



28 February 2011

# REPORT



## BLACK FOREST ROAD, WYNDHAM VALE PHASE I ENVIRONMENTAL SITE ASSESSMENT

**Submitted to:**

Alfred Sung  
Phileo Australia Ltd  
Level 8, 278 Collins Street  
Melbourne, Victoria 3000

**Report Number.** 117613005-001-R-Rev2

**Distribution:**

1 copy - Golder Associates Pty Ltd  
1 copy - Phileo Australia Ltd



## Table of Contents

<b>1.0</b>	<b>INTRODUCTION.....</b>	<b>1</b>
<b>2.0</b>	<b>SCOPE OF WORK AND PROJECT OBJECTIVES.....</b>	<b>1</b>
2.1	Scope of Work .....	1
2.2	Objectives .....	1
<b>3.0</b>	<b>SITE LOCATION AND DESCRIPTION .....</b>	<b>2</b>
3.1	Site Location.....	2
3.2	Planning Scheme and Zoning.....	2
3.3	Site Description and Current Site Use .....	2
<b>4.0</b>	<b>ENVIRONMENTAL SETTING .....</b>	<b>3</b>
4.1	Geological and Hydrogeological Setting .....	3
4.2	Local Groundwater Quality .....	3
4.3	Regional Groundwater Use .....	4
4.4	Surface Water.....	4
<b>5.0</b>	<b>SITE HISTORY .....</b>	<b>4</b>
5.1	Reviewed Information .....	4
5.2	Historical Aerial Photographs.....	4
5.3	Melway Street Directory Maps .....	5
5.4	Certificates of Title .....	5
<b>6.0</b>	<b>SITE INSPECTION .....</b>	<b>6</b>
6.1	General Use of Site and Surrounds.....	6
<b>7.0</b>	<b>REGULATORY REVIEW .....</b>	<b>7</b>
7.1	EPA Priority Site Register.....	7
7.2	Statutory Environmental Audits.....	7
<b>8.0</b>	<b>SUMMARY OF POTENTIAL ENVIRONMENTAL ISSUES .....</b>	<b>7</b>
<b>9.0</b>	<b>CONCLUSIONS.....</b>	<b>8</b>
<b>10.0</b>	<b>LIMITATIONS .....</b>	<b>8</b>

## FIGURES

Figure 1 – Site Location Plan

Figure 2 – Site Infrastructure



**APPENDICES**

**APPENDIX A**

Planning Scheme

**APPENDIX B**

Site Photographs

**APPENDIX C**

Aerial Photographs

**APPENDIX D**

Certificates of Titles

**APPENDIX E**

EPA Priority Sites Register

**APPENDIX F**

Completed Statutory Environmental Audits

**APPENDIX G**

Limitations



### 1.0 INTRODUCTION

Phileo Australia Ltd (Phileo) engaged Golder Associates Pty Ltd (Golder Associates) to undertake a Phase I Environmental Site Assessment (Phase 1 ESA) on five parcels located on Black Forest Road, Wyndham Vale Victoria (refer Figure 1). Golder Associates understands that Phileo wishes to understand the contamination status of the site to support potential urban development within the Growth Areas Authority boundary.

The Phase 1 ESA was undertaken in accordance with our proposal dated 13 January 2011 (reference P17613003-001-P-Rev0).

### 2.0 SCOPE OF WORK AND PROJECT OBJECTIVES

#### 2.1 Scope of Work

The scope of works undertaken for the Phase 1 ESA comprised the following:

- Limited review of selected publicly available historical information, including:
  - Certificates of Title information.
  - Historical aerial photographs.
  - Historical Melway Street Directory Maps.
- Review of local zoning and planning overlay maps.
- Review of regulatory databases relating to the site, including:
  - The Victorian Environment Protection Authority (EPA) Priority Sites Register.
  - List of completed Statutory Environmental Audits.
  - A review of the environmental site setting, including relevant geological, hydrological and hydrogeological information.
- A site walkover undertaken by a Senior Environmental Engineer to confirm the findings of the site history review.
- Compilation of the above information to provide a summary of historical land use for the site and its surrounds, highlight potential sources of contamination and areas of environmental concern due to current and historical activities or the natural setting, and highlight potential environmental planning constraints associated with the site location and surrounds.

No analysis of planning, cultural heritage or flora and fauna issues or any sampling, testing and/or other method of analysis was carried out as part of this work.

#### 2.2 Objectives

The objectives of the Phase 1 ESA are to:

- Reduce the uncertainty associated with the potential contamination status of the site.
- Highlight potential constraints that may be associated with the site (if any).
- Make recommendations for further assessment that may be required in order to further reduce the uncertainty (if any) to an acceptable level.



### 3.0 SITE LOCATION AND DESCRIPTION

#### 3.1 Site Location

The site is located in the suburb of Wyndham Vale approximately 31 km west of the Melbourne Central Business District. The site is bounded to the north by Greens Road with grazing land on the alternate side, the south by the Black Forest Road reserve with grazing land on the alternate side and to the west and east by grazing land including a dam in the south eastern corner of the site. Further to the east and north east are new residential developments. Figure 1 presents a Site Location Plan.

#### 3.2 Planning Scheme and Zoning

The site is located within the municipality of Wyndham. Pursuant to the Local Planning Scheme, the site is covered by three zones:

- The majority of the site is covered by the Urban Growth Zone (UGZ) which applies to land in transition from non-urban land to urban land.
- A section of the site through the middle is zoned Urban Floodway (UF) which is used to identify waterways, major floodpaths, drainage depressions and high hazard areas within urban areas which have the greatest risk and frequency of being affected by flooding.
- A strip of land along the western boundary is zoned Rural Conservation (RC). The rural conservation area is also covered by two overlays these being an Environmental Significance Overlay (ESO2) and a Public Acquisition Overlay (PAO5) associated with the proposed Outer Metropolitan Ring / E6 Transport Corridor.

The site is not covered by an Environmental Audit Overlay.

The planning scheme zoning and overlay map for the site is presented in Appendix A. For further information relating to local planning schemes refer to the Department of Sustainability & Environment (DSE) website <http://www.dse.vic.gov.au/planningschemes>.

#### 3.3 Site Description and Current Site Use

The site is an irregular parcel of land comprising five lots [Lots 1,2,3,4 and 5 on Title Plan 846432N (formerly known as part of Crown Allotment 1 Section 20, part of Crown Allotment 2 Section 20, Crown Allotments 1 and 2 Section 21, part of Crown Allotment 3 Section 21 Parish of Mambourin), Title Volume 06147 Folio 359] equating to approximately 370 hectares in size. The site is in most vacant and used for cropping. The site generally slopes to the middle of the site where a drainage line was noted.

Infrastructure and features noted on the site and indicated in Figure 2 include:

- A holding pen is located in the north western corner of the site adjacent to Greens Road (refer to Appendix B - Photo 1).
- A dam in the north eastern corner of the site again adjacent to Greens Road (refer to Appendix B - Photo 2).
- Three above ground water tanks and windmill located adjacent to Greens Road (refer to Appendix B - Photo 3).
- Two smaller depressions capable of holding water are located in the centre of the site (refer to Appendix B - Photos 4 and 5).
- Two large piles of basaltic rocks (assumed to be sourced from site): one along the western boundary and one along the Greens Road boundary (refer to Appendix B - Photos 6 and 7).



## 4.0 ENVIRONMENTAL SETTING

### 4.1 Geological and Hydrogeological Setting

Based on review of the Geological Survey of Victoria Melbourne Map Sheet (1:63,360), the general area of the site is likely to be underlain by sediments of olivine basalts of the Newer Volcanics. Typical of this formation the basalts are coarsely vesicular and contain minor interbedded layers or lenses of silty sands and baked soils. The Newer Volcanics basalts generally consist of multiple layers of basaltic lava which range from 0.5 m to 10 m thick. In general, the Newer Volcanics comprise olivine basalt exhibiting various structural features such as fracturing and columnar jointing. Underlying the basalt are Tertiary age sediments of the Brighton Group, Fyansford Formation and the Werribee Formation. This in turn overlies Silurian Age siltstone and sandstone.

