

**MELBOURNE METRO RAIL
PROJECT
HISTORICAL HERITAGE
IMPACT ASSESSMENT**

Prepared for
Melbourne Metro Rail Authority

With sub consultants
Jacobs (Australia) Pty Ltd
and
John Patrick Pty Ltd, Landscape Architects

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LOVELL CHEN

ARCHITECTS & HERITAGE CONSULTANTS

LEVEL 5, 176 WELLINGTON PARADE
EAST MELBOURNE 3002
AUSTRALIA
TEL +61 (0)3 **9667 0800**
FAX +61 (0)3 9416 1818
enquiry@lovellchen.com.au
www.lovellchen.com.au

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Glossary and abbreviations

Acronym	Definition
AHC	Australian Heritage Council
AMP	Archaeological management plan
Burra Charter	Australia ICOMOS Burra Charter, 2013
CBD	Central Business District
CHL	Commonwealth Heritage List
CMP	Conservation management plan
DoE	Australian Department of the Environment
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999
EPR	Environmental Performance Requirement
ESO	Environmental Significance Overlay
Graded buildings	Buildings that are subject to gradings in local municipal heritage studies or planning schemes
HIS	Heritage impact statement
HMP	Heritage management plan
HO	Heritage Overlay
Heritage Victoria	HV
ICOMOS	International Council on Monuments and Sites
LPPF	Local Planning Policy Framework
MCC	City of Melbourne
Melbourne Metro	Melbourne Metro Rail Project
City Loop	Melbourne underground rail loop
NHL	National Heritage List
RMH	Royal Melbourne Hospital
RWH	Royal Women's Hospital
SPPF	State Planning Policy Framework
TPZ	Tree Protection Zone
ULE	Useful Life Expectancy
VCCC	Victorian Comprehensive Cancer Centre
VHR	Victorian Heritage Register
VHI	Victorian Heritage Inventory

Executive Summary

This report provides an assessment of the historical cultural heritage issues and impacts of the Melbourne Metro Rail Project (Melbourne Metro). These include potential physical and visual impacts on heritage places or objects from the construction works and permanent infrastructure associated with Melbourne Metro. Aboriginal cultural heritage is the subject of a separate assessment, refer to EES Technical Appendix K *Aboriginal Cultural Heritage* and the Cultural Heritage Management Plan under the *Aboriginal Heritage Act 2006*.

Context

The Melbourne Metro extends from a point just east of the Maribyrnong River at Kensington (western portal) and through (under) parts of North Melbourne, Parkville and Carlton and the central city to the Yarra River. South of the Yarra River, the project extends under the Domain Parklands, St Kilda Road and Toorak Road before tying into the existing rail lines at South Yarra (eastern portal).

The city and inner suburbs of Melbourne feature a large number of historical heritage places, including buildings, structures, heritage precincts, trees, landscapes and archaeological sites, many of which fall within Melbourne Metro study area and could be affected by the construction of Melbourne Metro.

Impacts could occur as a result of the establishment of construction work sites and construction activities and the permanent infrastructure itself. For the most part the impacts are likely to occur at the station and portal sites where works are proposed at and close to the surface, but there are also broader issues of construction vibration and ground settlement where there is a risk of damage to heritage places.

Methodology

The methodology for the study is consistent with the EES Scoping Requirements issued by the Minister for Planning as relevant to Cultural Heritage.

The methodology for the study included:

- identification of all heritage places that are subject to statutory heritage controls under Australian or Victorian legislation as follows:
 - *Environment Protection and Biodiversity Conservation Act 1999* (Commonwealth)
 - *Heritage Act 1995* (Victoria)
 - *Planning and Environment Act 1987* (Victoria)
- desktop review of relevant studies, non-statutory registers and other assessments and site inspections to identify additional places and sites within the Melbourne Metro study area
- historical research and site inspections
- review of relevant legislation and guidelines and place-specific assessments and management plans to inform risk and impact assessment
- consultation with stakeholders including Heritage Victoria, City of Melbourne, City of Port Phillip, City of Stonnington, the National Trust of Australia (Victoria) and the Shrine of Remembrance.

Risk and impact assessment

In summary, the risk assessment considered potential consequences for heritage values of:

- physical impact on heritage places and sites (full or partial demolition or removal of significant fabric, alteration and adaptation works)
- visual impact associated with permanent infrastructure and development as part of Melbourne Metro at or in proximity to heritage places and sites

- disturbance or removal of archaeological sites (both identified and unknown)
- damage to heritage places as a result of construction vibration or ground settlement.

A series of specific risks were identified. Some apply across the Concept Design as a whole while others are localised to particular precincts or sites.

The risk assessment concluded that with mitigation measures implemented, the majority of risks could be reduced to residual ratings of Very Low, Low or Medium. A number of risks remain at High with some adverse impacts (demolition, loss of significant fabric or compromised presentation) that could not be fully mitigated and a high likelihood rating (Almost Certain). Notwithstanding these residual ratings, the impacts associated with these risk pathways are not considered to be of such severity as to be considered unacceptable in heritage terms, particularly in the context of a project of this scale.

Residual risks that remain High are as follows:

- demolition of four graded residences within the Kensington Precinct HO9 (western portal)
- demolition of railways workshops buildings proposed for an HO control (Arden station)
- demolition of five graded buildings in the Flinders Gate Precinct HO505 (CBD South station)
- relocation of South African Soldiers Memorial (VHR H1384) and loss of trees on the site (Domain station).

In all cases, the risk assessment found these impacts to be Moderate. In the case of the buildings to be demolished that are subject to local HO controls there are adverse impacts associated with the works but these are localised and do not compromise the broader heritage of the City of Melbourne. In the case of the South African Soldiers Memorial, there is an adverse impact on a state registered place but the monument itself is retained and conserved and subject to further design refinements, its key values will be retained.

Following is a summary of the key heritage issues, risks and management measures by precinct:

Table 1 Key project issues and risks

Project wide	
Historical archaeology	Historical archaeology is the study of the past since European contact through archaeological evidence on or beneath the land or seabed. Historical archaeology is a project-wide theme, with the greatest potential for historical archaeological sites in the central city, where evidence may survive of the earliest phases of Melbourne’s post-settlement history. Wherever ground disturbance works occur, there is the potential for impact on known and unknown archaeological sites and relics. On this basis, the report addresses the issue of historical archaeology through a combination of historical research and field work to identify known and likely sites and values (predictive modelling). For sites and areas that have been identified as of significance, requirements have been specified for the development of archaeological management plans. These plans would include further detailed investigation and management to ensure that where sites and areas are disturbed, the research potential of the sites is fulfilled. In addition, there is a need for an awareness of historical archaeology more generally across the Concept Design and the potential for the discovery of unknown sites or relics of significance not previously identified is acknowledged. The report recommends the development of a project-wide protocol to ensure appropriate actions (stop work, reporting and investigation and/or monitoring) are undertaken consistent with the requirements of the Heritage Act 1995.
Construction-related damage	Another project-wide challenge is that of the potential impact of construction vibration and/or ground settlement on heritage buildings and places, where there are no direct physical works to those buildings and places.

Project wide

	<p>In the area of vibration and ground movement impacts, both relevant technical assessments in these areas identify the potential for damage to occur to heritage places within the Concept Design. In both cases the potential is low and the potential impacts can be addressed by appropriate mitigation measures. To manage such potential impacts, consistent with Environmental Performance Requirement CH2 and the relevant Environmental Performance Requirements of the noise and vibration and ground settlement reports, detailed surveys of impacted structures would occur before, during and after construction. In the case of places and structures which are identified as sensitive to the potential impacts of vibration or settlement, these would be subject to monitoring requirements. Should damage present in the course of the works then appropriate action would need to be taken to vary the construction approach and any damage would need to be rectified to accepted conservation standards.</p> <p>In the case of Victoria Barracks (included in the CHL under the EPBC Act), there is an express requirement for survey and monitoring as associated with the determination of the Commonwealth Minister for the Environment that the proposed works do not constitute a controlled action if undertaken in a particular manner. These requirements align with the survey and monitoring requirement associated with heritage places for the Concept Design as a whole.</p> <p>In the event of damage, documentation and undertaking of rectification works would occur in accordance with the Burra Charter and the requirements of the relevant heritage authorities.</p>
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<p>Operational vibration</p>	<p>Technical Appendix I <i>Noise and Vibration</i> confirms that there would be no risk of damage as a result of operational vibration. Compliance with project criteria for vibration (human comfort) and ground-borne noise is predicted with the installation of vibration isolating trackform. Compliance with the criteria for vibration (human comfort) infers compliance with the criteria for building damage as it is less onerous.</p>
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Tunnels precinct

<p>Sectors 1-4: Western portal to CBD South station</p>	<p>Other than the project-wide issues identified above, no key issues or impacts were identified in Sector 1 (western portal to Arden station), Sector 2 (Arden station to Parkville station), Sector 3 (Parkville station to CBD North station), Sector 4 (CBD North station to CBD South station).</p>
<p>Sector 5: CBD South station to Domain station</p>	<p>The proposed Linlithgow emergency access shaft option for the Concept Design and the potential alternative design option would involve interventions within the VHR-listed Domain Parklands. Both options would have an adverse heritage impact, through tree removal for construction works and the visual impact of the proposed permanent above-ground structure set within the parkland, albeit the impacts would be localised in the context the broader registered place. Recommendations are made for the reinstatement of landscape where affected, and for the approach to detailed design of the permanent structures to minimise the impacts.</p> <p>Ground improvement works may be required within the Domain Parklands in the vicinity of the proposed shallow crossing above the existing CityLink tunnels. These works could have an adverse impact on significant trees and memorials within the parklands and, depending on the methods used, could also affect the soil profile and inhibit the reinstatement of the valued landscape character in this location. Recommendations are made for the mitigation of these potential impacts.</p>
<p>Sector 6: Domain station to the Eastern portal</p>	<p>The Fawkner Park option for the TBM southern launch site would include the removal of some mature trees in the park which is located within a local HO precinct in the Melbourne Planning Scheme but which was assessed in a 2002 study (Hassell 2002) as of higher level of significance. It is expected that the impact of the launch site within the park would be temporary and could be mitigated through the reinstatement of the landscape.</p>

Tunnels precinct

Two options for the required emergency access shaft are proposed within Fawkner Park and both would have a minor adverse impact associated with tree removal and the permanent above-ground structure.

Western portal precinct

There would be an adverse impact on the local HO Kensington Precinct (HO9) as a result of the demolition of four graded Edwardian residences in Childers Street and Ormond Street on the southern edge of the precinct. The impact is a relatively modest one, however, with the core heritage values of the precinct remaining intact. The impact cannot be mitigated, however the buildings would be recorded consistent with good practice. The alternative design option does not pose the same impact, with a single ungraded residence demolished in this case and no adverse heritage impact arising from the demolition.

Arden station precinct

At the Arden station precinct there would be some impacts on industrial/infrastructure sites that are proposed for local HO controls under a proposed planning scheme amendment. There would be an adverse impact associated with the demolition of the railways workshops buildings at 173-189 Laurens Street, North Melbourne. A small brick pumping station in Langford Street in North Melbourne, which forms part of a proposed HO precinct, could also be demolished for the proposed new substation, though retention of this structure may be possible. Recording requirements would apply in the case of the buildings to be demolished and it is recommended that an interpretation plan be developed for the railways workshops site in Laurens Street.

Parkville station precinct

The Parkville station site abuts several VHR registered places including Royal Parade and three University of Melbourne sites; the Vice-Chancellor's House, Main Entrance Gates, Pillar and Fence, and Gatekeeper's Cottage, all located on the north side of Grattan Street. Impacts on all three University sites would be limited and relate to the proximity of the structures to works. These could be managed or mitigated. There would be no significant impacts in the VHR registered Royal Parade associated with the construction of the station itself, which would be within Grattan Street, but there would be tree losses associated with the proposed new tram stop in Royal Parade and consequent changes to road functional layouts. Mitigation measures include the re-establishment of the boulevard character through tree replanting.

CBD North station precinct

There would be few direct impacts on heritage places associated with works in this precinct. There would be a visual impact associated with new above ground structures in proximity to the City Baths, however this could be mitigated through care in detailed design. While a project-wide issue, it is noted that works are proposed in close proximity to numerous heritage buildings in this precinct and risks associated with construction vibration and ground settlement would need to be addressed. The management of historical archaeology is also a key issue in the central city and the development of archaeological management plans would be required, specifying activities such as testing, excavation and monitoring.

CBD South station precinct

VHR-registered places

This area is highly sensitive in heritage terms and has a concentration of heritage sites and buildings, many of State significance and included in the VHR. Of these, the only one that would be directly affected by the works is Flinders Street Station where a direct connection from the CBD South station is proposed. This connection would require the removal of some significant fabric but with care in detailed design the adverse impact on heritage values would be a modest one.

CBD South station precinct

HO precincts	The works include the demolition of some relatively low graded buildings in the Flinders Gate Precinct (HO505). Of these, the Port Phillip Arcade (224-226 Flinders Street) is of some individual heritage significance in its own right and recommendations are made for its interpretation as part of the redevelopment of the site for the new station. The retention of the façade to one building (65 Swanston Street) is recommended however the other buildings proposed for demolition make a minor contribution to the HO precinct. While not mitigating the loss, all would be recorded prior to demolition.
Historical archaeology	As noted above, the management of historical archaeology is a key issue in the central city and this is particularly so in the case of CBD South Station precinct, where evidence of Melbourne's earliest post-contact history may be uncovered. As for CBD North station the management of historical archaeology is also a key issue in the central city and the development of archaeological management plans would be required, specifying activities such as testing, excavation and monitoring.

Domain station precinct

Located in St Kilda Road, Domain station is located at the edge of the VHR-registered Shrine of Remembrance and also intersects with the VHR-registered South African Soldiers Memorial on the triangular reserve at St Kilda and Albert roads. New entries are proposed on both these sites. In the case of the Shrine, as part of mitigation, a low-key design approach would be required to minimise the physical impacts and visual presence of the entry and ensure no adverse impact on the place as a whole. The co-location of the station entry with the South African Soldiers Memorial presents a more significant challenge in terms of the establishment of an appropriate setting for the memorial if located on this site. An improved outcome may be achieved through reconfiguration and enlargement of the reserve to accommodate the relocated memorial. There would also be significant construction impacts in this location and these would include tree removal and other works. These impacts are concentrated within the St Kilda Road road reserve and on the South African Soliders Memorial site at St Kilda and Albert roads, with little adverse impact in the Shrine Reserve or the VHR-registered Domain Parklands (where a construction works site is proposed on the Edmund Herring Oval). St Kilda Road is not currently subject to statutory heritage controls but even in the absence of these, is considered to be of state historical and aesthetic significance. Mitigation measures for St Kilda Road would include the reinstatement of the boulevard treatment and provision for replanting of trees.

Eastern portal precinct

Construction activities and new infrastructure in the eastern portal precinct would include works within a local HO precinct, the Toorak Road (west of William and Claremont Streets) Precinct (HO150) in the Stonnington Planning Scheme. The majority of the works occur in the rail reserve south of Toorak Road. While these works are significant, there would be little or no adverse impact on the heritage values of the HO precinct as a result. The historical association between the railway and Toorak Road would be undiminished.

Western turnback precinct

The establishment of the construction work site for the western turnback includes the site of the Cross Street Electrical Substation (HO192); if required the demolition of this building would result in the complete loss of a place of local heritage value. It is recommended that the building be retained and protected during works.

Early Works

The impact of early works (comprising services relocation, tram re-routing and similar) preparatory to the main construction works) would be largely archaeological, but with some potential impacts on buildings and structures, and on trees as part of heritage places.

Early Works

In some cases, the works could intersect with heritage places that would also be affected by the main construction works for the project and in a number of these cases, the early works would not pose additional heritage impacts.

Where additional heritage impacts are possible, these appear, on the basis of the information available, to be impacts that could be avoided, minimised or mitigated. This is the case for the University of Melbourne Main Entrance Gates (Gate 6), Pillars and Fence (VHR H0918) and Royal Parade (VHR H2198).

It is noted that the early works are shown in concept form only, however and it is possible that there may be other-archaeological and non-archaeological impacts associated with early works.

Works are proposed as part of the Concept Design close to, abutting or extending into a number of VHR sites (including Flinders Street Station). More detail on the works would be required in order to confirm the nature of any additional impacts, however given the nature of the works (services works), it is expected these would be minor and adverse impacts could be avoided through detailed design and care in undertaking the works.

The project is generally consistent with the draft EES evaluation objective for Cultural heritage in that adverse effects on historic cultural heritage values are avoided or minimised as far as is practicable. This is a project which extends through areas of considerable historical cultural heritage sensitivity in inner and central Melbourne. Works are proposed to occur at or close to the surface within dense and constrained urban environments with high concentrations of heritage buildings and sites, as well as sites and areas recognised for their heritage landscape qualities. In this regard, it is useful to consider Melbourne Metro in the context of the delivery of other infrastructure projects in Melbourne's history, with the most relevant example being the City Loop project (1971-1985). There are a number of parallels with that project, which while it included heritage impacts, equally demonstrated that a project of complexity and scale could be managed and successfully delivered in close proximity to important heritage assets, including heritage buildings and landscapes.

In the case of Melbourne Metro, even accepting that the majority of the project is proposed to be located underground, there would be some adverse impacts associated with the early works and construction phases and permanent infrastructure which would occur and could not be fully avoided or mitigated. These impacts would be localised to particular sites along the proposed alignment.

The conclusion of this assessment is that with appropriate mitigations and management measures in place Melbourne Metro can be constructed in a manner which adverse impacts are avoided or minimised to a level that is acceptable from a heritage perspective.

Benefits and opportunities

There are a number of potential benefits or opportunities of the project:

- *Historical archaeology:* The research value of archaeological sites to be removed or damaged would be fulfilled through testing, monitoring and salvage and this offers significant benefits in terms of adding to current knowledge of past practices and developments, particularly in the central city. There would also be opportunities for community involvement in archaeological investigations.
- *Repair and conservation works:* There may be cases where active conservation works are undertaken to the heritage place associated with the works. This occurs in many projects where significant change is proposed and where that change can provide the impetus or resources for needed repair and/or active conservation works. In the case of Melbourne Metro, there may be opportunities to undertake necessary repair and/or conservation works where physical interventions are required or temporary or permanent relocation of structures is proposed. This could include heritage landscapes. These works have not been scoped or considered in detail in this impact assessment.

- *Interpretation:* This report has recommended that a heritage interpretation strategy be developed for the project as a whole which offers opportunities to explore historical and Aboriginal cultural heritage themes and recognise heritage places associated with new stations. This is particularly important in some locations and these are specified in impact assessment.

Environmental Performance Requirements

Environmental Performance Requirements (EPRs) have been developed to avoid or minimise adverse impacts on heritage places and values. These include general requirements applicable to multiple heritage places and values across the project. These are referenced above and listed in Table 2 below. Note that this assessment also references and relies on EPRs in other Technical Assessments including those for Arboriculture, Noise and Vibration and Land Stability and Ground Settlement

More specific mitigation measures which could be employed at particular locations or heritage places as part of compliance with the performance requirements have also been identified in the report.

Refer to Chapter 23 *Environmental Management Framework* of the EES for the full list of Environmental Performance Requirements.

Table 2 Historic Cultural Heritage Environmental Performance Requirements

Number	Environmental Performance Requirement
CH1	<p>Design permanent and temporary works to avoid or minimise impacts on the cultural heritage values of heritage places.</p> <p>Consult as required with Heritage Victoria and/or the responsible authority (as applicable).</p>
CH2	<p>To avoid or minimise impacts on the cultural heritage values of heritage places:</p> <ul style="list-style-type: none"> • Perform works in accordance with the following noise and vibration and ground movement Environmental Performance Requirements as related to heritage places: NV2, NV5, NV6, NV11, GM2, GM4, GM5, GM6. • Undertake condition assessments of heritage places prior to commencement of construction where located within the identified vibration and ground settlement zones of sensitivity and monitor as per NV6, GM4 and GM5 <p>Should damage occur to a building or structure on the Victorian Heritage Register or that is subject to a Heritage Overlay as a result of works, undertake rectification works in accordance with accepted conservation practice (with reference to the Australia ICOMOS Burra Charter 2013) to the satisfaction of Heritage Victoria or the responsible authority, as applicable.</p>
CH3	<p>Prior to construction undertake archival photographic recording in accordance with Heritage Victoria Technical Note: Photographic Recording for Heritage Places and Objects where heritage places are to be demolished or modified.</p>
CH4	<p>Prior to construction of main works or shafts that affect heritage structures or places, develop detailed methodology in accordance with Australia ICOMOS Burra Charter and to the satisfaction of Heritage Victoria or the responsible authority (as applicable) where heritage fabric is required to be dismantled, stored and reconstructed. Work is to be documented and overseen by an appropriately qualified conservation practitioner.</p>
CH5	<p>Prior to construction of main works or shafts that affect heritage structures or places, develop and implement appropriate protection measures for heritage places and objects including sculptures, memorials, monuments and associated heritage fabric where retained in proximity to works. This is to be done to the satisfaction of Heritage Victoria or the responsible authority (as applicable).</p>

Number	Environmental Performance Requirement
CH6	<p>To the satisfaction of Heritage Victoria:</p> <ul style="list-style-type: none"> ● Develop archaeological management plans to manage disturbance of archaeological sites and values affected by the project ● Undertake investigation in accordance with the Guidelines for Investigating Historical Archaeological Artefacts and Sites, Heritage Victoria 2014 (as amended or updated) and to the satisfaction of the Executive Director, Heritage Victoria ● Develop and implement a protocol for managing previously unidentified historical archaeological sites discovered during project works.
CH7	<p>To the satisfaction of Heritage Victoria and the responsible authority, develop and implement a heritage interpretation strategy as part of detailed design as a whole which seeks to explore historical and Aboriginal cultural heritage themes. This must include but not be limited to the exploration of opportunities for interpretation at Arden station (referencing the use of this land for railways workshops and sidings), and at CBD South station (referencing the Port Phillip Arcade and the early Port Phillip Club Hotel).</p>
CH8	<p>To the satisfaction of Heritage Victoria and the responsible authority (as applicable) undertake all underground service works beneath or within heritage places or tree protection zones (TPZs) for trees as part of heritage places to avoid, minimise and mitigate impacts to the heritage fabric.</p>
CH9	<p>To the satisfaction of Heritage Victoria and the responsible authority (as applicable), ensure new development is responsive to heritage places in terms of height, massing, form, façade articulation and materials</p>
CH10	<p>To the satisfaction of the responsible authority, ensure no direct impact on heritage buildings on the former Glueworks site in Kensington.</p>
CH11	<p>To the satisfaction of the responsible authority, retain and protect Langford Street pumping station (part of proposed Moonee Ponds Creek and Infrastructure Precinct) as part of the design for the new substation.</p>
CH12	<p>To the satisfaction of Heritage Victoria and the responsible authority, replace removed Elm trees in Royal Parade as part of project delivery using appropriate species and re-establish the boulevard formation.</p> <p>Provide suitable soil conditions to facilitate the growth of new trees to reach the size of the existing mature trees in the boulevard.</p>
CH13	<p>To the satisfaction of Heritage Victoria, in detailed design ensure the eastern Parkville station entry is set no less than 8-10 metres from the original Gatekeeper's Cottage and an appropriate boundary treatment is retained or re-established for the heritage building.</p>
CH14	<p>To the satisfaction of the responsible authority, in detailed design for the CBD South station, incorporate the Charles Bush sculpture into the design for the new building on the Port Phillip Arcade site, preferably in a prominent position on the Flinders Street façade</p>
CH15	<p>In the event the permanent relocation of the Burke and Wills Monument from its current site is required, resolve the final location of the monument to the satisfaction of the appropriate responsible authority and/or in consultation with the City of Melbourne prior to the commencement of construction.</p>
CH16	<p>Integrate the bluestone pillar and cast iron fencing at the corner of Grattan Street and Royal Parade into the design for the station entry and surrounds in consultation with the University of Melbourne.</p>

Number	Environmental Performance Requirement
CH17	<p>Replace removed trees as part of project delivery in accordance with relevant policy documents and to re-establish valued landscape character and in consultation with the City of Melbourne, the City of Port Phillip, the Shrine of Remembrance and Shrine Trustees and Heritage Victoria as applicable. Policy documents are as follows:</p> <ul style="list-style-type: none"> ● Domain Parklands: Domain Parklands CMP (in preparation, Context, draft 2015-16) and the Domain Parklands Masterplan (in preparation) ● Shrine of Remembrance: Shrine of Remembrance CMP (Lovell Chen, 2010) or any future review and the Shrine of Remembrance Landscape Improvement Plan (Rush Wright Associates, 2010) ● South African Soldiers Memorial Reserve: Any relevant CMP for the South African Soldiers Memorial ● Fawkner Park: Fawkner Park Conservation Analysis (Hassell, 2002) and the Fawkner Park Masterplan (City of Melbourne, 2005).
CH18	<p>To the satisfaction of Heritage Victoria, review the siting and design of the eastern Domain station entry in detailed design to ensure it is as recessive as possible in this location and has only a limited presence on the edge of the Reserve.</p> <p>The design needs to allow for the maintenance of an appropriate setting to the Macpherson Robertson Memorial Fountain.</p>
CH19	<p>To the satisfaction of Heritage Victoria, review the siting and design of the western Domain station entry in detailed design to ensure the South African Soldiers Memorial has an appropriate landscaped setting if relocated on this site. If no appropriate setting can be established, consider options for relocation of the memorial to an alternative site.</p>
CH20	<p>To the satisfaction of the City of Melbourne, City of Port Phillip and/or the responsible authority, as applicable replace removed trees in St Kilda Road to re-establish the boulevard formation.</p>
CH21	<p>Retain and protect the Cross Street Electrical Substation in situ within or abutting proposed construction site.</p>

1.0 Introduction

This report provides an assessment of the historical cultural heritage (or ‘historical heritage’) impacts of the Melbourne Metro Rail Project (Melbourne Metro). The report should be read in conjunction with the following technical appendices:

- Technical Appendix E *Land Use and Planning*
- Technical Appendix I *Noise and Vibration*
- Technical Appendix P *Ground Movement and Land Stability*
- Technical Appendices R and S *Arboriculture*

The historical heritage assessment does not address Aboriginal cultural heritage, which is the subject of a separate assessment, comprising a Cultural Heritage Management Plan under the Aboriginal Heritage Act 2006 (refer to Technical Appendix K).

1.1 Definitions

The term ‘historical cultural heritage’ or ‘historical heritage’ (the two are used interchangeably) is understood in this report to mean places and objects that are of aesthetic, archaeological, architectural, cultural, scientific or social significance. It does not include places or objects that are of significance only on the grounds of their association with Aboriginal tradition or Aboriginal traditional use. Accepting this, it is noted that the term ‘historical heritage’ should not be interpreted as excluding Aboriginal cultural heritage values and there are many historical heritage places which have Aboriginal cultural heritage values in addition to non-Aboriginal cultural values (shared values).

This is consistent with the definitions and exclusions in the Heritage Act 1995.

The term, ‘heritage place’ has been used throughout this report. For the purposes of the report, ‘heritage place’ means:

- all places that are subject to a statutory heritage control under the Environmental Protection and Biodiversity Conservation Act 1999, the Heritage Act 1995 or the Planning and Environment Act 1987
- [including] all historical archaeological sites over 50 years in age whether identified or unknown related to non-Aboriginal settlement or visitation of the area or any part of the area which comprises Victoria
- those places which have been identified in this report as being of heritage value or potential heritage value (including sites of archaeological potential, and specific places which are currently not subject to statutory heritage controls).

In an historical heritage context, the term ‘place’ is wide ranging. An industry standard which is most frequently referenced as a guide to best practice management of cultural heritage places in Australia is the Australia ICOMOS Burra Charter, 2013 (Burra Charter). Consistent with the Burra Charter, a ‘place’ is a geographically defined area. It may include elements, objects, spaces and views. Places may have tangible and intangible dimensions (Australia ICOMOS: 2013, refer Article 1). The Heritage Act (refer section 3) also provides a useful description of what heritage places can encompass, including buildings, gardens, trees, shipwrecks, archaeological sites, precincts, sites and associated land. Monuments and memorials can also be considered, whether as heritage places (or as part of a heritage place) or as objects.

1.2 Project Description

Melbourne Metro comprises two nine-kilometre long rail tunnels from Kensington to South Yarra, travelling underneath Swanston Street in the Central Business District (CBD), as part of a new Sunbury to Cranbourne/Pakenham line to form the new Sunshine-Dandenong Line.

The infrastructure proposed to be constructed as part of Melbourne Metro broadly comprises:

- two nine-kilometre rail tunnels from Kensington to South Yarra connecting the Sunbury and Cranbourne/Pakenham railway lines (with the tunnels to be used by electric trains)
- rail tunnel portals (entrances) at South Kensington and South Yarra
- new underground stations at Arden, Parkville, CBD North, CBD South and Domain with longer platforms to accommodate longer High Capacity Metro Trains. The stations at CBD North and CBD South will feature direct interchange with the existing Melbourne Central and Flinders Street stations respectively
- train/tram interchange at Domain station.

Proposed construction methods would involve bored and mined tunnels, cut and cover/mined cavern (CBD Stations) construction of the station boxes, and portals. The project would require planning, environmental and land tenure related approvals to proceed. Heritage approvals are also required in addition to planning, environmental and land tenure approvals.

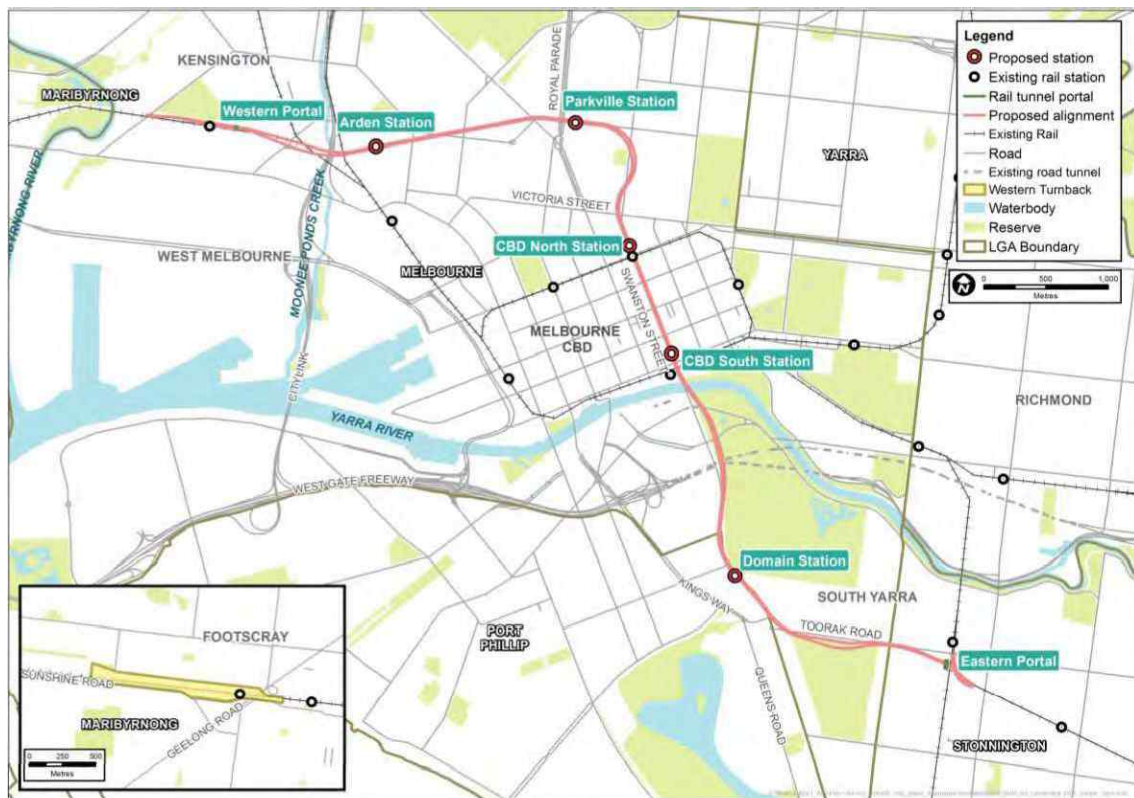


Figure 1 Map of the Melbourne Metro alignment and five underground stations
Source: AJMJV

1.3 Purpose of this Report

The purpose of this report is to provide an assessment of the potential impacts of the project on historical heritage places, including buildings and structures, precincts, landscapes and archaeological sites. The report describes the heritage values associated with these places and any risks and potential impacts on these values. Where possible, the report also identifies measures and specific actions through which any adverse impacts on these values could be avoided or minimised.

1.4 Project Precincts

For assessment purposes, the project boundary has been divided into precincts as outlined below. The precincts have been defined based on the location of project components and required construction works, the potential impacts on local areas and the character of surrounding communities.

The proposed precincts are:

- Precinct 1: Tunnels (outside other precincts)
- Precinct 2: Western portal (Kensington)
- Precinct 3: Arden station (including substations)
- Precinct 4: Parkville station
- Precinct 5: CBD North station
- Precinct 6: CBD South station
- Precinct 7: Domain station
- Precinct 8: Eastern portal (South Yarra).
- Precinct 9: Western turnback (West Footscray).

The nine precincts are shown in Figure 2 on the following page.

1.5 Study Area

The historical heritage impact assessment considered potential impacts associated with above ground works where they occur within the Melbourne Metro boundary. Such surface interactions are associated with the station sites, eastern and western portal sites and emergency access shafts.

In addition, areas associated with the proposed early works and the western turnback were also assessed. The impact assessment also considered potential impacts associated with the tunnelling and other construction activities across the project as a whole, both at or below surface, and with the operation of Melbourne Metro (potential vibration impacts).

It is also noted that areas associated with the four substation options were also considered. These are all located within proposed precinct boundaries (one within western portal and three within Arden station precinct), and as such, the impact of all substation options are considered to be represented within the respective precinct summaries.

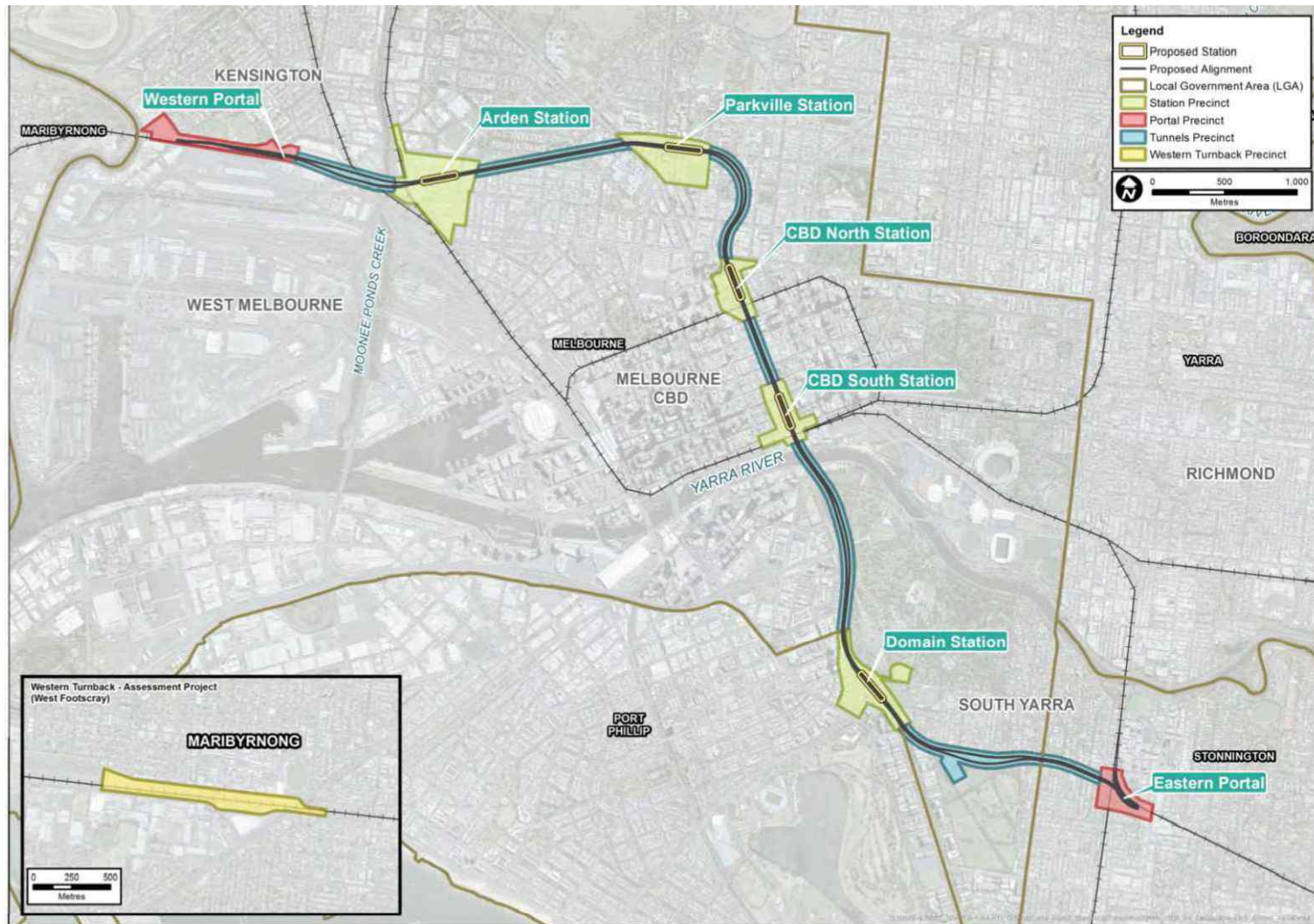


Figure 2 Map of the Melbourne Metro precincts
Source: AJMJV

2.0 Scoping Requirements

2.1 EES Objectives

The following draft evaluation objective (Table 3) is relevant to historical cultural heritage and identifies the desired outcomes in the context of potential project effects. The draft evaluation objectives provide a framework to guide an integrated assessment of environmental effects of the project, in accordance with the *Ministerial guidelines for assessment of environmental effects under the Environment Effects Act 1978* (Department of Sustainability and Environment, 2006).

Table 3 Cultural heritage draft evaluation objective

Draft evaluation objective	Key legislation
Cultural heritage - To avoid or minimise adverse effects on Aboriginal and historic cultural heritage values.	EPBC Act 1999 Aboriginal Heritage Act 2006 Heritage Act 1995 Planning and Environment Act 1987

2.2 EES Scoping Requirements

The following extracts from the Scoping Requirements, issued by the Minister for Planning, are relevant to this draft evaluation objective.

Table 4 Scoping Requirements for historical cultural heritage

Aspect	Relevant response
Key Issues	Potential adverse effects on historic cultural heritage values, especially buildings and properties identified through statutory instruments (particularly the Heritage Act, planning schemes or as protected under the EPBC Act), including potential susceptibility of historic cultural heritage properties to damage resulting from airborne or groundborne vibrations during or after construction of the project.
Priorities for characterising the existing environment	Identification of sites on the Victorian Heritage Register or identified by Heritage Overlays in relevant planning schemes or otherwise documented as being of heritage significance, including as appropriate condition of listed structures that could be affected. Identification of sites or precincts of archaeological sensitivity for historic cultural heritage values, including the need for investigations to supplement past studies, in the light of Heritage Victoria guidelines.
Design and mitigation measures	Describe and evaluate proposed design, management or site protection measures which could avoid or mitigate potential adverse effects on ...historic cultural heritage values, especially with regard to project construction.
Assessment of likely effects	Assess potential effects of the project on sites of historic cultural heritage significance, with due regard for relative levels of significance and possible impact pathways, including vibration.
Approach to manage performance	Describe the principles to develop measures to mitigate and manage residual effects on sites and places of historic heritage significance, including site investigation, recording and monitoring procedures. Describe the approach to identify contingency measures to manage effects on sites of historic cultural heritage sensitivity if effects are discovered or found to be of greater significance during project construction.

3.0 Legislation, Policy and Guidelines

3.1 Summary of Applicable Legislation

This section provides an overview of the legislation and policy frameworks relevant to historical cultural heritage in Victoria, with specific reference where appropriate to Melbourne Metro.

Table 5 below summaries the relevant primary legislation that applies to the project as well as the implications, required approvals and interdependencies and information requirements associated with obtaining approvals. Descriptions of all relevant legislations are contained in Appendix A of this report.

The heritage registers and controls that trigger the regulatory requirements in the case of specific sites within the Melbourne Metro study area are listed and discussed in Section 5.0.

Table 5 Primary legislation and associated information

Legislation / policy	Key policies / strategies	Implications for this project	Approvals required	Timing / interdependencies
Commonwealth				
Environment Protection and Biodiversity Conservation Act 1999	Matters of national environmental significance, including:	One place is listed on the list of Australian Places on the World Heritage List: The Royal Exhibition Building	No further approval required. The delegate for the Minister for the Environment determined on 22 September 2015 that Melbourne Metro is 'not a controlled action if undertaken in a particular manner' to avoid significant impacts as a result of vibration on Commonwealth Heritage listed structures within the Victoria Barracks site in St Kilda Road.	No further assessment is required under this Act.
Environment Protection and Biodiversity Conservation Regulations 2000	- World heritage areas - National heritage places Commonwealth Heritage List places are also defined under the EPBC Act	One CHL place falls within the study area; this is Victoria Barracks located on the south side of St Kilda Road between Wadey and Coventry Streets (CHL); note this site is reflected in multiple listings on the CHL. No other listed NHL places are within the study area though there are seven NHL places within a 1km buffer area (refer Appendix F). ¹		

¹ The 1km buffer was used based on the online Protected Matters Search Tool provided by the Australian Department of the Environment. The purpose of the tool is to help determine whether protected matters are likely to occur in an area of interest. <http://www.environment.gov.au/epbc/protected-matters-search-tool>, accessed 17 March 2016.

Legislation / policy	Key policies / strategies	Implications for this project	Approvals required	Timing / interdependencies
State				
Heritage Act 1995	<p>Victorian Heritage Register (places of state significance)</p> <p>Victorian Heritage Inventory (archaeological sites)</p> <p>(The Heritage Act provides 'blanket protection' for all historical archaeology where sites are over 50 years in age)</p> <p>Numerous policies and guidelines are applicable, refer to following section.</p>	<p>Provides for the protection and conservation of places and objects of cultural heritage significance and the registration of such places and objects</p> <p>VHR and VHI sites within the study area are listed in Appendix F.</p>	<p>Permits required under the Heritage Act 1995 for all VHR places where subdivision or physical works are proposed. Permit exemptions may be sought under s.66 (3) in the case of VHR sites for works where there is little or no impact. No planning permit is required under the HO provisions for VHR-listed places.</p> <p>In the case of sites included in the VHI, where subsurface disturbance is proposed that may affect the archaeological record, consents to excavate (for testing) or consents to damage (for disturbance / removal) are required.</p> <p>It is noted that all archaeological sites more than 50 years in age related to non-Aboriginal settlement or visitation of the area or any part of the area which comprises Victoria are protected by the Heritage Act, regardless of whether they are included in the VHI. As for the VHR, there are enforcement provisions for unlawful activities in relation to archaeological relics and places.</p>	<p>Heritage permit and consent applications have requirements for documentation to be submitted – these may include (but not be limited to) drawings showing conditions and proposed works, a heritage impact statement report and/or an archaeological management plan.</p> <p>Permits and consents often include conditions which require particular actions prior, during, or after works.</p>

Legislation / policy	Key policies / strategies	Implications for this project	Approvals required	Timing / interdependencies
Local				
Planning and Environment Act 1987	<p>HOs in the Melbourne, Port Phillip Stonnington and Maribyrnong Planning Schemes</p> <p>Numerous policies and guidelines are applicable. Refer to Appendix A for a summary of these.</p>	HO precincts and individual places included within the study area are listed in Appendix F.	<p>Planning approval is generally required for all external works, including demolition, alteration and new development (excluding sites which are on the VHR).</p> <p>For Melbourne Metro, planning approval is proposed to be via a planning scheme amendment and the introduction of an incorporated document.</p>	There may be specific actions that are required to be undertaken prior to works commencing, during works, or following completion.
	<p>Environmental Significance Overlay (ESO Schedule 2) in the Melbourne Planning Scheme – establishes an Exceptional Tree Register for trees of historic (and environmental) value to the City of Melbourne.</p> <p>Trees are generally only those on private land with some also identified on land which forms part of the University of Melbourne.</p>	There are a number of sites that fall partly within the Melbourne Metro project boundaries that are affected by the ESO Schedule 2. Refer to Appendix F.	<p>The extent of the overlay is defined as its Tree Protection Zone (TPZ) which is included in the Table to ESO2. Works that do not require planning approval under the provisions of ESO2 are listed in Cl. 42.01-3. Generally any works within a TPZ, subdivision, or removing, destroying or lopping a tree subject to the ESO would require planning approval.</p> <p>As noted, for Melbourne Metro planning approval is proposed to be via a Planning Scheme Amendment and the introduction of an Incorporated Document.</p>	-

3.2 Commonwealth

At a Commonwealth level, the *Environment Protection and Biodiversity Conservation Act 1999 (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 lists.

There is one historical heritage place included in the CHL within the study area for Melbourne Metro (Victoria Barracks – precinct listing and individual buildings). There are no historical heritage places included in the NHL within the study area, although there are seven NHL sites within a one kilometre buffer zone. Located within the Domain Parklands, the Sidney Myer Music Bowl is in particularly close proximity to the study area.

Both the State Library of Victoria and Shrine of Remembrance have previously been nominated to the NHL, however in both cases the nominations have lapsed. This would not preclude re-nomination.

As noted in Table 5, the delegate for the Australian Minister for the Environment determined on 22 September 2015 that Melbourne Metro is ‘not a controlled action if undertaken in a particular manner’. Specific measures were identified in the referral decision to avoid significant impacts on Commonwealth land; these were vibration monitoring and measuring measures to be applied in the vicinity of the Victoria Barracks (and specifically the former Guardhouse, B Block) in St Kilda Road, Melbourne. Refer to the discussion at section 7.6.1.

3.3 State

3.3.1 Legislation

3.3.1.1 Heritage Act 1995

The main purpose of the Heritage Act is to provide for the protection and conservation of places and objects of cultural heritage significance. The Heritage Act establishes two registers, the Victorian Heritage Register (VHR) and the Victorian Heritage Inventory (VHI). The Heritage Act is relevant to Melbourne Metro as there are numerous places and objects within the study area which are included in the VHR and the VHI. Sites on the VHR and VHI are uniquely numbered.

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 relics, archaeological artefacts, equipment, vehicles and many other features. 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.

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 subdivision and 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.66(3) 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 the 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.

Victorian Heritage Inventory

The VHI is a register of known historical (non-Aboriginal) archaeological sites in Victoria. The VHI enables Heritage Victoria to record and monitor archaeological sites that are not considered to be of state significance or where the significance is unknown. There is currently no significance threshold for VHI places. Places that are assessed as of archaeological significance at a state level are included in the VHR.

The two categories of listing (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 or its objects included on the VHI must have first obtained the consent of Heritage Victoria. Section 129 of the Heritage Act sets out the process for the issuing of consents.

It is noted that all archaeological sites related to non-Aboriginal settlement or visitation of the area or any part of the area which comprises Victoria and are more than 50 years in age are protected by the Heritage Act, regardless of whether they are included in the VHI. As for the VHR, there are enforcement provisions for unlawful activities in relation to archaeological relics and places.

Review of the Heritage Act

In June 2015, the Victorian Government announced a review of the Heritage Act. A discussion paper on the Act and potential changes has been released and public consultation on the review occurred between July and August 2015. On 12 February 2016 a summary paper on the consultation process was published. While wide-ranging, the proposed changes are directed in large part to streamlining existing processes. It would be unlikely that any of the changes proposed in the discussion paper and through the consultation process would have any significant impact on Melbourne Metro.

3.3.2 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 archaeology. Relevant guidelines are listed at Appendix A of this report and the full range can be found on the Heritage Victoria website (<http://www.dtpli.vic.gov.au/heritage>).

The decision-making processes for heritage permit applications are guided by Section 73 *Matters to be considered in determining applications* and under Section 129 Executive Director may issue consents under the Heritage Act.

3.3.3 Implications for Melbourne Metro

There are numerous VHR and VHI places within the project boundaries for Melbourne Metro (refer to Appendix F). In particular, there are a number of VHR places through the central city, and several VHR places south of the Yarra River and towards the Domain station precinct which could be directly affected by the project.

Historical archaeology is a major theme in the central city, with a concentration of VHI sites throughout this area. There are otherwise relatively few identified VHI sites within the project boundaries.

Permits and consents would be required under the Heritage Act for works associated with the project where these affect VHR or VHI sites or unknown archaeological sites. These would be required in addition to the planning approvals sought for the project.

3.4 Local

3.4.1 Legislation

3.4.1.1 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 State government and Councils through planning schemes. The legislation governing these controls is the *Planning and Environment Act 1987*.

3.4.2 Planning schemes

Planning schemes contain standard provisions (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 or in close proximity to the Melbourne Metro study area. These are identified in the Melbourne, Port Phillip, Stonnington and Maribyrnong Planning Schemes (refer to Appendix F of this report).

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)

3.4.2.1 Zoning and overlays

Heritage Overlay (HO)

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.

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
- precinct-based HOs which can extend over larger areas and include multiple individual properties
- site-specific HO places which may be located within or outside precincts.

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. On occasion, the requirements of the HO may be moderated by incorporated plans which are 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 proposed development or new building is in keeping with the heritage significance, character and appearance of adjacent buildings and the heritage place.

Environmental Significance Overlay (ESO)

The ESO (Cl. 42.01) has been used in the Melbourne Planning Scheme to protect the majority of designated trees identified in Exceptional Tree Register 2012 as amended in 2014 (refer to Schedule 2 of the Environmental Significance Overlay). The register is generally limited to trees located on private

land, with additional trees included located within the Melbourne Zoo and the University of Melbourne's Parkville campus. Trees on land managed by the City of Melbourne are not included, on the basis that trees that grow on City of Melbourne land are subject to careful regulation, planning, and management in line with council policies.

Criteria for the assessment of significance include both cultural heritage and natural values, though most trees included have recognised cultural heritage significance. Trees included in the register are listed in Schedule 2 to the Environmental Significance Overlay, and trees already located within a HO (and not on the VHR) are also individually listed in the Tree Controls column within the schedule to the HO.

In considering the effect of the ESO, affected land is defined as the Tree Protection Zone (TPZ) for each tree and this is included in the Table to ESO2. Works that do not require a permit under the provisions of ESO2 are listed in Cl. 42.01-3. Generally any works within a TPZ, subdivision, removal, destruction or lopping of a tree within the ESO, would require planning approval.

3.4.2.2 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.

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.

The policy for Settlement at Cl. 11.04-4 of the SPPF - Liveable communities and neighbourhoods - also makes reference to the need to consider and protect cultural heritage in planning for the Melbourne metropolitan area. One of the strategies identified is:

- Maintain central Melbourne's high quality parks and gardens, heritage places, conference and exhibition facilities, museums, concert halls and art galleries and other public buildings and high standards of urban design.

Under Cl. 10.04 - Integrated decision making - state policy also recognises that on occasions there would be a need to balance conflicting planning objectives 'in favour of net community benefit and sustainable development for the benefit of present and future generations'. This may be a factor of relevance in considering the impact of heritage loss identified in this report.

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. All of the LPPFs relevant to Melbourne Metro make reference to local municipal heritage studies, which generally contain place-specific citations and building or place gradings. Building or place gradings can reflect on the relative significance of individual buildings and places and recognise that they may contribute to the significance of a precinct at different levels.

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 Planning Practice Note *Applying the Heritage Overlay* (July 2015) 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' / 'individually significant' places can also be contributory to a precinct.

Clause 22.04 - Heritage Policy - in the Stonnington Planning Scheme also applies in the case of sites adjacent to sites included in the HO.

At Clause 22.04 - Heritage Policy - in the Port Phillip Planning Scheme, under New Development in Heritage Overlay Areas, consideration must be given to adjacent heritage place/s.

A summary of the LPPFs for heritage in the Melbourne, Port Phillip, Stonnington and Maribyrnong Planning Schemes is included at Appendix A of this report.

3.4.3 Policy implications for Melbourne Metro

The Melbourne Metro alignment passes through some of Melbourne's most well-known heritage areas, including the central city and inner northern and south-east suburbs. There is a large number of sites and extensive areas of land within the study area which are covered by HOs. These include site-specific HOs and HO precincts.

Planning permits are not required for heritage places subject to an incorporated document following the approval of an EES. This is with the note that places that are included in the VHR or VHI would still require permits and consents under the Heritage Act.

3.5 Other Standards and Guidelines

3.5.1 *The Burra Charter*

An industry standard which is most 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 referenced in the LPPF for heritage in the Melbourne Planning Scheme (Clause 22.04) and the Maribyrnong Planning Scheme (Clause 22.01).

3.5.2 *Conservation management plans*

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. A number of places within the study area have CMPs and these are relevant to consideration of potential impacts on the heritage values of these places. Other places do not have CMPs at present.

4.0 Methodology

4.1 Existing Conditions

The existing conditions assessment has been undertaken consistent with the scoping requirements which identify priorities for characterising the existing environment for historical heritage as follows:

- identification of sites on the Victorian Heritage Register or identified by Heritage Overlays in relevant planning schemes or otherwise documented as being of heritage significance, including as appropriate condition of listed structures that could be affected
- identification of sites or precincts of archaeological sensitivity for historical cultural heritage values including the need for investigations to supplement past studies, in the light of Heritage Victoria guidelines.

The process commenced with a desktop review of relevant heritage registers and lists, followed by site investigations.

4.1.1 Statutory listings and controls

The desktop review included a review of the current statutory listings and controls, as established under the following acts;

- EPBC Act 1999 (WHL, NHL, CHL)
- Heritage Act 1995 (VHR, VHI)
- Planning and Environment Act 1987 (including the SPPF and LPPFs and Heritage Overlays and associated schedules in the Melbourne, Port Phillip, Stonnington and Maribyrnong Planning Schemes).

Proposals for new heritage listings and controls were also considered, including current recommendations for additions to the VHR and exhibited planning scheme amendments.

4.1.2 Non-statutory listings

The National Trust of Australia (Victoria) register was consulted for particular sites. While it has no statutory weight, the register was reviewed to inform the potential for additional heritage places and to provide additional information if required.

The Register of the National Estate was originally established under the *Australian Heritage Commission Act 1975*. Under that Act, the Australian Heritage Commission entered more than 13,000 places in the register. Transferred to the Australian Heritage Council in 2004, it was frozen and exists as a non-statutory archive. The Register was reviewed to confirm there were no additional places of heritage interest that were not subject to statutory heritage controls.

4.1.3 Municipal, thematic and other studies

A range of municipal, thematic and other heritage studies were consulted in the preparation of this report.

These include municipal heritage studies for the cities of Melbourne, Port Phillip, Stonnington and Maribyrnong that address sites and locations in the study area.

Other key sources consulted include:

- City of Melbourne i-Heritage database (n.d.) and Melbourne Heritage Places Inventory (June 2015)
- Victorian Heritage Database, an online database containing information about local and state listed heritage places
- Lovell Chen, University of Melbourne Heritage Documentation (Main Campus Datasheets), 2010.

All sources consulted are listed at section 19.0 of this report.

CMPs for specific sites that could be affected by the project were also consulted and these are referenced in the report.

4.1.4 Site investigations

Field work was initially undertaken within the study area in May and June 2015. The sites within each of the station precincts were inspected and photographed from the public domain. The objective of the field work was to confirm the nature of heritage places within the precincts and likely heritage challenges and impacts that may arise as a result of the project.

More limited fieldwork was undertaken for the Melbourne Metro Tunnels precinct (Precinct 1), on the basis that for many areas within the precinct where the project is a tunnel at depth, the assumption was made that there is less likely to be a direct physical impact as a result of the project. In taking this approach, it was recognised there may still be vibration or ground settlement impacts over the tunnels at depth. It was also recognised that there might be specific sites where works would occur which are at or just below the surface and that additional site investigations would be required as part of impact assessment.

Additional fieldwork was undertaken in October and November 2015 in response to changes in the boundary of the study area as well as to revisit certain sites and areas along the proposed alignment to inform impact assessment. In a small number of cases, this additional fieldwork included obtaining access to the interiors and other parts of buildings and places concealed from the public domain in order to consider the implications of the project for the heritage values of these places (as part of impact assessment).

4.1.5 Mapping

Mapping has been prepared for places within the study area which are currently the subject of statutory heritage protection under the Heritage Act and the Planning and Environment Act. Refer to Appendices C-E of this report.

4.2 Risk Assessment Methodology

4.2.1 Overview

An Environmental Risk Assessment has been completed for impacts of Melbourne Metro. The risk-based approach is integral to the EES as required by Section 3.1 of the scoping requirements for the EES. Importantly, an environmental risk is different from an environmental impact. Risk is a function of the likelihood of an adverse event occurring and the consequence of the event. Impact relates to the outcome of an action in relation to values of a resource or sensitivity of a receptor. Benefits are considered in impact assessment but not in risk assessment. Impact assessment must be informed by risk assessment so that the level of action to manage an impact relates to the likelihood of an adverse impact occurring.

The overall risk assessment process adopted was based on AS/NZS ISO 31000:2009, as illustrated in Figure 3.

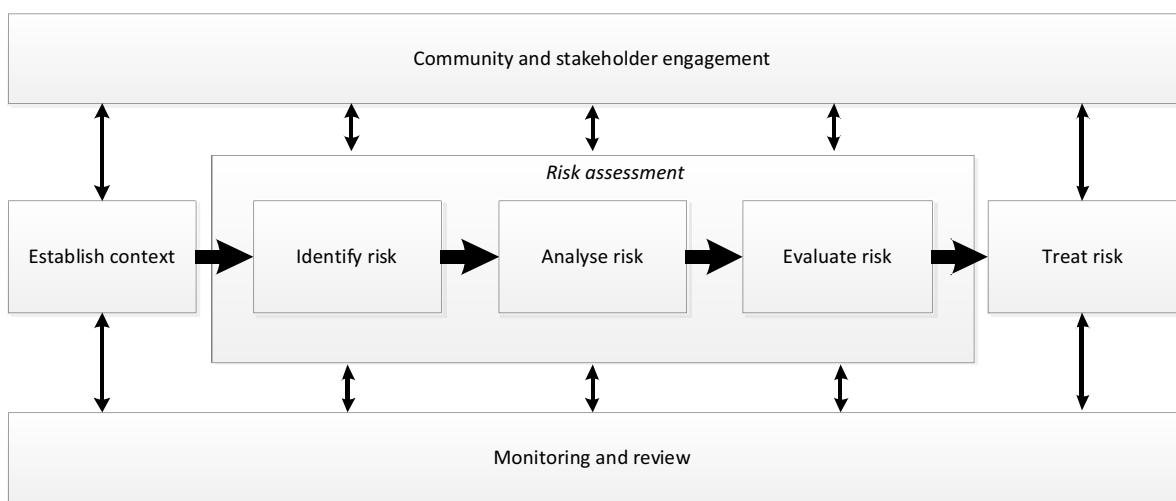


Figure 3 Overview of AS/NZS ISO 31000-2009 Risk Process

The following tasks were undertaken to determine the impact pathways and assess the risks:

- setting of the context for the environmental risk assessment
- development of consequence and likelihood frameworks and the risk assessment matrix
- review of project description and identification of impact assessment pathways by specialists in each relevant discipline area
- allocation of consequence and likelihood categories and determination of preliminary initial risks
- workshops with specialist team members from related discipline areas and focussing on very high, high and moderate initial risks to ensure a consistent approach to risk assessment and to identify possible interactions between discipline areas
- follow-up liaison with specialist team members and consolidation of the risk register.

A more detailed description of each step in the risk assessment process is provided in Technical Appendix B *Environmental Risk Assessment Report*.

4.2.2 Context

The overall context for the risk assessment and a specific context for each specialist study is described in Technical Appendix B *Environmental Risk Assessment Report*. The context describes the setting for evaluation of risks arising from Melbourne Metro. The specific context for the historical cultural heritage impact assessment follows:

The city and inner suburbs of Melbourne feature a large number of historical heritage places, including buildings, structures, heritage precincts, trees, landscapes and archaeological sites, many of which fall within the Melbourne Metro investigation area and could be affected by the construction of Melbourne Metro.

The Melbourne Metro alignment and station and portal ‘footprints’ have been located to minimise direct impact on heritage places. Potential impacts to heritage places will be managed in accordance with the Heritage Act 1995, Conservation Management Plans (where available) and applicable heritage related provisions of the planning schemes.

The likelihood rating criteria used in the risk assessment by all specialists is shown in Table 6.

Table 6 Likelihood rating criteria

Level	Description
Rare	The event is very unlikely to occur but may occur in exceptional circumstances.
Unlikely	The event may occur under unusual circumstances but is not expected.
Possible	The event may occur once within a 5 year timeframe.
Likely	The event is likely to occur several times within a 5 year timeframe.
Almost Certain	The event will occur one or more times a year.

The consequence criteria framework used in the risk assessment follows. Each specialist has used this framework to develop criteria specifically for their assessment.

Table 7 Consequence framework

Level	Qualitative description of biophysical / environmental consequence	Qualitative description of socio-economic consequence
Negligible	No detectable change in a local environmental setting.	No detectable impact on economic, cultural, recreational, aesthetic or social values.
Minor	Short term, reversible changes, within natural variability range, in a local environmental setting.	Short term, localised impact on economic, cultural, recreational, aesthetic or social values.
Moderate	Long term but limited changes to local environmental setting that are able to be managed.	Significant and/or long term change in quality of economic, cultural, recreational, aesthetic or social values in local setting. Limited impacts at regional level.
Major	Long term, significant changes resulting in risks to human health and/or the environment beyond the local environmental setting.	Significant, long term change in quality of economic, cultural, recreational, aesthetic or social values at local, regional and State levels. Limited impacts at national level.

Level	Qualitative description of biophysical / environmental consequence	Qualitative description of socio-economic consequence
Severe	Irreversible, significant changes resulting in widespread risks to human health and/or the environment at a regional scale or broader.	Significant, permanent impact on regional economy and/or irreversible changes to cultural, recreational, aesthetic or social values at regional, State and national levels.

The consequence rating criteria used in the risk assessment specifically for the Historical Heritage study is shown in the table below. The consequence rating criteria intentionally focus on heritage values rather than seeking to describe specific actions, activities and works that may have an impact on those values. It is acknowledged that a variety of actions (including demolition, removal, relocation, reconstruction, disturbance, alteration, new development and others) may have the potential to have an impact on the heritage values of a heritage place or object. The severity of the consequence of any particular action or combination of actions can be measured in terms of the impact on the heritage values and this is reflected in the criteria.

It is noted that in the development and application of the consequence criteria, it has been assumed that all archaeological sites are of at least local significance. This is a precautionary approach recognising that the significance is in most cases unknown.

Table 8 Consequence rating criteria

Level of consequence	Consequence criteria
Negligible	No detectable impact on the values of a heritage place or heritage object.
Minor	<p>Detectable impact on the heritage values of a heritage place or object of local significance with limited reduction in those heritage values.</p> <p>Detectable impact on the heritage values of a heritage place or heritage object of State, Commonwealth or National significance but with heritage values overall retained intact.</p>
Moderate	<p>Complete loss of the heritage values of a heritage place or heritage object of local significance and which may be subject to a site-specific HO, or loss of the heritage values of several contributory places within an HO precinct but with the precinct heritage values retained substantially intact.</p> <p>Loss of the heritage values of an archaeological site or sites not included in the VHR (included in the VHI or previously unknown).</p> <p>Partial reduction in the heritage values of a heritage place or object of State, Commonwealth or National significance</p>
Major	<p>Loss of the heritage values of several heritage places which are included within a heritage precinct resulting in substantial reduction or complete loss of the heritage values of the precinct.</p> <p>Substantial reduction in the heritage values of a heritage place or object of State, Commonwealth or National significance</p>
Severe	Complete loss of heritage values of a heritage place or object of State, Commonwealth or National significance.

The environmental risk assessment matrix used by all specialists to determine levels of risk from the likelihood and consequence ratings is shown in Table 1.

Table 9 Risk Matrix

		Consequence rating				
		Negligible	Minor	Moderate	Major	Severe
Likelihood rating	Rare	Very Low	Very Low	Low	Medium	Medium
	Unlikely	Very Low	Low	Low	Medium	High
	Possible	Low	Low	Medium	High	High
	Likely	Low	Medium	Medium	High	Very High
	Almost Certain	Low	Medium	High	Very High	Very High

Section 5 provides a summary of the historical heritage risks assessed as part of the EES.

4.3 Impact Assessment Assumptions

The following assumptions apply to this assessment:

Assumption	Description
Further heritage advice	The design of permanent infrastructure where this interfaces with heritage places would be developed with further heritage advice and input (consistent with Environmental Performance Requirement (EPR) CH2)
Construction vibration and ground settlement	The potential for construction vibration and ground settlement to cause damage or otherwise impact on heritage places is referenced in this report but it is assumed these risks can be addressed through the EPRs developed by technical specialists for noise and vibration and ground movement and land stability.

4.4 Stakeholder Engagement

As part of this assessment, the following engagement with stakeholders was undertaken:

Table 10 Summary of stakeholder engagement

Activity	When	Matters discussed / issues raised	Consultation outcomes
Design team for the project	Through the period of EES preparation	A range of heritage issues were discussed as these were identified by the design team and advice was provided on a number of these	Design refinements have occurred as an outcome of this ongoing engagement.
Heritage Victoria	Regular meetings throughout impact assessment phase	<p>Approach to impact assessment for heritage places in the EES.</p> <p>Approach to the management of historical archaeology.</p> <p>Discussion of various locations/heritage places where impacts may occur and the issues that may arise.</p>	<p>Confirmation of requirements for impact assessment in relation to archaeological sites. A single archaeological management plan could be prepared for a group of co-located VHI sites in the central city on the basis they have commonalities in terms of development history and archaeological potential.</p> <p>Heritage Victoria also advised of places within the study area which are the subject of current recommendations for the amendment of the VHR.</p> <p>Some feedback was provided on key issues and impacts posed by the proposed project.</p>
City of Melbourne	November-December 2015	Approach to mitigation of landscape impacts (identification of applicable Council policies and strategies).	<p>The consultants gained a better appreciation of the relevant council policies and strategies and strategic planning work currently under way for heritage places under its management, specifically the Domain Parklands CMP and masterplan projects.</p> <p>Information regarding current management of Domain Parklands, Fawkner Park, St Kilda Road and Royal Parade was provided.</p> <p>It was confirmed that mitigation (reinstatement of landscape) would need to be undertaken in consultation with the City of Melbourne and consistent with its plans for particular assets.</p>
City of Melbourne	November 2015	Potential relocation of the Burke and Wills Monument, located in the City Square.	Information was provided by Council officers on previous relocation and conservation works to the monument.

Activity	When	Matters discussed / issues raised	Consultation outcomes
			Further feedback was provided to MMRA by Council officers in relation to the location of the monument.
City of Port Phillip	November 2015	South African Soldiers Memorial and the likely need for a CMP for this. Council signalled its intention to commission this.	The CMP would be a valuable source of further detailed information on the registered memorial and would be an important input to detailed design.
City of Stonnington	December 2015	Confirmation in relation to current and proposed heritage assessment (strategic planning) projects.	
Shrine of Remembrance	November 2015	Approach to reinstatement of landscape and management of dedicated trees. Issues and impacts related to the station entry within the Shrine Reserve.	The consultants confirmed that mitigation would need to be undertaken in consultation with the Shrine of Remembrance and its Trustees.
National Trust of Australia (Victoria) and Melbourne Heritage Action	January 2016	Overview of Melbourne Metro, status of planning and design work and discussion of key heritage matters along the alignment.	The National Trust of Australia (Victoria) representatives noted potential sensitivities and identified areas where additional information would be beneficial.
City of Port Phillip	January 2016	Ongoing discussion regarding the proposed relocation of the South African Soldiers Memorial.	Council officers provided feedback on a range of issues relevant to the site and advised that a CMP for the site was likely to be commissioned.

In addition to the specific agency and Technical Reference Group (TRG) engagement and the engagement listed in the table above, general engagement and consultation with the community was also conducted as part of this assessment. Written feedback was obtained through feedback forms and the online engagement platform, and face-to-face consultation occurred at the drop-in sessions (refer to Technical Appendix C *Community and Stakeholder Feedback Summary Report* for further information). A heritage specialist attended the drop-in sessions at Domain and the CBD to answer questions related to heritage issues.

The comments and feedback received have been valuable in understanding the values related to historical places and the importance placed on certain areas.

4.5 Limitations

The limitations associated with this assessment are as follows:

- The assessment was based on the Concept Design and the associated alternative design options. This report would require updating if any design changes, additional information or design development comes to hand or occurs.

- The impact assessment is based on statutory controls and policy frameworks as they exist or are proposed at the time of writing.
- Only limited information is available in the Concept Design documentation for the design of the individual stations and other permanent infrastructure including the physical impact on heritage places where these are to be altered.
- There may be a need for ground improvement works which are not well defined in the Concept Design and these have the potential to have heritage impacts.
- Only limited additional historical research was undertaken to inform impact assessment. The approach was to rely on existing reports and heritage assessments (including CMPs where these exist). Additional historical research was undertaken for:
 - Sites and areas of historical archaeological potential (including existing VHI sites and additional sites and areas where there might be archaeological potential)
 - Specified individual sites where it was considered additional information was required to inform impact assessment
- Site inspections were generally undertaken from the public domain.
- The Scoping Requirements include a reference to the ‘condition of listed structures’, however an assessment of the condition of listed structures is outside the scope of this study. Condition assessments would be required as an integral part of the measures developed to assess and avoid the risk of damage to heritage buildings and places as a consequence of construction vibration and ground settlement. Refer to Technical Appendix I, *Noise and Vibration* and Technical Appendix P *Ground Movement and Land Stability*. It would be considered premature to undertake detailed condition assessments at this stage of the project, rather, they would be undertaken as part of detailed design and construction planning. Refer to EPR CH3 and to the findings of Technical Appendices I and P.
- The report should be read in association with Technical Appendix E *Land Use and Planning*, Technical Appendix I *Noise and Vibration*, Technical Appendix P *Ground Movement and Land Stability*, and Technical Appendix R and S *Arboriculture*.

5.0 Risk Assessment

Table 11 presents the historical cultural heritage risks associated with the project, based on a precinct basis. The environmental risk assessment methodology is outlined in Section 4.2.

As a result of the risk assessment, project-specific performance requirements ('Environmental Performance Requirements') have been proposed to reduce risks and hence determine the 'Residual Risk Rating'. The Environmental Performance Requirements are outlined in the following sections of the impact assessment and collated in Section 27. All Environmental Performance Requirements are incorporated into the Environmental Management Framework for the project (Chapter 23).

For further details refer to Technical Appendix B *Environmental Risk Assessment Report* which includes the full Risk Register, with existing performance requirements and EPRs assigned to each risk.

Table 11 Risk Register for impact assessment

Impact pathway		Precinct	Initial risk			Residual risk			Risk no.
Category	Event		Consequence	Likelihood	Risk	Consequence	Likelihood	Risk	
Subsurface disturbance	Damage or destruction of site of archaeological significance not identified and not included in VHI	All	Moderate	Possible	Medium	Minor	Possible	Low	HH01
Subsurface disturbance	Damage or destruction of site of archaeological significance included in the VHI	All	Moderate	Almost Certain	High	Minor	Almost Certain	Medium	HH02
Vibration associated with construction and/or ground movement as a result of construction	Damage to heritage buildings or structures	All	Minor	Possible	Low	Minor	Possible	Low	HH03
Ground improvement works (CityLink tunnels crossing – above City Link tunnels)	Loss of trees, potential to constrain future landscape reinstatement works, potential impact on significant memorials within the Domain Parklands (VHR H2304), Boer War Memorial (VHR H0382), Marquis of Linlithgow Memorial (VHR H0366)	1 - Tunnels	Major	Likely	High	Moderate	Likely	Medium	HH04
Emergency access shaft and associated construction work site - Queen Victoria Gardens (Concept Design)	Loss of trees, visual impact of new structure within the Domain Parklands (VHR H2304)	1 - Tunnels	Minor	Almost Certain	Medium	Minor	Almost Certain	Medium	HH05

Impact pathway		Precinct	Initial risk			Residual risk			Risk no.
Category	Event		Consequence	Likelihood	Risk	Consequence	Likelihood	Risk	
Emergency access shaft and associated construction work site – Tom’s Block within Alexandra Park	Tree removal, visual impact of new structure within park, access may disrupt significant elm row within the Domain Parklands (VHR H2304)	1 - Tunnels	Minor	Almost Certain	Medium	Minor	Almost Certain	Medium	HH06
TBM Southern Launch site: located in Fawkner Park open space and tennis courts	Tree removal within Fawkner Park (within HO6)	1 - Tunnels	Minor	Almost Certain	Medium	Minor	Almost Certain	Medium	HH07
Emergency access shaft – Fawkner Park north-east location (Concept Design)	Tree removal and visual impact of permanent structure within Fawkner Park (within HO6)	1 - Tunnels	Minor	Almost Certain	Medium	Minor	Almost Certain	Medium	HH08
Emergency access shaft – Fawkner Park location of the Fawkner Park TBM launch site (alternative design options to the Concept Design)	Visual impact of permanent structure within Fawkner Park (within HO6)	1 - Tunnels	Minor	Almost Certain	Medium	Minor	Almost Certain	Medium	HH09
Operations within the western portal construction work site	In Concept Design, demolition of four (4) graded buildings in Childers Street and Ormond Street, Kensington (within HO9) Adverse impact on local heritage precinct	2 - Western portal	Moderate	Almost Certain	High	Moderate	Almost Certain	High	HH10
	In the alternative design option, demolition of one (1) ungraded building in Ormond Street, Kensington (within HO9). s	2 - Western portal	Negligible	Almost Certain	Low	Negligible	Almost Certain	Low	HH11

Impact pathway		Precinct	Initial risk			Residual risk			Risk no.
Category	Event		Consequence	Likelihood	Risk	Consequence	Likelihood	Risk	
	Potential impact on locally significant place, Kensington Glue Works complex (HO239)	2 - Western portal	Minor	Possible	Low	Negligible	Almost Certain	Low	HH12
Construction work site - VicTrack lease and private property acquisition and demolition at Laurens Street and construction of Arden station	Demolition of buildings in the proposed Railway Reserve Precinct (proposed HO1093) Complete loss of a locally significant heritage place	3 - Arden station	Moderate	Almost Certain	High	Moderate	Almost Certain	High	HH13
Substation associated with Arden station	Demolition of existing pumping station – part of the proposed Moonee Ponds Creek and Infrastructure Precinct (proposed HO1092)	3 - Arden station	Minor	Possible	Low	Minor	Unlikely	Low	HH14
Station box under Grattan Street, to the east of Royal Parade (option 3)	Removal and reinstatement of four (4) trees in Royal Parade (VHR H2198)	4 - Parkville station	Minor	Almost Certain	Medium	Minor	Almost Certain	Medium	HH15
Road functional layout of Royal Parade	Removal and reinstatement of six (6) trees in Royal Parade (VHR H2198) and permanent changes to medians, replanted trees in proximate locations	4 - Parkville station	Minor	Almost Certain	Medium	Minor	Almost Certain	Medium	HH16
Station box under Grattan Street, to the east of Royal Parade (option 3)	Physical impact on University of Melbourne Main Entrance Gate (Gate 6) Pillars and Fence (VHR H918)– potential to dismantle and reconstruct	4 - Parkville station	Moderate	Almost Certain	High	Minor	Almost Certain	Medium	HH17

Impact pathway		Precinct	Initial risk			Residual risk			Risk no.
Category	Event		Consequence	Likelihood	Risk	Consequence	Likelihood	Risk	
Station box under Grattan Street, to the east of Royal Parade (option 3)	Potential visual impact on Gatekeeper's cottage (VHR H919) and Vice-Chancellor's House (VHR H1003)	4 - Parkville station	Minor	Likely	Medium	Negligible	Possible	Low	HH18
Station box under Grattan Street, to the east of Royal Parade (option 3)	Potential removal of remnant bluestone pillar and cast iron fencing at the corner of Grattan Street and Royal Parade (no statutory controls)	4 - Parkville station	Minor	Likely	Medium	Negligible	Possible	Low	HH19
Permanent above ground infrastructure within HO1 (Carlton Precinct) at Barry and Grattan Streets	Visual impact of new structures in proximity to heritage buildings	4 - Parkville station	Minor	Possible	Low	Minor	Possible	Low	HH20
Station located under Swanston Street, between Franklin and LaTrobe streets	Visual impact on City Baths (VHR H0466) of new station entry in Franklin Street	5 - CBD North station	Moderate	Almost Certain	High	Minor	Almost Certain	Medium	HH21
Flinders Street entrance including Port Phillip Arcade with underground connection to Flinders Street station (Option 2).	Loss of significant fabric and impact of new works on Flinders Street Railway Station (VHR H1083)	6 - CBD South station	Moderate	Almost Certain	High	Minor	Almost Certain	Medium	HH22
Collins Street entrance at City Square Flinders Street entrance including Port Phillip Arcade with underground connection to Flinders Street station (Option 2).	Demolition of five graded buildings in Flinders Gate Precinct (HO505)	6 - CBD South station	Moderate	Almost Certain	High	Moderate	Almost Certain	High	HH23

Impact pathway		Precinct	Initial risk			Residual risk			Risk no.
Category	Event		Consequence	Likelihood	Risk	Consequence	Likelihood	Risk	
Collins Street entrance at City Square (may include 65 and 67 Swanston Street) Flinders Street entrance including Port Phillip Arcade with underground connection to Flinders Street station (Option 2).	New development in Flinders Gate Precinct (HO505) may have an adverse visual impact on the precinct and registered buildings in it including Young and Jackson's Hotel	6 - CBD South station	Moderate	Likely	Medium	Minor	Likely	Medium	HH24
Collins Street entrance at City Square (may include 65 and 67 Swanston Street)	Relocation of Burke and Wills statue (within HO505)	6 - CBD South station	Minor	Almost Certain	Medium	Minor	Almost certain	Medium	HH25
Station located under St Kilda Road, adjacent to Albert and Domain Roads	Detrimental visual impact of entry in Shrine Reserve (Shrine of Remembrance, VHR H0848)	7 - Domain station	Minor	Almost Certain	Medium	Minor	Almost Certain	Medium	HH26
	Relocation of South African Soldiers Memorial (VHR H1374) and loss of trees with adverse impact on setting and presentation.	7 - Domain station	Major	Almost Certain	Very High	Moderate	Almost Certain	High	HH27
Construction work site with or without TBM launch site	Tree loss in St Kilda Road (not listed but of state significance) for construction work site, trees to be replanted consistent with road functional layout	7 - Domain station	Moderate	Almost Certain	High	Minor	Almost Certain	Medium	HH28
	Tree loss and other impacts in Shrine Reserve (Shrine of Remembrance, VHR H0848)	7 - Domain station	Minor	Almost Certain	Medium	Minor	Almost Certain	Medium	HH29

Impact pathway		Precinct	Initial risk			Residual risk			Risk no.
Category	Event		Consequence	Likelihood	Risk	Consequence	Likelihood	Risk	
	Tree loss and other impacts in Domain Parklands (VHR H2304), Edmund Herring Oval	7- Domain station	Negligible	Almost Certain	Low	Negligible	Almost Certain	Low	HH30
	Potential relocation and reinstatement of Tram Shelter (VHR H1869)	7- Domain station	Moderate	Possible	Medium	Minor	Possible	Low	HH31
Construction of portal, cut and cover construction works, works activities on the construction work site to the eastern portal (South Yarra)	Potential impact of works within the railway reserve and changes to elements which contribute to the Toorak Road precinct (HO150) (Lovers Walk, railway cutting, South Yarra Sidings reserve) potential. Impact on heritage values associated with the precinct.	8 - Eastern portal	Minor	Almost Certain	Medium	Minor	Almost Certain	Medium	HH32
Early works (services and tram relocation)	Works could have an impact on significant trees	All	Moderate	Possible	Medium	Minor	Rare	Very Low	HH33
Early works (services and tram relocation)	Works could have an impact on significant buildings, structures or places	All	Moderate	Possible	Medium	Minor	Rare	Very Low	HH34
Construction of the western turnback	Possible demolition of Cross Street Electrical Substation (HO192) included within construction work site	9 - Western turnback	Major	Possible	High	Moderate	Unlikely	Low	HH35

6.0 Project-wide Issues

6.1 Project Components

There are two issues that can be considered on a whole-of-project basis:

Historical archaeology: the identification of archaeological potential and the management of archaeological impacts.

Vibration and ground movement:

- the potential for impacts to heritage places through vibration associated with construction, or vibration associated with operation of the rail system following construction
- the potential for impacts to heritage places through ground movement at construction stage and/or the operational stage.

For both construction and operation, vibration and ground movement assessments were undertaken to estimate the potential for an event that may result in damage to fabric which contributes to the significance of the affected heritage place. In the case of vibration, the event may relate to the construction and/or the operational phase, while a ground movement event is most likely to occur in the construction phase, albeit that post-construction incremental change may also be a consideration. Both matters are the subject of specialist technical reports:

- Technical Appendix I *Noise and Vibration*
- Technical Appendix P *Ground Movement and Land Stability*

Both of these assessments address the project as a whole.

In the assessment of both construction and operational vibrations, relevant standards and/or guidelines commonly adopted in such assessment processes have been applied. In the case of vibration and damage to buildings the German DIN 4150 standard has been used and in particular DIN 4150-3 Structural Vibration Part 3: Effects of Vibration on Structures (DIN 4150). This has been adopted ahead of the less conservative British Standard BS 7358 Evaluation and Measurement for Vibration in Buildings Part 2 (BS 7358).

In the case of ground settlement the assessment is based on a modelling process. This was informed by initial geological analysis to determine the geological and hydrogeological setting combined with consideration of structural type, current condition and the potential for differential settlement across the structure.

In both assessments the conclusions drawn are based on certain construction techniques being adopted and in certain cases note that actions to mitigate impacts may require a variation to these techniques.

6.1.1 Infrastructure (Concept Design and Alternative Design Options)

No heritage impact issues arise in relation to the permanent infrastructure as a consequence of the above issues.

6.1.2 Construction (Concept Design and Alternative Design Options)

There is the potential for adverse impacts on historical archaeological sites during construction. This includes both sites listed on the VHI and sites which have unknown heritage value at this time (unidentified archaeological sites).

There would also be the potential for damage to heritage places, including sites, buildings and structures, as a consequence of vibration and ground movement associated with construction works, including tunnelling works and other construction works.

6.1.3 Operation (Concept Design and Alternative Design Options)

There would be the potential for damage to heritage places as a consequence of operational vibration.

6.2 Impact Assessment

The following draft EES evaluation objectives and assessment criteria (and indicators where relevant) are relevant to this assessment.

Draft EES evaluation objectives	Assessment criteria
Cultural Heritage – To avoid or minimise adverse effects on Aboriginal and historical cultural heritage values	Avoid or minimise impacts on Aboriginal cultural heritage values and places
	Avoid or minimise impacts on historical cultural heritage values and places

The project is generally consistent with the draft EES evaluation objective to avoid or minimise impacts on post-settlement cultural heritage values and places as:

- historical archaeological impacts can be mitigated by the realisation of the research potential of the affected sites through appropriate management techniques
- the risk of damage to heritage buildings and structures through construction vibration and ground movement is to be managed through specification of appropriate construction methods and controls, and structural assessments and monitoring prior and during works
- the risk of damage to heritage buildings and structures as a result of operational vibration has been assessed as negligible.

6.2.1 Historical archaeology

A considerable number of sites within the study area (but particularly in the Melbourne CBD) have identified archaeological values and are included in the VHI on this basis. These are referenced in the precinct descriptions.

By their very nature, archaeological sites are concealed and many are unknown. There are likely to be other places within the study area that have archaeological potential and may be of significance but have not been included in the VHI.

All historical archaeological sites over 50 years in age (even if not included in the VHI) are protected under the Heritage Act. On this basis preliminary predictive archaeological modelling has been undertaken for particular locations/sites within the study area which were considered to have some archaeological potential. The objective in undertaking this predictive modelling work is to identify sites which may warrant inclusion in the VHI and to allow for their management consistent with their archaeological values. The results of this work are set out in the Predictive Archaeological Assessment at Appendix B and summarised in the precinct descriptions. The predictive archaeological assessment included the identification of additional sites/locations which are considered potentially to have significant archaeological values and thereby suitable for inclusion in the VHI.

The additional sites are as follows:

- Brick stormwater drain, Laurens Street, North Melbourne (within Arden station precinct)
- City Ford archaeological area, Elizabeth Street, Melbourne (within Parkville station precinct)
- Fawkner Park, Toorak Road, South Yarra (within Tunnels precinct)
- St Kilda Road road reserve archaeological area, Melbourne (within Domain station precinct)

Site cards were prepared for these sites and submitted to Heritage Victoria (HV). Three of the four sites have been included in the VHI as a result. One site, the brick stormwater drain, was assessed by HV as not warranting inclusion in the VHI.

Archaeological investigation is inherently valuable in that it can inform historical research and knowledge of past practices and patterns of development. While the preference is for archaeological

sites to remain intact, providing the process of disturbance is appropriately managed, the values themselves, as related to research and the ability to inform, are not necessarily lost. In this way, any adverse impact on these sites and values could be mitigated.

For sites that are identified as being of historical archaeological significance and included in the VHI, requirements have been set out for the preparation of more detailed archaeological management plans consistent with Heritage Victoria's requirements. These plans would include recommendations for investigation and monitoring as part of the works. Sites and areas which require the preparation of archaeological management plans are identified for each precinct.

Even beyond the predictive modelling undertaken as part of this assessment, there may be further sites or artefacts which may be uncovered in the course of works. On this basis, a protocol has also been developed setting out requirements for stop work, protection, reporting and management of any such sites or artefacts consistent with their archaeological values.

For any archaeological sites or artefacts revealed or discovered during construction, the following measure would be implemented:

- stop any activity which may impact on the discovery
- ensure that other people working in the area are aware of it and have also stopped work in the area
- protect the artefact, or site feature(s) by, for example, erecting temporary fencing or other suitable enclosure
- consult with a qualified cultural heritage consultant to determine the appropriate course of action
- advise Heritage Victoria where the discovery was made and provide a description or photograph of the discovery
- determine how to manage the find through consultation with Heritage Victoria, in consultation with the onsite heritage consultant
- obtain the necessary Consent under the Heritage Act, or other necessary approvals to protect, recover or remove the find.

6.2.2 Construction or operational vibration

The following discussion addresses the assessments and conclusions of the Technical Appendix I noise and vibration assessment as relevant to heritage places only.

