

URBIS STAFF RESPONSIBLE FOR THIS REPORT WERE:

Associate Director

James Goulding

Senior Consultant

Anthony Johnson

Consultant

Sophie Thompson

Job Code

MA7143

Report Number

MA7143 rep001 22-07-13

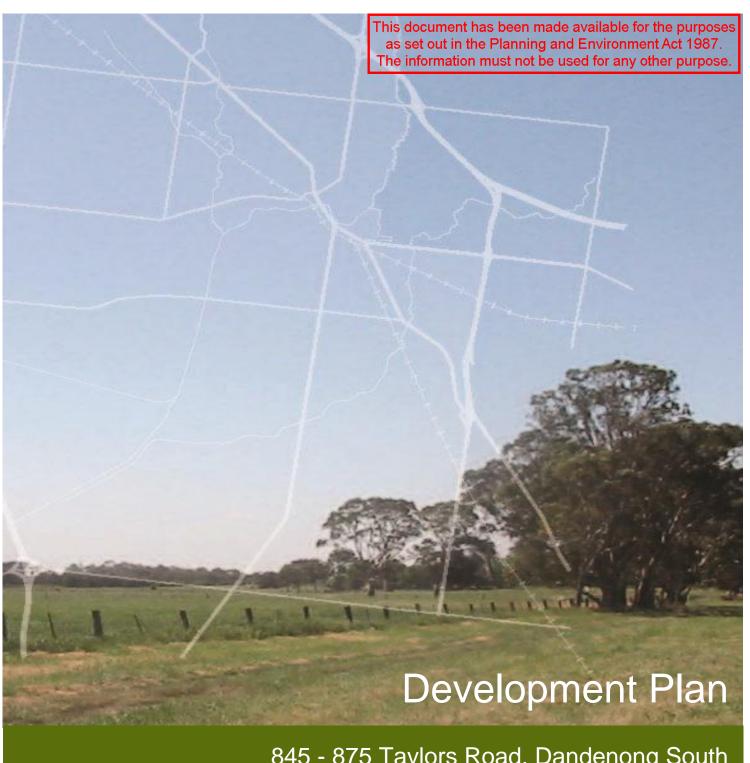
Please Note that development proposed within the area covered by this Development Plan will be subject to suitable road network access arrangements to the arterial road network being constructed to the satisfaction of Council, in line with the Lyndhurst Structure Plan, January 2009 and that the construction of the arterial road network is subject to the availability of funds from the DCPO3 – Dandenong South Industrial Area Development Contributions Plan – Lyndhurst.

Please Note that the area covered by this Development Plan is located within a designated Bushfire Prone Area as per State Government mapping, meaning that there are building requirements for certain classes of occupation.

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845 - 875 Taylors Road, Dandenong South

July 2013



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1 Introduction

In this report, Urbis has prepared a Development Plan for land at 845 - 875 Taylors Road, Dandenong South.

The northern boundary of the subject site is located approximately 400m south of Colemans Road, with the site's southern boundary located approximately 500m north of Glasscocks Road. The site will also benefit in the future from having a significant frontage along Taylors Road, which forms the eastern boundary of the site (refer to **Figure 1**).

In accordance with the requirements of Clause 43.04 of the Greater Dandenong Planning Scheme, this Development Plan has been prepared to respond directly to Schedule 6 of the Development Plan Overlay (DPO6) of the Greater Dandenong Planning Scheme, known as *The Dandenong South Industrial Area Extension – Keysborough & Lyndhurst Sites*. In this regard, the provisions of DPO6 respond to the *Dandenong South Industrial Area Extension Structure Plan, January 2009*.

In accordance with Clause 43.04-1 of the Greater Dandenong Planning Scheme, *A permit must not be granted to use or subdivide land, construct a building or construct or carry out works until a development plan has been prepared to the satisfaction of the responsible authority.* As such, the Development Plan is required to be approved to facilitate the future development of the subject land.

Figure 1: Subject Site



LOCATION PLAN
875 TAYLORS ROAD, DANDENONG SOUTH

UI'DIS

2 Background

The City of Greater Dandenong previously prepared the *Dandenong South Industrial Area Extension Structure Plan, January 2009.* The purpose of the document was to facilitate the development of additional industrial land in an orderly and coordinated manner, thereby integrating the future industrial area with the existing urban form and associated infrastructure in the surrounding area.

The investigation area related to two areas of land referred to as the 'Keysborough Site' and the 'Lyndhurst Site' (refer to **Figure 2**) - the property at 875 Taylors Road is located within the Lyndhurst Site.

The vision for both the 'Keysborough Site' and the 'Lyndhurst Site' was for *The Development of the land should create an environment that is sensitive and responsive to the surrounding landscape and environmental issues. In this regard the following outcomes are required:*

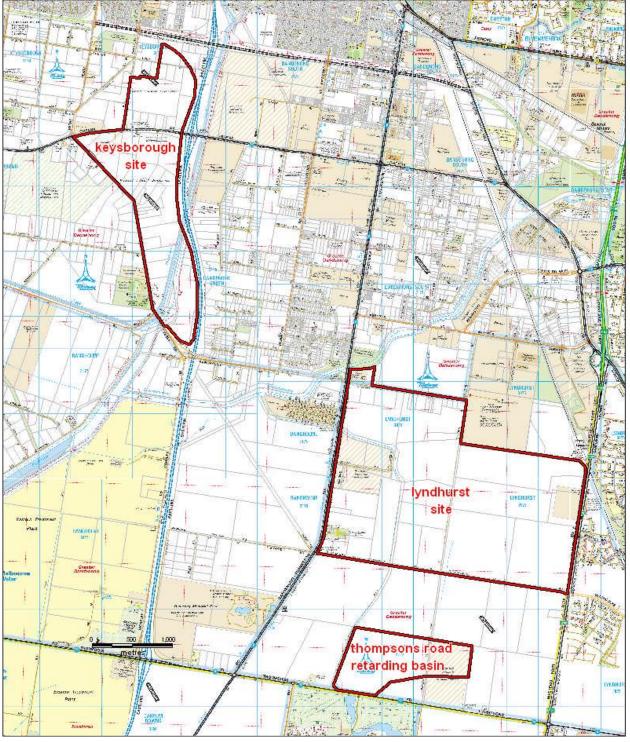
- High quality urban design and landscaping.
- Environmentally sensitive subdivision and building design based on sustainability principles.
- Facilitation, development and management of effective and sustainable transport networks within the study area and its integration into the regional transportation system.

It is noted that on 27 November 2006 Amendment C67 was abandoned and replaced with Amendment C87, which applies to both the 'Keysborough Site' and the 'Lyndhurst Site'. Amendment C87 to the Greater Dandenong Planning Scheme, gazetted on 6 March 2009, resulted in the incorporation of the Structure Plan (and associated supplementary documents) into the Schedule to Clause 81.01 within the Greater Dandenong Planning Scheme.

There have been other Development Plans prepared for surrounding sites, including:

- Lyndhurst Inland Port and Industrial Hub, which abuts Bayliss Road to the north and Taylors Road to the west. The Development Plan was prepared by Bosco Jonson for Salta Properties Pty Ltd.
- The 'Innovation Park' Development Plan, prepared by the Pellicano Group, which abuts Colemans Road to the north, Taylors Road to the east and Frankston Dandenong Road to the west.
- A Development Plan prepared for the property at 155 Glasscocks Road. The documentation has been prepared by Gattini & Partners for Little Project Developments Pty Ltd.
- A Development Plan prepared for the property at 45-85 & 125 Glasscocks Road. The documentation
 has been prepared by The Planning Group for Goodman Property Services (Australia) Pty Ltd.

Figure 2: Site Investigation Areas



Source: South Dandenong Industrial Area Extension Structure Plan, January 2009

3 Subject Site

3.1 SUBJECT SITE

The site has been used previously for agriculture purposes and as such the subject site is generally vacant of any buildings, except for a dilapidated homestead and associated outbuildings in the north-eastern corner of the site. The Survey Plan indicates that a notable feature of the site is small clusters of trees at various stages of health and age. These clusters are mainly located within the Taylors Road road reserve, but are also scattered elsewhere within the site (refer to **Figure 3A**). Refer to Attachment 11 in the supporting documentation for a copy of the Survey Plan.

The subject site comprises five separate lots, with the fifth lot relating to the land at 845 Taylors Road. The following is a description of each lot, including references to the applicable site areas:

- Lot 1 on Title Plan 143980Y:
 - Site Area 15.69 hectares.
- Lot 1 on Title Plan 143981W:
 - Site Area 17.69 hectares.
- Lot 1 on Title Plan 143982U:
 - Site Area 36.73 hectares.
- Lot 1 on Title Plan 143983S:
 - Site Area: 1.067 hectares.
- Lot 1 on Title Plan 520069Y (845 Taylors Road)
 - Site Area: 3.755 hectares

Refer to Attachment 1 in the supporting documentation for copies of the titles.

At Council's request, the Development Plan also makes reference to the land at 845 Taylors Road, Dandenong South because the land is less than the minimum 30 hectare lot size permitted by the Development Plan Overlay – Schedule 6. The specialist reports that have informed the Development Plan specifically relate to land at 875 Taylors Road. Details relating to the developability of land at 845 Taylors Road are unknown and as such the respective landowner will be required to submit to Council the applicable documentation before it is used for industrial purposes.

3.2 SURROUNDS

The landscape of the surrounding area is generally consistent with the subject site's conditions insofar as it has been used previously for agricultural purposes. It is noted the subject site does not have an interface with a residential or community use. As Council has been approving Development Plans for adjoining and nearby sites, industrial uses are beginning to appear (for example Jayco to the west and Pellicanos to the north). Other notable features in the surrounding area include Rodds Drain and the Easter Contour Drain.

Figure 3A: Survey Plan



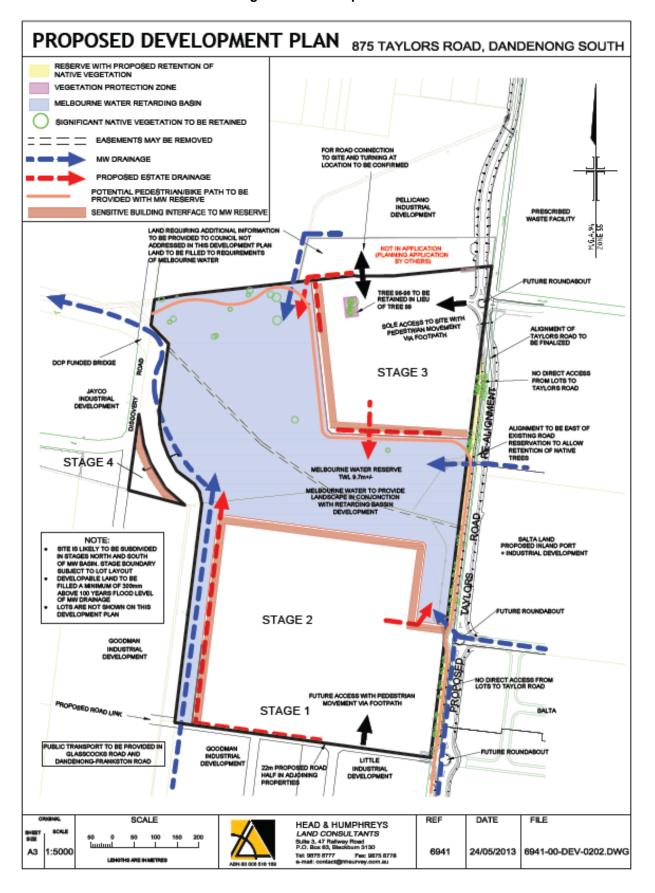
4 Proposal

A Development Plan has been designed to respond to the key requirements of Development Plan Overlay – Schedule 6 (DPO6) within the Greater Dandenong Planning Scheme.

The Development Plan relates to a proposed industrial subdivision of the subject site which will accommodate multiple lots of various sizes (refer to **Figure 4A**). Vehicular access to the subject site will be via Taylors Road and the road extending west from Taylors Road as part of the Little Project Developments Pty Ltd Development Plan.

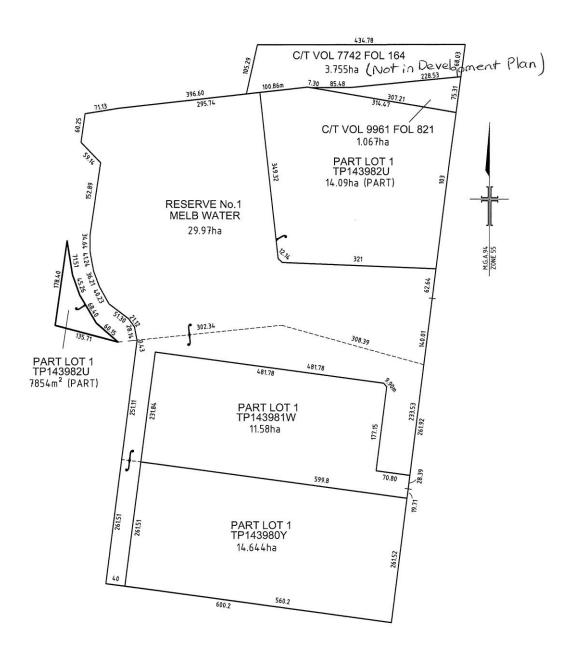
A feature of the Development Plan is the proposed Melbourne Water retarding basin which is centrally located within the site.

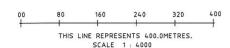
Figure 4A: Development Plan



The following map at **Figure 4B** identifies the subject site and Melbourne Water retarding basin in the context of the relevant title particulars and associated site areas.

Figure 4B: Subject Site Title Configuration





Planning Context 5

The Development Plan is subject to the State and Local Planning Policy Frameworks of the Greater Dandenong Planning Scheme and the requirements of the Dandenong South Industrial Area Extension Structure Plan, January 2009.

The subject land has two zonings:

Industrial 1 Zone

There are two pockets of land within the subject site which are zoned Industrial 1 Zone (IN1Z).

Urban Floodway Zone

The remaining portion of the subject site is classified as Urban Floodway Zone (UFZ).

This area is generally located within the centre of the site and extends to the north-western corner of the site, with a then slither of land zoned Urban Floodway Zone also extending along the western boundary towards the south.

The land zoned Urban Floodway Zone is to be acquired by Melbourne Water and be utilised as a retarding basin.

There are four overlays covering the site:

- Development Plan Overlay Schedule 6 (DPO6).
- Land Subject to Inundation Overlay (LSIO).
- A Development Contributions Plan Overlay Schedule 3 (DCPO3).
- A Public Acquisition Overlay Schedule 6 (PAO6).

Refer to Attachment 2 in the supporting documentation for copies of the zoning and overlay maps.

6 Features of the Development Plan

The proposed Development Plan has had regard to the design and layout issues set out in this section of the Development Plan. The Development Plan has been designed to ensure integration and consistency with other nearby industrial subdivisions is achieved. This will be achieved through the appropriate provision of infrastructure, including bicycle, open space and street networks, and the planting of new landscaping in addition to the retention of existing vegetation within the industrial subdivision. Unlike other properties, the land subject to this Development Plan abuts the Melbourne Water reserve, which is considered to be a sensitive area. The developable land which abuts or is within proximity to the Melbourne Water reserve will be treated appropriately (i.e. through fencing, architectural treatments at the rear of buildings and sensitive placement of plant and equipment with no external storage unless appropriately screened to Council's satisfaction). Walls (excluding fences) will not be built along the shared boundary with the Melbourne Water reserve without Council's approval.

6.1 STAGING

It is considered the subdivision and development of the subject site is likely to occur in three stages, subject to the construction of Taylors Road. At this point in time it is unclear whether Taylors Road will be constructed in its entirety adjacent to the site's eastern boundary prior to any works occurring on the subject land. The following is a summary of the potential three stage development of the subject land:

Stage 1

As a result of the construction of the road extending west from Taylors Road as part of the Little Project Developments Pty Ltd Development Plan, Stage 1 will comprise lots within the subject site that abut this road.

Stage 2

This stage will involve the construction of Taylors Road up to the roundabout that abuts the south-eastern fringe of the Melbourne Water retarding basin. The proposed internal road within this section of the subject site will enable the balance of the land to the south of the Melbourne Water retarding basin to be developed.

Stage 3

The third stage relates to the land to the north of the Melbourne Water retarding basin.

Refer to the Development Plan at Figure 4A for the proposed staging.

Stages 1 and 2 can only occur upon completion of an appropriate industrial road.

6.2 CULTURAL HERITAGE MANAGEMENT PLAN

TerraCulture Pty. Ltd. has been engaged to undertake a Cultural Heritage Management Plan (CHMP) for the land at 875 Taylors Road, Dandenong South in order to meet the requirements of the Victorian *Aboriginal Heritage Act (2007)*. The Department of Planning and Community Development (DPCD's) approved the CHMP on 9 April 2012.

Refer to Attachment 3 in the supporting documentation for the DPCD's letter approving the CHMP and Attachment 4 for the comprehensive CHMP.

6.3 ENVIRONMENTAL MANAGEMENT PLAN

The DPO6 sets out a variety of issues that are to be considered in regards to the Environmental Management of the subject site.

A preliminary Environmental Management Plan (EMP) has been prepared by Tree Wishes indicating how various environmental aspects relating to the subject site are to be managed via various environmental protection measures. The EMP also contains a schedule and provides responses to the relevant bullet points set in the Development Plan Overlay – Schedule 6.

Refer to Attachment 5 in the supporting documentation for a copy of the EMP.

In addition to the EMP, the following environmental issues are also considered to be relevant and will be addressed at the planning permit stage for buildings and works on the site.

Treatment of Stormwater

- Melbourne Water, in its letter of 12 April 2011, does not object to stormwater runoff associated with the future development of the subject land to be directed to their retarding basin.
- On 8 November 2011, Munn Consulting Pty Ltd sent Urbis a letter advising how stormwater management for the subject site is to be addressed.
- On 21 November 2011, Melbourne Water sent a letter to Munn Consulting Pty Ltd indicating that Melbourne Water was satisfied with the proposed stormwater management plan for the subject site.

Refer to Attachment 6 in the supporting documentation for copies of the correspondence regarding the treatment of stormwater found.

Retention of Native Vegetation

- A Net Gain Assessment has been prepared by Tree Wishes in accordance with the Native Vegetation Precinct Plan (NVPP). Key issues relating to the Assessment include:
 - Section 4.6 identifies a conflict between the vegetation mapped and listed in the NVPP and the vegetation which currently exists on-site. The conflict relates to the vegetation in Area 2 of the site where the NVPP identified three trees when in fact 14 trees exist in this area.
 - All works will be undertaken in accordance with the Dandenong South Native Vegetation Precinct Plan.
- The Department of Sustainability and Environment (DSE), in its email of 16 May 2013, has consented to the proposed removal of Tree 99 within the NVPP on the basis that Trees 96, 97 and 98 in the NVPP are retained and protected in accordance with relevant standards including the Australian Standard AS4970-2009 Protection of Trees on Building Sites.

Refer to Attachment 7 in the supporting documentation for a copy of the Net Gain Assessment and the DSE email.

Earthworks

- The subject site is generally flat, elevating from 8.2m asl to 12.5m asl. Parts of the site must be filled to accord with the Melbourne Water requirements relating to the 1:100 year flood. In this regard, it is considered there will be no erosion issues relating to the future use and development of the subject site.
- A Fill Plan has been prepared by Head and Humphreys. It is noted that fill will not be placed under the retained native vegetation. As per the email from DSE (refer to Attachment 7), Tree 99 can be removed on the basis Trees 96, 97 and 98 are retained in lieu. The placement of fill will need to be carefully managed to ensure there is no adverse impact on the trees and to maintain the existing hydrological conditions of these trees. This will be demonstrated at the approval process.

Refer to Attachment 8 in the supporting documentation for a copy of the Fill Plan.

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Open Space Network and Landscaping

- The open space network that is proposed within the Dandenong South Industrial Area Extension Structure Plan, January 2009 will be considered in the future subdivision layout of the subject land.
- The Dandenong South Industrial Area Extension Development Contributions Plan requires Miramah to provide a 1.733% of the value of the developable land as a cash contribution for open space.
- The provision of open space links will adhere to the Dandenong South Industrial Area Extension Structure Plan, January 2009.
- The future subdivision layout will consider the ability to landscape environmentally significant areas, including land presenting to the future street network and within the Melbourne Water retarding basin.
 - Head and Humphreys have prepared a Landscape Plan that shows proposed street trees along the new roads. Refer to Attachment 9 in the supporting documentation for a copy of the indicative Landscape Plan.
- Section 4 of the Dandenong South Industrial Area Extension Structure Plan, January 2009 provides guidance on urban design and landscaping issues. Notwithstanding that the future subdivision permit and land development will adhere to the prevailing principles contained within this section of the Structure Plan; the Development Plan at Figure 4A indicates the extent of the sensitive building interface with the Melbourne Water reserve. This is the designated area where appropriate urban design and landscape treatments will be proposed in accordance with the Dandenong South Industrial Area Extension Structure Plan, January 2009 to create an appropriate interface between the built form and the Melbourne Water Reserve.
- Due to the subject site's interfaces with the future Melbourne Water retarding basin and the role the retarding basin plays in facilitating a wetland system, opportunity for any required offset to be accommodated (or partially accommodated) within the retarding basin is to be investigated, subject to Melbourne Water's consent. Any additional vegetation within the retarding basin can assist the ecological quality of this wetland environment.
- Notes are included within the Landscape Plan confirming that any offset planting along the perimeter of the Melbourne Water reserve will only be undertaken with Melbourne Water's consent, and that Melbourne Water are to provide details of the landscape treatment for the waterways and retarding basin.

Refer to Attachment 9 in the supporting documentation for a copy of the Landscape Plan.

Protection of Native Vegetation or Reserves

- Any tree that is to be retained will be protected by 'tree protection zones' (TPZ). This measure may be
 enforced through a condition of any future Planning Permit pertaining to the site concerning buildings
 and works, including earthworks.
- The specifics of the TPZs can be determined by the NVPP.

6.4 INTEGRATED TRANSPORT PLAN

The purpose of the ITP is to assist in achieving a sustainable transport design, whereby car dependency is reduced and sustainable forms of transport (i.e. public transport, cycling and walking) are encouraged.

The ITP addresses the following issues:

Review of access to the site for all transport modes.

Access to the existing and future road network.

- Adequate pedestrian and cycle access throughout the subject site.
- Pedestrian and cycle strategy within the subject site.
- Potential public transport access to the subject site.
- Integration with existing and future public transport services and infrastructure.

Refer to the supporting documentation for a copy of the ITP.

The main issues relating to the ITP are summarised below:

Road Accessibility

- Taylors Road will form the main north/south road that divides the Lyndhurst Site. It is noted that a portion of Taylors Road already exists and as such will allow the subject site to integrate with the wider street network within the Dandenong South area.
- As the eastern boundary of the subject site abuts Taylors Road, it has good accessibility to the future road network.

Pedestrian and Cycling Networks

The subject site is strategically sited adjacent to the Melbourne Water retarding basin and in an area that is primarily flat. As such:

- There is an ability to introduce appropriate street designs within the subject site to facilitate safe and convenient walking and cycling environs. Furthermore, the street designs should be appropriately integrated with the wider street network.
- The future subdivision of the subject land may consider integrating pedestrian and cycling networks within the subject land with the open space network available in the wider area, including the Melbourne Water retarding basin.
- The City of Greater Dandenong is continually extending the bike network within the municipality. The latest advice from Council is that there is around 150 kilometres of bike paths.

Public Transport

As per the note in the Development Plan at figure 4A, public transport is to be provided in Glassocks Road and Dandenong-Frankston Road.

In-keeping with the Structure Plan's intent of reducing car dependency and encouraging sustainable forms of transport, there is an opportunity to facilitate a public transport service within the subject site. In this regard, the provision of a bus stop within the subject site is encouraged. As the site is to be divided into two sections due to the location of the Melbourne Water retarding basin, there may be adequate justification for a bus stop within each section. The benefit of such an arrangement is that the occupants of the subject site can be connected to the existing and proposed broader public transport network.

Refer to Attachment 10 in the supporting documentation for a copy of the Integrated Transport Plan.

6.5 STORMWATER MANAGEMENT PLAN

Discussions have occurred with Melbourne Water regarding the ability to direct stormwater runoff to the retarding basin. As per the information contained in Attachment 6 in the supporting documentation regarding the treatment of stormwater, Melbourne Water consents to this arrangement. However, it is noted that the technical aspects relating to the treatment of the stormwater generated by any development on the subject land are yet to be finalised, in part because the form and intensity of development on the subject land is not yet finalised.

In addition, the below schedule contains responses to the relevant bullet points set in the Development Plan Overlay – Schedule 6. A condition on a Planning Permit relating to the development of the subject land can adequately deal with this issue of Stormwater Management.

STORMWATER MANAGEMENT PLAN	RESPONSES
OTOTALION TELEVISION DE INC.	.125. 5.1625
A Stormwater Management Plan showing as appropriate:	
 Construction and maintenance requirements for water bodies and wetlands. 	As per the letter of 8 November 2011, the proposed retarding basin shall incorporate sediment ponds as well as buffer zones and filter strips to facilitate the natural assimilation of water pollutants and to reduce run-off.
- Details of stormwater management measures.	As per the letter of 8 November 2011, It is expected that the design of the inlet structures to the retarding basin will incorporate trash racks and / or gross pollutant traps to intercept debris to protect the aesthetic and environmental quality of the retarding basin.
How development will comply with best practice environmental management or urban stormwate	As per the letter of 8 November 2011, an Erosion and r. Sediment Control Plan is to be developed in conjunction with the contractor. The Control Plan will be prepared in accordance with the requirements of Council's Design Manual for the Subdivision of Land and the appropriate sections of the Council's Construction Specifications.
Any other matters as required by the responsible authority and Melbourne Water.	At the time of preparing the Development Plan, it is understood Council is comfortable with the proposed Stormwater Management procedures, particularly as Melbourne Water's consent has been obtained regarding the measures to reduce run-off from the site into the Melbourne Water retarding basin.

As detailed in Melbourne Water's letter of 21 November 2011, the Stormwater Management Plan is to Melbourne Water's satisfaction.

Conclusion 7

It is demonstrated that the proposed Development Plan appropriately addresses the provisions contained within DPO6 of the Greater Dandenong Planning Scheme, and is doing so, has responded appropriately to the Dandenong South Industrial Area Extension Structure Plan January 2009.

The proposed Development Plan will provide a site responsive design with careful management of the relevant environmental, cultural heritage, topography, access and landscaping issues, Furthermore, due to the relationship between the subject site and the Melbourne Water retarding basin, the proposal will also comply with Melbourne Water's requirements pertaining to the site. Whilst only an indicative concept plan has been prepared, it is evident that the site can accommodate an appropriate subdivision layout, particularly as it abuts Taylors Road.

Whilst the Development Plan shows the land at 845 Taylors Road, Dandenong South as forming part of the subject land, Council should be aware that this has only been done in response to Council's request due to the size of the property at 845 Taylors Road, Dandenong South being less than the minimum 30 hectare lot size permitted by the DPO6.

Sydney

Level 21, 321 Kent Street Sydney, NSW 2000 t +02 8233 9900 f +02 8233 9966

Melbourne

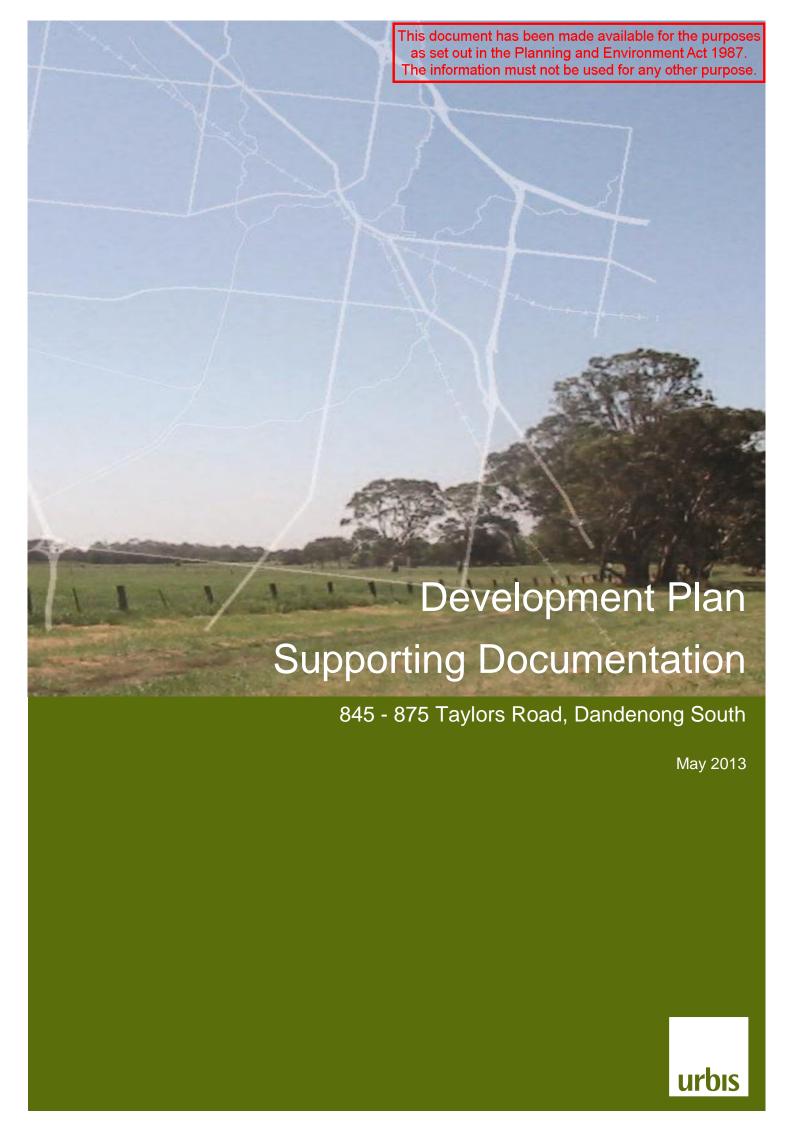
Level 12, 120 Collins Street Melbourne, VIC 3000 t +03 8663 4888 f +03 8663 4999 Brisbane

Level 12, 120 Edward Street Brisbane, QLD 4000 t +07 3007 3800 f +07 3007 3811

Perth

Level 1, 55 St Georges Terrace Perth, WA 6000 t +08 9346 0500 f +08 9321 7790

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SUPPORTING DOCUMENTATION

Table of Contents

Attachment 1 Copies of Titles

Attachment 2 Zoning and Overlay Maps

Attachment 3 Department of Planning and Community Development's letter approving the

Cultural Heritage Management Plan

Attachment 4 Comprehensive Cultural Heritage Management Plan document

Attachment 5 Environmental Management Plan

Attachment 6 Correspondence regarding the treatment of stormwater

Attachment 7 Net Gain Assessment

Attachment 8 Fill Plan

Attachment 9 Landscape Plan

Attachment 10 Integrated Transport Plan

Attachment 11 Survey Plan

Attachment 1

Copies of Titles



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LAND DESCRIPTION

Lot 1 on Title Plan 143980Y (formerly known as part of Lot 10 on Plan of Subdivision 010630). PARENT TITLE Volume 08034 Folio 930 Created by instrument P472515T 12/10/1989

REGISTERED PROPRIETOR

Estate Fee Simple Sole Proprietor MIRAMAH INVESTMENT PTY LTD of 60 GARNETT ROAD WHEELERS HILL P472515T 12/10/1989

ENCUMBRANCES, CAVEATS AND NOTICES

Any encumbrances created by Section 98 Transfer of Land Act 1958 or Section 24 Subdivision Act 1988 and any other encumbrances shown or entered on the plan set out under DIAGRAM LOCATION below.

NOTICE as to part Section 10(1) Land Acquisition and Compensation Act 1986
MELBOURNE WATER CORPORATION
ADDRESS FOR SERVICE OF NOTICES
MELBOURNE WATER CORPORATION of 100 WELLINGTON PARADE EAST MELBOURNE VIC 3002
AH958982F 19/05/2011

DIAGRAM LOCATION

SEE TP143980Y FOR FURTHER DETAILS AND BOUNDARIES

ACTIVITY IN THE LAST 125 DAYS

NIL
END OF REGISTER SEARCH STATEMENT
Additional information: (not part of the Register Search Statement)
Street Address: 875 TAYLORS ROAD DANDENONG SOUTH VIC 3175
DOCUMENT END

Title 9961/818 Page 1 of 1



Imaged Document Cover Sheet

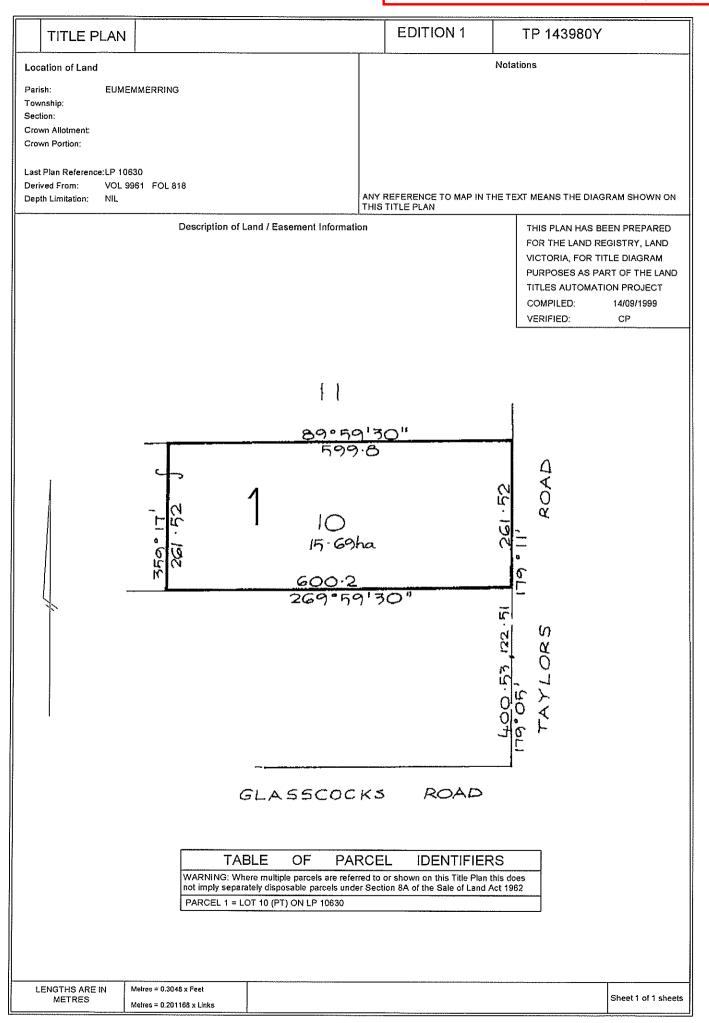
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Application by Acquiring Authority



Section 10(1) Land Acquisition and Compensation Act 1986

indexes

Lodged by

Name: Garland Hawthorn Brahe Lawyers

Phone: (03) 9629-5551

Address: Level 20, 31 Queen Street, Melbourne Vic 3000

Reference: WDB:CRA:629447 Customer Code: 0841Y

The applicant applies for the recording of the notice of intention to acquire in respect of the land described and requires notice of any dealing with the land to be served upon the applicant at the address for service of notice.

Land: (volume and folio)

Being part of the land contained in Certificates of Title Volume 9961 Folio 820, Volume 9961 Folio 819 and Volume 9961 Folio 818, shown as Reserve No 1 on SES 1462/3, Reserve No 1 on SES 1462/2 and Reserve No 1 on SES 1462/1 as specified in the Notice of Intention to Acquire panel below.

Applicant: (full name and address including postcode)

Melbourne Water Corporation, 100 Wellington Parade, East Melbourne, Victoria 3002

Notice of intention to acquire:

The notice of intention to acquire was served on * 21/04/2011

a copy of which is attached.

* Insert date of service of notice of intention to acquire on the persons having an interest in the land

Address for service of notice:

/Melbourne Water Corporation 100 Wellington Parade EAST MELBOURNE VIC 3002

Dated:

3/5/2011

Signed for and on behalf of the applicant acquiring authority

(signature of responsible officer - please state qualification)

30800812A

APA

Page 1 of 1

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Land Victoria, 570 Bourke Street, Melbourne, 3000, Phone 8636-2010

This document has been made available for the purposes as set out in the Planning and Environment Act 1987.
The information must not be used for any other purpose.

Land Acquisition and Compensation Act 1986 Land Acquisition and Compensation Regulations 2010 No. 44

FORM 1

Ss.6 and 8(1)(a) Reg.7

NOTICE OF INTENTION TO ACQUIRE

To:

Miramah Investment Pty Ltd (ACN 006 951 766) of 767B Nicholson Street.

Carlton North, Victoria 3054

To:

Derek Anderson, 225 Glasscocks Road, Dandenong South Victoria 3175

And to:

All other interests

Melbourne Water Corporation (Melbourne Water) intends to acquire an interest in the following described land.

Title particulars:

Being part of the land contained in Certificates of Title Volume 9961 Folio 820,

Volume 9961 Folio 819 and Volume 9961 Folio 818:

Area:

Part of Lot 1 on TP143982U - 22.91 hectares Part of Lot 1 on TP143981W - 6.011 hectares Part of Lot 1 on TP143980Y - 1.046 hectares

Total - 29.967 hectares



Description:

٠.;٠

Part of Lot 1 on TP143982U shown as Reserve No. 1 on SES 1462/3, part of

Lot 1 on TP143981W shown as Reserve No. 1 on SES 1462/2 and part of Lot 1

on TP143980Y shown as Reserve No. 1 on SES 1462/1, Parish of

Eumemmerring and being part of the property situated at 875 Taylors Road, Dandenong South, Vic, 3175 (a copy of plans SES 1462/3, SES 1462/2 and

SES 1461/1 are attached hereto).

The description of the land set out above refers to Plans SES 1462/1, SES 1462/2 and SES 1462/3. A copy of these documents can be inspected without charge at the office of Melbourne Water, 100 Wellington Parade, East Melbourne during the hours 9.00 am to 4.00 pm.

Melbourne Water thinks that the land is suitable for the construction of a stormwater retarding basin, because the land is low lying and appropriately located in a floodplain to be used for the stated purpose.

The land is reserved for a public purpose under the Greater Dandenong Planning Scheme.

At the present time it is expected that Melbourne Water may require possession of the land on approximately 28 June 2011. This date may change.

Melbourne Water requires you to provide it with information about the following -

- The name of any other person who has, or you think may have, an interest in the land. (Such 1. a person might be a tenant or a mortgagee or a person to whom you have agreed to sell the ·land.)
- 2. If you have a current building permit or approval or a planning permit concerning the land.
- 3. If you have sold or let or in any other way dealt with the land or were intending to deal with

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Land Acquisition and Compensation Act 1986 Land Acquisition and Compensation Regulations 2010 No. 44



land immediately before you received this notice.

- 4. If you know of any other person proposing to do any of those things mentioned in paragraph 3.
- 5. Any other matters of which you are aware which will help Melbourne Water to work out what compensation you should receive for the land. (This information may include details of any mortgage, lease or other arrangement affecting the land. If you claim financial loss, please provide financial documents and other records to substantiate all losses. All documents provided will be treated in confidence).

For and on behalf of Melbourne Water:

Authorised Officer of Melbourne Water

Signed:

Name: SNAM LEGIE COX

Date: 21 April 2011

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. 1910312011 \$32.50 EAC

MELBOURNE WATER CORPORATION

TAYLORS ROAD RETARDING BASIN - DANDENONG SOUTH

RESERVE No.1 REQUIRED FOR USE OF MELBOURNE WATER

OWNER: MIRAMAH INVESTMENT PTY LTD

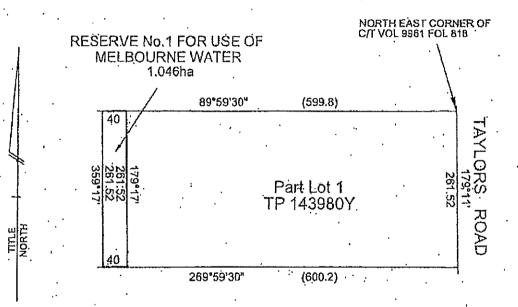
PART LOT'1 ON TP 143980Y

FORMERLY KNOWN AS PART OF LOT 10 ON LP 10630

CROWN PORTION 49

PARISH OF EUMEMMERRING

Bearing Datum; TITLE C/T VOL 9961 FOL 818



Scale of Metres
0 50 150 250

Scale 1: 5000 Sheet size A4

I certify that dosures and ereas on this plan

are comact.

Stephen Joseph Felton Licensed Surveyor Dale: 19/02/2010

Melbourne Water

This document has been made available for the purposes as set out in the Planning and Environment Act 1987. The information must not be used for any other purpose.

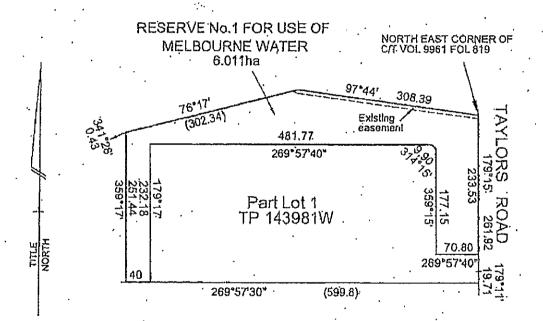
PARISH OF EUMEMMERRING



MELBOURNE WATER CORPORATION TAYLORS ROAD RETARDING BASIN - DANDENONG SOUTH

RESERVE No.1 REQUIRED FOR USE OF MELBOURNE WATER OWNER: MIRAMAH INVESTMENT PTY LTD PART LOT 1 ON TP 143981W FORMERLY KNOWN AS PART OF LOT 11 ON LP 10630 CROWN PORTIONS 49 & 50

Bearing Datum; TITLE C/T VOL 9961 FOL 819



Scale of Metres
0 50 150 250

Scale 1: 5000 Sheet size A4

I certify that closures, and areas on this plan

Me Chied.