The principal regional aquifers are considered to be the Newer Volcanics Aquifer and the Brighton Group Aquifer. The Newer Volcanics basalt forms a fractured rock aquifer that extends across most of western Victoria. The DSE Groundwater Beneficial Use Map of South Western Victoria – Water Table Aquifers indicates it is an unconfined aquifer, hence direct recharge from surface infiltration occurs over an extensive area. The Tertiary Age Brighton Group forms a granular aquifer, and is the deeper aquifer.

Regional groundwater flow is likely to be in a southerly direction towards Port Philip Bay. It may also be that groundwater is locally influenced and/or hydraulically connected to the Werribee River, located approximately 3.8 km to the east of the site. Werribee River flows in a general southerly direction towards Port Philip Bay, approximately 12.5 km south of the site.

### 4.2 Local Groundwater Quality

Based on review of the DSE Water Table Aquifers Beneficial Use map series for South Western Victoria, the groundwater in the regional area of the site is likely to be classified as Segment C. Each segment is defined by the State of Environment Protection Policy (SEPP) Groundwater's of Victoria on the basis of the background Total Dissolved Solids (TDS). Segment C is characterised by TDS content in the range of 3,501 mg/L to 13,000 mg/L. The beneficial uses that must be protected for this segment are shown in Table 1:

**Table 1: Ground Water Beneficial Uses**

Beneficial Use	Segment C
Maintenance of Ecosystems	Yes
Potable mineral Water Supply	No
Agriculture, Parks and Gardens	No
Stock Watering	Yes
Industrial Water Use	Yes
Primary Contact Recreation	Yes
Buildings & Structures	Yes



### 4.3 Regional Groundwater Use

A search of the DSE groundwater database indicated that there are at least 6 groundwater bores registered within a 2.5 km radius of the site boundary including one in the north eastern corner of the site (refer Appendix B Photo 3). All of the wells with a known usage are registered for either domestic and/or stock purposes. Table 2 presents a summary of the search results:

Table 2: Registered Groundwater Bores within a 2.5 km Radius of Site

Site ID	Site Name	Direction	Distance (m)	Status	Screen interval (mbgl)	Use of Groundwater
51967	BORE 77063	North East	Onsite	Active	6.10-31.70	Domestic and Stock
72442	BORE 102583	South West	1,662	Active	15.24-28.50	Domestic and Stock
51945	BORE 77041	North West	2,500	Active	11.27-13.71	Unknown
51994	BORE 77090	North East	1,839	Active	14.50-20.50	Stock
72445	BORE 102586	North East	1,900	Active	Unknown	Domestic and Stock
72452	BORE 102593	East	2,000	Inactive	3.00-42.67	Domestic

### 4.4 Surface Water

A dam was noted during the site walkover and a number of areas of informal ponded water at the site. The dam is located in the north east corner of the site adjacent to Greens Road, two areas capable of holding water were noted along the drainage line through the centre of the site. The drainage line was noted to extend from the western boundary through the middle of the site stopping just short of Greens Road. At the time of the site visit the drainage line was noted to contain ponded water with evidence of a recent overland flow event (refer to Appendix B - Photo 8).

## 5.0 SITE HISTORY

### 5.1 Reviewed Information

A limited site history review was completed in general accordance with the technical principles presented in the Australian Standard AS4482.1-2005 “*Guide to the sampling and investigation of potentially contaminated soil Part 1: Non-volatile and semi-volatile compounds*” (AS4482.1-2005). The following reviews were undertaken as part of the site historical study:

- Historical aerial photographs.
- Historical Melway Street Directory maps.
- Certificates of Title.

### 5.2 Historical Aerial Photographs

An aerial photograph review was undertaken to assess the potential for historical uses or activities at the site which may have adversely impacted on the site contamination status. Photographs were obtained for review from the Department of Sustainability and Environment (DSE) dating back to 1968. Review of the aerial photographs is provided in Table 3, with copies of the aerial photographs presented in Appendix C.



**Table 3: Summary of Aerial Photographs**

Year	Observations on Site	Observations Adjacent to Site
1968	The site appears to be vacant with the depression capable of holding water in the middle of the site visible.	To the east of the site a small area appears to be in the process of subdivision whilst the remainder of the land appear to be being used for farming.
1975	The site appears unchanged.	Further residential subdivision of the far east of the site has taken place. The immediately surrounding sites appear unchanged.
1986	The site appears unchanged although the drainage line and depression capable of holding water in the middle of the site is more evident.	The immediately surrounding sites appear unchanged.
2010	The dam to on the north eastern corner of the site and the storage tanks are present. The remainder of the site appears unchanged.	Further residential subdivision of to the east and north east of the site has taken place. The immediately surrounding sites appear unchanged.

### 5.3 Melway Street Directory Maps

Selected Melway Street Directories of Greater Melbourne for the period 1971 to 2010 were reviewed. The site did not appear in the Melway directories until 1980. This 1980 Melway indicated that a tributary of Lollypop Creek ran across the site from the west to the east where it crossed Greens Road in the vicinity of the large dam. The site and surrounding sites remained relatively unchanged until 2004 when the large dam on the adjacent property which forms the south eastern boundary of the site was noted. By 2010, the two areas capable of holding water in the middle of the site (along the drainage line) are noted.

### 5.4 Certificates of Title

Various Certificates of Title relate to the site and were retrieved online from Victoria Land Data website (<http://www.land.vic.gov.au>). Certificates of Title for the site were reviewed and the ownership details are summarised in Table 4, with copies of the Certificates of Title provided in Appendix D.

**Table 4: Summary of Certificate of Title Information**

Source	Year	Observation
Crown Allotments 1 and 2 Section 20, 1, 2 and 3 Section 21 Parish of Mambourin	Pre 1937	Crown
Certificate of Title Vol. 06147 Fol. 359	23 June 1937	The Equity Trustees Executors and Agency Company Limited of 472 Bourke Street Melbourne
Certificate of Title Vol. 06147 Fol. 359	4 September 1937	Thirza Leach Lawrence and Jean Fermos Lawrence
Certificate of Title Vol. 06153 Fol. 559 Lots 1 to 5 on Title Plan 846432N	13 September 1984	Robert Athol Johnson Hand
Certificate of Title Vol. 11202 Fol. 514	11 March 2010	Daleston Pty Ltd of Level 8 278 Collins Street Melbourne



## 6.0 SITE INSPECTION

### 6.1 General Use of Site and Surrounds

#### Site Observations

- In general the site appears to be used for cropping. The site is fenced with a wire and post fencing, and is accessible by a gate on the Greens Road boundary.
- There is a holding pen located in the north western corner of the site adjacent to Greens Road (refer to Appendix B - Photo 1).
- There was no evidence of rubbish located on the land although rubbish has been dumped extensively along Greens Road.
- Two piles of basalt rocks one located on the western boundary and one located along the northern boundary were observed (refer to Appendix B - Photos 6 and 7).

#### Vegetation

- The property consisted of ploughed fields. There were trees noted along the western and south eastern boundaries of the site. A detailed flora and fauna survey has not been undertaken as part of this assessment.

#### Water Storage and Use

- The Victorian Water Resources Map identified one groundwater bores on the site listed as being for domestic and stock use. A windmill and water tanks were noted as being associated with this well.
- One dam was noted on the site one on the north eastern boundary and two depressions capable of holding water along the central drainage line (refer to Appendix B - Photos 2, 4 and 5).
- A drainage line was noted as running west east through the centre of the site. Evidence of recent overland flow event was noted (refer to Appendix B - Photo 8).

#### Chemical Storage and Use

- No visual evidence of chemical storage was observed during the site inspections. The paddocks have been used for growing crops and as such pesticides, herbicides or fertilisers may have been used at the site.
- There was no visual evidence of sheep dips on the site.