6.2.2.1 Construction vibration

The issues of vibration impacts and ground movement impacts, and the potential for these to impact on properties and buildings, including heritage buildings, are identified in the EES Objectives and the associated Scoping Requirements for both Amenity and Land Stability. As relevant to vibration the draft amenity evaluation objective is, 'To minimise adverse noise or vibration effects on the amenity of nearby residents and local communities, as far as practicable, especially during construction'. Under the associated scoping requirements, the key issue is the 'Generation of airborne or ground-borne vibrations which could adversely affect amenity of residential or other sensitive premises'. Under the consideration of 'Design and mitigation measures' and the 'Assessment of likely effects', the focus is on the identification of measures to control vibrations and the analysis of the potential for vibrations to cause disturbance, including as related to cultural heritage values.

The vibration assessment identifies two potential sources of vibration damage: tunnelling and additional construction works. As a general qualifying statement the report notes that:

It is important to note that vibration predictions can be inaccurate at distances of less than 5 metres. As such it is recommended that vibration monitoring is

conducted whenever equipment is operated within 5 metres of a building. This applies to rippers, rock breakers and piling rigs.

As related to heritage buildings within the individual precincts the report's assessment of the Concept Design concludes as follows:

Precinct 4: Parkville station

Tunnelling: there are no exceedances of the heritage buildings vibration criteria.

Additional construction works: there are no exceedances of the heritage vibration criteria.

The report further notes that if blasting is used to create the station box, the Gatekeeper's Cottage (VHR H0919) at the University of Melbourne may be vulnerable and a survey and assessment is recommended prior to works occurring to determine the risk of damage. Blasting may be restricted to in the order of half the excavation area if there is risk of damage.

Precinct 5: CBD North station

Tunnelling: there are no exceedances of the heritage buildings vibration criteria, assuming road header excavation of the station cavern.

Additional construction activity: there are no exceedances of the heritage buildings vibration criteria with three specific exceptions

- Cyclone Wire Fence Co. (63-67 Franklin Street, HO1042)
- Oxford Hotel (427- 433 Swanston Street, Melbourne, HO1085)
- 411-423 Swanston Street (HO1084)

The expectation is that in these cases construction techniques and proximity of construction to the individual buildings may result in exceedance of the heritage building vibration criteria. In all cases it is recommended that survey and monitoring occur to enable construction methodologies to be varied if required to manage the exceedances.

Precinct 6: CBD South station

Tunnelling: there are no exceedances of the heritage buildings vibration criteria.

Additional construction activity: there are no exceedances of the heritage buildings vibration criteria with six specific exceptions:

- Nicholas Building (VHR H2119)
- Young and Jackson's Princes Bridge Hotel (VHR H0708)
- Ross House (VHR H0627)
- Flinders Street Railway Station Complex (VHR H1083)
- Some buildings that comprise the Flinders Gate Precinct (HO505)
- Some buildings that comprise the Block Precinct (HO505)

The expectation is that in these cases, construction techniques and proximity of construction to the individual buildings may result in exceedance of the heritage building vibration criteria. In all cases it is recommended that survey and monitoring occur to enable construction methodologies to be varied if required to manage the exceedances.

Remaining precincts

In all other precincts the assessment determined that vibration levels associated with tunnelling and additional construction works are predicted to comply with DIN 4150 Guideline Targets for structural damage.

Victoria Barracks

As directly related to the issue of construction vibration, in the case of the Commonwealth Heritage listed Victoria Barracks, the Commonwealth Minister for the Environment determined on 22 September 2015 that Melbourne Metro is 'not a controlled action if undertaken in a particular manner'. The prescribed manner is as follows:

The following measures must be taken into avoid significant impacts on:

- Commonwealth land (sections 26 and 27A)
- To mitigate potential impacts to Commonwealth land, the person taking the action must implement the following vibration monitoring and measuring approach:
 - A Conduct preconstruction dilapidation surveys of the **nearest** Commonwealth Heritage listed structures to the proposed action, including the **Former Guardhouse (B Block)**, to record structural condition and structural integrity prior to **commencement of tunnelling**;
 - B Conduct vibration monitoring at the **commencement of tunnelling** in geological conditions that are similar to those at **Victoria Barracks** in order to quantify the actual tunnel boring machine vibration characteristics (level and frequency) for comparison to the values derived from **the literature** and the **German DIN target**;
 - C Conduct continuous vibration monitoring at the **nearest Victoria Barracks** heritage structures to the proposed action, including the **Former Guardhouse (B Block)**, to assess the actual tunnelling vibrations for acceptability, taking into account both the vibration frequency and condition of structures, until monitoring of vibration at **the Former Guardhouse (B Block)** shows measurements equivalent to preconstruction vibration readings at the Former Guardhouse (B Block);
 - D If monitoring conducted according to Particular Manner C demonstrates the condition of heritage structures may be degraded as a result of vibration, ground vibration must be reduced by adjusting the advance rate of the tunnel boring machine until monitoring of vibration at the **Former Guardhouse (B Block)** shows consistent measurements equivalent to preconstruction vibration readings at the **Former Guardhouse (B Block)**.

In relation to Victoria Barracks the noise and vibration impact assessment report notes, 'The vibration level predicted at this site is 0.4 mm/s which is well below the Guidelines Target for this location and also below the existing vibration level measured at the Victoria Barracks of 0.6 mm/s.'

6.2.2.2 Operational vibration

Technical Appendix I *Noise and Vibration* concludes that there would be no risk of damage as a result of operational vibration. Compliance with project criteria for vibration (human comfort) and ground-borne noise, is predicted with the installation of track vibration isolation. Compliance with the criteria for vibration (human comfort) infers compliance with the criteria for building damage as it is less onerous. Refer to the Executive Summary in Technical Appendix I.

6.2.2.3 Environmental Performance Requirements for noise and vibration

A series of Environmental Performance Requirements developed as part of the noise and vibration assessment are relevant to the assessment and management of potential impacts on heritage buildings.

These include NV2 (sets out the requirements for Victoria Barracks), NV5 (establishes guideline targets to prevent damage), NV6 (requires condition assessments and monitoring during construction), and NV11 (relates to the use of blasting techniques).

6.2.3 Ground movement

In the case of ground movement, the relevant draft evaluation objective in the EES is 'Land Stability – To avoid or minimise adverse effects on land stability that might arise directly or indirectly from project works'. The relevant EES scoping requirements note that the key issue is the 'Potential for project works to cause or lead to reduced ground stability, which could adversely affect properties, structures or other values'.

The following discussion addresses the assessments and conclusions of the Technical Appendix P *Ground Movement and Land Stability* as relevant to heritage places only.

As in the case of any large tunnelling project, the potential for ground movement exists where excavations would be undertaken as part of Melbourne Metro works. The assessment undertook to estimate the potential extents and magnitude of ground movements resulting from Melbourne Metro works and estimate any subsequent impacts to existing structures and infrastructure including buildings and structures of heritage value.

Ground Movement contour maps were developed to estimate the extents of the Potential Zone of Influence in relation to ground movement. The Potential Zone of Influence relating to ground movement is defined by:

- The estimated 5 mm *excavation induced* ground settlement contours and
- The estimated *primary consolidation settlement* where estimated consolidation settlement is 10 mm or greater (Technical Appendix P, section 6.3).

Excavation induced ground settlement contours are based on predictions of ground settlement caused by underground (tunnelling and cavern excavation) and open cut works such as shafts and station boxes (Technical Appendix P, sections 4.4.2-4.4.2) These areas are shown on the plans at Appendix C to Technical Appendix P.

Primary consolidation may occur in softer soils due to groundwater drawdown or new embankment loading. Zones of interest for primary consolidation occur where compressible soils are found locally to the proposed alignment, not necessarily overlying the project alignment (Technical Appendix P, section 4.4.3). The extents and estimated magnitudes of primary consolidation settlement contours are shown on the plans in Appendix D to Technical Appendix P).

Properties, structures and utilities located within the Potential Zone of Influence are considered 'at risk' and require an assessment of potential impacts resulting from the proposed works.

Individual impacts of settlement on all structures, utilities and infrastructure were not assessed, and this would occur during detailed design prior to construction. A representative sample of buildings, structures and utilities were assessed across the alignment with varying geological settings, construction types and proximities to the proposed works. All VHR listed buildings were assessed and the results are presented in the Technical Appendix P report.

6.2.3.1 Results

Preliminary impact assessments were undertaken for a series of identified building typologies at particular locations within the Potential Zone of Influence.

The results of the preliminary assessment for selected building types are presented in Tables 8-1 and 8-2 in Section 8 of the Technical Appendix P. Estimated impacts were generally found to be Negligible or Minor with a small number of Minor-Moderate or Moderate impacts. Potential mitigation measures are listed where the potential impact is estimated to be moderate or worse.

Most relevant for this historical heritage assessment, the results of the preliminary assessment for selected heritage buildings are presented at section 8.2 of Technical Assessment P and in Table 8-3 of the report. For the heritage buildings assessed, the estimated impacts were generally found to be Negligible or Minor. At these levels, the predicted damage was likely to be fine cracks with widths up to 0.1 mm (Negligible) or 1 mm. The one exception was the Franklyn House Flats (HO447) in the eastern portal precinct, where the estimated impact was somewhat greater (typical crack widths to 5 mm), albeit still within the 'Minor' range as defined in the Evaluation criteria and impact ratings at (section 5.4.4, Technical Appendix P).

In commenting on mitigation or protective measures the report notes that, 'In the event that mitigation measures are not considered to reduce risk of asset damage to acceptable levels, protective measures could be recommended for an asset. For difficult or severe cases, these could include underpinning or structural strengthening. Ground improvement by way of construction of pipe roof canopy at the TBM receival point at the eastern portal is also identified as a means of improving ground mass strength (Technical Appendix P, section 6.5.1).

The ground movement assessment notes the need for further work in detailed design, including additional studies, development of acceptability criteria, ground movement monitoring (baseline, pre-construction, construction phase and close-out monitoring) and pre-construction condition surveys. Ground movement and ground movement impact assessments would be undertaken at detailed design stage to incorporate the detailed design scheme and any changes to the project alignment that might evolve at that state. Additional measures to limit ground movement and its effects would be designed at that stage (Technical Appendix P, section 11).

The assessment of potential impacts to heritage structures due to ground movement are likely to include the following considerations:

- The sensitivity of the building/structure to ground movements and its ability to tolerate movement without significant distress
- The potential for interaction with adjacent buildings/structures
- The sensitivity of movement of particular features within structures and how they might respond to ground movements
- The current condition of the structure, as determined from a pre-construction condition survey which may increase the vulnerability rating of the asset. Therefore a structural survey is required to determine the structural condition of the buildings and also, to confirm as built details which are typically an analysis input (Technical Appendix P, section 5.3.3).

6.2.3.2 Environmental Performance Requirements for ground movement

The Environmental Performance Requirements identified in the ground movement assessment set out the means through which the objective is to be achieved (to avoid or minimise adverse effects on land stability that might arise directly or indirectly from project works (refer to Table 12-1, Environmental Performance Requirements in relation to Ground Movement, Technical Appendix P, section 12). The most relevant are: GM2 (tunnel and underground structures to be designed to limit ground movement), GM4 (ground movement plan required), GM5 (pre-construction conditions required where assets are predicted to be affected by ground movement), GM6 (adopt construction techniques to limit ground movement).

6.2.4 Conclusion

To the degree that it is possible to predict impacts on heritage places within the project alignment both the noise and vibration assessment and the ground movement impact assessment conclude that the potential risk for damage to such places is low to very low. Both assessments are predicated on certain construction methodologies being adopted and should these methodologies vary the potential for damage may also vary. In a limited number of cases it is anticipated that exceedances may occur with

regard to the relevant standards or modelling and in these cases mitigation is proposed. The mitigation ranges from varying construction speed to changing the nature of the construction methodology. In all cases both assessments conclude that a pre-condition survey and monitoring regime should be implemented.

From a heritage perspective it is anticipated that a survey and monitoring process would include:

- an investigation and analysis of the building structure, including consideration of footing type and foundation conditions
- an analysis of the vulnerability of fabric to damage or failure as a consequence of construction vibration and/or ground movement
- determination of mitigation measures to remove or diminish the potential for adverse impacts as a consequence of construction vibration and/or ground movement
- the installation of a monitoring system to detect construction vibration and/or ground movement and associated monitoring programme
- in the event of damage, documentation and undertaking of rectification works in accordance with accepted conservation practice and in accordance with the requirements of the relevant heritage authorities.

Table 12 below provides information on typical construction typologies for heritage buildings and potential vulnerabilities for heritage fabric.

For heritage buildings and structures, it is particularly important that in the event damage does occur that rectification works are undertaken consistent with the heritage values of the affected building.

It is noted that for the purposes of management of the potential impacts of construction vibration and ground movement the definition of heritage buildings and structures needs to be consistent with the definition in this historical heritage assessment, with the exception of archaeological sites which are not required to be assessed. The definitions are:

- places that are subject to statutory heritage controls under the EPBC Act, the Heritage Act, the Planning and Environment Act
- places identified as of heritage value but not currently subject to statutory heritage controls, including graded buildings not subject to HO controls, and St Kilda Road.

In reviewing the noise and vibration assessment and the ground movement impact assessment the conclusion is that neither assessment indicates that there are unacceptable or unmanageable risks to heritage places impacted by the proposal. Equally both identify the need for a rigorous process of survey and monitoring of potentially impacted heritage places and the implementation of appropriate mitigation.

Table 12 Heritage buildings and structures: typical construction typologies

Construction typology	Comment
<p>Timber-framed construction: timber or concrete stumps; weatherboard cladding; steel sheet or tile roof</p>	<p>Relatively flexible structure. Relatively high potential for cosmetic cracking in lath and plaster surfaces, and moulded or cast plaster ornament.</p> <p>Relevant precinct: Western portal precinct</p> <p>Examples: Typical late nineteenth century and early twentieth century dwellings and smaller commercial buildings</p>
<p>Timber-framed construction: brick veneer cladding; timber/concrete stumps on shallow footings, continuous strip footings to perimeter; steel sheet or tile roof</p>	<p>Relatively rigid external wall structure, more flexible internal structure. Relatively high potential for cosmetic cracking in sheet plaster surfaces, and moulded or cast plaster ornament.</p> <p>Relevant precincts: Western portal precinct, Tunnels and eastern portal precinct</p> <p>Examples: Typical twentieth century dwellings and small commercial buildings</p>
<p>Solid or cavity masonry construction; shallow footings; timber framing to roof structure; slate, tile or steel clad roof</p>	<p>Relatively inflexible structure. Relatively high potential for cosmetic cracking in masonry, and sheet and solid lining materials.</p> <p>Relevant precincts: Western portal precinct, Tunnels and eastern portal precinct</p> <p>Examples: Typical late nineteenth century and early twentieth century dwellings and smaller commercial buildings</p>
<p>Masonry construction with applied cement render; shallow footings; timber framed roof structure; sheet steel or tile roof</p>	<p>Relatively inflexible structure. Relatively high potential for cosmetic cracking in render finish to masonry, and sheet and solid lining materials.</p> <p>Relevant precincts: Western portal precinct, Parkville station, CBD North station, Tunnels, CBD South station and eastern portal precinct</p> <p>Examples: Typical late nineteenth century and early twentieth century dwellings and commercial buildings</p>
<p>Fence - Masonry plinth (rendered brick or stone); discontinuous strip footings; cast iron fence</p>	<p>Relatively flexible structure. Relatively high potential for cosmetic cracking in render finish to masonry.</p> <p>Relevant precinct: Parkville station</p> <p>Example: Main Entrance Gates (Gate 6), Pillars and Fence (VHR H0918)</p>
<p>Loose rubble/stone construction; discontinuous shallow footings, timber framed internal walls and roof structure</p>	<p>Relatively inflexible structure. Relatively high potential for cosmetic cracking in masonry, and sheet, lath based and solid lining materials.</p> <p>Relevant precinct: CBD South station</p> <p>Example: Young and Jackson's Princes Bridge Hotel (VHR H0708)</p>

Construction typology	Comment
<p>Steel-framed structure with masonry curtain wall with attached stone or terracotta cladding. Concrete or terracotta block floors</p>	<p>Relatively inflexible structure. Relatively high potential for cracking and possible failure in attached cladding material where fixings corroded.</p> <p>Relevant precincts: Tunnels and CBD South station</p> <p>Example: Manchester Unity Building and Nicholas Building</p>
<p>Loadbearing masonry (brick and stone) construction founded on masonry strip footings</p>	<p>Relatively inflexible structure. Relatively high potential for cracking in stone cladding and in internal applied finishes.</p> <p>Relevant precincts: Parkville station, CBD North station, CBD South station and Tunnels sectors 4 and 5</p> <p>Examples: Melbourne Town Hall and Administration Building (VHR H0001), St Pauls Cathedral Precinct (VHR H0018) and Victoria Barracks</p>

6.3 Environmental Performance Requirements

As related to archaeological impact, and vibration and ground movement impacts, Table 13 below provides the recommended Environmental Performance Requirements and proposed mitigation measures for the precinct.

Table 13 Environmental Performance Requirements

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
Archaeological sites project-wide	Destruction or disturbance	<p>CH6 To the satisfaction of Heritage Victoria:</p> <ul style="list-style-type: none"> Develop archaeological management plans to manage disturbance of archaeological sites and values affected by the project Undertake investigation in accordance with the Guidelines for Investigating Historical Archaeological Artefacts and Sites, Heritage Victoria 2014 (as amended or updated) and to the satisfaction of the Executive Director, Heritage Victoria Develop and implement a protocol for managing previously unidentified historical archaeological sites discovered during project works. 	<p>For any archaeological sites or artefacts revealed or discovered during construction, the following measure would be implemented:</p> <ul style="list-style-type: none"> stop any activity which may impact on the discovery ensure that other people working in the area are aware of it and have also stopped work in the area protect the artefact, or site feature(s) by, for example, erecting temporary fencing or other suitable enclosure consult with a qualified cultural heritage consultant to determine the appropriate course of action advise Heritage Victoria where the discovery was made and provide a description or photograph of the discovery determine how to manage the find through consultation with Heritage Victoria and the heritage consultant obtain the necessary Consent under the Heritage Act 1995, or other necessary approvals to protect, recover or remove the find. <p>Archaeological management may require a combination of testing, excavation, salvage and monitoring and related reporting.</p>	HH01
Archaeological sites project-wide	Destruction or disturbance	<p>CH6 To the satisfaction of Heritage Victoria:</p> <ul style="list-style-type: none"> Develop archaeological management plans to manage disturbance of archaeological 	<p>The archaeological management plan would include the following:</p> <ul style="list-style-type: none"> description and background history of Archaeological Area statement of significance of Archaeological Area, in accordance with Guidelines for Conducting Historical Archaeological Surveys (Heritage Council of Victoria and Heritage Victoria 2008), Criteria for Assessing 	HH02

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
		<p>sites and values affected by the project</p> <ul style="list-style-type: none"> Undertake investigation in accordance with the Guidelines for Investigating Historical Archaeological Artefacts and Sites, Heritage Victoria 2014 (as amended or updated) and to the satisfaction of the Executive Director, Heritage Victoria Develop and implement a protocol for managing previously unidentified historical archaeological sites discovered during project works. 	<p>Cultural Heritage Significance (Heritage Council of Victoria 2008) and Victoria’s Framework of Historical Themes (Heritage Council of Victoria 2010)</p> <ul style="list-style-type: none"> research design, including research questions which will be addressed as a result of any archaeological investigations excavation methodology, including method to be used to excavate deposits, record spatial and stratigraphic information and recover artefacts and how these would help address the research design artefact retention policy, including how and why individual artefacts and types of artefact would be retained, discarded or sampled during the archaeological investigation artefact management proposal, including details of how recovered artefacts would be managed in the field and post-excavation (including materials conservation if required). <p>Through the development and implementation of the archaeological management plan, the research potential of the affected site can be realised and this would mitigate the impact of destruction or disturbance.</p>	
Heritage places project-wide	Damage to heritage places, buildings or structures through construction vibration and/or ground movement as a result of works	<p>CH2 To avoid or minimise impacts on the cultural heritage values of heritage places:</p> <ul style="list-style-type: none"> Perform works in accordance with the following noise and vibration and ground movement Environmental Performance Requirements as related to heritage places: NV2, NV5, NV6, NV11, GM2, GM4, GM5, GM6. Undertake condition assessments of heritage places prior to commencement of construction where located 	<p>Should construction vibration be determined to be a risk to a heritage place mitigation measures may include, as relevant, use of alternative construction equipment/construction methodology as identified in Technical Appendix I <i>Noise and Vibration</i> or in the course of subsequent investigations.</p> <p>Should ground movement be determined to be a risk to a heritage place mitigation measures may include, as relevant, permeation grouting, underpinning and structural strengthening or other techniques as identified in the Technical Appendix P <i>Ground Movement and Land Stability</i> or as part of subsequent investigations.</p>	HH03

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
		<p>within the identified vibration and ground settlement zones of sensitivity and monitor as per NV6, GM4 and GM5</p> <p>Should damage occur to a building or structure on the Victorian Heritage Register or that is subject to a Heritage Overlay as a result of works, undertake rectification works in accordance with accepted conservation practice (with reference to the Australia ICOMOS Burra Charter 2013) to the satisfaction of Heritage Victoria or the responsible authority, as applicable.</p>		

6.4 Conclusion

The project-wide issues of archaeological impacts and the impact of vibration and ground movement on heritage places have both been assessed to be manageable within the draft evaluation objectives of the EES.

The archaeological assessment has considered both existing and potential archaeological sites and determined that the works are unlikely to result in the destruction of any sites which warrant permanent protection. Within the framework of the Environmental Performance Requirements a process is proposed for the investigations and documentation of such sites as part of the works. Anticipating the complete destruction of such sites where works occur, the managing activity is the realisation of the research potential of these sites, and the impact is to some extent mitigated by this activity which is valuable in itself. Recognising the early age of some of the sites and their potential to reveal information about Melbourne's early development rigorous adherence to an archaeological management regime would be an important performance consideration in delivery of the project as a whole.

In the area of vibration and ground movement impacts, both relevant technical assessments in these areas identify the potential for damage to occur to heritage places within the Concept Design area. In both cases the potential is low and the potential impacts can be addressed by appropriate mitigation measures. To manage such potential impacts, consistent with Environmental Performance Requirement CH3 and the relevant requirements of the noise and vibration and ground movement and land stability impact assessments, detailed surveys of impacted structures would occur before, during and after monitoring. Should damage present in the course of the works then appropriate action would need to be taken to vary the construction approach and any damage would need to be rectified to accepted conservation standards. In the case of Victoria Barracks there is an express requirement for survey and monitoring as associated with the determination of the Australian Minister for the Environment that the proposed works do not constitute a controlled action. These requirements align with the survey and monitoring requirement associated with heritage places for the project as a whole.

7.0 Precinct 1 – Tunnels

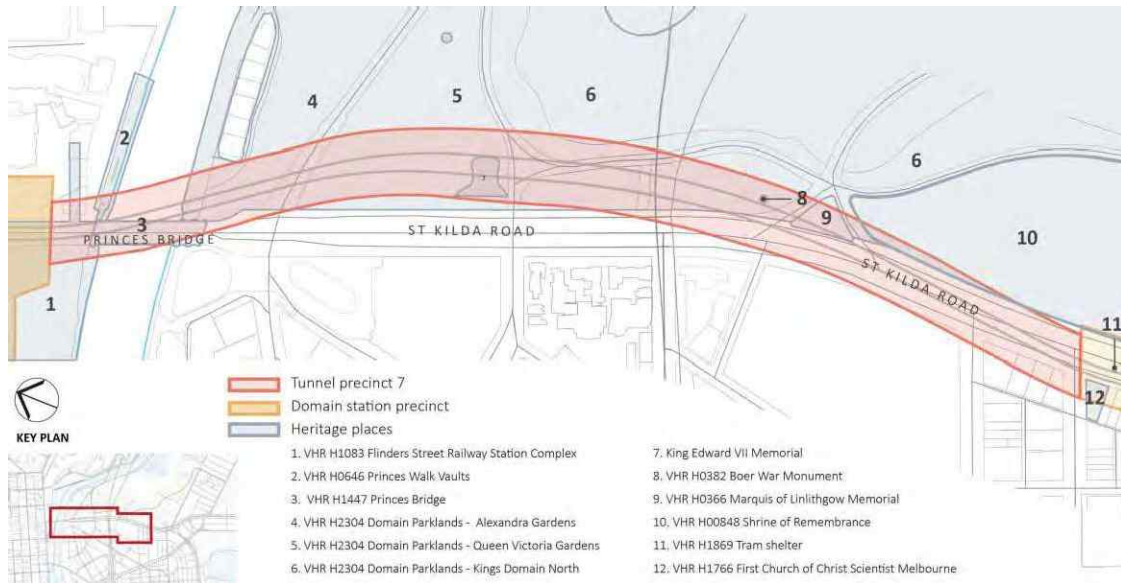


Figure 4 Key plan for Tunnels precinct CBD South to Domain

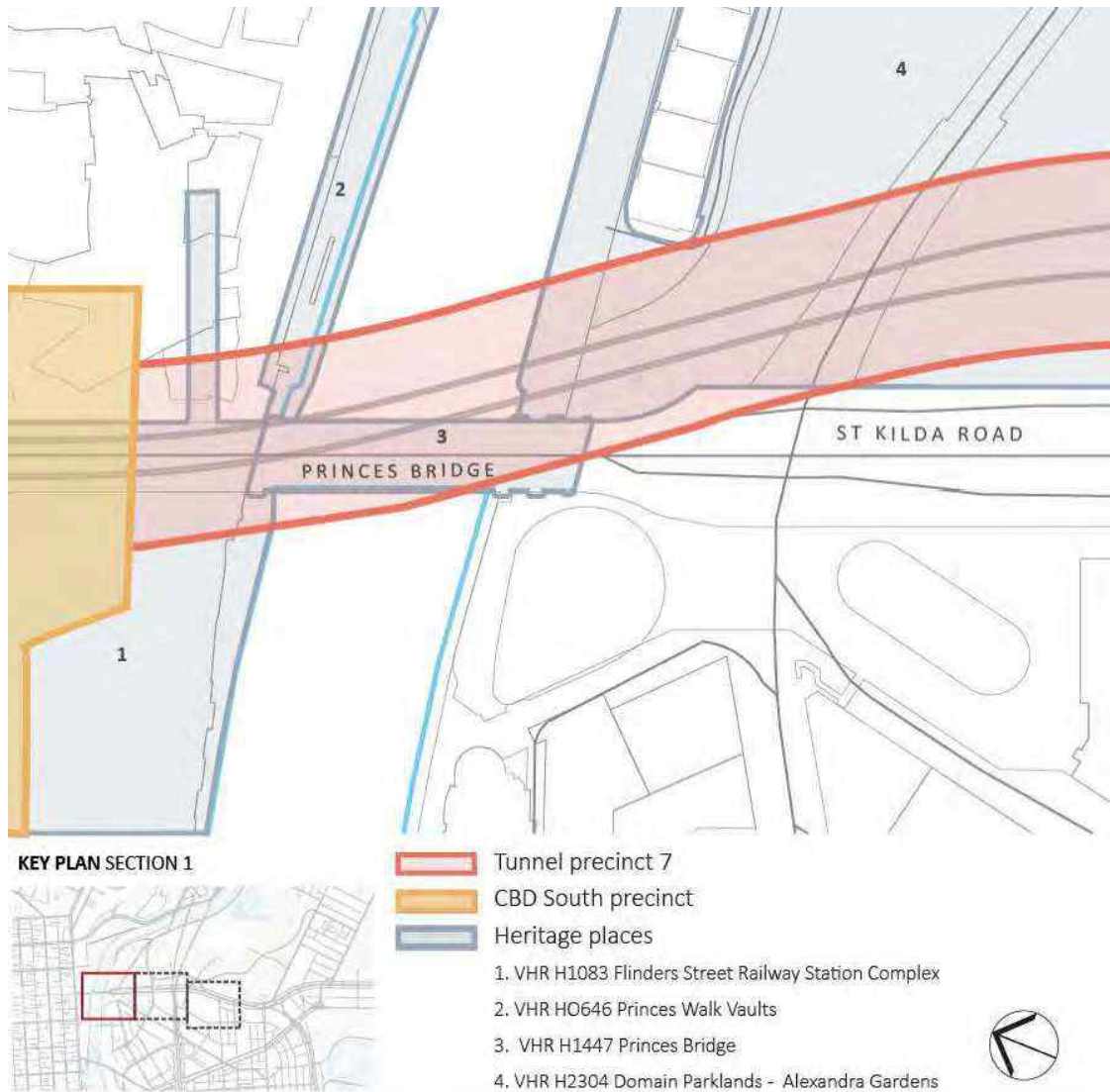


Figure 5 Key heritage places Tunnels precinct, CBD South to Domain, section 1

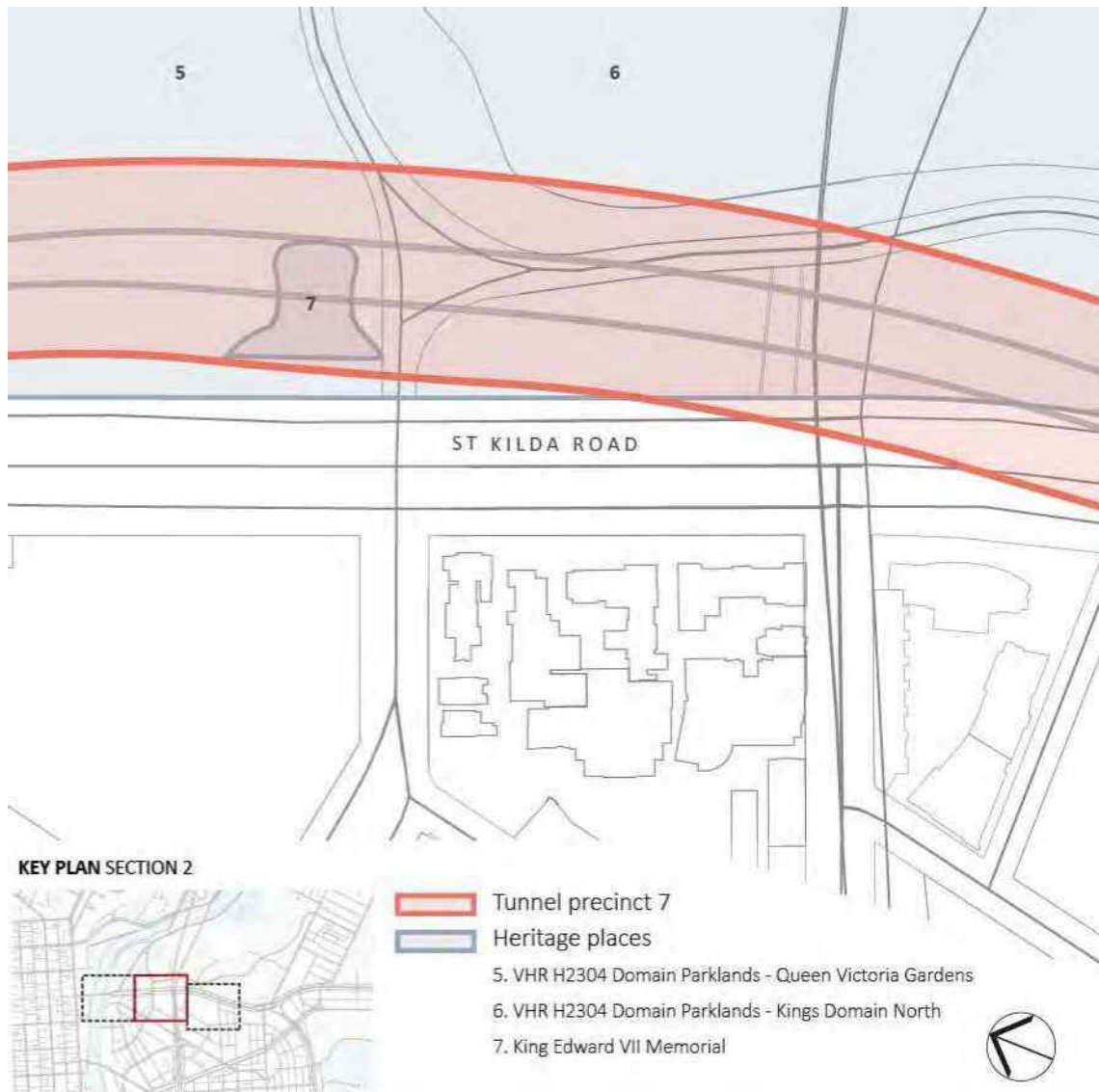


Figure 6 Key heritage places Tunnels precinct, CBD South to Domain, section 2

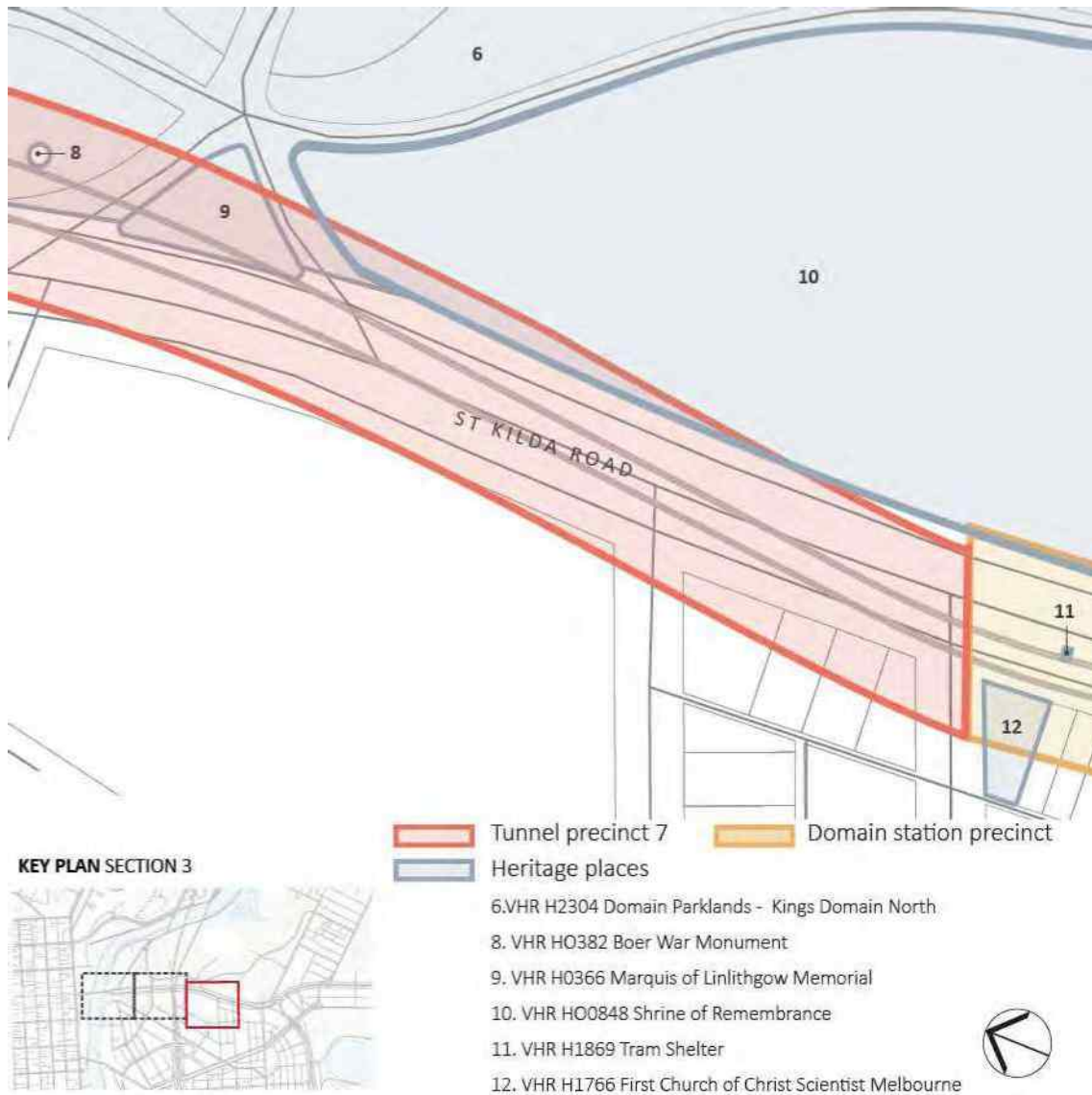


Figure 7 Key heritage places Tunnels precinct, CBD South to Domain, section 3



Figure 8 Key heritage places Tunnels precinct, Domain to Eastern portal (part), Fawkner Park

7.1 Project Components

7.1.1 Infrastructure

The Precinct 1 infrastructure includes the following elements.

7.1.1.1 Vertical alignment project – vertical design

The tunnels would generally be located at depths (proposed rail level between 10-40 m) where there would be no direct interface with heritage places.

7.1.1.2 Yarra River crossing – TBM under the river

The Yarra River crossing alignment extends into or is in close proximity to five VHR sites:

- Flinders Street Railway Station Complex (VHR H1083)
- Princes Bridge (VHR H1447)
- Princes Walk Vaults (H0646)
- Domain Parklands (VHR H2304)

The proposed Yarra River crossing alignment extends into the extent of two VHI sites:

- Swanston Street (H7822-1966)
- Alexandra Gardens (H7822-0252)

7.1.1.3 CityLink tunnels crossing – above CityLink tunnels

The City Link tunnels crossing would be located within the Domain Parklands (VHR H2304) – which is a registered heritage and archaeological place and is in close proximity to a number of registered features within this site. It also passes under or close to the Boer War Monument (VHR H0382) and the Marquis of Linlithgow Statue (VHR H0366), both of which are located within the Domain Parklands. The tunnels would be located at shallow depths in this area.

7.1.1.4 Emergency access shafts

Fawkner Park north-east location (option 5)

The Fawkner Park emergency access shaft would be included in the South Yarra Precinct (HO6).

The above ground structure would remain as a permanent feature on the edge of the park.

Linlithgow Avenue: located in Queen Victoria Gardens

The Queen Victoria Gardens emergency access shaft would be located in the VHR-registered Domain Parklands (VHR H2304). It would be in close proximity to the King Edward VII memorial statue, identified in the VHR extent of registration for Domain Parklands as F10.

There would be a permanent above ground structure associated with the shaft in this location.

7.1.1.5 Tram diversion

The no. 8 tram is proposed to be diverted along Toorak Road West.

7.1.2 Construction

7.1.2.1 Vertical alignment project – vertical design

Excavation of the proposed tunnels via TBM and mined tunnel methods would occur at a depth where there would be no direct interface with heritage places including archaeological sites but there could be vibration or ground settlement impacts.

Yarra River crossing – TBM under the river

Excavation of the proposed tunnels via TBM would occur at a depth where there would be no direct interface with heritage places at or in the river including archaeological sites.

7.1.2.2 CityLink tunnels crossing – above CityLink tunnels

Ground improvement (stabilisation) works, such as soil mixing and ground grouting, may be undertaken to limit the impact of surface settlement over the alignment of the shallow tunnelled section through Tom's Block and within the VHR-registered Domain Parklands extending southwards to St Kilda Road. Tree removal would occur where ground grouting is undertaken.

7.1.2.3 TBM southern launch site

Fawkner Park open space and tennis courts

The construction work site for the Fawkner Park launch site would be located in Fawkner Park which is within the South Yarra Precinct (HO6).

The establishment of the construction work site in Fawkner Park could require the removal of all trees within the designated site as well as a number of trees along the northern (Toorak Road West) boundary to allow for access.

The construction work site would also require the removal of the existing tennis courts.

Domain launch sites

The proposed Domain launch sites are addressed in the section of this report which examines the Domain Precinct (Section B). Refer to Domain Precinct, section 13.

7.1.2.4 Emergency access shafts

Fawkner Park north east location

The construction work site for the Fawkner Park emergency access shaft would be located within Fawkner Park which is within the South Yarra Precinct (HO6).

Tree removals would be required to facilitate construction works in this location, impacting on the row plantings on Toorak Road.

Queen Victoria Gardens, adjacent to Linlithgow Avenue

The construction work site for the Queen Victoria Gardens emergency access shaft would be included in the VHR-registered Domain Parklands (VHR H2304).

Trees and vegetation removal would be required within the Domain Parklands for the construction work site associated with the emergency access shaft.

7.1.2.5 Tram diversion works

Construction works are proposed within St Kilda Road and Toorak Road West for the diversion of the no. 8 tram.

7.1.2.6 Operation

- Refer to Section 6.2.2.2 for a discussion of operational vibration.

7.2 Alternative Design Options

7.2.1 Infrastructure

Alternative design options to the Precinct 1 Infrastructure would include the following elements:

7.2.1.1 CityLink tunnels crossing –below CityLink tunnels

The alternative design option for the tunnels vertical alignment would be located under the CityLink tunnels.

7.2.1.2 Emergency access shaft

Utilising the location of the Fawkner Park TBM launch site

The alternative design option location would be within Fawkner Park and included in the South Yarra Precinct (HO6).

The above ground structure would remain as a permanent feature on the edge of the park.

Located in Tom's Block

The alternative design option location would be included in the VHR-registered Domain Parklands (VHR H2304). It would be in close proximity to the Victoria Police memorial (identified in the VHR extent of registration for Domain Parklands as F26).

The above ground structure would remain as a permanent feature in the park to the west of Linlithgow Avenue.

7.2.2 Construction

7.2.2.1 CityLink tunnels crossing-below CityLink tunnels

In this alternative design option the tunnels are at a depth where there would be no direct interface with heritage places including archaeological sites or trees.

7.2.2.2 Emergency access shafts

Option 2 - Utilising the location of the Fawkner Park TBM launch site.

No additional tree removals would be required over those required for the TBM launch site.

Option 3 - Located in Tom's Block

Tree removals would be required within Tom's Block to establish the construction work site for this option.

7.2.3 Operation

- N/A

7.3 Existing Conditions

The study area includes five distinct tunnel precincts linking the station precincts and portals along the alignment, described below. The following description focuses on describing those areas and heritage values where the Concept Design is close to or at surface level and where impacts could occur as a result. Where the tunnels would be at depth, only general descriptive comments are provided.

7.3.1 Sector 1 - Western portal to Arden station

The Tunnels precinct between the proposed western portal and the proposed Arden station precinct is characterised by relatively recent industrial development including; the 50 Lloyd Street Business Estate; railway reserves incorporating the Craigieburn, Sunbury and Upfield railway lines; the Moonee Ponds Creek and the elevated CityLink roadway. Of interest, this includes an area defined as the Moonee

Ponds Creek and Infrastructure Precinct that is proposed for an individual HO control under Amendment C207 to the Melbourne Planning Scheme.

7.3.2 Sector 2 - Arden station to Parkville station

The area above the Tunnels precinct, between the proposed Arden station and the proposed Parkville station precincts, is characterised by industrial and commercial buildings in the west through to a predominantly residential typology heading to the east. Primarily developed in the Victorian period (c. 1850 to c. 1900), the area also includes later Edwardian period (c. 1900 to c. 1919) buildings. Reflecting these origins, some areas above the Tunnels precinct are incorporated in the local HO North and West Melbourne precinct (HO3) in the Melbourne Planning Scheme as well as site-specific HOs. Modern commercial buildings are also found throughout the area and are typically of low scale (one to two storeys).

7.3.3 Sector 3 - Parkville station to CBD North station

Generally, the Tunnels precinct from the proposed Parkville station to the proposed CBD North station is characterised by nineteenth and early twentieth century building stock interspersed by modern commercial buildings of a similar scale and, more recently, large scale residential development. This area includes VHR and HO places.

7.3.4 Sector 4 - CBD North station to CBD South station

The Tunnels precinct from the proposed CBD North station to the proposed CBD South station includes both State and locally significant heritage places in addition to numerous archaeological (VHI) sites. As it extends through the city's lower scale retail core, the Tunnels precinct is characterised by medium to large scale building stock, including a number of significant heritage buildings.

7.3.5 Sector 5 - CBD South station to Domain station

Here the Tunnels precinct is on a wide band on a north-west to south-east orientation commencing north of the north bank of the Yarra River, taking in part of Federation Square, the VHR-registered Flinders Street Station complex (VHR H1083) and the Princes Walk Vaults (VHR H0646). Princes Bridge (VHR H1447) is also within the precinct.

South of the Yarra River, the Tunnels precinct extends through the Domain Parklands and could have an impact on areas along its western edge (refer to the mapping at Appendices C-E). The Domain Parklands is included in the VHR in its entirety (VHR H2304) as a heritage place and an archaeological place (Figure 19 -Figure 21). The registered place incorporates the Alexandra Gardens, Alexandra Park, Queen Victoria Gardens, Kings Domain North and Kings Domain South and features numerous memorials, avenue plantings and rockery fountains in a mature garden landscape (refer to Figure 9 and Figure 10). Parts of the Domain Parklands were reserved for a variety of uses from as early as the 1840s and it was developed and managed as parklands from the later nineteenth century. The Domain includes a range of important sites and institutions including Government House, the Royal Botanic Gardens, the Sidney Myer Music Bowl, the Shrine of Remembrance and others (Figure 9 and Figure 10). As included in the VHR, the place as a whole and/or its component parts are considered to be of State historical, archaeological, aesthetic, architectural, scientific, social and potentially of spiritual significance.

The Tunnels precinct passes through a number of discrete gardens environments within the Domain Parklands, each of which has its own history and character.

Alexandra Gardens is located at the northern end of the Domain Parklands close to the Yarra River (Figure 11). This area was laid out in the early twentieth century and is characterised by extensive use of rock work to terrace the steep embankments in the west of the site, forming attractive, terraced garden beds and rock-edged paths and stairs. Palms feature prominently within the gardens, specifically Canary Island Palms (*Phoenix canariensis*) and these are visually dominant rows along the upper, southern terrace of the gardens, along the river embankment adjacent to Princes Bridge and as a central lawn plantation in the eastern portion of the gardens. Other mature tree plantings in the terraced, western

section of the Alexandra Gardens include Spotted Gum (*Corymbia maculata*), cedar (*Cedrus deodara*) and peppercorn trees (*Schinus areira*). The lower lawn contains trees of recent origin, Lemon Scented Gums (*Corymbia citriodora*) and lindens (*Tilia sp.*). Extending along the riverbank, in front of the boatsheds, is a developing row of oaks (*Quercus robur*) to the north of the river promenade. Further plantings of juvenile Lindens are located in cut-outs in front of the boat sheds. A mature avenue of plane trees (*Platanus acerifolia*) and elms (*Ulmus procera*) is formed along the pedestrian path to the south of the Gardens bounding Alexandra Avenue.

South of Alexandra Avenue, parts of the Queen Victoria Gardens are also within the study area. Like the Alexandra Gardens, the Queen Victoria Gardens were also in the early twentieth century and contain numerous significant trees and other landscape elements and monuments and memorials such the King Edward VII memorial and the Floral Clock (Figure 12).

Further south, the early twentieth century rockery fountain at Linlithgow Avenue is also within the study area as is Alexandra Park (Tom's Block) with its elm (*Ulmus xhollandica*) rows, Red Flowering Gum (*Corymbia ficifolia*) plantation and collection of memorials (refer Figure 9, Figure 10 and Figure 13). Tom's Block is a discrete, broadly linear section of the Domain Parklands, defined by the aforementioned elm row to the eastern interface with Linlithgow Avenue, and a diverse western boundary plantation of that feature a number of notably large trees including Moreton Bay Figs, Canary Island Pine and Hoop Pine. A band of Red Flowering Gums is located within the central portion of the area along with other Australian native trees in the south of Toms Block, as well as later plantings undertaken in the 1930s. These latter trees are generally smaller in scale and located north of the Weary Dunlop memorial (Context draft CMP, 2015: 109).

Other trees of interest within the central portion of Tom's Block are a number of mature Canary Island Date Palms, planted as specimens and a component of the Catani stage of development, and earlier specimens of White Silky Oak (*Grevillea hilliana*) and Muttonwood (*Myrsine howittiana*), early surviving Guilfoyle plantings.

A number of other separately registered VHR places are included within the Domain Parklands. The Boer War monument (VHR H0382) is a distinctive sandstone memorial on a bluestone base located within Alexandra Park. It dates from 1903, shortly after the end of the Boer War and was erected by the Victorian Mounted Rifles Regiment to a design by the architect George De Lacy Evans. Originally located opposite Victoria Barracks, it was relocated a short distance to its current site to allow for road widening works. It is of State historical and aesthetic significance.

The Marquis of Linlithgow Memorial is just south of Alexandra Park (VHR H0366) at the driveway entrance to Government House. This monument was erected in 1911 and honours John Adrian Louis Hope Hopetoun (the Seventh Earl of Hopetoun), Victorian Governor (1889-1895) and first Governor-General of Australia (1901-1903). It is of State historical and aesthetic significance. A collection of mature Canary Island Palms forms part of the setting of the Memorial.

Further south, part of the Tunnels precinct extends into the Shrine of Remembrance (registered as VHR H848), being aligned along the western flank of the Shrine Reserve. Constructed between 1927 and 1934, the Shrine of Remembrance is Victoria's principal war memorial and is a place of State historical, social, architectural and aesthetic significance.

Victoria Barracks is located on the west side of St Kilda Road between Wadey and Coventry Streets and the eastern part of the complex falls within the Tunnels precinct. The Barracks complex was developed from the 1850s and early 1860s and is a key site in Victoria's and Australia's defence history. The heritage values of Victoria Barracks are protected under the EPBC Act and there are multiple listings for the barracks in the CHL (refer to Appendix F of this report).

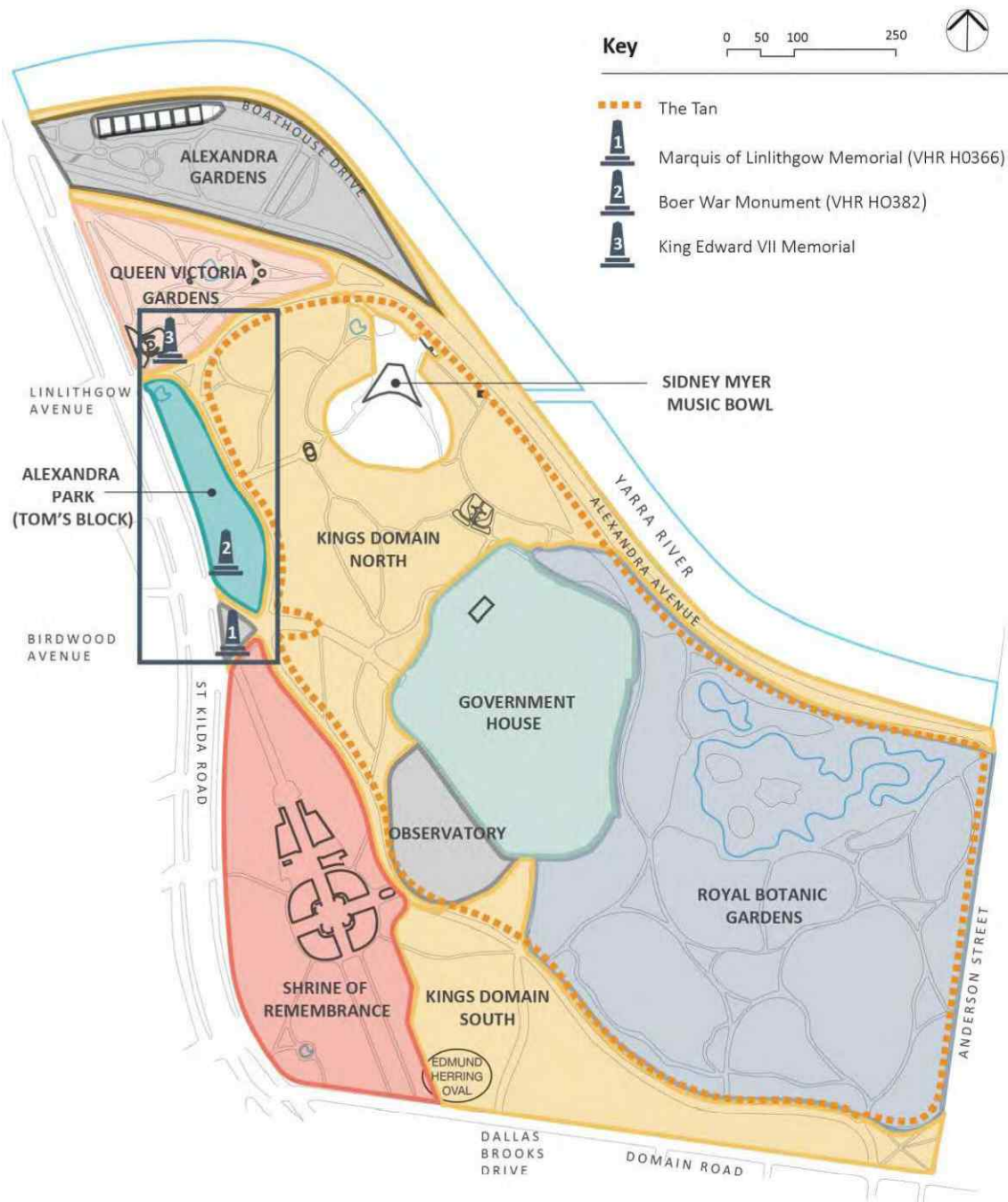


Figure 9 Plan of Domain Parklands VHR H2304 showing key areas within the registered place and abutting VHR-registered places

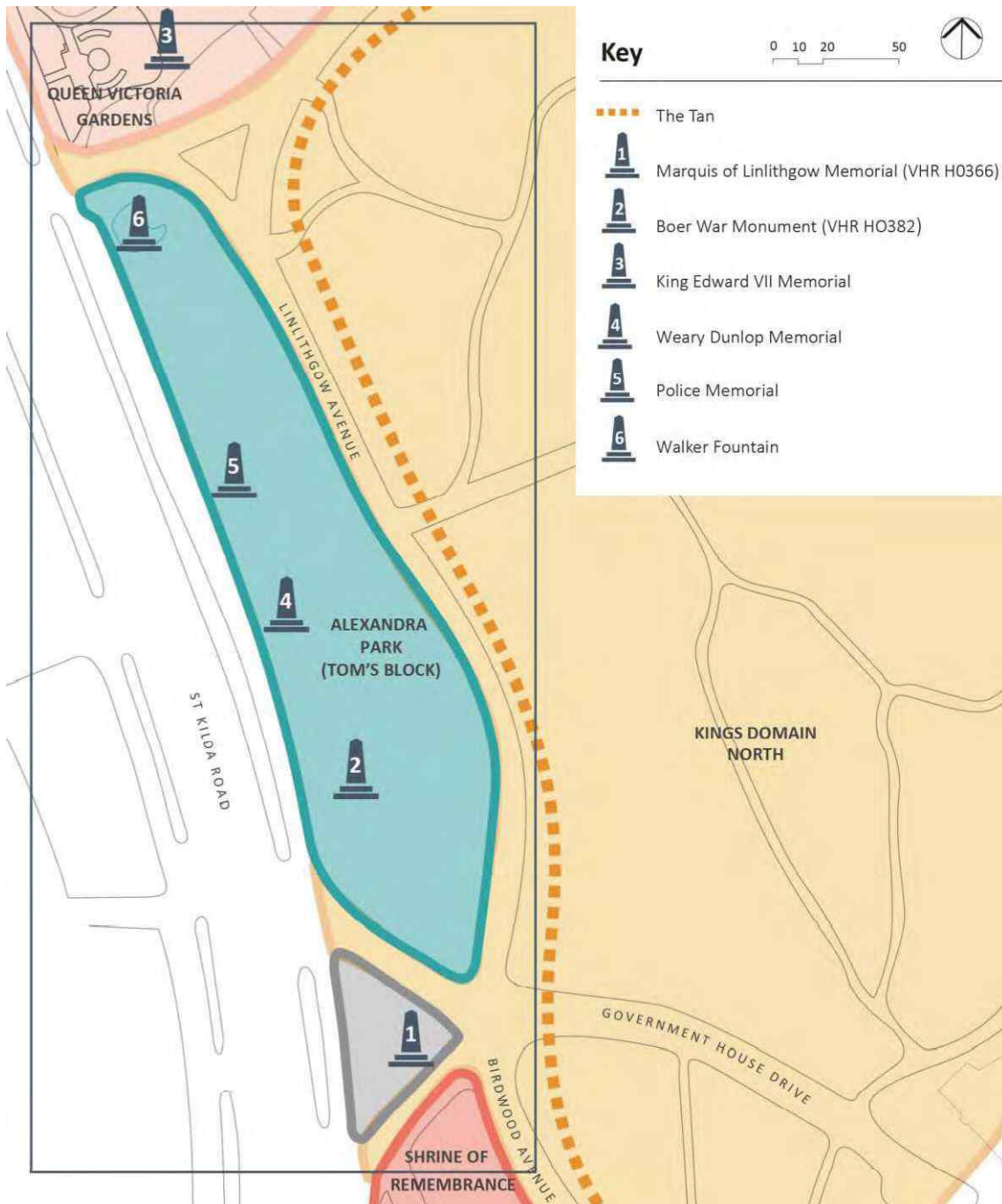


Figure 10 Detail of Figure 9 showing Alexandra Park (Tom's Block) and monuments and memorials along the proposed tunnels alignment



Figure 11 Alexandra Gardens looking north east over Princes Bridge and the Yarra River



Figure 12 King Edward VII Memorial and Floral Clock in Queen Victoria Gardens



Figure 13 Tom's Block looking north west towards St Kilda Road

7.3.6 Sector 6 - Domain station to Eastern portal

The proposed alignment of the Tunnels precinct between the proposed Domain station and the proposed eastern portal largely follows under Toorak Road. The area is characterised by traditional inner city residential development on the north side of Toorak Road, generally dating to the late nineteenth century through to the late interwar period and Fawkner Park on the south. These areas are included within the South Yarra Precinct (HO6) a broad precinct-based HO in the Melbourne Planning Scheme. HO6 includes Toorak Road West, where works within the road reserve would occur associated with the diversion of the no. 8 tram.

Fawkner Park is a major feature within the Tunnels precinct and there is the potential for the Concept Design to have an impact within the park. Fawkner Park was first reserved in 1862, and the pathway system and avenues were laid out in 1875 by the City of Melbourne Parks and Gardens Curator Nicholas Bickford. While the park has undergone a series of phases of development since the nineteenth century, it retains its early path system and mature plantings and is of a high level of heritage significance (Figure 14 and Figure 15).

The northern boundary of the park is defined by an alternating plantation of maturing Pin Oaks (*Quercus palustris*) and Canary Island Palms (*Phoenix canariensis*) along the Toorak Road boundary. A number of the primary treed avenues within the Park terminate within this precinct, including several avenues of Elm trees (*Ulmus procera*) and two avenues of Moreton Bay Fig trees (*Ficus macrophylla*), the eastern of these is extended by juvenile specimens of the same taxon (Figure 16). An avenue of Pin Oaks (*Quercus palustris*) has recently been planted in this precinct, east of the tennis club.

Fawkner Park contains numerous buildings and structures. The Tennis Club and Community Centre is set in from Toorak Road West and is located within the study area (Figure 15). This is a substantial bungalow styled building which has had extensive additions and alterations. The earliest and central section of the building dates to c. 1925 and displays red brick walling, rough cast render treatments to the gable ends and an extensive terracotta Marseilles tiled roof. The building includes an attic level with gable ends to the north, east and west and a verandah to the ground level on the west and north. Modern additions have been made to the north and south of the original building; with the southern additions being designed to be sympathetic to the original in material and form. The low-scaled northern addition adopts a distinctly modern aesthetic with a folded ribbed sheet clad roof and rendered walling in grey tones. To the west of the addition is a fenced and hedged playground, occupied by the kindergarten. Further west of the Community Centre are six tennis courts within a cyclone wire mesh fence enclosure.

There are a range of other buildings and structures within the park but outside the study area, including a Caretaker's Cottage of 1885 and several interwar pavilions and toilet blocks (Figure 17).

The most conspicuous vegetative elements west of the Tennis Club and Community Centre buildings are two mature intersecting Elm Avenues (*Ulmus sp.*), and a large Lemon Scented Gum (*Coymbia citriodora*) on the east side of the tennis courts. A juvenile row of recently planted Willow Oaks (*Quercus phellos*) forms an avenue along the axial path to the west of the tennis courts. Other, relatively modestly scale trees are planted in the lawn areas between the avenue plantations.

Fawkner Park also contains a number of mature, grouped specimen trees, such as a cluster of four very large Moreton Bay Figs south of Toorak Road, with a similar configuration of mature Bunya Pines (*Araucaria bidwillii*) located in a lawn area further to the east, opposite Marne Street.

Due to its history and intactness, including extensive and mature plantings, Fawkner Park has the potential to be of heritage significance at a State level (Hassell, 2002). It also has archaeological values and has recently been added to the VHI.

The Tunnels precinct continues east of Punt Road generally along the alignment of the low-scaled commercial area of Toorak Road where it intersects with a series of local HO precincts in the Stonnington Planning Scheme. It comes to near grade in the vicinity of South Yarra Station, in the proposed eastern portal.



Figure 14 View of the paths and mature trees within Fawkner Park



Figure 15 View of open space to the west of the Tennis Club and Community Centre



Figure 16 View of Moreton Bay Fig Avenue within Fawkner Park



Figure 17 The Caretaker's Cottage within Fawkner Park

7.3.7 Statutory heritage controls and listings

7.3.7.1 Environment Protection and Biodiversity Conservation Act 1999

The Victoria Barracks as a whole is partly within the proposed project boundary and is listed on the CHL as the Victoria Barracks Precinct (Place ID 105232). A number of buildings within the Barracks are also listed individually in the CHL (refer to Appendix F of this report).

All NHL and CHL places within a one kilometre buffer of the proposed project boundary are listed in Appendix F.

7.3.7.2 Heritage Act 1995

There are 15 places included in the VHR within the Tunnels precinct. These are shown in the mapping at Appendix C and listed in the tables in Appendix F of this report.

There are 67 VHI sites within the Tunnels precinct. These are shown in the mapping at Appendix D and listed the tables in Appendix F of this report. Additionally there is the potential for unlisted archaeological sites within the precinct to be impacted by the project.

Of these, relatively few places are affected by the works with the majority being located over the tunnels where they are at depth.

VHR places and sites which could be affected by works within the Tunnels precinct are listed in Table 14 and VHR sites which could be affected by the works are listed in Table 15.

Table 14 Potentially affected VHR sites within the Tunnels precinct

VHR number	HO number and Planning Scheme	Place	Address	Location in Tunnels precinct
VHR H1447	HO790 (Melbourne)	Princes Bridge	Over Yarra River, Swanston Street and St Kilda Road, Melbourne	CBD South station to Domain station
VHR H0366	HO946 (Melbourne)	Marquis of Linlithgow Statue	St Kilda Road and Government House Drive and Anzac Avenue, Melbourne	CBD South station to Domain station
VHR H0382	HO948 (Melbourne)	Boer War Monument	Kings Domain, St Kilda Road and Government House Drive, Melbourne	CBD South station to Domain station
VHR H2304	HO398 (Melbourne)	Domain Parklands	St Kilda Road and Domain Road, Melbourne	CBD South station to Domain station
VHR H0848	HO489 (Melbourne)	Shrine of Remembrance	2-42 Domain Road, Melbourne	CBD South station to Domain station

Table 15 Potentially affected VHI sites in Tunnels precinct

VHI number	Place	Address	Location in Tunnels precinct
VHI H7822-2342	Fawkner Park	24-88 Commercial Road, South Yarra, Melbourne City	Domain station to eastern portal

7.3.7.3 Planning and Environment Act 1987

There are numerous HO sites (precincts and site-specific HOs) within the Tunnels precinct. Many cover VHR places while others are local HO precincts or individual places. HO places within the Tunnels precinct are shown in the mapping at Appendix E and are listed in the tables at Appendix F of this report. As for the VHR and VHI sites, relatively few HO sites are affected by the works with the majority being located over the tunnels where they are at depth.

HO places and sites which could be affected by works within the Tunnels precinct are listed Table 16. Note that the HO reference for VHR sites is included in Table 14 and these are not listed again in Table 16.

Table 16 Potentially affected local HO places, other than VHR places, within the Tunnels precinct

HO number	Place	Address	Planning Scheme/ Tunnels precinct
HO6	South Yarra Precinct		Melbourne Domain station to eastern portal
HO150	Toorak Road (west of William and Claremont Streets) Precinct		Stonnington Domain station to eastern portal

7.3.8 Potential additional heritage places

The City of Melbourne has prepared Amendment C207 to the Melbourne Planning Scheme. This is based on a recent heritage review of the Arden Macaulay area (Butler, 2012). The amendment seeks to introduce heritage controls over a series of predominantly industrial sites and precincts in the north-west and west of the municipality. The Amendment has been publicly exhibited and reviewed by an independent Planning Panel, and is currently with the Minister for Planning awaiting approval.

While not directly affected by works, a length of Moonee Ponds Creek - along with associated infrastructure including but not limited to road bridges, pylons, pumping stations, bluestone levees and the watercourse is proposed to be included in the Schedule to the HO (HO1092, see Figure 18 and Table 17) – and falls within the Tunnels precinct.

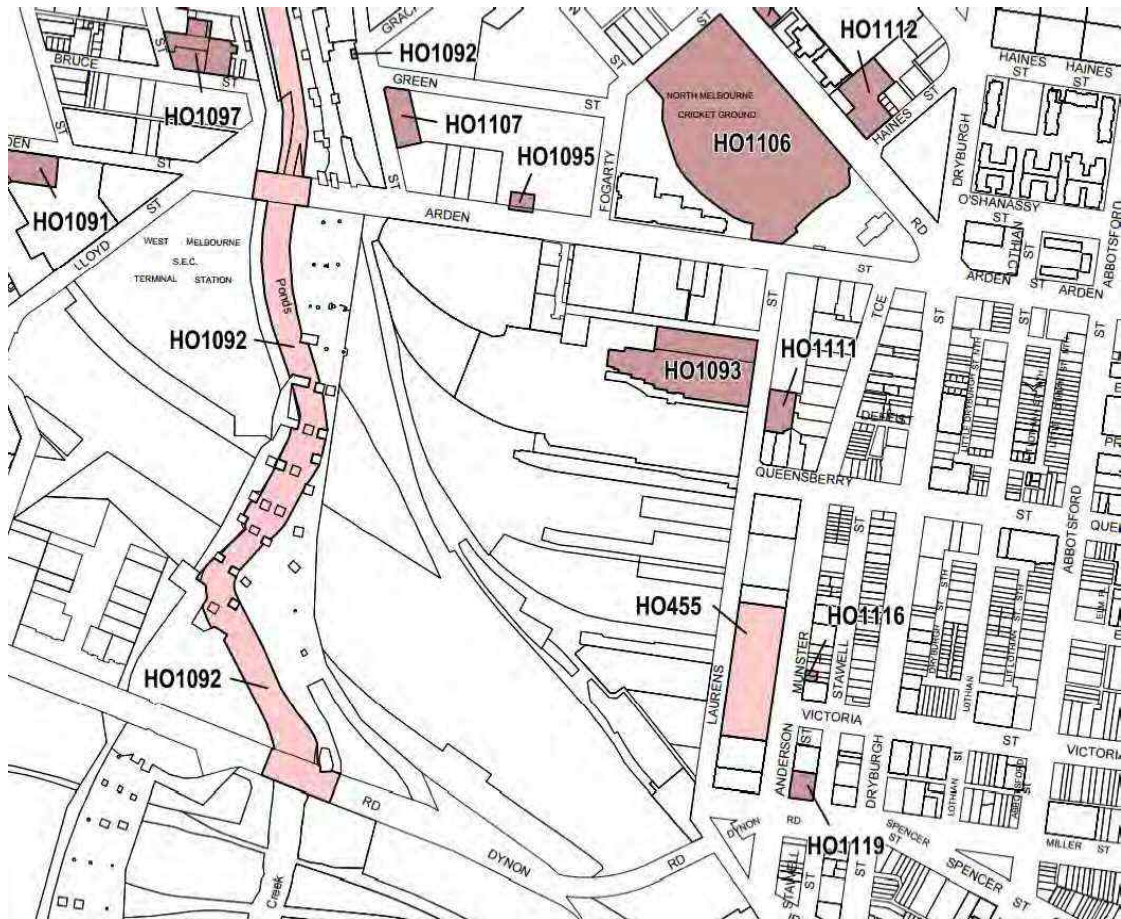


Figure 18 Proposed HO mapping under Amendment C207 (adopted version, post-panel, as forwarded to the Department for approval) showing the extent of the proposed Moonee Ponds Creek and Infrastructure Precinct (H1092)
 Source: Planning Scheme Amendments on line

Table 17 Proposed additional HO places in the Tunnels precinct

Proposed HO number	Place	Address	Grading
HO1092	Moonee Ponds Creek and Infrastructure Precinct	Kensington and North Melbourne	C

7.4 Key Issues

The key issues associated with the Concept Design are identified in the table below.

Table 18 Key issues associated with the Concept Design

Concept Design	Issue
CityLink tunnels crossing – above CityLink tunnels	Ground improving works may be required and these could have an impact on the Domain Parklands (VHR HH2304) and other separately registered places within the parklands (Boer War Memorial, VHR H0382 and the Marquis of Linlithgow Statue, VHR H0366).
TBM Southern launch site	
- Fawkner Park open space and tennis courts	Loss of trees that contribute to the character of the place, most especially the row of Canary Island Palms and Pin Oaks to the Toorak Road West frontage.
- Domain launch	Refer to the Domain station precinct at section 13 of this report.
Emergency access shafts	
- Fawkner Park north-east location	Tree removal as a result of construction works and visual impact associated with the permanent structure in Fawkner Park (within the South Yarra precinct, HO6).
- Queen Victoria Gardens, adjacent to Linlithgow Avenue	Tree removal as a result of construction works and visual impact associated with the permanent structure within the Domain Parklands (VHR H2304) and located close to the King Edward VII Memorial within the parklands.

7.4.1 Alternative design options

The key issues associated with the alternative design options to the Concept Design are identified in Table 19.

Table 19 Key issues associated with alternative design options to the Concept Design

Alternative design options	Issue
CityLink tunnels crossing – below CityLink tunnels	This option would be preferred from a heritage perspective on the basis that no ground improvement works would be required, reducing the likelihood of tree loss.
Emergency access shafts	
- Located in Fawkner Park TBM launch site	In the event the Fawkner Park TBM launch site is established, this location would be preferred from a heritage perspective as the proposed access shaft poses no additional construction impacts.
- Located in Tom's Block	Loss of trees associated with construction, and permanent removal of trees between the access shaft and Linlithgow Avenue for emergency vehicle access. Visual impact of the permanent structure within the Domain Parklands (VHR H2304).

7.5 Benefits and Opportunities

Benefits and opportunities associated with the Concept Design and its alternative design options are listed in the tables below.

Table 20 Benefits and opportunities associated with the Concept Design

Concept Design	Benefits	Opportunities
TBM Southern launch site		
- Domain launch	-	Site would be also be affected by construction works associated with the Domain Station and so there would be no additional adverse heritage impact.

Table 21 Benefits and opportunities associated with alternative design options

Concept Design	Benefits	Opportunities
CityLink tunnels crossing – below CityLink tunnels	Avoids potential impacts associated with ground improvement works.	-
Emergency access shafts		
- Using the location of the Fawkner Park TBM launch site	-	Ability to co-locate the access shaft within the land area disturbed for the launch site.

7.6 Impact Assessment

The following draft EES evaluation objectives and assessment criteria (and indicators where relevant) are relevant to this assessment.

Draft EES evaluation objectives	Assessment criteria
Cultural Heritage – To avoid or minimise adverse effects on Aboriginal and historical cultural heritage values	Avoid or minimise impacts on Aboriginal cultural heritage values and places.
	Avoid or minimise impacts on historical cultural heritage values and places.

The project is generally consistent with the draft EES evaluation objective to avoid or minimise impacts on historical cultural heritage values and places as:

- subject to appropriate controls and achievement of Environmental Performance Requirements, works within the Domain Parklands and Fawkner Park would have localised and temporary impacts associated with construction activities
- where landscape impacts occur, there would be opportunities to re-establish the valued landscape character over time
- where permanent above-ground structures and works are required, there would be opportunities for these to be designed sited and landscaped so as to minimise their physical and visual impacts.

7.6.1 Victoria Barracks

7.6.1.1 Statutory heritage controls

The Victoria Barracks as a whole is listed on the CHL as the Victoria Barracks Precinct (Place ID 105232). A number of buildings within the Barracks are also listed individually in the CHL. The statutory heritage controls that apply at the Victoria Barracks are as follows:

Legislation	Place name	Place ID
EPBC Act 1999	Victoria Barracks Precinct	105232
	Victoria Barracks A Block	105167
	Victoria Barracks C Block	105171
	Victoria Barracks F Block	105170
	Victoria Barracks G Block	105168
	Victoria Barracks Guardhouse (former)	105173
	Victoria Barracks J Block	105172
	Victoria Barracks Precinct	105232
	Victoria Barracks, The Keep	105169
Heritage Act	-	-
Planning and Environment Act	-	-

7.6.1.2 Heritage considerations

Victoria Barracks and its component parts are currently subject to seven different listings in the CHL, with one broad precinct-based listing and a series of others addressing particular buildings. The official CHL values for the precinct are as historical (CHL criterion a), representative (CHL criterion d), aesthetic (CHL criterion e), creative/technical (CHL criterion f), social (CHL criterion g) and associative (CHL criterion h).

In considering the specific nature of the values, it is relevant to reference the Heritage Management Plan (HMP) for Victoria Barracks that was prepared for the Department of Defence in 2011 (Godden Mackay Logan, 2011). The HMP referenced the official CHL values as expressed in the Victoria Barracks precinct citation but also recommended a new official assessment of these values.

The HMP agreed that Victoria Barracks meets the threshold for Commonwealth Heritage values for historical (CHL criterion a), representative (CHL criterion d), aesthetic (CHL criterion e), creative/technical (CHL criterion f), social (CHL criterion g) and associative (CHL criterion h). The assessment found only some components to have minor rare attributes under criterion b which addresses rarity.

The updated and revised statement of significance contained in the 2001 HMP referenced the following key aspects and characteristics of the place (these have been summarised, refer Godden Mackay Logan: 2011, Vol. 1, section 5.2.4):

- as a key site in Victoria's and Australia's defence history (criterion a)
- for its axial layout, colonial and wartime-era buildings and plantings illustrate different periods in Australia's military history, as well as construction styles and materials (criterion a)

- for particular uncommon and rare historical qualities associated with particular buildings including colonial era buildings (fine bluestone construction, cells and evidence of later laboratory use in the guardhouse, F Block as the earliest surviving hospital building in Victoria, G Block for its construction by soldiers, Cabinet Rooms in A and New A Blocks, unusual public presentation to St Kilda Road and for its archaeological potential (criterion b)
- for its high archaeological potential (criterion c)
- as a fine representation of military planning including layout, functional relationships, and perimeter walling and good examples of particular architectural styles (criterion d)
- a highly visible landmark on St Kilda Road, including both the buildings and landscaped setting (criterion e)
- notable workmanship evident in its bluestone buildings and some internal features (criterion f)
- of social significance for its association with Victorian military history and the defence of the nation as a whole (criterion g)
- strong association with a large number of significant Australians (criterion h).

The HMP also included a ranking of the various elements on the site in terms of their significance as part of the place as a whole. It also contains a range of policies for the management of the place as a whole and its component parts.

7.6.1.3 Impact assessment

There would be no direct physical impact on Victoria Barracks nor any adverse visual impact associated with new structures as a result of the project.

Accepting this, as for other heritage places in proximity to works as part of the project, there may be the potential for damage to the buildings and structures and features at Victoria Barracks as a result of construction vibration and ground settlement.

This issue has been considered on a project-wide basis and is addressed at section 6.0 of this report.

Of relevance, it is noted that delegate for the Australian Minister for the Environment determined on 22 September 2015 that Melbourne Metro is ‘not a controlled action if undertaken in a particular manner’. The decision requires the project to measure and monitor vibration when tunnelling passes Victoria Barracks. On the basis of the project-wide requirements for management of the risk of construction vibration and ground settlement and the particular manner requirements there would be expected to be no impacts on the heritage place. The mitigation measures in the case of Victoria Barracks would need to reflect what is set out in the particular manner requirements, which are as follows:

The following measures must be taken into avoid significant impacts on:

Commonwealth land (sections 26 and 27A)

To mitigate potential impacts to commonwealth land, the person taking the action must implement the following vibration monitoring and measuring approach:

- A Conduct preconstruction dilapidation surveys of the **nearest** Commonwealth Heritage listed structures to the proposed action, including the **Former Guardhouse (B Block)**, to record structural condition and structural integrity prior to **commencement of tunnelling**.
- B Conduct vibration monitoring at the **commencement of tunnelling** in geological conditions that are similar to those at **Victoria Barracks** in order to quantify the actual tunnel boring machine vibration

characteristics (level and frequency) for comparison to the values derived from **the literature** and the **German DIN target**.

- C Conduct continuous vibration monitoring at the **nearest Victoria Barracks** heritage structures to the proposed action, including the **Former Guardhouse (B Block)**, to assess the actual tunnelling vibrations for acceptability, taking into account both the vibration frequency and condition of structures, until monitoring of vibration at **the Former Guardhouse (B Block)** shows measurements equivalent to preconstruction vibration readings at the Former Guardhouse (B Block).

- D If monitoring conducted according to Particular Manner C demonstrates the condition of heritage structures may be degraded as a result of vibration, ground vibration must be reduced by adjusting the advance rate of the tunnel boring machine until monitoring of vibration at the **Former Guardhouse (B Block)** shows consistent measurements equivalent to preconstruction vibration readings at the **Former Guardhouse (B Block)**.

7.6.2 Princes Bridge

7.6.2.1 Statutory heritage controls

The statutory heritage controls that apply are as follows:

Legislation	Relevant VHR/HO number
Heritage Act	VHR H2304
Planning and Environment Act	HO398 (Melbourne Planning Scheme)

7.6.2.2 Heritage considerations

Princes Bridge is of state historical, social, architectural and aesthetic significance. The third bridge at this location, it is of historical significance as a river crossing that was critical to early transport routes and in forming the shape of the city. The construction of this bridge in 1888 reflects the boom in Melbourne and it is of architectural significance as a substantial and grand example of nineteenth century bridge design. It is of social and aesthetic significance as a landmark in Melbourne and the symbolic entrance to the city, on axis with St Kilda Road, Swanston Street and the Shrine of Remembrance.

A CMP for Princes Bridge was prepared by Allom Lovell & Associates (Allom Lovell & Associates, 2002).

7.6.2.3 Impact assessment

On the basis of the project-wide requirements for management of the risk of construction vibration and ground settlement and the particular manner requirements there would be expected to be no impacts on the heritage place. Refer to section 6.0.

7.6.3 Domain Parklands

7.6.3.1 Statutory heritage controls

The statutory heritage controls that apply are as follows:

Legislation	Relevant VHR/HO number
Heritage Act	VHR H2304
Planning and Environment Act	HO398 (Melbourne Planning Scheme)

7.6.3.2 Heritage considerations

The Domain Parklands (see Figure 19) is of historical, archaeological, aesthetic, architectural, scientific (horticultural) and social significance to the State of Victoria. These values are variously embodied in the overall planning and layout of the place, its diverse historical and social associations and the diversity and richness of its landscape and built form characteristics.

In considering the impact on a particular area or single feature within the place, the issue is that of the significance of that area or feature and its contribution to the heritage values of the place as a whole.

Within the place as a whole there are hard and soft landscape elements of significance that can be identified, including structural elements such as avenue and row plantings, garden beds and rockeries, road and path networks, as well as its plant collection and important specimen trees, buildings and sculptures and other built features. Important vegetation and landscape characteristics are identified within the VHR statement of significance, while buildings and structures (including memorials, monuments, sculptures, paths and roadways) are specifically listed and mapped as part of the VHR registration (refer Figure 20 and Figure 21).

Under *Why is it significant?*, the VHR statement of significance reads as follows:

The Domain Parklands is of historical importance for its associations with the early settlement of Melbourne and the foundation of British colonial administration in Victoria. The Domain is a tangible link with the British Colonial tradition of establishing a large Government Domain surrounding the vice-regal residence. The Domain has close associations with Government House, the Observatory, the Shrine of Remembrance and the Royal Botanic Gardens, and includes memorials and statuary which reflect the links with the administration of the colony.

Buildings such as the stables, former astronomer's residence, gardener's cottage and Government House Guardhouse are illustrative of the variety of activities that took place within the parklands.

The Domain Parklands is of historical significance for its associations with important figures in Victoria, including Ferdinand von Mueller, Government Botanist (1853-96) and first Director of the Royal Botanic Gardens (1857-73), who established the initial layout and planting of the Domain; William Guilfoyle, von Mueller's successor as Director who was responsible for the late 19th century layout and planting of the Domain and Government House to Joseph Sayce's plan; Carlo Catani, Chief Engineer of the Public Works Department, who was the main influence in the design of Alexandra Avenue, Alexandra Gardens and the Queen Victoria Gardens; and Hugh Linaker, prolific public landscape designer in Victoria and responsible for the layout of the King's Domain.

The Domain Parklands is of archaeological significance for its potential to contain historical archaeological deposits, features and/or objects associated with previous activities and uses. This may include archaeological material associated with such sites as the former Immigration Home and the Engineers' Depot.

The Domain Parklands is of aesthetic significance for its extensive scale and collection of planting, landscape styles and features. The Domain has contrasting informal and formal areas, layers of 19th and 20th century character and features such as statuary, monuments, numerous vistas and views and picturesque boulevards and avenues, including Alexandra Avenue with its innovative design, the 1934 Hugh Linaker designed Pioneer Women's Memorial Garden of a formal layout and planting, a grotto, a fern gully in a former quarry, ponds and rockeries, and two unusual rockery fountains. Landmark views include the Yarra River from Alexandra Avenue, glimpses of the tower of Government House and the Shrine from Swanston Street and St Kilda Road. The oak, plane and elm and other tree avenues and rows along Birdwood, Linlithgow and Alexandra Avenues, the Tan, King George V path, St Kilda and Domain Roads, Jeffries Parade, are all of aesthetic significance.

The Domain Parklands is of scientific (horticultural) significance for the outstanding collection of plants, including avenues and rows, and/or specimens of *Ulmus*, *Platanus xacerifolia*, *Populus Quercus*, *Ficus macrophylla*, *Eucalyptus*, *Araucaria*, *Pinaceae*, *Pinus*, *Cupressus*, *Olea* and *Areaceae*.

The Domain Parklands contain buildings and structures which are of architectural significance including the Janet Lady Clarke Memorial designed by Herbert Black (1913); the Electricity Substation (c1934) and the Stapely Pavilion designed by Frank Stapely (1937-39).

The Domain Parklands is of social significance for the highly valued recreational role it holds for Victorian's [sic.], residents and visitors. The Domain continues to be a key venue for walking, cycling, rowing, jogging along the Tan, and the setting for major outdoor events such as concerts at the Sidney Myer Music Bowl, Anzac Day ceremonies, the Moomba Festival and rowing regattas.

The Aboriginal reburial site within the Domain Parklands is of social significance and potentially of spiritual significance to the Aboriginal community as a commemorative site of remembrance. It contains unprovenanced skeletal remains which represent 38 Victorian Aboriginal tribes.

In terms of more detailed heritage assessments, a Conservation Analysis for the Domain Parklands was prepared by John Patrick Pty Ltd and Allom Lovell & Associates for the City of Melbourne in 2003 (John Patrick Pty Ltd, 2003) and this report is referenced in the VHR registration.

More recently, an updated CMP for the Domain Parklands was commissioned by the City of Melbourne. The CMP project is nearing completion (Context, 2015) and Council officers have provided a draft of the report, including draft policies.

As the Domain Parklands is a registered heritage place and a registered archaeological place, consideration has also been given to the potential for the works to have an adverse impact on its archaeological values.