Stephen Joseph Falzon Licensed Surveyor

Date: 02/03/2010



MELBOURNE WATER CORPORATION

TAYLORS ROAD RETARDING BASIN - DANDENONG SOUTH

RESERVE No.1 REQUIRED FOR USE OF MELBOURNE WATER

OWNER: MIRAMAH INVESTMENT PTY LTD

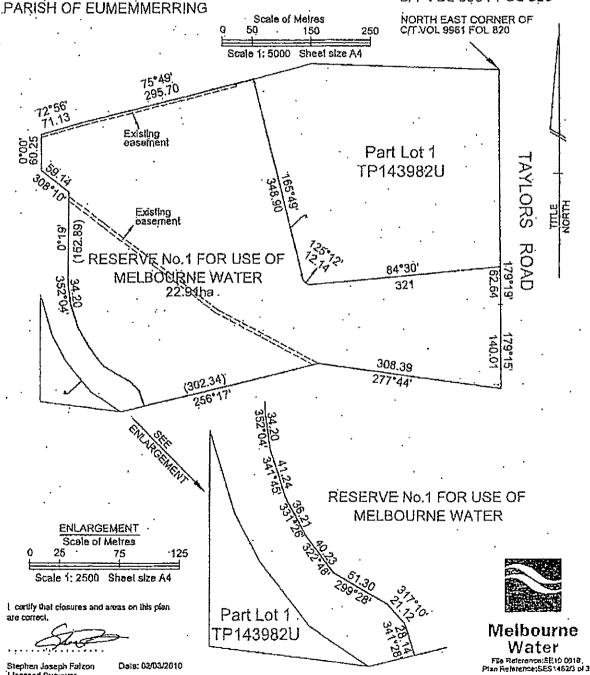
PART LOT 1 ON TP 149982U

FORMERLY KNOWN AS PÄRT OF LOT 12 ON LP 10630

CROWN PORTIONS 50 & 51

Licensed Surveyor

Bearing Datum: TITLE C/T VOL 9961 FOL 820



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VOLUME 09961 FOLIO 819

Security no : 124040365536V Produced 23/12/2011 11:27 am

LAND DESCRIPTION

Lot 1 on Title Plan 143981W (formerly known as part of Lot 11 on Plan of Subdivision 010630). PARENT TITLE Volume 08034 Folio 930 Created by instrument P472516Q 12/10/1989

REGISTERED PROPRIETOR

Estate Fee Simple Sole Proprietor MIRAMAH INVESTMENT PTY LTD of 60 GARNETT ROAD WHEELERS HILL P472516Q 12/10/1989

ENCUMBRANCES, CAVEATS AND NOTICES

Any encumbrances created by Section 98 Transfer of Land Act 1958 or Section 24 Subdivision Act 1988 and any other encumbrances shown or entered on the plan set out under DIAGRAM LOCATION below.

NOTICE as to part Section 10(1) Land Acquisition and Compensation Act 1986
MELBOURNE WATER CORPORATION
ADDRESS FOR SERVICE OF NOTICES
MELBOURNE WATER CORPORATION of 100 WELLINGTON PARADE EAST MELBOURNE VIC 3002
AH958982F 19/05/2011

DIAGRAM LOCATION

SEE TP143981W FOR FURTHER DETAILS AND BOUNDARIES

ACTIVITY IN THE LAST 125 DAYS

NIL
END OF REGISTER SEARCH STATEMENT
Additional information: (not part of the Register Search Statement)
Street Address: 875 TAYLORS ROAD DANDENONG SOUTH VIC 3175
DOCUMENT END

This document has been made available for the purposes as set out in the Planning and Environment Act 1987. The information must not be used for any other purpose.

Title 9961/819 Page 1 of 1



Imaged Document Cover Sheet

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Document Type	plan
Document Identification	TP143981W
Number of Pages	1
(excluding this cover sheet)	
Document Assembled	23/12/2011 11:28

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The document is invalid if this cover sheet is removed or altered.

EDITION 1 TP 143981W TITLE PLAN Notations Location of Land EUMEMMERRING Parish: Township: Section: Crown Allotment: Crown Portion: Last Plan Reference:LP 10630 VOL 9961 FOL 819 ANY REFERENCE TO MAP IN THE TEXT MEANS THE DIAGRAM SHOWN ON Depth Limitation: NII THIS TITLE PLAN

Description of Land / Easement Information

ENCUMBRANCES

AS TO THE LAND SHOWN MARKED "E-1"

THE EASEMENTS (IF ANY) EXISTING OVER THE SAME BY VIRTUE OF SECTION 98 OF THE TRANSFER OF LAND ACT

THIS PLAN HAS BEEN PREPARED
FOR THE LAND REGISTRY, LAND
VICTORIA, FOR TITLE DIAGRAM
PURPOSES AS PART OF THE LAND
TITLES AUTOMATION PROJECT
COMPILED: 14/09/1999

VERIFIED:

14/09/1999 CP

GLASSCOCKS ROAD

TOTAL AREA: 17.69ha

TABLE OF PARCEL IDENTIFIERS

WARNING: Where multiple parcels are referred to or shown on this Title Plan this does not imply separately disposable parcels under Section 8A of the Sale of Land Act 1962

PARCEL 1 = LOT 11 (PT) ON LP 10630

LENGTHS ARE IN METRES

Metres = 0.3048 x Feet

Metres = 0.201168 x Links

Sheet 1 of 1 sheets

Application by Acquiring Authority



Section 10(1) Land Acquisition and Compensation Act 1986

indexes.

Lodged by

Name: Garland Hawthorn Brahe Lawyers

Phone: (03) 9629-5551

Address: Level 20, 31 Queen Street, Melbourne Vic 3000

Reference: WDB:CRA:629447 Customer Code: 0841Y

The applicant applies for the recording of the notice of intention to acquire in respect of the land described and requires notice of any dealing with the land to be served upon the applicant at the address for service of notice.

Land: (volume and folio)

Being part of the land contained in Certificates of Title Volume 9961 Folio 820, Volume 9961 Folio 819 and Volume 9961 Folio 818 shown as Reserve No 1 on SES 1462/3, Reserve No 1 on SES 1462/2 and Reserve No 1 on SES 1462/1 as specified in the Notice of Intention to Acquire a copy of which is attached hereto and referred to in the Notice of Intention to Acquire panel below.

Applicant: (full name and address including postcode)

Melbourne Water Corporation, 100 Wellington Parade, East Melbourne, Victoria 3002

Notice of intention to acquire:

The notice of intention to acquire was served on * 21/04/2011

a copy of which is attached.

Insert date of service of notice of intention to acquire on the persons having an interest in the land

Address for service of notice:

Melbourne Water Corporation 100 Wellington Parade EAST MELBOURNE VIC 3002

Dated:

3/5/2011

Signed for and on behalf of the applicant acquiring authority

(signature of responsible officer - please state qualification)

30800812A

APA

Page 1 of 1

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Land Victoria, 570 Bourke Street, Melbourne, 3000, Phone 8636-2010

Land Acquisition and Compensation Act 1986 Land Acquisition and Compensation Regulations 2010 No. 44

FORM 1

Ss.6 and 8(1)(a)

Reg.7

NOTICE OF INTENTION TO ACQUIRE

To:

Miramah Investment Pty Ltd (ACN 006 951 766) of 767B Nicholson Street,

Carlton North, Victoria 3054

To:

Derek Anderson, 225 Glasscocks Road, Dandenong South Victoria 3175

And to:

All other interests

Melbourne Water Corporation (Melbourne Water) intends to acquire an interest in the following described land.

Title particulars:

Being part of the land contained in Certificates of Title Volume 9961 Folio 820,

Volume 9961 Folio 819 and Volume 9961 Folio 818:

Area:

Part of Lot 1 on TP143982U - 22.91 hectares Part of Lot 1 on TP143981W - 6.011 hectares Part of Lot 1 on TP143980Y - 1.046 hectares

Total - 29.967 hectares

AH958982F



Description:

...

Part of Lot 1 on TP143982U shown as Reserve No. 1 on SES 1462/3, part of Lot 1 on TP143981W shown as Reserve No. 1 on SES 1462/2 and part of Lot 1

on TP143980Y shown as Reserve No. 1 on SES 1462/1, Parish of

Eumemmerring and being part of the property situated at 875 Taylors Road, Dandenong South, Vic, 3175 (a copy of plans SES 1462/3, SES 1462/2 and

SES 1461/1 are attached hereto).

The description of the land set out above refers to Plans SES 1462/1, SES 1462/2 and SES 1462/3. A copy of these documents can be inspected without charge at the office of Melbourne Water, 100 Wellington Parade, East Melbourne during the hours 9.00 am to 4.00 pm.

Melbourne Water thinks that the land is suitable for the construction of a stormwater retarding basin, because the land is low lying and appropriately located in a floodplain to be used for the stated purpose.

The land is reserved for a public purpose under the Greater Dandenong Planning Scheme.

At the present time it is expected that Melbourne Water may require possession of the land on approximately 28 June 2011. This date may change.

Melbourne Water requires you to provide it with information about the following -

- 1. The name of any other person who has, or you think may have, an interest in the land. (Such a person might be a tenant or a mortgagee or a person to whom you have agreed to sell the land.)
- 2. If you have a current building permit or approval or a planning permit concerning the land.
- 3. If you have sold or let or in any other way dealt with the land or were intending to deal with

Land Acquisition and Compensation Act 1986 Land Acquisition and Compensation Regulations 2010 No. 44



land immediately before you received this notice.

- If you know of any other person proposing to do any of those things mentioned in paragraph
 3.
- 5. Any other matters of which you are aware which will help Melbourne Water to work out what compensation you should receive for the land. (This information may include details of any mortgage, lease or other arrangement affecting the land. If you claim financial loss, please provide financial documents and other records to substantiate all losses. All documents provided will be treated in confidence).

For and on behalf of Melbourne Water:

Authorised Officer of Melbourne Water

Signed:

Name: SNAM LEGIE COX

Date: 21 Avril 2011

AH958982F

- . 19105/2011 \$52,60 {AC

MELBOURNE WATER CORPORATION

TAYLORS ROAD RETARDING BASIN - DANDENONG SOUTH

RESERVE No. 1 REQUIRED FOR USE OF MELBOURNE WATER

OWNER: MIRAMAH INVESTMENT PTY LTD

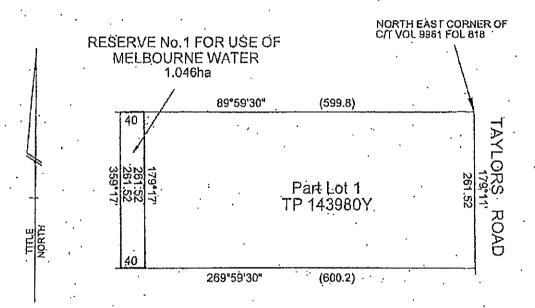
PART LOT'1 ON TP 143980Y

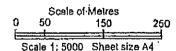
FORMERLY KNOWN AS PART OF LOT 10 ON LP 10630

CROWN PORTION 49

PARISH OF EUMEMMERRING

Bearing Datum: TITLE C/T VOL 9961 FOL 818





I certify that dosures and ereas on this plan

are correct.

Stephen Joseph Felton Licensed Surveyor Date: 19/02/2010

Melbourne Water File Relevence:SE10 0018

MELBOURNE WATER CORPORATION

TAYLORS ROAD RETARDING BASIN - DANDENONG SOUTH

RESERVE No.1 REQUIRED FOR USE OF MELBOURNE WATER

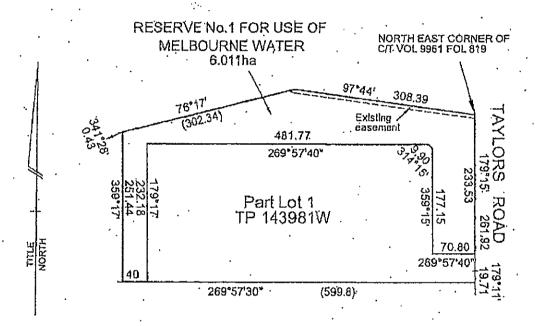
OWNER: MIRAMAH INVESTMENT PTY LTD

PART LOT 1 ON TP 143981W

FORMERLY KNOWN AS PART OF LOT 11 ON LP 10630

CROWN PORTIONS 49 & 50 PARISH OF EUMEMMERRING

Bearing Datum: TITLE C/T VOL 9961 FOL 819



Scale of Metres
0 50 150 250

Scale 1: 5000 Sheet size A4

I certify that closures, and areas on this plan

BIE COITEG.

Stephen Joseph Felzon Licensed Surveyor

Date: 02/03/2010

Welbourne
Water

Plan Reterence:SES1452/2 of 3

MELBOURNE WATER CORPORATION

TAYLORS ROAD RETARDING BASIN - DANDENONG SOUTH

RESERVE No.1 REQUIRED FOR USE OF MELBOURNE WATER

OWNER: MIRAMAH INVESTMENT PTY LTD

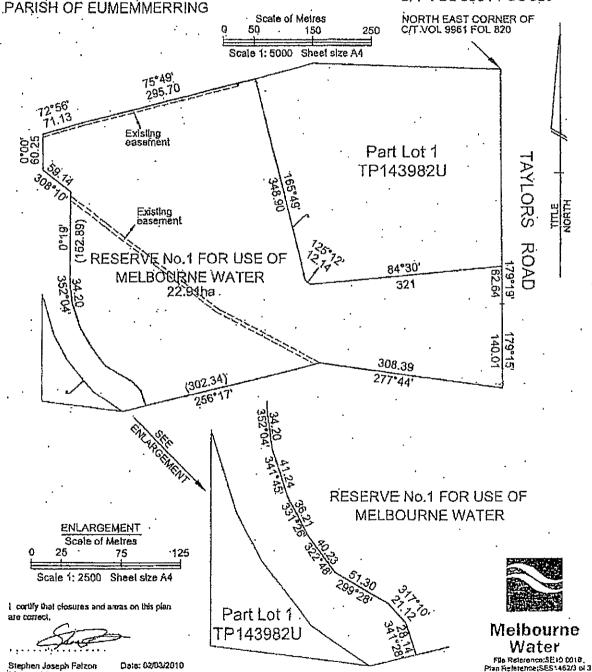
PART LOT 1 ON TP 149982U

FORMERLY KNOWN AS PÄRT OF LOT 12 ON LP 10630

CROWN PORTIONS 50 & 51

Licensed Surveyor

Bearing Datum: TITLE C/T VOL 9961 FOL 820





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VOLUME 09961 FOLIO 820

Security no : 124040365477K Produced 23/12/2011 11:23 am

LAND DESCRIPTION

Lot 1 on Title Plan 143982U (formerly known as part of Lot 12 on Plan of Subdivision 010630). PARENT TITLE Volume 08034 Folio 930 Created by instrument P472517M 12/10/1989

REGISTERED PROPRIETOR

Estate Fee Simple Sole Proprietor MIRAMAH INVESTMENT PTY LTD of 60 GARNETT ROAD WHEELERS HILL P472517M 12/10/1989

ENCUMBRANCES, CAVEATS AND NOTICES

Any encumbrances created by Section 98 Transfer of Land Act 1958 or Section 24 Subdivision Act 1988 and any other encumbrances shown or entered on the plan set out under DIAGRAM LOCATION below.

NOTICE as to part Section 10(1) Land Acquisition and Compensation Act 1986
MELBOURNE WATER CORPORATION
ADDRESS FOR SERVICE OF NOTICES
MELBOURNE WATER CORPORATION of 100 WELLINGTON PARADE EAST MELBOURNE VIC 3002
AH958982F 19/05/2011

DIAGRAM LOCATION

SEE TP143982U FOR FURTHER DETAILS AND BOUNDARIES

ACTIVITY IN THE LAST 125 DAYS

NIL
END OF REGISTER SEARCH STATEMENT
Additional information: (not part of the Register Search Statement)
Street Address: 875 TAYLORS ROAD DANDENONG SOUTH VIC 3175
DOCUMENT END

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Title 9961/820 Page 1 of 1



Imaged Document Cover Sheet

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Document Type	plan
Document Identification	TP143982U
Number of Pages	2
(excluding this cover sheet)	
Document Assembled	23/12/2011 11:26

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The document is invalid if this cover sheet is removed or altered.

TITLE PLAN

EDITION 1 TP 143982U

Notations

Parish: EUMEMMERRING
Township: Section:
Crown Allotment:
Crown Portion:

Last Plan Reference:LP 10630
Derived From: VOL 9961 FOL 820
Depth Limitation: NIL

ANY REFERENCE TO MAP IN THE TEXT MEANS THE DIAGRAM SHOWN ON THIS TITLE PLAN

Description of Land / Easement Information

ENCUMBRANCES

AS TO THE LAND SHOWN MARKED "E-1"

THE EASEMENTS (IF ANY) EXISTING OVER THE SAME BY VIRTUE OF SECTION 98 OF THE TRANSFER OF LAND ACT

THIS PLAN HAS BEEN PREPARED
FOR THE LAND REGISTRY, LAND
VICTORIA, FOR TITLE DIAGRAM
PURPOSES AS PART OF THE LAND
TITLES AUTOMATION PROJECT
COMPILED: 14/09/1999
VERIFIED: CP

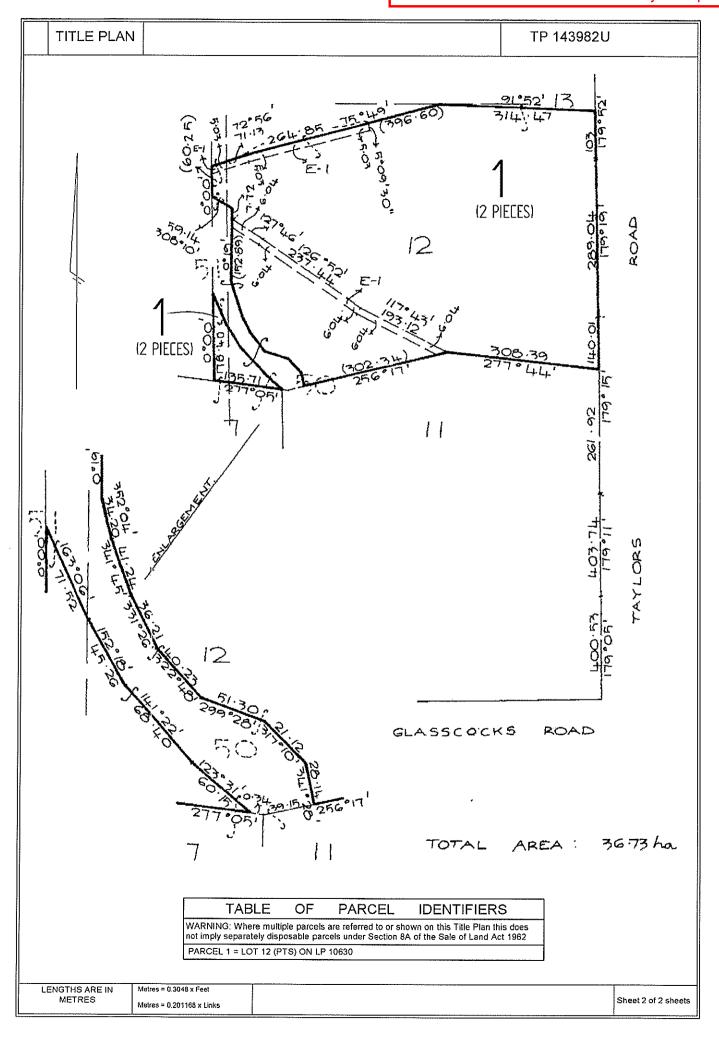
SEE SHEET 2 FOR DIAGRAM

LENGTHS ARE IN METRES Metres = 0.3048 x Feet

Metres = 0.201168 x Links

Sheet 1 of 2 sheets

as set out in the Planning and Environment Act 1987. The information must not be used for any other purpose.



Application by Acquiring Authority



Section 10(1) Land Acquisition and Compensation Act 1986

indexes

Lodged by

Name: Garland Hawthorn Brahe Lawyers

Phone: (03) 9629-5551

Address: Level 20, 31 Queen Street, Melbourne Vic 3000

Reference: WDB:CRA:629447 Customer Code: 0841Y

The applicant applies for the recording of the notice of intention to acquire in respect of the land described and requires notice of any dealing with the land to be served upon the applicant at the address for service of notice.

Land: (volume and folio)

Being part of the land contained in Certificates of Title Volume 9961 Folio 820, Volume 9961 Folio 819 and Volume 9961 Folio 818 shown as Reserve No 1 on SES 1462/3, Reserve No 1 on SES 1462/2 and Reserve No 1 on SES 1462/1 as specified in the Notice of Intention to Acquire a copy of which is attached hereto and referred to in the Notice of Intention to Acquire panel below.

Applicant: (full name and address including postcode)

Melbourne Water Corporation, 100 Wellington Parade, East Melbourne, Victoria 3002

Notice of intention to acquire:

The notice of intention to acquire was served on * 21/04/2011

a copy of which is attached.

* Insert date of service of notice of intention to acquire on the persons having an interest in the land

Address for service of notice:

) 'Melbourne Water Corporation 100 Wellington Parade EAST MELBOURNE VIC 3002

Dated:

3/5/2011

Signed for and on behalf of the applicant acquiring authority

(signature of responsible officer - please state qualification)

30800812A

APA

Page 1 of 1

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Land Victoria, 570 Bourke Street, Melbourne, 3000, Phone 8636-2010

Land Acquisition and Compensation Act 1986 Land Acquisition and Compensation Regulations 2010 No. 44

FORM 1

Ss.6 and 8(1)(a) Reg.7

NOTICE OF INTENTION TO ACQUIRE

To:

Miramah Investment Pty Ltd (ACN 006 951 766) of 767B Nicholson Street.

Carlton North, Victoria 3054

To:

Derek Anderson, 225 Glasscocks Road, Dandenong South Victoria 3175

And to:

All other interests

Melbourne Water Corporation (Melbourne Water) intends to acquire an interest in the following described land.

Title particulars:

Being part of the land contained in Certificates of Title Volume 9961 Folio 820.

Volume 9961 Folio 819 and Volume 9961 Folio 818.

Area:

Part of Lot 1 on TP143982U - 22.91 hectares Part of Lot 1 on TP143981W - 6.011 hectares Part of Lot 1 on TP143980Y - 1.046 hectares

Total - 29.967 hectares



Description:

...

Part of Lot 1 on TP143982U shown as Reserve No. 1 on SES 1462/3, part of

Lot 1 on TP143981W shown as Reserve No. 1 on SES 1462/2 and part of Lot 1

on TP143980Y shown as Reserve No. 1 on SES 1462/1, Parish of

Eumemmerring and being part of the property situated at 875 Taylors Road, Dandenong South, Vic, 3175 (a copy of plans SES 1462/3, SES 1462/2 and

SES 1461/1 are attached hereto).

The description of the land set out above refers to Plans SES 1462/1, SES 1462/2 and SES 1462/3. A copy of these documents can be inspected without charge at the office of Melbourne Water, 100 Wellington Parade, East Melbourne during the hours 9.00 am to 4.00 pm.

Melbourne Water thinks that the land is suitable for the construction of a stormwater retarding basin, because the land is low lying and appropriately located in a floodplain to be used for the stated purpose.

The land is reserved for a public purpose under the Greater Dandenong Planning Scheme.

At the present time it is expected that Melbourne Water may require possession of the land on approximately 28 June 2011. This date may change.

Melbourne Water requires you to provide it with information about the following -

- 1. The name of any other person who has, or you think may have, an interest in the land. (Such a person might be a tenant or a mortgagee or a person to whom you have agreed to sell the ·land.)
- 2. If you have a current building permit or approval or a planning permit concerning the land.
- 3. If you have sold or let or in any other way dealt with the land or were intending to deal with

Land Acquisition and Compensation Act 1986 Land Acquisition and Compensation Regulations 2010 No. 44



land immediately before you received this notice.

- If you know of any other person proposing to do any of those things mentioned in paragraph
- Any other matters of which you are aware which will help Melbourne Water to work out what compensation you should receive for the land. (This information may include details of any mortgage, lease or other arrangement affecting the land. If you claim financial loss, please provide financial documents and other records to substantiate all losses. All documents provided will be treated in confidence).

For and on behalf of Melbourne Water: Authorised Officer of Melbourne Water

Date:



MELBOURNE WATER CORPORATION

TAYLORS ROAD RETARDING BASIN - DANDENONG SOUTH

RESERVE No. 1 REQUIRED FOR USE OF MELBOURNE WATER

OWNER: MIRAMAH INVESTMENT PTY LTD

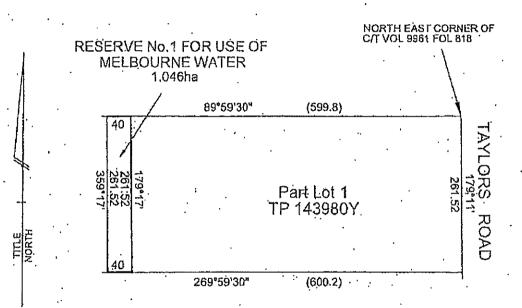
PART LOT'1 ON TP 143980Y

FORMERLY KNOWN AS PART OF LOT 10 ON LP 10630

CROWN PORTION 49

PARISH OF EUMEMMERRING

Bearing Datum: TITLE C/T VOL 9961 FOL 818



Scale of Metres
0 50 150 250

Scale 1: 5000 Sheet size A4

I certify that closures and eress on this plan

are correct.

Stephen Joseph Felzon Licensed Surveyor Dale: 19/02/2010

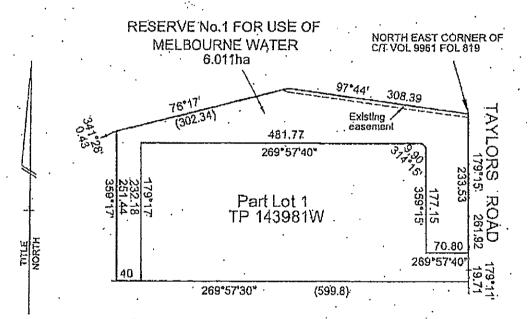
Melbourne Water File Relevence:SE10 0010



MELBOURNE WATER CORPORATION TAYLORS ROAD RETARDING BASIN - DANDENONG SOUTH

RESERVE No.1 REQUIRED FOR USE OF MELBOURNE WATER OWNER: MIRAMAH INVESTMENT PTY LTD PART LOT 1 ON TP 143981W FORMERLY KNOWN AS PART OF LOT 11 ON LP 10630 CROWN PORTIONS 49 & 50 PARISH OF EUMEMMERRING

Bearing Datum: TITLE C/T VOL 9961 FOL 819



Scale of Metres
0 50 150 . 250

Scale 1: 5000 Sheet size A4

I certify that closures, and areas on this plan

Bie Collect.

Stephen Joseph Falzon Licensed Surveyor Date: 02/03/2010

Melbourne
Water
File Relatence: 5551 45272 of 3

MELBOURNE WATER CORPORATION

TAYLORS ROAD RETARDING BASIN - DANDENONG SOUTH

RESERVE No.1 REQUIRED FOR USE OF MELBOURNE WATER

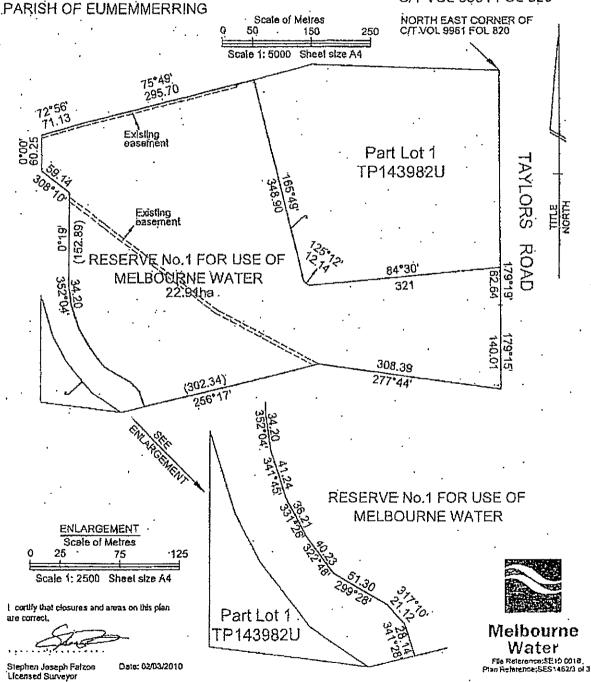
OWNER: MIRAMAH INVESTMENT PTY LTD

PART LOT 1 ON TP 143982U

FORMERLY KNOWN AS PÄRT OF LOT 12 ON LP 10630

CROWN PORTIONS 50 & 51

Bearing Datum: TITLE C/T VOL 9961 FOL 820



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VOLUME 09961 FOLIO 821

Security no : 124040365511X Produced 23/12/2011 11:25 am

LAND DESCRIPTION

Lot 1 on Title Plan 143983S (formerly known as part of Lot 13 on Plan of Subdivision 010630). PARENT TITLE Volume 08034 Folio 930 Created by instrument P472518J 12/10/1989

REGISTERED PROPRIETOR

Estate Fee Simple
Sole Proprietor
MIRAMAH INVESTMENT PTY LTD of 60 GARNETT ROAD WHEELERS HILL
P472518J 12/10/1989

ENCUMBRANCES, CAVEATS AND NOTICES

Any encumbrances created by Section 98 Transfer of Land Act 1958 or Section 24 Subdivision Act 1988 and any other encumbrances shown or entered on the plan set out under DIAGRAM LOCATION below.

DIAGRAM LOCATION

SEE TP143983S FOR FURTHER DETAILS AND BOUNDARIES

ACTIVITY IN THE LAST 125 DAYS

NIL
-----END OF REGISTER SEARCH STATEMENT-----Additional information: (not part of the Register Search Statement)
Street Address: 875 TAYLORS ROAD DANDENONG SOUTH VIC 3175
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Title 9961/821 Page 1 of 1



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EDITION 2 TP 143983S TITLE PLAN Notations Location of Land Parish: EUMEMMERRING Township: Section: Crown Allotment: 50(pt) & 65 (pt) Crown Portion: Last Plan Reference: LP 10630 Derived From: VOL 9961 FOL 821 ANY REFERENCE TO MAP IN THE TEXT MEANS THE DIAGRAM SHOWN ON THIS TITLE PLAN Depth Limitation: NIL. Description of Land / Easement Information THIS PLAN HAS BEEN PREPARED FOR THE LAND REGISTRY, LAND VICTORIA, FOR TITLE DIAGRAM PURPOSES AS PART OF THE LAND TITLES AUTOMATION PROJECT COMPILED: 14/09/1999 VERIFIED: CP ROAD BANGHOLME AREA:1.067ha **TABLE** OF **PARCEL IDENTIFIERS** WARNING: Where multiple parcels are referred to or shown on this Title Plan this does not imply separately disposable parcels under Section 8A of the Sale of Land Act 1962 PARCEL 1 = LOT 13 (PT) ON LP 10630 LENGTHS ARE IN Metres = 0.3048 x Feet Sheet 1 of 1 sheets METRES Metres = 0.201168 x Links

MODIFICATION TABLE

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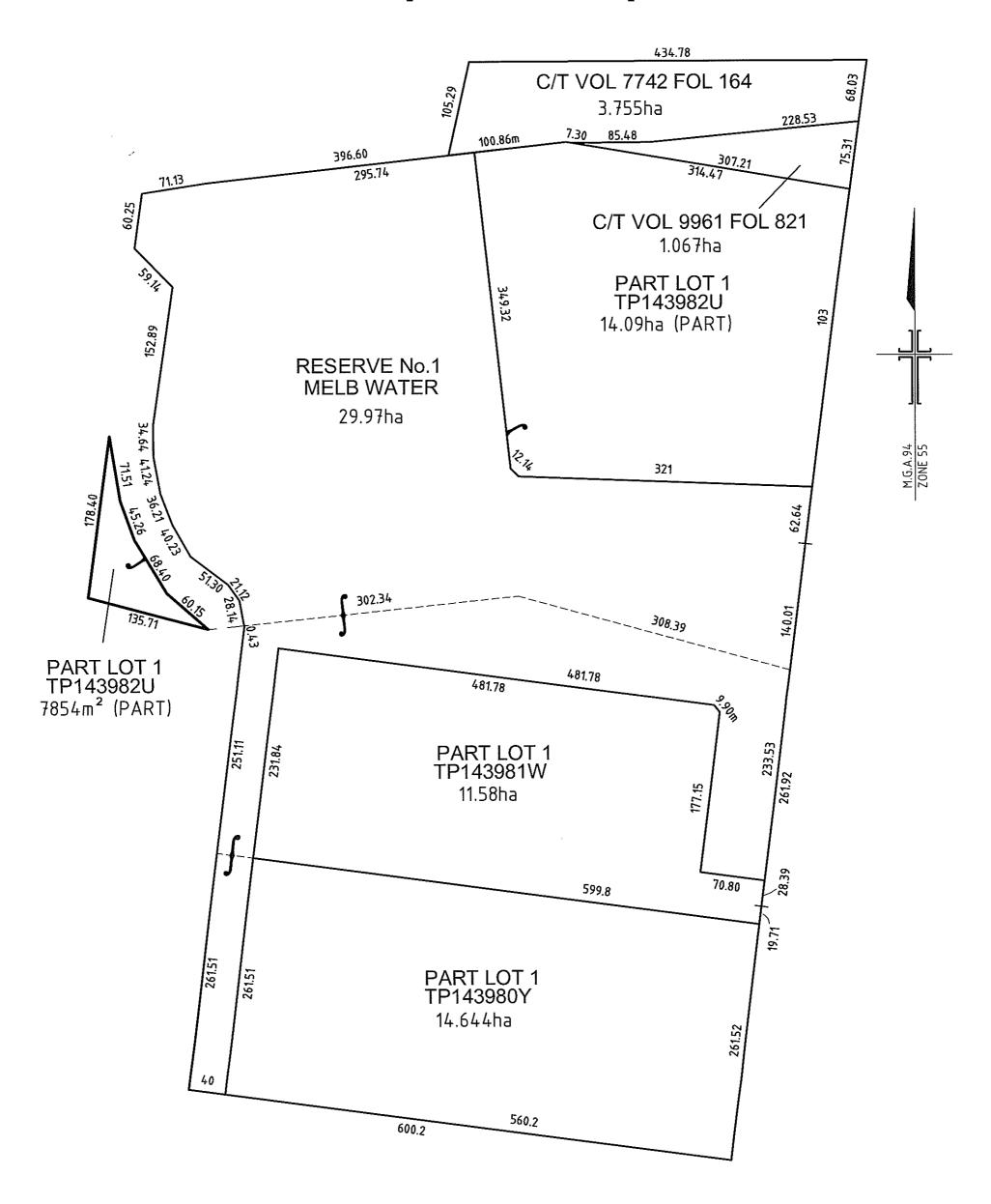
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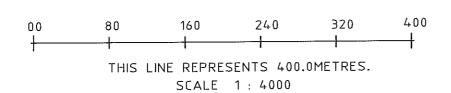
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		RECTIFICATION	AG894121Y	2/12/09	2	N.L.H.

Title & MW Acquisition Compilation Plan







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REGISTER SEARCH STATEMENT (Title Search) Transfer of Land Act 1958

VOLUME 07742 FOLIO 164

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LAND DESCRIPTION

Lot 1 on Title Plan 520069Y (formerly known as part of Lot 13 on Plan of Subdivision 010630). PARENT TITLE Volume 06963 Folio 480 Created by instrument 2236049 03/08/1949

REGISTERED PROPRIETOR

Estate Fee Simple Joint Proprietors

> NAVARATNAM NADARAJAMOORTHY DHUSYANTHI NADARAJAMOORTHY both of 15 HINRICHSON DRIVE HALLAM VIC 3975 AC593295B 10/01/2004

ENCUMBRANCES, CAVEATS AND NOTICES

MORTGAGE AE873436H 01/02/2007

NATIONAL AUSTRALIA BANK LTD

Any encumbrances created by Section 98 Transfer of Land Act 1958 or Section 24 Subdivision Act 1988 and any other encumbrances shown or entered on the plan set out under DIAGRAM LOCATION below.

DIAGRAM LOCATION

SEE TP520069Y FOR FURTHER DETAILS AND BOUNDARIES

ACTIVITY IN THE LAST 125 DAYS

NIL

----- SEARCH STATEMENT-----END OF REGISTER SEARCH STATEMENT-----

Additional information: (not part of the Register Search Statement)

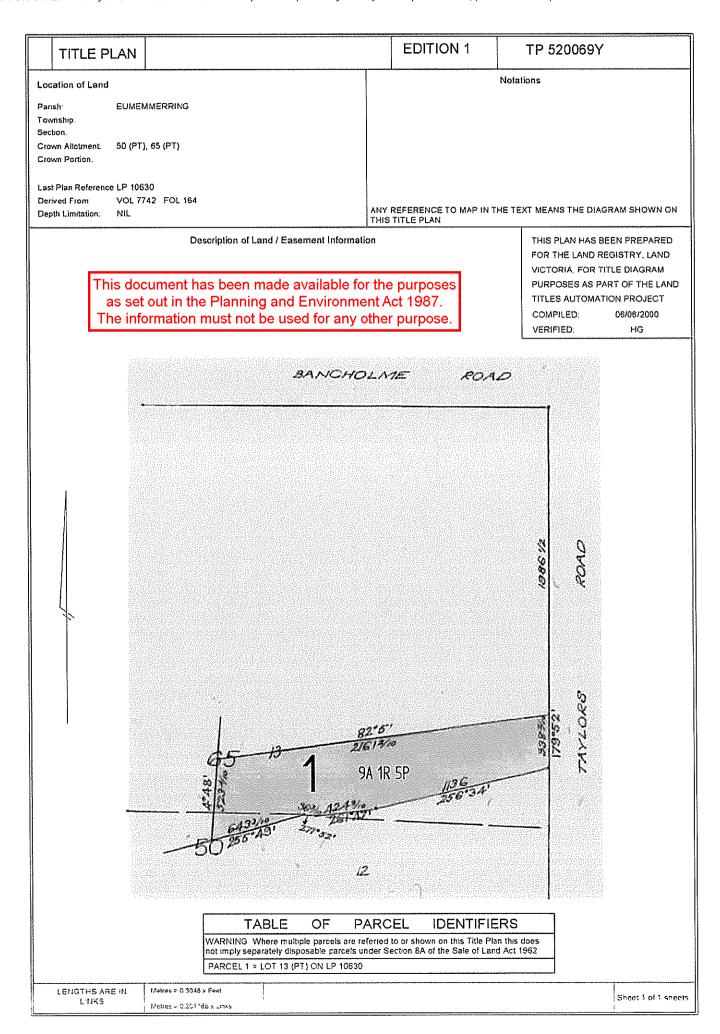
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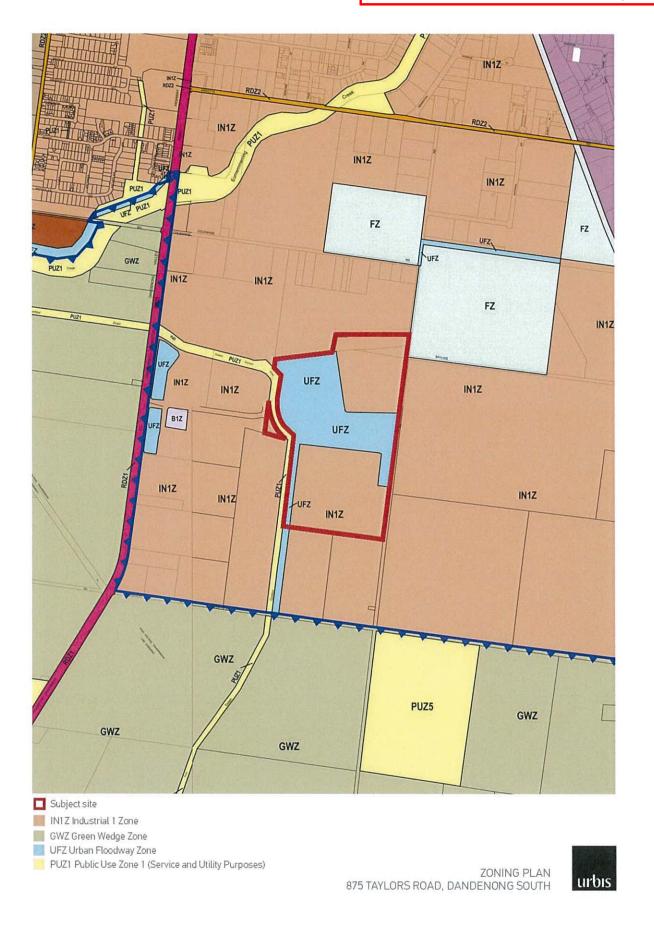
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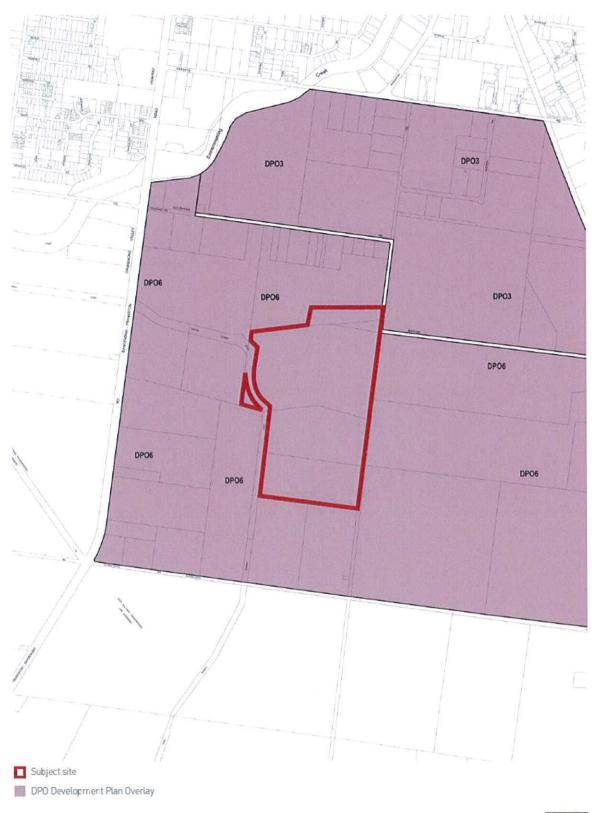
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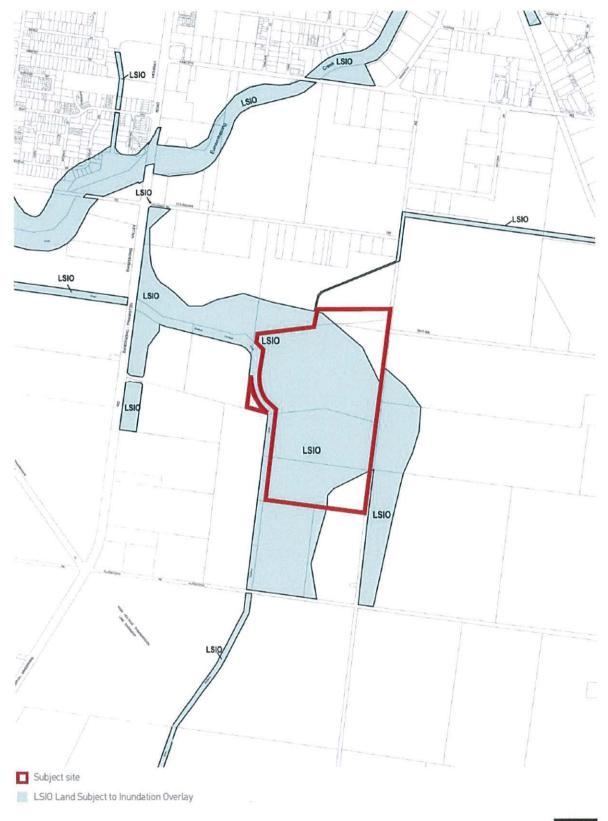
Attachment 2 Zoning and Overlay maps





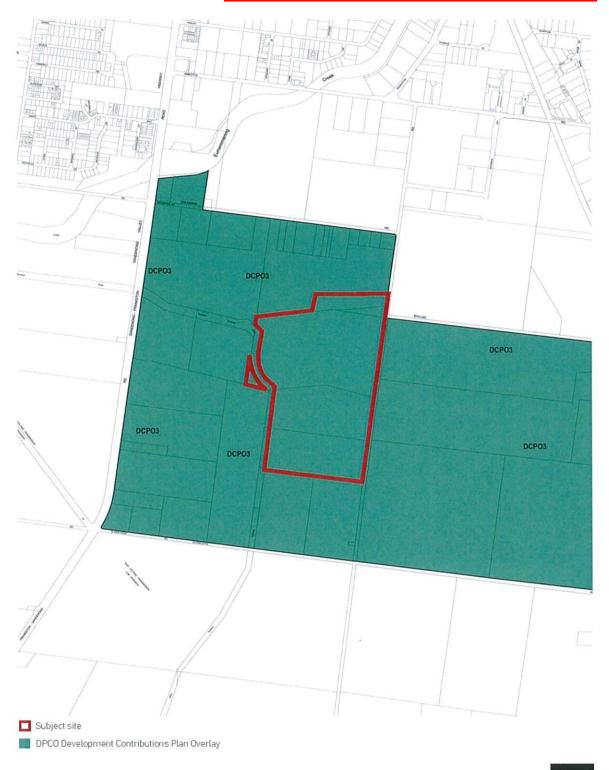
DEVELOPMENT PLAN OVERLAY 875 TAYLORS ROAD, DANDENONG SOUTH





LAND SUBJECT TO INUNDATION OVERLAY 875 TAYLORS ROAD, DANDENONG SOUTH









PUBLIC ACQUISITION OVERLAY 875 TAYLORS ROAD, DANDENONG SOUTH



Attachment 3

Department of Planning and Community Development's letter approving the Cultural Heritage Management Plan



HELEN TANG.