#### Landfilling and Land forming Practices

- The site slopes from both Greens and Black Forest Road to a central drainage line this drainage line with little observable cutting or filling of the land except for the following:
  - The construction of a large dam on the Greens Road boundary, the shape of this dam indicates that the excavated material was likely pushed up around the edges to form the dam walls.
  - The drainage lines running through the centre of the site may have been excavated out to define the channel more clearly or create the areas capable of holding water.
  - Two basaltic rock stockpiles (approximately 25 m<sup>3</sup> each), this is most likely material from the site rather than imported fill.



## 7.0 REGULATORY REVIEW

### 7.1 EPA Priority Site Register

Priority Sites are sites for which EPA has issued a Clean-Up Notice pursuant to section 62A or a Pollution Abatement Notice pursuant to section 31A or 31B (relevant to land and/or groundwater) of the Victorian Environment Protection Act 1970. Typically, these are sites where pollution of land and/or groundwater presents an unacceptable risk to human health or to the environment.

EPA maintains the Priority Sites Register as a listing of all priority sites and the register is available to the public. It is important to note that the Priority Sites Register is not a listing of all contaminated sites in Victoria, nor is it a list of all contaminated sites of which EPA has knowledge.

A search of the EPA Victoria Priority Sites Register reported that the site is not listed on the register, and is not in the vicinity of a site listed on the Priority Sites Register. The results of this search are provided in Appendix E.

### 7.2 Statutory Environmental Audits

The Environmental Audit System was established in Victoria by the EPA as a means by which planning authorities, site owners, purchasers and others are provided with assurance regarding the condition of the property and its suitability for use, frequently in the context of site redevelopment. Each audit undertaken under section 53X (Victorian Environment Protection Act 1970 (as amended)) will have a certificate or statement attached, and a list of audits which is publicly available. It is important to note that the list is not a register of contaminated or clean sites but rather is a list of properties that have been found to be suitable (in some cases subject to certain conditions) for the proposed land use.

A search of the list of completed audits indicated 19 environmental audits were undertaken in the municipality of Wyndham, none of these sites are located within 1 kilometre of the site. The results of this search are presented in Appendix F.

## 8.0 SUMMARY OF POTENTIAL ENVIRONMENTAL ISSUES

Based on the site history and site walkover, the key features and potential sources of contamination have been identified as presented below in Table 5.

**Table 5: Summary of Potential Contamination Risks**

Features	Potential Contamination Issues	Potential Chemicals of Interest	Transport Pathways
General farming operation	Low intensive stock grazing property with limited use of inputs (fertilisers, chemicals and fuels, etc.).	Metals Hydrocarbons Pesticides Fertilisers/Nutrients	Surface soils/unsealed surfaces, sub-surface soils and groundwater.
Maintenance activities	Equipment and vehicle maintenance activities associated with farming machinery.	Heavy metals chlorinated solvents oil and grease	Surface soils.
Whole Site	Weed control	Metals Pesticides	Surface soils.
Waste Disposal and Burning of Rubbish	Potential uncontrolled disposal of wastes and/or chemicals and animal carcasses in the rubbish/burn pits.	Metals Hydrocarbons Pesticides Fertilisers/Nutrients	Surface soils and groundwater.
Imported Fill	Uncontrolled filling of former dams or other areas such as drainage channels.	Metals Hydrocarbons Pesticides Fertilisers/Nutrients	Surface soils and groundwater.



## 9.0 CONCLUSIONS

Golder Associates undertook a limited Phase 1 ESA of the site located at Black Forest Road, Wyndham Vale including a site walkover.

This ESA has not identified evidence of gross or widespread contamination risks.

This ESA has indicated some potential contamination issues common with agricultural land of this type that may need to be further assessed and/or managed as part of the proposed residential development, as listed in Table 5.

However, the site is considered to represent a relatively low contamination risk with respect to the proposed residential use.

## 10.0 LIMITATIONS

Your attention is drawn to the document "Limitations", which is included in Appendix G of this report. The statements presented in this document are intended to advise you of what your realistic expectations of this letter should be. The document is not intended to reduce the level of responsibility accepted by Golder Associates, but rather to ensure that all parties who may rely on this letter are aware of the responsibilities each assumes in so doing.



