2 Consultation

In accordance with the Commonwealth Aboriginal and Torres Strait Islander Heritage Protection Act 1984, chairperson of the Wurundjeri Tribe, Land Compensation and Cultural Heritage Council Incorporated, Mr Bill Nicholson, was contacted by mail on Monday 23rd of September 1996, and given details of the impending archaeological study and reconnaissance survey. Mr Nicholson engaged Mr Robert Mullins as community representative during the vehicle reconnaissance survey. Ms Annette Xiberras, AAV's Regional Site Officer for the district was contacted by phone on Monday the 30th of September 1996, in order to ensure her continued awareness of current archaeological activities in the area. The Wurundjeri community have received a draft of this report in order to enable the inclusion of any comments or concerns they may have in the final report.

The site registers at Heritage Services Branch, AAV, and the National Estate were each consulted for the presence of Aboriginal archaeological sites which have been previously recorded within the study area. Archival plans held at the Central Plans Office, Melbourne, were also consulted for the presence of references to Aboriginal places. As required by Victoria State Legislation, a notification of intention to conduct an archaeological survey was lodged (Form D) by the consultant with the Heritage Services Branch, AAV, prior to conducting the reconnaissance survey (Appendix 2).

1.3 The Study Area

The study area lies within the Dandenong Ranges foothills, with its boundaries being to the west, Narre Warren North, to the east, the township of Harkaway, and to the south, by the northern borders of Berwick (Figure 1). The study area covers approximately 2,500 hectares and is comprised entirely of small to medium sized privately owned allotments. Many of these properties are currently used for grazing purposes, mixed farming and small scale horticulture. A number of stands of original vegetation, many of which contain large mature gums exist within the study area. Parts of the area have been

developed into high density residential properties (eg. Harkaway), with several hundred inhabitants. Bluestone quarries have historically been a feature of the region in general, and a gravel quarry currently operates in the central sector of the study area. The ridge-lines of hills in the Narre Warren North region contain a number of granite outcrops. These outcrops are situated within cleared areas on small land-holdings. One of the main features of the study area is that, being situated on the southern foothills of the Dandenong ranges they provide excellent vantage points to view lands in both the Western Port and Port Phillip Bay directions.

2 ENVIRONMENTAL BACKGROUND

The relief of the study area varies from flat, poorly draining areas, to steep hills. The hills within the study area are part of the foothills of the Dandenong Ranges. These hills rise at most 30-90 metres above the plains to the south. In general, the lowland regions are those associated with the western section of the study and with watercourses such as Eumenmerring Creek, and its adjoining flood plain. The present flood plain associated with Cardinia Creek is a narrow band adjacent to steep hills. The hills and steeper areas which form the western catchment area of Cardinia Creek, dominate the central and eastern sections of the study area.

The foothills within the study area form part of two major catchment areas. Creeks and drainage lines in the western section of the study area form part of Port Phillip Bay catchment, whilst those in the eastern section form part of the Western Port Bay catchment. Three major watercourses are located within the study area. In the west, Eumemmerring Creek is the major water course into which all other streams drain. In the south and east, Grasmere, Walsdorf, and Warby Creeks drain the Harkaway hills catchment into Cardinia Creek. On the eastern boundary of the study area is a section of Cardinia Creek, one of the major creeks of the region, which eventually flows into Western Port Bay. For pre-contact Aboriginal people, an access route provided by Cardinia Creek via Koo-wee-rup Swamp to Westernport would have been relatively feasible. The number and density of sites previously recorded along Cardinia Creek to the south of the present study area, suggest that this creek may have been a major pre-contact Aboriginal pathway of the region.

The geology of the study area is part of the east Victorian Uplands geomorphic unit (LCC 1991: Map 9). This geomorphic unit consists of mudstone, claystone, sandstone, hornfels and siltstone capped in many areas by basalt (Smith 1989:6, Queenscliff SJ55-9 1:250,000 Geological Series Mapsheet). Within this type of geological area, basalt deposits form entire hills which, in the past have been quarried by Europeans.

Since European settlement clearing of native vegetation has occurred throughout the study area. Few stands of native mature trees and remains of plains scrubland exist. The areas in which original vegetation remains are confined to creek margins, road reserves and sections of privately owned land. The original vegetation of the hills comprised forests of: messmate (<u>Eucalyptus obliqua</u>), narrow leaf peppermint (<u>Eucalyptus radiata</u>) and she-oaks (<u>Casurina</u> species.). The plains and low-lying areas would have comprised dense tea-tree

scrub (<u>Melaleuca</u> sp.), manna gum (<u>Eucalyptus viminalis</u>) and along major watercourses, swamp gum (<u>Eucalyptus ovata</u>)(Smith 1989:10).

The study area would have contained a large number and wide variety of faunal species associated with forests and waterways prior to European settlement. With the demise of native habitat, the number and range of species which once existed has been greatly reduced. Arboreal and land mammal species which would have been commonplace throughout the study area are: brushtail possum, Leadbeaters possum, ring-tail possum, yellow-bellied glider, greater glider, horseshoe bat, tiger quoll, native rats, wallaby, kangaroo, echidna, and koala. Within wetlands and associated with waterways would have existed: black swans, ducks, ibis, quail, emu, fish, and crustaceans (LCC 1991:111). Detailed lists of plants and animal species available within the Western Port and Port Phillip areas can be obtained from Gaughwin (1981), Sullivan (1981), Presland (1994) and Gott (1983).

The climate of the study area is characterised by cool wet winters and moderate summers with short dry periods. The average rainfall is in excess of 700mm annually. The average temperatures range from a winter minimum of 3°C to a summer maximum of 26°C (LCC 1991:60).

2.1 Resources Available for Aboriginal People

The resources available within the study area for Aboriginal subsistence in the past would have been rich. The study area and surrounding region contain an array of productive ecological zones such as: riverine, mountainous, lacustrine and terrestrial that would have been attractive for hunter-gathers.

It would be expected then, that areas associated with water bodies and drainage systems would be the focus of Aboriginal exploitation within and near the study area. Within each of the above mentioned ecological zones, there would have been variations in staple species diversity and abundance, and this would have in turn influenced site location (Walsh 1987). It is beyond the scope of this study to reconstruct the resource structure at a local scale, however, some of the food resources which may have been utilised by Aboriginal people are; wetland root crops (such as Typa, Triglochin), dry land root (such as Microseris scaigera), fresh water fish crustaceans, waterfowl and land mammals (such as possums, kangaroos, wallabies, koalas, emu, echidnas).

Some stone resources used by Aboriginal people in the past would have been available within and surrounding the study area. Basalt, often used for grindstones and axes, was obtainable from surface outcrops at Berwick and possibly Cranbourne (Thomas et. al. 1967:55). Most of these larger deposits have now been quarried for road metal. Quartz, like basalt, is readily available within the study area and surrounding region (Queenscliff & Warragul 1:250,000 Geological Series Mapsheet). Quartz pebbles are located within most creeks and drainage lines, and quartzite is exposed throughout hills. Siltstone and mudstone, two other materials occasionally used for the manufacture of stone artefacts, readily occur within the foothills of the study area. Granite, a stone type sometimes utilised for axes and grindstones is also found throughout the study area. Neither silcrete or chert occur naturally within the study area. This highly utilised

stone materials occur 10-50km to the south and south-west of the study area along the coast and on the Mornington Peninsular (Gaughwin 1981: McConnell 1981:159).

Swamp gum (<u>Eucalyptus ovata</u>) was common along watercourses and within flood plain areas. Remnant stands of these trees are still found along Cardinia and Eumemmerring Creeks. Because of their relatively smooth bark and large size, they were commonly used for the manufacture of bark implements by Aboriginal people (Edwards 1972:31). To a lesser extent, the extensive regions of messmate gums, remnants of which are still found within some sections of the study area, would also have been utilised for the manufacture of wooden implements. Apart from the manufacture of wooden implements and access to food resources, the bark from these trees would also have been removed for other non-utilitarian purposes such as for ceremonial and social activities.

2.2 European Impact on the Study Area

Since the settlement by Europeans of the study area in 1830s, dramatic changes have been made to the landscape. The dominant changes are associated with pastoral activities (such as the clearing of vegetation, construction of farm buildings, drainage), residential development, road construction and the installation of services.

