

# Outer Metropolitan Ring (OMR) Transport Corridor

## Cultural Heritage Desktop Study

Name of Activity:

Outer Metropolitan Ring (OMR) Transport Corridor Cultural Heritage Desktop Study

Sponsor: Cultural Heritage Advisor:

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# EXECUTIVE SUMMARY

This investigation was undertaken by searching relevant Commonwealth, State and local registers for any known heritage sites or places in the study area and verification of work undertaken by VicRoads in the development of options for the OMR/E6 Transport Corridor (refer to Appendix 2). Background research was also undertaken into the cultural heritage context and environmental history of the Study Area. This involved reviewing existing information on the Study Area including reports from previous heritage surveys undertaken in or within the study area, published works about cultural heritage in the relevant geographic region, and historical and ethnohistorical accounts of Aboriginal occupation of the relevant geographic region.

The Outer Metropolitan Ring transport corridor commences at the Princes Freeway between the Little River and Werribee townships and travels in a northerly direction for much of its length before ultimately connecting with the Hume Freeway at Donovans Lane just to the south of the Beveridge township. The proposed transport corridor is intended to be a "dual facility" incorporating both a new freeway and railway facility.

Along its length, the Outer Metropolitan Ring intersects a number of major freeways and arterial roads including Ballan Rd, Hopkins Road, Western Freeway, Melton Highway, Calder Freeway, Bulla Road and Mickleham Road. The proposed corridor also crosses the main railway lines from Melbourne to the Geelong, Ballarat and Bendigo regional centres.

A total of 128 known Aboriginal cultural heritage sites are within the OMR Study area. The majority of these sites are stone artefact scatters (n = 115) although scarred trees (n = 4), earth features (n = 4), multi component sites (i.e. sites consisting of more than one site type) (n = 3), stone features (n = 1) and a non-site (a site that although listed on the Victorian Aboriginal Heritage Registry is classified as not being a site) (n=1) are also represented (See Section 2.4.1).

On the basis of the nature of the known archaeological record in the wider region and the landforms present in the study area, it has been determined that land within 200m of river and major creek valleys (Merri Creek, Moonee Ponds Creek, Deep Creek, Jacksons Creek, Kororoit Creek, Skeleton Creek, Dry Creek, Werribee River, and Lollypop Creek) are of *high* archaeological potential to contain Aboriginal Cultural Heritage sites especially where a large degree of native vegetation and relatively undisturbed land surface survive. These river and creek valleys would have formed the major focus for Aboriginal activities throughout the past. Furthermore, alluvial terraces associated with these rivers and creeks have the potential for cultural heritage to be preserved in a depositional environment.

On the basis of the data available, it would be premature to postulate a comprehensive model of Aboriginal site distribution across the remainder of the study area, though the evidence suggests that sites may be associated with the full range of other landforms present in the study area (elevated areas adjacent to swamps, land adjacent to ephemeral water sources, eruption points and the basalt plains).

A total of 100 known Non-Aboriginal cultural heritage sites and overlays are located within the OMR Study area. The majority of these are local in significance, but 2 sites VHRH810 and H1933 are of state significance. Sites and overlays are discussed in Section 2.4.2.

These results represent only a preliminary assessment of the examination area and it is to be expected that further research, both desktop and field, will result in a clearer determination of the non-indigenous cultural heritage values of the study area, in particular the archaeological values. The results of the desktop assessment are limited in their effectiveness due to a concentration on previously registered or listed places many of which were assessed against non-archaeological criteria.

Of the heritage sites and places identified along the proposed route options that may potentially be impacted, all will require further ground proofing in order to fully determine the location of components of the place in relation to the proposed route option.

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# PART 1 - RESULTS OF CULTURAL HERITAGE ASSESSMENT

### **DIVISION 1**

### DESKTOP ASSESSMENT

This stage of assessment involved the completion of a Desktop Assessment to identify cultural heritage issues and constraints affecting the Study 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

This desktop assessment has been authored by David Mathews, Jonathan Howell-Meurs, Jennifer Chandler, Eden Alley-Porter and Ricky Feldman of Andrew Long & Associates (Cultural Heritage Advisor), qualified archaeologists and heritage consultants, experienced in professional Aboriginal heritage assessment and evaluation since 1991.

The authors of this desktop assessment are:

- **David Mathews,** Project Manager Bachelor of Archaeology (Honours), University of Calgary, Canada (2004) Industry experience – 3 years
- Jonathan Howell-Meurs, Senior Project Manager Bachelor of Arts (Honours), University of Melbourne (1994) Master of Arts, University of Melbourne (1997) Industry experience – 10 years
- Jennifer Chandler, Project Manager Bachelor of Archaeology (Honours) at La Trobe University (2005) Industry experience – 3 years
- Eden Alley-Porter, Archaeologist Bachelor of Arts (Archaeology), James Cook University (2002) Industry experience – 4 years
- Ricky Feldman, Senior Project Manager Bachelor of Arts (Honours Degree in Archaeology), University of Melbourne 2001 Bachelor of Science, University of Melbourne (1998) Industry Experience – 7 years

#### 1.2 Desktop Assessment Methodology

The Desktop Assessment into the Aboriginal and non-Aboriginal cultural heritage present in the study area was conducted between August 2008 and February 2009. Further assessment on an updated study area boundary occurred in April and May 2009.

This investigation was undertaken by searching relevant Commonwealth, State and local registers for any known heritage sites or places in the Study area. These included:

- Aboriginal Heritage Register (Aboriginal Affairs Victoria);
- Victorian Heritage Register and Victorian Heritage Inventory (Heritage Victoria);
- National Heritage List and Commonwealth Heritage List (Australian Government Department of

Environment and Water Resources);

- Local Council Heritage Overlays and/or Planning Schemes (Local Government);
- Register of the National Estate (Australian Heritage Council); and
- National Trust Register (National Trust Victoria).

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

- Reports from previous heritage surveys undertaken in or within the study area or on any relevant cultural heritage matters;
- Published works about cultural heritage in the relevant geographic region;
- Historical and ethno-historical accounts of Aboriginal occupation of the relevant geographic region; and

#### 2. RESULTS OF DESKTOP ASSESSMENT

#### 2.1 Physical Background

The following section provides background information on the physical context of the study 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.

The Outer Metropolitan Ring transport corridor commences at the Princes Freeway between the Little River and Werribee townships and travels in a northerly direction for much of its length before ultimately connecting with the Hume Freeway at Donovans Lane just to the south of the Beveridge township. The proposed transport corridor is intended to be a "dual facility"incorporating both a new freeway and railway facility.

Along its length, the Outer Metropolitan Ring intersects a number of major freeways and arterial roads including Ballan Rd, Hopkins Road, Western Freeway, Melton Highway, Calder Freeway, Bulla Road and Mickleham Road. The proposed corridor also crosses the main railway lines from Melbourne to the Geelong, Ballarat and Bendigo regional centres.

Given the shear size of the Study area, a number of different climatic, environmental, geological and geomorphological units are traversed. They are broadly discussed in a north to south manner below:

#### 2.1.1 Climate and Rainfall

#### Northern Section of the Study Area.

Climate conditions across the study area have been described as temperate with dry warm to hot summers and wet winters. The mean annual rainfall for the study area is 600–700 mm (LCC 1991, 57, Map 9).

#### Central Section of the Study Area

The climate in the area has been described as 'temperate' with warm dry summers and wet, cool winters with an average annual rainfall of 500 mm (LCC 1973, Map 5).

#### Southern Section of the Study Area

The climate in the area is very dry with an average annual rainfall of 543mm and average temperatures ranging between c. 11.5-19.2°C in spring-summer and 9.7-17.4°C in Autumn-Winter (LCC 1985, 32-33).

#### 2.1.2 Vegetation

#### Northern Section of the Study Area.

As the region has been extensively cleared it is difficult to determine the original vegetation pattern (LCC 1991, 73, Figure 7). Areas of box woodland and grassland characterise the basalt plains with localised grassy wetlands occurring around seasonally flooded depressions (LCC 1991, 84–5; Peel 1974, 6).

#### Central Section of the Study Area

Large portions of this section of the project have been heavily modified by European land clearance and grazing practices and little remains of the native vegetation. The original vegetation of the plains is known from early

surveyors' maps and it is likely that dry tussock grassland (*Themeda australis*) covered much of the area (McDougall 1987; LCC 1973, 254).

#### Southern Section of the Study Area

The majority of the southern section of the study area has been heavily modified by European land clearance and grazing practices and little remains of the native vegetation. The original vegetation of the plains is known from surveyors' maps and it is likely that dry tussock grassland (*Themeda australis*) covered much of the area (McDougall 1987).

#### 2.1.3 Regional Geology and Geomorphology

It is important to understand the environmental context of the study area in order to gain a better understanding of the possible resources available to pre-contact Aboriginal people and early European settlers which may have influenced patterns of past human activity. In addition, this information assists in determining the degree to which environmental (e.g. natural erosion of landforms) and/or human processes (e.g. land clearance, cultivation, construction or other land use practices) could have impacted on archaeological sites.

#### Northern Section of the Study Area.

The Northern section of the study area forms part of the West Victorian Volcanic Plains, a land system comprising undulating basalt plains with some stony rises (LCC 1991, Map 9). These plains formed during a period of volcanic activity in the Late Pliocene/Pleistocene. During this period, basalt, derived from a large number of small vents, extended as lava flows along valleys and locally merged into basalt sheets. Several small vents currently characterised by low hills (i.e. Mount Ridley, Aitkin Hill) occur close to the study area. Soils predominantly comprise of dark mottled and yellow mottled sodic duplex soils overlying coarse alkaline yellow-grey soil (LCC 1985, 218-219). The modern drainage system developed in the Pleistocene, dissecting the volcanics in the study area, which created wide valleys and deposited relatively thin alluvial sediments within creek corridors (LCC 1973, 19, 24; 1985, Map 5). The course of Merri Creek itself runs adjacent to the northeast of the study area.

#### Central Section of the Study Area

The Central section of the study area is mostly situated within the Newer Volcanic Plains of the Central Lowlands comprising olivine basalt with some stony rises. (Geological Survey of Victoria 1: 63,360 Melbourne and Sunbury maps). The Volcanic Plains formed during a period of volcanic activity in the Late Pliocene/Pleistocene. During this period basalt, derived from a large number of small vents, extended as lava flows along valleys and locally merged into basalt sheets. The modern drainage system developed in the Pleistocene dissecting the volcanic plain in the study area, creating wide valleys and depositing relatively thin alluvial sediments within creek corridors (LCC 1973, 19, 24; Geological Survey of Victoria 1:63,360 Melbourne and Sunbury maps).