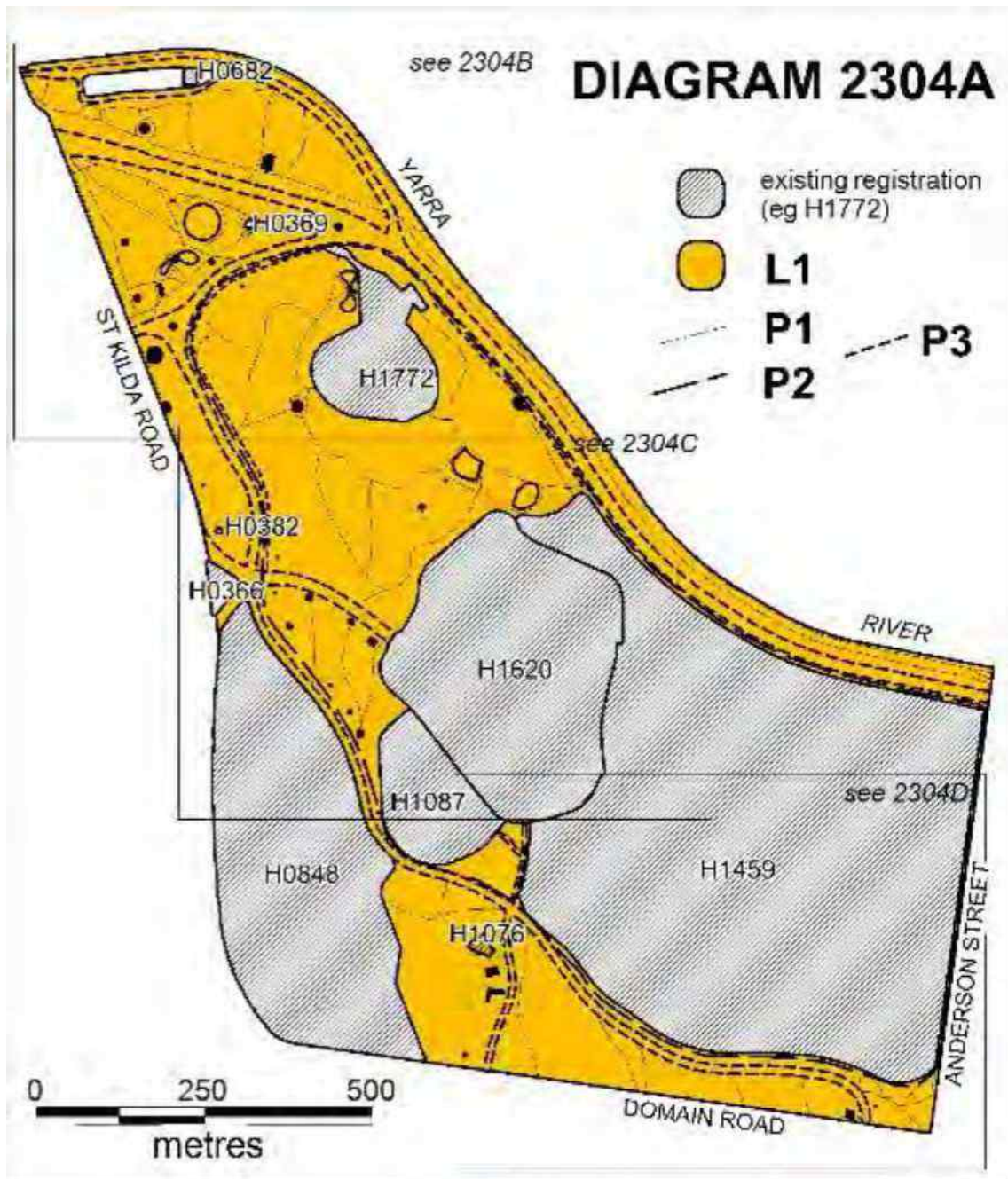


Figure 19 Extent of the VHR registration for Domain Parklands
 Source: Victorian Heritage Database online

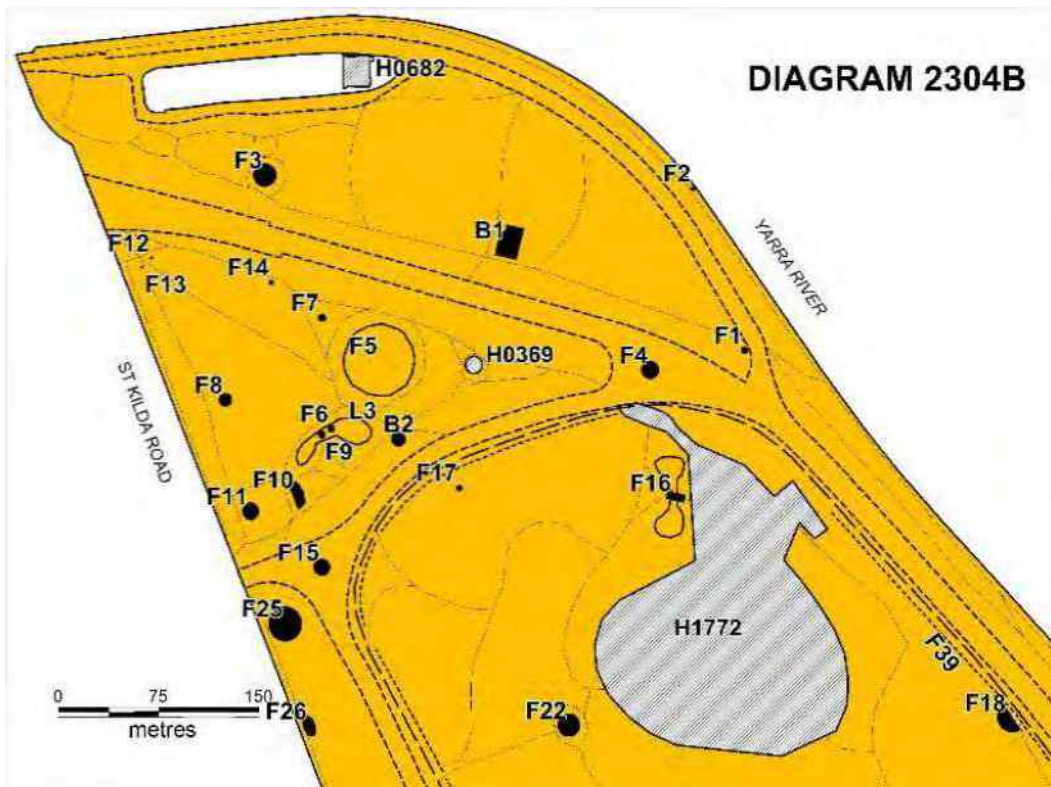


Figure 20 Part of the Domain Parklands registration mapping (Diagram 2304B) showing the location of significant elements in the northern part of the registration
Source: Victorian Heritage Database online

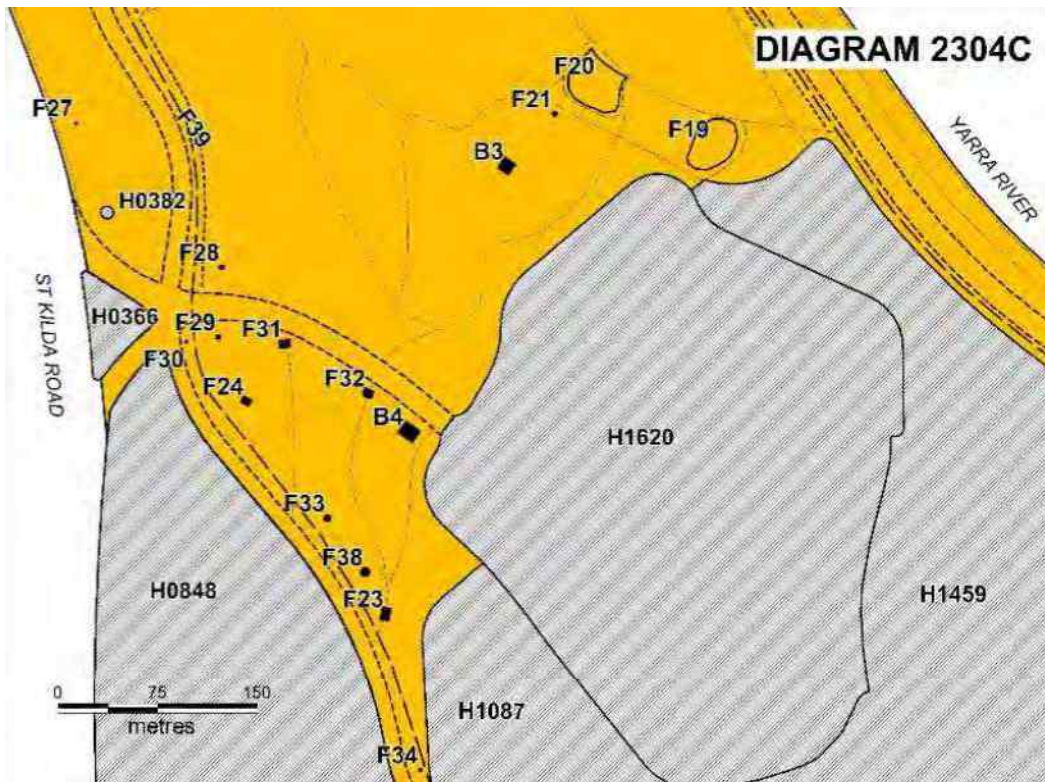


Figure 21 Part of the Domain Parklands registration mapping (Diagram 2304C) showing the location of significant elements in the central part of the registration
Source: Victorian Heritage Database online

7.6.3.3 Impact assessment

There are three potential impacts on the VHR registered Domain Parklands within the Tunnels precinct:

- emergency access shaft locations (Concept Design and alternative design options)
- potential ground improvement works associated with the CityLink tunnels crossing – above CityLink tunnels (Concept Design)
- TBM Southern launch site – Domain launch.

These are addressed in turn below.

Emergency access shaft

Two options are proposed for the emergency access shaft.

Queen Victoria Gardens

In the Concept Design, the shaft would be located on the southern edge of the Queen Victoria Gardens, on Linlithgow Avenue, a short distance south-west of the King Edward VII memorial. For the purposes of this assessment, it is assumed that the required emergency vehicular parking and access to the permanent structure would be on Linlithgow Avenue (within the roadway) rather than within the Gardens.

The key issues with this option are those of the visual impact of the permanent structure, particularly on the King Edward VII Memorial and its setting and the physical impacts (tree removal) associated with the establishment of construction work sites in this location.

The Queen Victoria Gardens contains three key monuments, those to Queen Victoria, King Edward VII and Janet, Lady Clarke. The Context draft CMP (Context, 2015) describes the design of the Gardens as a ‘memorial setting’ which

... exhibits particular aesthetic characteristics... to ensure the memorial structures of Queen Victoria monument, King Edward VII monument and the Janet, Lady Clarke Memorial Rotundas are visually dominant, and the surrounding landscape either provides unobstructed views to and from these monuments, or frames the monuments in some way, such as the Palms planted around both Queen Victoria and King Edward Memorial monuments... (Context, 2015: vol. 4, pp. 5-6)

The King Edward VII Memorial (1911-1920) is of a high level of significance within the registered place. It is individually identified in the VHR registration (see F10 at Figure 20) and statement of significance and was assessed as of primary significance in the draft CMP (Context, 2015). The artwork itself is of King Edward VII on horseback and is the work of notable Australian sculptor, Sir Bertram MacKenna (1863-1931).

The primary view to the memorial is from St Kilda Road over the 1966 Floral Clock (registered feature F10 at Figure 20). This vista is identified as of significance in the draft CMP (Context, 2015: vol 1, p.67). The Floral Clock itself is a significant feature (albeit of contributory rather than primary significance in the Context draft CMP). There are also significant trees in this area as associated with the memorial; these include groups of Canary Island Date Palms (*Phoenix canariensis*) to the south-west, north, north-west and east as well as an American Fan Palm (*Washingtonia filifera*) to the south-west. The palms are identified in the draft CMP as dating from the development of Queen Victoria Gardens from c. 1907. Earlier work by Jellie and Whitehead confirms that Chief Public Works Department engineer Carlo Catani was consulted as to the layout of the surrounding area and he had advised that groupings of palms would ‘give the Memorial an artistic setting’ (Context, 2015: vol. 1, p. 95, see also vol. 4, p. 67, Jellie and Whitehead, 1992: 23). The trees are all elements of primary significance in the draft CMP.



Figure 22 Aerial view of the location of the proposed emergency access shaft at Linlithgow Avenue with the King Edward VII Memorial (red arrow), the Floral Clock and palms: refer to Figure 30 for the location of the emergency access shaft
Source: Nearmap, 13 September 2015



Figure 23 View over the Floral Clock towards the King Edward VII Memorial, showing the importance of the palms as part of the setting of the memorial



Figure 24 Another view from further north, looking south-east towards the memorial (note the existing toilet block is not evident in this view)



Figure 25 View east from the curved path south of the Floral Clock, King Edward VII Memorial in the distance; Linlithgow Avenue is to the right



Figure 26 View from the south in Linlithgow Avenue north towards the proposed site of the emergency access shaft, King Edward VII Memorial in the background

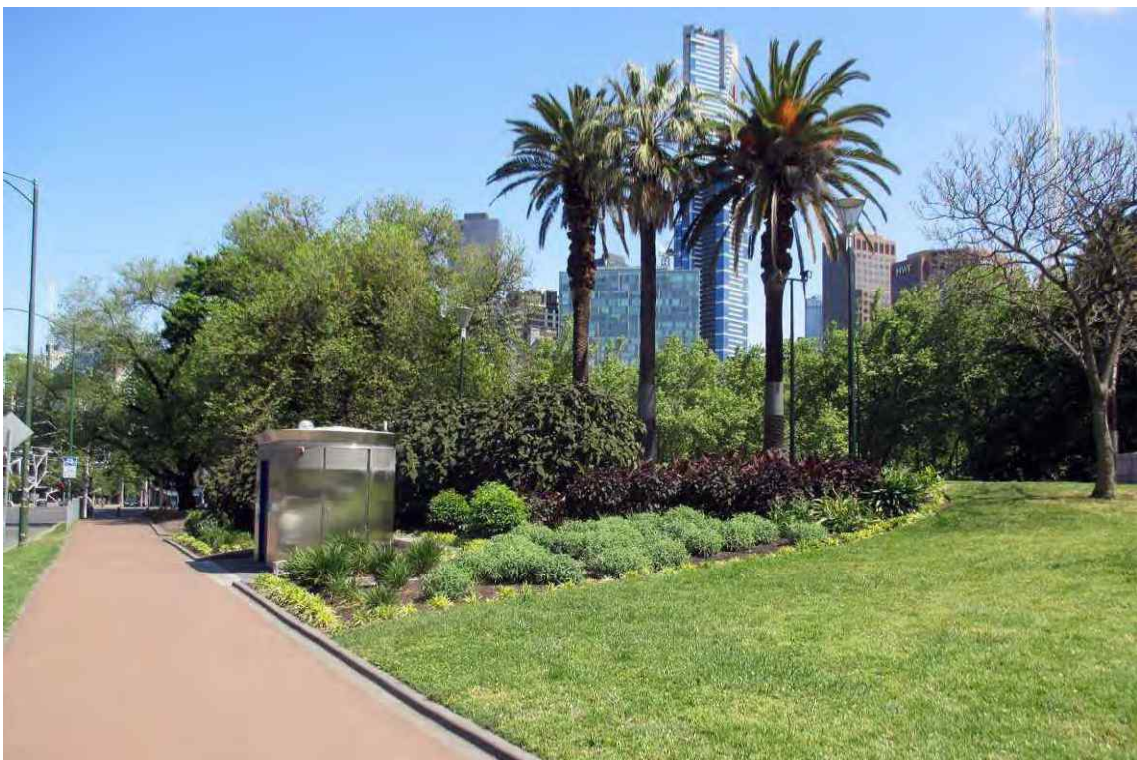


Figure 27 View from the east showing the use of screening landscaping to the existing toilet



Figure 28 Rockery fountain in the Domain Parklands

While there is already an existing building (public toilet) in this location, the new permanent infrastructure (over the emergency access shaft) would be larger in the Concept Design and consequently would have an additional visual impact. It is understood the building would be required to accommodate both the necessary access to the shaft below (including stair and lift overrun) as well as toilets to replace the existing building. Recognising these functional requirements, the design should be reviewed to minimise its visual impact, particularly through lowering the height if possible and potentially, deleting the requirement for the building to accommodate a toilet facility.

The priority would be the protection of the significant view to the King Edward VII Memorial from the west. To some extent, this view is protected by the enclosing effect of the existing landscaping and topography as the site falls away toward Linlithgow Avenue. Additional landscaping should be used to screen the new structure in key views from this direction, as has successfully occurred in relation to the existing toilet building. The building would have a more immediate impact in views from the south (refer Figure 26) where it would be relatively prominent on Linlithgow Avenue. It would obscure some views across to the memorial from the south, but these are not considered to be as significant. It would also be visible from within the immediate surrounds of the memorial.

If required, the provision of vehicular access or on-site parking in this location would have a further adverse heritage impact and parking should be provided within the road reserve.

Figure 29 is a recently constructed structure of the type contemplated and illustrates the nature of such structures; it is not suggested the structures for Melbourne Metro would adopt this appearance.

In terms of construction activities and impacts in this location, in the Concept Design the construction work site is indicated within the Queen Victoria Gardens north of Linlithgow Avenue, extending north (refer Figure 10 and Figure 18). A number of trees would be affected but the site has been held back to protect the monument and its immediate surrounds (refer to Figure 30).



Figure 29 Recently constructed permanent structure associated with the sewer mining (water recycling) plant in Yarra Park (VHR H2251), this building contains a stair and lift

There would be scope to temporarily transplant and reinstate the three mature palms at this location to facilitate construction. Two additional trees that would be impacted, a Jacaranda (*Jacaranda mimosifolia*, Tree DN108, a Japanese Flowering Crabapple (*Malus floribunda*, Tree DN111) have not been identified of individual significance within this precinct (Context, 2015). Trees that would require removal are shown on the plan at Figure 30 and in Table 22.

The construction work site in the road itself would have no impact assuming appropriate protection of the significant avenue plantings on Linlithgow Avenue and the significant rockery fountain.

Consideration has also been given to the potential for archaeological impacts in this location as this site coincides with site of one of the earliest government institutions to be established in the Domain. The Immigrants' Home comprised a group of timber buildings established by the government in the 1850s to deal with the housing crisis which occurred as a result of the influx of homeless immigrants during the early gold rush. The complex included a kitchen, mess room and superintendent's quarters. After the housing crisis, the buildings were used as military barracks for the 40th regiment, then as temporary accommodation for the homeless and a reformatory for boys and girls in 1860. In 1903 the complex was known as the Victorian Homes for the Aged and Infirm. The Home was demolished in 1913 and the area incorporated into the Queen Victoria Gardens. In 1920 the King Edward VII statue was constructed on the site, followed in 1966 by the Floral Clock (John Patrick and Allom Lovell and Associates, 2003: 10, 11, 78).

Despite this documented history, due to the disturbance from the demolition and later constructions, there is unlikely to be any physical archaeological remains of the Immigrants' Home still present.

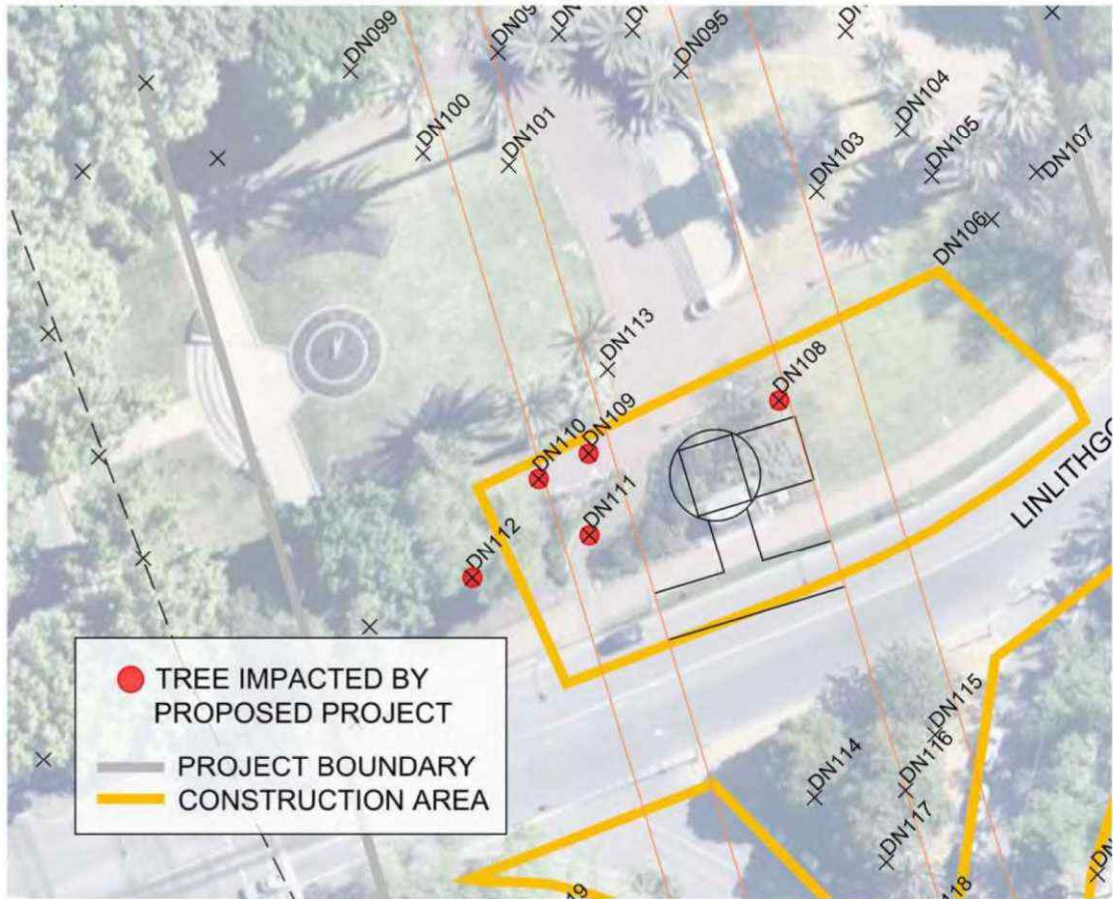


Figure 30 Potential tree removals in Queen Victoria Gardens as related to the proposed emergency access shaft

Table 22 Trees potentially impacted - emergency access shaft Queen Victoria Gardens, adjacent Linlithgow Avenue

No	Species	Common name	ULE	Age
Trees highlighted grey are semi-mature to over mature trees in the public realm with a ULE > 10years				
DN108	<i>Jacaranda mimosifolia</i>	Jacaranda	31-60	Semi-mature
DN109	<i>Washingtonia filifera</i> †	American cotton palm	21-30	Mature
DN110	<i>Phoenix canariensis</i> †	Canary Island date Palm	31-60	Mature
DN111	<i>Malus floribunda</i>	Japanese flowering crabapple	21-30	Juvenile
DN112	<i>Ulmus glabra</i>	Scotch Elm	21-30	Mature
DN113	<i>Phoenix canariensis</i> †	Canary Island date palm	31-60	Mature
Total number of trees				7

† = Palm that can be temporarily relocated and reinstated.

Located in Tom's Block within Alexandra Park (alternative design option)

The alternative location for the emergency access shaft is proposed on the west side of Linlithgow Avenue just north of (and opposite) the approach to the King George V memorial. Provision may need to be made for emergency vehicle access from Linlithgow Avenue but this is not confirmed. The construction work site that would need to be established associated within this location extends into the park and tree removals would be required.

As for the Queen Victoria Gardens site, the two issues are the temporary physical impacts of the construction works, including any construction work site established associated with the works, and the visual impact of the permanent structure.

A number of trees would be anticipated to require removal to facilitate construction of the shaft and its associated construction work site. A total of 14 trees would be potentially impacted. These are shown on the plan at Figure 31 and are listed at Table 23.

Trees to be removed include a number of relatively recently planted elms, two Canary Island Date Palms and several Red-Flowering Gums (*Corymbia ficifolia*). As for other mature palms within Domain Parklands that might otherwise require removal, the Canary Island Palms can be temporarily transplanted and relocated at the end of works. These trees have been identified as of contributory significance as an original Catani planting along St Kilda Road (Context, 2015: vol 2, p.113). A significant Canary Island Pine (*Pinus canariensis*, DC013) is located very close to the west side of the nominated construction work site, and depending on the works or activities that may occur within the site is at potential risk of removal or damage. In addition, a substantial elm (DN132) would be removed.

In terms of the permanent structure, it is assumed it would be generally as for the Concept Design (Queen Victoria Gardens) version in terms of height and scale (refer to the project description), but possibly with some reduction in size as it is not required to accommodate replacement toilet facilities.

Located in a relatively open area, the new structure would be easily viewed from a number of vantage points, but most readily from within Tom's Block and along Linlithgow Avenue (see Figure 34, Figure 35). The structure would be set well back from St Kilda Road; while visible, it would not be prominent in views into the parkland from this frontage. It would not impact on any of the key views identified in the draft CMP (Context, 2015: vol.1, p. 55) nor intrude into the setting of any of the nearby memorials and

features (such as the Police Memorial and the Walker Fountain, both of which are located in Tom's Block and the King George V Memorial to the east of Linlithgow Avenue). It would stand as an atypical element within the parkland setting, albeit one of relatively modest proportions. As for the Concept Design option, and recognising there are constraints posed by its function, it would be important to design the building and its surrounds to minimise its visual impact.

While the access shaft is shown located back from the edge of Linlithgow Avenue, there would also be a permanent impact on the elm row which extends along the western side of Linlithgow Avenue, including the permanent removal of trees to facilitate emergency vehicle access to the access shaft. Because of the existing spacing between trees in the boundary avenue, this would be likely to be limited to one permanent tree loss (the mature elm, DN132). It is assumed no on-site parking within the park itself would be required. The need for a crossover on Linlithgow Avenue would need to be confirmed.

The Domain Parklands avenue and row plantings are important to the overall planning and presentation of the places as a whole and contribute to its aesthetic value. Those in Linlithgow Avenue are specifically referenced in the VHR statement of significance. Both the alignment / layout of the road and the elm avenue are identified as elements of primary significance in the draft CMP (Context 2015: vol. 5, see section 4.2). The permanent loss of one tree would result in a minor interruption to the avenue but its overall presentation would be maintained.

In considering the potential for historical archaeology in this location, the proposed location of the emergency access shaft between Linlithgow Avenue and St Kilda Road does not appear to have been subject to historical occupation or activities apart from those related to the construction of the park structures, memorials and features. As such, there is unlikely to be any physical archaeological remains present.

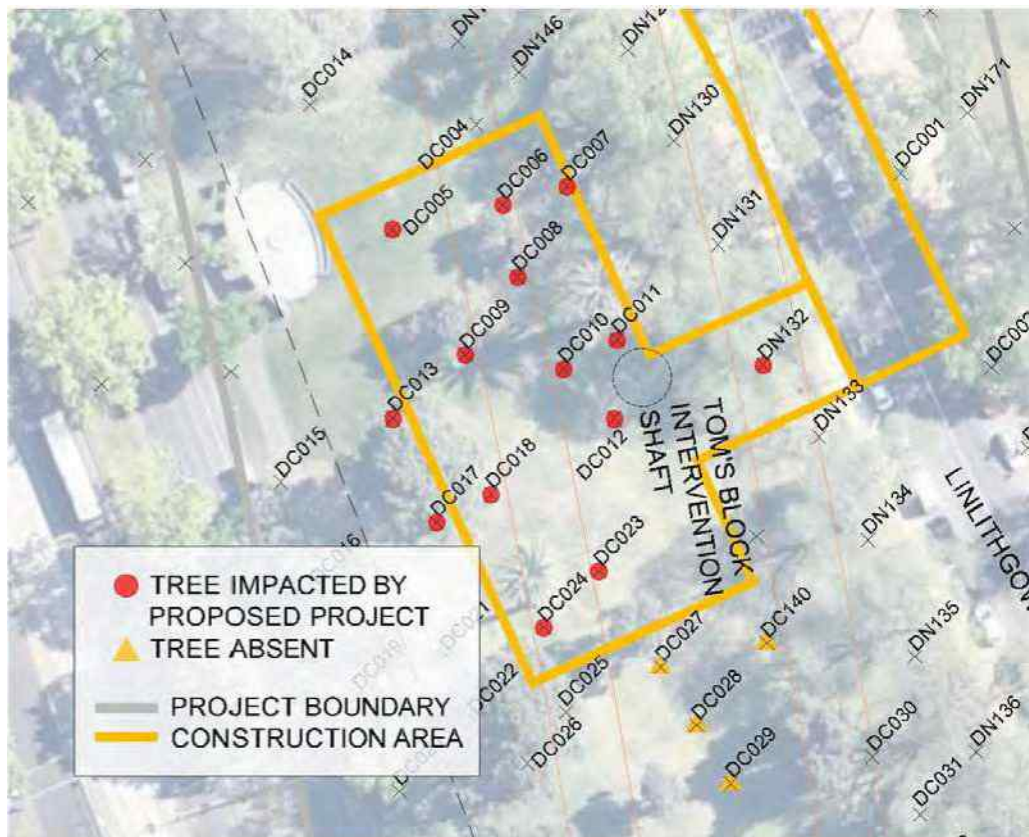


Figure 31 Potential tree removals at Linlithgow Avenue and at the northern end of Tom's Block

Table 23 Trees potentially impacted - emergency access shaft, Tom's Block

No	Species	Common name	ULE	Age
DN132	<i>Ulmus</i> sp.	Elm	11-20	Mature
DC005	<i>Ulmus procera</i>	English Elm	60+	Juvenile
DC006	<i>Tilia cordata</i>	Small-leaved linden	60+	Juvenile
DC007	<i>Ulmus</i> sp.	Elm	1-5	Semi-mature
DC008	<i>Corymbia ficifolia</i>	Red-flowering gum	6-10	Semi-mature
DC009	<i>Corymbia ficifolia</i>	Red-flowering gum	21-30	Semi-mature
DC010	<i>Ulmus</i> sp.	Elm	60+	Juvenile
DC011	<i>Phoenix canariensis</i> †	Canary Island date palm	31-60	Mature
DC012	<i>Corymbia ficifolia</i>	Red-flowering gum	6-10	Semi-mature
DC013	<i>Corymbia ficifolia</i>	Red-Flowering Gum	5-10	Mature
DC017	<i>Pinus canariensis</i>	Canary Island Pine	31-60	Mature
DC018	<i>Corymbia ficifolia</i>	Red-flowering gum	6-10	Semi-mature
DC023	<i>Ulmus</i> sp.	Elm	60+	Semi-mature
DC024	<i>Phoenix canariensis</i> †	Canary Island date palm	31-60	Mature
Total number of trees				14

† = Palm that can be temporarily relocated and reinstated.



Figure 32 Aerial view showing the context of the proposed emergency shaft location in Tom's Block



Figure 33 Elm avenue on Linlithgow Avenue, on the eastern edge of Tom's Block



Figure 34 View looking north within Tom's Block towards the area proposed for the emergency access shaft



Figure 35 Another view of the proposed location, also looking north

Ground improvement works associated with the CityLink tunnels crossing – above CityLink tunnels (Concept Design)

The extent and method of ground improvement works are unknown at this time. If required, ground improvement works in Tom's Block would likely to have an adverse impact on existing trees and could limit the extent to which new trees could be replanted. A total of 52 trees have been identified as potentially requiring removal, including a mix of juvenile, semi mature, mature and over-mature specimens. Refer to the plan at Figure 36 and Table 24.

Potentially impacted trees include mature, significant elms along the east side of Tom's Block forming a continuous boundary plantation, as well as individual specimen trees of some significance within the place such as Hoop Pine (*Araucaria cunninghamii*, DC065), Monterey Pine (*Pinus radiata*, DC066) as well as the aforementioned Canary Island Palms and Canary Island Pine within or close to the Tom's Block emergency access shaft location.

It is noted that the Context Pty Ltd draft CMP (Context, 2015: vol. 2, p. 79) suggests that a group of trees within the affected area of Tom's Block may have been planted to mark the first anniversary of the Gallipoli landing, however the City of Melbourne has advised that additional research would be required to confirm this. These trees include a group of red flowering gums, a Hoop Pine and Moreton Bay fig.

There is the potential to mitigate against this impact through careful control of volume loss, TBM operations and ground monitoring during construction, so that surface ground stabilisation works are not required or at least limited and there is no associated requirement for tree removals.

If ground improvement works are required, a methodology should be adopted that includes the re-establishment of a two metre depth of soil sufficient to allow for landscape reinstatement.

Ground improvement works may also have an adverse impact on the significant memorials and monuments in Tom's Block, works either directly, or through proximity to a construction area. This includes the two separately registered monuments, the Boer War Monument, VHR H0382 (Figure 37) and the Marquis of Linlithgow Statue, VHR H0366, (Figure 38) as well as several elements identified within the Domain Parklands as follows:

- Sir Edward 'Weary' Dunlop Memorial (F27) and commemorative steps with plaques
- Electricity Supply Pillar on the west side of Linlithgow Avenue (not identified in the VHR extent of registration but assessed as of contributory significance in the draft CMP (Context, 2015: vol.2, p. 122).

The Walker Fountain (F25) and Victoria Police Memorial (F26) are both set to the west of the tunnel alignment and it is not clear if they would be affected by works either directly, or through proximity to a construction area. It is possible that some or all of these elements would need to be removed and reinstated following the completion of the works.

Subject to the development of an appropriate methodology for dismantling, storing and reinstating these elements, there would be minimal adverse impact. A conservation specialist / materials conservator would need to develop an appropriate methodology and undertake the works. It is noted, however that the Boer War Monument (Figure 37) and Marquis of Linlithgow Statue (Figure 38) would both be vulnerable to physical damage during relocation works, particularly the Boer War Monument, which is a finely detailed sandstone work. It would be preferable to retain and protect these memorials *in situ*. Refer to detailed impact assessments below at section 7.6.4 and section 7.6.5.



Figure 36 Potential tree removals at the CityLink tunnels crossing

Table 24 Trees potentially impacted - CityLink tunnels crossing

No	Species	Common name	ULE	Age
Trees highlighted grey are semi-mature to over mature trees in the public realm with a ULE > 10years				
DC004	<i>Ulmus sp.</i>	Elm	1-5	Juvenile
DC006	<i>Tilia cordata</i>	Small-leaved linden	60+	Juvenile
DC007	<i>Ulmus sp.</i>	Elm	1-5	Semi-mature
DC008	<i>Corymbia ficifolia</i>	Red-flowering gum	6-10	Semi-mature
DC009	<i>Corymbia ficifolia</i>	Red-flowering gum	21-30	Semi-mature
DC010	<i>Ulmus sp.</i>	Elm	60+	Juvenile
DC011†	<i>Phoenix canariensis</i>	Canary Island date palm	31-60	Mature
DC012	<i>Corymbia ficifolia</i>	Red-flowering gum	6-10	Semi-mature
DC018	<i>Corymbia ficifolia</i>	Red-flowering gum	6-10	Semi-mature
DC023	<i>Ulmus sp.</i>	Elm	60+	Semi-mature
DC024†	<i>Phoenix canariensis</i>	Canary Island date palm	31-60	Mature
DC025	<i>Corymbia ficifolia</i>	Red-flowering gum	6-10	Semi-mature
DC026	<i>Pinus canariensis</i>	Canary Island pine	31-60	Over mature
DC030	<i>Corymbia ficifolia</i>	Red-flowering gum	21-30	Mature
DC036	<i>Ficus macrophylla</i>	Moreton Bay fig	31-60	Over mature
DC037	<i>Cupressus torulosa</i>	Bhutan cypress	31-60	Mature
DC039	<i>Corymbia ficifolia</i>	Red-flowering gum	6-10	Semi-mature
DC040†	<i>Phoenix canariensis</i>	Canary Island date palm	31-60	Mature
DC041	<i>Corymbia ficifolia</i>	Red-flowering gum	11-20	Mature
DC042	<i>Angophora floribunda</i>	Rough-barked apple	31-60	Mature
DC050	<i>Corymbia ficifolia</i>	Red-flowering gum	21-30	Mature
DC051	<i>Corymbia ficifolia</i>	Red-flowering gum	11-20	Semi-mature
DC052	<i>Ulmus sp.</i>	Elm	31-60	Semi-mature
DC053	<i>Ulmus procera</i>	English elm	31-60	Semi-mature
DC054	<i>Lophostemon confertus</i>	Brush box	60+	Mature
DC055	<i>Ulmus sp.</i>	Elm	11-20	Mature
DC056†	<i>Phoenix canariensis</i>	Canary Island date palm	31-60	Mature
DC057	<i>Corymbia ficifolia</i>	Red-flowering gum	21-30	Mature

No	Species	Common name	ULE	Age
DC060	<i>Pinus halepensis</i>	Aleppo pine	60+	Juvenile
DC061	<i>Pinus pinea</i>	Stone pine	60+	Juvenile
DC065	<i>Araucaria cunninghamii</i>	Hoop pine	31-60	Mature
DC066	<i>Pinus radiata</i>	Monterey pine	11-20	Mature
DN123	<i>Ulmus</i> sp.	Elm	0	Mature
DN124	<i>Ulmus</i> sp.	Elm	6-10	Mature
DN126	<i>Ulmus</i> sp.	Elm	1-5	Mature
DN127	<i>Ulmus</i> sp.	Elm	1-5	Mature
DN128	<i>Ulmus</i> sp.	Elm	6-10	Mature
DN129	<i>Ulmus</i> sp.	Elm	1-5	Mature
DN130	<i>Ulmus</i> sp.	Elm	0	Over mature
DN131	<i>Ulmus</i> sp.	Elm	6-10	Mature
DN132	<i>Ulmus</i> sp.	Elm	11-20	Mature
DN133	<i>Ulmus</i> sp.	Elm	31-60	Semi-mature
DN139	<i>Quercus canariensis</i>	Algerian oak	31-60	Mature
DN141	<i>Grevillea hilliana</i>	White silky oak	6-10	Mature
DN144	<i>Myrsine howittiana</i>	Muttonwood	1-5	Over mature
DN145	<i>Ulmus</i> sp.	Elm	31-60	Semi-mature
DN146	<i>Tilia cordata</i>	Small-leaved linden	31-60	Semi-mature
DN150	<i>Ulmus</i> sp.	Elm	21-30	Semi-mature
DN151	<i>Ulmus</i> sp.	Elm	0	Over mature
DN152	<i>Ulmus</i> sp.	Elm	1-5	Over mature
DN153	<i>Ulmus</i> sp.	Elm	0	Over mature
DN165	<i>Ulmus</i> sp.	Elm	21-30	Semi-mature
Total number of trees				52



Figure 37 The Boer War Monument within Tom's Block, view from the north

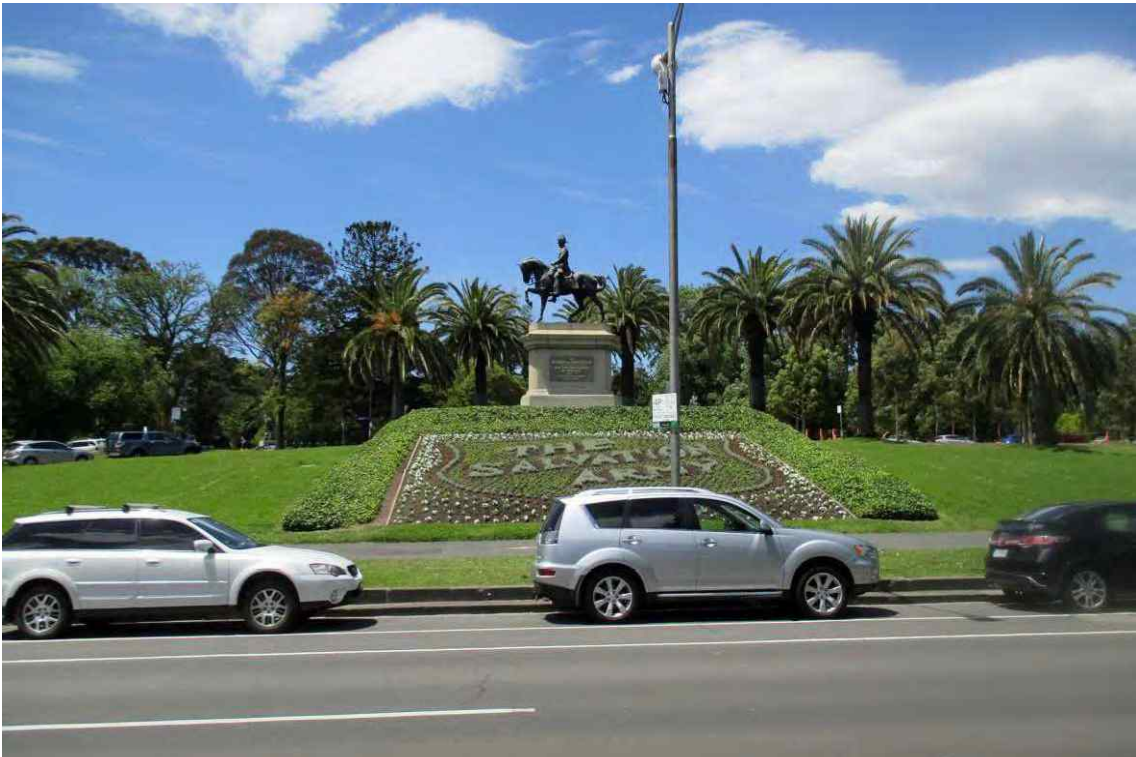


Figure 38 Marquis of Linlithgow Statue, view from St Kilda Road

TBM Launch site Domain

The option to locate the TBM launch site at the proposed Domain station construction work site has no additional heritage impacts. This is on the basis that the same construction work site footprint is required for the Domain station. Refer to section 13.0 of this report.

7.6.3.4 Conclusion

Given the size and diversity of the Domain Parklands and the multiple values that have been ascribed to the place (historical, archaeological, aesthetic, architectural, scientific/horticultural and social), any one of the interventions proposed would be unlikely to have a major adverse impact on the significance of the place when considered as a whole. Accepting this, the works would have a cumulative impact on this area of the Domain Parklands and a range of appropriate controls and mitigation measures would be required to ensure adverse impacts are controlled and minimised.

In considering the impact on the values of the place, the historical associations, architectural qualities, scientific and social values would remain and would not be diminished in any fundamental way. There would, however, be an adverse impact on the aesthetic qualities of this area, one that could be partly mitigated over time (assuming trees can be planted back into Tom's Block).

In summary:

- The Queen Victoria Gardens Linlithgow Avenue emergency access shaft would have an adverse impact on the setting of the King Edward VII Memorial that may be partly mitigated through detailed design of the structure and associated landscaping works. Of the two options for the location of the access shaft, this is the least preferred.
- The construction footprint north of Linlithgow Avenue is acceptable on the basis that there is no physical impact on the King Edward VII Memorial and appropriate protection measures are put in place to ensure its protection and the significant Palms can be reinstated.
- The Tom's Block access shaft within Alexandra Park (alternative design option to the Concept Design) option would have an adverse impact in that the permanent structure would have a visual impact in the park and there may be access requirements that could interrupt the elm row on the western side of Linlithgow Avenue. Of the two options for the location of the access shaft this is the option that would be preferred from a heritage perspective.
- There are unlikely to be any archaeological impacts associated with works for either the Queen Victoria Gardens Linlithgow Avenue emergency access shaft or the alternative Tom's Block access shaft within the Alexandra Park location.
- If required, ground improvement works would potentially have a major impact on Tom's Block in terms of tree removal (tree removal would be required in the affected area). Subject to the establishment of appropriate soil profile and depth, the impact could be mitigated through replanting. The ground improvement works may require the relocation and reinstatement of significant monuments and memorials within the Domain Parklands.
- For all works in the Domain Parklands, it would be important to prepare an archival record of the affected areas.

7.6.4 Boer War Monument

7.6.4.1 Statutory heritage controls

The statutory heritage controls that apply are as follows:

Legislation	Relevant VHR/HO number
Heritage Act	VHR H0382
Planning and Environment Act	HO948 (Melbourne Planning Scheme)

7.6.4.2 Heritage considerations

The Boer War Monument (Figure 37) is registered to the extent of the sandstone memorial itself and a limited area of associated land. The VHR statement of significance confirms the aesthetic and historical significance of the monument:

The Boer War Monument is of historic significance to the State of Victoria as it commemorates the participation of Victorians in the Boer War.

The Boer War Monument is of aesthetic significance to the State of Victoria as a finely executed work by architect George de Lacy Evans and sculptor Joseph Hamilton.

It also notes it has been relocated from its original position within the St Kilda Road reserve (this is confirmed by a review of historical photographs).

7.6.4.3 Impact assessment

Ground improvement works may be required in the immediate vicinity of the Boer War Monument to manage the risk of ground settlement in this area. The preference from a heritage perspective is for the retention and protection of the monument *in situ*, however it is possible that the works would require the temporary relocation and storage prior to works and reinstatement of the monument following their completion.

This monument would be particularly vulnerable to physical damage during relocation works. A conservation specialist / materials conservator would need to develop an appropriate methodology and advise on the works. Assuming the risk of damage is appropriately managed and the works are undertaken to the required standard, there would be no adverse impact.

If required to allow works to occur, reinstatement could occur on the existing site or an alternative appropriate site in St Kilda Road or in the Domain Parklands.

7.6.5 Marquis of Linlithgow Memorial

7.6.5.1 Statutory heritage controls

The statutory heritage controls that apply are as follows:

Legislation	Relevant VHR/HO number
Heritage Act	VHR H0366
Planning and Environment Act	HO946 (Melbourne Planning Scheme)

7.6.5.2 *Heritage considerations*

The Marquis of Linlithgow Memorial (1911) (Figure 38) is registered to the extent of the memorial itself and the triangular site on which it is sited. The VHR statement of significance confirms the historical and aesthetic significance of the monument.

The Marquis of Linlithgow Memorial is of historical importance as a commemoration of the first Governor General of Australia and his role at the time of Federation.

The Marquis of Linlithgow Memorial is of aesthetic significance to the State of Victoria as a part of the beautification of Melbourne with appropriate parks, gardens and memorials.

7.6.5.3 *Impact assessment*

Ground improvement works may be required in the immediate vicinity of the monument to manage the risk of ground settlement in this area.

While the specific methodology and extent of these works is unknown, it is possible that these would require the temporary relocation and storage prior to works and reinstatement of the monument following the completion of the works.

If relocation and reinstatement is required, a conservation specialist / materials conservator would need to develop an appropriate methodology and advise on the works. Assuming the risk of damage is appropriately managed and the works are undertaken to the required standard, there would be no adverse impact.

Any impact on the Canary Island Palms should be confirmed. If required, these could be removed and reinstated. These are not considered to be of a high level of significance (they are not referenced in the VHR statement of significance and do not appear on the 1945 aerial photograph). They do form part of the current setting for the Memorial as viewed from St Kilda Road.

The setting to the statue would need to be reinstated to the satisfaction of the City of Melbourne and Heritage Victoria.

7.6.6 *Shrine of Remembrance*

Refer to the Domain Station precinct, section 13.0.

7.6.7 *Fawkner Park*

7.6.7.1 *Statutory heritage controls*

The statutory heritage controls that apply are as follows:

Legislation	Relevant VHR/HO number
Heritage Act	
Planning and Environment Act	Within HO6 (Melbourne Planning Scheme)

7.6.7.2 *Heritage considerations*

Fawkner Park is currently subject to HO controls under the Melbourne Planning Scheme, falling within the South Yarra Precinct (HO6). The HO provisions and local heritage policy frameworks in the Melbourne Planning Scheme are relevant to a consideration of heritage issues and impacts within Fawkner Park. Refer to Appendix A of this report. Currently, no tree controls apply in HO6 and there is no adopted statement of significance for the precinct that references the park.

This may change with the current review of local heritage planning policies by the City of Melbourne (proposed Amendment C258 to the Melbourne Planning Scheme) which includes a draft statement of significance for HO6. This draft statement of significance references the importance of the various parks and gardens within the precinct, including Fawkner Park. These parks and gardens are identified as amongst the 'key attributes' of the precinct and as contributing to its historical, social and aesthetic/architectural significance. The draft statement of significance was open for community consultation as part of the local heritage policy review project in early 2016. The consultation process has now closed and an internal review process will take place before an amendment to the Melbourne Planning Scheme is prepared (<http://participate.melbourne.vic.gov.au/local-heritage>: accessed 25 January 2016).

Despite not being referenced as a heritage place its own right, Fawkner Park's heritage values have long been recognised by the City of Melbourne, which is responsible for its management. In 2002, a Conservation Analysis for the park was prepared for the City of Melbourne by Hassell, with heritage specialists Bryce Raworth and Barrie Gallacher (Hassell, 2002). This report was a key input to the Fawkner Park Draft Masterplan (City of Melbourne, 2005) and is referenced by the City of Melbourne in its management of the Park. While some changes have occurred since the preparation of the Conservation Analysis (including changes to buildings and the replacement of some avenues), this report continues to provide a sound basis on which to consider heritage issues and impacts on the park.

By way of context, the Conservation Analysis identifies Fawkner Park as one of the early established 'outer ring' of parks in Melbourne, with others being Royal Park, Princes Park, Yarra Park and Albert Park. This group of parks is characterised by active recreation use, including organised sport. This is in contrast to the 'inner ring' of Fitzroy Gardens, Treasury Gardens, Parliament Gardens, Alexandra Gardens, the Domain and the Royal Botanic Gardens, which have more formal designs and are used for passive recreation. Fawkner Park is noted to have been one of the last to be developed of the parks, and like Albert Park, Royal Park and Princes Park, it was used as a camp during World War II. Fawkner Park has a similar topography and avenue plantings to Yarra Park, which have been said to have been retained to a 'better standard' at Fawkner Park (Hassell, 2002: p. 71).

The Conservation Analysis found Fawkner Park as a whole to be of state rather than local significance and included the following statement of significance:

What is significant?

Fawkner Park was temporarily reserved and named in 1862. The park was not developed until 1875 when Nicholas Bickford, City of Melbourne Parks and Gardens Curator, laid out pathways and planted avenues. The park's boundaries are Toorak Road in the north, Pasley Street and residential /institutional development to the east, Commercial Road to the south and the rear of high-rise development to St Kilda Road on the western side. The park is trapezium-shaped and slopes down from Toorak Road to a flat area dominated by small playing fields adjacent to Commercial Road.

The dominant features of the park are linear pedestrian pathways, associated avenue plantings, lawns incorporating playing fields and geometric patterns of tree plantings scattered throughout. The park contains a number of buildings including a Caretaker's Cottage, two pavilions, two toilet blocks, a community centre, an electrical substation, a shelter and three playgrounds.

How is it significant?

Fawkner Park is of historical, aesthetic and social significance to the State of Victoria.

Why is it significant?

Historic significance:

- Fawkner Park was one of the earliest parks set aside in Melbourne, one of an outer circle of parks within a well-structured parkland system.
- It was named after one of Melbourne's founders, John Pascoe Fawkner.
- The park retains a substantially intact pathway system dating from 1875, as well as a great number of historic avenues.
- The park retains a number of intact group plantings in geometric forms dating from the 1870s and 1880s, demonstrating design styles of this period.
- The park has a long history of recreation use, formally commencing with the South Yarra Cricket Club's use of the site and continuing to the present day, in this way the original intent of the park has been preserved.
- The park has associations with World War II, being the temporary site of women's army camps and refugee camps, and more recently through the donation of the softball shelter.

Aesthetic significance:

- Advanced plantings of *Quercus*, *Ulmus* and *Ficus* avenues have great aesthetic value.

Social significance:

- Fawkner Park has a long history of recreational use, both active and passive.
- It has become a focus for community services and facilities, including a community centre, child care facilities and play equipment associated with adjacent schools.
- The park has intrinsic social value as a large public open space in Melbourne's inner suburbs.

While not a full CMP (it does not contain conservation policies), the Conservation Analysis also identifies 'Items of Significance' of high, moderate or no significance, indicated on the plan at Figure 39.

Fawkner Park has been nominated to the Victorian Heritage Register under the Heritage Act 1995. The nomination is currently being assessed by the Executive Director, Heritage Victoria.

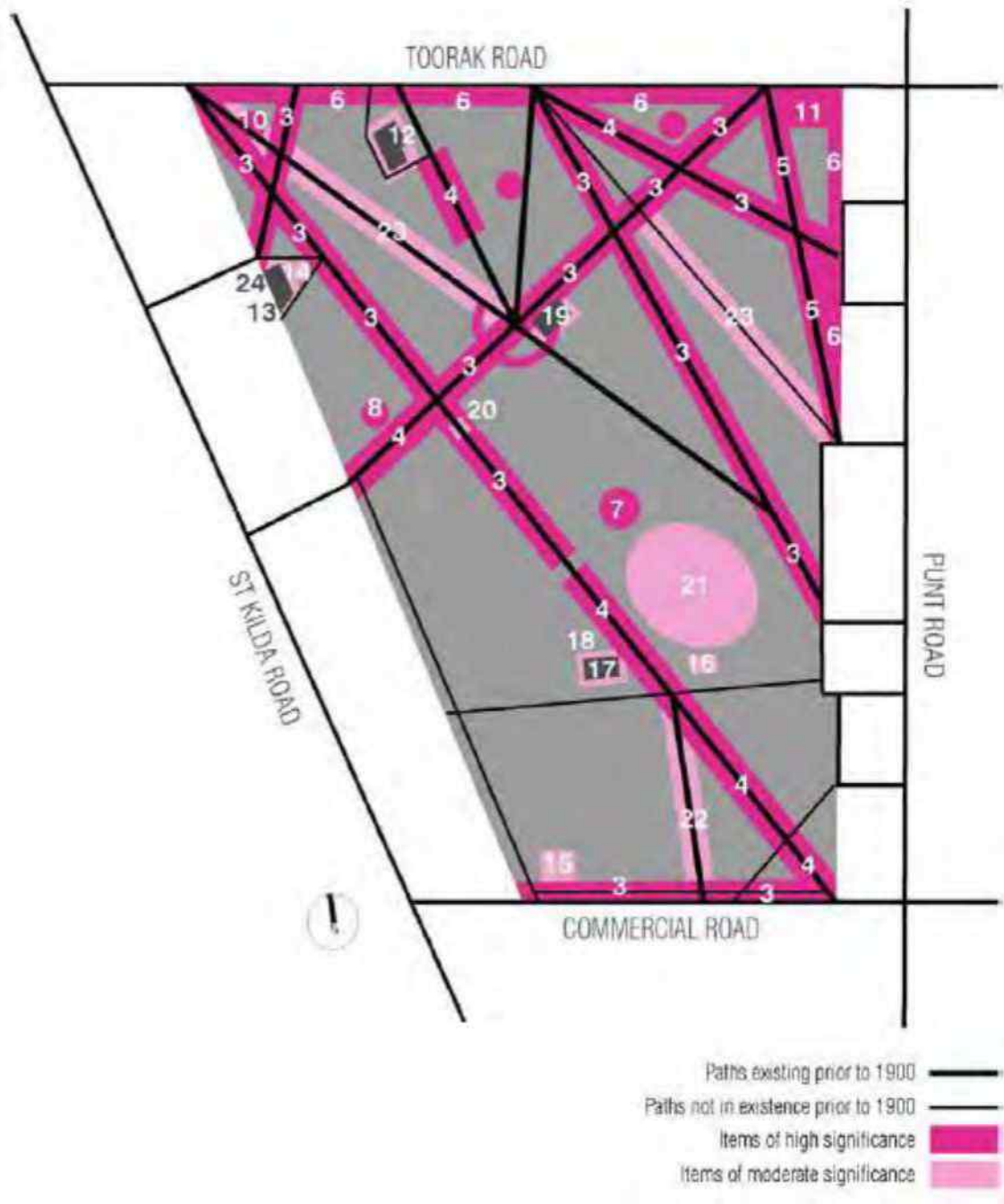


Figure 39 Fawkner Park Conservation Analysis: items of significance location plan, Hassell 2002:74

7.6.7.3 Impact assessment

There are potential impacts on Fawkner Park associated with the following:

- TBM Southern launch site: located in Fawkner Park open space and tennis courts
- Emergency access shaft locations:
 - Fawkner Park north-east location (Concept Design)
 - Option 2 – using the location of the alternative Fawkner Park TBM launch site (alternative design option to the Concept Design)

These are assessed in turn below.

TBM southern launch site in Fawkner Park

The site identified for the TBM Southern launch site is located on the northern side of Fawkner Park, west of the existing Tennis Club and Community Centre (refer Figure 40 and Figure 41). Occupation of Fawkner Park and its use as a TBM launch site would require the removal of trees within the designated area. Trees to be removed are shown on the plan at Figure 43 and are listed in Table 25 and are as follows:

- a recently planted juvenile avenue of Willow Oaks of no discernible heritage significance
- four trees at the Toorak Road West frontage, two Canary Island Palms and two Pin Oaks
- a Lemon Scented Gum and two Canary Island Palms to the immediate west of the Tennis Club building
- various juvenile and semi-mature specimen trees located within the lawn areas between avenue plantations.

The existing tennis courts would also be removed for the duration of the works (Figure 42).

The area used for TBM launch and construction purposes would be reinstated to its existing landscape character following the completion of the works. The reinstatement works would be undertaken in accordance with the requirements of the City of Melbourne and consistent with the Fawkner Park Master Plan. The mature Canary Island Palms within this sub-precinct can be temporarily transplanted and reinstated in their original locations at the completion of works.

The exception in terms of landscape reinstatement works would be the site of the emergency access shaft (Option 2, alternative design option to the Concept Design) if this location was selected (see below) and the permanent above-ground structure was required.

The TBM launch and construction work site identified avoids the need for large scale removal of mature trees. On this basis the reinstatement of the existing significant landscape character could be successfully achieved, such that the significance of the place was unchanged.

The specific landscape issues and impacts are as follows:

- *Avenue of Willow Oaks:* A c. 1930s-1940s Poplar avenue along Avenue D (identified in the Conservation Analysis (Hassel 2002: p. 74 as an item of moderate significance and shown as element no 23 on Figure 39) has been removed and replanted recently with Willow Oaks. This juvenile avenue would need to be removed and reinstated. While there would be an impact, this is a relatively minor one in that the juvenile specimens would be replaced with new trees of a similar age.
- *Figs:* The mature figs on the eastern edge of the proposed TBM launch and construction work site (of high significance and marked as element 4 on the plan at Figure 39) would be retained and protected.
- *Palms and Pin Oaks:* There would be an impact on the row planting (alternating Canary Island Palms and Pin Oaks) on the northern (Toorak Road) edge of the site where up to four trees

would be removed to provide access to the site. The Canary Island Palms on this boundary (and also on the eastern boundary) are thought to date from the c. 1920s and are identified as of high significance. While mature, the interspersed Pin Oaks appear to have been introduced later and these are not specifically referenced in the assessment of significance. Trees removed from the northern boundary treatment would be reinstated. The palms could be removed, stored and reinstated following the works, while the Pin Oaks would need to be reintroduced as juvenile specimens.

- *Paths:* The majority of paths in the park are part of the early layout and of high significance, though they do not retain early materials. Affected paths would be reinstated following the works consistent with the materials and detail used throughout the park.
- *Tennis Court:* The removal of the tennis courts is proposed. These are not significant in themselves however the Conservation Analysis did find that the tradition of sporting facilities within Fawkner Park was an important aspect of the place and its history and character:

While none of the features other than Cordner Oval are of great importance in themselves, Fawkner Park was established as a park specifically for recreational purposes and the pursuit of a range of sporting activities. The presence of facilities these activities is an integral part of the history and character of the park (Hassel 2002: p. 47).

The tennis courts could be reinstated following completion of the works subject to agreement by the City of Melbourne.

In summary, while the establishment of the TBM launch site in this location would have a major physical impact, the valued landscape character and plantings could be reinstated following the completion of the works, as could the tennis courts, and in a physical and visual sense the impact would be a temporary one.



Figure 40 Area south west of the Tennis Club proposed for location of the TBM launch site



Figure 41 View looking north towards the Tennis Club and the proposed location of TBM launch site



Figure 42 View of path between tennis courts and Tennis Club, section of proposed location for TBM launch site



Figure 43 Potential tree removals for the proposed TBM Launch site in Fawcner Park: the alternative access shaft location is shown on Toorak Road

Table 25 Trees potentially impacted - Fawkner Park southern launch site

No	Species	Common name	ULE	Age
Trees highlighted grey are semi-mature to over mature trees in the public realm with a ULE > 10years				
F085	<i>Quercus phellos</i>	Willow oak	60+	Juvenile
F086	<i>Quercus phellos</i>	Willow oak	60+	Juvenile
F087	<i>Quercus phellos</i>	Willow oak	60+	Juvenile
F088	<i>Quercus phellos</i>	Willow oak	60+	Juvenile
F089	<i>Quercus phellos</i>	Willow oak	60+	Juvenile
F090	<i>Quercus phellos</i>	Willow oak	60+	Juvenile
F091	<i>Quercus phellos</i>	Willow oak	60+	Juvenile
F092	<i>Quercus phellos</i>	Willow oak	60+	Juvenile
F169	<i>Corymbia citriodora</i>	Lemon-scented gum	31-60	Mature
F170	<i>Acer</i> sp.	Maple	31-60	Mature
F171	<i>Phoenix canariensis</i> [†]	Canary Island date Palm	31-60	Mature
F172	<i>Phoenix canariensis</i> [†]	Canary Island date palm	31-60	Mature
F173	<i>Casuarina cunninghamiana</i>	River she-oak	21-30	Mature
F176	<i>Quercus phellos</i>	Willow oak	60+	Juvenile
F177	<i>Quercus phellos</i>	Willow oak	60+	Juvenile
F178	<i>Quercus phellos</i>	Willow oak	60+	Juvenile
F179	<i>Quercus phellos</i>	Willow oak	60+	Juvenile
F180	<i>Quercus phellos</i>	Willow oak	60+	Juvenile
F181	<i>Quercus phellos</i>	Willow oak	60+	Juvenile
F182	<i>Quercus phellos</i>	Willow oak	60+	Juvenile
F183	<i>Quercus phellos</i>	Willow oak	60+	Juvenile
F184	<i>Quercus phellos</i>	Willow Oak	60+	Juvenile
F185	<i>Quercus phellos</i>	Willow oak	60+	Juvenile
F186	<i>Quercus phellos</i>	Willow oak	60+	Juvenile
F187	<i>Quercus phellos</i>	Willow oak	60+	Juvenile
F188	<i>Quercus phellos</i>	Willow oak	60+	Juvenile
F189	<i>Quercus phellos</i>	Willow oak	60+	Juvenile
F190	<i>Quercus phellos</i>	Willow oak	60+	Juvenile
F191	<i>Quercus phellos</i>	Willow oak	60+	Juvenile
F192	<i>Quercus phellos</i>	Willow oak	60+	Juvenile

No	Species	Common name	ULE	Age
F193	<i>Fraxinus excelsior</i>	Golden ash	21-30	Mature
F194	<i>Quercus palustris</i>	Pin oak	31-60	Mature
F195	<i>Phoenix canariensis</i> [†]	Canary Island date palm	31-60	Mature
F196	<i>Phoenix canariensis</i> [†]	Canary Island date palm	31-60	Mature
F197	<i>Quercus palustris</i>	Pin oak	31-60	Mature
F201	<i>Fraxinus excelsior</i>	Golden ash	31-60	Juvenile
F202	<i>Quercus canariensis</i>	Algerian oak	60+	Juvenile
F203	<i>Quercus robur</i>	English oak	60+	Juvenile
F204	<i>Quercus cerris</i>	Turkey oak	60+	Juvenile
F205	<i>Fraxinus excelsior</i>	Golden ash	21-30	Mature
F206	<i>Quercus cerris</i>	Turkey oak	60+	Juvenile
F207	<i>Quercus canariensis</i>	Hybrid oak	60+	Juvenile
F208	<i>Quercus canariensis</i>	Algerian oak	60+	Juvenile
F210	<i>Quercus phellos</i>	Willow oak	60+	Juvenile
F211	<i>Quercus phellos</i>	Willow oak	60+	Juvenile
F212	<i>Quercus phellos</i>	Willow oak	60+	Juvenile
F213	<i>Quercus phellos</i>	Willow oak	60+	Juvenile
F214	<i>Quercus phellos</i>	Willow oak	60+	Juvenile
F215	<i>Quercus phellos</i>	Willow oak	60+	Juvenile
F216	<i>Quercus phellos</i>	Willow oak	60+	Juvenile
F217	<i>Quercus phellos</i>	Willow oak	60+	Juvenile
F218	<i>Quercus phellos</i>	Willow oak	60+	Juvenile
F219	<i>Quercus phellos</i>	Willow oak	60+	Juvenile
F220	<i>Quercus phellos</i>	Willow oak	60+	Juvenile
F221	<i>Quercus phellos</i>	Willow oak	60+	Juvenile
F222	<i>Quercus phellos</i>	Willow oak	60+	Juvenile
F223	<i>Quercus phellos</i>	Willow oak	60+	Juvenile
F224	<i>Quercus phellos</i>	Willow oak	60+	Juvenile
F225	<i>Quercus canariensis</i>	Algerian oak	60+	Juvenile
F226	<i>Quercus canariensis</i>	Algerian oak	60+	Juvenile
F227	<i>Quercus canariensis</i>	Algerian oak	60+	Juvenile

No	Species	Common name	ULE	Age
F228	<i>Quercus canariensis</i>	Algerian oak	60+	Juvenile
Total number of trees				62

† = Palm that can be temporarily relocated and reinstated.

Access shaft

Two potential locations within Fawkner Park have been identified for the emergency access shaft that would be required between Domain and the eastern portal. In both cases there would be a permanent structure above ground.

As a general comment, the placement of new buildings within the park, particularly those that are unrelated to traditional use of the park (active and passive recreation, and community uses in general), would generally not be seen as positive in heritage terms. Accepting this, like the majority of Melbourne's heritage-listed parks and gardens, Fawkner Park already accommodates a range of buildings and structures within the landscape. In this context, the specific impacts of additional or replacement structures would vary depending on whether the new structure has a direct impact on significant fabric (requiring demolition or removal of that fabric) as well as its location, scale, form and design (visual impact).

Fawkner Park north-east location (Concept Design)

The Fawkner Park north-east location (Concept Design) option is on the Toorak Road frontage of the site. A limited number of trees would require removal from this location to accommodate construction and vehicular access to Toorak Road, which is largely confined to a relatively open, lawn area (Figure 44). Trees that would be required and may be required are shown on the plan at Figure 44 and are listed in Table 26. A large Bunya Pine (*Araucaria bidwillii*, F238) is part of a significant group planting and falls within the edge of the nominated construction work site. Ideally the footprint of the construction area can be adjusted so that the tree can be managed and retained on the edge of works. An Elm (F240) within a significant avenue to the south of the zone may be impacted by the works, as well as a substantial English Oak (*Quercus robur* F231) at the Toorak Road frontage, although this tree is in relatively poor condition. Two mature Canary Island Date Palms (F232, F234) that potentially might be impacted at the street frontage, can be temporarily relocated and reinstated at the end of works. The other two trees potentially impacted, a Pin Oak (F233) and Indian bean-tree (*Catalpa bignonioides*, F241) have not been identified of significance within the place. In total, seven trees within this zone may be potentially impacted by works.

There would also be a visual impact associated with the permanent above ground structure. In this case the emergency access shaft structure would likely be required to accommodate toilet facilities to replace the recently constructed toilets in this location. Combining the two functions into a single building potentially offers an opportunity to rationalise the design and avoid the need for two separate buildings in the same general location within the park. It would be a larger building when compared with the existing toilet block but not of a scale that would dominate this edge, nor would it detract from the landscape qualities of the broader park. While it would be very visible on the street (as a result of the functional requirements for ease of access from the road network), the impact of a new building on the edge of the park is potentially less than one that was set into the main body of the park. As for the options for the proposed structure above the access shaft in the Domain Parklands, the visual impact of the proposed new structure could potentially be reduced through careful design to minimise scale and to respond sympathetically to the park setting.

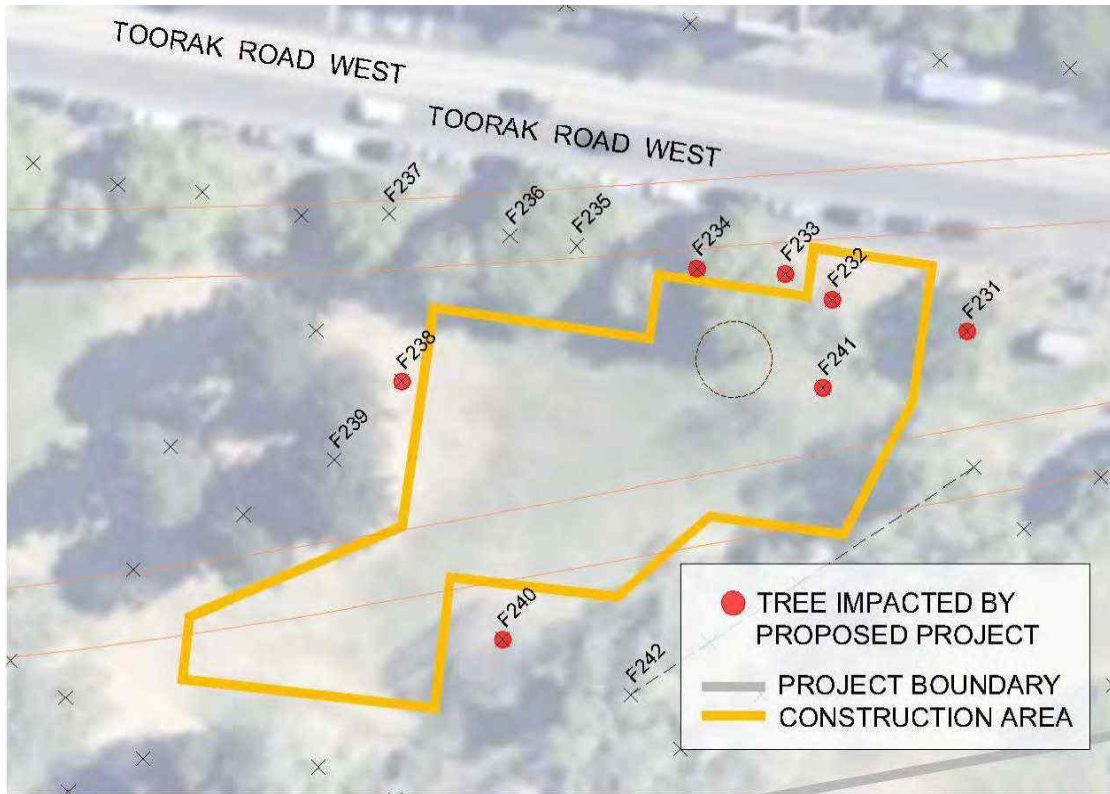


Figure 44 Potential tree removals in Fawkner Park for the proposed emergency access shaft in the Concept Design

Option 2 (alternative design option to the Concept Design)

Option 2 is the alternative design option to the Concept Design and this locates the access shaft within the proposed TBM launch site (Figure 40 to Figure 42). The above ground structure for the emergency access shaft would have the benefit of not requiring any additional tree removals (beyond those required for the launch site).

The permanent structure would also be in an area of the park where considerable development has already occurred and been accommodated (including the expanded community centre complex). In some respects this is a less sensitive site for this reason and one in which the visual presence of the structure would have less impact. The visual impact of the proposed new structure could potentially be reduced through careful design to minimise scale and to respond sympathetically to the park setting.

Table 26 Trees potentially impacted - Emergency access shaft, Fawkner Park north-east location

No	Species	Common name	ULE	Age
F231	<i>Quercus robur</i>	English oak	1-5	Over-mature
F232	<i>Phoenix canariensis</i> †	Canary Island date palm	31-60	Mature
F233	<i>Quercus palustris</i>	Pin oak	31-60	Mature
F234	<i>Phoenix canariensis</i> †	Canary Island date palm	31-60	Mature
F238	<i>Araucaria bidwillii</i>	Bunya-Bunya pine	31-60	Mature
F240	<i>Ulmus</i> sp.	Elm	31-60	Semi-mature
F241	<i>Catalpa bignonioides</i>	Indian bean tree	11-20	Mature
Total number of trees				7

† = Palm that can be temporarily relocated and reinstated.



Figure 45 Proposed location of the Fawkner Park emergency access shaft and construction work site (north-east location) looking north-east towards Toorak Road West



Figure 46 View of the proposed location of the Fawkner Park construction work site (north-east location) looking west



Figure 47 View of emergency access shaft location (to the left of the public toilet) at Fawkner Park (north-east location)

7.6.7.4 Conclusion

The works proposed for the TBM launch site within Fawkner Park are significant in a physical sense however they would have only a relatively minor impact on the heritage values of the place.

This is because the proposed changes are generally reversible through the reinstatement of trees and other vegetation and built elements (paths and tennis courts) once construction is completed. In the case of the soft landscaping the valued landscape qualities would be recoverable in a relatively short period of time. The majority of trees to be removed are either juvenile avenue replantings or are not identified as significant in the Conservation Analysis (Hassell: 2002).

There would be no adverse impact on the historical values of the place, which relate to the early origins of the park, its layout and mature trees and particular associations (eg with World War II).

The aesthetic qualities of the place, similarly, would be maintained through avoiding impacts on significant elements and the reinstatement of landscape where change is required.

The social significance of the park as identified in the Conservation Analysis is as a heavily used and highly valued public park, including its active and passive recreational uses and as a focus for community activities and services. It would be expected that the temporary loss of part of the park would have an adverse impact on the experience and enjoyment of the place by those who use it. Recognising the impact would vary and would be more keenly felt by some more than others, it is considered that the social value of the place and the community's attachment to place as a whole would be unlikely to be significantly diminished. Any impact would be temporary only.

Both options for the emergency access shaft would have a physical and visual impact, however in both cases the impact is minor with no significant concern in terms of the impact on the heritage values of the place. As for the options for the proposed structure above the access shaft in the Domain Parklands, the visual impact of the proposed new structures could potentially be reduced through care detailed design to minimise scale and to respond sympathetically to the park setting.

Impacts on the heritage values of Fawkner Park are identified in Table 27 (only those values where there could be an impact are listed).

Table 27 Summary of impacts on heritage values, Fawkner Park

Value	TBM launch site	Emergency access shaft (Concept Design)	Emergency access shaft (Alternative design option)
Historical significance			
Long history of recreation use, formally commencing with the South Yarra Cricket Club's use of the site and continuing to the present day	Temporary impact (tennis courts to be removed), no impact in the longer term	No impact	No impact
The park retains a number of intact group plantings in geometric forms dating from the 1870s and 1880s, demonstrating design styles of this period	No impact	Some impact, a large Bunya Pine (<i>Araucaria bidwillii</i> , F238) is part of a significant group planting and falls within the edge of the nominated construction work site	No impact

Value	TBM launch site	Emergency access shaft (Concept Design)	Emergency access shaft (Alternative design option)
Aesthetic significance			
Advanced plantings of <i>Quercus</i> , <i>Ulmus</i> and <i>Ficus</i> avenues of great aesthetic value	Minor visual impact, the Willow Oak avenue is a juvenile replanting and would be replaced and in the northern boundary row the Palm would be reinstated and new Pin Oak specimens would be introduced	Minor visual impact, the Palm would be reinstated and new Pin Oak specimens would be introduced.	No additional impact as in this option tree removals would occur for the TBM launch site
Social significance			
Long history of recreational use, both active and passive	Limited and temporary impact, defined area of the park and recreational facilities is unavailable for the duration of the construction period, the social value of the place as a whole is not diminished	No impact	No impact
Intrinsic social value as a large public open space in Melbourne's inner suburbs	Limited and temporary impact, defined area of the park and recreational facilities is unavailable for the duration of the construction period, the social value of the place as a whole is not diminished	No impact	No impact

7.6.8 Historical archaeology

7.6.8.1 Statutory heritage controls

The statutory heritage controls that apply are as follows:

Legislation	Relevant VHI number
Heritage Act	VHI H7822-2342

7.6.8.2 Heritage considerations

Consideration was given to the potential for Fawkner Park to have historical archaeological potential (refer to the predictive archaeological assessment at Appendix B). The conclusion of that assessment was that despite the relatively unchanged nature of the layout of Fawkner Park, there is a likelihood that early paths, garden beds or other features not documented in historical plans exist beneath the current ground surface. The occupation of the park during World War II may also have seen the deposition of artefacts (such as domestic items, food-related items, personal items), though disturbance of these may have occurred during removal of the World War II camp in 1951. There may also be evidence of the 'community' air raid shelter trenches that are known to have been dug in the park in 1942, including along the Toorak Road frontage of the site. There is also potential for archaeological evidence related to the earlier, historical period occupation of the park are by Aboriginal people. On this basis, the predictive archaeological assessment recommended that Fawkner Park be included for listing on the VHI for its archaeological values. The place has now been added to the VHI as VHI H7822-2342.

It is noted that some testing has recently been undertaken in the park (consent issued under the Heritage Act 1995). Extensive artefact were located, including large pieces of ceramics and a coin, two smoking pipes and an intact inkwell, some of which may be from the gold rush era.

7.6.8.3 Impact assessment

In order to manage and protect the archaeological values of Fawkner Park, the preparation of an archaeological management plan would be required to manage and mitigate impacts. The archaeological management plans would be prepared in accordance with *Guidelines for Investigating Historical Archaeological Artefacts and Sites* (Heritage Victoria 2014) and in consultation with Heritage Victoria. The archaeological management plan would include the following:

- description and background history of archaeological area
- statement of significance of archaeological area, in accordance with *Guidelines for Conducting Historical Archaeological Surveys* (Heritage Council of Victoria and Heritage Victoria 2008), *Criteria for Assessing Cultural Heritage Significance* (Heritage Council of Victoria 2008) and *Victoria's Framework of Historical Themes* (Heritage Council of Victoria 2010)
- research design, including research questions which would be addressed as a result of the archaeological investigations
- excavation methodology, including method to be used to excavate deposits, record spatial and stratigraphic information and recover artefacts and how these would help address the research design.

As there are no other VHI sites or other known areas of archaeological potential identified within precinct 1 where ground disturbance is likely to take place, there would be no impact on known historical archaeological values or sites. A protocol would be required in order to manage impacts on historical archaeological values and sites that are not currently known, but are revealed or discovered during construction.

7.7 Environmental Performance Requirements

Table 28 provides the recommended Environmental Performance Requirements and proposed mitigation measures for the precinct. Note that reference is made to Environmental Performance Requirements from the Arboriculture assessment reports, Technical Appendices R and S.

Table 28 Environmental Performance Requirements for Tunnels

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
Domain Parklands (VHR H2304)	<p>Ground improvement works (CityLink tunnels crossing – Above CityLink tunnels):</p> <ul style="list-style-type: none"> • may require tree removal and inhibit future planting • may require temporary relocation and reinstatement of memorials and other elements: <p>- Sir Edward ‘Weary’ Dunlop Memorial (F27)</p> <p>- Electricity Supply Pillar (unnumbered)</p> <p>- Walker Fountain (F25)</p> <p>- Victoria Police Memorial (F26).</p>	<p>CH1 Design permanent and temporary works to avoid or minimise impacts on the cultural heritage values of heritage places.</p> <p>Consult as required with Heritage Victoria and/or the responsible authority (as applicable).</p> <p>AR2 Reinstatement quality soils to sufficient volumes to support long-term viable growth of replacement trees.</p> <p>CH4 Prior to construction of main works or shafts that affect heritage structures or places, develop detailed methodology in accordance with Australia ICOMOS Burra Charter and to the satisfaction of Heritage Victoria or the responsible authority (as applicable) where heritage fabric is required to be dismantled, stored and reconstructed. Work is to be documented and overseen by an appropriately qualified conservation practitioner.</p> <p>CH5 Prior to construction of main works or shafts that affect heritage structures or places, develop and implement appropriate protection measures for heritage places and objects including sculptures, memorials, monuments and associated heritage fabric where retained in proximity to works. This is to be done to the satisfaction of</p>	<p>Tree removals within Domain Parklands to be minimised as far as possible. Replacement plantings to be designed in consultation with the City of Melbourne.</p> <p>Utilise strict monitoring of volume loss, TBM operations and ground monitoring to negate requirement for soil stabilisation works within Tom’s Block.</p> <p>Re-establish landscape character following works in consultation with the City of Melbourne.</p> <p>In preference retain heritage structures in situ. If temporary relocation is required in order to protect significant fabric, document and undertake works according to accepted conservation standards.</p> <p>Where dismantling and reconstruction works are required document and perform these works with specialist input. This would likely include an assessment of condition, detailed methodology for the work, recording of the structure prior to dismantling, dismantling methodology, the numbering of component parts for storage, specification of secure storage arrangements,</p>	HH04

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
		<p>Heritage Victoria or the responsible authority (as applicable).</p> <p>AR4 Prior to construction commencing of main works or shafts in affected areas, prepare and implement Tree Protection Plans for each Precinct in accordance with AS4970-2009 Protection of Trees on Development Sites, addressing the detailed design and construction methodology of the project.</p> <p>Within precincts 1, 4 and 7 a Tree Protection Plan must be developed for each heritage place as relevant to the satisfaction of Heritage Victoria or the responsible authority.</p> <p>CH17 Replace removed trees as part of project delivery in accordance with relevant policy documents and to re-establish valued landscape character and in consultation with the City of Melbourne, the City of Port Phillip, the Shrine of Remembrance and Shrine Trustees and Heritage Victoria as applicable. Policy documents are as follows:</p> <ul style="list-style-type: none"> • Domain Parklands: Domain Parklands CMP (in preparation, Context, draft 2015-16) and the Domain Parklands Masterplan (in preparation) • Shrine of Remembrance: Shrine of Remembrance CMP (Lovell Chen, 2010) or any future review and the Shrine of Remembrance Landscape Improvement 	<p>details of required repair and conservation works, if required, method for reinstating fabric including appropriate materials in the event fabric is required to be renewed or replaced.</p>	

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
		<p>Plan (Rush Wright Associates, 2010)</p> <ul style="list-style-type: none"> • South African Soldiers Memorial Reserve: Any relevant CMP for the South African Soldiers Memorial • Fawkner Park: Fawkner Park Conservation Analysis (Hassell, 2002) and the Fawkner Park Masterplan (City of Melbourne, 2005). 		
	<p>The permanent above ground structure for the emergency access shaft in Queen Victoria Gardens adjacent to Linlithgow Avenue (Concept Design) may have an adverse visual impact on the setting and presentation of the King Edward VII memorial. Construction activities would require tree removal in this location including of significant Palms.</p>	<p>CH1 Design permanent and temporary works to avoid or minimise impacts on the cultural heritage values of heritage places.</p> <p>Consult as required with Heritage Victoria and/or the responsible authority (as applicable).</p> <p>CH5 Prior to construction of main works or shafts that affect heritage structures or places, develop and implement appropriate protection measures for heritage places and objects including sculptures, memorials, monuments and associated heritage fabric where retained in proximity to works. This is to be done to the satisfaction of Heritage Victoria or the responsible authority (as applicable).</p> <p>AR4 Prior to construction commencing of main works or shafts in affected areas, prepare and implement Tree Protection Plans for each Precinct in accordance with AS4970-2009 Protection of Trees on Development Sites, addressing the detailed design and construction methodology of the project.</p>	<p>Tree removals within Domain Parklands to be minimised as far as possible. Replacement plantings to be designed in consultation with the City of Melbourne.</p> <p>Review the design for the permanent structure to minimise visual impact including screening vegetation, confirm no on-site parking</p>	HH05

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
		<p>Within precincts 1, 4 and 7 a Tree Protection Plan must be developed for each heritage place as relevant to the satisfaction of Heritage Victoria or the responsible authority.</p>		
	<p>The permanent above ground structure for the emergency access shaft - Tom's Block within Alexandra Park (alternative design option to the Concept Design) option would have an adverse impact. Access to the permanent structure may interrupt the elm row on the western side.</p>	<p>CH1 Design permanent and temporary works to avoid or minimise impacts on the cultural heritage values of heritage places.</p> <p>CH17 Replace removed trees as part of project delivery in accordance with relevant policy documents and to re-establish valued landscape character and in consultation with the City of Melbourne, the City of Port Phillip, the Shrine of Remembrance and Shrine Trustees and Heritage Victoria as applicable. Policy documents are as follows:</p> <ul style="list-style-type: none"> • Domain Parklands: Domain Parklands CMP (in preparation, Context, draft 2015-16) and the Domain Parklands Masterplan (in preparation) • Shrine of Remembrance: Shrine of Remembrance CMP (Lovell Chen, 2010) or any future review and the Shrine of Remembrance Landscape Improvement Plan (Rush Wright Associates, 2010) • South African Soldiers Memorial Reserve: Any relevant CMP for the South African Soldiers Memorial • Fawkner Park: Fawkner Park Conservation Analysis (Hassell, 2002) and the Fawkner Park Masterplan (City of Melbourne, 2005). 	<p>Tree removals within Domain Parklands to be minimised as far as possible. Replacement plantings to be designed in consultation with the City of Melbourne.</p> <p>Review the design for the permanent structure to minimise visual impact, minimise requirements for access and on-site parking.</p>	<p>HH06</p>

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
		<p>AR4 Prior to construction commencing of main works or shafts in affected areas, prepare and implement Tree Protection Plans for each Precinct in accordance with AS4970-2009 Protection of Trees on Development Sites, addressing the detailed design and construction methodology of the project.</p> <p>Within precincts 1, 4 and 7 a Tree Protection Plan must be developed for each heritage place as relevant to the satisfaction of Heritage Victoria or the responsible authority.</p>		
Boer War Memorial (VHR H0382)	Ground improvement works may require the temporary relocation and reinstatement of memorial.	<p>CH4 Prior to construction of main works or shafts that affect heritage structures or places, develop detailed methodology in accordance with Australia ICOMOS Burra Charter and to the satisfaction of Heritage Victoria or the responsible authority (as applicable) where heritage fabric is required to be dismantled, stored and reconstructed. Work is to be documented and overseen by an appropriately qualified conservation practitioner.</p>	<p>Subject to risk assessment preferably protect the memorial <i>in situ</i> or establish appropriate alternative site.</p> <p>In preference retain heritage structures <i>in situ</i>. If temporary relocation is required in order to protect significant fabric, document and undertake works according to accepted conservation standards.</p> <p>Where dismantling and reconstruction works are required document and perform these works with specialist input. This would likely include an assessment of condition, detailed methodology for the work, recording of the structure prior to dismantling, dismantling methodology, the numbering of component parts for storage, specification of secure storage arrangements, details of required repair and conservation works, if required, method for reinstating fabric including appropriate materials in the event fabric is required to be renewed or replaced.</p>	HH04

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
Marquis of Linlithgow Statue VHR H0366)	Ground improvement works may require the temporary relocation and reinstatement of the statue.	<p>CH4 Prior to construction of main works or shafts that affect heritage structures or places, develop detailed methodology in accordance with Australia ICOMOS Burra Charter and to the satisfaction of Heritage Victoria or the responsible authority (as applicable) where heritage fabric is required to be dismantled, stored and reconstructed. Work is to be documented and overseen by an appropriately qualified conservation practitioner.</p> <p>CH17 Replace removed trees as part of project delivery in accordance with relevant policy documents and to re-establish valued landscape character and in consultation with the City of Melbourne, the City of Port Phillip, the Shrine of Remembrance and Shrine Trustees and Heritage Victoria as applicable. Policy documents are as follows:</p> <ul style="list-style-type: none"> • Domain Parklands: Domain Parklands CMP (in preparation, Context, draft 2015-16) and the Domain Parklands Masterplan (in preparation) • Shrine of Remembrance: Shrine of Remembrance CMP (Lovell Chen, 2010) or any future review and the Shrine of Remembrance Landscape Improvement Plan (Rush Wright Associates, 2010) • South African Soldiers Memorial Reserve: Any relevant CMP for the South African Soldiers Memorial 	<p>Subject to risk assessment preferably protect the statue <i>in situ</i>.</p> <p>In preference retain heritage structures <i>in situ</i>. If temporary relocation is required in order to protect significant fabric, document and undertake works according to accepted conservation standards.</p> <p>Where dismantling and reconstruction works are required document and perform these works with specialist input. This would likely include an assessment of condition, detailed methodology for the work, recording of the structure prior to dismantling, dismantling methodology, the numbering of component parts for storage, specification of secure storage arrangements, details of required repair and conservation works, if required, method for reinstating fabric including appropriate materials in the event fabric is required to be renewed or replaced.</p>	HH04

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
		<ul style="list-style-type: none"> Fawkner Park: Fawkner Park Conservation Analysis (Hassell, 2002) and the Fawkner Park Masterplan (City of Melbourne, 2005). 		
Fawkner Park (HO6)	Establishment of the TBM Southern launch site would require the removal of trees and the existing tennis courts.	<p>CH1 Design permanent and temporary works to avoid or minimise impacts on the cultural heritage values of heritage places.</p> <p>Consult as required with Heritage Victoria and/or the responsible authority (as applicable)</p> <p>CH3 Prior to construction undertake archival photographic recording in accordance with Heritage Victoria Technical Note: Photographic Recording for Heritage Places and Objects where heritage places are to be demolished or modified.</p> <p>CH17 Replace removed trees as part of project delivery in accordance with relevant policy documents and to re-establish valued landscape character and in consultation with the City of Melbourne, the City of Port Phillip, the Shrine of Remembrance and Shrine Trustees and Heritage Victoria as applicable. Policy documents are as follows:</p> <ul style="list-style-type: none"> Domain Parklands: Domain Parklands CMP (in preparation, Context, draft 2015-16) and the Domain Parklands Masterplan (in preparation) Shrine of Remembrance: Shrine of Remembrance CMP (Lovell Chen, 2010) or any future review and the Shrine of 	Minimise the number of trees to be removed. In particular investigate retention of the Bunya-bunya Pine (Tree F238) on the western side of the Fawkner Park East emergency access shaft construction work site. Replacement plantings to be designed in consultation with the City of Melbourne.	HH07

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
		<p>Remembrance Landscape Improvement Plan (Rush Wright Associates, 2010)</p> <ul style="list-style-type: none"> • South African Soldiers Memorial Reserve: Any relevant CMP for the South African Soldiers Memorial • Fawkner Park: Fawkner Park Conservation Analysis (Hassell, 2002) and the Fawkner Park Masterplan (City of Melbourne, 2005). <p>AR4 Prior to construction commencing of main works or shafts in affected areas, prepare and implement Tree Protection Plans for each Precinct in accordance with AS4970-2009 Protection of Trees on Development Sites, addressing the detailed design and construction methodology of the project.</p> <p>Within precincts 1, 4 and 7 a Tree Protection Plan must be developed for each heritage place as relevant to the satisfaction of Heritage Victoria or the responsible authority.</p>		
	<p>Emergency access shaft locations:</p> <p>North-east location (Concept Design)</p> <p>Location of the Fawkner Park TBM launch site (alternative design option to the Concept Design).</p>	<p>CH1 Design permanent and temporary works to avoid or minimise impacts on the cultural heritage values of heritage places.</p> <p>Consult as required with Heritage Victoria and/or the responsible authority (as applicable).</p> <p>CH17 Replace removed trees as part of project delivery in accordance with relevant policy documents and to re-establish valued landscape character and in consultation with the City of</p>	<p>Minimise the number of trees to be removed. In particular investigate retention of the Bunya-bunya Pine (Tree F238) on the western side of the Fawkner Park East emergency access shaft construction work site. Replacement plantings to be designed in consultation with the City of Melbourne.</p> <p>Review the design for the permanent structure to minimise visual impact including screening vegetation.</p>	<p>HH08</p>

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
		<p>Melbourne, the City of Port Phillip, the Shrine of Remembrance and Shrine Trustees and Heritage Victoria as applicable. Policy documents are as follows:</p> <ul style="list-style-type: none"> ● Domain Parklands: Domain Parklands CMP (in preparation, Context, draft 2015-16) and the Domain Parklands Masterplan (in preparation) ● Shrine of Remembrance: Shrine of Remembrance CMP (Lovell Chen, 2010) or any future review and the Shrine of Remembrance Landscape Improvement Plan (Rush Wright Associates, 2010) ● South African Soldiers Memorial Reserve: Any relevant CMP for the South African Soldiers Memorial ● Fawkner Park: Fawkner Park Conservation Analysis (Hassell, 2002) and the Fawkner Park Masterplan (City of Melbourne, 2005). <p>AR4 Prior to construction commencing of main works or shafts in affected areas, prepare and implement Tree Protection Plans for each Precinct in accordance with AS4970-2009 Protection of Trees on Development Sites, addressing the detailed design and construction methodology of the project.</p>		

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
		<p>Within precincts 1, 4 and 7 a Tree Protection Plan must be developed for each heritage place as relevant to the satisfaction of Heritage Victoria or the responsible authority.</p>		
<p>Fawkner Park archaeological site (VHI H7822-2342)</p>	<p>Subsurface excavation could impact on archaeological values identified in Fawkner Park.</p>	<p>CH6 To the satisfaction of Heritage Victoria:</p> <ul style="list-style-type: none"> • Develop archaeological management plans to manage disturbance of archaeological sites and values affected by the project • Undertake investigation in accordance with the Guidelines for Investigating Historical Archaeological Artefacts and Sites, Heritage Victoria 2014 (as amended or updated) and to the satisfaction of the Executive Director, Heritage Victoria • Develop and implement a protocol for managing previously unidentified historical archaeological sites discovered during project works. 	<p>The archaeological management plan would include the following:</p> <ul style="list-style-type: none"> • description and background history of Archaeological Area • statement of significance of Archaeological Area, in accordance with Guidelines for Conducting Historical Archaeological Surveys (Heritage Council of Victoria and Heritage Victoria 2008), Criteria for Assessing Cultural Heritage Significance (Heritage Council of Victoria 2008) and Victoria’s Framework of Historical Themes (Heritage Council of Victoria 2010) • research design, including research questions which will be addressed as a result of any archaeological investigations • excavation methodology, including method to be used to excavate deposits, record spatial and stratigraphic information and recover artefacts and how these would help address the research design • artefact retention policy, including how and why individual artefacts and 	<p>HH02</p>

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
			<p>types of artefact would be retained, discarded or sampled during the archaeological investigation</p> <ul style="list-style-type: none"> • artefact management proposal, including details of how recovered artefacts would be managed in the field and post-excavation (including materials conservation if required). <p>Through the development and implementation of the archaeological management plan, the research potential of the affected site can be realised and this would mitigate the impact of destruction or disturbance.</p>	
Historical archaeology (Entire precinct)	Subsurface excavation may damage unidentified historical archaeological sites.	<p>CH6 To the satisfaction of Heritage Victoria:</p> <ul style="list-style-type: none"> • Develop archaeological management plans to manage disturbance of archaeological sites and values affected by the project • Undertake investigation in accordance with the Guidelines for Investigating Historical Archaeological Artefacts and Sites, Heritage Victoria 2014 (as amended or updated) and to the satisfaction of the Executive Director, Heritage Victoria • Develop and implement a protocol for managing previously unidentified historical archaeological sites discovered during project works. 	<p>For any archaeological sites or artefacts revealed or discovered during construction, the following measure would be implemented:</p> <ul style="list-style-type: none"> • stop any activity which may impact on the discovery • ensure that other people working in the area are aware of it and have also stopped work in the area • protect the artefact, or site feature(s) by, for example, erecting temporary fencing or other suitable enclosure • consult with a qualified cultural heritage consultant to determine the appropriate course of action • advise Heritage Victoria where the discovery was made and provide a 	HH01

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
			<p>description or photograph of the discovery</p> <ul style="list-style-type: none"> • determine how to manage the find through consultation with Heritage Victoria and the heritage consultant • obtain the necessary Consent under the Heritage Act 1995, or other necessary approvals to protect, recover or remove the find. <p>Archaeological management may require a combination of testing, excavation, salvage and monitoring and related reporting.</p>	

7.8 Conclusion

The potential heritage impacts of the proposed tunnels and their construction are in the main confined to Sector 5 and Sector 6 within the Tunnels precinct.