Tree clearance, and land development for pastoral and residential activities, and road construction would have adversely impacted on any sites which may exist. In these instances cultural material (such as stone tools) would have been disturbed, redeposited, or even destroyed. Any scarred tree sites which existed in areas prior to clearance would have been destroyed. Only sections within the study area which have not been cleared may still contain scarred tree sites (such as road reserves, within remnant pockets on private land, along waterways). In addition, the introduction by Europeans of exotic plant and animal species would also have affected the landscape.

Much of the original wetland areas have now been drained. The upper reaches of Eumemmerring Creek that lie within the study area were once wetlands rather than a defined creek, as exists today. Deepening of waterways such as Eumemmerring Creek, now gives the impression that wetland areas are rare, when originally these would have been a common feature of the low lying areas. Any sites associated with these wetlands would have been adversely affected by European clearance and drainage schemes. Undisturbed sites associated with these ecosystems would now only exist in areas that have incurred minimal past disturbance.

Extensive quarrying of basalt outcrops within the study area would have disturbed or even destroyed evidence of quarrying by Aboriginal people. Any evidence of quarrying that may still exist within the study area will be confined to small basalt outcrops which have not previously been utilised by Europeans or disturbed in any other way. These areas are situated on some hill tops within the study area.

3 HISTORICAL BACKGROUND

The Berwick and Narre Warren areas were first settled by Europeans during the 1830-40s. The area served as a transport corridor from Melbourne to Gippsland, and the existing Princes Highway is almost identical with the original survey (Hicks 1992:21ff). The earliest runs which included the study area were Eumemmerring and Cardinia Creek, both of which were on the boundary of the earliest Settled Districts (Figure 2). The Eummemerring run covered an area of 14 square miles and was first licensed to Dr F McCrae and Messrs Foster in 1839. The Cardinia Creek run covered 30 square miles and was first licensed to Abraham and Robert Gardiner. Until land sales in 1854, little development would have taken place on these runs. After the land sales of 1854, when secure ownership was obtained, landowners would have begun major constructions (such as houses, sheds, dairies) and developed land for pastoral and horticultural activities.

Initially, the Narre Warren township was situated where the present Narre Warren North is located. With the rail line to Bunyip completed in 1879, original settlement patterns altered. Development began to cluster along the rail route to the south causing relocation of the earlier township. Consequently, the Narre Warren township moved south to the railway line. In Harkaway, the original grid-like roads which had been surveyed and established in a north south orientation, took stock and foot travel over two of the steepest hills in the area. This proved to be too difficult to traverse and a more congenial route was established by local residents during the 1890s. The current Harkaway Road reflects a later road which was established as a result of avoiding the more difficult sections of the original route (Beaumont 1979).

The first European settlers of the Narre Warren and Narre Warren North regions were generally of British and Irish decent and were involved in sheep, cattle, and to a lesser extent, dairy farming. The first European settlers of Harkaway were almost entirely of German decent, and practised small scale mixed farming. The two differing landuse practises within the study area reflect the productivity typically related to hilly forested country of Harkaway, and that related to more open grazing lands of the Narre Warren area.

Since the land sales of 1854, the intensity of development within the study area has steadily increased. Pastoral land has been altered to include horticultural areas, small hobby-farms allotments, and currently, in the case of Harkaway township, high density residential areas. Large pastoral land-holdings are now a rarity within the study area. The European land use history within the study area is where much of the land has been subject to major changes in the past, with only small pockets of undisturbed areas remaining.

4 ABORIGINAL BACKGROUND

4.1 Ethnohistory

The information used to establish pre-settlement Aboriginal spatial organisation is mostly based on observations made by Europeans during the initial period of contact and subsequent settlement of the

and surrounding the study area are scant, with most descriptions by the Assistant Aboriginal Protector Thomas (Thomas Journals 1840-1843) and early European landowners of the area. The study area lies within the <u>Bunurong</u> tribal lands, and may also include lands which were recognised as a boundary with their neighbouring group, the <u>Woiworung</u> (Figure 3).

The <u>Woiworung</u> and <u>Bunurong</u> tribes belonged to the inter-marriage network and language ties group known as the <u>Kulin</u>, which inhabited areas around Melbourne.

The territory of the <u>Bunurong</u> is thought to have extended north from the coast at Western Port Bay to the Dandenong Ranges (Thomas in Gaughwin and Sullivan 1984:86). The northern boundary is thought to have been delineated by the source streams in the Dandenong Ranges, while the western boundary is thought to have followed a line from the Dandenong Ranges south to Mordialloc on the coast, and the eastern boundary was the Tarwin River (Gaughwin and Sullivan 1984:87).

The <u>Bunurong</u> clan whose estate included the present study area were the <u>Mayone-buluk</u>. Their territory is thought to have been "Carrum Swamp, the coastal strip at the head of Western Port Bay, and the upper portion of the Mornington Peninsular" (Barwick 1984:177). A Dr Bailey who recorded much ethnographic information during the 1840s cites clan member Manmangenur (ca. 1821-1845) as a recognised authority within this group (Barwick 1984:117).

The Woiworung clan whose estate boundary may have included in the present study area were the Baluk-willam. The Baluk-willam clan occupied territory extending from the "ranges and swamps south of Yering on the upper Yarra, extending south-east to Koo-wee-rup Swamp and headwaters of Latrobe River, south-west to adjoin Bunurong clans about Cranbourne and Dandenong' 1984:120, Clark 1990:386). The clan was patrilineal and belonged to the waa moiety system. Clan leaders were known as "ngurungaeta" and the recognised leader of the Baluk-willam at the time of contact was Morundulk (ca 1773-1840) - his son Bolete (1819-1845) was a member of the Native Police (Barwick 1984:120; Clark 1990:386).

Intermarriage and exchange of goods between the <u>Woiworung</u> and the <u>Bunurong</u> groups is known to have occurred (Ellender 1991:15; Sullivan 1981:36). <u>Kulin</u> people often met for interclan gatherings, such as that recorded in 1844 when groups of <u>Woiworung</u> people were camped on the site of the future M.C.G., and a group of <u>Bunurong</u> were camped on the site of the future Government House (Presland 1994:47). Greenstone from the Mt William quarries in the <u>Woiworung</u> territory appears to have been transported or traded into the <u>Bunurong</u> territory (McBryde 1984).

The seasonal movements of the <u>Bunurong</u> through their territory has been recorded by Assistant Aboriginal Protector Thomas, and early settlers in the Western Port region. Thomas noted that Aboriginal people would congregate around swamps to spear eels (Gaughwin 1981:75). Eels were noted by Thomas as being an important food and allowed people to stay at one camp spot for extended periods (Gaughwin and Sullivan 1984:89-90). Lyre-birds, wombats, wallabies and other animals were hunted in summer (Snoek 1978:7). Camp spots

with bark huts were noted by early settlers and explorers throughout the Western Port area, and these were always found on the banks of rivers and creeks (Sullivan 1981:33). Aboriginal people were observed to spend no more than 3 to 10 days at these camps while the resources within a 10 kilometre radius were exploited (Sullivan 1981:37). Hunting was mainly done by men, with plant foods and small animals largely collected by women. These included liquid amber from the black wattle tree, tuberous roots, as well as the hearts of fern trees (Snoek 1987:8). A large variety of plants were not only valued for their potential food resources but also in the manufacture of implements and for their medicinal uses (Snoek 1987:8-9).

The movement by the <u>Woiworung</u> within the study area is uncertain. There is also little ethnographic information of the lifestyles of the <u>Mayone-buluk</u> clan at the time of European settlement. The few instances and recollections cited by early residents make no reference to clans or clan estates, movements or names. However, snippets of information cited within local histories can be assumed to be that of Mayone-buluk or Buluk-willam clan members.

In the early days of European settlement numerous Aboriginal people were known to reside in the district, and were considered to belong to the <u>Bunurong</u> tribe. They are cited as camping by the edge of dense vegetation and focused much of their activities along the major watercourses. The women collected fresh water mussels from within creeks, small animals, and plant foods. Men speared fish, hunted kangaroo, possum, snake and emu, and children played around camps or in shallow sections of creeks (Beaumont 1979:34). In the Berwick area there are references to Aboriginal people visiting homesteads to seek tobacco, or to investigate curious objects such as a music box. Canoe trees were known to exist by the Grasmere Swamp, where stone axes were also collected. Another canoe tree was also known to have existed along Cardinia Creek. On properties owned at one stage by a Mr Bailleau and Mr Jones, numerous artefacts and midden sites were located, indicating where local Aboriginal people apparently cooked possums and fresh water mussels (Beaumont et.al 1979:34).

