Appendices

APPENDIX A RISK ASSESSMENT

	INITIAL RISK							RI	SIDUAL RIS	К					
Dick	Potential threat and effect on the		Magni	itude of cons	equence	Overall	Overall Risk		Magnitude of consequence			Overall	mall Diek		
Risk ID	environment	Initial EPR	Extent	Severity	Duration	consequence	Likelihood	level	Final EPR	Extent	Severity	Duration	consequence	Likelihood	Risk level
CONST	TRUCTION														
Risk HH01	Construction works and permanent infrastructure have a direct physical and/or visual impact on VHR-listed places of state significance with an adverse impact on heritage values	HH1 Design and construct to minimise impacts on heritage AR1 Tree retention and arboriculture assessment, AR3 Tree Protection Plan, AR4 Tree Replacement Program and Landscaping Plan	Local	Low	7+ years	Minor	Likely	Medium	Banyule Homestead: Refer to GM and NV EPRs Heide I and II: Refer to GM and NV EPRs, see also HH5 Fairlea Womens Prison: HH1, HH2	Local	Low	7+ years	Minor	Likely	Medium
Risk HH02	Construction works and permanent infrastructure have a direct physical and/or visual impact on heritage places listed in the planning schemes with an adverse impact on heritage values	HHI Design and construct to minimise impacts on heritage, HH4 Archival photographic records AR1 Tree retention and arboriculture assessment, AR3 Tree Protection Plan, AR4 Tree Replacement Program and Landscaping Plan	Local	High	7+ years	Major	Planned	Planned	Journeys End and Bridge Street Pine and Cypress Plantings: HH1, AR1, AR2, AR3 River Red Gum: HH4 Yarra River Protectorate Station site: HH2, AH1 English Oak: AR1, AR2 Archaeological site, Wetherby Road, Doncaster: AH1	Local	High	7+ years	Major	Planned	Planned
Risk HH03	Construction works and permanent infrastructure have a direct physical and/or visual impact on places of potential heritage significance but with no statutory controls with an adverse impact on heritage values	HHI Design and construct to minimise impacts on heritage, HH4 Archival photographic records	Local	Medium	7+ years	Moderate	Planned	Planned	Simpson Barracks: HH1, HH4 Veneto Club: AR3 Eastern Freeway Stage 1: HH1, HH4, AR1, AR3, LV1 Yarra River and Environs: HH1, AR1, AR2 AR3, GW2, GW5, SW4, CL2, FF2, FF4, FF6, AH1, HH2 Yarrandoo Park windbreak planting: AR1, AR2	Local	Medium	7+ years	Moderate	Planned	Planned
Risk HH04	Construction work or the establishment of construction sites disturbs historical archaeological sites listed on the Victorian Heritage Inventory (eg Yarra Bend Park H7922-0142)	HH2 Archaeological Management Plan	Local	Low	7+ years	Minor	Planned	Planned	HH2	Local	Low	7+ years	Minor	Planned	Planned
Risk HH05	Construction works or the establishment of construction sites disturbs unidentified historical archaeological sites	HH2 Archaeological Management Plan	Local	Low	7+ years	Minor	Possible	Low	HH2	Local	Low	7+ years	Minor	Possible	Low
Risk HH06	Vibration or ground settlement as a result of construction works causes damage to significant buildings or structures	HH1 Design and construct to minimise impacts on heritage, HH3 Monitoring of heritage sites – refer also to relevant NV and GM EPRs	Local	Low	3 months to 2 years	Minor	Possible	Low	NV3, NV4, NV9, GM1, GM2, GM3, GM4	Local	Low	3 months to 2 years	Minor	Possible	Low
Risk HH07	(Construction) Changes to groundwater conditions including groundwater drawdown cause damage to significant trees and landscapes as part of heritage places	HH1 Design and construct to minimise impacts on heritage, AR1 Tree retention and arboriculture assessment, AR3 Tree Protection Plan, AR4 Tree Replacement Program and Landscaping Plan, GW2 Groundwater monitoring, GW3 Tunnel drainage design and construction measures	Local	Medium	2-7 years	Moderate	Possible	Medium	GW2, GW5, SW1, CL2, FF2, FF4, FF6	Local	Medium	2-7 years	Moderate	Possible	Medium

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	INITIAL RISK						RESIDUAL RISK								
Risk	Potential threat and effect on the		Magnit	tude of conse	equence	Overall		Risk		Magn	itude of cons	equence	Overall		Risk
ID	environment	Initial EPR	Extent	Severity	Duration	consequence	Likelihood	level	Final EPR	Extent	Severity	Duration	consequence	Likelihood	level
OPER/	ATION														
Risk HH08	(Operation) Changes to groundwater conditions including groundwater drawdown cause damage to significant trees and landscapes as part of heritage places	HH1 Design and construct to minimise impacts on heritage, AR1 Tree retention and arboriculture assessment, AR3 Tree Protection Plan, AR4 Tree Replacement Program and Landscaping Plan, GW2 Groundwater monitoring, GW3 Tunnel drainage design and construction measures	Local	Medium	7+ years	Moderate	Possible	Medium	GW2, GW5, SW1, CL2, FF2, FF4, FF6	Local	Medium	7+ years	Moderate	Possible	Medium

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APPENDIX B LEGISLATION, POLICY AND STANDARDS

B.1 Legislation and policy

B.1.1 Australian Government: Environment Protection and Biodiversity Conservation Act 1999

At a Commonwealth level, the EPBC Act focuses on the protection of matters of national environmental significance, with the states and territories having responsibility for matters of state and local significance. Matters of national environmental significance include world heritage properties and national heritage places. The EPBC Act establishes lists of places of cultural heritage significance and sets management requirements that apply to these places. The EPBC Act also establishes the National Heritage List (NHL) and Commonwealth Heritage List (CHL) and sets out the requirements for the management of heritage places on these.

The Department of the Environment and Energy publishes a range of policies and guidelines which provide practical advice on the EPBC Act. Of particular importance for heritage are the significant impact guidelines for matters of national environmental significance (2013), for actions on or impacting upon, Commonwealth land and actions by Commonwealth agencies (2006).

The North East Link project has been determined as a 'controlled action' that requires assessment and approval under the EPBC Act (EPBC 2018/8142).

B.1.2 Victorian Government: Heritage Act 2017

The main purpose of the Heritage Act is to provide for the protection and conservation of the cultural heritage of the State. The Heritage Act is administered by Heritage Victoria, within the Department of Environment, Land, Water and Planning (DELWP). The Heritage Council is an independent statutory authority and decision-making body established under the Heritage Act. It also has important advisory and policy-making roles and promotes public understanding of heritage.

The Heritage Act establishes two registers, the Victorian Heritage Register (VHR) and the Victorian Heritage Inventory (VHI).

B.1.2.1 Victorian Heritage Register

The VHR includes heritage places and heritage objects. Heritage places can include buildings, trees, parks and gardens, streetscapes, archaeological sites, precincts, sites, land associated with any of these things, and shipwrecks. Heritage objects are generally moveable and could include furniture, signs, shipwreck artefacts, archaeological artefacts, equipment, vehicles and many other features. Heritage objects may be of State-level significance and registered in their own right, or they may be objects that are integral to registered places.

The VHR includes a legal extent of registration for any registered place or object. For most registered places and objects, supporting documentation includes a statement of cultural heritage significance which typically explains what is significant about a heritage place or object, why it is significant and how it is significant.

All shipwrecks and shipwreck artefacts that have been situated in Victorian waters for at least 75 years (or in some cases has been removed from Victorian waters 75 years after coming to rest) are automatically considered to be historic for the purposes of the Act and are also included in the VHR, whether or not their existence/location is known.

Any changes to registered places, objects, shipwrecks, shipwreck relics and associated protected zones require permit approval by the Executive Director, Heritage Victoria. Heritage permits are required for any physical works, unless specifically determined to be exempt from the requirement for a permit. As an alternative to a permit, minor works which do not have an adverse impact on the heritage values of a registered place or object, can be approved by way of s. 92 of the Heritage Act. This section allows an owner to apply for a determination that particular works and activities do not require a permit. Examples could include geotechnical testing, where that testing has no impact on significant fabric, active conservation works supported by

appropriate documentation or demolition or alteration of non-significant parts of a heritage place. Use of a heritage place or object is not controlled under the Heritage Act. Subdivision of heritage places generally is approved under the Planning and Environment Act, with the Executive Director the determining referral authority.

There are extensive enforcement provisions which apply in relation to unlawful activities to registered places, objects, archaeological sites, historic shipwrecks, shipwreck relics and protected zones. In the case of shipwrecks, there are also requirements for Heritage Victoria to be notified of the discovery of a historic ship, part of a ship or article associated with a ship.

B.1.2.2 Victorian Heritage Inventory

The VHI is a register of known historical (non-Aboriginal) archaeological sites in Victoria.

The Heritage Act 2017 defines an archaeological site as a place (other than a shipwreck) which -

- contains an artefact, deposit or feature which is 75 or more years old; and
- provides information of past activity in the State; and
- requires archaeological methods to reveal information about the settlement, development or use of the place; and
- is not associated only with Aboriginal occupation of the place.

Under the Act, the Executive Director must establish the VHI and record in it all archaeological sites other than any archaeological sites which are determined by the Executive Director to have low archaeological value (see s. 118(1a)).

For an archaeological site to have more than low archaeological value, and be approved for inclusion in the VHI, it must address both Threshold A and Threshold B (below).

Threshold A (archaeology):

- the place meets the definition of archaeological site under the Act; and
- it can be demonstrated that the site contains archaeological features, associated artefacts and/or deposits;
 and/or
- documentary evidence and/or oral history, landscape features, visible site fabric or other information indicates a likelihood that the site contains archaeological remains; and
- the archaeological remains are, or are likely to be, in a condition that will allow information to be obtained that will contribute to an understanding of the site;

and

Threshold B (place history):

- the site evidences (or is likely to evidence) an association with a historical event, phase, period, process, function, tradition, movement, custom or way of life; and
- the site history is of significance within a state, regional, local, thematic or other relevant framework

As a general comment, the two categories of listing of archaeological sites (the VHR and the VHI) are reflected in two different principles in terms of approvals under the Heritage Act. The guiding principle for places in the VHR is to protect and conserve as much of the fabric of the place and the relics and artefacts as is possible. However, for places listed in the VHI, recording, excavating and monitoring are the usual methods of assessing and managing the heritage values of a site.

Any activities that would result in the excavation or disturbance to an archaeological site included on the VHI must have first obtained the consent of Heritage Victoria (Section 123). Section 124 of the Heritage Act sets out the process for the issuing of consents.

It is noted under Section 123 that all archaeological sites (refer to the definition above) are protected by the Heritage Act, regardless of whether they are included in the VHI. As with the VHR, there are penalties and enforcement provisions for unlawful activities in relation to archaeological sites.

This means that there is a need to establish project protocols for the discovery of previously unknown archaeological sites.

B.1.2.3 Policy

Policy and guideline papers have been prepared by the Heritage Council and Heritage Victoria related to particular processes that occur under the Heritage Act, and for heritage management in general. It is necessary to review all relevant guidelines in considering registration processes and permit applications for VHR places under the Heritage Act. Heritage Victoria has also prepared guidelines for the protection and management of archaeological sites and relics including for maritime archaeological sites and shipwrecks, and these documents are also an invaluable source in understanding the requirements of the Heritage Act as they relate to these.

In the case of heritage places and heritage objects, the decision-making processes for heritage permit applications are guided by section 101 of the Heritage Act, *Determination of permit applications*.

In the case of shipwrecks, permit applications are made under Sections 77 and 78 of the Heritage Act.

Under section 129 the Executive Director may issue consents under the Heritage Act. Relevant considerations are set out in section 129(3) and include consideration of relevant research and the potential for the relic or site to contribute to this. The Heritage Victoria *Guidelines for Investigating Historical Archaeological Artefacts and Sites* (Heritage Victoria, 2015) is a key document in guiding the approval and investigations processes. Also relevant is the *Policy for determining Low Archaeological Value* (Heritage Victoria, 2017), which assists in the interpretation of the Heritage Act as related to historical archaeology.

B.1.3 Victorian Government: Planning and Environment Act

B.1.3.1 Planning and Environment Act 1987

For all municipalities in Victoria, the requirements for land use, development and protection are covered by land use planning controls prepared and administered by the Victorian Government and councils through planning schemes. The legislation governing these controls is the Planning and Environment Act.

B.1.3.2 Planning schemes

Planning schemes contain standard provisions (Heritage Overlays or HOs, found at Cl. 43.01 of planning schemes) that are directed at conserving and enhancing places of natural and cultural heritage significance, including historical heritage places. Numerous HOs are within the historical heritage study area and some are in proximity to the North East Link reference project in the planning schemes for the municipalities of:

- Whittlesea
- Nillumbik
- Banyule
- Manningham
- Yarra
- Boroondara
- Whitehorse.

Planning schemes address heritage through the following:

• State Planning Policy Framework (common to all Victorian planning schemes)

- Local Planning Policy Framework (tailored in individual planning schemes)
- Heritage and other overlays (standard provisions applied to particular heritage places and other overlays can reference heritage).

B.1.3.3 Heritage overlay

Places of recognised local significance are listed for protection in planning schemes by HOs. HO places are not exclusively of local significance, however, and also include places of a higher level of significance, included in the VHR under the Heritage Act. In the case of the VHR places, although these are also listed in the schedules to the HO, these places are subject to the requirements of the Heritage Act, and not the HO provisions of the relevant planning scheme. Heritage Victoria is the responsible authority for VHR places, with referral requirements to local councils. The exception to this is for subdivision permits under the HO for registered places, where Heritage Victoria is a determining referral authority.

A Schedule to the HO lists the properties affected by the HO in that particular planning scheme. HOs are mapped to show the location and extent of heritage controls over a particular heritage place. There are two types of HO control:

- Site-specific HOs relating to individually significant heritage places which may be located within or outside precincts
- Precinct-based HOs which can extend over larger areas and include multiple individual properties.

HOs control a range of works and actions including subdivision, demolition, external alterations and additions. In some instances, there are controls for external painting, internal alterations and trees. As applicable, these controls are identified in the schedule to the HO. The Schedule to the HO can also identify Aboriginal heritage places. On occasion, the requirements of the HO may be moderated by incorporated plans which are also referenced in the Schedule to the HO.

Decision guidelines for HO places are set out at Cl. 43.01-4. Broadly, the focus of these is on whether there would be any adverse impact on the significance of the heritage place and whether the reference development or new building is in keeping with the heritage significance, character and appearance of adjacent buildings and the heritage place.

B.1.3.4 Other overlays

Other overlays in the planning schemes can also refer to historical heritage. A wide range of planning controls apply within the study area that have environmental and landscape protection objectives. These include vegetation protection, significant landscape and environmental significance overlays. Many of these apply within areas that may also be of historical heritage value and may have HO or other controls, including the river and creek environs. Some overlays also apply to trees and landscapes within heritage places or otherwise of heritage significance.

B.1.3.5 Planning scheme policies

State Planning Policy Framework

The State Planning Policy Framework (SPPF) forms part of all Victorian planning schemes and seeks to inform planning and responsible authorities of the State's objectives for planning in Victoria. The SPPF is from the Victoria Planning Provisions, a statutory device to ensure that consistent provisions for various matters are maintained across Victoria. It provides the framework, standard provisions and State planning policy.

Cl. 10.02 – Goals – notes that one of the stated objectives of planning in Victoria is:

(d) to conserve and enhance those buildings, areas or other places which are of scientific, aesthetic, architectural or historical interest, or otherwise of special cultural value.

Cl. 15 – Built Environment and Heritage – notes that:

Planning should ensure all new land use and development appropriately responds to its landscape, valued built form and cultural context, and protect places and sites with significant heritage, architectural, aesthetic, scientific and cultural value.

More detailed policy is found at Cl. 15.03-1 which deals with Heritage conservation. This establishes an overarching objective:

To ensure the conservation of places of heritage significance.

More detailed strategies follow:

Identify, assess and document places of natural and cultural heritage significance as a basis for their inclusion in the planning scheme.

Provide for the protection of natural heritage sites and man-made resources and the maintenance of ecological processes and biological diversity.

Provide for the conservation and enhancement of those places which are of, aesthetic, archaeological, architectural, cultural, scientific, or social significance, or otherwise of special cultural value.

Encourage appropriate development that respects places with identified heritage values and creates a worthy legacy for future generations.

Retain those elements that contribute to the importance of the heritage place.

Encourage the conservation and restoration of contributory elements.

Ensure an appropriate setting and context for heritage places is maintained or enhanced.

Support adaptive reuse of heritage buildings whose use has become redundant.

Local Planning Policy Framework

In addition to the HO provisions at Cl. 43.01 and the SPPF, most planning schemes include reference to historical heritage at Clause 21 – Municipal Strategic Statement (MSS) and Clause 22 – Local Planning Policies. Combined, these are known as the Local Planning Policy Framework (LPPF).

Local planning policies for historical heritage are generally considered when determining a planning application under the HO. Within the LPPF, specific local policies can address issues of full or partial demolition of heritage buildings and places, alterations and additions to heritage buildings and places, and provide guidance on the preferred outcomes (from a heritage perspective) in terms of new development.

In some cases, the LPPF lists reference documents and incorporated documents that need to be considered when assessing a planning application under the HO. Typically, these include place-specific citations and can also include building or place 'gradings'. Building or place gradings can reflect on the relative significance of individual buildings and places and recognise that these may be of varying significance and can contribute to the heritage of the municipality or the significance of a precinct (where located in one) in different ways.

Historically, different grading systems have been adopted by individual municipalities, though it is noted that the use of letter gradings such as 'A', 'B' 'C' is now discouraged. The VPP Planning Practice Note *Applying the Heritage Overlay* (January 2018) confirms that letter gradings should not be used. The Practice Note notes that the appropriate thresholds are those of State Significance and Local Significance. In practice, many municipalities do continue to distinguish between places of local significance that are 'contributory' and those that are considered to be 'significant' or 'individually significant'. This is recognising that 'significant' places can also be contributory to a precinct.

The majority of planning schemes that are relevant to the project include local heritage policies. Key aspects of the policies are summarised below in Table B.1.

Table B.1 Summary of local planning policy frameworks

Planning scheme	Summary of policy	Reference documents
Whittlesea Planning	Scheme	
Clause 21.08 Built Environment and Heritage	Establishes overarching objectives for heritage conservation for both Aboriginal and 'European' heritage	City of Whittlesea Heritage Study Volumes 1-3 (Context, 2013) – policy guideline and reference document
Clause 22.04 Heritage Conservation	Applies to both land within a HO and all drystone walls Includes objectives for the identification and protection of heritage, references management issues including conservation, setting and significant views. Supports the conservation of drystone walls and integration with new development. Includes specific policies for physical stabilisation, interpretation, demolition, archaeology, alterations and additions as week as particular elements at heritage places (signage, fences and gates and others), sets out application requirements	City of Whittlesea Environmental Sustainability Strategy (2012 – 2022) City of Whittlesea Open Space Strategy (1997, or as amended) City of Whittlesea Green Wedge Management Plan (River Red Gum Policy) (2011 – 2021) City of Whittlesea Heritage Study (Meredith Gould and Associates, 1991) City of Whittlesea Heritage Study (Context Pty Ltd, 2013) City of Whittlesea Archaeological Study (Context Pty Ltd, 2009) Planning Practice Note 1 – Applying the Heritage Overlay (Department of Environment, Land, Water and Planning, 2015) Plenty Valley Historical Survey (Hicks, P. 1988. for Ministry of Planning and Environment) Plenty Valley Corridor: The Archaeological Survey of Historic Sites (Weaver, F. 1989) Lower Plenty River Archaeological Survey (Weaver, F. 1991. For Board of Works)
Nillumbik Planning S	cheme	,
Clause 22.05 Objectives Strategies Implementation	Objective 3 is to protect places of natural and cultural heritage and references the encouragement of responsive new use and development, and community education programs protecting sites of natural and cultural heritage	
Clause 22.01 Medium density housing	References the protection and enhancement of local heritage places	
Banyule Planning Sci	heme	
Clause 21.03 Cultural Heritage	Identifies key heritage issues and sets out objectives and strategies for addressing these: Objective 1 – protection and conservation of heritage places Objective 2 – protection of Aboriginal cultural heritage Objective 3 – sustainability of heritage places Implementation measures include: • the application of appropriate overlays (HO, DDO on adjacent land, ESO for significant trees) • the application of the local policy at Clause 22.06 • review of the heritage precinct guidelines	

Planning scheme	Summary of policy	Reference documents
	review of local policy	
	• thematic environmental history	
	to help inform future HOs	
Clause 22.06 Cultural heritage conservation policy	review of local policythematic environmental history	Aboriginal cultural resource management grid map (Aboriginal Affairs Victoria) Banyule City Council. Aboriginal Heritage Study, July 1998 Banyule Heritage Places Study (July 1999) Banyule Heritage Places Review (2012) Banyule Heritage Strategy (2013) Banyule Heritage Guidelines Beaumont Estate (2005) Banyule Heritage Guidelines Beauview Estate (2005) Banyule Heritage Guidelines Glenard Estate (2005) Banyule Heritage Guidelines Ivanhoe Views Estate (2005) Banyule Heritage Guidelines Mount Eagle Estate (2005) Banyule Heritage Guidelines Sherwood Grove/Thoresby Avenue (2005) Banyule Heritage Guidelines Warringal Village (2005) City of Banyule Cultural Strategy 2007-2011 (2007) Context, June 2013, Ivanhoe Activity Centre Heritage Items & Precincts, Final Report Ellender, I. 1989, The Plenty Valley Corridor: Archaeological Survey of Aboriginal Sites Ellender I. 1994, The Aboriginal Heritage of the Shire of Eltham Gasparetto, N. & Levi, C. 2011, Saxam Homestead – Heritage Assessment Heidelberg Conservation Study (1985) Heritage Victoria 'Heritage Overlay Guidelines' (2007) Lower Plenty River Concept Plan, October 1994 Lower Darebin Creek Concept Plan, Dights Falls to Burke Road, August 1990
		· ·
		The Glenard Estate and its Parks (2008)
		The Middle Yarra Concept Plan – Burke Road to Watsons Creek, December 1993
		The Mount Eagle Estate Common Parks Conservation Management Plan (2011)
		Weaver, F. 1989, Plenty Valley Corridor: The Archaeological Survey of Historic Sites
		Weaver, F. 1991, Lower Plenty River Archaeological Survey (for Board of Works)
		Weaver, F. 1991, Report as part of the Lower Darebin Creek Concept Plan Banyule

Planning scheme	Summary of policy	Reference documents
Manningham Planni	ng Scheme	
Clause 21.11 Heritage	Includes some overview comments on the diverse nature of the heritage of the municipality. Identifies key issues (development pressure on heritage places, impact of development on land adjoining places of heritage significance and lack of information about the location and significance of Aboriginal archaeological places) Objectives are tailored to these three key issues. Strategies including the identification and assessment of heritage places and sites with archaeological potential, support for retention of heritage places and initiatives' that preserve and enhance cultural heritage, requirement for historical archaeologists to assess areas with archaeological significance and consider allowing prohibited uses to support preservation of heritage buildings. Strategies include the application of the HO and vegetation controls and undertaking future strategic work in the areas of assessment and the development of guidelines. The implementation of the Manningham Monterey Pine and Cypress Tree assessment is also referenced. A range of other supporting actions are noted, including promoting heritage in the community	Cities of Banyule, Manningham and Whitehorse (1998) Commitment to Indigenous People by the Cities of Banyule, Manningham & Whitehorse, Victoria Context Pty Ltd, Peterson R, Stafford B (1991) Heritage Study City of Doncaster and Templestowe, Doncaster Context Pty Ltd, Kellaway Cr C, Peterson R (1996) Wonga Park Heritage Study — Report on Stages 1 & 2 Manningham City Council, Doncaster Context Pty Ltd (2006) Manningham Heritage Study Review 2006, Melbourne Ellender I (1991) The City of Doncaster and Templestowe: The Archaeological Survey of Aboriginal Sites Department of Conservation and Environment, Melbourne HLCD Pty Ltd & Lancashire D (July 2007) Warrandyte Township Heritage Guidelines Parts 1 to 7, Victoria John Patrick Pty Ltd Landscape Architects (2006) Manningham Heritage Garden & Significant Tree Study — Stage 2, Manningham City Council, Doncaster Kellaway C (1994) Doncaster and Templestowe Heritage Study — Additional Historical Research City of Doncaster and Templestowe Manningham City Council (2005) Warrandyte River Reserve Management Plan, Manningham City Council, Doncaster Michael Smith Landscape Architecture & Urban Design, Kenyon B, Banks F (2003) Manningham Monterey Pine and Cypress Tree Assessment, Manningham City Council, Doncaster Peterson R (1993) Heritage Study Additional Sites Recommendations City of Doncaster and Templestowe, Doncaster Peterson R (1999) Draft Manningham Heritage Guidelines, Manningham City Council, Doncaster Urban Initiatives (2005) Warrandyte Urban Design Framework (2005), Melbourne, Victoria
Yarra Planning Sch	neme	
Clause 21.05 Built Form, Clause	Notes that over half of the municipality has heritage	

21.05-1 Heritage

protection, heritage underpins Yarra's valued character.

Objectives include:

- To protect and enhance Yarra's heritage places (in their diversity)
- To protect the setting and context of the World Heritage Listed Royal Exhibition Building and Carlton Gardens

Planning scheme	Summary of policy	Reference documents
Clause 22.02 Development Guidelines for sites subject to the Heritage Overlay	The policy provides guidance for the protection of places of natural and cultural significance. The policy refers to the grading system in place (Individually significant, Contributory and Not contributory). It sets out overarching policies for heritage, and then provides more detailed guidance under a series of headings: Demolition (full demolition and part demolition) Retention in original location Reconstruction and restoration Painting and surface treatments Culturally significant trees Subdivision New development, alterations and additions (includes detailed guidance on siting, height, visibility and other issues) Archaeology	Heritage Gap Study: Review of 17 Precincts Stage 2 Report August 2014, Revised 16 October 2016 (Context Pty Ltd) Heritage Review of Predefined Areas In Abbotsford & Collingwood Stage 2 Report July 2015 (Context Pty Ltd) Heritage Gap Study: Review of Central Richmond, Stage 2 Final Report, November 2014 (Context Pty Ltd) City of Yarra Heritage Gaps Study July 2014 – Smith Street South (Anthemion Consultancies) City of Yarra Heritage Gaps Review One 2013 [Appendix A and B includes Statements of Significance] Incorporated Plan under the provisions of clause 43.01 Heritage Overlay – methodology report, July 2014 City of Yarra Heritage Gaps Review Two 2013 City of Yarra Heritage Gaps Study October 2012 – 233-251 Victoria Street, Abbotsford (Anthemion Consultancies) City of Yarra Review of Heritage Overlay Areas 2007 (Graeme Butler and Associates) [Appendix 7 includes Statements of Significance] Yarra Heritage Database 2007 including photos 'City of Yarra Heritage Review', Allom Lovell and Associates, 1998 'City of Yarra Heritage Review', Building Citations Volume 2 Part I and II, Allom Lovell and Associates 'Protecting Archaeological Sites in Victoria', Heritage Victoria, 1998 The Australian ICOMOS Charter for the Conservation of Places of Cultural Significance 'Fitzroy Urban Conservation Study', Andrew Ward and Associates, 1989 'Richmond Conservation Study', Jand T O'Connor and Coleman and Wright Architects, 1985 'Carlton, North Carlton and Princes Hill Conservation Study', Nigel Lewis and Associates, 1984 'City of Northcote Urban Conservation Study', Graeme Butler Architect, 1982 'South Fitzroy Conservation Study', Jacob Lewis Vines Architects, 1979 'North Fitzroy Conservation Study', Jacob Lewis Vines Architects, 1978
Clause 22.10 Built form and design	Includes guidance on development on sites adjacent to or near heritage	City of Yarra Built Form Review 2003 Environment Protection Authority: 'Guidelines for Major

2012)

Services, Commercial Buildings and

Archaeological Sites apply to all

three property gradings

Fairmount Park Estate Precinct Heritage Citation (2016)

Hawthorn Heritage Study (City of Hawthorn, 1993)
Heritage Policy – Statements of Significance (City of

Grange Avenue Residential Precinct Citation (August 2014)

Hawthorn Heritage Precincts Study (City of Boroondara, April

Planning scheme	Summary of policy	Reference documents
		Boroondara, August 2016, or as amended and adopted by Council from time to time)
		Kew and Hawthorn Further Investigations – Assessment of Specific Sites (February 2014)
		Kew Junction Commercial Heritage Study (September 2013)
		National Trust of Australia (Victoria) Technical Bulletin 8.1 Fences & Gates (1988)
		Review of B-graded Buildings in Kew, Camberwell and Hawthorn (City of Boroondara, January 2007, updated June 2007 and November 2009) Volumes 1, 2 and 3
		Review of C* Grade Buildings in the Former City of Hawthorn (City of Boroondara, September 2006, updated June 2007 and November 2009) Volumes 1 and 2
		Surrey Hills North Residential Precinct Citation (2014, updated 2014)
		Surrey Hills and Canterbury Hill Estate Heritage Study (2014, updated 2016)
		Union Road Commercial Precinct Citation (City of Boroondara, 2011)
		Union Road Residential Precinct Citation (2011, updated 2014)
Whiteherse Blann	ing Schomo	

Whitehorse Planning Scheme

Clause 21.05 Environment

Identifies issues of the natural, visual and built environment, the latter which includes places of historic significance, which are of importance to the City of Whitehorse. Through this Clause, there is the opportunity to apply controls to protect identified assets. As related to heritage, the key objective is 'to protect and enhance areas with special natural, environmental cultural or historic significance for the future enjoyment of the community'. The strategy for achieving this objective is 'Identifying those buildings, structures and features of historical significance within the municipality'. Implementation of the strategy is through the application of Heritage Overlay (HO) controls on places included on the VHR and places identified in City of Whitehorse heritage reviews. Further, implementation of the strategy requires using Clause 22.01 Heritage **Buildings and Precincts and Clause** 43.01 Heritage Overlay for the assessment of planning applications in heritage areas.

The Vegetation Protection Overlay (VPO) controls in the planning scheme may also be relevant. Past studies have employed historical significance as one criterion for application of the VPO controls, alongside a variety of other characteristics.

Guidelines for Areas of Special Significance

Blackburn Lake Surrounds Study, 2002

Walker Estate Special Character Area Urban Character Study, May 1999

Whitehorse Economic Development Strategy 2014-2019

Whitehorse Neighbourhood Character Study 2014

KLM City of Whitehorse, Neighbourhood Character Study Review of areas 14 and 16, February 2004

Whitehorse Sustainability Strategy 2008-2013, April 2008

Whitehorse Integrated Transport Strategy, May 2011

Whitehorse Energy Action Plan 2009-2014

Whitehorse Water Action Plan 2009-2014

Review of Neighbourhood Character Implementation Recommendations, Part 2 Review Areas, July 2004

131 Central Road, Nunawading: Vegetation Assessment by Stephen Mueck, Biosis (November 2007)

Flora, fauna and habitat hectare assessment of 15 Virgillia Street Blackburn North Victoria, Biosis Research, April 2008

Collina Dell SLO Review, October 2007

Whitehorse Open Space Strategy, Thompson Berrill Landscape Design Pty Ltd, in association with Environmental & Land Management Pty Ltd, November 2007

Review of Three Precincts in Character Areas 16 & 18 May 2008

Tally Ho Major Activity Centre Urban Design Framework, 2007
Tally Ho Activity Centre Urban Design and Landscape
Guidelines, 2013

Planning scheme	Summary of policy	Reference documents
Clause 22.01 Heritage Buildings and Precincts	This policy enacts the requirements of Clause 21.05 through the identification of heritage precincts and places and the conservation and enhancement of heritage buildings. Clause 22.01 identifies the statements of significance for all heritage precincts in the municipality. It also anticipates the identification and protection of places not yet affected by heritage controls. Establishes three levels of significance for HO places and component parts of these: Significant heritage places Contributory heritage places Non-contributory places Sets out heritage policies related to Subdivision, Demolition and removal of buildings, New buildings and works, External alterations, External painting, and Trees and hedges. Further, sets out Performance measures related to each of the policies.	City of Whitehorse Heritage Review, 1999 City of Whitehorse Heritage Review, 2001 Heritage Precincts Report, 2004 City of Whitehorse Individual Heritage Properties Review, 2006 William Street Precinct Report, 2010 City of Whitehorse Heritage Assessments, 2010 Whitehorse Heritage Review, 2012 City of Whitehorse Post 1945 Heritage Study, 2016

B.1.3.6 Incorporated documents and reference documents

Incorporated and reference documents are identified in planning schemes.

These are documents which either form part of the planning scheme itself (in the case of incorporated documents) or form part of the basis of local planning policies or are relevant in the application of these policies.

Incorporated documents and incorporated plans

Incorporated documents are listed in the Schedule to Clause 81 in each planning scheme. These form part of the planning scheme. Incorporated plans may also be specified in the Schedule to the HO.

The following incorporated plans have been identified as of relevance to heritage issues in the study area:

- City of Manningham Statements of Tree & Garden Significance (2006)
- City of Yarra Incorporated Plan under the provisions of clause 43.01 Heritage Overlay, Planning permit
 exemptions, July 2014 (allows for exemptions from permits for minor works, applies to a large number of
 HO places and precincts)
- City of Yarra Review of Heritage Overlay Areas 2007 Appendix 8, revised February 2018
- City of Whitehorse Incorporated Document No. 10 City of Whitehorse-Statements of Tree Significance-2005 (updated September 2016)
- City of Whitehorse Incorporated Document No. 11 City of Whitehorse-Statements of Tree Significance-2006 (updated September 2016)
- City of Whitehorse Incorporated Document No.13 City of Whitehorse Significant Tree Study 22 April 2016.

Reference documents

Reference documents include heritage studies, citations and the like and these are important both as sources of information on individual heritage places as well as on the history of an area. These are identified in Table B.1 above.

B.1.4 Victorian Government – Yarra River Protection (Wilip-gin Birrarung murron) Act 2017

The Yarra River Protection (Willip-gin Birrarung murron) Act 2017 (Vic) provides an overarching policy and planning framework to coordinate and harmonise planning for the use, development and protection of the Yarra River, its parklands and other land in its vicinity. A purpose of the Act is to protect the Yarra River and the surrounding parcels of public land as one living and integrated natural entity. The Act also recognises the importance of the Yarra River, and its parklands and associated public places, to the economic prosperity, vitality and liveability of Melbourne and the Yarra Valley.

The Act provides for the preparation of a Yarra Strategic Plan in accordance with Yarra Protection Principles to guide future use and development, and areas for protection within the Yarra corridor. An exemption from the provisions of the Act applies for projects declared under the *Major Transport Projects Facilitation Act 2009* (Vic) (including the North East Link). However, NELP has undertaken strategic planning to consider the long-term community vision within the Yarra Strategic Plan, as well as having regard to the Yarra Protection Principles set out in the Act.

The Act is relevant to historical heritage. As well as acknowledging Aboriginal cultural values, heritage and knowledge of Yarra River land and the importance of the role of traditional owners, the cultural principles set down in the Act (Part 2, section 12) include the following:

The cultural diversity and heritage of post-European settlement communities should be recognised and protected as a valued contribution to the identity, amenity and use of Yarra River land.

The Yarra Strategic Plan being developed by Melbourne Water under the Act is required to have regard to the Yarra protection principles, including as related to heritage (https://www.melbournewater.com.au/about-us/our-customers/yarra-strategic-plan). The Yarra Strategic Plan must include a land use framework plan which creates the spatial structure for future use and development and identifies areas for protection. The Yarra Strategic Plan is also required to 'recognise and protect Aboriginal tangible and intangible cultural values and other cultural and heritage values (Clause 21(d)).