The proposed Linlithgow emergency access shaft option for the Concept Design and the option for the potential alternative design option would be located within the Domain Parklands which is included in the VHR. Both options would have an adverse heritage impact, through tree removal for construction works and the visual impact of the proposed permanent above ground structure set within the parkland, albeit the impacts would be localised within the broader registered place. Of the two, the Tom's Block (alternative design option) is preferred from a heritage perspective. Recommendations are made for changes to the construction work sites, for the reinstatement of landscape where affected, and for the approach to detailed design of the permanent structures to minimise the impacts.

Ground improvement works may be required within the Domain Parklands in the vicinity of the proposed crossing of the existing CityLink tunnels. These works could have an adverse impact on significant trees and memorials within the parklands and, depending on the methods used, could also affect the soil profile and inhibit the reinstatement of the valued landscape character in this location. Recommendations are made for the mitigation of these potential impacts.

The Fawkner Park option for the TBM Southern Launch site would include the removal of some mature trees in the Park which is located within a local HO precinct in the Melbourne Planning Scheme but which has been assessed as of higher level of significance (and has been nominated to the VHR). It is expected that the impact of the launch site within the Park would be temporary and could be mitigated through the reinstatement of the landscape.

Two options for the required emergency access shaft are proposed within Fawkner Park and both would have a minor adverse impact associated with tree removal and the permanent above ground structure.

8.0 Precinct 2 - Western Portal (South Kensington)

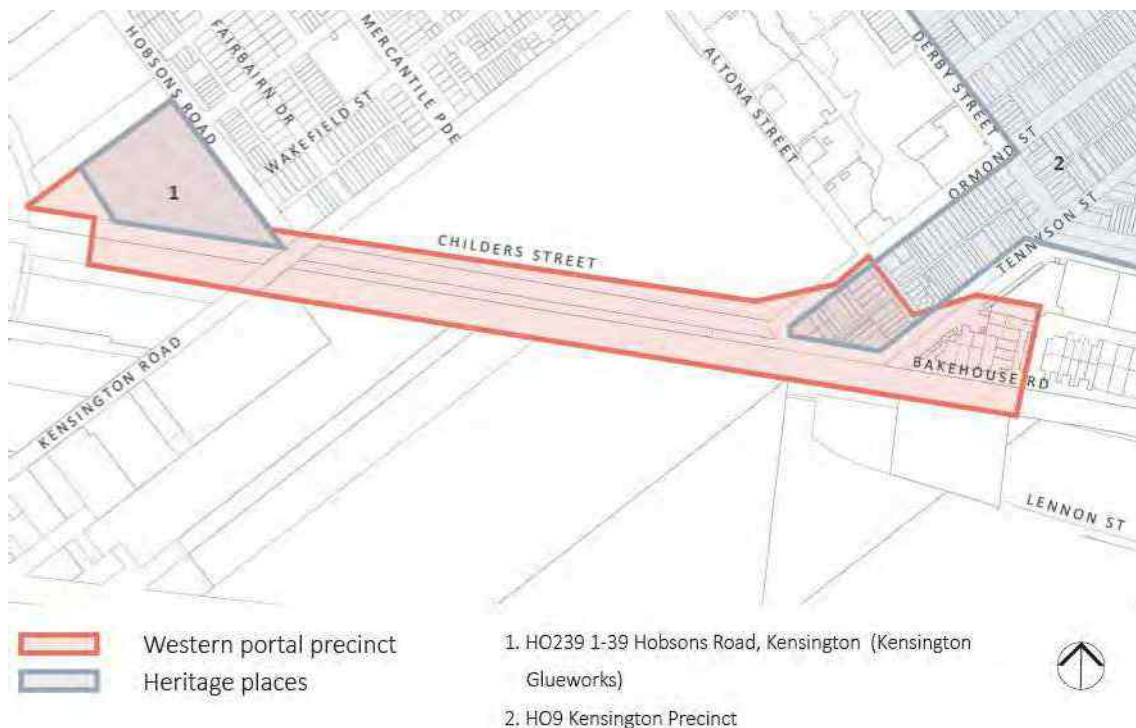


Figure 48 Key heritage places at the western portal precinct

8.1 Project Components

8.1.1 Infrastructure

On completion of the project the permanent infrastructure would include:

- new road functional layout including a roundabout, new parking bays and new footpaths
- rail infrastructure (new track)
- portal infrastructure including decline structure (twin track) and retaining wall to Childers Street.

8.1.2 Construction

Construction activities, including site establishment, would include:

- construction areas on the north side of the railway line at the eastern end of the precinct
- construction work site at the western end of the precinct on the Hobsons Road site
- demolition of four D-graded residences (1, 3 and 5-7 Childers Street and 133 Ormond Street), an ungraded townhouse development (9 and 13 Childers Street, 124 and 126 Tennyson Street and a further ungraded residence (135-141 Ormond Street).

8.1.3 Operation

N/A

8.2 Alternative Design Options

8.2.1 Infrastructure

Permanent infrastructure arising from alternative design options would include:

- TBM retrieval box opposite Pavilion on Childers Street and a longer decline structure
- a new substation on Bakehouse Road (Option 4).

8.2.2 Construction

Constructions activities arising from alternative design options would include:

- construction area to the north side of the railway line
- construction of the TBM Retrieval Box to Childers Street and Kensington Road Bridge
- demolition of one ungraded residence (135-141 Ormond Street).

8.2.3 Operation

N/A

8.3 Existing Conditions

The western portal precinct extends along the existing rail alignment from the rail bridge over the Maribyrnong River (VHR H1213) to the west, and ends at the 50 Lloyd Street Business Estate at Bakehouse Road at its east. The precinct incorporates the rail reserve at South Kensington and follows the alignment of Childers Street/McLennan Drive to the business estate. South Kensington station is also within the western portal precinct. Refer Figure 48.

Land on the south side of the rail reserve is generally given over to industrial or rail-related uses. Land to the north of the rail reserve includes the JJ Holland Park (formerly known as Seagull Swamp) and residential streets (Childers, Ormond and Tennyson Streets). JJ Holland Park has been open space since at least 1945. The present plantings, including the ring of elms around the ovals, are all post-1945.

The Western Portal precinct includes HO239, 1-39 Hobsons Road, Kensington which dates to the interwar period (c. 1919 to c. 1939). This site is also known as the former Kensington Glue Works complex. The site is on the north side of the railway reserve east of the Maribyrnong River. It is bounded by the rail reserve on the south and Hobsons Road to the north-east (Figure 49). It appears to be currently in use for storage of construction materials.

Approximately midway along the western portal study area, the proposed alignment incorporates the southern edge of the Kensington Precinct HO9 (Figure 50 to Figure 55). HO9 is extensive with the largest area following the alignment of the Craigieburn rail line on its western side. Smaller areas within the HO are located west of Epsom Road and south of Canning Street (the latter on the east side of the railway line) though these are remote from the study area. The heritage precinct is largely comprised of residential buildings dating to the Victorian period (c. 1850 to c. 1900), though with examples of Edwardian (c. 1900 to c. 1919) and interwar period buildings (c. 1919 to c. 1939). Residences are predominantly of detached timber and brick construction, as well as examples of terrace housing. Commercial areas are located along the main thoroughfares. The component of the heritage precinct within the study area is comprised of predominantly small scale, detached timber houses dating to the Edwardian (c. 1900 to c. 1919) period. Recent residential development is located within the precinct on the corner of Childers and Tennyson streets.

Although there is currently no adopted statement of significance for this precinct, a statement of significance is being developed by the City of Melbourne as part of a review of local heritage policies (refer to 8.6.1.2 below.)



Figure 49 View along the southern boundary of the former Kensington Glue Works site at 1-39 Hobsons Road, Kensington (HO239) as included within the western portal precinct (C grade, Level 3 streetscape), site to be used for construction purposes



Figure 50 Edwardian period residences within HO9 Kensington Precinct at Nos 1 to 5 Childers Street, Kensington (all D grade, Level 3 streetscape) viewed from the south (proposed to be demolished as part of the Concept Design)



Figure 51 Townhouse development at 9 and 13 Childers Street, Kensington at the corner of Childers and Tennyson streets viewed from the east (proposed to be demolished as part of the Concept Design)



Figure 52 126 Tennyson Street and the rear of 1 Altona Street, Kensington viewed to the north (126 Tennyson Street to be demolished in the Concept Design)



Figure 53 From left; Nos 1, 3 and 5 Altona Street, Kensington within HO9 Kensington Precinct (all D grade, Level 3 streetscape), to be retained



Figure 54 Dwelling at 133 Ormond Street, Kensington (at right) within HO9 Kensington Precinct (D grade, Level 2 streetscape) (proposed to be demolished as part of the Concept Design)



Figure 55 135-141 Ormond Street, Kensington viewed from the south-west (proposed to be demolished in the Concept Design)

8.3.1 Statutory heritage controls and listings

Statutory heritage controls applicable to the western portal precinct are shown in the mapping at Maps 1 and 2 of Appendices C, D and E of this report.

8.3.1.1 Environment Protection and Biodiversity Conservation Act 1999

There are no sites subject to the provisions of the EPBC Act within the western portal precinct.

All NHL and CHL places within a one kilometre buffer of the proposed project boundary are listed in Appendix F of this report.

8.3.1.2 Heritage Act 1995

There are no VHR places or VHI sites in the western portal precinct.

8.3.1.3 Planning and Environment Act 1987

Two HO sites in the Melbourne Planning Scheme fall within the western portal precinct boundary (refer Table 29).

Table 29 HO places in the western portal precinct

HO number	Place	Address
HO239	1-39 Hobsons Road, Kensington (Former Kensington Glue Works)	1-39 Hobsons Road, Kensington
HO9	Kensington Precinct	n/a

A number of residential properties at the south end of the Kensington Precinct (HO9) are within the western portal precinct and there is a site-specific HO for the former Glue Works site at the western end of the western portal precinct.

8.3.2 Potential additional heritage places

No potential additional heritage places were identified in the western portal precinct.

8.3.3 Historical archaeology

Consideration was given to the potential for previously unidentified sites of archaeological significance to exist within the precinct (refer to Appendix B of this report).

No additional sites were identified that warranted specific consideration in impact assessment.

8.4 Key Issues

The key heritage issues associated with the Concept Design are identified in the table below.

Table 30 Key issues associated with the Concept Design

Concept Design	Issue
New road functional layout at Childers Street	A new road layout including widened road, parking bays and a roundabout are within the Kensington Precinct (HO9) could have a visual impact.
Construction work site at the western end of the precinct	Part of the former Kensington Glueworks site (1-39 Hobsons Road, HO239) would be temporarily acquired for construction purposes and cleared; this could have an adverse impact on significant buildings on this site.
Construction work site at the eastern end of the precinct	The acquisition and demolition of four D-graded residential buildings (1, 3 and 5-7 Childers Street and 133 Ormond Street), and two ungraded residential buildings (townhouse development at 9- 13 Childers Street/124 and 126 Tennyson Street and the residence at 135-141 Ormond Street) in the Kensington Precinct (HO9).

8.4.1 Alternative design options

Table 31 Key issues associated with the alternative design options

Alternative Design Options	Issue
Construction work site at the eastern end of the precinct	The acquisition and demolition of one ungraded residential building in the Kensington Precinct (HO9)

8.5 Benefits and Opportunities

There are no benefits or opportunities associated with the Concept Design.

The alternative design option avoids the demolition of graded places within the HO (HO9).

Table 32 Benefits and opportunities associated with alternative design options to the Concept Design

Concept Design	Benefits	Opportunities
Construction work site at the eastern end of the precinct	Avoids impact on graded residences in HO9	-

8.6 Impact Assessment

The following draft EES evaluation objectives and assessment criteria (and indicators where relevant) are relevant to this assessment.

Draft EES evaluation objectives	Assessment criteria
Cultural Heritage – To avoid or minimise adverse effects on ... historic cultural heritage values	Avoid or minimise impacts on cultural heritage values and places

The Concept Design is generally consistent with the draft EES evaluation objective to avoid or minimise impacts on post-settlement cultural heritage values and places as:

- the loss of graded buildings on Childers Street would have a limited impact on the heritage values of the local HO precinct HO9 Kensington Precinct
- works within the former Kensington Glue Works are contained to a part of the site which does not support buildings or structures of significance.

The alternative design options is consistent with the EES draft evaluation objective to avoid or minimise impacts on post-settlement cultural heritage values and places as:

- graded buildings would remain unaffected by the project
- works within the former Kensington Glue Works are contained to a part of the site which does not support buildings or structures of significance

8.6.1 Kensington Precinct (HO9)

8.6.1.1 Statutory heritage controls

The statutory heritage controls that apply are as follows:

Legislation	Relevant VHI / HO number
Heritage Act	-
Planning and Environment Act	HO9 (Melbourne Planning Scheme)

8.6.1.2 Heritage considerations

The Kensington Precinct is a large and diverse HO precinct. The precinct is a predominantly residential late Victorian and Edwardian era precinct, with a strong link to the industrial history of the surrounding areas. It includes some commercial streetscapes in Macaulay Road and Bellair Street. The Kensington Precinct differs from other areas in the municipality in that the residential building stock is predominantly timber.

There is currently no statement of significance for the precinct in the Melbourne Planning Scheme. A draft statement of significance has been prepared as part of the City of Melbourne's Local Heritage Policy Review project (City of Melbourne, 2015) and this is currently subject to community consultation (<http://participate.melbourne.vic.gov.au/local-heritage>). The draft statement notes the precinct is of historical significance as a Victorian and Edwardian era precinct developed predominantly from the late nineteenth century through to the 1910s, of social significance for the value residents place on its historic streetscapes, and aesthetic/architectural significance for its consistent Victorian and Edwardian building stock.

Buildings within the Kensington Precinct have been ascribed building and streetscape gradings in the City of Melbourne's municipal heritage studies. Gradings for buildings in HO precincts outside the Capital City Zone are listed in the Heritage Places Inventory June 2015. As for all other HO precincts in the City of Melbourne, places within HO9 are graded using an A-D grading system, which is proposed to be converted to a new system of Significant, Contributory and Non-contributory as part of the Local

Heritage Policy Review project. Refer to Appendix A of this report for an explanation of the current gradings. Graded places within the western portal precinct in HO9 are D grade in Level 2 and Level 3 streetscapes are listed in Table 7 at Appendix F of this report.

Properties where there is a direct impact from the Concept Design are listed in Table 29. Note that a number of the ungraded properties on Childers and Tennyson streets have recently been demolished for a townhouse development.

Table 33 Building gradings and streetscape levels of affected properties within HO9

Address	Grading and streetscape level	Comment
1 Childers Street	D graded, Level 3 streetscape	Edwardian residence
3 Childers Street	D-graded, Level 3 streetscape	Edwardian residence
5-7 Childers Street	D-graded, Level 3 streetscape	Edwardian residence
9 Childers Street	Ungraded, no streetscape level	Combined for recent townhouse development
13 Childers Street	Ungraded, no streetscape level	Combined for recent townhouse development
133 Ormond Street	D-graded, Level 2 streetscape	Edwardian residence
135-141 Ormond Street	Ungraded, no streetscape level	Post World War II residence
124 Tennyson Street	Ungraded, no streetscape level	Combined for recent townhouse development
126 Tennyson Street	Ungraded, no streetscape level	Combined for recent townhouse development

8.6.1.3 Impact assessment

In the Concept Design, the demolition of the four D-graded residences (1, 3 and 5-7 Childers Street and 133 Ormond Street) within the Kensington Precinct (HO9) would have an adverse impact on the precinct in that it would reduce the stock of contributory buildings and effectively reduce the extent of the precinct on this southern edge. The demolition of the ungraded buildings (135 Ormond Street and the townhouses at 9-11 Childers Street and 124-126 Tennyson Street) would have no adverse impact as these are not contributory to the precinct heritage values.

Recognising that the loss of any contributory or the graded significant building within an HO precinct is an undesirable action, the demolition of these buildings is an action which would not unacceptably compromise the core values of the precinct. As they are located on an edge of the precinct, the contribution which the buildings make is less critical to the cohesion of the place, than buildings which are located more centrally. The three Childers Street residences have a degree of separation from other contributory building stock by virtue of the townhouse development at the corner of Tennyson and Childers streets, which fronts both streets and extends north to the rear of the houses facing north on Altona Street.

In the Concept Design, the proposed changes to the layout of Childers Street (refer to the plans at Appendix E to Technical Appendix D, *Transport Assessment*) would not result in an additional impact.

The alternative design options for the construction work site in this location would be preferred from a heritage perspective as only the ungraded residence at 135 – 141 Ormond Street would be demolished. Ungraded buildings are not considered to contribute to the significance of the precinct. No functional road layout has been confirmed for the alternative design options and it is not known whether changes

to the road layout are proposed that would have an adverse impact on retained graded buildings in this location. If possible, the layout should avoid such impacts.

8.6.2 Former Kensington Glue Works site (1-39 Hobsons Road, HO239)

8.6.2.1 Statutory heritage controls

The statutory heritage controls that apply are as follows:

Legislation	Relevant VHR/HO number
Heritage Act	-
Planning and Environment Act	HO239 (Melbourne Planning Scheme)

8.6.2.2 Heritage considerations

This site appears to have been acquired in the late 1920s by a New Zealand-based company, Davis Gelatine Pty Ltd, and developed for a new factory complex to be known as 'Glues and By-products Pty Ltd'. The Davis Gelatine company was one of some importance, operating in other Australian states and in New Zealand and with offices elsewhere in the Commonwealth.

The buildings are thought to have been designed by Melbourne architect, Frank Stapley (later Stapley & Hall) and to have been constructed between 1928 and the late 1930s / early 1940s (Allom Lovell & Associates client memorandum, 2004).

There is no known statement of significance for the site applicable under the Melbourne Planning Scheme, however the place would appear to be of local historical / architectural significance as an example of an interwar factory complex associated with the meat and by-products industry.

The site is graded C (refer to the discussion of gradings at Appendix F).

8.6.2.3 Impact assessment

In both the Concept Design and the alternative design option, the proposed construction work site is located on land at the southern end of the site and there are no buildings or structures of heritage value in this location.

Providing the site is contained within the area identified, there would be no adverse impact associated with the works. The works would be temporary and there would be no impact on the heritage values of the place.

8.6.3 Historical archaeology

8.6.3.1 Statutory heritage controls

The statutory heritage controls that apply are as follows:

Legislation	Relevant VHR/HO Number
Heritage Act	- Note the Heritage Act provides blanket protection for all historical archaeological sites more than 50 years in age.
Planning and Environment Act	-

8.6.3.2 *Impact assessment*

While no archaeological sites of significance have been identified within the precinct, it is possible such sites may be encountered during the works.

Refer to section 6.2.1 for a discussion of this issue and the requirements in the event a site or artefact is discovered.

8.7 Environmental Performance Requirements

Table 34 provides the recommended Environmental Performance Requirements and proposed mitigation measures for the precinct.

Table 34 Environmental Performance Requirements for the precinct

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
Kensington Precinct (HO9)	Demolition of four graded buildings	CH3 Prior to construction undertake archival photographic recording in accordance with Heritage Victoria Technical Note: Photographic Recording for Heritage Places and Objects where heritage places are to be demolished or modified.	None identified beyond recording of the buildings. Recording should be the external fabric only.	HH10
Former Kensington Glue Works site (HO239)	Physical impact of construction work site at the western end of the precinct	CH1 Design permanent and temporary works to avoid or minimise impacts on the cultural heritage values of heritage places. Consult as required with Heritage Victoria and/or the responsible authority (as applicable). CH10 To the satisfaction of the responsible authority, ensure no direct impact on heritage buildings on the former Glueworks site in Kensington.	Avoid the need for demolition works to significant buildings on the site retain and protect heritage buildings from physical impacts, physical protection work to be designed as part of construction management plan.	HH12

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
Historical archaeology (Entire precinct)	Subsurface excavation may damage unidentified historical archaeological sites	CH6 To the satisfaction of Heritage Victoria: <ul style="list-style-type: none"> ● Develop archaeological management plans to manage disturbance of archaeological sites and values affected by the project ● Undertake investigation in accordance with the Guidelines for Investigating Historical Archaeological Artefacts and Sites, Heritage Victoria 2014 (as amended or updated) and to the satisfaction of the Executive Director, Heritage Victoria ● Develop and implement a protocol for managing previously unidentified historical archaeological sites discovered during project works. 	For any archaeological sites or artefacts revealed or discovered during construction, the following measure would be implemented: <ul style="list-style-type: none"> ● stop any activity which may impact on the discovery ● ensure that other people working in the area are aware of it and have also stopped work in the area ● protect the artefact, or site feature(s) by, for example, erecting temporary fencing or other suitable enclosure ● consult with a qualified cultural heritage consultant to determine the appropriate course of action ● advise Heritage Victoria where the discovery was made and provide a description or photograph of the discovery ● determine how to manage the find through consultation with Heritage Victoria and the heritage consultant ● obtain the necessary Consent under the Heritage Act 1995, or other necessary approvals to protect, recover or remove the find. Archaeological management may require a combination of testing, excavation, salvage and monitoring and related reporting.	HH01

8.8 Conclusion

The works within the western portal precinct would have an adverse heritage impact associated with the demolition of four D-graded buildings on the southern edge of the precinct, within the Kensington Precinct (HO9). This impact is relatively small given the location of the buildings on the southern edge of the precinct and the core heritage values of the precinct would remain intact. The impact cannot be mitigated however the buildings would be recorded consistent with good practice. The alternative design option does not pose the same impact, with a single ungraded residence demolished in this case and no adverse heritage impact arising from the demolition.

9.0 Precinct 3 – Arden Station

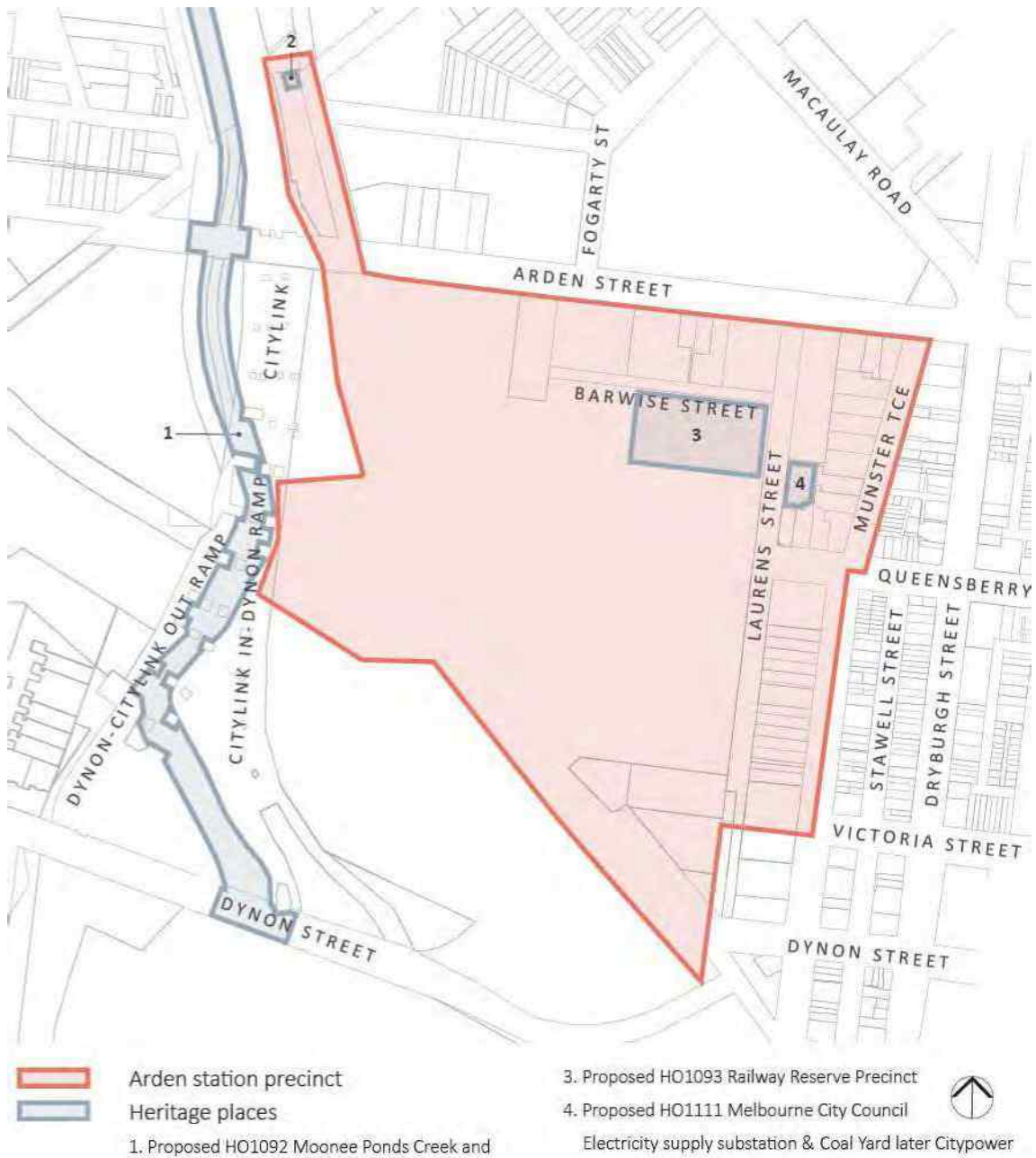


Figure 56 Key heritage places in the Arden station precinct

9.1 Project Components

9.1.1 Infrastructure

On completion of the project, the permanent infrastructure would include:

- Substation located north of Arden Street between Langford Street and CityLink, one of four potential options.

9.1.2 Construction

Construction activities, including site establishment, would include:

- Occupation of VicTrack lease and private property acquisition and demolition at 239-271 Arden Street.

9.1.3 Operation

N/A

9.2 Alternative Design Options

9.2.1 Infrastructure

There are three alternative options for the substation: co-location at Melbourne Metro Trains Melbourne Traction Substation, in the southern section of the Arden station precinct, and north of the western portal in the 50 Lloyd Street Business Estate. None of the alternative design options intersect with any heritage places.

9.2.2 Construction

N/A

9.2.3 Operation

N/A

9.3 Existing Conditions

Precinct 3 - Arden station is bounded on its western edge by the rail reserve containing the Upfield and Craigieburn rail lines. The precinct includes a concrete batching plant and construction yard (formerly occupied by rail sidings) located between the railway reserve and Laurens Street to the east, a former railways workshop complex developed from the c. 1910s south of Barwise Street, and a light industrial area to Anderson Street. East of Laurens Street, the Arden station precinct incorporates a number of small scale industrial and residential buildings between Laurens Street and Munster Terrace. These predominantly date to the mid to late twentieth century. Opposite the railways workshops is the Melbourne City Council Electricity Supply substation and coal yard at 146-166 Laurens Street, and its associated fenced yard. The southern reaches of the precinct incorporate warehouses/office. Outside the Precinct and at its south-eastern corner is a large site comprising the former Thomas Brunton & Company Australian Flour Mill (Weston Milling). The prominent silos and substantial red brick buildings dominate the streetscape in this area. At the northern boundary to the north in Arden Street itself, is the Arden Street Oval and North Melbourne Recreation Centre. At its northern end the precinct includes a brick pumping station on Langford Street. Refer to Figure 56.

With regard to the plantings and landscape character of the Arden station precinct, the most conspicuous features are the mature Plane trees (*Platanus xacerifolia*) located along Laurens Street, albeit this plantation is fragmented and does not read as a continuous row. To the east, a younger plantation of plane trees forms an outer row along Queensberry Street, with relatively juvenile White Cedar (*Melia azedarach*) along Munster Terrace. Spotted Gums (*Corymbia maculata*) are located in the central median of both road reserves.

Tree plantings within the former railway sidings contain typical plantings of the interwar period, namely Peppercorn Trees (*Schinus areira*) and Monterey Cypress (*Cupressus macrocarpa*).

The Arden station precinct contains no places currently subject to heritage controls under the provisions of the Heritage Act or the Melbourne Planning Scheme, though a number of HO places are proposed for controls under Planning Scheme Amendment C207.

9.3.1 Statutory heritage controls and listings

Statutory heritage controls within the Arden station precinct are shown in the mapping at Map 3 Appendices C, D and E; note the mapping confirms there are no applicable heritage controls within the precinct.

9.3.1.1 Environment Protection and Biodiversity Conservation Act 1999

There are no sites subject to the provisions of the EPBC Act within the Arden station precinct.

All NHL and CHL places within a one kilometre buffer of the proposed project boundary are listed in Appendix F.

9.3.1.2 Heritage Act 1995

There are no VHR registered places or objects or VHI sites within the Arden station precinct.

9.3.1.3 Planning and Environment Act 1997

There are no places covered by HO controls within the Arden station precinct.

9.3.2 Potential additional heritage places

The City of Melbourne has prepared Amendment C207 to the Melbourne Planning Scheme based on a recent heritage review of the Arden-Macaulay area (Butler, 2012). The amendment seeks to introduce heritage controls over a series of predominantly industrial sites and precincts in the north-west and west of the municipality. The amendment is currently with the Minister for Planning awaiting approval.

The Arden station precinct extends into the site of the proposed Railways Reserve Precinct, 173-199 Laurens Street, North Melbourne proposed as HO1093 (individual HO) under Amendment C207 (refer to Figure 57 and Figure 57). The large site is comprised of three shed buildings as well as a small brick substation.

The largest of these is the Former Victorian Railways Carpenters Shop, later Victorian Railways Printing Works (Figure 58). This is a large, corrugated clad building with a multiple saw tooth roof and timber-framed double hung windows. Unusually, the Laurens Street façade presents with multiple gable bays, concealing the saw tooth roof behind. The former printing works is offset from the Laurens Street boundary by a narrow garden and unrelated single-storey brick structure. Two substantial corrugated clad workshops are located within the site; one to the north boundary on Barwise Street and the second to its immediate south (refer to Figure 60). Both workshops display timber framed windows and roof mounted ventilators. A small brick substation with a hipped roof and gable ventilators is located on the Barwise Street boundary and to the east of the workshop (Figure 62). The site as a whole is identified as being of historic and aesthetic significance.

On the east side of Laurens Street, at 146-166 Laurens Street, is the Melbourne City Council Electricity Supply substation and coal yard, later CitiPower (Figure 63). The c. 1938 Moderne style building is constructed of polychromatic brickwork in contrasting solid and banded red and cream brickwork. Fenestration is expressed as blind windows in brown brick. Formally, the building is composed of a central two-storied section with flanking single storied wings. The building is located to the street boundary, with the yard and ancillary structures behind. The site is identified as being of historic and aesthetic significance (Butler, 2012) and is proposed as HO1111 (individual HO) as part of Amendment C207. The building is identified as being historically and aesthetically significant to North Melbourne.

Proposed for inclusion under of Amendment C207, as part of HO455, is the Thomas Brunton & Company Australian Flour Mill (Weston Milling) site. The amendment proposes to increase the current HO extent to cover all of the milling related buildings and structures on the site located between Munster Terrace and Laurens Street, North Melbourne (Figure 64). The complexes are collectively identified as being historically and aesthetically significant to North Melbourne (Butler, 2012).

The panel for Amendment C207 supported the application of the HO to these various sites, though some recommendations were made for amendments to the associated documentation.

The mature plane trees (*Platanus xacerifolia*) in Laurens Street are of amenity value within the precinct. They have not been assessed to be of heritage value. The peppercorn trees (*Schinus areira*) and Monterey Cypress (*Cupressus macrocarpa*) within the former rail reserve are of more limited amenity value. They are representative of typical plantings associated with railway land and are not considered to be of heritage significance in their own right. The citation from the Arden-Macaulay Heritage Study 2012 notes the presence of peppercorn trees associated with this site, however tree controls are not proposed to apply as part of Amendment C207 Arden-Macaulay Heritage Review.

As part of Amendment C207, a length of Moonee Ponds Creek - along with associated infrastructure including but not limited to road bridges, pylons, pumping stations, bluestone levees and the watercourse - is proposed to be included in the Schedule to the HO (HO1092). The proposed precinct is identified as being of historic significance at a local level for its historical associations and ability to demonstrate the change in use and public perception of the Moonee Ponds Creek and, more recently, the development of major infrastructure projects including CityLink, within its alignment. The pumping station (Figure 65) on Langford Street, North Melbourne is located within the Arden station precinct. Its location is shown in Figure 56.

Table 35 Potential heritage places within the Arden Precinct as a result of Amendment C207 to the Melbourne Planning Scheme

Proposed number	HO	Place	Address	Grading
HO455		Thomas Brunton & Company Australian Flour Mill part, later Weston Milling factory also Filigree P/L and Thomas Brunton & Co flour mill complex later N.B. Love	24-78 Laurens Street, North Melbourne (also known as 1-25 Munster Terrace)	B1
HO1111		Melbourne City Council Electricity Supply substation and coal yard later Citipower	146-166 Laurens Street, North Melbourne	C3
HO1093		Railways Reserve Precinct	173-199 Laurens Street, North Melbourne	C2
HO1092		Moonee Ponds Creek and Infrastructure Precinct	Kensington and North Melbourne	C

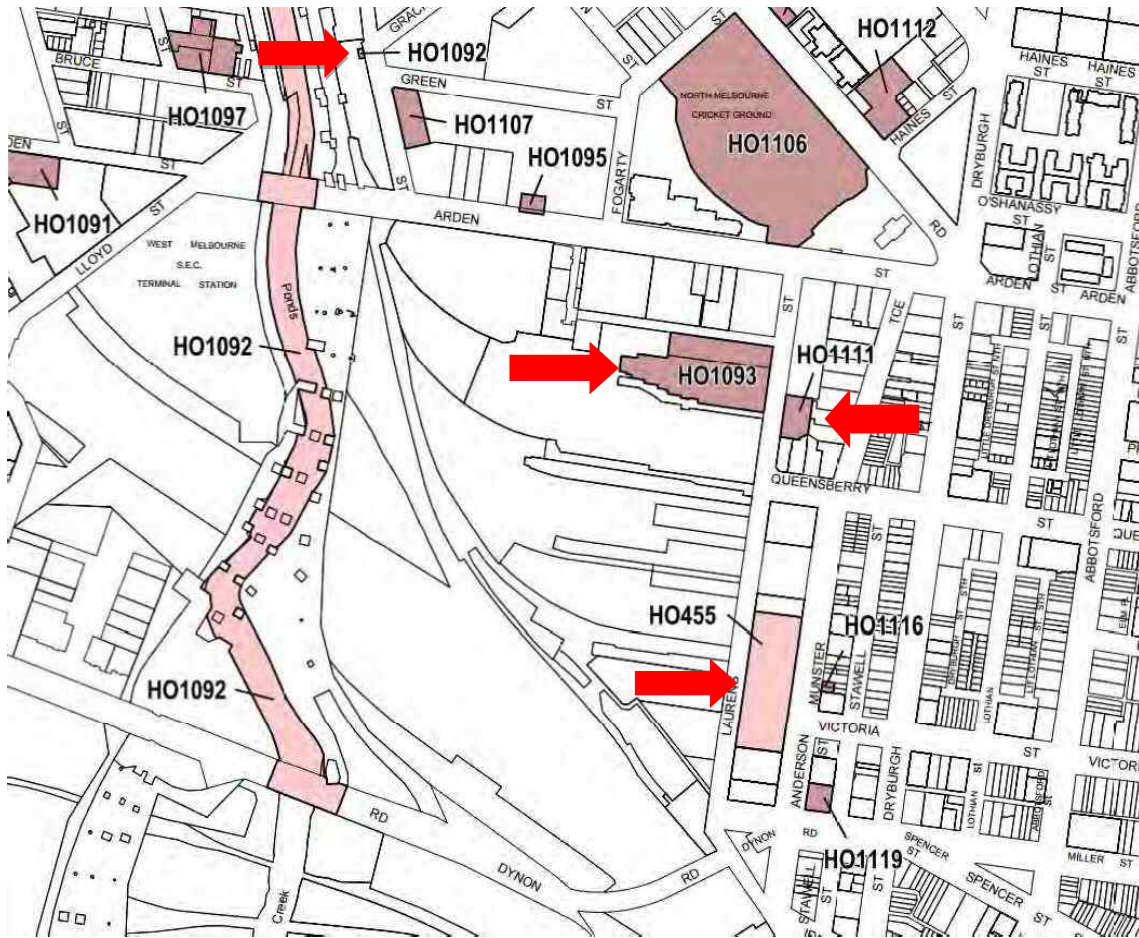


Figure 57 Proposed additional HO controls under Amendment C207 (adopted version, post-panel, as adopted by Council, subject sites indicated

Source: Report to the Future Melbourne Committee 27 May 2014

<https://www.melbourne.vic.gov.au/about-council/committees-meetings/meeting-archive/Lists/CouncilMeetingAgendaItems/Attachments/11513/FULL%20SET%20MAY14%20CCL%20AGENDA%20ITEM%205.1%20Planning%20Scheme%20Amendment%20C207.pdf>, accessed 22 January 2016



Figure 58 Railways Reserve Precinct, 173-199 Laurens Street, North Melbourne (proposed HO1093), the above building is the Former Victorian Railways Carpenters Shop, later Victorian Railways Printing Works (workshop 1), viewed from the north-west



Figure 59 South elevation of the Former Victorian Railways Carpenters Shop at Railways Reserve Precinct, 173-199 Laurens Street, North Melbourne (proposed HO1093)



Figure 60 West and south elevation of the northern workshop to Railways Reserve Precinct, 173-199 Laurens Street, North Melbourne (proposed HO1093), with the central shed behind



Figure 61 Central workshop in the Railways Reserve Precinct, 173-199 Laurens Street, North Melbourne (proposed HO1093), viewed from the north-east



Figure 62 Brick substation within the Railways Reserve Precinct (proposed HO1093) as viewed from the south, within the site



Figure 63 Melbourne City Council Electric Supply substation and coal yard later Citipower, 146-166 Laurs Street, North Melbourne (proposed HO1111)



Figure 64 Thomas Brunton & Co flour mill complex, later Weston Milling factory, 24-78 Laurens Street (proposed for inclusion in HO455)

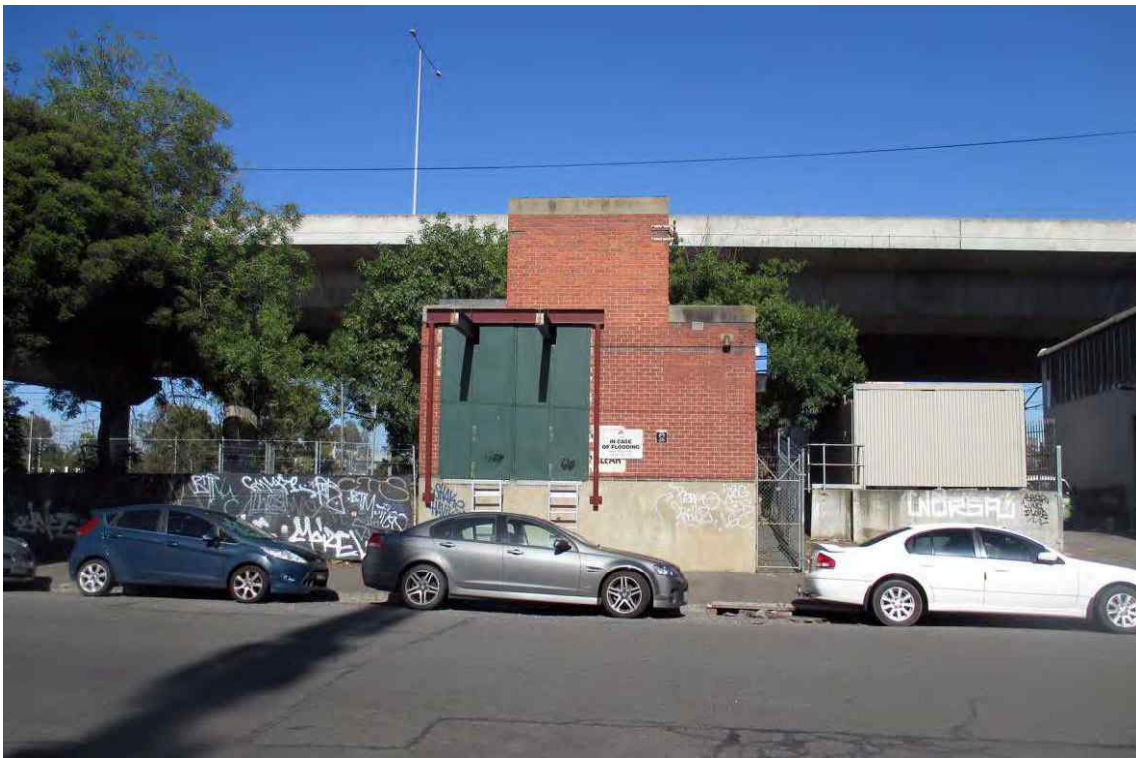


Figure 65 Pumping station on Langford Street, North Melbourne; part of the proposed Moonee Ponds Creek Infrastructure Precinct (proposed HO1092)

9.3.3 Historical archaeology

There are no VHI sites within the precinct.

Consideration was also given to the potential for previously unidentified archaeological sites of significance to exist in the precinct and to be affected by works (refer to Appendix B of this report).

The outcome of this investigation was that due to the level of disturbance, most of the site is unlikely to have any physical archaeological remains still remaining below the current ground surface.

The proposed construction works include the relocation of a 1200 millimetre brick stormwater drain. This appears to be a drain described in the 1897 MMBW plan as a four feet diameter brick barrel drain. The brick stormwater drain was considered as part of the predictive archaeological assessment (Appendix B) and was referred to Heritage Victoria for consideration for inclusion in the VHI, however Heritage Victoria has determined it does not warrant listing.

9.4 Key Issues

The key issues associated with the Concept Design are identified in the table below.

Table 36 Key issues associated with the Concept Design

Concept Design	Issue
Aligned between the alignment of Arden and Queensberry Streets, in the VicTrack land	Requires the demolition of buildings within the Railways Reserve Precinct at 173-199 Laurens Street, North Melbourne (proposed HO1093)
Substation (Option 1)	Potential demolition of a brick pumping station in Langford Street North Melbourne, included within the Moonee Ponds Creek Infrastructure Precinct (proposed HO1092)
Establishment of construction works site and TBM launch site east of Laurens Street	Demolition of buildings within the Railways Reserve Precinct at 173-199 Laurens Street, North Melbourne (proposed HO1093)

9.5 Benefits and Opportunities

There are no benefits or opportunities associated with the Concept Design. The alternative design option would have the benefit that the pumping station would be unaffected.

Table 37 Benefits and opportunities associated with alternative design option

Concept design	Benefits	Opportunities
Substation options 2-4	Avoids impact on the pumping station included within the Moonee Ponds Creek Infrastructure Precinct (proposed HO1092)	-

9.6 Impact Assessment

The following draft EES evaluation objectives and assessment criteria (and indicators where relevant) are relevant to this assessment.

Draft EES evaluation objectives	Assessment criteria
Cultural Heritage – To avoid or minimise adverse effects on ... historic cultural heritage values	<i>Avoid or minimise impacts on cultural heritage values and places</i>

The Concept Design is generally consistent with the draft EES evaluation objective to avoid or minimise impacts on post-settlement cultural heritage values and places as:

- The loss of the former railways workshops would result in the loss of the values associated with this proposed heritage place but the site would be recorded in full and its history could be recognised through future interpretation at the site.
- The pumping station which forms part of the proposed HO precinct could be considered for retention in the relevant option for the required new substation. If its removal is required, it is a relatively minor element within the proposed HO precinct and one of a number of like structures.

9.6.1 Railways Reserve Precinct, 173-199 Laurens Street, North Melbourne (proposed HO1093)

9.6.1.1 Statutory heritage controls

The statutory heritage controls that apply are as follows:

Legislation	Relevant VHR/HO number
Heritage Act	-
Planning and Environment Act	Proposed HO1093 as part of Amendment C207 to the Melbourne Planning Scheme

9.6.1.2 Heritage considerations

This place is not currently subject to statutory heritage controls but is the subject of a seriously entertained amendment to the Melbourne Planning Scheme (Amendment C207) which would introduce such controls.

A statement of significance was prepared by Graeme Butler (2012) as part of the Amendment C207 supporting documentation, though it is noted this has yet to be approved. Butler describes the significant fabric at the place as follows:

Former Victorian Railways Carpenter's Shop, later Victorian Railways Printing Works, 173-189 Laurens Street:

Large corrugated iron clad sawtooth workshop building has been used as the over [sic.] much of its early existence and Victorian Railways Carpenters Shop before that;

Victorian Railways Way and Works workshop (part), 191-199 Laurens Street:

Gabled corrugated iron clad workshop buildings with timber framed openings and louvered gable vents.

A gabled red brick and contributory MCC substation is adjoining to the east with remnant pepper tree planting.

The place was assessed in the Butler study (2012) as having a C grading.

9.6.1.3 Impact assessment

The construction of Arden station and the establishment of the construction works site in this location would result in the demolition of all buildings and features associated with the Railways Reserve Precinct, 173-199 Laurens Street, North Melbourne, proposed as HO1093 in the Melbourne Planning Scheme. Specifically, the four buildings identified in the citation under 'What is significant?' the former Carpenters Shop (later Printing Works) and the workshops would be demolished, as would the gable-roofed brick sub-station referenced in the citation. Pepper trees on the site would also be removed.

The northern section of the present-day VicTrack site was developed for rail workshops from the turn of the twentieth century and for much of the twentieth century the Victorian Railways Printing Works was also accommodated here (Butler 2012: p. 375-6). The existing buildings are clearly identifiable on plans and photographs from the early to mid-twentieth century (refer to Figure 66 - Figure 69). Land further to the south (beyond Queensberry Street) was also used for railways purposes with extensive sidings established by the late nineteenth century (see Figure 66).

Historically the buildings at 173-199 Laurens Street have been identified as those best able, on the broader site, to demonstrate the historical association of the place with railways expansion in Victoria in the early twentieth century. (It is noted that there are other buildings on the broader site which appear

based on physical inspection and review of early plans, to be contemporary with those identified for the HO control).

Aesthetically, the buildings present as functional industrial structures with their form and materiality typical of the period and use (refer Figure 70 to Figure 77). These are the more substantial and intact elements surviving from a more extensive complex, and appear to have been identified by Butler as elements, that through their form and fabric, can demonstrate the importance of the broader area as an important rail infrastructure precinct, rather than necessarily for their specific characteristics or historical uses. The 'remnant pepper tree planting' on the site is also referenced as significant, notwithstanding the fact that Amendment C207 does not propose to include tree controls.

The impact of demolition would be complete loss of the heritage values (historical and aesthetic) associated with the proposed Railways Reserve Precinct. In a general sense the association with rail transport would be maintained through the establishment of a new station, but the early origins of this would no longer be evident through the physical fabric of the place.

While retention and relocation of one or more of the buildings (to this or an alternative site) may be physically and technically possible, this would not appear to be justified on the basis of their significance. Any salvaged and relocated building or part of building retained on this site would necessarily stand in a transformed context and its historical origins and purpose would not be easily discernible. The buildings are of local historical significance as related to the history of the broader site, but are of conventional design and construction and are not of architectural or technical significance at a level where relocation might be warranted.

It is noted that Panel for Amendment C207 noted submissions to the effect that the building [sic] was likely to be demolished as part of the future Melbourne Metro and commented as follows:

In the circumstances that 173-199 Laurens Street is only 'likely to be demolished', we believe that in the balancing of factors relevant to the proposal to apply the overlay, this factor does not weigh heavily against the public benefits of application of heritage controls which at the very least could see recording of the building before demolition. Our view may have been different if the building was certain to be demolished.

(Panel Report Melbourne Planning Scheme, Amendment C207, 21 January 2014: 78).

The buildings should be recorded prior to demolition and an interpretation strategy should be developed to reference the history of the place.

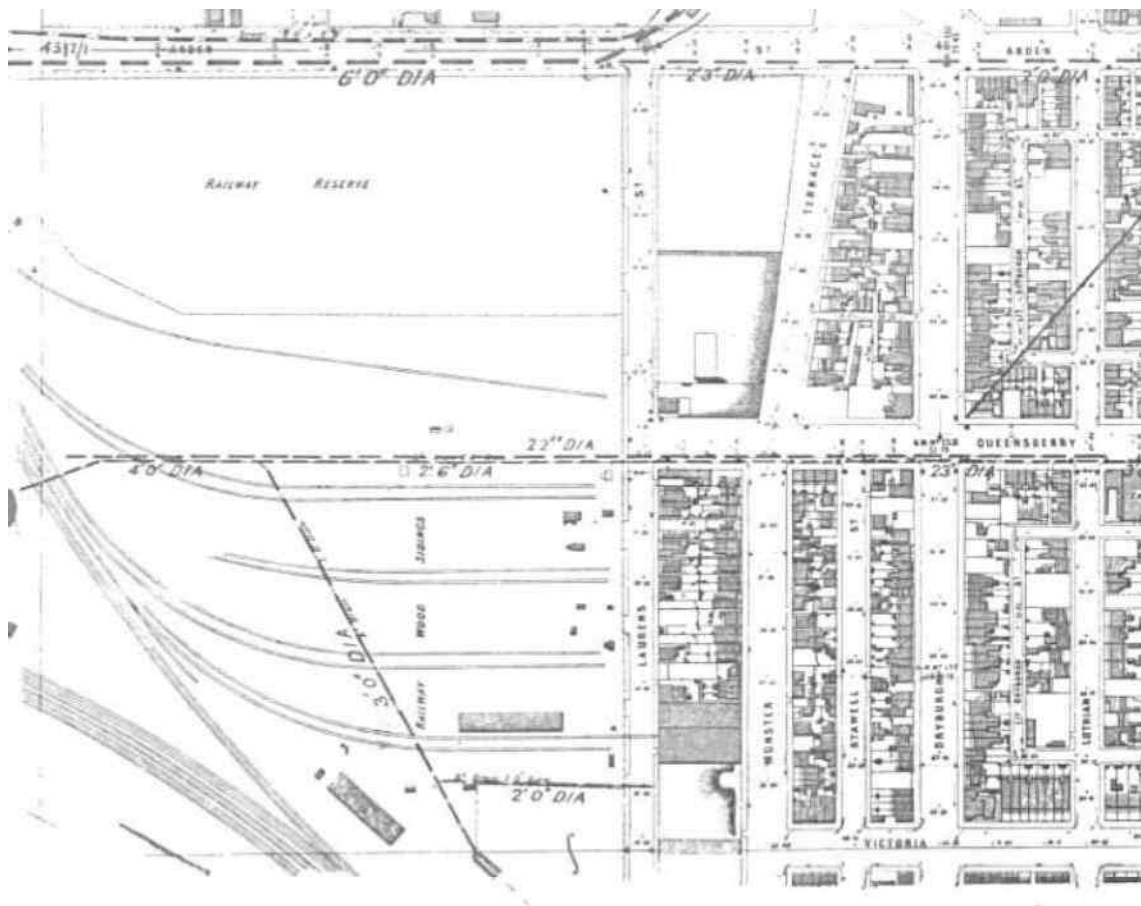


Figure 66 c. 1895 MMBW Plan No. 31, Melbourne and North Melbourne, showing the Railway Reserve north of Queensberry Street and 'Railway Wood Sidings' and timber structures to the south
Source: State Library of Victoria Maps Collection

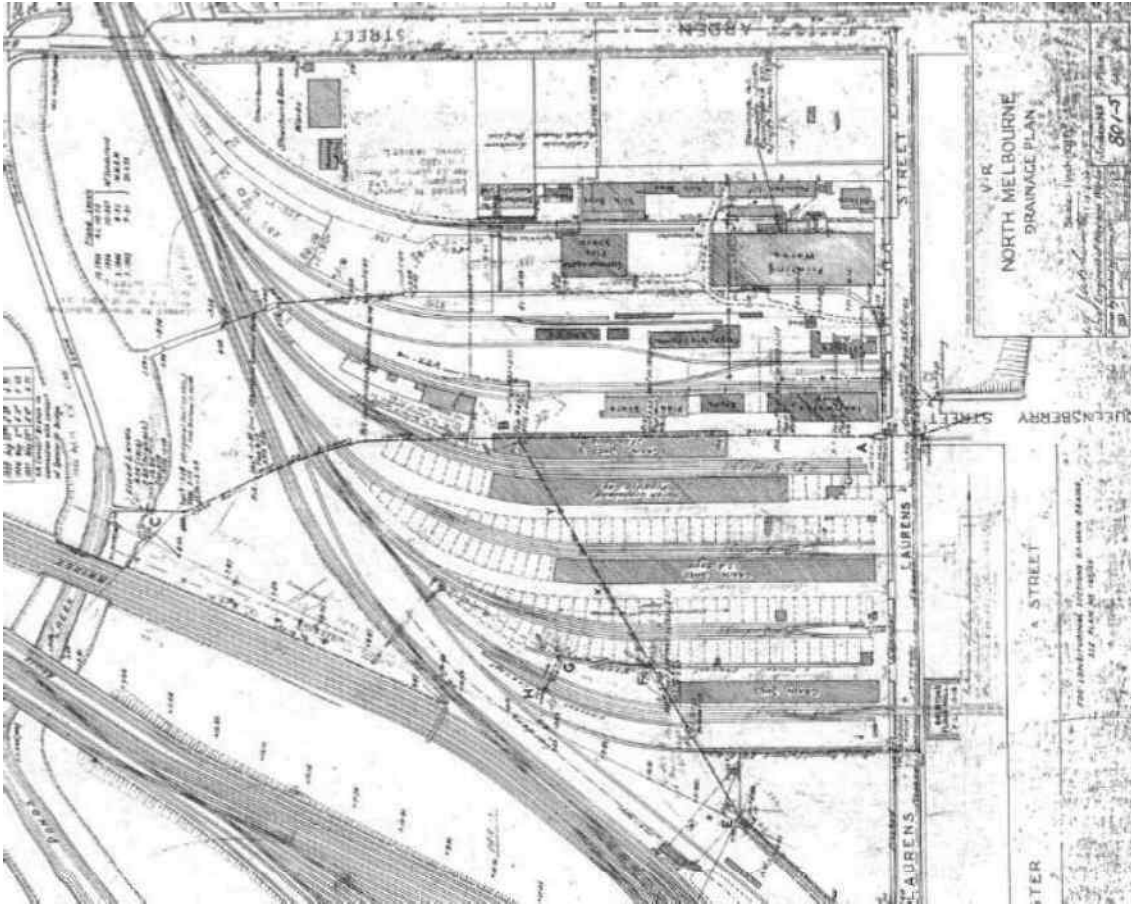


Figure 67 1928 plan of the Arden station site, showing the development of the railway reserve for Railways Department workshops, and additional grain sheds/stores south of Queensberry Street
 Source: Department of Transport Drawing Management System



Figure 68 Aerial view from the north c. 1955
 Source: State Library of Victoria (photographer Charles Pratt)

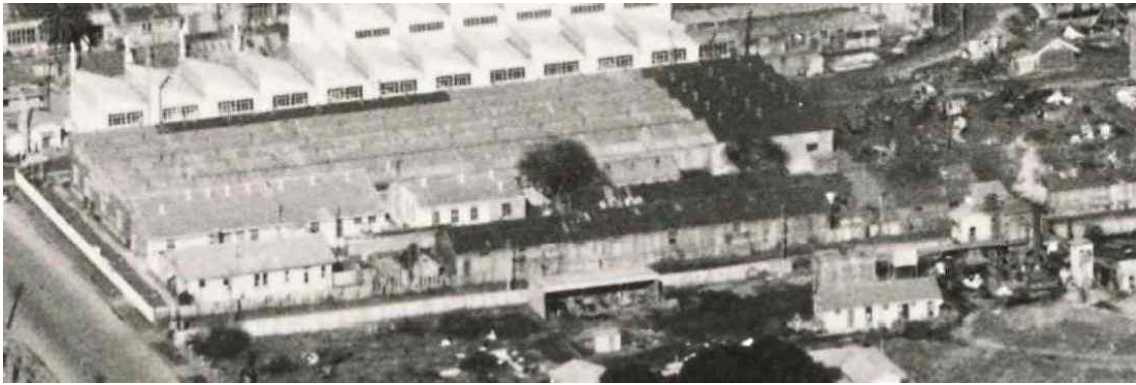


Figure 69 Detail of the same c. 1955 view showing the existing buildings at 173-199 Laurens Street
Source: State Library of Victoria (photographer Charles Pratt)



Figure 70 Southern elevation of the Former Victorian Railways Carpenters Shop at Railways Reserve Precinct, 173-199 Laurens Street, North Melbourne (proposed HO1093)



Figure 71 Southern elevation (looking west) of the Former Victorian Railways Carpenters Shop at the Railways Reserve Precinct, 173-199 Laurens Street, North Melbourne (proposed HO1093)



Figure 72 Internal view of the Former Victorian Railways Carpenters Shop at the Railways Reserve Precinct, 173-199 Laurens Street, North Melbourne (proposed HO1093) looking north



Figure 73 Interior of the Former Victorian Railways Carpenters Shop at the Railways Reserve Precinct, 173-199 Laurens Street, North Melbourne (proposed HO1093)



Figure 74 Interior of the Former Victorian Railways Carpenters Shop at the Railways Reserve Precinct, 173-199 Laurens Street, North Melbourne (proposed HO1093) looking north



Figure 75 Exterior of the central workshop at the Railways Reserve Precinct, 173-199 Laurens Street, North Melbourne (proposed HO1093)



Figure 76 Exterior of the northern workshop at the Railways Reserve Precinct, 173-199 Laurens Street, North Melbourne (proposed HO1093)



Figure 77 Northern elevation of the northern workshop at the Railways Reserve Precinct, 173-199 Laurens Street, North Melbourne (proposed HO1093)

9.6.2 Moonee Ponds Creek and Infrastructure Precinct (Proposed HO1092)

9.6.2.1 Statutory heritage controls

The statutory heritage controls that apply are as follows:

Legislation	Relevant VHR/HO number
Heritage Act	-
Planning and Environment Act	Proposed HO1092 as part of Amendment C207 to the Melbourne Planning Scheme

9.6.2.2 Heritage considerations

This place is not currently subject to statutory heritage controls but is the subject of a seriously entertained amendment to the Melbourne Planning Scheme (Amendment C207) which would institute such controls.

A statement of significance was prepared by Graeme Butler (2012) as part of the Amendment C207 supporting documentation, though it is noted this has yet to be approved. Butler describes the precinct as historically significant, with significant fabric at the place defined as follows:

- land within the existing creek reserve
- water course either as naturalistic or constructed form, with vegetated banks and existing channel widths
- earthen embankments either side of water channel
- blue stone pitched channels as evident or further identified
- brick pipe bridge piers south of Arden Street bridge
- inter-war brick stormwater pump houses numbers 1-5 and
- four significant and contributory interwar reinforced concrete bridges: Dynon Road, Arden Street, Macaulay Road and Racecourse Road.

9.6.2.3 Impact assessment

The proposed precinct has been identified as of historical significance for its ability to reflect on or demonstrate a series of important themes in the history of the area, including:

- as an early watercourse in Melbourne which took the accumulated waste from the city prior to the construction of the MMBW sewage and drainage systems
- for its history of flooding and flood mitigation schemes
- for its association with major transport infrastructure
- more recently as the focus for pedestrian and cycling recreation.

If it occurred, the demolition of the pump house would have a very minor impact on the proposed HO precinct. It is one of a number of these structures included in the precinct and in itself is of no intrinsic significance. Collectively, the pump houses reference flood abatement schemes associated with the creek, but this would continue to be understood by reference to the other pump houses. Its demolition would have no impact on the ability of the creek and associated infrastructure to demonstrate the historical themes and associations identified in the statement of significance.

While the impact on the proposed heritage precinct would not have a major adverse impact, equally, the retention of the building would be preferred from a heritage perspective, and it is recommended that the siting of the new substation be reviewed to allow the retention *in situ* of the pump house and the co-location on this site of the new building.

If demolition is required, the building should be recorded.

9.6.3 Historical archaeology

9.6.3.1 Statutory heritage controls

The statutory heritage controls that apply are as follows:

Legislation	Relevant VHI number
Heritage Act	- Note the Heritage Act provides blanket protection for all historical archaeological sites more than 50 years in age.

9.6.3.2 Impact assessment

There are no VHI sites or other known areas of significant archaeological potential identified within Precinct 3 and there would be no additional impact on known historical archaeological values or sites. A protocol for managing previously unidentified historical archaeological sites discovered during project works would be established.

Refer to Section 6.2.1 for a discussion of this issue and the requirements in the event a site or artefact is discovered.

9.7 Environmental Performance Requirements

Table 38 provides the recommended Environmental Performance Requirements and proposed mitigation measures for the precinct.

Table 38 Environmental Performance Requirements for the precinct

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
Railways Reserve Precinct (173-199 Laurs Street North Melbourne, proposed HO1093)	Complete loss of significant fabric and associated heritage values	<p>CH3 Prior to construction undertake archival photographic recording in accordance with Heritage Victoria Technical Note: Photographic Recording for Heritage Places and Objects where heritage places are to be demolished or modified.</p> <p>CH7 To the satisfaction of Heritage Victoria and the responsible authority, develop and implement a heritage interpretation strategy as part of detailed design as a whole which seeks to explore historical and Aboriginal cultural heritage themes. This must include but not be limited to the exploration of opportunities for interpretation at Arden station (referencing the use of this land for railways workshops and sidings), and at CBD South station (referencing the Port Phillip Arcade and the early Port Phillip Club Hotel).</p>	While not mitigating the impact of the demolition of the heritage place, site interpretation should be developed for the station precinct which references its history as rail workshops and importance as one of a once-extensive network of workshops Victorian Railways workshop sites (along with others such as the workshops at Newport and Spotswood). Existing conditions and historic photography should be incorporated and a range of other strategies should be explored, including opportunities for oral and community history sources and re-use of salvaged materials.	HH13
Moonee Ponds Creek and Infrastructure Precinct (proposed HO1092)	Loss of one structure (brick pumping station) within this precinct with only minor impact on significance	<p>CH11 To the satisfaction of the responsible authority, retain and protect Langford Street pumping station (part of proposed Moonee Ponds Creek and Infrastructure Precinct) as part of the design for the new substation.</p> <p>CH1 Design permanent and temporary works to avoid or minimise impacts on the cultural heritage values of heritage places.</p>	<p>Review siting of new substation to allow retention and protection of the heritage building in situ.</p> <p>Protect heritage building from physical impacts, physical protection work to be designed as part of construction management plan.</p>	HH14

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
		<p>Consult as required with Heritage Victoria and/or the responsible authority (as applicable).</p> <p>CH3 Prior to construction undertake archival photographic recording in accordance with Heritage Victoria Technical Note: Photographic Recording for Heritage Places and Objects where heritage places are to be demolished or modified.</p>		
Historical archaeology (Entire precinct)	Subsurface excavation may damage unidentified historical archaeological sites	<p>CH6 To the satisfaction of Heritage Victoria:</p> <ul style="list-style-type: none"> ● Develop archaeological management plans to manage disturbance of archaeological sites and values affected by the project ● Undertake investigation in accordance with the Guidelines for Investigating Historical Archaeological Artefacts and Sites, Heritage Victoria 2014 (as amended or updated) and to the satisfaction of the Executive Director, Heritage Victoria ● Develop and implement a protocol for managing previously unidentified historical archaeological sites discovered during project works. 	<p>For any archaeological sites or artefacts revealed or discovered during construction, the following measure would be implemented:</p> <ul style="list-style-type: none"> ● stop any activity which may impact on the discovery ● ensure that other people working in the area are aware of it and have also stopped work in the area ● protect the artefact, or site feature(s) by, for example, erecting temporary fencing or other suitable enclosure ● consult with a qualified cultural heritage consultant to determine the appropriate course of action ● advise Heritage Victoria where the discovery was made and provide a description or photograph of the discovery ● determine how to manage the find through consultation with Heritage Victoria and the heritage consultant ● obtain the necessary Consent under the Heritage Act 1995, or other necessary approvals to protect, recover or remove the find. <p>Archaeological management may require a combination of testing, excavation, salvage and monitoring and related reporting.</p>	HH01

9.8 Conclusion

At the Arden station precinct there would be some impacts on industrial/infrastructure sites that are proposed for local HO controls under a proposed planning scheme amendment. There would be an adverse impact associated with the demolition of the railways workshops buildings at 173-189 Laurens Street, North Melbourne. Recording requirements would apply in the case of the buildings to be demolished on this site and it is recommended that an interpretation plan be developed for the railways workshops site. A small brick pumping station in Langford Street North Melbourne which forms part of a proposed HO precinct preferably would be retained.

10.0 Precinct 4 – Parkville Station

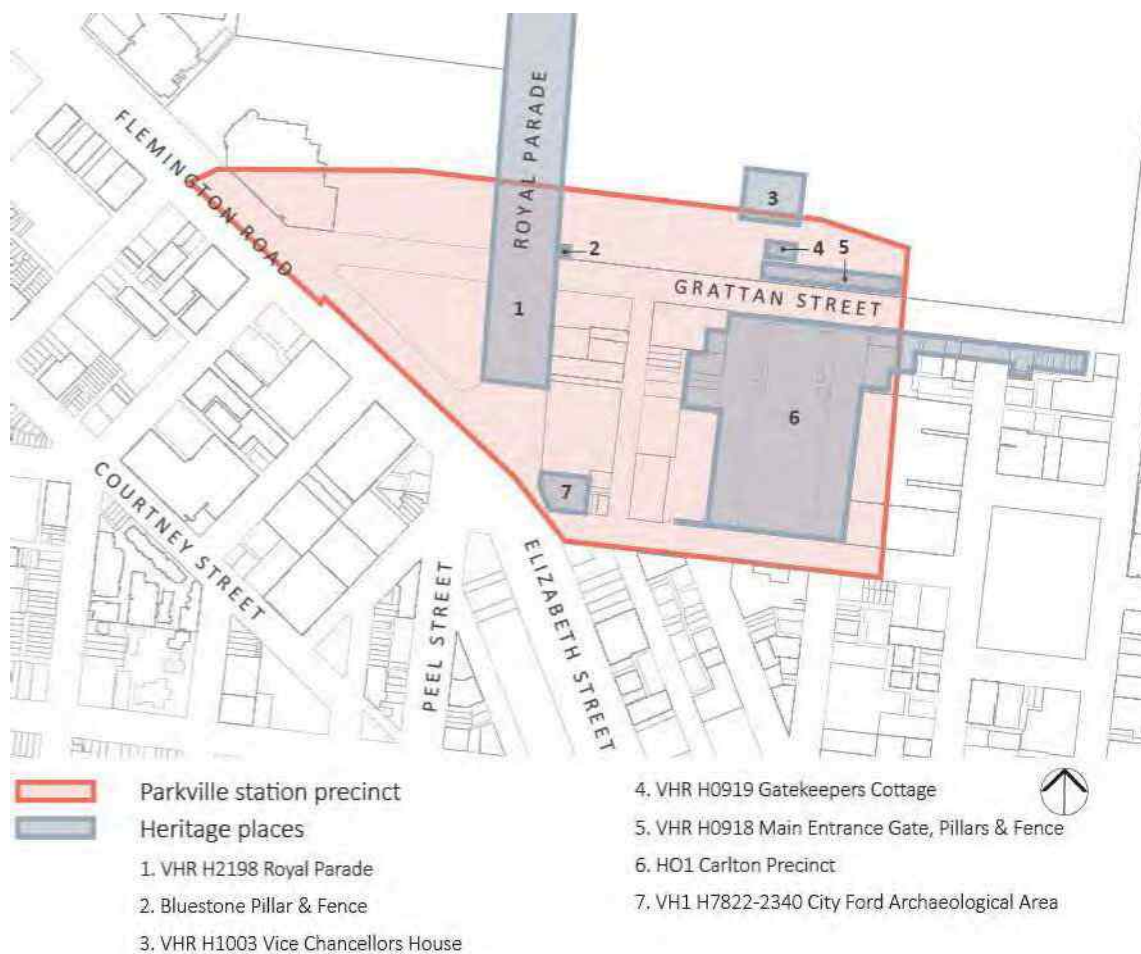


Figure 78 Key heritage places in the Parkville station precinct

10.1 Project Components

10.1.1 Infrastructure

The proposed station entrances, vent shafts and services at ground level are variously located along Royal Parade, Grattan Street and Barry Street. On completion of the project the permanent infrastructure would include:

- station box located in Grattan Street between Royal Parade and Leicester Street
- station entrances:
 - station entrance on the north-east corner of Royal Parade/Grattan Street including fire egress, an escalator and public lift on the east side of Royal Parade
 - station entrance on the south-west corner of Royal Parade/Grattan Street – the Victorian Comprehensive Cancer Centre (VCCC) entrance, includes a public lift and entrance for the VCCC
 - station entrance on the north side of Grattan Street (University of Melbourne entrance) east of the Faculty of Medicine, includes a public lift, maintenance lift, escalators and fire egress.
- chiller plant, generator, air intake/discharge grilles and vent shafts in Barry Street, west of University Square

- vent shafts and maintenance hatch on the south side of Grattan Street along the northern boundary of University Square
- vent shaft at 212 and 214 Berkeley Street
- the establishment of a new functional road layout within Royal Parade to accommodate the proposed new tram stop north of Grattan Street and consequent changes to the roadways and medians.

10.1.2 Construction

Construction activities including site establishment, would include:

- construction area and cut and cover construction of the station box within Grattan Street (top down)
- mined or cut and cover of the underground pedestrian connection across Royal Parade
- construction area south of Grattan Street in University Square
- construction work site in Elizabeth Street bounded by Haymarket Lane, Berkeley and Pelham streets.

10.2 Alternative Design Options

10.2.1 Infrastructure

N/A

10.2.2 Construction

In the alternative design option, construction would include:

- cut and cover construction of the station box within Grattan Street (bottom up).

10.3 Existing Conditions

The Parkville station site would be located under Grattan Street east of Royal Parade, with station entries on the east and west sides of Royal Parade and the north side of Grattan Street. The precinct extends to the north and south of Grattan Street (Figure 78).

The VHR-listed Royal Parade is a major urban landscape characterised by a generous width and boulevard layout with service roads, grassed medians and English Elm (*Ulmus procera*) avenues either side of a broad central carriageway (Figure 79 and Figure 80). The medians feature concrete kerbing and the roadways retain early bluestone gutters (Figure 81 and Figure 82). There have been some changes in the alignment and planting at the far southern end of Royal Parade, related to the development of the Haymarket roundabout. Refer to Figure 58 and Figure 59.

Royal Parade is included on the VHR (VHR H2198) and is identified as being of historical, aesthetic, and social significance to the State of Victoria. The extent of registration extends from just south of Grattan Street north to Park Street in Brunswick and includes all median, kerbing, elm trees and footpaths, though excludes roadway and tramway infrastructure.

Further along Grattan Street and to the east, and within the grounds of the University of Melbourne, is the Vice-Chancellor's House, The University of Melbourne, 156-292 Grattan Street, Parkville (VHR H1003, Figure 85). Set back from the Grattan Street site boundary, the Vice Chancellor's House is located on Kernot Road within the grounds of the university. The c. 1937-1938 residence is identified as being of historical and architectural significance, reflecting the tradition of the provision of housing on campus for Professorial staff and as a fine example of a Georgian Revival style residence. It also is a reflection of the links between the architect Harry A Norris and philanthropist George Nicholas, as associated with the University.

At the entry of the University, is the VHR-listed place, Main Entrance Gates (Gate 6), Pillars and Fence, The University of Melbourne, 156-292 Grattan Street, Parkville (VHR H0918, Figure 87). The heritage place is identified as being the extent of the gates and the whole of the fence, and is of historical and architectural significance. The gates and fence mark the original main entry to the University and are architecturally significant for their Gothic Revival styling.

The Gatekeeper's Cottage, The University of Melbourne, 156-292 Grattan Street, Parkville (VHR H0919) is included on the VHR for its historical and architectural significance. The cottage is one of the earliest surviving buildings at the University and adopts a distinctly picturesque styling (Figure 86). It is also significant as an early design by the prominent architect Joseph Reed.



Figure 79 Royal Parade (VHR H2198) road reserve, looking north from the intersection of Grattan Street



Figure 80 Royal Parade (VHR H2198) road reserve, looking south from the intersection with Grattan Street; the VCC is to the right of the image



Figure 81 Royal Parade, date unknown (c. 1950-70)
Source: State Library of Victoria, photographer Mark Strizic



Figure 82 View north along Royal Parade from Grattan Street showing concrete kerbing and bluestone gutters



Figure 83 Aerial view of the southern end of Royal Parade at the intersection with Grattan Street, 1945
Source: Land Victoria 1945 Photo Mosaics Collection, Melbourne 848B2D

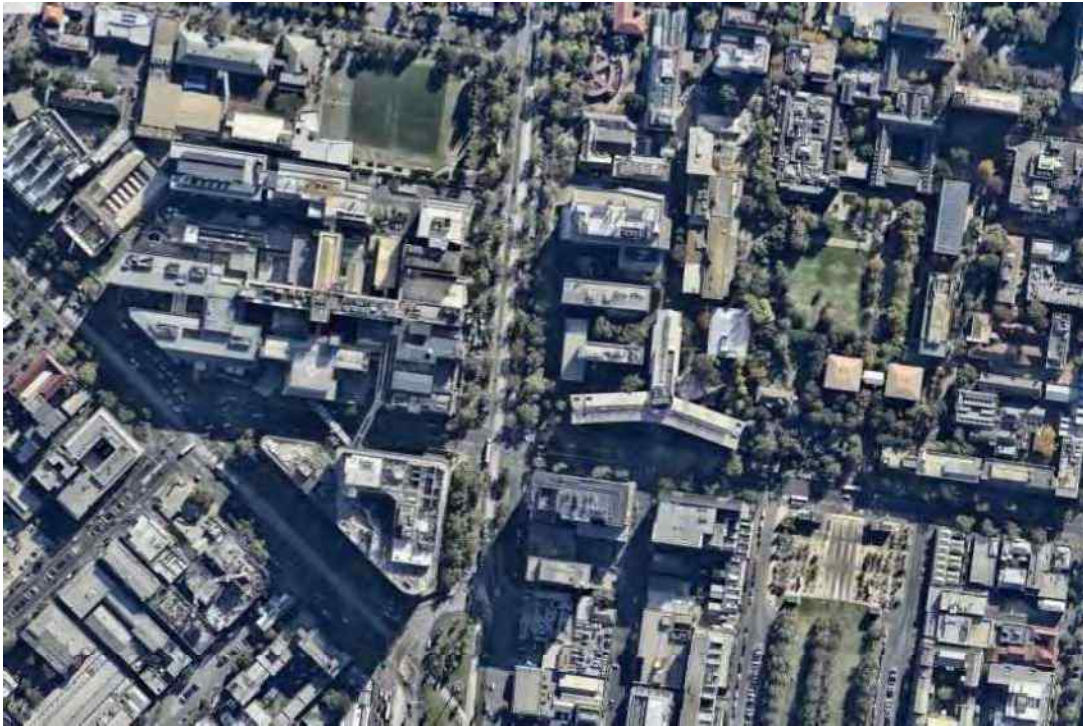


Figure 84 Recent aerial image of the southern section of Royal Parade (1 May 2015) at the intersection with Grattan Street
Source: Nearmap accessed June 2015



Figure 85 Vice Chancellor's House, University of Melbourne (VHR H1003) viewed from the south (within the university grounds)



Figure 86 Gatekeeper's Cottage, University of Melbourne (VHR H0919); viewed from the north; note the modern single-storey addition to the west side of the Cottage



Figure 87 View along the western portion of Main Entrance Gates (Gate 6), Pillars and Fence, University of Melbourne (VHR H0918); this portion is to the front boundary of Gatekeeper's Cottage, University of Melbourne (VHR H0919)

The western edge of the Parkville station precinct is defined by Flemington Road. Like Royal Parade, Flemington Road is a major roadway characterised by a wide central carriageway, centrally located tramlines and narrower flanking carriageways. The central and flanking roadways are divided by narrow grassed medians. Substantial elms are located in the Flemington Road road reserve.

A further elm plantation in Grattan Street (east-west alignment) is a near continuous avenue of mature English Elms to the east of the intersection with Royal Parade. The trees extend as a single row only on the north side of the street to the west of Royal Parade. No heritage controls apply in this area of the Parkville Station precinct.

The Grattan Street/Royal Parade intersection is characterised by buildings of substantial height and scale. To the north-east is the University of Melbourne's Parkville campus. While many parts of the broader campus have a distinct heritage character, the south-western corner presents a series of substantial, multi-storey buildings of the post-World War II era set back from the street. Closest to the corner, the medicine building is an eight-storey building dating from the 1960s (Figure 88). The building was originally six storeys; the upper two floor levels were added in the late 1990s. On the south-east corner is the recently constructed Peter Doherty Institute (Figure 89).

Diagonally opposite, on the west side of Royal Parade, the Royal Melbourne Hospital (RMH) and the Royal Women's Hospital (RWH) complex extend along the north side of Grattan Street west towards Flemington Road. The multi-level VCCC is nearing completion on the triangular island site to the south side of Grattan Street (Figure 80).

The eastern extent of the Parkville Station precinct incorporates part of the Carlton Precinct (HO1). In this area, the Carlton Precinct is comprised of two-storey terrace houses to Barry Street, with a contemporary backdrop and the recently revitalised University Square (Figure 90 to Figure 92). Substantial elms are located in the south-east of the precinct where four mature rows form a significant plantation within the southern portion of University Square. HO1 is a large and disparate precinct, with a distinctive, predominantly Victorian (c. 1850 to c. 1900) character arising from its early development and scale of built form. Typically, heritage buildings are small scale, one to two stories, on small sites. The precinct is distinguished by wide streets with mature trees, and established parklands.



Figure 88 University of Melbourne medicine building, viewed from the west



Figure 89 The Peter Doherty Institute building at the south-east corner of Grattan Street and Royal Parade



Figure 90 Terrace houses in Barry Street, Carlton, Carlton Precinct HO1 (C grade, Level 1 streetscape)



Figure 91 Grattan Street, looking east with University Square to the right of the image



Figure 92 View to the south along Barry Street from the intersection of Grattan Street



Figure 93 Former residence, 226 Pelham Street, Carlton (H083)



Figure 94 Part of the former Ramsay Surgical Precinct, 182-210 Berkeley Street, Carlton (HO1149) viewed from the west

10.3.1 Statutory heritage controls and listings

Statutory heritage controls in the Parkville station precinct are shown in the mapping in Appendices C, D and D.

10.3.1.1 Environment Protection and Biodiversity Conservation Act 1999

There are no sites subject to the provisions of the EPBC Act within or in proximity to the Parkville station precinct.

All NHL and CHL places within a one kilometre buffer of the proposed project boundary are listed in Appendix F.

10.3.1.2 Heritage Act 1995

There are four VHR-listed places within the Parkville station precinct (refer to Table 39).

Table 39 VHR places in the Parkville station precinct

VHR number	HO number	Place	Address
VHR H2198	HO977	Royal Parade	Royal Parade, Parkville and Royal Parade, Carlton North and Elizabeth Street, Melbourne
VHR H1003	HO821	Vice Chancellor's House	The University of Melbourne, 156-292 Grattan Street, Parkville
VHR H0918	HO343	Main Entrance Gates (Gate 6), Pillars and Fence	The University of Melbourne, 156-292 Grattan Street, Parkville
VHR H0919	HO338	The Gatekeeper's Cottage	The University of Melbourne, 156-292 Grattan Street, Parkville

There is one VHI-listed place in the Parkville station precinct

Table 40 VHI-listed places in the Parkville station precinct

Legislation	Relevant VHI number
Heritage Act	VHI H7822-2340 – City Ford Archaeological Area Note the Heritage Act provides blanket protection for all historical archaeological sites more than 50 years in age.

10.3.1.3 Planning and Environment Act 1987

The VHR sites are reflected in site-specific overlays in the Melbourne Planning Scheme (refer to Table 39).

There are also site-specific and precinct-based local HOs in the area (refer Table 41).

The Parkville station precinct extends into the Carlton Precinct (HO1).

Table 41 Local HO places in the Parkville station precinct

HO Number	Place	Address
HO83	Former Residence	226 Pelham Street, Carlton
HO346	Old Engineering Building (1889 section only)	University of Melbourne
HO1120	Former Ramsay Surgical Precinct	182-210 Berkeley Street, Carlton
HO1149	Former Gladstone Motors Building	213-221 Berkeley Street, Carlton
HO1121	Little Pelham Precinct	168-180 Leicester Street, Carlton (183-195 Bouverie & 150-170 Pelham Street)
HO1159	House	228 Pelham Street
HO1	Carlton Precinct	-

The University of Melbourne's Parkville campus (156 Grattan Street) is subject to the ESO Schedule 2. The Table to Schedule 2 lists the trees on campus that are included in the Exceptional Tree Register. Three of these trees (tree nos 99, 87 and 58) are close to the northern boundary of the study area.