The study area is characterised by a flat to gently undulating plain with isolated hills such as Mount Atkinson and Mount Cottrell rising above the plain. Rivers and creeks associated with the Werribee River, Skeleton Creek and Kororoit Creek drainage basins, dissect the plain. Soils predominantly comprise reddish calcareous duplex soils, grey soils and sodic duplex soils, with black clay in depression (LCC 1973, 254).

#### Southern Section of the Study Area

The majority of the southern section of the study area is situated within the Newer Volcanic Plains of the Central Lowlands comprising olivine basalt with subordinate alkaline derivatives. Post Tertiary Sedimentary Plains of Non-marine origin surround the southern portion of the lower Werribee River that extends into the southern-central section. This broader region is also known as the 'Werribee Plains' (LCC 1973, Maps 3 & 4).

The Werribee Plains formed during a period of volcanic activity and extensive basaltic lava flows during the Late Pliocene/Pleistocene (LCC 1973, 19). During this period (0 to 2 million years ago) the ground surface of the study area would have been barren, flat and rocky and much lower to sea level than at present. Pleistocene sea level changes resulted in increased erosion of the volcanic plains and along the edges of lava flows, resulting in the forming of streams and creek beds (LCC 1973, 252). Into this region the Werribee River and Little River, their tributaries and many other small watercourses were channelled. Between these watercourses alluvial material has washed over the area raising the ground surface and forming the current geomorphic face of the Werribee Plains that is characterised by gently sloping to flat open plains which, due to depressions in the impenetrable lava flows, resulted in the creation of low lying wet lands and swamps (LCC 1973, 25). The You Yangs and a number of extinct volcanic cones form the higher relief in the area (LCC 1973, 25).

The soils of the volcanic plains are generally fertile and have accumulated over time with contributions of rich alluvial material.

#### 2.2 Historical Background

The following section provides background information on the history of Aboriginal and European settlement within the Study Area.

#### 2.2.1 Aboriginal Pre-Contact History

In this section the available ethnohistoric and historical information relating to Aboriginal people in the study area is briefly reviewed. This information can assist in formulating a model of Aboriginal subsistence and occupation patterns in the wider area. In conjunction with an analysis of the documented archaeological record of the region, the ethnohistorical information also assists in the interpretation of archaeological sites in the wider area, and in predicting the potential location of archaeological site types within the immediate study area.

The development of the nearby township of Melbourne resulted in the loss of traditional lands and resources, the spread of disease, social breakdown and removal of both groups and individuals to reserves and mission stations. Aboriginal people from other clans and language groups were attracted to Melbourne for a variety of reasons, making it difficult to identify and document the ethnohistory and post-contact history of specific Aboriginal clan groups after the period of initial settlement. A full ethnographic search was outside the scope of this assessment and the following section summarises major syntheses previously undertaken on Aboriginal associations with the Port Phillip area in general in the pre-contact and post-contact period (i.e. Clark 1990; Clark & Heydon 1998; Presland 1994).

The study area is located within the language group of both the *Woi wurrung* (Clark 1990: 364) who occupied the basins of the Yarra and Maribyrnong rivers and *Wada Wurrung* who occupied land to the west of the Werribee River (see Figure 9). A language group consisted of independent groups of closely related kin, or 'clans', who were spiritually linked to designated areas of land through their association with topographic features connected to mythic beings or deities. Clan lands were inalienable, and clan members had religious responsibilities (e.g. conducting rituals), to ensure 'the perpetuation of species associated with the particular mythic beings associated with that territory' (Berndt 1982: 4).

#### Woi wurrung

The territories of three clans *Woi wurrung* clans are located within the study area, they are:

- *Tallin willam* meaning 'Talling dwellers' (Talling being the locality name for Toolern Creek). This clan identified with the area around Toolern Creek and other streams draining into the Werribee River around Bacchus Marsh (Clark 1990, 382).
- *Kurung jang balug* meaning 'red ground people' were associated with the Werribee River and Mount Cottrell area (Clark 1990, 383).
- *Marin balug* meaning 'Marin people' (Marin being the locality name for Saltwater River) who were associated with Kororoit Creek.

Very little is known about the occupation of the study area by these clans, with most references to *Woi wurrung* clans describing Aboriginal associations with either the Yarra River or Mount William, west of Kilmore (Presland 1994).

In 1839 a census requested by George Robinson, the Chief Protector of Aborigines in the Port Phillip Protectorate, of Aboriginal people living in and around Melbourne found that the probable Aboriginal population at this time consisted of 140 *Woi wurrung*, 50 *Wada wurrung* and 12 *Bun wurrung* people (Lakic & Wrench 1994: 110, 113). However it is likely that the numbers of Aboriginal people in Melbourne varied greatly throughout this period, and was subject to the influx of various groups and individuals.

Throughout the 1840s the confluence of the Merri Creek with the Yarra River was an important location for Aboriginal people in Melbourne. Initially, the location of an Assistant Protectors station (Thomas) and later the location of the Merri Creek Aboriginal School. The population of *Woi wurrung* and *Bun wurrung* people declined in the 1840s with an influenza epidemic in 1847 leading to deaths and the dispersal of Aboriginal people from this location (Clark & Heydon 1998).

Through the influence of the Government, Missionary Societies and the new 'landowners', the number of Aboriginal people in the area dwindled as a result of high mortality rates and forced movement out of the

township. Complaints from settlers who wanted to exclude Aboriginal people from their newly acquired land, and move them further into the 'bush' and requests by Aboriginal people themselves for a 'station' of their own, led to the establishment of an Aboriginal reserve known as Coranderrk, near Healesville in 1863. The majority of *Woi wurrung* people lived at Coranderrk from 1863 to the early 1900s when the introduction of the *Aborigines Act* 1909 requiring all 'half castes' to leave Mission Stations, resulted in Aboriginal people moving back to Melbourne, attracted by work opportunities (Rhodes *et al.* 1999, 88-89).

#### Wada Wurrung

Through the close proximity of the Werribee region to the earliest areas of European settlement in Victoria and the accounts of escaped convict William Buckley (cf. Morgan 1852) a relatively high level of information exists for 19<sup>th</sup> century Aboriginal populations towards the south of the study area (cf Carey 1904; Russell 1904). Other sources of information include written records of early European settlers, government administrators and missionaries. Much of this information has been summarised in previous research (e.g. du Cros 1989; 1991) and a full review is outside the scope of this study. Extensive additional archival material remains to be incorporated into this body of evidence (e.g. the Wesleyan archives from Buntingdale Mission). From written accounts and Aboriginal informants, post-contact tribal and clan boundaries have been mapped as accurately as possible. However, these boundaries should not be considered as rigid lines in the landscape.

There are several problems concerned with correctly identifying and describing 19<sup>th</sup> century Aboriginal groups within the study area. This is largely a result of discrepancies in early European accounts and the difficulties early settlers had in understanding Aboriginal languages and social systems. Furthermore, the devastating affects of European settlement to Aboriginal people, such as the loss of traditional lands and resources, the spread of disease, social breakdown and removal of groups and individuals to reserves and mission stations have added additional complexities. As a result it is difficult to accurately identify the ethnohistory and post-contact history of specific Aboriginal clan groups in the study area after the period of initial settlement.

From the available ethnohistorical sources it is possible to reconstruct a tentative pre-contact subsistence pattern for Aboriginal people in the southwest of the current study area. Much of this information is derived from the reminiscences of William Buckley, an escaped convict who was adopted into the *Wada wurrung balug* clan (Morgan 1852), and in the papers of George Augustus Robinson, Chief Protector, Port Philip Aboriginal Protectorate (in Clark 1990).

Groups followed a semi-sedentary hunter gatherer lifestyle. Resource rich watercourses and swamps, containing a diversity of fish, shellfish, birds and other plant or animal foods formed a particular focus for regular Aboriginal occupation. George Armytage, an early landholder in the Werribee area, noted that the *Wada wurrung balug* depended upon fishing in the summer and autumn periods and hunting and the plant food *murnong* in the winter and spring period (Bride 1969). This clan was known to have fished for eel at Lake Modewarre, 20km south west of the study area (Morgan 1852).

The uneven distribution of particular resources (e.g. greenstone for ground edge axes) resulted in a trade and exchange network between different clan groups across the region. For example, the *Wada wurrung balug* attended meetings at Mt Noorat (over 100 km west of the study area) and at Mirrewuae Swamp (120 km west of the study area). Further, an account from Dawson (1881), again at Mt Noorat states;

...the Aborigines from the Geelong district brought the best stones for making axes and a kind of wattle gum celebrated for its adhesiveness. The Geelong gum is so useful in fixing handles of stone axes and splinters of flint in gum and for cementing the joins of bark buckets, that it is carried in large lumps all over the Western District.

This summary of Aboriginal behaviour patterns within the study area during the mid-19<sup>th</sup> century indicates that occupation in the region was undertaken on a seasonal basis, characterised by temporary encampments shifting between resources rich zones at different times of the year. Large camp areas were often set up close to rivers and creeks. Such camps were generally occupied by smaller groups within the major clans and lasted a few days, possibly weeks at a time. This allowed Aboriginal groups to move seasonally between resource rich zones, exploiting a range of regionally available subsistence entities. For example, when in the western regions the natural occurrence of silcrete outcrops would have been exploited for tool making material. The tool making process would have been performed back at a seasonal campsite, which leaves physical evidence thus, indicating past human activities (Presland 1997).

In 1803 the explorers Charles Grimes and James Fleming examined land near Skeleton Creek describing the recently burnt ground (Flemming 1984, 22) as evidence of the use of fire by Aboriginal people, possibly to promote open woodland in the area.

The Werribee region was undoubtedly a popular camping ground with resource rich watercourses and wetlands attracting groups on a seasonal basis from the wider area.

2.2.2 Aboriginal Post-Contact History

Two Registered Aboriginal Parties (RAPs) are currently present for the study area.

- Wurundjeri Tribe Land & Compensation Cultural Heritage Council Inc.
- Wathaurung Aboriginal Corporation

Four RAP applicants are present for the study area:

- Boon Wurrung Foundation Ltd (BWF)
- Bunurong Land Council Aboriginal Corporation (BLCAC)
- Wurundjeri Tribe Land & Compensation Cultural Heritage Council Inc.
- Wandoon Estate Aboriginal Corporation
- N.B. It should be noted that on the 22<sup>nd</sup> April 2009 the Wathaurong Aboriginal Cooperative Ltd. withdrew their RAP application, it is possible they may resubmit an application at a later time.

Details of the current boundaries for the above RAPs and RAP applicants are presented in Figures 2 to 8. Please note that at the time of finalisation of this study no detailed map of the Wathaurung Aboriginal Corporation RAP boundary was available so their RAP application map is presented.