Department of Planning and Community Development

MRGENT

Aboriginal Affairs Victoria

This document has been made available for the purposes as set out in the Planning and Environment Act 1987.
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Level 9, 1 Spring Street Melbourne VIC 3000 GPO Box 2392 Melbourne VIC 3001 Telephone: 03 9208 3333 Faesimile: 03 9208 3680 ABN: 30 485 673 497

www.dped.vie.gov.au

Mrs Helen Tang
Mirimah Investments Pty Ltd
Suite 1, Level 2
261 Thomas Street
DANDENONG VIC 3175

Dear Mrs Tang

EVALUATION OF CULTURAL HERITAGE MANAGEMENT PLAN 11432: INDUSTRIAL SUBDIVISION: 875 TAYLORS ROAD, DANDENONG SOUTH

I refer to your application, received on 9 March 2012, for approval of the cultural heritage management plan (management plan) 11432.

This management plan meets the standards prescribed for the purposes of s.53 and s.61 of the *Aboriginal Heritage Act 2006* (the Act), and is in the approved format. Therefore, acting under authority delegated to me by the Secretary, Department of Planning and Community Development and pursuant to section 65(2) of the Act, I approve the management plan 11432 and attach a notice of approval for that purpose.

The sponsor of an approved management plan must, within 14 days after the approval of the plan, give to the Secretary in the approved form, all assessment documentation relating to Aboriginal cultural heritage prepared or obtained in the course of the conduct of the assessment for the plan pursuant to section 67(1) of the Act.

Assessment documentation includes a PDF of the management plan (with the approval notice/s inserted after the title page); Victorian Aboriginal Heritage Register forms not yet lodged; archaeological survey and excavation attributes forms; relevant photographs; and shapefiles of the activity area, ground survey areas, subsurface testing or excavation pits or transects, and the extent of Aboriginal Places recorded.

The recommendations in this management plan are now compliance requirements. Officers from the Department of Planning and Community Development may attend the subject land to monitor compliance with the recommendations. You may wish to discuss compliance requirements and, if so, you should contact Ms Liz Kilpatrick, Manager Heritage Assessments (9208 3268).

Yours sincerely

IAN HAMM

Executive Director Aboriginal Affairs Victoria

...9.*1991*2.12012



Aboriginal Heritage Act 2006 Section 65

Cultural Heritage Management Plan - Notice of Approval

I, Ian Hamm, Executive Director, Aboriginal Affairs Victoria, acting under authority delegated to me by the Secretary, Department of Planning and Community Development, hereby approve the cultural heritage management plan referred to below:

INDUSTRIAL SUBDIVISION: 875 TAYLORS ROAD, DANDENONG SOUTH

Cultural Heritage Management Plan number: 11432

Sponsor: Mrs Helen Tang of Mirimah Investments Pty Ltd

Cultural Heritage Advisors: Mr Ashley Matic and Mr John Hyett [TerraCulture Heritage Consultants]

[Terraculture Heritage Consultants]

Authors: Mr Ashley Matic and Mr John Hyett [TerraCulture Heritage Consultants]

Cover Date: 8 March 2012

Pages: viii + 81 numbered pages

Received for Approval: 9 March 2012

Pursuant to s.65(6) of the Act this cultural heritage management plan takes effect upon the granting of this approval.*

The recommendations in this management plan are now compliance requirements.

Signed:

IAN HAMM

Dated:

9APR 2012

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

Attachment 4 Comprehensive Cultural Heritage Management Plan document

Industrial Subdivision: 875 Taylors Road, Dandenong South

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Cultural Heritage Management Plan No. 11432



Sponsor: Mirimah Investments Pty. Ltd.

Cultural Heritage Advisor: Ashley Matic and John Hyett

Authors: Ashley Matic and John Hyett

Date: 08/03/2012



340 Separation Street Northcote, VIC, 3070 Ph: (03) 9486 4524 inquiries@terraculture.com.au

Industrial Subdivision: 875 Taylors Road, Dandenong South

This document has been made available for the purposes as set out in the Planning and Environment Act 1987. The information must not be used for any other purpose.

Cultural Heritage Management Plan No. 11432

Sponsor: Mirimah Investments Pty. Ltd.

Cultural Heritage Advisor: Ashley Matic and John Hyett

Authors: Ashley Matic and John Hyett

Date: 08/03/2012



340 Separation Street Northcote, VIC, 3070 Ph: (03) 9486 4524 inquiries@terraculture.com.au

EXECUTIVE SUMMARY

This document has been made available for the purposes as set out in the Planning and Environment Act 1987.

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Activity Description

The proposed Activity is the subdivision of approximately 73.2 hectares of land in Taylors Road, Dandenong South, for use as a light industrial estate.

The Activity Location

The Activity Area is located at 875 Taylors Road, Dandenong South. It is bordered by Taylors Road to the east, an industrial estate to the west, residential land to the north and agricultural land to the south.

Assessment Summary

The following is a summary of the assessment undertaken for this Activity Area.

Desktop

The Desktop Assessment identified that it is likely that Aboriginal cultural heritage is present within some sections of the Activity Area, particularly on those sandy landforms which have been identified as archaeologically sensitive in the past- specifically, the sandy rises located in the north east of the Activity Area. Much of the Activity Area, however, is located on a landform that would have not been conducive to Aboriginal occupation in the past (swamp) and therefore has a much lower potential to feature *in situ* deposits of Aboriginal cultural heritage material.

Standard

No new Aboriginal Cultural heritage Places were identified during the Standard Assessment.

The Activity Area was identified as having undergone high levels of prior disturbance, most noticeably the two drainage channels that have been excavated through it. A house and yards in the north eastern corner of the activity area has also resulted in significant levels of disturbance to the ground surface in those areas, both through construction of the house and through stock trampling within the yards.

Despite this, sections of the Activity Area were identified as having the potential to retain Aboriginal cultural heritage, specifically those areas located on the sandy rise identified immediately adjacent to Taylors Road in the north east of the activity area, which appears to be a continuation of the landform identified as containing Aboriginal Cultural heritage in the property to the east of Taylors Road.

While the survey did not identify any Aboriginal cultural heritage this is considered likely to be the result of the poor surface visibility over much of the area. In light of the desktop finding that there was a reasonable possibility of Aboriginal cultural heritage being present, the presence of potential archaeologically sensitive landforms and the inability to visually inspect much of the ground surface due to vegetation cover, a Complex Assessment for this section is required under Regulation 60(1) (a) of the Aboriginal Heritage Regulations 2007 as it is considered likely that Aboriginal cultural heritage could be present and it is not possible to identify the extent, nature and significance of any Aboriginal cultural heritage in the Activity Area unless a complex assessment is carried out.

Complex

One Aboriginal cultural heritage place was discovered during the sub-surface testing, VAHR7921-1318 (Taylors Road Industrial Estate 1), a low-density stone artefact scatter consisting of quartz and silcrete materials located on a low sandy rise in the north-east of the activity area. Testing determined that this site covers at least the eastern half of the rise located within the activity area and is likely to extend to the west, however the presence of a derelict house and associated sheds, tracks and refuse on this part of the rise did not make sub-surface investigation of this area possible. Testing also identified that west of the house and associated outbuildings there was no cultural heritage material present on the rise, however this area is topographically considerably lower than that on which the house complex is located; it is likely, therefore, that the site is associated with the more elevated components of the landform.

Outside of the rises located in the north east of the Activity Area, the majority of it is low-lying former swamp land; due to the constraints of saturated soils and surface water it was not possible to test over the entire former swamp landform within the activity area, however the areas that were examined demonstrated a uniform soil profile of former swamp deposits. No cultural heritage was identified during the testing undertaken within this landform, and given that the soil profile appears to be relatively uniform across it, it is considered unlikely that any Aboriginal cultural heritage is located within this landform within the activity area.

It is therefore considered that the archaeological potential within the Activity Area is limited to the sandy rises in the north east; the sub-surface testing program conducted for this CHMP is believed to have sufficiently examined this landform and therefore determined both the nature and extent of Aboriginal Cultural Heritage within the Activity Area.

Results and Summary of the Aboriginal Cultural Heritage Identified During the Assessment

There is one Aboriginal place within the activity area, VAHR7921-1318 (Taylors Road Industrial Estate 1), a low-density stone artefact scatter located on the crest and eastern slope of the low sandy rise situated in the north eastern corner of the Activity Area. The scatter consists of a total of twenty artefacts; eight pieces of silcrete and twelve pieces of quartz. These were found in a sub-surface context between 30cm and 90cm below the current ground surface.

Recommendations

Please refer to sections 8.1 and 9.2 for a full summary of recommendations to be implemented, including processes to be followed, upon approval of this Cultural Heritage Management Plan.

Recommendation 1

Prior to the commencement of works, a program of archaeological salvage is to be carried out on the site. Salvage of the site is to be conducted by a qualified archaeologist with participation from representatives of the relevant local Aboriginal community group(s). Any excavated cultural heritage material should be provided to a qualified Archaeologist upon completion of the works, for analysis and inclusion within a report detailing the results of the salvage.

Any excavated cultural material, including that recovered during the complex assessment conducted for the preparation of this CHMP, is to be re-buried on site, preferably within open space, upon completion of a report outlining the nature and significance of the salvaged material.

Recommendation 2

Cultural Heritage Awareness Training will be required for any contractors working on the site prior to the commencement of works, to prevent damage to or destruction of further components to the site during works.

A copy of this CHMP is to be retained on site allowing completion of this training to ensure the recommendations and contingencies contained within are followed appropriately.

The costs for all salvage works (fieldwork, report writing, cataloguing, analysis, and storage of artefacts) and induction works, including the costs for Aboriginal community representation, are the responsibility of the sponsor.

Contingency Plans

Please refer to Section 9 for all contingency plans to be followed with regards to management of Aboriginal Cultural Heritage within the Activity Area upon approval of this Cultural Heritage Management Plan.

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PART 1 - ASSESSMENT

1. Introduction

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1.1 Preamble

TerraCulture Pty Ltd was commissioned by Head & Humphries Pty. Ltd., on behalf of Miramah Investments Pty Ltd to prepare a Cultural Heritage Management Plan (CHMP) for a proposed industrial subdivision of land at 875 Taylors Road, Dandenong South, with an area of 73.2 hectares.

A full Glossary of terms used within this CHMP is provided in Appendix 1

1.2 Reasons for Preparing the Management Plan

Part 2 Division 1 of the *Aboriginal Heritage Regulations 2007* states that a CHMP is required under the regulations if:

(a) all or part of the activity area for the activity is an area of cultural heritage sensitivity; and (b) all or part of the activity is a high impact activity.

Division 3 specifies 'areas of cultural heritage sensitivity'. Regulation 31 lists the Koo Wee Rup Plain, marked "Qrm" on the Geological Survey of Victoria 1:250 000 map series sheet SJ55-9 Queenscliff (second edition 1997) as an area of cultural heritage sensitivity.

Division 5 specifies 'high impact activities'. Regulation 46 (2) states that the subdivision of land into two or more lots in an industrial zone is a high impact activity.

Most of the Activity Area lies within an area deemed as being of cultural heritage sensitivity under the regulations, the Koo Wee Rup Plain, and the activity meets the definition of a high impact activity. Therefore this is a mandatory CHMP under Section 46 (a) of the *Aboriginal Heritage Act* 2006.

1.3 Notice of Intention to Prepare a Management Plan

Under section 54 of the *Aboriginal Heritage Act 2006* and attached to this CHMP, the sponsor submitted a Notice of Intent to prepare a Cultural Heritage Management Plan (NOI) to AAV. As there is no Registered Aboriginal Party (RAP) appointed for the area and the sponsor is the owner of the land, no other person or body needed to be notified.

A copy of the Notice of Intent and the response received from AAV is included as Appendix 2.

1.4 The Name of the Sponsor

The Sponsor of this CHMP is:

Company: Miramah Investments Pty Ltd

Contact: Mrs Helen Tang

Address: Suite 1, Level 2, 261 Thomas Street, Dandenong, 3175

Phone: (03) 9706 7695 **ABN:** 32 006 951 766

1.5 Cultural Heritage Advisor (in accordance with Section 189 of the Act)

The Cultural Heritage Advisors for this CHMP are Ashley Matic and John Hyett.

Ashley holds a Masters of Arts degree in Archaeology from the Flinders University of South Australia in addition to a Bachelor of Archaeology (Honours) degree from the same institution, and has ten years experience in conducting archaeological assessments, both Aboriginal and Historical, in Victoria, New South Wales, South Australia and Queensland, including five years of conducting Aboriginal cultural heritage assessments in Victoria.

John holds a Bachelor of Arts (Honours) majoring in Archaeology from the University of La Trobe and has ten years experience in Aboriginal cultural heritage assessments in Victoria and southern New South Wales

1.6 The Names of Owners and or Occupiers of the Activity Area Land

The land is owned by Miramah Investments Pty Ltd. Their contact details are:

Company: Miramah Investments Pty Ltd

Contact: Mrs Helen Tang

Address: Suite 1, Level 2, 261 Thomas Street, Dandenong, 3175

Phone: (03) 9706 7695 **ABN:** 32 006 951 766

The Activity Area is currently being leased as farm land, and it has no occupants at this time.

1.7 Registered Aboriginal Parties with the responsibility for the Activity Area

The Aboriginal Heritage Act 2006 requires consultation with any Registered Aboriginal Parties (RAPs) registered under the State act. At the time of the commencement of the CHMP no RAP was registered for the Activity Area.

There is currently one application before the Aboriginal Heritage Council for appointment as the RAP for the activity area, the Wurundjeri Tribe Land and Compensation Cultural Heritage Council Inc. Additionally, both the Bunurong Land Council Aboriginal Corporation and Boon wurrung Foundation have been recognised as traditional owners of the lands on the Mornington Peninsula, including the Dandenong area, and must be consulted in relation to the preparation of any CHMP in that area.

2. Activity Description

2.1 Description of the Proposed Activity (in accordance with Clause 6.1, Schedule 2 of the Regulations)

2.1.1 Proposed Activity

The proposed Activity is the subdivision of approximately 73.2 hectares of land in Taylors Road, Dandenong South, for use partly as a light industrial estate and partly as Melbourne Water wetlands. The subdivisional layout is not finalised and detailed engineering design has yet to be carried out but the preliminary layout shows a total of 49 lots, ranging in size from 0.27 ha to 2.9 ha and occupying 34.26 ha (Figure 1). Access roads are also included. The remainder of the Activity Area is to be Melbourne Water reserve (Figure 2) and an area of open space will be retained on the western bank of the Eastern Contour Drain. The Council will be realigning part of Taylors Road to create a roundabout at the junction with Bayliss Road and to protect significant trees.

The lower areas of the industrial estate will require the addition of fill to an expected depth of up to one metre above the current land surface. Trenching for sewers and drainage are expected to be between two and four metres deep while those for water, gas, electricity and telecommunication facilities are expected to be up to 1.4 metres deep.



Figure 1 - Preliminary subdivision plans



Figure 2 - Proposed wetlands

2.1.2 Possible Impact on Aboriginal cultural heritage

The activity will disturb the current land surface and possible buried former land surfaces during the subdivision. As such, any Aboriginal cultural heritage present may be harmed.

3. Extent of Activity Area

The whole extent of the Activity Area is shown in Map 1 outlined in yellow. The Management Plan covers the whole of this area to the extent of planned works and any ancillary activities.

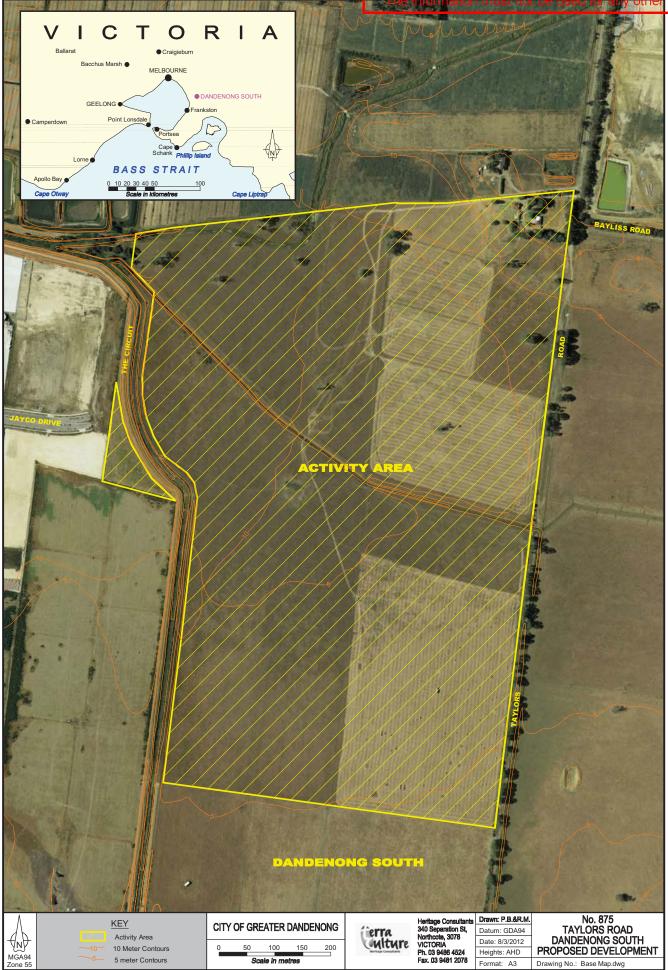
The activity area consists of four separate titles being:

- Volume 9961 Folio 818;
- Volume 9961 Folio 819;
- Volume 9961 Folio 820; and
- Volume 9961 Folio 821.

This land forms an irregularly shaped block of approximately 73.2 hectares of size, bounded to the east by Taylors Road and to the west mainly by the Eastern Contour Drain. This drain bisects vol 9961 fol 820 leaving approximately 7,000 square metres on the western side of the drain (see Map 1).

The activity area is within the City of Greater Dandenong and is partly zoned "Industrial 1 Zone" and partly "Urban Floodway Zone".

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4. Documentation of Consultation

4.1 Consultation in relation to the assessment

The following tables provide details of any consultation in relation to the assessment of the Activity Area for the purposes of the Management Plan.

Date	Participants	Organisation	Consultation Type
10/01/2011,	Pamela Smith	TerraCulture Pty. Ltd.	Notification of fieldwork and request for participation
10/04/2011, 11/05/2011,	Sonia Murray	Bunurong Land Council Aboriginal Corporation	
16/01/2012, 17/02/2012	Fjorn Butler	Wurundjeri Tribe Land Compensation and Cultural Heritage Council, Inc.	
	Gabrielle Gunderson Carolynne Wilson	Boon wurrung Foundation Boon wurrung Foundation	

Table 1 - Consultation in relation to assessment summary

4.2 Participation in the conduct of the assessment

Table 2 identifies the names of those individuals who participated in the field assessment.

Date	Name	Owneriestien	Role
Date	Name	Organisation	Role
18/01/2011	Ashley Matic	TerraCulture Pty. Ltd.	Supervising archaeologist
	Dana Kells	TerraCulture Pty. Ltd.	Archaeological Field Assistant
	Dan Turnbull	Bunurong Land Council Aboriginal Corporation	Aboriginal Field Representative
	Gary Galway	Wurundjeri Tribe Land Compensation and Cultural Heritage Council, Inc.	Aboriginal Field Representative
14/4/2011	John Hyett	TerraCulture Pty. Ltd.	Supervising archaeologist
	Mike O'Connor	TerraCulture Pty. Ltd.	Archaeological Field Assistant
	Zac Spielvogel	TerraCulture Pty. Ltd.	Archaeological Field Assistant
	Darren Symington	Bunurong Land Council Aboriginal Corporation	Aboriginal Field Representative
	Kerry Xiberras	Wurundjeri Tribe Land Compensation and Cultural Heritage Council, Inc.	Aboriginal Field Representative
15/4/2011	John Hyett	TerraCulture Pty. Ltd.	Supervising archaeologist
	Mike O'Connor	TerraCulture Pty. Ltd.	Archaeological Field Assistant
	Zac Spielvogel	TerraCulture Pty. Ltd.	Archaeological Field Assistant
	Darren Symington	Bunurong Land Council Aboriginal Corporation	Aboriginal Field Representative
18/4/2011	John Hyett	TerraCulture Pty. Ltd.	Supervising archaeologist
	Richard Marshall	TerraCulture Pty. Ltd.	Archaeological Field Assistant
	Iris Pepper	Bunurong Land Council Aboriginal Corporation	Aboriginal Field Representative
	Kerry Xiberras	Wurundjeri Tribe Land Compensation and Cultural Heritage Council, Inc.	Aboriginal Field Representative
19/4/2011	John Hyett	TerraCulture Pty. Ltd.	Supervising archaeologist
	Mike O'Connor	TerraCulture Pty. Ltd.	Archaeological Field Assistant
	Zac Spielvogel	TerraCulture Pty. Ltd.	Archaeological Field Assistant
	Iris Pepper	Bunurong Land Council Aboriginal Corporation	Aboriginal Field Representative
	Kerry Xiberras	Wurundjeri Tribe Land Compensation and Cultural Heritage Council, Inc.	Aboriginal Field Representative

Date	Name	Organisation	Role
20/4/2011	John Hyett	TerraCulture Pty. Ltd.	Supervising archaeologist
	Mike O'Connor	TerraCulture Pty. Ltd.	Archaeological Field Assistant
	Zac Spielvogel	TerraCulture Pty. Ltd.	Archaeological Field Assistant
	Iris Pepper	Bunurong Land Council Aboriginal Corporation	Aboriginal Field Representative
	Robert Mullins	Wurundjeri Tribe Land Compensation and Cultural Heritage Council, Inc.	Aboriginal Field Representative
17/5/2011	John Hyett	TerraCulture Pty. Ltd.	Archaeologist
	Mike O'Connor	TerraCulture Pty. Ltd.	Archaeological Field Assistant
	Wayne Pepper	Bunurong Land Council Aboriginal Corporation	Aboriginal Field Representative
	Robert Mullins	Wurundjeri Tribe Land Compensation and Cultural Heritage Council, Inc.	Aboriginal Field Representative
18/5/2011	John Hyett	TerraCulture Pty. Ltd.	Archaeologist
	Wayne Pepper	Bunurong Land Council Aboriginal Corporation	Aboriginal Field Representative
	Robert Mullins	Wurundjeri Tribe Land Compensation and Cultural Heritage Council, Inc.	Aboriginal Field Representative
21/2/2012	Ashley Matic	TerraCulture Pty. Ltd.	Supervising archaeologist
	Monica Toscano	TerraCulture Pty. Ltd.	Archaeological Field Assistant
	Iris Pepper	Bunurong Land Council Aboriginal Corporation	Aboriginal Field Representative
	Eddie Ockwell	Wurundjeri Tribe Land Compensation and Cultural Heritage Council, Inc.	Aboriginal Field Representative
	Michael Williams	Boon wurrung Foundation	Aboriginal Field Representative
22/2/2012	Ashley Matic	TerraCulture Pty. Ltd.	Supervising archaeologist
	Monica Toscano	TerraCulture Pty. Ltd.	Archaeological Field Assistant
	Iris Pepper	Bunurong Land Council Aboriginal Corporation	Aboriginal Field Representative
	Robert Mullins	Wurundjeri Tribe Land Compensation and Cultural Heritage Council, Inc.	Aboriginal Field Representative
	Michael Williams	Boon wurrung Foundation	Aboriginal Field Representative
23/2/2012	Ashley Matic	TerraCulture Pty. Ltd.	Supervising archaeologist
	Monica Toscano	TerraCulture Pty. Ltd.	Archaeological Field Assistant
	Iris Pepper	Bunurong Land Council Aboriginal Corporation	Aboriginal Field Representative
	Danielle Mullins	Wurundjeri Tribe Land Compensation and Cultural Heritage Council, Inc.	Aboriginal Field Representative
	Kieran Satour	Boon wurrung Foundation	Aboriginal Field Representative

Table 2 - Participation in the conduct of the assessment

4.3 Consultation in relation to the recommendations

Date	Name	Organisation	Consultation
8/6/2011 John Hyett Darren Griffin Sonia Murray Gabrielle Gunderson		TerraCulture P/L Wurundjeri TLCAC Bunurong LCAC Boon wurrung Email inviting a 'statement of significal accordance with Aboriginal tradition'. No res from Bunurong	
27/6/2011	John Hyett Darren Griffin	TerraCulture P/L Wurundjeri TLCAC	Copy of draft report sent for comment. No comment received by 15/8/2011
21-23/02/12	Ashley Matic Eddie Ockwell Robert Mullins Danielle Mullins Iris Pepper Michael Williams Kieran Satour	TerraCulture P/L Wurundjeri TLCAC Wurundjeri TLCAC Wurundjeri TLCAC Bunurong LCAC Boon Wurrung Boon Wurrung	Discussions in field for establishment of site boundaries through suitable excavation techniques and analysis of landform; discussion of and establishment of suitable salvage methodology for recommendations, and discussions of contingencies for inclusion in final plan. Also discussed earlier conclusions of archaeological sensitivity for the whole activity area

Table 3 - Consultation Summary

4.4 Summary of outcomes of consultation

The outcomes of the consultation are summarised as follows:

- The representatives of the Aboriginal community groups were consulted during the fieldwork in regard to the survey and placement and extent of test pits;
- The representatives were happy with the extent of the sub-surface testing given the nature of the activity area in terms of landform and geomorphology;
- All parties were satisfied that the extent of the site identified in the activity had been formally identified;
- A program of archaeological salvage to be conducted prior to works occurring would be the best management strategy for the site given the nature of the proposed works that will impact upon it;
- The sandy rise in the north east of the activity area was recognised as the only area
 within it likely to contain significant in situ deposits of Aboriginal cultural heritage
 despite the impacts from construction of the farm house and outbuildings on it, while
 the lower lying former swamp was identified as having little to no archaeological
 potential; and
- The Aboriginal community groups were contacted regarding provision of statements of significance in accordance with Aboriginal tradition for the cultural heritage identified within the activity area.

5. Aboriginal Cultural Heritage Assessment

5.1 Desktop Assessment

5.1.1 Search of the Victorian Aboriginal Heritage Register

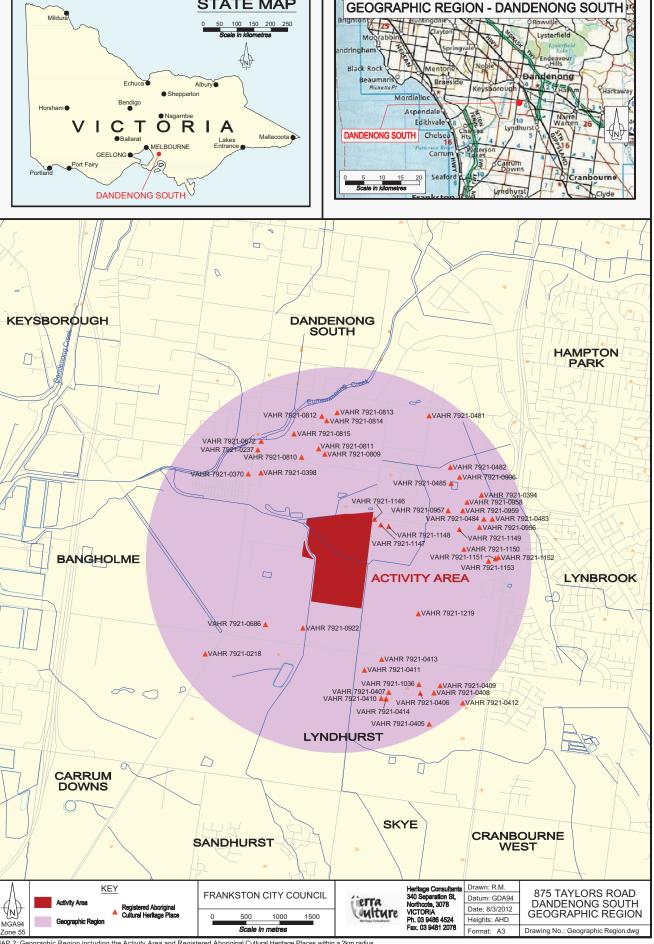
The Desktop Assessment was completed by Ashley Matic (Senior Project Archaeologist), with assistance from John Hyett (Archaeologist). Historical information and relevant background was obtained from published and unpublished documents and statutory registers were accessed and environmental information assessed.

A search of the Victorian Aboriginal Heritage Register (VAHR) and other registers was initially conducted by Caroline Seawright (TerraCulture Pty Ltd) on 27 September 2010. The VAHR was accessed several times during the preparation of the CHMP including, but not necessarily restricted to, 13 and 18 January 2011 by Jasma Walker (Archaeologist) and 2, 7 and 27 June 2011 by John Hyett. AAV maintains a register of all recorded Cultural Heritage Places and a library of all published and unpublished reports describing investigations of Aboriginal archaeological sites in Victoria. The VAHR was accessed electronically and a map generated showing the location and type of registered Aboriginal heritage places. Where available, site cards were copied and checked against the relevant report and maps contained therein.

5.1.2 The Geographic Region

While the majority of the activity area lies within the Koo Wee Rup Plains it is situated on the edge of the plain with a small section at the northern end containing Baxter Sandstone. An area of Pleistocene dune sands lies to the north; to the east lies an area of Baxter sandstone, and to the northwest an area of Moorabool Viaduct sands. In using the landscape all of these areas would have been utilised by Aboriginal people prior to European settlement. Much of the surrounding area has been subject to archaeological studies in the recent past and so, for the purposes of this assessment, the geographic region is defined as an area of approximately two kilometre radius surrounding the activity area. This is considered sufficient as it covers all four geological areas and because of the knowledge of the area built up through earlier studies.

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STATE MAP

5.1.3 Aboriginal places in the geographic region

There are no Aboriginal Cultural Heritage Places on the VAHR within the Activity Area (see Map 2). The registry search indicates that there are forty-seven registered Aboriginal archaeological sites within the geographic region, defined as a 2 kilometre radius around the activity area. Twenty-six of these sites are artefact scatters and twenty-one are scarred trees; a list of the recorded sites can be seen in Table 4.

VAHR Number	Place Name	Easting MGA94 Zone 55	Northing MGA94 Zone 55	Place Type	Location relative to Activity Area
7921-0218	Dandenong 5	342383	5785950	Scarred Tree	1.40 km SW
7921-0237	Dandenong 7	343012	5788384	Scarred Tree	1.00 km NW
7921-0370	Postregna Scarred Tree	342896	5788097	Scarred Tree	0.89 km NW
7921-0394	Bayliss Rd Scarred Tree 1	345681	5787845	Scarred Tree	1.3 km ENE
7921-0398	Kelly Bros SS	343237	5787814	Artefact Scatter / Collection	0.45 km NW
7921-0405	ST (2)	345056	5785113	Scarred Tree	1.63 km SE
7921-0406	ST (75)	344951	5785481	Scarred Tree	1.27 km SE
7921-0407	ST (45)	344574	5785491	Scarred Tree	1.15 km SSE
7921-0408	ST (1)	345114	5785485	Scarred Tree	1.35 km SE
7921-0409	ST No 3	345188	5785570	Scarred Tree	1.35 km SE
7921-0410	ST No 4	344485	5785419	Scarred Tree	1.15 km SSE
7921-0411	ST (16)	344284	5785757	Scarred Tree	0.75 km S
7921-0412	D/Hs Rd SS	345458	5785364	Artefact Scatter	1.70 km SE
7921-0413	ST (60)	344490	5785885	Scarred Tree	0.68 km SSE
7921-0414	ST (41)	344543	5785414	Scarred Tree	1.15 km SSE
921-0481	Parham Site 1	345056	5788791	Scarred Tree	1.33 km NNE
7921-0482	Parham Site 2	345310	5788178	Scarred Tree	1.08 km NE
921-0483	Parham Site 3	345810	5787559	Scarred Tree	1.40 km E
921-0484	Parham Site 4	345710	5787559	Artefact Scatter	1.33 km E
921-0485	Parham Site 5	345318	5787984	Scarred Tree	1.00 km ENE
921-0548	Anco Northwest	345842	5785611	Artefact Scatter	1.86 km SE
921-0549	Anco Central	345937	5785155	Artefact Scatter	2.00 km SE
921-0672	Colemans RD AS1	343051	5788486	Artefact Scatter	1.08 km NW
921-0686	45 Glasscocks RD ST	343102	5786301	Scarred Tree	0.63 km SW
7921-0809	Kelly 1	343813	5788335	Artefact Scatter	0.75 km N
7921-0810	Kelly 2	343536	5788297	Artefact Scatter	0.74 km N
7921-0811	Kelly 3	343740	5788397	Artefact Scatter	0.80 km N
7921-0812	Kelly 4	343777	5788787	Artefact Scatter	1.22 km N
7921-0813	Kelly 5	343960	5788830	Artefact Scatter	1.25 km N
921-0814	Colemans Road Scarred Tree 1	343836	5788732	Scarred Tree	1.15 km N
7921-0815	Colemans Road Scarred Tree 2	343444	5788577	Scarred Tree	1.02 km NNW
7921-0906	Bayliss Rd Scarred Tree 2	345420	5788060	Scarred Tree	1.13 km NE
921-0922	85 Glasscocks Road	343550	5786260	Artefact Scatter	0.35 km S
921-0956	Bayliss Road 2	345660	5787460	Artefact Scatter	1.30 km E
921-0957	Bayliss Road 3	345285	5787660	Artefact Scatter	0.91 km E
921-0958	Bayliss Road 4	345510	5787760	Artefact Scatter	1.12 km ENE
921-0959	Bayliss Road 5	345460	5787660	Artefact Scatter	1.06 km E
921-1036	Glasscocks Rd 1	344935	5785586	Artefact Scatter / Collection	1.17 km SE
921-1146	Lyndhurst Inland Port 1	344406	5787558	Artefact Scatter	35 m E
921-1147	Lyndhurst Inland Port 2	344482	5787491	Artefact Scatter	115 m E
921-1148	Lyndhurst Inland Port 3	344576	5787471	Artefact Scatter	208 m E
921-1149	Lyndhurst Inland Port 4	345418	5787435	Artefact Scatter	1.05 km E
921-1150	Lyndhurst Inland Port 5	345473	5787198	Artefact Scatter	1.15 k m E
921-1151	Lyndhurst Inland Port 6	345851	5787085	Artefact Scatter	1.55 km E
921-1152	Lyndhurst Inland Port 7	345883	5787099	Artefact Scatter	1.55 km E
921-1153	Lyndhurst Inland Port 8	345766	5787058	Artefact Scatter	1.40 km E
'921-1219	Lyndhurst Inland Port 9	344929	5786430	Artefact Scatter / Collection	0.07 km E

Table 4 - Registered Aboriginal cultural heritage places within the geographic region

5.1.4 Previous work in the geographic region

The current activity area is in a region that has undergone several large scale regional studies, and has also seen the completion of many smaller, development specific assessments. Some

of these have been undertaken in close proximity to the activity area, with CHMPs completed or being undertaken for activities to the north and south of the current activity area.

A review of the relevant studies is presented below.

5.1.4.1 Regional Surveys

Rhodes 2001

Rhodes conducted a regional study over the Greater City of Dandenong area, including several areas of pedestrian survey (the current activity area, however, was not covered by pedestrian survey). Despite covering several large areas of the City, only two new sites were identified- a scarred tree and an isolated artefact occurrence, however three large areas of archaeological potential were identified - one of which includes the current Activity Area.

Rhodes identified that the sandier landforms within the south-east of the wider survey region, including those on which the activity area is located, are the most archaeologically sensitive remnant landforms in the area, and that these features have the highest likelihood of retaining stone artefact sites. Rhodes also states, however, that any such sites are also likely to have been disturbed through market gardening and ploughing activities in the past.

Rhodes also noted the large number of mature native trees in the south east of the city region (again including the activity area) which have the potential to feature Aboriginal scarring.

Rhodes 1990

Rhodes also conducted a large regional study of Dandenong Creek and Patterson River, which passes to the north of the Activity Area. A low number of sites were identified during the field survey, including seven scarred trees and one artefact scatter, the majority of which were identified within 250m of the waterway. Rhodes has attributed the lack of sites identified during the assessment as likely to be a result of development work and historic land use practices along the waterway.

Smith 1989

Smith conducted a broad-scale Aboriginal archaeological survey of the Berwick – Pakenham Growth Corridor. The survey sampled portions of four landscape units defined thus;

- Undulating Hills
- Lowland Plains
- Flood Plains
- Cranbourne Sands

The survey resulted in the location of sixty-two new Aboriginal archaeological sites, thirteen of which were in the Undulating Hills category, including thirty-three isolated artefacts, five artefact scatters (the most common raw materials for the stone artefact sites being chert and quartz), two scarred trees (on River Red Gums) and six isolated stone artefacts. The Cranbourne sands were identified as having the highest archaeological sensitivity.

Smith's site prediction model for the undulating hills landform unit is summarised thus;

- Artefact scatters and isolated artefacts are the most likely site type to occur.
- Most artefact scatters will occur within 50m of permanent creek lines while isolated artefacts will mostly be found on hill slopes and tops.
- Site densities are lower than elsewhere in the corridor and this may be explained by either the relatively lower amount of food resources or by the presence of the boundary between *Bunurong* and *Wurundjeri*.
- Scarred tree sites are not expected to occur more than 50m from creek lines.
- Sites in the eastern end of this unit will be dominated by chert and silcrete artefacts.

Presland 1983

Presland conducted a large regional survey of the Melbourne Metropolitan area, which includes the current activity area. The Activity area falls within what Presland identifies as Landscape Unit 1 (Presland 1983: 5), which consists of a flat plain which features the alluvial fans, terraces and valleys of the Yarra and Maribyrnong rivers.

Presland identified that while the landform has been severely affected by development works, it still features the potential to contain archaeological sites with ten new sites identified during the field component of his assessment. Site types recorded and likely to be present include scarred trees and stone artefact sites (both isolated artefact occurrences and scatter sites), with sites likely to be associated with elevated landforms particularly those close to existing and former fresh water sources (ie Cranbourne Swamp). In particular, Presland identified the market garden areas around Cranbourne as one of the areas where limited residential and commercial development may have led to the retention of Aboriginal archaeological sites.

5.1.4.2 Local Surveys

Murphy and Rymer 2008a

Murphy and Rymer conducted an archaeological survey of a 74 hectare parcel of land immediately to the north of the current activity area which had been surveyed previously by Marshall and Webb (2001). Two sites had been recorded in the study area in the earlier assessment, both surface artefact scatters, which had undergone significant disturbance in the past through drain excavation and other agricultural activities on the property; during the survey one of these sites was re-located and three new silcrete artefacts identified.

Murphy 2007

Murphy conducted an assessment of a 15.6 hectare property immediately to the south of the current activity area, on the corner of Glasscocks Road and Taylors Road, Lyndhurst. No Aboriginal archaeological sites or areas of potential sensitivity were identified during the survey.

Bell and Rhodes 2004

Bell and Rhodes conducted a survey and sub-surface testing at a proposed subdivision at the corner of Glasscocks Road and the Western Port Highway in Lyndhurst. Several areas of Aboriginal archaeological potential were identified in the survey; subsequent testing identified five sub-surface sites within the property.

The sites were all identified in a sub-surface context at depths between 200 to 900mm, and all consist of low density artefact sites with none containing more than seven artefacts. The artefact assemblage contained chert, silcrete, quartz, quartzite and ironstone artefacts, and aside from a single core that was recovered, all the objects were flakes or flaked pieces.

Long et. al 2004

Andrew Long and Associates conducted an assessment of the proposed Eastern Irrigation Scheme between Taylors Road and Matthews Road, Cranbourne, to the south of the current activity area. A total of ten Aboriginal archaeological sites were identified in surface contexts along the proposed pipeline alignment, all of which were artefact scatters associated with sand drifts or elevated areas of the Cranbourne Volcanics landform. All of the sites contained a low number of artefacts (five or less) and the majority of the material identified was silcrete, with some quartzite artefacts also identified.