Table 42 Exceptional Tree Register trees in the vicinity of the Parkville station precinct

Exceptional Tree Register No.	Tree	Comment
99	<i>Corymbia citriodora</i> (Lemon-scented Gum)	Adjacent to the Medicine Building, University of Melbourne
87	<i>Eucalyptus biostata</i> (Victorian Blue Gum)	Adjacent to the Medicine Building, University of Melbourne
58	<i>Salix babylonica</i> (Weeping Willow)	North of the Vice-Chancellor's Residence, University of Melbourne

10.3.2 Potential additional heritage places

A bluestone pillar and section of cast iron fence is located at the corner of Royal Parade and Grattan Street (Figure 95). This is a remnant of the boundary fencing to the University of Melbourne which was taken down in sections beginning in the 1930s. This section was reinstated in 1982. While of interest in the context of the University's own history, this element is not considered to meet the threshold for the application of statutory heritage controls at any level.



Figure 95 Bluestone pillar and cast iron fence at the University of Melbourne

10.3.3 Historical archaeology

There is one VHI site within the precinct, the City Ford Archaeological Area (VHI H7822-2340).

Consideration was also given to the potential for previously unidentified archaeological sites of significance to exist in the precinct and to be affected by works (refer to the predictive archaeological assessment at Appendix B of this report).

A summary of the likelihood and significance of archaeological remains being physically present at various locations within the Parkville station precinct is presented in Table 43.

Table 43 Likelihood of archaeological remains in Parkville station precinct

Location	Likelihood of archaeological remains	Comment	Significance
Properties fronting Berkeley Street	Low / None	Earlier nineteenth century remains likely destroyed due to subsequent mid to late twentieth century construction	n/a
230-236 Pelham Street	Moderate	Evidence of nineteenth century residential development may survive due to minimal 1950s warehouse construction, and subsequent open area asphalted car yard	Early domestic occupation of the Melbourne city fringe, including an understanding of early domestic activities and lifeways of nineteenth century Melbourne residents
Former Junction Hotel site, corner of Pelham Street and Elizabeth Street/Haymarket	High	Remains of nineteenth century Junction Hotel likely present in the asphalted car yard area due to the nature of the original construction of the hotel and there apparently being no subsequent construction apart from an open asphalted car yard	<p>Early and continued commercial occupation, particularly due to its location on a major route from the City of Melbourne to the Victorian goldfields</p> <p>Potential for information about the operation and patrons of an early city-fringe hotel on the route to the Victorian goldfields</p> <p>Potential to provide information over time of the changing social nature of the surrounding area up into the late 20th century</p>
Royal Parade (VHR H2198)	Moderate	Possible that there is evidence surviving of earlier road treatments within the road reserve itself	Potential for information about early road construction techniques

10.4 Key Issues

The key issues associated with the Concept Design are identified in the table below:

Table 44 Key issues associated with the Concept Design

Concept Design	Issue
Station box located under Grattan Street, to the east of Royal Parade (Option 3)	<p>Above ground structures may have an adverse visual impact on heritage places in the Precinct, including:</p> <ul style="list-style-type: none"> • Royal Parade (VHR H2198) • Main Entrance Gates, Pillars and Fence (VHR H0918) • The Gatekeeper's Cottage (VHR H0919) • Vice Chancellor's House (VHR H1003) • Carlton Precinct (HO1).
	The design of the station box and entries may impact on the management of trees in Royal Parade (VHR H2198).
Road functional layout for new tram stop in Royal Parade north of Grattan Street	The road functional layout may impact on the ability to maintain/reinstate the layout of medians and avenue plantings in Royal Parade (VHR H2198).
Cut and cover construction of the station box and entries	Construction works would have a direct physical impact on the VHR-listed Royal Parade and would require the removal of trees.
	Construction works are in close proximity to VHR-registered places on the north side of Grattan Street: Main Entrance Gates, Pillars and Fence (VHR H0918) and the Gatekeeper's Cottage (VHJR H0919).
	Construction works would require the removal of the remnant bluestone pillar and cast iron fencing at the corner of Royal Parade and Grattan Street.
	There may be an impact on sites of archaeological potential within the precinct.
Temporary construction work site bounded by Pelham, Berkeley, Haymarket Walk and Elizabeth Street	There is the potential for the requirement of subsurface excavation for the installation of structures and services related to the use of the area as a temporary construction work site. Such subsurface disturbance has the potential to impact on subsurface archaeological remains at the City Ford Archaeological Area (VHI H7822-2340).

10.5 Benefits and Opportunities

Concept Design	Benefits	Opportunities
Location of station box in Grattan Street east of Royal Parade	Located outside zone of high sensitivity in Royal Parade	

10.6 Impact Assessment

The following draft EES evaluation objectives and assessment criteria (and indicators where relevant) are relevant to this assessment.

Draft EES evaluation objectives	Assessment criteria
Cultural Heritage – To avoid or minimise adverse effects on ... historic cultural heritage values	<i>Avoid or minimise impacts on post-settlement cultural heritage values and places</i>

10.6.1 Royal Parade (VHR H2198)

10.6.1.1 Statutory heritage controls

The statutory heritage controls that apply are as follows:

Legislation	Relevant VHR/HO number
Heritage Act	VHR H2198
Planning and Environment Act	HO977 (Melbourne Planning Scheme)

10.6.1.2 Heritage considerations

The VHR statement of significance for Royal Parade notes that it is of historical, social and aesthetic heritage values at a state level.

Historically it is important as the ‘road to Sydney’ and as the traditional approach to Melbourne from the north. Its general arrangement and use from 1913 of multiple lanes and elm avenues also reflect changing approaches to traffic management and the precepts of the ‘City Beautiful’ planning movement popular in that period. As is noted in the VHR statement of significance, Royal Parade has aesthetic significance for these ‘City Beautiful’ design qualities and as one of Victoria’s finest boulevards, featuring multiple English Elm avenues, providing ‘shade in summer, autumn colour and sunlight penetration in winter.’

The extent of registration includes the boulevard in its entirety between Park Street in the north and the top of Elizabeth Street in the south and to the full width of the carriageway and footpaths, comprising three roadway sections separated by four plantations with wide footpaths on the east and west. The registration explicitly references key elements within the registration, these being the four grassed medians, concrete curbing, elm trees and footpaths. It notes that the registration excludes all the road surfaces and tram tracks, poles and fences. By implication these are not significant, although they are within the extent of the registered land.

There is no Conservation Management Plan for the place.



Figure 96 Extent of VHR registration for Royal Parade; the affected location is indicated
Source: Victorian Heritage Database online

10.6.1.3 *Impact assessment*

There would be an adverse impact on the intactness and presentation of Royal Parade arising from the construction works and permanent infrastructure.

The impacts include the removal of trees and existing medians, footpaths and road surfaces. While the station box is located to the east of Royal Parade and the construction impacts for this are relatively limited within Royal Parade, associated works for the Concept Design include the establishment of a new road functional layout in which a new tram stop is located in the centre of Royal Parade. This layout requires changes to the layout of medians and also the removal of trees. Plans showing the proposed road functional layouts are included in the Transport assessment (refer to Technical Appendix D and Appendix E).

The extent to which the physical impacts of the construction works can be mitigated through reinstatement of the boulevard form and the replanting of trees depends on the design of the permanent infrastructure.

In the Concept Design, up to 10 elms within the registered Royal Parade would be required to be removed as a result of construction of the station (four trees) and for changes to the road functional layout (six trees). The trees are shown on the plan at Figure 97 and in Table 45.

Four trees would likely be required to be removed associated with the construction of the station and its entries. Three are located on the north-east corner of Grattan Street and Royal Parade with the fourth tree located on the south-west corner of the intersection.

As noted, a further six trees would be removed for the functional road layout. Plans showing the proposed road functional layouts are included in the Transport assessment (refer to Technical Appendix D, Appendix E). The road layout has been designed around the construction of a new tram stop in the centre carriageway north of Grattan Street and requires the diversion of north and south-bound traffic from this carriageway. The road functional layout requires the removal of four trees north of Grattan Street to allow traffic to merge from the central carriageway to the flanking eastern carriageway. Two trees to the south of Grattan Street would also be removed to merge north-bound traffic from the western carriageway to a right-turning lane in the central carriageway. In addition to tree removal, these works would involve the modification of the form of a number of the existing medians to guide traffic, including the loss/modification of sections of the significant concrete kerbing. Changes to existing pedestrian crossings would see modification of the medians and concrete kerbing. Pitched bluestone gutters in the flanking eastern and western carriageways are to be removed/resurfaced to allow for a safe bicycle lane in this location.

Mitigation measures for any trees removed from Royal Parade would include replacement of trees removed with the same species, and in the same locations, as far as is possible to reinstate the visual character.

Three trees also could not be reinstated in the same location north and south of Grattan Street where the road functional layout design requires merge lanes, however sufficient space allows for re-planting of trees in proximate locations, resulting in localised reconfiguration of the avenue plantation. Widening of the medians south of Grattan Street would allow for the re-establishment of missing trees from this portion of Royal Parade.

As well as the tree removals and replacement, there would be some permanent changes to the arrangement and physical fabric of the significant medians both north and south of Grattan Street as these are modified for the merge lanes and the surfacing of the flanking carriageways would be modified (removal of the bluestone gutters).

The VHR statement of significance for Royal Parade notes that it is of historical, social and aesthetic heritage values at a state level and comments are provided on each of these values in turn.

The place is of historical significance for its status as the traditional 'road to Sydney' and main approach to Melbourne from the north, and these associations would remain and would be undiminished. Royal Parade is also of historical significance in terms of its ability to demonstrate technical developments in planning and road design, whereby traffic of different types and speeds were separated by planted medians. In this context, there would be some change to the layout in this location (new tram stop, modified arrangement of medians, removal of gutters for bike lanes). These changes would reduce the intactness of the place in terms of both layout and significant fabric, however in the context of the scale of the heritage place, the changes are limited in their extent. Importantly, the overall layout is maintained and it would remain legible and broadly consistent with the unaltered sections of Royal Parade through the retention of the basic arrangement of medians to roadways and the replanting of as many trees as possible.

In terms of aesthetic values, the statement notes that Royal Parade is of aesthetic significance as one of Victoria's finest boulevards, distinguished by its layout, including multiple avenues, and the beauty and dramatic seasonal changes of its mature elms.

The changes proposed to construct the new station, its entries and the new road functional layout would see the loss of a number of trees at the southern end of the avenue.

In considering the issue of tree removal and replacement, it is noted that heritage landscapes are living rather than static and replanting of failing mature trees is an inevitable aspect of the maintenance and management of such landscapes. Replanting as part of a maintenance programme is a well-established principle for the management of heritage landscapes. In the case of avenues, replanting can occur in blocks or through the replanting of individual specimens, but either way, it does result in a change in presentation for a period of time. This can sometimes be of considerable duration, depending on the species and landscape.

In this case, the trees to be removed for the works are not at immediate risk nor are they likely to require replacement in the short term (most would have a useful life of five years or more).

There is a further impact associated with the new above ground structures. In the Assessment Project, the new entry in Royal Parade and the new tram stop would all be located partly within the extent of registration. These would appear as contemporary elements of transport infrastructure as elsewhere in Melbourne streets. In considering their visual/aesthetic impact, while there would be a change in presentation, this is very limited and localised.

In summary, the physical changes proposed are significant and would result in some impact on the aesthetic qualities of this part of Royal Parade, including views along and from within the place. The landscape qualities of this area would be largely recoverable over time, providing care is taken in detailed design to minimise and manage the impacts and mitigation measures such as tree replacement are undertaken appropriately. It is also noted that the extent of change is limited in scale in the context of the place as a whole and is localised at one end of the heritage place rather than interrupting the main body of the boulevard. It would change the perception of the boulevard when entering from the south but does not result in a gap once within the main body of the heritage place.

The VHR statement of cultural heritage significance notes Royal Parade is of social significance to the state of Victoria. While the statement itself does not give reasons for this, the social significance of the place would be likely to derive from a combination of its historical and aesthetic values, and the experience of travelling through the place. While there would be a change in the experience of the place, this would be minor and would not impact on the social value of the place.

Overall, in consideration of the scale and extent of Royal Parade, the changes proposed are relatively contained and can be accommodated without compromising the significance of the heritage place in any fundamental way.



Figure 97 Proposed trees to be removed in Royal Parade

Table 45 Trees to be removed in Royal Parade

No	Species	Common name	ULE	Age
Trees highlighted grey are semi-mature to over mature trees in the public realm with a ULE > 10years				
P018	<i>Ulmus sp.</i>	Elm	6-10	Mature
P019	<i>Ulmus sp.</i>	Elm	1-5	Mature
P023	<i>Ulmus sp.</i>	Elm	6-10	Mature
P027	<i>Ulmus sp.</i>	Elm	1-5	Mature
P028	<i>Ulmus sp.</i>	Elm	1-5	Mature
P036	<i>Ulmus sp.</i>	Elm	6-10	Mature
P037	<i>Ulmus sp.</i>	Elm	11-20	Mature
P045	<i>Ulmus sp.</i>	Elm	6-10	Mature
P046	<i>Ulmus sp.</i>	Elm	6-10	Mature
P047	<i>Ulmus sp.</i>	Elm	11-20	Mature
Total number of trees				10

10.6.2 Gatekeeper's Cottage, University of Melbourne (VHR H0919)

10.6.2.1 Statutory heritage controls

The statutory heritage controls that apply are as follows:

Legislation	Relevant VHR/HO number
Heritage Act	VHR H0919
Planning and Environment Act	HO338 (Melbourne Planning Scheme)

10.6.2.2 Heritage considerations

The Gatekeeper's Cottage (1860) at the University of Melbourne (also known as the Gate Lodge) is of historical and architectural significance to the State of Victoria:

- as one of the earliest surviving buildings at the University of Melbourne (the other is the Old Quadrangle building); the two buildings are on axis and demonstrate the original planning of the University
- as an early building in straw coloured brick at the University, setting a precedent for non-academic buildings on the campus and as an early work on campus by the prominent architect Joseph Reed

In 1995, a conservation report for the building was prepared for the University of Melbourne by the architectural historian George Tibbits. This also addressed the main entry gates on Grattan Street (The Lodge and the Main Entrance Gates, University of Melbourne: History and Conservation Guidelines, Tibbits, 1995).

10.6.2.3 Impact assessment

The northern station box (below ground) would be close to registered land associated with the Gatekeeper's Cottage (VHR H0919), however there is no significant fabric in this location within the

extent of registration for the cottage. The mature elm to the south of the cottage is assumed to require removal for works but this is not identified in the VHR documentation nor is it referenced in the conservation report (Tibbits, 1995).

There is another potential impact, however, where the north-eastern station entry and the building associated with the entry is close to the extent of registration for the Gatekeeper's Cottage (to be confirmed). The construction work site also extends into this area and there would be a substantial excavation in this location.

The legal extent of registered land west of the building is described as being 10 metres from the building (meaning the original building, not including the c. 1960s addition on the western side). This extent of registration appears to be notional and is not based on the area of land that was associated with the cottage in the late nineteenth century. It is not clear whether this extent coincides with the extent of fence on Grattan Street or with the hedged western boundary treatment.

The Conservation guidelines developed by George Tibbits in 1995 include the following:

[Policy no.] 11 That no permanent building work should be allowed adjacent to or near the Gate Lodge and Main Entrance that does not respect the significance of the old structures (Tibbits, 1995:21-22).

The 2010 Lovell Chen assessment confirmed the Tibbits recommendations and commented further as follows:

The historic siting and presentation of the place and its relationship with the entrance gates should be a key consideration in the event that future development is proposed to or in the vicinity of the south University entry on Grattan Street (Lovell Chen 2010A, vol. 2: Building No. 187).

Lovell Chen identified a general setting for the building as the 'lawn setting to extent of registered area'.

The building footprint and massing identified in the Concept Design indicate a building of approximately four metres in height, set well to the west, on Grattan Street, angling back slightly east as it extends northward into the University grounds. This would achieve good separation on Grattan Street and to the rear within the site. In preference, this should be held west of the existing hedge marking the western boundary of the cottage site, which coincides with the extent of the historic fence on Grattan Street (VHR H0819). Accepting this, this boundary is not of historical significance. If the north end of the station entry needs to extend slightly into the extent of registration for the Gatekeeper's Cottage, this could be accommodated providing an appropriate enclosing boundary to the cottage is re-established through hedging or similar treatment as at present.

In summary, the proposal is considered to be consistent with heritage values of the place and with the Tibbits and Lovell Chen recommendations. While the detail of the siting of the station entry requires confirmation, in the Concept Design there would be no physical impact on significant fabric, nor is there any adverse visual impact associated with the proposed entry. In the location indicated, the new structures would be located with a good separation from the cottage.

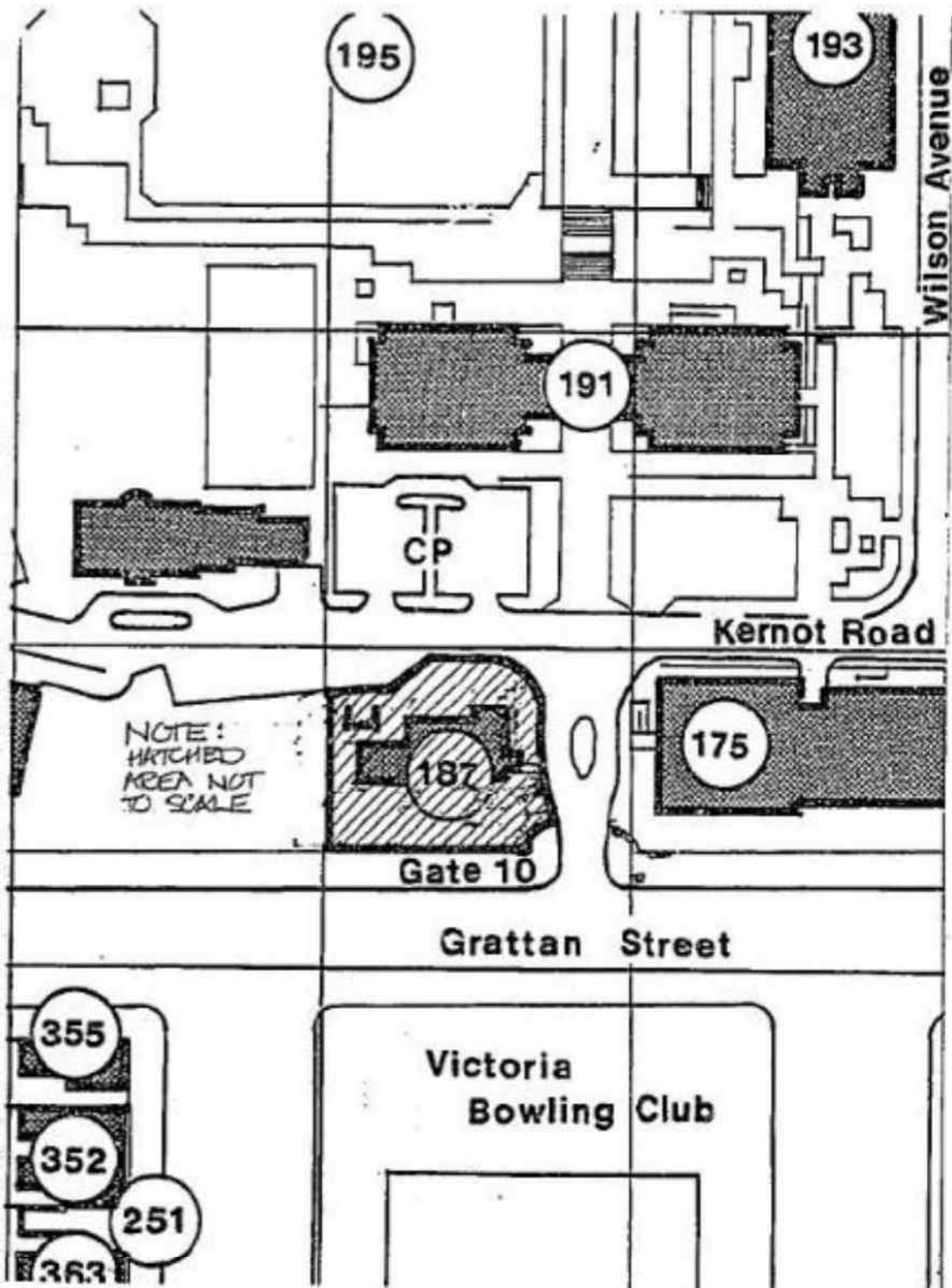


Figure 98 Extent of registration for the Gatekeeper's Cottage (hatched area not to scale)
 Source: Victorian Heritage Database online

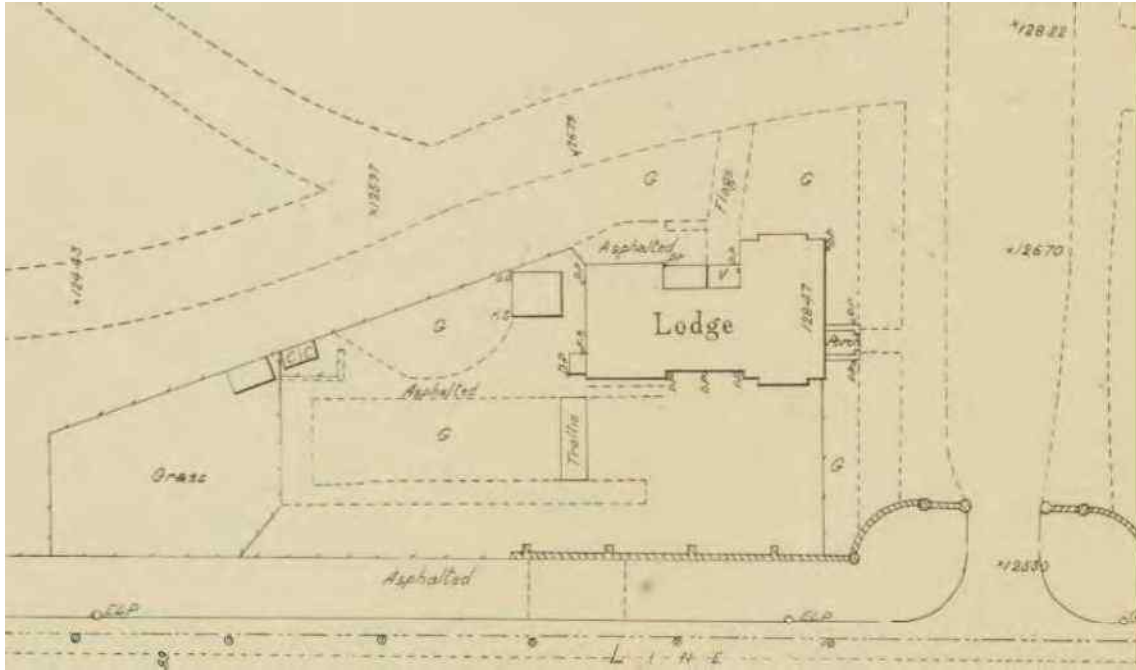


Figure 99 Excerpt from the MMBW Detail Plan 1173, 1896
Source: State Library of Victoria

10.6.3 Main Entrance Gates (Gate 6), Pillars and Fence, University of Melbourne (VHR H0918)

10.6.3.1 Statutory heritage controls

The statutory heritage controls that apply are as follows:

Legislation	Relevant VHR/HO number
Heritage Act	VHR H0918
Planning and Environment Act	HO343 (Melbourne Planning Scheme)

10.6.3.2 Heritage considerations

The Main Entrance Gates, Pillars and Fence (1876) at the University of Melbourne (also known as the Gate Lodge) are of historical and architectural significance to the State of Victoria:

- as marking the original main entrance to the University
- for their architectural design consistent with the Gothic Revival style of the main University buildings and as a design by the prominent architects Reed and Barnes.

The entry has been modified through the removal of inner paired pillars and the central iron carriage and side (pedestrian) gates.

In 1995 a conservation report for the main entry gates on Grattan Street was prepared for the University of Melbourne by the architectural historian George Tibbits. This also addressed the Gatekeeper's Cottage (The Lodge and the Main Entrance Gates, University of Melbourne: History and Conservation Guidelines, Tibbits, 1995).

A data sheet with recommendations for the place is also included in the University of Melbourne Heritage Documentation (Lovell Chen, 2010A: vol. 2 Building No. 187A, Pillars & Fence).

10.6.3.3 Impact assessment

The Parkville station box would be in very close proximity to the registered place and construction works would occur abutting or possibly even extending into the site, subject to detailed design. The northern edge of the station box would be aligned with the northern boundary of the road reserve, which itself abuts the registered Main Entrance Gates (Gate 6), Pillars and Fence. The wall of the station box may abut or be below the registered fence.

The issue is one of ensuring the protection of the heritage fabric. The retention and protection of the fabric *in situ* is always to be preferred from a heritage perspective, however this would be subject to the development of appropriate protection measures to ensure no damage to the fabric. Given the location of the structure, and subject to detailed design, it may be preferable to dismantle the impacted section of fence and pillars and reinstate following construction.

Both the Tibbits (Tibbits, 1995) and Lovell Chen (Lovell Chen, 2010A) assessments recommended the maintenance and conservation of the significant fabric associated with the original entry. They also confirmed the need to maintain the relationship between the entry and the Gatekeeper's Cottage and the original axis northward into the University and to ensure future development does not impact on these relationships.

In summary:

- The positioning of the station box below and in close proximity to the fence and gate pillars would have no adverse impact on their presentation and would not have an adverse impact on significance.
- If required in order to protect the significant fabric and undertaken in accordance with accepted methodologies and specialist input, the dismantling and reinstatement works could occur without any adverse impact on heritage values of the place.

10.6.4 Vice Chancellor's House (VHR H1003)

10.6.4.1 Statutory heritage controls

The statutory heritage controls that apply are as follows:

Legislation	Relevant VHR/HO number
Heritage Act	VHR H1003
Planning and Environment Act	HO821

10.6.4.2 Heritage considerations

The Vice Chancellor's House (1937-8) is of historical and architectural significance to the State of the Victoria as:

- possibly the only Vice-Chancellor's residence located on a campus in Australia
- a rare example of such a house paid for by private sponsorship (benefactors were Herbert Brookes and George Nicholas)
- reflects the link between George Nicholas and the architect Harry Norris
- a demonstration of the importance of the Vice-Chancellor's position
- a representative example of a large interwar Georgian Revival residence and stylistic links with 'notions of Australian colonial history, scholarship and propriety'.

The extent of registration for the place includes a substantial area of land around the building including the small area of front garden and the full width of the road to the south of the house (Kernot Road) and land beyond and a very large private garden to the north, including a tennis court which was added in 1938 (Figure 101).

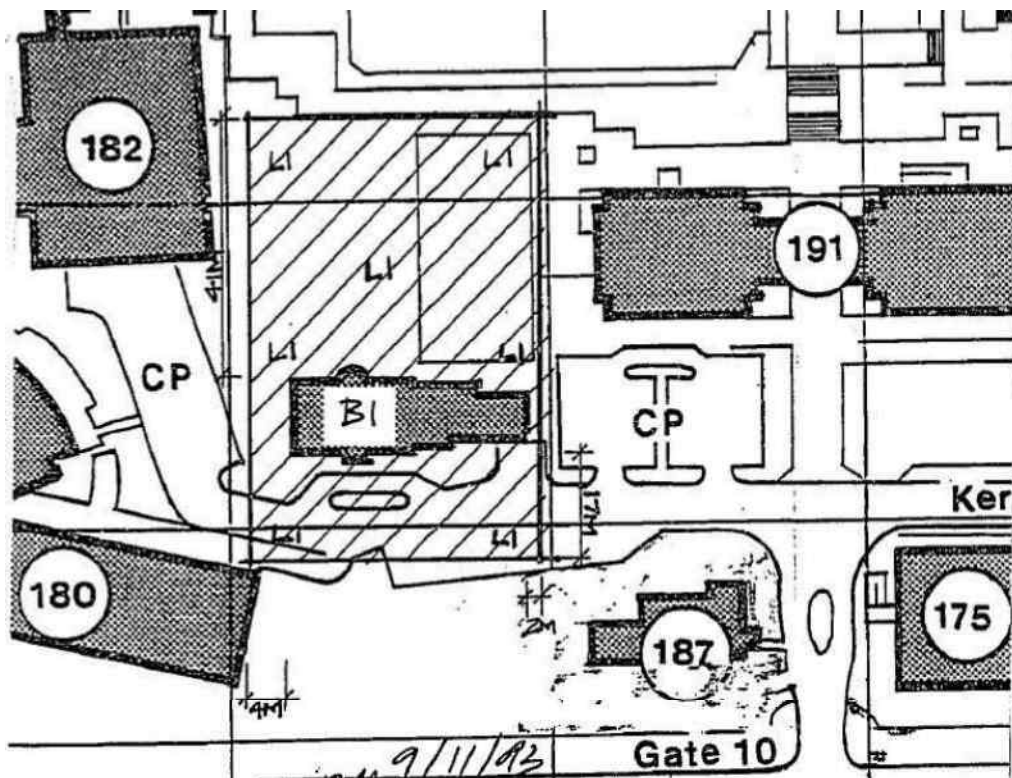


Figure 100 Extent of registration for the Vice Chancellor's House
 Source: Victorian Heritage Database online.

No CMP has been located for the Vice-chancellor's House, however in 2010 a building data sheet was prepared by Lovell Chen for the University of Melbourne (Lovell Chen, 2010A, vol 2, building no 186).

10.6.4.3 Impact assessment

The north-east station entry building is proposed to be located in the University of Melbourne grounds on the Grattan Street frontage between the medicine building and the Gatekeeper's Cottage. Subject to detailed design, there is a possibility that works for the station entry or associated landscaping would extend into the extent of registration for the Vice Chancellor's House. This would be on the southern side of the residence, where it fronts onto Kernot Road.

There are only limited implications for the registered place related to the works.

At present, the Vice Chancellor's House is visible from Grattan Street and some of these views would be obstructed by the new station entry building. While it would be a noticeable change, this is not considered to pose a major heritage issue. The Vice Chancellor's House is set well back from Grattan Street and while it faces south, it has always addressed the road immediately in front of it (Kernot Road) rather than Grattan Street itself. Its siting related to the professors' houses which were immediately to the west and arranged in a row running north-south (see Figure 101).

More significant would be the treatment of the space immediately to the south of the house. At present this consists of a projecting paved area with steps down, and a very small setback to a parking/drop off bay on the north side of Kernot Road. Small areas of garden are located to either side, enclosed by original curved brick garden walls which come forward of the main house.

If there is a need to modify either the road alignment or the landscaping in this area associated with the construction of the new entry on the south side of Kernot Road, this should be undertaken on the basis of further historical research and investigation of the original treatment in this area.

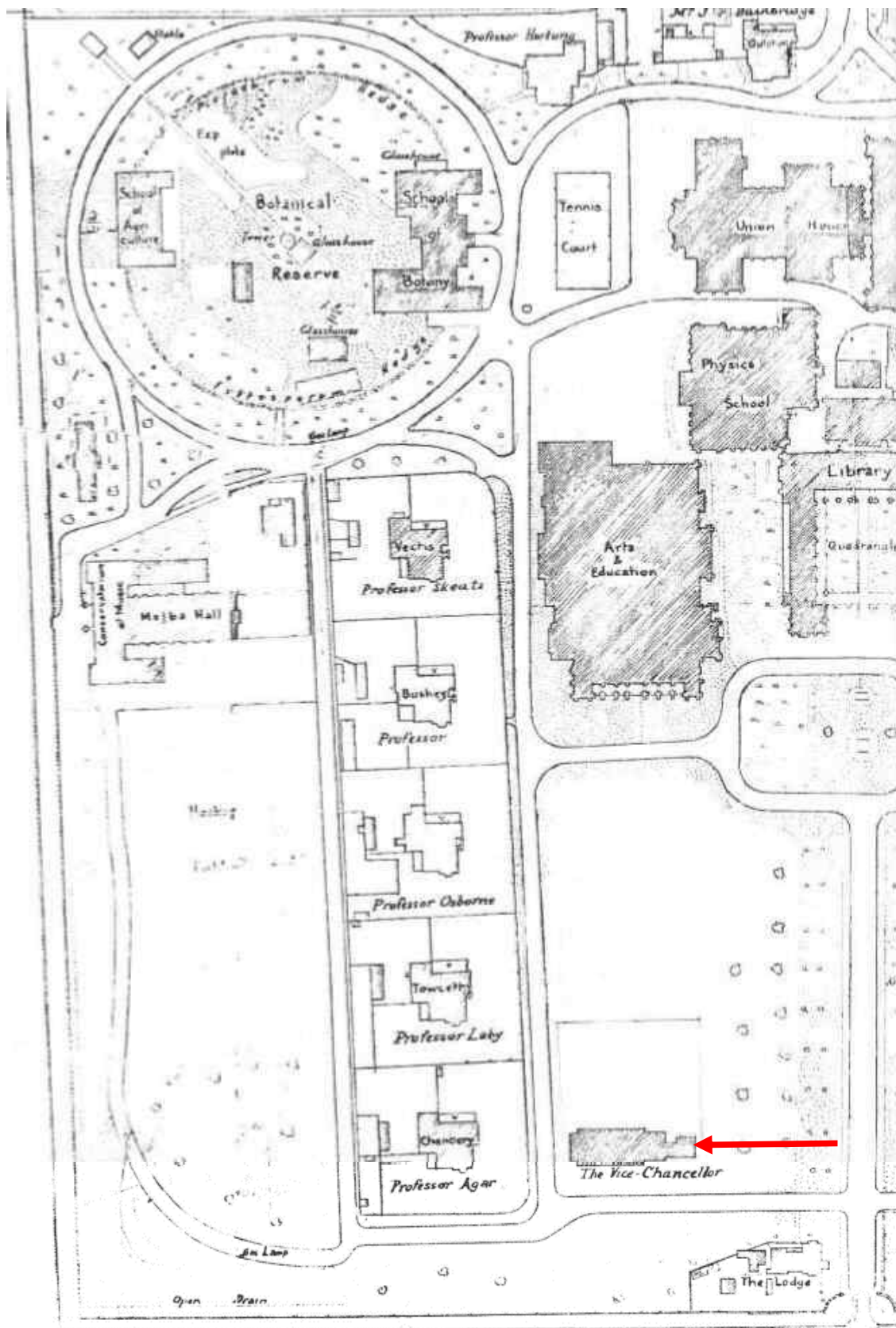


Figure 101 The western half of a c. 1935 plan of the campus: the location of the Vice Chancellor's house is indicated
 Source: A Short History of the University of Melbourne (Macintyre and Selleck, 2003:82)

10.6.5 Carlton Precinct (HO1)

10.6.5.1 Statutory heritage controls

The statutory heritage controls that apply are as follows:

Legislation	Relevant VHR/HO number
Heritage Act	-
Planning and Environment Act	HO1 (Melbourne Planning Scheme)

10.6.5.2 Heritage considerations

The Carlton Precinct is a large, varied and discontinuous HO precinct which was developed from the mid-nineteenth century as the city extended to the north. Heritage building stock in the precinct is predominantly low-scale Victorian but includes buildings from the mid-nineteenth century through to the interwar period and later. It encompasses predominantly residential areas but these are of some diversity and include historic shops, hotels and limited industrial development. It also includes a number of public parks, squares and gardens reflecting nineteenth century subdivision patterns, including Barry (University) Square south of Grattan Street. There is currently no statement of significance included in the Melbourne Planning Scheme. A draft statement of significance has been prepared as part of the City of Melbourne's Local Heritage Policy Review project (City of Melbourne, 2015) and this is currently subject to community consultation (<http://participate.melbourne.vic.gov.au/local-heritage>). The draft statement notes the precinct is of historical significance as a predominantly Victorian-era precinct which reflects the early development of Carlton on the northern fringe of the city, for its early building stock and evidence of early urban planning (including layout of parks and squares) and demographic patterns within the suburb. It is also noted as of historical and social significance for its later layers of history and culture and of aesthetic/architectural significance primarily for its strong Victorian-era character and building stock, as well as for its wide streets and parks and smaller squares (<http://participate.melbourne.vic.gov.au/local-heritage>).

As for all precincts in the City of Melbourne, buildings in HO1 have been graded in municipal heritage studies (generally A-D). Definitions are provided at Appendix A of this report. These gradings are proposed to be converted to the significant, contributory, non-contributory system as part of the Local Heritage Policy Review project.

The HO provisions and local policies in the Melbourne Planning Scheme provide guidance on proposals to demolish, alter and make additions to heritage buildings and for new development within the precinct.

Ventilation equipment is proposed at 212-214 Berkeley Street, adjacent to the Carlton Precinct.

10.6.5.3 Impact assessment

Land in the Parkville station precinct on the south side of Grattan Street, extending along Barry and Leicester Streets and including University Square and the University of Melbourne underground carpark, is all included in the Carlton Precinct (HO1).

The Concept Design works within the Carlton Precinct (HO1) include the establishment of construction work sites over the University of Melbourne carpark north of University Square and within Barry Street. Permanent above ground infrastructure includes a series of vent shafts (four metres in height) on the south side of Grattan Street and chiller plant, generator, air intake/discharge grilles and vent shafts in Barry Street.

The construction work sites identified do not include significant fabric and there would be no adverse impacts arising from their establishment and temporary use.

The construction of the new above ground infrastructure in the locations identified is also not considered to pose an adverse impact. The vent structures are positioned in the footpath on the south side of Grattan Street where they would be viewed in association with the contemporary landscape of the University of Melbourne's underground carpark.

While the ventilation infrastructure proposed at 212-214 Berkley Street will be adjacent to HO1 and HO1120, there are no controls on sites adjacent to heritage places in Clause 22.05 of the Melbourne Planning Scheme. There are no heritage impacts arising from these works.

10.6.6 Remnant bluestone pillar and cast iron fencing

10.6.6.1 Statutory heritage controls

No statutory heritage controls apply to the bluestone pillar and cast iron fencing.

10.6.6.2 Heritage considerations

As noted, this reinstated pillar and section of original fencing is an item of interest in the context of the university's own history.

10.6.6.3 Impact assessment

The removal of this feature would not have a major heritage impact. Equally, consideration could be given to its incorporation into the design for the new station entry as it provides a historical marker defining the corner. Desirably the element would be reinstated on the corner.

10.6.7 Historical archaeology

10.6.7.1 Statutory heritage controls

The statutory heritage controls that apply are as follows:

Legislation	Relevant VHI Number
Heritage Act	VHI H7822-2340 City Ford archaeological area Note the Heritage Act provides blanket protection for all historical archaeological sites more than 50 years in age.

10.6.7.2 Heritage considerations

The use of the area bounded by Pelham, Berkeley, Elizabeth streets and Haymarket Walk as a temporary construction work site has the potential to impact on archaeological remains, specifically the former site of the Junction Hotel and adjacent residences within the current boundary of the City Ford car yard site. As these sites are adjacent to each other on the same block they have been grouped to be treated as a single entity – the City Ford archaeological area. As a result of the predictive modelling undertaken as part of this project (refer to Appendix B), the City Ford archaeological area was recommended for inclusion in the VHI and has now been listed as VHI H7822-2340. The impacts and mitigation measures for this archaeological area in the Parkville station precinct are presented in Table 46.

The key mitigation measure would be the preparation of an archaeological management plan to detail the archaeological investigation of the City Ford archaeological area.

The construction work site within the VHR-listed Royal Parade may also potentially impact on archaeological remains of earlier road surfaces. Given the likely nature of these remains, archaeological monitoring would be undertaken during any ground disturbance works in this area. The monitoring would be undertaken by an appropriately qualified historical archaeologist. The works would cease to enable the archaeologist to investigate and record any potentially significant archaeological features or deposits, before work recommences.

10.6.7.3 Impact assessment

The impact assessment for historical archaeology in the Parkville precinct is as follows:

Table 46 Impact assessment and mitigation measures for City Ford archaeological area

Archaeological Area	City Ford Archaeological Area
Listings for Archaeological Places	VHI H7822-2340
Archaeological Potential	<p>Remains of nineteenth century Junction Hotel likely present in the asphalted car yard area due to the nature of the original construction of the hotel and there apparently being no subsequent construction apart from an open asphalted car yard</p> <p>Evidence of earlier nineteenth century residential development may survive due to minimal 1950s warehouse construction, and subsequent open area asphalted car yard</p>
Significance	<p>Early and continued commercial occupation, particularly due to its location on a major route from the city of Melbourne to the Victorian goldfields</p> <p>Potential for information about the operation and patrons of an early city-fringe hotel on the route to the Victorian goldfields</p> <p>Potential to provide information over time of the changing social nature of the surrounding area up into the late 20th century</p> <p>Early domestic occupation of the Melbourne city fringe, including an understanding of early domestic activities and lifeways of nineteenth century Melbourne residents</p>
Heritage Assessment	<p>Impact</p> <p>Proposed works within the archaeological area:</p> <ul style="list-style-type: none"> • Temporary construction work site <p>There is the potential for the requirement of subsurface excavation for the installation of structures and services related to the use of the area as a temporary construction work site. Such subsurface disturbance has the potential to impact on subsurface archaeological remains at the site.</p>
Mitigation Measures	Archaeological management plan, providing details of monitoring/test/salvage excavation and artefact analysis

10.7 Environmental Performance Requirements

Table 47 provides the recommended Environmental Performance Requirements and proposed mitigation measures for the precinct.

Table 47 Environmental Performance Requirements for the precinct

Asset / value	Impact	Environmental performance requirements	Proposed mitigation measures	Risk no
Royal Parade (VHR H2198)	<p>Construction of station:</p> <p>Tree removals</p> <p>New entries have visual impact</p> <p>Removal of bluestone to flanking carriageways</p> <p>Modification of medians including form and significant concrete kerbing</p>	<p>CH1 Design permanent and temporary works to avoid or minimise impacts on the cultural heritage values of heritage places.</p> <p>Consult as required with Heritage Victoria and/or the responsible authority (as applicable).</p> <p>CH3 Prior to construction undertake archival photographic recording in accordance with Heritage Victoria Technical Note: Photographic Recording for Heritage Places and Objects where heritage places are to be demolished or modified.</p> <p>CH12 To the satisfaction of Heritage Victoria and the responsible authority, replace removed Elm trees in Royal Parade as part of project delivery using appropriate species and re-establish the boulevard formation.</p> <p>Provide suitable soil conditions to facilitate the growth of new trees to reach the size of the existing mature trees in the boulevard.</p> <p>AR4 Prior to construction commencing of main works or shafts in affected areas, prepare and implement Tree Protection Plans for each Precinct in accordance with AS4970-2009 Protection of Trees on</p>	<p>In detailed design further review road functional layout to minimise impact on the significant trees and optimise the opportunities for replanting</p> <p>In detailed design re-use and/or reproduce concrete kerbing detail to modified medians</p> <p>In detailed design investigate the potential to introduce new surface over retained bluestone (in preference to removal).</p> <p>The location of each tree proposed to be removed would need to be surveyed and photographed prior to removal. Replacement to be undertaken in consultation with the City of Melbourne.</p>	<p>HH15</p> <p>HH16</p>

Asset / value	Impact	Environmental performance requirements	Proposed mitigation measures	Risk no
		<p>Development Sites, addressing the detailed design and construction methodology of the project.</p> <p>Within precincts 1, 4 and 7 a Tree Protection Plan must be developed for each heritage place as relevant to the satisfaction of Heritage Victoria or the responsible authority.</p>		
University of Melbourne Main Entrance Gates (Gate 6), Pillars and Fence (VHR H0918)	Station box is located immediately abutting the fence and there may be a direct physical impact or risk of damage (subject to detailed design)	<p>CH1 Design permanent and temporary works to avoid or minimise impacts on the cultural heritage values of heritage places.</p> <p>Consult as required with Heritage Victoria and/or the responsible authority (as applicable).</p> <p>CH4 Prior to construction of main works or shafts that affect heritage structures or places, develop detailed methodology in accordance with Australia ICOMOS Burra Charter and to the satisfaction of Heritage Victoria or the responsible authority (as applicable) where heritage fabric is required to be dismantled, stored and reconstructed. Work is to be documented and overseen by an appropriately qualified conservation practitioner.</p>	<p>Review detailed design and construction methodology to avoid impact or risk of impact on significant fabric if possible.</p> <p>If temporary relocation is required in order to protect significant fabric, document and undertake works according to accepted conservation standards.</p> <p>Where dismantling and reconstruction works are required document and perform these works with specialist input. This would likely include an assessment of condition, detailed methodology for the work, recording of the structure prior to dismantling, dismantling methodology, the numbering of component parts for storage, specification of secure storage arrangements, details of required repair and conservation works, if required, method for reinstating fabric including appropriate materials in the event fabric is required to be renewed or replaced.</p>	HH17
University of Melbourne Gatekeeper's Cottage (VHR H0919)	New structure in proximity	CH1 Design permanent and temporary works to avoid or minimise impacts on the cultural heritage values of heritage places.	The design should be developed consistent with the Urban Design Strategy and the referenced EPRs and with specialist heritage advice to achieve a sympathetic relationship with the heritage place.	HH18

Asset / value	Impact	Environmental performance requirements	Proposed mitigation measures	Risk no
		<p>Consult as required with Heritage Victoria and/or the responsible authority (as applicable).</p> <p>CH5 Prior to construction of main works or shafts that affect heritage structures or places, develop and implement appropriate protection measures for heritage places and objects including sculptures, memorials, monuments and associated heritage fabric where retained in proximity to works. This is to be done to the satisfaction of Heritage Victoria or the responsible authority (as applicable).</p> <p>CH9 To the satisfaction of Heritage Victoria and the responsible authority (as applicable), ensure new development is responsive to heritage places in terms of height, massing, form, façade articulation and materials.</p> <p>CH13 To the satisfaction of Heritage Victoria, in detailed design ensure the eastern Parkville station entry is set no less than 8-10 metres from the original Gatekeeper's Cottage and an appropriate boundary treatment is retained or re-established for the heritage building</p>	<p>Protect heritage buildings from physical impacts, physical protection work to be designed as part of construction management plan.</p>	
Vice Chancellor's House (VHR H1003)	New structure in proximity	CH1 Design permanent and temporary works to avoid or minimise impacts on the cultural heritage values of heritage places.	The design would need to be developed consistent with the Urban Design Strategy and the referenced EPRs and with specialist heritage advice to achieve a sympathetic relationship with the heritage place.	HH18

Asset / value	Impact	Environmental performance requirements	Proposed mitigation measures	Risk no
		<p>Consult as required with Heritage Victoria and/or the responsible authority (as applicable).</p> <p>CH9 To the satisfaction of Heritage Victoria and the responsible authority (as applicable), ensure new development is responsive to heritage places in terms of height, massing, form, façade articulation and materials.</p>	<p>If works (including landscaping works) are required within the extent of registration preferably additional investigation should be undertaken into the original treatment to the south of the heritage building.</p>	
Carlton Precinct (HO1)	New structures within precinct	<p>CH1 Design permanent and temporary works to avoid or minimise impacts on the cultural heritage values of heritage places.</p> <p>Consult as required with Heritage Victoria and/or the responsible authority (as applicable).</p> <p>CH9 To the satisfaction of Heritage Victoria and the responsible authority (as applicable), ensure new development is responsive to heritage places in terms of height, massing, form, façade articulation and materials.</p>	<p>Ensure new structures are of a scale, form and materiality that does not detract from the heritage context. They should preferably be of simple contemporary design.</p>	HH20
City Ford Archaeological area (VHI H7822-2340)	Subsurface excavation for the installation of structures and services related to the use of the area as a temporary construction work site may	<p>CH6 To the satisfaction of Heritage Victoria:</p> <ul style="list-style-type: none"> Develop archaeological management plans to manage disturbance of archaeological sites and values affected by the project Undertake investigation in accordance with the Guidelines for Investigating 	<p>The archaeological management plan would include the following:</p> <ul style="list-style-type: none"> description and background history of Archaeological Area statement of significance of Archaeological Area, in accordance with Guidelines for Conducting Historical Archaeological Surveys (Heritage Council of Victoria and Heritage Victoria 2008), Criteria for Assessing Cultural Heritage Significance (Heritage Council of Victoria 2008) and Victoria's Framework of Historical Themes (Heritage Council of Victoria 2010) 	HH02

Asset / value	Impact	Environmental performance requirements	Proposed mitigation measures	Risk no
	damage archaeological remains	<p>Historical Archaeological Artefacts and Sites, Heritage Victoria 2014 (as amended or updated) and to the satisfaction of the Executive Director, Heritage Victoria</p> <ul style="list-style-type: none"> Develop and implement a protocol for managing previously unidentified historical archaeological sites discovered during project works. 	<ul style="list-style-type: none"> research design, including research questions which will be addressed as a result of any archaeological investigations excavation methodology, including method to be used to excavate deposits, record spatial and stratigraphic information and recover artefacts and how these would help address the research design artefact retention policy, including how and why individual artefacts and types of artefact would be retained, discarded or sampled during the archaeological investigation artefact management proposal, including details of how recovered artefacts would be managed in the field and post-excavation (including materials conservation if required). <p>Through the development and implementation of the archaeological management plan, the research potential of the affected site can be realised and this would mitigate the impact of destruction or disturbance</p>	
Remnant bluestone pillar and cast iron fencing	Possible removal for the station entry	<p>CH1 Design permanent and temporary works to avoid or minimise impacts on the cultural heritage values of heritage places.</p> <p>Consult as required with Heritage Victoria and/or the responsible authority (as applicable).</p> <p>CH4 Prior to construction of main works or shafts that affect heritage structures or places, develop detailed methodology in accordance with Australia ICOMOS Burra Charter and to the satisfaction of Heritage Victoria or the responsible authority (as applicable) where heritage fabric is required to be dismantled, stored and reconstructed. Work is to be documented and overseen by</p>	<p>Incorporate the feature into the design for the entry and preferably develop active site interpretation which references the historical boundary treatment to Parkville campus.</p> <p>Where dismantling and reconstruction works are required document and perform these works with specialist input. This would likely include an assessment of condition, detailed methodology for the work, recording of the structure prior to dismantling, dismantling methodology, the numbering of component parts for storage, specification of secure storage arrangements, details of required repair and conservation works, if required, method for reinstating fabric including appropriate materials in the event fabric is required to be renewed or replaced.</p>	HH19

Asset / value	Impact	Environmental performance requirements	Proposed mitigation measures	Risk no
		<p>an appropriately qualified conservation practitioner.</p> <p>CH16 Integrate the bluestone pillar and cast iron fencing at the corner of Grattan Street and Royal Parade into the design for the station entry and surrounds in consultation with the University of Melbourne</p>		

10.8 Conclusion

The proposed Parkville station precinct abuts several VHR registered places including Royal Parade and three University of Melbourne sites, the Vice-Chancellor's House, Main Entrance Gates, Pillar and Fence, and Gatekeeper's Cottage, all located to the east on Grattan Street. Impacts on all three University sites would be limited and could be managed or mitigated. There would be minor impacts in Royal Parade associated with the construction of the station itself, which would be within Grattan Street, but there would also be tree losses associated with the proposed new tram stop in Royal Parade and consequent changes to road functional layouts. Mitigation measures include the re-establishment of the boulevard layout and visual character through replanting of trees and maintenance of the arrangement of medians to roadways as far as is possible.

11.0 Precinct 5 – CBD North Station

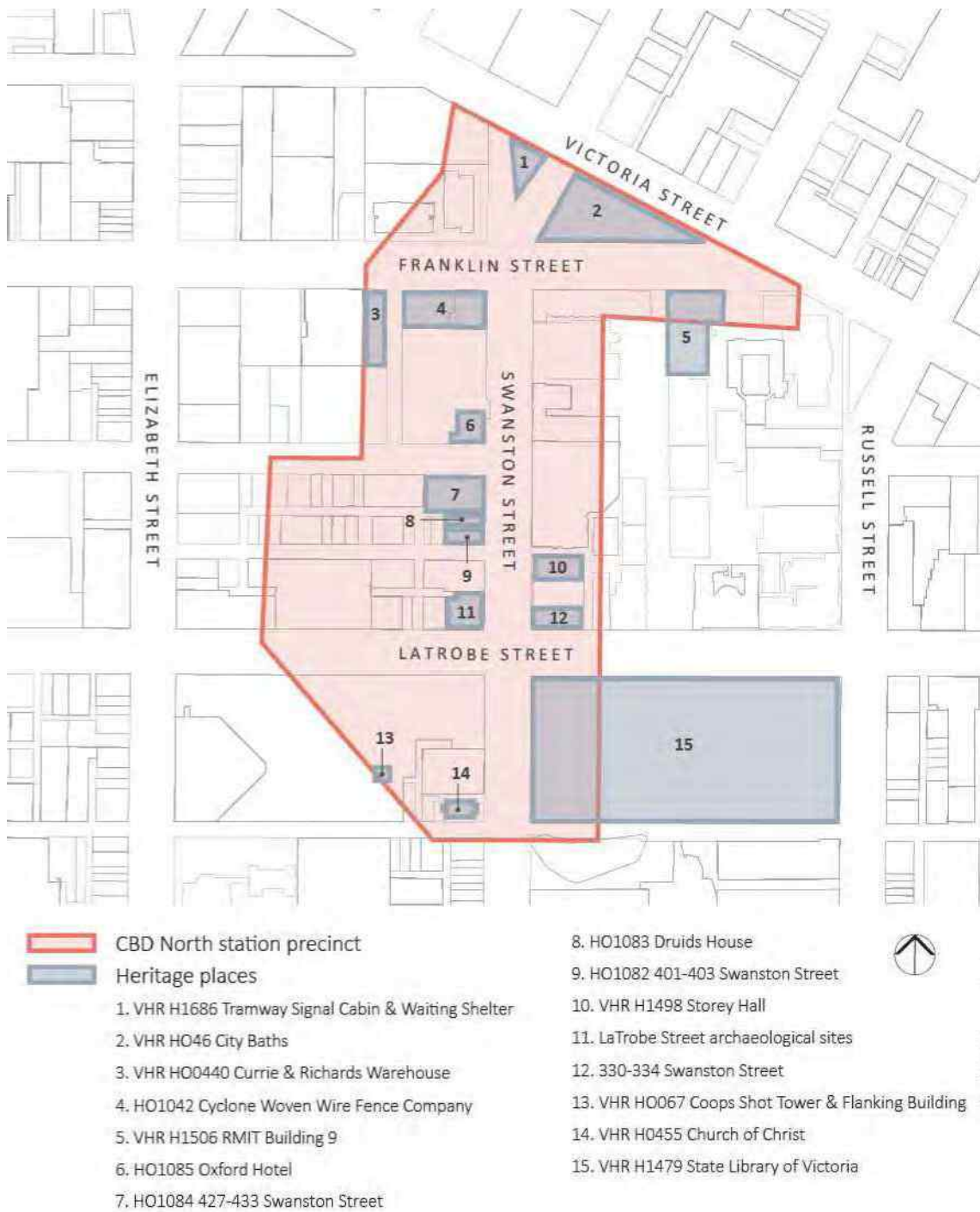


Figure 102 Key heritage places in the CBD North station precinct

11.1 Project Components

11.1.1 Infrastructure

On completion the proposed permanent infrastructure would include:

- station box located under Swanston Street, between Franklin and La Trobe streets
- station entrances to Franklin Street and Swanston and La Trobe streets
- fire egress and maintenance access to Franklin Street east of Swanston Street
- fire egress, ventilation shaft and maintenance access on Franklin Street west of Swanston Street
- ventilation shaft and maintenance access to A'Beckett Street.

11.1.2 Construction

The proposed construction works and activities associated with the Concept Design include:

- mined cavern construction to station box
- construction site on Swanston and La Trobe Streets
- cut and cover construction to Franklin Street entrance (east of Swanston Street)
- construction sites to Franklin Street (east and west of Swanston streets)
- grouting works associated with the mined cavern construction of CBD North Station
- mined adits (underground passages) between Little La Trobe and Swanston streets.

11.2 Alternative Design Options

11.2.1 Infrastructure

N/A

11.2.2 Construction

- alternative construction work site to 22-44 A'Beckett Street (site of tennis courts/park) and roadway.

11.3 Existing Conditions

Swanston Street is one of the major north-south routes through the CBD, and is a major tram, pedestrian and cyclist route with some sections providing local access for private vehicles. The study area for the CBD North station follows the alignment of Swanston Street, commencing on the south side of Victoria Street, extending to Franklin Street to the east (to the intersection with Victoria Street) and west, and terminating at Little Lonsdale Street to the south (Figure 102).

The Tramway Signal Cabin, Waiting Shelter and Conveniences (VHR H1686, Figure 103) is located within the roadway and at the intersection of Swanston and Victoria streets. The tramway cabin is of historical significance for being the only surviving elevated signal cabin within an operating tram network.

The VHR-listed City Baths (VHR H0466, Figure 104) is located on a triangle of land bounded by Swanston, Franklin and Victoria streets. Designed in the Edwardian Baroque style, the City Baths are of architectural and historical significance.

Also on Franklin Street is RMIT Building 9 (VHR H1506, Figure 105), designed in the Moderne style by Percy Everett of the Public Works Department and constructed in c. 1938, Building 9 is of architectural significance to the State of Victoria.

Storey Hall (VHR H1498, Figure 106) at 344-346 Swanston Street (RMIT Building 16) is within the precinct. This three-storey stuccoed brick and stone building has a modern addition (c. 1995) to the

south. Storey Hall is significant at a state level for historical and architectural reasons, relating to its development by the Hibernian-Australian Catholic Benefit Society and as a nineteenth century hall designed externally in the High Renaissance style.

The CBD North study area encompasses the forecourt, portico and flanking wings to the State Library of Victoria (VHR H1479, Figure 107). The station footprint is distant from the registered place with no excavation works occurring in the vicinity of the building.

State significant warehouses, The Currie and Richards Warehouse (VHR H0440), dating to c. 1875, at 79-81 Franklin Street along with the Warehouse (VHR H0980) at 61-69 A'Beckett Street are within the CBD North station precinct.

The Church of Christ (VHR H0455) is at the corner of Swanston and Little Lonsdale Streets (327-333 Swanston Street). This registered place is located at the southern edge of the Precinct. The Coops Shot Tower and Flanking Building (VHR H0067) in Knox Place (part of Melbourne Central) is also within the precinct.



Figure 103 Tramway Signal Cabin, Waiting Shelter and Conveniences, (VHR H1686) within the roadway at the intersection of Swanston and Victoria streets



Figure 104 City Baths, corner of Swanston and Franklin streets (VHR H0466)



Figure 105 RMIT Building 9, (VHR H1506) viewed from the north; to the south side of Franklin Street



Figure 106 Storey Hall, 344-346 Swanston Street (VHR H1498) on the east side



Figure 107 The State Library of Victoria (VHR H1497) as viewed from the north-west

Two former warehouse buildings related to the Cyclone Wire Fence Company are located at the south-west corner of Swanston and Franklin streets. Both form part of HO1042, 63-67 Franklin Street. The red brick former factory building at 65-77 Franklin Street was constructed in c. 1906 for the Cyclone Wire Fence Company (Figure 108). It is a three-storey red face-brick building with cement render cornice detailing, timber-framed windows, a high brick parapet and a saw tooth roof. The building at 469 Swanston Street is a three-storey (plus basement), over-painted brick former factory building, constructed in 1913 (Figure 109 and Figure 110). The complex is of local level historic and aesthetic significance.

Within the study area, there are also a number of buildings subject to local heritage controls (Table 50). Several of these building are part of the RMIT University campus. These buildings variously date to the Victorian (c. 1850 to c. 1900) and interwar (c. 1919 to c. 1939) periods and are within the study area and are as follows:

- 401-403 Swanston Street, Melbourne (HO1082, Figure 111), noted as being of historic and aesthetic significance
- Druids House, 407-409 Swanston Street, Melbourne (HO1083, Figure 111), noted as being of historic and aesthetic significance
- 411-423 Swanston Street, Melbourne (HO1084, Figure 111), noted as being of historic significance and aesthetic interest
- The Oxford Hotel (1887), at 427- 433 Swanston Street, Melbourne (HO1085, Figure 112), noted as being of social and historical significance at a local level and aesthetically in Victoria.



Figure 108 67-77 Franklin Street, Melbourne (part HO1042) viewed from the west



Figure 109 469 Swanston Street (part HO1042), as viewed from Swanston Street c. 2013



Figure 110 Franklin Street facade of 469 Swanston Street (HO1042)



Figure 111 401-403 Swanston Street, Melbourne (HO1082, at left), Druids House, 407-409 Swanston Street, Melbourne (HO1083, centre), 411-423 Swanston Street, Melbourne (HO1084, at right) viewed from the south-east



Figure 112 The Oxford Hotel, 427-433 Swanston Street, Melbourne (HO1085) with the recently constructed RMIT Swanston Academic Building to the north



Figure 113 Building 22, 330-334 Swanston Street, Melbourne (C grade, Level 2 streetscape, at centre); RMIT Storey Hall (VHR H1498, with later addition at left); Former Foresters Hall (VHR H1495, under scaffold at right) viewed from the south

11.3.1 Statutory heritage controls and listings

Statutory heritage controls in the CBD North station precinct are shown in the mapping at Map 7 Appendices C, D and E.

11.3.1.1 Environment Protection and Biodiversity Conservation Act 1999

There are no sites subject to the provisions of the EPBC Act within the CBD North station precinct.

The State Library of Victoria has previously been nominated for inclusion in the NHL. The nomination for inclusion on the NHL has lapsed, although this determination does not preclude the re-nomination of the place under the provisions of the EPBC Act.

All NHL and CHL places within a one kilometre buffer of the proposed project boundary are listed in Appendix F.

11.3.1.2 Heritage Act 1995

There are 11 VHR registered places or objects within the CBD North station precinct (Table 48) - shaded places are the subject of impact assessment in the following section.

Table 48 VHR places in CBD North station precinct

VHR number	HO number	Place	Address
VHR H1686	HO911	Tramway Signal Cabin, Waiting Shelter and Conveniences	Swanston Street and Victoria Street
VHR H0466	HO493	City Baths	420 Swanston Street, 39-41 Victoria Street, and 2-6 Franklin Street
VHR H0440	HO664	Currie and Richards Warehouse	79-81 Franklin Street
VHR H1498	HO482	Storey Hall	344-346 Swanston Street
VHR H1495	HO481	Former Foresters Hall	168-170 La Trobe Street
VHR H1479	HO751	State Library of Victoria	304-328 Swanston Street
VHR H0455	HO752	Church of Christ	329-333 Swanston Street
VHR H1506	HO483	RMIT Building 9	1-55 Franklin Street
VHR H1646	HO485	Emily McPherson College	379-405 Russell Street
VHR H0980	HO515	Warehouse	61-69 A'Beckett Street
VHR H0067	HO681	Coops Shot Tower and Flanking Building	Knox Place

There are 41 VHI sites within the CBD North station precinct (Table 49) - shaded places are the subject of impact assessment in the following section.

Table 49 VHI places in CBD North station precinct

VHI number	Place	Address
H7822-1079	Church Of Christ	327-333 Swanston Street
H7822-1966	Swanston Street	
H7822-2075	Oxford Hotel (Former)	427-433 Swanston Street
H7822-2076	437-447 Swanston Street	
H7822-2077	Gateway House	459-469 Swanston Street
H7822-2078	Currie & Richards Building	79-81 Franklin Street and 3 Stewart Street
H7822-2082	22-44 A'Beckett Street	22-44 A'Beckett Street
H7822-2128	204-206 La Trobe Street	204-206 La Trobe Street
H7822-2129	208-210 La Trobe Street	
H7822-2130	377-391 Swanston Street	377-391 Swanston Street (also 188-196 La Trobe Street)

VHI number	Place	Address
H7822-2134	62-64 Little La Trobe Street	62-64 Little La Trobe Street
H7822-2135	58-60 Little La Trobe Street	58-60 Little La Trobe Street
H7822-2136	54 Little La Trobe Street	54 Little La Trobe Street
H7822-2137	50-52 Little La Trobe Street	50-52 Little La Trobe Street
H7822-2138	46-48 Little La Trobe Street	46-48 Little La Trobe Street
H7822-2139	42-44 Little La Trobe Street	42-44 Little La Trobe Street
H7822-2140	38-40 Little La Trobe Street	38-40 Little La Trobe Street
H7822-2141	34-36 Little La Trobe Street	34-36 Little La Trobe Street
H7822-2142	22-32 Little La Trobe Street	22-32 Little La Trobe Street
H7822-2143	18-20 Little La Trobe Street	18-20 Little La Trobe Street
H7822-2144	16 Little La Trobe Street	16 Little La Trobe Street
H7822-2145	12-14 Little La Trobe Street	12-14 Little La Trobe Street
H7822-2146	401-403 Swanston Street	401-403 Swanston Street and 2-10 Little La Trobe Street
H7822-2147	Druid's House	407-409 Swanston Street
H7822-2148	1-17 A'Beckett Street	1-17 A'Beckett Street
H7822-2149	19-29 A'Beckett Street	19-29 A'Beckett Street
H7822-2150	31-37 A'Beckett Street	31-37 A'Beckett Street
H7822-2151	39 A'Beckett Street	39 A'Beckett Street
H7822-2152	41-45 A'Beckett Street	41-45 A'Beckett Street
H7822-2153	47-49 A'Beckett Street	47-49 A'Beckett Street
H7822-2154	51-53 A'Beckett Street	51-53 A'Beckett Street
H7822-2155	55-59 A'Beckett Street	55-59 A'Beckett Street
H7822-2081	46-50 A'Beckett Street	46-50 A'Beckett Street
H7822-2179	Gossard Building	63-37 Franklin Street
H7822-2182	342-348 Swanston Street	342-348 and 334-336 Swanston Street
H7822-1080	National Museum	285-321 Russell Street
H7822-1081	State Library & National Museum Complex	304-328 Swanston Street
H7822-1076	194-196 Little Lonsdale Street	194-196 Little Lonsdale Street
H7822-1077	198-200 Little Lonsdale Street	198-200 Little Lonsdale Street
H7822-2156	Aban's Printing	61-69 A'Beckett Street
H7822-2174	Emily McPherson College	369-405 Russell Street

11.3.1.3 Planning and Environment Act 1987

The VHR sites are reflected in site-specific HOs in the Melbourne Planning Scheme (Table 48)

Individual HOs are also located within the CBD North station precinct (Table 50).

Table 50 HO places in CBD North station precinct – shaded places are the subject of impact assessment in the following section

HO Number	Place	Address
HO479	Building No. 4 RMIT	Bowen Street
HO1082	401-403 Swanston Street	401-403 Swanston Street
HO1083	Druids House	407-409 Swanston Street
HO1084	411-423 Swanston Street	411-423 Swanston Street
HO1085	The Oxford Hotel	427-433 Swanston Street
HO1042	Cyclone Woven Fence Co. Factory	63-67 Franklin Street
HO1059	194-196 Little Lonsdale Street	194-196 Little Lonsdale Street
HO1060	198-200 Little Lonsdale Street	198-200 Little Lonsdale Street

Note that there are a number of errors and anomalies in the mapping of RMIT buildings in Bowen Lane. The HO mapping for HO479 (which falls within the study area) includes RMIT Buildings 2, 4, 6, 8 and 28. In the Schedule to the HO, however, it is described only as Building No. 4 RMIT Bowen Street, Melbourne. Conversely, HO480 is on the east side of Bowen Lane and is not included in the study area. It is described in the Schedule as Building No. 2, 3, 5, 6 & 7 RMIT, Bowen Street, Melbourne.

While these anomalies should be corrected by the City of Melbourne, it is not expected that they would have any implications for the project.

11.3.2 Potential additional heritage places

While not subject to statutory heritage controls, a small number of buildings within the study area have been graded in previous municipal heritage studies. (Refer to section 8.3.1 for the City of Melbourne's grading definitions). These include 330-334 Swanston Street, Melbourne, RMIT Building 22 at the corner of Swanston and La Trobe Streets (Figure 113). While altered externally with recent additions, this c. 1915 Edwardian former warehouse is a handsome example of the style and a C grade building in a Level 2 Streetscape. Further north, 335-337 Swanston Street is an interwar period Moderne style building with a C grading, while 459-469 Swanston Street is graded D. Of these, only 330-334 Swanston Street is considered to be of a level of significance whereby its retention would be preferred on heritage grounds, notwithstanding the alterations and additions.

Graded places with no statutory heritage controls in the CBD North station precinct are listed in Appendix F in this report.

11.3.3 Historical archaeology

Previous predictive archaeological investigations of the central city in the *Melbourne Central Activities District: Archaeological Management Plan* (Fels et al., 1992) are reflected in the VHI sites in this location and show the CBD North station precinct to be an area of very high potential for historical archaeology. There are 29 VHI sites within the CBD North station precinct. Of these six would be subject to project works but these works would be at depth and there would be no impact on the archaeological record. Consents would still be sought for the works under the Heritage Act but there would be no need for an archaeological management plan. The relevant sites are as follows:

- H7822-2146 - 401-403 Swanston Street / 2-10 Little La Trobe Street
- H7822-2147 - Druids House 407-409 Swanston Street
- H7822-2148 – 411-423 Swanston Street / 1-17 A’Beckett Street
- H7822-2143 – 18-20 Little La Trobe Street
- H7822-2145 – 12-14 Little La Trobe Street
- H7822-1966 – Swanston Street

Four VHI sites would be subject to project works as they are situated within the construction site on the corner of Swanston Street and La Trobe Street, and the alternative construction work site option at 22-44 A’Beckett Street. The four sites are identified for their archaeological potential in Fels et al. (1992), and their history is summarised in Table 51, following.

Table 51 Summary of archaeological potential for individual sites

VHI no	Address	Archaeological potential and history
H7822-2128	204-206 La Trobe Street	<p>Potential (area)</p> <p>Buildings/businesses identified within this site on 1857 plan (building on La Trobe street frontage), 1864 directory (wholesale grocers, wine and spirit merchants), 1866 map (building on La Trobe Street frontage), 1873 rate books (brick store), 1873 directory (wholesale druggist), 1866 isometric plan (building), 1880 Panorama (two storey building), 1888 directory (carriage builders), 1890 rate books (brick store), 1890 directory (importers of carriage material), 1895 MMBW plan (building), 1901 directory (tinsmiths), 1920 directory (printers and stationers), 1925 Mahlstedt (fire insurance) plan (two storey building), 1940 directory (printers), 1962 Mahlstedt plan (two storey building)</p>
H7822-2129	208-210 La Trobe Street	<p>Potential (area)</p> <p>Buildings/businesses identified within this site on 1857 plan (vacant), 1864 directory (vacant), 1866 isometric plan (possibly vacant), 1873 directory (ironworkers workshop), 1875 photo (building), 1880 Panorama (single storey building), 1888 directory (ironworkers), 1890 directory and rate book (cabinetmaker, brick house), 1895 MMBW plan (building), 1901 directory (ornamental iron worker, building and contractor), 1905 plan (single storey building), 1920 directory (ironworkers, 1925 Mahlstedt plan (single storey building), 1928 building application (two storey building – extant), 1940 directory (manufacturer’s agent), 1962 Mahlstedt plan (two storey building - extant)</p>

VHI no	Address	Archaeological potential and history
H7822-2130	377-391 Swanston Street / 188-196 La Trobe Street	<p>Potential/disturbed</p> <p>Buildings/businesses identified within this site on 1857 plan (buildings on corner), 1857 directory (merchant, butchers, clothiers, upholsterer), 1864 directory (china dealer, ironmongers, fishmonger, tailor, dressmaker, stationer, solicitor, grocer), 1866 isometric plan (single storey buildings on corner), 1873 directory (manufacturers, fishmonger and oyster saloon, cane chair maker), 1873 rate books (brick and stone shops), 1875 photos (single storey buildings), 1880 Panorama (indistinct), 1885 directory (printer and law stationer, financial agent, paint company, ironmonger), 1890 directory (printer, leather merchant, French polisher, oven manufacturer), 1890 rate books (stone stores), 1895 MMBW plan (buildings on corner), 1901 directory (wood turner, iron merchant, printer, metal spinner, wood carver, sign writer, machinist), 1905 plan (several single storey buildings), 1920 directory (wood turner, motor cycle importers, bootmaker, plumber, cycle manufacturer), 1925 Mahlstedt plan (three storey retail building – extant), 1940 directory (mantle manufacturers, tile manufacturers, frock manufacturers, hire/drive yourself service) tyre dealers, tea rooms, booth repair, chemist)</p>
H7822-2082	22-44 A'Beckett Street	<p>Potential (area)</p> <p>Buildings/businesses within this site on 1857 plan (buildings on street front), 1858 directory (baker, coach building, sawmills, timber yard, undertaker), 1864 directory (joiner, produce merchants, machine maker, plumber), 1866 plan (buildings on street front and along western boundary including smokestack), 1873 directory (timber merchants, shop and workshop, blacksmith, sheet lead and gas pipe manufacturers), 1873 rate books (brick shops and workshops, iron forge), 1885 directory (blacksmiths, carpenter, engineer, flock manufacturer, furniture factory), 1890 directory (workshops, refrigerator manufacturers, house, smithy, wood turners, furniture manufacturer), 1890 rate books (iron workshop, brick workshop, brick house, iron smithy, brick workshop with machinery), 1895 plan (multiple sheds and other buildings across entire site), 1910 directory (engineers, machinists, iron forge, cigar manufacturers), 1910 rate books (brick workshops, iron forge, brick warehouse), 1925 plan (tobacco manufacturer, including single storey office and box making building, and three and four storey manufacturing and warehouse buildings), 1927-28 plan (tobacco warehouse buildings), 1930 directory (tobacco and cigar manufacturers), 1930 rate books (brick offices, brick factory and frontage to Stewart Street), early 1960s plan (single, three and four storey buildings still on site), 1965 plan (car park), 1967 directory (car park).</p>

By the mid-1850s, the sites in Swanston and La Trobe streets had been developed with a number of one and two-storey brick or stone buildings constructed to the street frontage, with a central laneway running parallel to La Trobe and Little La Trobe streets. These buildings were occupied by businesses including merchants, provision stores and light industry, such as ironmongers. The buildings at this time were simply detailed single-storey shops or store buildings built of stone to the corner of La Trobe and Swanston streets. These early buildings appear to have remained through the nineteenth century.

The sites retained a generally service and light industrial character into the twentieth century, with basket manufacturer, bootmaker, hardware merchants and furniture makers listed in the 1920 Sands & McDougall directory. However, by 1925, some nineteenth century buildings had been demolished and replaced with larger buildings. This includes the three-storey retail building at the corner of Swanston and La Trobe streets (H7822-2130), which appears not to have a basement. Further development of the sites and replacement of buildings was undertaken through the twentieth century, including the two-storey reinforced concrete factory building at 208 La Trobe Street (H7822-2129). Both of these buildings still stand.

The built form of these sites is predominantly twentieth century, but given the lack of basements as shown on the 1962 Mahlstedt fire insurance plans, there is potential for the archaeological remains of nineteenth century commercial and residential occupation of the sites. As these three sites are listed on the VHI, they are deemed to be of heritage significance.

11.3.3.1 Alternative A'Beckett Street Site

The A'Beckett Street site (H7822-2082) had been developed by the late 1850s with a number of small buildings, and had an early character of light industrial and residential buildings. This type of use of the site continued through the nineteenth century with workshops, forges, factories, sheds and residences being present. Between 1910 and 1920, the subject site was acquired by the British and Australasian Tobacco Company, and the cigar manufacturers, States Tobacco Company. The site had been developed by 1925 with single-storey brick office and box making room, larger sawtooth roofed warehouses, and a laneway access from Stewart Street. The tobacco warehouse buildings on the subject site are still present in the early 1960s. In c. 1965, all buildings on the site were demolished and the site became a commercial car park, Westside Parking. In 2014, the car park site was redeveloped as the RMIT Urban Square, which includes sports courts and landscaping.

Given the early twentieth century development of the site did not appear to have basement levels, and the lack of substantial development of the site after the demolition of these buildings in the 1960s, there is potential for the archaeological remains of both nineteenth and twentieth century light industrial and residential occupation of the site. As the site is listed on the VHI, it is deemed to be of heritage significance.

11.4 Key Issues

The key issues associated with the Concept Design are identified in the table below.

Table 52 Key issues associated with the Concept Design

Concept Design	Issue
Station box located under Swanston Street, between Franklin and La Trobe Streets.	Potential construction impacts on heritage places within the precinct
Cut and cover construction of station entry	Construction work site is in close proximity to VHR Registered places: City Baths (VHR H0466) and RMIT Building 9 (VHR H1506)
Entrances at:	
<ul style="list-style-type: none"> Franklin Street east of Swanston Street corner of Swanston and La Trobe Street 	<p>Potential visual impact of new above ground station entrance on City Baths (VHR H0466)</p> <p>Historical archaeological impacts including the destruction of three archaeological places:</p> <ul style="list-style-type: none"> 377-391 Swanston Street (H7822-2130) 204-206 La Trobe Street (H7822-2128) 208-210 La Trobe Street (H7822-2129)
Vent structure in Franklin Street opposite Bowen Street	Potential adverse visual impact of above ground vent structure on City Baths (VHR H0466)
Construction of mined adit	Construction of mined adit beneath HO places: 401-403 Swanston Street (HO1082), Druids House (HO1083) and 411-423 Swanston Street (HO1084)

11.4.1 Alternative design options

The key issues associated with the alternative design option to the Concept Design are identified in Table 53.

Table 53 Key issues associated with the alternative design option

Alternative Design Option	Issue
Construction work site to 22-44 A'Beckett Street (H7822-2082) and roadway	<p>The use of 22-44 A'Beckett Street as a construction work site may require subsurface excavation of the VHI site.</p> <p>No issue arising from construction work site in the A'Beckett Street roadway</p>

11.5 Benefits and Opportunities

There are no benefits or opportunities associated with the Concept Design in this precinct.

11.6 Impact Assessment

The following draft EES evaluation objectives and assessment criteria (and indicators where relevant) are relevant to this assessment.

Draft EES evaluation objectives	Assessment criteria
Cultural Heritage – To avoid or minimise adverse effects on ... historic cultural heritage values	Avoid or minimise impacts on cultural heritage values and places

The Concept Design is generally consistent with the draft EES evaluation objective to avoid or minimise impacts on post-cultural heritage values and places as:

- Historical archaeological impacts can be mitigated by the realisation of the research potential of the affected sites through appropriate management techniques.
- Where permanent above-ground structures and works are required (new structures adjacent to the City Baths), there are opportunities for these to undergo design refinements to minimise their visual impacts.

11.6.1 City Baths (VHR H0466)

11.6.1.1 Statutory heritage controls

The statutory heritage controls that apply are as follows:

Legislation	Relevant VHR/HO number
Heritage Act	VHR H0466
Planning and Environment Act	HO493 (Melbourne Planning Scheme)

11.6.1.2 Heritage considerations

The City Baths are of architectural and historical significance to the State of Victoria:

- as a distinctive example of the Edwardian Baroque in Melbourne and as an important work of architect J J Clark.
- as a reminder of the role of bathing establishments in the early twentieth century.

The VHR extent of registration of the place is described as:

Historic Building No. 466 – City Baths, Swanston Street, Melbourne (excluding the residence at the rear).

The citation for the place does not include a permit policy statement or permit exemptions. A CMP has not been prepared for the Baths. Available reports on the place refer to the 1980s refurbishment.

The City Baths complex is broadly intact externally with noted alterations being the replacement of the original brick fence with a wrought iron and brick fence, reconfiguration of the Swanston Street entry. Extensive internal renewal works were undertaken in the early 1980s (Argroup Architects, 1979).

11.6.1.3 Impact assessment

Construction works would occur to the majority of Franklin Street east of Swanston Street immediately adjacent to the City Baths. Permanent infrastructure in the form of a vent structure with access stair

would be located on Franklin Street (east end) and the new north station entry east of the intersection of Swanston Street. This would be in close proximity to, though not within, the registered place.

The issues associated with this registered place are two-fold. In construction, the issues revolve around the protection of heritage fabric during cut and cover works proximate to the registered place. Appropriate protection measures would need to be developed to ensure that there are no resultant impacts on heritage fabric. Refer to 6.2.2 for a discussion of potential construction vibration and ground settlement impacts.

While outside the registered place, the scale and proximity of permanent infrastructure associated with CBD North station (above ground entry and vent structures) may result in a visual impact on the long south façade of the City Baths. The Concept Design indicates that the station entry canopy would be approximately 4.0 m high with the vent structures approximately three metres high. Careful detailed design, addressing the management of the scale and height of structures where close to the registered building, would assist in mitigating the intrusion on the views of the Franklin Street façade. The new structure adjacent to the heritage place should in preference be visually lightweight, incorporating glazing and lightweight construction materials.

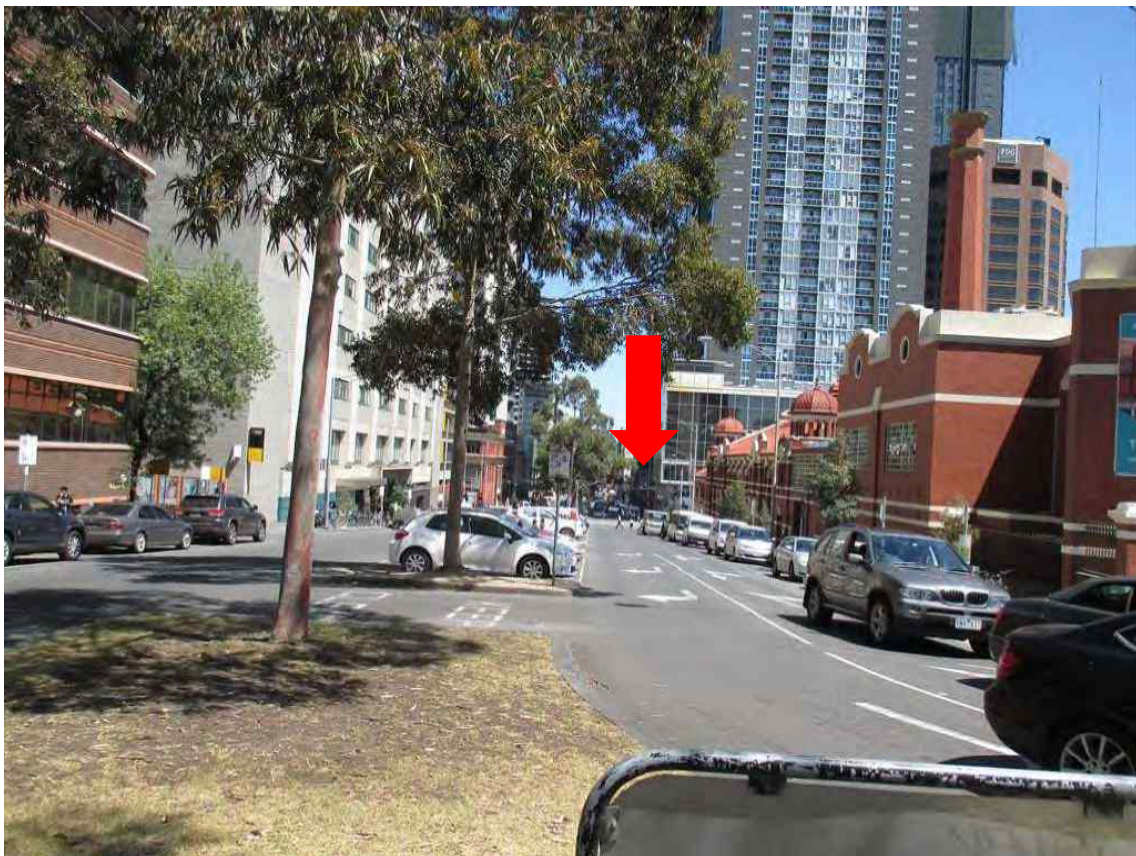


Figure 114 View of Franklin Street to the west (from the intersection with Victoria Street); City Baths is to the right of the image: Concept Design locates CBD North station entry canopy as indicated

11.6.2 401-403 Swanston Street (HO1082)

11.6.2.1 Statutory heritage controls

The statutory heritage controls that apply are as follows:

Legislation	Relevant VHR/HO number
Heritage Act	-
Planning and Environment Act	HO1082 (Melbourne Planning Scheme)

11.6.2.2 Heritage considerations

The heritage place, originally The Democratic Club, is significant at a local level for historic and aesthetic reasons as follows:

- historically, as being commissioned by the a private club to be used for the education of and recreation for labourers in the late nineteenth century
- as a sophisticated example of the Victorian Mannerist idiom.

11.6.2.3 Impact assessment

Potential heritage impacts on the aesthetic values associated with the place relates to the damage to building fabric and structure through the mining works for the adits. The protection of fabric from vibration and settlement is anticipated to be managed on a project wide basis. Refer to 6.2.2 for a discussion of potential construction vibration and ground settlement impacts.

11.6.3 Druids House (HO1083)

11.6.3.1 Statutory heritage controls

The statutory heritage controls that apply are as follows:

Legislation	Relevant VHR/HO Number
Heritage Act	-
Planning and Environment Act	HO1083 (Melbourne Planning Scheme)

11.6.3.2 Heritage considerations

Druids House is aesthetically and historically significant at a local level for the following reasons:

- as an example of Greek Revival styling evoking the temple form and expressing the ideals of the United Ancient Order of Druids
- for reflecting the contribution of Friendly societies in Victoria.

11.6.3.3 Impact assessment

The potential for impact on the fabric and structure of the heritage place arises during the construction phase of the project with the construction of mined adits beneath the heritage place. The protection of fabric from vibration and settlement during the construction works would be managed on a project wide basis. Refer to 6.2.2 for a discussion of potential construction vibration and ground settlement impacts.

11.6.4 411-423 Swanston Street (HO1084)

11.6.4.1 Statutory heritage controls

The statutory heritage controls that apply are as follows:

Legislation	Relevant VHR/HO Number
Heritage Act	-
Planning and Environment Act	HO1084 (Melbourne Planning Scheme)

11.6.4.2 Heritage considerations

The heritage value of 411-423 Swanston Street primarily relates to its long association with the major Australian tobacco firm W.D. and H.O. Wills and the building's architect Francis J Davies. The building is described as being of historic and aesthetic interest for the use of reinforced concrete for its construction and for being a competent yet conservative design in the Edwardian style.

11.6.4.3 Impact assessment

Potential impacts on the heritage values and fabric of the heritage place relate to the construction phase of works, specifically a mined adit beneath the building. Potential for impact on architectural values of the place relate to vibration and settlement of the place. Management of these impacts during construction would be managed on a project wide basis. Refer to 6.2.2 for a discussion of potential construction vibration and ground settlement impacts.