## Report Signature Page

GOLDER ASSOCIATES PTY LTD

Natalie Curran  
Senior Environmental Engineer

Cary Ehrman  
Associate

NRC/CLE/nrc

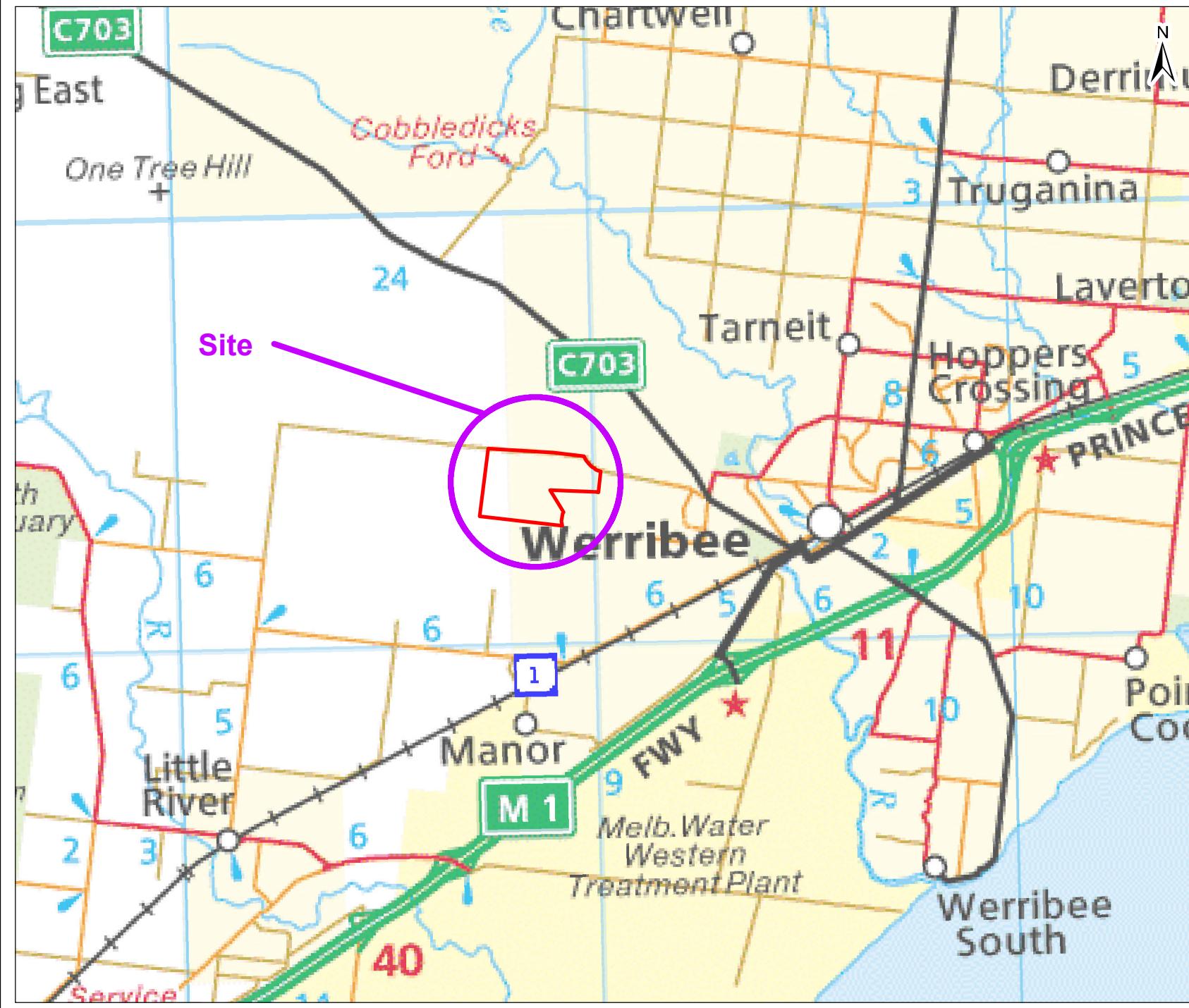
A.B.N. 64 006 107 857

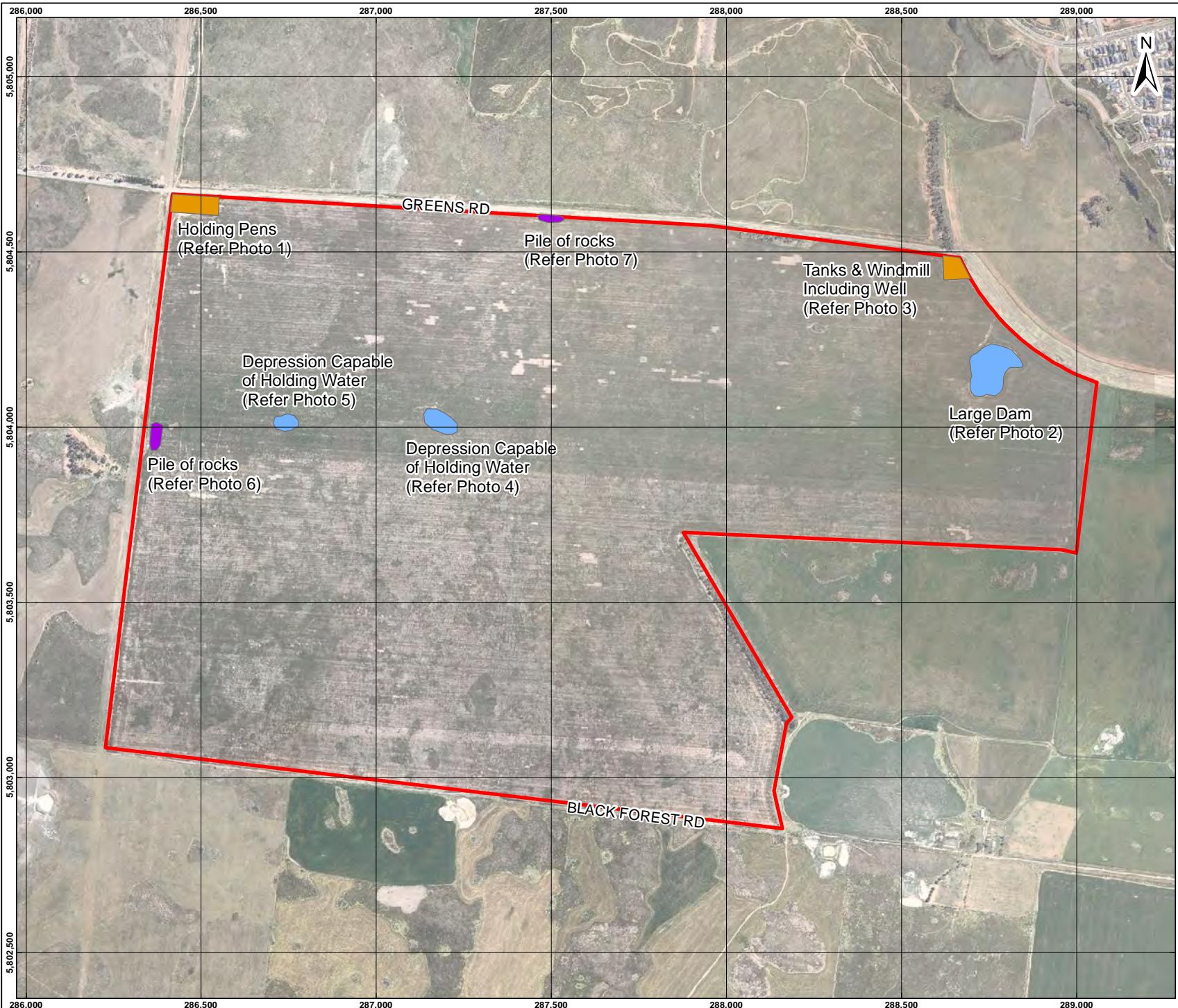
Golder, Golder Associates and the GA globe design are trademarks of Golder Associates Corporation.

j:\env\2011\117613005 - black forest road esa\correspondence out\117613005-003-r-rev2.docx



# FIGURES





PHASE 1 ESA  
WYNDHAM VALE  
PHILEO

## SITE INFRASTRUCTURE



### NOTES

Aerial Photograph dated 28/10/2010 sourced from Nearmap.

**COPYRIGHT**  
Aerial Photography Copyright NearMap Pty Ltd.

0 50 100 200 300 400 500 metres

**SCALE (at A4)** 1:15,000  
DATUM GDA 94, PROJECTION MGA Zone 55

PROJECT: 117613005  
DATE: 28 FEB 2011  
DRAWN: MCH / MB  
CHECKED: EC



**FIGURE 2**



# APPENDIX A

## Planning Scheme

# Planning Property Report

From [www.dpcd.vic.gov.au/planning](http://www.dpcd.vic.gov.au/planning) on 19 January 2011 04:56 PM

**Address:** BLACK FOREST ROAD MAMBOURIN 3024

**Lot and Plan Number:** Lot 1 TP846432

This property has a total of 5 parcels.

For full parcel details search for this address at [Property Reports](#) and get a free Basic Property Report.

**Local Government (Council):** WYNDHAM **Council Property Number:** 144339

**Directory Reference:** Melway 204 E3

**This land is in an area added to the Urban Growth Boundary after 2005.**

**It may be subject to the Growth Area Infrastructure Contribution.**

For more information go to the [Growth Areas Authority](#) website.

See next page for planning information

## Planning Zones

RURAL CONSERVATION ZONE (RCZ)

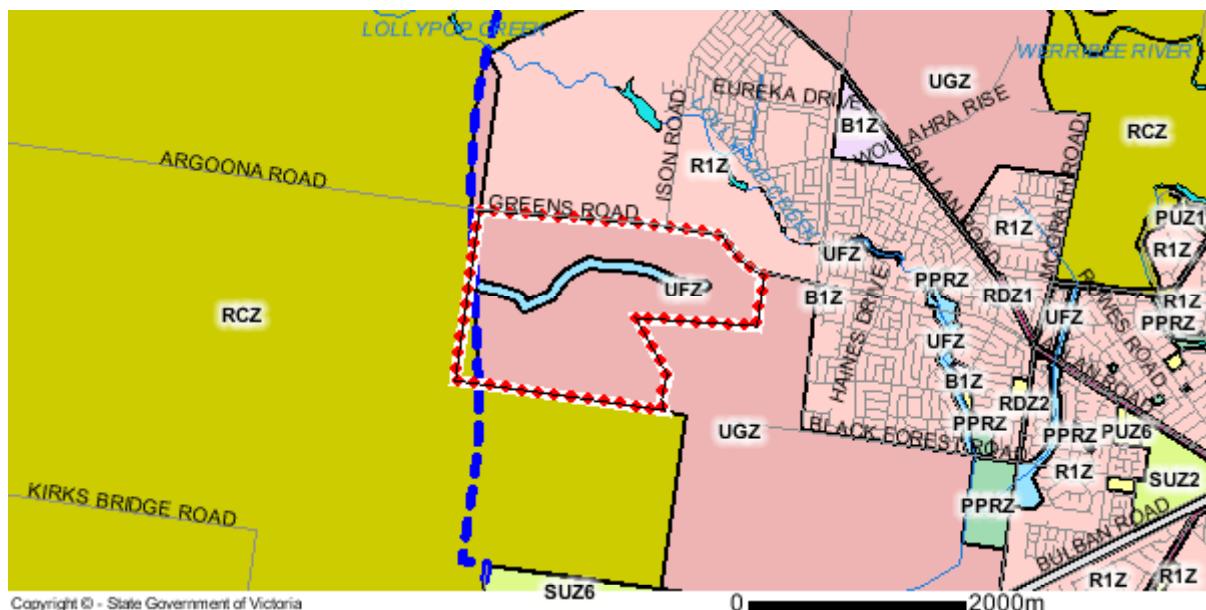
SCHEDULE TO THE RURAL CONSERVATION ZONE

URBAN FLOODWAY ZONE (UFZ)