Murphy 2004

Survey of 'Jayco Land' located at 449-523 Frankston-Dandenong Road, Lyndhurst recorded no new Aboriginal archaeological sites, which has been interpreted as a reflection of the impacts of post-contact land-use of the study area.

Rhodes 2002

Rhodes conducted a survey of land immediately to the north-east of the current activity area which identified six new Aboriginal archaeological sites including five scarred trees and one stone artefact scatter. Rhodes identified that the potential for further sites to be located in the study area was low due to the high levels of prior disturbance it has undergone through market gardening activities.

Weaver and Haley 2002

The Anco Turf Farm is located on the Westernport Highway approximately 1 kilometre north of Thompsons Road, and was the subject of two archaeological investigations in 2002 and 2003. Weaver and Haley surveyed the Anco Turf Farm in January 2002. At the time of this survey, surface visibility over the whole property was limited to between 0-5%. During the survey six

Aboriginal archaeological sites were located, comprising one artefact scatter, four isolated artefacts and one scarred tree.

Weaver and Haley concluded that the Aboriginal archaeological sites recorded were comparable to others in the surrounding area, in terms of both the raw materials and tool types. Consequently, they considered most of the sites to be of low scientific significance; however, one of the stone artefact sites and a scarred tree were considered to be of medium significance. Weaver and Haley (2002: 12) noted in particular that only one isolated artefact was located on the high ground within the survey area, which was in direct contrast to the broader site distributions in the area. They reflected that the location of the larger artefact site could not be attributed to any particular existing feature within the landscape. They thus concluded that the site distribution was a result of extensive disturbance to the subject land, particularly from ploughing, which had considerably altered the terrain.

Subsequently, TerraCulture Pty Ltd returned to the Anco Turf Farm in May 2003 (<u>Chamberlain 2003</u>). At this time the majority of the turf plots were cleared of lawn, leaving approximately 50% of the property with excellent ground surface visibility. In these conditions, the recommendation for sub-surface testing was considered inappropriate and a crew of three carefully surveyed all of the vacant plots.

The survey resulted in the location of four new Aboriginal archaeological sites and in combination with the sites located by Weaver and Haley (2002), Chamberlain concluded that the site distribution did broadly conform to the local topography, in that the majority of the artefacts were located on the high points and that the isolated material was more a result of dispersal and disturbance due to historic land use practises.

Weaver and Haley 2001

The survey of a 20.84 hectare property at 250 Dandenong-Hastings Road, Lyndhurst, did not identify any new Aboriginal archaeological sites or areas of potential.

Murphy 2001

Murphy was commissioned to undertake a cultural heritage investigation of 131 hectares of land set aside for a proposed cemetery located west of Westernport Highway, Lyndhurst, directly to the north of the current survey area. During the survey one Aboriginal surface scatter and nine scarred trees (7921-0405 to 7921-0414) were recorded. The sandy hilltop in the eastern section of the study area was assessed as containing potential for sub-surface deposits of both Aboriginal and historic archaeological material. Based upon the results of the investigation, it was recommended by Murphy that the scarred trees (7921-0405 to 7921-0414) be preserved and the hilltop area identified as a potentially sensitive area to be further assessed by subsurface testing.

Murphy 1998, 1999

Murphy was commissioned to conduct an archaeological survey of a 26 hectare property located at 550 South Gippsland Highway, Lyndhurst. Murphy (1998) recommended further archaeological investigation in the way of site survey to properly assess the study area. No Aboriginal archaeological sites were recorded during the survey, and Murphy concluded that there were no areas of Aboriginal archaeological sensitivity in the study area.

<u>Lane 1996</u>

This report looks at a survey and subsequent testing conducted on an area along the Dandenong-Hastings Road between Thompsons Road and Cranbourne-Frankston Road prior to proposed road widening works. Lane identified that the road passes over occurrences of the Cranbourne Sands; despite this, only one previously recorded artefact (7921-0182) was encountered on the survey, with no new cultural heritage sites identified. Subsurface testing also failed to identify any new sites, although due to the presence of the Cranbourne Sands much of the proposed area of works was identified as archaeologically sensitive.

Sciusco 1995

A field survey was conducted along a proposed 3 kilometre sewerage pipeline installation, between Dandenong-Hastings Road and Knowles Road in Cranbourne. No sites were identified within the study area; however one scarred tree was recorded outside of the study area.

5.1.4.3 CHMPs

Mitchell 2010

This CHMP was undertaken for an industrial development immediately to the north of the current Activity Area. A large scale sub-surface testing program was carried out for the project, with thirty-one test pits, twenty-eight mechanical scrapes and six shovel test pits excavated in the property, resulting in the recovery of 539 artefacts comprising one large site (Kelly Bros surface scatter VAHR 7921-0398) located in the north west of the activity area. The materials in the site were largely silcrete and quartz, with basalt, crystal quartz, glass, hornfels and basalt objects also recovered, with the assemblage comprised of waste material and formal tools, as well as several cores. Depth of recovery ranged from the surface to 140cm, with the majority of artefacts recovered from between 50 and 60 centimetres within sandy soils located in the activity area.

O'Reilly 2009

O'Reilly completed a CHMP for the proposed upgrade to the intersection of Pound Road and South Gippsland Highway/Abbots Road, located to the North east of the Current Activity area. No Aboriginal Cultural heritage sites were identified during the assessment.

Murphy and Morris, 2009

Murphy and Morris completed a CHMP for a proposed Gas Pipeline running across properties to the west of the current Activity Area. One new Aboriginal archaeological site was identified, a stone artefact scatter containing eight silcrete artefacts identified on a sandy landform along the pipeline alignment.

Murphy and Rymer 2008b

This CHMP was undertaken for a proposed industrial estate located to the north-east of the current Activity Area. Nine Aboriginal Cultural Heritage Places were identified within the Activity Area, including four scarred trees and five stone artefact scatters. The stone artefact sites were restricted to sandy landforms at the south of Murphy and Rymer's Activity area, and were dominated by silcrete, with quartz, basalt and quartzite materials also recovered.

Murphy and Rymer 2008c

Located to the West of the Current Activity Area, this CHMP was undertaken for a proposed Light Industrial development, with a scarred tree and two artefact scatters recorded in the activity area. Again, the stone artefact scatters were identified on the sandy landforms within the activity area, with silcrete and quartz materials the only types identified. The scatters were identified as being of low density, with a total of only thirteen artefacts identified in both the survey and sub-surface testing of the activity area.

Stone 2007

Stone conducted a CHMP for a proposed series of wetlands along Eumemmering Creek in Dandenong. The CHMP was limited to a Standard Assessment (field survey) and did not involve any sub-surface testing as it was determined that the area was a former swamp that was unlikely to contain any Aboriginal Cultural heritage. As expected, no Aboriginal archaeological sites were identified during the assessment carried out for the project.

Clark (in prep.)

Dr Vincent Clark and Associates conducted an assessment in 2009 for a CHMP of land immediately to the east of the current Activity Area. During the complex assessment a total of 724 test holes were excavated from which nine Aboriginal cultural heritage places were recorded. Three of these, 7921-1146, 7921-1147 and 7921-1148, were recorded in a low sandy rise that extends across Taylors Road into the current Activity Area. The largest of these, 7921-1146, consisted of sixty-nine artefacts with a maximum density of $34/m^2$ and occurring between 10cm and 110cm below ground level. The soil profile was generally dark grey silty sand becoming lighter at depth reaching a clay base between 68cm to 120cm.

5.1.5 Ethnohistory

The following section provides background information on the history of Aboriginal people within the activity area. Its purpose is to provide a historical context for the audits of known archaeological sites as well as the field investigation.

Melbourne was one of the major locations from where Europeans colonised much of Victoria and there is a wealth of written and illustrated text on the Aboriginal people of the area. Europeans made first written observations on the Aboriginal people of Port Phillip from 1802, when explorers began to chart the entrance to Port Phillip Bay. However, most of the text relates to 1835 onwards when there was a permanent European presence.

The primary sources of this ethnohistory have been collated by Clark (1990) in his reconstruction of traditional language boundaries in western Victoria. These sources include journal entries and government correspondence produced by explorers such as Matthew Flinders and Charles Grimes, as well as settlers and missionaries, particularly G.A. Robinson, the Chief Aboriginal Protector.

The following notes are restricted to information on linguistic and clan organisation for the group of Aboriginal people whose former territory probably included the Dandenong South study area.

Aboriginal Pre-Contact History

Bun wurrung linguistic and social organisation

According to Clark, the *Bun wurrung* were part of the East Kulin Language area, which covered central Victoria from the east side of Port Phillip Bay north to the Murray River (Clark 1990:363-4 & Table 20). The *Bun wurrung* were largely coastal people living around Western Port Bay, Port Phillip Bay east of the Werribee River and the Mornington Peninsula. The *Bun wurrung* language group was divided into six clans (Clark 1990: 263-5).

Clark defines the clan as the 'land owning, land renewing and land-sustaining unit of Aboriginal society' (1990: 4). Similarly, Barwick defines the term as 'a named localised patrilineal descent group ... whose members had an historical, religious and genealogical identity' (Barwick 1984: 106). She notes that 'Clan territories were defined by ritual and economic responsibilities. Clan names were distinguished by the suffixes -balluk or -bulluck meaning a number of people and – (w)illam...meaning dwelling place' (Barwick 1984: 106). Barwick continues her discussion on clan organisation noting that:

'Clan lands were exploited by residential groups (now termed bands) whose membership changed over time as nuclear families formed, aged and were replaced, and over the course of each year because the families and individuals instilled to make use of a specific clan estate were sometimes together (and) sometimes dispersed' (Barwick 1984: 106).

Whilst the composition of a clan was fluid during an individual's lifetime, 'clan membership was fixed at birth as these were inherited from a person's father and retained ... until death' (Barwick 1984: 106).

Bun wurrung clans shared close ties with the neighbouring Woi wurrung people who occupied the present Melbourne area based on the Yarra River drainage basin. Their language was a variant of Woi wurrung, spoken in the country of Lohan, the creation spirit who made the land between the mouth of the Yarra and Wilson's Promontory.

Ngaruk Willam

The Ngaruk Willam (literally 'Stone Dwellers') clan occupied land around Dandenong, Brighton and Mordialloc, between Mt Martha and Mt. Eliza, including the current Activity Area. Little else in the way of ethnographic material has been recorded for this clan, except that Poliorong was the Arweet from 1839 until his death in 1849 or 1850, prior to which it had been Tuolwing whose sons Nunnuptune and Mumba had served with the Native Police Corps (Clark 1990: 367).

The social organisation of the *Bun wurrung* was based on a moiety system that recognised clans and the individuals within them as belonging to one of two moieties; Waa (Crow) or Bunjil (Eaglehawk). The marriage system was based on these moieties and determined possible partners, which could only be of opposite moieties. In this way each generation of a clan married outside that clan (often to other language groups), reaffirming the religious, trade and social links between the separate groups. The *Ngaruk Willam* belonged to the Bunjil moiety (Clark 1990: 368)

Hunting and Gathering

There are few historic details on traditional *Bun wurrung* subsistence for the language group as a whole. It is likely that *Bun wurrung* patterns of settlement and movement were based on seasonal rounds following the changing availability of plant and animal resources. Indeed, Sullivan's (1981: 29-34 and Figure 3) review of Thomas' papers showing the movement of *Bun wurrung* groups around the Mornington Peninsula indicates the *Bun wurrung* extensively exploited both coastal and inland areas on the peninsula and elsewhere. *Bun wurrung* people maintained a number of pathways, or travelling routes, by which they moved around their country on an annual basis. Generally speaking, large numbers of people would gather on a seasonal basis at campsites associated with specific and plentiful resources (Sullivan 1981: 30). These larger groups would then split up into smaller foraging parties, which moved to specific localities as directed by the clan elders (Sullivan 1981: 31). The current study area would have supported a wide range of plants and animals that would have been exploited by *Bun wurrung* people. Examples of terrestrial, aquatic and marine resources traditionally exploited by the *Bun wurrung* people are presented in Table 5.

Resource	Uses		
Banksia spp	Cones soaked in water to extract nectar and make a sweet drink		
Melaleuca spp	Bark used for wrapping babies, timber used to make a variety of		
	implements, flowers used for nectar		
Yam daisy (myrnong)	Dietary staple throughout much of Victoria		
New Zealand Spinach	Leaves eaten uncooked		
Bracken Fern	Roots eaten after cooking and pounded into a paste		
Pigface (Carpobrotus spp)	Fruit eaten. Leaves can be sucked as a water source		
Manna Gum	Manna eaten		
Lilies (Thysanotus sp.)	Tubers eaten		
Prickly currant bush	Fruit eaten		
Orchids (Diuris sp.)	Bulbs eaten raw or cooked		
Drooping She-oak	Foliage chewed as a source of moisture		
Cherry ballart	Fruit eaten		
Acacia spp	Wattle gum was tapped, collected, often stored and eaten.		
Coast Beard-heath	Fruit eaten		
Kangaroo Apple	Fruit eaten		
Water Ribbon	Tubers cooked and eaten		
Cumbungi (Typha spp)	Many uses - food source, fibre, spears, reed necklaces		
Common Reed			
Mammals	Most mammals hunted – Eastern Grey Kangaroo, Black Wallaby,		
	Possum, Echidna particularly. Used for food, skins, echidna quills		
	used for necklaces		
Birds	Many species of marine and terrestrial birds trapped and eaten.		
	Their eggs were also gathered and eaten. Brush bird traps were		
	common.		
Shellfish	Marine shellfish, predominantly rock platform sp., were abundant		
	and regularly exploited.		
Fish (freshwater and marine)	Fish were often speared or caught in nets set in stone or brush		
Table E Evernles of Tradition	fishtraps on freshwater streams		

Table 5 - Examples of Traditional Resources that are likely to have been available to Bunurong people in and around the study area (Sullivan,1981; Zola & Gott 1990).

5.1.6 Landforms and/or geomorphology of the activity area

Geology and Geomorphology

The Activity Area has two geological formations within its boundaries (Figure 3). These formations are:

- Unnamed Holocene paludal: lagoon and swamp deposits of silt and clay (Qm1).
- Baxter Sandstone Miocene fluvial deposits of sandstone, conglomerate, siltstone and ironstone (Nxx) (GeoVic geological polygons).



Figure 3 - Geomorphology of the Activity Area (Red Outline)

The activity area falls within one Geomorphic land system, the Gippsland Plain (DSE Biodiversity map, land classification, geomorphology layer) and contains two Geomorphic Units (GMU) 7.1.1 (Barrier Complex) and 7.1.2 (Moderate Ridge).

The small area of Baxter Sandstone in the northern section of the activity area forms part of the Barrier Complex (7.1.1) and is described as coastal plains with ridges and dunes formed over Neogene sediments, generally mantled by a layer of sand of variable thickness. The soils are either acidic sandy texture contrast soils or deep, strongly acid sands with bleached subsoil and a hard, dark brown "B" horizon of "coffee rock" at about 0.8 metres, composed of organic matter and aluminium and/or iron compounds (VRO web site).

The larger section of the activity area lies within the alluvial plain (7.1.2) developed on the lower reaches of the Eumemmerring Creek. The drainage eventually flowed into swamps and lagoons, the closest being the Carrum Swamp, formerly grassy wetlands and remaining largely intact until about 40 years ago (VRO website).

Landform

The activity area is relatively flat and features only limited changes in topography, however it is slightly elevated at its north eastern corner. The activity area is dissected by two drainage channels that run roughly east west through it, one at the northern end (unnamed) and the other through the centre (Rodds Drain). Another drain, the Eastern Contour Drain, is located along the western boundary of most of the Activity Area, bisecting vol 9961 fol 820.

5.1.7 Land use history of the Activity Area

The activity area, being part of Crown Allotments 49 and 50 of the parish of Eumemmerring, was granted to James Goodwill Francis in 1859 (Land Application file no. 43956), a member of the Pilot Board of Victoria by the Office of Commissioner of Trade and Customs (Gov Gaz. 1857, 972). These allotments, each containing 147 acres (approximately 59 hectares), had good soil and were 'well-grassed' (parish plan, 1859).

Allotments 49 and 50, as well as 51, 52 and 65, were sold to James, Clement and William Henry Greaves, all graziers, for a total price of £ 2750 in 1884 (Land app. 43956). The land remained the property of the Greaves family until 1953, when it was purchased by Allan Bassett, a farmer from Lyndhurst. After his death in 1956, the land was passed on to Grace Luriel Bassett, William Roy Bassett and Norman Allan Bassett.

The subsequent owners of the activity area include:

SOURCE	DATE	OWNER			
Title Vol 8034/930	03 Jul 1958	Death of Allan Bassett in 09 July 1956, his will granted to Grace Luriel Bassett, widow, William Roy Bassett and			
		Norman Allan Bassett			
	30 Jan 1976	William Roy Bassett, auctioneer and Norman Allan			
		Bassett, oven operator, now the joint proprietors.			
	12 Oct 1989	Betsy Lurline Bassett.			
Title Vol nos.	12 Oct 1989	Miramah Investment Pty Ltd of 60 Garnett Road			
996/821		Wheelers Hill.			
996/820					
996/819					
996/818					

Table 6 - Landholders of the Activity Area since 1958

In the late 1800s drainage works on the Carrum Swamp were commenced, including the Eastern Contour Drain. It is probable that the other two drains, Rodds Drain and the unnamed drain were constructed as part of this drainage scheme. Within the low-lying land that comprises most of the Activity Area a series of shallow drainage lines have been excavated to facilitate run-off into the larger drains.

The Activity Area has been used as farming land, primarily grazing, since it was first settled by Europeans.

5.1.8 Conclusions from the desktop assessment

The desktop assessment has shown that Aboriginal people were present in the area both before and after European settlement. There have been several archaeological studies undertaken in the area immediately around the Activity Area which have resulted in many archaeological sites having been recorded, including several stone artefact scatters (in both surface and sub-surface contexts) and scarred trees. A study of the land use since European settlement indicates that disturbance has been significant enough to disturb many locations within the Activity Area which may contain Aboriginal Cultural Heritage places; however it is unlikely that it will have destroyed all archaeological evidence of Aboriginal occupation in the area.

The results of other assessments, particularly those immediately to the north (Mitchell 2010) and east (Clark in prep.) indicate that despite high levels of prior disturbance, significant concentrations of Aboriginal Cultural Material can still be retained within the sandier landforms in the region, such as those exhibited in the north of the current Activity Area. It has also been identified that the presence of a water source increases the potential for archaeological material to be present; the channel at the north of the property may be indicative of a former natural waterway which would increase the chance of Aboriginal Cultural heritage Material being located within that section of the activity area.

A review of the geology and geomorphology of the activity area has identified that the majority of the south and west of the property is situated on former swamp/lagoon deposits, while the north eastern corner is located on an elevated sandy landform. This lowers the potential for Aboriginal cultural heritage to be located across much of the activity area as it would have been unsuitable for habitation in the past, however it also identifies that the sandy areas in the northeast of the activity area are landforms which would have been conducive to Aboriginal occupation.

In summary, the Desktop Assessment has shown that it is likely that Aboriginal cultural heritage is present within some sections of the Activity Area, particularly on those sandy landforms which have been identified as archaeologically sensitive in the past. Much of the Activity Area, however, is located on a landform that would have not been conducive to Aboriginal occupation in the past and therefore has a much lower potential to feature *in situ* deposits of Aboriginal cultural heritage material.

5.2 Standard Assessment

5.2.1 Standard Assessment Methodology

The standard assessment was conducted on the 18th of January 2011. Due to the large size of the activity area, dense grasses, surface water and the high levels of disturbance that have occurred in the past it was determined that targeted survey was the most feasible way to effectively survey the activity area. The survey involved examination of the ground surface (where visible) for cultural heritage and inspecting any mature indigenous trees for cultural scarring, as well as the assessment of the landforms based within the activity area for their potential to contain Aboriginal cultural heritage.

Where possible, transects were walked by the field team with five metre spacing between participants. This was affected by the impassable nature of the vegetation at some points, however this spacing was maintained across much of the area surveyed. The field survey focused on elevated areas in the north of the activity area, where ground surface visibility, lack of disturbance and absence of water gave an increased potential for the identification of surface cultural heritage should it be present.

In addition, other areas not accessible during the initial field survey were inspected during the complex assessment phase; this was primarily undertaken in the southern half of the activity area (however this was also affected by environmental factors, see section 5.3.3.7).

The following information was collected during the survey:

- information regarding surface exposure and ground surface visibility;
- notes and photographs were taken in order to illustrate prior ground disturbance, as well as landform; and
- the potential for sections of the Activity Area to retain evidence of Aboriginal occupation

The following division has been established to assess ground surface visibility. The higher the percentage the less vegetation:

- Excellent visibility 90-100%
- Good 50-90%
- Poor 30-50%
- Very Poor 0-30%

5.2.2 Results of Ground Survey

5.2.2.1 Personnel

The following table lists the participants in the field investigation.

Date	Name	Role
18/01/2011	Ashley Matic	Supervising archaeologist and Cultural Heritage Advisor
	Dana Kells	Assistant (TerraCulture)
	Dan Turnbull	Bunurong Land Council Aboriginal Corporation
	Gary Galway	Wunrundjeri Tribe Land Compensation and Cultural Heritage
		Council, Inc.

Table 7 - Names of persons who took part in the survey

5.2.2.2 Survey Results

No new Aboriginal Cultural heritage Places were identified during the Standard Assessment. Additionally, there were no caves or rock shelters identified within the Activity Area.

Ground surface across the activity area was identified as being extremely low (Table 8), with long grasses and ground water obscuring much of the ground surface, particularly in the south and west of the Area (Photograph 1). Exposures were limited across much of the area (Table 8), being confined to unmaintained vehicular tracks and clearings around trees across much of the south and west of the area; in the northwest fence lines and stock movement had created more exposures (Photograph 2); however, these were also relatively limited.

Survey Unit	Landform unit	Dimensions (L x W)	Exposure (%)	Visibility (%)	Est. of Effective Coverage	Artefacts
1	Sandy Rise	218m x 197m (42,946 m ²)	5% (2,147.3m ²)	10%	14.693m ²	0
2	Former Swamp	1097m x 627m (689,054m ²)	0.5% (3,445.3 m ²)	5%	117.333m ²	0
Total		732,000 m ²			132.03m ² (0.01%)	0

Table 8 - Estimate of Effective Survey Coverage



Photograph 1 - Example of low GSV common across southern and western Activity Area



Photograph 2 - Exposure identified on sandy rise in north eastern activity area

The Activity Area was identified as having undergone prior disturbance, most noticeably the drainage channels that have been excavated through it. Rodds Drain, which runs through the centre of the Activity Area, has been excavated to at least 1.5 metres depth, with the spoil piled along the edges of the channel to form an embankment. The unnamed northern channel, while not as long or deep, has also severely impacted the ground surface with its fill piled to the north of the channel near the boundary of the Activity Area. The Eastern Contour Drain, running mainly along the western boundary but also bisecting one of the allotments, also has a large embankment along its eastern edge.

A house and yards in the north eastern corner of the activity area has resulted in significant levels of disturbance to the ground surface, both through construction of the house and through stock trampling within the yards. The construction and use of both has also resulted in the removal of the majority of mature native trees from the area; no evidence of cultural scarring was identified on those that remained (Photograph 3).



Photograph 3 - Survey team inspecting stand of gum trees in western activity area

The majority of the activity area has been used for grazing and has numerous shallow drains excavated across it which have impacted on the ground surface to a depth of around 30 centimetres. Where ground surface visibility was good this was confirmed, however due to the low level of visibility across the majority of the Activity Area this could not be ascertained for much of it. The use for agricultural activities also required the removal of the majority of mature native trees from the property; those that remained were inspected for cultural scarring during the field survey, no such evidence was identified.

Despite this, some sections of the Activity Area were identified as having the potential to retain Aboriginal Cultural Heritage. Specifically, this is located in the north of the Activity Area, on the more elevated landforms. Of particular significance was a sandy rise identified immediately adjacent to Taylors Road, which appears to be a continuation of the landform identified as containing Aboriginal Cultural heritage in the property to the east of Taylors Road (Clark in prep). The remaining areas of potential were all identified in areas where disturbance from prior land use activities was minimal and remnant mature native trees exist, in the north of the activity area close to the northern drainage channel (Map 3).

5.2.2.3 Obstacles and Constraints

The activity area was covered by thick vegetation (shoulder height in many locations) which severely impeded both the Ground Surface Visibility and the ability to traverse the activity area. Overall, the ground surface visibility of the activity area was considered to be very poor (0-30% Visibility) (Photograph 4).



Photograph 4 - Field team in area with low GSV

Additionally, several sections of the Activity Area were waterlogged and could not be passed by the field team on foot. This includes the majority of the south of the activity area, where combined with the thick grasses ground surface visibility dropped to zero.

It is considered, however, due to the information gathered from the desktop assessment that these obstacles and constraints did not affect the overall findings of the standard assessment.

This document has been made available for the purposes as set out in the Planning and Environment Act 1987. for any other purpose. Α R DANDENONG SOUTH BASS STRAIT **DANDENONG SOUTH** No. 875 TAYLORS ROAD DANDENONG SOUTH AREA SURVEYED Heritage Consultants 340 Separation St, Northcote, 3078 VICTORIA Ph. 03 9486 4524 Fax. 03 9481 2078 Drawn: P.B.&R.M. CITY OF GREATER DANDENONG Datum: GDA94 erra ulture Activity Area Date: 8/3/2011

KEY

Survey Transect

Ballarat O

Bacchus Marsh

GEELONG •

Scale in metres

Heights: AHD

Drawing No.: Area Surveyed.dwg

5.2.3 Conclusions from the Ground Survey

While the survey did not identify any Aboriginal cultural heritage this is considered likely to be the result of the poor surface visibility over much of the area. In light of the desktop finding that there was a reasonable possibility of Aboriginal cultural heritage being present, the presence of potential archaeologically sensitive landforms and the inability to visually inspect much of the ground surface due to vegetation cover a Complex Assessment for this section is required under Regulation 60(1) (a) of the *Aboriginal Heritage Regulations* 2007 as it is considered likely that Aboriginal cultural heritage could be present and it is not possible to identify the extent, nature and significance of any Aboriginal cultural heritage in the Activity Area unless a complex assessment is carried out.

5.3 Complex Assessment

5.3.1 Aims of the sub-surface testing/excavation

The aims of the sub-surface testing were to:

- Determine whether there are deposits that contain Aboriginal cultural heritage within the soil profile to be disturbed;
- Determine the nature and extent of any such cultural heritage should it be present; and
- Determine the general stratigraphy of the area.

5.3.2 Methodology of the sub-surface testing / excavation

Following Burke and Smith (2004), a stratified (judgement) sampling strategy was adopted for the Complex Assessment, with pits positioned within the Activity Area where archaeological deposits were most likely to occur (2004: 66-68). Also pits were excavated in areas considered to have no archaeological sensitivity as a check against the interpretation of the landscape during the standard assessment.

The planned field investigation process involved:

- Test pits (1m x1m) to be hand excavated with vertical control in 10cm spits;
- Shovel Test pits (50x50cm) to be hand excavated by spade or shovel with vertical control in 10cm spits; Shovel Probes (30x30cm) excavated at 100m intervals across the low lying flood plain covering much of the south of the activity area to determine/confirm the continuity of soils across this landform;
- All removed spoil to be 100% screened through a 5mm gauge sieve;
- All pits recorded photographically at the end of excavation, and where dug in spits, at the end of each spit;
- In the event that in situ archaeological material was identified in sub-surface conditions
 then additional excavation to be conducted in close proximity, to determine the integrity
 of the Aboriginal Cultural Heritage Place and define the extent of the distribution;
- Should it be present, material suitable for dating would be collected; and
- All artefactual material recovered would be recorded according to AAV guidelines.

The complex assessment was conducted in three phases. The first phase was undertaken between the 14th and 20th of April 2011, and concentrated on the high ground in the northern section of the Activity Area, identified during the standard assessment as having the highest potential for archaeological deposits.

The second phase of the sub-surface testing program was conducted on the 17th and 18th of May 2011 with the aim of testing the low-lying floodplain. The proposed methodology was to conduct a series of shovel probes in a grid across the floodplain at approximately 100 metre intervals, switching to controlled excavations if any cultural heritage was found. However field conditions at the time made this impracticable; as despite the system of drainage channels (both large and small across the area) water was laying ankle deep over much of the area (Photograph 5).



Photograph 5 - Sub-surface testing in area featuring significant levels of surface water

The third phase was undertaken in order to fully determine the extent of the site identified on the sandy rise in the north of the activity area, and was conducted between the 21st and 23rd of February 2012.

5.3.3 Results of the sub-surface testing/excavation

The following section presents the results of the Complex Assessment.

5.3.3.1 Personnel

The following table presents the names of those who participated in all phases of sub-surface testing within the activity area.

Date	Name		Role
14-20/04 & 17-18/05/	John Hyett	TerraCulture	Supervising archaeologist
2011			
21-23/02/2012	Ashley Matic	TerraCulture	Supervising archaeologist
14-15, 19-20/4/2011	Mike O'Connor	TerraCulture	Archaeological Field Assistant
& 17/05/2011			
14-15 & 19-20/4/2011	Zac Spielvogel	TerraCulture	Archaeological Field Assistant
18/04/2011	Richard Marshall	TerraCulture	Assistant (Archaeological Field Assistant
21-23/02/2012	Monica Toscano	TerraCulture	Archaeological Field Assistant
14-15/04/2011	Darren Symington	Bunurong	Aboriginal Community Representative
14-15 & 18-19/04/ 2011	Kerry Xiberras	Wurundjeri	Aboriginal Community Representative
18-20/4/2011 & 21- 23/02/2011	Iris Pepper	Bunurong	Aboriginal Community Representative
20/4/2011, 17-18/5/ 2011 & 22/02/2012	Robert Mullins	Wurundjeri	Aboriginal Community Representative
17-18/5/2011	Wayne Pepper	Bunurong	Aboriginal Community Representative
21/02/2012	Eddie Ockwell	Wurundjeri	Aboriginal Community Representative
23/02/2012	Danielle Mullins	Wurundjeri	Aboriginal Community Representative
21-22/02/2012	Michael Williams	Boon wurrung	Aboriginal Community Representative
23/02/2012	Kieran Satour	Boon wurrung	Aboriginal Community Representative

Table 9 - Names of persons who took part in the subsurface testing / excavation

5.3.3.2 Testing Locations

The sub-surface testing involved the implementation of a variety of excavation methods across the activity area, the manner and locations of which are presented in the tables below and in Map 4.

Test Pit	Size	Max Depth (cm)	Location GDA 94 Zone 55 Easting	Location GDA 94 Zone 55 Northing	Artefacts	Representative Landform
Test Pit 1	1m x 1m	140	344343	5787608	Nil	Sandy Rise
TP1	1m x 1m	140			2 x quartz	Sandy Rise
			344347	5787595	3 x silcrete	

Table 10 - 1m x 1m Test Pit Location Summary

Shovel Test Pit	Size	Max Depth (cm)	Location GDA 94 Zone 55 Easting	Location GDA 94 Zone 55 Northing	Artefacts	Representative Landform
1	50cm x 50 cm	105	344358	5787597	1 x silcrete	Sandy Rise
2	50cm x 50 cm	105	344358	5787594	Nil	Sandy Rise
3	50cm x 50cm	90	344367	5787600	Nil	Sandy Rise
4	50cm x 50 cm	80	344360	5787589	1 x silcrete	Sandy Rise
5	50cm x 50 cm	95	344361	5787603	1 x quartz	Sandy Rise
6	45cm x 45cm	90	344357	5787583	Nil	Sandy Rise
7	50cm x 50 cm	100	344349	5787580	Nil	Sandy Rise
8	50cm x 50cm	110	344348	5787485	Nil	Sandy Rise
9	50cm x 45cm	100	344335	5787470	Nil	Sandy Rise
10	50cm x 50 cm	110	344356	5787468	Nil	Sandy Rise
11	50cm x 50 cm	50	344234	5787495	Nil	Flood plain
X1	50cm x 50 cm	110	344372	5787594	Nil	Sandy Rise
X2	50cm x 50 cm	110	344379	5787594	Nil	Sandy Rise
X3	50cm x 50 cm	115	344369	5787592	Nil	Sandy Rise
X4	50cm x 50 cm	120	344353	5787594	2 x quartz	Sandy Rise
X5	50cm x 50 cm	90	344370	5787610	Nil	Sandy Rise
X6	50cm x 50 cm	85	344371	5787604	1 x silcrete	Sandy Rise
X7	50cm x 50 cm	85	344369	5787616	Nil	Sandy Rise
X8	50cm x 50 cm	110	344370	5787579	Nil	Sandy Rise
X9	50cm x 50 cm	100	344351	5787590	4 x quartz 1 x silcrete	Sandy Rise
X10	50cm x 50 cm	110	344351	5787599	1 x quartz 1 x silcrete	Sandy Rise
X11	50cm x 50 cm	100	344351	5787585	Nil	Sandy Rise
X12	50cm x 50 cm	92	344351	5787603	Nil	Sandy Rise
X13	50cm x 50 cm	90	344341	5787595	Nil	Sandy Rise
X14	50cm x 50 cm	85	344327	5787622	1 x quartz	Sandy Rise
X15	50cm x 50 cm	100	344327	5787582	Nil	Sandy Rise
X16	50cm x 50 cm	50	344323	5787627	1 x quartz	Sandy Rise

Table 11 - Shovel Test Pit Location Summary

SP	Size	Max Depth (cm)	Location GDA 94 Zone 55 Easting	Location GDA 94 Zone 55 Northing	Artefacts	Representative Landform
1	30cm x 30 cm	25	344254	5787458	Nil	Flood plain
2	30cm x 30 cm	25	344230	5787396	Nil	Flood plain
3	30cm x 30 cm	30	344208	5787273	Nil	Flood plain
4	30cm x 30 cm	20	344185	5787210	Nil	Flood plain
5	30cm x 30 cm	15	344163	5787117	Nil	Flood plain
6	30cm x 30 cm	25	344040	5787177	Nil	Flood plain
7	30cm x 30 cm	20	344038	5787238	Nil	Flood plain
8	30cm x 30 cm	15	344037	5787300	Nil	Flood plain
9	30cm x 30 cm	20	344060	5787362	Nil	Flood plain
10	30cm x 30 cm	15	344059	5787432	Nil	Flood plain
11	30cm x 30 cm	20	344057	5787516	Nil	Flood plain
12	30cm x 30 cm	30	344081	5787578	Nil	Flood plain
13	30cm x 30 cm	15	344154	5787549	Nil	Flood plain
14	30cm x 30 cm	20	344269	5787617	Nil	Low rise
15	30cm x 30 cm	15	343958	5787599	Nil	Flood plain
16	30cm x 30 cm	30	344356	5787435	Nil	Flood plain
17	30cm x 30 cm	35	344344	5787344	Nil	Flood plain
18	30cm x 30 cm	35	344329	5787246	Nil	Flood plain

SP	Size	Max Depth (cm)	Location GDA 94 Zone 55 Easting	Location GDA 94 Zone 55 Northing	Artefacts	Representative Landform
22	30cm x 30 cm	20	344142	5787242	Nil	Flood plain
23	30cm x 30 cm	30	344161	5787336	Nil	Flood plain
24	30cm x 30 cm	30	344176	5787424	Nil	Flood plain
25	30cm x 30 cm	60	344213	5787605	Nil	Low rise
26	30cm x 30 cm	30	344068	5787604	Nil	Flood plain
27	30cm x 30 cm	30	343933	5787517	Nil	Flood plain
28	30cm x 30 cm	10	343915	5787211	Nil	Flood plain
29	30cm x 30 cm	30	344067	5787544	Nil	Flood plain
30	30cm x 30 cm	40	344243	5786519	Nil	Flood plain
31	30cm x 30 cm	35	344252	5786601	Nil	Flood plain
32	30cm x 30 cm	35	344265	5786702	Nil	Flood plain
33	30cm x 30 cm	30	344280	5786809	Nil	Flood plain
34	30cm x 30 cm	40	344290	5786901	Nil	Flood plain
35	30cm x 30 cm	30	344301	5786996	Nil	Flood plain
36	30cm x 30 cm	25	344217	5787052	Nil	Flood plain
37	30cm x 30 cm	30	344124	5787079	Nil	Flood plain
38	30cm x 30 cm	20	344033	5787104	Nil	Flood plain
39	30cm x 30 cm	25	343931	5787143	Nil	Flood plain
40	30cm x 30 cm	30	343851	5787185	Nil	Flood plain
41	30cm x 30 cm	25	343759	5787194	Nil	Flood plain

Table 12 - Shovel Probe Testing Locations

This document has been made available for the purposes as set out in the Planning and Environment Act 1987.



5.3.3.3 1m x 1m Test Pit descriptions

Test Pit 1

The excavation, conducted during the first phase of Complex Assessment, was a 1m x1m hand excavated test pit located near the top of the sandy rise in the north-western corner of the Activity Area (Photograph 6). The soil stratigraphy consisted of a dark grey sand which extended to 30cm depth, which sat atop a very dark greyish brown sand that darkened in colour with increasing depth to the base of the pit. Some European material, including glass, ceramics and metal, were present in the upper 30 cm of the soil, and a large piece of mudstone was found at 1 metre depth. At 110 centimetres a sondage was excavated in the southwest corner of the pit due to the difficulties of working beyond that depth. The water table was reached at 1.15 metres with water seeping into the sondage and collapsing the walls. The sondage was terminated at 1.4 metres.

No Aboriginal cultural heritage was identified in this test pit.



Photograph 6 - Test Pit 1 at completion of excavation

TP1

TP1 was excavated during the third phase of complex assessment, and consisted of a 1m x1m hand excavated test pit located close to the top of the small sandy rise in the north-western corner of the Activity Area (Photograph 7). As with Test Pit 1, the soil profile identified in TP1 consisted of a dark grey sand which extended to 30cm depth, which sat atop a very dark greyish brown sand that darkened in colour with increasing depth; this extended to 130cm depth where it terminated and the soil changed to a very dark brown sandy clay. Some European material, including glass, ceramics and metal, were present in the upper 30 cm of the pit. Excavation across the entire pit was halted at 110 cm depth due to OH&S concerns over working at depth, at which point a sondage was commenced in the northwest corner of the pit. The sondage was terminated at 1.4 metres where a sterile subsoil was encountered (Figure 4).

Aboriginal cultural heritage was recovered from this pit; two silcrete fragments were recovered from between 40-50cm depth, a silcrete artefact was recovered from 60-70cm depth, and two quartz pieces were recovered from 80-90cm depth.



Photograph 7 - TP1 at completion of excavation

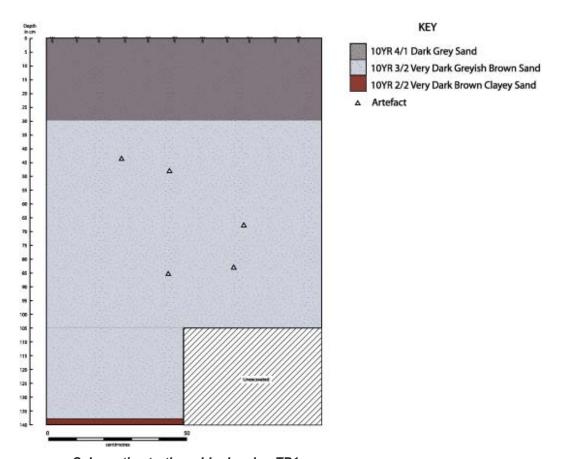


Figure 4 - Schematic stratigraphic drawing TP1

5.3.3.4 Shovel Test Pit descriptions

Shovel Test Pit 1

An excavation measuring 50 cm x 50 cm located on the eastern slope of the sandy rise. Soil stratigraphy consisted of dark grey sand which extended to 30cm depth, which sat atop a very dark greyish brown sand that darkened in colour and extended to the base of the pit. The water table was reached at 90 cm causing the walls to begin to collapse at the bottom of the pit. The

excavation was terminated at 105 cm (Figure 5). A single silcrete flake was found in spit 6 between 50cm and 60cm.

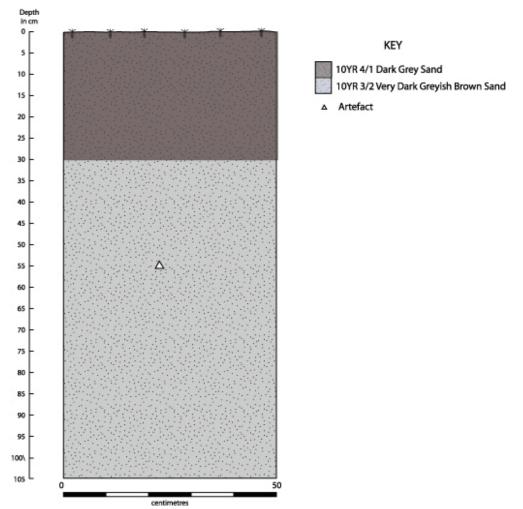


Figure 5 - Schematic stratigraphic drawing Shovel Test Pit 1

Shovel Test Pit 2

An excavation measuring 45cm x 45cm located 5 metres up the slope from Pit 2. Soil stratigraphy consisted of dark grey sand which extended to 30cm depth, which sat atop a very dark greyish brown sand that darkened in colour and extended to the base of the pit. The water table was reached at 97 cm causing the walls to begin to collapse at the bottom of the pit. The excavation was terminated at 105 cm. No Aboriginal cultural heritage was found.

Shovel Test Pit 3

An excavation measuring 50cm x 50cm located 5 metres down the slope from Pit 2. Soil stratigraphy consisted of dark grey sand which extended to 30cm depth, which sat atop a very dark greyish brown sand that darkened in colour and extended to the base of the pit. The water table was reached at 85 cm causing the walls to begin to collapse at the bottom of the pit. The excavation was terminated at 90 cm. No Aboriginal cultural heritage was found.

Shovel Test Pit 4

An excavation measuring 50cm x 45cm located 5 metres across the slope (north) from Pit 2. Soil stratigraphy consisted of dark grey sand which extended to 30cm depth, which sat atop a very dark greyish brown sand that darkened in colour and extended to the base of the pit. The water table was reached at 72 cm causing the walls to begin to collapse at the bottom of the pit. The excavation was terminated at 80 cm (Figure 6). A single silcrete flake was found in Spit 4 between 30cm and 40cm.