B.2 Other standards, guidelines and information sources

B.2.1 The Burra Charter

An industry standard which is frequently referenced as a guide to best practice management of cultural heritage places in Australia is the *Australia ICOMOS Burra Charter*, 2013 (Burra Charter). It is recognised by both the Heritage Council and the Executive Director, Heritage Victoria and is also sometimes referenced by planning authorities. The Burra Charter provides definitions for terms and processes associated with conservation of places of cultural significance and establishes a series of conservation principles, conservation processes and guidelines for conservation practice.

The Burra Charter is also sometimes referenced in the LPPFs for heritage in planning schemes.

B.2.2 Conservation management plans and other heritage assessments

Conservation management plans (CMPs) are typically prepared for places included in the VHR and for some places of local significance. CMPs follow a standard format as endorsed by Heritage Victoria and most other heritage bodies.

The principal purpose of the CMP is to establish the nature and extent of heritage significance and provide guidance on future works and development. Such a plan is a relatively standard document for heritage properties and is often a requirement of heritage permits. CMPs usually are a key reference tool in making decisions on applications for heritage places. On occasion, CMPs are referenced in the permit policy or other guidelines for those places.

Where they could be identified, CMPs were referenced in the impact assessment, although this was the case for very few places assessed.

The following CMPs and heritage assessments have been identified as of relevance to heritage issues in the study area:

- Allom Lovell & Associates, *Banyule Homestead Conservation Report*, 1989, copy held Victorian Government Library Service
- Biosis & ERM, Heritage Assessment for Simpson Barracks, unpublished draft, prepared for Department of Defence, 21 November 2017
- Context, Warringal Parklands & Banyule Flats: Cultural Heritage Assessment, prepared for Banyule City Council, 2014
- Lovell Chen, *Heide Museum of Modern Art, Conservation Management Plan,* prepared for Arts Victoria and Heide Museum of Modern Art, 2014
- National Trust, 'Eastern Freeway Stage 1 Bridges', Draft Classification Report, version 9 January 2018.

While not a CMP, it is noted that a new environmental history has been prepared for Banyule City Council and this has also been reviewed.

 Context, Banyule Thematic Environmental History, Revised draft report, prepared for the Banyule City Council, 29 June 2018.

APPENDIX C LAND USE HISTORY

C.1 Introduction

This land use history considers the broad patterns of land use and occupation the areas through which North East Link passes through. The history considers land in the municipalities of Yarra, Boroondara, Darebin, Banyule, Manningham and Whitehorse, with small sections of Whittlesea and Nillumbik. This history is not limited to the historical heritage study area shown in Figure 5.2 in Section 5 of this report but considers the patterns of use and development in these areas to inform an understanding of the heritage context of North East Link. This land use history focuses on the occupation and use of land within the study area following the arrival of Europeans in Melbourne in the mid-1830s. The use of the land by Aboriginal people is not the focus, however, it is addressed where relevant as part of the study area's post-contact history

The study area is generally located in portions of the eastern and north-eastern suburbs of Melbourne. It is characterised by watercourses, including the Yarra River, Koonung Creek and Plenty River, and main roads, including Greensborough Road corridor and the Eastern Freeway. As such this land use history has been structured to use these features as foundations from which to explore the main uses and occupation patterns of these areas.

Following the arrival of Europeans, land sales took place in the 1830s and 1840s, with early development generally occurring closer to Melbourne, and spreading east and north through the study area. The main themes include early farming and agriculture, land sales and land speculation, institutions, 19th and 20th century suburban development, appreciation of the environment, recreation, and road development.

C.2 Yarra River and environs

The major waterway of the study area, the Yarra River, is 'slow moving, high load bearing' and 'characterised by long meanders and large areas of lagoons and flats' (Context, 2014: 20). The river's course is shaped by volcanic rock to its west, with sandstone and mudstone to its east (Otto, 2005: 4-5). Although on the whole the river course is relatively low-lying within the study area, at its western end, the Yarra River is sited within gorges, the land dropping steeply to meet it. Further north and east, the land slopes more gently to the water. Both the riverbanks' geology and topography have shaped the different land uses with the study area. The Yarra River and its tributaries was the estate of the Wurundjeri, one of the four Woi wurrung-speaking clans of the Port Phillip region (Woiwurrung, VACL, accessed 2 May 2018). It was the Wurundjeri, and the other Woi wurrung people, that were encountered by the first European arrivals of the 19th century. Furthermore, due to the early 19th century sealing trade along the Victorian coast, and the short-lived settlement at Sorrento of 1803, the Aboriginal people of the Yarra River district in 1835 'already understood both the utility of British goods and the threat posed by British power' (Boyce, 2011: 15).

C.2.1 Early European arrivals

In 1803, the New South Wales Surveyor-General, Charles Grimes, travelled up the Yarra River as far as what is now Dights Falls. Grimes had been sent from Sydney to ascertain the possibility of settlement in Port Phillip. One of Grimes' party, diarist James Flemming, observed that 'a few miles up' the Yarra River, there was 'excellent water' (Otto, 2005: 14-15). The permanent arrival of European settlers in the Yarra River area, however, did not take place for another 30 years.

In mid-1835, Tasmanian pastoralist John Batman was sent by a small group of investors to investigate the pastoral and grazing potential of land north of Bass Strait. Batman met with a group of Kulin elders, stating afterwards that treaty had been signed, which reportedly transferred 'hundreds of thousands of acres' of land, in return for a 'yearly rent' (Boyce, 2011: 57). While it is unknown what transpired at this meeting, the story of the treaty gave the backing for the land claims of those wishing to establish pastoral runs in the Port Phillip District (Boyce, 2011: 57). John Pascoe Fawkner arrived at the Yarra River on the Enterprize in August 1835. By June 1836, there were 177 residents and over 20,000 sheep, mainly to the west of the small settlement on the

Yarra River, now Melbourne ('Foundation and Early History', eMelbourne, accessed 11 May 2018). To the north of Melbourne, which was surveyed by Robert Hoddle in 1837, other small settlements began developing in the late 1830s and early 1840s.

C.2.2 Collingwood, Clifton Hill, Abbotsford

In 1838-9, eighty-eight allotments in what became Fitzroy, Collingwood and Richmond were made available as part of the first land sales outside of the town reserve of Melbourne (Allom Lovell & Associates, 1992: 4.1.).

The municipal district of East Collingwood was proclaimed in 1855. The area east of Hoddle Street, now Abbotsford, was known as the Collingwood Flat, as the low-lying area close to the river. The area developed as predominantly working-class area and was known for the noxious industries which developed along the river banks. The Flat was prone to flooding and run off from the more elevated areas of Collingwood and Fitzroy, making land less desirable, and therefore cheaper. Early occupation included huts and tents in what was 'one of the muddiest settlements' in the early colony (Barrett, 1971: 8). However, Collingwood and Abbotsford later developed as suburbs, with streets ordered in a grid layout. By 1858, the section of Johnston Street to the immediate east of Hoddle Street was partially developed, with some buildings occupying the southern side of the street and a small cluster of buildings near Hoddle Street (Figure C.1). Land to the north of Johnston Street, between Hoddle Street and the Yarra River was known as Dight's Paddock. In 1878, Edwin Trenerry purchased the land for a residential subdivision (Figure C.2), which incorporated a central recreation reserve, which was used by local cricket and football teams from the 1880s. This reserve became known as Victoria Park (VHR H0075, VHD). The first train line in Collingwood connected the suburb to Heidelberg in the late 1880s, with a connection to the city established 1901 (Collingwood, Victorian Places, accessed 11 May 2018). By the late 19th century, Hoddle Street, the boundary between Collingwood and Abbotsford, was occupied by a mix of residential and small scale commercial properties. Now a major metropolitan highway, Hoddle Street in the 19th century was a suburban thoroughfare. Produce and service providers were located close to the railway station, serving local residents. These included butchers, greengrocers, a dairy, dress maker, the Highbury Barn Hotel on the Collingwood side (Sands & McDougall, 1895). The streets to the east and west of Hoddle Street, including Bendigo Street and Hotham Street in Collingwood and Maugie Street and Lulie Street, Abbotsford, were predominantly residential. The Melbourne Metropolitan Board of Works (MMBW) 160 feet to 1 inch plans of 1896 (Figure C.4 and Figure C.5) show a mix of brick and timber pairs or terrace rows, with a school located opposite Victoria Park.

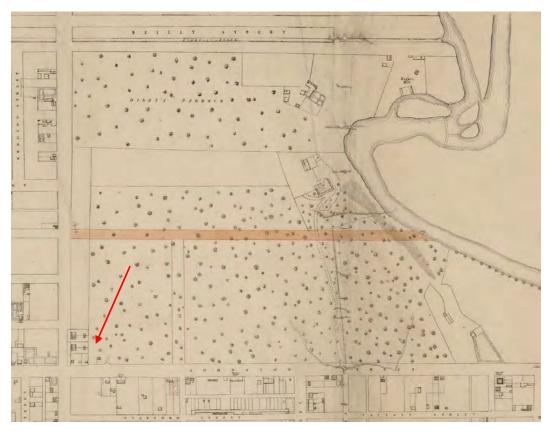


Figure C.1 1858 plan of buildings in part of East Collingwood, now Abbotsford, with buildings at intersection of Johnston Street and Hoddle Street indicated (Clements Hodgkinson, State Library of Victoria)

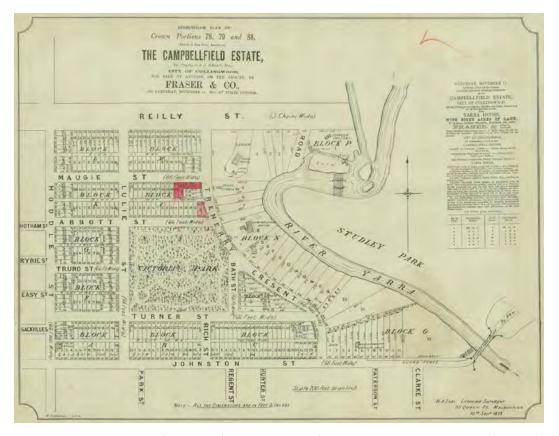


Figure C.2 Subdivision of Campbellfield Estate, 1881 (Vale Collection, State Library of Victoria)

The western entry to the what is now the Eastern Freeway was originally Reilly Street, which extended between Lygon Street, Carlton and the confluence of the Yarra River and Merri Creek, Clifton Hill. In the late 1850s, the Reilly Street drain, a major open storm water drain, was constructed along its length between Smith Street and the river, later extended to Carlton. The drain was approximately ten feet deep 'lined with stone [and] partly fenced in' (Barrett, 1971: 45-46). Although residents had anticipated the drain would bring with it residential development and trade, it 'proved to be a failure', regularly overflowing during winter. By the mid-1870s, there was mixed occupation of Reilly Street, east of Wellington Street, Collingwood, then known as East Collingwood. The Sands & McDougall directory of 1875 lists two dairies, a wheelwright and cab owner and quarry man as occupying the eastern end of the street (Sands & McDougall, 1875). In the early 20th century, Reilly Street was 'beautified', with the open drain covered over with a concrete deck, and the central median planted with trees and grass. This part of the thoroughfare was renamed Alexandra Parade East (Age, 23 September 1908: 11 and 29 May 1909: 12).

The northern part of the municipality, now Clifton Hill, developed later as a suburb than Collingwood to the south. A Melbourne City Council basalt quarry was established near the Merri Creek in the 1850s, operating for a century ('Clifton Hill', Victorian Places, accessed 11 May 2018). Clifton Hill to the west of Hoddle Street was subdivided into residential allotments by 1864 (Department of Lands & Survey, 1864), with subdivision to the east of Hoddle Street taking place by 1873. The Department of Lands & Survey show a much wider reservation for Hoddle Street in Clifton Hill than had been allowed for in Collingwood (Figure C.3). It was in the early 1870s that the portion of East Collingwood north of Reilly Street began to be known as Clifton Hill (*Argus*, 18 September 1871: 2), distinguishing the more elevated new suburb from the lower-lying Collingwood. The suburb had a much lower density than Collingwood, seven houses per acre compared with 15 per acre, and larger dwellings ('Clifton Hill', Victorian Places, 2015).

The MMBW detail plans of 1900 show the development and occupation of Clifton Hill, Abbotsford (Figure C.4) and Collingwood (Figure C.5) by the end of the 19th century. Although a relatively wide road accommodating the central open drain to the creek, Reilly Street ostensibly did not 'lead' anywhere, with no bridge at its end allowing access to Fairfield on the east side of Merri Creek. A number of brick crossings over the drain can be seen in MMBW plans (MMBW 1896). Occupation at the Abbotsford end of Reilly Street was light industrial in character, with the MMBW plan (MMBW, no. 1228, 1900) showing the Melbourne Flour Milling Co. complex of buildings on the Abbotsford side of the street. Clifton Hill, within the study area, is shown on this plan as having been developed with rows of mainly brick dwellings, with quarries visible along the Merri Creek.

Photographs of the 1870s (Figure C.6) and 1920s (Figure C.7) show a consistent character of the eastern end of Reilly Street and the junction of the Merri Creek and the Yarra River continued into the 20th century.



Figure C.3 Department of Lands & Survey plan of allotments in Clifton Hill, then part of East Collingwood, 1873 (State Library of Victoria)

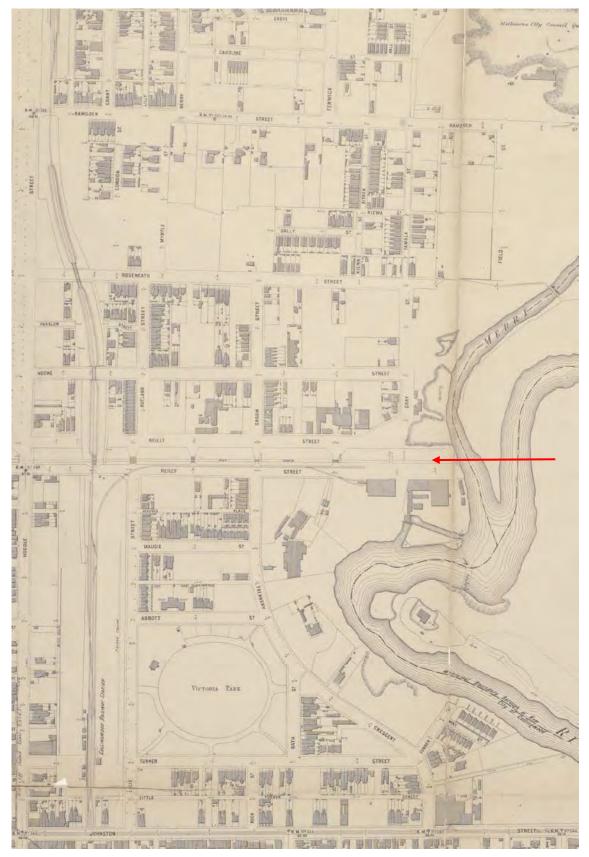


Figure C.4 MMBW 160':1" plan, no. 38, 1900, showing development around Reilly Street and Hoddle Street, Abbotsford. Reilly Street indicated (State Library of Victoria)

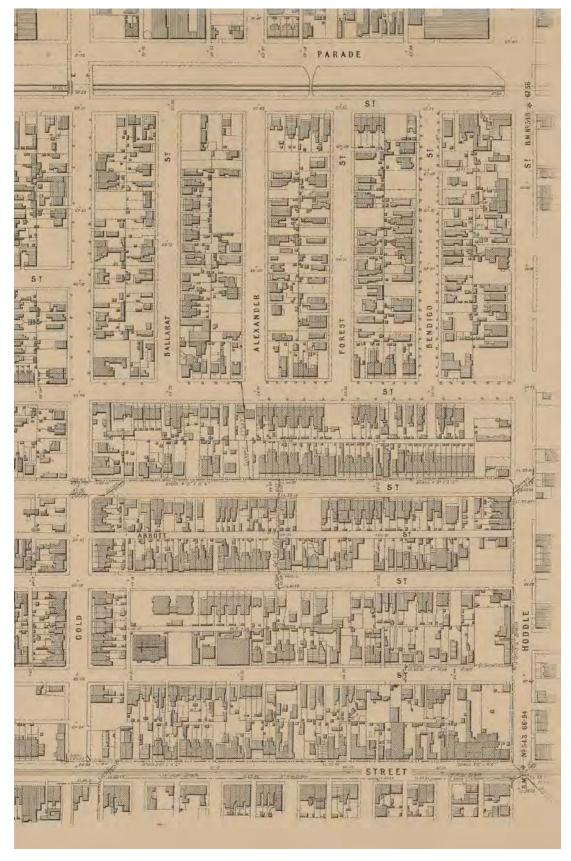


Figure C.5 MMBW 160':1" plan no. 29, showing Collingwood, 1896 (State Library of Victoria)



Figure C.6 Dights Falls and mill, 1875, photographed by Charles Nettleton (State Library of Victoria)



Figure C.7 Junction of Merri Creek (in foreground) and Yarra River, with Melbourne Flour Milling Co. buildings visible at right, c. 1929. (V J Hearnes, State Library of Victoria)

C.3 Kew

At the time of European arrival in the Kew area and into the mid-19th century, the present-day municipality of Boroondara was characterised by dense vegetation. Robert Hoddle, surveying the area in the 1830s adopted the Aboriginal name, Boroondara, meaning 'a shady place' (Built Heritage, *Boroondara Thematic Environmental History*, 2012: 21). While much of this bushland was replaced over the subsequent decades and into the 20th century, some remnant vegetation remains along the Yarra River. One such area of remnant vegetation is Yarra Bend Park, which was recognised as early as the 1850s by writer James Bonwick, who noted 'that quarter will well repay the lover of nature as well as the student of geology' (James Bonwick, in Built Heritage, 2012: 26).

The northern parts of Kew East and Balwyn North, which now abut the Eastern Freeway, developed later as suburbs than the southern parts of the municipality. Early plans land close to the Yarra River and uncleared and still heavily treed (Kearney, Plan of Melbourne and its suburbs, 1855). The lack of river crossings over the Yarra River upstream from Melbourne hindered suburban development through the 19th century.

Early farming

One of the earliest farmers known to have occupied land in the Kew area, prior to the Crown Land sales of early 1845 was George Langhorne (Built Heritage, 2012: 79). Langhorne established his farming operations at a bend of the Yarra River where the Kew Golf Club is now located. A fenced-in property and hut attributed to Langhorne can be seen in Hoddle's survey of allotments (Figure C.8). This survey plan also indicates a number of ad hoc properties had been established along the southern banks of the Yarra River at Kew prior to the official sale of land by the Crown. Huts are shown, as are bush fences, including one which encloses 'cultivation'. James Connell's huts and bush fence were located within apparently cultivated land.

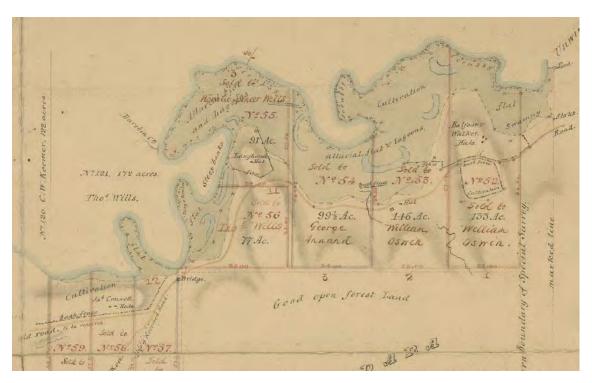


Figure C.8 Detail of survey of allotments in Parish of Boroondara, by Robert Hoddle, April 1844 (Historic Plan Collection, Public Record Office Victoria)

Following the Crown Land sales of Boroondara, George Langhorne was instructed to remove his improvements, and Crown Allotment 55, on which he had been located, was purchased by H S Wills, who established Willsmere Farm (Built Heritage, 2012: 79). These riverside allotments were established as farms, including Kilby Farm and Belford Farm, the names of which have since been reflected in roads in Kew East (Built Heritage, 2012: 79).

Twentieth century development

Land close to the Yarra River in what is now Kew and Balwyn underwent residential development in the 20th century, but such development took place generally later than the areas to the south. Kew East, for example, 'is a product of the 1920s', with Balwyn North developing through the 1940s in to the post-war period (Kew and Balwyn North, Victorian Places, accessed 20 June 2018).

C.4 Institutions

While the flatter land along the river was increasingly used for farming, the elevated and relatively inaccessible areas either side of the Yarra River were progressively given over to institutions from the mid-19th century. These areas of Kew and Fairfield provided sufficient proximity to the city and isolation from the population, as well as pleasant rural setting which it was believed would aid in the treatment and rehabilitation of patients. Furthermore, in the case of Kew, the elevation of the site enabled a high level of visibility, important in a period which valued philanthropy and welfare, albeit at a distance from the city.

The site above the confluence of the Merri Creek and Yarra River was a traditional camping ground for the Wurundjeri and other Aboriginal people, and this continued to be the case initially after the arrival of Europeans in Melbourne. The Assistant Protect William Thomas took note of the camp in 1841, and its location influenced the establishment of a Protectorate station (1841-1847) and Aboriginal school (1842-53) there. A Native Police Corps, established in 1837, was relocated to this site in 1842, operating until 1853 (Context, 2008: 28, 85, 111). The school comprised a number of simple buildings, including a schoolhouse, wattle and daub residence, kitchen, store, dormitory for students and a log coach house (Clark & Heydon, 2004: 60). While no buildings remain, the protectorate site is recognised by a Heritage Overlay in the Yarra Planning Scheme.

The Yarra Bend Asylum on the Fairfield side of the Yarra River was established in the mid-1840s, as the first such asylum in Melbourne. The site on the north side of the Yarra, near the junction with Merri Creek was selected in 1846, near the site of the Aboriginal Protectorate. The site fit in with contemporary thinking on the treatment of mental illness: 'pleasant surroundings, with sufficient land for the inmates to be employed outdoors, away from the gaze of strangers' (Context, 2008: 117). The Melbourne Asylum was opened in October 1848, with the first patients, or 'inmates', transferred from the Melbourne Gaol (Kew Asylum, eMelbourne, accessed 18 February 2018). The site had access via a footbridge across the river and road. It developed into a substantial complex (Figure C.10) including the first bluestone wings, later wooden wards, infirmary, staff quarters, gatehouse and ha-ha wall. The MMBW plan of c. 1898, shows the development of the asylum over the preceding 50 years, including vegetable gardens and a cemetery located on the bank of the Yarra River (Figure C.12). The asylum continued to operate until 1922, despite calls for its closure from as early as the 1860s (Darebin Heritage, Yarra Bend Lunatic Asylum, accessed 28 February 2018).

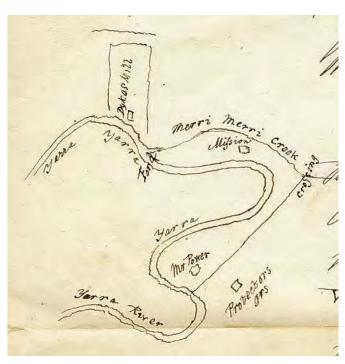


Figure C.9 Sketch plan by Assistant Protector of Aborigines for the Westernport District, W Thomas, of Yarra Bend, 1847, with Aboriginal Protectorate (Mission) shown, along with Dights Mill. North is to the right. (VPRS 11/P0/10, Item 658, Public Record Office Victoria).

Overcrowding at the asylum saw the decision made in the mid-1860s to establish three new asylums across Victoria: Kew, Ararat and Beechworth. The site of the Kew Lunatic Asylum, later known as Willsmere, was gazetted in 1864, on the opposite side of the river to the Yarra Bend Asylum (Figure C.11). The new institution opened in 1872 and was the largest of the asylums. The asylum building, which is extant, is an imposing structure and was visible from a distance, due to its elevated position. It was described in 1871 as 'a large pile of buildings ... From certain points in the city one can plainly see to the eastward the long white front of the buildings and the two conspicuous towers'. (*Argus*, 15 December 1871: 6). The adjacent Kew Cottages were constructed from 1887 to accommodate children and young adults with intellectual disabilities (Kew Asylum, eMelbourne, accessed 28 February 2018).

To the north of the Yarra Bend Asylum, and accessed via the same road from Heidelberg Road, the Queens Memorial Infectious Diseases Hospital was established in 1904. The selection of this site again demonstrates the choice of isolated metropolitan sites for the treatment of health. The hospital, later the Fairfield Infectious Diseases Hospital, was the 'first centralised isolation hospital for the treatment of infectious diseases' (Heritage Victoria, VHR H1878, VHD). This hospital operated until the 1990s, in a complex of red brick buildings which have since been taken over by the Northern Metropolitan Institute of TAFE (now Melbourne Polytechnic). The HM Prison Fairlea, the first female-only prison in Victoria was also opened in Yarra Bend Park near the hospital in 1956.

The use of land by the Yarra River for institutions continued in the post-WWII period, on a portion of land excised from the Kew site. On the eastern side of the Chandler Highway, completed in 1954, the Guide Dog Association was granted land for a purpose-built Guide Dog Centre in 1962 (Guide Dogs Victoria, History, accessed 7 March 2018). The Royal Talbot Rehabilitation Centre was transferred in 1961 from its original location in Clayton to a site on the western side of the Chandler Highway (Austin Health, Royal Talbot Rehabilitation Centre – About Us, accessed 7 March 2018).

While some above ground evidence remains of these institutions, much has been removed. The Kew Asylum site (Willsmere) retains the main building, however, most buildings have been demolished at the Kew Cottages site, and only archaeological evidence remains at the Protectorate, Yarra Bend Asylum and Fairlea site, aside from the gate post.

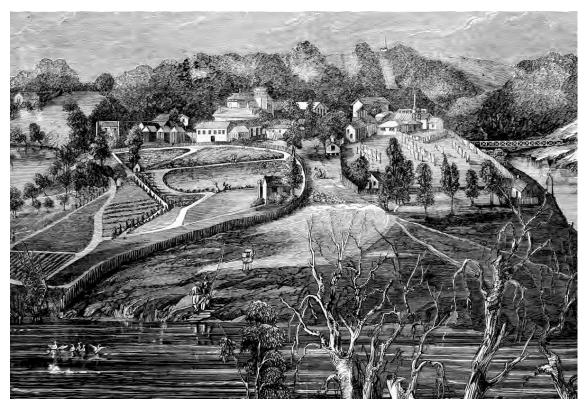


Figure C.10 Engraving of Yarra Bend Asylum for the Insane, 1868 by Frederick Gross (State Library of Victoria)

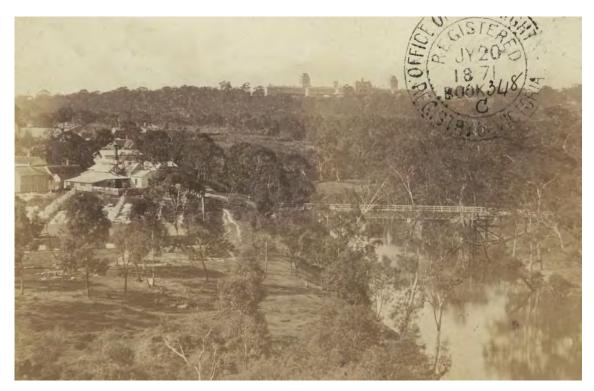


Figure C.11 View across the Yarra River with the Yarra Bend Asylum at left and the Kew Asylum on the hill in the background, George Ross Reid, photographer, 1871 (State Library of Victoria).

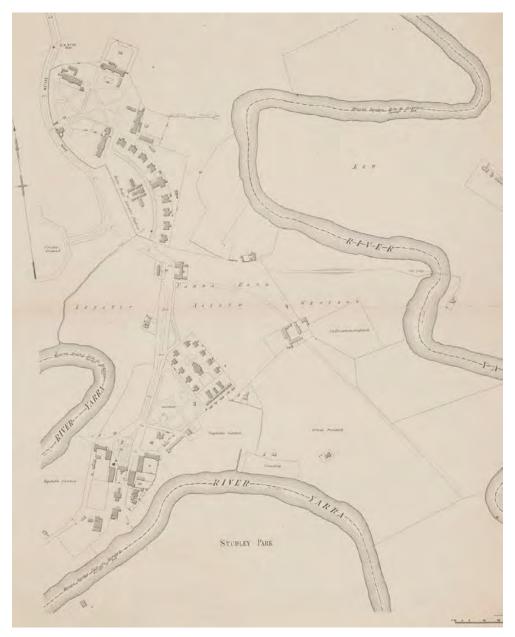


Figure C.12 Detail of MMBW 160':1" plan no. 39, 1898, with Yarra Bend Lunatic Asylum buildings shown. North is at the top-left of the image (State Library of Victoria).

C.5 Heidelberg district

C.5.1 Early European occupation and development

The area around Heidelberg was one of the first to be subdivided following the arrival of Europeans in Victoria the mid-1830s. As noted in the Encyclopedia of Melbourne, the early date of its subdivision was due to the area's attributes, 'the beauty of its well-watered and undulating land along the Yarra Valley [and] the initial fertility of the land which made it ideal for grazing and farming' (Heidelberg, eMelbourne, 28 February 2018). Land at the confluence of the Yarra River and Plenty River was occupied by Edward Willis in 1837, who had taken up the land as a pastoral lease. The area's timber also attracted sawyers and splitters in this early period (Butler, 1985: 70). A map included in the Heidelberg Conservation Study of 1985 show early pastoral stations located on the west and east sides of the Yarra River, at what is now Heidelberg and Bulleen. These include Woods Station and 'Ruffey's Station' of the late 1830s noted on the Bulleen side, with Mr Wood's House and Mr Smith's Station indicated on the Heidelberg side (Butler, 1985: following 74).

Following surveys undertaken by Robert Hoddle and William Wedge Darke in 1837, allotments in the Parish of Keelbundora were sold at an auction in Sydney in 1838 (Context, 2014: 17). These allotments were soon resold for profit (Butler, 1985: 75). A site for a village at Warringal, as Heidelberg was originally known, was laid out in Sydney by the Deputy Surveyor-General, following pressure from pastoralists in the Parish of Keelbundora from as early as 1839. The village was laid out in the form of a diamond, close to the Yarra River (Figure C.13). The village reserve grid remains in the alignment of Jika Street, Burgundy Street, and Yarra Street, although Heidelberg Crescent did not develop through the parkland, likely due to the topography. Allotments in the township were sold in 1845, following the economic downturn of the early 1840s (Allom Lovell & Associates, 1999a: 21). The name Warringal soon gave way to Heidelberg. A site was reserved for a Church of England in 1846, with the church constructed from 1849. By 1856, the population of the village was approximately 555, with a court house constructed in 1859, since demolished (Allom Lovell & Associates, 1999a: 26). The Heidelberg Road Board was established in 1860, with the Shire of Heidelberg proclaimed in 1871.

With the increased traffic in the area brought about by the gold rush, there was a 'brief agricultural boom' in the Yarra River flood plains in the 1850s (Figure C.14), but regular flooding and overcropping saw dairying become more dominant (Heidelberg, eMelbourne, accessed 19 June 2018). As described in the 1880s, Heidelberg in the 1840s and 1850s was:

scarcely a suburb; it was rather a favourite district for those who desired to have ample domains round their dwellings. Until 1850, it was regarded as the distinctly aristocratic locality; the beauty of the river scenery, the quite romantic aspect of the place, gave it an early reputation among the Melbourne men of means as the site for country residences (Alexander Sutherland, in Allom Lovell & Associates, 1999a: 11).

One example characteristic of the early Heidelberg area was the subdivision of Section 6 of the Parish of Keelbundora, originally purchased from the Crown in September 1838 by Richard Henry Browne (Land Victoria, Parish of Keelbundora plan). Browne's allotment, to the north-east of the village reserve in what is now part of Viewbank and the Banyule Swamp, was located near the junction of the Yarra River with the Plenty River. He named his estate Heidelberg, likely influencing the naming of the district, and in 1839 subdivided and sold the land. Part of Browne's land was purchased by Joseph Hawdon, an aristocratic early resident of the area, whose Banyule Homestead was designed by architect John Gill in c. 1847. Through land acquisition, Hawdon expanded his Banyule Estate overlooking the Yarra River to a 657-acre property. Banyule Estate was used for tenant farming from the 1850s, with:

... farmers given a portion of the desirable river flats and having to take, whether they liked it or not, a portion of the higher lands (Context, 2014: 18).

Another portion of Brown's land became known as the Sill's bend area, purchased by the Sills family in the 1850s, for use as a dairy farm (Context, 2014: 18, 20).

As noted above, flooding (Figure C.14), as well as drought caused a number of the farms to fail, with the December 1863 flood leading to a shift in land use from crops to grazing (Context, 2014: 21). The estates along the Yarra River in the 1850s can be seen in a plan prepared by historian Don Garden in at Figure C.15. As outlined in the *Banyule Flats & Warringal Parklands Heritage Assessment*, Context, 2014, small-scale farming returned to this area in the early 1900s, with the establishment of Chinese-operated market gardens. These ventures, however, ultimately suffered the same fate as their predecessors with major flooding in 1924 and 1935. The Banyule Estate remained a farming property into the 1960s, with residential subdivision proposed from the 1950s.

The population of the Heidelberg village remained consistent over the subsequent decades, but increased following the opening of the railway line from Spencer Street to Heidelberg in 1888 (Allom Lovell & Associates, 1999c: 39). It was in this period that the Heidelberg Shire Council moved from the 'ridiculous in the extreme' accommodation to new offices built at a site in Burgundy Street, Heidelberg. The new office building, a 'temporary' solution for the council, was a double-fronted timber building, with additions made in the early 20th century. The building was relocated following the completion of the new shire offices of 1908-1909, to form part of a new complex adjoining the Austin Hospital. The 1908 building was largely designed by architect Harold Desbrowe-Annear. The building was relocated to a site in the Warringal Parklands in 2004 (Former Shire Offices and Library, Context, 2012).

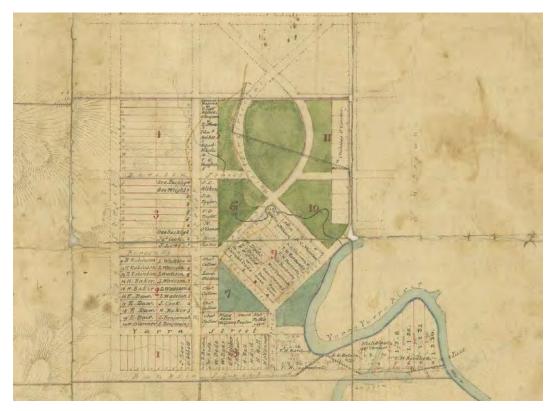


Figure C.13 Crown Land subdivision plan of Warringal village, now Heidelberg (: Historic Plan Collection, VPRS 8168, Public Record Office Victoria)



Figure C.14 Antoine Fauchery, View near Heidelberg, with the Yarra River in flood, c. 1858 (State Library of Victoria)

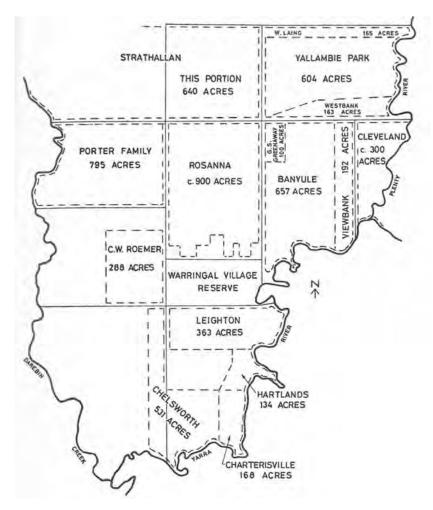


Figure C.15 'Large properties in Heidelberg district of the 1850s (Garden, Heidelberg, 1972: 47)

C.5.2 Ivanhoe

Sections 1 and 2 of the Parish of Keelbundora were sold in early 1838 to Thomas Walker. At their southern end, the allotments were bounded by the Yarra River and its confluence with the Koonung Creek and the Darebin Creek to the west. Thomas Walker also purchased Section 3 in September 1838, to the west of the Warringal village reserve. By 1839, the western portion of Section 1 had been subdivided into allotments of around 50 acres and sold as part of the Glanville Estate (Allom Lovell & Associates, 1999a: 12). Allotments at southern end of the Glanville Estate, where it met the Yarra River, were purchased by Colonel Snodgrass and G B Smith. The eastern part of Section 1 and all of Section 2 were sold in 'large sections to the wealthy men of the colony for estates' (Garden, 1972: 11, 14). An advertisement in the Sydney-based *Australasian Chronicle* described the locality thus:

This estate is bounded by invaluable properties of the most respectable and opulent gentlemen in New South Wales... Great Heidelberg Road runs through the property (*Port Phillip Gazette*, 22 February 1840: 2)

The advertising above is typical of how Keelbundora subdivisions were promoted, focusing on the prestige of the area due to the association with the important men of the colony along with the beauty and fertility of the land (Garden, 1972: 15). As shown in the above plan prepared by historian Don Garden, the land formerly owned by Thomas Walker was by the 1850s a series of large estates, including Hartlands, Chelsworth and Leighton (Figure C.15).