SCHEDULE TO THE URBAN FLOODWAY ZONE

URBAN GROWTH ZONE (UGZ)

SCHEDULE TO THE URBAN GROWTH ZONE



### Zones Legend

B1Z - Business 1	IN1Z - Industrial 1	R1Z - Residential 1
B2Z - Business 2	IN2Z - Industrial 2	R2Z - Residential 2
B3Z - Business 3	IN3Z - Industrial 3	R3Z - Residential 3
B4Z - Business 4	LDRZ - Low Density Residential	RAZ - Rural Activity
B5Z - Business 5	MUZ - Mixed Use	RCZ - Rural Conservation
CA - Commonwealth Land	PCRZ - Public Conservation & Resource	RDZ1 - Road - Category 1
CCZ - Capital City	PDZ - Priority Development	RDZ2 - Road - Category 2
CDZ - Comprehensive Development	PPRZ - Public Park & Recreation	RLZ - Rural Living
DZ1 - Dockland	PUZ1 - Public Use - Service & Utility	RUZ - Rural
ERZ - Environmental Rural	PUZ2 - Public Use - Education	SUZ - Special Use
FZ - Farming	PUZ3 - Public Use - Health Community	TZ - Township
GWAZ - Green Wedge A	PUZ4 - Public Use - Transport	UFZ - Urban Floodway
GWZ - Green Wedge	PUZ5 - Public Use - Cemetery / Crematorium	UGZ - Urban Growth
	PUZ6 - Public Use - Local Government	----- Urban Growth Boundary
	PUZ7 - Public Use - Other Public Use	

Copyright © - State Government of Victoria

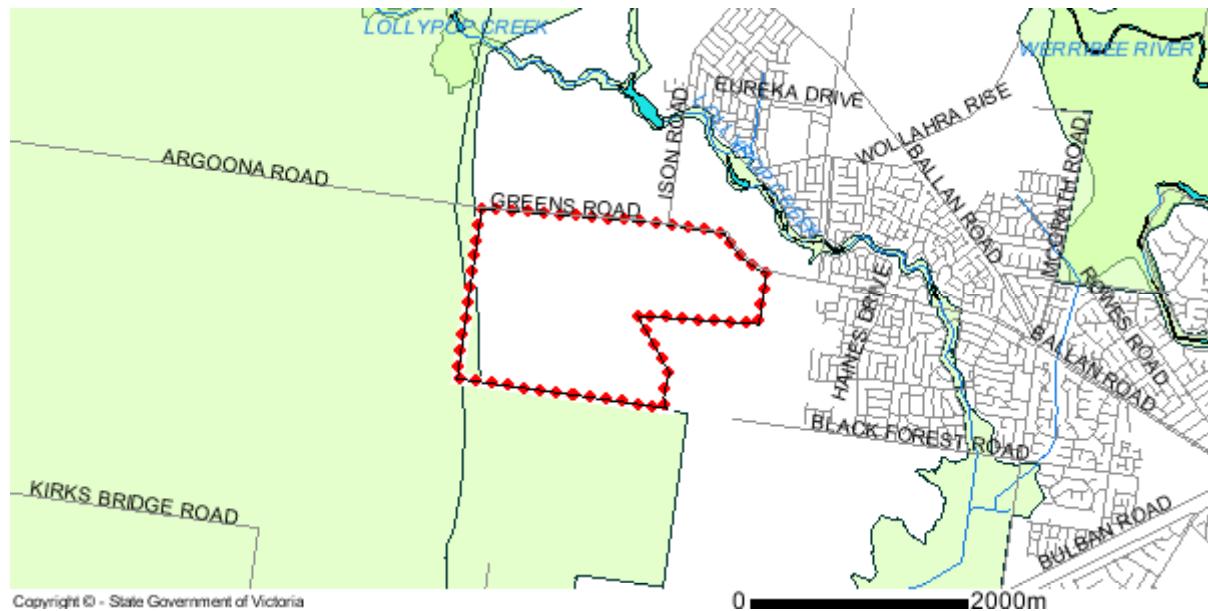
**Disclaimer:** This content is provided for information purposes only. No claim is made as to the accuracy or authenticity of the content. The Victorian Government does not accept any liability to any person for the information provided. Read the full disclaimer at [www.land.vic.gov.au/disclaimer](http://www.land.vic.gov.au/disclaimer)

## Planning Overlays

ENVIRONMENTAL SIGNIFICANCE OVERLAY (ESO)

ENVIRONMENTAL SIGNIFICANCE OVERLAY - SCHEDULE 2 (ESO2)

ENVIRONMENTAL SIGNIFICANCE OVERLAY - SCHEDULE 4 (ESO4)



PUBLIC ACQUISITION OVERLAY (PAO)

PUBLIC ACQUISITION OVERLAY 5 SCHEDULE (PAO5)



**Copyright © - State Government of Victoria**

**Disclaimer:** This content is provided for information purposes only. No claim is made as to the accuracy or authenticity of the content. The Victorian Government does not accept any liability to any person for the information provided. Read the full disclaimer at [www.land.vic.gov.au/disclaimer](http://www.land.vic.gov.au/disclaimer)

## Planning Overlays Legend

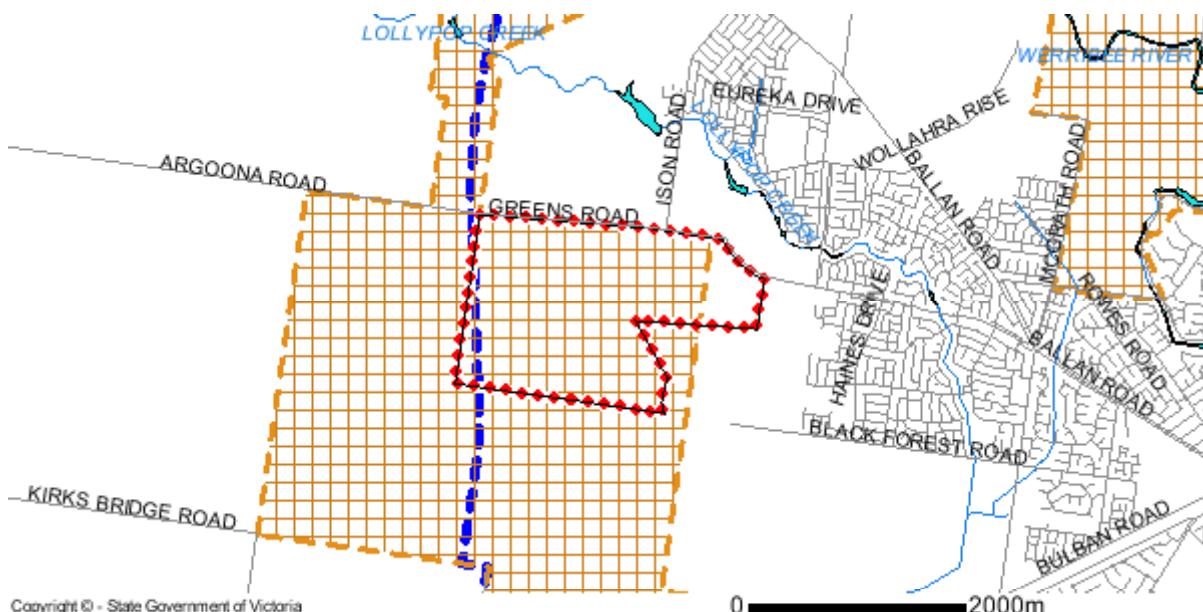
## Overlays Legend

Airport Environ	Floodway	Restructure
City Link Project	Heritage	Road Closure
Design & Development	Incorporated Plan	Salinity Management
Design & Development (Part)	Land Subject to Inundation	Significant Landscape
Development Contributions Plan	Land Subject to Inundation & Floodway	Special Building
Development Plan	Melbourne Airport Environ 1	State Resource
Environmental Audit	Melbourne Airport Environ 2	Vegetation Protection
Environmental Significance	Neighbourhood Character	Wildfire Management

Note: due to overlaps some colours on the maps may not match those in the legend.