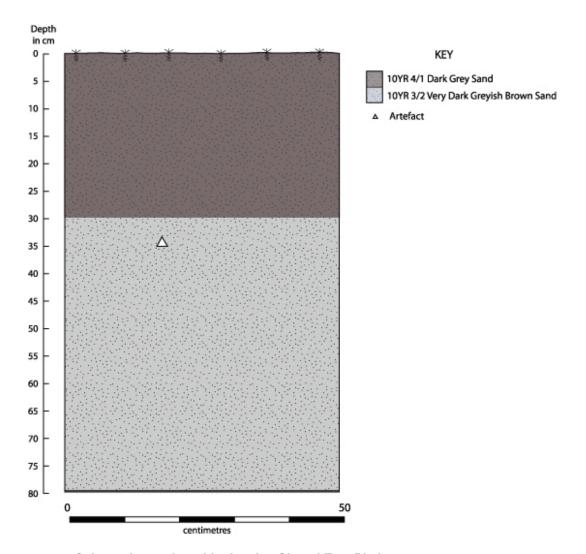


Figure 6 - Schematic stratigraphic drawing Shovel Test Pit 4

An excavation measuring 45cm x 45cm located 5 metres across the slope (south) from Pit 2. Soil stratigraphy consisted of dark grey sand which extended to 30cm depth, which sat atop a very dark greyish brown sand that darkened in colour and extended to the base of the pit. The water table was reached at 90cm causing the walls to begin to collapse at the bottom of the pit. The excavation was terminated at 95cm (Figure 7). A single quartz flake was found in Spit 2 at 20cm.

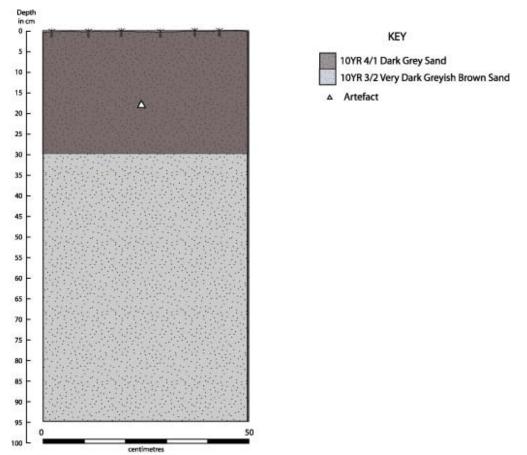


Figure 7 - Schematic stratigraphic drawing Shovel Test Pit 5

An excavation measuring 45cm x 45cm located 5 metres up the slope from Pit 5. Soil stratigraphy consisted of dark grey sand which extended to 30cm depth, which sat atop a very dark greyish brown sand that darkened in colour and extended to the base of the pit. The water table was reached at 82 cm causing the walls to begin to collapse at the bottom of the pit. The excavation was terminated at 90cm. No Aboriginal cultural heritage was found.

Shovel Test Pit 7

An excavation measuring 43cm x 43cm located 5 metres across the slope (south) from Pit 6. Soil stratigraphy consisted of dark grey sand which extended to 30cm depth, which sat atop a very dark greyish brown sand that darkened in colour and extended to the base of the pit. The water table was reached at 91 cm causing the walls to begin to collapse at the bottom of the pit. The excavation was terminated at 100cm. No Aboriginal cultural heritage was found.

Shovel Test Pit 8

An excavation measuring 50 cm x 50 cm located on the sandy rise running east/west some 90 to 100 metres south of the previous excavations. Tree roots were present in the upper 50cm of the pit making it impossible to excavate in spits. Soil stratigraphy consisted of dark grey sand which extended to 30cm depth, which sat atop a very dark greyish brown sand that darkened in colour and extended to the base of the pit at 110cm. No Aboriginal cultural heritage was found.

Shovel Test Pit 9

An excavation measuring 50cm x 45cm located on the southern slope of the sandy rise. Soil stratigraphy consisted of dark grey sand which extended to 30cm depth, which sat atop a very dark greyish brown sand that darkened in colour and extended to the base of the pit. The water table was reached at 93 cm causing the walls to begin to collapse from 80cm. The excavation was terminated at 100cm. No Aboriginal cultural heritage was found.

An excavation measuring 45cm x 45cm located towards the eastern end of the sandy rise within the Activity Area. Soil stratigraphy consisted of dark grey sand which extended to 30cm depth, which sat atop a very dark greyish brown sand that darkened in colour and extended to the base of the pit. The water table was reached at 100cm causing the walls to begin to collapse at the bottom of the excavation. The excavation was terminated at 110cm. No Aboriginal cultural heritage was found.

Shovel Test Pit 11

An excavation measuring 50 cm x 50 cm located on the flat floodplain some 80 -100 metres west of the sand ridge Soil stratigraphy consisted of black clay to 40cm over yellow pebbly clay. The excavation was terminated at 50cm. No Aboriginal cultural heritage was found.

Shovel Test Pit X1

Excavated during the third phase of Complex Assessment, STP X1 was dug east of Shovel Test Pit 1 at the base of the sandy rise. Soil stratigraphy consisted of dark grey sand which extended to 30cm depth, which sat atop a very dark greyish brown sand that darkened in colour with increasing depth and extended to the base of the pit where very dark brown clayey sand was present. The excavation was terminated at 110cm. No Aboriginal cultural heritage was found.

Shovel Test Pit X2

STP X2 was excavated a further 5m east of STP X2, again at the base of the sandy rise. Soil stratigraphy consisted of dark grey sand which extended to 30cm depth, which sat atop a very dark greyish brown sand that extended to the base of the pit where the very dark brown clayey sand was encountered. The excavation was terminated at 110cm. No Aboriginal cultural heritage was found.

Shovel Test Pit X3

STP X3 was excavated 5m west of Shovel Test Pit 1 on the slope of the sandy rise. Soil stratigraphy consisted of dark grey sand which extended to 30cm depth, which sat atop a very dark greyish brown sand that extended to the base of the pit where the very dark brown clayey sand was encountered. The excavation was terminated at 115cm. No Aboriginal cultural heritage was found.

Shovel Test Pit X4

STP X4 was excavated 5m west of STP X3 on the slope of the sandy rise, near the crest. Soil stratigraphy again consisted of dark grey sand which extended to 30cm depth, which sat atop a very dark greyish brown sand that darkened in colour with increasing depth and extended to the base of the pit where the very dark brown clayey sand was encountered. The excavation was terminated at 120cm (Figure 8). A single quartz flake was identified within the shovel test pit at between 30 to 40cm depth.

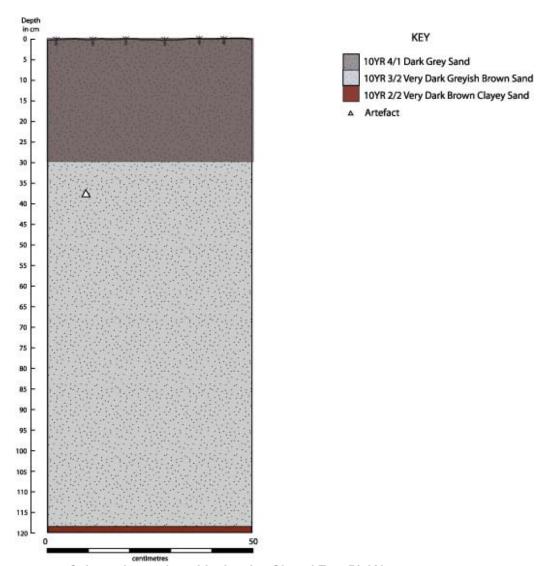


Figure 8 - Schematic stratigraphic drawing Shovel Test Pit X4

STP X5 was excavated 5m to the north of Shovel Test Pit 5 at the base of the sandy rise. Soil stratigraphy consisted of dark grey sand which extended to 30cm depth, which sat atop a very dark greyish brown sand that extended to the base of the pit where the very dark brown clayey sand was encountered. The excavation was terminated at 90cm depth. No Aboriginal cultural heritage was found.

Shovel Test Pit X6

STP X6 was excavated 5m to the north of STP X5, again at the base of the sandy rise. Soil stratigraphy consisted of dark grey sand which extended to 30cm depth, which sat atop a very dark greyish brown sand that extended to the base of the pit where the very dark brown clayey sand was encountered. The excavation was terminated at 90cm depth (Figure 9). A single silcrete artefact was identified in this test pit from between 40 to 50cm depth.

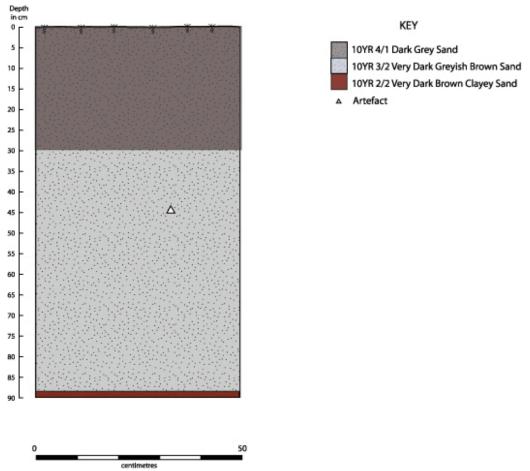


Figure 9 - Schematic stratigraphic drawing Shovel Test Pit X6

STP X7 was excavated 5m to the north of STP X6 at the base of the sandy rise. Soil stratigraphy followed that identified in the other shovel test pits on this landform, and consisted of dark grey sand to 30cm depth, sitting atop a very dark greyish brown sand that extended to the base of the pit where the very dark brown clayey sand was encountered. The excavation was terminated at 90cm depth. No Aboriginal cultural heritage was found.

Shovel Test Pit X8

STP X8 was excavated 5m to the south of Shovel Test Pit 6 at the base of the sandy rise. Soil stratigraphy followed that identified in the other shovel test pits on this landform, and consisted of dark grey sand to 30cm depth, sitting atop a very dark greyish brown sand that extended to the base of the pit where the very dark brown clayey sand was encountered. The excavation was terminated at 110cm depth. No Aboriginal cultural heritage was found.

Shovel Test Pit X9

STP X9 was excavated 5m to the south-west of STP X4, on the crest of the sandy rise. Soil stratigraphy consisted of dark grey sand which extended to 30cm depth, which sat atop a very dark greyish brown sand that darkened in colour with increasing depth and extended to the base of the pit where the very dark brown clayey sand was encountered. The excavation was terminated at 100cm depth (Figure 10). Five artefacts were identified within this test pit, consisting of four quartz pieces and one silcrete, all excavated from 40 to 60cm depth.

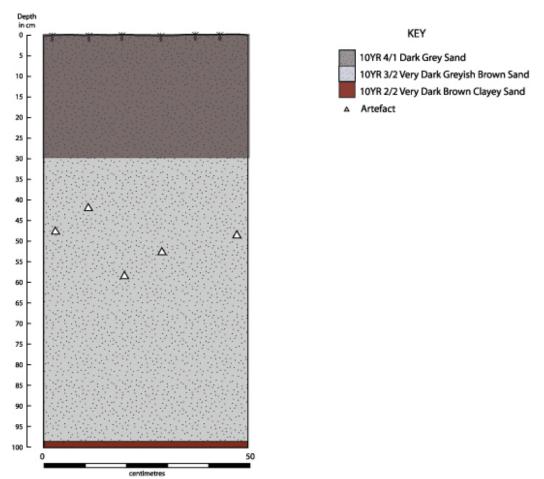


Figure 10 - Schematic stratigraphic drawing Shovel Test Pit X9

STP X10 was excavated 5m to the north-west of STP X4, again on the crest of the sandy rise. Soil stratigraphy consisted of the dark grey sand extending to 30cm depth, which sat atop a very dark greyish brown sand that extended to the base of the pit where the very dark brown clayey sand was encountered. The excavation was terminated at 110cm depth (Figure 11). Two artefacts were identified within this test pit, one quartz and one silcrete, both excavated from 50 to 60cm depth.

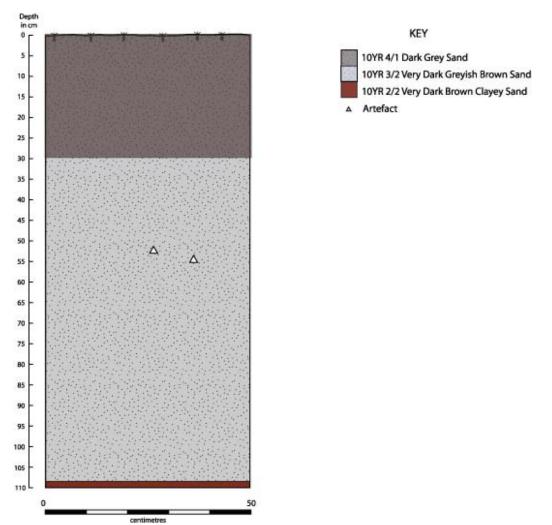


Figure 11 - Schematic stratigraphic drawing Shovel Test Pit X10

STP X11 was excavated 5m to the south of STP X9, on the crest of the sandy rise. Soil stratigraphy consisted of dark grey sand which extended to 30cm depth, which sat atop a very dark greyish brown sand that darkened in colour with increasing depth and extended to the base of the pit where the very dark brown clayey sand was encountered. The excavation was terminated at 100cm depth. No Aboriginal cultural heritage was found.

Shovel Test Pit X12

STP X12 was excavated 5m to the north of STP X10, on the crest of the sandy rise. Soil stratigraphy consisted of dark grey sand which extended to 30cm depth, which sat atop a very dark greyish brown sand that extended to the base of the pit where the very dark brown clayey sand was encountered. The excavation was terminated at 95cm depth. No Aboriginal cultural heritage was found.

Shovel Test Pit X13

STP X13 was excavated to the west of TP1, on the crest of the sandy rise immediately adjacent to the front porch of the abandoned house. Soil stratigraphy consisted of dark grey sand which extended to 30cm depth, which sat atop a very dark greyish brown sand that extended to the base of the pit where the very dark brown clayey sand was encountered. The excavation was terminated at 90cm depth. No Aboriginal cultural heritage was found.

STP X14 was excavated on the crest of the sandy rise to the north of the abandoned house. Soil stratigraphy consisted of dark grey sand which extended to 30cm depth, which sat atop a very dark greyish brown sand that darkened in colour with increasing depth and extended to the base of the pit where tree roots prevented excavation. There was extensive disturbance to the top 30cm of the Shovel Test Pit, including a pipe trench and associated pipe, and a large amount of European ceramic and glass material. The excavation was terminated at 85cm depth (Figure 12). One quartz flake was identified in this pit at 40-50cm depth.

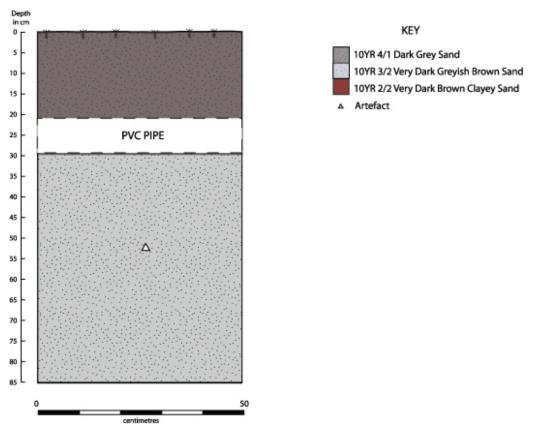


Figure 12 - Schematic stratigraphic drawing Shovel Test Pit X14

Shovel Test Pit X15

STP X15 was excavated on the crest of the sandy rise immediately south of the abandoned house. Soil stratigraphy consisted of dark grey sand which extended to 30cm depth, which sat atop a very dark greyish brown sand that extended to the base of the pit where the very dark brown clayey sand was encountered. The excavation was terminated at 100cm depth. No Aboriginal cultural heritage was found.

Shovel Test Pit X16

STP X16 was excavated on the crest of the sandy rise to the north of the abandoned house, 5m to the north-west of STP X14. Soil stratigraphy consisted of dark grey sand which extended to 30cm depth, which sat atop a very dark greyish brown sand that darkened in colour with increasing depth and extended to the base of the pit where tree roots prevented excavation. The top 30cm of the pit featured a large amount of European ceramic and glass material. The excavation was terminated at 50cm depth where extensive tree roots made excavation impossible. No Aboriginal cultural heritage was found.

5.3.3.5 Shovel Probe Excavations

A program of shovel probe excavation was undertaken across the southern and north-eastern activity area in the areas of former swamp land. The aim of this testing was twofold; firstly, to identify if any cultural heritage was present within this landform, and secondly, to identify if a

uniform soil profile is present across the landform as had been identified in the desktop review of geomorphology of the Activity Area.

A total of forty-one Shovel Probes were excavated during the testing- eleven along the Eastern Boundary of the property, six through the centre parallel to Rodds Drain, nine running in a line north-south through the central north activity area, three in the north western quadrant of the area, and twelve in the North Eastern quadrant (see Map 4). The emphasis in testing in the north and east of the activity area was a result of surface water inundation across the activity area as outlined in section 5.3.3.7.

The shovel probe excavations did not identify any Aboriginal cultural heritage, and recorded a relatively uniform soil profile across the area as had been identified during the desktop assessment. Soil depths were found to be relatively consistent, with depths of excavation commonly between 15 and 40cm (Table 8).

5.3.3.6 Stratigraphy

Two distinct landforms were investigated during the sub-surface testing, the sandy rises in the north east of the activity area and the low lying flood plain in the east and south.

The soil profile on the sandy rise consisted of a 10YR 4/1 dark grey sand which extended to between 25 and 35 cm depth across the landform, which in turn sat atop a 10YR 3/2 very dark greyish brown sand which extended to the base of each of the Test Pits and Shovel Test pits excavated, the deepest of which extended to 140cm. At the lower levels of the Dark greyish brown sand small pieces of 'coffee rock' were commonly encountered. Below this was a culturally sterile 10YR 2/2 Very Dark Brown clayey sand, evidence of which began to appear in the lower levels of the C₂ horizon in each pit (Figure 4 and Photograph 8).

During the first phase of excavation digging became problematic beyond one metres depth anywhere on this landform due to high levels of groundwater seeping into the pit, which both obscured the bottom of the pit and caused collapse of the walls. During the third phase of excavation groundwater was not an issue on this landform.

The site identified within the activity area, VAHR7921-1318 (Taylors Road Industrial Estate 1), was excavated from this landform. All save one of the artefacts (which was recovered from a disturbed topsoil context) identified within the site were identified within the very dark greyish brown sand, and were recovered from depths ranging from 20cm to 90cm (Figures 4 to 12).

The other landform investigated within the Activity Area was the low lying flood plain. Soils on this landform were much different; in each of the Shovel Test Pits and Probes excavated on this landform the profile features a 7.5YR 2.5/1 black clay that extended to a base of 10YR 5/8 Yellowish Brown pebbly clay, with excavation depths ranging from 15 to 50 cm (Figure 13). No Aboriginal cultural heritage was identified on this landform and it is considered that the potential for it to be located within it is low to nil.

Soils within the activity area were found to be reasonably neutral to slightly acidic, with pH's ranging from 5.5 to 6.5 (Table 13).

Context	Munsell Rating	Soil Type	рН
C ₁	10YR 4/1 Dark Grey	Sand	5.5
C ₂	10YR 3/2 Very Dark Greyish Brown	Sand	6.0
C ₃	10YR 2/2 Very Dark Brown	Clayey Sand	6.5
C ₄	7.5YR 2.5/1 Black	Clay	6.5
C ₅	10YR 5/8 Yellowish Brown	Pebbly Clay	6.0

Table 13 - Excavated Soil Type Descriptions



Photograph 8 - Northern wall of TP1 at completion of excavation

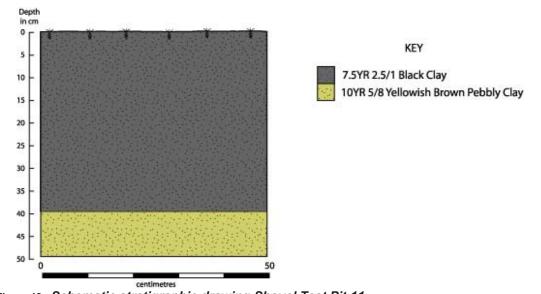


Figure 13 - Schematic stratigraphic drawing Shovel Test Pit 11

5.3.3.7 Limitations and constraints

The sub-surface testing program was subject to constraints which affected the ability of some areas to be investigated. Specifically, these were:

- Field conditions, specifically waist high grass and surface water, restricted the ability to test across the entire section of the former swamp (Photographs 9 and 10);
- Water seepage into the pits and collapsing walls created OH&S issues in relation to the
 pits excavated within the sandy rises during the first phase of Complex Assessment
 (Photograph 11); and

 Some sections on top of the sandy rise in the north east of the activity area could not be subjected to sub-surface testing as they were located under existing structures and related infrastructure.

These limitations and constraints are not considered to have significantly affected the outcomes of the Complex Assessment.



Photograph 9 - Long grasses in Activity Area south of Rodds Drain



Photograph 10 - Typical surface water coverage in the south of the Activity Area



Photograph 11 - Water seepage into Shovel Test Pit 5

5.3.4 Conclusions from the sub-surface testing/excavation

Following completion of the third phase of Complex Assessment within the activity area, it is believed that the cultural heritage values and potential of the Activity area are fully understood.

One Aboriginal cultural heritage place was discovered during the sub-surface testing, VAHR7921-1318 (Taylors Road Industrial Estate 1). The place consists of a low-density stone artefact scatter consisting of quartz and silcrete materials, located on a low sandy rise in the north-east of the activity area. Testing determined that this site covers at least the eastern half of the rise located within the activity area and is likely to extend to the west, however the presence of a derelict house and associated sheds, tracks and refuse on this part of the rise did not make sub-surface investigation of this area possible. Testing identified that west of the house and associated outbuildings there was no cultural heritage material present on the rise, however this area is considerably topographically lower than that on which the house complex is located; it is likely, therefore, that the site is associated with the more elevated components of the landform.

Outside of the rises located in the north east of the Activity Area, the majority of it is low-lying former swamp land. Sub-surface testing results from other assessments carried out within the geographic region indicate that artefacts are found on sandy rises rather than within the adjacent swamp land. Due to the afore mentioned constraints of saturated soils and surface water it was not possible to test over the entire former swamp landform within the activity area, however the areas that were examined demonstrated a uniform soil profile of former swamp deposits. No cultural heritage was identified during the testing undertaken within this landform, and given that the soil profile appears to be relatively uniform across it is considered unlikely that any Aboriginal cultural heritage is located within this landform within the activity area.

It is therefore considered that the archaeological potential within the Activity Area is limited to the sandy rises in the north east; the sub-surface testing program conducted for this CHMP is believed to have sufficiently examined this landform and therefore determined both the nature and extent of Aboriginal Cultural Heritage within the Activity Area.

6. Details of Aboriginal Cultural Heritage in the Activity Area

6.1 Aboriginal cultural heritage in the Activity Area

There is one Aboriginal place within the activity area, VAHR7921-1318 (Taylors Road Industrial Estate 1) (Appendix 3), a low-density stone artefact scatter located on the crest and eastern slope of the low sandy rise situated in the north eastern corner of the Activity Area. The scatter consists of a total of twenty artefacts; eight pieces of silcrete and twelve pieces of quartz. These were found in a sub-surface context between 30cm and 90cm below the current ground surface.

6.1.1 Assessment of the Aboriginal cultural heritage

6.1.1.1 Site formation processes

The majority of the material identified in the site was recovered from between 40 to 60 centimetres depth, with the exception of three pieces that were identified below and three identified above this depth. This level is therefore likely to represent the primary period of Aboriginal occupation in the area, with the sand above it having been deposited post-occupation. The artefacts that were identified outside of these depths are likely to represent post depositional movement of materials in the soil profile, with the exception being the two pieces identified between 80-90cm depth in TP1, which may represent an earlier more limited phase of occupation of the area; however, given the material used and manufacturing techniques employed on these pieces it is not possible for this to be determined utilising the artefacts alone.

The distribution of the artefacts identified on the site also demonstrates the formation processes at work on the site. The majority of the material identified was recovered from the top of the small rise, which corresponds with known Aboriginal site selection practices in the region. There were several pieces, however, that were recovered from the foot of the rise; these demonstrate artefact movement down the slope soon after deposition. Given that the deposit of soil above the finds was similar both on top and at the foot of the rise, it can be concluded that this major movement of artefacts occurred soon after the artefacts had originally been deposited on the site.

6.1.1.2 Artefact analysis

A total of twenty stone artefacts were recovered from the site. Of these, quartz artefacts formed the bulk, with twelve individual artefacts made from this material; the remainder were made of silcrete, with both a light grey and dark red stone type identified in the assemblage (Photographs 12 to 14).



Photograph 12 - Artefacts recovered during the first phase of complex assessment



Photograph 13 - Artefacts recovered from Shovel Test Pits in the third phase of complex assessment



Photograph 14 - Artefacts recovered from TP1 in the third phase of complex assessment

The majority of the assemblage was waste flakes and broken flakes, with thirteen examples of this object type recovered; flaked pieces accounted for a further two artefacts, with only five formal tools identified. The tools were all made from silcrete without exception, while all but three of the flakes were quartz (the remainder were silcrete). This demonstrates that silcrete was the preferred stone type for tool manufacture on the site, despite the predominance of quartz in the assemblage.

Of the five formal tools identified, four were blades or broken blades, while the remaining artefact was a geometric microlith (Photograph 15). Retouch was evident on three of the tools identified, including on the largest of the identified blades which appears to have been notched on its distal margin, while use wear was evident on four of the tools but nowhere else within the assemblage.



Photograph 15 - Formal tools recovered from the site

All of the tool types and manufacturing techniques identified within the assemblage are consistent with types common to the Australian Small Tool Tradition, which in south eastern Australia can be dated to within the last 4,000 years as the dominant stone tool manufacturing tradition.

Please see Appendix 4 for the full catalogue of artefacts recovered from the site.

6.1.2 Information about the Aboriginal cultural heritage from the RAP applicant(s)

No information regarding the cultural heritage was received from the representatives of the indigenous groups during the fieldwork.

6.1.3 Results of the assessment of Aboriginal cultural heritage

One low-density stone artefact scatter was found within the Activity Area during the assessment (Map 5). The majority of the Activity Area was assessed as having little or no potential for Aboriginal cultural heritage, with large areas of the former swamp in the west and south of the Activity Area being underwater despite the numerous drains excavated since European settlement. The desktop assessment showed that extensive testing of similar landforms on neighbouring properties indicated that Aboriginal cultural heritage was more likely to occur in sandy rises or ridges rather than within the former swampland. This was borne out by the subsurface testing conducted during this assessment.

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6.2 7921-1318 Taylors Road Industrial Estate 1

6.2.1 Extent of VAHR7921-1318 (Taylors Road Industrial Estate 1)

VAHR7921-1318 (Taylors Road Industrial Estate 1) is a low-density scatter comprising twenty artefacts found in a sub-surface context, located on sandy rise overlooking a former swamp (Photograph 16, Figure 14 and Map 5). The site covers an area of 30 by 45 metres, and extends to a maximum depth of 90 centimetres below the current ground level. The extent has been defined based on the results of the sub-surface testing, with shovel test pits excavated radially outwards from those where cultural heritage was found until a negative result was obtained; these pits were then linked together to form the extent boundary with the pits that featured cultural heritage material concentrated within said boundary.

The Aboriginal cultural heritage place is located within Vol 9961 Folio 821. The artefacts were collected during the complex assessment and are being held by the cultural heritage advisor until the completion of the Activity when they will be managed in accordance with Section 7.3, along with any further cultural heritage found during the Activity. A collection form has been lodged with the VAHR and will be updated at the completion of the Activity



Photograph 16 - Looking to the NNW over the location of VAHR7921-1318 (Taylors Road Industrial Estate 1)

6.2.2 Nature of 7921-1318 Taylors Road Industrial Estate 1

The Aboriginal cultural heritage place is a low-density stone artefact scatter comprising eight silcrete artefacts and twelve quartz artefacts. These were found at varying depths of between 20cm and 90cm below the current ground surface across the area of the site, indicating movement of artefacts vertically and horizontally across the site over time. Construction activities associated with a derelict house have heavily impacted the western boundary of the site, while the majority of the remainder of the site has undergone impact to the top 30cm of the soil profile through stock movement; below this depth the site retains a moderate level of spatial integrity despite artefact movement through natural processes within the soil profile.

The site is of a type common throughout the geographic region in terms of the size of the assemblage, the material types represented, the artefact types identified and its location within the wider landscape.

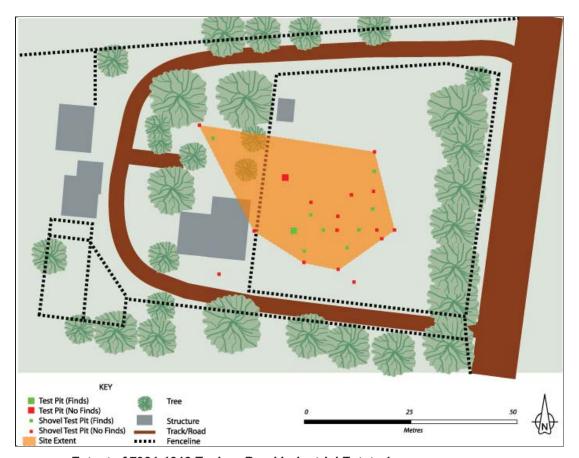


Figure 14 - Extent of 7921-1318 Taylors Road Industrial Estate 1

6.2.3 Significance of 7921-1318 Taylors Road Industrial Estate 1

Section 4 of the *Aboriginal Heritage Act* 2006 defines cultural heritage significance on the basis of archaeological, anthropological, contemporary, historical, scientific, social <u>or</u> spiritual significance; <u>and</u> significance in accordance with Aboriginal tradition. The significance of the Aboriginal site investigated during the complex assessment is discussed in relation to the archaeological significance and in accordance with Aboriginal tradition below.

Archaeological Significance

In assessing the degree of significance of a site it is necessary to consider five issues (Heritage Collections Council 2001: 11):

- Provenance
- Representativeness
- Rarity
- Condition
- Interpretive potential

The Table below presents a summary of the significance assessment for the registered site.

Site Number	Site Type	Provenance	Representativeness	Rarity	Condition	Interpretive Potential
7921-1318	Artefact scatter	Partly Disturbed	Typical	Common	Moderate	Moderate

Table 14 - Summary of significance

The artefacts identified within the site are typical of others identified within the region, and do not represent any rare or unusual attributes. The site is considered to be in moderate condition due to past disturbance to its western extent and in the upper levels of the soil profile across

the site, however, it does retain some spatial integrity below 30cm depth where the bulk of the material was recovered; as such, the archaeological significance of the site is considered to be moderate as it has some potential to further inform on the Aboriginal occupation of the Dandenong South area prior to European settlement.

Significance in accordance with Aboriginal Tradition

No Statements of Significance for the Aboriginal Cultural Heritage Place identified within the Activity Area have been provided by the Bunurong Land Council Aboriginal Corporation and Boon Wurrung Foundation.

The following statement has been provided by *Wurundjeri* Tribe Land Compensation and Cultural Heritage Council.

The process for establishing cultural heritage significance is outlined in the Australia ICOMOS Charter for the Conservation of Places of Cultural Significance, otherwise known as 'The Burra Charter' (Marquis-Kyle and Walker 1992). The Illustrated Burra Charter (Australia ICOMOS. Sydney). The Burra Charter is based on preceding international charters formulated by ICOMOS (International Council on Monuments and Sites). The recently revised Burra Charter defines cultural heritage significance as the aesthetic, historic, scientific, social or spiritual value for past, present or future generations.

Therefore in addition to the archaeological (scientific) significance of a site/place, a CHMP must incorporate the aesthetic, historic, social or spiritual value of that site/place in order to arrive at an overall statement of significance. These values can all be incorporated as part of the cultural significance of an Aboriginal site/place to Aboriginal peoples.

Aboriginal places and areas of land under the custodianship of the *Wurundjeri* have a special significance for Aboriginal people. All pre-contact (pre-European settlement) sites/places in the Activity Area are considered to have cultural significance to the *Wurundjeri*. These sites/places are all evidence of past Aboriginal occupation and use of the Activity Area, and are now the main source of information about the Aboriginal past in Victoria. Cultural significance is not merely measured by the artefacts themselves, but incorporates the natural and landscape values of the region that the sites/places are located within. Recorded (and unrecorded) precontact sites/places also have cultural significance because they are rare or, at least, uncommon site-types. In particular, many sites in the greater Melbourne area have been destroyed by land clearance and land use practices in the historic period that continue to this day. As a result, all Aboriginal sites/places in the greater Melbourne region are a diminishing resource and the *Wurundjeri* feel strongly that these should all be protected as much as is practicable.

Comment on the cultural values and significance of these sites/places can only be made by the Aboriginal community. Specific details about cultural significance should be dealt on a case-by-case basis with the Aboriginal community. The statement below is a general statement of cultural significance that the *Wurundjeri* has provided for their RAP area, which includes the greater Melbourne region.

For Aboriginal people, there are many different kinds of cultural values associated with the landscapes that were once lived in by their ancestors. These include the tangible values normally recorded during archaeological investigations, such as artefact scatters and scarred trees. These places are physical reminders of the cultural lives of the Wurundjeri ancestors and a special connection therefore exists between those places and contemporary Wurundjeri people. This special connection underpins the high significance of these places. Once they are destroyed, the connection is largely destroyed.

There are other values that the Wurundjeri people connect to in landscapes such as the landscapes of the Activity Area. In this instance, the natural values, including waterways and remnant vegetation, are all integral to the cultural landscape in which Wurundjeri ancestors hunted and gathered and in which they lived their lives for many thousands of years. These landscape characteristics are therefore significant in accordance with Aboriginal tradition. Best practice heritage management, in terms of

avoidance of harm to cultural heritage and where harm cannot be avoided, proper management of the disturbance of those values, is integral in the management of these significant cultural places in the Activity Area.

For Aboriginal people, there are many different kinds of cultural values associated with the landscapes that were once lived in by their ancestors. These include the tangible values normally recorded during archaeological investigations, such as artefact scatters and scarred trees. These places are physical reminders of the cultural lives of the Wurundjeri ancestors and a special connection therefore exists between those places and contemporary Wurundjeri people. This special connection underpins the high significance of these places. Once they are destroyed, the connection is largely destroyed.

There are other values that the Wurundjeri people connect to in landscapes such as the Dandenong Activity Area. In this instance, the natural values, including remnant vegetation, are all integral to the cultural landscape in which Wurundjeri ancestors hunted and gathered and in which they lived their lives for many thousands of years. These landscape characteristics are therefore significant in accordance with Aboriginal tradition. Best practice heritage management, in terms of avoidance of harm to cultural heritage and where harm cannot be avoided, proper management of the disturbance of those values, is integral in the management of these significant cultural places in the Activity Area.

7. Consideration of Section 61 matters – Impact Assessment

In accordance with Section 61 of the *Aboriginal Heritage Act* 2006 the Management Plan must consider whether the Activity will be conducted in a way that avoids harm to Aboriginal cultural heritage.

7.1 Section 61 matters in relation to VAHR7921-1318 (Taylors Road Industrial Estate 1)

7.1.1 Can harm to VAHR7921-1318 (Taylors Road Industrial Estate 1) be avoided?

It is not possible for the proposed development to avoid the site VAHR7921-1318 (Taylors Road Industrial Estate 1).

The realignment of Taylors Road and the construction of the roundabout at the junction with Bayliss Road, which is necessary for safe traffic management, will destroy the Aboriginal cultural heritage place VAHR7921-1318 (Taylors Road Industrial Estate 1). It is not practicable to relocate this realignment and still provide safe vehicle movement. This realignment of the road is consistent with the Greater Dandenong City Council Planning Amendment C87 approved and gazetted on the 26 March 2009.

7.1.2 Can harm to VAHR7921-1318 (Taylors Road Industrial Estate 1) be minimised?

Harm to the place can be minimised through salvage prior to works occurring, and Cultural Heritage Awareness Training for contractors working on site to identify components of the site that may be identified during works.

7.1.3 Are specific measures needed for the management of VAHR7921-1318 (Taylors Road Industrial Estate 1) (such as mitigating harm)?

Prior to the commencement of works, a program of archaeological salvage is to be carried out on the site. As determined during consultation with the representatives of the relevant Aboriginal communities in the field, the determined salvage methodology for the site would be for a small area excavation to be undertaken within the site boundaries (Map 6) to recover additional spatial and contextual information from the site prior to its disturbance.

Salvage of the site is to be conducted by a qualified archaeologist with participation from representatives of the relevant local Aboriginal community group(s). Any excavated cultural heritage material should be provided to a qualified Archaeologist upon completion of the works for analysis and inclusion within a report detailing the results of the salvage.

Any excavated cultural material, including that recovered during the complex assessment conducted for the preparation of this CHMP, is to be re-buried on site within open space upon completion of a report outlining the nature and significance of the salvaged material.

Additionally, Cultural Heritage Awareness Training will be required for any contractors working on the site prior to the commencement of works, to prevent damage to or destruction of further components to the site during works.

All salvage works, including the costs for Aboriginal community representation, are to be carried out at the expense of the proponent.

7.2 Are there particular contingency plans that might be necessary?

Contingency plans are detailed in Section 9 in relation to delays and other obstacles that may affect the conduct of the activity. These include the discovery of previously unknown (and unexpected) Aboriginal cultural heritage and the discovery of human skeletal remains.

7.3 Custody and management of Aboriginal cultural heritage

If any further Aboriginal Cultural Heritage is found during the activity then the contingency plan for such an event must be followed and any cultural heritage material recovered must be managed in accordance with the following provisions.

If any Aboriginal Cultural Heritage is recovered or salvaged from the Activity Area it will be the responsibility of the Cultural Heritage Advisor to:

- Catalogue the Aboriginal Cultural Heritage;
- Label and package the Aboriginal Cultural Heritage with reference to provenance; and
- Arrange storage of the Aboriginal Cultural Heritage in a secure location with copies of the catalogue and assessment documentation.

The Sponsor will be responsible for the costs associated with the assessment, cataloguing, labelling and packaging of this cultural heritage material.

Provision must be made for the management and custody of Aboriginal cultural heritage found during the assessment or during the activity (other than Aboriginal human remains or sacred objects). The sponsor must take into account the willingness and capacity of the proposed custodian to adequately manage and protect the Aboriginal heritage material.

Custody should be assigned according to the following order of priority, as appropriate:

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

Should re-burial be considered as appropriate then it must occur within the Activity Area. At the completion of the Activity the artefacts should be re-buried within the Activity Area, the reburial will be in a suitable location (ideally within designated open space) agreed upon by the sponsor and the RAP (if appointed).

Details regarding the final reburial location (address, GPS co-ordinate) of the artefacts will be recorded by the Cultural Heritage Advisor and submitted to the Victorian Aboriginal Heritage Register on an approved form.

PART 2 - CULTURAL HERITAGE MANAGEMENT RECOMMENDATIONS

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

8. Specific Cultural Heritage Management Requirements

8.1 VAHR7921-1318 (Taylors Road Industrial Estate 1)

Recommendation 1

Prior to the commencement of works, a program of Archaeological salvage must be undertaken on the site. The archaeological salvage will involve the manual excavation of one 2m x 2m small area excavation within the recorded site boundary (Map 6). The excavation should be located in the central area of the recorded site near the top of the sandy rise (east of the derelict house), as this area was identified as both containing the highest concentration of artefacts and having undergone limited disturbance compared to the majority of the activity area.

Excavation of the salvage will be conducted manually, with the soil dug in arbitrary spits of 10cm down to a depth where culturally sterile soil is encountered or excavation is impractical due to safety requirements. The soil excavated will be 100% sieved to allow for total recovery of material from the salvage area, with artefacts bagged in zip lock plastic bags for cleaning and analysis off site. Any datable materials (i.e. charcoal, shell) will be recovered and submitted for radiometric dating should they be identified during the salvage fieldwork.

Following the completion of the fieldwork component of the salvage, all recovered materials must be submitted to a qualified Cultural Heritage Advisor for analysis. The results of the fieldwork and analysis must then be presented in a technical site report, to be completed and submitted to Aboriginal Affairs Victoria within six (6) months of the completion of the salvage fieldwork.

Following completion of the analysis of the salvaged material, it is the responsibility of the cultural heritage advisor to ensure that all archaeological material reported above should be;

- Catalogued, labelled and packaged with reference to provenance; and
- In consultation with the Wurundjeri Tribe Land Compensation and Cultural Heritage Council, Inc., Bunurong Land Council Aboriginal Corporation and the Boon wurrung Foundation, stored in a secure location together with copies of the catalogue and assessment documentation awaiting reburial, if appropriate.

The reburial of the recovered stone artefacts should:

- Occur in consultation with the relevant Aboriginal parties;
- Be placed in a durable container with reference to provenance and with the catalogue and assessment documentation;
- Occur at a location within the activity area where there will be no ground disturbance in the foreseeable future;
- The catalogue, assessment documentation and details of the reburial will be submitted to AAV.

The cost of these procedures is the responsibility of the sponsor.

It is also recommended that the following conditions be met during the proposed Activity:

 Information about avoiding Aboriginal cultural heritage impacts will be included in a cultural heritage induction for contractors engaged during the conduct of the activity.

Management Prior to the Activity

- The Activity will impact the low density artefact scatter VAHR7821-1318 (Taylors Road Industrial Estate 1) and this cannot be avoided.
- A program of archaeological salvage, as outlined above, should be conducted on the site;
- A technical site report, outlining the results of the salvage works and the analysis of the recovered cultural heritage material, must be prepared and submitted to AAV within six months of the completion of the fieldwork component of the salvage;

- Prior to Activity commencement the sponsor or its civil contractors must provide appropriate Indigenous Cultural Awareness Training for construction personnel in regards to the Aboriginal cultural heritage places within the Activity Area. These inductions should be carried out with assistance from the Wurundjeri Tribe Land Compensation and Cultural Heritage Council, Inc., Bunurong Land Council Aboriginal Corporation, the Boon wurrung Foundation and the CHA. These inductions will include the provision of appropriate AAV Aboriginal cultural heritage Mini-posters for display to assist with the identification of Aboriginal cultural heritage during operations. It will specifically mention VAHR7821-1318 (Taylors Road Industrial Estate 1).
- All costs associated with the salvage fieldwork, preparation of the report, analysis and curation of artefacts and inductions will be covered by the Sponsor.

Management Needed During the Activity

- All works must be restricted to the extent of the Activity Area as this is shown in Map 1.
- In the event that additional cultural heritage is recovered during the activity, Contingency 9.4 must be followed.
- A copy of this CHMP is to be retained on site during works to ensure recommendations and contingencies are followed appropriately.

Management Needed After the Activity

- No additional archaeological investigations are required;
- Should any artefacts be recovered during the activity, they will be analysed and catalogued by the CHA, labelled and packaged with reference to provenance and returned to the site to be reburied in a suitable location where future disturbance is unlikely to occur;
- Any further information recovered from the course of the excavation must be submitted to the Heritage Registry at AAV through submission of amended/updated site card component forms;
- The Sponsor will be responsible for the costs associated with the assessment; cataloguing, labelling and packaging of this cultural heritage material (refer to Section 9.6 for the custody of cultural material).