C.5.3 Nineteenth century suburban development

The promotion of suburban development of the Alphington-Heidelberg area took place during the 1880s as the prospect of rail connections to Melbourne became more likely. A number of large properties, including Fairfield Park, Lucerne Farm in Alphington and the Rosanna Estate were purchased by land speculators and subdivided into villa allotments. Advertising for the sale of the suburban estates, as with the earlier sales of the 1840s, focused on the quality of life of the area, including the promise of the rail link, and the beauty of the surroundings (*Fitzroy City Press*, 19 February 1887: 2). Despite the confidence of the speculators, however, much of the land in these estates remained unsold and few residences were actually built (Allom Lovell & Associates, 1999a:51). The railway line was completed to Heidelberg in 1888, although its indirect route meant it was an hour and half trip to Spencer Street station (Allom Lovell & Associates, 1999a: 39). As such, the railway 'effectively negated the influence of the land boom ... on the Heidelberg area' (Allom Lovell & Associates, 1999a: 40).

As a result, the Heidelberg district remained essentially rural in character until the 20th century, with the extension of the line from Collingwood to Princes Bridge providing direct access to the city. Suburban development began to increase to the north of Heidelberg in the early 20th century. Architect Harold Desbrowe-Annear designed a number of Arts and Crafts bungalows close to the Yarra River in Ivanhoe and Eaglemont. The Mount Eagle property, between The Eyrie and Maltravers Street, had previously been put up for sale in 1892, and was described as the 'show-piece' of the neighbourhood (*Australasian*, 10 December 1892: 4). Suburban subdivision, however, did not take place in this estate until the 1910s. The Mount Eagle Estate, later Eaglemont, was designed by the American architect, and designer of Canberra, Walter Burley Griffin. Allotments in the subdivision were put up for sale in 1915, in an estate which featured curved roads following the area's contours, a departure from the standard grid layout of most subdivisions. The Griffins designed the Glenard Estate subdivision, to the east of Lower Heidelberg Road on a former farming property (Allom Lovell and Associates, 1999b: 54, 55). The Griffins lived on the estate for approximately 8 years, and designed the tiny house, Pholiota (Wight, 2008).

Rosanna remained relatively undeveloped in terms of residential construction through the first half of the 20th century. In 1928-29, the Catholic order of nuns, Sisters of Mercy, established a new novitiate on Rosanna Road. The newly completed complex can be seen in an oblique aerial photograph (Figure C.16) as the most substantial development in the area, with only a small number of dwellings visible. The three-storey building, built to a design by architect R Harper, comprised 107 rooms, chapel and cloister on a site of 25 acres (10 hectares) (Figure C.17). The building was described by the parish priest, Fr Power, as 'a high water mark of the district' (Allom Lovell and Associates, 1999b: 360.)

The Sands & McDougall directory of 1930 reflects the still rural character Rosanna in the interwar period. Listings for Banyule Road, south of the novitiate, include a stud farm and a poultry farm. Only a small number of residences are listed in each of Laane Avenue, Coorie Crescent and Douglas Street (now the western end of Banyule Road). No streets off Rosanna Road are listed to the north of the convent, and the streets of Rosanna remained listed in the directory as part of the Heidelberg section (Sands & McDougall, 1930). By the mid-1950s, however, consistent with the residential development of other suburbs in the area, the area to the east of Rosanna Road was becoming more populated, with numerous residents listed along Banyule Road (formerly Douglas Street), Coorie Crescent, Laane Avenue and Jones Crescent (Sands & McDougall, 1955).



Figure C.16 Airspy oblique aerial view of the newly completed Sisters of Mercy Novitiate, c. 1930s (State Library of Victoria)



Figure C.17 Novitiate of the Sisters of Mercy, photographed by Lyle Fowler in 1950 (Harold Paynting Collection, State Library of Victoria)

C.6 Bulleen

Land in the Parish of Bulleen, to the east of the confluence of the Yarra River and Koonung Creek, was taken up as F W Unwin's Special Survey in 1841. Unwin has been credited with giving the area the name 'Bulleen', believed to have been derived from the nearby billabong of Lake Bolin Bolin, also known as Bolin Bolin Billabong (Bulleen, Victorian Places, accessed 19 June 2018). By 1844, the Special Survey had been resurveyed into farm allotments and sold as part of the Carlton Estate. An undated plan showing this subdivision (Figure C.18) shows purchasers of land with frontage to the Yarra River included Sidney Ricardo, a Victorian member of parliament. The plan indicates in purple farms which had been purchased; the remainder were likely leased. At the southern boundary of Ricardo's land was a punt crossing at the river, at the approximate location of the bridge now at Manningham Road West. A stone chimney likely relating to Ricardo's occupation of the land was removed in 2006. In the 1870s, Ricardo sold his property to farmer Thomas Dowd, who constructed a weatherboard house. The property was subsequently leased and owned by James and William Lang from 1899 (Lovell Chen, 2014: 9).

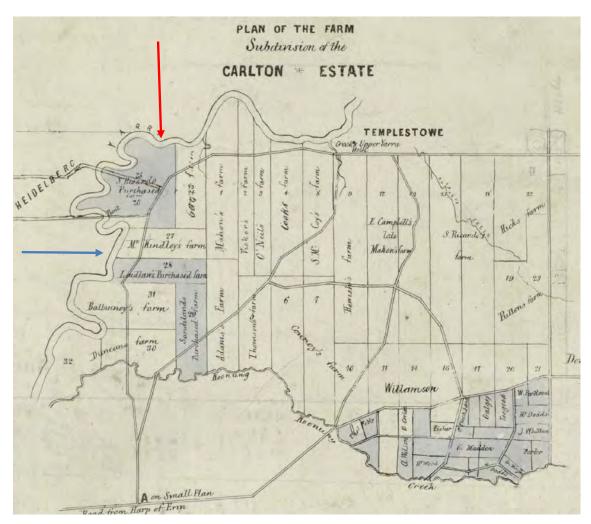


Figure C.18 Undated plan (c. 1860s) of farm subdivisions of Carlton Estate, formerly Unwin's Special Survey.

The eastern boundary of this plan is approximately the alignment of Victoria Road, Doncaster,
with the alignments of Bulleen Road, Templestowe Road and Thompsons Road visible. Sidney
Ricardo's farm is indicated in red, now the location of Banksia Park and Heide. Robert Laidlaw's
property is indicated in blue (State Library of Victoria)

An early residence, Spring Bank, now Clarendon Eyre, was constructed overlooking Bolin Bolin Billabong in the 1870s. The property had been leased from the early 1850s and subsequently purchased (Figure C.18) by farmer Robert Laidlaw, and it became known as 'Springbank' by the mid-1860s. The Spring Bank residence (Figure C.19) was constructed for Laidlaw, with additions possibly undertaken in the late 1880s. Laidlaw held the property until his death in 1907, and it was sold in 1925 to J B M Wood, who renamed it Clarendon Eyre, after the jersey stud which he ran on the property (Peterson & Context, 1991: 19; Kellaway, 1994). A newspaper feature on the property in 1932 shows cattle and sheep by the river, as well as a 'fine crop' of maize being grown (*Australasian*, 30 July 1932: 29). The property was later acquired by the MMBW. The residence is now privately occupied, and sits within a small, late-20th century subdivision. The eastern part of the property forms part of a mid-20th century residential subdivision of Bulleen.

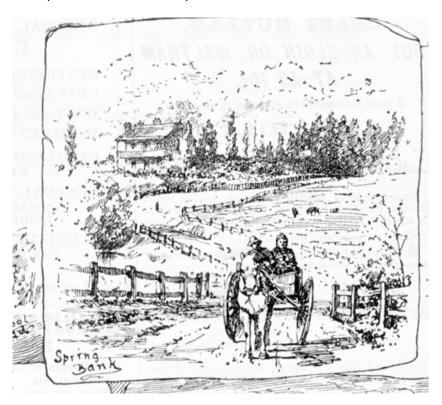


Figure C.19 Sketch of Spring Bank, 1890, included in the *Illustrated Australian News*, 1 February 1890 (Copy held by State Library of Victoria



Figure C.20 Photographs of Clarendon Eyre property, 1932 (Australasian, 30 July 1932: 29)

The Bulleen area remained relatively rural into the mid-20th century, and development was hampered by its isolated location: 'bordered on all but its eastern side by watercourses, with only two bridges [and] no public transport which came near it' (Bulleen, Victorian Places, accessed 4 May 2018). Fruit-growing and dairying were typical agricultural undertakings in the area. Suburban development increased in the post-war period.

Bridge Street, as it was known between Bulleen Road and the Yarra River, developed as a small commercial area in the post-war period, with businesses relating to light industry and motoring. By 1970, the *Sands & McDougall directory* listed a nursery, die-casters, food preservers, machinery hire, estate agents and two service stations (Sands & McDougall, 1970). The service station at the triangular allotment at intersection of what is now Bridge Street and Manningham Road was originally an Esso service station, later a Caltex Service Station (Figure C.21). It was established in c. 1965-1970 on land which had remained vacant until the mid-20th century (Sands & McDougall, 1965, 1970). The River Red Gum on this site was retained as part of the service station development due to community pressure, reportedly including the input of Mrs E Fullarton of the Doncaster & Templestowe Tree Preservation Society (National Trust Register of Significant Trees). In 1970, community concerns were also raised about the industrial area of Bulleen near the Banksia Street bridge, with one councillor calling it 'the rubbish trip of the city' (*East Yarra News*, 20 January 1970: 10).

A number of sporting and community facilities were established along the Yarra River in in the latter post-war period (Bulleen, Victorian Places, accessed 4 May 2018). A comparison of an aerial photograph of 1945 (Figure C.23) and the map of the area included in the 1966 edition of the *Melway* street directory (Figure C.24) illustrates this development. The 1945 view shows the Bulleen area as open and undeveloped land, with a few small clusters of buildings along Bulleen Road. In contrast, the street directory includes the Carey Grammar School sports centre, the Marcellin College Senior School, the Camberwell Municipal Golf Course, and suburban subdivision in the triangle of land between Bulleen Road, Thompsons Road and Manningham Road. The Hoyts Bulleen Drive-in was opened in 1966, on a site on Bulleen Road, with capacity for 754 cars, and facilities including cafeteria and snack bar (Figure C.22). The location was likely selected due it being an area with comparatively high levels of car use due to the lack of public transport. It operated until 1984 (Hoyts Bulleen (Doncaster), Australian Drive-ins, accessed 8 May 2018).

The 'ethno-centric' social club, the Veneto Club, was established in the 1960s, and reflected Bulleen's European population (Context, 2011: 70). With the area attracting prosperous Italian migrants moving from the inner suburbs, the Veneto Club was established in 1969, with the purchase of 16 acres near the Bolin Bolin Lake and Yarra River. A small shed acted as a temporary clubhouse, replaced in 1972-73 with a three-storey club designed by Ermin Smrekar (History, Veneto Club, accessed 21 May 2018; Heritage Alliance, 2008: 025—018). The new club was opened on 8 December 1973 by the leader of the Federal Liberal Opposition, Billy Snedden and the Italian Ambassador to Australia in front of 3,000 people (History, Veneto Club, accessed 21 May 2018). In 1972, the Yarra Valley Country Club was opened to the north of Templestowe Road. The Kew-based Trinity Grammar School opened the Bulleen Playing Fields to the east of Bulleen Road in 1983. To the south of the Trinity site is Marcellin College, a Catholic boys' secondary school, established in Bulleen in 1963.

Banksia Park was developed by the MMBW as regional park from the late 1970s, on land which had formerly been part of Ricardo's property. It was designed along 'North American principles' with car parks, picnic facilities, play equipment and interpretation signs (Peterson & Context, 1991: 23).

The changed character of Bulleen following development in the post-war period can be seen in an aerial photograph of 1987 (Figure C.25). The land to the east and west of Bulleen Road had been altered from farmland to a residential suburban with significant areas of recreational facilities for public and educational use.



Figure C.21 Caltex Service Station, corner Bridge Road and Manningham Road, Bulleen, 1971 (National Library of Australia)



Figure C.22 Cafeteria at Bulleen Drive-In, 1966, photograph by Peter Wille (State Library of Victoria)

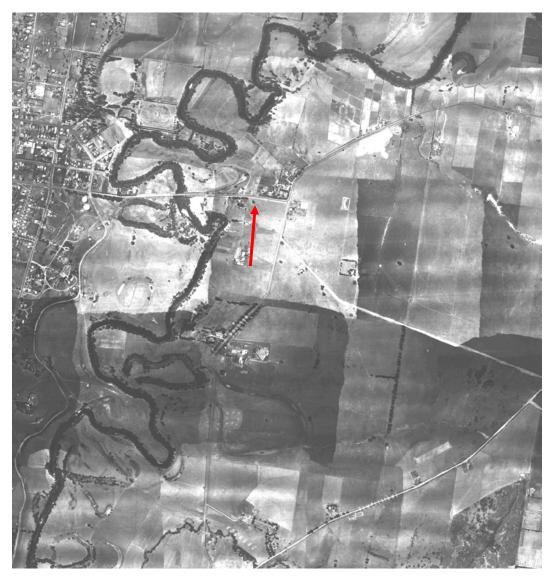


Figure C.23 Aerial photograph of Bulleen, 1945, showing continuing rural character of area. The River Red Gum at Bridge Street is indicated (1945 Melbourne Photo-Maps, University of Melbourne Library)

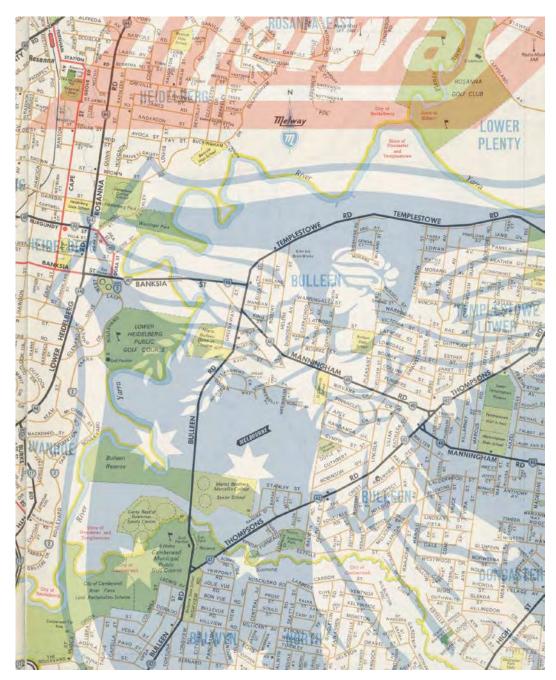


Figure C.24 Map of Bulleen in 1966 edition of *Melway street directory of Greater Melbourne*, as digitised by University of Melbourne Library (watermark behind) (University of Melbourne Library)



Figure C.25 Aerial photograph of Bulleen between Eastern Freeway and Manningham Road, 1987, with suburban and recreational development visible. Veneto Club indicated (Land Victoria Historic Aerials Collection)

C.7 Artists

The Yarra River corridor has long been a popular subject of artists, particularly those which formed part of the 19th century Heidelberg School, which comprised Tom Roberts and Arthur Streeton, amongst others. Scenes painted by these artists depicted were often romantic or rustic, but do give an indication of the change in the landscape from the mid-19th century.

As noted in the *Boroondara Thematic Environmental History*, 2012, the Yarra River around Studley Park and Dights Falls was also a popular subject, with watercolour sketches by R S Kelly, Daniel Rutter Long and James Howe Carse produced in the 1850s and 1860s. French artist Francois Cogne depicted Dights Mill, Abbotsford in 1863 (Figure C.26) in a rustic manner, with the solid bluestone mill building and water race in the foreground,

and hills with remnant eucalyptus bush behind. Fred Williams, painting in the 1970s, depicted the Yarra River at Dight's Falls and the billabongs at Kew (Built Heritage, 2012: 27). The Yarra River also proved a popular subject of photographers including Fred Kruger (Figure C.27)

The Heidelberg School, as the group of Impressionist artists were termed by American art critic, Sidney Dickinson, painted together at sites around the river at Heidelberg, including at Yarra Flats, and at Box Hill, then a rural locality (National Gallery of Victoria, Australian Impressionism, accessed 15 March 2018). Despite the collective term, not all artists spent significant time at Heidelberg. The Heidelberg School brought with it the 'promise of a new 'nationalist' school of Australian painting' (Galbally, 2004: 55), and the scenes painted by the group at Heidelberg as well as at Box Hill and in the city have become highly recognisable. While ostensibly a 'nationalist' school, many of the scenes were of the post-European occupation landscape, with cleared pastures, gentle waterways, and open skies. The Heidelberg area, with its 'undulating and lightly timbered landscape' was highly suited to the impressionist work being undertaken by these artists (Allom Lovell & Associates, 1999a: 74). A c. 1850s residence, Mount Eagle, was made available to the group of artists in 1888 and part of the 1840s property, Charterisville, in Burke Road, Ivanhoe, was leased to Walter Withers (Yarra Flats, Context, 2012, accessed via VHD).



Figure C.26 Watercolour and lithograph by Francois Cogne of Dight's Mill, Abbotsford, 1863 with Dight's Falls visible at right and Yarra Bend Park in the background (National Gallery of Victoria)



Figure C.27 Fred Kruger, 'Scene at Yarra Flats', c. 1868-78 (National Gallery of Victoria)



Figure C.28 Winter morning near Heidelberg by Louis Buvelot, 1866 (National Gallery of Victoria)



Figure C.29 Spring by Arthur Streeton, 1890, painted at what is now Banksia Park, Templestowe (National Gallery of Victoria)

C.7.1 Heide

The establishment of Heide, on the Bulleen side of the Yarra River in the 1920s further cemented the area's picturesque reputation and popularity as an artistic subject.

In 1934, a portion of Sidney Ricardo's former property, comprising approximately 11 acres, was purchased by John and Sunday Reed. The Reeds altered the Dowd farmhouse in the mid-1930s and in the 1950s. This building is now known as Heide I. Sunday Reed also transformed the property, laying the garden with different 'zones'. The site is now the Heide Museum of Modern Art, but during the Reed occupation it was a focus of a circle of prominent artists of the mid-20th century, with the Reeds acting as patrons of the artists they supported. These artists included Charles Blackman, Sidney Nolan and Mirka Mora. In 1964, the Reeds commissioned architect David McGlashan of McGlashan & Everist to design a new house for them on the site, away from the suburban development encroaching on the area. The house, now known as Heide II, was envisaged as 'a gallery for living in' (Lovell Chen, 2014: 10-12).

In 1980, the Reeds sold the larger Heide II allotment to the Victorian Government as an art gallery and park, which was developed as a sculpture park. John and Sunday Reed returned to Heide I, and died within days of each in late 1981. The Heide Park and Art Gallery was renamed the Heide Museum of Modern Art in 1993, the same year an additional wing was constructed at the gallery, known as Heide III (Lovell Chen, 2014)

C.8 Recreation

Much of the land either side of the Yarra River has been designated parkland or reserves from the mid-19th century. The earliest, Studley Park in Kew, was set aside from sale by the Crown, and has been popular as a walking and picnicking ground since the 1830s (eMelbourne, Studley Park, accessed 19 June 2018). Other parks have been created with the cessation of governmental or industrial uses. The importance of green spaces as 'lungs' in the increasingly suburban areas has also been an importance consideration in the reservation of these areas.

C.8.1 Yarra Bend Park

Following the closure of the Yarra Bend Asylum in 1922, the site was redeveloped from the late-1920s as a sports and recreation ground. The reserve was described as a 'metropolitan lung' for the inner suburbs, with various groups debating 'the best use to which the area might ... be put' (*Age*, 15 September 1925: 8). The site's reservation as a 'lunatic asylum and hospital for the insane' was revoked in August 1926 (Victoria Government Gazette, 18 August 1926, Gazette 112: 2444), paving the way for the site to become a public recreation reserve. The permanent reservation was made in November 1926, with a committee of management appointed (*Argus*, 4 November 1926: 11). Regulations were put in place for the management and use of the newly reserved park in January 1927. They included free public access, aside from a limited number of occasions for sporting or recreational events, and limiting the grazing of cattle, sheep, horses or other animals, aside from when permitted by the Committee of Management (Victoria Government Gazette, Gazette 10, 26 January 1927: 316). Grazing, as permitted by the Committee, was listed in the park regulations at least into the 1950s and may have continued into the 1970s (Victoria Government Gazette, Gazette 268, 29 April 1953: 1725; Ward, 2012: np).

A golf links was soon proposed, the site being 'eminently suited' for the purpose (*Age*, 15 September 1927: 10). The 83 former asylum buildings were demolished and dismantled over an 18-month period in c. 1927 by Whelan the Wrecker, and removed from the site (*Weekly Times*, 16 July 1927: 46; Bannear, 2005: 54). After initially opening as a 9-hole course, the 18-hole Yarra Bend Golf Links (Figure C.30) was opened in March 1934, as a publicly accessible golf course (*Sporting Globe*, 28 March 1934: 8). The rustic bungalow-style Yarra Bend Golf Club House was constructed in 1936, south of the study area, to a design by the Public Works Department Chief Architect, Percy Everett (Allom Lovell & Associates, 1998). A footbridge, known as Kane's Bridge, was constructed in 1928 across the river at Studley Park connecting Kew with the golf course (Sanderson, 1988 via Hermes). The Yarra Boulevard was funded through sustenance provisions and constructed by unemployed relief labour during the Depression period of the late 1920s and early 1930s. The boulevard was modelled on the American example of recreational drives, and the completed road extended between Walmer Street and the Chandler Highway in Kew, overlooking the river (Yarra and Kew, eMelbourne, accessed 10 May 2018). The construction of the roadway required cutting into the side of the hill (Figure C.31).

In the early 1990s, it was noted that the floodplains near the Chandler Highway comprised the second highest concentration of golf courses in Melbourne (Melbourne Parks & Waterways, 1993: 27).



Figure C.30 Oblique aerial photograph of Yarra Bend golf course, 1946, looking south over Yarra River towards Kew (Airspy, State Library of Victoria)



Figure C.31 Yarra Boulevard, c. 1945, showing a section outside the study area near the Yarra Golf Links and the cutting into the hillside required for the construction of the road (Victoria Railways, State Library of Victoria)

C.8.2 Swimming

In the early part of the 20th century, as restrictions on public bathing in the Yarra River were eased, a number of river-based swimming pools and clubs were established.

The Deep Rock Swimming Club (Figure C.32, Figure C.33) was established on the north bank of the Yarra River in 1906. The site became a popular swimming and diving spot, with the cliff on the south bank the location for a record-setting dive of – reportedly – 62.7 metres by well-known swimmer, Alick Wickham, in 1918 in front of a huge crowd of 60,000 (Parks Victoria, Yarra Bend Park, History, accessed 10 May 2018; *Tribune*, 11 October 1967: 12). The club, which at one time was controlled by notorious local identity John Wren, was in operation into the 1930s. However, fire and then the Yarra River floods of 1934, in which two pedestrian bridges and the club's buildings were swept away, impacting access to the club's facilities (*Age*, 8 February 1935: 9). Despite this, the site continued to be used into the mid-20th century. Alterations to the course of the river during the construction of the Eastern Freeway in the 1970s resulted in the removal of the remaining pool structures (Otto, 2005: 154). A stone memorial marks the location of the club.

Likewise, the Alphington Swimming Club was formed in 1920, with a riverside pool constructed in c 1922-1924 at the south end of the Alphington Park (Figure C.34). Swimming was taught at the pool, and a dive pool was later constructed. The pool was popular with local residents, but with increasing pollution associated with suburban and industrial development in the area in the post-war period, swimming was again banned in the river and the pool closed (Alphington Swimming Pool, Darebin Heritage, accessed 19 June 2018).

Other public pools were established along the Yarra River with the section between Ivanhoe and Fairfield reportedly 'equal in popularity as St Kilda beach in the late 1920s'. Other Yarra River pools included those at Wilson Reserve in Ivanhoe, Fairfield Boathouse, Rudder Grange in Alphington, Sills Bill at Heidelberg, as well as Willsmere, East Kew (Otto, 2005: 150).

C.8.3 Boating

The Yarra River has been used for recreational boating since the mid-19th century. The Studley Park boathouse was opened in 1863 as Burn's Boathouse, with a collection of buildings including sheds, boat store, kiosk and residence subsequently constructed. Boathouses were also constructed in Alphington, including Marriott's Boathouse at the end of Alphington Street in 1891, which was sufficiently popular to warrant a steam service to Studley Park (Darebin Heritage). The Rudder Grange tea house was established in 1904, and operated in conjunction with the adjacent Marriott's boathouse. This early building was replaced in 1913 following floods, with a two-storey structure in 1913, which incorporated staff accommodation and kitchen facilities. The tearooms were dismantled in the c. late 1930s, and were replaced by boat sheds in which canoes were built. The boathouse was demolished in 1963 (Lacey, 2004: 122-124). The Fairfield Canoe Club was established in 1919 close to Rudder Grange.

C.9 Conservation

Appreciation of the beauty of the landscape of the Yarra River in the Heidelberg area has been evident since the 19th century, with the works produced by the Heidelberg School of artists. However, as noted in the Heidelberg Conservation Study of 1985, this appreciation was not for the indigenous landscape, but for the one remade by the European occupation of the district, through farming and 'improvements'. By the late 20th century, much of the Yarra River valley was composite landscape, with evidence of pre-contact Aboriginal occupation, European pastoral and agricultural use, and market gardening (Butler, 1985, Part 2: 13, 16) found alongside newly established revegetation projects.

From the 1950s, an appreciation grew of the value of the Yarra River corridor, with reserves made along its course. From the 1970s, revegetation projects were undertaken on an increasingly systematic basis by local councils, community groups, and state authorities. Surveys undertaken in the 1980s noted the community preference for the retention of bushland and native vegetation along the river corridor (Melbourne Parks & Waterways, 1993: 28).

The protection of trees in the Bulleen and Lower Templestowe became a local issue in the late 1960s, as residential and commercial development increased in the area. Such was the interest in the subject, that by late 1967, the Doncaster & Templestowe Tree Preservation Society had 183 financial members (East Yarra News, 17 May 1967: 1). In 1969, as reported by secretary Mrs E Fullarton in the local newspaper, undertook a survey of 'notable trees' in the area (East Yarra News, 12 August 1969: 9). A number of articles in the East Yarra News reported on the protection or removal of mature gums and pine trees, and the local interest appears tied with an overall concern with the perceived loss of remnants of the area's history. The local newspaper ran a campaign in late 1967 to 'save tree slaughter', inviting the formation of 'vigilante groups to promote tree planting [and] report on any act of vandalism' (East Yarra News, 20 December 1967:1). In a letter entitled 'last of the living gums', Eve Fullarton wrote to the East Yarra News in 1969 about the removal of river red gum in Potter Court, Lower Templestowe, while the retention of an 'old gum tree' was highlighted in an October 1970 report on progress of the Templestowe High School site (East Yarra News, 12 August 1969: 9, East Yarra News, 27 October 1970: 7). The Tree Preservation Society was later renamed the Doncaster & Templestowe Conservation Society in 1970, with Mrs E Fullarton elected as president (East Yarra News, 1 December 1970: 17). In the c. early 1970s, Mrs Fullarton campaigned for the retention of the river red gum at a site the intersection of Bridge Street and Manningham Road which was being redeveloped as a service station (National Trust Register of Significant Trees).

Likewise, to the west of Yarra River, sections of the community in the Heidelberg area also became concerned with conservation matters. The Warringal Conservation Society was formed in 1970 as a response to development proposals in the Banyule Flats and Warringal Parklands (Warringal Conservation Society).

During the 1990s, pedestrian and cycle access was improved in the section of the river known as the Middle Yarra, which took in the river between Burke Road, Kew and Watsons Creek. Such cycle trails took in areas of revegetated landscape.



Figure C.32 Deep Rock Swimming Pool, looking upstream along the Yarra River, 1920. John Wren is in centre of group wearing hat and tie (Yarra Libraries)



Figure C.33 Deep Rock Swimming Club, on north bank of Yarra River, 1920 (Yarra Libraries)



Figure C.34 Opening of the Alphington Swimming Pool, Yarra River, 1924 (Darebin Heritage)



Figure C.35 Rudder Grange, Yarra River at Alphington, undated (Darebin Heritage)



Figure C.36 Yarra River in flood, 1952, looking east from Chandler Highway bridge (Fairfield Canoe Club, State Library of Victoria)

C.10 Plenty River

While only a small section of the Plenty River is within the study area, the land form and geology of the river valley has influenced the development of areas within the municipalities of Whittlesea and Banyule. The southern end of the Plenty River was the division of the Parish of Keelbundora (Figure C.37) to the west and Nillumbik to the east, with the Parish of Morang to the north bisected by the watercourse.

The Plenty River region was explored by Europeans as part of the 1824 Hume & Hoddle expedition, and the river was given its name in c. 1835 by J T Gellibrand, a member of Batman's Port Phillip Association. The river valley subsequently became known as the Plenty Valley. Formal survey by Robert Hoddle took place in 1838-1839 (Context, 2013: 8). The Yan Yean reservoir and the Plenty River formed the basis of Melbourne's first piped water supply scheme, opened in 1857 (Water supply, eMelbourne, accessed 9 May 2018).

In 1840, George Coulstock purchased two Crown allotments to the west of the Plenty River in the Parish of Morang, which is situated immediately to the north of the Parish of Keelbundora. The site is now part of the suburb of Bundoora, north of the study area. Coulstock established a mill on the Plenty River in the early 1840s. The mill was owned and operated by various owners into the late 1850s, prior to the construction of the Yan Yean Reservoir which caused its closure. Large allotments were sold in Crown Land sales along the east of the Plenty River in 1840, with a number of allotments of between 610 acres (246 hectares) and 1060 acres (428 hectares) in what is now Greensborough, Briar Hill and Montmorency.

The terrain of the Plenty Valley and surrounding area was not suitable to grazing, discouraging early development. The discovery of gold in the Caledonia goldfields, however, saw small centres at Eltham and Greensborough established, buoyed by the trade of passing miners. Subsequent land selection and fruit growing saw population of the area grow, and cool stores established in Diamond Creek and Hurstbridge (Diamond Creek, eMelbourne, accessed 20 June 2018). The area's reputation as a fruit growing district continued through the 20th century (Plenty, Victorian Places, accessed 20 June 2018)

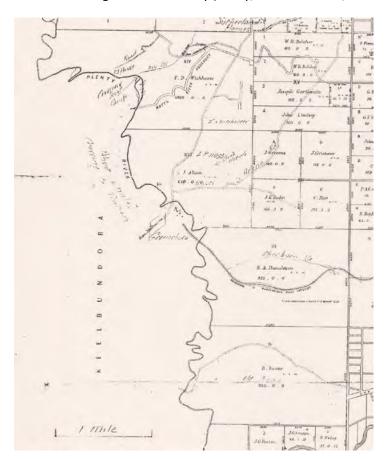


Figure C.37 Portion of map of Parish of Nillumbik, with showing large Crown allotments along Plenty River sold in 1840 (State Library of Victoria)



Figure C.38 View on the Plenty River at Janefield, F Kruger, 1877 (National Gallery of Victoria)

C.11 Koonung Creek and environs

The Koonung Creek runs alongside the Eastern Freeway from the Nunawading/Mitcham area westward to its confluence with the Yarra River at Bulleen (Presland, 2009: 76). The creek is situated in a valley, and has a number of small tributaries.

The Koonung Creek area remained rural for much of the 19th century after the arrival of Europeans, with small scale agricultural pursuits and quarrying characteristic of the district. Land to the north and south of the creek was characterised by farming uses through the 19th century and into the 20th century before suburban residential development took place.

In the Parish of Nunawading, Thomas Toogood established a dairy on the Koonung Creek in c. 1840. Two early 'special surveys' were situated to the north and south of the creek in the parishes to the east of the Yarra River. The system of special surveys had been transferred to Port Phillip in 1840, whereby wealthy capitalists in England were able to purchase large blocks of land (5,120 acres or 2,112 hectares) at a distance of at least five miles from Melbourne for £1 per acre (Allom Lovell & Associates, 1999c: 3). Henry Elgar's special survey took in land now bound by Burke, Canterbury and Elgar Roads, and the creek, and was soon subdivided and sold, prior to the Crown land sales in the parishes of Boroondara and Nunawading, in which it was located. Similarly, Sydney lawyer, F W Unwin, purchased the permissible 5,120 acres to the north of Elgar's survey and the Koonung Creek in 1841. Unwin's Special Survey reverted to the Crown in 1844 and was subsequently sold to R Campbell who subdivided the land for farms (Peterson & Context, 1991: 40).

Allotments were sold east of the boundary of Elgar's Special Survey from 1850, with purchasers including William Kerr, John Dane, Thomas Toogood and James Cousens, who purchased three allotments between what is now Middleborough and Blackburn roads, north of Springfield Road (Figure C.39). Arundel Wright purchased allotments from the Crown, reflecting land he had occupied from the late 1830s as a cattle run. In Bulleen, early purchasers along the Koonung Creek in what became Doncaster and Doncaster East included Owen Pool and William Burnley. An 1840 survey plan of Bulleen, updated to show Crown land purchasers, shows location of Wright's cattle station to the south of the creek, and Dr McDermard's cattle station on the north side (Figure C.40). This survey plan also shows the topography and vegetation along the creek, with notations of 'stringy

bark ranges', 'thickly wooded' and 'sandy soil'. The western portion of the Bulleen parish, within Unwin's Special Survey is noted on this plan to be 'moderately timbered with gum and honeysuckle' (FEAT362, Unwin's Special Survey, Public Record Office Victoria). Unsold portions of Unwin's Special Survey, comprising 72 allotments were put up for sale in the 1850s. The subdivisional estate of Unwin's property appears to have been called the 'Carlton Estate' from as early as 1849 (*Melbourne Daily News*, 4 May 1849: 2). By the mid-1850s, there were 'numerous farms' on the Unwin Special Survey land (*Argus*, 26 July 1855: 6). A survey plan of land between Doncaster Road and Koonung Creek of the c. 1850s (Figure C.41) indicates a small number of fenced properties and structures, possibly huts/residences or farming buildings. These include at the approximate site of Wilsons Road Reserve, Doncaster, and at Malcolm Crescent, Doncaster.