11.6.5 Heritage places adjacent to construction work sites/infrastructure

The heritage places adjacent to construction work sites and infrastructure are as follows:

Heritage place	VHR/HO number
RMIT Building 9	VHR H1506/HO483
Tramway Signal Cabin Waiting Shelter and Conveniences	VHR H1686/HO911
Storey Hall	VHR H1498/HO482
Cyclone Woven Wire Factory	HO1042
Oxford Hotel	HO1085

11.6.5.1 Impact assessment

Potential impact on the heritage fabric and architectural values of the above listed VHR and HO places may occur as a result of vibration and settlement related to proximate construction works. It is anticipated that measures applied to the whole of the Project would manage the impacts on the heritage places. The discussion at 6.2.2 considers construction vibration and ground settlement impacts.

11.6.6 Historical archaeology

11.6.6.1 Statutory heritage controls

The statutory heritage controls that apply are as follows:

Legislation	Relevant VHI number
Heritage Act	VHI H7822-2128 - 204-206 La Trobe Street VHI H7822-2129 - 208-210 La Trobe Street VHI H7822-2130 - 377-391 Swanston Street / 188-196 La Trobe Street VHI H7822-2082 – 22-44 A’Beckett Street Note the Heritage Act provides blanket protection for all historical archaeological sites more than 50 years in age.

The impacts and mitigation measures for the historical archaeology sites in CBD North station precinct are presented in Table 54 and Table 55.

11.6.6.2 Heritage considerations

The construction of the La Trobe Street station entrance would require complete destruction of three VHI sites. As these three sites are adjacent or in close proximity on the same block, and have a similar history of occupation they have been grouped to be treated as a single entity – La Trobe Street archaeological area. The use of 22-44 A’Beckett Street as a construction work site may require subsurface excavation of the site.

11.6.6.3 Impact assessment

The key mitigation measure would be the preparation of archaeological management plans to detail the archaeological investigation of the La Trobe Street archaeological area and for 22-44 A’Beckett Street. The archaeological management plans would be prepared in accordance with Guidelines for Investigating Historical Archaeological Artefacts and Sites (Heritage Victoria, 2014) and in consultation with Heritage Victoria. The archaeological management plans would include the following:

- description and background history of Archaeological Area
- statement of significance of Archaeological Area, in accordance with *Guidelines for Conducting Historical Archaeological Surveys* (Heritage Council of Victoria and Heritage Victoria 2008), *Criteria for Assessing Cultural Heritage Significance* (Heritage Council of Victoria 2008) and *Victoria’s Framework of Historical Themes* (Heritage Council of Victoria 2010)
- research design, including research questions which would be addressed as a result of the archaeological investigations
- excavation methodology, including method to be used to excavate deposits, record spatial and stratigraphic information and recover artefacts and how these would help address the research design
- artefact retention policy, including how and why individual artefacts and types of artefact would be retained, discarded or sampled during the archaeological investigation
- artefact management proposal, including details of how recovered artefacts would be managed in the field and post-excavation.

Table 54 Impact assessment and mitigation measures for the La Trobe Street archaeological area

Archaeological area	La Trobe Street archaeological area
Listings for Archaeological Places	<p>VHI H7822-2128 - 204-206 La Trobe Street</p> <p>VHI H7822-2129 - 208-210 La Trobe Street</p> <p>VHI H7822-2130 - 377-391 Swanston Street / 188-196 La Trobe Street</p>
Archaeological Potential	<p>This area potentially evidences commercial and light industrial occupation from the 1850s, and thereafter, with a wide range of commercial/industrial activities taking place. The nineteenth century structures were replaced in around the 1920s with buildings that do not appear to have basements, therefore there is potential for archaeological remains from the mid-late nineteenth and early twentieth centuries to exist in this location.</p>
Significance	<p>The archaeological investigation of the remains would likely provide information on the initial settlement and of the evolution and alteration of the city through known historic phases of settlement, expansion, rapid growth, urbanisation, and other activity. The archaeological remains may be expected to record and reflect the processes of urban growth and development in Melbourne from the 1830s to the present.</p>
Heritage Impact Assessment	<p>Proposed works within the archaeological area:</p> <ul style="list-style-type: none"> • Construction of La Trobe Street entrance <p>This would require the complete destruction and removal of all three VHI sites.</p>
Mitigation Measures	<p>Archaeological management plan, providing details of test/salvage excavation and artefact analysis</p>

Table 55 Impact assessment and mitigation measures for the 22-44 A'Beckett Street archaeological area

Archaeological Area	22-44 A'Beckett Street
Listings for Archaeological Places	VHI H7822-2082 – 22-44 A'Beckett Street
Archaeological Potential	This area potentially evidences mainly light industrial with some residential occupation from the 1850s onwards, with a wide range of industrial activities taking place. The nineteenth century structures were replaced in the early twentieth century with buildings that do not appear to have basements, therefore there is potential for archaeological remains from the mid-late nineteenth to exist in this location. The early twentieth century buildings were demolished in the 1960s but have only been replaced with an open asphalted/concreted area with little subsurface construction. Therefore there is also potential for the remains of the early twentieth century use and occupation of the site to exist.
Significance	The archaeological investigation of the remains would likely provide information on the initial settlement and of the evolution and alteration of the city through known historic phases of settlement, expansion, rapid growth, urbanisation, and other activity. The archaeological remains may be expected to record and reflect the processes of urban growth and development in Melbourne from the 1850s to the present.
Heritage Impact Assessment	<p>Proposed works within the archaeological area:</p> <ul style="list-style-type: none"> • Use of the entire area as a construction work site <p>This may require destruction or removal of some or all of the VHI site.</p>
Mitigation Measures	Archaeological management plan, providing details of test/salvage excavation and artefact analysis

11.7 Environmental Performance Requirements

Table 56 provides the recommended Environmental Performance Requirements and proposed mitigation measures for the precinct.

Table 56 Environmental Performance Requirements for the precinct

Asset / value	Impact	Environmental performance requirements	Proposed mitigation measures	Risk no
Multiple heritage places in proximity to works	Establishment of construction sites in proximity to heritage sites	CH5 Prior to construction of main works or shafts that affect heritage structures or places, develop and implement appropriate protection measures for heritage places and objects including sculptures, memorials, monuments and associated heritage fabric where retained in proximity to works. This is to be done to the satisfaction of Heritage Victoria or the responsible authority (as applicable).	Protect heritage buildings from physical impacts, physical protection work to be designed as part of construction management plan.	-
City Baths (VHR H0466)	Two new structures (station entry and vent shaft) in proximity Excavation abutting and below site: Potential physical impact of construction work including excavation in close proximity to building (construction vibration and ground settlement)	CH1 Design permanent and temporary works to avoid or minimise impacts on the cultural heritage values of heritage places. Consult as required with Heritage Victoria and/or the responsible authority (as applicable). CH2 To avoid or minimise impacts on the cultural heritage values of heritage places: <ul style="list-style-type: none"> Perform works in accordance with the following noise and vibration and ground movement Environmental Performance Requirements as related to heritage places: NV2, NV5, NV6, NV11, GM2, GM4, GM5, GM6. 	In detailed design investigate the potential for the use of visually lightweight materials for the entry and vent structure and manage scale to minimise the visual impact on the City Baths.	HH21

Asset / value	Impact	Environmental performance requirements	Proposed mitigation measures	Risk no
		<ul style="list-style-type: none"> Undertake condition assessments of heritage places prior to commencement of construction where located within the identified vibration and ground settlement zones of sensitivity and monitor as per NV6, GM4 and GM5 <p>Should damage occur to a building or structure on the Victorian Heritage Register or that is subject to a Heritage Overlay as a result of works, undertake rectification works in accordance with accepted conservation practice (with reference to the Australia ICOMOS Burra Charter 2013) to the satisfaction of Heritage Victoria or the responsible authority, as applicable.</p>		
<p>401-403 Swanston Street (HO1082)</p> <p>Druids House (HO1083)</p> <p>411-423 Swanston Street (HO1084)</p>	<p>Mined adit beneath: Potential physical impact of construction work (construction vibration and ground settlement)</p>	<p>CH1 Design permanent and temporary works to avoid or minimise impacts on the cultural heritage values of heritage places.</p> <p>CH2 To avoid or minimise impacts on the cultural heritage values of heritage places:</p> <ul style="list-style-type: none"> Perform works in accordance with the following noise and vibration and ground movement Environmental Performance Requirements as related to heritage places: NV2, NV5, NV6, NV11, GM2, GM4, GM5, GM6. 	<p>Should construction vibration be determined to be a risk to a heritage place mitigation measures may include, as relevant, use of alternative construction equipment/construction methodology as identified in Technical Appendix I Noise and Vibration or in the course of subsequent investigations.</p> <p>Should ground movement be determined to be a risk to a heritage place mitigation measures may include, as relevant, permeation grouting, underpinning and structural strengthening or other techniques as identified in the Technical</p>	<p>HH03</p>

Asset / value	Impact	Environmental performance requirements	Proposed mitigation measures	Risk no
		<ul style="list-style-type: none"> Undertake condition assessments of heritage places prior to commencement of construction where located within the identified vibration and ground settlement zones of sensitivity and monitor as per NV6, GM4 and GM5 <p>Should damage occur to a building or structure on the Victorian Heritage Register or that is subject to a Heritage Overlay as a result of works, undertake rectification works in accordance with accepted conservation practice (with reference to the Australia ICOMOS Burra Charter 2013) to the satisfaction of Heritage Victoria or the responsible authority, as applicable.</p>	Appendix P Ground Movement and Land Stability or as part of subsequent investigations.	
Historical archaeology (Entire precinct)	Subsurface excavation may damage unidentified historical archaeological sites	<p>CH6 To the satisfaction of Heritage Victoria:</p> <ul style="list-style-type: none"> Develop archaeological management plans to manage disturbance of archaeological sites and values affected by the project Undertake investigation in accordance with the Guidelines for Investigating Historical Archaeological Artefacts and Sites, Heritage Victoria 2014 (as amended or updated) and to the satisfaction of the Executive 	<p>The archaeological management plan would include the following:</p> <ul style="list-style-type: none"> description and background history of Archaeological Area statement of significance of Archaeological Area, in accordance with Guidelines for Conducting Historical Archaeological Surveys (Heritage Council of Victoria and Heritage Victoria 2008), Criteria for Assessing Cultural Heritage Significance (Heritage Council of Victoria 2008) and Victoria's 	HH01

Asset / value	Impact	Environmental performance requirements	Proposed mitigation measures	Risk no
		<p>Director, Heritage Victoria</p> <ul style="list-style-type: none"> Develop and implement a protocol for managing previously unidentified historical archaeological sites discovered during project works. 	<p>Framework of Historical Themes (Heritage Council of Victoria 2010)</p> <ul style="list-style-type: none"> research design, including research questions which will be addressed as a result of any archaeological investigations excavation methodology, including method to be used to excavate deposits, record spatial and stratigraphic information and recover artefacts and how these would help address the research design artefact retention policy, including how and why individual artefacts and types of artefact would be retained, discarded or sampled during the archaeological investigation artefact management proposal, including details of how recovered artefacts would be managed in the field and post-excavation (including materials conservation if required). <p>Through the development and implementation of the archaeological management plan, the research potential of the affected site can be realised and this would mitigate the impact of destruction or disturbance.</p>	

Asset / value	Impact	Environmental performance requirements	Proposed mitigation measures	Risk no
<p>La Trobe Street Archaeological Area (VHI H7822-2128 and VHI H7822-2129)</p>	<p>Construction of La Trobe Street entrance to station would require the complete destruction and removal of all three VHI sites</p>	<p>CH 6 To the satisfaction of Heritage Victoria:</p> <ul style="list-style-type: none"> ● Develop archaeological management plans to manage disturbance of archaeological sites and values affected by the project ● Undertake investigation in accordance with the Guidelines for Investigating Historical Archaeological Artefacts and Sites, Heritage Victoria 2014 (as amended or updated) and to the satisfaction of the Executive Director, Heritage Victoria ● Develop and implement a protocol for managing previously unidentified historical archaeological sites discovered during project works. 	<p>The archaeological management plan would include the following:</p> <ul style="list-style-type: none"> ● description and background history of Archaeological Area ● statement of significance of Archaeological Area, in accordance with Guidelines for Conducting Historical Archaeological Surveys (Heritage Council of Victoria and Heritage Victoria 2008), Criteria for Assessing Cultural Heritage Significance (Heritage Council of Victoria 2008) and Victoria's Framework of Historical Themes (Heritage Council of Victoria 2010) ● research design, including research questions which will be addressed as a result of any archaeological investigations ● excavation methodology, including method to be used to excavate deposits, record spatial and stratigraphic information and recover artefacts and how these would help address the research design ● artefact retention policy, including how and why individual artefacts and types of artefact would be retained, discarded or sampled during the archaeological investigation 	<p>HH02</p>

Asset / value	Impact	Environmental performance requirements	Proposed mitigation measures	Risk no
			<ul style="list-style-type: none"> artefact management proposal, including details of how recovered artefacts would be managed in the field and post-excavation (including materials conservation if required). <p>Through the development and implementation of the archaeological management plan, the research potential of the affected site can be realised and this would mitigate the impact of destruction or disturbance.</p>	
<p>22-44 A'Beckett Street Archaeological Area (VHI H7822-2130)</p>	<p>Use as Construction work site may require complete or partial description and removal of the VHI site, depending on subsurface excavation activities required</p>	<p>CH6 To the satisfaction of Heritage Victoria:</p> <ul style="list-style-type: none"> Develop archaeological management plans to manage disturbance of archaeological sites and values affected by the project Undertake investigation in accordance with the Guidelines for Investigating Historical Archaeological Artefacts and Sites, Heritage Victoria 2014 (as amended or updated) and to the satisfaction of the Executive Director, Heritage Victoria Develop and implement a protocol for managing previously unidentified historical archaeological sites discovered during project works. 	<p>The archaeological management plan would include the following:</p> <ul style="list-style-type: none"> description and background history of Archaeological Area statement of significance of Archaeological Area, in accordance with Guidelines for Conducting Historical Archaeological Surveys (Heritage Council of Victoria and Heritage Victoria 2008), Criteria for Assessing Cultural Heritage Significance (Heritage Council of Victoria 2008) and Victoria's Framework of Historical Themes (Heritage Council of Victoria 2010) research design, including research questions which will be addressed as a result of any archaeological investigations 	<p>HH02</p>

Asset / value	Impact	Environmental performance requirements	Proposed mitigation measures	Risk no
			<ul style="list-style-type: none"> ● excavation methodology, including method to be used to excavate deposits, record spatial and stratigraphic information and recover artefacts and how these would help address the research design ● artefact retention policy, including how and why individual artefacts and types of artefact would be retained, discarded or sampled during the archaeological investigation ● artefact management proposal, including details of how recovered artefacts would be managed in the field and post-excavation (including materials conservation if required). <p>Through the development and implementation of the archaeological management plan, the research potential of the affected site can be realised and this would mitigate the impact of destruction or disturbance.</p>	

11.8 Conclusion

There would be few direct impacts on heritage places associated with works in this precinct. There would be a visual impact associated with new above ground structures in proximity to the City Baths, however this could be mitigated through care in detailed design. While a project-wide issue, it is noted that works are proposed in close proximity to numerous heritage buildings in this precinct and risks associated with construction vibration and ground settlement would need to be addressed. The management of historical archaeology is also a key issue in the central city and the development of archaeological management plans would be required, specifying activities such as testing, excavation and monitoring.

12.0 Precinct 6 – CBD South Station

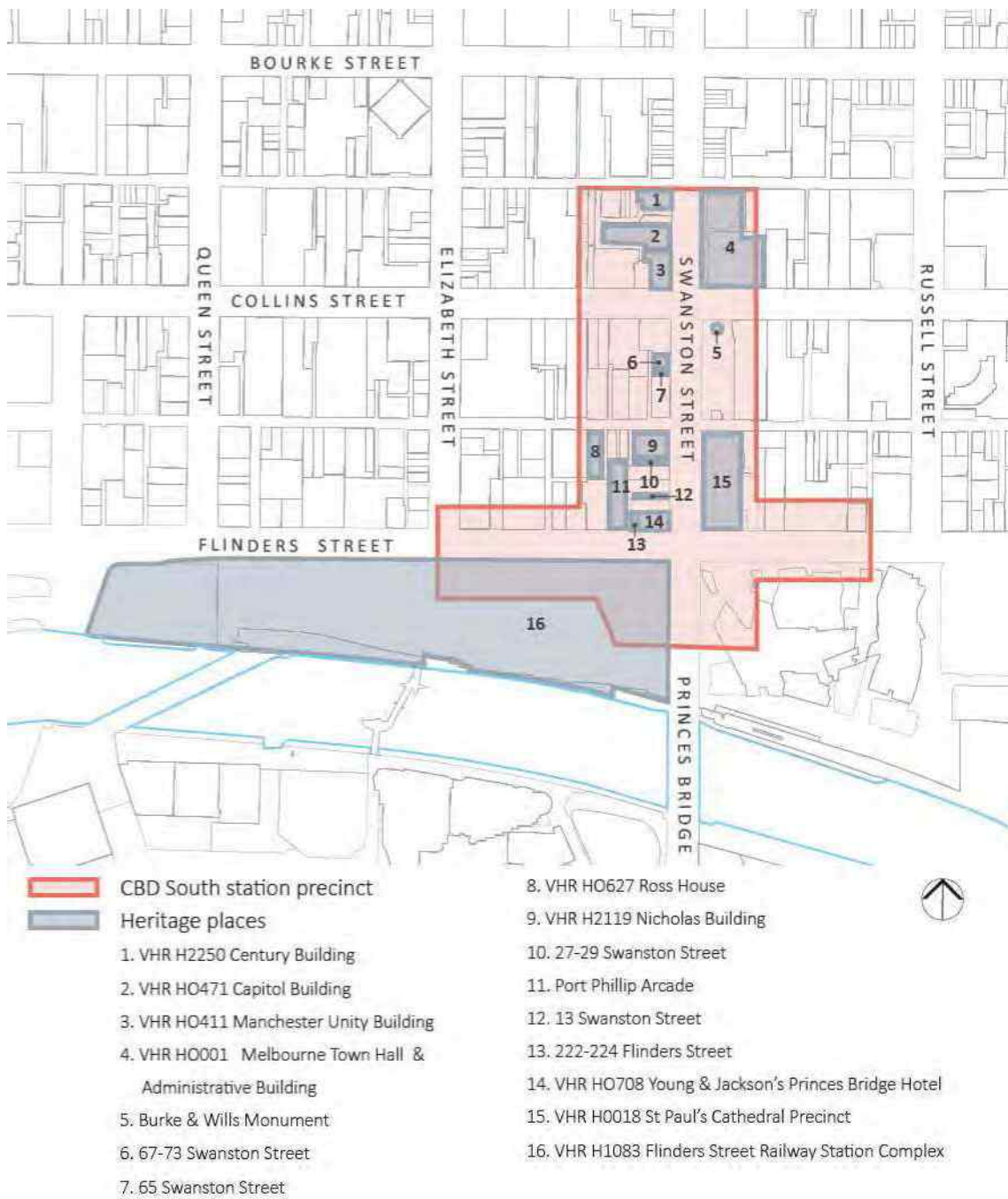


Figure 115 Key heritage places in the CBD South station precinct

12.1 Project Components

12.1.1 Infrastructure

The proposed permanent infrastructure associated with the Concept Design includes:

- station located under Swanston Street, between Collins and Flinders streets
- Collins Street entrance at City Square (potential to include 65 and 67 Swanston Street)
- Flinders Street entrance in the location of the Port Phillip Arcade with an underground connection to Flinders Street Station
- underground connection to Federation Square

12.1.2 Construction

Construction works are within or in close proximity to several VHR sites:

- construction work site, cut and cover excavation for the connection to Flinders Street Station and excavation in Federation Square
- excavated construction work site at the southern end
- cavern construction and mined adits connecting the station box to surrounding sites

12.2 Alternative Design Options

12.2.1 Infrastructure

N/A

12.2.2 Construction

N/A

12.3 Existing Conditions

The CBD South station precinct extends from Little Collins Street in the north to just short of the north bank of the Yarra River in Federation Square. The study area extends in a wide band extending to the east and west of Swanston Street. The south end of Swanston Street is an intensely developed and heavily utilised urban area. The Flinders Street/Swanston Street intersection, Flinders Street Station, Federation Square and the Yarra River are all either within or in close proximity, resulting in high volumes of traffic, including pedestrians, trams and vehicles (Figure 115).

In addition, a number of Melbourne's most significant heritage buildings, dating from the 1850s to the early 21st century, are located within or close to the CBD South station precinct. A number are on Swanston Street and abut or are very close to the station box. These include:

- *Melbourne Town Hall* (VHR H0001, Figure 116). Dating from 1867, the Town Hall has evolved over the late nineteenth and early twentieth century to its current complex. The Town Hall is of architectural, historical, scientific (technical) and aesthetic significance to the State of Victoria. It is the foremost example of the work of prominent architects Reed and Barnes and the civic centre of Melbourne. The building is very close to the north end of the station box under Swanston Street.
- *Manchester Unity Building* (VHR H0411). Located opposite Melbourne Town Hall and between Little Collins and Collins streets the Manchester Unity Building is of architectural, historical, social, aesthetic and technical significance to the State of Victoria. It is notable for its Gothic styling, use of terracotta cladding to the exterior and as a key work of the architect Marcus Barlow. The building abuts the north end of the station box under Swanston Street.
- *Capitol House* (VHR H0471, Figure 117). Designed by the architects Walter Burley Griffin and Marion Mahoney, Capitol House is of architectural, historical, aesthetic and scientific

(technical) significance to the State of Victoria. It is one of the great works of Griffin and Mahoney. It is also of note for combining number of functions in an original manner and as one of the first group of picture palaces in Melbourne. It is distinguished by its reinforced concrete cantilevered awning. The building is a short distance north of the north end of the station box under Swanston Street.

- *Century Building* (VHR H2250, Figure 118). The Century Building is situated on the south-west corner of the intersection of Swanston and Little Collins streets and uses terracotta faience cladding to the exterior of the vertically expressed Streamlined Moderne tower. It was designed by architect Marcus Barlow. The Century Building is of architectural and technological significance to the State of Victoria. The building is a short distance north of the north end of the station box under Swanston Street.
- *The Former Fourth Victoria Building* (VHR H1542) and *Newspaper House Mosaic* (VHR H0447), 241-249. The Former Fourth Victoria Building is of aesthetic, architectural and historical significance with the Napier Waller Mosaic (applied to the facade) being of aesthetic significance to the State of Victoria. See Figure 119. Both are on Collins Street a short distance to the west of works for the project.
- *St Paul's Cathedral Precinct*, 198-202 Flinders Street and 24-40 Swanston Street (VHR H0018). This site is just east of the station box. It is comprised of a number of elements with the study area incorporating the Cathedral itself (B1, Figure 120) and (B2, Figure 121) and Cathedral Offices as well as the fencing and steps contained within L1 identified in the VHR extent of registration. St Paul's Cathedral Precinct is of architectural, historical and scientific (technical) significance at a State level. It is a unique example of the high Victorian Gothic Revival architecture as designed by William Butterfield and would also be considered to have social and spiritual significance.
- *The Nicholas Building*, 31-41 Swanston Street, Melbourne (VHR H2119, Figure 123). This building is on the VHR and is of architectural and historical significance to the State of Victoria. It is an outstanding example of the Commercial Palazzo style, was designed by the prominent architect Harris Norris, and has historical associations with the Nicholas Company and Alfred Nicholas.
- *Ross House*, 247-251 Flinders Lane (VHR H0627). Ross House is at the western boundary of the CBD South precinct and abuts the construction work site for the station. It is the retained portion of an originally larger warehouse building that is designed in the American Romanesque style. It is of architectural and historical significance to the State of Victoria.
- *Young and Jackson's Princes Bridge Hotel*, 1-7 Swanston Street, Melbourne (Figure 124). The hotel is included on the VHR as VHR H0708 and is also an archaeological place. It is of historical significance to the state as one of Victoria's oldest, most important and successful hotels. As an amalgamation of five individual buildings, Young and Jackson's Hotel retains components dating to its establishment in 1853 and redevelopment at that time. Young and Jackson's directly abuts the station box.
- *Flinders Street Railway Station Complex* (VHR H1083, Figure 125), 207-361 Flinders Street. Flinders Street Station was designed by architect James Fawcett and HPC Ashworth of the Railways Department and was completed in 1910. The site of Flinders Street Station has been a focal point of Melbourne's railway network since 1854. The building extends the length of a city block and comprises offices, station facilities and platforms. Its primary presentation, addressing the Swanston and Flinders streets intersection, features a large arch, timetable clocks and a large dome flanked by smaller cupolas. The registered complex also includes the associated platforms, subways and tracks and extends to the east, beneath Swanston Street and into Federation Square. Flinders Street Station is of architectural, historical and social significance to the State of Victoria. Works would be required as part of the project for the connection to Flinders Street Station.



Figure 116 Melbourne Town Hall (VHR H0001), viewed from the opposite corner of Swanston and Collins streets



Figure 117 View south along the west side of Swanston Street: VHR-registered Capitol House (VHR H0471) and Manchester Unity Building (VHR H0411) to its left; graded buildings in HO502 (Block Precinct) on the right



Figure 118 Century Building (VHR H2119) 125-133 Swanston Street



Figure 119 Former Fourth Victoria Building (VHR H1542) at left, with the facade to Newspaper House with the Napier Waller Mosaic (VHR H0447) to the right



Figure 120 St Paul's Cathedral Precinct (VHR H0018), with the cathedral in the foreground, viewed from the south-west

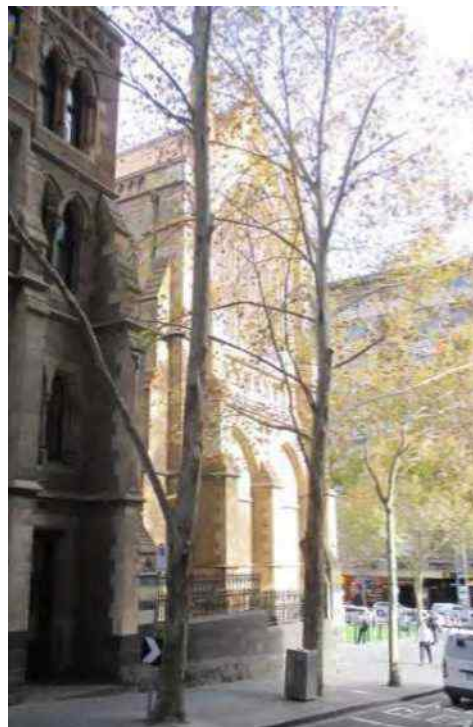


Figure 121 St Paul's Cathedral Precinct (VHR H0018) Cathedral Offices as viewed from Flinders Lane



Figure 122 Ross House (VHR H0627), 247-251 Flinders Lane



Figure 123 Nicholas Building (VHR H2119), 31-41 Swanston Street viewed from the east

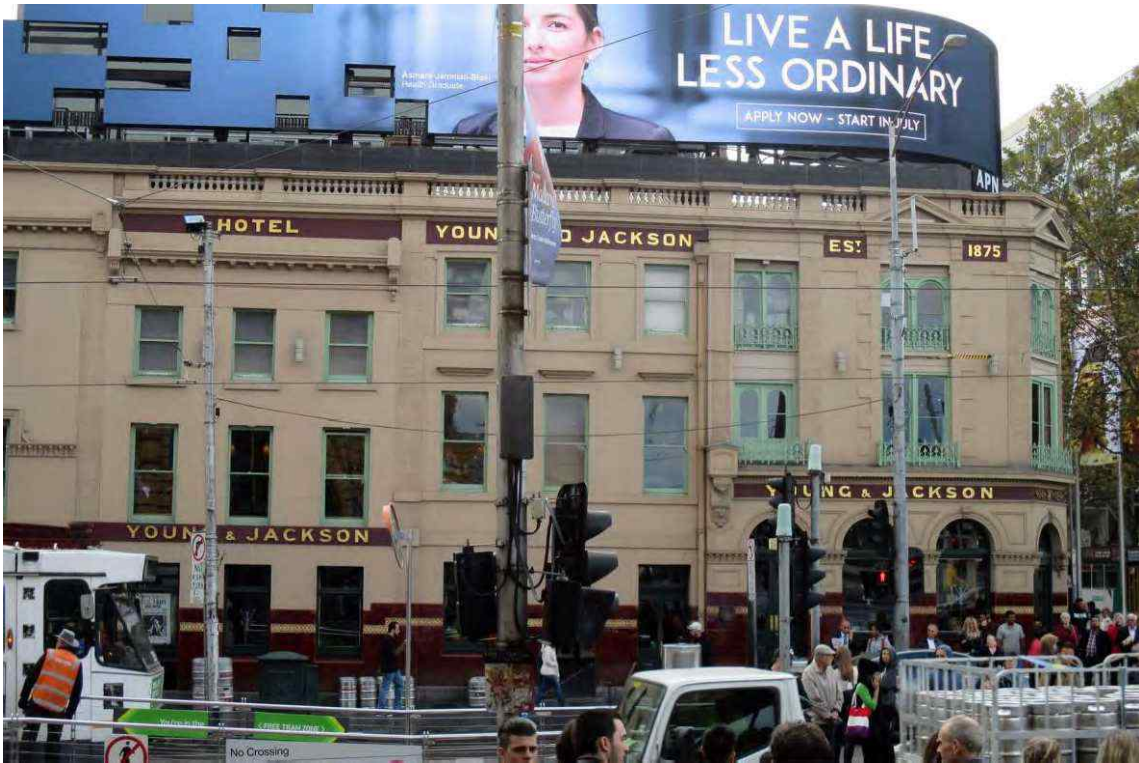


Figure 124 Young and Jackson's Princes Bridge Hotel (VHR H0708) Swanston and Flinders streets as viewed from the south



Figure 125 Flinders Street Railway Station (VHR H1083) viewed from the north-east

The CBD South station precinct also extends into four HO precincts (refer Figure 126) and these include various buildings and sites that have been graded in the City of Melbourne’s heritage studies.

The significance of the HO precincts is summarised as follows:

- *HO502 The Block Precinct:* This precinct contains many significant and architecturally impressive buildings dating to Melbourne’s boom period of the late nineteenth century and early twentieth century. The precinct includes a number of shopping arcades, the more significant of which comprise the eponymous The Block, as well as Block Court, Manchester Unity Arcade and Century Arcade which relate to key buildings within the precinct. Historically, the character of the precinct is strongly related to its retail use.
- *HO504 Collins East Precinct:* Identified as Melbourne’s leading street, Collins Street historically has been associated with Melbourne’s professional and artistic elite. Within the precinct are a number of significant buildings that come together to form a series of prominent streetscapes. Important attributes include the consistency in height, scale, character and appearance of the nineteenth and early twentieth century buildings, and the boulevard quality of Collins Street.
- *HO505 Flinders Gate Precinct:* The Flinders Gate Precinct contains a number of key buildings at the southern edge of the CBD, including St Paul’s Cathedral, Flinders Street Station and Young and Jackson’s Princes Bridge Hotel. The precinct is significant as the historic gateway to the central city from the south and it includes many major nineteenth and twentieth century buildings.
- *HO506 Flinders Lane Precinct:* The significance of the Flinders Lane Precinct is based upon the scale and quality of the warehouse and office buildings constructed in Flinders Lane in the nineteenth century and adapted for clothing manufacturing use in the early part of the twentieth century. These buildings demonstrate the concentration of ‘rag trade’ activities in Flinders Lane.

While noting its strong heritage character, the CBD South station precinct also includes major post-WWII redevelopments including Federation Square (2002), the City Square (1967-68, subsequently truncated and remodelled) and the adjacent Westin Melbourne Hotel (199-205 Collins Street and 202-206 Flinders Lane), a seven-storey hotel and apartment complex completed in 2000. All are ungraded.

12.3.1 Statutory heritage controls and listings

Statutory heritage controls in the CBD South station precinct are shown in the mapping at Map 8 of Appendices C and E and Maps 10, 11 and 12 of Appendix D.

12.3.1.1 Environment Protection and Biodiversity Conservation Act 1999

There are no sites subject to the provisions of the EPBC Act within the CBD South station precinct.

All NHL and CHL places within a one kilometre buffer of the proposed project boundary are listed in Appendix F.

12.3.1.2 Heritage Act 1995

There are 13 VHR registered places or objects within the CBD South station precinct (refer to Table 57). Places which are in close proximity and are the subject of impact assessment in the following section are shaded.

Table 57 VHR places in CBD South station precinct

VHR number	HO number	Place	Address
VHR H0001	HO746	Melbourne Town Hall and Administrative Buildings	90-130 Swanston Street, Melbourne
VHR H0471	HO747	Capitol Building	109-117 Swanston Street, Melbourne
VHR H0411	HO590	Manchester Unity Building	91-107 Swanston Street, Melbourne
VHR H2250	HO748	Century Building	125-133 Swanston Street, Melbourne
VHR H1542	HO591	Former Fourth Victoria Building	241-245 Collins Street, Melbourne
VHR H0447	HO592	Newspaper House Mosaic	247-249 Collins Street, Melbourne
VHR H0018	HO655	St Paul's Cathedral Precinct	24-40 Swanston Street and 198-202 Flinders Street, Melbourne
VHR H2119	HO745	Nicholas Building	31-41 Swanston Street, Melbourne
VHR H0708	HO744	Young and Jackson's Princes Bridge Hotel	1-7 Swanston Street, Melbourne
VHR H0627	HO642	Ross House	247-251 Flinders Lane, Melbourne
VHR H1083	HO649	Flinders Street Railway Station Complex	207-361 Flinders Street, Melbourne (refer note following)
VHR H2094	HO938	Hosies Hotel Mural	1-5 Elizabeth Street

VHR number	HO number	Place	Address
VHR H0438	H0953	(Forum) Former State Theatre	150-162 Flinders Street

There are 45 VHI sites within the CBD South station precinct (refer to Table 58). Shaded places are the subject of impact assessment in the following section.

Table 58 VHI places in the CBD South station precinct

VHI number	Place	Address
H7822-1720	Vesta House	Carson Place
H7822-1721	254 Collins Street	
H7822-1722	256 Collins Street	
H7822-1733	267-271 Little Collins Street	
H7822-1734	Presgrave Building	273-279 Little Collins Street
H7822-1735	Halladale House	281-283 Little Collins Street
H7822-1736	285 Little Collins Street	
H7822-1741	Capitol House	109-117 Swanston Street
H7822-1742	119-121 Swanston Street	
H7822-1743	123 Swanston Street	
H7822-1752	Victoria Private Hotel	223-231 Little Collins Street
H7822-1800	239 Collins Street	
H7822-1801	241-245 Collins Street	
H7822-1802	Newspaper House	247-249 Collins Street
H7822-1806	226-232 Flinders Lane	
H7822-1807	234-236 Flinders Lane	
H7822-1808	238-244 Flinders Lane	
H7822-1811	65 Swanston Street	
H7822-1812	67-73 Swanston Street	
H7822-1891	237-239 Flinders Lane	
H7822-1892	241-243 Flinders Lane	
H7822-1893	Ross House	247-251 Flinders Lane
H7822-1894	253-265 Flinders Lane	
H7822-1898	Young & Jackson's Princes Bridge Hotel	210-220 Flinders Street
H7822-1899	224-226 Flinders Street	
H7822-1900	244-248 Flinders Street	
H7822-1904	9-11 Swanston Street	
H7822-1905	13 Swanston Street	

VHI number	Place	Address
H7822-1906	15-19 Swanston Street	
H7822-1907	21-25 Swanston Street	
H7822-1908	27-41 Swanston Street (also 221-235 Flinders Lane)	
H7822-1960	Collins Street	Collins Street
H7822-1966	Swanston Street	Swanston Street
H7822-1968	Little Collins Street	Little Collins Street
H7822-1753	Council Chambers	233-247 Little Collins Street
H7822-1756	Town Hall	90-130 Swanston Street
H7822-1916	Chapter House St Paul's	197-203 Flinders Lane
H7822-1920	St Paul's Cathedral	200-208 Flinders Street
H7822-1959	Flinders Street (Near Batman's Hill To Exhibition Street)	Flinders Street
H7822-1965	Elizabeth Street	Elizabeth Street
H7822-1901	250-254 Flinders Street	250-254 Flinders Street and 6-20 Degraves Street
H7822-1902	256-268 Flinders Street	256-268 Flinders Street
H7822-1917	150-162 Flinders Street	150-162 Flinders Street
H7822-1918	164-170 Flinders Street	164-170 Flinders Street
H7822-1919	Gas & Fuel Corporation	194-196 Flinders Street

12.3.1.3 Planning and Environment Act 1987

The VHR sites are reflected in site-specific HOs in the Melbourne Planning Scheme (refer to Table 57). Those that are which are in close proximity and are considered to have the potential to be affected by the project are shaded.

Individual HO places and HO precincts are included in the Schedule to the HO of the Melbourne Planning Scheme (refer to Table 60). Shaded places are the subject of impact assessment in the following section.

Table 59 Individual heritage places and HO precincts, excluding VHR sites, within the CBD South station precinct

HO number	Place	Address
HO593	250-252 Collins Street, Melbourne	250-252 Collins Street, Melbourne
HO641	234 Flinders Lane, Melbourne	234 Flinders Lane, Melbourne
HO643	253-265 Flinders Lane, Melbourne	253-265 Flinders Lane, Melbourne
HO702	281-283 Little Collins Street, Melbourne	281-283 Little Collins Street, Melbourne
HO656	Former Empire Arcade	256-268 Flinders Street, Melbourne
HO654		194-169 Flinders Street
HO502	The Block Precinct	
HO504	Collins East Precinct	
HO505	Flinders Gate Precinct	
HO506	Flinders Lane Precinct	
HO509	Post Office Precinct	

The arrangement of precinct-based HOs is shown at Figure 126. Buildings within these HO precincts have been graded by the City of Melbourne. Gradings for individual buildings are listed in Appendix F and referenced as relevant in the impact assessment which follows.



Figure 126 Precinct-based HOs at the CBD South station precinct
Source: Melbourne Planning Scheme, Planning Schemes Online

12.3.2 Potential additional heritage places

Consideration was given to the identification of additional heritage places within the precinct.

One site was identified; this was the Burke and Wills Monument (Figure 127) on the north-east corner of Collins Street and Swanston Street. Designed and created by sculptor Charles Summers (1825-1878), the monument was unveiled on 21 April 1865. It was originally located on the corner of Collins and Russell Streets, but increasing traffic and the construction of tram tracks resulted in its relocation in 1886 to a reserve in Spring Street, opposite Parliament House. It was moved to the Carlton Gardens in 1973 when the underground railway loop was under construction, and then to the corner of Swanston and Collins Streets in 1979. It was restored and moved to its present location in 1993 (Downer, Burke and Wills Monument, *Encyclopaedia of Melbourne* online, 2008). The monument is considered to have the potential to be of a level of aesthetic and historical significance that would warrant inclusion as an object in the VHR. The ultimately ill-fated Victorian Exploring Expedition of 1860-61 was of great public interest and the Burke and Wills monument is said to have been Melbourne's first public monument (Downer, Burke and Wills Monument, *Encyclopaedia of Melbourne* online, 2008). The work was commissioned by the Parliament of Victoria and was unveiled by the Victorian Governor. The ceremony was attended by the sole survivor of the expedition, John King (The Age, 22 April 1865: 6). It is considered to be amongst the sculptor Charles Summers' finest achievements (Eastwood: *Australian Dictionary of Biography* online, 1976).



Figure 127 Burke and Wills Monument, Swanston Street



Figure 128 City Square, viewed from the north-west

12.3.3 Historical archaeology

Previous predictive archaeological investigations of the central city in the *Melbourne Central Activities District: Archaeological Management Plan* (Fels et al., 1992) are reflected in the VHI sites in this location and show the CBD South station precinct to be an area of very high potential for historical archaeology. There are 34 VHI sites within the CBD South station precinct.

In addition to the identified sites, the Fels Archaeological Management Plan references the potential presence of early service infrastructure in the central city and recommended further work be completed on the identification of related structures and features. Extensive services infrastructure is known to exist below Swanston Street including a telecommunications tunnel, and this would require investigation. Of relevance, it is noted that recent tramways works in Collins Street uncovered a late nineteenth/early twentieth century brick sewer pit.

Of the 34 VHI sites in the precinct, only eight would be subject to project works as they are situated within the construction work site on the corner of Swanston Street and Flinders Street, the potentially included site at 65-73 Swanston Street and within the roadway reserve of Flinders Street. The eight sites are identified for their archaeological potential in Fels et al. (1992), and their history from various documentary sources (presented in Table 60).

Table 60 Summary of archaeological potential for individual sites, CBD south station precinct

VHI no	Address	Archaeological potential and history
H7822-1904	9-11 Swanston Street	<p>Potential (area).</p> <p>Buildings identified within this site on 1839 plan, 1864 directory and rate book (ironmongers, large stone store, 2 floors), 1866 isometric plan (two storey building), 1873 directory and rate book (ironmongers, stone store, 3 floors), 1875 and 1877 Plans (three storey building on street front and single storey building at rear, Whitney, Chambers and Co Ironmongers), 1885 directory (architect, wholesale grocers and wine and spirit merchant), 1888 plan (two storey building on street front, two storey and one storey buildings at rear, Warehouseman's Trading Co), 1890 directory and rate book (architect, contractors, trading company, brick office, brick shop), 1901 directory (dentist, office, draper), 1905 plan (two x two storey buildings), 1910 and 1925 plans (two storey building on street front, one storey and three storey buildings at rear, no basements, JJ Foster Dentist), 1948 plan (two storey building across whole allotment), current building (three storeys).</p>
H7822-1905	13 Swanston Street	<p>Remnant Structure, Potential (area).</p> <p>Buildings identified within this site on 1839 plan (building), 1864 directory and rate book (wine, spirit and produce merchant, Freemasons Hotel, stone store, 2 floors), 1866 isometric plan (two storey building), 1873 directory and rate book (wine and spirit merchants, fish and oyster saloon, architects, surveyors, Freemasons Hotel, stone store with 2 floors and cellars, brick hotel), 1875 plan (three storey building on street front, three storey building with side yard, and one storey building at rear, Freemasons Hotel), 1877 plan (three storey building), 1885 directory (grocers, wine and spirit merchants, Gippsland Hotel), 1888 plan (two storey building on street front, three storey, one storey and two storey building at rear, Gippsland Hotel), 1890 directory (Gippsland Hotel), 1895 plan (Gippsland Hotel), 1905 plan (two storey building), 1901 directory (Gippsland Hotel), 1910 plan (two storey building, with partial basement), 1925 plan (two storey building with partial basement, Bates Sweet Shop), 1948 plan (two storey building with partial basement).</p>
H7822-1906	15-19 Swanston Street	<p>Potential (area).</p> <p>Buildings identified within this site on 1839 plan (building), 1864 directory and rate books (wholesale grocers, land agents, solicitors, brick store with offices over), 1866 isometric plan (two storey buildings), 1873 directory (solicitor and commissioner), 1875 plan (two x two storey buildings on street front, combination of three x two storey, and one x one storey buildings at rear, N McLean & Sons, Pownceby Books), 1877 plan (two x three storey buildings), 1885 directory (printers, pork butcher), 1888 plan (two x two storey buildings on street front, one x one storey building, and one x two storey building at rear, N McLean and Sons Merchants, H Hearne Pork Butcher), 1890 directory and rate books (one building vacant, grocers, brick shop and offices, brick warehouse), 1895 plan (part basements), 1901 directory (printer and publisher, tea and coffee merchants, wholesale grocers), 1910 plan (two x two storey buildings across allotment), 1925 plan (two x two storey buildings across allotment, Lyons Continental Café, Hearne Butcher), 1948 plan (two x two storey buildings with one three storey section).</p>

VHI no	Address	Archaeological potential and history
H7822-1907	21-25 Swanston Street	<p>Potential (area).</p> <p>Buildings identified within this site on 1857 plan (building), 1864 directory and rate books (wholesale grocer, Bible and Tract Societies, large store and offices), 1866 isometric plan (three storey building), 1873 directory (wholesale grocers, wine and spirit merchants), 1875 plan (two x two storey buildings at street front, two x one storey buildings and yards at rear, Lyell and Brown Grocers, Book Depot), 1885 directory (wholesale grocers, wine spirit and provision merchants), 1888 plan (two x two storey buildings on street front, three one storey buildings at rear, RG Wilson and Co, Religious Tract Society), 1890 directory and rate books (Religious Tract Society, Queen Building Society, whole sale grocers, brick shop, stone warehouse), 1895 plan (building with small shed at side rear), 1901 directory (fruiterers, hat shop, wholesale grocers, pork butcher), 1910 plan (two x two storey buildings at street front, two x one storey buildings at rear), 1925 plan (two storey building at street front, one storey building at rear, Criterion Cafe), 1948 plan (two storey buildings at street front, one storey across rest of site, partial basement).</p>
H7822-1908	27-41 Swanston Street / 221-235 Flinders Lane (part – 27 Swanston Street only)	<p>Potential, partially disturbed.</p> <p>Buildings identified within this site (27 Swanston Street only) on 1857 plan (building), 1864 directory and rate books (Leeds Arms Hotel, brick house, late Beehive Hotel), 1866 isometric plan (three storey building), 1874 directory and rate books (Religious Tract Society of Victoria, Fishmongers Arms Hotel), 1875 plan (three storey building on street front, two x one storey buildings in middle, and three storey building at rear, Stewart's Hotel), 1885 directory (glass and china importer, Bell Hotel, Religious Tract Society), 1888 plan (one x three storey building on street front, three x one storey buildings at rear), 1890 directory and rate books (MA Alexander tobacconist, four vacant floors, brick shop and offices), 1895 plan (one building across entire allotment with cellar under whole of building), 1901 directory (tobacconist, auctioneer and estate agent, importer, manufacturers agents), 1910 plan (five storey building with basement), 1925 photograph (MA Alexander building, five storeys), 1925 plan (five storey building, Alexander Buildings), 1939 (Alexander Building demolished), 1948 plan (three storey building with basement).</p>
H7822-1959	Flinders Street (Near Batman's Hill to Exhibition Street) (part)	<p>Potential (area).</p> <p>Early maps indicate:</p> <p>Presence of Pre Grid settlement within the (later) road corridor</p> <p>Batman's Privy (west of Spencer Street)</p> <p>Surveyors' tents</p> <p>Armstrong house/yards</p> <p>Additional potential:</p> <p>For significant services (hydraulics, water etc.); known to include 1854 water pipe from Eastern Reservoir</p> <p>Potential for other (undocumented) peripheral structures (privies, pits etc.)</p>

VHI no	Address	Archaeological potential and history
H7822-1811	65 Swanston Street	Buildings identified within this site in 1864 directory and rate books (two brick shops and eight rooms), 1866 isometric plan (two storey building), 1873 directory and rate books (plumber and exporter), 1875 plan (two storey building), 1885 directory (café), 1890 directory and rate books (café/restaurant, brick building), 1901 directory (confectioner), 1904 advertisement (construction of three storey brick shops across 65 and 67-73), 1910 plan (three storey buildings with basement level), 1920 directory and rate books (café, brick building), 1950 newspaper (adjoining 67-73 damaged in explosion and demolished), current building (three storey with basement level)
H7822-1812	67-73 Swanston Street	Buildings identified within this site in 1864 directory and rate books (commercial chambers including solicitors, tailor, engravers, architect, house agent, and wine and spirit merchant, druggist, wholesale provision merchants, fruiterers), 1866 isometric plan (three storey buildings), 1873 directory and rate books (commercial chambers including book binders, engraver and import/export company, and hotel, warehousemen and importers, alcohol merchants), 1875 plan (three storey buildings), 1885 directory (solicitor, architects, surveyors, estate agents, hotel, boot importer, piano and organ importer), 1890 directory and rate books (brick shops, hotel and offices, boot importer, optician, cigarette manufacturer, land agents, billiard saloon, hotel), 1901 directory (bootmaker, oyster saloon and dining rooms, land agents, hotel), 1904 advertisement (construction of three storey brick shops across 65 and 67-73), 1910 plan (three storey buildings with basement level), 1920 directory and rate books (brick shops, brick hotel, boot manufacturers, tailor, hotel), 1950 newspaper (building damaged in explosion and demolished, adjoining no 65 retained), 1950s plans (eight storey building with two basements and a sub-basement), current building (eight storeys with basements).

12.4 Key Issues

The key issues associated with the Concept Design are identified in the table below.

Table 61 Key issues associated with the Concept Design

Concept Design	Issue
Infrastructure	
Located under Swanston Street, between Collins and Flinders Streets.	
Collins Street entrance at City Square (may include 65 and 67 Swanston Street)	Impact of new development within the HO precinct HO505 (Flinders Gate Precinct)
Flinders Street entrance including Port Phillip Arcade with underground connection to Flinders Street station	Physical and visual impact on the VHR-registered Flinders Street Station Alterations to existing heritage buildings as a result of demolition and development:

Concept Design	Issue
(Option 2).	<p>Nicholas Building (make good existing connections to 27-29 Swanston Street)</p> <p>Potential for the north wall of Young and Jackson’s Princes Bridge Hotel to be exposed as part of the station design.</p> <p>Use of the warehouse at 222-224 Flinders Street for pedestrian connection</p> <p>Impact of new development within the HO precinct HO505 (Flinders Gate Precinct) in close proximity to graded and VHR-registered buildings</p> <p>Destruction of 5 VHI sites in Swanston Street (referred to here as the Swanston Street Archaeological Area) :</p> <ul style="list-style-type: none"> ● H7822-1904 9-11 Swanston Street ● H7822-1905 13 Swanston Street ● H7822-1906 15-19 Swanston Street ● H7822-1907 21-25 Swanston Street ● H7822-1908 27-41 Swanston Street / 221-235 Flinders Lane (part – 27 Swanston Street only) <p>Damage to one additional VHI site: H7822-1959 – Flinders Street (Near Batman’s Hill to Exhibition Street)</p>
Underground entrance connection to Federation Square.	<p>Possible physical impact on the VHR-registered Flinders Street Station</p> <p>Adits located below St Paul’s Cathedral</p>
Federation Square entry	<p>Potential visual impact on views to St Paul’s Cathedral from Federation Square</p>
Construction	
	<p>Relocation of Burke and Wills Statue, currently within the HO precinct HO505 (Flinders Gate Precinct)</p>
	<p>Demolition of graded buildings within the HO precinct HO505 (Flinders Gate Precinct):</p> <ul style="list-style-type: none"> ● 13 Swanston Street (E graded) ● 27-29 Swanston Street (D graded)

Concept Design	Issue
	<ul style="list-style-type: none"> ● 65 Swanston Street (D graded) ● 67-73 Swanston Street (E graded) ● 228-236 Flinders Street, Port Phillip Arcade (D graded)
	<p>Demolition of ungraded buildings within the HO precinct HO505 (Flinders Gate Precinct):</p> <ul style="list-style-type: none"> ● 15-19 Swanston Street ● 21-25 Swanston Street
	<p>Excavation of sites and establishment of major construction work sites directly abutting VHR-registered buildings :</p> <ul style="list-style-type: none"> ● Young and Jackson’s Princes Bridge Hotel (VHR H0708) ● Nicholas Building (VHR H2119) ● Flinders Street Station Complex (VHR H1083) ● Ross House (VHR H0627)
	<p>Excavation works and establishment of major construction work sites directly abutting graded buildings within HO precincts:</p> <ul style="list-style-type: none"> ● 222-224 Flinders Street - former warehouse, Dangerfield building (C graded within the Flinders Gate Precinct HO505) ● 244-248 Flinders Street (D graded within the Flinders Gate Precinct HO505)
	<p>Mined tunnels and adits in proximity to heritage buildings</p>

12.5 Benefits and Opportunities

The benefits and opportunities associated with the Concept Design are listed below:

Table 62 Benefits and opportunities associated with the Concept Design

Concept design	Benefits	Opportunities
Collins Street entrance at City Square	While it may involve the relocation of Burke and Wills Monument, the Collins Street entrance in the City Square avoids impacts on key heritage buildings in this location (note that this does not apply if 65-67 Swanston Street is included)	-
Potential to provide pedestrian access through the original carriageway of the former warehouse at 222-224 Flinders Street	This potential access point works within the constraints of the existing fabric. It would reveal an uncommon feature of the building and allow for an appreciation of this.	There may be an opportunity to reveal the rear wall of the building and undertake active conservation works as part of the project.

12.6 Impact Assessment

The following draft EES evaluation objectives and assessment criteria (and indicators where relevant) are relevant to this assessment.

Draft EES evaluation objectives	Assessment criteria
Cultural Heritage – To avoid or minimise adverse effects on ... historic cultural heritage values	Avoid or minimise impacts on cultural heritage values and places

The project is generally consistent with the draft EES evaluation objective to avoid or minimise impacts on post-settlement cultural heritage values and places as:

- The works to Flinders Street Station, if carefully designed, would result in limited loss of significant fabric and would have only a modest impact on the presentation of the station
- The demolition of low graded buildings within the Flinders Gate Precinct (HO505) would not threaten the core heritage values of the heritage precinct

If carefully designed to respond to their heritage context, new above ground structures associated with the CBD South station would not have an adverse impact on heritage buildings and the Flinders Gate Precinct.

Historical archaeological impacts can be mitigated by the realisation of the research potential of the affected sites through appropriate management techniques.

12.6.1 Flinders Street Railway Station Complex (VHR H1083)

12.6.1.1 Statutory heritage controls

The statutory heritage controls that apply are as follows:

Legislation	Relevant VHR/HO number
Heritage Act	VHR H1083
Planning and Environment Act	HO649 (Melbourne Planning Scheme) Also within HO505 Flinders Gate Precinct

12.6.1.2 *Heritage considerations*

The Flinders Street Railway Station Complex is of historical, aesthetic, architectural, technical and social significance to the State of Victoria.

Following is a brief summary of the values as identified in the VHR statement of significance (not all details in the statement are referenced):

Historical significance:

- Centre of the suburban railway system, major landmark building in both Melbourne and Victoria
- Campbell Arcade (Degraeves Street Subway) was the first major public infrastructure in the city after WWII
- Intactness of its layout

Architectural and aesthetic significance:

- One of the most important public buildings in Victoria and an excellent example of a great railway building of the early twentieth century
- As an eclectic design incorporating a range of various stylistic sources
- For its high standard of detailing (pressed metalwork, cast and wrought iron, copper domes, leadlight and stained glass and wall tiles).

Technical significance:

- Extensive use of four types of decorative and functional pressed metal work, rare example of pressed metal in large scale external wall cladding, structural use through Trägerwellblech system for floor and ceiling construction, use of copper for the roof domes, and extensive interior decorative use
- Early surviving signal bridges and overhead tensioning and switching structures

Social significance:

- One of the best known and most heavily used public spaces in Melbourne
- Has a treasured place in the consciousness of many in the city, a popular meeting place (under the clocks)
- A public building designed to offer a range of activities and functions to the general public aside from its function as a railway station

The VHR report also includes a range of exemptions and a detailed permit policy, which specifies levels of significance (primary significance and contributory significance and no heritage significance) for various areas/elements of the station complex. The policy also includes a series of General Policies, Maintenance Policies, Alteration and Adaptation Policies, Environmental Performance Policies, Hazardous Materials Policies, Use and Building Programme Policies and Interpretation Policies.

The relevant CMP for the place is Flinders Street Station Conservation Management Plan, Melbourne (Lovell Chen, 2012).

12.6.1.3 *Impact assessment*

Proposed works included in the Concept Design include the construction of an underground connection to Flinders Street Station accessing the public concourse at level 1. Within the station building, it is anticipated works would include the demolition of two shopfronts, internal wall structure and interiors of retail premises to Flinders Street (currently occupied by Scissors and Cignall, Figure 129); demolition of floors and ceilings to these spaces and floors and internal walls to level one above to enable escalator

access to the concourse. At level 1 the escalators are to be located within the area currently occupied by station operations and it is likely that alteration to the fabric in this space would also be required.

As noted the VHR citation for the heritage place attributes a level of significance to individual spaces/fitting and finishes and external components. All spaces affected by permanent infrastructure are identified as being of primary significance in the VHR citation.

The CMP goes into more detail in terms of individual spaces. It notes that the affected shopfronts are reconstructed and identifies the interiors to these particular shops and basements to be of little or no significance. This is with the exception that the CMP does identify the pressed metal ceilings as primary significant fabric.

While the CMP notes the external fabric of the operations area/modern toilets to the concourse to be of primary significance, the interior space is of contributory significance.

New infrastructure in place at the completion of the project would include two reconstructed shopfronts at ground level to Flinders Street, new escalators and pedestrian links within the station building.

It is understood that no works are proposed to the external structure and fabric of the building; specifically the stone plinth and piers and masonry structure with render dressings to the external facade. It is not clear whether the awning canopy would be affected by the works.

The majority of the works occur within spaces defined as being of little or no significance in the CMP. This includes the basements and shop interiors to the ground level retail premises. In terms of fabric, the shop interiors retain original pressed metal linings to ceilings and stair soffit (the latter to the Scissors tenancy) but with otherwise largely modern fit-outs. Adverse impacts arising from works to the shops and reconstruction of the shopfronts are considered to be limited, with the loss of some significant internal fabric (pressed metal ceilings) and only relatively minor change to the external fabric of the heritage place. Accepting this, great care would need to be taken in detailed design to maintain the traditional presentation of the heritage building. Visibility/awareness of the escalators (carrying patrons) rising within the building should be limited as far as is possible in views to the building, including at night. These would be an atypical element that is at odds with the planning and presentation of the building. In terms of a design response, the replacement shopfronts should be positioned on the alignment of the original. It is recommended that new glazing be divided into multiple panels reflecting the typical arrangement of the original shopfront glazing and plinth to maintain a consistent presentation of the building at the pedestrian interface.

First floor alterations to accommodate the proposed escalators are extensive and would impact on the operations area/modern amenities located to the west of the Booking Hall. Change is also proposed to the first floor rooms (office above the retail tenancies) and corridor to the south at this level. It is anticipated that alterations would involve the removal of internal walls (full or partial demolition), floors (partial demolition to accommodate the connection of the escalator to the level 1 concourse). It is assumed that the modern amenities would be relocated.

As noted, the internal corridor and external walls (Figure 130) to the operation area is identified as being of primary significance in the VHR citation and CMP. The operations area wall was originally an external wall and part of the station envelope, altered as part of the concourse refurbishment works to become an internal wall. The interior of this area is of contributory significance reflecting previous alteration of fabric and presentation. While altered with the application of a fire-retardant coating, the Trägerwellblech ceiling in the operations area is original. While of primary significance, the extent of corridor that would be affected by the works is limited to its eastern end and it is considered that the heritage impacts of changes in this area would be limited. The two affected offices are of contributory significance as defined in the CMP reflecting the alteration of these spaces, though the eastern office retains its pressed metal ceiling. Alterations in this area should not result in a change to the external presentation of the building, and there should be no change to the external windows.

Minimising the impact on heritage fabric can be achieved through careful design, with consideration to the location of new infrastructure as related to heritage fabric and arrangement of original walls, careful design of new openings to internal walls and floors where required to limit the extent of loss of heritage fabric (particularly the external wall to the operations area). In this area, it is recommended that new openings be made within the existing wall as opposed to the wholesale removal of fabric. Careful planning and design of alterations to work within the existing layout of the station is preferable.

Considering the values for which the place is included in the VHR, the statement of cultural heritage significance for the station complex notes that it is of architectural, historical and social significance at a state level.

Architecturally the Flinders Street Railway Station complex is of significance as 'one of the most important and eclectic public buildings in Victoria and as an excellent example of a twentieth century railway building'. While altered in a number of areas, the station still stands as a relatively intact example of its type in a national context. The station complex is also of aesthetic/architectural significance for its decoration including the extensive use of distinctive pressed metal finishes.

Having regard to these values, and recognising the scale of the intervention, the impact on the presentation of the railway station and its significant fabric, and the aesthetic/architectural qualities would be modest. Assuming care in detailed design, the change to the shopfronts on Flinders Street is a minor change and would have very little impact on the presentation of the station. As noted above, visibility/awareness of the escalators (carrying patrons) rising within the building should be limited as far as is possible.

Internally the works would result in the loss of some original fabric of significance, including the removal of pressed metal ceiling fabric to the first floor passageway and to the interior of the two shops. While the preference is always for retention of this detail, in the context of the extent of decorative finishes found at Flinders Street, the impact is not a major one. Overall, the impact on the architectural values of the place through the loss of original fabric is limited. Significantly, while the detail of some of the spaces would be lost, the overall planning and layout of the station building and complex as a whole would remain clear.

In relation to historical significance, in the case of Flinders Street Station, this derives from the station's position at the heart of Melbourne's suburban railway network, its historical associations with the Victorian Railway Department and its status as a landmark building within the city and state. None of these associations would change and the station complex would continue its traditional role within an expanded suburban rail network. Public appreciation of the history and operation of the station over a century would be undiminished.

The VHR statement also identifies the station complex as being of social significance at a state level, acknowledging the continued attachment that Melburnians and Victorians feel for the place. Flinders Street Railway Station is recognisable as a cultural icon for Melbourne and a major physical landmark in the city, and is a time-honoured meeting place. None of these qualities would be in any way diminished by the works and the intervention in support of the continuing/expanded rail function positively supports their value.

In summary, the key impacts on the presentation and significant fabric of the railway station are limited to a small number of locations. For the most part, proposed works occur in areas assessed in the CMP as of little or no significance, such as the basements, or in areas of contributory value, with only minor changes to fabric of primary significance.

In terms of the scale of the place and the nature of the proposed changes, there would be little or no impact on the cultural significance of the heritage place. Importantly, in accordance with the CMP policies, the works are directed at supporting the ongoing role of the station as the heart of Melbourne's suburban railway network and its status as a commuter hub would be confirmed and enhanced as a result.



Figure 129 Shopfronts to Flinders Street Railway Station proposed for replacement



Figure 130 Concourse area to be linked to escalators: note original external wall to the right of image

12.6.2 Young and Jackson's Princes Bridge Hotel (VHR H0708)

12.6.2.1 Statutory heritage controls

The statutory heritage controls that apply are as follows:

Legislation	Relevant VHR/HO Number
Heritage Act	VHR H0708
Planning and Environment Act	HO744 (Melbourne Planning Scheme) Also within HO505 Flinders Gate Precinct

12.6.2.2 Heritage considerations

Young and Jackson's Princes Bridge Hotel was constructed in the 1850s as a series of bluestone warehouses and subsequently remodelled as a hotel and the various warehouses incorporated into the complex.

It is of historical and social significance to the State of Victoria.

The VHR statement of significance identifies the following aspects of significance:

- one of Melbourne's oldest, most important and successful nineteenth century hotels
- a landmark on this key corner site facing Princes Bridge and Flinders Street Railway Station
- commercial signage from the 1920s reinforcing landmark status
- association with the painting Chloe by Jules Lefebvre since 1908
- for its associations with brewers and publicans
- as one of the most famous pubs in Australia and an international symbol of Australia, a destination for tourists and others.

A CMP for the building was prepared in 1999 by Allom Lovell & Associates (Allom Lovell & Associates, 1999).

12.6.2.3 Impact assessment

No works are proposed directly to Young and Jackson's as part of the Concept Design, however works are proposed directly adjacent on the north side, where extensive excavation would occur and where the new station building would directly abut the heritage building.

Given this, there is a risk of damage to the building as part of the construction works. This would need to be assessed and managed including through a structural assessment and monitoring during and after the works.

There is also the potential for the new building constructed to the north of the hotel to have an adverse impact on the presentation of the building. The scale of new build as identified in the Concept Design seems broadly appropriate however this is a very sensitive location and care would need to be taken in detailed design to ensure new development does not overwhelm the hotel nor detract from its prominence on this key corner site. The form, façade articulation, detailing and materials all need to be responsive to the existing building and not dominate in terms of scale or architectural treatment.

It is noted that Young & Jackson's has had a building abutting on its north side since the 1850s. In the event it is proposed to reveal this north wall as part of the station design, the nature of the exposed wall would need to be investigated and consideration given to how this is presented.

12.6.3 Nicholas Building (VHR H2119)

12.6.3.1 Statutory heritage controls

The statutory heritage controls that apply are as follows:

Legislation	Relevant VHR/HO Number
<i>Heritage Act</i>	VHR H2119
Planning and Environment Act	HO745 (Melbourne Planning Scheme) Also within HO505 Flinders Gate Precinct

12.6.3.2 Heritage considerations

The Nicholas Building is a nine-storey office building constructed in 1925-26 to a design by Harry Norris, perhaps the most prominent commercial architect in Melbourne in the interwar period.

It is of architectural and historical significance to the State of Victoria, with the key points from the VHR statement of significance as follows:

- an outstanding and imposing example of the grand commercial palazzo mode of the 1920s
- an important example of the work of Harry Norris
- notable for its use of Wunderlich terracotta faience (Norris was known for his use of the material)
- notable for its largely intact interiors including street level arcade and shopfronts
- as a reminder of a mid-rise scale of the CBD before the 1950s and an outstanding example of 132 feet (40.3m) 'height limit' buildings constructed in the city when this limit was in force.
- historical associations with the successful businessman Alfred Nicholas.

12.6.3.3 Impact assessment

While the interiors have not been inspected, it is understood that there is at least one opening in the south wall of the registered building allowing a connection through to the adjacent building (27-29 Swanston Street), which was constructed in c. 1939-40 as an adjunct to the Nicholas Building. There is also a connection at basement level. In the event 27-29 Swanston Street is demolished the south wall of the Nicholas Building would be made good (wall infilled to match existing) as part of the work. This would have no adverse impact. No other works are proposed directly to the Nicholas Building as part of the Concept Design.

A construction work site is proposed to be located immediately adjacent to the building and to its south. Refer to 6.2.2 for a discussion of potential construction vibration and ground settlement impacts.

Potential future oversite development to a height of 40 metres is also contemplated in this location (refer to the Concept Design). This is not assessed in detail, however subject to the demolition of the existing buildings, the development of an appropriate design and compliance with other planning requirements and policies, it is likely that this scale of building would not have an adverse impact on the Nicholas Building. The southern wall of the registered building has a simple rendered treatment and is very much a secondary element when compared with the principal Swanston Street and Flinders Street elevations. Historically the south elevation has been used to display signage and the like. New development could be contemplated on the adjacent site having regard for other planning requirements. The cornice returns to the registered building would need to be retained and remain visible (refer to Figure 132).

12.6.4 St Paul's Cathedral Precinct (VHR H0018)

The statutory heritage controls that apply are as follows:

12.6.4.1 Statutory heritage controls

Legislation	Relevant VHR/HO number
Heritage Act	VHR H0018
Planning and Environment Act	HO655 (Melbourne Planning Scheme) Also within HO505 Flinders Gate Precinct

12.6.4.2 Heritage considerations

St Paul's Cathedral was constructed from 1884 and was designed by English architect William Butterfield. The towers and spire were added in the 1920s and were designed by Sydney architect James Barr. The precinct also includes the Cathedral Offices and Chapter House, both of which were designed by prominent Melbourne architect Joseph Reed and were constructed in the 1890s.

The VHR statement of significance notes that the Cathedral precinct is of architectural, historic and scientific (technical) significance to the State of Victoria:

- as an example of a high Victorian Gothic Revival work by the eminent architect William Butterfield
- for the contribution of the Chapter House and Cathedral offices by Joseph Reed, which combine to form a cohesive group
- as a long standing focus for the Church of England in Victoria
- for its organ (1890, rebuilt 1929) by TC Lewis.

It is also considered to be of social and spiritual value.

A CMP for the complex was prepared by Falkinger Andronas Pty Ltd in 2002 (Falkinger Andronas, 2002).

12.6.4.3 Impact assessment

The Concept Design proposes a connection to Federation Square which may extend under land associated with St Paul's Cathedral and within the extent of registration.

There would be no direct physical impact on significant fabric at the place nor any adverse visual impact associated with the permanent above ground structures proposed.

There is also a proposal for the temporary use of the carpark on the east side of the cathedral as public open space during the construction period. The St Paul's carpark could be developed for this use to ameliorate the loss of the City Square during project construction. Works could potentially include the removal of the current at-grade carpark and installing hard and soft landscaping, paths, lighting and structures. The space would allow informal recreation and potentially could support public events. While this area is important as part of the setting to the Cathedral, the majority of fabric associated with the current at-grade carpark is of no significance. Temporary development of the area for this use would be likely to be acceptable providing the works do not pose any physical threat to significant fabric (including the fencing and gates and associated stone piers and plinth) and are not of a scale or form as to compromise the presentation of the Cathedral during the temporary use. Approval would be required for the works under the Heritage Act (permit or permit exemption). Note that the site is also included in the VHI and in the event any subsurface works are required, a consent would also be required.

Refer to 6.3.2.2 for a discussion of potential construction vibration and ground settlement impacts.



Figure 131 View of the at-grade carpark on the east side of the Cathedral, from the south

12.6.5 Ross House (VHR H0627)

12.6.5.1 Statutory heritage controls

The statutory heritage controls that apply are as follows:

Legislation	Relevant VHR/HO Number
Heritage Act	VHR H0627
Planning and Environment Act	HO642 (Melbourne Planning Scheme) Also within HO506

12.6.5.2 Heritage considerations

Ross House is the surviving section of a once-extensive six-storey brick warehouse which extended from Flinders Street to Flinders Lane. It was designed in the American Romanesque style for Melbourne importers Sargood, Butler, Nichol and Ewen by the Sydney architects Sulman and Power and completed in 1898-1900.

Ross House is of architectural and historical significance to the State of Victoria with the following aspects of significance noted in the VHR statement of significance:

- as a transitional and unusual example in Melbourne of the American Romanesque style as developed by the American architect HH Richardson, featuring a massive plinth, huge brick arches and overhanging cornice, albeit combined with delicate façade detailing
- for its early fire protection measures
- as evidence of the large commercial warehouses typical of this area of Melbourne.

12.6.5.3 Impact assessment

The Concept Design identifies a site immediately abutting Ross House as a construction work site to be excavated. The new station building would be constructed in this location. (Note that it is unclear what form of building is proposed in this location).

Refer to 6.2.2 for a discussion of potential construction vibration and ground settlement impacts.

Even accepting the form of the building has not been confirmed, it is considered unlikely there would be adverse impacts.

12.6.6 Flinders Gate Precinct (HO505)

12.6.6.1 Statutory heritage controls

The statutory heritage controls that apply are as follows:

Legislation	Relevant VHR/HO number
Heritage Act	-
Planning and Environment Act	HO505 (Melbourne Planning Scheme)

12.6.6.2 Heritage considerations

The HO decision guidelines are relevant to a consideration of the impact of proposed works within HO505. These guidelines are set out at Cl. 43.01-5 of the Melbourne Planning Scheme. They generally support the conservation of significant heritage places and elements within them and new development that is consistent with the significance of heritage places.

The Melbourne Planning Scheme includes local policies for heritage places in the Capital City Zone (Clause 22.04). These are consistent with the objectives of the HO and focus on the conservation and enhancement of heritage places and on ensuring new development within precincts is responsive to the character, scale, form and appearance of those precincts.

Clause 22.04 includes a statement of significance and key attributes for the Flinders Gate precinct:

This precinct comprises the City's southern face, a major access point at Princes Bridge, and the specialised commercial district of Flinders Street. The area has been a gateway to the City from the south ever since the first Prince's Bridge (1841) and Melbourne's first railway were constructed, and Flinders and Spencer Street stations were linked by a viaduct in 1879. A grand new Princes Bridge (1886) confirmed the trend to redevelopment in the latter decades of the 19th century. The present Flinders Street Station (1906-10) also dates from this period. Proximity to the centre of Victoria's railway system explains the location and the size of the Commercial Travellers' Club (1899) in Flinders Street. It was here, at Melbourne's southern gate, that the Anglican community chose to build their grand new St Paul's Cathedral (1880-91), replacing an earlier church on the same site. The choice was a logical one as many of them lived in the southern and eastern suburbs. More commercial motives saw the construction in Flinders Street of large retail emporia such as the former Mutual Store (1891) and Ball and Welch (1899). This precinct offers evidence of all these changes, and also includes two of Melbourne's earliest and best known hotels, the Duke of Wellington (1850) and Young and Jackson's Princes Bridge Hotel (1854). An important feature of Flinders Street's southern face of buildings is their uniform height facing the station, Federation Square and the Yarra River.

Key Attributes:

The traditional gateway to the central city from the south and an area associated with retailing.

Major 19th and early 20th century buildings including Flinders Street Station, St Paul's Cathedral and Princes Bridge.

Clause 22.04 also requires consideration be given to building gradings in the individual conservation studies and their significance as described by their individual Building Identification Sheets. These are generally as accessed on Council's I-heritage database.

As noted elsewhere, the City of Melbourne is reviewing its local heritage policy frameworks including Clause 22.04 and the use of building gradings (Local Heritage Policies Review project, 2015). The building gradings are proposed to be converted to the significant/contributory system required by the DELWP and Planning Panels. These changes to the LPPF for heritage would be subject to a future planning scheme amendment (yet to be placed on exhibition) and may be implemented during the life of Melbourne Metro.

12.6.6.3 *Impact assessment*

Demolition and/or other works to graded buildings

A number of graded buildings in the precinct are proposed to be demolished. Each is considered in turn below.

13 Swanston Street (E graded building in HO505)

This building is a two-storey Edwardian shop building, which has been extensively altered at ground floor level. The upper level has been overpainted but retains some original elements, including the parapet. The demolition of 13 Swanston Street is proposed to allow for the construction of the CBD South station southern entry.

13 Swanston Street is located at the southern end of the precinct where Swanston Street approaches Flinders Street. Ungraded two-storey buildings are located to either side, while further south at the intersection is the VHR-registered Young and Jackson's Hotel. 13 Swanston Street is related to key themes in the history of the precinct terms of use and date of construction, but is so altered as to make only a very limited contribution to the precinct. Located as it is between two ungraded buildings, its demolition would not have a significant impact on the surrounding streetscape or the Flinders Gate precinct as a whole. Even when within HO precincts, E-graded buildings are considered of marginal interest at best, and while the policy at Clause 22.04 generally supports the retention of all parts of heritage places, only A-D graded buildings are specifically referenced. While the policy for Heritage Places in the Capital City Zone at Cl. 22.0-4 does not refer to streetscape gradings, it is noted that this building has no identified streetscape level (information sourced from the I-heritage database <http://www.melbourne.vic.gov.au/building-and-development/heritage-planning/Pages/i-heritage-database-search-results.aspx?streetno=65&street=swanston>, accessed 8 February 2016).

27-29 Swanston Street (D-graded building in HO505)

This building is a three-level shop with basement of reinforced concrete with a brick façade dominated by a large bank of steel-framed windows set into a concrete frame (Figure 133). It was constructed in 1939-40 and replaced the Alexander Building, a tall and narrow five-storey office building of 1890 (Annear n.d.). The existing building was built for George Nicholas, prominent businessman and owner of the Nicholas Building, immediately to the north (Figure 132). It was conceived of as an extension to the Nicholas Building to accommodate additional floor area for the GJ Coles store that was already operating in the basement and ground floor levels of that building. The plan for the new building was to remove the dividing wall on the ground floor and basement level of the Nicholas Building to achieve a continuous shopfront. The upper levels were to be used for bulk storerooms (Argus: 18 May 1939:18).

While the building was to be of three levels, it was proposed that it be increased to the height limit (132 feet or 40.3m) in due course and the foundations were to be designed to carry a building of this height. The architect was the office of Harry A Norris, favoured architect for both George Nicholas and his brother Alfred in this period. The design approach was described by the *Age* as follows: 'Architecturally, it is being treated as a separate unit, harmonising with but not exactly reproducing the present Nicholas Building.' (*Age*: 16 May 1939:8). The *Argus* had a different view of the architect's intentions, seeing the building as an extension that would match the existing Nicholas Building: '... the front will be set back slightly so that when [the additional levels were constructed] a new façade, to match the main building, can be added economically' (*Argus*, 18 May 1939: 18). Coles were operating in the new building by c. 1941 (*Sands and McDougall Directories*, 1940-42). Ultimately, the additional floor levels were not added, nor was the building refaced to match. Mahlstedt plans show the open floors at basement and ground floor levels and historic photos show a continuous canopy across the two buildings. It is not clear whether this canopy survives under the existing cladding.

This building is of local architectural and historical significance. It is of historical interest as a small-scale extension to the Nicholas Building undertaken at the beginning of World War II, and planned so as to have additional floor levels constructed subsequently. Architecturally, it is a distinctive design and of additional interest for its association with the prolific commercial architect, Harry Norris.

The decision guidelines at Clause 43.01 of the Melbourne Planning Scheme apply as does the local policy at Clause 22.04. Clause 43.01 generally supports the conservation of significant buildings and requires the consideration of impacts of new works on the building or heritage place, while Clause 22.04 notes that 'the demolition or alteration of any part of a heritage place should not be supported unless it can be demonstrated that that action would contribute to the long-term conservation of the significant fabric of the heritage place.'

In considering the heritage values of the building and its contribution to the precinct, the building is considered to be of both architectural and historical interest at the local level.

In the first instance, it is of some interest for its association with the architect Harry Norris, albeit as a late and relatively minor example of his work. Norris' career spanned five decades (he was in practice from c. 1915 until six months before his death in 1967), but he is best-known for his interwar designs, particularly of commercial buildings. His city buildings include the commercial palazzo style Nicholas Building, 27-41 Swanston Street (1925-6), Block Court, Collins Street (1929), the new pink facade of the GJ Coles building in Bourke Street (1929) and other Coles buildings across Victoria and Majorca House in Flinders Lane (1931) and Mitchell House, in Elizabeth Street (1936-37). A number of these show Norris' particular interest in the use of faience - see the Nicholas, Coles and Majorca buildings (Gurr and Willis, 2012:502-3). Norris also designed the Melford Motors showroom in Elizabeth Street (1936).

In commissions arising from his association with the wealthy industrialist Alfred M Nicholas and his brother George, partners in the company that made the Australian aspirin 'Aspro', Norris designed buildings for Wesley College in St Kilda Road (1933-39) and the modest Nicholas Hall for the Wesley Church in Lonsdale Street (1938). He is also known for several substantial and high style domestic designs including the Streamlined Moderne Burnham Beeches in Sherbrooke (1930-33) and the Spanish Colonial Revival Ilyuka at Portsea (1929-30). Over a large body of work undertaken in the interwar period, Norris employed an eclectic range of popular styles with favourites including Streamlined Moderne and Spanish and Georgian revival styles. His Missions to Seamen in Port Melbourne (1937, demolished) was an exercise in Dudokian modernism.

Historically, the relationship between this building and the adjacent Nicholas Building, including the common owner and architect and use of the two buildings in combination, is also of interest, but is not considered of such import as to elevate the building's significance to a higher than local level.

Having regard for these values, the building does make a contribution to the precinct, as a commercial building by a prominent and accomplished architect and with an interesting history as related to the Nicholas Building. Accepting this interest, the building itself is a modest rather than a key contributor within HO505 and its demolition would not compromise the core values of the precinct. As for 13 Swanston Street above, no streetscape grading is identified for the building.



Figure 132 Swanston Street, c. 1962 showing the building at 27-29 Swanston Street, accommodating the GJ Coles store and with continuous canopy from the Nicholas Building
Source: State Library of Victoria (photographer Mark Strizic)



Figure 133 1939-40 shop building at 27-29 Swanston Street, indicated by arrow

65 Swanston Street (D-graded building in HO505)

Constructed in 1904, this three-storey shop has an elaborate brick and render facade and parapet other than for its overpainting appears to be relatively intact. It originally formed part of a row of four shops (Figure 134). The ground floor shopfront has been extensively altered and a non-original canopy has been added. The demolition of 65 Swanston Street is proposed to allow for the construction of the CBD South station northern entry.

This building is identified as a D-graded building, defined as those which are 'representative of the historical, scientific, architectural or social development of the local area. They are often reasonably intact representatives of particular periods, styles or building types'.

The decision guidelines at Clause 43.01 of the Melbourne Planning Scheme apply as does the local policy at Clause 22.04. Clause 43.01 generally supports the conservation of significant buildings and requires the consideration of impacts of new works on the building or heritage place, while Clause 22.04 notes that 'the demolition or alteration of any part of a heritage place should not be supported unless it can be demonstrated that that action would contribute to the long-term conservation of the significant fabric of the heritage place.'

Constructed in the Edwardian period, this shop building relates and contributes to one of the key attributes of the Flinders Gate Precinct as related to the historical development of retailing within the precinct. Considered individually it is also a building of local significance as an example of an early twentieth century shop, relatively intact to the upper floor levels and with a façade treatment of some interest. It is typical of commercial buildings of the period surviving in the central city.



Figure 134 Row of 1904 brick shops at 65-73 Swanston Street, c. 1950, prior to the construction of the hotel building at 67-73 Swanston Street: the building at 65 Swanston Street is at left.
Source: State Library of Victoria

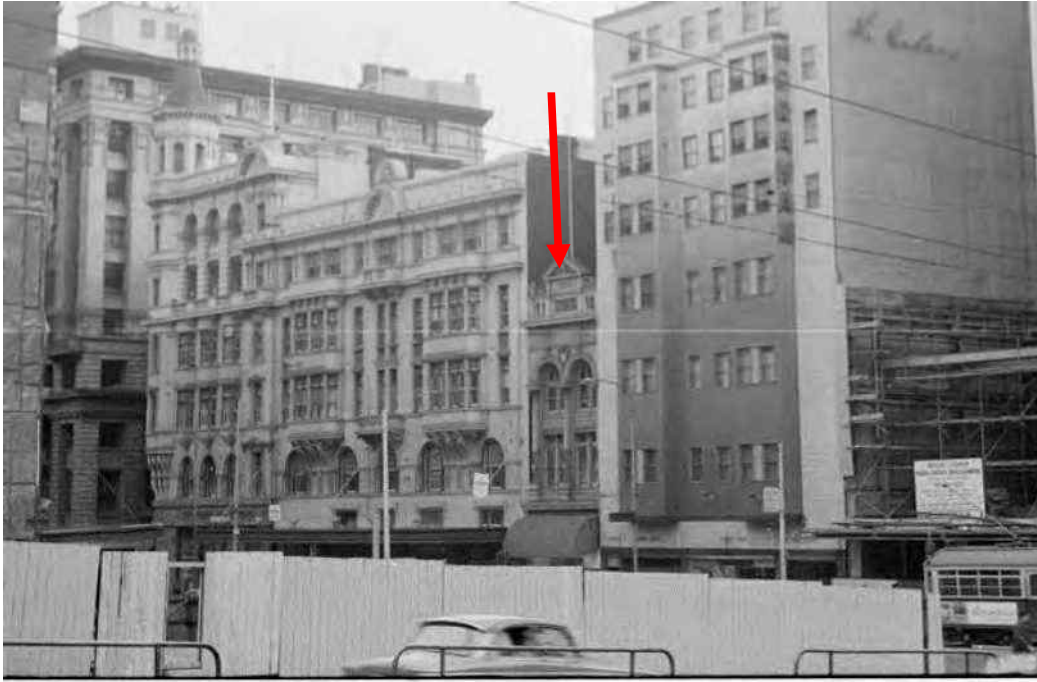


Figure 135 View of the west side of Swanston Street in 1967, following the construction of the Graham Hotel to the north of 65 Swanston Street (indicated by red arrow) but prior to the redevelopment of the sites to its south, note the façade of 65 Swanston Street
Source: State Library of Victoria, photographer KJ Halla



Figure 136 65 Swanston Street

The demolition of 65 Swanston Street would reduce the stock of contributory buildings within HO505 as a whole and more particularly, the loss of evidence of the more modest built form of the Edwardian period.

In considering the more localised precinct context, the impact would in reality be more limited. This is because the building sits in a very isolated position and in a streetscape context that is not intact, with neighbouring buildings at odds with other parts of HO505 in terms of built form and generally unrelated to the key heritage values of the precinct. To its north, 65 Swanston Street is the E-graded 1950s multi-storey Graham Hotel at 67-73 Swanston Street, while the building to the south, 47-61 Swanston Street, is an ungraded late twentieth century commercial tower. These flanking buildings contrast dramatically in terms of their scale and are unrelated in terms of their design. Between them the earlier and more modest Edwardian shop building at 65 Swanston Street evidences an earlier phase of development.

In considering these issues of context, the impact of the demolition of 65-67 Swanston Street on the heritage place (HO505) as a whole is considered to be minor. It is, however, a building of sufficient value and distinction as to warrant consideration for retention, even if this was a partial retention (façade) with new build behind.

It is noted that the removal of this building, could bring into question the inclusion of this part of Swanston Street (west side between Flinders Lane and Collins Street) in the HO precinct HO505, or a reconsideration of the boundaries of this precinct as related to the other abutting precincts. The relative weakness of this part of the precinct may be reflected in the lack of identified streetscape gradings for these graded buildings fronting Swanston Street. HO505 is anchored at its northern end by a substantial post-war office tower on the south-west corner of Collins Street and Swanston Street, the former Bank of New South Wales at 221-231 Collins Street by Stephenson and Turner. While this building may be of potential significance in its own right, its relationship with the balance of the Flinders Gate is not particularly strong.

67-73 Swanston Street (E graded)

The Graham Hotel building relates to a later phase of development and as noted, is in a part of HO505 that is not particularly cohesive. It not considered to make any contribution to the significance of the precinct. Equally, while designed by a well-known architect in Best Overend, it has been extensively altered as a result of the truncation of the projecting bay windows to accommodate the large first floor display window (compare the photograph at Figure 135 with Figure 137), and is not considered to be of any significance in its own right. Only A-D graded buildings are referenced in the local heritage planning policy at Clause 22.04 in the Melbourne Planning Scheme.



Figure 137 Former Graham Hotel, 67-73 Swanston Street

228-236 Flinders Street, Port Phillip Arcade (D graded)

The Port Phillip Arcade was constructed in 1960-61 on the site of the Port Phillip Club Hotel. The Port Phillip Club Hotel operated from the site from as early as 1850, but the Thomas Bibbs' survey plan of 1857 and Cox and Lucken's c. 1861-62 photograph 'Port Phillip Club Hotel' (Figure 138) suggest that the distinctive arcaded hotel rendered brick hotel building was constructed sometime before 1862.

The redevelopment of the hotel was proposed from early as 1923, with the sale of the property for £180,000 to a syndicate who proposed to 'demolish [the hotel] and built an arcade on the site' (Advertiser 12 April 1923: 12). In 1959, the then owners of the hotel, Carlton and United Breweries (CUB), were criticised by the Victorian Licensing Court for 'deplorable conditions' at the Port Phillip Club. CUB did not renew the hotel's licence, and it closed on 31 December 1959 (Age 16 December 1959:3 and 1 January 1960: 2). Soon afterward, in early 1960, architect J F W Ballantyne advertised for tenders for the construction of 'an arcade of 50 shops and offices to be erected on the site of Port Phillip Hotel' (Cross section, May 1960:2).