In the hills of Harkaway, sightings of Aboriginal people were less frequent than along the flats and creek margins of Berwick and Narre Warren. It is thought that the groups which were seldom seen after the 1860s were part of the Bunurong tribe. The loss of game and a less reliable water supply was thought at the time to account for the fewer sightings of Aboriginal people in the Harkaway area. By the 1860s the traditional Aboriginal owners had been dispossessed of their land. The dense scrub which characterised Harkaway for much of its early settlement period by Europeans would have hampered both European and Aboriginal movement in the area. There are no recorded Aboriginal pathways through this region, however, it can be assumed that at least some of the present day roads through the area. may have originally followed narrow tracks established by local Aboriginal people. One early resident, Mrs Fritzlaff is known to have had cordial relationships with local Aboriginals, whom she gave sweet tea whenever they visited her property. Mrs Fritzlaff is also known to have been visited by Aboriginal women, some of whom carried their children in wooden coolamons on their backs. Another local resident at that time, a Mrs Halleur, was often greeted with a large quantity of wood-grubs to be exchanged for jam. Local Aboriginal women were

also cited feeding ground-up wood worms to young European children (Beaumont et. al. 1979:69).

Significantly, "ceremonies" were also known to have taken place within the Harkaway area (Beaumont 1979:69). In 1858, noisy gatherings were known to have occurred in a depression between the properties of John Milne and Edward Halleur, near a bend of Harkaway Road. Stone axes have been retrieved from this location. No evidence has been located to indicate what type of gatherings occurred in Harkaway, who attended, or where these people originated. At this stage it is not possible to discern between ceremonial or social gatherings by Aboriginal people at this Harkaway location. Regardless of the function of this site, an undisturbed location where Aboriginal people gathered during pre-settlement and early contact period is to be considered as potentially of high archaeological significance.

There is one other site located in the Clematis area that is also suspected as a ceremonial place for local Aboriginals. The site of "Bald Hill" was first reported by Howitt (1904:400) who makes an unreferenced allusion to a rock on which the Ngaruk-Willam clansmen of the Wurundjeri used to place leafy boughs when going out hunting so as to ensure a good catch. Massola (1961, 1971) describes "Bald Hill" as being close to Wellington Road, Clematis, and that it is a flat topped prominent hill on which natural rock formations occur. Beaumont reports that an Aboriginal known as King Mirree who used to visit Narre Warren North, spoke of Bald Hill as being hallowed ground, where no hunting was apparently allowed. Near to Mr Kerrs property, on which "Bald Hill" was located, axe heads have been found. These axe heads were considered to be associated with a tribal burial ground (Beaumont et. al. 1979:94). Examination of the background information suggests that the location of this hill may now be within the boundary of Cardinia Reservoir.

In addition to the ceremonial cites at Clematis and Harkaway, meteorites once located near Cranbourne where believed by early European settlers to have been significant to local Aboriginals. It is reported that Aboriginals often camped at the location of these meteorites, on the property of "Ironbank", and became very distressed by the meteorites removal (Smith 1989:16). These meteorites are now housed in the Melbourne and London Museums.

The local Aboriginal history associated with Narree Narree (Narre Warren) is far more extensive, due to the presence of the Native Police Force established in Dandenong during the 1840's. The site of the Native Police Force was chosen by members of local Aboriginal groups and represented a traditionally important camping and meeting place. In the Narre Warren North valley, also known as Troup's Flat, few local Aboriginals were known to visit the area. The dense scrub was known to provide plentiful food and material resources, though it was not seen to be exploited by Aboriginals during the early contact period. It was considered that during this period, the preferred camping ground of local Aboriginals was at the then newly established Police Paddocks (Beaumont et. al. 1979:95).

Many local place names and properties have supposedly originated from extracts of the local Aboriginal language. There is little possibility now to challenge the accuracy of these words. However,

their existence verifies some level of verbal communication between European landowners and local Aboriginal people. Aboriginal word "Karr-Din-Yarr" (Cardinia) was interpreted to mean "Looking at the Rising Sun" (Beaumont et. al. 1979:10). Another early run "Ghin Ghin Bean" (Gin Gin Bin), was said to have meant "Deep Dark Waters" and refers in particular to a deep water hole, one of the best known features of Cardinia Creek. In 1851 extensive fires swept through this area, forcing some local residents to shelter in this water hole within Cardinia Creek. The local Aboriginal people who were still residing in the area during the time of these fires are recorded to have commented "that the bright fellow (the sun) had got the blight in his eye" (Beaumont et. al. 1979:12). The deep dark water hole referred to so often in local histories has long since disappeared through the general deterioration of Cardinia Creek and its margins.

The property "Kalimna" in Harkaway is apparently a local Aboriginal term for "lovely or beautiful" (Beaumont et. al. 1978:80). The Aboriginal term Narre Warren apparently meant "No Good" from the belief held that the mineralised brackish water in the creeks was unsuitable for drinking purposes (Beaumont et. al. 1978:90), though according to the Berwick Historical Society (1982:121), Narre Warren means "small hills". Secondary historical interpretations by Europeans of Aboriginal language must generally be considered as unsubstantiated.

Aboriginal population numbers decreased rapidly after white settlement in the Western Port area due to dispossession of land and associated resources, and the spread of diseases brought into the area by Europeans settlers. Many of the descendants of the original Aboriginal clans presently live in nearby areas and form the Wurundjeri community.

4.2 Previous Archaeological Studies

As with most parts of Australia, the study area would have been well known, if not utilised by Aboriginal people for at least the last 30,000 years. The Port Phillip Bay region has evidence for this period of occupation at Keilor (Bowdler 1976:63-65), and burial sites in the Maribyrnong and Werribee River Valley dating back 7,000 years (Mulvaney 1970; Coutts 1977, 1980). While slightly more favourable climatic conditions during the early Holocene period may have seen increased use of the region during this time, greatest use is most likely to have occurred during the last 5,000 years. Like many parts of Victoria, the study area may have experienced population increases and reorganisations of social groupings due to a series of complex internal changes in society (Lourandos 1993).

Within a 10 kilometre radius of the study area there have been a total of 30 previously recorded Aboriginal archaeological sites. These sites comprise 7 isolated artefact occurrences (AAV 7921/192,193,195, 204,212,219,220) 17 surface scatters of stone artefacts (AAV 7921/189,191,194,200,205,208,209,211,229,230,232,233,234,235,239,244,245) and 6 scarred tree sites (AAV 7921/180,190,196,206,207,236) (Appendix 3 - Glossary). These sites are predominantly located along Cardinia Creek to the east and south of Berwick, and were recorded by Smith (1989) during a study of the Berwick-Pakenham Corridor (Figure 4).

The nearest Aboriginal sites of National significance which are recorded with the National Estate Register are the Narre Narre Warren protectorate Station (File no. 2/18/292/0009); and the Grave of Bungeleen (File no. 2/18/292/0080). Both of these sites are located outside the present study area.

There is one regional archaeological survey for Aboriginal sites that has been conducted near the present study area (Smith 1989). No Aboriginal archaeological sites have been previously recorded within the study area.

Smith (1989) has undertaken a regional investigation of the Aboriginal archaeology of the Berwick to Bunyip Corridor, the present study area lies in the north west corner of this corridor. Smith recorded a total of 62 Aboriginal archaeological sites during this study. These sites comprise 32 surface scatters of stone artefacts, 15 scarred tree sites, and 15 isolated artefact occurrences. The highest site and artefact densities were found to occur on sandy ridges in the Cranbourne area, particularly those associated with water. This finding has also been previously noted by Presland (1983:89, and Gaughwin (1981). The dominant stone material types identified in the surface scatters by Smith (1989) were chert and quartz. The majority of artefact types recorded at these sites were flaked pieces and flakes, with less than 2% of the recorded assemblage consisting of formalised tools (Smith 1989:47).