#### 2.2.3 Non-Aboriginal Post-Contact History

European interest in the Port Phillip region was initiated by reports from Hamilton Hume and William Hilton Hovell, who explored the area in 1824. Following these reports, John Batman, a small landholder in Van Diemens Land, set up the Port Phillip Association, to explore and settle the Port Phillip hinterland (Payne 1975, 1-2) The following synthesis represents a generalised historical sketch of the non-aboriginal settlement and development of the northern, central and southern sections of the study area which correspond roughly with the LGA boundaries of the cities of Hume, Melton and Wyndham and include small sections of the cities of Mitchell, Whittlesea and Brimbank.

#### Northern Section of the Study Area (Hume, Mitchell and Whittlesea)

In December 1824 the exploration party of Hamilton Hume and William Hovell, traveled overland from near present-day Canberra, climbed the peak of the present-day Mt Ridley and surveyed the surrounding landscape, including the current Hume and Whittlesea city areas.

From this point they continued on to Corio Bay, passing through the district again on their return journey, commenting that the district was no less appealing a second time. With the arrival of European settlers from Tasmania in the Port Phillip District in June 1835, a 'treaty' for the use of an extensive piece of land was drawn up between John Batman, as representative of the Port Phillip Association, and Aboriginal leaders. Although ostensibly 'purchasing' land to be shared among members of the Association, it should be noted that Batman reserved for his own use land situated between the Merri and Deep Creeks (Harcourt 2001). This can be taken as an indication of the early recognition of the suitability of the land north of Melbourne for farming and grazing. The settlement of the Craigieburn district subsequently took place soon after this time.

Most of the early settlements in the Hume region were isolated homesteads rather than villages or urban settlements. And it was the gold rush of the 1850s that brought the region its first major population explosion. Wheat was the major crop in the region throughout the 1840's although oats, barley, potatoes and other crops were also grown at this time. The townships of Craigieburn and Somerton were established over this period to service this agricultural district, as production intensified during the 1850s gold rushes. However, by the 1860s, bad farming practices had reduced the fertility of the soil, and coupled with falls in property and product values, the district saw a return to pastoral activities. The cultivation of vineyards in western areas of the Hume region, particularly near Sunbury was also developed during this period, peaking during the late 19<sup>th</sup> and early 20<sup>th</sup> centuries. Grape production generally ceased in the 1920s with vines being pulled out and the land turned over to grazing (Symmonds 1985, 121-124). By the 1880s mixed farming had become more common with many farms focusing on dairying and the cultivation of more diverse crops such as oats, peas, and potatoes (Peel 1974, 43).

The overland route for squatters entering the district from New South Wales was eventually gazetted as a public highway (Sydney Road) on November 14, 1850, and a tollgate was placed across the road at Campbellfield. This officially became the Hume Highway in 1928, and the first section of freeway from Melbourne to Craigieburn was built in 1961. The opening of the Sydney-Melbourne Railway in 1873 (Lemon 1982, 61) complimented the increasingly dependence of the region's economy upon manufacturing industries, established along the transport corridors, and on the extractive industries siturtaed on the wider basalt plains.

Following World War II, the area experienced a rapid growth in industrial and residential development following large-scale immigration, and the outer suburbs of Melbourne expanded out through Broadmeadows and Campbellfield, and township of Craigieburn has since become an outer suburb of the Melbourne metropolitan area.

#### Central and Southern sections of the Study Area (Melton, Brimbank and Wyndham)

The central and southern sections of the study area share a large number of geographical and environmental characteristics and consequently display similar patterns of European settlement, particularly in relation to pastoral and agricultural land use practices (see also section 2.2.4)

In February 1803, Charles Grimes, Surveyor General of New South Wales led a small party in the exploration of the shores of Port Phillip Bay, including the mouth of Werribee River and the plains several kilometres inland. The area was described as grassy, treeless and with very bad stony soils (Popp 1979, 13-14). However, the explorers Hume and Hovell were probably the first Europeans to cross the western Melbourne plains in 1824 (Andrews 1981).

As a result of the activities of John Batman's Port Phillip Association the earliest depictions of the study region occurred in a map of squatting runs in Port Phillip drawn up by J. H. Wedge as a result of the Batman Treaty in 1835 (Powell 1968, 247). 'Treaty Lands' which encompassed parts of the study area were assigned to J.T. Collicott (Portion 11) (Harcourt 2001, 68); however the occupation of these lands by the Port Phillip Association was, however, short lived as the treaty did not receive official recognition, and the land 'purchases' were disallowed in 1836 (James 1985, 4). Evidence of this early occupation was apparent in the form of 'deserted huts' observed by Darke in 1837 (Starr n.d., 13). Whether these were the remains of shepherds huts or incursions into the hinterland by whalers or convicts on the run is not clear but it is likely some settlement and grazing did occur prior to the issuing of official grazing in 1838.

The grazing prospects in the region raised by the actions of the Port Phillip Association, although deemed illegal soon attracted numerous squatters to the region and by 1837 the Werribee plains were fully occupied and fully stocked (James 1985, 6). From 1838 the New South Wales Government began issuing annual grazing licenses and from 1848 squatters were able to hold land for longer periods through pastoral leases. In the Werribee district, however, it was not until 1850 that pastoralists were able to secure their tenure for longer periods through the purchase of land at auction under freehold title (James 1985, 7). Numerous pastoral runs were established in the Werribee region with a number of prominent 19th century pastoral leases and grants occurring within the Study area.

By the late 19th and early 20th centuries, many of these larger properties were sub-divided in small holdings as part of closer settlement schemes and individual subdivision schemes and it is at this time that the landscape evolved into the form that is visible today. Typically, settlement of this era consisted of small timber or bluestone homesteads and farm complexes sheltered by conifer or sugar gum (E. cladocalyx) windbreaks, typically situated on high points in the landscape close to established roads.

These small mixed farming properties generally proved to be uneconomic, and during the mid-late 20th century they were amalgamated into larger farms, interspersed by smaller land units along major lines of communications with specialised purposes, such as horse agistments.

Much of the land in the district was taken up by large property holders, such as the Chirnside family, who owned already extensive pastoral holdings on the western plains, or was bought speculatively by Melbourne businessmen. Estates in this area were characterised by sheep grazing with some mixed farming from about 1870 onwards, with comparative little construction or improvements beyond the construction of drystone field boundaries, pens and yards. The rich soils of the Werribee River floodplain and its associated terraces were selected for agricultural use soon after European occupation in 1841. Small mixed farming activities such as market gardens, orchards, wheat, cattle and sheep were the dominant forms of land use throughout the 19th and 20th centuries. The later 19th and early 20th centuries were also characterised by the break-up of the large pastoral properties with an increase in the numbers of small farmers and tenants growing grain and raising dairy cattle.

Settlement within the broader region was largely dispersed and rural in nature with exception of township developments such as Werribee. The first official settlement in the Werribee district was in 1849 when a village reserve was mapped out on the site of the present Werribee Township. In May 1850 the Village of Wyndham was proclaimed by the Colonial Secretary's Office. Local government was instituted in 1862, known as Wyndham Road District and was renamed Wyndham Shire in 1864 (James 1985, 19-23).

Prior to this official proclamation, an inn, the Golden Fleece Inn, was located in the vicinity of the present town close to the main track between Melbourne and Geelong. A rough timber and stone bridge had also been constructed in this location. Construction of a second hotel, Armstrong's Inn, was commenced in 1849 on the location of the present Racecourse Hotel (James 1985, 17).

Land sales within the village reserve began in 1850 with the sale of ten half-acre town lots in the vicinity of Mortimer, Stawell and Greaves Streets (James 1985, 24). However, Wyndham was slow to develop, with only ten or twelve houses in the village scattered over a wide area. Settlement increased substantially after the opening of the Geelong-Melbourne railway in 1857 with a population of 130 in 1861 growing to 366 in 1871 (James 1985, 48-50). This period of growth was followed by a period of stagnation and decline during which one resident described the appearance of the town as that of 'a deserted village' (James 1985, 52).

During the 1890s a large proportion of the Chirnside's Werribee Park was subdivided for farming purposes and the Board of Works Metropolitan Farm was established. As noted above these changes brought a striking transformation to the economy of the area from pastoral to farming. These changes resulted in dramatic population growth with the population of the shire doubling between 1881 and 1901 (James 1985, 57). The majority of pastoral land was subdivided into grain (oats and barley) and dairy (butter and cheese) farms and held on a tenant basis (James 1985, 59). The majority of the Metropolitan Farm was subdivided for irrigation purposes to deal with Melbourne's increasing sewerage problem (James 1985, 64).

Initially road communications traversing the broader region evolved in an organic manner and by 1838 there were two rough tracks traversing the area passing close to the present town area (James 1985, 16). However, from a relatively early date government surveyors were employed in surveying and marking out new routes or rationalising old ones. In the 1840s William Darke surveyed and marked the alignment of the Geelong Road between Geelong and Melbourne (Rowe and Huddle 1998-2000, 30).

A private company was formed in Geelong in 1852 to build the railway to Melbourne and Geelong-Greenwich (Newport) Private Railway was opened in 1857. The construction of the line resulted in substantial employment with up to 200 workers utilised, as well as convict labor (Rowe and Huddle 1998-2000, 31). Initially passengers and goods to and from Melbourne were transported by steamer to the railhead at Newport Line from which the single line ran to Geelong. Numerous problems with the quality of materials, construction and drainage occurred along the line until in 1860 the railway was purchased by the State Governement (James 1985, 48-49). The construction of the railway brought both quick travel between Melbourne and Geelong as well as fostering the development of towns such as Lara and Little River (Rowe and Huddle 1998-2000, 31).

#### 2.2.4 Land Use History

#### Northern Section of the Study Area

Early settlement of the Hume region was rapid with many pastoralists taking up land in the region by the late 1830s. For instance by 1837 John Patterson occupied 20,000 acres east of Merri Creek in the vicinity of Donnybrook while James Malcolm operated a large station at Mount Ridley by 1839. Other major landholders included Richard Brodie and W. Clarke (Lemon 1982, 33, 228; Payne 1975, 100; 1980, 2). During this initial phase of settlement tenant farmers were engaged by largely absentee owners to manage sheep grazing and small portions of land were cultivated to produce wheat and potatoes for local consumption (Peel 1974, 13, 16-20).

By the early 1840s, the growing township of Melbourne led the development of agriculture with cropping carried out east of Sydney Road, while to the west sheep grazing continued to predominate. An observation of tenant farmers at Bald Hill in 1849 noted 'All the country round the Bald Hill being under cultivation looked much like a farm at home on a very big scale' (Payne 1975, 103). Throughout the 1840s wheat was the major crop in the region although oats, barley, potatoes and other crops were also grown at this time (Peel 1974, 20).

The townships of Kalkallo and Craigieburn developed to service the growing community and people travelling between Sydney and Melbourne. These towns, including wider infrastructure such as roads, developed further during the gold rush with services expanding to meet the demands of those travelling to and from the gold fields (Payne 1975, 103; 1980, 3-48).