A c. 1850s plan of Boroondara near Koonung Creek (Figure C.42) show the general alignment of Bulleen Road and Doncaster Road as being extant by this period (Boroondara No. 3, c. 1850s, State Library of Victoria). The relatively few early newspaper references to the Koonung Creek were to the waterway as a as a geographical marker and a boundary, a boundary for allotments being sold in the 1850s. At a public meeting in September 1865 at the Doncaster Common School, local residents petitioned the Minister of Lands to reserve an area of land between Doncaster Road and Koonung Creek for recreation and public purposes (*South Bourke Standard*, 29 September 1865: 2). In November 1865, a proclamation was made prohibiting the cutting of timber along the Koonung Creek in the Parish of Bulleen (*South Bourke Standard*, 2 November 1865: 2). The Boroondara and Nunawading District Roads Boards constructed bridges over the creek from the early 1860s, giving access to Templestowe and Doncaster (*South Bourke Standard*, 4 October 1861: 3). The railway line from Box Hill to Lilydale was opened in 1882, passing through Blackburn, Nunawading and Mitcham south of the Koonung Creek. Despite increased access to the city, Blackburn and Nunawading attracted little suburban development, with Blackburn being described as a 'rising township' into the 20th century (Alves, 2010: 62, 64).

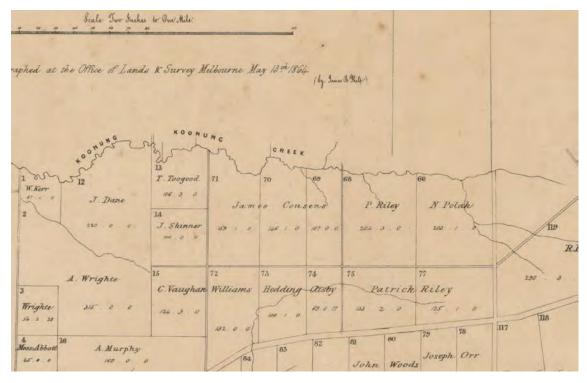


Figure C.39 Detail of plan of Parish of Nunawading, as surveyed in May 1864, showing early land owners along south bank of Koonung Creek (State Library of Victoria)

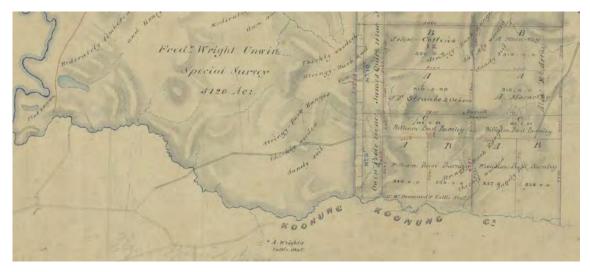


Figure C.40 Plan of Parish of Bulleen at Koonung Creek, surveyed 1840 with 1850s notations, showing Unwin's Special Survey at left, and in Doncaster and Doncaster East at right (FEAT362, Historic Plan Collection, Public Record Office Victoria)

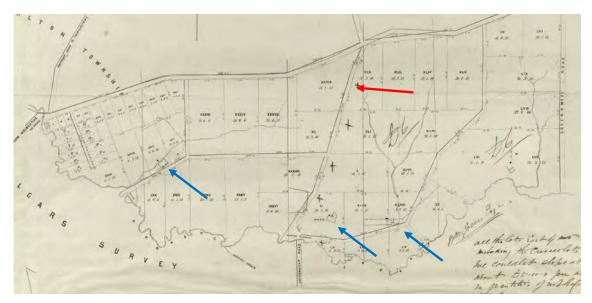


Figure C.41 Subdivisional plan of Portion A, Carlton Estate, c. 1850s. Plan shows land between the Koonung Creek and Doncaster Road, with Church Road at eastern edge. Elgar Road is indicated in red.

Note fenced properties indicated by blue arrows (Vale Collection, State Library of Victoria)

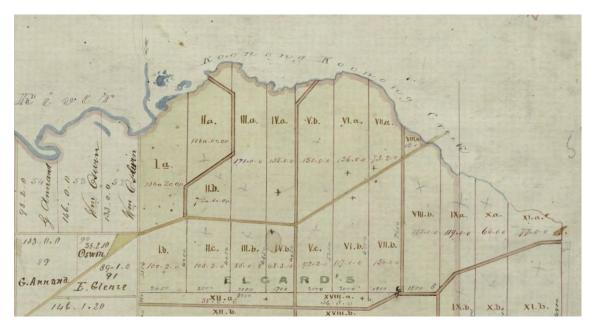


Figure C.42 Section of plan of Boroondara, c. 1850s. Plan shows land between Koonung Creek and Belmore Road, Balwyn, with Doncaster Road, Balwyn North visible in the centre of the plan (State Library of Victoria)

Land along the creek alignment was sold in the 1880s for farming and large residences, with advertising noting the proximity to the railway. One advertisement for land formerly the Elgar's Special Survey declared:

To agriculturists and graziers, this is an excellent opportunity of obtaining undulating arable land ... to gentlemen desirous of residing within a comparatively easy distance of the city, and surround themselves with everything that taste and pleasure dictate, this spot is admirable ... to business gentlemen desirous of a retreat from the city no more admirable position can be selected. (Auction notice, 'Valuable property situate at Boroondara', State Library of Victoria).

Further east, although agricultural pursuits dominated, other operations made use of land close to the creek. William Henry Slater established a large property in the 1860s called Mitcham Grove east of Surrey Road, growing medicinal herbs, including peppermint, camomile and lavender, along with ten acres dedicated to orcharding (Sydenham, 1990: 92). In the Parish of Nunawading, the 1893 Geological Survey of Victoria survey (Figure C.43 and Figure C.44) shows a number of small quarries situated along the banks of the Koonung Creek, with pottery works and brickworks located in the broader Blackburn area.



Figure C.43 1893 Geological Survey of Victoria survey plan, showing Koonung Creek valley in green (Geological Survey Office, State Library of Victoria)

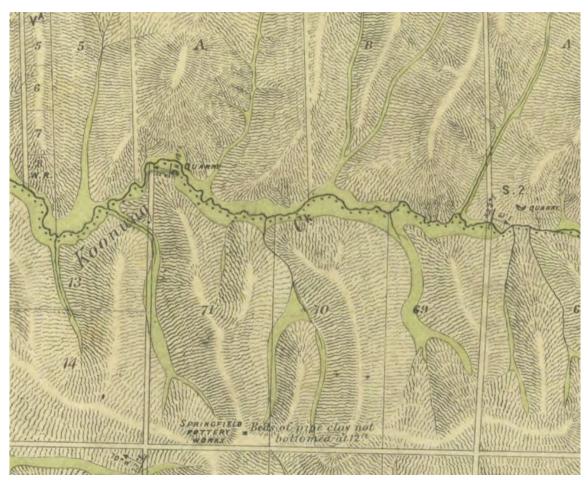


Figure C.44 Detail of 1893 Geological Survey plan, showing quarries and pottery works in Blackburn North near Koonung Creek (Geological Survey Office, State Library of Victoria)

C.11.1 Suburban development

As can be seen on the 1945 aerial photograph in Figure C.45, much of the area to the east of Box Hill remained relatively rural in character into the mid-20th century. This photograph shows that what are now suburban areas of Nunawading, Blackburn North, Donvale, Box Hill North and Doncaster East, remained characterised by orchards and farms, and by small reservoirs, with little, with little in the way of building development. The main north-south thoroughfares, such as Blackburn Road, Springvale Road and Station Street incorporated crossings over the creek, whereas others such as Middleborough Road and Surrey Road terminated south of the creek. As noted in Victorian Places, Blackburn in the 1940s was a 'residential fruit and vegetable growing district with cool stores and fruit-case factories' ('Blackburn', Victorian Places, accessed 21 May 2018). The localities of the City of Nunawading remained distinct townships, with small commercial centres along Whitehorse Road and the railway (Alves, 2010: 127). A road bridge constructed over Koonung Creek at Middleborough Road in 1962 catered for and increased the motor traffic which was becoming more prevalent in the area (Lemon, Box Hill: 207). Orcharding declined significantly through the 1960s and 1970s, as did other agricultural industries such as poultry farming (Built Heritage, 2016: 35).

A major shift in land use occurred as agriculture declined, to be replaced by manufacturing industries. As agriculture declined, it was replaced by a burgeoning manufacturing industry the district. From the 1950s, the Koonung Creek area of Blackburn North began to develop this character, with textiles company, Baekert Australia, the Dominion Press printing works and Aubedal Pty Ltd establishing premises along Joseph Street (Built Heritage, 2016: 40). While much of the development along Koonung Creek was residential, the growing suburbs also saw an increase in industrial establishments. Roger de Stoop's textiles factory was established in 1950 on a 50-acre site near the Koonung Creek in Blackburn North. Stoop's factory also provided housing, part of a grand plan to build a 'model suburb' with recreational, educational and shopping facilities complementing the housing (Allom Lovell & Associates, 1999c: 10; Sands & McDougall, 1960).

From the 1950s, suburban development in the eastern suburbs began to spread from the centres of Box Hill, Blackburn and Nunawading on the south side of Koonung Creek, and from the centre of Doncaster to the north of the creek. While land close to the stations was developed first, post-war subdivision of rural holdings 'followed a somewhat random pattern, depending merely on which family decided to sell next' (Built Heritage, 2016: 51). A number of companies established residential estates in Whitehorse. An early example of this was in Spencer Street, Nunawading, where AV Jennings constructed a group of weatherboard houses to an essentially standardised plan. Although this model was not repeated by the company, other construction companies undertook residential subdivisions across the municipality (Built Heritage, 2016: 57). By the mid-1970s, suburban development had taken place along both the north and side of the Koonung Creek. The Sands & McDougall directories in the 1950s and 1960s reveal the extent of suburban subdivision and residential development occurring in the northern parts of Nunawading and Blackburn between Springvale Road and Middleborough Road. In 1950, there was no listing of streets including Kathleen, Kett and Winifred in Nunawading, or of Douglas and Middlefield in Blackburn. By the mid-1970s, however, with subdivisions substantially complete, the directory listings showed those streets were occupied with residences (Sands & McDougall, 1950, 1974). Likewise, land to the east of Springvale Road in Nunawading and Mitcham which was orchards either side of the Koonung Creek in the 1940s, was by the 1970s occupied by suburban residential development (Sands & McDougall, 1974). Similar to the community groups formed in Bulleen in the 1960s, the Blackburn and District Tree Preservation Society was formed in 1958 and campaigned for the retention of existing native vegetation under pressure by suburban development and road making (Alves, 2010: 132-133). The availability of land in the post-war in Nunawading and, to a lesser extent, Box Hill, enabled both municipalities to create public reserves. A number were set aside along the Koonung Creek valley, including Elgar Park on a proposed high school site and Slater Reserve on the former Mitcham Grove property (Built Heritage, 2016: 53).



Figure C.45 Aerial photograph of Koonung Creek area, between Station Street, Box Hill and Springvale Road, Nunawading, 1945. North is at the top of the image (Melbourne 1945 Photo Maps, University of Melbourne)

LOVELL CHEN

C.12 Roads

The study area comprises a number of arterial roads which have developed from historic routes north or east from the city, and others which were developed from the post-war period

C.13 Eastern Freeway

C.13.1 Freeway development

Much of this section has been drawn from Max Lay, *Melbourne Miles: The Story of Melbourne's Roads*, Australian Scholarly Publishing, Melbourne, 2003.

The Eastern Freeway was proposed in the mid-20th century and developed in stages from the 1970s to the 1990s between Alexandra Parade, Collingwood and Clifton Hill, and Springvale Road, Nunawading and Donvale. The need for a main arterial road, such as a highway or later a freeway, to service the growing eastern suburbs had been flagged as early as the 1920s. As noted by Max Lay, the Eastern Freeway route followed creek and river valleys which had been left 'vacant' by the prohibition of construction due to flood risks (Lay, 2003: 198).

A Fairfield to Doncaster Highway was proposed in the 1929 Plan for General Development commissioned by the Metropolitan Town Planning Commission. The open spaces along the Koonung Creek and Yarra River can be seen in a plan produced by the commission (Figure C.46). As described by the Commission:

In deciding upon the route to be recommended to arterial roads leading from the City to large areas east and south of the Yarra River and north of Whitehorse-road, the Commission found it essential to avoid ... using the present main eastern arteries (Melbourne Town Planning Commission, Plan of General Development, 1929)

The proposal was for a highway along a widened Doncaster Road to Burke Road, then along Kilby Road to the unused Outer Circle Railway reserve to Fairfield over the now Chandler Highway Bridge. It was acknowledged that a new road would be required once the highway had reached Heidelberg Road to connect it to other arterial roads (Metropolitan Town Planning Commission, 1929: 80.). This planning scheme retained the green reserves along both the Yarra River and Koonung Creek (Figure C.46). The Melbourne Metropolitan Planning Scheme of 1954 proposed a number of arterial routes, many of which eventuated in modified forms over the subsequent 50 years. A plan produced as part of this scheme shows a main road largely in the same alignment as the existing Eastern Freeway (Figure C.47). In 1965, the Victorian government announced a ten-year program of freeway construction, most of which was to be undertaken by the MMBW (Lay, 2003: 199). Freeway plans were produced in the 1969 Transport Plan, which gave a longer western extension along Alexandra Parade to Lygon Street. An amendment to the planning scheme approved the route east of Hoddle Street, and its construction to Bulleen Road was endorsed by then Premier Hamer in 1973. Responsibility for project was taken over by the Country Roads Board (CRB) in 1974 (Lay, 2003: 209).



Figure C.46 Metropolitan Town Planning Commission Melbourne & suburbs plan, 1929 (State Library of Victoria), showing the green open space reserves along the Yarra River and Koonung Creek (State Library of Victoria)



Figure C.47 Melbourne Metropolitan Planning Scheme 1954, showing existing conditions. Note alignment of the future Eastern Freeway shown in red as a main road along the Koonung Creek valley (State Library of Victoria)

Despite support from the incumbent government, there was much public opposition about the freeway, particularly the impact it would have at its western end. Although Premier Rupert Hamer had removed Alexandra Parade as a freeway, there was considerable concern about the termination of the Eastern Freeway at Hoddle Street and the resultant traffic along Alexandra Parade. Many of the residents of these suburbs were well educated and well connected, and the Eastern Freeway protests fit within a broader movement in 1970s Australia against freeways and growing awareness of the effect on communities of such developments (Howe et al, 2014: 20).

As construction neared the inner suburbs, protests were held, and the Fitzroy City Council voted that the F19 Eastern Freeway would not be built (*Tribune*, 30 June 1976: 12). Such was the level of local opposition, the two councils allocated \$50,000 to fund protest groups, including Citizens Against Freeways (Sparrow, 2004: 195). The Melbourne anti-freeway protestors included members of the Labor Party, Communist Party branches, 'urban groups and resident activists', with a 'brick-in' of the Alexandra Parade entry organised in October 1976 (*Tribune*, 13 October 1976: 11). The Fitzroy and Collingwood councils resolved to restrict traffic along Alexandra Parade but the Victorian Government reclassified it a highway, giving control to the CRB, preventing the councils' efforts to discourage freeway traffic along this road (*Canberra Times*, 12 October 1977: 3).The

protests escalated following this announcement, with initially peaceful actions ceding to more violent clashes between locals and police and the arrest of two mayors 'in full regalia' (Sparrow, 2004: 196). An increasingly large barricade of household and building materials and cars was established at the intersection of Wellington Street and Alexandra Parade, but was dismantled by the CRB on 24 November 1977 (Sparrow, 2004: 196).

C.13.2 Freeway construction

In August 1971, the MMBW accepted an \$11.3 million tender for the freeway's construction (Canberra Times, 18 August 1971: 3). Work on the freeway began in 1972, and was completed in three stages, between Hoddle Street and Chandler Highway, Chandler Highway to Burke Road, with the Burke Road to Bulleen Road section completed in December 1977 (M3 Eastern Freeway, http://mrv.ozroads.com.au/, accessed 10 May 2018). The alignment of the new road, which as noted above followed the Yarra River and Koonung Creek valleys, took in '94 houses, 13 factories, one shop and a block of flats' (Canberra Times, 27 May 1969: 7). As part of the construction of the freeway, part of the course of the Yarra River was diverted, removing a loop north-east of the Willsmere Road-Kilby Road junction in Kew. This bend was the site of a river swimming pool (Otto, 2005: 89). An MMBW detail plan of the c. 1990s, held by the Kew Historical Society, shows two water holes in the golf course corresponding with the old river course (MMBW, Yarra 2500/11:13). In 1974, the then Victorian Premier, Rupert Hamer, endorsed the route of the freeway to extend to Bulleen Road, and 'by implication, to Ringwood' (Lay, 2003: 209). The Eastern Freeway Lands Act 1971 was passed giving the authority for the revocation of a number of public reserves, and the redrawing of the boundaries of the municipalities of Kew and Northcote to follow the new course of the river (National Trust, 2018: 3; Eastern Freeway Lands Act 1971, section 6 (d)). As noted by the CRB, the freeway design incorporated a wide central median to accommodate a railway line to serve East Doncaster (CRB, Annual Report, 1975: 6).

New road, rail and pedestrian bridges were required to cross the new freeway cutting and to carry freeway traffic over watercourses, including the Merri Creek and Yarra River at its western end. The Planning and Highways Department of the MMBW prepared designs for the majority of the concrete bridges, with amendments undertaken following the CRB takeover of the project for bridges over the Yarra River. The National Trust draft classification report for the bridges attributes the design of the bridges to engineer Bruce Day, with George Deutsch designing the railway bridge at Clifton Hill and Maurice Low of CRB for the Merri Creek and Portal Frame structures (National Trust, Eastern Freeway Stage 1 Bridges, Draft Classification Report: 3). The bridges were designed as a consistent group, with 'visual references between each bridge' (National Trust, 2018: 4). Undated sketch plans (Figure C.48-Figure C.51) of a selection of bridges demonstrate this, as does the photograph of a newly completed overpass at Belford Road (Figure C.52).

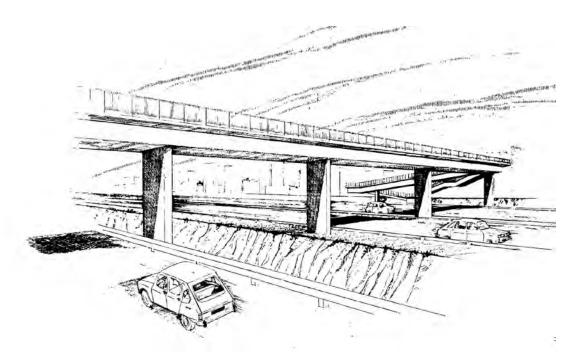


Figure C.48 Sketch design of Trenerry Crescent pedestrian overpass (VicRoads)

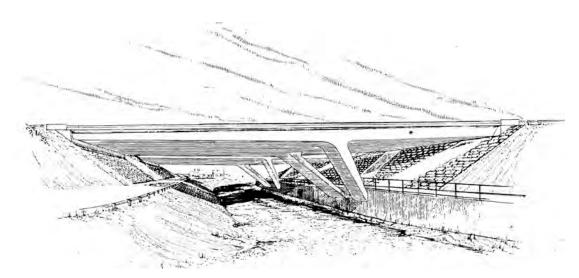


Figure C.49 Sketch of design of Merri Creek Bridges (VicRoads)

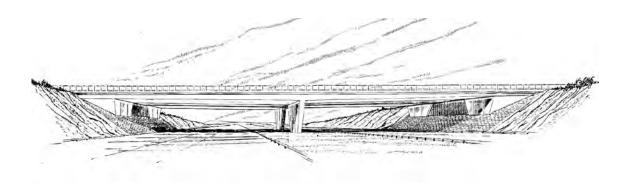


Figure C.50 Sketch of design of Bulleen Road overpass (VicRoads)

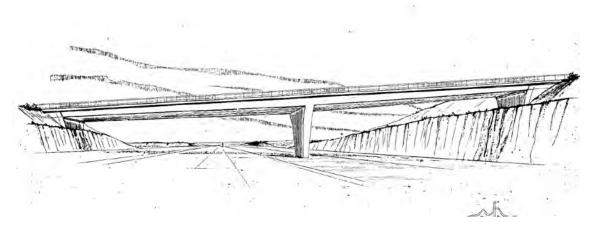


Figure C.51 Sketch design of overpass at Columba Street (VicRoads)



Figure C.52 Undated photograph of Belford Road, Kew overpass, likely soon after completion (VicRoads)

The freeway was completed and opened to traffic in 1977. As noted in the CRB Annual Report of that year, the road's construction comprised 'four million tonnes of earthworks, the construction of 16 bridges and the asphalting of 9 km of road pavement', with generally four lanes in each direction. The CRB observed:

The freeway was designed to provide an aesthetic travelling environment for the motorist. It follows the line of the Yarra River Valley, bordering the Yarra Bend Park and three golf courses. Extensive landscaping was carried out on the freeway reserve. During the past seven years, shrubs and ground cover were planted [and] much of the vegetation is now well established. (CRB, Annual Report, 1978: 7-8).

Although viewed as overall a successful project, the CRB 'regretfully' acknowledged the protests which had taken place particularly in Fitzroy and Collingwood.

C.13.3 Freeway extensions

In July 1975, the Victorian government combined the Ringwood Roads Impact Study and the Koonung Creek Corridor Study into a joint management group. With the recommendation of this group that the freeway be developed along the Koonung Creek, plans were also made to integrate other uses in this reserve, including active and passive recreation and a linear park (CRB, *Eastern Freeway*: Bulleen to Ringwood Drawings, 1980).

By 1980, plans had been prepared for the extension of the freeway from Bulleen to Nunawading along the Koonung Creek, which incorporated provision for landscaping, public open space and links to existing parks and community facilities (Figure C.53). The freeway was initially planned to include an overpass over Doncaster Road, but this was later amended (CRB, *Eastern Freeway*: Bulleen to Ringwood Drawings, 1980).



Figure C.53 Extract from plans for Eastern Freeway extension, 1980, showing proposed landscaping around Elgar Park and Elgar Road (Country Roads Board, *Eastern Freeway*: Bulleen to Ringwood Drawings, 1980)

C.13.4 Bulleen Road to Doncaster Road

In 1982, the extension of the freeway between Bulleen Road and Doncaster Road was opened. The 3-kilometre extension comprised two lanes and an emergency lane in each direction, with a pedestrian overpass constructed at Kenneth Street, Bulleen. Precast concrete median barriers, consisting of 410 precast units, were installed at the centre of the extension, separating traffic directions. The barriers were designed to deflect the impact of vehicles and to minimising injury. The median barriers were installed over a period of 14 days (CRB, Annual Report, 1982: 11, 70).

The construction also included the undergrounding of the Koonung Creek for a length of 2.4 kilometres within a reinforced concrete conduit of half-arches on a concrete slab. The new open space created by this work was to be planted with 12,000 trees by the CRB, and the cities of Camberwell and Doncaster and Templestowe (CRB, Annual Report, 1982: 11). While alternatives were considered, including lined channels and a grassed floodway, the decision to relocate the creek via an underground conduit was considered to be the most cost effective and the one favoured in a public questionnaire (CRB, Annual Report, 1980: 85).

C.13.5 Doncaster Road to Springvale Road

By 1993, the extension of the freeway from Doncaster to Nunawading was in pre-construction phase, with contracts for the design and construction of the overpass bridges by 1994 (VicRoads, Annual Report, 1993 and 1994). This extension was to terminate the freeway at Springvale Road, which had been duplicated by the CRB between Springfield Road and Koonung Creek in 1982 (CRB, Annual Report, 1982: 32).

The Stage 3 extension of the freeway was constructed between February 1996 and December 1997, with a duplication of the Bulleen Road to Doncaster Road section undertaken between October 1995 and September 1997 (VicRoads, 1999: 29). The road overpasses over the extension were completed at Tram Road, Elgar Road, Middleborough Road, Blackburn Road and Springvale Road in 1995 and 1996. The contractors for the Eastern Freeway included John Holland Engineering and Construction, Fletcher Construction and Abigroup Contractors (VicRoads, Annual Report, 1996: 13 and 1997: 14). The freeway extension was opened for traffic in December 1997.

As noted above, the extension provided for open recreation space along the Koonung Creek corridor. This stage of the freeway development also included the creation of wetlands, and the use of indigenous vegetation in the valley landscapes outside of the freeway.

The freeway extension development was recognised with a number of industry awards. The sound barriers along the widened and extended Eastern Freeway between Bulleen Road and Springvale Road were designed by architects Woods Marsh with Pels Innes Nielson Kosloff. The barriers were awarded the Walter Burley Griffin Award for Urban Design by the Royal Australian Institute of Architects in 1998. The jury noted that:

The architects have sculpted the edges of the freeway to create a unique urban design solution. Pronounced changes in texture, colour, height, planting and curvature provide a powerful visual experience along the extension. Close up, textured concrete walls reveal the site's rocky origins and contrast the strappy leaves of native grasses. From the road, drivers experience a multiplicity of patterns and textures in the walls and sweeps of planting; from the residents' side there is insulation from noise and pollution and a backdrop filtered by trees.

Mastery of acoustic modelling and engineering concepts demonstrates the professional range of the architects, and their involvement in perfecting the textures of the prefabricated panels is impressive.

This is a fresh look at the problem of separating the noise of speeding vehicles from nearby residents; one which has set a benchmark for other road builders. (*Architecture Australia*, Vol. 87 No. 6, November/December 1998: 52-53).

The barriers were also awarded the 1998 Victorian Architecture Medal and the Joseph Reed Award for Urban Design (VicRoads, Annual Report, 1998). The landscaping for the Eastern Freeway earned the 1998 Australian Institute of Landscape Architects National Projects Award in the Transport and Infrastructure category, and the Heyington Avenue pedestrian bridge was also recognised with an award for engineering excellence by the Institution of Engineers (VicRoads, Annual Report, 1998).

The Eastern Freeway was extended eastwards as the tollway EastLink, which opened in 2008.



Figure C.54 New precast concrete median barriers in Bulleen-Doncaster extension of Eastern Freeway, 1982 (CRB, Annual Report, 1982)

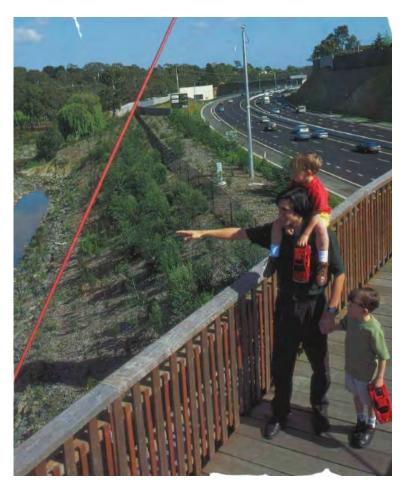


Figure C.55 Front cover of the 1998 VicRoads Annual Report showing the Heyington Avenue pedestrian bridge, the wetlands landscaping and the Woods Bagot sound barriers in the background (VicRoads)



Figure C.56 1974 aerial photograph of Clifton Hill, Collingwood and Abbotsford, showing excavations for construction of Hoddle Street exit of Eastern Freeway (Land Victoria Historical Aerial Photography Collection)



Figure C.57 1978 aerial photograph showing section of newly completed Eastern Freeway, from Yarra Bend Park to Chandler Highway (Land Victoria Historical Aerial Photography Collection)



Figure C.58 1979 aerial photograph showing completed western entrance to Eastern Freeway at Collingwood (Land Victoria Historical Aerial Photography Collection)

C.14 Greensborough Road corridor

The Greensborough Road and Greensborough Highway corridor takes in parts of the present suburbs of Yallambie, Watsonia, Greensborough and MacLeod.

C.14.1 Yallambie

Land in Section 8 of the Parish of Keelbundora, now the site of Simpsons Barracks, was purchased in 1838 by Thomas Wills, and subsequently acquired in 1839 by Thomas Walker (Biosis and ERM, 2017: 17). This land was the first of early land owner Walker's subdivisions, which 'unaccountably' preceded the sale of his Glanville Estate, which was located closer to Melbourne. Section 8 was bounded approximately by Martins Lane to the south, Plenty River to the east, Greensborough Road to the west, with Elder Street generally indicative of its northern boundary. The property was subdivided into 12 allotments and sold in June 1839, with W T Elliot purchasing five of the blocks (Garden, 1972: 12). By 1842, 605 acres (245 hectares) of Walkers' allotments had been consolidated into Yallambie Park by John and Robert Bakewell. Artist Edward La Trobe Bateman visited the property in c. 1853, and produced a set of drawings (Figure C.59) which show the station overlooking the Plenty River as a complex of timber buildings, extensive garden with vineyard and grazing cattle (Bateman, Plenty Set, National Gallery of Victoria). The property retained the name Yallambie when it was purchased by pastoralist Thomas Wragge. It was Wragge that constructed the large residence known as Yallambie, which remains in Tarcoola Drive (Victorian Places, Yallambie, accessed 19 June 2018). The Bakewells' vineyard has been cited as one of the earliest vineyards in Victoria (Henderson, 2006: 37; 'Yallambie Matters too', Yallambie Wordpress, 2017). An undated, but c. 1850 survey plan of 'Yallambee' shows the layout of the paddocks in the property, with cultivation concentrated to the east near the Yarra River (Figure C.60). The grassed paddocks are the later location of Simpsons Barracks. The plan also shows a damn at the west of the property, close to Greensborough Road.



Figure C.59 One of a set of drawings by Edward La Trobe Bateman of the Bakewells' Yallambie Park, c. 1853-1856 (National Gallery of Victoria)

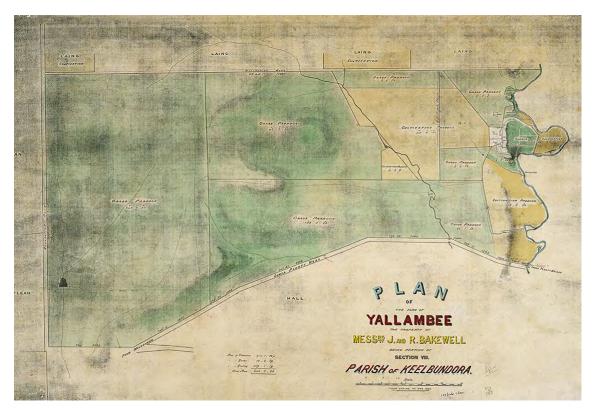


Figure C.60 Undated (c. 1850) plan of 'Yallambee', showing grassed (green) and cultivated (yellow) paddocks (Original source not known, accessed via Yallambie Wordpress, https://yallambie.wordpress.com/2017/08/02/the-oldest-new-idea/)>

The Wragge family remained owners of the property into the 1930s (Biosis & ERM, 2017: 17). Thomas Wragge passed away in 1910, and the inventory of his estate described Yallambie Park as:

... having frontages to Greensborough and Lower Plenty Roads and on the East a short frontage to the River Yarra and containing about 604 ½ acres. On the land is erected a large old fashioned two-storey brick stuccoed dwelling with slate roof ... The outbuildings consist of a dairy, Man's room, laundry, lumber-room, stabling and buggy sheds, Feed and harness room, old two roomed hut, cattle yard, bales &c. The land is fenced and divided into 5 paddocks and 2 acres are used as a fruit and vegetable garden, the remainder for grazing. (Thomas Wragge, Probate and Administration Files, VPRS 28/P3/137, Public Record Office Victoria)

Under the terms of Wragge's will, an acre of land at the south-east corner of Greensborough Road and Yallambie Road was granted to the Church of England for the construction of a church on the site. In 1926, the new church was dedicated as a memorial to Wragge (*Argus*, 24 December 1926: 6).

In 1935, the remainder of the property was purchased by prominent and ground-breaking psychiatrist Dr Ainslie Meares. Meares' substantial residence, Aldermaston, was constructed the following year at the south of the property, to a design by architect Les Forsyth (Biosis and ERM, 2017: 17). Soon after, in 1938, the Australian Army took 100 acres (40 hectares) of the property for training purposes. During World War II, the Army purchased this land, and requisitioned the remainder of Meares' property for training, which it purchased in 1951. By 1945, the Meares had left the property (Biosis & ERM, 2017: 18).

C.14.2 Simpson Barracks

The training facility became known as Watsonia Camp (Figure C.61), and barracks, rifle ranges, camp reception and transit camp were established, and Aldermaston was taken over as a hospital. Defence development in this period was concentrated in the northern half of the site (Figure C.62) By 1946, the camp was 'almost deserted' (Biosis & ERM, 2017: 19). Between 1946 and 1951, it was used for emergency housing by the Victorian Government, before the Army took control of the site again. It was redeveloped for regional training and personnel depot headquarters, and officially opened as Watsonia Barracks in May 1960. New buildings included mess (Figure C.63), assembly hall (Figure C.64), and accommodation blocks (B6295, National Archives of Australia) with the new arrangement of the barracks visible in an aerial photograph of 1962 (Figure C.65). It was renamed Simpson Barracks in 1986. Change in occupation and use by the Army saw a portion of the site to the south-east sold and subdivided into residential allotments (Biosis & ERM, 2017: 18). The site remains in use as a Defence training facility.



Figure C.61 Men of the Victory March Contingent in training at Watsonia (State Library of Victoria)



Figure C.62 Aerial photograph of Watsonia Camp, 1945. With development concentrated in northern half of site, and Aldermaston visible to the south (indicated) (Land Victoria Aerial Photography Collection)



Figure C.63 Watsonia Barracks, new Rank and File mess (B6295, 2197A, National Archives of Australia)



Figure C.64 Watsonia Barracks, new Assembly Hall (B6295, 2197C, National Archives of Australia)



Figure C.65 Aerial photograph of 1962 with redeveloped Simpson Barracks (Land Victoria Aerial Photography Collection)

C.14.3 Watsonia

To the north of Heidelberg, the area now known as Watsonia was also surveyed as part of the Parish of Keelbundora in 1838. Allotments to the east and west of what is now Greensborough Road were purchased from the Crown between 1838-1840. The area was used for agriculture and dairying, with owners of large landholdings leasing to tenant farmers. Although the railway line was extended from Heidelberg to Greensborough in 1902, no station was built was built until the 1920s, and locality remained rural in the early 20th century (Watsonia, Victorian Places, accessed 20 May 2018). A photograph of Grimshaw Street in c. 1914 (Figure C.66) attests to this character.

Watsonia was named after Frank Watson, a local landowner who funded the railway station of the same name, which opened in 1924 (Biosis & ERM, 2017: 17). A small estate known as the Grace Park Electric Station Estate, at the north-east corner of the intersection of Greensborough Road and Yallambie Road, was subdivided and sold in 1924 (Figure C.67), which advertised Watsonia Railway Station as the Grace Park Railway Station.

Land to the north of what is now Yallambie Road was purchased from the Crown in 1838 by John Brown as Crown Allotment 17 in the Parish of Keelbundora. Brown also purchased Crown Allotments 15 and 16, to the west of Greensborough Road. In 1877, 682 acres of Brown's Crown Allotment 17 was purchased by Frederick Augustus James Nell, a Carlton headmaster. The land was held by Nell until his death in 1908. A small section of the estate was acquired by the Victoria Railways Commissioners for the Watsonia Railway Station and the alignment of Greensborough Road. However, the majority of the estate was held by his executors into the 1940s. In this period, part of the Grace Park Estate was occupied by 'small farms of five or ten acres', each holding having cows and chickens (Eric Barclay, Greensborough Historical Society). The Nell estate was subdivided in to 1029 allotments and purchased by the War Service Homes, sold in the late 1950s (Grace Park and the Nell Family, Peter Simmenauer, Greensborough Historical Society, accessed 26 April 2018). The suburb developed through the post-war period, evidenced by three primary schools opened in the area between 1965 and 1971 (Watsonia, Victoria Places, accessed 20 May 2018).

In 1964, the Shire of Diamond Valley was established following the severance of the northern areas from the City of Heidelberg. Within the study area this included Greensborough and Watsonia (Diamond Valley, eMelbourne, accessed 20 May 2018).