The present study area conforms to Smith's landscape unit "undulating hills" (1989:11-12, Figure 2). The site prediction model formulated for this landscape unit by Smith is also applicable to the present study area and concludes that:

- Artefact scatters and isolated artefacts are the most likely site type to occur within this unit.
- Most artefact scatters will occur within 50m of permanent creek lines, while isolated artefacts will be found on hill slopes and tops across this unit.
- Site densities in the undulating hills landscape unit are lower than elsewhere (within the corridor), and this may be explained either by the relatively lower amount of food resources in this unit or by the presence of the boundary between the <u>Bunurong</u> and <u>Woiworung</u>.
- Scarred tree sites are not expected to occur more than 50m from creek lines. The majority of scars will occur on swamp qum.
- Surface scatters and isolated artefact sites in this unit will be dominated by quartz and chert artefacts.

The general conclusions made by Smith (1989:61) are that due to then poor surface visibility within the Berwick-Pakenham corridor, it was considered that many more sites than those recorded by the site survey occur. Furthermore, that due to the degree of disturbance to the landscape within much of the corridor it will be expected that most of these sites will be disturbed to some extent.

In addition to Smith's study (1989) there have also been a number of previous archaeological surveys undertaken in the region that are relevant to the present study. These have comprised regional studies (Wood & Lance 1990, Williams & Barber 1993; Goulding 1988; Presland 1983; Gaughwin 1981; Ellender and Weaver 1994) and a number of localised surveys (Snoek 1987; Clark & Gardiner 1992, Murphy 1992, 1994, 1995, Brown 1995,1996, Rhodes 1990a, 1990b, Weaver 1992, Ellender 1991).

The study by Wood and Lance (1990) is a desktop investigation of an optical fibre cable route from Melbourne to Sydney. The aims of this study were to assess the potential impact on archaeological sites that may exist within the proposed cable route. The Berwick and Narre Warren areas were included in their assessment. Although no ground surface inspection of these areas were undertaken, Wood and Lance concluded (1990:28) that large numbers of surface scatters of stone artefacts may be encountered within the Berwick and Narre Warren regions. They also considered that the scientific significance of these sites would potentially be low to moderate (see section 5).

The investigation undertaken by Williams and Barber (1995) is similar in nature to that of Wood and Lance (1990). Williams and Barber assessed the potential impact on archaeological sites by a proposed optical fibre cable between Dandenong and the NSW border. As with the study by Wood and Lance (1990), this desktop study did not undertake any field examinations in the Narre Warren or Berwick areas. Williams and Wood concluded that the proposed optical fibre cable route would not impact significant archaeological sites in the Berwick and Narre Warren areas (1995:6).

The study by Goulding (1988) is a synthesis of available material relating to Aboriginal occupation of the area between Western Port Bay and Healesville. The study deals with the history of Aboriginal people in this area, and assesses the scientific significance of Aboriginal archaeological sites on public land. This study did not undertake field investigations.

Presland (1983) in his study of the Melbourne Metropolitan Area, did not include the present study area within his field examinations. Prior to Smith's study in 1989, only two sites recorded by Presland existed within the Berwick to Bunyip corridor. These sites were a scarred tree (AAV 7921/180) and a surface artefact scatter (AAV 7921/182), both situated on Cardinia Creek south of Beaconsfield.

Gaughwin's study (1981) extended from Western Port Bay, including both Phillip and French Islands, to and including the lower foothills of the Dandenong Ranges (1981:4). Gaughwin's site survey was generally confined to the coastal region, and only limited sample surveys were undertaken in the northern regions of her study area. Gaughwin did not survey any areas within the present study area. Gaughwin recorded a total of 264 sites with less than 1% located away from the coast or coastal plains. Gaughwin considered proximity to water an important factor in site location, as 45% of her sites were found to be within 100 metres of water (1981:92-5). Based on ethnographic data Gaughwin also adds that sites within the undulating hills of the Dandenong Ranges are expected to be situated on the slopes or crest of the hills (1981:120).

The results of relevant small scale studies undertaken in the area have generally conformed to the site distribution and contents models formulated within the regional studies (Smith 1989; Gaughwin 1981).

The only site to have its sub-surface deposit archaeologically tested near the present study was undertaken by Murphy (1992). The site investigated is located on Cardinia Creek (AAV 7921/245) south of the present study area, and proved to be a small dense artefact scatter which had been buried by alluvium from the creek sometime in the recent past. The site was assessed as being of moderate scientific significance on the basis of its rareness in the region and site contents (geometric microlith). No organic remains or charcoal were identified within the deposit which could have been used to date the site.

Ellender conducted an archaeological site survey of a proposed quarry site in Pakenham (1991) and located no archaeological sites. Ellender also considered that her study area was of low archaeological sensitivity.

More recently an archaeological survey has been undertaken of a proposed Pakenham Reservoir Inlet route from Officer to Pakenham (Brown 1996). Though no archaeological sites were located during the survey, the Toomuc Valley Creek was identified as being archaeologically sensitive (1996:16). Recommendations have been made that the Toomuc Valley Creek be archaeologically monitored during the pipeline's installation.

An important study of the Dandenong Police Paddocks has been undertaken by Rhodes (1989). This investigation has documented the archaeological remains at this site, the results of which are significant in terms of detailing Aboriginal history during the initial period of European contact. A total of 27 archaeological features were identified within Rhodes' study area ranging from Aboriginal surface artefact scatters to European building sites. Many of the features identified by Rhodes were previously undocumented and all relate to the sites use as Police Headquarters during the 1800s.

The previous regional studies and localised surveys have located a range of Aboriginal archaeological sites within the Berwick-Pakenham region. These include; scarred trees, isolated stone artefact occurrences, and surface scatters of stone artefacts. No burial sites have been previously recorded, and the ceremonial sites referred to in the historical literature have been not been located. There is evidence for sub-surface stone artefact sites to exist within alluvial deposits of major watercourses (Murphy 1992), though the majority of sites which have been previously recorded are surface archaeological sites. There have been no sites near the study area which have provided dates of occupation for these areas. As the majority of sites are located on the present ground's surface they will most likely date to the last 5,000 years (recent).

4.3 Implications of the Aboriginal Background for the Present Study

The implications of the ethnographic and archaeological background for the present study are:

- Scarred trees, surface scatters, isolated artefacts are the most likely sites to be located within the study area.
- Scarred tree sites are more likely to be located within 100 metres of a water supply. Potential scar types will range from canoe to small bowls, and will predominantly occur on swamp gums.
- Surface scatters of stone artefacts are most likely to be found within 100 metres of a water supply.
- Isolated artefacts are most likely to be found further than 100 metres away from a water supply, on hill slopes and on tops of hills.
- Quarry sites will only be located at basalt outcrops which have not incurred significant levels of past disturbance.
- Granite outcrops that have not been previously disturbed within the study area potentially contain axe grinding grooves sites.
- Freshwater midden sites will only be located on the banks of permanent water supplies within the study area (Cardinia Creek) which have not incurred significant levels of past disturbance.
- Ceremonial sites will be a rare occurrence within the study area.
 Based on historical evidence, one area in Harkaway is known to have existed. Remains of this site may be located if the area has not incurred significant levels of past disturbance.
- The dominant raw materials within surface scatters and isolated artefacts will be chert and quartz.
- Less likely raw materials within surface scatters and isolated artefacts are basalt, silcrete, mudstone, and greenstone.
- It is unlikely that burial remains will be found within the study area.
- Highest site densities will be found within 100 metres of permanent waterways such as Cardinia Creek.
- Areas further than 100 metres away from watercourses will have the lowest site density within the study area.

5 ASSESSMENT OF SCIENTIFIC SIGNIFICANCE

The following section outlines criteria for assessing cultural heritage significance which would be applicable in the archaeological assessment of any sites identified within the present study area. Isolated artefact occurrence (AAV 7922/563) located during the vehicle reconnaissance has been provisionally assessed in this section.

Assessment of archaeological site significance can be complex and encompass a range of heritage values. The heritage values of a site or place are broadly defined as the "aesthetic, historic, scientific or social values for past, present or further generations" (Australia ICOMOS 1988).

Scientific significance is assessed by examining the research potential and the representativeness of archaeological sites recorded.