The construction of a railway through the study region in the 1870s, with stations at Somerton, Craigieburn and Donnybrook, led to improvements in communications and access to the Melbourne market. It also was central to a land boom in the 1880s with at least four syndicates involved in purchasing land around Somerton and

Craigieburn, with the intent of subdividing larger estates and selling the land to small investors. However some large estates remained with the Clarke Estate west and north of Kalkallo remaining intact through to 1911, when it was reverted to smaller holdings (Lemon 1982, 62, 85; Payne 1975, 105).

While townships developed and services improved land use practices also underwent broad changes. Dairying increased from 1880-1945, after which sheep and beef cattle gained popularity due to better economic returns (Payne 1975, 106). In the post-WWII years the need for additional industrial and residential land on the outskirts of Melbourne has seen the steady encroachment of former agricultural and pastoral land, with the creation of new suburbs and industrial areas serviced by major road, rail and water management infrastructure. Today the Hume region has an industrial and residential character over much of the south, centre and west while the remainder of the area is predominantly used for pastoral and agricultural land use practices.

#### Central Section of the Study Area

The explorers Hume and Hovell were probably the first Europeans to observe the central and southern parts of the study area. Surveyor William Wedge Darke was the first person to map the area in 1837 although the first reference to it was in early plans prepared by J. H. Wedge at the time of the Batman Treaty in 1835 (Starr n.d., 13). Other evidence of earlier visitors to the Melton area in the form of 'deserted huts' was noted by Darke in his writings (Starr n.d., 13). Whether these were the remains of shepherds huts or incursions into the hinterland by whalers or convicts on the run is not known.

The prospect of sheep farming in the area soon attracted settlers with surrounding land opened up for selection around 1840. The Pyke family are reported to be the first to live and graze stock in the Melton District although others had probably tried to establish some form of living there earlier (see Darke's above reference to 'deserted huts'). The Pykes held over 5,000 acres at Pennyroyal Creek (now the township of Melton) between 1838 and 1851 (Spreadborough and Anderson 1983, 262). A further pre-emptive section of 640 acres was granted to them in 1855 (Starr n.d., 31).

Other early settlers possessing large runs in the Melton region include W.C. Yuille who held a Pre-emptive Right Run at Rockbank from 1841 through to 1853 when the property was sold (Murphy 1998, 5; Spreadborough and Anderson 1983, 263; Starr n.d., 26). In 1845 James Pinkerton acquired the largest holding of land along Kororoit Creek near Rockbank and J. and A. Dennistoun held over 18,000 acres between Toolern and Kororoit Creek (Murphy 1998, 5; Spreadborough and Anderson 1983, 263). Land in the Rockbank region was first sold by auction in 1854 but the marginal nature of the grasslands appears to have delayed settlement until the early 1900s. Estates in this area were characterised by sheep grazing with some mixed farming from about 1870 onwards (Murphy 1998, 6).

The first 'village' lots in Melton (Lots 95-111), were advertised for sale on the 9<sup>th</sup> December 1840 but the sale was postponed when no bids were received (Starr n.d., 13). The same land, however, sold readily a few years later. In 1852 Lot 8 was subdivided for a village site, which later became Melton (Starr n.d., 13). From 1856 Melton became a Postal village and by 1862 the village comprised not only a Post Office but also a church, a school, stores and hotels servicing a flourishing pastoral and agricultural district of over 29,500 ha (Starr n.d., 13). The population of the District at that time was around 1,000 people and there were 212 homes and a great many farms (Starr n.d., 13, 36).

By 1860 the Pyke run had been subdivided and sold off, part of which formed sections for the township of Melton. A 1,400 acre section known as Pyke's Dairy Farm was rented to George Minns (Starr n.d. 36). Minns (in Starr n.d., 36) describes the chattels of the farm as 300 head of cattle as well as '...112 cows, 100 head of two-year-olds and yearlings, 25 pigs, 200 fowls of all sorts, nine horse teams and bullocks, together with 35 acres of oats...'. This was probably typical of the numerous farms in the Melton District at this time.

The Ballarat Road (Western Freeway) had been surveyed by 1846 and the position has not changed significantly since then. Prior to that time numerous bullock tracks led through the study area to Ballarat and many of these have been retained as major and minor roads in the UGA (Starr n.d., 14). The first coach between Ballarat and Melbourne ran in 1851 and Cobb & Co began operating daily coaches between the two cities in 1856 (Starr n.d., 147). Thieves and bushrangers were often a problem especially through the forest country that surrounded Melton at that time (Starr n.d., 147).

The rail line reached Keilor in 1862 and the mail was sent to Keilor Road Station, now known as Sydenham, from where it was picked up by coach and conveyed to Ballarat via Melton (Starr n.d. 117, 147). The rail line from Melbourne to Ballarat reached Melton in 1884. The advent of the railway probably assisted the land boom of the 1880s when people from the city were buying land in the District for record prices.

To summarise, land use in the Melton region throughout the mid 19th and early 20th centuries was characterised firstly by large pastoral runs, which were predominantly for sheep grazing and wool production with some cattle followed by smaller mixed farming activities such as market gardens, orchards, wheat, cattle and sheep.

In the post-war years the need for additional residential land on the outskirts of Melbourne has seen the steady encroachment of development onto former agricultural and pastoral land, from the east with the creation of new suburbs and industrial areas serviced by major road, rail and water management infrastructure.

Today the Melton region is still largely pastoral and agricultural but has an increasingly urban character as residential and industrial development spreads westward from the outskirts of Melbourne and around Melton township itself.

#### Southern Section of the Study Area

In February 1803, Charles Grimes, Surveyor General of New South Wales led a small party in the exploration of the shores of Port Phillip Bay, including the mouth of Werribee River and the plains several kilometres inland. The area was described as grassy, treeless and with very bad stony soils (James 1985, 4).

In 1836 a number of squatters settled on the Werribee Plains helping to establish the south western portion of Victoria as a vast sheepwalk (James 1985, 6). During the 1830s and 1840s the area was used as a resting point for travellers between Melbourne and Geelong. The first official settlement in the district was in 1849 when a village reserve was mapped out on the site of the present Werribee township. In May 1850 the Village of Wyndham was proclaimed by the Colonial Secretary's Office. Local government was instituted in 1862, known as Wyndham Road District and was renamed Wyndham Shire in 1864 (James 1985, 19-23).

Pastoralists began to settle in the area from the 1850s to the 1890s. The Chirnside family acquired a number of runs and by 1875 their estate of freehold land was approximately 85,000 acres with 80,000 sheep (James 1985, 24). Described in 1841 by a European traveller, the study region was outlined as:

...open plains, broken only by very low ridges of trap rock, which are moderately wooded with honey suckle and She Oak. The plains afford the finest possible sheep pasture, being covered with the richest herbage (Drake 1841 in Peel 1974).

The rich soils of the Werribee River floodplain and its associated terraces were selected for agricultural use soon after European occupation in 1841. Small mixed farming activities such as market gardens, orchards, wheat, cattle and sheep were the dominant forms of land use throughout the 19th and 20th centuries.

Between 1838 and 1854 Government land auctions were held within the region and resulted in two types of land owners e.g., rich individuals who resided in Melbourne and leased their land, or farmers who lived and worked on their own land (Vines & Ward 1988; Lane 1996).

During the 1890s a large proportion of the Chirnside's Werribee Park was subdivided for farming purposes and the Board of Works Metropolitan Farm was established. These changes brought a striking transformation to the economy of the area from pastoral to farming and resulted in a dramatic population increase (James 1985, 57). The majority of pastoral land was subdivided into grain (oats and barley) and diary (butter and cheese) farms. The majority of the Metropolitan Farm was subdivided for irrigation purposes to deal with Melbourne's increasing sewerage problem (James 1985, 64).

In the years between the two World Wars, a number of market gardens and orchards were established around Werribee, successfully growing apricots, peaches, plums, apples and quinces. Poultry farming also became popular in the region by the early between Melbourne and Geelong (James 1985, 87-88).

In the post-war years the need for additional industrial and residential land on the outskirts of Melbourne has seen the steady encroachment of intensive development onto former agricultural and pastoral land right across the southern section of the study area, with the creation of new suburbs and industrial areas serviced by major road, rail and water management infrastructure.

Today the study area has a largely urban character, though with some agriculture on the rich alluvial soils of the lower Werribee River corridor in the south and generally around the outskirts of the developing townships.

#### 2.3 Previous Archaeological Assessments

There have been several archaeological assessments within the OMR study area.

# Shire of Melton Heritage Study (Moloney 2006) and Shire of Melton Heritage Study – Stage 2 (Maloney et al 2006)

In 2006, Maloney undertook a large scale regional study of historical heritage within the shire of Melton. The study sought to identify, evaluate and document the built heritage of the LGA and to make recommendations for the conservation and management of significant places. A total of 475 places of potential heritage significance were identified through a combination of desk based assessment, including the examination of historical maps and field inspections. The majority of the places identified consisted of structural remains associated with pastoral and agricultural activities, a number of which occur in the current study area. Potential heritage significance was determined through a combination of age and historical associations while sites associated with early squatting development were considered to have the most significant archaeological potential (Moloney 2006:74).

Stage 2 of the Shire of Melton Heritage Study included a more detailed examination of the historical and heritage values of Heritage Places identified in the previous stage of the study. Of particular interest to the current study area are two places; the Kerr Farm Site and 'Rocklands' Homestead and Farm. Both places are representative of the Heritage values associated with early pastoral land use and occupation in the current LGA area and are discussed in further detail below:

#### • Kerr Farm Site, 1780-1882 Boundary Road, Mt Cottrel (c. 1855).

At the time of the heritage study, the Kerr dairy farm complex was described as ruinous, consisting of the ruins of a substantial bluestone cottage, a substantial complex of drystone wall stockyards, paddocks and boundary fences, a shallow dam, the remains of a well/cistern, an unusual gatepost, a hollowed out rock and a cobbled area. The place is described as being socially significant at a local level for several reasons including its association with the deaths of seven of the Kerr children, six of whom died from diphtheria in the space of a few weeks and one who drowned in the property dam, illustrating the difficulties of life on isolated nineteenth century farms such as this one. Two of the children are also believed to be buried on the property however the location of the graves was unknown at the time of the study. The place is also described as being scientifically significant at a local level for its potential to provide evidence of nineteenth century small farming practices and lifestyle in the region. Moloney et al. (2006) recommended that the Kerr farm site be included in the Melton Planning Scheme Overlay and the Victorian Heritage Inventory.

• 'Rocklands' Homestead and Farm, 619-653 Hopkins Road, Truganina .(c. late 1850's).