8.2 Sensitive areas not to be impacted by activity

There are no additional areas of Aboriginal cultural heritage sensitivity within the Activity Area that will be affected by the proposed development.

This document has been made available for the purposes as set out in the Planning and Environment Act 1987.



MAP 6: Management Recommendations for sites recorded within Activity Area.

9. Contingency Plans

9.1 Section 61 matters

9.2 Section 61 matters

The following s.61 matters are discussed in Section 7 of this Plan in relation to each Aboriginal Heritage Place identified during the assessment:

- Whether the activity will be conducted in a way that avoids harm to Aboriginal Cultural Heritage;
- If it does not appear to be possible to conduct the activity in a way that avoids harm to Aboriginal Cultural Heritage, whether the activity will be conducted in a way that minimises harm to Aboriginal Cultural Heritage; and
- Any specific measures required for the management of Aboriginal Cultural Heritage likely to be affected by the activity, both during and after the activity.

9.2.1 Avoidance of Harm to Aboriginal Cultural Heritage

This activity cannot be conducted in a way that avoids harm to Aboriginal Cultural Heritage.

9.2.2 Minimisation of Harm to Aboriginal Cultural Heritage

Prior to the commencement of works, a program of archaeological salvage should be carried out on the Aboriginal Cultural Heritage Place identified within the Activity Area, VAHR7921-1318 (Taylors Road Industrial Estate 1).

Salvage of the site is to be conducted by a qualified archaeologist with the participation of the relevant local Aboriginal community organisation(s). Any excavated cultural heritage material should be provided to a qualified Archaeologist upon completion of the salvage works for analysis, to be re-buried on site within open space upon completion of a report outlining the nature and significance of the salvaged material from the place.

Additionally, Cultural Heritage Awareness Training will be required for any contractors working on the site prior to the commencement of works, to prevent damage to or destruction of further components to the site during works.

9.2.2.1 Indigenous Cultural Awareness Training

- A. The proponent shall ensure that all appropriate employees (whether from the proponent or its contractors) who may enter the Activity Area in relation to the activity are given appropriate cultural awareness training to:
 - Familiarise such persons with local Aboriginal traditions and culture;
 - Promote a knowledge and understanding of and respect for Aboriginal tradition and culture; Assist with compliance with relevant Commonwealth and State cultural heritage legislation; and
 - Foster good relationships between the the relevant local Aboriginal community organisations and the proponent.
- B. Unless otherwise agreed, representatives from the relevant local Aboriginal community organisations and the proponent will initially conduct this cultural awareness training prior to the commencement of the activity.
- C. In addition, heritage information (including key CHMP findings and process requirements) will be included in the standard site induction provided to all new on-site personnel.
- D. A copy of this CHMP is to be retained on site during works following completion of the training to ensure recommendations and contingencies are followed appropriately.

9.2.3 Specific Measurements Required for the Management of Aboriginal Cultural Heritage

9.2.3.1 Salvage of Aboriginal Cultural Heritage before Construction

Salvage Area

Before the commencement of construction works, the proponent will engage a qualified archaeologist and representatives of the relevant local Aboriginal community organisations to undertake a salvage excavation of Aboriginal Heritage Place VAHR7921-1318 (Taylors Road Industrial Estate 1), in order to recover additional spatial and contextual information from the place before it is destroyed.

The area to be salvaged from site is to be a 2m x 2m area located within the known site boundary, in an area of relative artefact concentration on top of the rise, with exact placement to be determined in the field in consultation between all parties.

Salvage Methodology

- A. The salvage methodology will involve the manual excavation of a small area within the determined site boundary following proper archaeological practice.
- B. All excavated material will be sieved using no greater than a 5mm mesh to recover any cultural material from the sites.
- C. The salvage program will be conducted by a qualified archaeologist with field representatives from the relevant local Aboriginal community organisations, with the analysis of the material post-salvage to be undertaken by a qualified archaeologist.

Salvage Report

- A. The results of the salvage of Aboriginal Cultural Heritage material will be provided in a report, which will be completed and lodged with the relevant authorities (including the Heritage Registrar in Aboriginal Affairs Victoria) as soon as possible and within 60 days of completing the salvage operation.
- B. The relevant local Aboriginal community organisations will be given an opportunity to review and comment on the salvage report before it is finalised.
- C. This report will include information on the density of salvaged cultural heritage material, size range of artefacts, raw materials, the stage of reduction and artefact type, and will also include maps and/or plans that accurately present the location and extent of any excavation, and the details of any exposed sediments and stratigraphy. Insights into the procurement of the raw materials for making the stone artefacts may also be obtained from the size analysis and reduction stages of different materials.

Management of Salvaged Material

Requirements and processes for the custody and management of Aboriginal Cultural Heritage material recovered during salvage operations are outlined in Section 9.6.

9.3 Dispute Resolution

As there is no RAP there can be no dispute between the RAP and the Sponsor.

9.4 Discovery of Aboriginal cultural heritage during works

9.4.1 Unexpected discovery of Human Remains

If any suspected human remains are found during any Activity, works must cease. The Victoria Police and the State Coroner's Office should be notified immediately. **Do not contact the media.** If there are reasonable grounds to believe that the remains are Aboriginal, the Department of Sustainability and Environment's Emergency Coordination Centre must be contacted immediately on 1300 888 544. This advice has been developed further and is

described in the following 5 step contingency plan. Any such discovery at the Activity Area must follow these steps.

Discovery:

- If suspected human remains are discovered, all Activity in the vicinity must **stop** to ensure minimal damage is caused to the remains; and,
- The remains must be left in place, and protected from harm or damage.

Notification:

- Once suspected human skeletal remains have been found, the Coroners Office and the Victoria Police must be notified immediately;
- If there is reasonable grounds to believe that the remains could be Aboriginal, the DSE Emergency Co-ordination Centre must be immediately notified on 1300 888 544; and
- All details of the location and nature of the human remains must be provided to the relevant authorities.
- If it is confirmed by these authorities that the discovered remains are Aboriginal skeletal remains, the person responsible for the Activity must report the existence of the human remains to the Secretary, DPCD in accordance with s.17 of the Act.

Impact Mitigation or Salvage:

- The Secretary, after taking reasonable steps to consult with any Aboriginal person or body with an interest in the Aboriginal human remains, will determine the appropriate course of action as required by s.18(2)(b) of the Act.
- An appropriate impact mitigation or salvage strategy as determined by the Secretary must be implemented (This will depend on the circumstances in which the remains were found, the number of burials found and the type of burials and the outcome of consultation with any Aboriginal person or body);

Curation and further analysis:

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

Reburial:

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

9.4.2 Unexpected discovery of isolated or dispersed Aboriginal cultural heritage Discovery:

A person who discovers Aboriginal cultural heritage during the Activity must immediately notify the site Supervisor and suspend any relevant works at the location of the discovery. A buffer (i.e. 20 metres in terms of an artefact) must be established around the relevant site extent (the "area of exclusion"). Works within this buffer must be immediately suspended until the appropriate investigation outlined below is completed;

Notification:

- The supervisor must immediately contact the Sponsor of the identification of the Cultural Heritage.
- A Cultural Heritage Advisor must be contacted to evaluate and record the Aboriginal cultural heritage and advise on possible management strategies.
- In accordance with the requirements of Section 24 of the *Aboriginal Heritage Act* 2006, the person in charge of the Activity must ensure that the Secretary of the Department of Planning and Community Development is notified of the discovery of any Aboriginal cultural heritage, by providing the Secretary with completed site record cards (completed by a Cultural Heritage Advisor) as soon as is practicable.

Impact Mitigation or Salvage:

Within a period not exceeding three (3) working days a decision/recommendation must be made by the Cultural Heritage Advisor in consultation with the Sponsor as to the process to be followed to manage the Aboriginal cultural heritage in a culturally appropriate manner, and how to proceed with the works. Such management may include salvage operations.

- A possible mitigation may be;
 - a. the surface collection of the Aboriginal Cultural Heritage; and / or
 - b. a briefing to contractors on this heritage by the CHA; and / or
 - c. the excavation of a 1 x 1 metre test pit to determine the nature of the Aboriginal Place. Additional, hand excavated test pits (such as 50x50cm test pits) may be required if the Place is found to have a subsurface component; and / or
 - d. Protective fencing during works.
- Work may recommence within the area of exclusion;
 - when an appropriate course of action has been agreed between the Sponsor and the CHA;
 - > the appropriate protective measures have been taken;
 - > all parties agree there is no alternative prudent or feasible course of action;
 - > any relevant Dispute has been resolved.
- The sponsor must ensure that the above steps are followed and the legal obligations and requirements are complied with at all times.
- The Sponsor must ensure that all appropriate documentation of the Aboriginal cultural heritage is completed and submitted to Secretary of the Department of Planning and Community Development.

9.4.3 Unexpected discovery of stratified occupation deposits Discovery:

A person who discovers Aboriginal cultural heritage during the Activity must immediately notify the site Supervisor and suspend any relevant works at the location of the discovery. A buffer zone of 20 metres must be established around the relevant site extent (the "area of exclusion"). Works must be immediately suspended within that zone until the appropriate investigation outlined below is completed.

Notification:

- The supervisor must immediately contact the Sponsor of the identification of the Cultural Heritage.
- A CHA must be contacted to evaluate and record the Aboriginal cultural heritage and advise on possible management strategies.
- In accordance with the requirements of Section 24 of the *Aboriginal Heritage Act* 2006, the person in charge of the Activity must ensure that the Secretary of the Department of Planning and Community Development is notified of the discovery of any Aboriginal cultural heritage, by providing the Secretary with completed site record cards (completed by a Cultural Heritage Advisor) as soon as is practicable.

Impact Mitigation or Salvage:

- Within a period not exceeding three (3) working days a decision/recommendation must be made by the Cultural Heritage Advisor in consultation with the Sponsor as to the process to be followed to manage the Aboriginal cultural heritage in a culturally appropriate manner, and how to proceed with the works. Such management may include, investigation strategies, salvage operations or *in situ* retention of the Aboriginal Place.
- In situ retention may involve;
 - The preservation of an area of land encompassing the Aboriginal Cultural Heritage that is not disturbed by development. This may be an outcome if the cultural heritage is assessed by the CHA / archaeologist to have High significance and good contextual integrity;
 - ➤ Change in construction methods to a process that does not impact or that reduces the impact of the construction works on the cultural heritage.
- A possible investigation strategy might be;
 - > the surface collection of the Aboriginal Cultural Heritage;
 - a briefing to contractors on this heritage by the CHA;
 - the hand excavation of test pits (2x1 metre, 1x1 metre or other size as needed) to determine the nature of the Aboriginal Place. Additional, hand excavated test

pits (such as 50x50cm test pits) may be required if the Place is found to have a stratified subsurface component.

- > Samples would be taken for dating analysis (if identified).
- > The recommendation that salvage of the Cultural heritage should occur.
- Work may recommence within the area of exclusion;
 - when an appropriate course of action has been agreed between the Sponsor, and the CHA;
 - the appropriate protective measures have been taken;
 - all parties agree there is no alternative prudent or feasible course of action;
 - any relevant Dispute has been resolved.
- The sponsor must ensure that the above steps are followed and the legal obligations and requirements are complied with at all times.
- The Sponsor must ensure that all appropriate documentation of the Aboriginal cultural heritage is completed and submitted to Secretary of the Department of Planning and Community Development.

9.5 Reporting discovery of Aboriginal cultural heritage during works

Under Section 24 of the Aboriginal Heritage Act 2006 a person discovering an Aboriginal Place or object must report the discovery to the Secretary as soon as practicable unless they have reasonable cause to believe that the Register contains a record of the place or object. In the case of the discovery being made during the course of works being carried out on any land the person in charge of the works is deemed to be the person who discovered the place or object.

In the event any Aboriginal cultural heritage is found during the activity The Sponsor must engage a Cultural Heritage Advisor to prepare and submit the appropriate site card(s) to the Secretary.

9.6 Custody of Aboriginal cultural heritage discovered during works

Provision must be made for the management and custody of Aboriginal cultural heritage found during the assessment or during the activity (other than Aboriginal human remains or sacred objects). The sponsor must take into account the willingness and capacity of the proposed custodian to adequately manage and protect the Aboriginal heritage material.

Custody should be assigned according to the following order of priority, as appropriate:

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

Should re-burial be considered as appropriate then it must occur within the Activity Area. At the completion of the Activity the artefacts should be re-buried within the Activity Area, the reburial will be in a suitable location (ideally within designated open space) agreed upon by the sponsor and the RAP (if appointed).

Details regarding the final reburial location (address, GPS co-ordinate) of the artefacts will be recorded by the Cultural Heritage Advisor and submitted to the Victorian Aboriginal Heritage Register on an approved form.

9.7 Reviewing compliance

To ensure that the work carried out is in compliance with the recommendations of the CHMP a copy of the checklist, included as Appendix 5, must be present on site during the Activity and referred to as necessary:

- Compliance with the recommendations of an approved CHMP or Cultural Heritage Permit is mandatory under the Aboriginal Heritage Act 2006 (Vic). Non-compliance that results in harm to Aboriginal Cultural Heritage is an offence under the Aboriginal Heritage Act (2006) and the sponsor may be charged accordingly;
- Should the recommendations of the approved CHMP not be followed and harm has occurred to Aboriginal Cultural Heritage then AAV must be contacted immediately;
- When non-compliance is suspected that has resulted in harm to Aboriginal Cultural Heritage the Minister for Aboriginal Affairs Victoria may order a Cultural Heritage Order under Section 80 an audit may be undertaken independently of an order from the Minister in order to ensure compliance;
- Where AAV finds a breach of the CHMP has resulted in the harming of Aboriginal Cultural Heritage the sponsor may be directed to remedy the harm.

REFERENCES

- Barwick, D.E. 1984 'Mapping the Past: An Atlas of Victorian Clans 1835-1904. Part 1.' Aboriginal History: 1-2.
- **Bell, J. And Rhodes, D. 2004** *Eclipse Park Stud Estate: Archaeological Survey and Subsurface Testing*, Report to Devcon Group Pty. Ltd.
- Burke, H. and Smith, C. 2004 The Archaeologist's Field Handbook. Allen & Unwin. Crows Nest
- Chamberlain, M. 2003 An Archaeological Investigation Anco Turf Farm, Lyndhurst.
- Clark, I.D. 1990 Aboriginal Languages and Clans: an historical atlas of western and central Victoria, 1800-1900. Monash Publications in Geography No. 37.
- **Lane S. 1996** Dandenong Hastings Road Archaeological Survey and Subsurface Report, Report to VicRoads
- Long, A., Schell, P. and Howell-Meurs, J. 2004 Eastern Irrigation Scheme Archaeological Assessment, Report to Earthtech Engineering Pty. Ltd.
- Marshall, B. And Webb, C. 2001 An Archaeological Assessment of Kelly Bros Market Gardens, Lyndhurst, Report to Watsons Pty. Ltd.
- Mitchell, J. 2010 Innovation Park Industrial Estate at corner of Colemans and Dandenong-Frankston Roads, Dandenong South, Victoria, Report for Kelly Land Developments Pty. Ltd. and Pellicano Investments No.4 Ltd.
- **Murphy, A. 1998** Archaeological Desktop Study of 550 South Gippsland Highway, Lyndhurst, Victoria. A Report to Ratio Consultants Pty Ltd.
- **Murphy, A. 1999.** 550 South Gippsland Highway, Lyndhurst. A Cultural Heritage Survey. A Report to Parklea Pty Ltd.
- **Murphy, A. 2001** Proposed Cemetery, Lyndhurst. A Preliminary Cultural Heritage Survey. A Report to Reeds Consulting Pty Ltd.
- **Murphy, A. 2004** *Jayco Land, Dandenong-Frankston Road, Lyndhurst*, Report to KLM Gerner Consulting Group Pty. Ltd.
- Murphy, A. 2007 155 Glasscocks Road, Dandenong South, Cultural Heritage Assessment, Report to Macquarie Bank
- Murphy, A. and Amorosi, L. 2003 Bangholme Road, Bangholme: Cultural Heritage Assessment, Report to Jamison and Craig Consultants Pty. Ltd.
- Murphy, A. and Morris, A. 2009 Abbotts Road, Dandenong South to Hall Road, Lyndhurst.

 Envestra Augmentation Gas Pipeline (Stage 1), Report for Monarc Environmental Pty.

 Ltd.
- Murphy, A. and Rymer, T. 2008a Innovation Park, Colemans & Dandenong-Frankston Roads, Lyndhurst, Report to Devcon Group Pty. Ltd.
- Murphy, A. and Rymer, T. 2008b M3 Industrial Estate, 95-117 Bayliss Road, Lyndhurst, Cultural Heritage Management Plan, Report for Devcon Group Pty. Ltd.
- Murphy, A. and Rymer, T. 2008c 45-125 Glasscock's Road, Lyndhurst, Cultural Heritage Management Plan, Report to Goodman International Limited
- O'Reilly, S. 2009 Pound Road Upgrade and South Gippsland Highway/Abbots Road Intersection Upgrade, Dandenong South, Report for VicRoads
- **Presland, G. 1983** An Archaeological Survey of the Melbourne Metropolitan Area, VAS Occasional Reports No. 15
- Rhodes, D. 2002 An Archaeological Survey of a Proposed Industrial Estate at Lyndhurst, Dandenong South, Report to the Devcon Group Pty. Ltd.

- Rhodes, D. 2001 City of Greater Dandenong Aboriginal Heritage Study, Report to the City of Greater Dandenong
- Rhodes, D. 1990 Dandenong Creek and Patterson River Melbourne: An Archaeological Survey, VAS occasional Report No. 33
- **Sciusio L. 1995** An Archaeological Survey of a Pipeline easement between Dandenong-Hastings Road and Knowles Road, Cranbourne. Report to Melbourne Water
- Smith, L. 1989 The Berwick-Pakenham Corridor: The Archaeological Survey of Aboriginal Sites, VAS occasional Report No. 45
- Spreadborough, R. and H. Anderson 1983 Victorian Squatters. Red Rooster Press, Ascot Vale
- **Stone, T. 2007** Propsed Wetlands parallel to Eumemmering Creek, Dandenong South: Aboriginal Cultural Heritage Management Plan, Report for Melbourne Water
- Weaver, F. and M. Haley. 2001 "Valentine Park" 250 Dandenong-Hastings Road, Lyndurst, Victoria: Proposed Residential Development, A Survey for Aboriginal and Historical Archaeological sites, Report to Breese Pitt Dixon Pty. Ltd.
- Weaver, F. and M. Haley. 2002 "Anco Turf Farm" 340 Dandenong Hastings Road Lyndhurst Victoria. Proposed Residential Development. A Survey for Aboriginal and Historic Archaeological Sites.

Websites

Bureau of Meteorology

http://www.bom.gov.au/climate/averages/tables/cw 082039.shtml

DSE Interactive Map

http://mapshare2.dse.vic.gov.au/MapShare2EXT/imf.jsp?site=bim

VRO (Victorian Resources Online)

http://www.dpi.vic.gov.au/DPI/Vro/vrosite.nsf/pages/landform_geomorphological_framew_ork_4

APPENDICES

Appendix 1 - Glossary

The following glossary presents definitions for words and terms that may have been used in the preceding TerraCulture report.

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

AAV: Aboriginal Affairs Victoria

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

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

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

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

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

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

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

Activity Area: The area that is under investigation. Also referred to as study area.

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

Artefact: Any object created or modified by humans.

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

Assemblage: Archaeological term used to describe a collection of artefacts associated by a particular place or time and assumed to have been generated by a single group of people. An assemblage can be made from different *artefact* types.

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

CHMP: Cultural Heritage Management Plan

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

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

Core Tool: A core displaying signs of use.

Cortex: The weathered external surface of a stone. Cortex often identifies the origins and original form of flaked stone, e.g. river pebbles.

Deposit: A term used to describe buried archaeological material.

Excavation: The systematic removal of archaeological deposits using archaeological techniques.

Flake: A piece of stone detached by percussion or pressure from a core. The flake will usually display characteristic features such as a platform and bulb of percussion. The core will display a negative flake scar. These features assist in distinguishing between stone that has been altered through human agency and that which has been naturally shaped.

Ground Exposure: A measure of the quantity of sediment that would normally be buried beneath a modern land surface.

Ground Surface Visibility: A term used to describe the area of the ground's surface that is visible during archaeological field surveys. Effective ground visibility refers to the actual area of ground visible during a field survey calculated as the area of ground inspected multiplied by the percentage of ground visibility.

Industry: A single class of artefacts that are consistent in their form and that can be credited to a single group of people.

In situ: In its original place.

Layer: A recognisable band of material of varying thickness.

Platform: Face of core that is struck by a *hammerstone*, leaving remnants on both the *core* and the resultant *flake*.

Pleistocene: The geological period equivalent to the last ice age and preceding the *Holocene* from ca 2 million to 10,000 years ago. The late Pleistocene commonly refers to the last 40,000 years *BP*.

RAP: Registered Aboriginal Party

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

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

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

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

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

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

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

Spit: arbitrary quantity of excavated ground.

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

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

Sub-surface Testing: The testing for buried archaeological material through manual or mechanical excavation.

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

Appendix 2 - Notice of Intent to Prepare a CHMP

Notice of Intent to prepare a Cultural Heritage Management Plan for the purposes of the Aboriginal Heritage Act 2006

This form can be used by the Sponsor of a Cultural Heritage Management Plan to complete the notification provisions pursuant to s.54 of the *Aboriginal Heritage Act* 2006 (the "Act").

SECTION 1 – Sponsor Information
Name of Sponsor: MRS HELEN TANG.
Business Name: ON BEHALF OF MIRAMAH INVESTMENTS PTY LTD
Postal Address: SUITE 1, LEVEL 2, 261 THOMAS STILLET, DANDENONG, 3175
Telephone Number: 03 9706 7695 Fax number: 03 9706 7732
Mobile:
Email Address:
SECTION 2 – Description of proposed activity and location
Provide a project name:
List the relevant municipal district/s (ie. Local Council or Shire):
 Clearly identify the proposed activity for which the cultural heritage management plan is to be prepared (ie. mining, road construction, housing subdivision):
SURDIVISION
 Clearly identify the area (such as listing cadastral information, attaching a copy of a title search, or indicating the street address): \[\frac{Vol. 9961 Fol. 820}{Vol. 9961 Fol. 819} \[\frac{Vol. 9961 Fol. 818}{Vol. 7742} \[\frac{Vol. 9961 Fol. 819}{Vol. 7742} \[\frac{Vol. 9961 Fol. 819}{Vol. 7742} \[\frac{Vol. 9961 Fol. 819}{Vol. 7742} \[\] \[\frac{Vol. 9961 Fol. 819}{Vol. 7742} \[\] \[\text{Attach a map} (to scale, with a north arrow and indicating the municipal district - if any) that clearly identifies the area and boundaries in respect of which the cultural heritage management plan is to be prepared. \[\] \[Please ensure the map refers to existing roads and features, rather than proposed roads and features. \] \[\] \[\] \
SECTION 3 – Cultural Heritage Advisor
If you would like a Cultural Heritage Advisor (a person who has the qualifications or experience [or both] required under section 189 of the Act) notified of the status of this Cultural Heritage Management Plan, please provide the following details for that person:
Name Company (if any) Email address

SECTION 4 – Expected start and finish date for the cultural heritage management plar

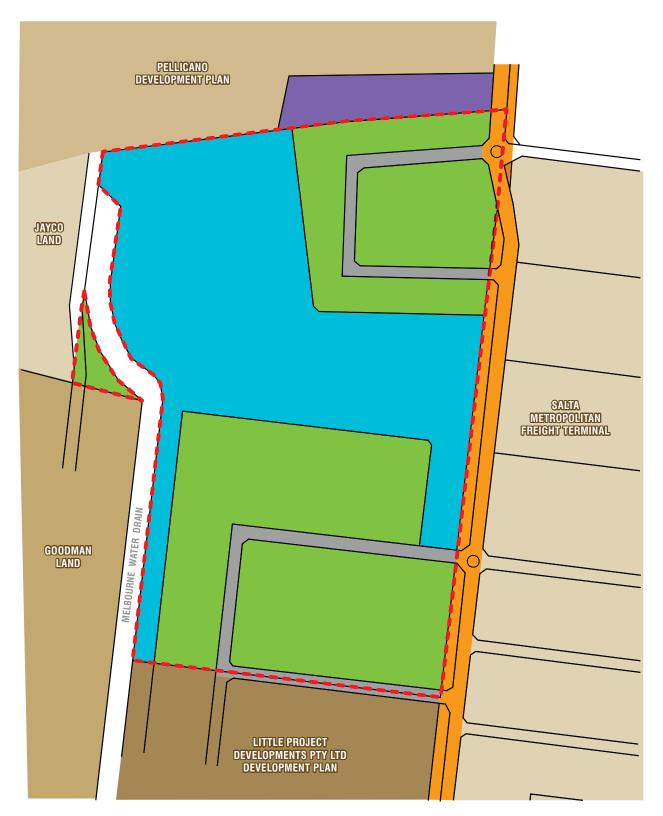
Start date: / / Finish date: / /

SECTION 5 – Why	are you preparing this Cultural Heritage Management Plan	
	age Management Plan is required by the Aboriginal Heritage Regulati	ons 2007
What is the Hig	th Impact Activity listed in the regulations?	
Is any part of th	ne activity in an area of cultural heritage sensitivity, as listed in the reg	ulations? YES / NO Please Circle
Other reasons	(Voluntary)	
An Environmen	tal Effects Statement is required	
A Cultural Herit	age Management Plan is required by the Minister for Aboriginal Affair	3
SECTION 6 – List tl	ne relevant registered Aboriginal parties (if any)	
This section should only	be completed where there is a registered Aboriginal party in relation	to the Plan
SECTION 7 – Signa	ture of Sponsor	
I certify that to the best o	of my knowledge and belief that the information supplied is correct and	complete.
Signed:	(CONSULTANT) Date: 27 / 8 / 2010 Sponsor]	
SECTION 8 – Notific	cation Checklist	
Ensure appro	priate attachment/s are completed and attached to this notification (se	e section 2 of this form).
Please ensure this notice	e and all attached items are sent to the:	
Aborig Depart GPO E	v Director inal Affairs Victoria ment of Planning and Community Development Box 2392 OURNE VIC 3001	
Email:	vahr@dpcd.vic.gov.au	
Notes:		
■ Ensure that any relev	ant registered Aboriginal party/s is also notified. A copy of this notice m	ay he used for this nurness

In addition to notifying the Deputy Director and any relevant registered Aboriginal party/s, a sponsor must also notify any owner and/or occupier of any land within the area to which the management plan relates. A copy of this notice may be used for this purpose. This document has been made available for the purposes as set out in the Planning and Environment Act 1987. The information must not be used for any other purpose.

(A registered Aboriginal party is allowed up to 14 days to provide a written response to a notification specifying whether or not it

intends to evaluate the management plan)





Subject site



Proposed Subdivision Area



Proposed Taylors Road road reserve



Indicative Internal Streets



Melbourne Water Retarding Basin



Moorthy Land

From: Paul.Brownrigg@dpcd.vic.gov.au [mailto:Paul.Brownrigg@dpcd.vic.gov.au] Sent: Thursday, 16 September 2010 3:25 PM

To: inquiries

Cc: Liz.Kilpatrick@dpcd.vic.gov.au; Boheme.Rawoteea@dpcd.vic.gov.au

Subject: Notice of Intent to Prepare CHMP

To whom it may concern,

This email is the formal response. This is an automated response indicating that, on 02-Sep-2010, the Secretary, Department of Planning and

Community Development received a Notice of Intent to Prepare a Cultural Heritage Management Plan (CHMP) for:

Helen Tang - Subdivision - Taylors Road, Dandenong South

The notification has been allocated the AAV Project Number:

CHMP Plan ID. 11432

Please quote this number when making any future enquires to AAV regarding this project.

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

http://www1.dpcd.vic.gov.au/aav/heritage/registered

Please do not reply to this email.

Appendix 3 - Site Gazetteer

Registered Aboriginal Place within the 875 Taylors Road activity area, VAHR7921-1318 (Taylors Road Industrial Estate 1).

VAHR number	Site Name	Site Type	Easting MGA94 Zone 55	Northing MGA94 Zone 55	Landform
7921-1318	Taylors Road Industrial Estate 1	Artefact Scatter	344354	5787589	Sandy rise

APPENDICES

Appendix 4 - Artefact Catalogue

	_					_	_	_									_			
Modification	Nil	Nil	Nil	Nii	Nil	Marginal Retouch, Use wear	Nil	Nil	Nil	Nil	Distal Retouch, Use wear	Nii	Nil	Nil	Nil	Proximal Snap, Use wear	Proximal snap	Distal Snap, Marginal Retouch (Notch?), Usewear	-	ı
Platform Type	Crushed	Flaked	Flaked	Crushed	Crushed			Flaked	Flaked	Crushed		Flake	Crushed	Crushed	-	-	-	Crushed	Flaked	Flaked
Cortex %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	0	0
Thick. (mm)	2	2	4	4	4	2	10	4	4	2	3	4	2	3	1	1	1	4	3	1
Width (mm)	8	12	6	6	8	6	11	8	8	8	4	8	2	6	9	8	7	19	14	6
Length (mm)	13	12	12	11	8	9	18	12	7	10	15	16	12	12	7	6	8	27	14	12
Termination Type	Feather	Feather	Indeterminate	Feather	Feather	Indeterminate	Indeterminate	Step	Feather	Plunge	Indeterminate	Feather	Indeterminate	Feather	Feather	Feather	Feather	Indeterminate	Feather	Feather
Raw Material	Silcrete	Silcrete	Quartz	Quartz	Quartz	Silcrete	Quartz	Quartz	Quartz	Quartz	Silcrete	Quartz	Silcrete	Quartz	Quartz	Silcrete	Silcrete	Silcrete	Quartz	Quartz
Manufacture type	Flake	Flake	Flaked piece	Flake	Flake	Geometric Microlith	Flaked Piece	Flake	Flake	Flake	Blade	Flake	Blade	Flake	Flake	Broken Blade	Snapped Flake	Broken Blade	Flake	Flake
Spit																5	5	7	6	6
Excav	STP 1	STP 4	STP 5	STP X4	STP X4	STP X6	STP X9	STP X9	STP X9	STP X9	STP X9	STP X10	STP X10	STP X14	STP X14	TP1	TP1	TP1	TP1	TP1

Appendix 5 - Compliance Checklist

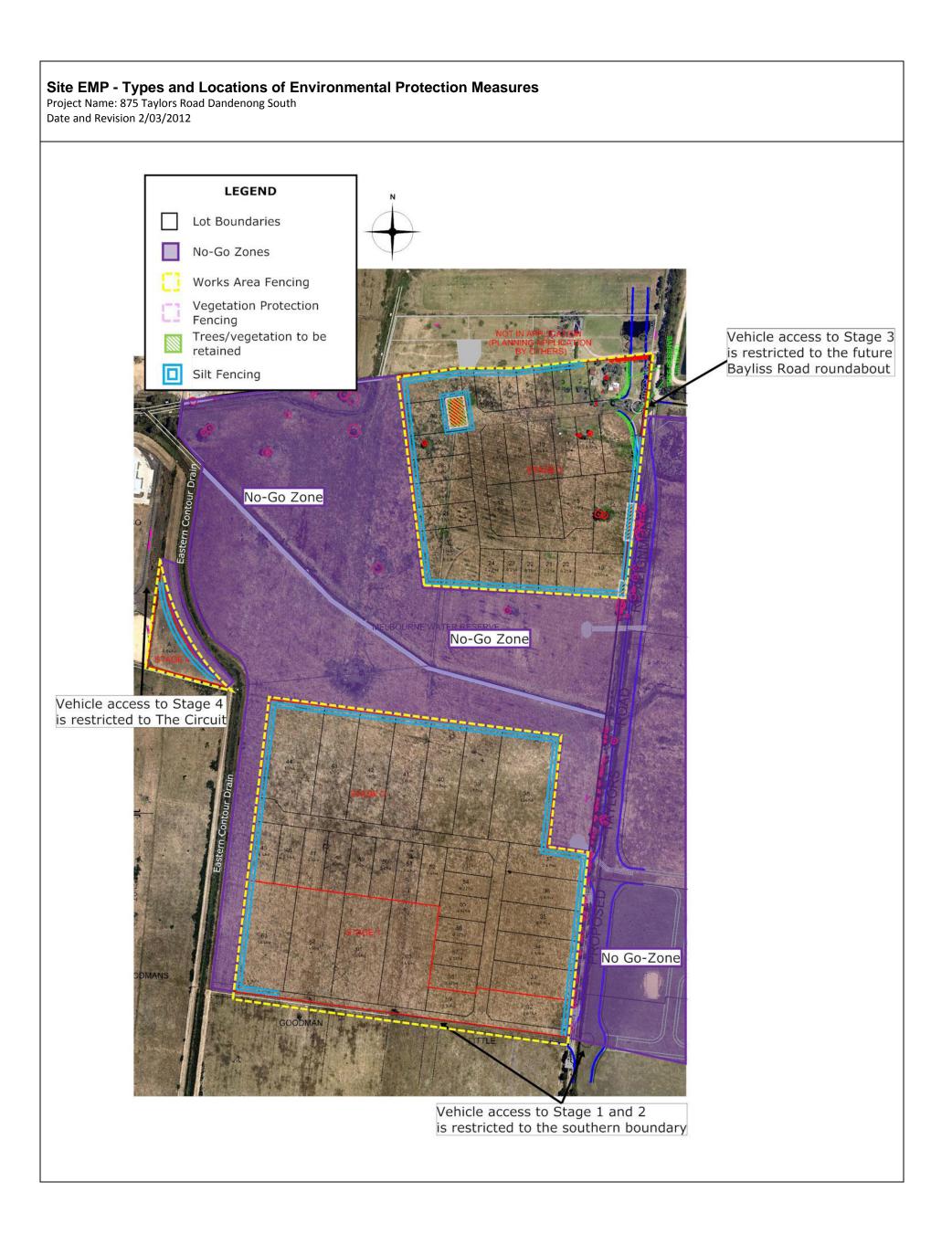
Checklist for Compliance with the Recommendations of CHMP 11432 - 875 Taylors Road, Dandenong South Industrial Subdivision

ltem	CHMP Section	Yes/No
Salvage Excavation Undertaken and completed	9.2.3.1	
Cultural heritage induction conducted for all on-site	8.1	
personnel		
Is a copy of the CHMP 11432 containing this checklist	8.1	
kept onsite		
If previously unknown Aboriginal Cultural Heritage identified during the activity, was the following undertaken		
works ceased within appropriate buffer zone	9.4.2	
	9.4.3	
The Cultural heritage Advisor notified and	9.4.2	
investigated the discovery	9.4.3	
Has the Cultural Heritage Advisor	9.4.2	
completed/updated site cards	9.4.3	
If in situ Cultural Heritage is discovered has	9.4.2 9.4.3	
effort been made to avoid harm		
If in situ Cultural Heritage is discovered and	9.4.2	
cannot be avoided, has appropriate salvage	9.4.3	
been undertaken by a qualified Archaeologist	0.1.1	
If suspected human remains were discovered, were the	9.4.1	
police immediately notified and AAV in the case of Aboriginal human remains (1300 888 544)		

Attachment 5 Environmental Management Plan

 I he following have been identified as significant environmen Native Vegetation. to be protected 	
Erosion and Drainage	
■ Dust	
These aspects shall be managed with the environmental protection measures outline	d on this plan.
Management – To be filled	
1. Responsibilities: Emergency Contact 1:	4. Staging of Works:
2:	
2. Communication of EMP Requirements:	5. Informing Residents:
3. Inspections and Maintenance:	6. Associated Documents:
Significant Flora	Risk: Significant
Requirement: All significant flora, other than that marked for removal, on and ac 7. Vegetation Protection Zone Installation:	8. Vegetation Protection Zone Management:
Vegetation Protection Zone installation: Vegetation to be protected with Vegetation Protection Fencing as specified.	No vehicles are to enter Vegetation Protection Zones for any reason.
in Plan (1) before construction begins.	No works are to be carried out in the Vegetation Protection Zone.
Vegetation Protection Fencing must be maintained in place until	No fill, other materials, vehicles or equipment is to be placed in or stored
construction is complete.	in the tree protection zones, even for a short time.
Regular checks must be carried out to ensure fencing is in place and secure.	Onsite drainage must be managed to ensure works do not change water
	flow regimes to Vegetation Protection Zones.
	Contaminated water from site must not flow into Vegetation Protection Zenes
Dust	Zones. Pick: Significant
Requirement: Dust generation must be minimised to ensure there is no health risk	Risk: Significant
9. Minimising Dust Generation:	11. Contingencies:
Strip or fill in stages leaving as much of the site surface covered with intact	Stop work if dust becomes a risk to neighbouring properties or
vegetation as long as possible.	occupational health.
Restrict vehicle movement over site to a minimum and use a vehicle	
parking area.	
 Restrict vehicle movement to defined haul roads and use speed restrictions. 	
 Seal roadways early in construction process or cover with gravel or crushed 	
rock to prevent dust generation.	
10. Dust Suppression:	12. Other:
Cover stockpiles with material such as geotextile matting, tarpaulins or	Spray water, if necessary, on areas where dust is most likely to be
mulch to provide a barrier between wind and exposed soil.	generated. In particular haul roads, areas of earthworks and stockpiles
 Consider grassing stockpiles to be stored for longer periods of time. 	should be targeted.
 Consider grassing stockpiles to be stored for longer periods of time. Re-grass or mulch filled lots after completion to stabilise exposed soil. 	should be targeted.Water should not be sprayed at site access points. This can allow mud to
 Consider grassing stockpiles to be stored for longer periods of time. Re-grass or mulch filled lots after completion to stabilise exposed soil. Wind fence may be placed perpendicular to prevailing wind where dust 	 should be targeted. Water should not be sprayed at site access points. This can allow mud to be transported onto the adjoining road.
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 Consider grassing stockpiles to be stored for longer periods of time. Re-grass or mulch filled lots after completion to stabilise exposed soil. Wind fence may be placed perpendicular to prevailing wind where dust generation is a significant issue. Erosion and Sediment Requirement: Erosion and sediment must be managed in accordance with current longer periods of time.	 should be targeted. Water should not be sprayed at site access points. This can allow mud to be transported onto the adjoining road. Care must be taken to ensure that the method of applying water does not result in contaminated water. Excessive application of water has the potential to create turbid run-off. Risk: Significant
 Consider grassing stockpiles to be stored for longer periods of time. Re-grass or mulch filled lots after completion to stabilise exposed soil. Wind fence may be placed perpendicular to prevailing wind where dust generation is a significant issue. Erosion and Sediment Requirement: Erosion and sediment must be managed in accordance with current from entering any drainage system or natural waterway.	should be targeted. • Water should not be sprayed at site access points. This can allow mud to be transported onto the adjoining road. • Care must be taken to ensure that the method of applying water does not result in contaminated water. Excessive application of water has the potential to create turbid run-off. Risk: Significant pest practice environmental management practices, to prevent sediment-laden water
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Noise Requirement: EPA Victoria and Council requirements must be adhered to in relation applicable neighbours to the site are not disturbed unreasonably. The generation of n 19. Working Hours: 7 am to 6 pm Mon-Fri	
7 am to 1 pm Sat	 Use embankments or parked machinery as a noise barrier between neighbours and works generating noise. Schedule high noise activity for times when it is least likely to cause annoyance.
Chamicals	Risk: Medium
Chemicals Requirement: Steered and spill requirement are still as a second as it was a s	
Requirement: Storage and spill management practices must be implemented to enschemicals or fuels.	
 21. Storage: Chemicals and fuels should always be stored in an area where spills cannot result in any environmental damage, away from drainage lines, stormwater inlets, waterways, areas of significant flora and fauna and other sensitive areas. As an absolute minimum, chemicals and fuels should be stored at least 10m away from sensitive areas. Bunding should be considered as a secondary containment measure in the event of a spill. 	 Spills must also be quickly cleaned up with absorbent materials to ensure the spilt material does not leach into the groundwater. Contaminated soil from spill must be disposed of. A minimum of two people on site should be trained to act in the event of a spill.
 22: Spill Refuelling Procedure: A designated refuelling area should be established in an area where spills cannot result in any environmental damage. Bunding should be considered as a secondary containment measure in the event of a spill. 	 Equipment: Material safety data sheets (MSDS) should be kept on site Spill kit or other containment and clean up equipment should be stored onsite in appropriate location. Staff responsible for cleanup of spills should be familiar with the location and content of MSDS and spill kits.
Waste	Risk: Medium
Requirement: Waste management procedures must be implemented to ensure that r	no litter or other waste materials are transported offsite by wind or water.
Requirement: Waste must be disposed of in a responsible manner and waste general	tion must be minimised.
 25. Waste Minimisation Methods: Take care not to over order materials. Negotiate with supplier to take back unused materials, reuse waste material where possible. Recycle by separating materials such as concrete, timber, metal, oils and topsoil and ensuring there are clearly marked stockpile areas for each material. 	 27. Waste Disposal: Ensure that waste disposal method is suitable for classification of waste (see EPA Victoria's publication 448.1 Classification of Wastes) In the event that painting, brick cutting or concrete equipment (including trucks) require clean up they should be washed out in a designated area This designated wash down area should be away from Vegetation Protection Areas and the No Go Zones. This designated wash down area should be appropriately bundled to
	contain all contaminated water from off site or into water ways.
26. Waste Containment:	
Designate a stockpile area or use a skip to store solid waste until a sufficient amount has accumulated for removal. I have read this Environmental Management Plan and agree to undertake wor	contain all contaminated water from off site or into water ways. This wash up area should be clearly signed. 28. Other: Where possible select recycled materials for use on site. Ensure litter is collected daily when it is visible on site. General litter should in lidded bins so litter cannot escape before collection, these bins should be located near site offices or other locations where food is consumed.
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RISK ASSESSMENT CHECKLIST	
Noise	
 Nature of Noise Generating Works: Truck movement, soil dumping, earthwork machinery and general construction activities Potential Noise Receptors and Proximity: 	<u>Likelihood</u> <u>Rare</u>
• Stages 1 and 2 are approximately 0.4 km from the nearest houses to the south west and south east and approximately 0.4 km the Jayco industrial estate to the southwest.	n from <u>Consequence</u> <u>Moderate</u>
 Trucks accessing Stages 1 and 2 along Taylors Road would pass within 250 m of houses on Glassocks Road. Stage 3 is approximately 500 metres from houses on Colemans Road to the north and Jayco industrial estate to the west. 	Overall Risk Low
Dust	
Issues:	Likelihood
 Dust Sources: imported landfill, stripped ground, dirt roadways and other stockpiled materials. Potential Dust Receptors: Houses to the southwest, southeast and north on Glassocks and Colemans Road, Jayco industrial experiences. 	Likely state to
 the west. Proximity of Works to Dust Receptors: 250-500 metres. Extent of Exposed Earth and Duration of Time Exposed: Most of development site will be exposed for a time dependent upon 	<u>Consequence</u> <u>Moderate</u> n works
schedule and re-grassing or mulching regime. • Wind Conditions: Prevailing winds are from the southwest in winter and the northwest in summer. Land is flat with minimal	Overall Risk
windbreaks so strong winds would be anticipated at times. Erosion and Sediment	
Issues: • Erosion and Sediment Sources: imported landfill, stripped ground, dirt roadways • Detection Sediment Sources: imported landfill, stripped ground, dirt roadways	<u>Likelihood</u> <u>Likely</u>
 Potential Erosion and Sediment Receptors: The Eastern Contour Drain runs roughly north south along or near the western be of the site before turning west, Radds Drain traverses the property from a central point along Taylor road to the north west the site where it joins the Eastern Contour Drain. The Eastern Contour Drain runs, via the Eumemmerring Creek, into The Pat 	corner of
River. Glassocks Rd, The Circuit and Taylors Road could receive mud or spilt fill from trucks transporting landfill or other mate	
 and construction workers. Proximity of Works to Erosion and Sediment Receptors: Western boundary of Stages 1 and 2 is approximately 25 m from the 	
Contour Drain at a point approximately 2 km from where that drain meets the Eumemmerring Creek. The north boundary of is approximately 40 m south of Radds Drain. The south boundary of Stage 3 is approximately 80 m north of Radds Drain and boundary of Stage 3 is approximately 300 m east of the Eastern Contour Drain. Radds Drain also runs along the eastern boundary of Stage 3 is approximately 300 m east of the Eastern Contour Drain.	the west
the south east section of Stage 2. • Extent of Exposed Earth and Duration of Time Exposed: Most of development site will be exposed when covered in fill, exposed.	, l
be for a time dependent upon works schedule and re-grassing or mulching regime. Note however that the Melbourne Water Zones are currently very well grassed and will not be disturbed by construction. This will help slow water flow and filter any of flowing from construction site into those areas.	No Go
 Soil Type and Erosivity: Soil on site is heavy black clay of low erosivity Slope: Subject land is very flat, the 10 m contour line runs through the north west third of the site. The very minimal fall is to 	
northwest of the site but the proposal is for extensive landfill which will raise the level of the development area by > 1 metre sections.	
 Site Drainage Regime: Described above. Rainfall: 762mm average annual. 	
 Vehicle Movements On and Off Site: These will be restricted to the 3 points indicated on Plan (1). Waste 	
Wasie	
Issues: Nature of Waste to be Generated: Litter from construction workers, possibly other construction waste such as concrete, bridge	<u>Likelihood</u> ks, <u>Medium</u>
 packaging, fuel and fuel containers, fencing materials, signage, other. Presence of Waste on Site Prior to Work Commencement: Minimal, old fencing materials, small amounts of litter. 	<u>Consequence</u> <u>Moderate</u>
	<u>Overall Risk</u> <u>Medium</u>
Chemicals	
Issues:	Likelihood
 Types of Chemicals and Fuels Used and/or Stored On Site: Diesel and Petrol, Detergents, Paints, other 	Unlikely
 Quantities of Chemicals and Fuels Used and/or Stored On Site: < 500 litres of any one type. Potential Chemical Receptors: Drains and waterways as identified above. 	<u>Consequence</u> <u>Moderate</u>
 Proximity to Potential Chemical Receptors: Proximity to drains and waterways as detailed above 	<u>Overall Risk</u> <u>Medium</u>
Flora	1
Issues:	Likelihood
 Types of Flora/ Fauna: The site holds scattered trees (EVC 55 – Plains Grassy Woodland), patches of Plains Grassy Woodland vegetation and patches of Swampy Riparian Woodland/Swamp Scrub Mosaic vegetation (EVC 688) *. 	Likely
 Vulnerability of Flora/ Fauna: These two vegetation categories are listed as endangered by DSE *. Proximity of Flora/Fauna to Works: There is one patch of vegetation on the north west corner of Stage 3 that is indicated on as vegetation to be protected this fall within an area to be filled and will require careful protection. There is also vegetation. 	Consequence Plan (1) <u>Major</u>
as vegetation to be protected, this fall within an area to be filled and will require careful protection. There is also vegetation including trees along Taylors Road for which the Vegetation Protection Zones extend into Stages 1, 2 and 3 on the eastern boundaries. These will also require Vegetation Protection Fencing to be erected and maintained within the works areas.	
 Work Activities Which May Threaten Flora/ Fauna: Driving of vehicles compacting soil over root zones, physical damage of tr branches by vehicles or machinery, disturbance of root function and flow regime through fill placement, siltation or contami 	
 branches by vehicles or machinery, disturbance of root function and flow regime through fill placement, siltation or contaminated due to contaminated runoff. Potential Impacts on Flora/ Fauna: impacts could include reduced health or death of vegetation and reduced ecological functions. 	
vegetation patches.	