Research potential is assessed by examining site contents and site condition. Site contents refers to all cultural materials and organic remains associated with human activity at a site. Site contents also refers to the site structure; the size of the site, the patterning of cultural materials within the site, and the presence of any stratified deposits. Site condition refers to the degree of disturbance to the contents of a site at the time it was recorded. Ratings for site contents and condition are given below.

The site contents ratings used for archaeological sites are:

- 0 No cultural materials remaining.
- Site contains a small number (eg. 0-10 artefacts) or limited range of cultural materials with no evident stratification.
- 2 Site contains:
 - (a) a larger number, but limited range of cultural materials;and/or
 - (b) some intact stratified deposit.
- 3 Site contains:
 - (a) a large number and diverse range of cultural materials;
 and/or
 - (b) largely intact stratified deposit; and/or
 - (c) surface spatial patterning of cultural materials that still reflect the way in which the cultural materials were laid.

The site condition ratings used for archaeological sites are:

- 0 Site destroyed
- Site in a deteriorated condition with a high degree of disturbance but with some cultural materials remaining.
- Site in a fair to good condition, but with some disturbance.
- Site in an excellent condition with little or no disturbance. For surface artefact scatters this may mean that the spatial patterning of cultural materials still reflect the way in which the cultural materials were laid.

Representativeness refers to the regional distribution of a particular site type. It is assessed on whether the site type is common, occasional or rare in a given region. Assessments of representativeness are subjectively biased by current knowledge of the distribution and numbers of archaeological sites in a region.

Current knowledge varies from place to place depending on the extent of previous archaeological research. Consequently, a site which is assigned low significance values for contents and/or condition, but a high significance value for its representativeness, can only be regarded significant in terms of current knowledge of the regional archaeology. Any such sites should be subject to further reassessment as further archaeological research is carried out.

Assessment of representativeness also takes into account the contents and condition of a particular site. For example, in any region, there may only be a limited number of sites of any type which have suffered minimal disturbance. Such undisturbed sites would therefore be given a high significance rating for representativeness, although they may occur commonly within the region.

The representativeness ratings used for archaeological sites are:

- 1 Common occurrence
- 2 Occasional occurrence
- 3 Rare occurrence

Overall scientific significance ratings for sites, based on a cumulative score for site contents, site integrity and representativeness are given as follows:

- 1-3 Low scientific significance
- 4-6 Moderate scientific significance
- 7-9 High scientific significance

Management of archaeological sites and/or places are made on the basis of their assessed scientific significance, and discussion of the potential impact a proposed development may have.

Table 1 Significance Assessment for Aboriginal Archaeological Site AAV 7922/563

Site No	Site	Site	Representati	Scientific
	Contents	Condition	-veness	Significance
AAV 7922/563	1	1	. 1	3

Isolated artefact occurrence (AAV 7922/563) is provisionally assessed as being of low scientific significance.

5.1 Cultural Significance to the Aboriginal Community

Both prehistoric and historic Aboriginal sites and places will generally have specific significance to the Aboriginal community which possess custodianship, and more broadly to Australian Aboriginal people.

"In southern Australia the vast majority of sites are prehistoric (rather than sacred or historic). They relate

to evidence of Aboriginal occupation of the continent over at least 60,000 years, but they have no specific traditional significance to any particular group. They are usually as unknown to Aborigines as to others until located and identified by archaeological survey or other research" (Pearson and Sullivan 1995:162).

Any archaeological sites that may potentially be located within the study area are to be considered as culturally significant to the Wurundjeri Tribe Land Compensation and Cultural Heritage Council. Such sites are the main source of information about the areas Aboriginal past as they provide evidence for occupation and land use.

Furthermore, Aboriginal archaeological sites are an uncommon feature within the region due to past European land use practises and development. Therefore sites that still exist, and those yet to be found are important glimpses of past Aboriginal occupation of the area and therefore of Aboriginal cultural significance.

It is important also to note that archaeological and Aboriginal significance do not necessarily follow the same assessment criteria. Archaeological sites or places which are not of high scientific significance can be of high cultural significance to the local Aboriginal community. It is of course, up to the local Aboriginal community, in this case the Wurundjeri, to assess the Aboriginal cultural significance of any sites within their area of custodianship.

6 ARCHAEOLOGICAL SENSITIVITY WITHIN THE STUDY AREA

Areas of archaeological sensitivity are those designated as containing potential for archaeological sites. These are usually areas which have poor ground surface visibility so that it is possible that surface and/or sub-surface deposits may exist but are currently obscured. Archaeologically sensitive areas are also those which may not have been previously surveyed, but within which, the results of a study indicate that sites might occur. Areas deemed archaeologically sensitive may be considered low, medium or highly sensitive. Figure 5 indicates areas considered archaeologically sensitive for Aboriginal sites within the study area.

Based on the archaeological, ethnographic background and results of the vehicle reconnaissance, the archaeologically sensitive areas within the present study area for Aboriginal archaeological sites are:

- Eumemmerring, Cardinia, Grasmere, Walsdorf and Warby Creeks.
- Stands of remnant forest containing mature examples of swamp gum and messmate.
- Ridge-lines and top of hills, particularly those containing granite or basalt outcrops.
- Any area that can be identified as being associated with past ceremonial/social activities.

The archaeological sensitivity along creeks extends from the creek bank to the break of slope. These areas are provisionally assessed as being highly sensitive for Aboriginal archaeological sites. These areas are considered archaeologically sensitive for isolated artefact occurrences and surface scatters of stone artefacts. The past soil disturbance in these areas has been moderate (clearing, grazing and in the case of a tributary of Eumemmerring Creek, ploughing), and therefore, it is possible that cultural material exists. If any deposits of cultural material do exist, it is most likely that they have been disturbed by past land use activities.

Areas where mature stands of swamp and messmate gum still exist are considered to be of moderate archaeological sensitivity. Archaeologically sensitivity of these tree types are not limited to those occurring near waterways. Although Aboriginal scarred tree sites are more likely to occur close to watercourses, it is possible that some scarred tree sites are situated some distance from waterways.

Hill tops and ridge-lines are considered to be archaeologically sensitive for grinding groove sites, isolated artefact occurrences, and to a lesser extent, surface scatters of stone artefacts. Due to the vantage points which most hill tops within the study area provide, it is possible that these areas were utilised for more reasons than From points accessing granite outcrops. these vantage surrounding land can be inspected and the movement or the locations of other Aboriginal groups monitored. This may be an important aspect, given that the study area is located within a region that is thought to have been a tribal boundary at the time of European contact. These areas are considered to be of moderate archaeological sensitivity.

The identification of isolated artefact occurrence AAV 7922/563 on Cardinia Creek during the vehicle reconnaissance, further supports the assessment of high archaeological sensitivity of the area immediately adjacent to Cardinia Creek. Isolated artefact site AAV 7922/563 comprises a single chert blade flake, and is located within an area that has incurred high levels of past disturbance (road construction and water erosion) and has been provisionally assessed as being of low scientific significance. This site reflects the potential high utilisation of the upper reaches of Cardinia Creek by Aboriginal people prior to European settlement.

Any ceremonial area or location where people gathered for social purposes that can be identified within a subsequent field survey will be considered to be of high archaeological significance. Depending on the artefactual remains at such a location, the site may be considered of national archaeological significance, and accordingly, be nominated for inclusion on the "National Estate Registry" for Aboriginal archaeological sites. The location of a ceremonial or clan meeting site during a site survey of the area would have great significance to the Wurundjeri community.

The remainder of the study area is considered to be of low archaeological sensitivity for Aboriginal archaeological sites. Areas of low archaeological sensitivity are those which have been developed into medium and high density residential areas; areas which have in the past been quarries; and areas between the break of slope and tops of hills.

7 STATUTORY REQUIREMENTS

The following is a summary of the Victorian Cultural Heritage Legislation.