Figure C.66 Grimshaw Street, Bundoora, c. 1914 (copy held by Nillumbik Historical Society)

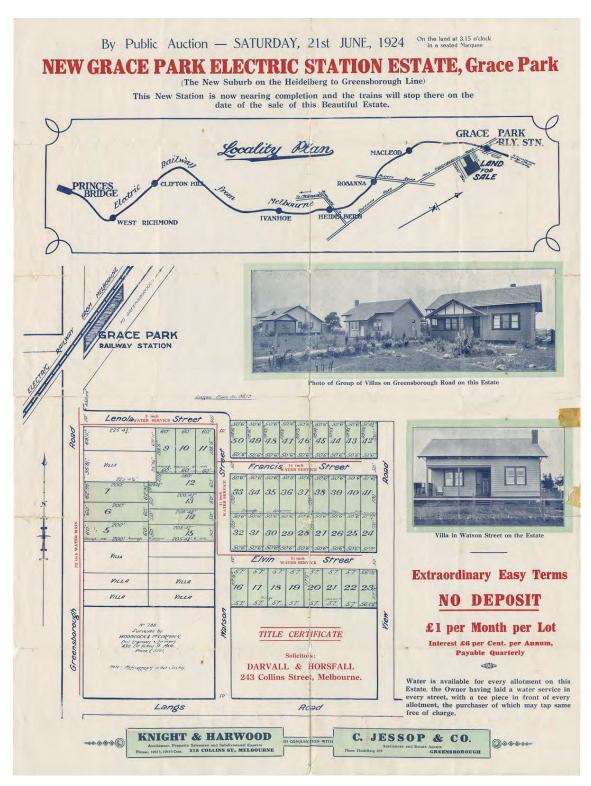


Figure C.67 Flyer advertising the sale of allotments in the Grace Park Electric Station Estate, 1924 (Yarra Plenty Regional Libraries)

C.15 Greensborough Bypass/M80 Ring Road

C.15.1 Greensborough

The suburb of Greensborough is at the northern end of the study area, although much of the historical development of this area was focused to the east. A settlement at Greensborough was established in the 1840s with a small agricultural community near a crossing of the Plenty River. The town was named after Edward Green, who had acquired land in 1841. His survey plan of a town on the Plenty River was believed to have been related to establishing a mail service in the area, and although this failed, he persisted with the sale of township lots. The area developed with market gardens and orcharding (Allom Lovell & Associates, 1999: 37), with both served by the opening of the railway line to Eltham in 1902. By the early 20th century (Figure C.68), the village of Greensborough had a population of 270, and the 1903 *Australian Handbook* noted that it was popular with 'excursionists', but its distance from Melbourne precluded intense suburban development. Although by the mid-20th century suburban development had begun in the area (Figure C.69), focused around the railway station, Greensborough within study area remained relatively undeveloped until the 1960s (Greensborough, Victorian Places, accessed 20 May 2018). An aerial photograph of 1975, however, shows the more intense suburban development that had taken place through the latter post-war period (Figure C.69).



Figure C.68 View of Greensborough, c. early 20th century (Nillumbik Historical Society)



Figure C.69 Aerial showing Greensborough and Watsonia North, 1945, with residential development to east in Greensborough township. Intersection of Grimshaw Street and Macorna Street/Watsonia Road indicated (1945 Melbourne Photomaps, University of Melbourne Library)



Figure C.70 Aerial showing Greensborough and Watsonia North, 1975, prior to construction of Greensborough Bypass (Land Victoria Historical Aerial Photography Collection)

C.15.2 Maroondah aqueduct

With the growth in population of Melbourne in the 30 years since the Yan Yean Reservoir was established to supply Melbourne with water, the Maroondah Aqueduct was constructed from the Watts River, Healesville in 1891 (History of our water supply system, Melbourne Water, accessed 10 May 2018). The system carried water from the Maroondah Reservoir, west through Kangaroo Ground, Diamond Creek and Greensborough, crossing the Plenty River in Bundoora, in what is now the south of the Plenty Gorge Parklands.

C.15.3 Janefield

To the north of M80 Ring Road interchange is the site of the former Janefield Training Centre.

The Janefield site formed part of Crown allotment 27, in the Parish of Keelbundora which was purchased by Philip Oakden in 1838. An early parish plan (Figure C.71) shows the location of a building, marked 'Brock', within Oakden's allotment. This is the location of the bluestone homestead constructed by John Brock, for his Bulanda Vale property in the 1850s. (H7922-0117, VHI, Heritage Victoria). John Brock's son James was also one of the owners of the Coulstock Mill to the north (see section on Plenty River, above), and the property became known as the Janefield Estate. A nearby early township of the same name was established on Plenty Road, although the closure of the mill in 1862 and the school in 1877 saw the town 'virtually abandoned' (Bundoora, Victorian Places, accessed 27 April 2018). In 1875 Henry Brock put the Janefield Estate up for sale (*Argus*, 26 January 1875: 2), although no sale appears to have taken place, and it was offered to let to farmers and graziers following his death that year (*Argus*, 29 December 1875: 3). The property remained rural until its purchase by the Victorian government in 1912 (Bundoora, Victorian Places, accessed 27 April 2018).

The site was first used for health purposes from 1920 as for the convalescence of ex-servicemen suffering tuberculosis, and first as the Anzac Red Cross Farm, and then overseen by the Austin Hospital. The Red Cross farm incorporated a poultry farm, piggery and cattle stud, as well as market gardens. Buildings included recreation, residential and staff quarters. The sanitorium closed in 1933 (Janefield Training Centre, Gould, 1990).

In 1937, it became the Janefield Colony, a centre for 'mentally deficient children'. The former Janefield Estate was permanently reserved for mental health purposes, taking in the southern part of Crown allotment 28 (Figure C.72). The institution comprised a Special School, farm and accommodation, and it was proposed to house 1,000 children. Janefield became a training centre in 1962 (Album description, Janefield Colony, Public Record Office Victoria, Flickr). The centre closed in the early 1990s.

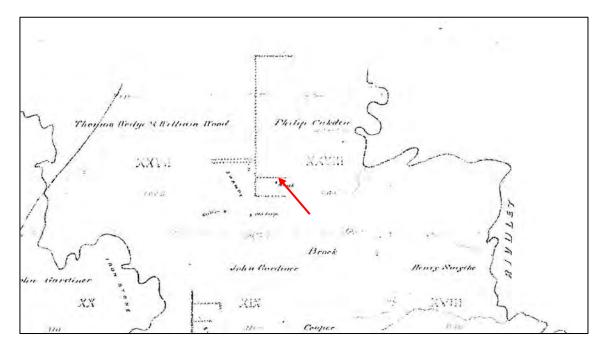


Figure C.71 Portion of annotated Keelbundora parish plan, showing allotments in Watsonia North and Greensborough. Brock homestead indicated (Department of Lands and Survey, State Library of Victoria)

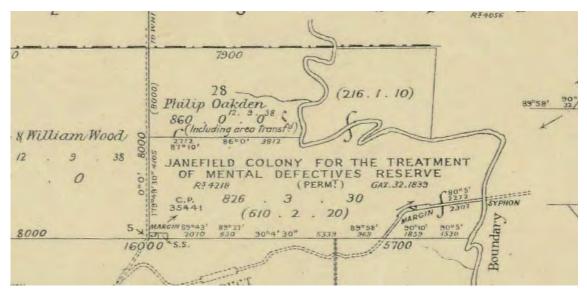


Figure C.72 Updated Keelbundora parish plan (1950) showing Crown allotment 28 divided for 1930s Janefield Colony reservation (State Library Victoria)

C.15.4 Greensborough Bypass

The Greensborough Bypass was first formalised with the provision of a main road reservation in the 1962 Melbourne Metropolitan Planning Scheme, to be known as the F18 route. This road reservation was revoked in 1973 south of Lower Plenty Road, however, feasibility studies continued for the northern section and the construction of an Outer Ring Road (F5). The CRB included it its 1974 'plan of intentions' and in it 'list of urgent road needs' in 1976 (Lay, 2003: 208). In 1977, the Victorian Government and the two local councils, Diamond Valley and Whittlesea, agreed on a programme of construction of the bypass and ring road in three stages: Stage 1, Metropolitan Ring Road (now M80 Ring Road) between Diamond Creek Road and Plenty Road; Stage 2, Metropolitan Road between Plenty Road and Dalton Road; and Stage 3, Greensborough Bypass to Greensborough Road (CRB, Annual Report, 1982: 42). By the time of the construction of the bypass, there had been substantial suburban subdivision undertaken of the land either side of the road reserve (*Melway*, 1978, Map 10). The first stage of the bypass, at the eastern end of the Metropolitan Ring Road was opened in 1984, with subsequent stages opened in 1988 and 1989. As part of the project, a steel bridge was constructed over the Plenty River, opening in 1988 (Lay, 2003: 208).

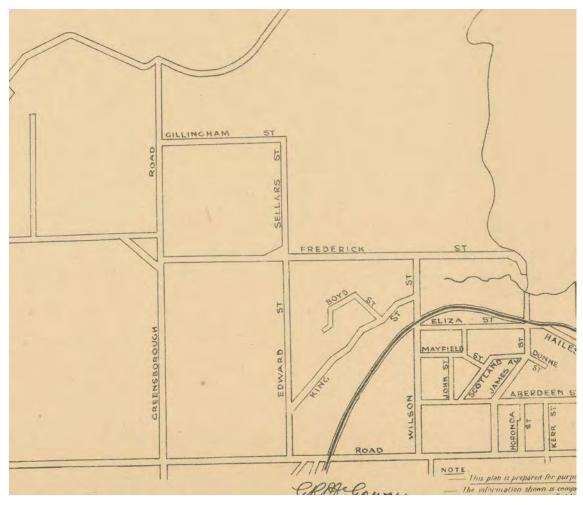


Figure C.73 MMBW 800 feet to 1-inch plan, no. 15, showing original alignment of Greensborough Road, and street development to 1931 (State Library of Victoria)



Figure C.74 1945 aerial showing Watsonia and Greensborough, with pockets of residential development, rail line and agricultural areas visible (1945 Melbourne Photomaps, University of Melbourne Library. The intersection of Sellars Street and Grimshaw Street is indicated (now altered))

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APPENDIX D MAPPING











Study Area

Surface road

Proposed reference project





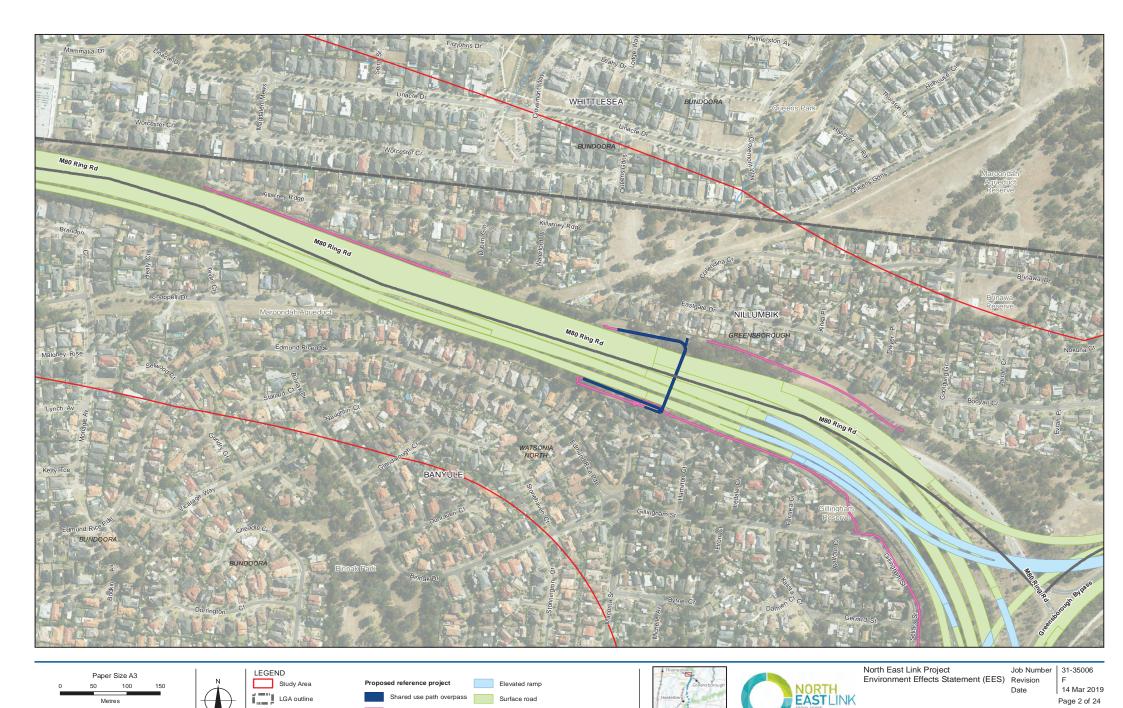
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Victorian Heritage Register M80 to Northern Portal

Victorian Heritage Register



Metres

Victorian Heritage Register

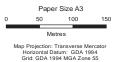
M80 to Northern Portal

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Victorian Heritage Register

Shared use path











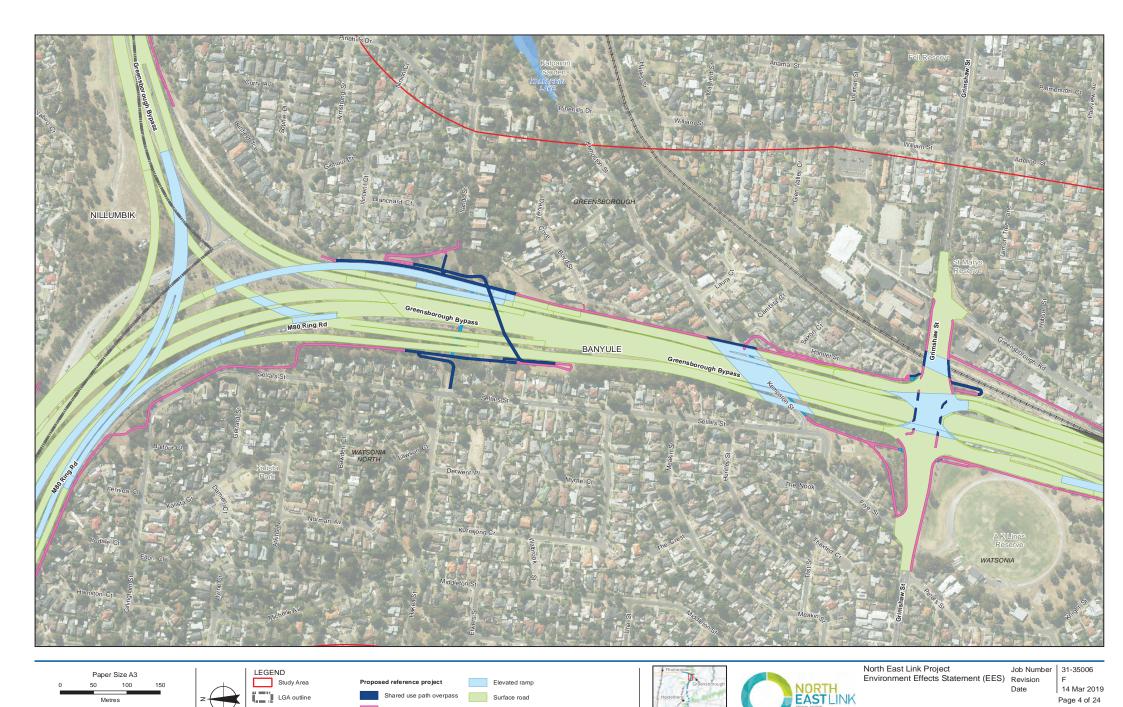


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Surface road



Metres

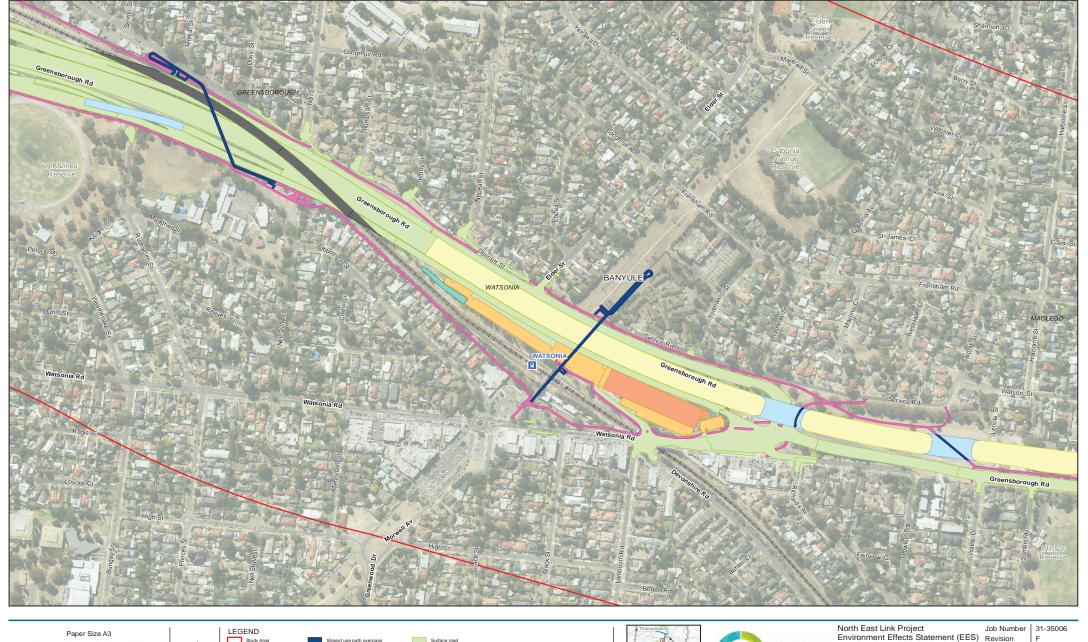
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Shared use path

Shared use path underpass

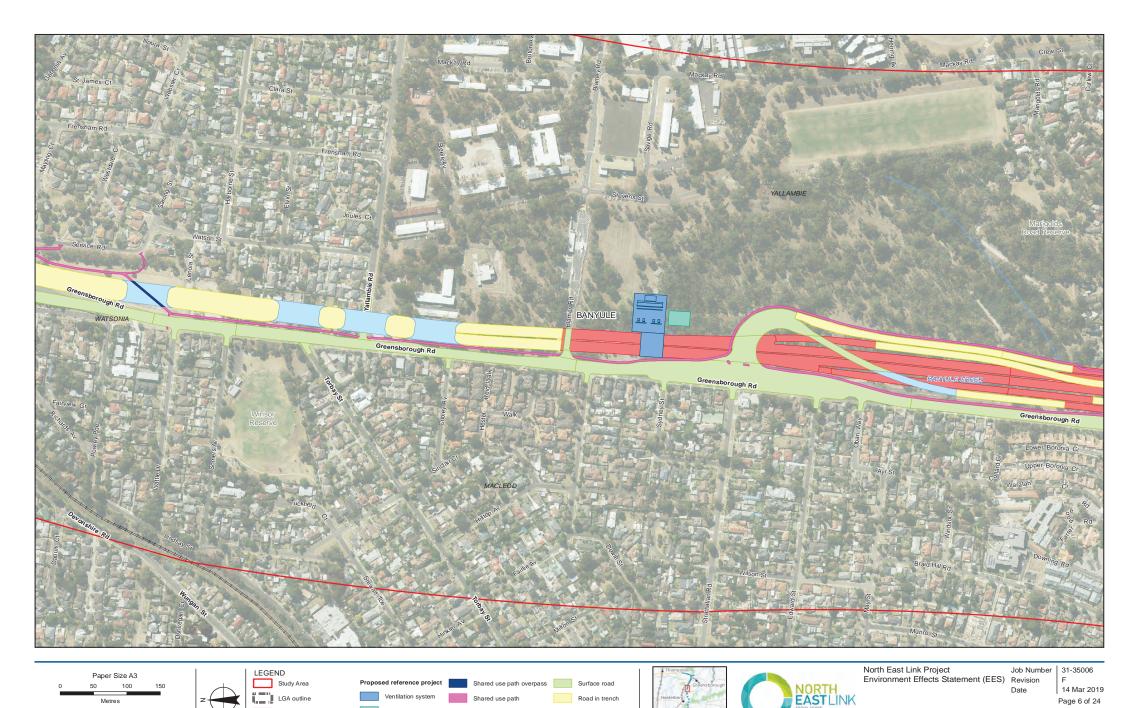






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Victorian Heritage Register M80 to Northern Portal



Road in trench

Shared use path

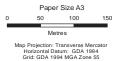
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Victorian Heritage Register M80 to Northern Portal

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Area for substation







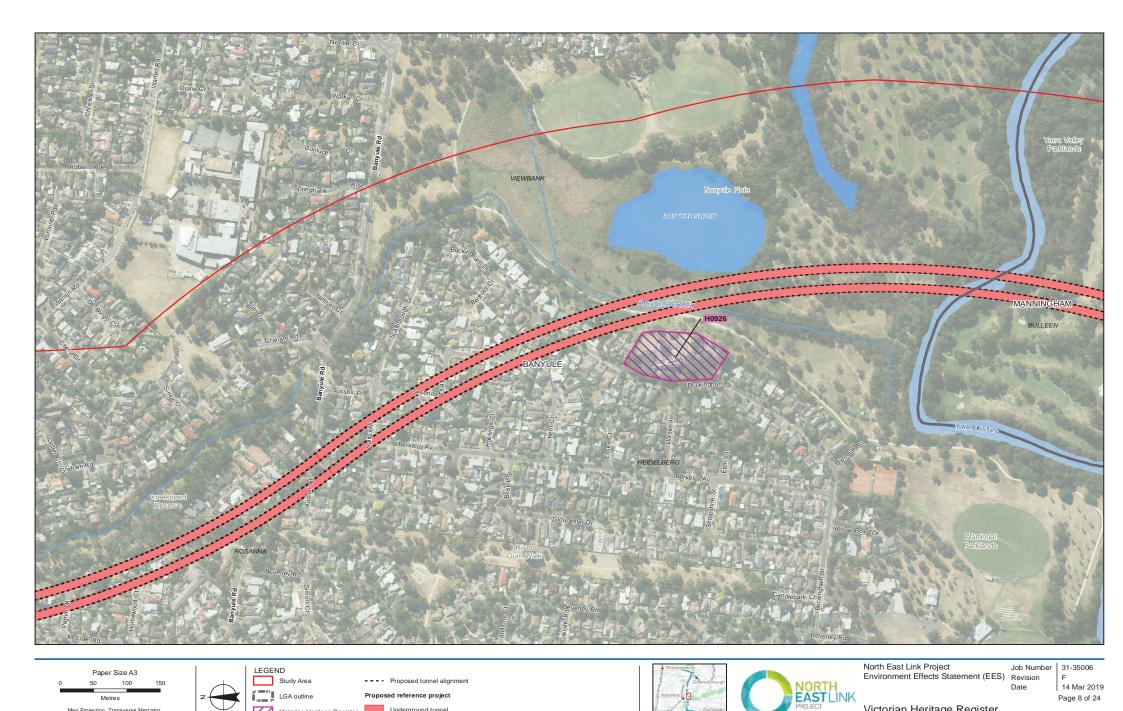




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Victorian Heritage Register Northern Portal to Southern Portal





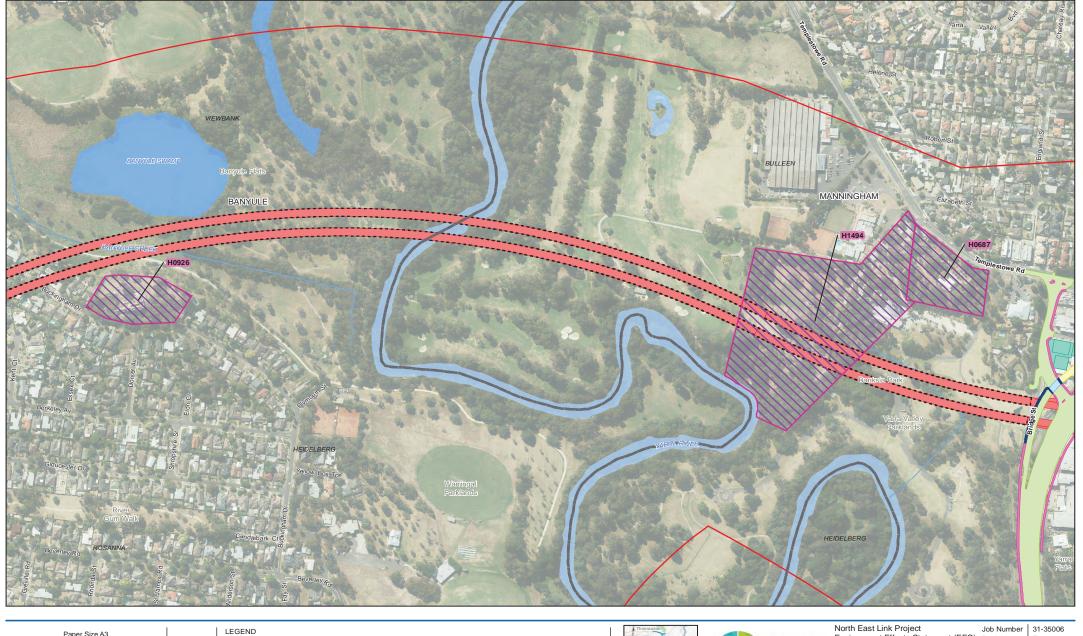
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Victorian Heritage Register

Proposed reference project

Underground tunnel



Shared use path overpass Surface road



Metres



North East Link Project Environment Effects Statement (EES) Revision

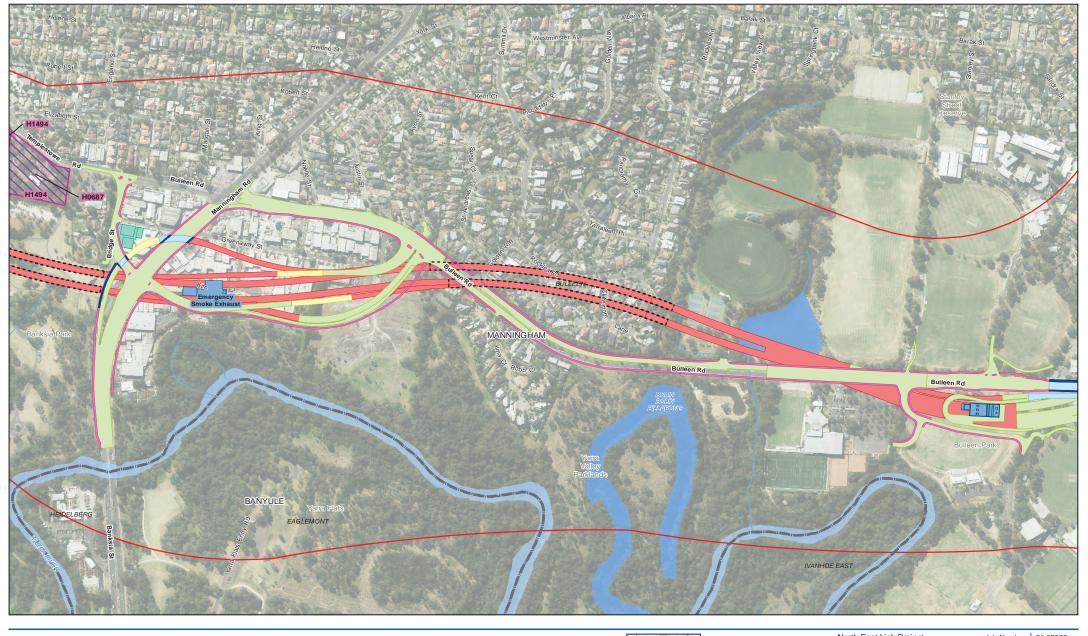
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Victorian Heritage Register Northern Portal to Southern Portal

- - · Proposed tunnel alignment

Area for substation

Study Area









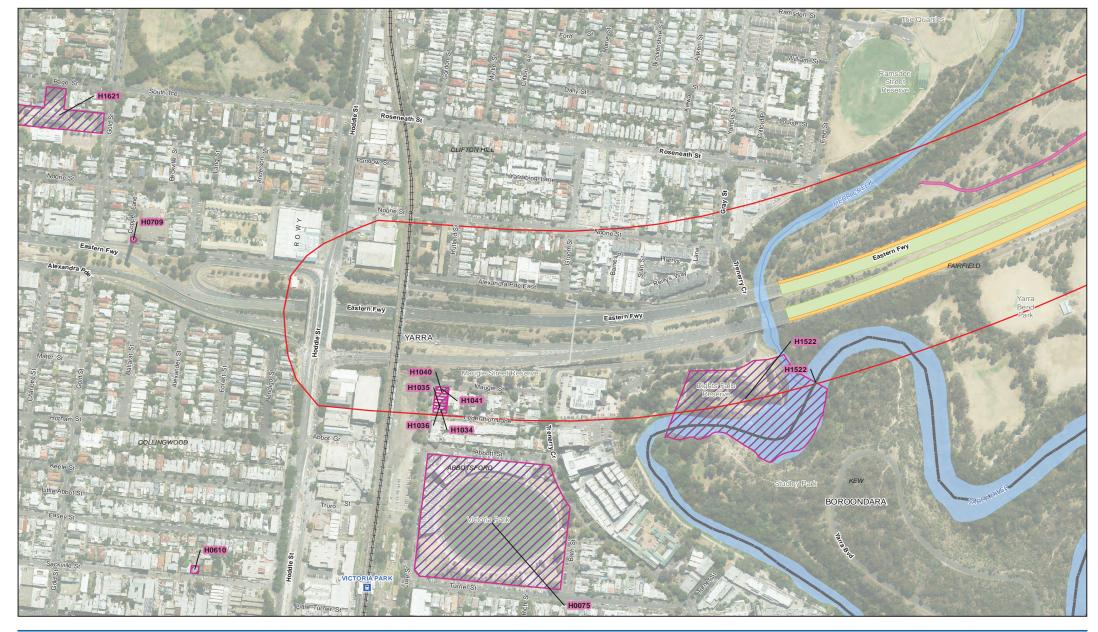


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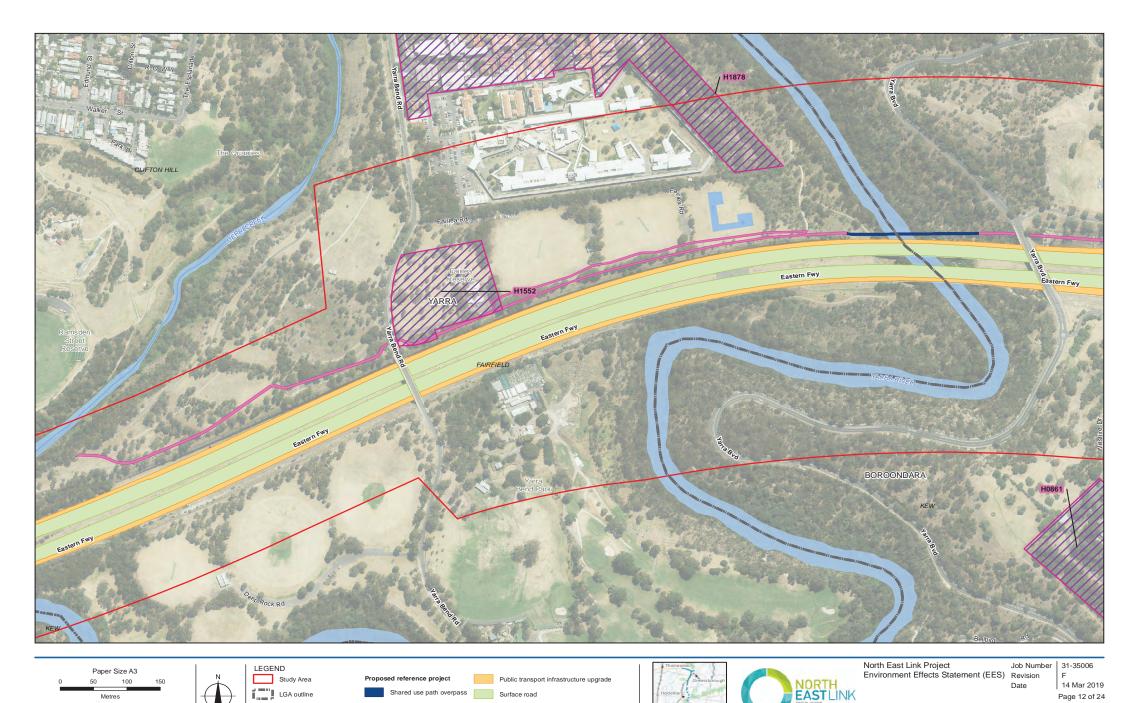
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Victorian Heritage Register Eastern Freeway

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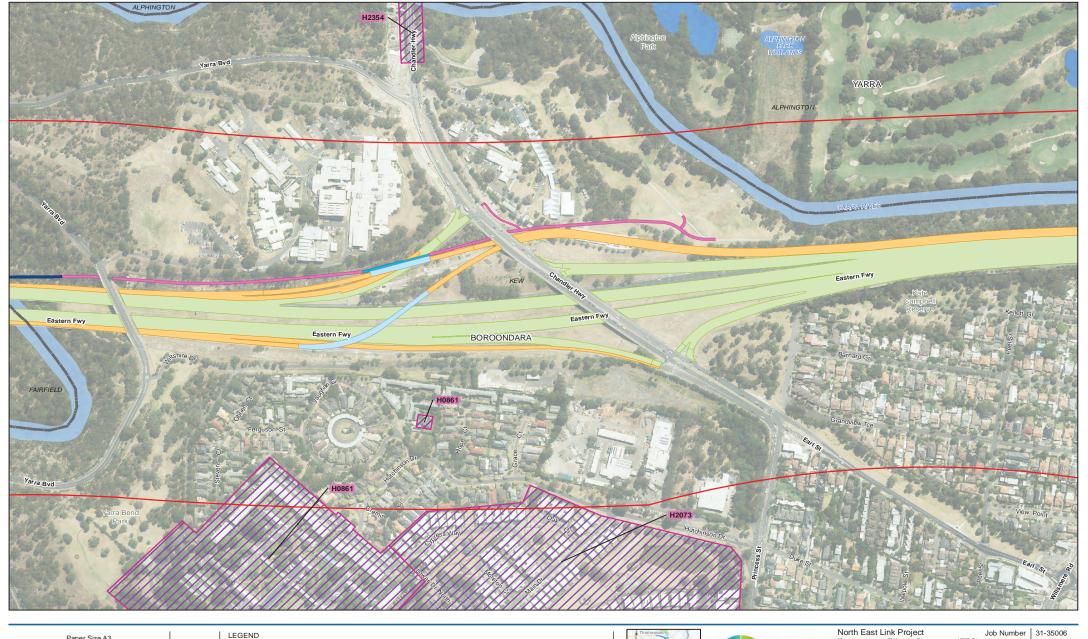
Surface road

Metres

Victorian Heritage Register

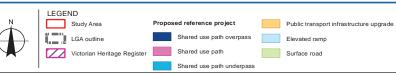
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Victorian Heritage Register













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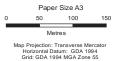
Victorian Heritage Register Eastern Freeway