Moloney et al (2006) described the 'Rocklands' Homestead as consisting of a moderately intact Victorian styled main house with a nearby, visually connected dam situated in a rural setting defined by the presence of drystone walls and stands of sugar gums and cypress trees. *Rockbank* was identified as being both historically and architecturally significant at a local level. The main house is described as being architecturally significant, despite later alterations, for its original and early Victorian design qualities and it's setting amongst a 'fine' complex of drystone walls, outbuildings and rural surrounds. The historical significance of the site was attributed to its survival as one of the most substantial of the few early (stone) farm dwellings that remain south of the Western Highway and east of the Werribee River. It was also identified as being historically significant for its representation of early land-use practices in the region particularly with relation to the importance of water in historical pastoral and agricultural activities in the region. In particular the small, drystone wall lined dam was noted for its fine construction as an exceptional representation of shallow, fieldstone lined dams built across drainage lines in the Melton Plains area. Moloney et al (2006) recommended that the site be included on the Melton planning scheme heritage overlay with particular schedule controls.

#### City of Hume: Heritage Study of the Former Shire of Bulla (Moloney and Johnson 1998)

A comprehensive assessment of the heritage values of the former Shire of Bulla was undertaken by Moloney and Johnson in 1998, resulting in the identification of 71 historical sites, potential archaeological sites and a number of cultural landscapes based on age, historical association and in the case of the cultural landscapes, significant geographical elements. All of the sites were identified through the survey of early historical plans with many of the sites remaining unsurveyed at the time of publication. No specific attempt was made to investigate the archaeological values of identified sites.

The majority of identified sites consist of structural remains including farm buildings and public buildings or are areas where the potential for structural/archaeological features to exist such as early squatting and camp sites. Additionally, four of the identified cultural landscapes occur within the current study area:

- Jacksons Creek, Sunbury Assessed as being of national significance due to it's associations with the early settlement of Port Phillip, the Clarke pastoral empire and the presence of a number of significant indigenous and non indigenous heritage places
- Melbourne to Echuca Railway The Melbourne to Echuca Railway dissects the current study area southeast of Diggers Rest. Moloney and Johnson (1998) considered the line to be of national significance as an indicator of the importance of the Castlemaine and Bendigo Goldfields and the Murray Valley and Riverina Hinterland areas. It was the first government railway in Victoria and was the greatest public work in Australia at the time of its construction.
- Waterways Including Jacksons, Deep and Emu creeks. Moloney and Johnson (1998) considered the 'Waterways' Cultural Landscape to be of State significance having played an important role in the initial European settlement of Port Phillip and in the social history and development of the areas associated with them.
- Oaklands Included the area currently known as Woodlands Historic Park, Gellibrand Hill and the area directly southeast of Craigieburn. Moloney and Johnson (1998) considered 'Oaklands' to be of state significance as an area of aesthetic and social importance containing remnant natural landscape as well as rare examples of mid nineteenth century mudbrick and granite structures, early granite quarries and the *Woodlands* historic homestead.

#### City of Wyndham Heritage Study (Context 1997) & City of Wyndham Review of Heritage Sites of Local Interest (Barrett 2004)

Context (1997) undertook a large scale study of the Heritage values of the City of Wyndham through a combination of desk based assessment and field inspections resulting in the identification of a number of places of potential local and regional heritage significance, many of which occur in the current study area. Barrett (2004) re-identified and surveyed most of the same places, allocating further ratings of significance. Places identified in both studies included major infrastructure such as the Melbourne-Geelong railway line, structures and structural remains associated with past agricultural and pastoral activities and places associated with World War Two. Both studies also identified the Truganina/Tarneit landscape (including Skeleton and Lollypop Creeks) as being of local significance for it's natural distinctiveness and the presence of features associated with the city's nineteenth and twentieth century, rural development (Barrett 2004:124)

#### Melbourne-Sydney Passing Lane 2: Donnybrook (Feldman et al. 2007)

Feldman, Howell-Meurs and Mathews undertook a field survey and subsurface testing programme as part of a Cultural Heritage Management Plan, of a 7km linear transect of land that extended north of the Donnybrook Road to south of Beveridge Road as part of the Melbourne-Sydney Passing Lanes project in 2005. The northern section of the Passing Lane study area is located within the OMR study area.

No Aboriginal cultural heritage material was identified during the field survey of this area (12 metres wide by 7 kilometres long), with low ground surface visibility contributing to this result. Six previously registered Aboriginal heritage places consisting of isolated artefacts and diffuse stone artefact scatter (7822-1175, 0783, 1174, 1173, 7823-0076 and 0075) were investigated during the subsurface testing programme. It was concluded that these Aboriginal heritage places generally occurred in a highly disturbed context and no additional material associated with these assemblages was identified.

During the subsurface testing programme, three Aboriginal heritage places were identified comprising isolated stone artefacts (7822-2217, 2218) and an artefact scatter of 33 stone artefacts (7823-0189) of low-moderate archaeological significance. This artefact scatter was represented by mainly silcrete artefacts, with quartz and quartzite also present. This artefact scatter was located in a disturbed, shallow deposit and occurred on the upper slope and crest of a small stony rise. This rise is approximately 1.5 km south of Beveridge Station Lane and approximately 100 m south of a minor tributary crossing.

Feldman et al concluded that the artefacts recorded at nine of the ten sites (AAV 7822-1179, 1175, 0783, 1174, 1173, 2217, 2218, 7823-0076 & 0075), probably represent the totality of the archaeological deposits at these locations, given the disturbed contexts in which they occurred and the extent of the detailed testing programme.

Only at one site location (7823-0189) did Feldman, Howell-Meurs and Mathews conclude that there may be additional artefacts still present in the remaining soil deposits, though these artefacts are unlikely to be *in situ* given the documented extent of disturbance at the locale. Feldman, Howell-Meurs and Mathews concluded that the presence of this relatively dense artefact scatter on the slope of a stony rise, overlooking a minor drainage

corridor supports the theory that within the study area, the major watercourses acted as a foci for more intensive activities, such as long term or recurrent habitation sites, and that stony rises can also influence the site distribution pattern in the broader area.

#### Merrifield Development, Mickleham (Chandler 2008)

As part of initial scoping investigations for the Merrifield Development Cultural Heritage Management Plan (Chandler 2008) a large area north of Donnybrook Road and west of the Hume Highway was surveyed. Eleven Aboriginal sites were identified including two sites within the OMR study area. The two sites comprise – an isolated artefact exposed on a track (7822-2268) and a series of isolated artefacts (n=8) revealed in various exposures adjacent to a minor gully feeding into the drainage basin (7822-2269).

These scatters may form individual sites or components of broader sites extending over wider areas. The extent of ground surface visibility was not sufficiently consistent to allow a full definition of site boundary or significance.

#### Proposed Walking Tracks in the Woodlands Historic Park near Tullamarine Airport (Stone 2002)

An archaeological survey was conducted at the Woodlands Historic Park, part of which is located within the OMR study area (Stone 2002). Ground surface visibility during the survey was around 20% due to the existence of vehicle tracks (Stone 2002, 12). No new archaeological sites were located, although 18 known Aboriginal sites existed within the Woodlands Historic Park prior to the survey (Stone 2002, 9). All 18 sites were located outside the survey area.

#### Calder Hwy, Melton Hwy to Diggers Rest (Clark 2001)

A section of the Calder Highway between Melton Highway, Keilor to Duncans Lane, south of Diggers Rest, was subject to a survey (Clark 2001). Some of the survey area is located within the OMR study area. Twelve new sites were recorded comprising seven artefact scatters and five isolated artefacts (Clark 2001, 25). One of these sites, 7822-1310 was located within the OMR study area within a ploughed paddock and comprised a surface artefact scatter. Ground surface visibility during the survey was affected by heavy grass cover (Clark 2001, 27). The site was rated as having low to moderate significance as it was located within a disturbed context (Clark 2001, 29).

#### Proposed Service Centre, Calder Park (Murphy & Amorosi 2005)

Murphy and Amorosi (2005) conducted a survey of a proposed service centre at Calder Park. Ground surface visibility across the study area ranged between 0-10% due to grass with increased visibility in areas under trees, vehicle and stock tracks (Murphy & Amorosi 2005, 26). One Aboriginal site was recorded comprising a single quartzite stone artefact (Murphy & Amorosi 2005, 31). The site was given a low significance rating as it was disturbed, of limited materials and was a common occurrence (Murphy & Amorosi 2005, 38).

#### Sydenham Corridor (du Cros 1990)

du Cros conducted a 5 day sample field survey of the Sydenham Corridor, an area of approximately 45 square kilometres in size. A small part of the study area overlaps with the OMR study area, near the Calder Highway and Sydenham Road. Areas were targeted taking into account the landscape unit – volcanic plains and major rivers and creeks, ground surface visibility, if they had been surveyed previously, and if there was local information regarding Aboriginal sites in certain areas. In total, 19 sites were recorded during the survey (du Cros 1990, 21).

Three sites were located on the volcanic plains – an artefact scatter (7822-404) and two isolated artefacts (7822-404 and 7822-403). The artefact scatter was located close to a large swamp about 300 metres from the Maribyrnong River Valley escarpment. The two isolated artefacts were located close to tributaries of the Kororoit Creek (du Cros 1990, 23).

Thirteen artefact scatters, a quarry, cultural material eroding out of a creek bank (7822-397), and an isolated artefact were located in the major rivers and creeks landscape unit. These sites were mainly recorded on the edge of the Maribyrnong River Valley escarpment, or the break of slope above Kororoit Creek. The quarry (7822-413) was identified on Taylors Creek, approximately 700 metres west of the Maribyrnong River Valley escarpment (du Cros 1990, 23).

The majority of the artefacts identified were either flakes or flaked pieces, with the predominant raw material being fine-grained silcrete, usually of a grey colour, that possibly originates from a local source in the Maribyrnong River Valley. The remainder of the assemblage consists of coarse-grained silcrete, quartzite, quartz and other metamorphic rocks, which du Cros also concluded were locally derived from either the Maribyrnong River terraces, Bulla granordiorite formation of the Taylors Creek quarry. There were also 8 glass artefacts identified, which came from two sites (7822-399 and 7822-404) (du Cros 1990, 27).

Du Cros concluded, on the basis of the field results and the regional context for the study area, that artefact scatters (including isolated artefacts), sites with subsurface material, quarries and scarred trees were most likely to be found in the Upper Maribyrnong River Valley, with scatters likely to be along the land extending back 400 metres from the edge of the escarpment and most likely within 100 metres of major creeks and tributaries. The large swamp south of Calder Raceway was also likely to contain small artefact scatters (du Cros 1990, 31).

#### Melton East Growth Corridor (Vines et al. 2004)

A cultural heritage desktop assessment of the Melton East – Caroline Springs area was conducted by Vines et al. (2004). The study area was 5,500 hectares in size and included part of the OMR study area. In total, there are 36 recorded Aboriginal sites within the study area. Vines et al. (2004, 44-45) suggested that areas of high sensitivity would be found along Kororiot Creek and its tributaries and also Rockbank Swamps. Sites most likely to be found would be high density stone artefact scatters within 20-50 m from the edge of swamps or creeks. It is also suggested that away from waterways there may be low density stone artefact scatters across the landscape (Vines et al. 2004, 45).