Victoria has both State and Commonwealth legislation providing protection for Aboriginal cultural heritage. With the exception of human remains interred after the year 1843, the State Archaeological and Aboriginal Relics Preservation Act 1972 provides blanket protection for all material relating to the past Aboriginal occupation of Australia, both before and after European occupation. This includes individual artefacts, scatters of stone tools, rock art sites, ancient camp sites, human burials, trees with slabs of bark removed (for the manufacture of canoes, shelters etc.) and ruins and archaeological deposits associated with Aboriginal missions or reserves. The Act also establishes administrative procedures for archaeological investigations and the mandatory reporting of the discovery of Aboriginal sites. Aboriginal Affairs Victoria (AAV) administers the Archaeological and Aboriginal Relics Preservation Relics Act 1972.

In 1987, Part 11A of the <u>Aboriginal and Torres Strait Islander Heritage Protection Act</u> 1984 was introduced by the Commonwealth Government to provide protection for Aboriginal cultural property in Victoria. Immediately after enactment, the Commonwealth delegated the powers and responsibilities set out in Part 11A to the Victorian Minister Responsible for Aboriginal Affairs. Currently, this delegation is held by the Hon. Michael John MP, and the legislation is administered on a day to day basis by AAV.

Whereas the State Act provides legal protection for all the physical evidence of past Aboriginal occupation, the Commonwealth Act deals with Aboriginal cultural property in a wider sense. Such cultural property includes places, objects and folklore that "are of particular significance to Aboriginals in accordance with Aboriginal tradition". Again, there is no cut-off date and the Act may apply to contemporary Aboriginal cultural property as well as ancient sites. The Commonwealth Act takes precedence over State cultural heritage legislation where there is conflict. In most cases, Aboriginal archaeological sites registered under the State Act will also be Aboriginal places subject to the provisions of the Commonwealth Act.

The Commonwealth Act prohibits anyone from defacing, damaging, interfering with or endangering an Aboriginal place unless the prior consent of the local Aboriginal community has been obtained in writing. If no reply from an Aboriginal community is received to any permit application within 30 days, then an application for a permit may be made to the State Minister Responsible for Aboriginal Affairs. This is provided for under Section 21U(5-6) of the 1987 Act. The Schedule to the Act lists local Aboriginal communities and each community's area is defined in the Regulations so that the whole of Victoria is covered. Any applications to disturb, destroy, interfere with or endanger an Aboriginal place, object or archaeological site should be made to:

Mr Bill Nicholson Chairperson Wurundjeri Tribe, Land, Compensation and Cultural Heritage Council Incorporated. PO Box 26 Boolarra 3870 Victoria

Applications to excavate or disturb an Aboriginal archaeological site for purposes of archaeological fieldwork, should be addressed in writing to:

The Director Aboriginal Affairs Victoria 2nd Floor 115 Victoria Parade Fitzroy 3065. Victoria.

General enquires relating to Aboriginal archaeological sites should be forwarded to:

The Site Registrar
Heritage Services Branch
Aboriginal Affairs Victoria
2nd Floor
115 Victoria Parade
Fitzroy 3065.
Victoria
Ph: (03) 9412 7498
Fax (03) 9412 7601

7.1 Independent Review of Reports

It should be noted that archaeological reports relating to Aboriginal and non-Aboriginal historic archaeological sites/places and the recommendations contained therein, will be independently reviewed by the Heritage Services Branch of Aboriginal Affairs Victoria, the relevant Aboriginal community, and Heritage Victoria, Department of Planning and Development. Although the findings of a consultant's report will be taken into consideration, recommendations by an archaeological consultant for actions in relation to the management of an Aboriginal site should not be taken to imply automatic approval of those actions by Aboriginal Affairs Victoria, or the relevant Aboriginal community.

8 RECOMMENDATIONS AND MANAGEMENT ISSUES

8.1 Management Issues

Areas of archaeological sensitivity (Figure 5) should be taken into account in the future planning and cultural heritage management by the City of Casey. If the City of Casey does not instigate an archaeological survey of the study area, it should consider any proposals which include major land use changes in terms of their effects on Aboriginal and non-Aboriginal historic archaeological sites.

Any development proposal which includes altering the land use of archaeologically sensitive areas outlined within this study, should be requested to underwrite an intensive archaeological site survey of the area. An ensuing archaeological site survey of the study area should make assessments regarding both Aboriginal and non-Aboriginal historic archaeological sites. Granting proposals for major land use changes within the study area without undertaking impact assessments on cultural heritage will most likely disturb and/or destroy archaeological sites. The major threat to existing, though as yet unrecorded archaeological sites within the study area, is from further disturbance by current activities such as grazing, erosion, clearing and housing development.

8.2 Specific Recommendations

Based on the Aboriginal archaeological background, ethnographic information and the results of the vehicle reconnaissance of the study area, the following recommendations are made:

- 1. That a detailed systematic archaeological site survey be undertaken of the study area as delineated in "Casey Foothills" by a qualified archaeologist and member of the Wurundjeri Tribe, Land Compensation and Cultural Heritage Council Incorporated.
- An archaeological site survey of the study area should target areas identified during this background study as being moderately or highly archaeologically sensitive. Adequate time should be allowed for an effective survey coverage of the study area (minimum 2 weeks). The effectiveness of any archaeological site survey is largely dependent on ground surface visibility. Ideally, an archaeological site survey should be undertaken in late summer to take advantage of higher ground surface visibility associated with drier conditions.
- 3. Attempts should be made by the archaeologist conducting the survey to identify the exact location of the ceremonial/social ground referred to in historical documents. Prior to the survey, local publicity should be sought to encourage residents to make available any artefacts they may possess which originate from the study area for recording. The National Museum Of Victoria's artefact collection for the study area should also be reviewed and taken into account during the archaeological analysis of the study area.
- 4. Throughout any archaeological site survey of the study area, consultation must be made with the Wurundjeri Aboriginal community and with Aboriginal Affairs Regional Site Officer.
- Copies of the archaeological site survey report of the "Casey Foothills" should be forwarded to the Heritage Services Branch, Aboriginal Affairs Victoria, the Australian Heritage Commission and the Wurundjeri Tribe, Land Compensation and Cultural Heritage Council Incorporated.

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APPENDIX 1 - THE BRIEF

BRIEF

1. BACKGROUND

The City of Casey is undertaking a study entitled "The Casey Foothills Strategy" for the non-urban areas (including Harkaway Township) in the north-eastern section of the municipality.

The need for the Casey Foothills Strategy has emerged following a number of amendment requests affecting land within the study area. Such a strategy will also assist Council in the preparation of its Municipal Strategic Statement and associated Planning Reform Program which will incorporate the "new zones within the City of Casey."

The purpose of the Casey Foothills Strategy is:

- To undertake a detailed investigation of the study area to gain a clear understanding of the opportunities and constraints that exist for its future use and development.
- To develop a policy framework that will guide the use and development of non-urban land in the north-eastern section of the City of Casey.

2. STUDY AREA

The study area is approximately 2,500 hectares and is shown on the attached map.

3. OBJECTIVES OF THE STUDY

- (a) To locate Aboriginal cultural heritage sites and places within the study area using a systematic survey strategy.
- (b) To record and interpret any Aboriginal cultural heritage sites and places found.
- (c) To establish the significance of any Aboriginal cultural heritage sites and places found, using criteria normally applied to the assessment of cultural heritage resources.
- (d) To identify any areas or landforms of high potential for Aboriginal cultural heritage sites and places.
- (e) To establish the implications which the presence of any Aboriginal cultural heritage sites and places may have for the future management and/or development of the study area.

- (f) To establish the views of Aboriginal people, and of any other groups with a special interest in the cultural heritage and places of the project area on matters such as the interpretation and significance of recorded sites, and on appropriate management procedures.
- (g) To develop recommendations and guidelines for:
 - (i) management of any threatened Aboriginal cultural heritage sites and places or areas of high potential for Aboriginal cultural heritage sites and places;
 - (ii) methods to be used for carrying out any additional work, including information on permits/consents required if sites are to be disturbed or destroyed.

4. TASKS

The Project Archaeologist will be responsible for the following tasks:

- (a) Consult regularly throughout the course of the project with appropriate Aboriginal communities, and any other relevant groups or individuals.
- (b) Consult with any relevant public and private sector organisations and/or individuals responsible for the management of land within the study area.
- (c) Devise a systematic Aboriginal cultural heritage sites and places survey strategy for the study area.
- (d) Carry out the above strategy in order to document the Aboriginal cultural heritage sites and places of the area.
- (e) Assess the extent to which development is likely to impact upon Aboriginal cultural heritage sites and places sites within the study area.
- (f) Determine the actions required to protect, and/or mitigate the impact of development upon. Aboriginal cultural heritage sites and places and areas of importance identified during the project.
- (g) Prepare a satisfactory report describing the commission of the above tasks and commencing on the extent to which the objectives of the project have been fulfilled.