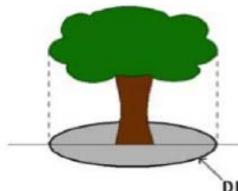


Figure 1. Location of Vegetation Protection
Fencing (from EPA SEMP Guidelines, 2004).
Fence must be securely constructed around all
areas of vegetation to be retained using star
pickets driven 600 mm into the ground every 1.5
metres. Chain mesh should be used and fence
should be at least 1.5 metres high. It must be at
the drip line or greater distance from trees.

DRIP LINE

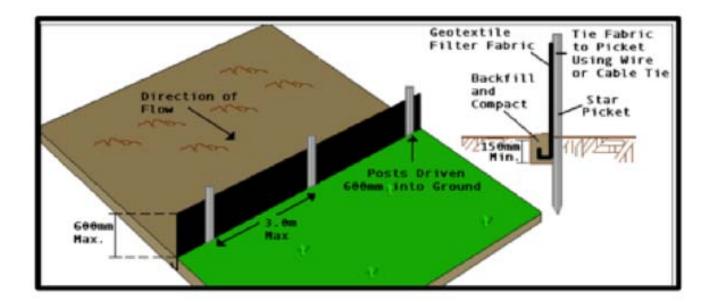


Figure 2. Silt fencing (from EPA SEMP Guidelines, 2004). If the fence is likely to be knocked over by construction activities it may be reinforced by placing star pickets every 1 metre or with wire mesh.

Environmental Management Plan

A framework for an Environmental Management Plan (EMP) showing as appropriate:

The environmental issues affecting the land.

The Development Plan contains relevant information relating to future use, development and subdivision of the subject land, including a Net Gain Assessment, and a Site Environmental Management Plan, with a Cultural Heritage Management Plan currently been undertaken.

Additionally, correspondence from Melbourne Water is contained within the Development Plan regarding the ability to direct stormwater runoff to the retarding basin. In this regard, Melbourne Water consents to stormwater runoff from the site being directed to the retarding basin.

It is therefore considered the Development Plan and its associated documentation has satisfactorily identified the environmental issues that affect the site.

Goals and objectives of the EMP.

The goals and objectives for the Environmental Management Plan are to ensure that the future use, development and subdivision of the site do not unreasonably affect the site or surrounding land. The individual assessments undertaken to address each of the environmental issues affecting the site set out specific goals and objectives and as such should be considered prior to preparing the Environmental Management Plan.

Measures to be taken to ensure that appropriate landscaping is carried out in identified areas of environmental significance.

Given the subject site abuts the Melbourne Water retarding basin, it is considered that in consultation with Melbourne Water, an appropriate landscaping outcome can be proposed for the developable areas of the subject site as well as within the Melbourne Water retarding basin. This level of design detail can only be considered at the time separate planning applications are lodged with Council for the use, development and subdivision of the subject site.

Erosion and siltation control during construction.

Any earthworks on the site must ensure the site's levels accord with the requirements relating to the 1:100 year flood. In this regard, it is considered there will be no erosion issues relating to the future use and development of the subject site. A Fill Plan forms part of the Development Plan (refer to **Attachment 8**) indicating where fill is proposed within the site.

In addition, Melbourne Water has given its consent for development on the site to direct runoff into the Melbourne Water retarding basin. As part of the Stormwater Management Plan associated with the site, an Erosion and Sediment Control Plan will be prepared (refer to **Attachment 6**).

Therefore, it is considered sufficient parameters will be in place to ensure that future development on the subject site will not have an unreasonable environmental impact on the site or surrounds.

Designation of areas (if any) where human access to open space areas will not be allowed, including descriptions of the systems to be established and the means of precluding human access.

The open space network that is proposed within the *Dandenong South Industrial Area Extension Structure Plan, January 2009* will be considered in the future subdivision layout of the subject land.

Due to the Melbourne Water's retarding basin being located in the middle of the site, prior to identifying open space areas consideration will need to be given to the retarding basin. Consultation with Melbourne Water may also be required as part of the design process, including obtaining advice on possible means of precluding human access.

An overview of the design details proposed for wetlands and open water bodies, including different edge treatments, vegetation associations, habitat areas, perching areas and underwater habitat.

This level of design detail is to be prepared following consultation between the land owner and Melbourne Water. It is considered documentation prepared to address the land abutting or within the Melbourne Water basin will occur as part of the Planning Application process for the use, development and / or subdivision of the subject site.

A Stormwater Management Plan that ensures appropriate hydrological regimes for retained vegetation based on expert ecological assessment.

Refer to Section 6.5 of the Development Plan.

Incorporation of stormwater management measures, including stormwater storage and water quality improvement devices such as wetlands and open water bodies to the satisfaction of Melbourne Water.

Refer to Section 6.5 of the Development Plan.

The requirements of the Dandenong South Native Vegetation Precinct Plan, January 2009 including the protection and enhancement of areas of public open space, native vegetation to be retained and native vegetation protection zones to be established.

Given the interface between the subject site and the Melbourne Water retarding basin, it is important that a collaborative approach between the land owner, Melbourne Water and Council occurs regarding the protection and enhancement of public open space, and the retention and protection of native vegetation to be retained.

As part of the Planning Application documentation associated with the future use, development and / or subdivision of the site, documentation that responds to the Dandenong South Native Vegetation Precinct Plan can be prepared, or Council can impose it as a requirement on a Planning Permit they grant for the future use, development and / or subdivision of the site.

Where offsets are required, the method of protecting those offsets through measures such as conservation covenants, section 173 agreements, or gifts to the Crown (where such gifts are accepted).

Whilst an offset is required (refer to **Attachment 7**), no decision has been made on the preferred method of protection of the offset. This level of detail should be addressed prior to Council issuing a Planning Permit for the use, development and / or subdivision of the site.

Method of protection of the reserve areas to be vested in Council until such time as the reserve areas are developed.

As no land within the subject site is to be vested in Council, this requirement is not applicable.

Any other matters as required by the responsible authority and the Department of Sustainability and Environment.

At the time of preparing the Development Plan, it is understood from Council that there are no environmental issues which have not already been addressed by the Development Plan.

Attachment 6	Correspondence	e regarding the	treatment of st	ormwater
		as set out in the	Planning and Env	lable for the purposes vironment Act 1987. or any other purpose.



12 April 2011

Mr Anthony Johnson Senior Consultant Urbis Level 12, 120 Collins St MELBOURNE VIC 3000

Dear Anthony

Taylors Road, Dandenong South

Stormwater runoff from the Miramah developments at Taylors road is to be directed to the proposed retarding basin site. Wetlands will to be constructed within the retarding basin that will treat the associated runoff to meet best practice standards for storm water quality.

Should you have any further queries please don't hesitate to call

Yours sincerely

DEVELOPMENT ENGINEER

Greter

Melbourne Water Corporation 100 Wellington Parade East Melbourne VIC 3002 Australia PO Box 4342 Melbourne VIC 3001 Australia Telephone 131 722 Facsimile 03 9235 7200 ABN 81 945 386 953

MUNN CONSULTING PTY. LTD.

ABN 23 006 737 006 CONSULTING CIVIL ENGINEERS LAND DEVELOPMENT CONSULTANTS

Ref: 10120

8th November 2011

Urbis Level 12 120 Collins Street MELBOURNE VIC 3000

Attention: James Goulding

Dear James,

Re: 875 Taylors Road, Dandenong South - Stormwater Management.

We set out preliminary details of how stormwater management for the above-mentioned property is to be addressed.

The proposed retarding basin to be constructed by Melbourne Water adjacent to the subject land shall incorporate permanent sediment ponds as well as buffer zones and filter strips to facilitate the natural assimilation of water pollutants and to reduce run-off. We would expect that the design of the inlet structures to the basin would incorporate trash racks and/or gross pollutant traps to intercept debris to protect the aesthetic and environmental quality of water.

Melbourne Water advises that stormwater run-off from the subdivision of the subject land may discharge directly to the retarding basin.

Management of stormwater drainage during subdivisional construction of the subject land will be addressed in detail at the time of construction via an appropriate Erosion and Sediment Control Plan to be developed in conjunction with the contractor engaged for such construction. The Erosion and Sediment Control Plan will be formulated in accordance with the requirements of the City of Greater Dandenong's Design Manual for the Subdivision of Land and the appropriate sections of the City of Greater Dandenong Construction Specification.

Yours faithfully, MUNN CONSULTING PTY, LTD.

BRIAN FOLEY.

277 CENTRE ROAD BENTLEIGH VICTORIA 3204 PHONE: (03) 9557 1477 FAX: (03) 9557 1488

EMAIL: munncon@bigpond.net.au





21 November 2011

Mr Brian Foley Munn Consulting Pty Ltd 277 Centre Road Bentleigh VIC 3204

Dear Brian

Stormwater Management Plan – 875 Taylors Road Dandenong South Your Ref: 10120

Further to the receipt of the letter that you forwarded to Urbis on the $8^{\rm th}$ November 2011 detailing the proposed stormwater management plan for 875 Taylors Road, I advise that this plan is satisfactory to Melbourne Water.

Should you have any queries please ring me on 9235 2180.

Yours sincerely

GRAHAM DAFF

DEVELOPMENT PLANNING ENGINEER

Melbourne Water Corporation 100 Wellington Parade East Melbourne VIC 3002 Australia PO Box 4342 Melbourne VIC 3001 Australia Telephone 131 722 Facsimile 03 9235 7200 ABN 81 945 386 953



Attachment 7 Net Gain Assessment

Net Gain Assessment for Taylors Road, Dandenong South





Tree Wishes land care advice

33 Olympic Avenue, Montmorency 3094 (03) 94441091; 0431101409 treewishes@optusnet.com.au

Report Title	Preliminary Biodiversity Assessment for Taylors Road, Dandenong South
Report directed by	Dean Platt ¹
Report written by	Dean Platt and Tania Begg ²
Internal editing	Dean Platt ¹
Previous Versions	None

- 1 Principal Consultant, Tree Wishes BApSc (Biological Resources Management); GDip (Land Rehabilitation); ASSSI (member) Ca Ma. Environment
- 2 Consultant Dip. ApSc. (Conservation and Land Management)

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Report prepared by Tree Wishes

Tree Wishes – Land Care Advice 33 Olympic Avenue, Montmorency 3094 03) 94441091; 0431101409



Figure One (Front): A patch of EVC 55 along Taylors Road.

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1 Introduction

Tree wishes Land Care advice were requested to assess the following issues in relation to a site at Taylors Road, Dandenong South;

- Ecological and biodiversity values on the site and adjoining roadsides;
- Preliminary assessments of impacts to these values;
- Guidance on best ways to address or comply with the State's Native Vegetation Management Framework (Net Gain Overview);
- Guidance on best ways to address or comply with the 'Dandenong South Native Vegetation Precinct Plan' – 2009;
- Preliminary vegetation management recommendations including tree protection, roadside vegetation conservation, weed treatment and revegetation potential/requirements.



Figure Two: Common Reed *(Phragmites australis)* in the drainage channel across Taylors Road.

2 Land Survey Descriptions

Feature	Description
Location	Taylors Road, Dandenong South.
Size	The property covers approximately 75 hectares.
Shape	The block is made up of 5 parcels that are roughly rectangular, with the two northern most parcels being almost triangular.
Current Use	The land is currently used for the grazing of stock.
Municipality	The City of Greater Dandenong.
Planning Zones and Overlays	Industrial Zone 1 (INZ1) Urban Floodway Zone (UFZ) Public Use Zone 1 - Service And Utility (PUZ1) Development Plan Overlay (DPO) Development Contributors Overlay (DCO)
Bioregion	Gippsland Plain.
Slope	The land is flat.
Relief and elevation	This site is very flat, elevating from 8.2m asl to 12.5m asl.
Inundation	The land is regularly inundated with pools of water slowly absorbed into the ground. There are drainage channels through the property to drain some water.

Feature	Description
	The site is relatively disturbed, the main remnant vegetation consisting of Scattered Trees.
Vegetation Pattern	The vegetation along Taylors Road is quality enough to be classified as EVC.
	The vegetation on the site belongs to EVC 55 – Plains Grassy Woodland. (Endangered EVC)

3 Description of Methods

3.1 Review of existing Information

For the purpose of this report, the following information was reviewed:

- Arborist report supplied by Head & Humphreys Land Consultants
- DSE's Biodiversity Interactive Map (BIM)
- Dandenong South Native Vegetation Precinct Plan 2009

3.2 Field Survey Methods

Vegetation was surveyed across the property over 8 person hours, walking the majority of the vegetated sections. Any indigenous vegetation on site was surveyed to confirm EVC or Scattered Trees were present.

No formal faunal trapping, netting or spotlighting was undertaken.

2.3 Special Considerations

Special consideration may be given to the following points:

- Some annual and/or perennial floral species may have been in diapause at the time of surveying and therefore been present but not recorded;
- No formal fauna surveys were undertaken.

4 Study Outcomes

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4.1 Study Areas

In order to easily identify the different areas of indigenous vegetation, the site has been separated into 12 different areas as shown below.

Figure Three: Layout of Vegetative Areas



4.2 Flora Species Found by Survey

Seven indigenous and forty one non-indigenous plants were recorded across the entire site. No rare or threatened species were located or detected.

Refer to the appendix for a full list of flora species found on site at Taylors Road, Dandenong South.

4.3 EVCs (and Listed Floristic Communities)

4.3.1 EVC 55 – Plains Grassy Woodland

EVC 55 – Plains Grassy Woodland is extant in areas 2, 6, 7, 9 & 10. This is due to the density of overstorey trees, and the presence of one understorey plant species. Much of the understorey in these areas consists of grassy and broadleaf weeds.

4.3.2 EVC 688 Swampy Riparian Woodland/Swamp Scrub Mosaic

Patches of EVC are present throughout the drainage channels in areas 1, 6, 9 & 12, however due to the lack of overstorey trees and shrubs the exact EVC this vegetation belongs to is difficult to determine. In accordance with the DSE's Biodiversity Interactive Map, for the purposes of this document, the EVC has been named EVC 688 - Swampy Riparian Woodland/Swamp Scrub Mosaic.

Although the channels coursing through the property have been artificially created, they have become dominated by native water plants, including the Common reed (*Phragmites australis*). This area provides important habitat for water birds, including many duck species and the Australian Reed-Warbler.

4.4 Scattered Trees

Areas 1, 3, 4, 5, 8 & 11 all contain Scattered Trees, with a dominant understorey of grassy weeds. These Scattered Trees belong to EVC 55 – Plains Grassy Woodland.

4.5 Large Old Trees

The benchmark diameter at breast height for large old trees in EVC 55 is 80 cm.

Table One: The type and number of trees present in each area.

	MOT's	LOTs	VLOTs	Other Trees	Total	Classification
Area 1	1	4	5	1	11	Scattered Trees
Area 2	4	1		9	14	EVC
Area 3			1^		1^	Scattered Stag Tree
Area 4		1			1	Scattered Trees
Area 5		1			1	Scattered Trees
Area 6	6	5		19	30	EVC
Area 7	4		1	30	35	EVC
Area 8		1			1	Scattered Trees
Area 9	9	5		10	24	EVC
Area 10	5	2		12	19	EVC
Area 11	1	1			2	Scattered Trees
Area 12						EVC
Total	30	22	6	103	161	

[^] Stag Tree, non-living, as described in the NVPP.

MOT: Medium Old Tree - > 0.75 to <1.0 x trunk diameter of a large old tree as defined by the relevant EVC benchmark

LOT: Large Old Tree - > 1.0 to <1.5 times trunk diameter of a large old tree as defined by the relevant EVC benchmark

VLOT: Very Large Old Tree - At least 1.5 times trunk diameter of a large old tree as defined by the relevant EVC benchmark

Note: The vegetation listed in Sections 4.1 through to 4.5 refers to the vegetation mapped in the arborist report supplied by Head and Humphrey's (H&H). See Section 4.6.

4.6 Conflict between Mapped Vegetation

A conflict arose between the vegetation mapped and listed in the Native Vegetation Precinct Plan (NVPP) and that listed in the Arborist report supplied by Head and Humphreys (H&H).

This conflict occurred in 'Area 2', where fourteen trees were listed in the H&H report; however only three were listed in the NVPP. It was determined through an onsite inspection by the City of Greater Dandenong's Planners that there were in fact fourteen trees in 'Area 2'.

As only three of the fourteen trees were listed in the NVPP, if 'Area 2' vegetation is to be removed then Offsets will only be required for the three trees listed in the NVPP.

If it is determined that 'Area 2' can be avoided, and therefore the vegetation be retained, then all fourteen trees as listed in the H&H report may be utilised as Offsets.

4.7 Fauna Species Found by Survey

No formal fauna surveys were conducted; however incidental sightings recorded 13 native animals and 5 non-native animals. The list of incidental sightings recorded can be found in the appendices.

5 Conservation Significance (CS)

5.1 EVC 55 – Plains Grassy Woodland

EVC 55 – Plains Grassy Woodland is listed as 'Endangered' within the Gippsland Plain Bioregion according to the DSE website (2008).

An 'Endangered' EVC automatically achieves a minimum Conservation Significance of 'High', with potential for 'Very High' if the Habitat Hectare Score exceeds 40 Habitat Hectare Points, or the site is deemed likely to be the best or remaining 50% of habitat for rare or threatened species. It is not likely that the EVC 55 present on this site will reach 'Very High' conservation significance.

5.2 EVC 688 - Swampy Riparian Woodland/Swamp Scrub Mosaic

EVC 688 - Swampy Riparian Woodland/Swamp Scrub Mosaic is listed as 'Endangered' within the Gippsland Plain Bioregion according to the DSE website (2008).

An 'Endangered' EVC automatically achieves a minimum Conservation Significance of 'High', with potential for 'Very High' if the Habitat Hectare Score exceeds 40 Habitat Hectare Points, or the site is deemed likely to be the best or remaining 50% of habitat for rare or threatened species.

There is potential for this EVC to be either the best or remaining 50% of habitat for endangered species, some of the species the EVC 688 present on site may provide habitat for include (but not limited to):

- Eastern Dwarf Galaxias
- River Swamp Wallaby-grass
- Growling Grass Frog
- Migratory wetland birds

5.3 Scattered Trees

According to the Framework (2002) the Conservation Significance of Scattered Trees is always the lowest rating for the EVC that the Scattered Trees would have been part of, unless the trees are potential habitat for threatened species or unless the trees themselves are a threatened species.

As the Scattered Trees are from EVC 55 – Plains Grassy Woodland, the Conservation Significance remains the same detailed in Section 5.1 'High'.

6 Implication for Development

In order to achieve a Net Gain, the Framework requires proponents to consider a three-step approach of Avoid, Minimise and Offset.

This means that proponents must firstly try to avoid as much as possible, the removal of native vegetation. If vegetation removal cannot be avoided, the proponent must justify their case for not avoiding removal and seek to minimise the amount of vegetation to be removed.

When the case is one of minimisation, the proponent must seek to reduce the amount of vegetation to be removed to an absolute justifiable minimum and propose suitable offsets.

Offsets are usually areas of land containing vegetation of equal or greater conservation significance to that being removed or revegetation that can be permanently protected and suitably managed in order to achieve the Net Gain so required.

6.1 Avoiding Impacts on Native Vegetation

Avoidance may generally be interpreted as avoiding adverse vegetation impacts, such as the clearance of habitat zones and trees, and the vegetation being retained post construction (DSE 2002).

Although vegetation has been listed in the Dandenong South Native Vegetation Precinct Plan - January 2009 (NVPP) as 'can be removed', the avoid step should be taken.

This step can easily be met. There is only a small amount of native vegetation present at the site. This vegetation can be avoided through appropriate development planning.

6.2 Minimising Impacts on Native Vegetation

Minimisation may generally be interpreted as reducing impacts on trees and habitat zones, or patches of habitat hectares (DSE 2002).

If the avoidance step is met, then minimising will not be required.

6.3 Native Vegetation Precinct Plan

The vegetation on this site comes under the Dandenong South Native Vegetation Precinct Plan - January 2009 (NVPP). This report specifies the native vegetation to be retained and removed and summarises the actions required to protect and offset the loss of vegetation.

The vegetation listed in the NVPP to be kept or removed is detailed in Table Two. Note: the vegetation listed as 'May be Removed' should be retained where ever possible.

Table Two: Vegetation listed in the NVPP to be retained and removed.

Area	Classification	Classification
Area 1	Scattered Trees	Must be Retained
Area 2	Scattered Trees	May be Removed*
Area 3	Scattered Stag Tree^	May be Removed
Area 4	Scattered Trees	Must be Retained
Area 5	Scattered Trees	Must be Retained
Area 6	EVC	Must be Retained
Area 7	EVC	Must be Retained
Area 8	Scattered Trees	Must be Retained
Area 9	EVC	Must be Retained
Area 10	EVC	Must be Retained
Area 11	Scattered Trees	May be Removed
Area 12	EVC	Must be Retained

^{*} If Area 2 is removed, Offsets will be required for 3 trees, however if the vegetation is retained then fourteen trees within a 'patch' of EVC are available for Offsets.

[^] Stag Tree, non-living, as described in the NVPP.

6.4 Quantification of Vegetation Present

6.3.1 EVC 55

Across the entire site there is approximately 0.8 hectares of EVC 55.

6.3.2 EVC 688

Across the entire site there is approximately 2.06 hectares of drain lines and channels that supports patches of EVC 688. This includes the channel along the eastern side of Taylors Road starting from area 6.

6.3.3 Scattered Trees

Across the site there are seventeen Scattered Trees. This includes five Very Large Old Trees, eight Large Old Trees, two Medium Old Trees, one Stag Tree and one Other Tree.

6.5 Offset Requirements

For each Large Old Tree (LOT) to be removed, 4 LOT's must be protected and 20 new trees must be recruited. For each Medium Old Tree (MOT) to be removed, 2 MOT's must be protected and 10 new trees must be recruited.

Table Three: Offsets required if vegetation is to be removed.

				Net Gain Target			
	Trees	To be	Lost	Trees to	o be Pro	otected	Trees to be
Area	MOT's	LOTs	Total	MOT's	LOTs	Total	Recruited
Area 2	2	1	3	4	4	8	40
Area 11	1	1	2	2	4	6	30
Total	3	2	5	6	8	14	70

Note: 'Area 3' has not been included in the Offset calculation, as according to the NVPP there are no offsets required for the loss of the single native tree in this Area.

7 Conclusions and Recommendations

There are Scattered Trees belonging to EVC 55 – Plains Grassy Woodland and patches of EVC 55 – Plains Grassy Woodland present, along with patches of EVC 688 Swampy Riparian Woodland/Swamp Scrub Mosaic present at the site in Taylors Road.

The conservation significance of this vegetation is no lower than 'High'.

All vegetation on the site comes under the Dandenong South Native Vegetation Precinct Plan - January 2009 (NVPP), which states the vegetation that must be retained and that which may be removed.

Much of the vegetation listed in the NVPP as 'May be removed' can and should be avoided by and during the development.

Furthermore provisions should be made to protect and enhance the vegetation, and incorporate these areas as permanent habitat and conservation areas, with appropriate indigenous land management techniques. This will take place within the retarding basins.

There is potential for understorey revegetation in all areas, however a priority revegetation area includes the drainage channels and waterways.

During construction, to avoid impact on the vegetation, fencing should be erected, preventing vehicle and pedestrian access to the areas. A guide for the area around the Scattered Trees to be fenced is no less than 12 times the diameter at breast height of the tree.

Appendices

Flora Species List

Flora Species List					
Indigenous					
Rush	Juncus sp.				
Common reed	Phragmites australis				
Cumbungi	Typha sp.				
Knotweed	Persicaria sp.				
Large Tussock Grass	Poa Labillardieri				
Narrow Leaf Peppermint	Eucalyptus radiata				
Red Gum	Eucalyptus camaldulensis				
African boythorn					
African boxthorn	Lycium ferocissimum				
Agapanthus	Agapanthus praecox				
Angled Onion	Allium triquetrum				
Arum Lily	Zantedeschia aethiopica				
Bent grass	Agrostis capillaris				
Blackberry	Rubus fruticosus aggregate				
Brassica	Brassica sp.				
Brome grass	Bromus sp.				
Capeweed	Arctotheca calendula				
Cats-ear	Hypochoeris radicata				
Clover	Trifolium sp.				
Couch Grass	Cynodon dactylon				
Curled Dock	Rumex crispus				
Fat hen	Chenopodium album				
Fireweed	Senecio madagascariensis				
Fumitory	Fumaria muralis				
Gorse	Ulex europaeus				
Kikuyu	Pennisetum clandestinum				
Milk thistle	Sonchus oleraceus				
Mirror bush	Coprosma repens				
Monterey Cypress	Cupressus macrocarpa				
Nightshade	Solanum sp.				
Onion grass	Romulea rosea				
Pampas grass	Cortaderia sp.				
Panic veldt (Annual)	Ehrharta longiflora				
Panic veldt (Perennial)	Ehrharta erecta				
Paspalum	Paspalum dilatatum				
Paterson's curse	Echium plantagineum				
Perennial ryegrass	Lolium perenne				
Pine Tree	Pinus radiata				
Plantain, Ribwort	Plantago lanceolata				

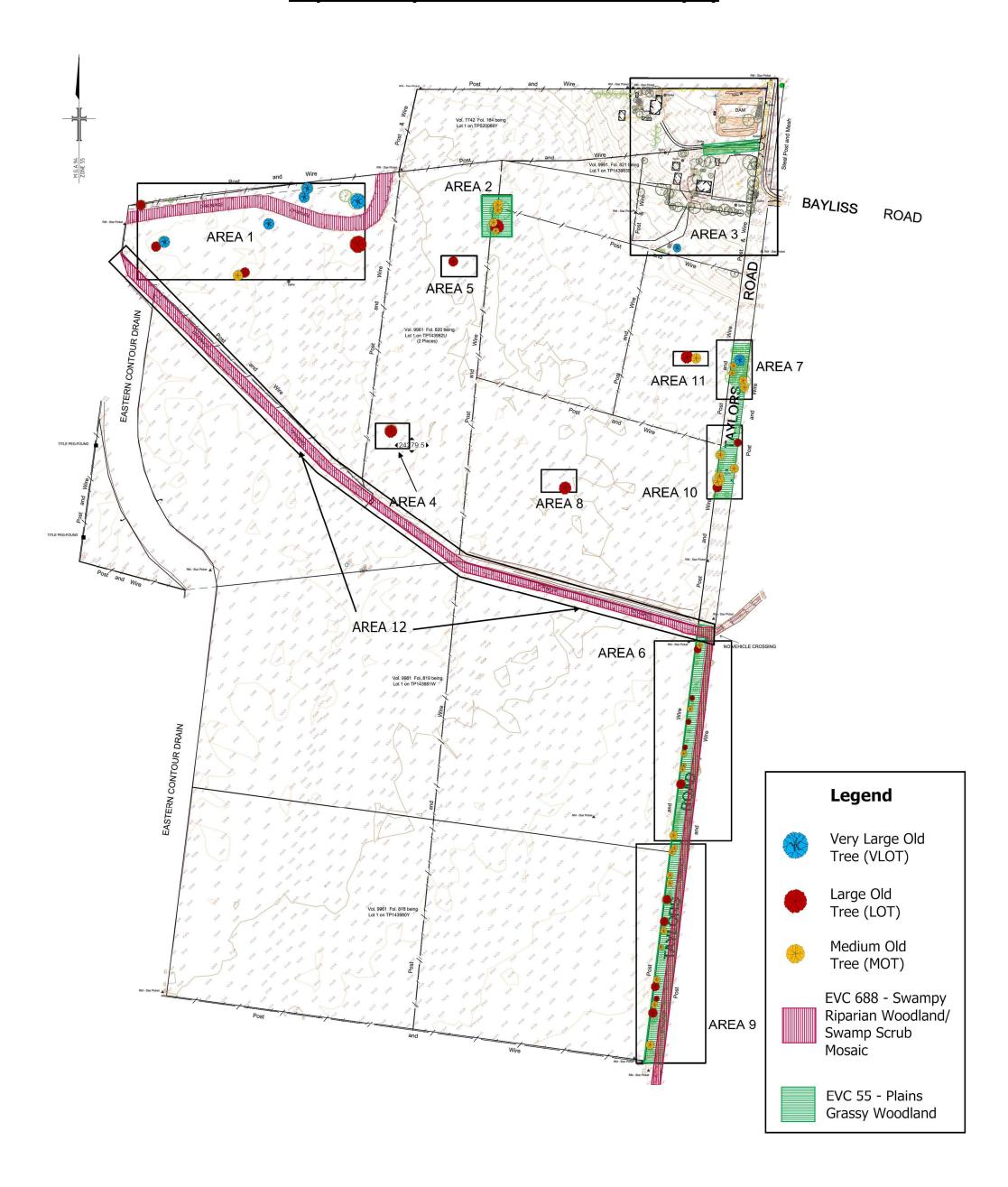
Pussy Willow	Salix reichardtii
Small flowered mallow	Malva parviflora
Spear thistle	Cirsium vulgare
Spotted gum	Corymbia maculata
Stinging nettle	Urtica dioica
Sweet Pittosporum	Pittosporum undulatum
Umbrella sedge	Cyperus involucratus
Vetch	Vicia sp.
Willow	Salix sp.
Yorkshire Fog	Holcus lanatus

Fauna Species List

	Exotic
Common Indian Myna	Acridotheres tristis
Cow	Bos sp.
Horse	Equus ferus
Domestic sheep	Ovis aries
Spotted Turtle-Dove	Steptopelia chinensis

Na	ative
Australian Reed-Warbler	Acrocephalus australis
Australian White Ibis	Threskiornis molucca
Australian Wood Duck	Chenonetta jubata
Black-shouldered Kite	Elanus axillaris
Chestnut Teal	Anas castanea
Little Raven	Corvus mellori
Magpie-lark	Grallina cyanoleuca
Pacific Black Duck	Anas superciliosa
Richard's Pipit	Anthus novaeseelandiae
Silver Gull	Larus novaehollandiae
Welcome Swallow	Hirundo neoxena
White-faced Heron	Egretta novaehollandiae
Willie Wagtail	Rhipidura leucophrys

Map 1 Site Layout and Locations of Zones (A3)



Gary Coles

From: julie.edwards@dse.vic.gov.au

Sent: Thursday, 16 May 2013 3:24 PM

To: Gary Coles

Cc: wwood@cgd.vic.gov.au; darren.wilson@cgd.vic.gov.au;

tricia.lumsden@dse.vic.gov.au

Subject: {Disarmed} 845-875 Taylors Rd, Dandenong South - Development Plan

Follow Up Flag: Follow up Flag Status: Completed

Categories: 6941 - Taylors Rd

Hi Gary,

DSE reference: SP446594, SP443632

I am writing in response to your email of 18 April 2013 to Suriya Vij of this Department. Suriya no longer works in this area and your query has been passed on to me. I apologise for the delay in responding.

I understand that this property is within the Dandenong South Native Vegetation Precinct Plan (NVPP) area. The approved NVPP shows Tree 99 on this property to be retained and protected. I understand that you are now seeking to remove Tree 99 and instead retain and protect another nearby group of trees shown as Trees 96, 97 and 98 in the NVPP.

The Department has no objection in-principle to this change as long as the trees to be retained will be appropriately protected from any adverse impacts in the long term and in accordance with relevant standards including the Australian Standard AS 4970-2009 Protection of Trees on Building Sites. If the trees are to be used as offsets for removal of native vegetation elsewhere then an area of twice the canopy diameter of the trees must be fenced and protected and there must be active management and monitoring to ensure long term survival and recruitment.

I understand that there is to be fill placed on the site greater than 1 metre in some areas, including in the area around these trees. The placement of fill will need to be carefully managed to ensure there is no adverse impact on the trees and to maintain the existing hydrological conditions for these trees. This needs to be demonstrated in the approval process. The NVPP requires that 'the placement of fill must be designed so as to ensure that it does not compromise native vegetation to be retained.'

Please contact me if you have any questions regarding these comments.

kind regards

Julie Edwards | Senior Biodiversity Officer | Environment & Water | Regional Services - Port Phillip Region Department of Environment and Primary Industries | Level 8/8 Nicholson Street, East Melbourne | PO Box 500 East Melbourne VIC 8002

T: 03 9637 9483 | F: 9637 8999 | M: 0429 001 565 | **MailScanner has detected a possible fraud attempt from**

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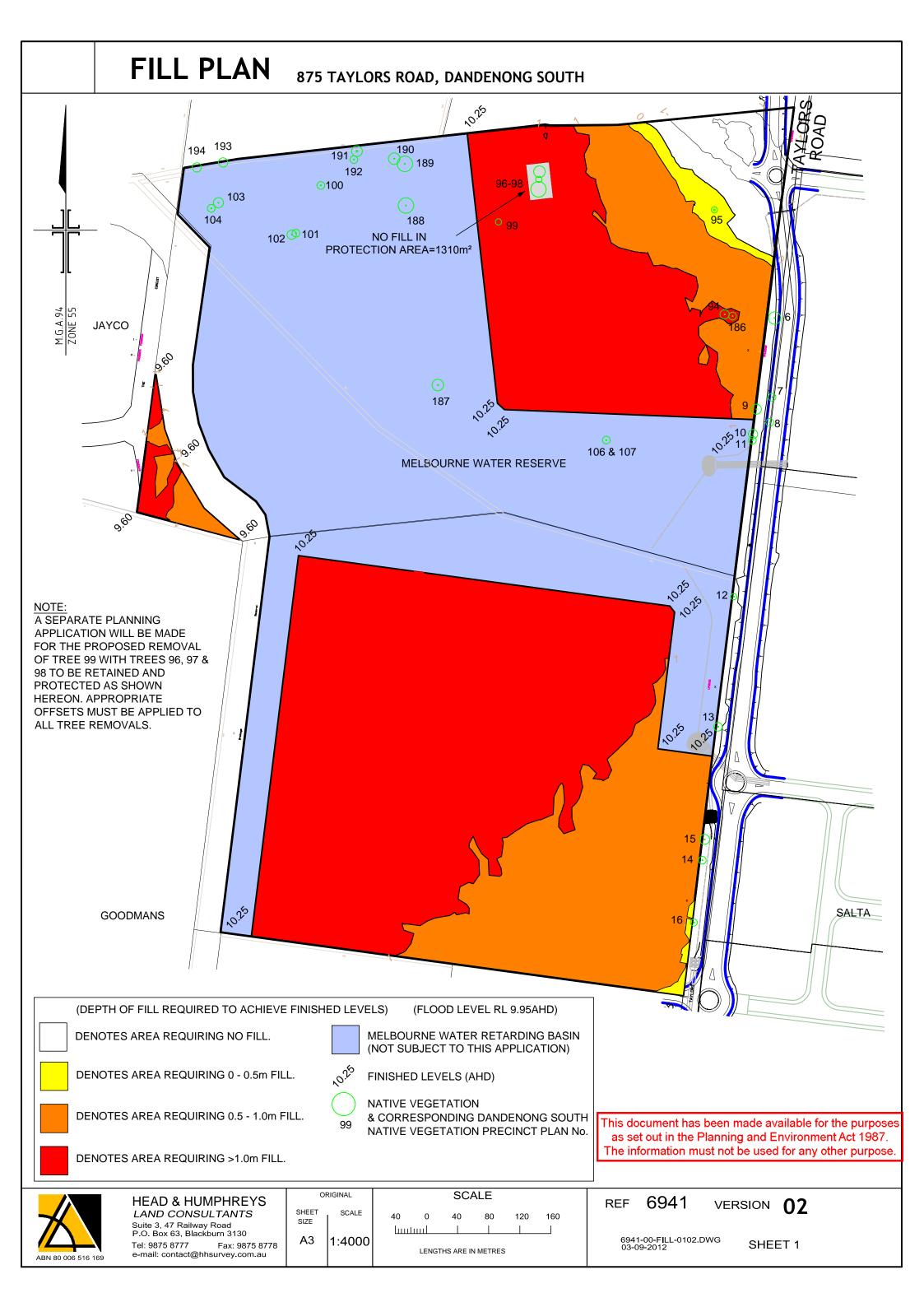
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Attachment 8 Fill Plan



Attachment 9 Landscape Plan





INITIAL ISSUE OF DRAWING

HEAD & HUMPHREYS
LAND CONSULTANTS
Suite 3, 47 Railway Road
P.O. Box 63, Blackburn 3130
Phone: +613 9875 8777
Fax: +613 9875 8778
e-mail: contact@hhaurvey.com.au
Ann 80006 161 169

NOTATIONS

OFFSET PLANTING TO BE UNDERTAKEN ON THE PERIMETER OF THE MELBOURNE WATER RESERVE (ADJACENT TO THIS LAND) AS DISCUSSED WITH MELBOURNE WATER.
 MELBOURNE WATER TO PROVIDE DETAILS OF THE LANDSCAPE TREATMENT FOR THE WATERWAYS AND RETARDING BASIN AS PART OF MELBOURNE WATER DEVELOPMENT.

LEGEND

- PROPOSED STREET PLANTING OF NATIVE SPECIES TO COUNCIL SATISFACTION
- RESERVE WITH PROPOSED RETENTION OF NATIVE VEGETATION
 - TREE PROTECTION PATCHES TO BE PLANTED WITH INDIGENOUS PLANTS ONLY

MIRAMAH INVESTMENTS P/L

LANDSCAPE PLAN

TITLE

PROJECT

CLIENT

TAYLORS ROAD
DANDENONG SOUTH

PROJECT N	° 6941	DATE 28.02	2.2012
DRAWN	JO / RL	CHECKED P	M
ORIGINAL	SCALE	1:2000	VERSION
ORIGINAL	SHEET SIZE	A1	02
SHEET No	SHEET_N	lo. 1 OF 1	UZ
			*** *** ***

Attachment 10 Integrated Transport Plan

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The information must not be used for any other purpose.