## Investigation Area

This land was included in an Investigation Area designated in 'Melbourne 2030: a planning update Melbourne @ 5 million'. For more information go to [Melbourne @ 5 million](#) at the DPCD website.



#### Investigation Area Legend

— — Urban Growth Boundary

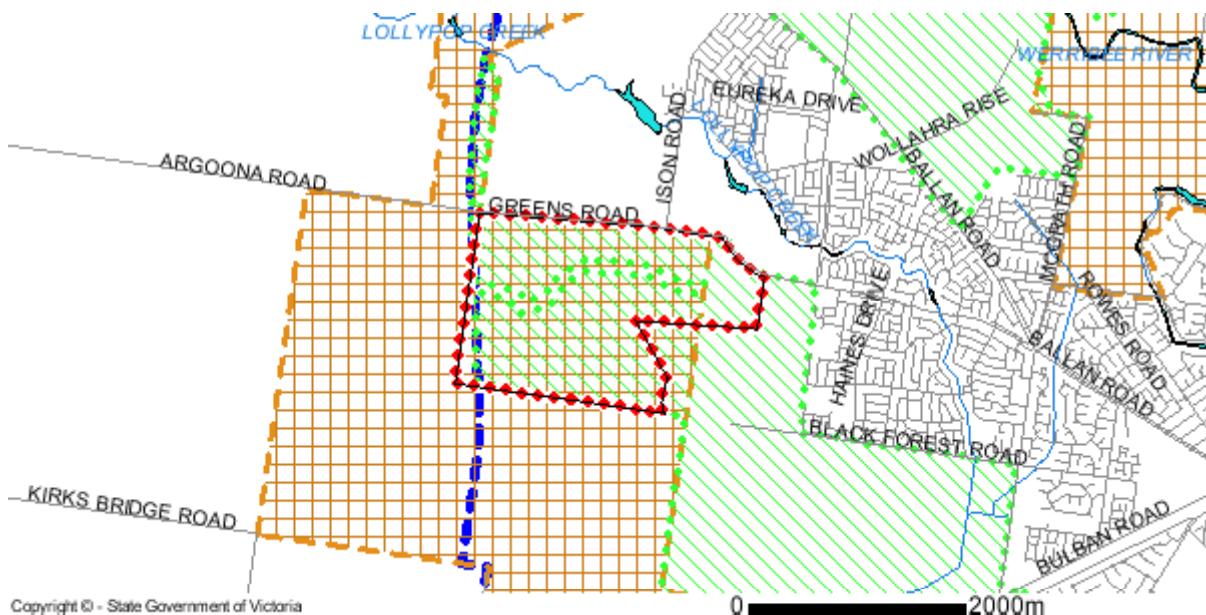
## Investigation Area

 Selected land

## Growth Area Infrastructure Contribution

This land is in an area added to the Urban Growth Boundary after 2005.  
It may be subject to the Growth Area Infrastructure Contribution.

For more information go to the [Growth Areas Authority](#) website.



### Growth Area Infrastructure Contribution Legend



## Further Planning Information

Planning scheme data last updated on 13 January 2011.

A **planning scheme** sets out policies and requirements for the use, development and protection of land.

This report provides information about the zone and overlay provisions that apply to the selected land.

Information about the State, local, particular and general provisions of the local planning scheme that may affect the use of this land can be obtained by contacting the [local council](#) or by visiting [Planning Schemes Online](#)

This report is NOT a **Planning Certificate** issued pursuant to Section 199 of the Planning & Environment Act 1987.  
It does not include information about exhibited planning scheme amendments, or zonings that may abut the land.

To obtain a Planning Certificate go to [Titles and Property Certificates](#)

To view planning zones, overlay and heritage information in an interactive format visit [Planning Maps Online](#)

For other information about planning in Victoria visit [www.dpcd.vic.gov.au/planning](http://www.dpcd.vic.gov.au/planning)

Copyright © - State Government of Victoria

**Disclaimer:** This content is provided for information purposes only. No claim is made as to the accuracy or authenticity of the content. The Victorian Government does not accept any liability to any person for the information provided. Read the full disclaimer at [www.land.vic.gov.au/disclaimer](http://www.land.vic.gov.au/disclaimer)



## APPENDIX B

### Site Photographs



---

**APPENDIX B**  
**Phase 1 ESA - Wyndham Vale**

---



Photograph 1 – Holding Pens



Photograph 2 – Large Dam



---

**APPENDIX B**  
**Phase 1 ESA - Wyndham Vale**

---



Photograph 3 – Tanks and Windmill including wells



Photograph 4 – Depression capable of holding water



---

**APPENDIX B**  
**Phase 1 ESA - Wyndham Vale**

---



Photograph 5 – Depression capable of holding water



Photograph 6 – Basaltic Rock Stockpile



---

## APPENDIX B

### Phase 1 ESA - Wyndham Vale

---



Photograph 7 – Basaltic Rock Stockpile

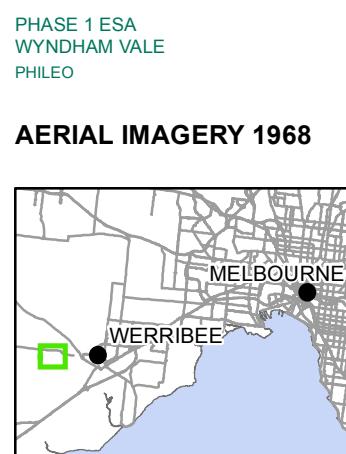
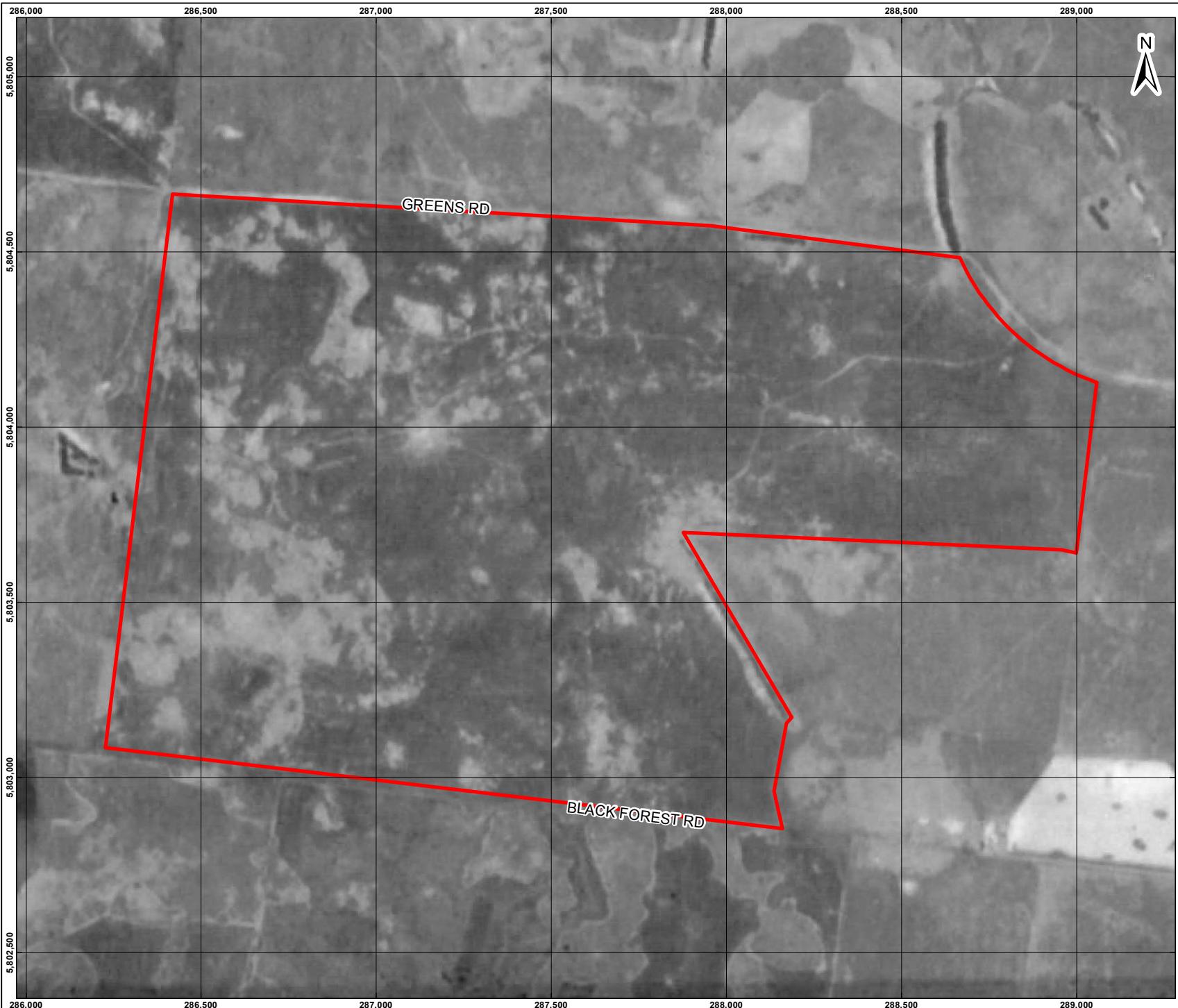