5. DOCUMENTATION

The Project Archaeologist will submit the following documentation.

- (a) Direct to the Site Registrar, Aboriginal Affairs (AAV):
 - A completed FORM D (Notification of intention to carry out a survey) prior to the start of fieldwork.

- Completed AAV site record cards and associated documentation (field notes, photographs, maps, etc) for all Aboriginal cultural heritage sites and places located.
- Two (2) copies of the final report on the project.
- (b) To the Project Manager nominated in Section 8:
 - Three copies of a draft report on the project.
 - Three copies of a final report on the project.

6. REPORT

The project report should generally conform with the AAV Guidelines for conducting and reporting upon Aboriginal cultural heritage sites and places surveys in Victoria.

All figures, tables and references to sites recorded during the project must show AAV registry numbers, NOT field designations. AAV registry numbers will be issued by the Site Registrar on receipt of suitably completed record cards and associated documentation.

7. RESTRICTIONS AND REQUIREMENTS

- (a) The Project Archaeologist will ensure that all work is carried out in accordance with the requirements set out in the AAV *Guidelines* noted in Section 6 above.
- (b) No person involved in the project shall damage or interfere with Aboriginal cultural heritage sites and places sites beyond the requirements of the survey.
- (c) No excavations, auguring or other forms of sub-surface sampling are to be carried out during the project unless all necessary permits and consent have been obtained.
- (d) The Project Archaeologist shall be fully responsible for the supervision of any sub-consultants or assistants engaged in connection with the work.
- (e) All necessary arrangements for access to private land are to made in advance of fieldwork by Lorna Benoiton.

8. PROJECT MANAGEMENT AND TIMING

- (a) The Project Manager is Lorna Benoiton.
- (b) The project will start as soon as possible and will finish on 7 October 1996.
- (c) All site record cards and associated documentation must be submitted to the Site Registrar (AAV) at the earliest possible time following completion of fieldwork.

The City of Casey requires an Aboriginal Cultural Heritage Sites and Places Study for the land within the Casey Foothills Strategy area.

The study should identify, evaluate and document Aboriginal cultural heritage sites and places of significance within the study area and make recommendations for their future conservation.

A copy of the brief is attached.

Expressions of interest (including an estimated cost) should be forwarded to:

Ms Jacqui Houguet
Manager Planning
City of Casey
PO Box 1000
NARRE WARREN 3805

Closing date for submissions is:

Wednesday 18 September 1996

For further information, please contact::"

Lorna Benoiton, 9705-5267

APPENDIX 2 - FORM D



24th September 1996

AAV/00861

Ms Andrea Murphy 163 High Street Berwick VIC 3806.

Dear Andrea,

PROPOSED SITE SURVEY - "Casey Foothills Strategy" - Narre Warren North & Harkaway.

Thank you for providing notice of your intended survey for archaeological sites within the above project area. Your Form D notification was received by this office on 24th September 1996.

Please note that, under the terms of section 22(5)(b) of the Archaeological and Aboriginal Relics Preservation Act 1972 and associated Regulations, you are required to provide this office with:

- a) completed AAV record cards for any sites found during the survey; and
- b) two copies of any resultant project report.

Blank record cards can be obtained from the Site Registrar, Mr Jamin Moon on (03) 412-6827. Copies of the document *Guidelines for Conducting and Reporting upon Archaeological Surveys in Victoria* (last updated February 1993) are also available on request.

If your project is likely to include documentation of non-Aboriginal historic sites, you should contact Heritage Victoria on (03) 628-5457, to discuss their requirements.

Under the terms of the Commonwealth Aboriginal and Torres Strait Islander Heritage Protection Act 1984, specified local Aboriginal organisations throughout Victoria hold responsibility for cultural heritage matters within their particular community areas. Your proposed survey affects the area covered by Wurundjeri Tribe Land Compensation and Cultural Heritage Council Incorporated. I therefore recommend that you contact the community's Chairperson & Elders' Spokesperson, Mr Bill Nicholson (P.O. Box 26 Boolarra Vic 3870) to discuss your project, and to establish how the community may best be advised of its results.

I have forwarded a copy of your Form D notification to our AAV Regional Site Officer, Ms Annette Xiberras. Annette may wish to meet up with you at some stage during the field project, in order to maintain her awareness of current archaeological activities within the area. I therefore suggest that you contact Annette before the start of the survey on ph. (03 9412 7498). In general, the Site Officers have their office days on Fridays.

Please feel welcome to contact me if any further information is required.

Yours sincerely,

JANE KIERCE Site Registry Officer Heritage Services Branch

d96_0179

APPENDIX 3 - GLOSSARY

Types of Aboriginal Prehistoric Archaeological Sites

Artefact Scatter: A surface scatter of stone artefacts which is defined as being the occurrence of five (5) or more items of cultural material within an area of about 100 square metres (AAV 1993:lj). Artefact scatters are often the only physical remains of places where Aborigines have camped, prepared and eaten meals and worked stone material.

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

In Situ: Refers to cultural material which is discovered as being undisturbed and considered to be in its original context. That is, material which, when identified is considered to be in the same location when the site was abandoned.

Isolated Artefact Occurrence: An isolated artefact is defined as being the occurrence of four (4) or less items of cultural material within an area of about 100 metres (AAV 1993:1) It/they can be evidence of an ephemeral (or one off) activity location, the results of an artefact being lost or discarded during travel or evidence of an artefact scatter which is otherwise obscured by poor ground surface visibility.

Midden Sites: Midden sites are an accumulation of hearth debris which has built up a deposit on the grounds surface over a length of time. Middens are generally comprised of charcoal and either freshwater or coastal shell species, depending on the sites location. Midden sites may also contain stone artefacts, and the food refuse of other native animals such as small mammals. Midden sites can be distinguished within the landscape by their thick deposit of burnt shells and dark grey/black deposit. Coastal shell middens are often found in close association with rock platforms. Freshwater shell middens are found in close proximity to areas which provided freshwater mussels.

Mound Sites: Mound sites are accumulation of hearth debris which has, over time built a deposit on the grounds surface over a length of time. Mounds are generally comprised of charcoal, burnt clay balls and burnt food refuse such as native animal bones. Mound sites may also contain stone artefacts. On rare occasions mound sites may also contain human burial remains. Mound sites can be distinguished in the landscape by their characteristic dark grey/black deposit and height above surrounding land. mounds which have been utilised over long periods can obtain dimensions of over 100 metres in length and 1 metre in height. Mound sites are generally situated close to major streams, and large waterbodies. In times of flood, mound sites are often become marooned, and provide dry land points from which surrounding resources could have been exploited.

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

ABORIGINAL ARTEFACT TYPES

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

Axe: A stone artefact which has been ground on one or more sides to produce a sharp edge.

Backed Blade (Geometric Microlith): A blade flake that has been abruptly retouched along one or more margins opposite an acute (sharp) edge. Backed pieces include backed lades and geometric microliths. They are thought to have been hafted onto wooden handles to produce composite cutting tools or spears. Backed blades are a feature of the "Australian Small Tool Tradition", dating from between 5,000 and 1,000 years ago in southern Australia (Mulvaney 1975).

Core: An artefact from which flakes have been detached using a hammerstone. Core types include blade, single platform, multiplatform and bipolar forms.

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

Flaked Piece: A piece of stone with define flake surfaces which cannot be classified as a flake or core.

Other Archaeological Terms

Secondary Flaking: Secondary working of a stone artefact after its manufacture. this often done to resharpen stone tools after use, or in the production of formal tool types such as blade flakes and scrapers.

Visibility: Refers to the degree to which the surface of the ground can be observed. This may be influenced by natural processes such as wind erosion or the character of the native vegetation, and by land use practices, such as ploughing or grading. It is generally expressed in terms of the percentage of the ground's surface visible for an observer on foot (Bird 1992)/

Use Wear: Tiny flakes or chips that have been broken of the edges of a stone artefact during use.