#### Proposed Quarry at Deer Park (Murphy & du Cros 1994)

An archaeological survey encompassing some of the OMR study area was conducted by Murphy and du Cros (1994). The study area was located to the east of Hopkins Road and south of the North Western Railway line. Ground surface visibility was hampered by thick grass cover with less than 5% visibility. Greater visibility was found on a graded track which ran around the perimeter of the property (Murphy & du Cros 1994, 11). An isolated stone artefact (7822-707) was located within the OMR study area and comprised a sandstone pebble used as a grindstone. Murphy and du Cros (1994, 11) surmised that as sandstone occurs naturally in the basalt plains, the stone may have been transported from a sedimentary stream. The site was rated as having low significance due to a high level of disturbance (Murphy & du Cros 1994, 12). The whole study area was deemed to have low archaeological sensitivity for Aboriginal sites (Murphy & du Cros 1994, 15).

#### Palm Springs Estate, Ravenhall (Long & Light 2005)

An archaeological survey of the proposed Palm Springs Estate in Ravenhall was conducted in 2005 by Long and Light. Some of the study area overlaps with the OMR study area. Four Aboriginal archaeological sites (AAV 7822-A, B, C & D), were identified as a result of the survey. Each consists of a diffuse, dispersed scatter of stone artefacts that occur sporadically in the landscape. Raw materials utilised include quartzite, quartz, silcrete and chert. On the basis of the available evidence, it was possible to conclude that low density activities were practised in the study area, including the concoidal flaking and block fracturing of a limited variety of local stone types for artefact manufacture or maintenance. No in situ material was noted, and there was no visible evidence of organic material (e.g. bone or charcoal) that could provide an occupation date and place these sites in a temporal context.

The individual site locations do not compare strongly with significant features in the landscape, and have an apparently random distribution in this subtle landscape. This is highly typical of the western plains of Melbourne away from watercourses. No zones of Aboriginal archaeological sensitivity or landforms of archaeological potential were identified.

#### Hopkins Road, Truganina (Thomson 2003)

A block of land to the east of Hopkins Road and the west of Mount Atkinson Road was surveyed by Thomson (2003). The majority of the study area overlaps with the OMR study area. Ground surface visibility was poor during the survey due to thick grass, although there were some small areas of good visibility along tracks (Thomson 2003, 29-30). Eighteen Aboriginal sites were identified during the survey comprising six artefact scatters and twelve isolated artefacts (7822-1534, 7822-1535, 7822-1536, 7822-1537, 7822-1538, 7822-1539, 7822-1540, 7822-1541, 7822-1542, 7822-1543, 7822-1544, 7822-1545, 7822-1546, 7822-1547, 7822-1548, 7822-1549, 7822-1550 & 7822-1551). The majority of the sites are located within the OMR study area. The most common raw materials utilised were quartz and silcrete, with small quantities of quartzite and volcanic stone. Shell was also found on one site (Thomson 2003, 31-39). The majority of the sites were located across the

stony ridge line and lower slopes of Mt Atkinson. Kororoit Creek is located 1 km to the north, while Skeleton Creek is located 2-3 km to the south (Thomson 2003, 39). The majority of the sites were rated as having moderate significance (n=12) while some were rated low (n=4) and high (n=2) (Thomson 2003, 41).

#### Gasnet Brooklyn-Lara Gas Pipeline (Howell-Meurs & Chandler 2007; Mathews et al. 2007)

A survey was conducted along the proposed Gasnet pipeline between Brooklyn and Lara by Howell-Meurs in 2007. The southern section of the OMR study area overlaps with much of the proposed pipeline route. Ground surface visibility, where present, was generally low (approx. 5%) due to the high amount of grass cover. However, some fields had been recently ploughed giving 100 % visibility. These conditions were sufficient to identify sites in areas of ground surface visibility and to undertake a general assessment of the archaeological sensitivity of the area. Four previously unregistered Aboriginal archaeological sites (7822-2045, 7822-2046, 7822-2043) were identified during the field assessment. These sites consist entirely of stone artefact occurrences located within the 30m corridor of the proposed pipeline alignment. Raw materials utilised included silcrete, quartz and quartzite.

A sub-surface testing programme (Mathews et al. 2007) was undertaken in response to a previous archaeological field survey and investigation conducted of the subject land (Howell-Meurs & Chandler 2006), which resulted in the nomination of two broad zones of Aboriginal archaeological sensitivity. The wetlands and drainage corridors (including 200 m along the alignment either side of these features), and the area between Point Wilson Road and Little River were given a moderate - high archaeological sensitivity rating. The remainder of the study area was afforded an archaeological sensitivity rating of between low and moderate, given the potential presence of stone artefacts to be distributed across the broader region.

The outcomes of the testing programme confirm the results of other recording projects in the wider region, that demonstrate a broad distribution of diffuse stone artefacts across the landscape, with higher concentrations in certain locations, such as adjacent to drainage lines. Du Cros (1991) identified Werribee and Little Rivers and their tributaries as the main areas of archaeological sensitivity.

The current sub-surface testing programme within areas of moderate – high sensitivity resulted in the recording of an additional four Aboriginal sites (AAV 7822-2161, 7822-2162, 7822-2160 & 7822-2163) and the revision of six existing site boundaries (AAV 7822-203, 7882-874, 7822-1074, 7822-2044, 7822-2046 & 7721-116). The testing programme also resulted in a revision of the archaeological sensitivity ratings for each Testing Area, as follows:

- TA (A1), TA (A2), TA (B1), TA (B2), TA (C1), TA (D1), TA (J1) and TA (K1) were all downgraded to moderate archaeological sensitivity.
- TA (A3), TA (G1), TA (I1) and TA (J2) remain at moderate high archaeological sensitivity.
- TA (E1), TA (F1) and TA (H1) were all upgraded to high archaeological sensitivity.

In conclusion, the results of the testing programme have determined that a total of 19 Aboriginal sites occur in the study area that will be impacted by the construction of the pipeline and that areas of high archaeological sensitivity occur at the Werribee River and Little River crossings.

#### Proposed Access Route, CSR Prescribed Waste Landfill and Composting Site, Werribee (Sciusco 1996)

An archaeological survey of a small area of land within the OMR study area was conducted by Sciusco (1996). The survey area was located on the Government Road reserve east of the Wyndham City Council Refuse Disposal Facility, Wests Road, Werribee. Ground surface visibility of the survey area ranged between 50-60% and no archaeological sites were located (Sciusco 1996, 3). Sciusco (1996, 3) suggested that previous land use such as grazing and clearance of volcanic rocks and vegetation may have contributed to the lack of sites in the area. It is also believed that construction of other facilities in the area, in the past, may have contributed to some disturbance in the area as well.

#### Proposed Optical Fibre Cable Line between Werribee and Lara (du Cros & Associates 1993)

An archaeological survey of a proposed optical fibre cable line between Werribee and Lara included a sample survey within the OMR study area (du Cros & Assocaites 1993). The sample survey was determined by areas of good ground surface visibility and archaeological sensitivity. Twelve sites, comprising surface artefact scatters and isolated artefacts were located during the survey, although none were located within the OMR study area (du Cros 1993, 3).

### 2.4 Registered Aboriginal and Non-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 Appendix A of this Report.

#### 2.4.1 Aboriginal Sites and Places

The following Aboriginal Heritage Sites and Places occur within the study area. They are sorted by Local Government Area (LGA) and listed in a roughly north to south manner.

These results are summarised in the table below:

Table 1: Known	Aboriginal	cultural	heritage a	sites within	the OMR	Study Area
Table L. Known	Abuligina	cultural	ner nage s	sites within	the OMK	Study Alta

Aboriginal Heritage Site No.	Site Name	Site Type	Site Type Rating	Easting	Northing
7823-0075	MINTON RD RAIL RES. 1	Artefact scatter	1	322612	5850084
7823-0076	MINTON RD RAIL RES. 2	Artefact Scatter	1	322612	5850034
7823-0152	LOCKERBIE 1A 1	Artefact Scatter	1	320653	5849293
7823-0162	HUME FREEWAY KALKALLO 5	Artefact scatter	1	319960	5849250
7823-0161	HUME FREEWAY KALKALLO 4	Artefact scatter	2	319830	5849005
7823-0158	LOCKERBIE 1A 7	Artefact Scatter	1	321159	5848290
7823-0159	LOCKERBIE 1A 8	Artefact Scatter	1	320811	5848118
7822-2218	MELBOURNE SYDNEY PASSING LANE 2-2	Artefact Scatter	1	321882	5847177
7822-2063	HUME FREEWAY KALKALLO 1	Artefact scatter	1	318930	5846555
7823-0077	MINTON RD RAIL RES.3	Artefact Scatter	1	322718	5850334
7823-0189	MELBOURNE SYDNEY PASSING LAND 2-3	Artefact Scatter	2	322554	5849432
7822-2269	MERRIFIELD 6	Artefact Scatter	2	315248	5846527
7822-2268	MERRIFIELD 5	Artefact Scatter	2	315034	5846455
7822-2064	HUME FREEWAY KALKALLO 2	Artefact Scatter	2	318856	5845585
7822-0024	COCKING	Scarred Tree	3	312912	5841784
7822-0026	SIMMIE	Scarred Tree	3	309754	5838318
7822-2106	470 SUNBURY RD, BULLA - 1	Artefact Scatter	1	305200	5833340
7822-0887	GELLIBRAND 14	Multiple Component	2	310012	5830684
7822-0994	GELLIBRAND 16	Multiple Component	2	310484	5829839
7822-1777	HOLDEN ROAD 1	Artefact Scatter	2	300932	5829479
7822-1778	HOLDEN ROAD 2	Artefact Scatter	2	301052	5829354
7822-1310	DIGGERS REST SOUTH 1	Artefact Scatter	2	300282	5830774
7822-2255	BEATTY ROAD PLUMPTON 1	Artefact Scatter	1	298728	5824193
7822-2256	BEATTY ROAD PLUMPTON 2	Artefact Scatter	1	298637	5824295
7822-1142	PLUMPTON SAS 5	Artefact Scatter	2	299111	5821233
7822-1058	WESTERN FREEWAY 1	Artefact Scatter	1	297911	5819642
7822-1830	PALM SPRINGS 4	Artefact Scatter	1	299347	5819113
7822-1829	PALM SPRINGS 3	Artefact Scatter	1	300006	5818596
7822-1828	PALM SPRINGS 2	Artefact Scatter	2	300432	5818264
7822-1827	PALM SPRINGS 1	Artefact Scatter	1	300542	5817814
7822-1922	CHRISTIES ROAD 1	Artefact Scatter	1	300850	5817963
7822-1541	MT ATKINSON IA 8	Artefact Scatter	1	296668	5819014
7822-1540	MT ATKINSON IA 7	Artefact Scatter	1	296480	5818749
7822-1547	MT ATKINSON AS 6	Artefact Scatter	2	296096	5818719
7822-1534	MT ATKINSON IA 1	Artefact Scatter	1	296746	5818174
7822-1536	MT ATKINSON IA 3	Artefact Scatter	1	297370	5818175