Victorian Heritage Register

Public transport infrastructure upgrade











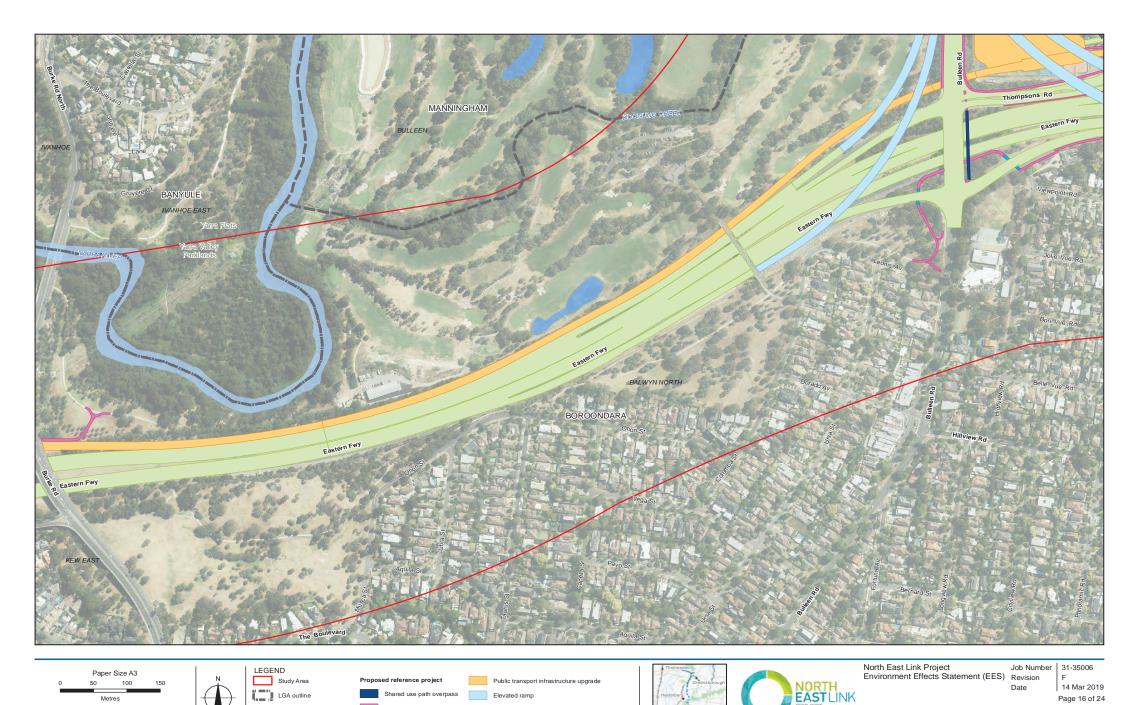




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Victorian Heritage Register Eastern Freeway



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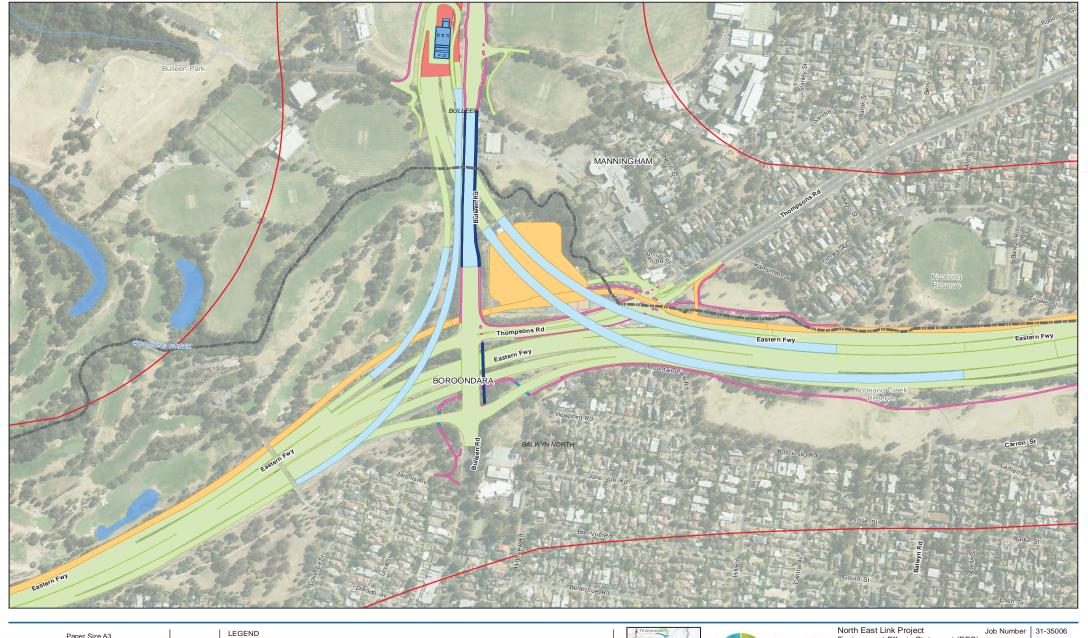
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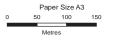
Victorian Heritage Register

Shared use path

Shared use path underpass

Surface road





Map Projection: Transverse Mercator Horizontal Datum: GDA 1994 Grid: GDA 1994 MGA Zone 55







Study Area LGA outline

Victorian Heritage Register

Shared use path overpass Shared use path

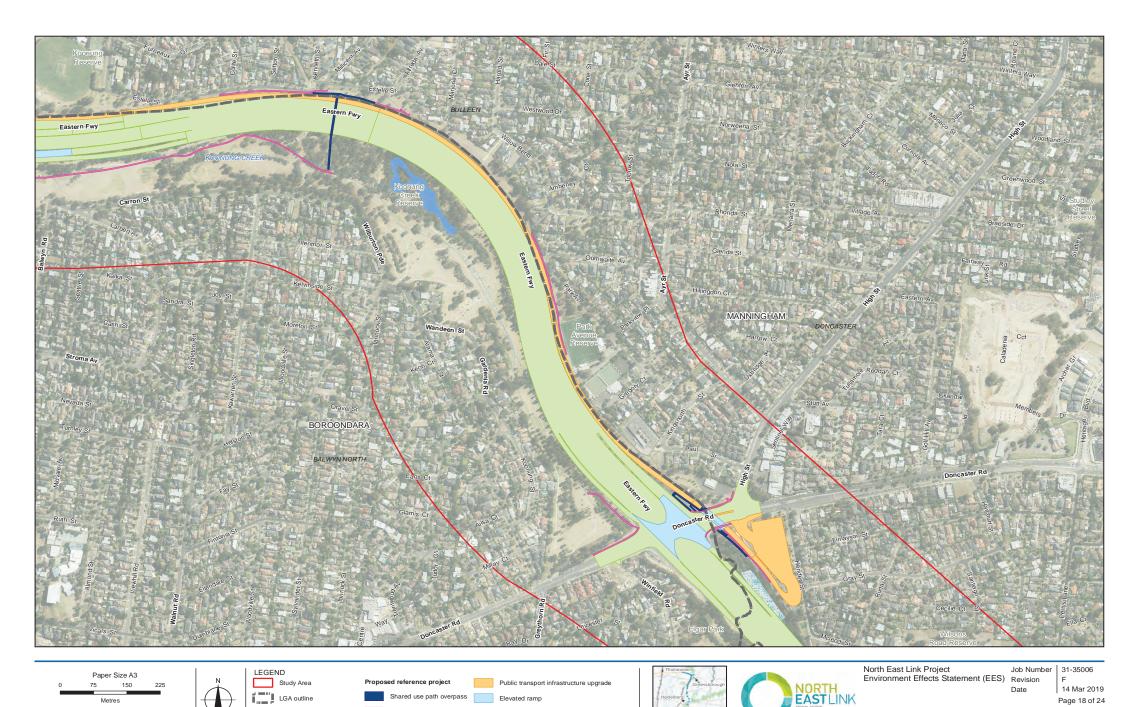
Proposed reference project Underground tunnel Shared use path underpass Public transport infrastructure upgrade Elevated ramp



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Victorian Heritage Register Eastern Freeway



Elevated ramp

Surface road

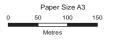
Metres

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Victorian Heritage Register





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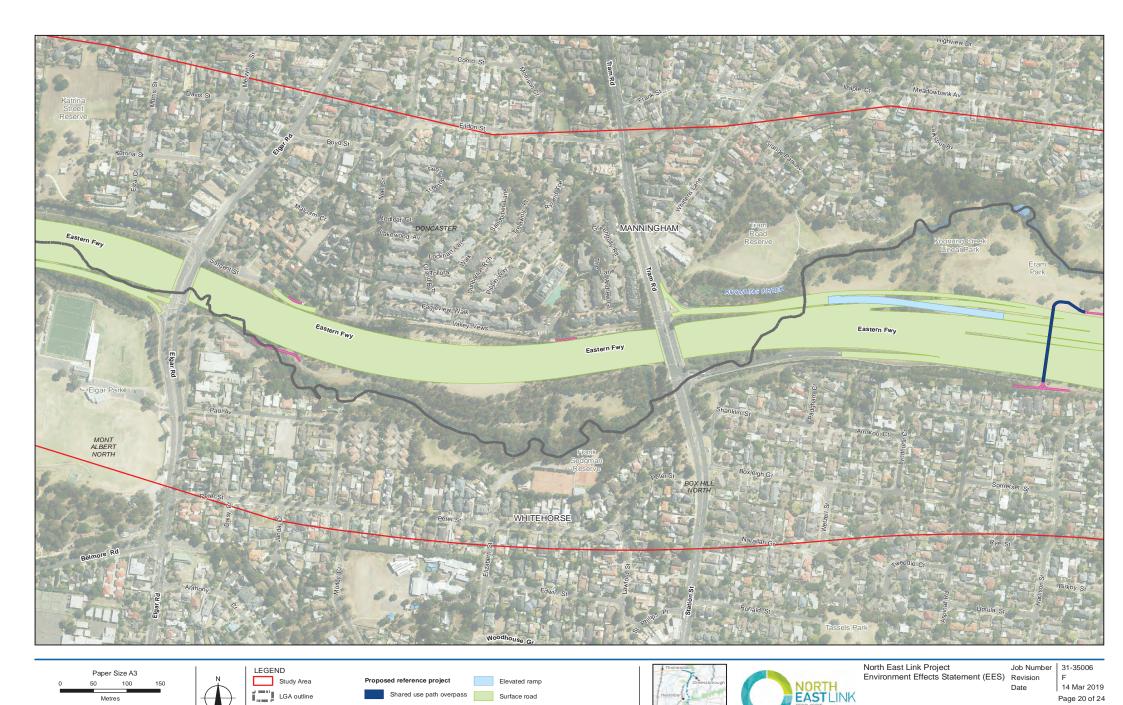


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Victorian Heritage Register Eastern Freeway

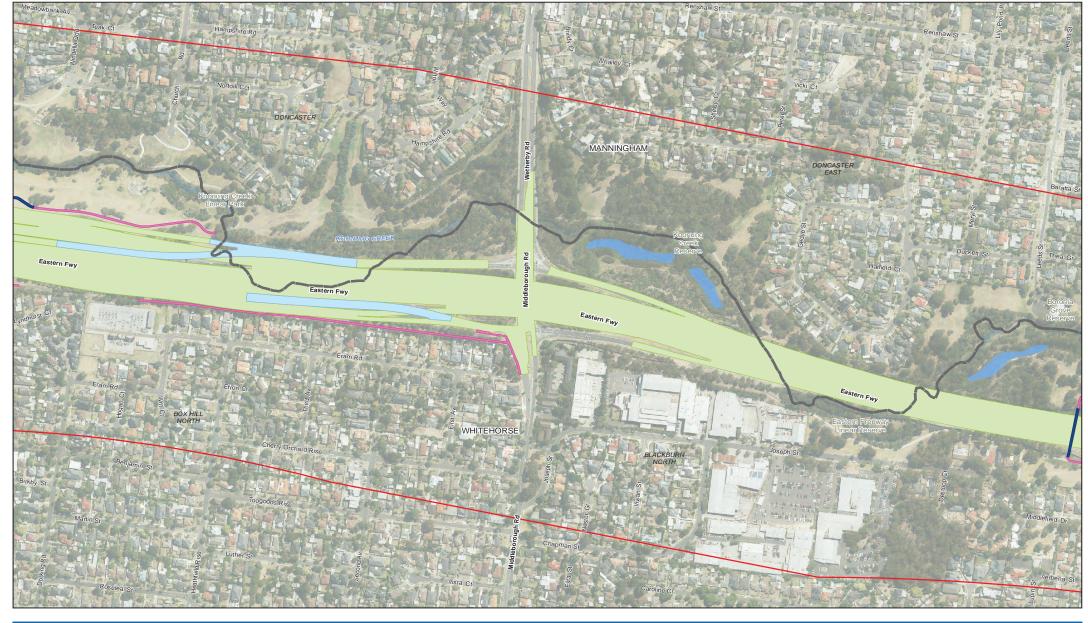




Metres

Victorian Heritage Register

Victorian Heritage Register













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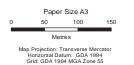


Metres

Victorian Heritage Register

Victorian Heritage Register













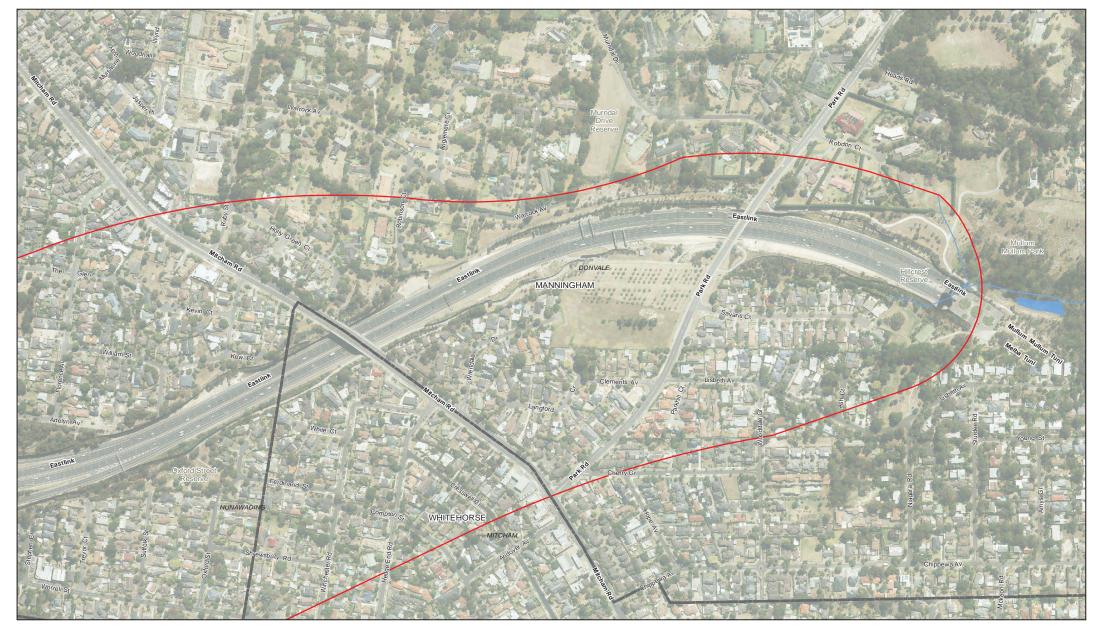


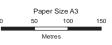
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Victorian Heritage Register Eastern Freeway





Map Projection: Transverse Mercator Horizontal Datum: GDA 1994 Grid: GDA 1994 MGA Zone 55





LEGEND Study Area LGA outline

Victorian Heritage Register





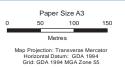
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Victorian Heritage Register Eastern Freeway













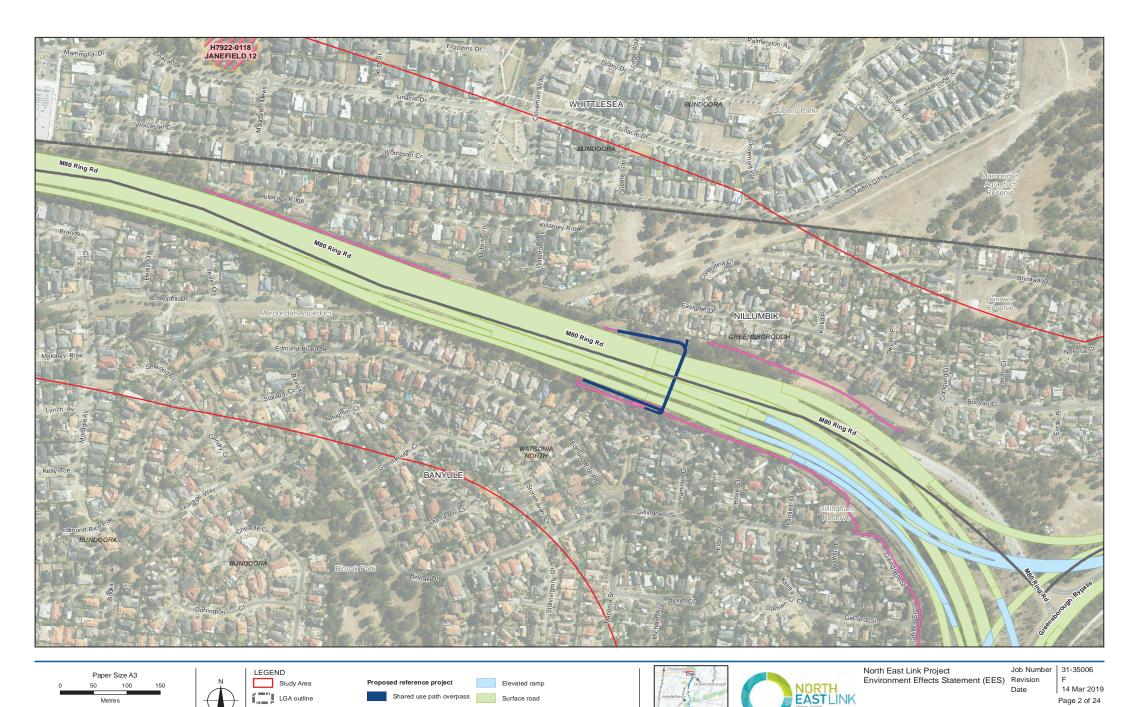


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Victorian Heritage Inventory M80 to Northern Portal



Surface road



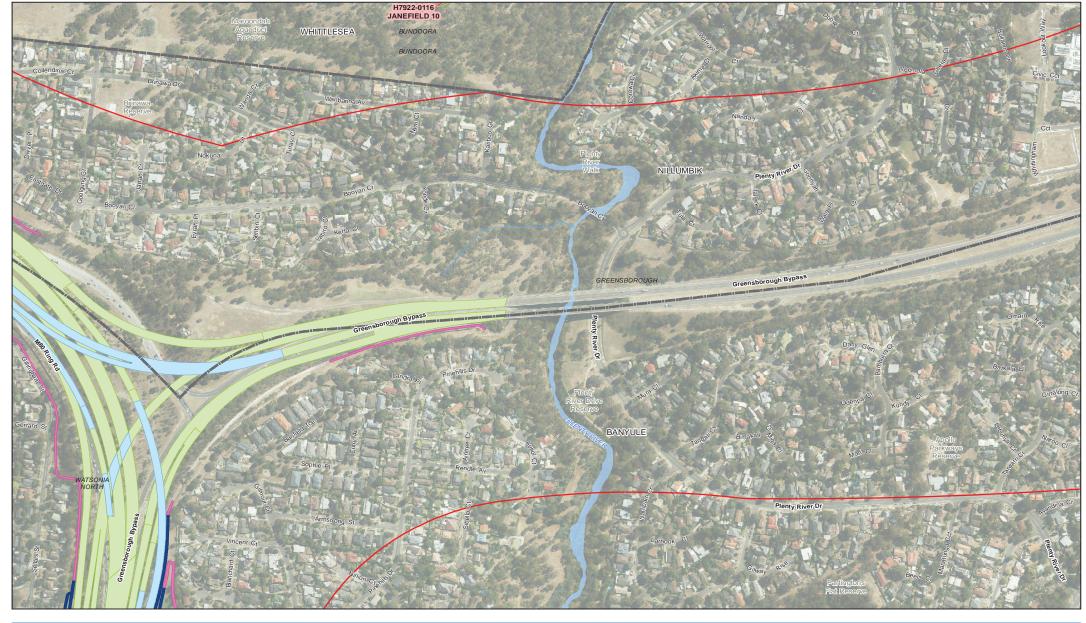
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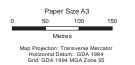
Victorian Heritage Inventory

M80 to Northern Portal

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Victorian Heritage Inventory











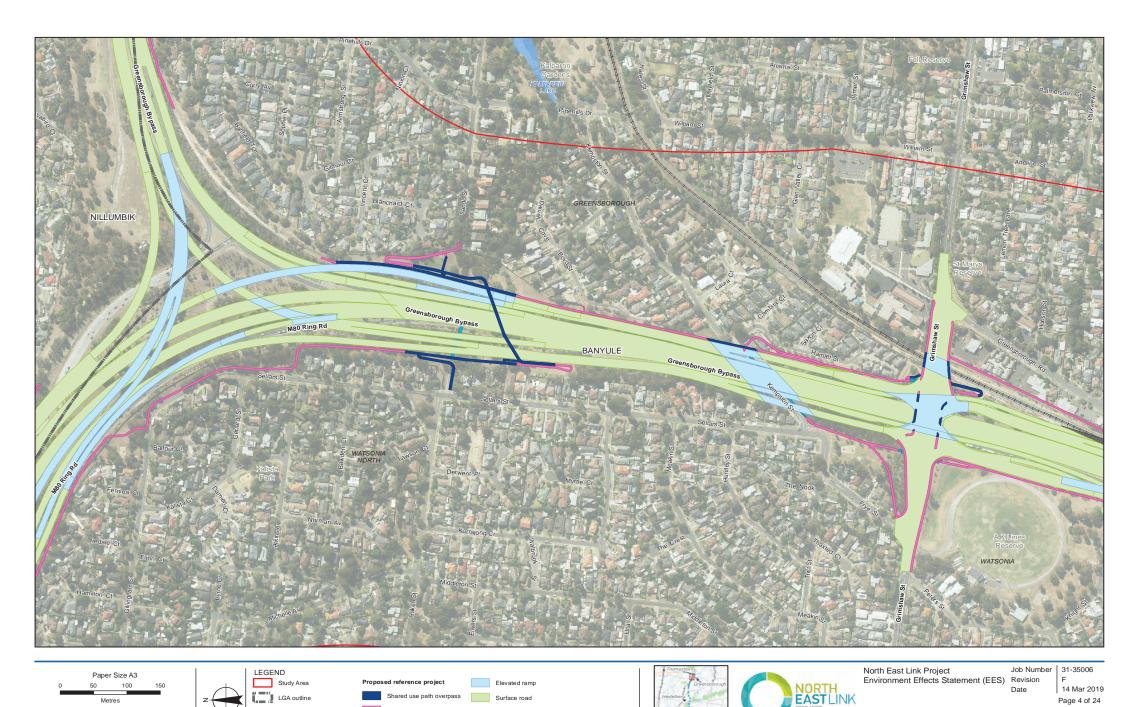


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Victorian Heritage Inventory M80 to Northern Portal



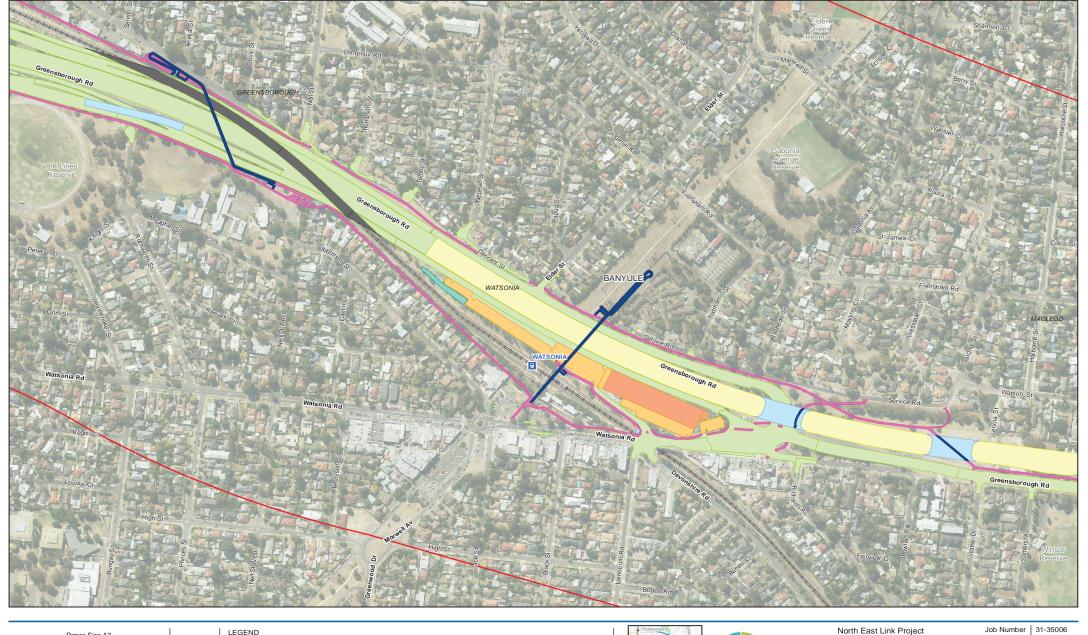
M80 to Northern Portal

Victorian Heritage Inventory

Shared use path

Shared use path underpass

Rail tunnel





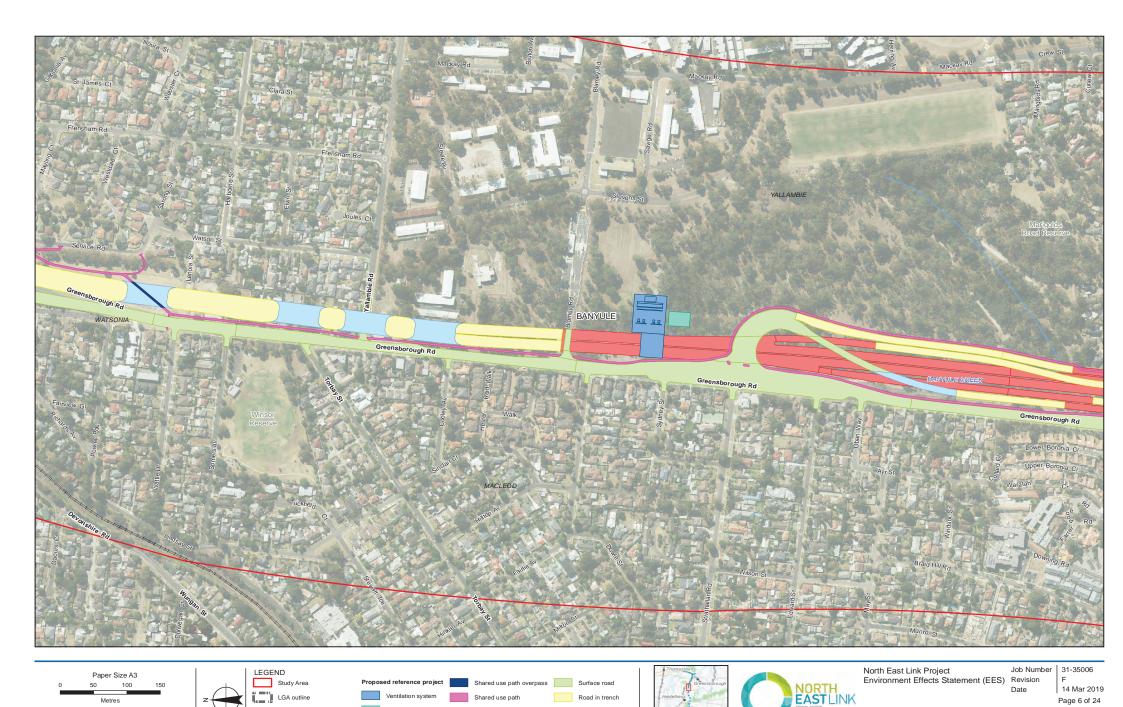
NORTH EASTLINK

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Victorian Heritage Inventory M80 to Northern Portal



Shared use path

Elevated ramp

Underground tunnel

Metres

Victorian Heritage Inventory

M80 to Northern Portal

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Victorian Heritage Inventory Area for substation









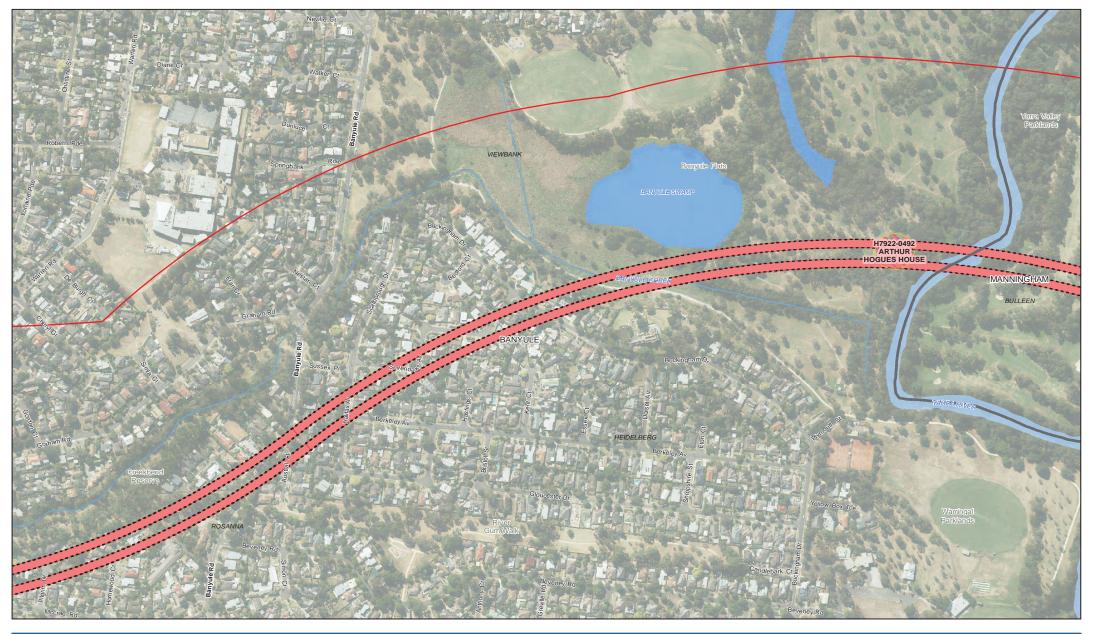
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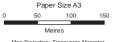
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Victorian Heritage Inventory Northern Portal to Southern Portal





Map Projection: Transverse Mercator Horizontal Datum: GDA 1994 Grid: GDA 1994 MGA Zone 55





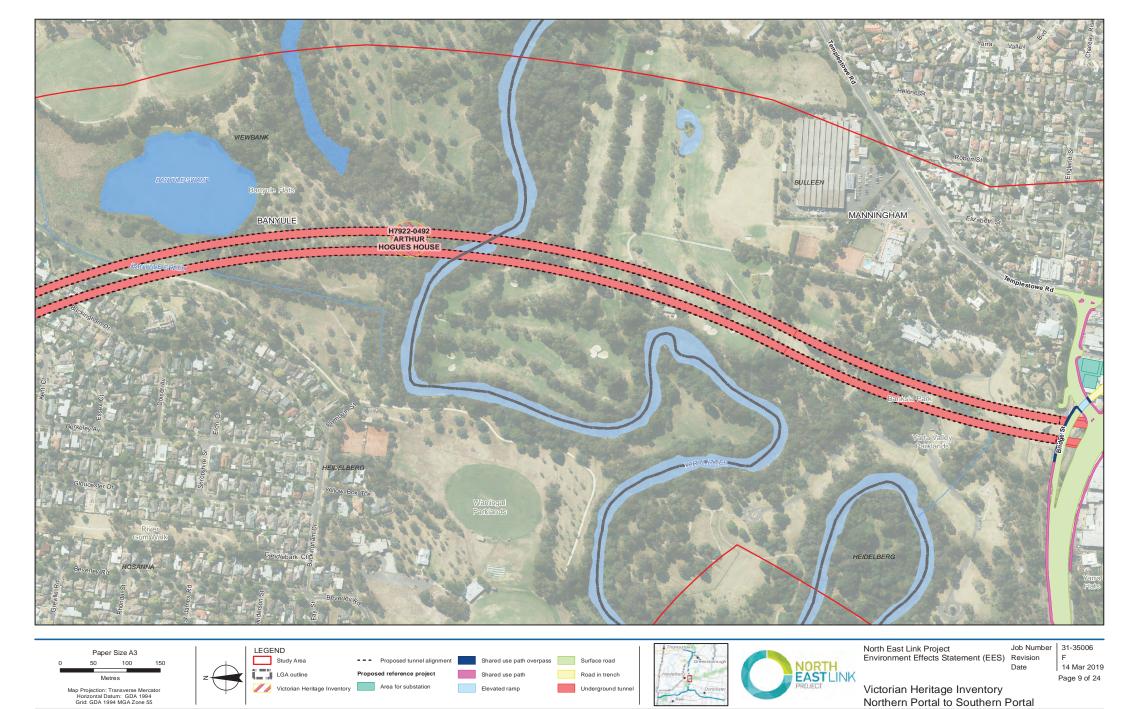


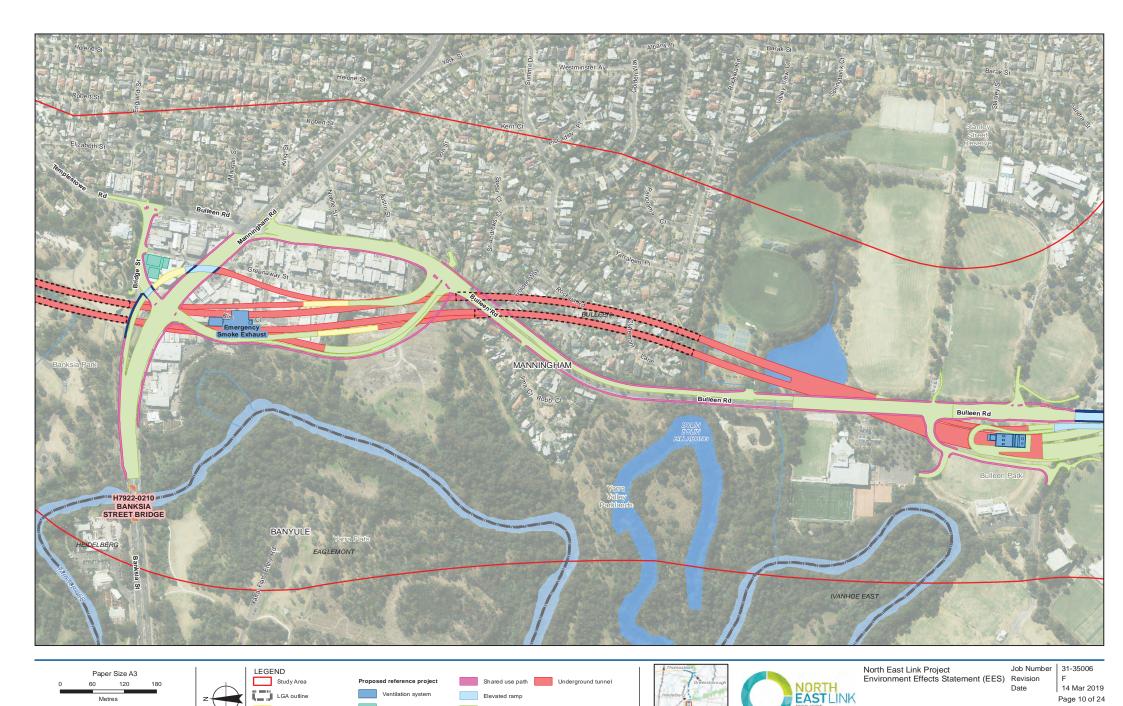
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Victorian Heritage Inventory Northern Portal to Southern Portal