Photograph 8 – Evidence of Overland Water Flow



## APPENDIX C

### Aerial Photographs



LEGEND

Site Boundary

NOTES

Aerial Photograph dated 1968 spatially referenced using parcel boundaries and Streetpro road network data

COPYRIGHT

Aerial Image sourced from Department of Sustainability & Environment, 2011. Reproduced with permission of the Department of Sustainability and Environment.

StreetPro © 2004 MapInfo Australia Pty Ltd.

0 50 100 200 300 400 500 metres

SCALE (at A4) 1:15,000

DATUM GDA 94, PROJECTION MGA Zone 55

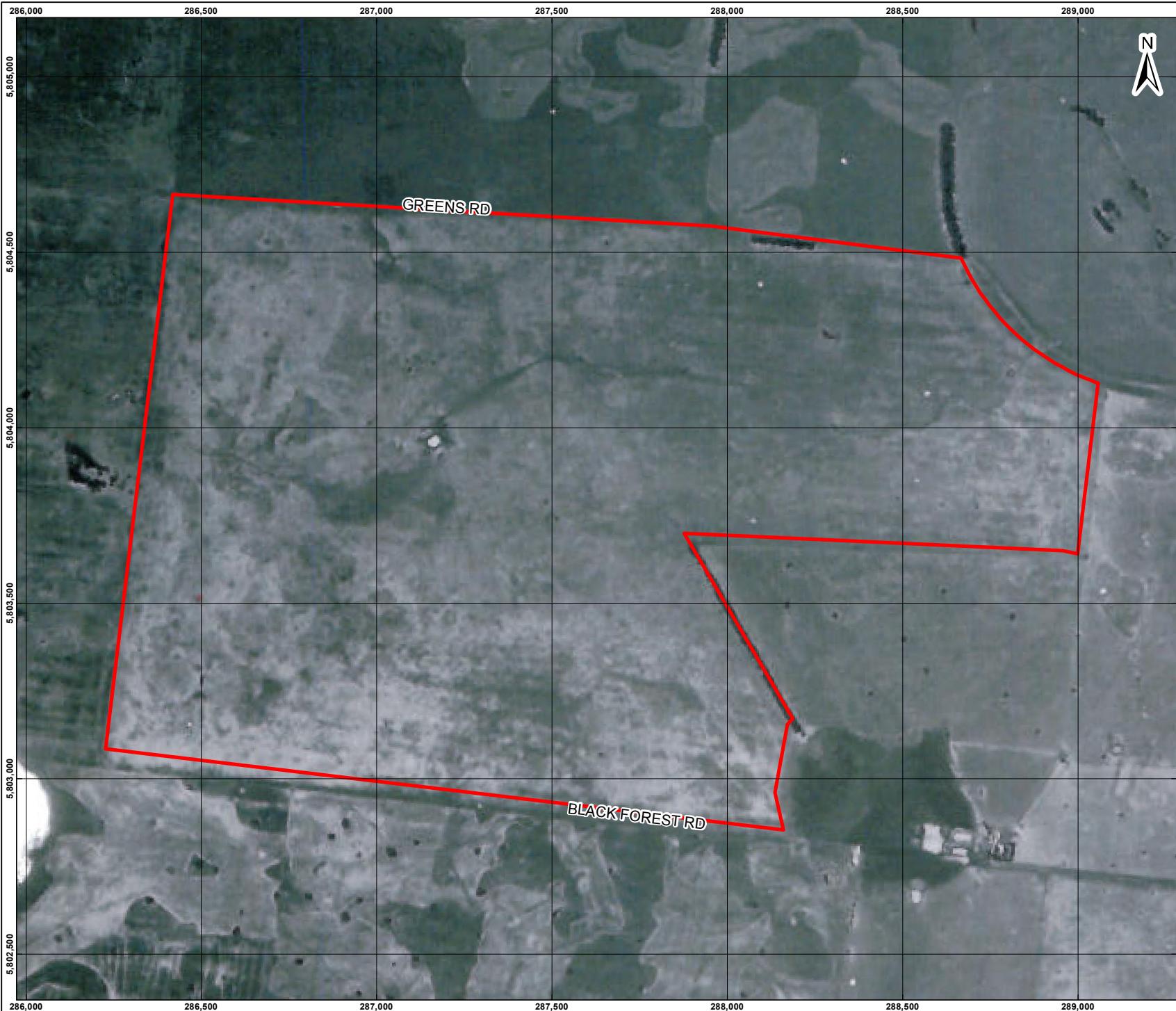
PROJECT: 117613005

DATE: 24 JAN 2011

DRAWN: MCH

CHECKED: EC

FIGURE C1



PHASE 1 ESA  
WYNDHAM VALE  
PHILEO

## AERIAL IMAGERY 1975



### LEGEND

Site Boundary

### NOTES

Aerial Photograph dated 01/01/1975 spatially referenced using parcel boundaries and Streetpro road network data

### COPYRIGHT

Aerial Image sourced from Department of Sustainability & Environment, 2011. Reproduced with permission of the Department of Sustainability and Environment.

StreetPro © 2004 MapInfo Australia Pty Ltd.