Aboriginal Heritage Site No.	Site Name	Site Type	Site Type Rating	Easting	Northing
7822-1542	MT ATKINSON AS 1	Artefact Scatter	2	297399	5818032
7822-1543	MT ATKINSON AS 2	Artefact Scatter	2	297332	5817972
7822-1544	MT ATKINSON AS 3	Artefact Scatter	2	297480	5817801
7822-0707	BQ 1	Artefact Scatter	1	297562	5817309
7822-1548	MT ATKINSON AS 9	Artefact Scatter	1	297026	5817024
7822-1549	MT ATKINSON AS 10	Artefact Scatter	1	296222	5817134
7822-1551	MT ATKINSON AS 12	Artefact Scatter	1	296231	5816925
7822-1545	MT ATKINSON AS 4	Artefact Scatter	2	296075	5816379
7822-2162	GASNET TA (B2)	Artefact Scatter	2	297071	5814863
7822-2161	GASNET TA (B1)	Artefact Scatter	1	298382	5814740
7822-1410	LADY GEE 2	Artefact Scatter	1	301629	5814726
7822-1409	LADY GEE 3	Artefact Scatter	1	301722	5814563
7822-2173	DEER PARK BYPASS 2	Artefact Scatter	1	302092	5814358
7822-1824	THUNDERDOME 1	Artefact Scatter	1	301096	5829054
7822-1789	WHITTLE IA1	Artefact Scatter	1	301445	5828821
7822-0892	ORGAN PIPES 6	Artefact Scatter	2	302320	5829084
7822-0895	ORGAN PIPES 13	Artefact Scatter	2	302520	5828978
7822-0873	WRR CONNECTION A7	Artefact Scatter	1	302500	5814364
7822-0841	BA 1	Artefact Scatter	2	302612	5814525
7822-1511	LAVERTON CREEK MIDDLE ROAD		1	302812	5814084
7822-0870	WRR CONNECTION A4	Artefact Scatter	2	303402	5814284
7822-2200	DEER PARK BYPASS 13	Artefact Scatter	1	303402	5814284
7822-2200	MT DERRIMUT RD 1	Artefact Scatter	1	303545	5814122
7822-2198	DEER PARK BYPASS 11	Artefact Scatter	1	303638	5814145
7822-2198	CREEK HILL	Artefact Scatter	2	292539	5812669
7822-0207	SHANAHANS RD 1	Artefact Scatter	1	292339	5811618
7822-2045	SPRING PLAINS 2	Artefact Scatter	2	290478	5810554
7822-0202	SPRING PLAINS 2	Scarred Tree	3	289030	5810527
7822-0201	SPRING PLAINS 3	Artefact Scatter	2	289128	5809904
7822-0203	OAKBANK 1	Artefact Scatter	2	289202	5810201
7822-2040	LOLLYPOP CREEK 5	Artefact Scatter	2	289322	5806584
7822-0293	LOLLYPOP CREEK 4	Stone Feature	4	286223	5806384
7822-0292	GASNET TA (G1)	Artefact Scatter	2	286403	5806192
7822-2160	ROCKLEIGH 3		1		
7822-0299	PRINCES FWY W-CHERRY TREE	Artefact Scatter	1	285112	5797784
7822-1164	CK 1	Earth Feature	2	288451	5797084
7822-1163	PRINCES FWY W-LOLLYPOP CK 2	Earth Feature	2	290469	5798558
7822-1162	PRINCES FWY W-LOLLYPOP CK 1	Artefact Scatter	1	290500	5798496
7822-1076	PRINCES 5	Artefact scatter	2	284637	5794259
7822-1074	LITTLE R/PRINCES FWY SAS 1	Multiple Component	2	284639	5794159
7822-2163	GASNET TA (H1)	Artefact scatter	1	284822	5794228
7822-1073	PRINCES 2	Artefact scatter	2	284594	5794242
7822-1161	PRINCES FWY WLITTLE R. N.	Artefact scatter	1	284613	5794213
7822-2044	POINT WILSON RD 1	Artefact scatter	2	283654	5793397
7822-0085	WSF 1	Artefact scatter	2	285020	5793282
	GEELONG MELBOURNE		N/A		
7822-2047	RAILWAY/GASNET	Non-site		286604	5797319
7822-0298	ROCKLEIGH 2	Artefact scatter	2	283767	5796369
7822-0305	ROCKLEIGH 4	Artefact scatter	1	284580	5794572
7822-0086	WSF 2	Scarred Tree	3	285329	5793595
7822-0433	LITTLE RIVER 2	Earth Feature	2	285912	5793384

Aboriginal Heritage Site No.	Site Name	Site Type	Site Type Rating	Easting	Northing
7822-0303	REECE'S FARM 2	Artefact scatter	1	282512	5793984
7822-0302	REECE'S FARM 1	Artefact scatter	2	282451	5793854
7822-0015	LITTLE RIVER	Artefact scatter	2	287612	5791184
7822-0455	MANOR PARK 1	Artefact Scatter	1	287693	5805855
7822-0456	MANOR PARK 2 "DUNNY SITE"	Artefact Scatter	1	288112	5805534
7822-0457	MANOR PARK 3 "SPILLWAY"	Artefact Scatter	2	288112	5805534
7822-2070	LAKESIDE 10	Artefact Scatter	2	288472	5805556
7822-1304	ORGAN PIPES ROAD 1	Artefact Scatter	1	302912	5828304
7822-0182	SINCLAIRS RD	Artefact Scatter	2	296030	5821612
7822-0183	DEANSIDE	Artefact Scatter	2	296819	5821983
7822-1205	LEAKES RD 7	Artefact Scatter	1	293884	5822707
7822-1206	LEAKES RD 8	Artefact Scatter	1	293682	5822564
7822-1207	LEAKES RD 9	Artefact Scatter	1	293549	5822639
7822-1208	LEAKES RD 10	Artefact Scatter	1	293939	5823062
7822-1211	LEAKES RD COMBINED 1	Artefact Scatter	2	293218	5822274
7822-1212	LEAKES RD COMBINED 2	Artefact Scatter	2	293167	5822305
7822-1221	LEAKES RD 23	Artefact Scatter	1	292942	5821724
7822-1395	ROCKBANK RAIL	Artefact Scatter	1	294377	5820914
7822-1535	MT ATKINSON IA 2	Artefact Scatter	1	296013	5818426
7822-1537	MT ATKINSON IA 4	Artefact Scatter	1	296771	5818458
7822-1538	MT ATKINSON IA 5	Artefact Scatter	1	296379	5818563
7822-1539	MT ATKINSON IA 6	Artefact Scatter	1	296193	5818595
7822-1546	MT ATKINSON AS 5	Artefact Scatter	2	296051	5818636
7822-1547	MT ATKINSON AS 6	Artefact Scatter	2	296096	5818719
7822-1550	MT ATKINSON AS 11	Artefact Scatter	1	295921	5817470
7822-2251	TROUPS ROAD NORTH AS1	Artefact Scatter	1	294842	5820964
7822-0187	STONELEIGH KOROROIT CREEK	Earth Feature	2	298076	5821108
7822-0206	MT ATKINSON	Artefact Scatter	2	295882	5818563
7822-0778	DEANSIDE DRIVE 1	Artefact Scatter	2	296143	5821698
7822-0779	VERE COURT 01	Artefact Scatter	2	296090	5821717
7822-0780	VERE COURT 02	Artefact Scatter	2	296112	5821784
7822-0781	VERE COURT 03	Artefact Scatter	2	296112	5821889
7822-0782	VERE COURT 03	Artefact Scatter	2	296162	5821986
7822-0790	VERE COURT 05	Artefact Scatter	2	295960	5821744
7822-0791	VERE COURT 06	Artefact Scatter	2	295990	5821650
7822-1042	ROCKBANK SWAMP	Artefact Scatter	2	295430	5821736
7822-1045	BEATTY'S RD 1	Artefact Scatter	2	295235	5823694
7822-1144	PLUMPTON IA 2	Artefact Scatter	1	299298	5821756
7822-1199	LEAKES RD 1	Artefact Scatter	1	294162	5822934
7822-1200	LEAKES RD 2	Artefact Scatter	1	294102	5822862
7822-1201	LEAKES RD 3	Artefact Scatter	1	294045	5822914
7822-1202	LEAKES RD 4	Artefact Scatter	1	293978	5822870
7822-1203	LEAKES RD 5	Artefact Scatter	1	294102	5822704
7822-1204	LEAKES RD 6	Artefact Scatter	1	294039	5822662

Site Type Rating 1 isolated artefact (<5)

2 artefact scatter

3 scarred tree

4 earth feature / stone feature

5 burial

Note: Although generally the higher the site type rating the higher the scientific significance it must be stressed that these rating numbers are indicative only. To fully ascertain the scientific significance of each site further ground proofing and detailed scientific investigation would be required. Traditional cultural heritage significance of sites is not considered here (and it is likely to be high in all instances).

	Artefact	Earth	Multiple	Non-site		Stone	
LGA	scatter	Feature	Component	_	Scarred Tree	Feature	Grand Total
Brimbank	12						12
Greater Geelong	4		1				5
Hume	6		2		2		10
Melton	62	1					63
Mitchell	9						9
Whittlesea	2						2
Wyndam	20	3		1	2	1	27
Grand Total	115	4	3	1	4	1	128

Table 2: Known Aboriginal cultural heritage sites within the OMR Study Area sorted by site type

On the basis of the nature of the known archaeological record in the wider region and the landforms present in the study area, it has been determined that land within 200m of river and major creek valleys (Merri Creek, Moonee Ponds Creek, Deep Creek, Jacksons Creek, Kororoit Creek, Skeleton Creek, Dry Creek, Werribee River, and Lollypop Creek) are of *high* archaeological potential to contain Aboriginal Cultural Heritage sites especially where a large degree of native vegetation and relatively undisturbed land surface survive. These river and creek valleys would have formed the major focus for Aboriginal activities throughout the past. Furthermore, alluvial terraces associated with these rivers and creeks have the potential for cultural heritage to be preserved in a depositional environment.

On the basis of the data available, it would be premature to postulate a comprehensive model of Aboriginal site distribution across the remainder of the study area, though the evidence suggests that sites may be associated with the full range of other landforms present in the study area (elevated areas adjacent to swamps, land adjacent to ephemeral water sources, eruption points and the basalt plains).