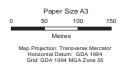


Area for substation

Surface road



Surface road









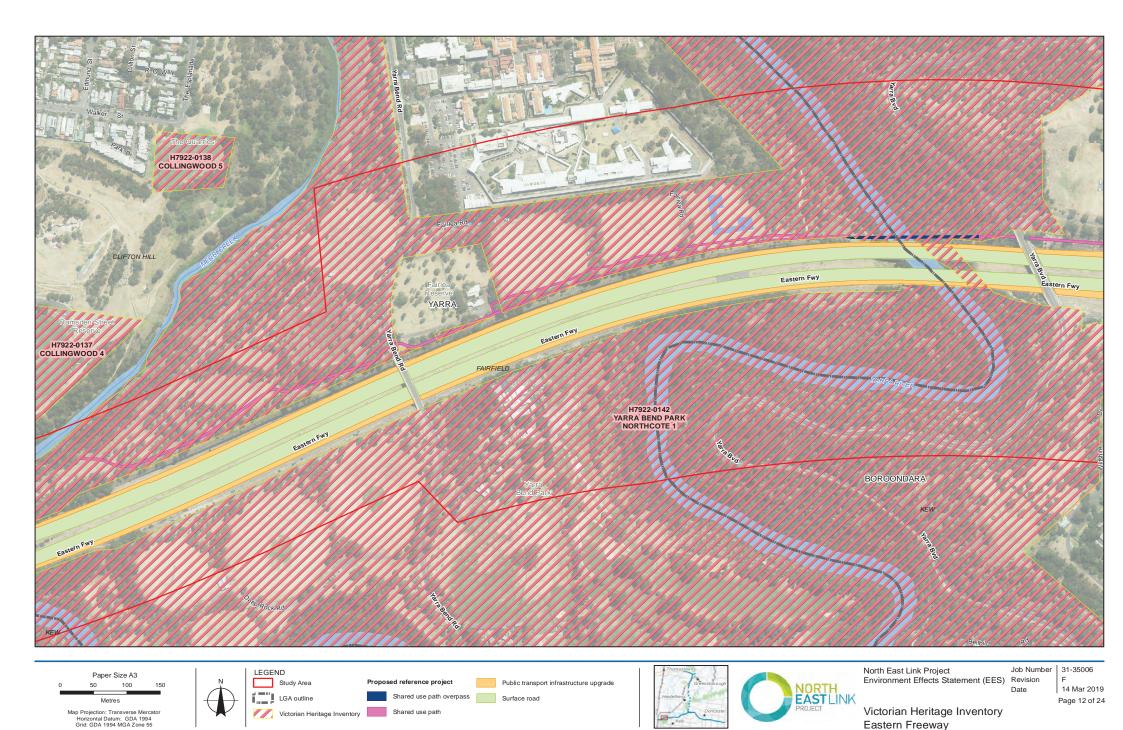


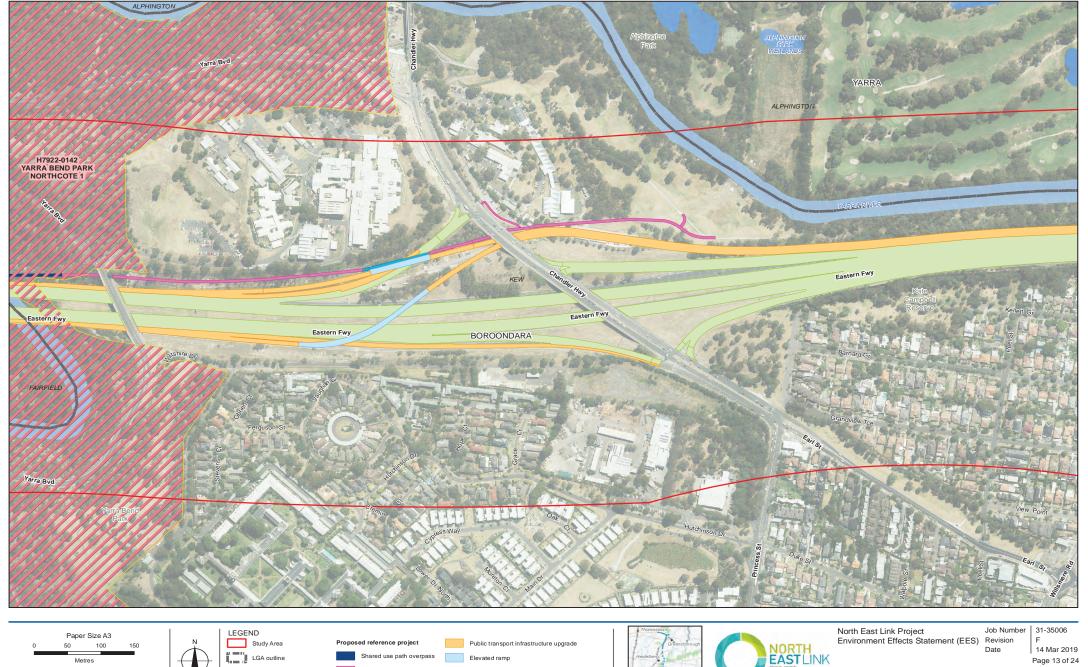


North East Link Project Environment Effects Statement (EES) Revision

Date

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Metres

LGA outline

Victorian Heritage Inventory

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Shared use path overpass

Shared use path

Elevated ramp

Victorian Heritage Inventory Eastern Freeway

14 Mar 2019

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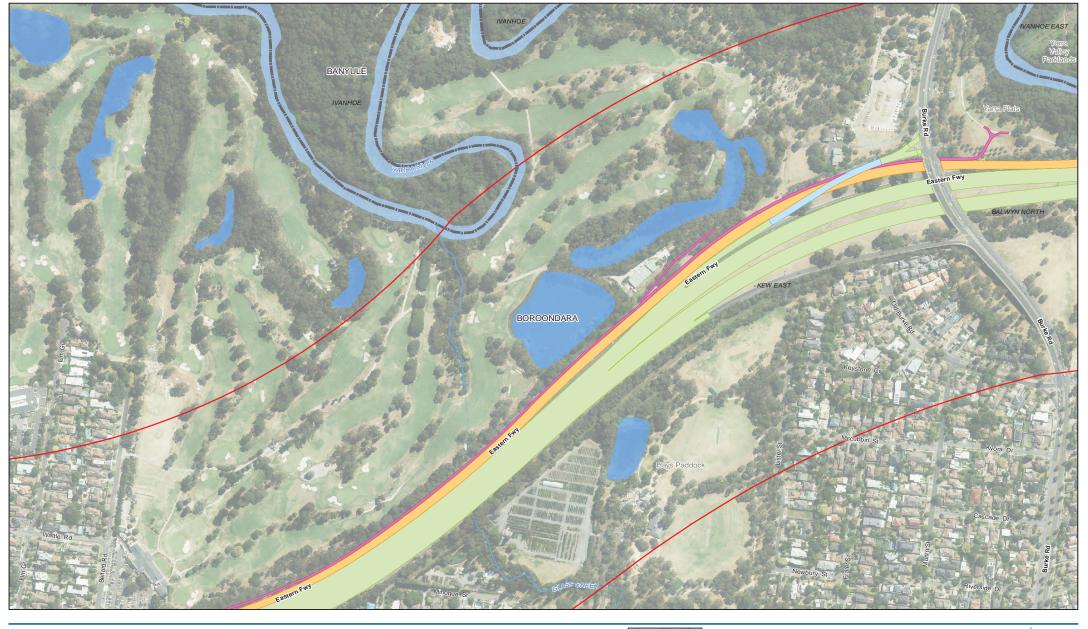
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Victorian Heritage Inventory

Public transport infrastructure upgrade











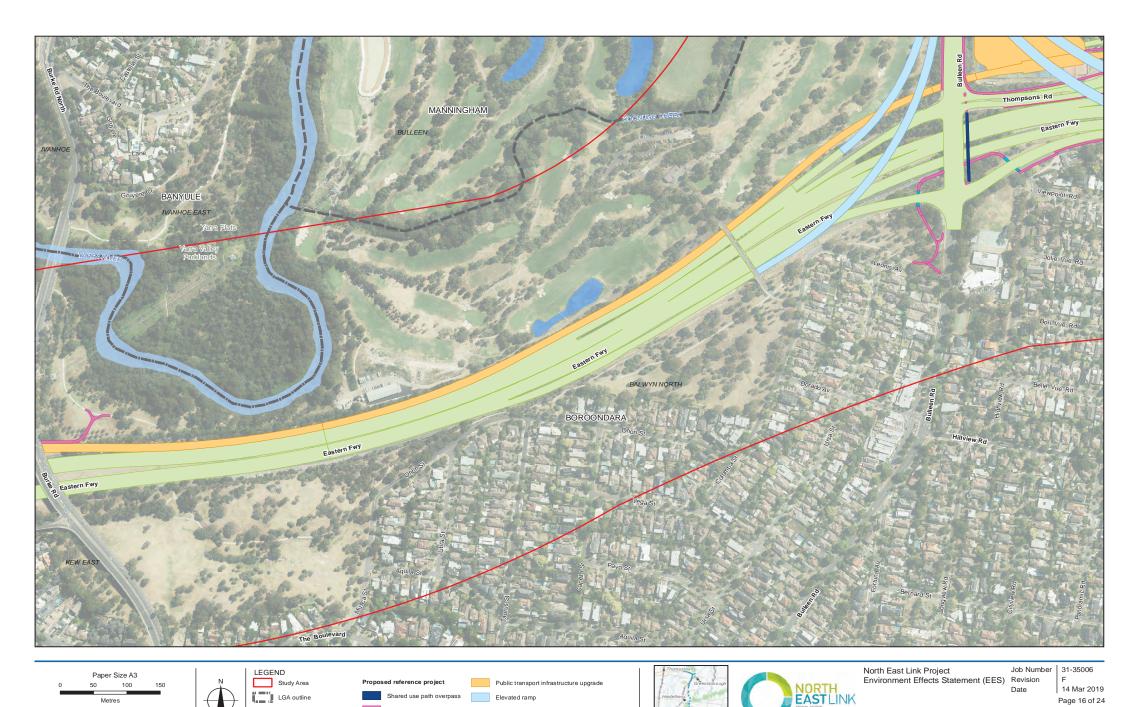




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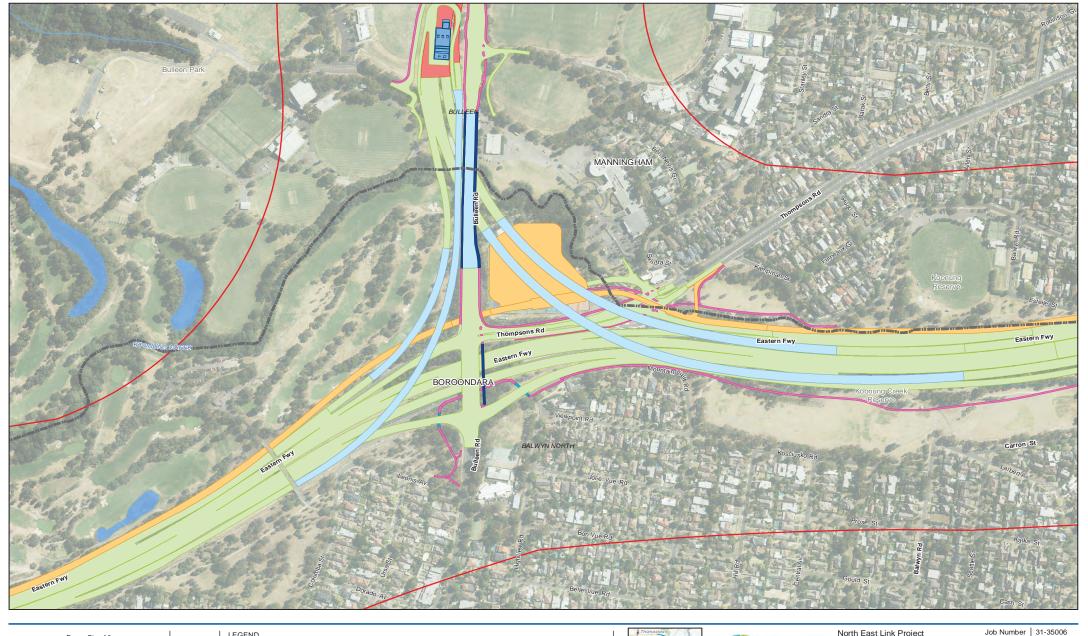


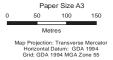
Victorian Heritage Inventory

Shared use path

Shared use path underpass

Surface road

















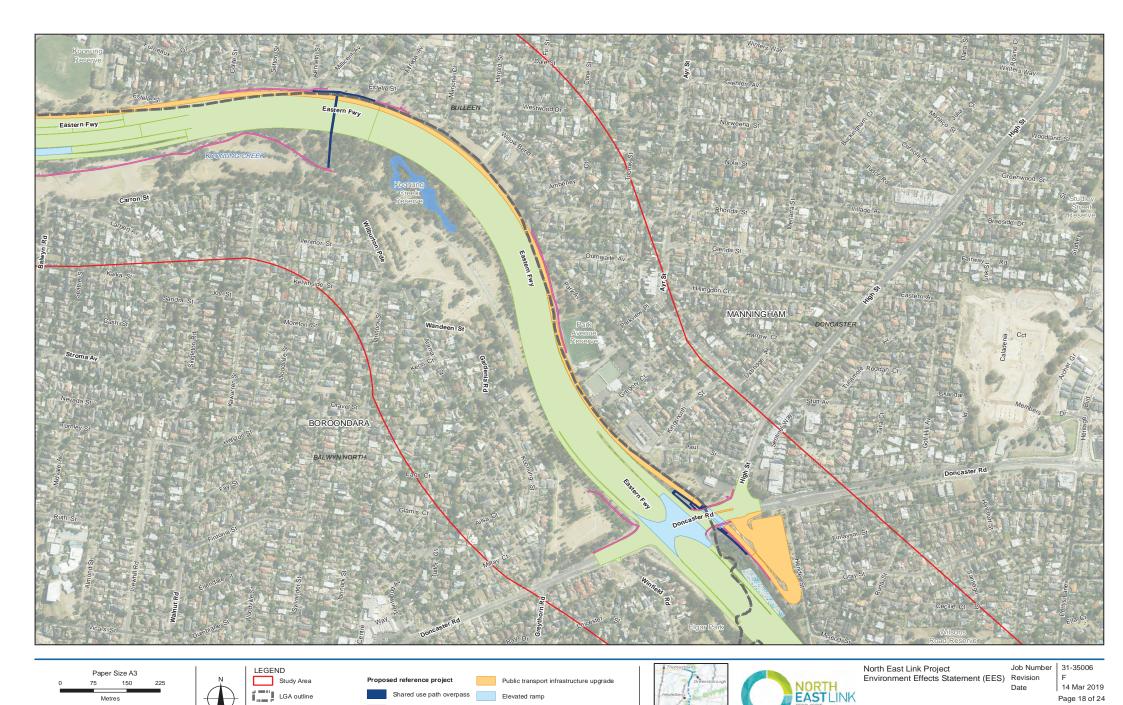
Surface road





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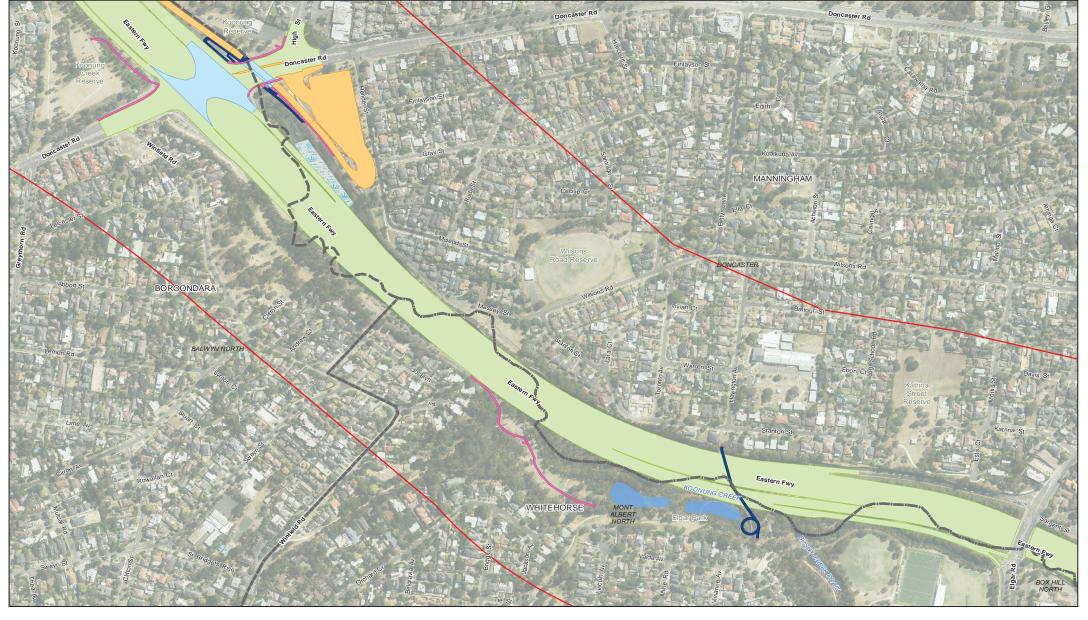
Surface road

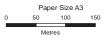
Metres

Map Projection: Transverse Mercator Horizontal Datum: GDA 1994 Grid: GDA 1994 MGA Zone 55

Victorian Heritage Inventory

Victorian Heritage Inventory





Map Projection: Transverse Mercator Horizontal Datum: GDA 1994 Grid: GDA 1994 MGA Zone 55



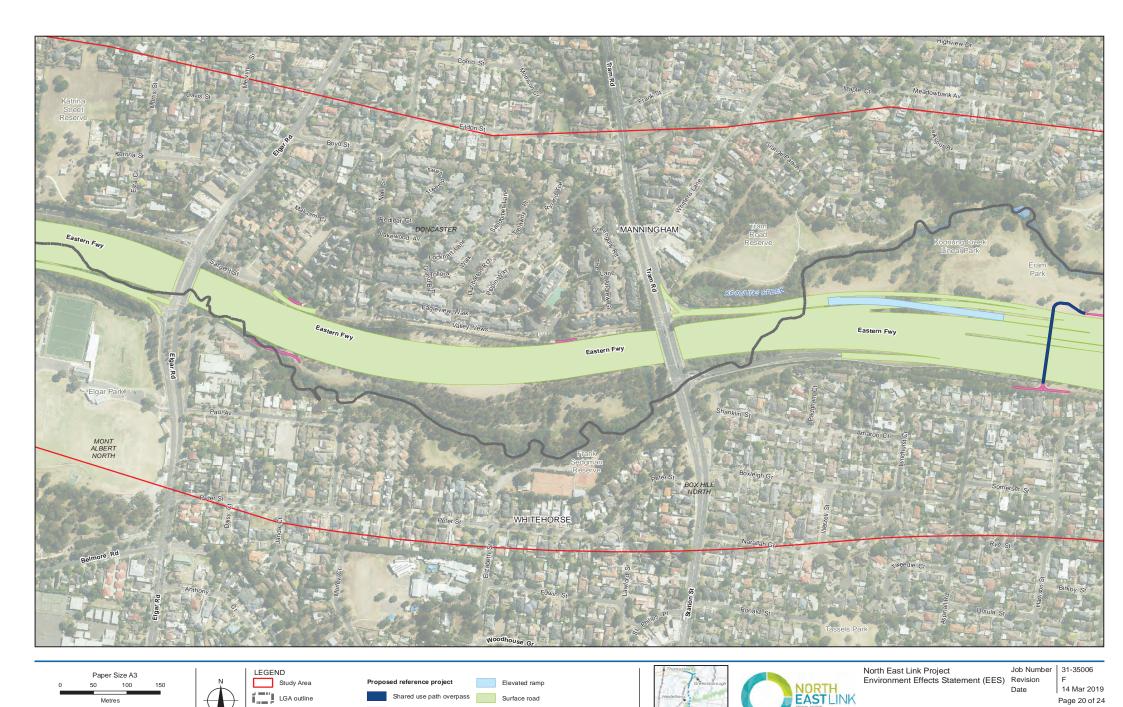




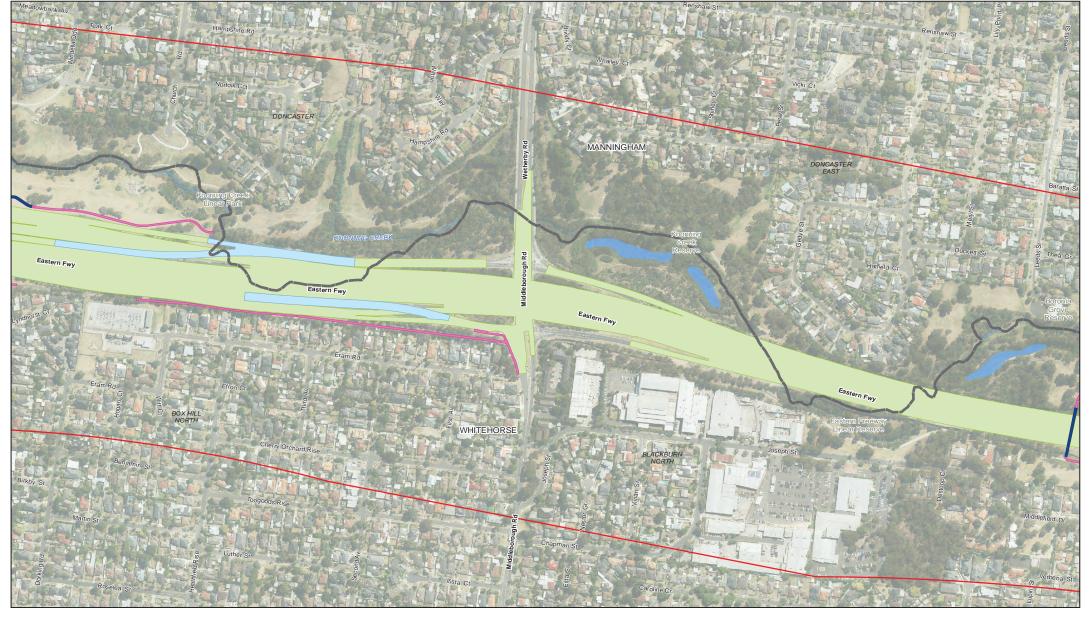


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Victorian Heritage Inventory













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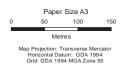
Metres

Victorian Heritage Inventory

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Victorian Heritage Inventory









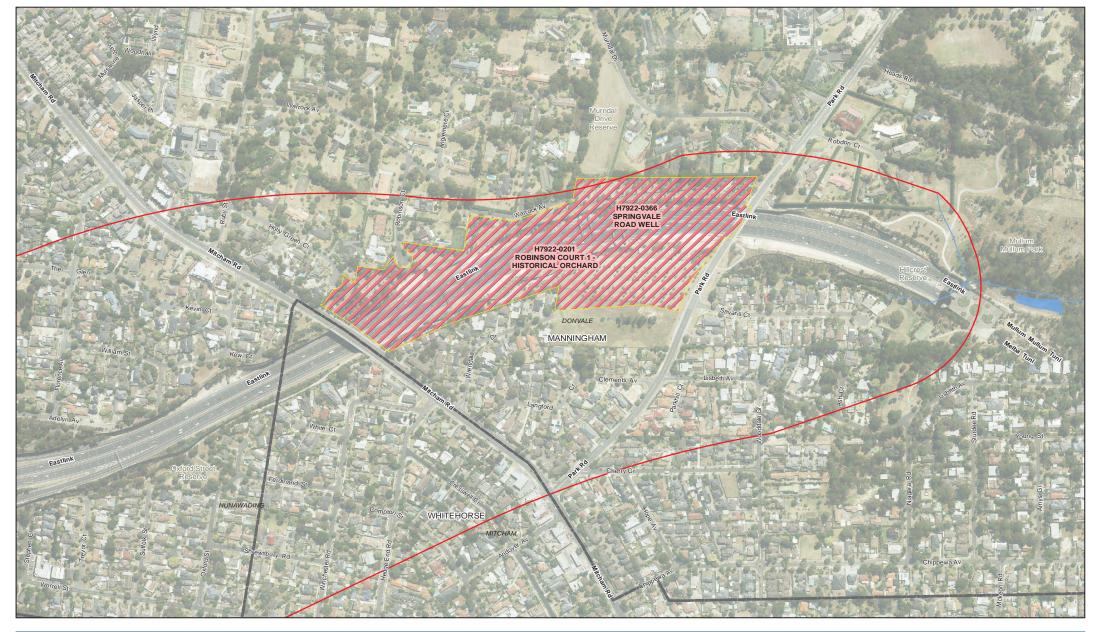


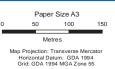


North East Link Project Job Numl
Environment Effects Statement (EES) Revision

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Heritage Overlay

Proposed reference project





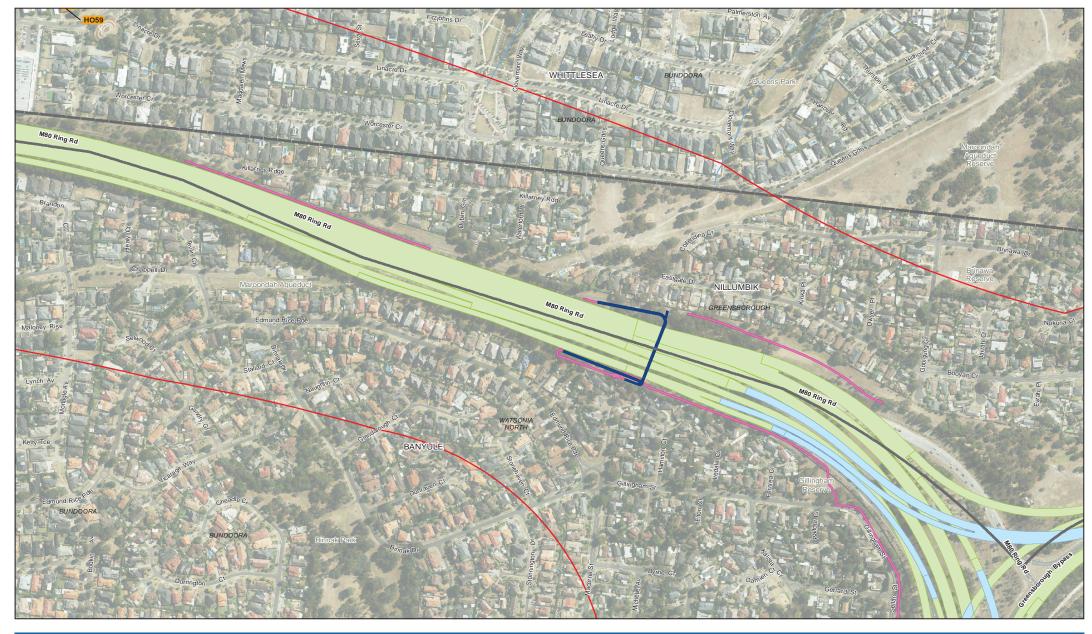


North East Link Project Environment Effects Statement (EES) Revision

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Victorian Heritage Overlay M80 to Northern Portal





Paper Size A3

100



LEGEND Study Area

Heritage Overlay

Proposed reference project

Shared use path overpass

Surface road





North East Link Project Environment Effects Statement (EES) Revision

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Victorian Heritage Overlay M80 to Northern Portal















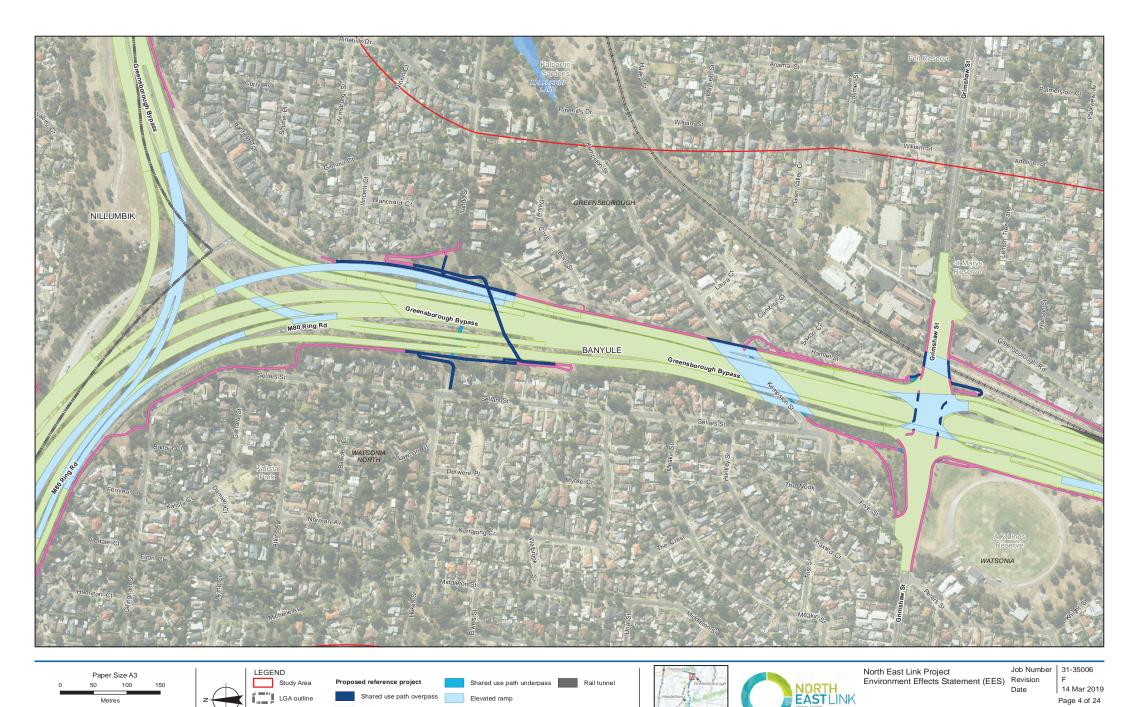


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Victorian Heritage Overlay M80 to Northern Portal



Elevated ramp

Surface road



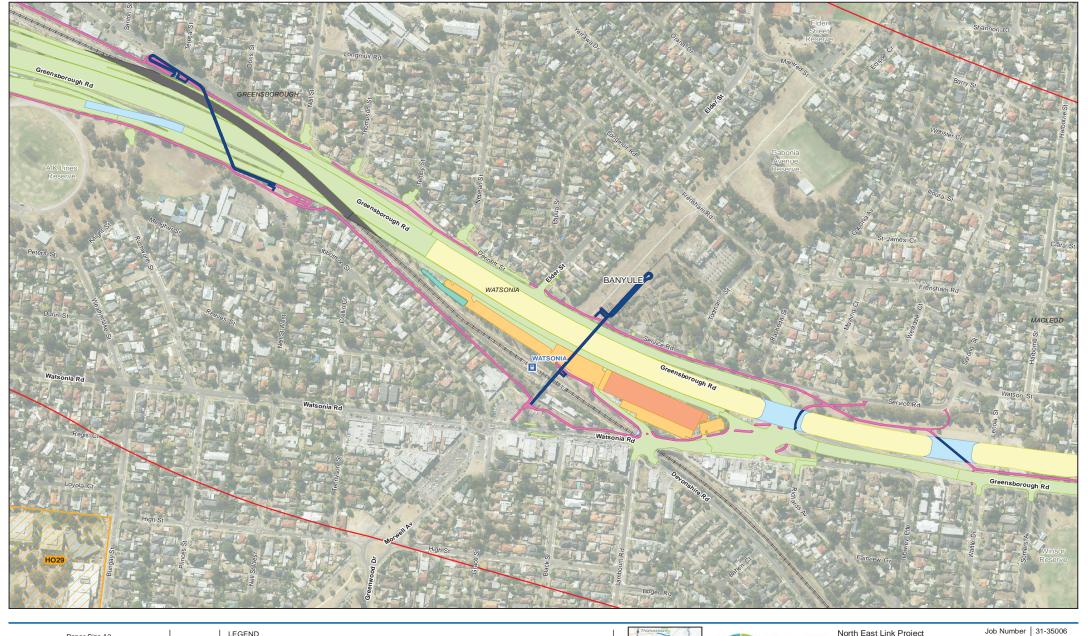
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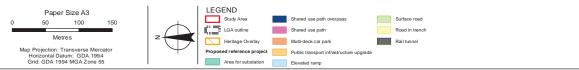
Victorian Heritage Overlay

M80 to Northern Portal

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Heritage Overlay





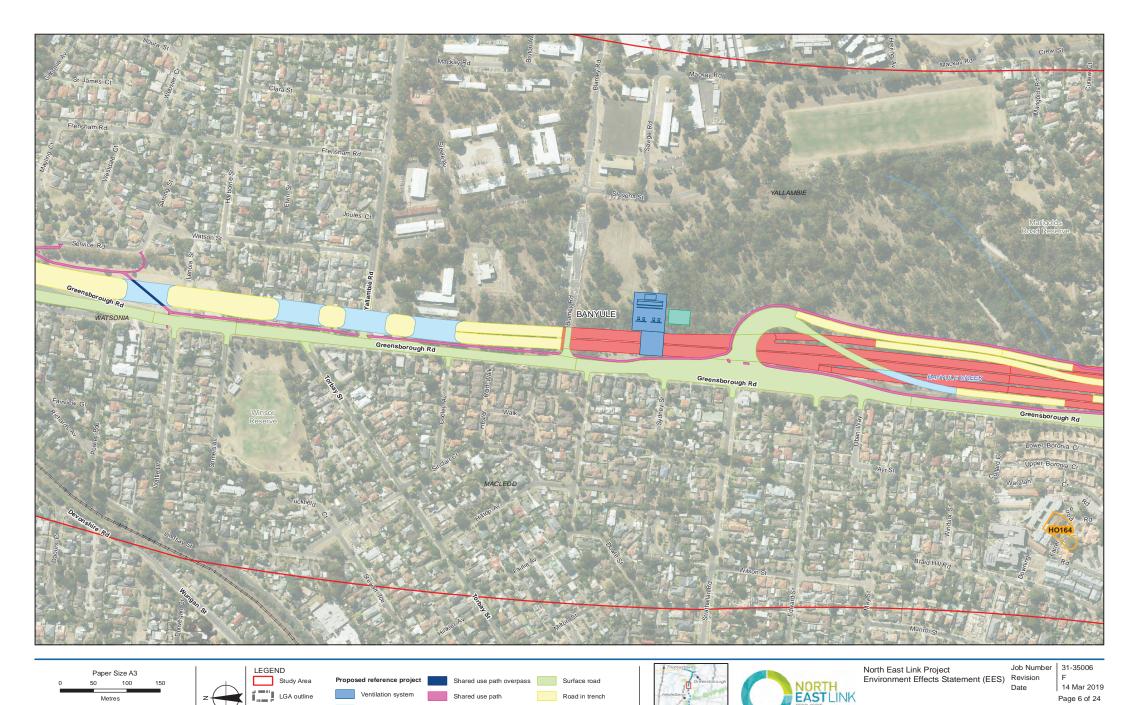
NORTH EAST LINK PROJECT

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Victorian Heritage Overlay M80 to Northern Portal

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Road in trench

Underground tunnel

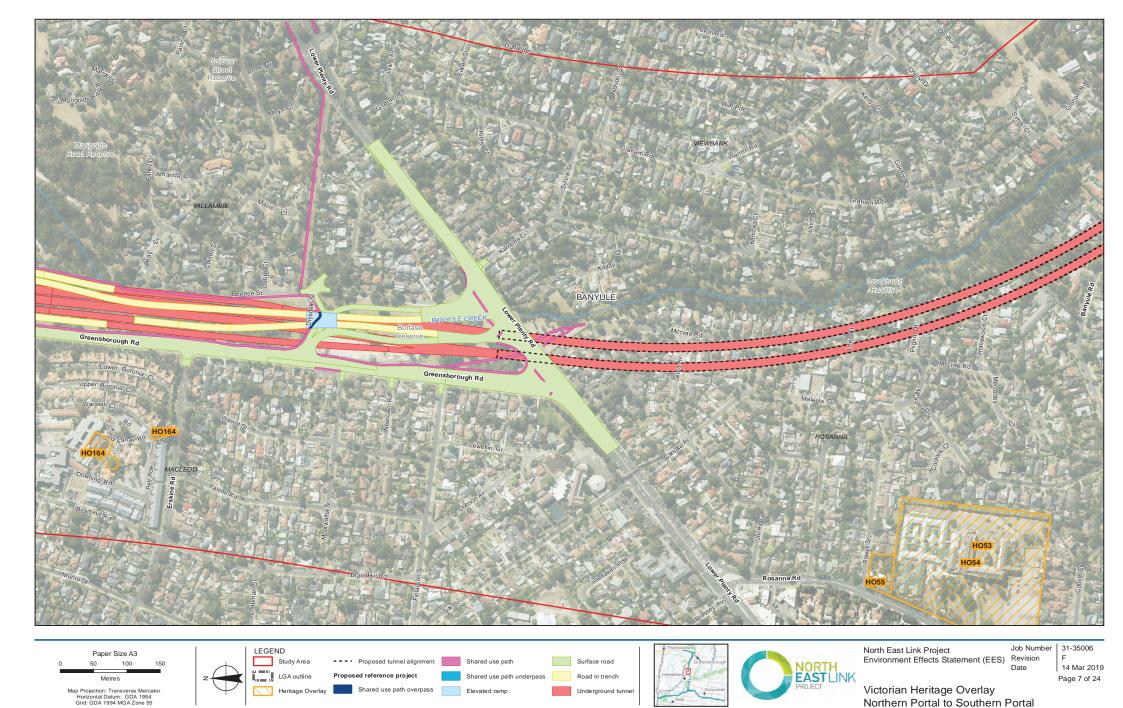
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Victorian Heritage Overlay