References

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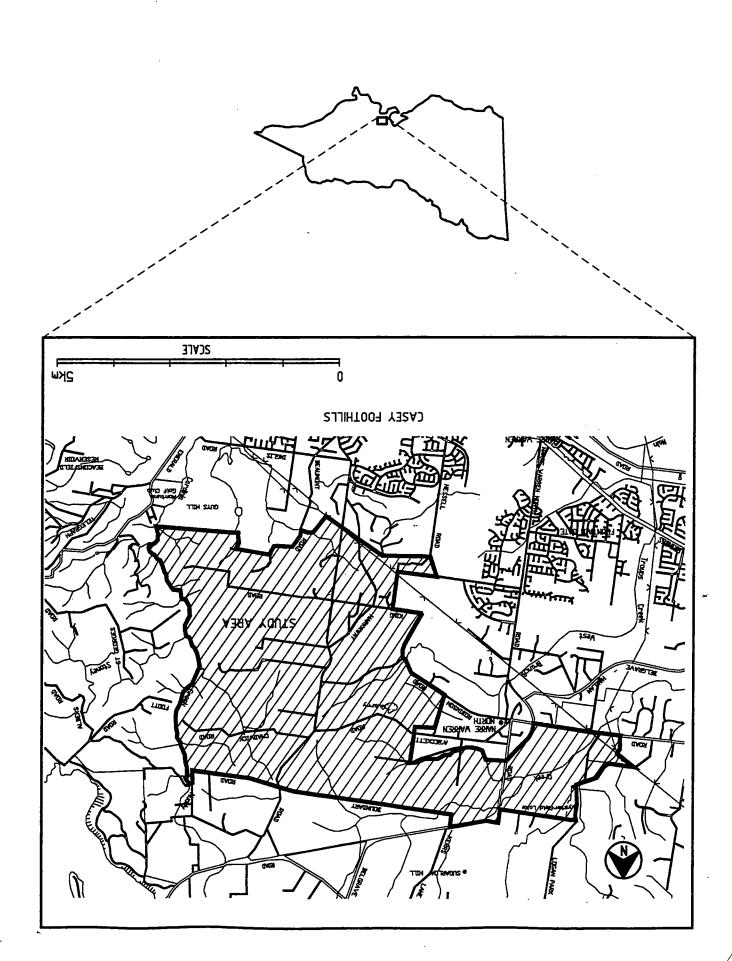




Figure 2 Early Settlements of the Study Area (from Spreadborough & Anderson 1983)

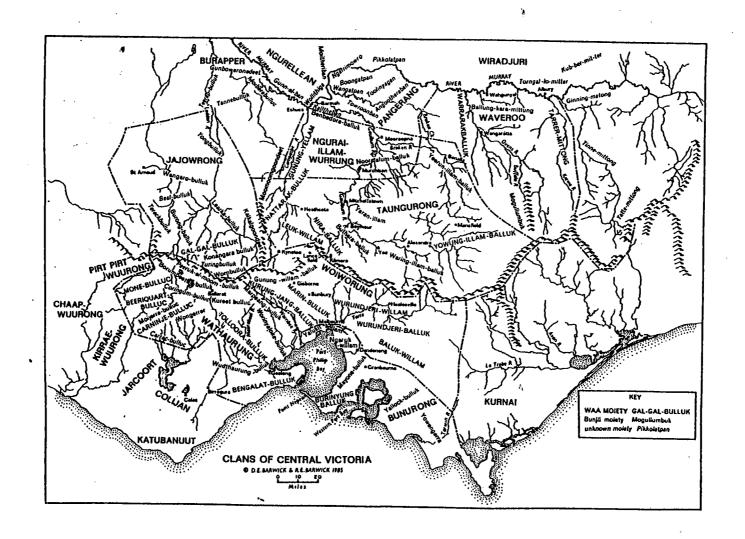
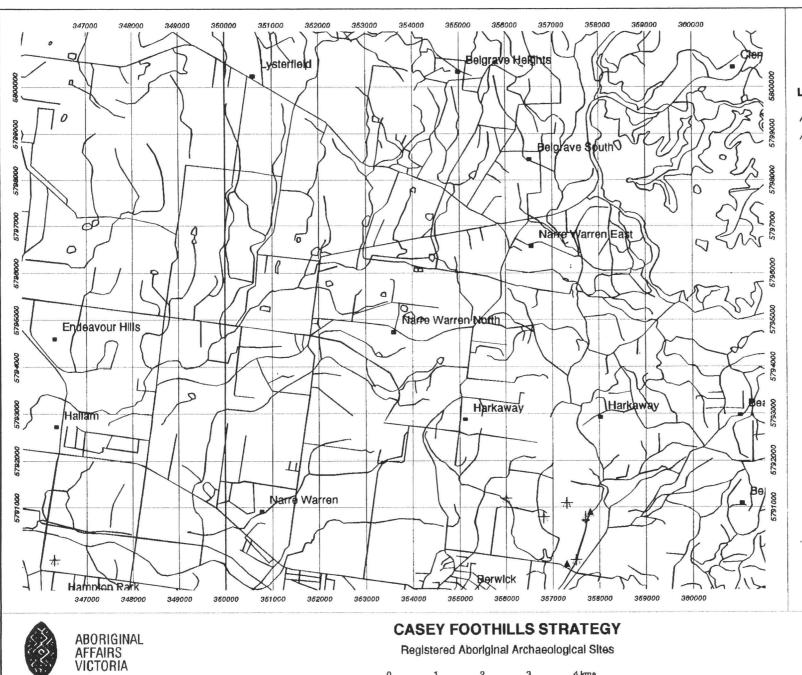


Figure 3 Aboriginal Tribe and Clan Territories (from Barwick 1984)



Legend

✓ Streams

// Roads

Towns

Isolated artefact

Surface scatter

Scarred tree

A Selected Archaeological Site

Data Capture in AMG Zone 55 at 1:100,000

CASEY FOOTHILLS STRATEGY

Registered Aboriginal Archaeological Sites



Date: 24 Sep 96

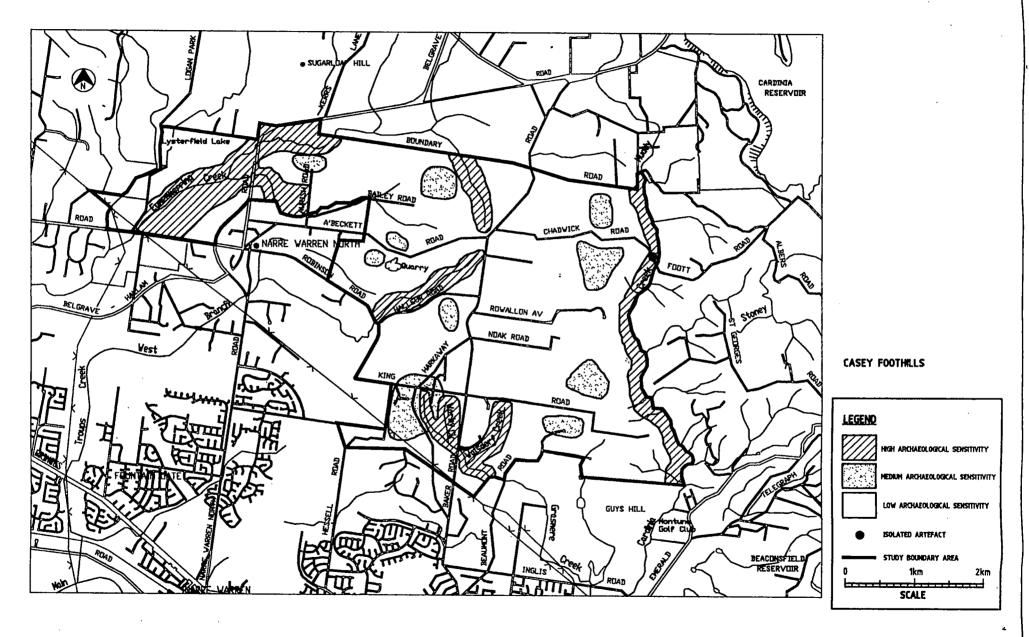


Figure 5: Areas of Archaelogical Sensitivity For Aboriginal Sites