#### 2.4.2 Non-Aboriginal Sites and Places

Non-Aboriginal Sites within the study area are listed in detail in the tables below. They are sorted by LGA

Non-Aboriginal Heritage Site No.	Site Name	Site Type	Level of Significance
HO7	State School No. 1476 Arrowsmith Street	School	Local
VHI7823-0054	Former Beveridge Station Complex, Station Lane, Beveridge	Railway station	Local
VHI7823-0052	Beveridge Brick Scatter, Beveridge Road, Beveridge	Artefact scatter	Local
VHI7823-0053	Oakfield Shearing Shed, Beveridge Road, Beveridge	Sheearing shed	Local
VHI7822-0728	Donnybrook Station Site, Donnybrook Road, Donnybrook	Railway station	Local
VHI7822-0197	Donnybrook Quarry VI - Dry stone wall	Dry stone wall	Local
VHI7822-0198	Donnybrook Quarry VII - Dry stone wall	Dry stone wall	Local
VHI7822-0196	Donnybrook Quarry V - Dry stone wall	Dry stone wall	Local
VHI7822-0195	Donnybrook Quarry IV - Dry stone wall	Dry stone wall	Local
MSHA - 13	Ruins of the former Inverlochy Castle Hotel	Hotel	Local

Table 3: Known Non-Aboriginal cultural heritage sites that are within the OMR Study Area – Mitchell

Non-Aboriginal Heritage Site No.	Non-Aboriginal cultural heritage sites that are within the OMR Stue Site Name	Site Type	Level of Significance
HO262	Bleak House (ruin) Gums Gully Road (rear Tandara), Mickleham	House (ruin)	Local
HO264	Marnong 155 Old Sydney Road, Mickleham	House	Local
HO261	Tulloch Outbuilding (former Cheese Factory, ruin) 30 Farleigh Court (rear), Mickleham		Local
HO36	Former Post Office 1960 Mickleham Road, Mickleham		Local
HO392	Harpsdale 860 Craigieburn Road West, Yuroke	House	Local
HO273	Warlaby 395 Oaklands Road, Oaklands Junction	House	Local
HO272	Oaklands Quarry 380 Oaklands Road, Oaklands Junction	Quarry	Local
HO271	Oaklands 380 Oaklands Road, Oaklands Junction	House	Local
HO22	Lochton and Lochton Steam Mill 225 Wildwood Road, Bulla	Mill	Local
HO27	Oaklands Road bridge (unused) Oaklands Road, Oaklands Junction	Bridge	Local
HO26	Hume & Hovell Memorial Oaklands Road, Oaklands Junction	Monument	Local
HO208	Bulla Cemetery Cemetery Lane, Bulla	Cemetery	Local
HO29	Holden Ford & Bridge Bulla-Diggers Rest Road, (over Jacksons Creek), Diggers Rest	Bridge	Local
HO19	Sunnyside 20 Loemans Road, Bulla		Local
HO233	Oakbank (barn, dairy, tank) 185 Bulla-Diggers Rest Road, Diggers Rest	Farmstead	Local
HO30	Duncan's Lane Bridge (over tributary of Jacksons Creek), Diggers Rest	Bridge	Local
VHI7822-0204	St Mary's Church Site, Sunbury Road, Greenvale	Church	Local
HHSFB – CL6	Mickleham Township and Environs	Cultural Landscape	Local
HHSFB – BB/12	Campbells Cottage*	House	Local
HHSFB – CL4	Oaklands	Cultural Landscape	Local
HHSFB – 14	Brodie's Wool Shed*	Farm Building	Local
HHSFB – 16	Old Station*		Local
HHSFB – 17	Old Station*		Local
HHSFB – 18	Brodie's Station*		Local
HHSFB – 19	Tents*		Local
HHSFB – TPB/06	Bluestone Quarry, Bulla*	Quarry	Local
HHSFB – CL3	Waterways	Cultural Landscape	Local
HHSFB – CL1	Jacksons Creek, Sunbury	Cultural Landscape	Local
HHSFB – CL2	Melbourne to Echuca Railway	Cultural Landscape	Local

#### Table 5: Known Non-Aboriginal cultural heritage sites that are within the OMR Study Area - Brimbank

	Non-Aboriginal Heritage Site No.	Site Name	Site Type	Level of Significance
Ī		Middle Road - Middle Road and Mt Derrimut Road, Derrimut, Brimbank	Cobbled Road	Local
		BIIIIDAIIK		
	VHI7822-0792	Whittle Well, Calder Highway, Calder Park, Brimbank	Well	Local

Non-Aboriginal Heritage Site No.	Site Name	Site Type	Level of Significance
HO44	Former Diggers Rest School 1290 Calder Highway		Local
HO46	House 1376 - 1432 Calder Highway		Local
HO43	The Diggers Rest Hotel 1434-1466 Calder Highway	Tree	Local
HO48	Former Murphy Dam 209 - 247 Plumpton Road	Dry stone wall	Local
		complex around the	
1054		gully	
H051	Arrunga 77-347 Holden Road		Local
H055	House 974-1048 Melton Highway	Cypresses and dry stone wall	Local
HO58	House 911-935 Melton Highway	Row of Monterey cypresses on front boundary	Local
HO4	Deanside Woolshed Complex 96-103 Reed Court, Rockbank	,	Local
HO112	House & Outbuildings 65-543 Greigs Road East, Truganina	+trees	Local
HO114	Rocklands' Homestead & Farm 619-653 Hopkins Road, Truganina	+trees & Dry stone walls etc	Local
HO110	Kerr Farm Site 1780-1882 Boundary Road, Mt Cottrell	Cistern, dry stone walls, stockyards etc	Local
VHRH810	Deanside Woolshed Complex 96-103 Reed Court, Rockbank		State
VHI7822-0978	Plumpton Road, Digger's Rest, House Site - 209-247 Plumpton		Local
	Road, Digger's Rest, Melton Shire		
VHI7822-0322	Victoria Road Artefact Scatter, 1-75 Holden Road, Plumpton Melton Shire	Artefact scatter	Local
VHI7822-0246	Stoneleigh Homestead, 196-246 Sinclairs Rd and 139 Gray Court, Rockbank, Melton	Homestead	Local
VHI7822-0247	Cropley Property Dry Stone Wall -274 SINCLAIRS ROAD ROCKBANK, MELTON SHIRE	Dry stone wall	Local
VHI7822-0245	Cobbled Roadway - Greigs Rd, 54-543 Hopkins Road,	Cobbled Road	Local
VHI7822-0230	Truganina, Melton Shire Western Ring Road/Highway Stonewall (H5) - Western	Dry stone wall	Local
VHI7822-0007	Highway Ravenhall, Melton Shire Derrimut Station Stone Walls 2 (H2), Western Highway and Christian Road Ravenhall, Malton Shire	Dry stone wall	Local
VHI7822-0227	Christies Road Ravenhall, Melton Shire Western Ring Road/Highway Stonewall (H3) - 1351-1383	Dry stone wall	Local
VIII/822-0227	Western Highway Ravenhall, Melton Shire	Dry stone wan	Local
VHI7822-0797	Ravenhall Feature 4 - Artefact Scatter, Christies Road and 1127-1175 Western Highway Ravenhall, Melton	Artefact scatter	Local
VHI7822-0174	Ravenhall 2, Melton Shire		Local
MHS-48	Road	Early line of road	Local
		(north of present	
		Western Fwy) to the	
		southerly crossing of	
		the Maribyrnong	
MHS-56	Shelter Shed	River Shed	Local
HO64	Plumpton Park		Local
HO63	Plumpton Dam	Dam	Local
	· · ·		
H056	Gollars Court	 Docidontial	Local
HO10	Rockbank Inn	Residential	Local
H1933	Rockbank Inn		State
H0118	Rockbank Headstation Dam	Dam	Local
HO4	Deanside Woolshed Complex	Wool Complex	Local
H7822-0298	Red Brick Stable and Row of Pines	Stable and Pines	Local
H7822-0301	Rockbank Railway Station	Isolated railway station and associated features	Local

Non-Aboriginal Heritage Site No.	Site Name	Site Type	Level of Significance
H7822-0717	Dome Well Near Rockbank Railway Station	Well	Local
H7822-0300	Gidney Farm	Property	Local
H7822-0297	Gidney Dam	Dam	Local
HO115	Rockbank Community Hall	Property	Local
HO121	Former Rose & Crown Hotel	Property	Local
HO120	House	Residential	Local
HO108	Former Rockbank Wireless Beam Station	Station	Local
H7822-0258	Rockbank Bridge	Remains of a bridge	Local
H7822-0257	Rockbank Inn	Remains of Bluestone hotel/inn	Local
H7822-0299	Radio Mast Sites	Radio mast foundations	Local
H7822-0876	Rockbank Service Centre Stone Wall	Stone wall	Local
H7822-0797	Ravenhall Feature 4 - Artefact Scatter	Artefact Scatter	Local
H7822-0880	GBL Dry Stone Wall 4	Dry stone wall	Local

Table 7: Known Non-Aboriginal cultural heritage sites that are within the OMR Study Area - Wyndham

Non-Aboriginal Heritage Site No.	Site Name	Site Type	Level of Significance
HO18	Cobbledicks Ford and Reserve	Ford	Local
	Cobbledicks Ford Road, Mt Cottrell		
WRHS - 164	Melbourne – Geelong Railway Line	Railway Line	Local
WRHS	Gunnery Range and Observers Huts, Mambourin	WWII Gunnery	Local
		Range	
WHS/WRHS (T128)	Former Pitson House site, Tarneit	House	Local
WHS/WRHS	Oakbank, Tarneit*		Local
WHS/WRHS	Truganina/Tarneit Landscape	Cultural Landscape	Local
WHS (W24)	House, 780 Bulban road, Werribee	House	Local
WHS	Lee House, Davis Rd Tarneit *	House	Local
WHS (W81)	House Tarneit road, Tarneit *		Local
WHS – 141 (W82)	House (Paynter's?), Tarneit Road, Tarneit *		Local
WHS – 142	Dam, Dohertys Rd near Sewells Rd, Tarneit *	Dam	Local
WHS (W6)	Ison House and Poultry Sheds, Bulban Rd Werribee *	Farm Buildings	Local
VHI7821-0072	Avro Ansen	Military Related	Local

### KEY TO TABLE

HHSFB	City of Hume: Heritage Study of the Former Shire of Bulla District	
НО	Heritage Overlay	
MHS	Shire of Melton Heritage Study	
MSHA	Mitchell Shire Heritage Assets	
WHS	City of Wyndham Heritage Study	
WRHS	City of Wyndham review of Heritage sites of Local Interest	
VHI	Victorian Heritage Inventory	
VHR	Victorian Heritage Registar	
*	Exact location of the site is uncertain.	

Entries in *Italics* have not been allocated a name.

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