Taylors Road, Lyndhurst Integrated Transport Plan

transportation planning, design and delivery



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Taylors Road, Lyndhurst Integrated Transport Plan

Issue: E 06/03/12

Client: Head & Humphreys Pty Ltd Reference: IM10030

GTA Consultants Office: VIC

Quality Record

Issue	Date	Description	Prepared By	Checked By	Approved By
Е	06/03/12	Revised Final	Scott Lipscombe	Scott Lipscombe	3MLD

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Introduction



1. Introduction

1.1 Background

The Urban Growth Boundary (UGB) prepared in 2004 addressed the undersupply of industrial land in south eastern Melbourne and identified the Dandenong South industrial area as a major employment area. Since then a Structure Plan has been prepared and a Panel Hearing held to deal with the infrastructure requirements for future industrial and commercial activities in the Keysborough Site, the Lyndhurst Site and the Thompsons Road Retarding Basin.

GTA Consultants was commissioned by Miramah Investments to produce an Integrated Transport Plan (ITP) for the property at Taylors Road (the Site) directly south-west of the Colemans Road and Taylors Road intersection, as a requirement of the Development Plan. This ITP is consistent in all respects with an ITP previously prepared by GTA Consultants and approved as part of the Goodman Development Plan (Approved Goodman ITP), but adds further detail where relevant for the Site. The ITP is to be consistent with the Lyndhurst Structure Plan as shown in Figure 1.1.

1.2 Scope and Objectives

The ITP covers the Site and deals with all road network users and modes of transport. Its aim is to assist in achieving the objectives of Melbourne 2030 in terms of sustainable transport design by reducing car dependency and encouraging public transport use, cycling and walking where possible. The ITP has been prepared to be consistent with the Department of Transport's Advisory Note for Integrated Transport Plans.

The ITP is required to provide the following outcomes:

- review of access to the site for all transport modes
- access to the existing and future road network
- adequate pedestrian and cycle access throughout the Site
- pedestrian and cycle strategy within the Site
- potential public transport access to the Site
- integration with existing and future public transport services and infrastructure.

1.3 Reference Documents

The ITP references a number of background documents, including the following:

- Lyndhurst Site South-West Corner, Dandenong South Integrated Transport Plan, GTA
 Consultants, 12 May 2009 (Approved Goodman ITP)
- Dandenong South Industrial Area Extension Structure Plan, SGS, January 2009
- Dandenong South Industrial Area Extension Development Contributions Plan, SGS,
 January 2009
- Greater Dandenong Planning Scheme Amendment C87 Panel Report, City of Greater Dandenong, July 2008
- Planning Scheme Amendment C87 Dandenong South Industrial Area Extension Structure
 Plan, Panel Recommendation Council Officer Responses, 22 September 2008

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Introduction

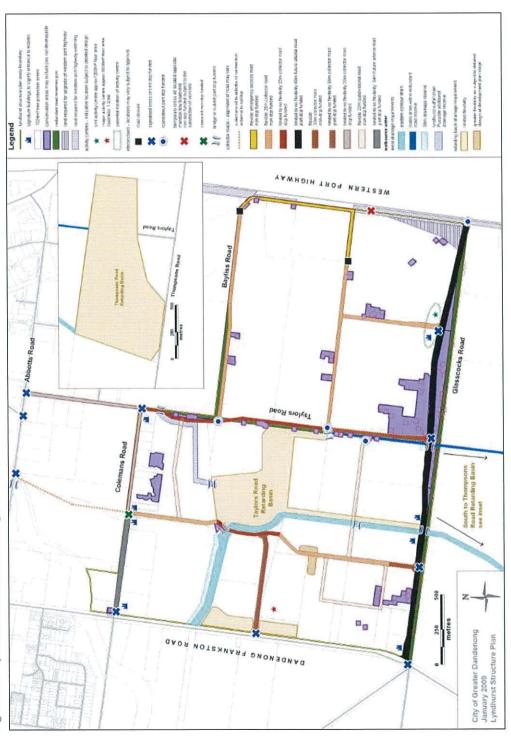
- C87 Dandenong South Industrial Area Extension Structure Plan Traffic Assessment, Cardno Grogan Richards, February 2008
- Dandenong South Amendment C87 Evidence of John Piper Traffic Pty Ltd, February 2008
 (Piper Evidence)
- Structure Plans for extensions to the Dandenong South Industrial Area Traffic Analysis and Road Costing, John Piper Traffic Pty Ltd, February 2007 (Piper Traffic Report)
- Colemans Road West Development Plan, Urbis, December 2007
- 75-90 Colemans Road, Dandenong South Traffic Report, GTA Consultants, June 2007
- Advisory Note for Integrated Transport Plans, Department of Transport, September 2008
- Public Transport Guidelines for Land Use and Development, Department of Transport,
 September 2008
- Greater Dandenong Public Transport Strategy, Needs and Priorities, City of Greater Dandenong, 2004
- Melbourne 2030
- VicRoads Access Management Polices, VicRoads, May 2006
- the Victorian Transport Plan, December 2008
- other documents as nominated.

1.4 Planning Context

Council's strategic direction for land use planning is illustrated in the Lyndhurst Structure Plan as shown in Figure 1.1.

The Development Contribution Plan is informed by the Structure Plan for the Lyndhurst and Keysborough Sites and lists road infrastructure items that the City of Greater Dandenong, as well as other agencies, will be expected to provide to service the Dandenong South Industrial Area extension.

Introduction



"Source: Dandenong South Industrial Area Extension – Lyndhurst Structure Plan, January 2009

Taylors Road, Lyndhurst Integrated Transport Plan



The Area and Surrounds

2. The Area and Surrounds

2.1 Land Use

The Site is located within the Lyndhurst Site which is approximately five kilometres to the south of the Central Dandenong Activity Centre and 24 kilometres from the central activities district of Melbourne.

The Lyndhurst Site is 678 hectares in area and bounded by the Dandenong – Cranbourne railway line and Western Port Highway to the east, Glasscocks Road to the south, Dandenong-Frankston Road to the west and includes properties to the north of Colemans Road/Bayliss Road as shown in Figure 2.1.

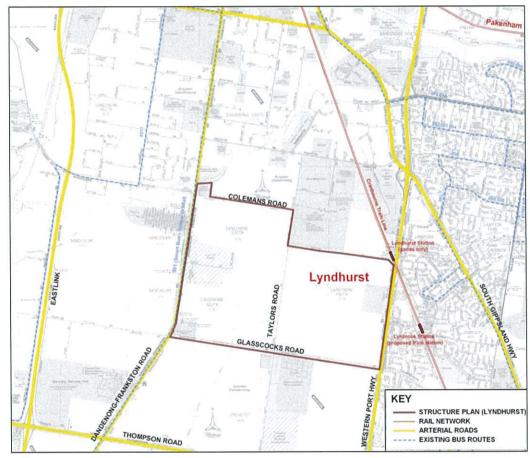


Figure 2.1: Lyndhurst Site and Existing Transport Network

2.2 Approved Goodman ITP Area and the Site

The Approved Goodman ITP Area covers approximately 230 hectares in the south-west corner of the Lyndhurst Site. It is bounded by Dandenong-Frankston Road to the west, Taylors Road to the east, Glasscocks Road to the south and the Eastern Contour Drain to the north. It contains the Site but did not deal specifically with access and movement issues for the Site

The Site is located within the Approved Goodman ITP Area above at 155 Glasscocks Road, on the northwestern side of the Taylors Road and Glasscocks Road Intersection. It covers an area of approximately 91 hectares, with a frontage of approximately 1230 metres to Taylors Road. Figure 2.2 illustrates the location of the Approved Goodman ITP Area and the Site in relation to the Lyndhurst Site.



The Area and Surrounds

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Figure 2.2: Approved Goodman ITP Area and Site

2.3 Population

The population of Greater Dandenong is estimated at 131,000¹ people with little change over the past 15 years. It has a growing proportion of ageing people which is forecast to lead to a doubling of the number of older residents by the year 2030.

2.4 Employment

In 2006, 48,000 Greater Dandenong¹ residents aged 15 years or more were in paid work. In the five years to 2006, the number of people working within the Greater Dandenong rose by 7,000 from 67,000 to 74,000. Among the major industries are manufacturing, accounting for 32% of local employment, as well as the retail and wholesale sectors, each employing 10%.

2.5 Journey to Work (JTW) Patterns

Only 7% (Melbourne average is 14.5%) ¹ of residents of Greater Dandenong use public transport as a means of transport. Public transport, especially in Dandenong South, is limited in comparison to other parts of Melbourne. Figure 2.3 illustrates the results of the ABS JTW¹ data in the surrounding suburbs, which are likely to form the basis of significant proportion of the work force travelling to and from the

¹ Australian Bureau of Statistics - 2006 Census Journey to Work Data



The Area and Surrounds

Approved Goodman ITP Area, whilst Table 2.1 provides existing and target mode shares for the same area.

Figure 2.3: Journey to Work Pattern in the Surrounding Suburbs

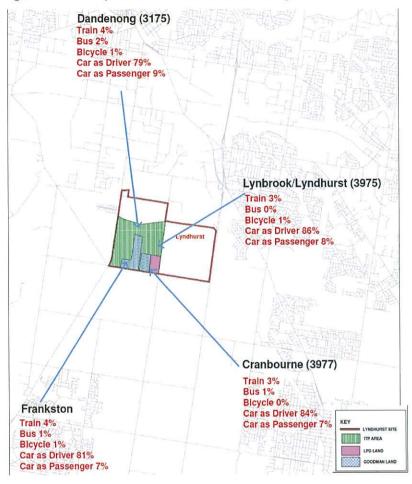


Table 2.1: Mode Share for Surrounding Suburbs and Approved Goodman ITP Area and Site Target

Mode		Average	ITP Area			
	Dandenong	Lynbrook/ Lyndhurst	Cranbourne	Frankston	of 4 suburbs	and Site Target
Car as Driver	79	86	84	81	83	79
Car as Passenger	9	8	7	7	8	10
Train	4	3	3	4	3	4
Bus	2	0	1	1	1	2
Walk	3	0	2	4	2	2
Bicycle	1	1	0	1	1	1
Other [1]	2	2	3	2	2	2
Total	100	100	100	100	100	100

[1] Includes truck, motorbike and taxi

The targeted mode share recognises the nature and location of the area and its associated travel behaviour outcomes.

GTA consultants

Transport Issues

3. Transport Issues

Through a review of existing conditions a suite of transport themes has been developed within which specific actions can be grouped. The four transport themes are:

- walking
- cycling
- public transport
- road network access.

The ITP is structured to focus on each of these transport themes. Within each theme this report discusses the specific context and issues that affect the ITP area before highlighting actions and targets. A summary list of all the actions and targets is provided in Section 4.

3.1 Walking

Walking is to be encouraged as an alternative to private vehicle travel through improving connectivity and increasing walk trips to and from public transport interchanges and commercial centres.

Currently, there are no pedestrian links between the Site and neighbouring areas. However pedestrian crossing points are controlled via a signalised crossing at key signalised intersections such as Frankston/Dandenong Road/Willow Road and Western Port Highway/Moreton Bay Boulevard.

The issue of pedestrian provision was partially addressed in the reports to the Panel Hearing, which showed typical cross sections for all types of roads within the Lyndhurst Site (refer to Piper Traffic Report, Section 5 pp 25-26). The proposed cross sections include pedestrian footpaths on both sides of the carriageway. In addition, all signalised intersections will incorporate pedestrian crossings.

The Structure Plan sets out two proposed activity centres within the Lyndhurst Site (refer to Figure 4.1):

- one that provides a range of retail, commercial and other services relevant to industrial development in the area (Frankston Dandenong Highway south of Jayco Road)
- one that provides a daily convenience function for the area of higher worker density (Glasscocks Road).

In addition, open spaces are provided which require pedestrian access so they can be used by workers at lunchtimes and similar. The Structure Plan defined the open spaces and these are reflected in the Approved Goodman ITP Area layout.

The Structure Plan and Panel Report support new pedestrian links along all new roads and through open spaces connecting new developments with proposed activity centres and public transport services.

The following recommendations are made in relation to pedestrian accessibility:

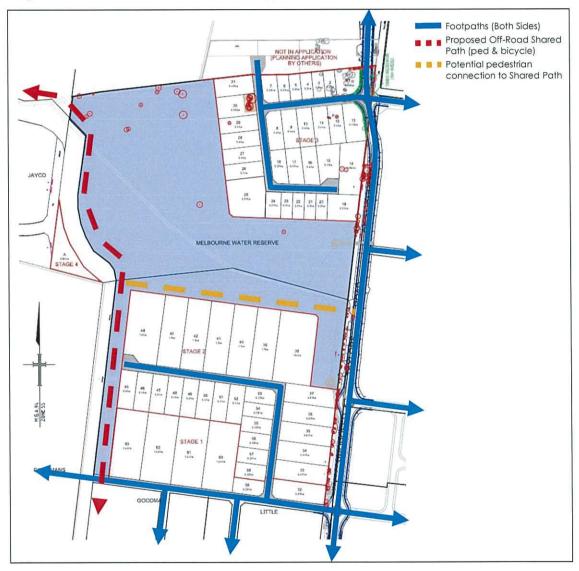
- Provide signalised pedestrian crossings at the Frankston Dandenong Road / Glasscocks Road
 Intersection and the Glasscocks Road / Taylors Road Intersection.
- Provide pedestrian footpaths on both sides of Glasscocks Road (to allow for a safe pedestrian linkage to/from public transport stops).
- Provide pedestrian footpaths on one side of the roads adjacent the Site except for roads with potential bus routes which will be provided with paths on both sides.



- Provide visible, safe, attractive and functional pedestrian linkage to/from the public transport stops and the proposed open spaces and bicycle paths.
- Develop a signage and wayfinding strategy to maximise the use of the public transport system.

Figure 3.1 outlines the anticipated pedestrian network within the subject site and indicates connections to proposed off-road shared path facilities as well as additional connections to the wider established pedestrian network.

Figure 3.1: Potential Pedestrian Site Network Opportunities



3.2 Cycling

Cycling is a low cost and sustainable form of transport and is generally suitable for short trips (one to 10 kilometres). It is therefore a suitable alternative to private cars and can help to reduce congestion. It is important that the proposed road network and individual developments within the Lyndhurst Site makes provision for bicycle use. Although bicycle usage in industrial areas is typically lower than in other urban areas, replacing short car trips with walk and cycle trips should not be underestimated in terms of resulting accessibility benefits.



At present, the Greater City of Dandenong has approximately 54km of off and on-road bicycle paths with shared paths along the Dandenong Creek and EastLink providing good north-south connections. However, similarly to pedestrian facilities, the Lyndhurst Site is characterised by a shortage of bicycle paths. Currently, only short sections of Western Port Highway has designated on road marked bicycle lanes. The nearest off road bicycle route are the Dandenong Creek Bicycle Trail and a number of paths in Lynbrook in the City of Casey.

The main concern about cycling is cyclist safety, particularly on busy roads and at intersections. The Structure Plan identifies the opportunities to promote non-motorised access to the Lyndhurst Site by incorporating footpaths and bicycle paths into the Development Plan approval process.

Cycling is well suited to the Approved Goodman ITP Area for a variety of work-related journeys due to the area's relatively flat topography. Walking and cycling will also be essential in connecting individual sites within the area with future public transport services (e.g. Lynbrook Railway Station- refer to Figure 4.1).

The Structure Plan provides a well-connected network of collector roads which provide direct access in all directions. Within the area, it provides opportunities for shared footpaths on one side of the carriageway and off road recreational trails along the eastern contour drain and open space network (refer to Figure 4.1).

If required, the network of collector roads within the area can be used by cyclists to link with designated bicycle paths and other facilities. These roads will play an important role in the connectivity of the overall network. The important road design aspects to best provide for cycling include: managed vehicle speeds, adequate sight distances, adequate street lighting, an even surface and lack of any squeeze points.

A bicycle network will also require secure parking and storage facilities at train stations, activity centres and work places. It is anticipated that the new Lynbrook Train Station will become the focus for bicycle activity to and from the area. Whilst it is proposed to provide bicycle facilities at the station, it is important that those facilities are located in well-lit and safe environments.

The overall approach to encourage cycling within the area is also relevant to all land holders with a particular focus to be paid to end-of-trip facilities to be incorporated into developments. The Site will promote cyclist access with features including:

- Connect to shared footpaths along the collector road network where they exist and off road paths along the open space network.
- Connect to public transport services with paths on the Site.
- Provide safe end-of trip facilities (bike lockers, changing rooms, showers).
- Provide material to advise cyclists how to access the Site by bike.

Figure 3.2 outlines the anticipated cycling network within the subject site and indicates connections to proposed off-road shared path facilities as well as additional connection to the wider established cycling network. It comprises both formalised on-road bicycle lanes as well as indicating the intended informal cycling routes within the site.



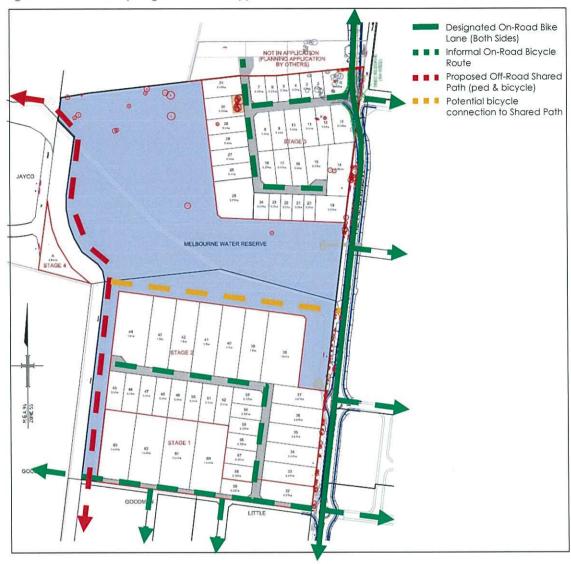


Figure 3.2: Potential Cycling Site Network Opportunities

3.3 Public Transport

The Structure Plan identifies opportunities to promote public transport and non-motorised vehicle access by incorporating bus interchange facilities and ensuring the road network accommodates new bus services in the future. New and expanded bus routes should endeavour to provide local access for potential employees between the Lyndhurst Site, surrounding suburbs and the proposed new Lynbrook Train Station.

Existing Services

The City of Dandenong has an established network of public transport routes but noticeable lack of services in Dandenong South. The Lyndhurst Site is currently serviced by only one bus route running north-south along Dandenong Frankston Road. The 901 bus route was introduced in March 2008 as part of the Smart Bus program to provide a cross-town connection from Frankston to Ringwood via Dandenong. The 901 bus route and Cranbourne train line form part of the Principal Public Transport Network that connects the Principal, Major and Specialised Activity Centres for the metropolitan area.



Table 3.1 summarises the existing public transport services, their routes and major destinations that can be reached using these services (Figure 2.1 shows the existing public transport services within the area).

Table 3.1: Existing Public Transport Services

Service	Line or Roufe Number	Route Description	Frequency (mins) Peak/Off Peak	Service Span First/Last Service		
				Weekday	Weekend	
Train	Cranbourne	City – Cranbourne	30/30	4:33am/1:02am	4:58am/1:02am	
Bus	901 (SmartBus)	Frankston – Ringwood	15/15	4:55am/10:00pm	6:45am/9:15pm	
	857	Dandenong - Chelsea	15/60	5:05am/6:20pm	7:37am/12:30pm	

The Site is located approximately 2km to the existing Smart Bus services along Frankston-Dandenong Road that provide connections to the CAD of Dandenong approximately 8km to the north and to Frankston approximately 12km to the south.

The ability of the existing services to attract passengers relies upon:

- geographic coverage
- timelines (service span, frequency and reliability)
- safety
- ease of use
- awareness of the service in the first place.

Public transport service coverage is usually considered adequate for those areas within 800m (10 minutes walk) of a train station and 400m (5 minutes walk) of a bus route. On this basis, the Site is beyond a reasonable walk distance to the existing SmartBus service.

Opportunities

An opportunity exists to establish new bus routes, or modify an existing route, to link to the new railway station, the SmartBus service, the activity centres within the Approved Goodman ITP Area and surrounding residential catchments along with key destinations further afield such as Frankston and Dandenong. These services would benefit employees and residents in the neighbouring suburbs.

Recommendations

It is recommended that the Site be provided with a bus stop within a comfortable walking distance (up to 400m) to maximise the use of the service. This requirement would be met by services operating along the Site's main road frontages of Taylors Road and Colemans Road. However, consideration should also be given to the possibility for a service connecting between the area and Lynbrook Train Station and alternative locations.

Potential Bus Routes and Interchange

Three potential bus routes have been identified to assist Government in the planning of the area as shown in Figure 4.1. Route 1 provides a direct east-west link potentially between the proposed activity centre on Jayco Drive and the new Lynbrook Train Station utilising Glasscocks Road, the north-south collector road (LR5) and Jayco Drive. Routes 2 and 3 provide potential additional north-south service coverage and utilise Glasscocks Road, Taylors Road and the LR5 Road. All of these routes pass the Site and would therefore service it.



It is understood that DoT is planning for the proposed activity centre located south of Jayco Road to incorporate a bus interchange. New roads within the area, which will be identified by DoT and Council to accommodate future bus routes, should be constructed with the below ground infrastructure in place to accommodate future bus stops, shelters and associated works. Connecting paths and road crossings should be provided during the initial development along with supporting infrastructure such as lighting to suit the night time use of the services.

The bus stop locations are recommended to be near intersections to maximise walking accessibility and allow a safe road crossing opportunity. In addition, bus stops should also be provided between intersections where distances exceed 300m and where two bus routes intersect. The main bus stop locations suggested to service the Ste are therefore shown in Figure 4.1 and include the intersections of Glasscocks Road and Taylors Road and Taylors Road and LR14 along the northern Site boundary. The other logical stop locations are mid block along the Site frontage to Taylors Road.

It is also recommended that provision be made for signal priority at signalised intersections through treatments such as exclusive bus turning phases or individual green phase for buses. It is understood that some upgrades are already being implemented to the 901 Smart Bus route at the Frankston-Dandenong Road / Jayco Drive Intersection to provide better access for southbound buses, and a dedicated bus lane with a 'queue jump' for northbound buses.

The network of roads within the area identified to accommodate future bus services will be constructed to accommodate those services in terms of road width, intersection design treatments and pavement construction (Refer to Piper Traffic Report, Section 5 pp 25-26 for road reserve widths).

3.4 Road Network Access

The rationale for the road network within the area, and to the Site itself, is described in the Structure Plan. It aims to provide suitable access arrangements off the surrounding arterial road network to land parcels within the area. The road network was agreed as part of the Structure Plan and Panel Hearing, noting that the Structure Plan indicates that the road locations may vary. Taylors Road will become the major north-south road supplemented by additional north-south collector road (LR5) which will run through the middle of the area. The actual alignment of this road is influenced by the design of a retarding basin (Refer to Figure 4.1 for road hierarchy and locations).

It is understood that Goodman, for the adjoining site to the west has committed to constructing a bridge over the contour drain which maintains the intents of the Structure Plan road network. The potential for an east-west road link LR14 may be possible, given the bridging works for the purposes of local connectivity or public transport provision, however the location and alignment of this link road is currently unspecified.

When determining suitable access arrangements from developments within the ITP Area to arterial roads, reference should be made to VicRoads Access Management Policies and approval must be granted by the Responsible Authority.

As the Site is located on Taylors Road, it can potentially be provided with access along its southern and eastern frontages. In addition, LR14 referred to above may potentially run along the northern edge of the Site and provide further opportunity for access. This road will potentially serve as shared access for the Site, the Goodman land to the west and the Mirramah land to the north. The placement of this road may alter slightly from that described in the structure Plan to suit the needs of adjacent land owners.



Site Access

The detailed configuration of the Site and its associated access points will be resolved as part of separate town planning applications. However, a preliminary revised masterplan dated December 2011, reproduced in Figure 3.3 below, shows the street network to each individual Lot frontage.

Figure 3.3: Revised Masterplan, December 2011, showing Taylors Road Realignment



As it is understood, Taylors Road is proposed to be realigned with additional access roads in order for the subdivision to align and remain consistent with the existing Melbourne Water Reserve abutting the site. It is intended that three of these intersections incorporate roundabout controls, as shown and is subject to further review and design.

Whilst functional layouts of these intersections will be resolved at a later stage in the planning process, it must be noted that the following design considerations (but not limited to) should be taken into account as part of the overall alignment and intersection layouts:

- Consideration of the swept paths for the appropriate design Heavy Vehicles which are anticipated to travel on these roads.
- Review of carriageway and road reservation widths to accommodate anticipated vehicular traffic. Approach lanes or turning radii may impact corner Lot splays.
- Consideration of Lot crossover access to abutting streets and intersections.

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Transport Issues

3.5 Demand Management

It is important that the issue of travel behaviour change be considered as part of each development included in the area. Examples of this include initiatives such as the Travel SMART travel behaviour change program for work places. The design of the Site should have regard to the arrangement of non-motorised and public transport access. Examples of activities that tenants may wish to offer their staff include:

- handing out public transport maps and timetables
- implementing a car pooling database
- assistance for staff wishing to purchase bicycles or Metcards
- establishment of shower and locker facilities for staff walking and cycling to/from work and installation of bicycle parking facilities
- development of new staff induction kits and participation in promotional activities such as the annual *Ride to Work Day*.

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Integrated Transport Strategy Elements

4. Integrated Transport Strategy Elements

The integrated transport strategy for the Approved Goodman ITP Area and the Site within the Lyndhurst Site provides for conventional private vehicle travel as well as other more sustainable options such as public transport and walks and cycle access.

Table 4.1 summarises issues, potential integration opportunities and constraints for a series of transport themes, while Figure 4.1 illustrates the ITP.

proposed train station | Figure 4.1: Lyndhurst Site South-West Corner LPD Land Integrated Transport Plan Potential Bus Route 3 Potential Bus Stop Locations 40m Arterial Roads (6 lanes) Structure Plan (Lyndhurst) ---- Proposed Off-Road Paths PEDESTRIAN & CYCLISTS **Proposed Activity Centre** Proposed Shared Paths **Existing Arterial Roads** Potential Bus Route 2 Existing Signalised Pedestrian Crossings 20m Collector Roads 22m Collector Roads 34m Collector Roads ---- Existing Bus Routes Potential Bus Roue 1 25m Collector Roads Proposed Signalised Intersections **Existing Bus Stops** 34m Arterial Roads GIAconsultants PUBLIC TRANSPORT Goodman Land ROAD NETWORK Open Space LPD Land **OPEN SPACES** ITP Area KEY Lynbrook Station Lyndhurst Station (duo spood) Cranbourne Train Line Figure 4.1: Integrated Transport Strategy for Approved Goodman ITP Area and Site Lyndhurst DANDENONG SOUTH 3175 123 (Istid10 wolley | Yeallow Orbital) 106 SHOLME

IM 10030 Taylors Road, Lyndhurst Integrated Transport Plan

Integrated Transport Strategy Elements

Transport Theme	Issues	Constraints	Opportunities [1]
Walking	Lack of pedestrian links between the ITP Area. Lack of pedestrian footpaths. Limited pedestrian crossing facilities in the vicinity of the ITP Area.	Limited range of travel in industrial area predominantly suited to very short trips. Environmental factors such as weather. A number of different walking environments (secluded paths, unlit areas). Safety, especially after dark.	Opportunity to provide new pedestrian links along all new roads and through open spaces. Connect pedestrian links with activity centres and public transport services. Opportunity to provide designated crossing facilities at Frankston Dandenong Road/Glasscocks Road Intersection and Glasscocks Road/Taylors Road Intersection. Provision of a signage and wayfinding strategy by Council to link to public transport services.
			Flat topography of the Lyndhurst Site.
Cycling	Poor on-road cycle network. Low usage in industrial areas. Lack of designated paths and facilities. No interconnectivity between transport modes.	High car and truck traffic in the industrial areas. High speeds on arterial roads may discourage commute cycling. Environmental factors such as weather. Safety, especially after dark.	Provision of shared paths along a number of collector roads within the ITP Area (as per Figure 4.1) and off road paths along the Eastern Contour Drain and Open Spaces. Well-connected network of collector roads providing direct access in all directions if required. Opportunities for linkage to the Dandenong Creek Trail, new Eastlink Trail and existing cycle paths within the City of Casey. Opportunities to provide cycle facilities at new intersections. Prosible linkage to the new Lynbrook Railway Station. Provision of end-of trip bicycle facilities at activity centre, Lynbrook Railway Station and the Site.
Public Transport	Lack of public transport services, especially buses, in Dandenong South. Poor geographical coverage with no east-west linkage.	Low density land use. Staged development. Limited surrounding high density areas. Discontinuing road network whilst being developed.	Opportunity to establish new DoT bus routes, or modify an existing route, to link to the new railway station, the SmartBus service, the activity centres within the ITP Area and surrounding residential catchments along key destinations further afield such as Frankston and Dandenong. Opportunity to construct new roads within the ITP Area with the below ground infrastructure in place to accommodate future bus stops, shelters and associated works Opportunity to provide new bus stops located within a comfortable walking distance (up to 400m). Bus stops to be located approximately every 300m along routes and reflect the location of key attractors such as activity centres and the road network layout itself. Site bus stop locations as per Section 3.3. Opportunity for DoT bus interchange at new activity centres. Provision for signal priority at new signalised intersections. New railway station at Lynbrook.
Road Network Access	Lack of appropriate road infrastructure. Lack of existing internal road network.	VicRoads plans to convert Western Port Highway to freeway standard with no abulting access. Increased vehicular traffic on the existing road network.	Proposed local road network will provide suitable access arrangements off the surrounding arterial road network to land within the IIP Area inclusive of the Site, and the proposed road reserves provide for on-street cycling paths and meet the requirements of the DoT Guidelines for bus services, as well as safely and efficiently providing for freight activity and staff movement. Good linkages to East Link. New road projects: Greens Road duplication, Dandenong South By-pass and extension of Glasscocks Road to the east of Casey. Opportunity to provide adequate on-site parking provision for trucks, staff and visitors in accordance with empirical rates.

^[1] Funding and implementing of the various items identified in opportunities should be consistent with the Structure Plan and Development Contributions Plan in terms of those items in public area (i.e. road reserve). All other treatments on private land are the responsibility of respective land owners unless separately identified in the DCP. The items in the Public Transport section are the responsibility of the Government.



5. Access Arrangements

5.1 Road Network Access

The Development Contributions Plan (DCP) outlines how the staging and timing of road construction within the Lyndhurst Site is expected to occur. The Site is expected to be developed in the period 2013-2015, following the development of the Lindhurst site in 2009-2011.

In terms of the LPD infrastructure contributions, the DCP adopts a development contribution rate of \$17.11 per square metre of developable land (138,000 sqm for the Site), resulting in a total infrastructure contribution requirement of \$2,361,180.

Notwithstanding, flexibility was envisaged within the DCP to cater for market forces and where necessary, construction of infrastructure should not restrict the development of land, subject to infrastructure funding being available. In order to provide access to the Site, three options have been considered as shown in Figure 5.1 and summarised in Table 5.1.



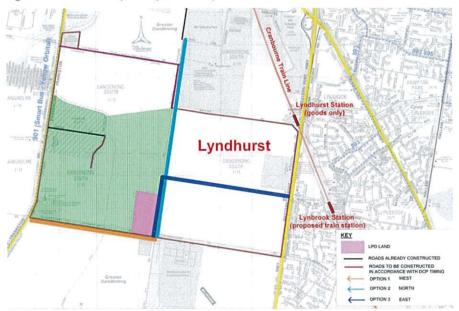


Table 5.1: Road Network Access Options

Access Option	Description	Works Required	DCP Cost [1]	DCP Timing
1	Access from West via Glasscocks Rd to Dandenong- Frankston Road	Construct Glasscocks Rd between Taylors Rd and Dandenong-Frankston Road in a two-way two-lane configuration. No signals required at Taylors Rd.	\$5.9m	2011-2015
2	Access from North via Taylors Rd	Construction of Taylors Road from Bayliss Road to the site, noting that Colemans Road and Taylors Road are expected to be constructed in the short term between Dandenong-Frankston Road and Bayliss Road	\$11.6	2009-1015
3	Access from East through Salta land to Western Port Hwy at Moreton Bay Blvd (temporary)	Construction of LR11 from Western Port Highway (via an interim signalised intersection with Moreton Bay Boulevard) through the Salta site to Taylors Road and to the site access. It is noted that following the construction of Glasscocks Road (2013-2017) the LR11 link will be terminated and no longer cater for through traffic movements	\$5.8 excl. Link through Salta land	2013-2015

^[1] Excludes land acquisition and various infrastructure items.

Option 1 providing direct access along Glasscocks Road to Dandenong-Frankston Road is preferred as it is the highest quality, most direct and cost-effective access strategy for the Site.

The DCP proposes that the first stage of Glasscocks Road, being a two lane two-way local road, will be constructed between 2013 and 2017 and funded through the DCP. Subsequent stages to duplicate it to a four lane divided carriageway then a six lane carriageway will be funded by VicRoads when they assume control of it as part of the arterial road network.

The DCP includes the provision of a new 40m road reserve to the north of the existing road reserve to accommodate the three stage widening above, while protecting a number of trees along its length. A number of these significant trees exist along the frontage of the Site and to the east of the Glasscocks Rd – Taylors Rd Intersection. The final alignment of the new road reserve will need to take account of the trees above, but there are options with respect to offset distances and resulting protection zone configuration that will inform the alignment. A proposed alignment for the 40m reserve and proposed first stage of construction will form part of the development submission for the Site in due course.

The intersection of Glasscocks Rd with Taylors Rd is expected to be used only by the Site in the period following its construction and as such will be unsignalised. The land requirements for the staged construction of the intersection will be resolved as part of the development application in due course.

The Taylors Rd alignment along the Site boundary is also set by the DCP and this alignment will form part of the detail in the development application.

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	GTA consultants
Summary	

6. Summary

This report sets out an Integrated Transport Plan (ITP) in accordance with the Structure Plan and Development Plan requirement for the Site at Taylors Road. The ITP is consistent with the Approved Goodman ITP Area, and adds further detail as required.

The ITP has been prepared using the relevant DoT Advisory Note and includes the results of consultation with DoT, Council and VicRoads.

The ITP has been designed so as to be consistent with the DoT Public Transport and Land Use Guidelines and other standards and guidelines relating to traffic and transport access and movement. It is a flexible document that allows for various development outcomes on the Site within the scope of what is permitted under the Adopted Structure Plan.

There are a range of options to provide road network access to the Site as set out in Section 5. A range of variables affect which option is adopted such as the timing of adjacent land development and associated availability of infrastructure contributions. However, Option 1 providing direct access along Glasscocks Road to Dandenong-Frankston Road is preferred as it is the highest quality, most direct and cost-effective access strategy for the Site.

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Melbourne

A 87 High Street South PO Box 684 KEW VIC 3101 P +613 9851 9600 F +613 9851 9610

E melbourne@gta.com.au

Sydney

A Level 2, 815 Pacific Highway CHATSWOOD NSW 2067 PO Box 5254 WEST CHATSWOOD NSW 1515 P +612 8448 1800

F +612 8448 1810

E sydney@gta.com.au

Brisbane

A Level 3, 527 Gregory Terrace BOWEN HILLS QLD 4006 PO Box 555 FORTITUDE VALLEY QLD 4006

P +617 3113 5000 F +617 3113 5010

E brisbane@gta.com.au

Canberra

A Unit 4, Level 1, Sparta Building, 55 Woolley Street PO Box 62 DICKSON ACT 2602 P +612 6243 4826

F +612 6243 4848

E canberra@gta.com.au

Adelaide

A Suite 4, Level 1, 136 The Parade PO Box 3421 NORWOOD SA 5067 P +618 8334 3600

F +618 8334 3610

E adelaide@gta.com.au

Gold Coast

A Level 9, Corporate Centre 2 Box 37 1 Corporate Court BUNDALL QLD 4217

E goldcoast@gta.com.au

P +617 5510 4800 F +617 5510 4814

Townsville

A Level 1, 25 Sturt Street PO Box 1064 TOWNSVILLE QLD 4810

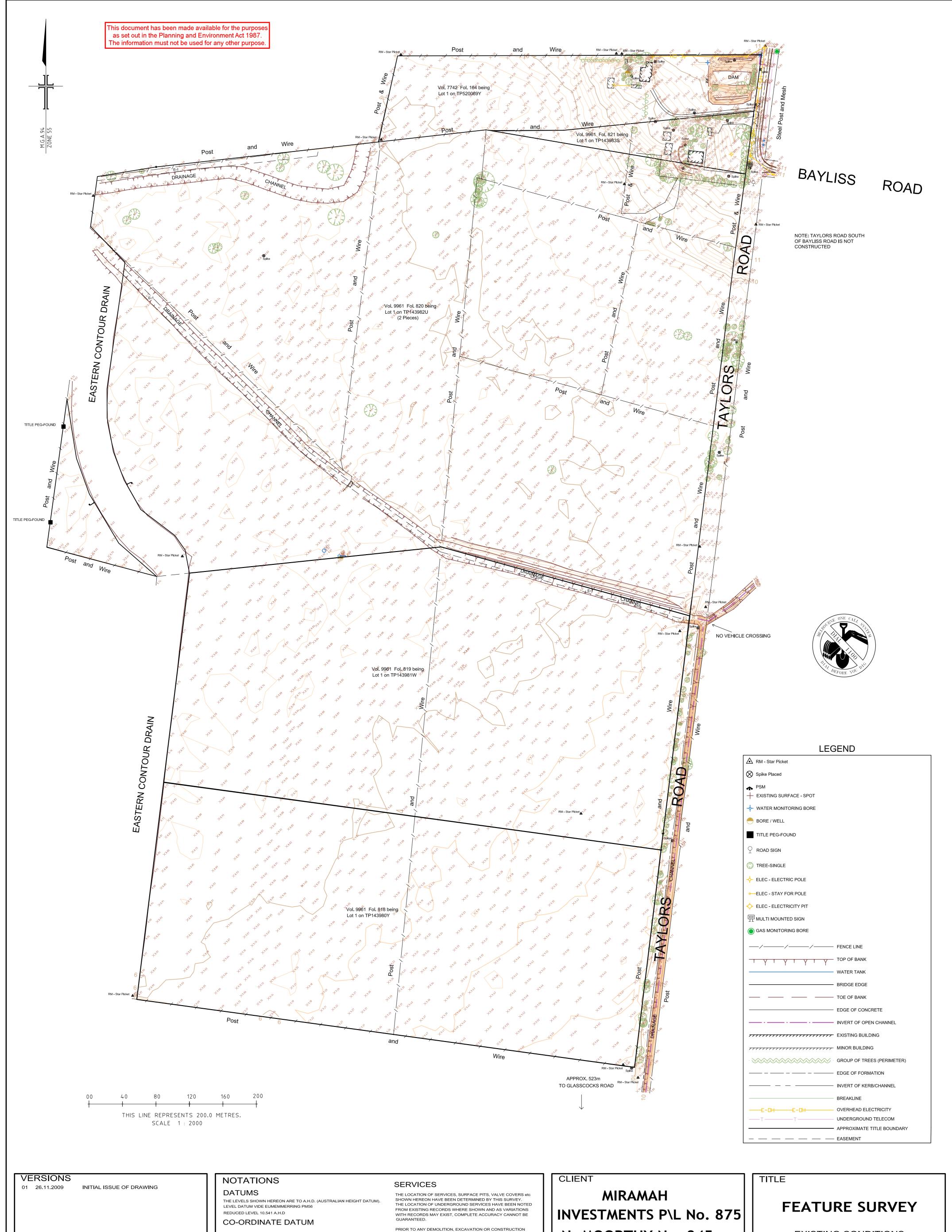
P +617 4722 2765

F +617 4722 2761

E townsville@gta.com.au



Attachment 11 Feature Survey Plan





HEAD & HUMPHREYS LAND CONSULTANTS Suite 3, 167 Whitehorse Rd P.O. Box 63, Blackburn 3130 Phone: +61 3 9875 8777 Fax: +61 3 9875 8778 e-mail: contact@hhsurvey.com.au

THIS PLAN IS ON M.G.A.94 HORIZONTAL DATUM (MAP GRID AUSTRALIA).

DATUM VIDE EUMEMMERRING PM141-PM143-PM56-PM241

THE COMBINED SCALE FACTOR IS 0.999896 **MISCELLANEOUS** DRAWING REFERENCE NO.6941-00-FEA-0101.dwg Layer State :20091125

DATE OF FIELD SURVEY : 20091106 TO 20091124 CONTOURS THE CONTOURS SHOWN ARE PROVIDED AS AN INDICATION OF GRADES ONLY AS VARIATIONS MAY OCCUR BETWEEN ACTUAL LEVEL POINTS SHOWN. CONTOUR INTERVAL SHOWN:
MAJOR INTERVAL: 1.0m
MINOR INTERVAL: 0.2m

REFER TO SHEET 2 (LOCALITY PLAN) AND SHEET 3 &4 (TAGGED TREE LOCATIONS)

TREES

ON THIS SITE THE RELEVANT AUTHORITY SHOULD BE CONTACTED TO ASCERTAIN THE POSSIBLE LOCATIONS OF FURTHER SERVICES AND DETAILED LOCATIONS OF ALL SERVICES.

BOUNDARIES

OCCUPATIONS SHOWN ALONG THE BUILDING LINES ARE FOR IDENTIFICATION PURPOSES ONLY AND THE PRECISE POSITION IN RELATION TO THE TITLE BOUNDARIES HAS NOT BEEN DETERMINED BY THIS SURVEY

BEEN DETERMINED BY DIMENSIONS ONLY AND NOT BY FIELD SURVEY TITLE AND EASEMENT DIMENSIONS REFER TO COPIES OF RELEVANT TITLES FOR FULL DETAILS REGARDING TITLE DIMENSIONS, EASEMENTS, ETC.

THE TITLE BOUNDARIES AS SHOWN HEREON WERE NOT MARKED AT THE TIME OF SURVEY AND APPROXIMATE LOCATIONS HAS BEEN

N. MOORTHY No. 845

PROJECT

TAYLORS ROAD DANDENONG SOUTH **EXISTING CONDITIONS**

DRAWING REF: 6941-00-FEA-0101.DWG

PROJECT No. 6941/6941A 26.11.2009 DRAWN CHECKED BS JO SCALE 1:2000 VERSION ORIGINAL SHEET SIZE Α1 SHEET No SHEET No. 1 OF 4

LAYER STATE: 20091126