M80 to Northern Portal

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Heritage Overlay

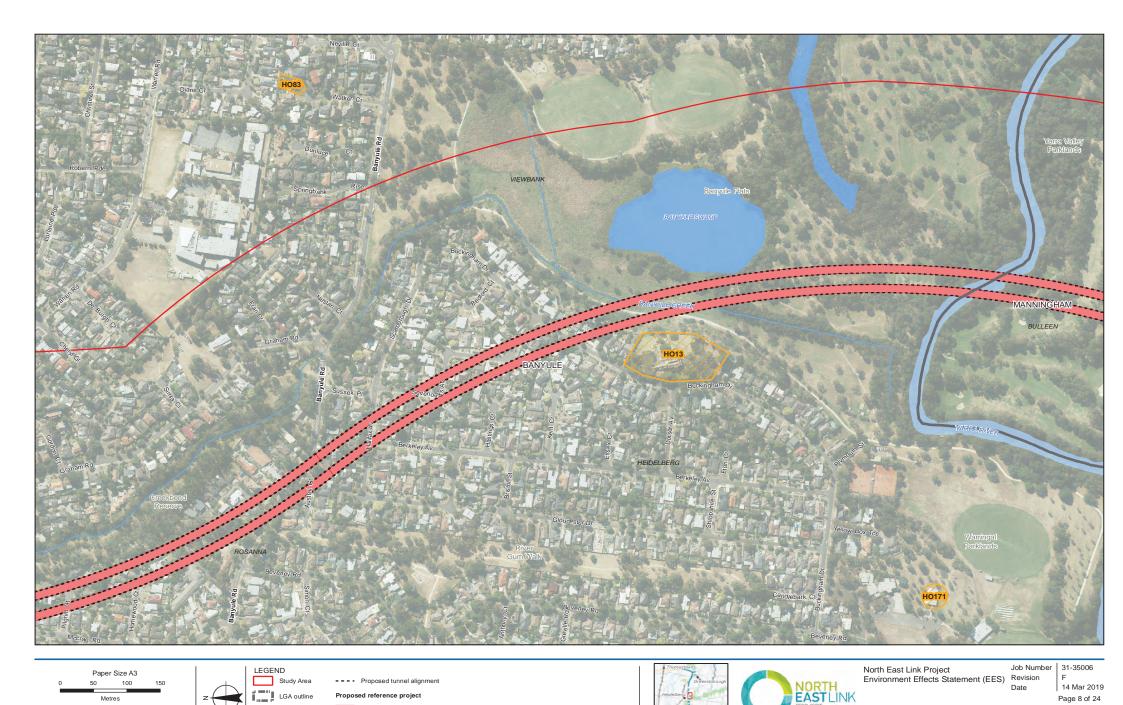


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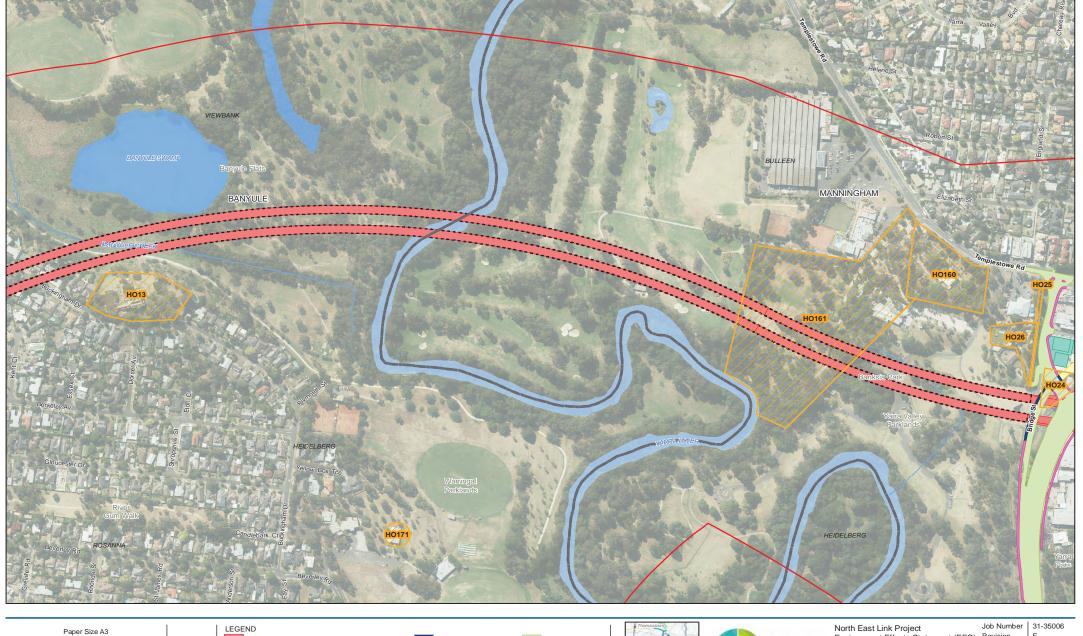


Victorian Heritage Overlay

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Heritage Overlay

Proposed reference project



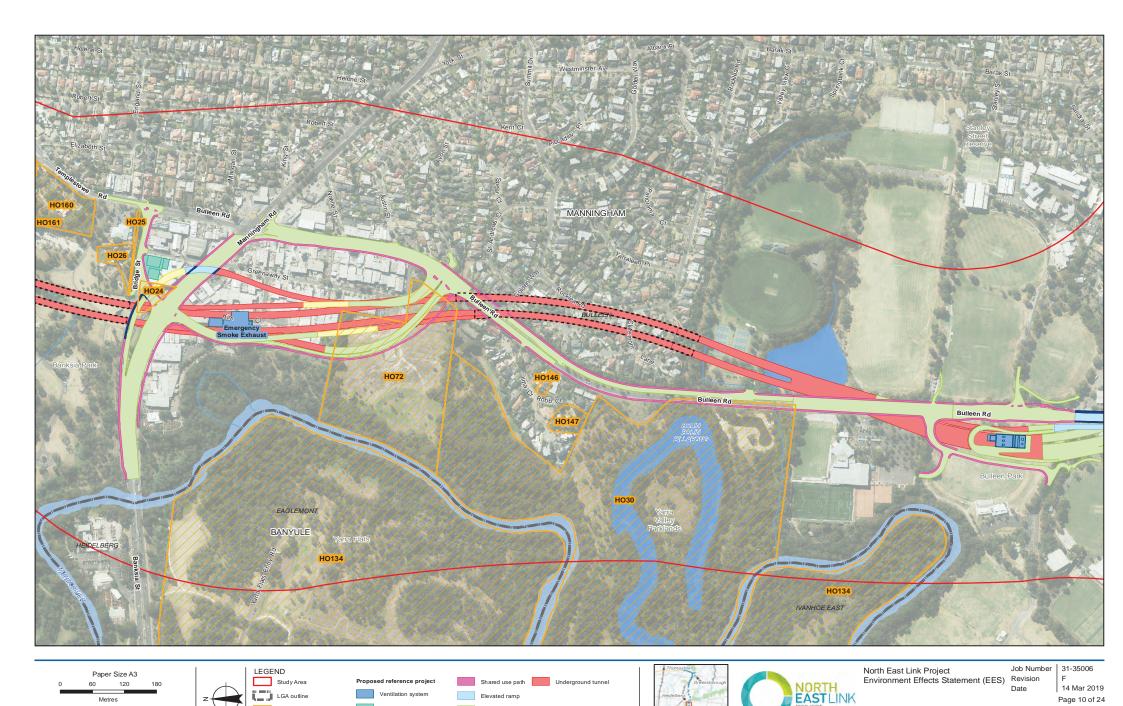


NORTH EAST LINK PROJECT

Environment Effects Statement (EES) Revision

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Victorian Heritage Overlay Northern Portal to Southern Portal



Victorian Heritage Overlay

Northern Portal to Southern Portal

Area for substation

Surface road

Road in trench

















Heritage Overlay























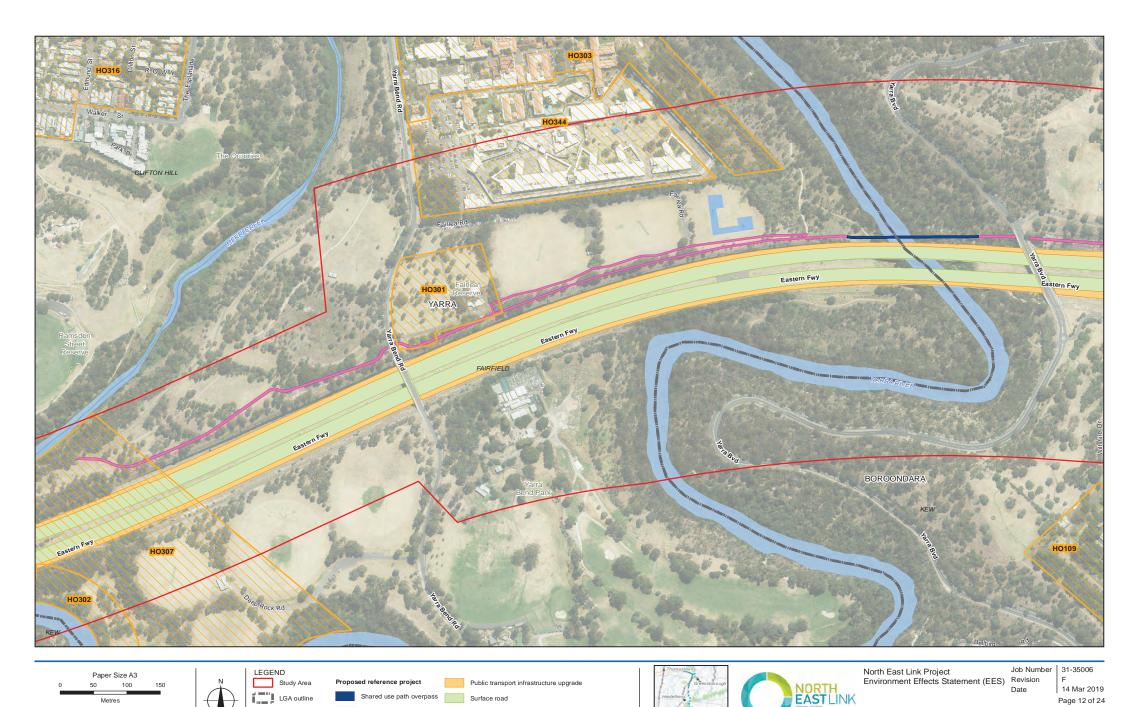
Surface road





North East Link Project Environment Effects Statement (EES) Revision

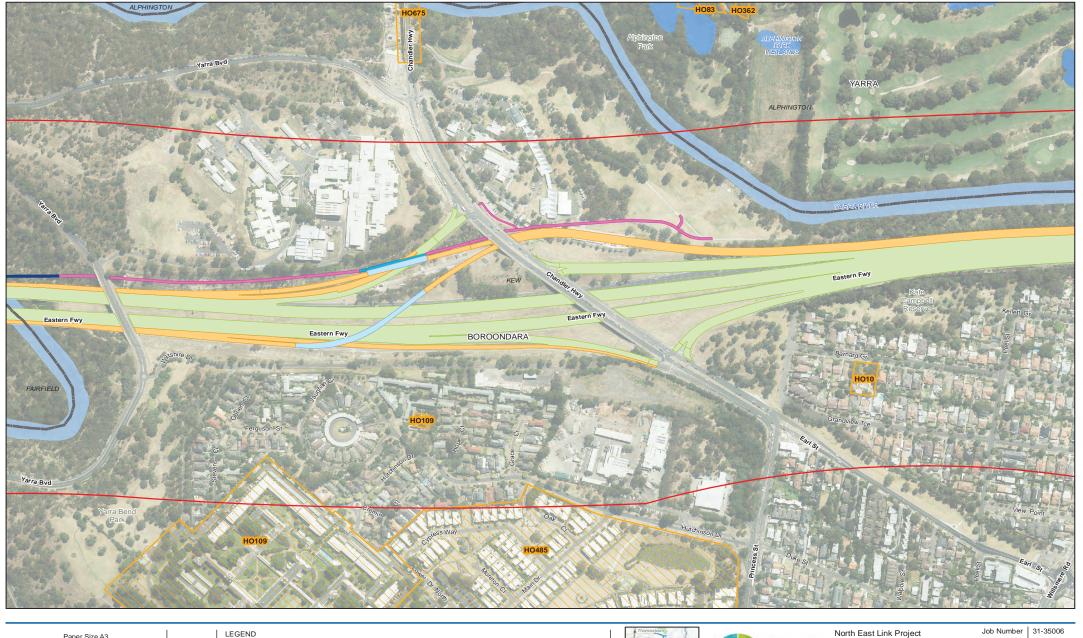
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Metres

Victorian Heritage Overlay

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Public transport infrastructure upgrade

Elevated ramp



Metres

NORTH EAST LINK PROJECT

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Victorian Heritage Overlay Eastern Freeway

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Proposed reference project

Shared use path

Shared use path overpass

Shared use path underpass

Study Area

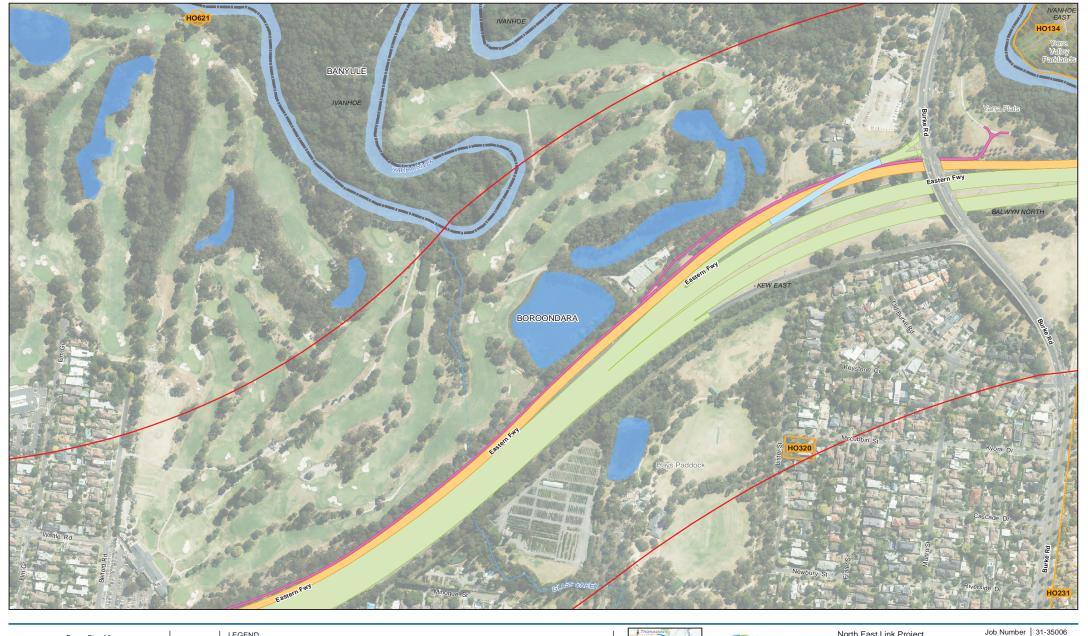
LGA outline



Victorian Heritage Overlay

Heritage Overlay

Public transport infrastructure upgrade



















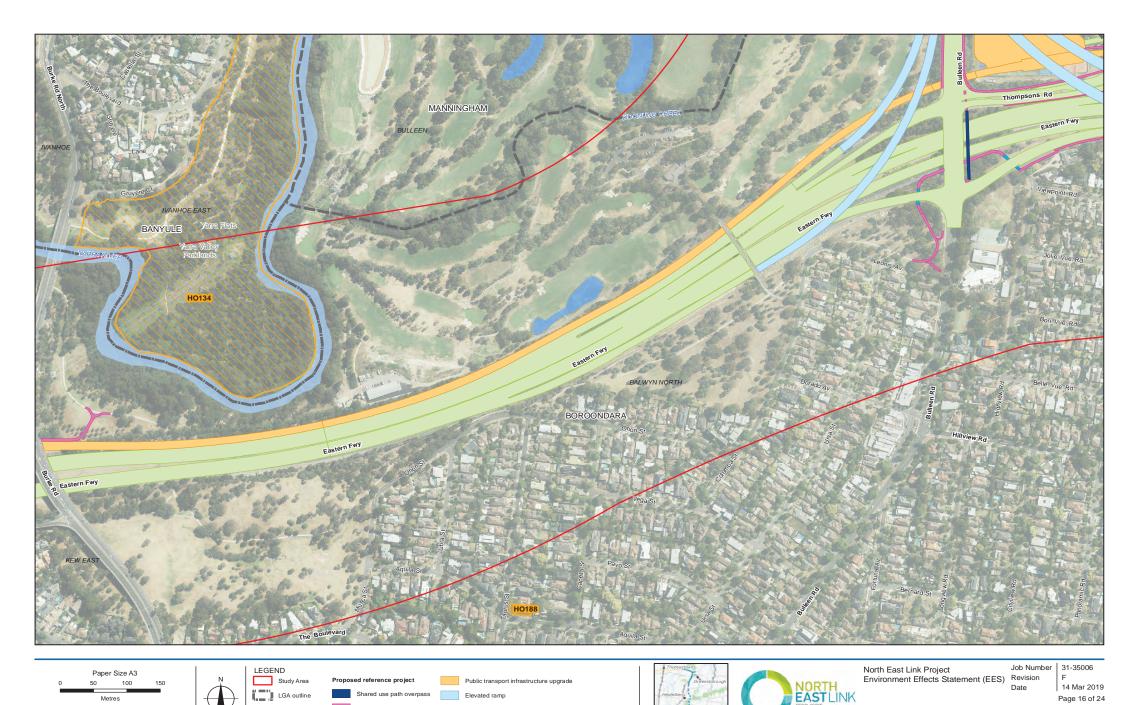






North East Link Project Environment Effects Statement (EES) Revision

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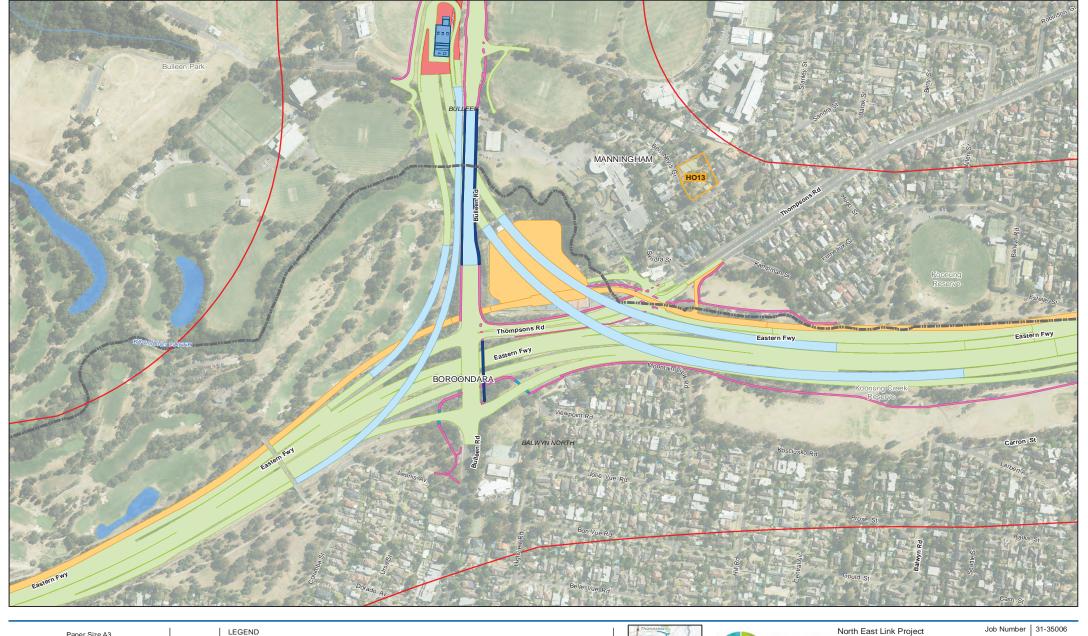
Eastern Freeway 180 Lonsdale Street Melbourne VIC 3000 Australia T 61 3 8687 8000 F 61 3 8687 8111 E melmail@ghd.com W www.ghd.com

Victorian Heritage Overlay

Shared use path

Shared use path underpass

Surface road



Underground tunnel

Shared use path underpass

Elevated ramp Surface road



100

NORTH EASTLINK PROJECT

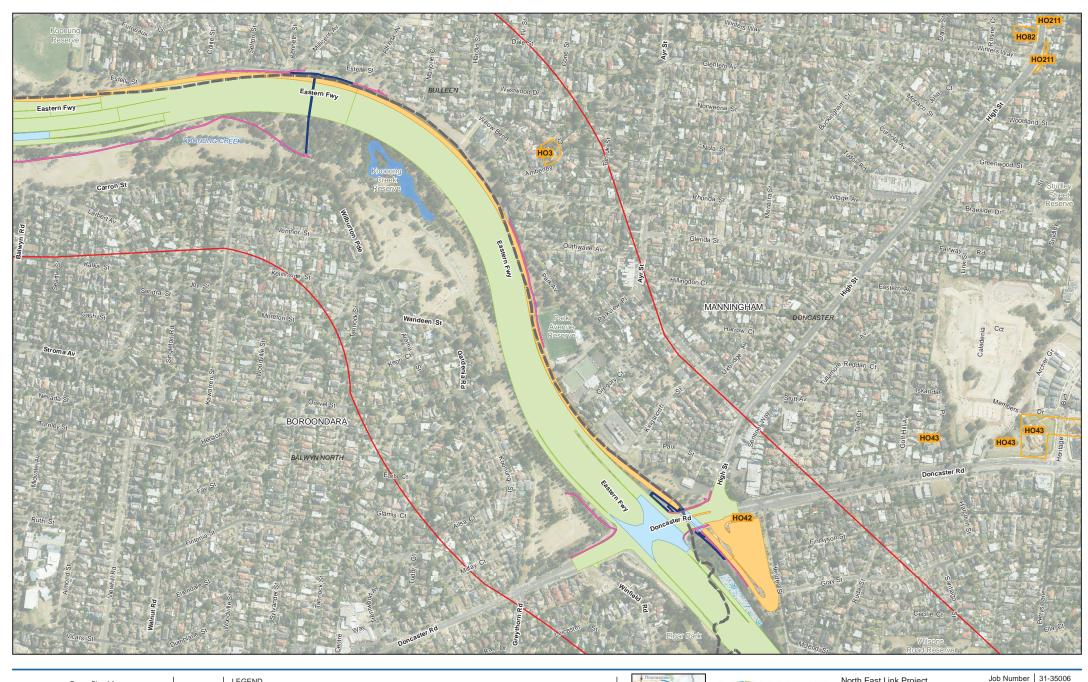
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Victorian Heritage Overlay Eastern Freeway

Shared use path overpass

Study Area





LGA outline

LEGEND Study Area

Heritage Overlay

Public transport infrastructure upgrade

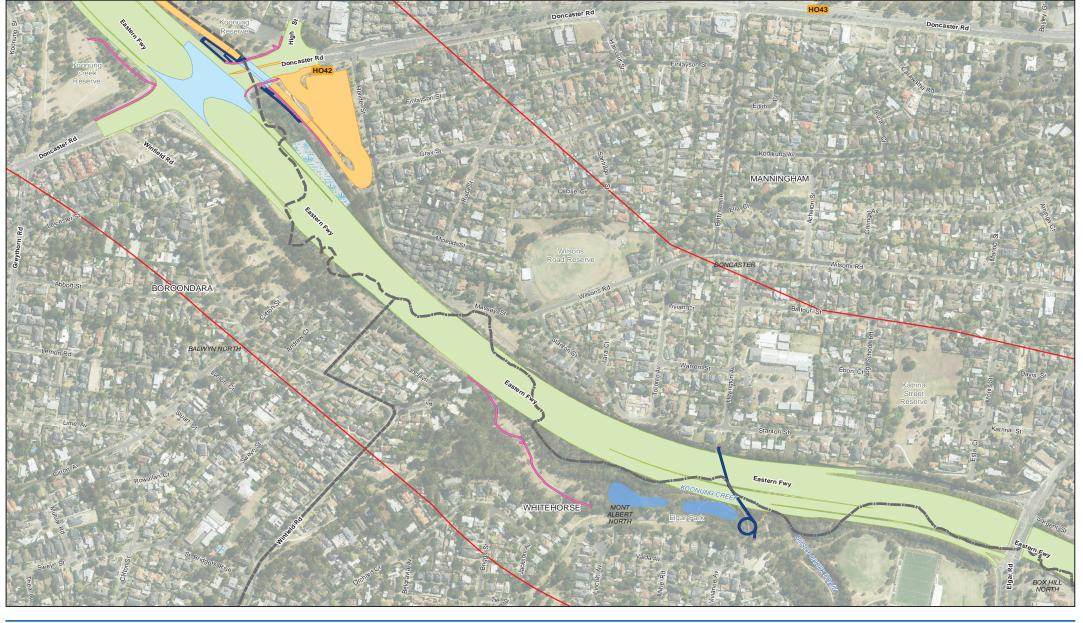
Elevated ramp Surface road

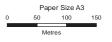




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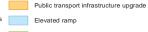














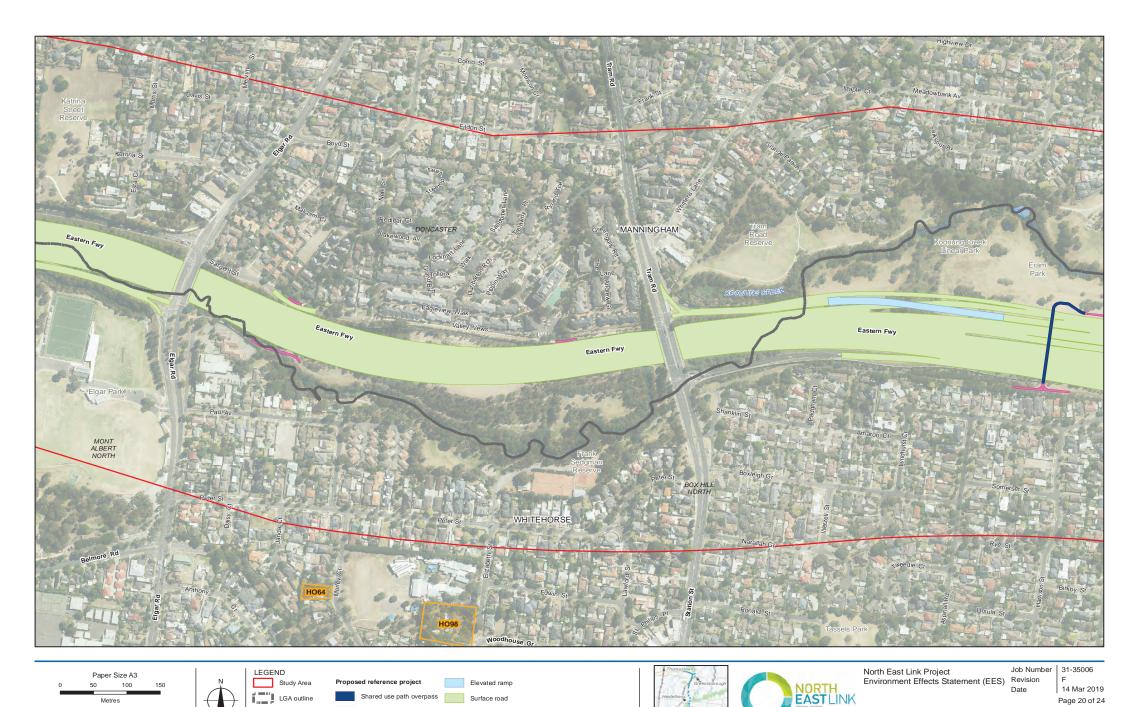




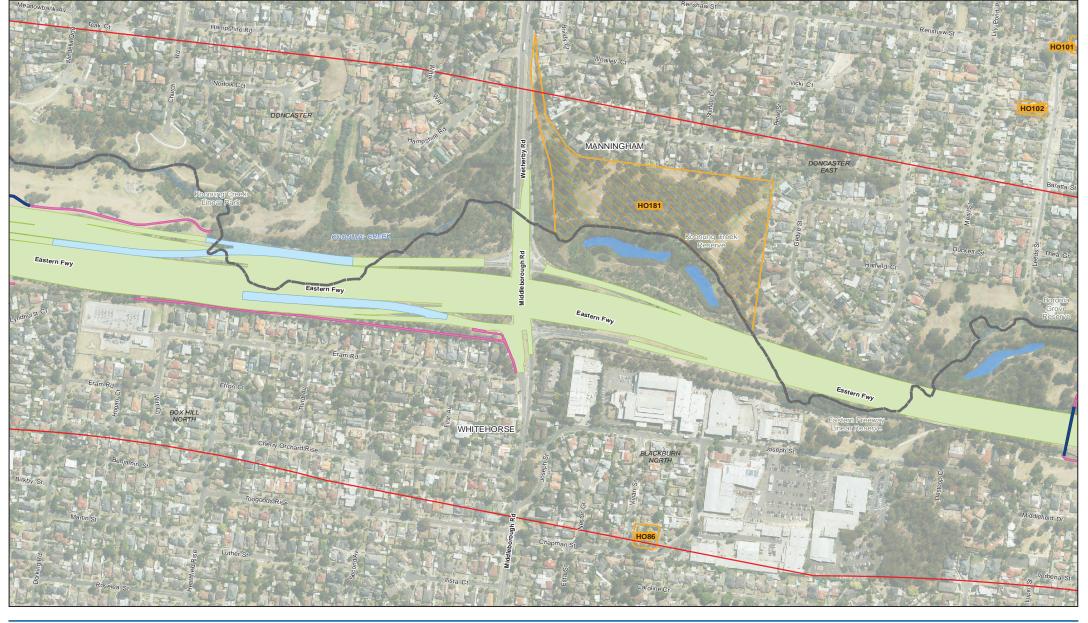
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Victorian Heritage Overlay

















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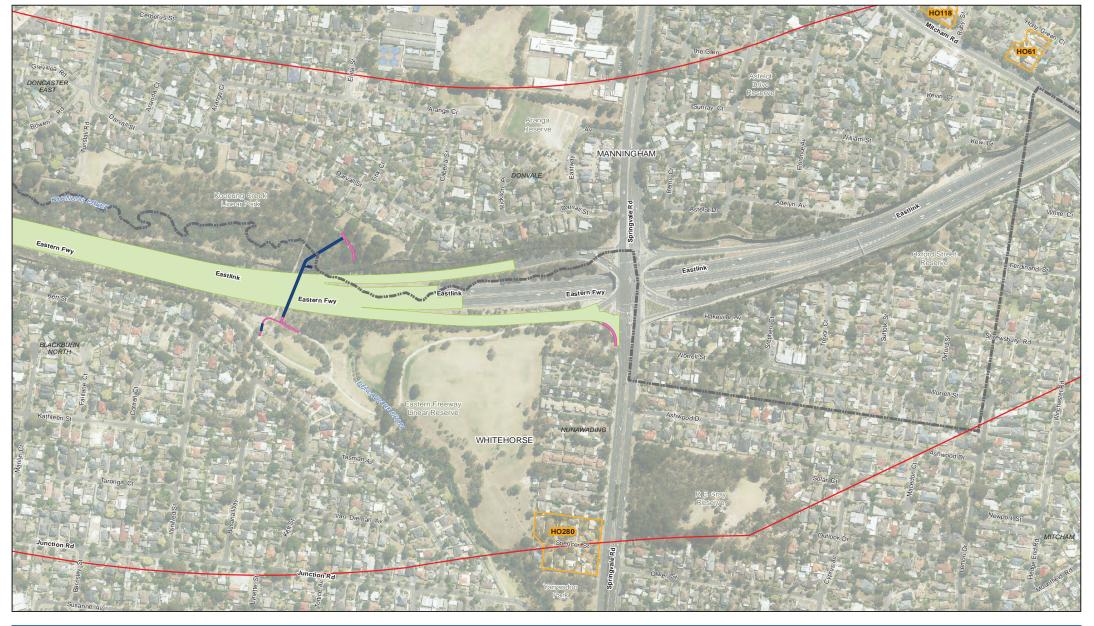
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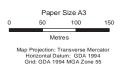


Metres

Victorian Heritage Overlay

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Surface road

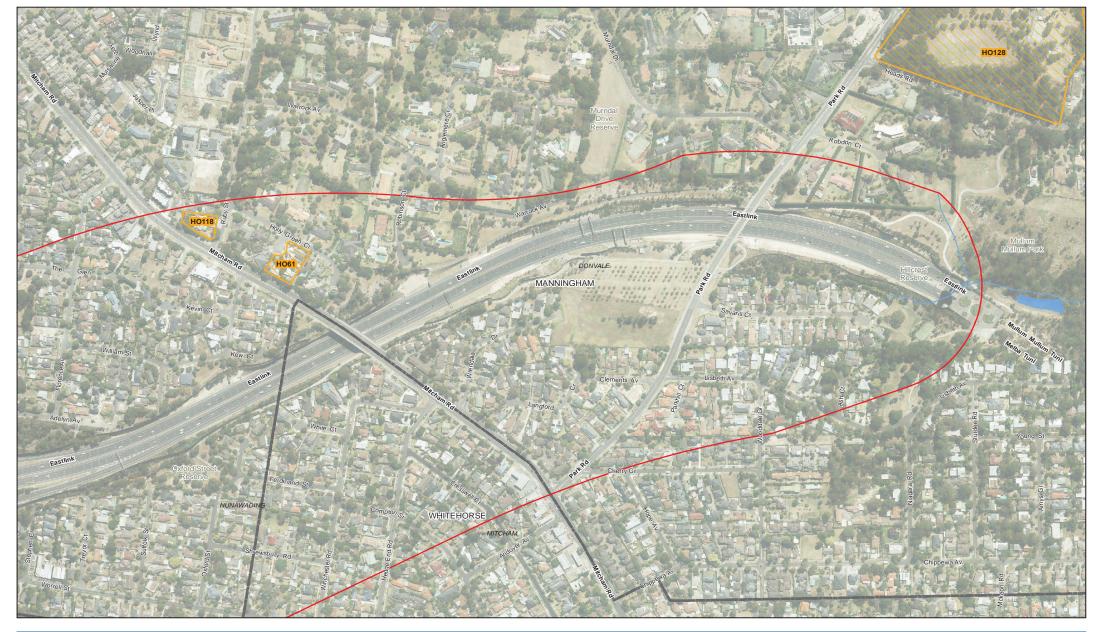


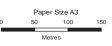


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Map Projection: Transverse Mercator Horizontal Datum: GDA 1994 Grid: GDA 1994 MGA Zone 55









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