At the time of the building's opening in May 1961, Melbourne's Lord Mayor Bernard Evans, himself an architect, was reported to have praised the new arcade for the reappearance of small shops in the city, stating that 'with nearly double the 1939 population, we have 20 percent fewer small shops than we

had then' (Age, 3 May 1961:7). The article also noted that it had been constructed at a cost of £220,000, with an air-conditioned basement with food mart, cafeteria and restaurant; ground floor with an arcade of 27 shops; and the offices of the State Electricity Commission (SEC) on the first and second floors (the SEC building was located immediately to the west).

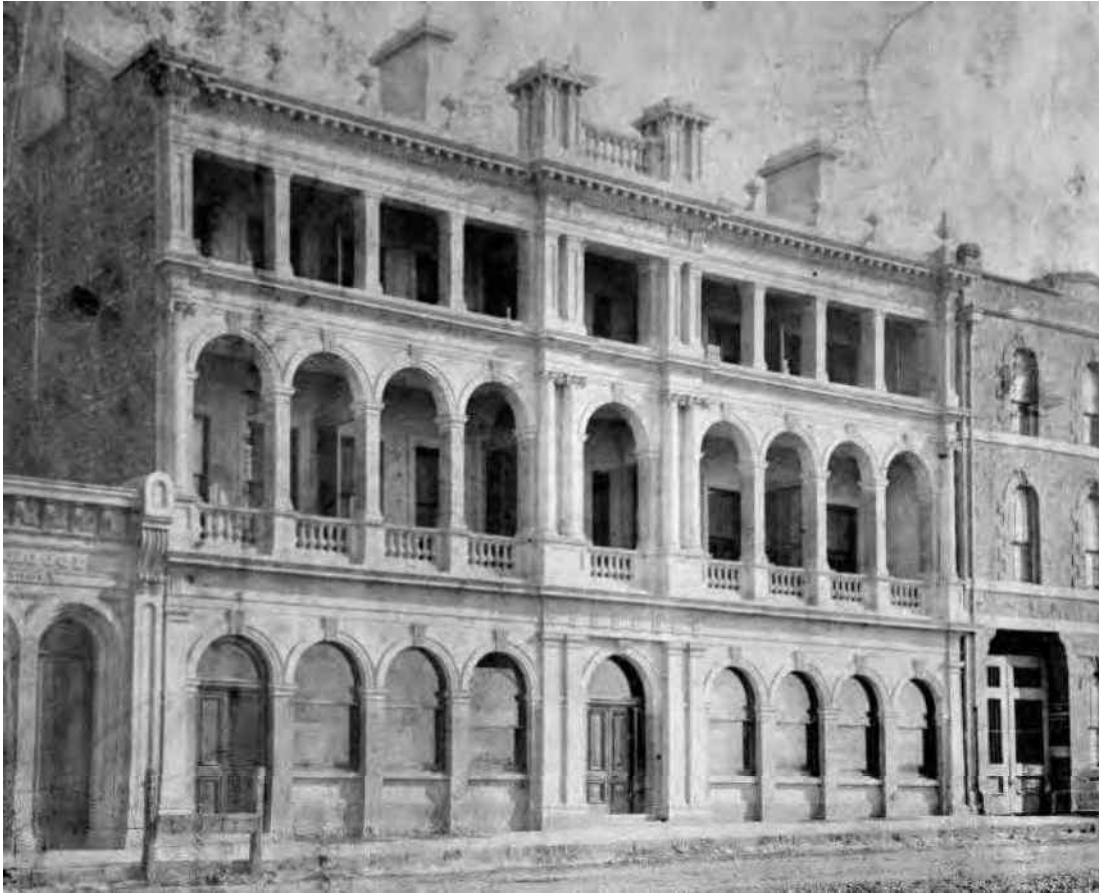


Figure 138 Port Phillip Club Hotel, 1861
Source: State Library of Victoria (photographer Cox and Lucken)



Figure 139 The north side of Flinders Street in the late nineteenth century showing the Port Phillip Club Hotel (on the left) and the warehouse at 224-226 Flinders Street on the right
Source: State Library of Victoria (photographer JW Lindt)

The newspaper praised the new building as:

sleek, modern, with chrome and Perspex, hidden lighting and background music ... The architect, Mr J F W Ballantyne, has not let history bother him too much. His work is strictly contemporary. At the same time it departs from the usual style of commercial arcades. There are ramps instead of stairs. The decor is subdued. The carborundum floor tiles are non-slip. (*Age*, 3 May 1961:7).

Another feature of the new building was a central tiled mosaic with modernist wrought iron sculpture by artist Charles Bush, depicting Neptune, described by the *Age* as a 'polite bow to the spirit of Port Phillip'. (*Age*, 3 May 1961:7).

The architect of the Port Phillip Arcade, James Frederick Wilson (J F W) Ballantyne, had begun his career as an articled pupil (the first) in the office of Walter Burley and Marion Mahoney Griffin in 1918. His work was predominantly residential, moving from Griffin-inspired residences in the 1920s (for which he is well known) to more modernist designs in the 1930s and the post-WWII period (Goad and Willis, 2012: 63).

Melbourne-based artist Charles Bush held his first exhibition in 1939, and after serving in World War II and touring through Europe on a British Council grant, he was a drawing master at the National Gallery schools in the early 1950s (Keys, 2007). Bush was a very well regarded watercolourist and won more than 50 awards for his paintings. Examples of his work are in the National Gallery of Australia and the Australian War Memorial in Canberra, in most state and regional galleries and numerous collections (Keys, 2007).

The demolition of the Port Phillip Arcade would have an adverse impact on the HO precinct HO505.

The arcade is considered to be of heritage significance in its own right as an unusual and relatively intact example of a post-WWII example shopping arcade. The arcade form is a building typology that was prevalent in Melbourne in the late nineteenth century and into the interwar period. In the post-WWII period, there was something of a return to the arcade form in Australian cities, with the development of new central city arcades, which in some cases replaced lanes in providing pedestrian access through city blocks. This was the case for the Port Phillip Arcade which provided access through to Scott Alley and also appears to have connected to Royston and Cocker Alley to either side. Arcades were also popular in the suburbs where they were often used to connect shopping strips to large carparks. There are other post-WWII shopping examples in central Melbourne (see, for example the Capitol Arcade in Swanston Street and the Tivoli Arcade, Bourke Street), but the Port Phillip Arcade appears to be a relatively early example in the post-WWII context (Gray and Goad, 2012: 26). An earlier and unusual example of the form is the Campbell Arcade (1956), an underground shopping arcade integrated with the subway below Flinders Street, connecting Flinders Street Station with Degraeves Street. The Port Phillip Arcade is notable in a city context for the manner in which it continues the Melbourne tradition of arcades providing a through block connection, and utilises the same form as nineteenth century examples, with central retail arcade, lit from above and with office space at first floor level to either side. The Arcade contributes to the Flinders Gate precinct in evidencing this particular retail theme in Melbourne. The low scale, tripartite facade sites comfortably with the scale of buildings to the east.

The Port Phillip Arcade also derives some interest for its distinctive 1960s design aesthetic and the input of the architect, JW Ballantyne, and received positive critical comment on its completion. While not assessed in detail, the Charles Bush sculpture also appears to be of significance in its own right, as a distinctive piece in wrought iron by a prominent and accomplished artist, albeit one better known as a painter. The piece was presumably commissioned specifically for the arcade and is an integral part of the building design.

The demolition of the Port Phillip Arcade is proposed to make way for the new station, specifically to provide a link to Flinders Street and a connection to the station on the south side of Flinders Street.

The demolition of the building would be the loss of a significant building which reflects on the continuing tradition of laneway arcades as a particular form of retailing in Melbourne. Having regard to the values ascribed to this precinct it would not diminish the core heritage values or key attributes as set out at Cl. 22.04:

- the traditional gateway to the central city from the south and an area associated with retailing
- major 19th and early 20th century buildings including Flinders Street Station, St Paul's Cathedral and Princes Bridge.

The statement is, however, poorly conceived, and a revision might well recognise the contribution of the Port Phillip Arcade as a distinctive post war development. It would be desirable to retain and adapt the building. If this is not possible, the Charles Bush sculpture should be incorporated into the design of the new building, in preference giving it prominence on the new façade. The maintenance of through block passage would also be desirable.

It is further recommended that an interpretation strategy be developed and implemented that reflects on the history of the site, including both the Port Phillip Club Hotel (c. 1861-c. 1960) and the Port Phillip Arcade (1961-).

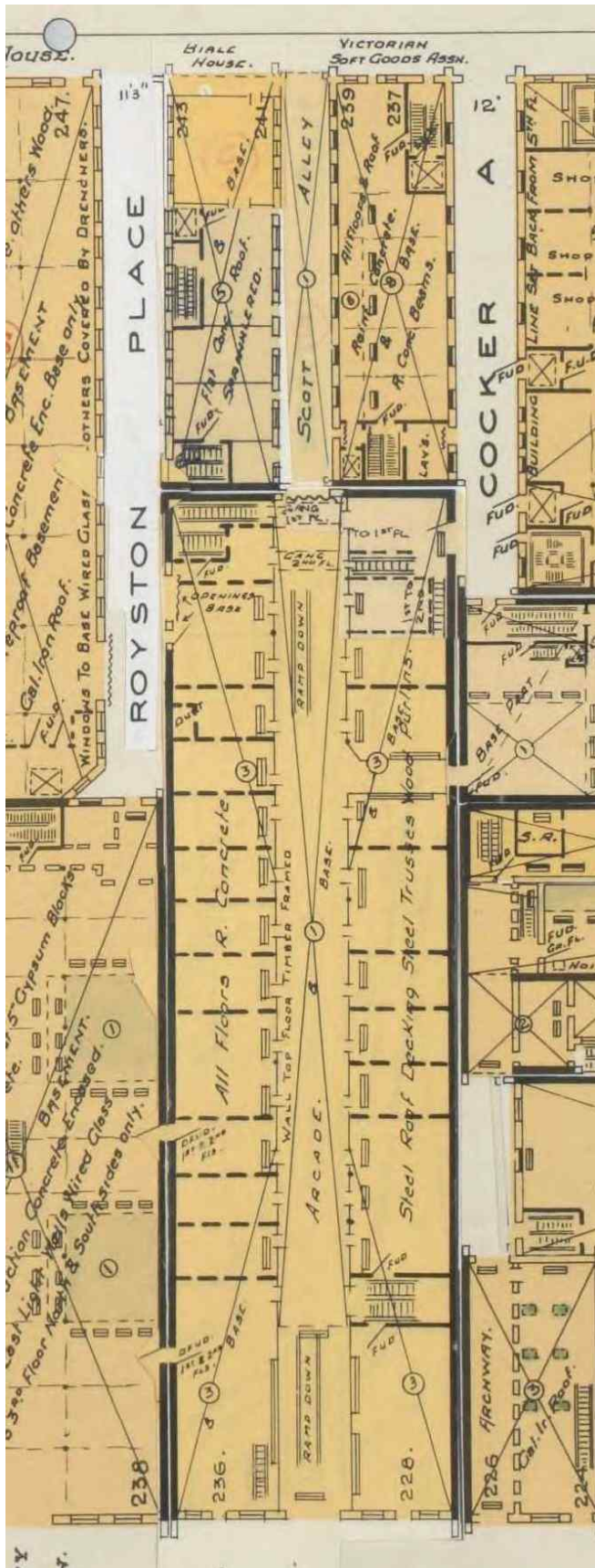


Figure 140 Mahstedt fire insurance plan, Plan 12, 1948, updated c. 1961 to show the layout of the Port Phillip Arcade
 Source: State Library of Victoria

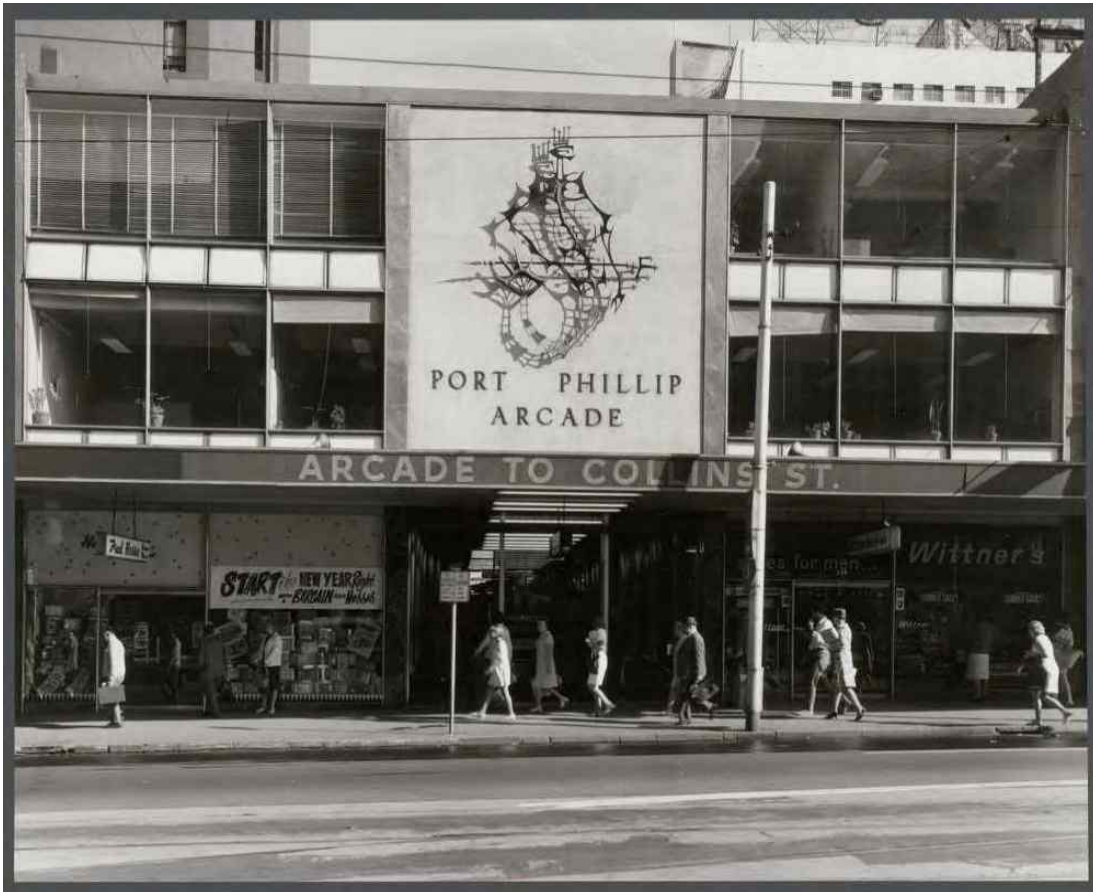


Figure 141 Flinders Street facade of the Port Phillip Arcade, c. 1969
Source: Wolfgang Sievers collection, State Library of Victoria



Figure 142 Recent view of the Port Phillip Arcade



Figure 143 Interior of the arcade looking towards Flinders Street, c. 1969
Source: Wolfgang Sievers collection, State Library of Victoria



Figure 144 Recent view of the arcade interior

Demolition of ungraded buildings at 15-25 Swanston Street

Ungraded buildings are to be demolished within the precinct; these are:

- 9-11 Swanston Street
- 15-19 Swanston Street
- 21-25 Swanston Street

These buildings date from the post-WWII period and are of no heritage interest. As reflected in their ungraded status, they make no contribution to the significance of the HO precinct. Their demolition would have no adverse impact on HO505.

It is noted, however, that reflecting the early development of this part of the city, there is some early fabric known to survive at the rear of the site at 13 Swanston Street (early bluestone and brick walling) and this may also be the case for the sites at 15-25 Swanston Street. Where they survive, these remnants of earlier buildings and structures should be recorded prior to demolition.

It is also noted that these sites are included in the VHI under the Heritage Act for their archaeological potential (again, this is a reflection of the early development of this area in the context of Melbourne's history) and any surviving early fabric would be investigated in the course of the preparation of the archaeological management plans for the sites.



Figure 145 Streetscape view showing (left to right) 9-11 Swanston Street (ungraded), 13 Swanston Street (E graded) and 15-25 Swanston Street (ungraded)



Figure 146 Ungraded building at 15-25 Swanston Street

Alteration of 222-224 Flinders Street - former warehouse, Dangerfield building (C graded)

The bluestone warehouse at no. 222-224 Flinders Street was constructed c. 1856, and possibly as early as 1855. The site was previously occupied by an iron warehouse, and the property was sold to Dennis Keogh in 1856 (i-Heritage citation for 222-224 Flinders Street).

Architects Webb & Taylor advertised for tenders for the construction of a 'three-storey bluestone warehouse, in Flinders-street' in March and July 1855, although it has not been confirmed these notices refer to the subject site (Argus 20 March 1855:7, Melbourne Herald, 20 July 1855:2). However, as the bluestone warehouses now incorporated within Young and Jackson's hotel had been constructed by c. 1854, there is a strong possibility that the tender notices relate to the subject site and the building was designed by Webb & Taylor. The subject building had been constructed by late 1856, as in October that year a warehouse at what was then 36 Flinders-street east was newly occupied by the importers and 'wholesale warehousemen', Mallach, Clark and Meikle (Argus, 25 September 1856: p. 3.) The survey plan undertaken by Thomas Bibbs in 1857 shows the footprint of the building, including a crossover and carriageway, as well as the adjacent warehouses now part of Young and Jackson's hotel. It is unclear how the rear laneway related to the subject property. It appears that it was a rear access requirement for the properties on Swanston Street, and it is possible that access for the delivery of goods was incorporated into the carriageway.

Mallach, Clark and Meikle remained at this location until November 1858, when the 'commodious warehouse' was advertised to let (Argus, 30 November 1858: 8). The warehouse was listed in the municipal rate books of 1861, described as 'stone store – 3 stories (sic)' and valued at a net annual value of £250. It was then owned by Walter Powell (City of Melbourne, rate books, 1861, La Trobe Ward: 176). The rate books also identify eight other stone store buildings on the north side of Flinders Street, between Elizabeth and Swanston streets, indicative of the utilitarian commercial character of this part of the street in the 1850s. That same year, a photograph of the adjacent Port Phillip Club hotel shows the subject building, with gates to the carriageway, quoining to the window openings and a simple parapet with pediment and stub columns to the ends.

By 1864, the property was occupied by G & G Shaw, wholesale grocers, and during the 1870s it was occupied by A W Schuhkraft (or Schuhkrafft), stationer and printer (*Sands & McDougall directory*, 1864 and 1873). As can be seen in an 1870s photograph of the Flinders Street (Figure 147) Schuhkraft had signage painted on the parapet and facade, with an arched doorway and arched window opening as the ground floor shop. Painted signage in the carriageway shows that this gave access to the Freemasons Hotel in Swanston Street and the Argus Clothing Factory, in Flinders Lane. In the 1880s, the building was owned and occupied by Thomas Whitelaw & Co., paper hangers, as can be seen on the Mahlstedt insurance plan (Figure 148). Whitelaw died in 1890, and a description of his estate noted the Flinders Street warehouse as a bluestone store valued at £11,500 and measuring 20 feet wide and 50 feet deep (6.1 metres by 15.2 metres). The carriageway was noted as 'owned' by Whitelaw, but was to be used as a right of way (*Table Talk*, 11 July 1890: 6). His probate papers also noted that the ground floor of the warehouse only occupied 20 feet, and that 'others have the right to use' the right-of way (Thomas Whitelaw, Probate and Administration files).

The MMBW detail plan of 1895 shows the building as 226 Flinders Street (Figure 149). From the early twentieth century, the building was used as a retail space, with Mitchell Bros. confectioners an early retail tenancy. The shopfront was also altered by the early twentieth century, as can be seen in a photograph of 1907 (Figure 150) with the entrance relocated to the eastern side of the building. From the mid-twentieth century, the building was used as a café (Figure 151), with fashion retailer, Dangerfield the current occupant. The interior was reportedly damaged by fire in the c. 1970s, although the extent of this damage is not known (National Trust of Australia, Victoria, B4066).

The building at 222-224 Flinders Street is a three-storey overpainted bluestone former warehouse (Figure 152). Although the ground floor shopfront has been modified, the building appears generally externally intact. The facade detailing includes dressed ashlar quoining to corners and arched window openings with expressed keystones, and rock-faced stonework to the remainder. Other detailing includes string courses at first and second levels, an expressed cornice and a central pediment to the parapet. The scrolls and stub columns are no longer extant and there are remnant signage frames fixed to the facade. At ground level there is a modern shopfront across the eastern half of the facade. The carriageway remains in place on the western half but is concealed by large gates. It survives intact behind the gates (Figure 153). The stonework at the western end appears to retain its original form, aside from the possible loss of the stepped form to the surrounds. The building did not originally have a verandah, but now has a deep mid-century awning suspended from the facade. The rear wall of the building survives but is obscured by the rear of the building at 9-11 Swanston Street (see Figure 154).

The building is considered to be of a higher level of significance than the C-grading would suggest. It makes an important contribution to the precinct and relates strongly to the VHR-registered Young and Jackson's Hotel to its east. In addition, the survival of the carriageway is of note; this is now an uncommon element in the central city and this example is intact and fully legible.

The building should be retained in full as part of the project to the extent of all original external fabric. There may be an opportunity to use the carriageway to provide pedestrian access from the station through to Flinders Street. The rear wall of the building should in preference remain exposed to enhance an understanding of the form of the building and the design of carriageway. There may be an opportunity in detailed design to reveal the eastern section of this wall (this is currently obscured) and undertake conservation works to the fabric, and this would be a positive outcome from a heritage perspective.



Figure 147 Flinders Street, c. 1870s: warehouse at 222-224 Flinders Street, carriageway indicated
 Source: American & Australasian Photographic Company, State Library of New South Wales

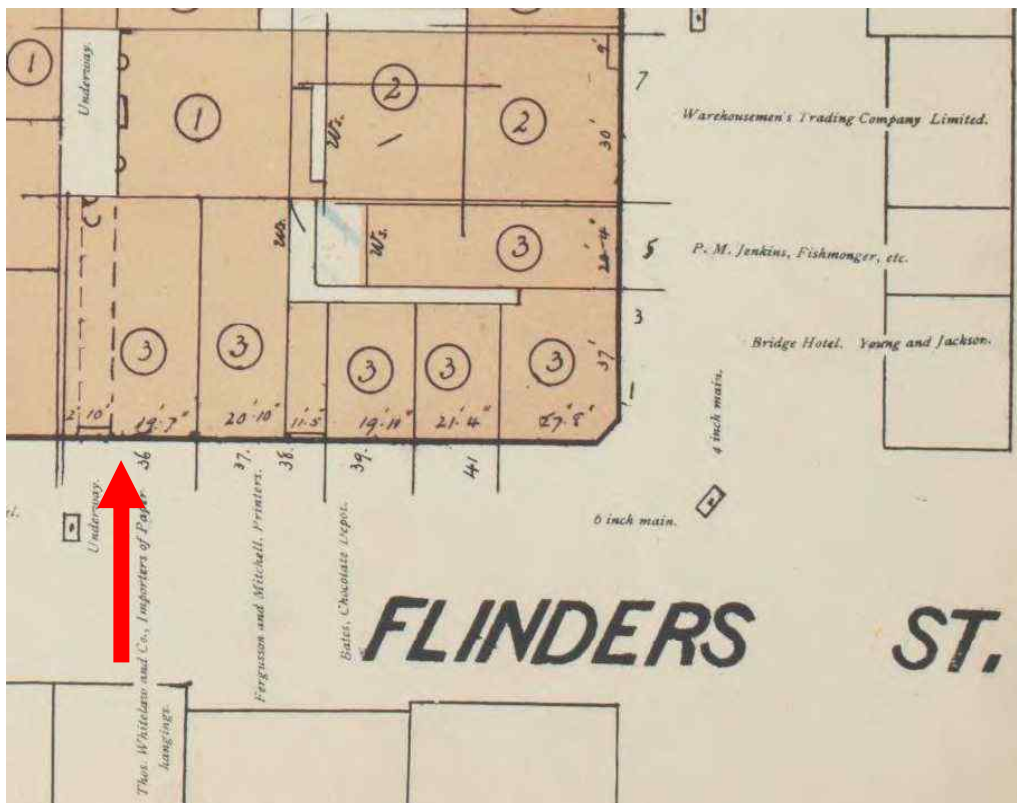


Figure 148 Mahlstedt fire insurance plan, plan no. 12, 1888: 222 Flinders Street indicated
 Source: State Library of Victoria

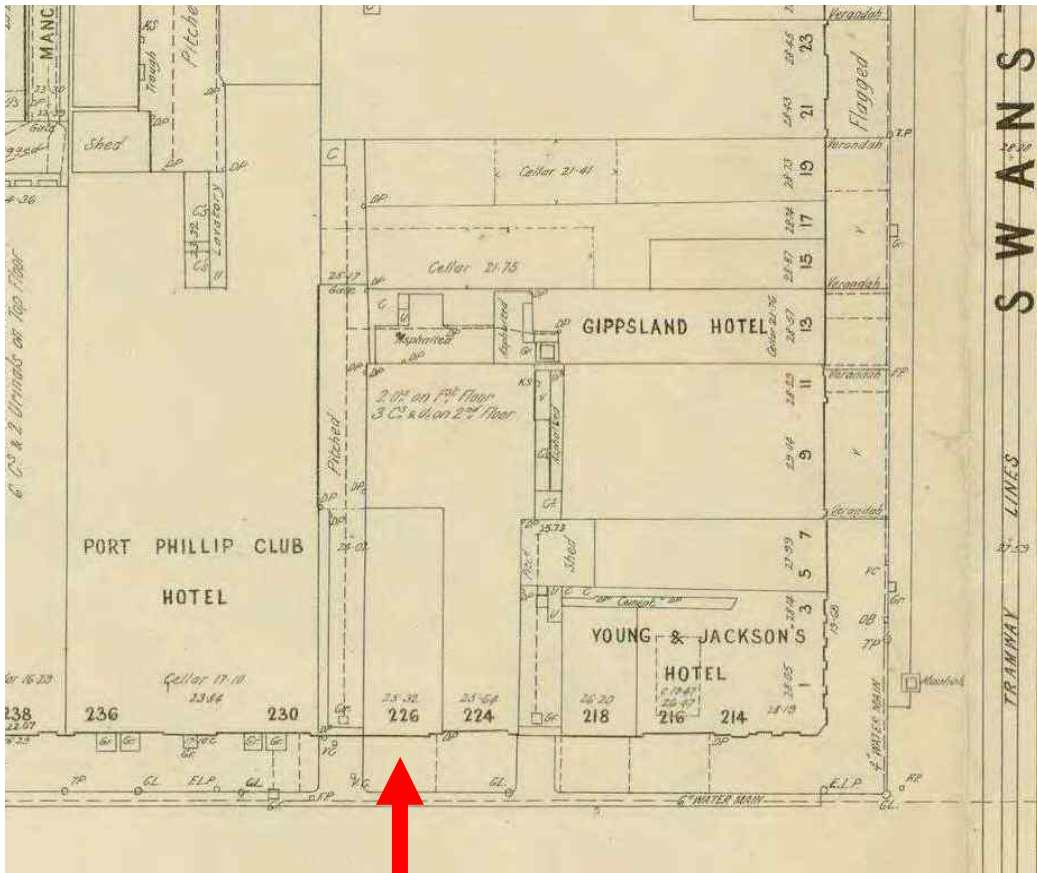


Figure 149 MMBW detail plan no 1009, 1895: warehouse at 222-224 Flinders Street indicated
Source: State Library of Victoria



Figure 150 1907 postcard of Flinders Street: 222-224 Flinders Street indicated
Source: State Library of Victoria



Figure 151 Undated (c. 1978) photograph of 222-224 Flinders Street, with carriageway in use as a shop: Note bricked over parapet and signage to facade.
Source: National Trust of Australia (Victoria), via http://vhd.heritage.vic.gov.au/search/nattrust_result_detail/64969



Figure 152 Recent view of 222-224 Flinders Street



Figure 153 View north from within the carriageway



Figure 154 View of the northern elevation of the building (eastern section obscured by later building)

Relocation of Burke and Wills statue

The Burke and Wills statue is located in the City Square. It is an ungraded element within HO505.

Designed and created by sculptor Charles Summers, this was unveiled on 21 April 1865. It was originally located on the corner of Collins and Russell streets, but increasing traffic and the construction of tram tracks resulted in the relocation of the monument in 1886 to a reserve in Spring Street, opposite Parliament House. It was moved to the Carlton Gardens in 1973, and again to the corner of Swanston and Collins streets in 1979, where it was placed over a large waterfall. It was restored and moved to its present location in 1994 ('Charles Summers Statue in Melbourne', Burke & Wills Web Digital Research Archive, 1996-2015). The monument is of a higher order of significance than its ungraded status would suggest, though its location on this particular site does not contribute to this significance.

While of a high level of significance in its own right, the Burke and Wills Monument has been relocated four times, and could be relocated to a suitable alternative location or reinstated on this site with no adverse impact on significance. This is providing the work is undertaken to a high conservation standard to ensure that no damage occurs.

If the monument is retained *in situ* during construction appropriate protection measures should be developed with advice from a conservator.

Whenever on this site or elsewhere, the location of the monument should be resolved in consultation with the City of Melbourne prior to the commencement of construction. The site should be appropriate for the status of the monument. Note that the issue of suitable locations for the monument has been considered in detail previously (Dean, 1994 and Maxwell and Dean 1995). In addition, a detailed methodology for the relocation would need to be developed by a specialist building conservation consultant and/or conservator. Detailed information is available on previous conservation treatments to the monument (Dean, 1994 and Maxwell and Dean 1995) and this should inform the approach.

In the event the monument is to be relocated to an alternative location in the city, it would be preferable that it be dismantled and reinstated in a single phase of work. This would reduce the risk of damage resulting from multiple handling.



Figure 155 Burke and Wills statue, view from the west

New development within the Flinders Gate Precinct (HO505)

The form of any new development (including buildings, structures and hard and soft landscaping) also has the potential to have an impact on the heritage values of the precinct. The impact is generally as related to above-ground built form. The concealed structures below the surface are not relevant in that they generally do not have the potential to impact visually.

Key issues from a heritage perspective include the height, form, façade design and materiality of new development. It is recognised that the Concept Design includes only limited and highly schematic information on the presentation of above-ground structures. On this basis, the comments that follow are necessarily limited in their scope, with the emphasis on identifying key considerations for detailed design.

The main elements are listed and comments provided in the following table:

Table 63 Comments on new above ground elements within the Flinders Gate Precinct (HO505)

Element	Assessment Project	Comment / recommendation
Northern station entry (City Square)	The structure is presented as a single-storey structure on the City Square site (notional height is 4 metres)	No heritage impact subject to confirmation of a suitable site for the Burke and Wills monument (see discussion above)
Northern station entry (potential to include 65 and 67 Swanston Street)	No information provided on built form in this location	Only limited heritage constraints apply in this location given the scale and atypical forms of the existing buildings to either side. Desirably consider retention of the façade of 65 Swanston Street and integration of any new build behind the façade.
Main station building Swanston Street frontage	Notional building envelopes have been reviewed as part of the assessment. On the southern half of the site (adjacent to the VHR-registered Young and Jackson’s Hotel) the proposed building is 18 metres in height, while to the north, future over-site development is contemplated.	<p>This is a very sensitive location in heritage terms. The scale of new build as identified in the Concept Design seems broadly appropriate, however care would need to be taken in detailed design to ensure new development does not overwhelm the hotel nor detract from its prominence on this key corner site. The form, façade articulation, detailing and materials all need to be responsive to the existing building and not dominate in terms of scale or architectural treatment.</p> <p>While potential oversite development has not been assessed, it is commented there would likely be some scope to increase the height to the northern part of the site, closer to the Nicholas Building which itself is at 40 metres (subject to other planning requirements).</p>
Main station building, Flinders Street frontage	The building form at the street edge (on the eastern part Port Phillip Arcade site) is indicated as at a height of 18 metres. Future oversite development is indicated to the west and set back to the north.	The height of building shown at the street edge immediately to the west of the 222-224 Flinders Street (Dangerfield) site appears broadly appropriate. The design would need to be developed in a manner that was responsive to the significant buildings to either side, but particularly to the east.

Element	Assessment Project	Comment / recommendation
		<p>The potential oversight development in this location has not been assessed.</p>
Federation Square entry	<p>Relatively low level structures are proposed to accommodate the entry, lift and fire egress stairs.</p>	<p>Federation Square is not subject to HO controls (though part of the land is included in the VHR as a consequence of its inclusion in the extent of registration for Flinders Street Station Complex).</p> <p>Development of the scale and form required would not have an adverse impact on the heritage values of the place.</p> <p>It is commented, however, that the issue of higher built form on this site could raise concerns in relation to views to St Paul's Cathedral, specifically the 'west' door. This was the case when the design of Federation Square and its proposed 'shards' was considered. On this basis, new built form should be low scale.</p>

12.6.7 Historical archaeology

12.6.7.1 Statutory heritage controls

The statutory heritage controls that apply are as follows:

Legislation	Relevant VHI number
Heritage Act	VHI H7822-1904 – 9-11 Swanston Street VHI H7822-1905 – 13 Swanston Street VHI H7822-1906 – 15-19 Swanston Street VHI H7822-1907 – 21-25 Swanston Street VHI H7822-1908 – 27-41 Swanston Street / 221-235 Flinders Lane (only 27 Swanston Street impacted) VHI H7822-1811 – 65 Swanston Street VHI H7822-1812 – 67-73 Swanston Street VHI H7822-1959 Flinders Street (near Batman’s Hill to Exhibition Street) Note the Heritage Act provides blanket protection for all historical archaeological sites more than 50 years in age.

12.6.7.2 Impact assessment

The impacts and mitigation measures for the historical archaeology sites in the CBD South station precinct are presented in Table 64, Table 65, Table 66. The construction of the Flinders Street Station entrance would require complete destruction of five VHI sites on Swanston Street through demolition of the existing buildings and subsurface excavation. An additional VHI site (Flinders Street) would be damaged through excavation for the pedestrian link under Flinders Street into the Flinders Street Station. All six of these sites would also be subject to impacts from use of the area as a construction work site. An additional two sites at 65-73 Swanston Street could be affected by an option for the northern station entry.

While there are other VHI sites within the precinct or station footprint boundaries, they are unlikely to be impacted due to the nature and depth of the proposed works in these areas. These include:

- H7822-1966 – Swanston Street
- H7822-1960 – Collins Street
- H7822-1920 – St Pauls Cathedral (VHR H0018)
- H7822-1916 – Chapter House St Pauls (VHR H0018)

It is assumed that the VHI site at 222-224 Flinders Street (H7822-1899) would not be disturbed.

While not assessed in detail, it is noted that there is a proposal that the at-grade carpark on the east side of St Paul’s Cathedral (VHI H7822-1920) be used temporarily as public open space to mitigate the loss of the City Square during the construction period. In the event works associated with this open space project require any subsurface disturbance, there would be a need to consider archaeological impacts and management techniques and a consent would be required under the Heritage Act.

As the five VHI sites at the southern end of Swanston Street are adjacent on the same block, and have a similar history of occupation they have been grouped to be treated as a single entity – Swanston Street archaeological area. The two sites on Swanston Street north of Flinders Lane are similarly to be grouped

together (65-73 Swanston Street archaeological area). The Flinders Street VHI site is addressed separately.

The key mitigation measure would be the preparation of an archaeological management plan to detail the archaeological investigation of the two archaeological areas and the Flinders Street VHI Site. The archaeological management plans would be prepared in accordance with *Guidelines for Investigating Historical Archaeological Artefacts and Sites* (Heritage Victoria 2014) and in consultation with Heritage Victoria.

Table 64 Impact assessment and mitigation measures for Swanston Street archaeological area

Archaeological area	Swanston Street archaeological area
Listings for Archaeological Places	<p>VHI H7822-1904 – 9-11 Swanston Street</p> <p>VHI H7822-1905 – 13 Swanston Street</p> <p>VHI H7822-1906 – 15-19 Swanston Street</p> <p>VHI H7822-1907 – 21-25 Swanston Street</p> <p>VHI H7822-1908 – 27-41 Swanston Street / 221-235 Flinders Lane (only 27 Swanston Street impacted)</p>
Archaeological Potential	<p>This area comprises a history of commercial and retail occupation from the 1850s with a wide range of activities taking place. Most of the nineteenth century structures were replaced in around the 1920s with buildings that do not appear to have basements. Later development occurred in the 1930s-1940s with a new building with a basement at 27 Swanston Street, and in the 1980s with a new building at 15-19 Swanston Street. While the archaeological potential would vary across the site, there is potential for archaeological remains from the mid-late nineteenth and early twentieth centuries to exist in this location.</p>
Significance	<p>The archaeological investigation of the remains would likely provide information on the initial settlement and of the evolution and alteration of the city through known historic phases of settlement, expansion, rapid growth, urbanisation, and other activity. The archaeological remains may be expected to record and reflect the processes of urban growth and development in Melbourne from the 1830s to the present.</p>
Heritage Impact Assessment	<p>Proposed works within the archaeological area:</p> <ul style="list-style-type: none"> • Construction of Flinders Street Station entrance • Use of the entire area as a construction site <p>This would require the complete destruction and removal of all five VHI sites.</p>
Mitigation Measures	<p>Archaeological management plan, providing details of test/salvage excavation and artefact analysis</p>

Table 65 Impact assessment and mitigation measures for 65-73 Swanston Street archaeological area

Archaeological area	65-73 Swanston Street archaeological area
Listings for Archaeological Places	VHI H7822-1811 – 65 Swanston Street VHI H7822-1812 – 67-73 Swanston Street
Archaeological Potential	This area comprises a history of commercial and retail occupation from the 1850s with a wide range of activities taking place. The sites remained as commercial and retail premises even after reconstruction of the site in 1904. An earlier subsurface brick oven was found during these construction works, but presumably destroyed when a basement level was constructed as part of the works. Following a gas explosion in 1950, significantly damaged buildings at 67-73 Swanston Street were replaced with an eight storey building with two basements and a sub-basements. Based on the construction of a basement level at no 65 and two basements and a sub-basement at no 67-73 it would be unlikely that archaeological evidence dating from pre-1904 would still remain at the sites. Physical investigation of the basements levels at both 65 and 67-73 Swanston Street have not been undertaken as part of this assessment, however such inspection could reveal the presence of archaeological evidence from later periods.
Significance	The archaeological investigation of the sites would likely provide information on the twentieth century development of the city including urbanisation and other activities, from the early twentieth century to the present.
Heritage Impact Assessment	Collins Street entrance (potential to include 65-73 Swanston Street).
Mitigation Measures	Archaeological management plan, providing details of test/salvage excavation and artefact analysis

Table 66 Impact assessment and mitigation measures for Flinders Street VHI site

Archaeological area	Flinders Street VHI site
Listings for Archaeological Places	VHI H7822-1959 – Flinders Street (Near Batman’s Hill to Exhibition Street) (only section between Swanston Street and Degraives Street impacted)
Archaeological Potential	Early maps indicate the presence of settlement prior to the Hoddle Grid current street layout, which may now occur within the current road corridor of Flinders Street. While a range of potential structures are indicated along the entire length of Flinders Street, those of particular relevance to the proposed works area include two buildings (A Thompson) near the corner of Swanston Street, significant services (hydraulics, water etc.) and other peripheral undocumented structures such as privies and pits. While road and tram construction may have damaged or destroyed earlier evidence, there is potential for archaeological remains dating to the earliest non-Aboriginal settlement of Melbourne to occur.
Significance	The archaeological investigation of the remains would likely provide information on the initial settlement and of the evolution and alteration of the city through known historic phases of settlement, expansion, rapid growth, urbanisation, and other activity. The archaeological remains may be expected to record and reflect the processes of urban growth and development in Melbourne from the 1830s to the present.

Archaeological area		Flinders Street VHI site
Heritage Assessment	Impact	<p>Proposed works within the archaeological area:</p> <ul style="list-style-type: none"> • Construction of pedestrian link under Flinders Street into the Flinders Street Station • Use of the a section of Flinders Street between Swanston Street and Degraeves Street as a construction site <p>This would require the complete destruction and removal of a section of the Flinders Street site through excavation for construction of the pedestrian link.</p>
Mitigation Measures		Archaeological management plan, providing details of proposed monitoring/test/salvage excavation and artefact analysis

12.7 Environmental Performance Requirements

Table 67 provides the recommended Environmental Performance Requirements and proposed mitigation measures for the precinct.

Table 67 Environmental Performance Requirements for the precinct

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
Multiple heritage places in proximity to works	Establishment of construction sites in proximity to heritage sites	CH5 Prior to construction of main works or shafts that affect heritage structures or places, develop and implement appropriate protection measures for heritage places and objects including sculptures, memorials, monuments and associated heritage fabric where retained in proximity to works. This is to be done to the satisfaction of Heritage Victoria or the responsible authority (as applicable).	Protect heritage buildings from physical impacts, physical protection work to be designed as part of construction management plan.	-
Young & Jackson's Princes Bridge Hotel (VHR H0708)	Potential physical impact of construction work including excavation in close proximity to building (construction vibration and ground settlement).	<p>CH2 To avoid or minimise impacts on the cultural heritage values of heritage places:</p> <ul style="list-style-type: none"> Perform works in accordance with the following noise and vibration and ground movement Environmental Performance Requirements as related to heritage places: NV2, NV5, NV6, NV11, GM2, GM4, GM5, GM6. Undertake condition assessments of heritage places prior to commencement of construction where located within the identified vibration and ground settlement zones of sensitivity and monitor as per NV6, GM4 and GM5 <p>Should damage occur to a building or structure on the Victorian Heritage Register or that is subject to a Heritage Overlay as a result of works, undertake rectification works in accordance with accepted conservation practice (with reference to the Australia ICOMOS Burra Charter 2013) to the satisfaction of Heritage Victoria or the responsible authority, as applicable.</p>	<p>Should construction vibration be determined to be a risk to a heritage place mitigation measures may include, as relevant, use of alternative construction equipment/construction methodology as identified in Technical Appendix I Noise and Vibration or in the course of subsequent investigations.</p> <p>Should ground movement be determined to be a risk to a heritage place mitigation measures may include, as relevant, permeation grouting, underpinning and structural strengthening or other techniques as identified in the Technical Appendix P Ground Movement and Land Stability or as part of subsequent investigations.</p>	HH03

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
	Potential adverse impact of new building (station entry) in proximity	<p>CH1 Design permanent and temporary works to avoid or minimise impacts on the cultural heritage values of heritage places.</p> <p>Consult as required with Heritage Victoria and/or the responsible authority (as applicable).</p> <p>CH9 To the satisfaction of Heritage Victoria and the responsible authority (as applicable), ensure new development is responsive to heritage places in terms of height, massing, form, façade articulation and materials.</p>	Design is developed to respond to the heritage values of Young & Jackson's and the heritage context generally. Reference any applicable policy in the Melbourne Planning Scheme for new development in HO precincts with reference to the Flinders Gate precinct in particular.	HH24
Flinders Street Railway Station Complex (VHR H1083)	<p>Adverse impacts from connection to Flinders Street Station:</p> <p>loss of interiors of two shops</p> <p>replacement of shopfront to two shops</p> <p>alteration to and demolition of significant fabric</p>	<p>CH1 Design permanent and temporary works to avoid or minimise impacts on the cultural heritage values of heritage places.</p> <p>Consult as required with Heritage Victoria and/or the responsible authority (as applicable).</p> <p>CH3 Prior to construction undertake archival photographic recording in accordance with Heritage Victoria Technical Note: Photographic Recording for Heritage Places and Objects where heritage places are to be demolished or modified.</p>	<p>Design and manage the construction process to limit extent of demolition, including for the introduction of escalators into position.</p> <p>Ensure the design is developed with specialist input to minimise visual impacts on the external presentation of the building and to limit physical impact on significant internal fabric.</p>	HH22
	Potential physical impact of construction work including excavation in close proximity to building (construction vibration and ground settlement)	<p>CH2 To avoid or minimise impacts on the cultural heritage values of heritage places:</p> <ul style="list-style-type: none"> Perform works in accordance with the following noise and vibration and ground movement Environmental Performance Requirements as related to heritage places: NV2, NV5, NV6, NV11, GM2, GM4, GM5, GM6. Undertake condition assessments of heritage places prior to commencement of construction where located within the identified vibration 	<p>Should construction vibration be determined to be a risk to a heritage place mitigation measures may include, as relevant, use of alternative construction equipment/construction methodology as identified in Technical Appendix I Noise and Vibration or in the course of subsequent investigations.</p> <p>Should ground movement be determined to be a risk to a heritage place mitigation</p>	HH03

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
		<p>and ground settlement zones of sensitivity and monitor as per NV6, GM4 and GM5</p> <p>Should damage occur to a building or structure on the Victorian Heritage Register or that is subject to a Heritage Overlay as a result of works, undertake rectification works in accordance with accepted conservation practice (with reference to the Australia ICOMOS Burra Charter 2013) to the satisfaction of Heritage Victoria or the responsible authority, as applicable</p>	<p>measures may include, as relevant, permeation grouting, underpinning and structural strengthening or other techniques as identified in the Technical Appendix P Ground Movement and Land Stability or as part of subsequent investigations.</p>	
<p>Ross House (VHR H0627)</p> <p>Nicholas Building (VHR H2119)</p>	<p>Potential physical impact of construction work including excavation in close proximity to building (construction vibration and ground settlement)</p>	<p>CH1 Design permanent and temporary works to avoid or minimise impacts on the cultural heritage values of heritage places.</p> <p>Consult as required with Heritage Victoria and/or the responsible authority (as applicable).</p> <p>CH2 To avoid or minimise impacts on the cultural heritage values of heritage places:</p> <ul style="list-style-type: none"> • Perform works in accordance with the following noise and vibration and ground movement Environmental Performance Requirements as related to heritage places: NV2, NV5, NV6, NV11, GM2, GM4, GM5, GM6. • Undertake condition assessments of heritage places prior to commencement of construction where located within the identified vibration and ground settlement zones of sensitivity and monitor as per NV6, GM4 and GM5 <p>Should damage occur to a building or structure on the Victorian Heritage Register or that is subject to a Heritage</p>	<p>Should construction vibration be determined to be a risk to a heritage place mitigation measures may include, as relevant, use of alternative construction equipment/construction methodology as identified in Technical Appendix I Noise and Vibration or in the course of subsequent investigations.</p> <p>Should ground movement be determined to be a risk to a heritage place mitigation measures may include, as relevant, permeation grouting, underpinning and structural strengthening or other techniques as identified in the Technical Appendix P Ground Movement and Land Stability or as part of subsequent investigations.</p>	<p>HH03</p>

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
		<p>Overlay as a result of works, undertake rectification works in accordance with accepted conservation practice (with reference to the Australia ICOMOS Burra Charter 2013) to the satisfaction of Heritage Victoria or the responsible authority, as applicable.</p>		
<p>St Paul's Cathedral Precinct (VHR H0018)</p>	<p>Potential physical impact of construction work including excavation in close proximity to building (construction vibration and ground settlement)</p> <p>Mined adits within registered site</p>	<p>CH1 Design permanent and temporary works to avoid or minimise impacts on the cultural heritage values of heritage places.</p> <p>Consult as required with Heritage Victoria and/or the responsible authority (as applicable).</p> <p>CH2 To avoid or minimise impacts on the cultural heritage values of heritage places:</p> <ul style="list-style-type: none"> ● Perform works in accordance with the following noise and vibration and ground movement Environmental Performance Requirements as related to heritage places: NV2, NV5, NV6, NV11, GM2, GM4, GM5, GM6. ● Undertake condition assessments of heritage places prior to commencement of construction where located within the identified vibration and ground settlement zones of sensitivity and monitor as per NV6, GM4 and GM5 <p>Should damage occur to a building or structure on the Victorian Heritage Register or that is subject to a Heritage Overlay as a result of works, undertake rectification works in accordance with accepted conservation practice (with reference to the Australia ICOMOS Burra Charter 2013) to the satisfaction of Heritage Victoria or the responsible authority, as applicable</p>	<p>Should construction vibration be determined to be a risk to a heritage place mitigation measures may include, as relevant, use of alternative construction equipment/construction methodology as identified in Technical Appendix I Noise and Vibration or in the course of subsequent investigations.</p> <p>Should ground movement be determined to be a risk to a heritage place mitigation measures may include, as relevant, permeation grouting, underpinning and structural strengthening or other techniques as identified in the Technical Appendix P Ground Movement and Land Stability or as part of subsequent investigations.</p>	<p>HH03</p>

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
Flinders Gate Precinct (HO505)	Demolition of five graded and two ungraded buildings in precinct			
	<ul style="list-style-type: none"> 9-11 Swanston Street (ungraded) 	-	-	
	<ul style="list-style-type: none"> 13 Swanston Street (E-graded) 	CH3 Prior to construction undertake archival photographic recording in accordance with Heritage Victoria Technical Note: Photographic Recording for Heritage Places and Objects where heritage places are to be demolished or modified	No additional mitigation measures identified beyond photographic recording of the external fabric of the building and streetscape in this location.	HH23
	<ul style="list-style-type: none"> 15-25 Swanston Street (ungraded) 	-	-	
	<ul style="list-style-type: none"> 27-29 Swanston Street (D-graded) 	CH3 Prior to construction undertake archival photographic recording in accordance with Heritage Victoria Technical Note: Photographic Recording for Heritage Places and Objects where heritage places are to be demolished or modified	No additional mitigation measures identified beyond photographic recording of the external fabric of the building and streetscape in this location.	HH23
	<ul style="list-style-type: none"> 65 Swanston Street (D-graded) 	<p>CH1 Design permanent and temporary works to avoid or minimise impacts on the cultural heritage values of heritage places.</p> <p>Consult as required with Heritage Victoria and/or the responsible authority (as applicable).</p> <p>CH3 Prior to construction undertake archival photographic recording in accordance with Heritage Victoria Technical Note: Photographic Recording for Heritage Places and Objects where heritage places are to be demolished or modified.</p> <p>CH7 To the satisfaction of Heritage Victoria and the responsible authority, develop and implement a heritage interpretation strategy as part of detailed design as a whole</p>	<p>Preferably retain the upper façade of the Edwardian shop and incorporate this into any new build to the rear.</p> <p>If demolition occurs, undertake photographic recording of the external fabric of the building and the streetscape in this location.</p> <p>Develop an interpretation strategy to address the history of the site, including the history of the existing building as part of a larger group.</p>	HH23

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
		which seeks to explore historical and Aboriginal cultural heritage themes. This must include but not be limited to the exploration of opportunities for interpretation at Arden station (referencing the use of this land for railways workshops and sidings), and at CBD South station (referencing the Port Phillip Arcade and the early Port Phillip Club Hotel).		
	<ul style="list-style-type: none"> 67-73 Swanston Street (E-graded) 	CH3 Prior to construction undertake archival photographic recording in accordance with Heritage Victoria Technical Note: Photographic Recording for Heritage Places and Objects where heritage places are to be demolished or modified.	No additional mitigation measures proposed beyond the photographic recording of the external fabric of the building.	HH23
	<ul style="list-style-type: none"> 228-236 Flinders Street, Port Phillip Arcade (D graded) 	<p>CH3 Prior to construction undertake archival photographic recording in accordance with Heritage Victoria Technical Note: Photographic Recording for Heritage Places and Objects where heritage places are to be demolished or modified.</p> <p>CH4 Prior to construction of main works or shafts that affect heritage structures or places, develop detailed methodology in accordance with Australia ICOMOS Burra Charter and to the satisfaction of Heritage Victoria or the responsible authority (as applicable) where heritage fabric is required to be dismantled, stored and reconstructed. Work is to be documented and overseen by an appropriately qualified conservation practitioner.</p> <p>CH7 To the satisfaction of Heritage Victoria and the responsible authority, develop and implement a heritage interpretation strategy as part of detailed design as a whole which seeks to explore historical and Aboriginal cultural heritage themes. This must include but not be limited to the exploration of opportunities for interpretation at Arden station (referencing the use of this land for railways</p>	<p>Active site interpretation should explore the history of the two key buildings that have existed on this site, the Port Phillip Club Hotel and the Port Phillip Arcade. This should include reference to long-term occupants of the arcade, and could include the use of oral history. The sculpture should be integrated into the design and the subject of active interpretation.</p> <p>Where dismantling and reconstruction works are required document and perform these works with specialist input. This would likely include an assessment of condition, detailed methodology for the work, recording of the structure prior to dismantling, dismantling methodology, the numbering of component parts for storage, specification of secure storage arrangements, details of required repair and conservation works, if required, method for reinstating fabric including</p>	HH23

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
		workshops and sidings), and at CBD South station (referencing the Port Phillip Arcade and the early Port Phillip Club Hotel). CH14 To the satisfaction of the responsible authority, in detailed design for the CBD South station, incorporate the Charles Bush sculpture into the design for the new building on the Port Phillip Arcade site, preferably in a prominent position on the Flinders Street façade.	appropriate materials in the event fabric is required to be renewed or replaced.	
	Works associated with the new station entry: provide access through the existing C-graded former warehouse at 222-224 Flinders Street (not an adverse impact).	CH1 Design permanent and temporary works to avoid or minimise impacts on the cultural heritage values of heritage places. Consult as required with Heritage Victoria and/or the responsible authority (as applicable).	Ensure any physical works are undertaken to a high conservation standard.	
	New structures within precinct	CH1 Design permanent and temporary works to avoid or minimise impacts on the cultural heritage values of heritage places. Consult as required with Heritage Victoria and/or the responsible authority (as applicable). CH9 To the satisfaction of Heritage Victoria and the responsible authority (as applicable), ensure new development is responsive to heritage places in terms of height, massing, form, façade articulation and materials.	New development should have regard for the local heritage policies in the Melbourne Planning Scheme (existing and as revised) including the statement of significance for the precinct as well as the Urban Design Strategy.	HH24
	Protection <i>in situ</i> or permanent relocation of Burke and Wills statue	CH1 Design permanent and temporary works to avoid or minimise impacts on the cultural heritage values of heritage places. Consult as required with Heritage Victoria and/or the responsible authority (as applicable).	I If relocation on this site or an alternative site is proposed the site should be appropriate to the status of the memorial and resolved with the City of Melbourne. If temporary relocation is required in order to	HH25

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
		<p>CH3 Prior to construction undertake archival photographic recording in accordance with Heritage Victoria Technical Note: Photographic Recording for Heritage Places and Objects where heritage places are to be demolished or modified.</p> <p>CH4 Prior to construction of main works or shafts that affect heritage structures or places, develop detailed methodology in accordance with Australia ICOMOS Burra Charter and to the satisfaction of Heritage Victoria or the responsible authority (as applicable) where heritage fabric is required to be dismantled, stored and reconstructed. Work is to be documented and overseen by an appropriately qualified conservation practitioner.</p> <p>CH5 Prior to construction of main works or shafts that affect heritage structures or places, develop and implement appropriate protection measures for heritage places and objects including sculptures, memorials, monuments and associated heritage fabric where retained in proximity to works. This is to be done to the satisfaction of Heritage Victoria or the responsible authority (as applicable).</p> <p>CH15 In the event the permanent relocation of the Burke and Wills Monument from its current site is required, resolve the final location of the monument to the satisfaction of the appropriate responsible authority and/or in consultation with the City of Melbourne prior to the commencement of construction.</p>	<p>protect significant fabric, document and undertake works according to accepted conservation standards.</p> <p>A detailed methodology for the recording, dismantling, storing and reconstruction of the statue would be required. This should include a condition assessment and specify active conservation and repair works, should these be required.</p>	
Historic archaeology (Entire precinct)	Subsurface excavation may damage unidentified historical archaeological sites	<p>CH6 To the satisfaction of Heritage Victoria:</p> <ul style="list-style-type: none"> Develop archaeological management plans to manage disturbance of archaeological sites and values affected by the project 	<p>For any archaeological sites or artefacts revealed or discovered during construction, the following measure would be implemented:</p> <ul style="list-style-type: none"> stop any activity which may impact 	HH01

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
		<ul style="list-style-type: none"> Undertake investigation in accordance with the Guidelines for Investigating Historical Archaeological Artefacts and Sites, Heritage Victoria 2014 (as amended or updated) and to the satisfaction of the Executive Director, Heritage Victoria Develop and implement a protocol for managing previously unidentified historical archaeological sites discovered during project works. 	<p>on the discovery</p> <ul style="list-style-type: none"> ensure that other people working in the area are aware of it and have also stopped work in the area protect the artefact, or site feature(s) by, for example, erecting temporary fencing or other suitable enclosure consult with a qualified cultural heritage consultant to determine the appropriate course of action advise Heritage Victoria where the discovery was made and provide a description or photograph of the discovery determine how to manage the find through consultation with Heritage Victoria and the heritage consultant obtain the necessary Consent under the Heritage Act 1995, or other necessary approvals to protect, recover or remove the find. <p>Archaeological management may require a combination of testing, excavation, salvage and monitoring and related reporting.</p>	
Swanston Street Archaeological Area	Construction of Flinders Street station entrance and use of the	CH6 To the satisfaction of Heritage Victoria:	The archaeological management plan would include the following:	HH02

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
<p>(VHI H7822-1904, VHI H722-1905. VHI H7822-1906, VHI H7822-1907, VHI H7822-1908)</p>	<p>entire area as a construction work site would require the complete destruction and removal of all five VHI sites</p>	<ul style="list-style-type: none"> • Develop archaeological management plans to manage disturbance of archaeological sites and values affected by the project • Undertake investigation in accordance with the Guidelines for Investigating Historical Archaeological Artefacts and Sites, Heritage Victoria 2014 (as amended or updated) and to the satisfaction of the Executive Director, Heritage Victoria • Develop and implement a protocol for managing previously unidentified historical archaeological sites discovered during project works. 	<ul style="list-style-type: none"> • description and background history of Archaeological Area • statement of significance of Archaeological Area, in accordance with Guidelines for Conducting Historical Archaeological Surveys (Heritage Council of Victoria and Heritage Victoria 2008), Criteria for Assessing Cultural Heritage Significance (Heritage Council of Victoria 2008) and Victoria’s Framework of Historical Themes (Heritage Council of Victoria 2010) • research design, including research questions which will be addressed as a result of any archaeological investigations • excavation methodology, including method to be used to excavate deposits, record spatial and stratigraphic information and recover artefacts and how these would help address the research design • artefact retention policy, including how and why individual artefacts and types of artefact would be retained, discarded or sampled during the archaeological investigation 	

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
			<ul style="list-style-type: none"> artefact management proposal, including details of how recovered artefacts would be managed in the field and post-excavation (including materials conservation if required). <p>Through the development and implementation of the archaeological management plan, the research potential of the affected site can be realised and this would mitigate the impact of destruction or disturbance.</p>	
Flinders Street VHI site	Construction of pedestrian link under Flinders Street into the Flinders Street Station and use of a section of Flinders Street between Swanston Street and Degraes Street as a Construction work site would require the complete destruction and removal of a section of the Flinders Street site.	<p>CH6 To the satisfaction of Heritage Victoria:</p> <ul style="list-style-type: none"> Develop archaeological management plans to manage disturbance of archaeological sites and values affected by the project Undertake investigation in accordance with the Guidelines for Investigating Historical Archaeological Artefacts and Sites, Heritage Victoria 2014 (as amended or updated) and to the satisfaction of the Executive Director, Heritage Victoria Develop and implement a protocol for managing previously unidentified historical archaeological sites discovered during project works. 	<p>The archaeological management plan would include the following:</p> <ul style="list-style-type: none"> description and background history of Archaeological Area statement of significance of Archaeological Area, in accordance with Guidelines for Conducting Historical Archaeological Surveys (Heritage Council of Victoria and Heritage Victoria 2008), Criteria for Assessing Cultural Heritage Significance (Heritage Council of Victoria 2008) and Victoria's Framework of Historical Themes (Heritage Council of Victoria 2010) research design, including research questions which will be addressed as a result of any archaeological investigations 	

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
			<ul style="list-style-type: none"> excavation methodology, including method to be used to excavate deposits, record spatial and stratigraphic information and recover artefacts and how these would help address the research design artefact retention policy, including how and why individual artefacts and types of artefact would be retained, discarded or sampled during the archaeological investigation artefact management proposal, including details of how recovered artefacts would be managed in the field and post-excavation (including materials conservation if required). <p>Through the development and implementation of the archaeological management plan, the research potential of the affected site can be realised and this would mitigate the impact of destruction or disturbance.</p>	
65-73 Swanston Street Archaeological Area (VHI H7822-1811, VHI H7822-1812)	Potential for alternative station entry location	<p>CH6 To the satisfaction of Heritage Victoria:</p> <ul style="list-style-type: none"> Develop archaeological management plans to manage disturbance of archaeological sites and values affected by the project Undertake investigation in accordance with the Guidelines for Investigating Historical Archaeological Artefacts and Sites, Heritage Victoria 2014 (as amended or updated) and to 	<p>The archaeological management plan would include the following:</p> <ul style="list-style-type: none"> description and background history of Archaeological Area statement of significance of Archaeological Area, in accordance with Guidelines for Conducting Historical Archaeological Surveys (Heritage Council of Victoria and 	

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
		<p>the satisfaction of the Executive Director, Heritage Victoria</p> <ul style="list-style-type: none"> Develop and implement a protocol for managing previously unidentified historical archaeological sites discovered during project works. 	<p>Heritage Victoria 2008), Criteria for Assessing Cultural Heritage Significance (Heritage Council of Victoria 2008) and Victoria's Framework of Historical Themes (Heritage Council of Victoria 2010)</p> <ul style="list-style-type: none"> research design, including research questions which will be addressed as a result of any archaeological investigations excavation methodology, including method to be used to excavate deposits, record spatial and stratigraphic information and recover artefacts and how these would help address the research design artefact retention policy, including how and why individual artefacts and types of artefact would be retained, discarded or sampled during the archaeological investigation artefact management proposal, including details of how recovered artefacts would be managed in the field and post-excavation (including materials conservation if required). <p>Through the development and implementation of the archaeological management plan, the research potential of the affected site can be realised and this would mitigate the impact of destruction or disturbance.</p>	

12.8 Conclusion

12.8.1 VHR-registered places

This area is highly sensitive in heritage terms and has a concentration of heritage sites and buildings, many of state significance and included in the VHR. Of these, the only one that would be directly affected by the works is Flinders Street Station where a direct connection from the CBD South station is proposed. This connection would require the removal of some significant fabric but with care in detailed design there would be only a minor adverse impact on heritage values. A proposal to use the existing carpark at St Paul's Cathedral as a temporary public open space could be pursued which no adverse impacts, subject to appropriate design.

12.8.2 HO precincts

The proposed works include the demolition of some relatively low graded buildings in the Flinders Gate Precinct (HO505). Of these, the Port Phillip Arcade (224-226 Flinders Street) is of some individual heritage significance in its own right and recommendations are made for its interpretation as part of the redevelopment of the site for the new station. The shop at 65-67 Swanston Street is also a building of some significance and the retention of the building, at least to the extent of the façade, is recommended. The other buildings proposed for demolition make a minor contribution to the HO precinct. While not mitigating the loss, all would be recorded prior to demolition.

12.8.3 Historical archaeology

As noted above, the management of historical archaeology is a key issue in the central city and this is particularly so in the case of CBD South station precinct, where evidence of Melbourne's earliest post-contact history may be uncovered.

13.0 Precinct 7 – Domain Station



Figure 156 Key heritage places at Domain station precinct

13.1 Project Components

13.1.1 Infrastructure

The proposed permanent infrastructure associated with the Concept Design includes:

- a station located under St Kilda Road, adjacent to Albert and Domain Roads
- three station entrances located at: Shrine Reserve, the triangular park at the intersection of Albert and St Kilda roads and Domain tram interchange
- above ground vents and other infrastructure
- new tram stop, fire egress, access hatch and other infrastructure in St Kilda Road
- new tram stop including associated infrastructure and pedestrian crossing in St Kilda Road, south of Toorak Road West intersection
- St Kilda Road functional road layout post-construction
- early works for services relocation/protection.

13.1.2 Construction

A construction work site (potentially incorporating the Southern TBM launch site) is proposed as follows:

- within St Kilda Road extending to Toorak Road to the east, Albert Road Reserve to the south, in the south-west corner of the Shrine Reserve (part of the Shrine of Remembrance, VHR H0848)
- extending into the Shrine Reserve (part of the Shrine of Remembrance, VHR H0848) on the St Kilda and Domain road frontages of the Reserve
- extending into the south-west corner of the Domain Parklands including the Edmund Herring Oval on the north side of Domain Road.

The TBM Southern Launch Site would be within the Domain station construction work site footprint.

Establishment of site compounds at Edmund Herring Oval and Albert Road Reserve.

13.2 Existing Conditions

The Domain station precinct generally extends along St Kilda Road and into Domain Road in the north-east, Bowen Crescent in the east and Albert Road to the south. Refer Figure 156.

At its northern end, there are two VHR places within or fronting St Kilda Road, the First Church of Christ Scientist Melbourne (336-340 St Kilda Road, Melbourne, VHR H1766) and the Tram Shelter (at the junction of Dorcas Street and St Kilda Road, VHR H1869). Located on the west side of St Kilda Road, outside the precinct but abutting it, the First Church of Christ dates from 1922 and is of State historical significance as the first church of the Christian Science movement in the State. It is also architecturally significant as a fine example of twentieth century classicism as applied to an ecclesiastical building. The Tram Shelter is located within the St Kilda Road road reserve and is located within the precinct. It dates from 1917 and is one of a small number of similarly picturesque timber shelters constructed in Melbourne between 1912 and 1927. It is of historical and architectural significance including for its association with Melbourne's cable tram network. Victoria Barracks is approximately 300 m further north on the west side of St Kilda Road and is within the Tunnels precinct.

To the south, the Domain station precinct incorporates the southern corner of the Shrine of Remembrance (VHR H0848), close to the intersection of Domain and St Kilda roads (Figure 157 to Figure 158). Completed in 1934, the Shrine of Remembrance is included in the VHR to the full extent of the Shrine Reserve. The Shrine of Remembrance is Victoria's principal war memorial and is of historical, social, architectural and aesthetic significance at a state level. It has also been assessed as potentially of national significance and in 2011 was the subject of a nomination to the NHL under the EPBC Act, albeit this nomination was not assessed and subsequently has lapsed.

The memorial itself is of imposing scale and presents as a distinctly stepped, highly symmetrical and classically derived design, clad in pale grey Tynong granite and with finely executed external statuary. The building interiors are of a high quality of design and are of great historical, symbolic and cultural meaning, particularly the Crypt and Sanctuary. The Shrine is set in a generous landscaped reserve which is characterised by its axial layout, including major approaches from the north and the south as well as diagonal pathways and perimeter plantings to the terraces, and a mature treed arboretum. The Shrine Reserve accommodates a large collection of memorials and statuary. The formal landscape setting of the Shrine incorporates an axial pathway system that ensures visibility of the building from key locations.

The study area is located on the southern down slope and is distant from the Shrine building itself.

A key element within the study area is the Macpherson Robertson Memorial Fountain, presented to the people of Victoria by Sir Macpherson Robertson in 1934. It was constructed contemporaneously with the construction of the Shrine itself and was designed by the Shrine architects, Hudson and Wardrop, with sculptor Paul Montford. It has a distinct setting, which includes a perimeter path edged in concrete, and original drinking fountains (Figure 160). To the west of the fountain is the Cobbers Memorial (2008) which includes a 2008 bronze replica of the original 1998 Cobbers by sculptor Peter Corlett (Figure 161); the latter is in the Australian Memorial Park near Fromelles in France.

The majority of trees in the area are dedicated to specific squadrons, divisions, service corps, field units, battalions and the like. The trees are of varying age and species and include four large River She-oak (*Casuarina cunninghamiana*), three of which are dedicated trees. There are number of relatively newly-planted specimen trees through the lawn area, including many dedicated specimens. Three very substantial maturing Spotted Gums (*Corymbia maculata*), each a dedicated tree, form a striking tree group within the precinct. The treed park extends to the north within the Shrine Reserve, containing a diverse mixture of mature trees, interspersed with numerous juvenile tree plantings reflecting the recent implementation of the Shrine Reserve landscape master plan. These recent plantings are configured in clusters of three, four and five of the same species. A number of established and juvenile trees are also dedicated and feature memorial plaques.

To the immediate west, within the road reserve extends a section of mature Elms (*Ulmus procera*) flanking the outside running lane of St Kilda Road.

The Shrine Reserve abuts the VHR-registered Domain Parklands (VHR H2304) on its south-eastern side and there is no physical boundary between the two sites in this location. This area was used from 1919 by Melbourne Grammar School and an oval and cricket pitch were developed there (Context, 2015, vol. 2: 141). The Edmund Herring Oval is bounded by a curved retaining wall on its north side with timber fence on top. There is also a 1960s brick clubhouse. The perimeter of the oval is defined by a plantation of trees, most conspicuous amongst these being a row of large, mature elms to the Domain Road boundary which extends from the corner of Dallas Brooks Drive, westwards into the Shrine Reserve. A more diverse plantation of predominantly exotic, deciduous trees extends from the west side of the oval (part of the Shrine Reserve), northwards above a high retaining wall and to the rear of the clubhouse and adjacent depot. The east boundary of Edmund Herring Oval, fronting Dallas Brooks Drive, features a plantation of juvenile Queensland Kauri (*Agathis robusta*).

On the western side of St Kilda Road, the South African Soldiers Memorial (VHR H1374) is located on a triangle of land contained by Albert and St Kilda Roads. Originally completed in 1924, it comprises a grey granite obelisk set on a podium. Four sculpted sandstone lions were added in 1952. The memorial is located within a triangular reserve bound on each side by a row of mature Elms (*Ulmus procera*) (as well as several juvenile replacement specimens). Those on the St Kilda Road frontage pre-date the memorial and appear to date from the late nineteenth century, forming part of the outer row of the St Kilda Road avenue plantation. A dedicated English Oak tree (*Quercus robur*) is located centrally within the reserve. This is a 'Royal' Oak planted in 1939, the progeny of a tree from Windsor Castle Park, Berkshire. A 1939 memorial plaque is located nearby but the Queensland Fire Wheel Tree (*Stenocarpus sinuatus*) that was

planted with the plaque is not present. A Pin Oak (*Q. palustris*) of relatively recent origin is also located within the memorial reserve.

The memorial is located on higher ground on the eastern side of the site and its primary orientation is to St Kilda Road. The balance of the site slopes away to the west. An early twentieth century drinking fountain is located on the northern apex of the triangle within the extent of registration (Figure 163).

The memorial is significant at a state level for historical, social and aesthetic reasons. It is an important war memorial in a state context, and is strongly associated with the Boer War and the rise in nationalism and patriotism in the early twentieth century. The extent of registration for the memorial includes the full extent of the triangular reserve on which it is located.



Figure 157 The Shrine of Remembrance viewed from the north-west on the WWII forecourt



Figure 158 South-west corner of the Shrine Reserve as viewed from the west: note the fountain in the background and dedicated trees



Figure 159 Macpherson Robertson Memorial Fountain viewed from the west



Figure 160 One of the two drinking fountains associated with the Macpherson Robertson Memorial Fountain



Figure 161 The Cobbers Memorial viewed from the south



Figure 162 The South African Soldiers Memorial viewed from the south (from Albert Road)



Figure 163 Early twentieth century drinking fountain at the corner of Albert Road and St Kilda Road (near the South African Soldiers Memorial)

Between Domain and Toorak Roads, the urban character on each side of the street varies markedly. To the south and east, within the City of Port Phillip, the streetscape is characterised by tall, modern residential towers (Figure 164). To the east, within the City of Melbourne, the streetscape has a finer-grained historic character, with built form typically of two to three storeys to the street, including Melbourne Grammar School and the former Kellow Falkiner Showrooms, now the Royce Hotel.

Bounded by Domain and St Kilda roads, the buildings and grounds of Melbourne Grammar School (VHR H0019, Figure 165) fall within the Domain station precinct at its westernmost corner. The large site, established c. 1856, is of historical, social, architectural and aesthetic significance to Victoria. It is significant as the oldest denominational school in the State and for its collection of architecturally significant buildings presented in an established landscape setting. The western corner of the site is dominated by a modern brick wall on a concrete plinth, following the curve of the site boundary, capped by a conical slate-clad roof. The building extends along St Kilda Road, with a curtain glazed wall replacing the brick. Along Domain Road, the brick wall terminates in a garden set within the site, with a more robust modern concrete and glass building on the boundary.

The Former Kellow Falkiner Showrooms (VHR H0668, Figure 166) is of historical and architectural significance at a state level. It is historically significant for its association with the development of the motoring trade in the early part of the twentieth century and, architecturally as an example of an early purpose built motor car showroom. Designed in the Spanish Mission style, the building was intended to evoke a sense of glamour and modernity associated with the then new car industry. It was constructed on the site of the former Cable Tram Engine House, and incorporated some of the walls of that earlier building (Argus, 2 November 1928: 5).

To the west, and within the City of Port Phillip, the Domain Station precinct boundary includes the former BP House (HO319, Figure 167) site at 1-29 Albert Road and part of the 31-33 Albert Road site identified as Offices (HO320, Figure 168) in the Port Phillip Planning Scheme. Both buildings are identified as individually significant heritage places in the Port Phillip Planning Scheme (definitions are provided at Clause 22.04-5 of the scheme), reflecting their local historical and aesthetic significance. The buildings reflect the commercialisation of St Kilda Road in the mid-late 1960s and the move toward modern forms in multi-storey construction. They are architecturally distinctive buildings utilising modern materials and adopting a curved form in response to the sweeping intersection of Albert and St Kilda Roads. The Former BP House is a landmark in this location (Figure 167). At 42 Albert Road is a large terrace house 'Former Residence' (HO334) - which is now incorporated as part of a recent tower development.

The eastern edge of the study area along St Kilda Road incorporates a small section of HO6 South Yarra Precinct (Melbourne Planning Scheme). Within the HO, three buildings at the eastern edge are graded, two of these buildings date to the Edwardian (c. 1900-1919) (Figure 169) and Interwar (c. 1919-1939) periods. The third graded site has been replaced by a modern building. Domain and Toorak Roads are also included in HO6.

St Kilda Road itself is a broad tree-lined boulevard which comprises two medians (grassed in some areas, gravel in others), two traffic lanes in each direction and tram tracks (Figure 170). In the vicinity of the study area, the avenue is planted as a double row configuration. The inner row consists of mature plane trees (*Platanus acerifolia*) flanking the inner traffic lanes and tramway. The outer row consists of English Elms (*Ulmus procera*). Smaller plane trees have recently been planted at the northern end of the tram interchange within the central median. There is a triangular island at the intersection of Toorak and St Kilda Roads which includes mature tree specimens.

The tram interchange at Albert Road – St Kilda Road – Domain Road intersection is a major element within the Domain Precinct. This interchange is of recent origins. Of interest, an old 'bundy clock' has been retained or relocated as part of the interchange works. Bundy clocks were used as a manual time keeping devices to ensure that trams were running to schedule before vehicles were able to be automatically monitored. The Melbourne Metropolitan Tramway Heritage Study (Biosis, 2012: 160) identified the clock at the Domain tram interchange as one of the only remaining clocks on the network. The origins of this particular clock are unknown, and it is not subject to any heritage controls.



Figure 164 Large towers on the south side of St Kilda Road



Figure 165 Melbourne Grammar School (VHR H0018) as viewed from the southern corner of the Shrine of Remembrance Reserve



Figure 166 The former Kellow Falkiner Showrooms (VHR H0668), now Royce Hotel, corner of Bromby Street and St Kilda Road



Figure 167 Former BP House (H0319) 1-29 Albert Road, viewed from the north



Figure 168 Offices (HO320), 31-33 Albert Road viewed from the west



Figure 169 405 St Kilda Road (HO6, B grade, Level 2 streetscape) viewed from the west



Figure 170 St Kilda Road viewed from the south-east and showing median plantings and central tramway: the former BP House is on the left of the image



Figure 171 'Bundy clock' within the Domain interchange, this view is looking north

13.2.1 Statutory heritage controls

Statutory heritage controls in the Domain station precinct are shown in the mapping at Map 11 of Appendices C and E and Map 15 of Appendix D.

13.2.1.1 Environment Protection and Biodiversity Conservation Act 1999

There are no sites subject to the provisions of the EPBC Act within the Domain station precinct.

All NHL and CHL places within a one kilometre buffer of the proposed project boundary are listed in Appendix F.

13.2.1.2 Heritage Act 1995

There are seven VHR registered places or objects within the Domain station precinct (refer to Table 68).

Table 68 VHR places within Domain station precinct

VHR number	HO number and Planning Scheme	Place	Address
VHR H0019	HO400 (Melbourne)	Melbourne Grammar School	345-369 & 355 St Kilda Road, 93-151 Domain Street, 2-124 Bromby Street and 1-99 Domain Road, Melbourne
VHR H0668	HO490 (Melbourne)	Former Kellow Falkiner Showrooms	375-385 St Kilda Road, Melbourne
VHR H0848	HO489 (Melbourne)	Shrine of Remembrance	2-42 Domain Road, Melbourne
VHR H1374	HO12 (Port Phillip)	South African Soldiers Memorial	29A Albert Road, South Melbourne
VHR H1766	HO252	First Church Of Christ Scientist Melbourne	336-340 St Kilda Road, Melbourne
VHR H1869	HO460	Tram Shelter	St Kilda Road and Dorcas Street, Melbourne
VHR H2304	HO398	Domain Parklands	St Kilda Road and Domain Road and Dallas Brooks Drive Melbourne

There are three related VHI sites within the Domain station precinct (refer to Table 69). The Former St Kilda Road Cable Tram Engine House Track Precinct site is in the St Kilda Road road reserve while the Former St Kilda Road Cable Tram Engine House is at 375-385 St Kilda Road. The St Kilda Road road reserve extends from Park Street to Kings Way.

Table 69 VHI places in the Domain station precinct

VHI Number	Place	Address
H7822-2220	Former St Kilda Road Cable Tram Engine House Track Precinct	St Kilda Road and Bromby Street, Melbourne
H7822-2246	Former St Kilda Road Cable Tram Engine House	375-385 St Kilda Road, Melbourne
H7822-2341	St Kilda Road Road Reserve	St Kilda Road, Melbourne

13.2.1.3 Planning and Environment Act 1987

The VHR sites are reflected in site-specific HOs in the Melbourne and Port Phillip Planning Schemes (refer to Table 68).

Individual HOs and HO precincts included in the Schedule to the HO of the Melbourne and Port Phillip Planning Schemes in the Domain station precinct are listed in Table 70.

Table 70 HO places, excluding VHR places, in the Domain station precinct

HO Number	Place	Address	Planning Scheme
HO319	Former BP House	1-29 Albert Road, Melbourne	Port Phillip Planning Scheme
HO320	Offices	31-33 Albert Road, Melbourne	Port Phillip Planning Scheme
HO334	Former Residence	42 Albert Road, Melbourne	Port Phillip Planning Scheme
HO6	South Yarra Precinct	South Yarra	Melbourne Planning Scheme

Melbourne Grammar School (321 St Kilda Road) is subject to the ESO Schedule 2. The Table to Schedule 2 lists the trees on the site that are included in the Exceptional Tree Register (tree nos 123 and 129). While the site is mapped with the ESO, it is noted that none of the trees referenced are included in the study area.

Table 71 Graded places in the Domain station precinct (within HO6 in the Melbourne Planning Scheme)

Address	Grading
391 St Kilda Road, Melbourne	D
403 St Kilda Road, Melbourne	D
405 St Kilda Road, Melbourne	B

13.2.2 Potential additional heritage places

While not previously identified for heritage reasons for St Kilda Road in its entirety is considered to be of significance in its own right a heritage place and warranting a statutory heritage control. St Kilda Road is a major metropolitan boulevard and is a key approach to Melbourne. It also features avenue plantings of considerable age and aesthetic significance. While modified in some areas, it stands as an urban landscape of high historical and aesthetic significance. It is currently not subject to heritage controls in this location. Refer to the discussion at section 13.5.6.2.

The 'bundy clock' at the Domain tram interchange is an element of historical interest but not at a level that would warrant a heritage control.

13.2.3 Historical archaeology

Consideration has also been given to the potential for previously unidentified sites of archaeological significance to exist within the Domain station precinct beyond the three VHI sites identified at Table 69 (refer to the predictive archaeological assessment at Appendix B). No additional sites, except for the St Kilda Road road reserve (which has been added to the VHI), were identified that warranted specific consideration in the impact assessment.

13.3 Key Issues

The key issues associated with the Concept Design are identified in the table below.

Table 72 Key issues associated with the Concept Design

Concept Design	Issue
Located under St Kilda Road, adjacent to Albert Road	Physical and visual impact of the eastern station entry located within the Shrine Reserve
	Physical and visual impact of the western station entry on the Albert Reserve and relocation of the South African Soldiers Memorial on the site
	Visual impact of new above ground structures in St Kilda Road (station entry, tram stop and other above ground structures) and impact on potential to re-establish trees in St Kilda Road consistent with the traditional boulevard layout
	Impact of changes in the functional road layout post-construction on the potential to re-establish trees in St Kilda Road consistent with the traditional boulevard layout
Cut and cover construction proposed, with a mixture of both top down and bottom up TBM southern launch site Domain launch site (within station construction work site footprint)	Physical impacts on significant fabric in the Shrine Reserve (VHR H0848) including tree removal and impacts on existing paths and roadways on the St Kilda and Domain road frontages
	Physical impacts on significant fabric in the South African Soldiers Memorial (VHR H1374) including removal (dismantling prior to relocation) of the memorial itself, the removal of mature trees including the perimeter rows of elms and the Windsor Oak, and the removal (relocation) of the historic drinking fountain
	Removal of mature trees on St Kilda Road
	Removal of trees and other fabric at the Edmund Herring Oval (located within the Domain Parklands VHR H2304)
	Possible temporary relocation of the Tram Shelter in St Kilda Road (VHR H1869)
	Would require the complete destruction and removal of one VHI site (Track Precinct) and possible damage to part of the second VHI site (Engine House), which form part of the St Kilda Road Cable Tram archaeological area. Potential for destruction of archaeological remains in the St Kilda Road road reserve archaeological area.
Tram super-stop south of the Toorak Road intersection with St Kilda Road	Additional removal of mature trees from the central avenue of St Kilda Road

13.4 Benefits and Opportunities

Table 73 Benefits and opportunities associated with the Concept Design

Concept Design	Benefits	Opportunities
TBM southern launch site Domain launch site (within station construction work site footprint)	From a heritage perspective, there are no additional construction impacts arising from the co-location of the proposed TBM Southern launch site and the Domain station construction work site.	-

13.5 Impact Assessment

The following draft EES evaluation objectives and assessment criteria (and indicators where relevant) are relevant to this assessment.

Draft EES evaluation Objectives	Assessment Criteria
Cultural Heritage – To avoid or minimise adverse effects on ... historical cultural heritage values	Avoid or minimise impacts on historical cultural heritage values and places

The Concept Design is generally consistent with the draft EES evaluation objective to avoid or minimise impacts on post-settlement cultural heritage values and places as far as practicable as:

- If the area can be refined to avoid the two mature elms within the Shrine Reserve the use of the Edmund Herring Oval (within the VHR-registered Domain Parklands) for construction purposes would have no adverse impact.
- With siting and care in detailed design, the permanent impact of the new station entry within the Shrine Reserve would be minor and there would be no adverse impact on the core heritage values of the place.
- The impact on St Kilda Road can be largely mitigated through the re-establishment of the boulevard treatment (layout and tree avenue plantings).
- Historical archaeological impacts can be mitigated by the realisation of the research potential of the affected site (St Kilda Road Cable Tram Engine House and Track Precinct) through appropriate management techniques.

While the co-location of the station entry with the South African Soldiers Memorial presents a more significant challenge in terms of the establishment of an appropriate setting for the memorial if located on this site, an improved outcome may be achieved through reconfiguration and enlargement of the reserve to accommodate the relocated memorial.

13.5.1 Domain Parklands (VHR H2304)

13.5.1.1 Statutory heritage controls

The statutory heritage controls that apply are as follows:

Legislation	Relevant VHR/HO Number
Heritage Act	VHR H2304
Planning and Environment Act	HO398 (Melbourne Planning Scheme)

13.5.1.2 Heritage considerations

The proposed construction work site within the Domain Parklands is located in Kings Domain South, and takes in the Edmund Herring Oval north of Domain Road and east of the Shrine of Remembrance. A small section of the Oval (and therefore of the construction work site) on its western side, would be located within the Shrine Reserve (Figure 172).

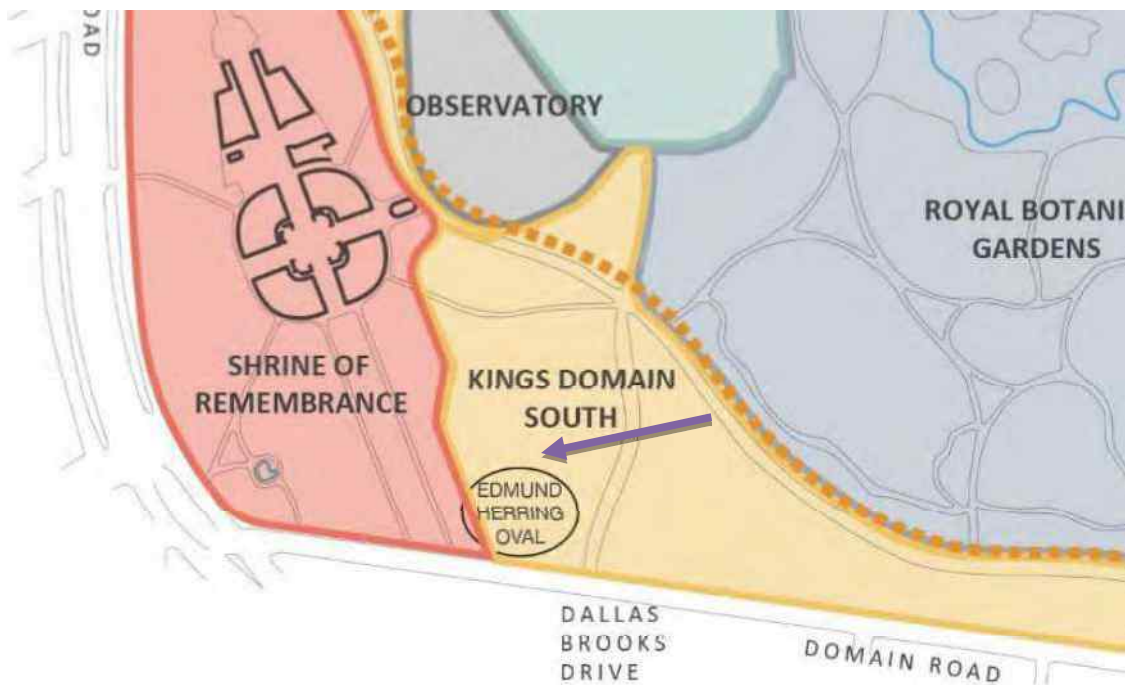


Figure 172 Detail showing Edmund Herring Oval extending into the Shrine Reserve

The construction work site would occupy the Edmund Herring Oval. Two mature elms from the southern boundary plantation would require removal to facilitate construction vehicle access from the construction work site to Domain Road. These are shown on the plan at Figure 173 and listed in Table 74. Whilst the two elms are not within the scope of the draft Context CMP (2015), the balance of the elm row that extends to the east are within the Domain Parklands and are attributed contributory significance as trees planted prior to 1945 (Context, 2015: vol. 2, p. 156). An additional three juvenile Queensland Kauri trees on the east side of Edmund Herring Oval will require removal to facilitate vehicle access to Dallas Brooks Drive. Of recent origin, the Kauri are not of significance within the place. All other trees in the vicinity of the site would be retained and protected. There would be no impact on buildings to the north of the oval. These include the nineteenth century Timber Stables building (registered as B6) on the west side of Dallas Brooks Drive and on the Edmund Herring Memorial Clubhouse (not identified in the registration).