0 50 100 200 300 400 500 metres

SCALE (at A4) 1:15,000

DATUM GDA 94, PROJECTION MGA Zone 55

PROJECT: 117613005

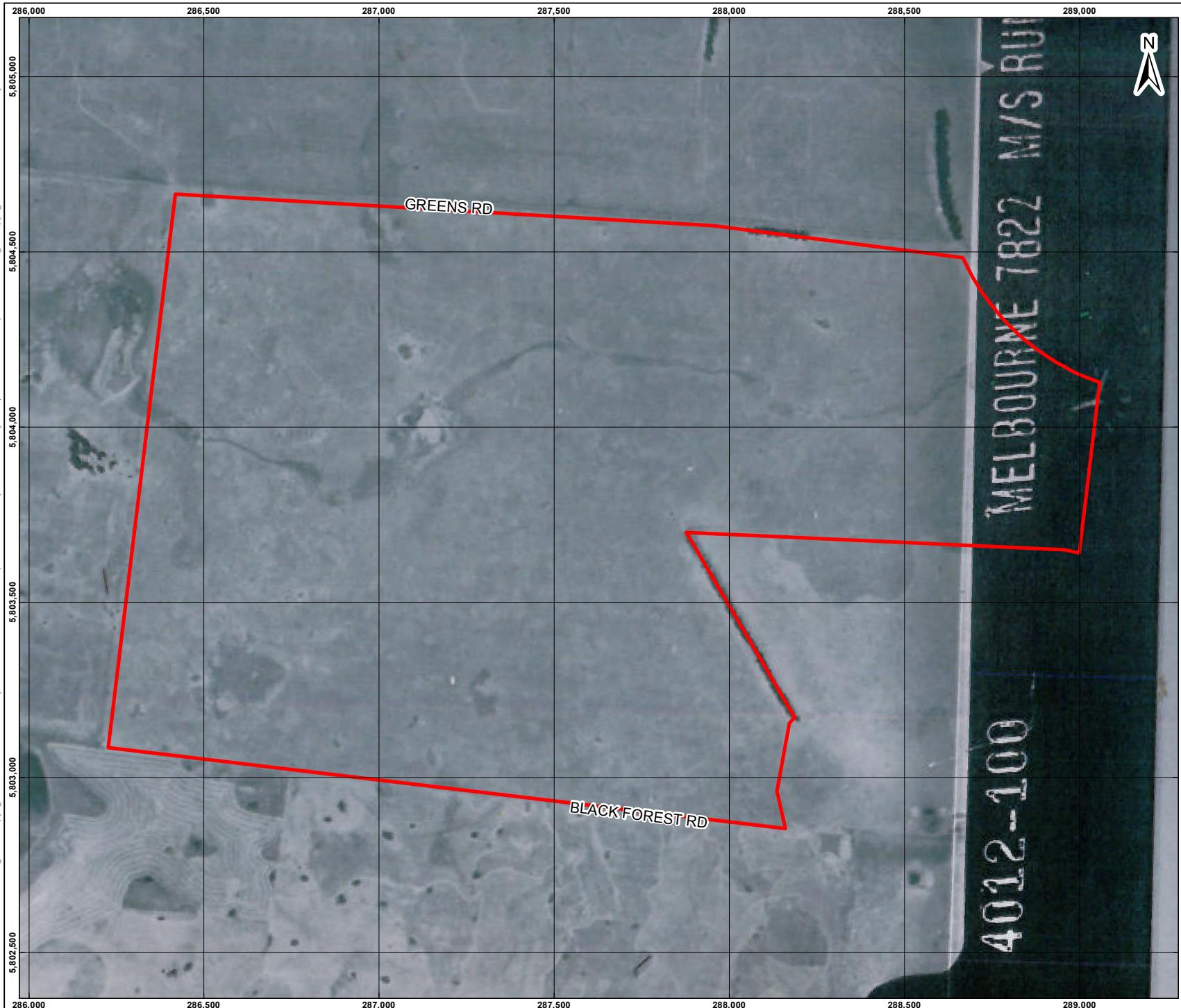
DATE: 24 JAN 2011

DRAWN: MCH

CHECKED: EC

FIGURE D2





PHASE 1 ESA  
WYNDHAM VALE  
PHILEO

## AERIAL IMAGERY 1986



### LEGEND

Site Boundary

### NOTES

Aerial Photograph dated 25/02/1986 spatially referenced using parcel boundaries and Streetpro road network data

### COPYRIGHT

Aerial Image sourced from Department of Sustainability & Environment, 2011. Reproduced with permission of the Department of Sustainability and Environment.

StreetPro © 2004 MapInfo Australia Pty Ltd.

0 50 100 200 300 400 500 metres

SCALE (at A4) 1:15,000

DATUM GDA 94, PROJECTION MGA Zone 55

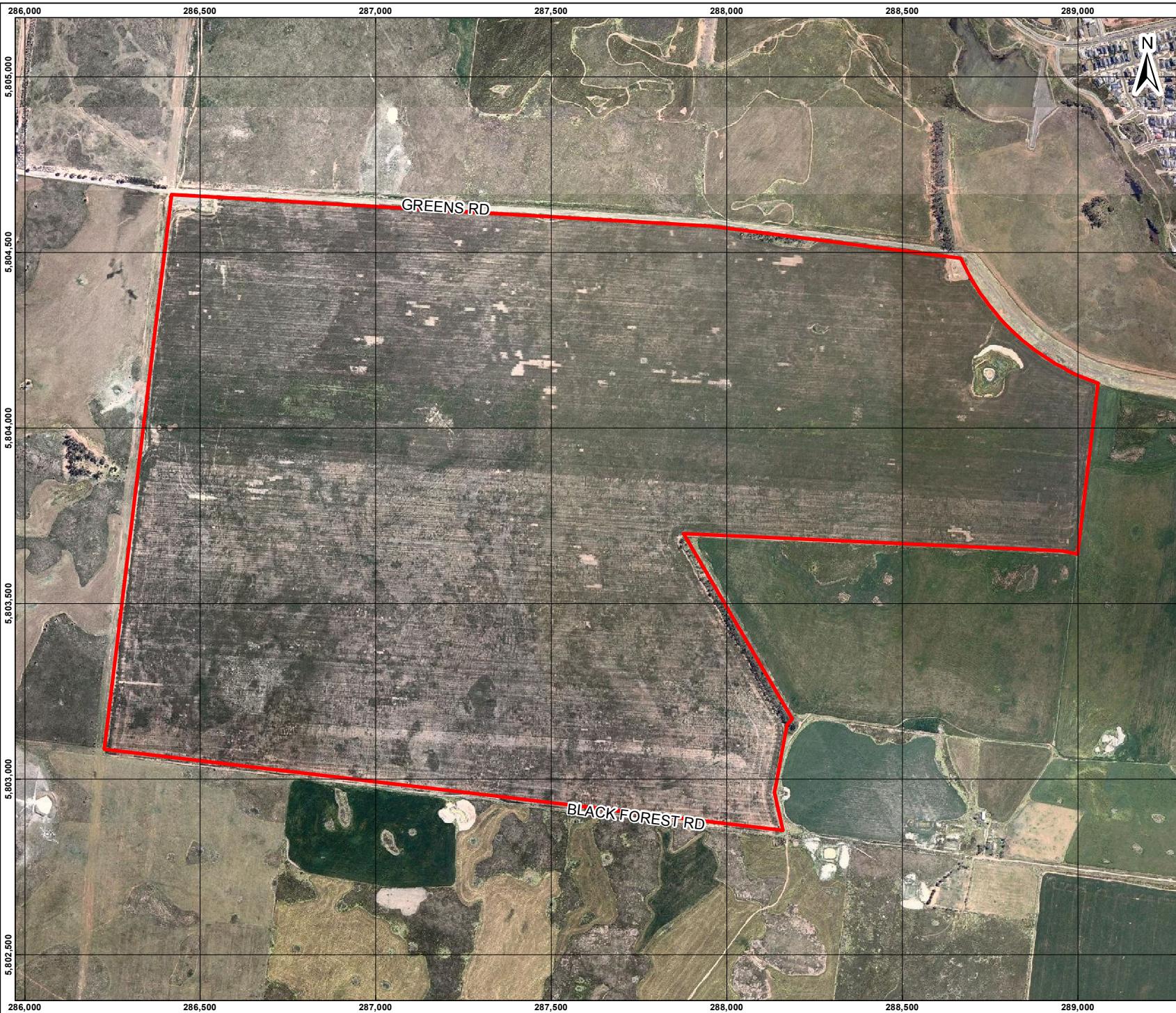
PROJECT: 117613005

DATE: 24 JAN 2011

DRAWN: MCH

CHECKED: EC

FIGURE D3



PHASE 1 ESA  
WYNDHAM VALE  
PHILEO

## AERIAL IMAGERY 2010



### LEGEND

Site Boundary

### NOTES

Aerial Photograph dated 28/10/2010 sourced from Nearmap.

### COPYRIGHT

Aerial Photography Copyright NearMap Pty Ltd.

0 50 100 200 300 400 500 metres

SCALE (at A4) 1:15,000

DATUM GDA 94, PROJECTION MGA Zone 55

PROJECT: 117613005

DATE: 24 JAN 2011

DRAWN: MCH

CHECKED: EC

FIGURE D4