In considering the implications of the works, it is noted that existing physical features (including the clubhouse and oval) at the Edmund Herring Oval are generally of no significance. This is reflected in the VHR documentation whereby the oval is included within the registered land but is not referenced in the statement of significance nor is it a numbered feature within the extent of registration (refer to the plans at Figure 20, Figure 21). The draft Domain Parklands CMP (Context, 2015: vol. 2, p. 142) equally found the fabric of both the oval and the associated clubhouse (known as the Sir Edmund Herring Memorial Clubhouse, 1966) to be of 'nil significance' (Context, 2015: vol. 2, p. 141-144). It did, however, find the oval to be important for its use, concluding that the 'continued use and association of Melbourne Boys Grammar with the Edmund Herring Oval and clubhouse is of social significance:

- as a long-standing facility for organised sport in the Kings Domain and the only one in the Domain Parklands
- for its ability to demonstrate the importance of organised sport and the involvement of Melbourne's private schools in cricket and football.

The draft CMP also found the oval to be of:

- 'memorial significance from its association with Sir Edmund Herring 'a great military leader and former Shrine of Remembrance Trustee' (Context: 2015: vol. 2, p. 7).

The bluestone retaining wall was not listed or mapped as an element of primary or contributory significance within the Domain Parklands (Context 2015: vol. 1, p. 63). It is noted that this wall is in poor condition and requires replacement. The City of Melbourne has applied for a Heritage Victoria permit to replace the wall and make other changes to the hard and soft landscaping in this area, including the removal of some existing trees and hedging north of the oval and introduction of new, and the introduction of new stairs and stepped seating terraces and path treatment (City of Melbourne permit application drawings November 2015).

A circular iron seat on north side of Domain Road just west of Dallas Brooks Drive is identified in the VHR extent of registration as F37. It was previously documented as surrounding a Marri (*Corymbia calophylla*). Both the tree and the seat have been removed.

Context has observed that over time the boundary between the Shrine Reserve and the King's Domain in this location has blurred, particularly through the 'memorialisation' of trees within Domain (Context, 2015: vol. 2, p. 167). This is a reference to the area is to the north of the Edmund Herring Oval, however, and no memorialised trees would be affected by the works.

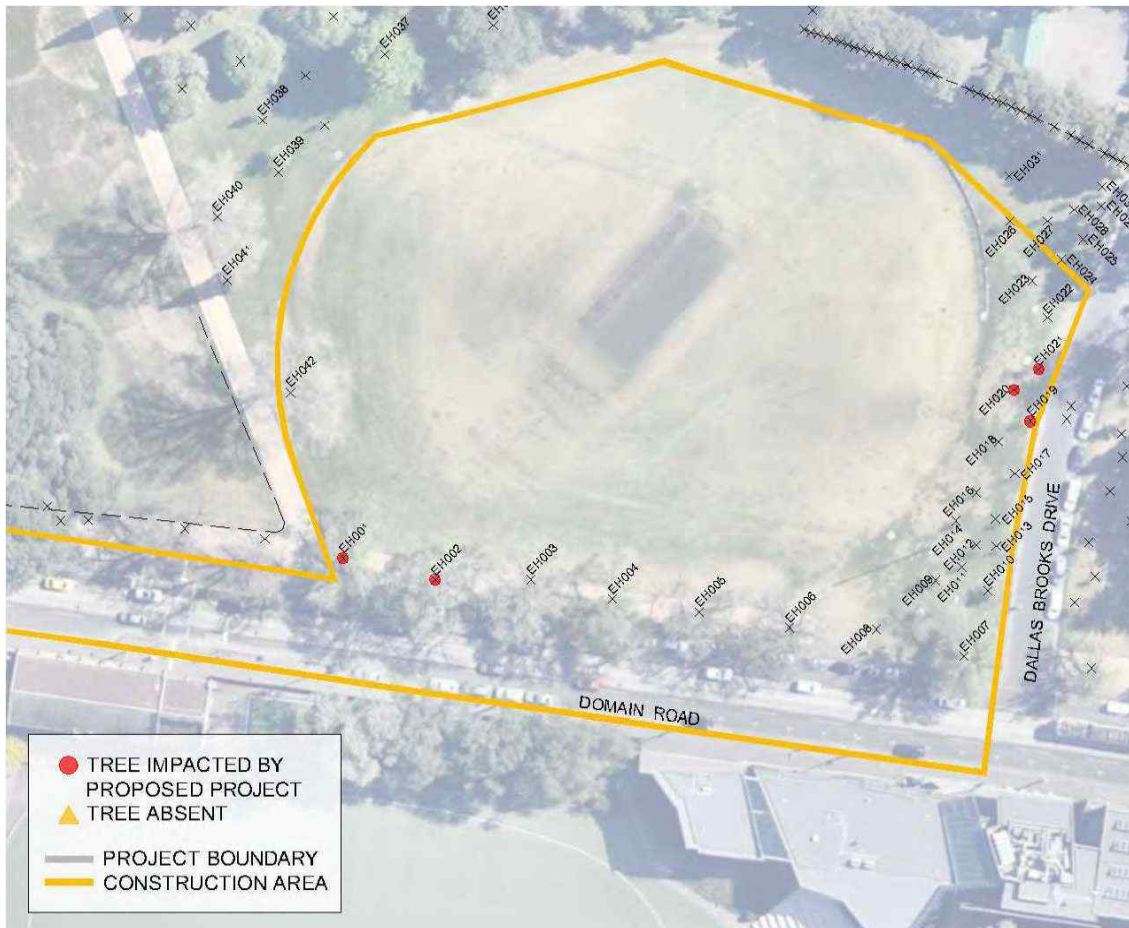


Figure 173 Edmund Herring Oval showing proposed tree removals

Table 74 Trees potentially impacted - Edmund Herring Oval

No	Species	Common name	ULE	Age
Trees highlighted grey are semi-mature to over mature trees in the public realm with a ULE > 10years				
EH001	<i>Ulmus sp.</i>	Elm	11-20	Over-mature
EH002	<i>Ulmus sp</i>	Elm	21-30	Over-mature
EH019	<i>Agathis robusta</i>	Queensland kauri	60+	Juvenile
EH020	<i>Agathis robusta</i>	Queensland kauri	60+	Juvenile
EH021	<i>Agathis robusta</i>	Queensland kauri	60+	Juvenile
Total number of trees				5

13.5.1.3 Impact assessment

In summary, the only elements of heritage significance affected by the works within the Domain station precinct would be the two elms identified of contributory significance at the Domain Road boundary and within the overlapping portion of the Shrine Reserve. The oval would be reinstated at the completion of the works. While the use of the oval would be interrupted for the period of construction, the historical and social associations referenced in the draft CMP would be undiminished. Consideration could be given to providing all vehicular access to the east of the oval from Dallas Brooks Drive, which would ensure no significant trees are directly impacted by the construction work site.

The reinstatement works should be undertaken in consultation with the City of Melbourne.

13.5.2 Shrine of Remembrance (VHR H0848)

13.5.2.1 Statutory heritage controls

The statutory heritage controls that apply are as follows:

Legislation	Relevant VHR/HO Number
Heritage Act	VHR H0848
Planning and Environment Act	HO489 (Melbourne Planning Scheme)

13.5.2.2 Heritage considerations

As summarised in the VHR statement of cultural heritage significance, the Shrine of Remembrance is of historical, social, architectural and aesthetic significance to the State of Victoria:

- historically, as the largest and most important memorial in Victoria, reflecting the community's need for a public expression of grief and commemoration.
- as the grandest memorial in a national context (at least until the Australian War Memorial in Canberra of 1941) reflecting on Melbourne's role as the seat of the Commonwealth Parliament until 1927
- for its associations with a wide range of prominent individuals including Sir John Monash
- for the presence of the Lone Pine [now replaced with a propagated specimen]
- socially, as the pre-eminent war memorial in Victoria and a focus for public events and private reflection since 1934 and for the widespread public support in terms of its original funding and dedication
- architecturally, as a large and imposing memorial, for its distinctive classically derived design, prominent siting, strong axiality, use of Australian materials, for its interior, including the ray of light feature and for its array of major sculptural works
- aesthetically, for its design within the landscape, which ensures prominence and vistas from all directions, and which includes an array of war memorials and plantings, some formal and others with symbolic meaning
- as a place of ceremonial purpose, a place of separateness and grandeur which is heightened by its isolated and elevated siting on the edge of the city and its highly formal and axial planning.

As noted earlier, it is considered that a number of these values are potentially at a national as well as a state level, and the place has previously been nominated to the NHL under the EPBC Act (in 2011), with the nomination having subsequently lapsed.

This registered place has a detailed CMP, the *Shrine of Remembrance Conservation Management Plan* (Lovell Chen, 2010) in place. The CMP identifies the values associated with the heritage place as a whole

and, along with the VHR statement of cultural heritage significance, this document is a key reference for assessing proposals for change.

Note that the Executive Director has recommended amendments to the registration for the Shrine of Remembrance pursuant to s.54 of the Heritage Act. The proposed amendments include the designation of the place as a registered archaeological place (in addition to its existing designation as a registered heritage place). Amendments to the statement of cultural heritage significance and to the supporting documentation are also proposed, including the acknowledgment of Aboriginal cultural heritage values associated with the place. The Executive Director's recommendation for the amendment of the registration has been publicly advertised.

13.5.2.3 Impact assessment

Potential impacts on the Shrine of Remembrance relate both to construction activities for the project and to the permanent infrastructure proposed within the Reserve. The impacts are both temporary (as related to construction) and permanent (infrastructure).

Construction impacts are as follows:

- While the main body of the construction work site would be outside the Shrine Reserve, it would extend into the Reserve in the location of the proposed station entry and this would require the removal of a small number of trees.
- The construction work site would be in close proximity to the Cobbers Memorial and the Macpherson Robertson Memorial Fountain.
- The construction work site could have a minor impact on paths at the south-western corner of the Reserve including the south-west diagonal pathway, one of four diagonal approaches to the Shrine. There would also be an impact on the southern end of the main north-south roadway which extends from the Shrine south to Domain Road. The construction work site is shown intersecting with the southern end of this element.
- Part of the Edmund Herring Oval (to be used for construction purposes) would be located within the Shrine Reserve. The removal of an additional two trees associated with the Edmund Herring Oval construction work site, located in the south east corner of the Shrine Reserve, is discussed in the previous section.

The impacts could be mitigated following construction through the reinstatement of hard and soft landscaping and over time could be reversed.

Trees to be removed or that may require removal in the Shrine Reserve associated with the construction of the proposed station entry are shown on the plan at Figure 174 and in Table 75 and Table 77.

A total of six juvenile specimens would be removed, with one mature tree, an English Elm, potentially impacted by the proposed project. As noted above, there are also two trees on Domain Road, close to the Edmund Herring Oval, that fall technically within the Shrine Reserve and may be required to be removed as part of the access arrangements for the proposed construction work site in that location. These are shown on the plan at Figure 173 and in Table 74.

None of the trees proposed for removal are dedicated trees (i.e.: trees with plaques commemorating a particular service unit) within the Shrine Reserve, though there are a number of these trees in the vicinity of the works. These include, for example, tree DS114, dedicated to the No. 2 Squadron, Royal Australian Air Force. Formed on 20 September 1916, this squadron will commemorate its centenary later this year. This tree is located a short distance north-east of the construction work site. There are a number of other dedicated trees in the vicinity of the works, including DS097, DS098 and DS115. Refer to Figure 175 and Table 76.

While none are likely to be directly affected by Melbourne Metro works, it is relevant to provide a comment in relation to dedicated trees. Unsurprisingly, given the large numbers of dedicated trees within the Reserve, these are replaced from time to time and this has occurred in recent years through a

major tree replacement program undertaken by the Shrine of Remembrance in association with the City of Melbourne (2010-2015). This is a process that occurs with no enduring impact on the significance of the place as a whole, but it is a process that needs to be undertaken with care and on the basis of detailed planning and consultation. Where trees to be removed are associated with commemorative plaques and the trees themselves have been dedicated, the Shrine of Remembrance has a standard protocol that appropriately recognises the historical and social associations of individual trees. This includes reference to records relating to the commemorative plaques and trees and a process of notification of the relevant organisation/group where trees are to be removed. In each case, a decision is made on whether the plaque goes to a newly planted tree or one existing and the records updated.

There may also be an impact on the Cobbers Memorial. The establishment of the construction work site in close proximity could have an impact in relation to the commemorative purpose and enjoyment of this memorial for a period of time and may even require the temporary removal of the memorial.

The Shrine CMP (Lovell Chen, 2010) recognises the collective significance of the memorials and monuments on the Reserve, but did not elevate particular memorials or monuments in terms of significance or contribution to the place. This is a collection which changes over time and which needs to have flexibility to respond to changes in commemorative practices and cultural associations. In this context, in the majority of cases, the placement and potentially the relocation of individual memorials and monuments is a matter for the Shrine of Remembrance to manage.

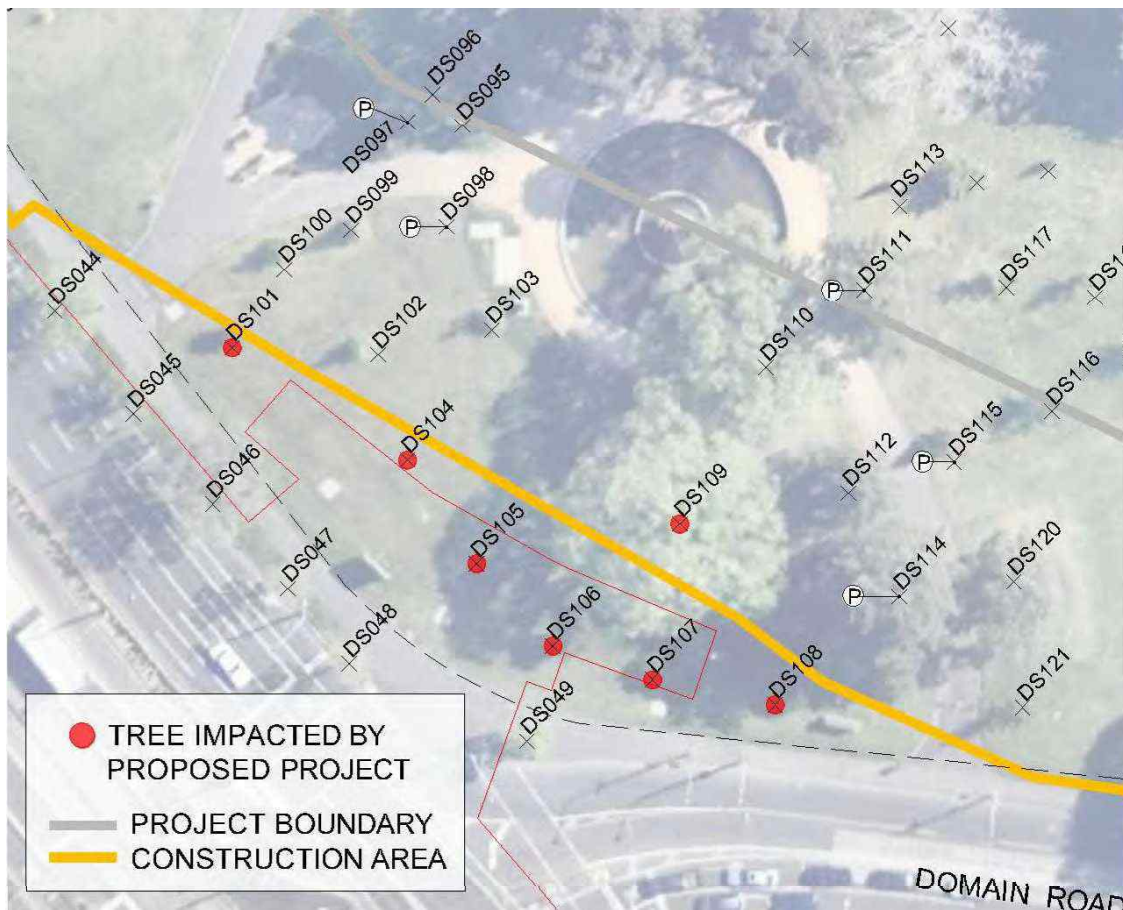


Figure 174 Eastern end of the proposed Domain station site showing potential tree removals within the Shrine Reserve

Table 75 Trees potentially impacted within the Shrine Reserve

No	Species	Common Name	ULE	Age
DS101	<i>Ficus rubiginosa</i>	Port Jackson fig	60+	Juvenile
DS104	<i>Jacaranda mimosifolia</i>	Jacaranda	60+	Juvenile
DS105	<i>Jacaranda mimosifolia</i>	Jacaranda	60+	Juvenile
DS106	<i>Ficus rubiginosa</i>	Port Jackson fig	60+	Juvenile
DS107	<i>Ficus rubiginosa</i>	Port Jackson fig	60+	Juvenile
DS108	<i>Ficus rubiginosa</i>	Port Jackson fig	60+	Juvenile
DS109	<i>Ulmus procera</i>	English elm	21-30	Mature
Total number of trees				7

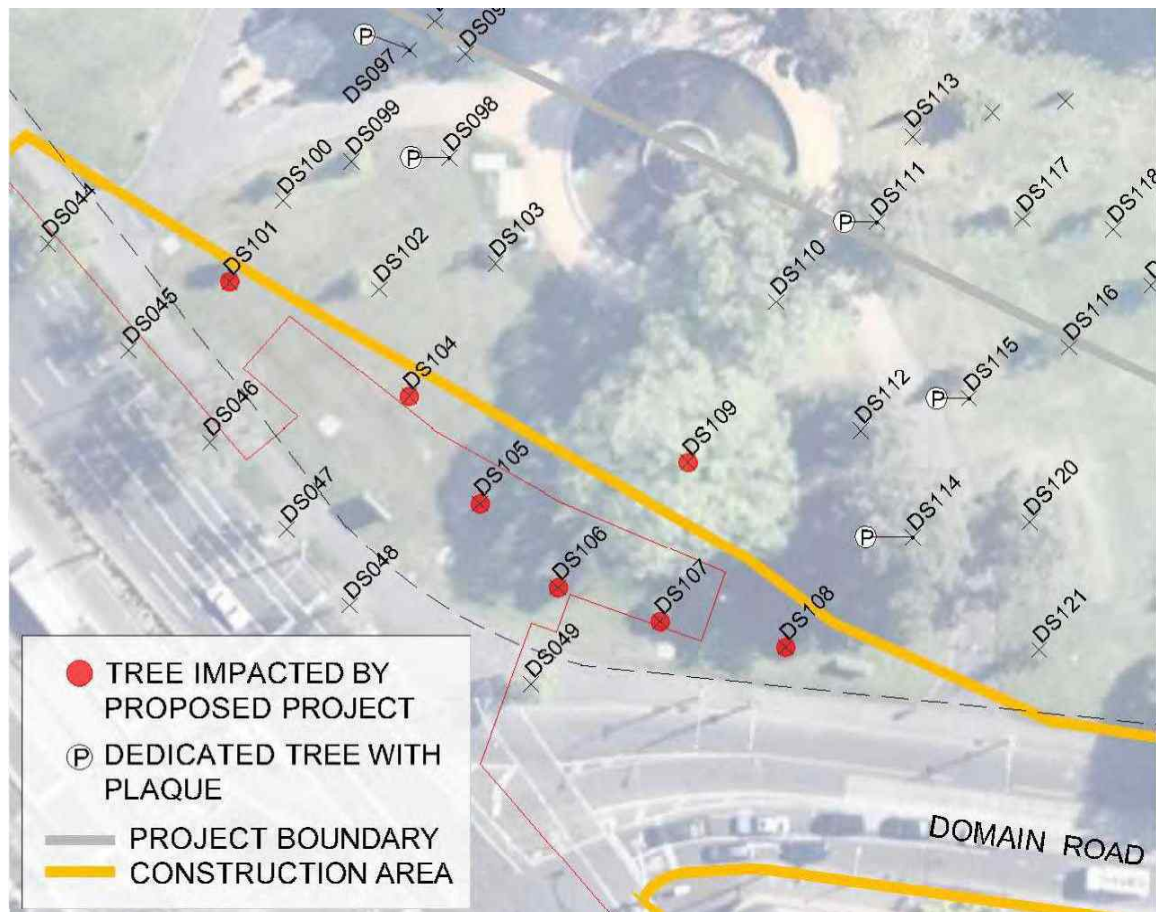


Figure 175 Dedicated trees with plaques within the Shrine Reserve in proximity to the Concept Design

Table 76 Dedicated trees with plaques in proximity to the Concept Design

No	Species	Common name	Plaque
DS097	<i>Acer sp.</i>	Maple	461 Squadron RAAF Coastal Command
DS098	<i>Jacaranda mimosifolia</i>	Jacaranda	Boer War South Africa 1899-1902
DS111	<i>Casuarina cunninghamiana</i>	River She-oak	No 2 Airfield Construction Squadron
DS114	<i>Casuarina cunninghamiana</i>	River She-oak	No 2 Squadron, Royal Australian Air Force
DS115	<i>Casuarina cunninghamiana</i>	River She-oak	Fighter Squadrons Branch RAAF Association

The specific policy is as follows:

Policy 10 - Generally, retain or relocate individual monuments and memorials as required (Lovell Chen 2010: 140)

Consistent with this policy, recognising that the Cobbers Memorial site was carefully selected as part of the design, if required the memorial could be relocated elsewhere on the Reserve, either temporarily or permanently, without adverse impact on the heritage values of the Shrine.

There are therefore three options for the memorial:

- retained *in situ* and protected during construction
- removed, stored and reinstated in this site following construction
- relocated elsewhere on the Reserve.

Assuming appropriate siting which does not conflict with significant elements or characteristics of the place, it is not considered likely that any of these options would have a heritage impact.

In relation to the Macpherson Robertson Fountain, while this is also in relatively close proximity, it would be sufficiently separated to be retained and protected *in situ*.

A small part of the Edmund Herring Oval (on its western edge) is located within the Shrine Reserve and would be occupied during construction. While part of the registered land, the oval does not relate to the main part of the Reserve and is managed as a sporting facility. There would be no heritage impact on the Shrine of Remembrance associated with the use of the land.

The physical impacts on the paths at the south-western corner of the Reserve (on St Kilda Road) and on the southern end of the north-south roadway (on Domain Road) would be minor and temporary and these would be reinstated following construction. Ideally, as previously discussed for Edmund Herring Oval, all vehicular access to the eastern construction work site would not encroach through the Shrine Reserve which would necessitate removal of two mature elms, but would utilise an eastern route to Dallas Brooks Drive where tree removals would be limited to recently planted, juvenile trees.

A number of affected elements were identified as significant in the CMP (Lovell Chen, 2010: 134-135) and the following assessment and policies are relevant:

Table 77 CMP policies for key elements at the Shrine of Remembrance

Approach	Discussion	Policy
Southern approach and associated plantings	While of secondary importance when compared with the northern approach, the southern approach is also a major element of the original site planning and contributes to the symmetry along the north-south axis of the Shrine. It is also of interest in that it retains the original configuration of two gravel roads separated by a central grassed median strip.	Retain the southern approach as a major landscape feature to the extent of its alignment and general scale and form. It would be preferable to retain the original layout of gravel roads separated by a central grassed median strip.
East-west axis and diagonal paths	The east-west axis and diagonal paths formed part of the original construction and layout of the site.	The diagonal paths are symmetrically placed (in plan) around the Shrine. This symmetry is not easily read in three dimensions, due to different ground levels and sloping areas, and the end conditions of the paths. The paths and their alignments, as elements of the original construction, should be retained but could be altered in width, edge detail or surface finish.

Having regard for the CMP policies the temporary removal of sections of the paths and roadways within the construction area is acceptable providing they are reinstated like for like.

In summary, the construction impacts proposed within the Shrine Reserve in the Concept Design are limited to a zone immediately adjacent to the station entry and are relatively minor.

Permanent infrastructure:

- New station entry within reserve.

The eastern station entry located at the south-western corner of the reserve would require the permanent removal of a number of existing trees, including a mature elm south of the Macpherson Robertson Fountain (DS109).

In terms of the built form, the completed station entry would include stairs, escalators, retaining walls, a lift with canopy and other services. Recognising these building forms are unrelated to the place, in a physical and visual sense they would be relatively recessive when considered in the context of the Reserve as a whole. The higher element is the lift and this is located toward the street edge, which is preferred.

In terms of a visual impact, the new station entry would be relatively remote from the Shrine of Remembrance building itself and the terraces and grassed mounds. The station entry would be located away from those areas within the Shrine Reserve that are highly sensitive or where there is a key visual relationship to the Shrine itself; these were identified in the CMP (Lovell Chen, 2010: 146-7). It would appear as an element of modest scale and appearance and one which is related to the street edge and other infrastructure in St Kilda Road. Critically, the station entry would have no long-term impact on the south-west diagonal pathway, one of four diagonal approaches to the Shrine and an important element

in the overall planning and layout of the Reserve. There would also be no impact on the views to the Shrine along this approach, with the station to be set off to the east of this path.

Overall, the design is considered to be generally in accordance with the relevant policy for new development in the CMP (Lovell Chen, 2010: 147):

Any visible development should be recessive in nature, and be carefully sited and designed to have regard for the dominance and integrity of the main building, the axial planning of the site and the formal and symmetrical qualities of the place as a whole (Lovell Chen, 2010).

While noting that there are no significant impacts on the presentation of the Shrine of Remembrance itself or the Shrine Reserve more broadly, there would be localised impacts including a change to the immediate setting of both the Macpherson Robertson Fountain and the Cobbers Memorial and these issues need also to be considered.

The fountain is an element that is unusual on this site in that it is not related to the commemoration of sacrifice in war, but rather, is associated with the centenary of the state as celebrated in 1934 (Lovell Chen, 2010). It was constructed contemporaneously with the construction of the Shrine itself and was designed by the Shrine architects, Hudson and Wardrop, with sculptor Paul Montford.

On this basis, while the CMP contemplates the relocation of other memorials and monuments on the Reserve as required, it recommends this element be retained *in situ* (Lovell Chen, 2010).



Figure 176 1955 view looking beyond the fountain north-east towards the Shrine of Remembrance, photographer Mark Strizic
Source: State Library of Victoria



Figure 177 Recent aerial view of the south-western corner of the Shrine Reserve: the Cobbers Memorial is indicated at the left of the image with the Macpherson Robertson Memorial Fountain indicated at right
Source: Nearmap, 13 September 2015

In accordance with the CMP policy, the fountain and its original surrounds are to be protected including the pair of granite drinking fountains, circular pathway and concrete kerbs.

In contrast, while a recent addition to the Reserve, the Cobbers Memorial does have a commemorative function, having been erected in 2008 as a tribute to those who fought and fell in the Battle of Fromelles on the Western Front (19-20 July 1916). The installation of the cast bronze replica of *Cobbers* at the south-west corner of the Shrine Reserve in 2008, has provided a new assembly point for participants in the Remembrance Day and Anzac Day commemorations, and annually on 19th July, a service commemorating the Battle of Fromelles takes place at this location. Outside of these events, its prominent siting draws visitors year round to what was previously a less-visited part of the Shrine Reserve.

The general plan form and arrangement of the station entry proposed, with stairs and escalators oriented generally to the north and south and a simple retaining wall on the eastern edge, is considered to represent an appropriate response to the heritage sensitivities. This arrangement minimises the footprint of the entry and minimises the intrusion into the Reserve and into the setting of the fountain and Cobbers Memorial. As proposed, the station entry would have good separation from both, however if feasible the preference would be to further increase these setbacks, siting the station entry closer to the edge of the Reserve.

While not critical to an appreciation of the fountain, views to this feature from the corner of Domain and St Kilda roads would be obscured by the station entry. In this context, the maintenance of green space around the fountain becomes very important and an increased setback would help to maintain the sense of a parkland setting. For the same reason, the introduction of additional areas of hard paving should be avoided in the space between the fountain and the station entry. In preference this area should be maintained as lawn with trees set into it and continue to read as part of the landscape. For its part, the Cobbers Memorial is best appreciated at close quarters (as one moves along the main south-western path to the Shrine) and the station entry would not affect this. Notwithstanding, as for all

commemorative elements at the Shrine, the memorial is the focus for reflection and gathering and an increased separation from the station entry would be desirable.

In detailed design, it would be important that the low scale of the station entry design is maintained and materials used are sympathetic to the context. Simple contemporary materials would be preferred. Recognising some directional signage would be required, this should be as low-key as functional requirements allow. In this regard it is noted that grey granite has been very successfully employed in recent work around the Shrine and in the reserve and desirably this material theme would be maintained in the new station entry.

Overall, the introduction of the eastern station entry in this location would alter the presentation of this edge of the Reserve but would not significantly detract from an appreciation of the Shrine of Remembrance nor impact on its significance. It would have no impact on the historical associations and meanings of the place, nor on its commemorative and social values. The architectural and aesthetic qualities of the place - deriving from the imposing scale and form and distinctive design of the memorial itself, the axial planning of the Reserve and significant views in and out and the mix of informal and formal landscaping - would all be undiminished. The change is a relatively modest one, located on an edge of the Reserve and away from the key views in. With continued care in detailed design, the proposed entry can be delivered in a form which is respectful of its context and the heritage values of the place.

13.5.3 South African Soldiers Memorial (VHR H1374)

13.5.3.1 Statutory heritage controls

The statutory heritage controls that apply are as follows:

Legislation	Relevant VHR/HO Number
Heritage Act	VHR H1374
Planning and Environment Act	HO12 (Port Phillip Planning Scheme)

13.5.3.2 Heritage considerations

Potential impacts on South African Soldiers Memorial relate both to construction activities for the Project and to the permanent infrastructure and station entry arrangement proposed on the site. The impacts are both temporary (as related to construction) and permanent (infrastructure).

In considering the nature and severity of the impacts, it is relevant to consider the heritage values associated with the place and the impact the works would have on these values.

The City of Port Phillip has advised it has commissioned a CMP for the South African Soldiers Memorial but this project had not been completed at the time of writing. The following summary of heritage values is based on the VHR documentation for the place.

The place is of historical, social and aesthetic importance.

Historically, it is important as the major memorial associated with Boer War in Victoria. It is one of a number on the VHR (including another constructed in 1903 to the north on St Kilda Road, VHR H0382) but as noted in the VHR statement of significance is one of the most substantial and is distinctive as it was intended to commemorate all Australians who took part in the conflict. This memorial pre-dates the completion of the Shrine of Remembrance in the 1930s and its planning was underway prior to World War I. It stands as a symbol of this earlier conflict (the first in which Australian and New Zealand soldiers volunteered together) and as a tangible expression of the Victorian community's commemoration of the soldiers' efforts and sacrifices at a time (1911 onward) which saw a rising nationalist consciousness. The Windsor Oak (1939) is of individual historical interest as a memorial planting. While not referenced in the statement, the drinking fountain, which pre-dates the memorial, is of historical significance in its own right and is part of a larger collection of such fountains found in both the City of Melbourne and the City of Port Phillip. The memorial plaque (where the Queensland Fire Wheel Tree was planted, Figure 180) is of historical interest as a later (1939) tribute to the soldiers who served in the Boer War.

Aesthetically, the scale, distinctive and monumental form and prominent location combine to give the memorial a strong presence on St Kilda Road. It is finely detailed and incorporates elements such as eucalyptus motifs that reflect the contemporary rise in nationalism. The memorial was designed by prominent architects Irwin & Stevenson. The later sandstone lions were the work of local sculptor, Stanley James Hammond.

The mature trees on the site are not referenced in the VHR statement but are also considered to be of both historical and aesthetic significance and are part of the setting of the memorial. Original plans from 1921 held by the City of Port Phillip (Figure 181, Figure 182) show the arrangement of trees to the perimeter of the reserve, with an open area on the eastern edge allowing for the primary presentation of the memorial to St Kilda Road. Interestingly, while they form a setting of long standing for the monument, many of the trees appear from photographic and documentary evidence possibly to have pre-dated its construction. The site previously was a local reserve, one of many ornamental and functional plantations established on what local historian Charles Daley describes as 'odd corners and triangles' in South Melbourne (Daley, 1940). These were under the control and management of the local South Melbourne council and were planted in the late nineteenth and early twentieth century. The MMBW plan of 1895 indicates a row of trees along the eastern edge of the reserve and a tennis court

located centrally, and the elms appear as relatively mature trees in a c. early 1930s photograph and on the 1945 aerials. Refer to Figure 184.

Socially, while not elaborated on in the VHR statement of significance, the majority of war memorials are likely to be the focus of sentiment and attachment, whether that is public or private. In this case the memorial is of special significance to the National Boer War Memorial Association (Victoria).

13.5.3.3 Impact assessment

The site is proposed to be cleared for the duration of the construction period including the removal of all existing trees and hard and soft landscaping. A total of 28 trees would be removed, the majority of which are semi-mature to over-mature specimens. They include the perimeter elms as well as the Windsor Oak.

Trees that would require removal are shown on Figure 178 and listed in Table 78.

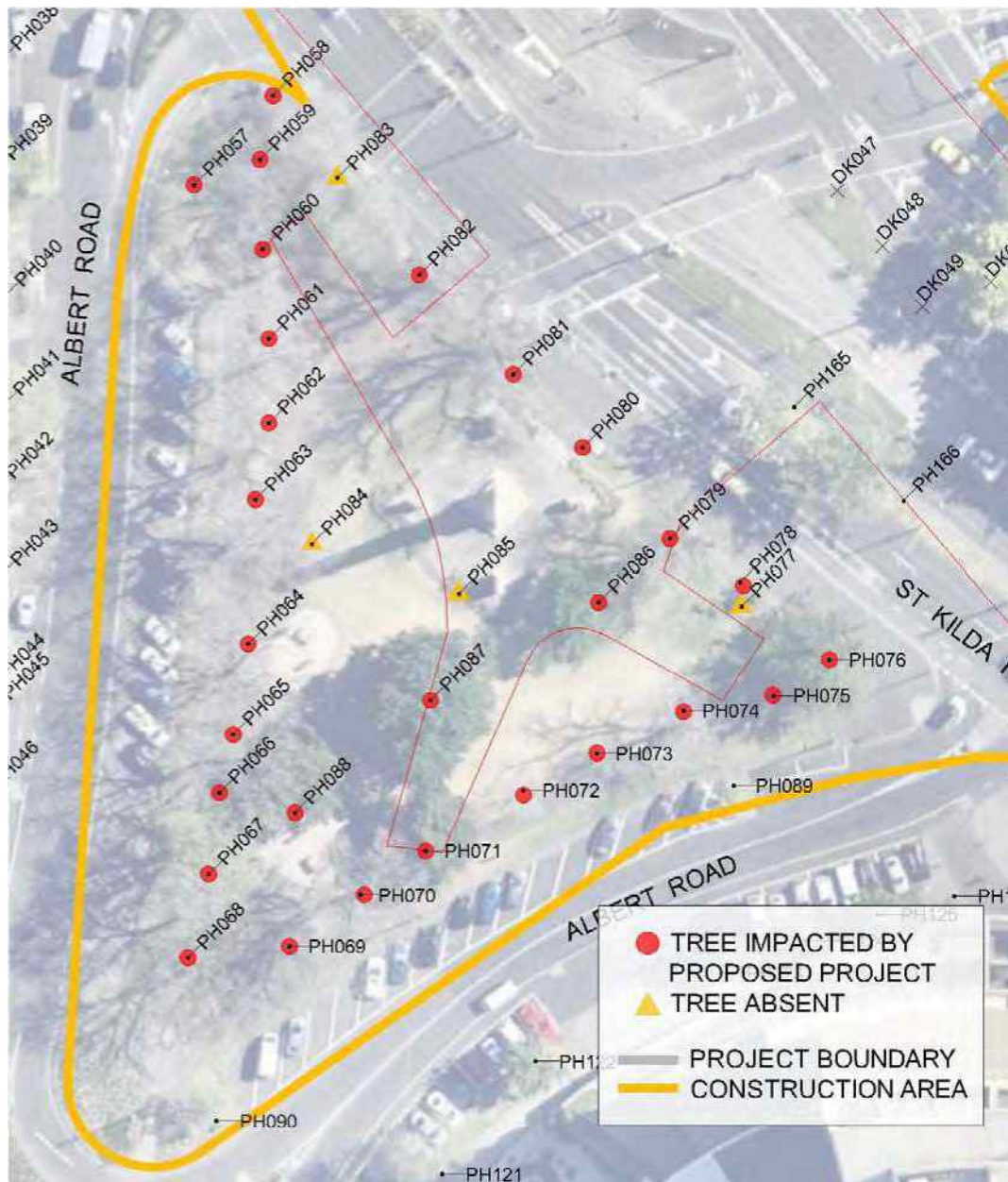


Figure 178 Potential tree removals, South African Soldiers Memorial

Table 78 Tree removals in the South African Soldiers Memorial Reserve

No	Species	Common Name	ULE	Age
PH057	<i>Ulmus procera</i>	English elm	31-60	Semi-mature
PH058	<i>Ulmus procera</i>	English elm	21-30	Semi-mature
PH059	<i>Ulmus procera</i>	English elm	11-20	Semi-mature
PH060	<i>Ulmus procera</i>	English elm	11-20	Mature
PH061	<i>Ulmus procera</i>	English elm	11-20	Mature
PH062	<i>Ulmus procera</i>	English elm	11-20	Mature
PH063	<i>Ulmus procera</i>	English elm	11-20	Mature
PH064	<i>Ulmus procera</i>	English elm	11-20	Mature
PH065	<i>Ulmus procera</i>	English elm	11-20	Mature
PH066	<i>Ulmus procera</i>	English elm	11-20	Mature
PH067	<i>Ulmus procera</i>	English elm	11-20	Mature
PH068	<i>Ulmus procera</i>	English elm	11-20	Mature
PH069	<i>Ulmus parvifolia</i>	Chinese elm	21-30	Mature
PH070	<i>Ulmus procera</i>	English elm	11-20	Mature
PH071	<i>Pittosporum undulatum</i>	Sweet pittosporum	11-20	Mature
PH072	<i>Ulmus procera</i>	English elm	60+	Semi-mature
PH073	<i>Ulmus procera</i>	English elm	31-60	Semi-mature
PH074	<i>Ulmus procera</i>	English elm	1-5	Mature
PH075	<i>Ulmus procera</i>	English elm	60+	Juvenile
PH076	<i>Ulmus procera</i>	English elm	1-5	Over mature
PH078	<i>Ulmus procera</i>	English elm	31-60	Juvenile
PH079	<i>Ulmus procera</i>	English elm	1-5	Over mature
PH080	<i>Ulmus procera</i>	English elm	6-10	Over mature
PH081	<i>Ulmus procera</i>	English elm	6-10	Over mature
PH082	<i>Ulmus procera</i>	English elm	21-30	Mature
PH086	<i>Quercus palustris</i>	Pin oak	31-60	Mature
PH087	<i>Quercus robur</i>	English oak	31-60	Mature
PH088	<i>Ulmus parvifolia</i>	Chinese elm	31-60	Semi-mature
Total number of trees				28

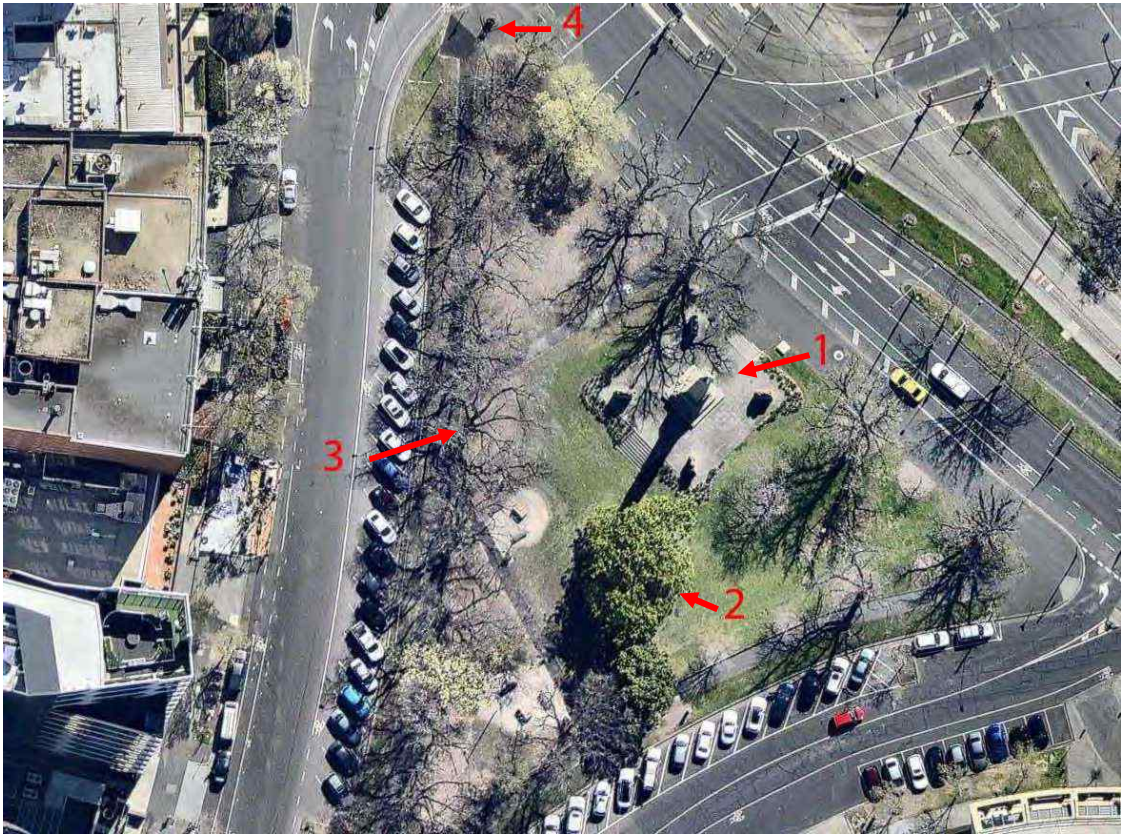


Figure 179 Aerial view of the South African Soldiers Memorial and South African Soldiers Memorial Reserve, elements identified as follows: 1. South African Soldiers Memorial, 2. Windsor Oak, 3. Fire Wheel tree plaque, 4. Drinking fountain
Source: Nearmap



Figure 180 Retained plaque associated with the removed Queensland Fire Wheel Tree

The memorial itself would be removed and stored for the duration of construction and reinstated in an alternative location at the western apex of the reserve post construction. Memorial plaques are to be removed and reinstated in proximity to the re-sited monument.

There is an early twentieth century drinking fountain located on the northern apex of the triangle within the extent of registration. The drinking fountain is within the footpath and it is assumed it would either be retained *in situ* and protected during works or removed and reinstated on the site following the completion of works.

Construction impacts

The construction impacts on this site would be significant, with the establishment of the construction work site requiring the removal of all trees, the memorial itself and the historic drinking fountain. There would be no additional impacts if the site were to be used for the TBM launch.

The extent to which these impacts can be mitigated over time depends in large part on the design for permanent works for the station entry and reserve as a whole.

In the Concept Design, the impacts are only partly mitigated. The memorial would be reinstated on the site, albeit this would be in a different location and it is likely the drinking fountain could also be reinstated. The tree loss would not be mitigated in the Concept Design, as the station design is unlikely to allow for replanting of trees to the perimeter of the reserve.

These issues are discussed in more detail below.

Permanent infrastructure

As proposed in the Concept Design, the memorial would be relocated to the western apex of the reserve and the station entry takes the balance of the site, and features escalators, stairs and a lift on the northern edge providing access from St Kilda Road, with a large terraced, sunken plaza entry from the west, stepping down to the concourse under St Kilda Road. With the exception of the lift and associated canopy on St Kilda Road, the station entry would be low scale and sit down into the site. The plaza has been designed with the relocated memorial a focus at its western end as it comes up to grade.

In the form included in Concept Design, the design would have a significant adverse impact on the heritage place.

The specific historical associations and meanings of the place would be largely unaltered following the reinstatement of the memorial on the site. These associations and meanings are best appreciated at close quarters, where the details of the memorial can be viewed and understood (including the text on the memorial), rather than in longer views to the site.

Contemporary social associations are likely to rely on ongoing engagement with the place and there may be an impact in this context. The proposed new location for the memorial offers little opportunity for commemorative gatherings and events, given the lack of space around the memorial, and this could have an impact on contemporary social associations and attachment to the place. Accepting this, it is noted that the annual Boer War Commemoration Ceremony is usually held at the Shrine of Remembrance in May.

The impacts associated with this registered place are largely aesthetic related to the relocation of the memorial to the west on the site, and the construction of the new station entry and associated landscaping.

On the basis that location and setting are often critical to the significance of heritage places, relocation is not an action that is generally supported in conservation practice. The *Burra Charter* recommends it not be considered 'unless this is the sole practical means of ensuring its survival' or in cases where the building or structure was designed to be relocated or has a history of relocation (refer to Article 9).

In this case, relocation would be contemplated on the same site (rather than an alternative site) but the change would still alter the presentation of the memorial. The memorial would be sited away from the

St Kilda Road frontage of the site, and would not be as prominent. Additionally there would be an alternative focus on the site, that of the station entry itself.

In this context, the key issue would be the establishment of an appropriate setting for the monument. The focus should be on a siting that allows sufficient space around the monument for it to retain a level of prominence and retain a dignified character befitting its commemorative purpose. One of the characteristics of the memorial currently is that it sits in an elevated position within a discrete parcel of land well defined spatially by a perimeter of large trees. It may not be possible to recreate this arrangement of enclosing perimeter trees on this site while accommodating the required station entry, and a more open presentation could be pursued if required. What is important is that the memorial is oriented appropriately and sufficient space is provided around, particular on its principal approach.

The Concept Design for the re-siting of the memorial to the west of the station box with stairs and platforms immediately to its east appears to be an unsatisfactory outcome which compromises the setting of the structure. While a restoration to the western apex of the site may be an acceptable outcome, this needs to deliver the memorial with an appropriate open space in the extensive foreground and generous open axial viewing, which is not crowded out by maturing vegetation. The station design should be reviewed and alternatives considered to achieve an appropriate setting for the memorial on this site.

The drinking fountain and memorial plaque should also be reinstated. Given its particular interest, the Windsor Oak could be vegetatively propagated and replanted (with its associated plaque) in a suitable location to allow for future growth into a mature specimen. The missing Queensland Fire Wheel Tree should also be reinstated.

The strong preference from a heritage perspective is to retain the monument on this site with an appropriate siting and setting established for it. Only in the event it is not possible or feasible to provide an appropriate setting on this site, should consideration be given to relocating the monument from the reserve to an alternative location. Any alternative location would need to have the capacity to accommodate the memorial and establish an appropriate setting for it, one that allows for a proper appreciation of its aesthetic and historical values and its commemorative function. Such a site would need to be publicly accessible and preferably would have a level of visual prominence. If this course of action is pursued it could have the benefit of avoiding 'double handling' during relocation (dismantling and storing prior to reconstruction) and reducing the risk of physical damage.

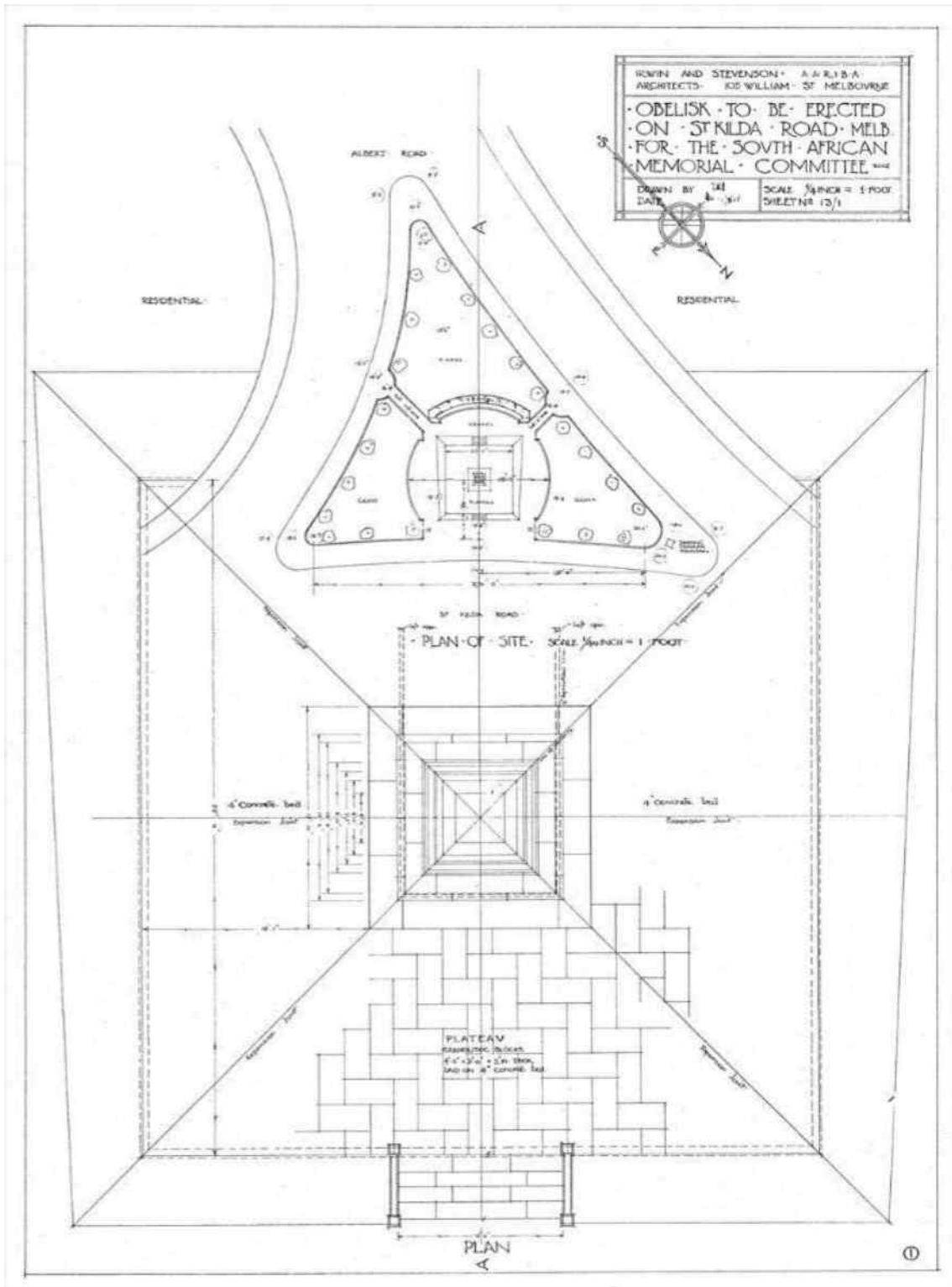


Figure 181 Original plan for the memorial (1921)
 Source: Courtesy City of Port Phillip

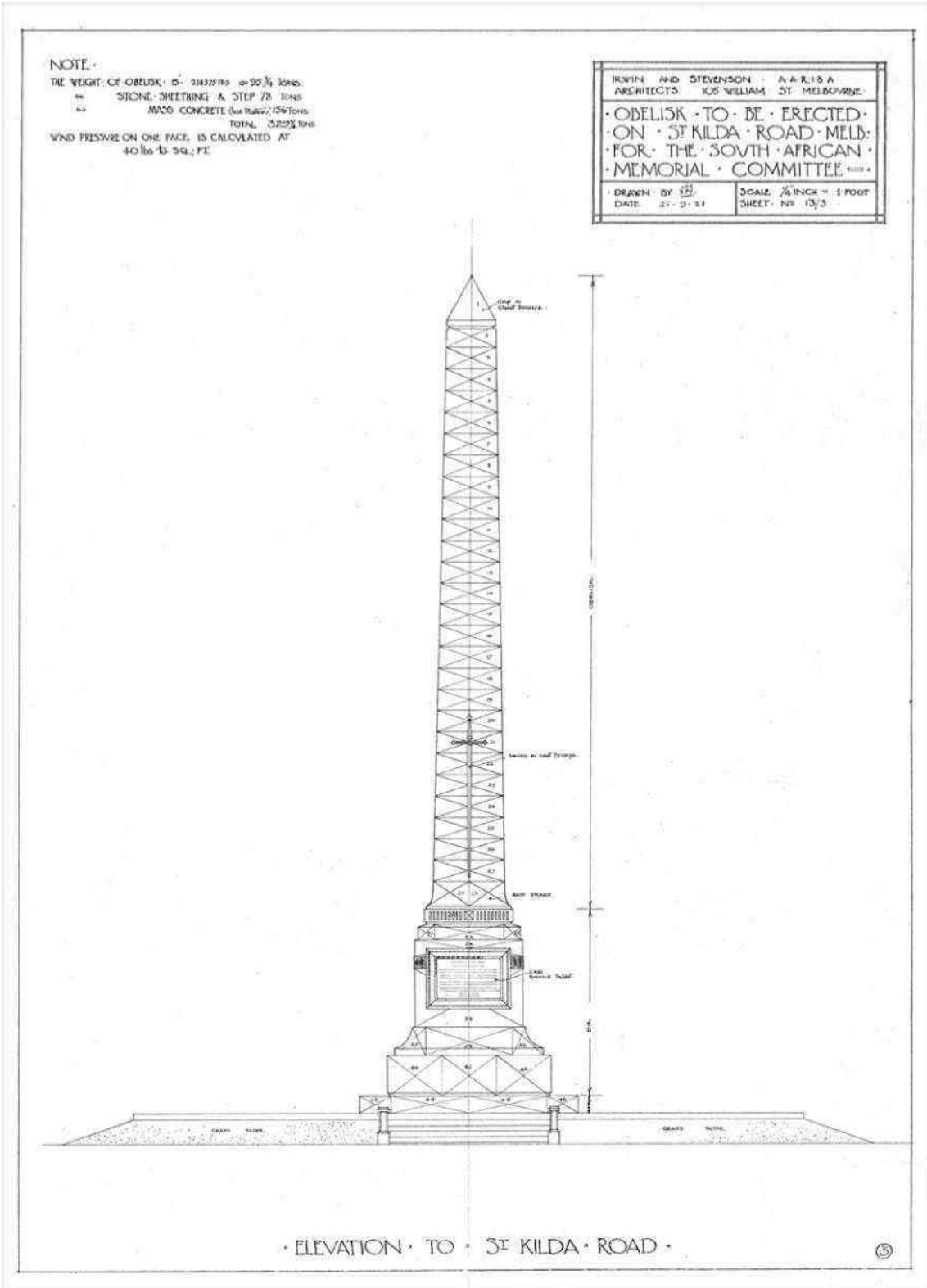


Figure 182 Original elevation, 1921
 Source: Courtesy City of Port Phillip



Figure 183 MMBW Detail Plan no 649 showing the Albert Reserve at the end of the nineteenth century when it accommodated tennis courts
Source: State Library of Victoria



Figure 184 Oblique aerial view over the reserve from the north-east, c. 1933
Source: State Library of Victoria, photographer Charles Pratt

13.5.4 Tram Shelter (VHR H1869)

13.5.4.1 Statutory heritage controls

The statutory heritage controls that apply are as follows:

Legislation	Relevant VHR/HO number
Heritage Act	VHR H1869
Planning and Environment Act	HO460 (Port Phillip Planning Scheme)

13.5.4.2 Heritage considerations

The VHR-registered Tram Shelter at the corner of St Kilda Road and Dorcas Street is located within the proposed construction work site at Domain.

The Tram Shelter dates from 1917 and is one of a small number of similarly picturesque timber shelters constructed in Melbourne between 1912 and 1927. It is of historical and architectural significance including for its association with Melbourne's cable tram network.

13.5.4.3 Impact assessment

Depending on the nature of works undertaken in proximity to this structure, it may be required to be relocated and stored during construction and reinstated in the same location following the completion of the works.

It would be preferable to retain and protect the building in its current location. Equally, if required to ensure its protection, the relocation and subsequent reinstatement of the building would be unlikely to have a significant impact on its heritage values. The works would need to be undertaken in accordance with accepted conservation standards and the building would need to be in secure storage for the duration.



Figure 185 View of the Tram Shelter looking north along St Kilda Road

13.5.5 Historical Archaeology

13.5.5.1 Statutory heritage controls

The statutory heritage controls that apply are as follows:

Legislation	Relevant VHI number
Heritage Act	H7822-2220 St Kilda Road Cable Tram Engine House Track Precinct
	H7822-2246 St Kilda Road Cable Tram Engine House
	H7822-2341 St Kilda Road Reserve

13.5.5.2 Impact assessment

The impacts and mitigation measures for the historical archaeology sites in Domain station precinct are presented in Table 79 and Table 80. The construction of the Domain station through cut and cover construction technique would destroy the VHI site St Kilda Road Cable Tram Engine House Track Precinct (H7822-2220) at the intersection of St Kilda Road and Bromby Street. The use of the adjacent area as a proposed construction work site has the potential to damage subsurface remains of the VHI site St Kilda Road Cable Tram Engine House (H7822-2246), which may be present in the footpath in front of the VHR-listed Former Kellow Falkiner Showrooms (VHR H0668). These activities would also potentially destroy any evidence of earlier road treatments in the St Kilda Road road reserve.

As the two VHI sites on St Kilda Road are adjacent to each other and have a similar history of occupation they have been grouped to be treated as a single entity – St Kilda Road Cable Tram archaeological area. The St Kilda Road road reserve is addressed separately.

The key mitigation measure would be the preparation of an archaeological management plan to detail the archaeological investigation of the St Kilda Road Cable Tram archaeological area and St Kilda Road road reserve. The archaeological management plan would be prepared in accordance with *Guidelines for Investigating Historical Archaeological Artefacts and Sites* (Heritage Victoria 2014) and in consultation with Heritage Victoria.

Table 79 Impact assessment and mitigation measures for St Kilda Road Cable Tram archaeological area

Archaeological area	St Kilda Road Cable Tram archaeological area
Listings for Archaeological Places	VHI H7822-2220 – Former St Kilda Road Cable Tram Engine House Track Precinct VHI H7822-2246 – Former St Kilda Road Cable Tram Engine House (also Former Kellow Falkiner Showrooms - VHR H0668)
Archaeological Potential	The site has potential to contain significant nineteenth century archaeological remains such as double tram tracks, wood blocked and/or stone setts paving, deep concrete cable tunnels centred under each track, inspection manholes and cast iron covers, large brick pits for the historical sheaves and possibly traces of equipment. Some of this physical evidence may also extend into the engine house boundary in the adjacent footpath.
Significance	The remains in the tram track precinct and associated engine house are highly significant as they have the potential to provide information on how Melbourne’s cable tram system operated.

Archaeological area	St Kilda Road Cable Tram archaeological area
Heritage Impact Assessment	<p>Proposed works within the archaeological area:</p> <ul style="list-style-type: none"> • construction of Domain station using cut and cover construction techniques • use of the entire area as a construction work site. <p>This would require the complete destruction and removal of one VHI site (Track Precinct) and possible damage to part of the other VHI site (Engine House).</p>
Mitigation Measures	Archaeological management plan, providing details of monitoring/test/salvage excavation and artefact analysis

Table 80 Impact assessment and mitigation measures for St Kilda Road road reserve archaeological area

Archaeological area	St Kilda Road road Reserve archaeological area
Listings for Archaeological Places	Nil
Archaeological Potential	There is the potential for cable tram structures still to be present in the St Kilda Road road reserve. There is also the potential for evidence of earlier road treatments.
Significance	As one of the early major thoroughfares in Melbourne and the early construction of cable tramways, St Kilda Road is of historical significance. The presence of evidence of early road and tram infrastructure has the potential to provide information about the technology, construction and operation of the cable tramway, and of early road construction.
Heritage Impact Assessment	<p>proposed works within the archaeological area:</p> <ul style="list-style-type: none"> • construction of domain station using cut and cover construction techniques • use of the entire area as a construction work site. <p>These activities have the potential to damage and destroy subsurface archaeological remains.</p>
Mitigation Measures	Archaeological management plan, providing details of monitoring/test/salvage excavation and artefact analysis

13.5.6 St Kilda Road

13.5.6.1 Statutory heritage controls

The statutory heritage controls that apply are as follows:

Legislation	Relevant VHII/HO Number
Heritage Act	-
Planning and Environment Act	HO5 South Melbourne Precinct (Melbourne Planning Scheme) –part only

13.5.6.2 Heritage considerations

Only limited sections of St Kilda Road are currently subject to heritage controls under the Melbourne Planning Scheme. These controls do not apply within or in proximity to that section of St Kilda Road that falls within the Domain station precinct. Despite this lack of recognition, St Kilda Road was identified in the course of the baseline study based on historical research and assessment work as a place of cultural heritage significance, potentially at a state level. The values identified are summarised as follows:

Significance	Values
Historical significance	<ul style="list-style-type: none">• as an early main road in Melbourne• as the preferred location of many important public institutions from the 1850s• as a focus for ceremonial and other public activities including royal and vice-regal processions and political protests• as the key route to the Shrine of Remembrance, the state's pre-eminent war memorial (including for the Anzac Day march) and framing key views to the Shrine• as a demonstration of early traffic planning and boulevard design in Melbourne.
Aesthetic significance	<ul style="list-style-type: none">• as a fine boulevard with consistent avenues of mature Elm and Plane trees separating traffic lanes• for its important visual relationships with the Domain Parklands to the east, particularly the Queen Victoria Gardens• for the important views to and from the Shrine of Remembrance• as a place that has been highly valued for its aesthetic qualities and a favourite subject for photographic studies and artworks.

This significance is considered to extend to the full extent of St Kilda Road from Princes Bridge in the north to St Kilda junction in the south and to the full extent of St Kilda Road road reserve, including the boulevard layout of roadways and planted medians but not including properties fronting onto the road. St Kilda Road has been nominated to the VHR and is currently being assessed by the Executive Director, Heritage Victoria.

13.5.6.3 Impact assessment

The proposed works at St Kilda Road would include extensive tree removal for the establishment of the construction work site (and potentially use for the Southern TBM Launch site). The construction impacts involve the removal of all trees within the construction work site and full clearance of this area including the existing tram stop and other infrastructure. There would be no additional impacts if the site were to be used for the TBM launch. New permanent infrastructure is proposed within St Kilda Road including a new tram stop in the centre of the road, co-located with a central station entry. Various vent, access hatches and other infrastructure would be located on landscaped medians within the roadway.

Works are also proposed at the southern end of the Domain station precinct for tram diversion works, where the no. 8 tram is to be diverted along Toorak Road. Works in this location would involve limited tree removals from the St Kilda Road outer (eastern) row minor changes to medians and works within the roadway itself. A tram stop and modifications to the road functional layout are proposed to the south of the Toorak Road intersection, within St Kilda Road. This would require the removal of an additional 12 plane trees from the central road reserve.

The impacts are both temporary (as related to construction) and permanent (infrastructure).

The impact relates to the extent of tree removal proposed within St Kilda Road, particularly the removal of mature trees and the impact this would have on the aesthetic qualities of this part of St Kilda Road. A total of 169 trees would be removed, 93 in the City of Melbourne, and 76 in the City of Port Phillip. These trees are shown on the plans at Figure 186, Figure 187, Figure 188, Figure 189 and Figure 190 and in Table 81 and Table 82.

Trees to be removed are a mix of planes and elms of varying ages but with substantial numbers of semi-mature to mature specimens.

In the short term the impact would be a significant one, based on the extent of the intervention and numbers of trees to be removed. The extent to which this impact can be mitigated over time depends on the design for permanent infrastructure including the station box and above ground infrastructure, the new tram stop and the road layout that is reinstated following the works.

The objective from a heritage perspective is for the reinstatement of the traditional boulevard form and plantings as close as is practicable either side of the new station and tram interchange. It is also desirable that the design allow for the incorporation of landscaping to soften the impact of the works.

As well as removal for the facilitation of station construction and temporary traffic diversions, the project would deliver a re-configured road functional layout, primarily for the section of St Kilda Road between Domain Road and Toorak Road West. The two lane layout would resolve in removal of the central traffic lanes and widening of the central medians which would allow for the re-establishment of the double avenue boulevard, except, potentially, at the new tram stop and central station entry immediately to its immediate north. Further south there would be another change where the second tram stop is located and the central islands shifted to the east to accommodate the stop and revised road functional layout. Trees removed in this location can be replanted, and whilst in a slightly altered position, the discernible double avenue scheme would be re-established that integrates with the retained trees to the north and south within St Kilda Road.

Conversely, the removal of the tram interchange between the Domain Road and Park Street intersections provides an opportunity to re-establish trees in an existing gap within the boulevard. This area is open and relatively free of trees. By re-establishing trees in this central section of St Kilda Road, the long-term visual impact of permanent tree removals to the south of Domain Road for the station entry and tram stop can be mitigated against, effectively moving the 'gap' in the boulevard southwards.

Plans showing the proposed road functional layouts are included in the Transport assessment (refer to Appendix E to Technical Appendix D).

It is noted in relation to the proposed works, that the affected area of St Kilda Road would be limited in its extent when considered in the context of the full length of the road. It also has a somewhat different and more open character when compared with other sections of the boulevard. Located on a sweeping curve in the road, it incorporates the angled intersections with Domain Road to the east and Albert Road to the west. It is also an area which has had significant tram infrastructure including junctions between different routes and the Domain Road tram interchange. In considering both the extent and location of the works, the impact is one that can be accommodated without any adverse impact on the heritage values of the broader extent of St Kilda Road, particularly as the boulevard character are re-established over time to the greatest extent possible.

As a note, it would be desirable to incorporate the 'bundy clock' currently at the Domain tram interchange into the new tram stop.

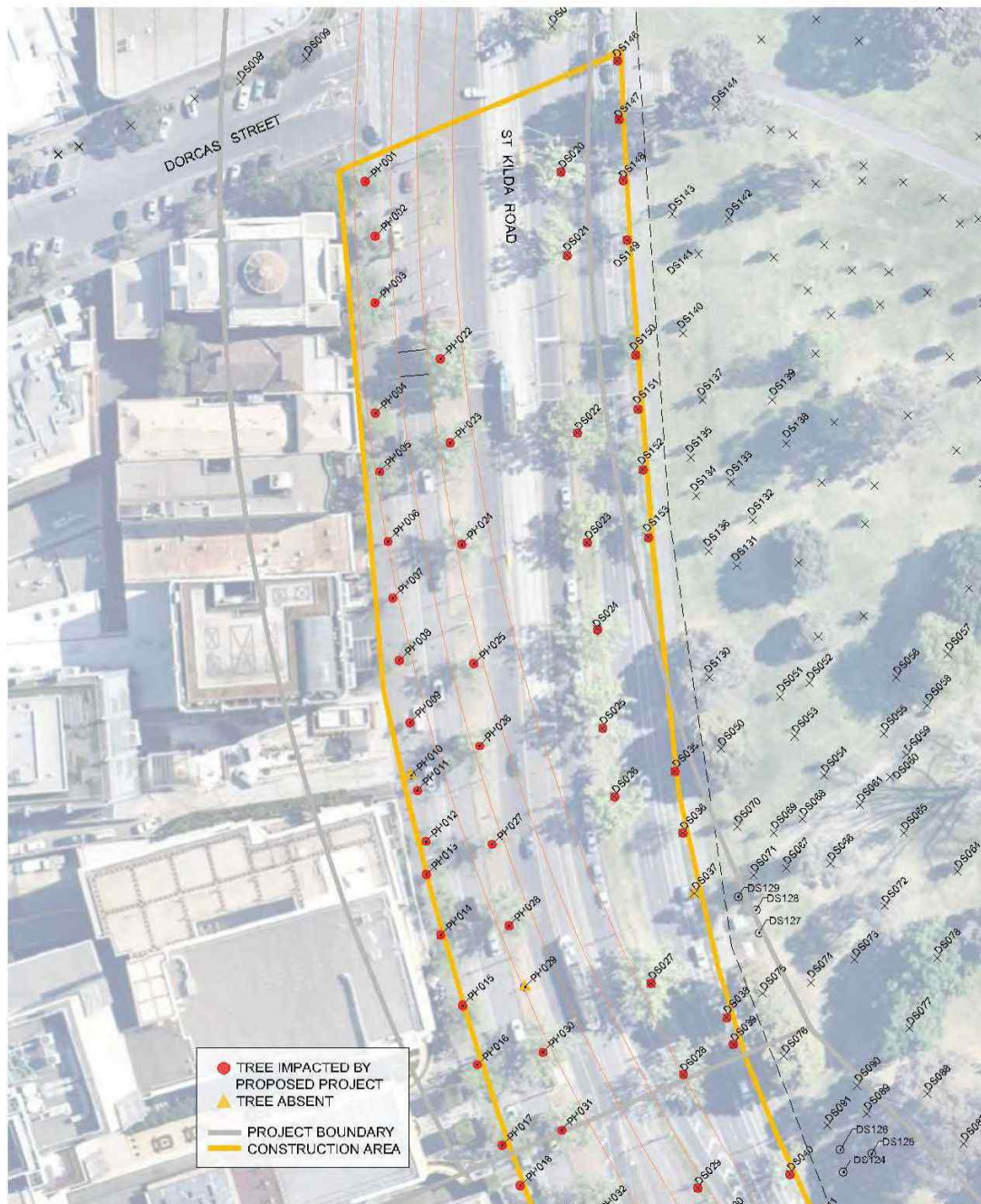


Figure 186 Proposed tree removals in St Kilda Road road reserve section 1

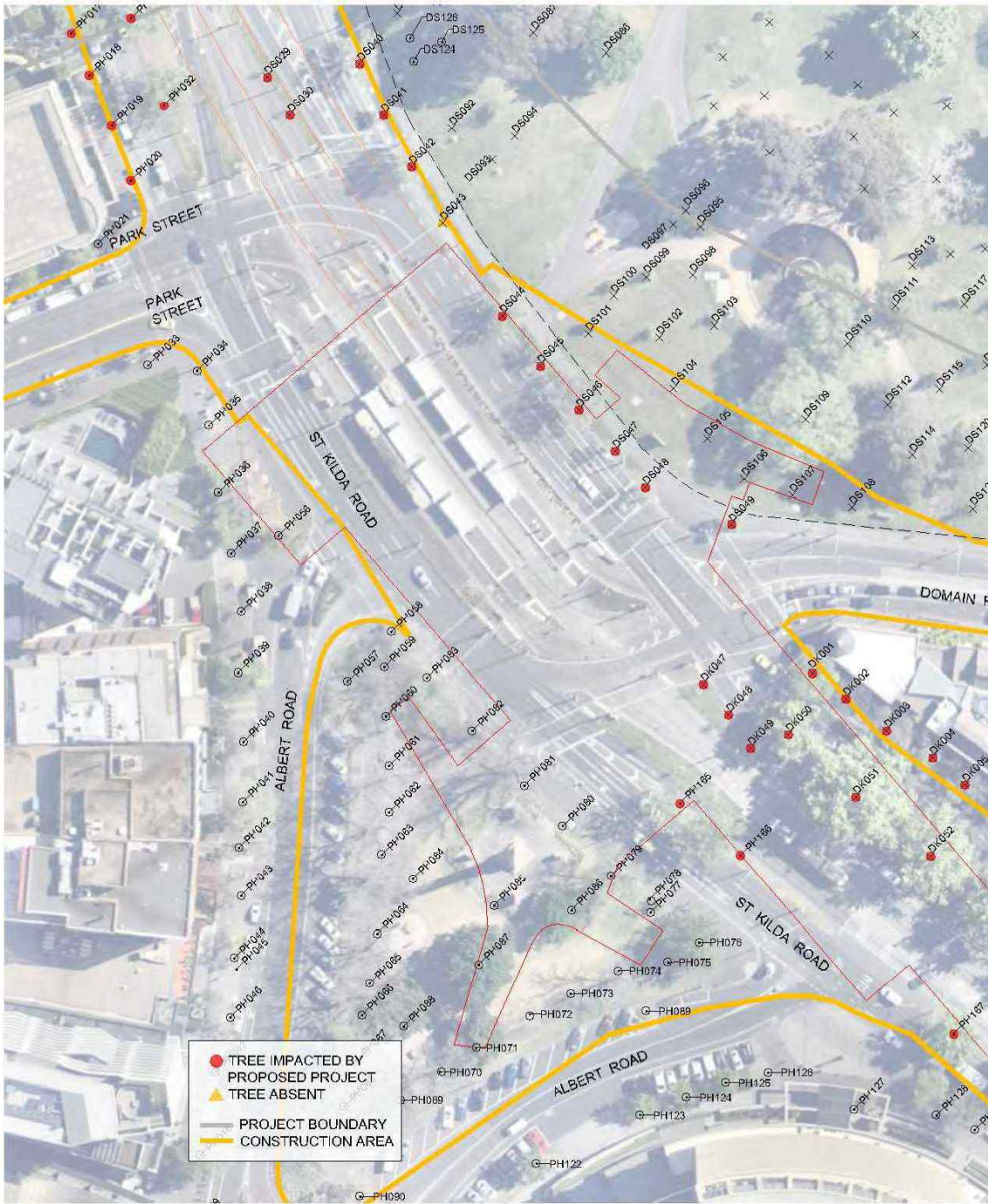


Figure 187 Proposed tree removals in St Kilda Road road reserve section 2



Figure 188 Proposed tree removals in St Kilda Road road reserve section 3

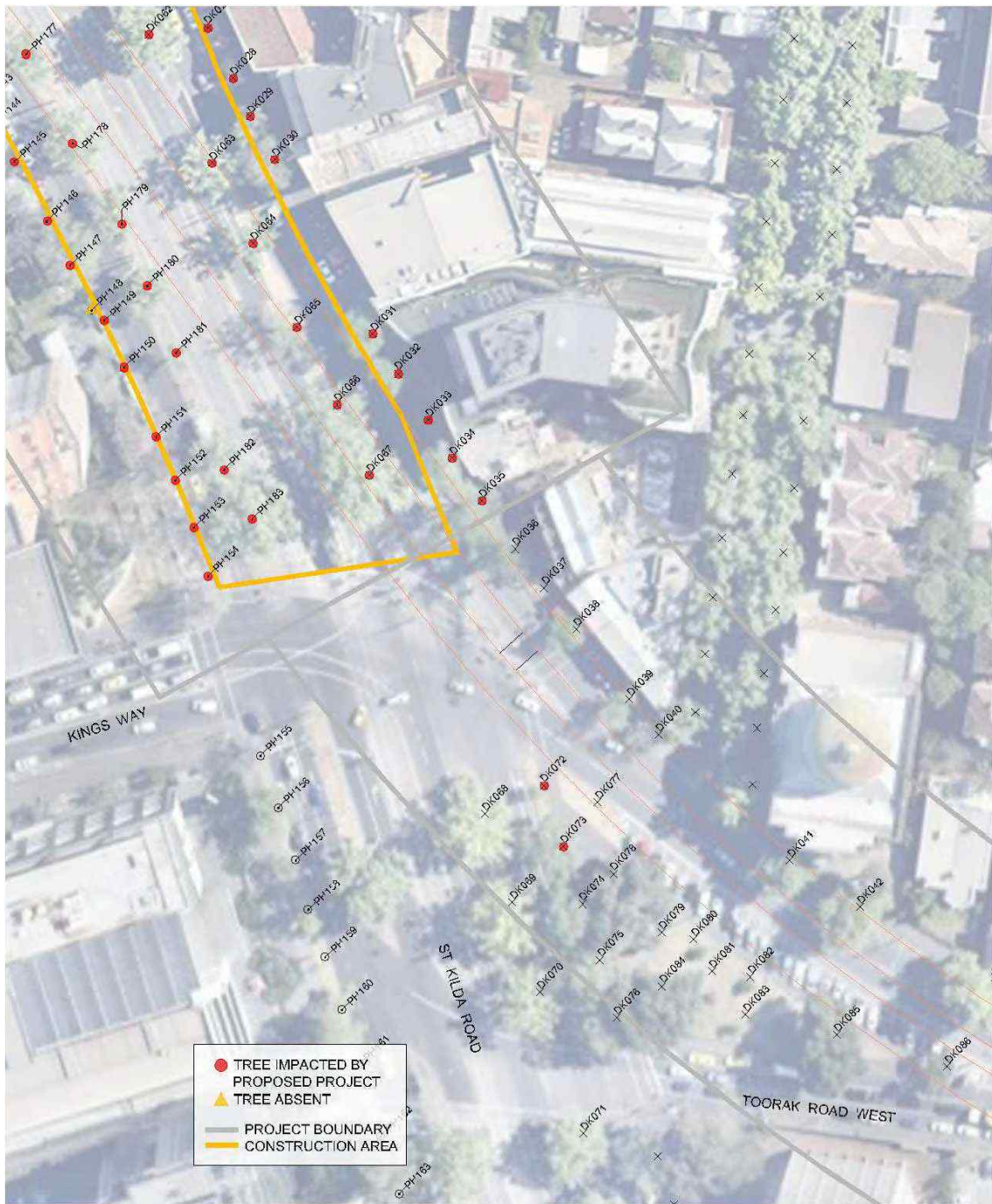


Figure 189 Proposed tree removals in St Kilda Road road reserve section 4, note that trees DK072 and DK073 are addressed in the early works section of this report (Section 16.5.7)

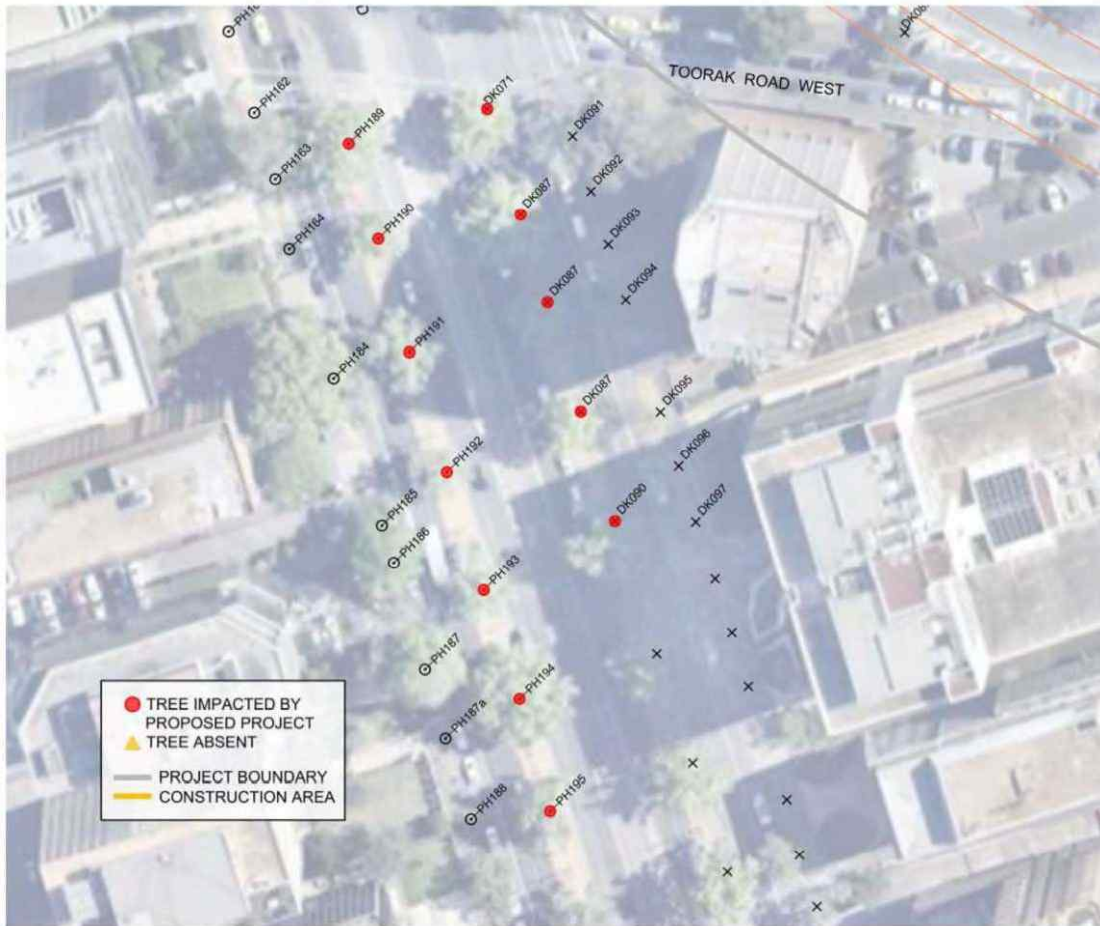


Figure 190 Proposed tree removals south of Toorak Road West for construction of tram super-stop

Table 81 Trees to be removed in St Kilda Road road reserve - City of Melbourne

No	Species	Common name	ULE	Age
DK001	<i>Ulmus sp.</i>	Elm	1-5	Semi-mature
DK002	<i>Ulmus sp.</i>	Elm	6-10	Mature
DK003	<i>Ulmus sp.</i>	Elm	1-5	Mature
DK004	<i>Ulmus sp.</i>	Elm	1-5	Mature
DK005	<i>Ulmus sp.</i>	Elm	1-5	Mature
DK006	<i>Ulmus sp.</i>	Elm	1-5	Mature
DK007	<i>Ulmus sp.</i>	Elm	6-10	Mature
DK008	<i>Ulmus sp.</i>	Elm	1-5	Mature
DK009	<i>Ulmus sp.</i>	Elm	6-10	Mature
DK010	<i>Ulmus sp.</i>	Elm	6-10	Mature
DK011	<i>Ulmus sp.</i>	Elm	1-5	Mature
DK012	<i>Ulmus sp.</i>	Elm	6-10	Over mature

No	Species	Common name	ULE	Age
DK013	<i>Ulmus sp.</i>	Elm	6-10	Over mature
DK014	<i>Ulmus sp.</i>	Elm	6-10	Over mature
DK015	<i>Ulmus sp.</i>	Elm	6-10	Mature
DK016	<i>Ulmus sp.</i>	Elm	6-10	Mature
DK017	<i>Ulmus sp.</i>	Elm	6-10	Mature
DK018	<i>Ulmus sp.</i>	Elm	11-20	Mature
DK019	<i>Ulmus sp.</i>	Elm	11-20	Mature
DK020	<i>Ulmus sp.</i>	Elm	6-10	Mature
DK021	<i>Ulmus sp.</i>	Elm	6-10	Mature
DK022	<i>Ulmus sp.</i>	Elm	1-5	Mature
DK023	<i>Ulmus sp.</i>	Elm	1-5	Mature
DK024	<i>Ulmus sp.</i>	Elm	6-10	Mature
DK025	<i>Populus xcanadensis</i>	Grey poplar	6-10	Mature
DK026	<i>Ulmus sp.</i>	Elm	60+	Juvenile
DK027	<i>Ulmus sp.</i>	Elm	60+	Juvenile
DK028	<i>Ulmus sp.</i>	Elm	60+	Juvenile
DK029	<i>Ulmus sp.</i>	Elm	1-5	Mature
DK030	<i>Ulmus sp.</i>	Elm	11-20	Mature
DK031	<i>Ulmus sp.</i>	Elm	11-20	Mature
DK032	<i>Ulmus sp.</i>	Elm	11-20	Mature
DK033	<i>Ulmus procera</i>	English elm	60+	Juvenile
DK034	<i>Ulmus sp.</i>	Elm	11-20	Mature
DK035	<i>Ulmus sp.</i>	Elm	6-10	Mature
DK047	<i>Platanus xacerifolia</i>	London plane	60+	Juvenile
DK048	<i>Platanus xacerifolia</i>	London plane	60+	Juvenile
DK049	<i>Platanus xacerifolia</i>	London plane	60+	Juvenile
DK050	<i>Platanus xacerifolia</i>	London plane	21-30	Semi-mature
DK051	<i>Platanus xacerifolia</i>	London plane	21-30	Mature
DK052	<i>Platanus xacerifolia</i>	London plane	21-30	Semi-mature
DK053	<i>Platanus xacerifolia</i>	London plane	21-30	Mature
DK054	<i>Platanus xacerifolia</i>	London plane	21-30	Mature
DK055	<i>Platanus xacerifolia</i>	London plane	21-30	Mature
DK056	<i>Platanus xacerifolia</i>	London plane	21-30	Semi-mature

No	Species	Common name	ULE	Age
DK057	<i>Platanus xacerifolia</i>	London plane	21-30	Mature
DK058	<i>Platanus xacerifolia</i>	London plane	21-30	Mature
DK059	<i>Platanus xacerifolia</i>	London plane	21-30	Mature
DK060	<i>Platanus xacerifolia</i>	London plane	21-30	Mature
DK061	<i>Platanus xacerifolia</i>	London plane	21-30	Mature
DK062	<i>Platanus xacerifolia</i>	London plane	21-30	Mature
DK063	<i>Platanus xacerifolia</i>	London plane	21-30	Semi-mature
DK064	<i>Platanus xacerifolia</i>	London plane	21-30	Semi-mature
DK065	<i>Platanus xacerifolia</i>	London plane	21-30	Semi-mature
DK066	<i>Platanus xacerifolia</i>	London plane	21-30	Semi-mature
DK067	<i>Platanus xacerifolia</i>	London plane	21-30	Mature
DK071	<i>Plantus xacerifolia</i>	London plane	21-30	Semi-mature
DK087	<i>Plantus xacerifolia</i>	London plane	21-30	Mature
DK088	<i>Plantus xacerifolia</i>	London plane	21-30	Mature
DK089	<i>Plantus xacerifolia</i>	London plane	21-30	Semi-mature
DK090	<i>Plantus xacerifolia</i>	London plane	31-60	Mature
DS020	<i>Platanus xacerifolia</i>	London plane	21-30	Mature
DS021	<i>Platanus xacerifolia</i>	London plane	11-20	Mature
DS022	<i>Platanus xacerifolia</i>	London plane	21-30	Mature
DS023	<i>Platanus xacerifolia</i>	London plane	11-20	Mature
DS024	<i>Platanus xacerifolia</i>	London plane	21-30	Mature
DS025	<i>Platanus xacerifolia</i>	London plane	21-30	Mature
DS026	<i>Platanus xacerifolia</i>	London plane	11-20	Mature
DS027	<i>Platanus xacerifolia</i>	London plane	21-30	Mature
DS028	<i>Platanus xacerifolia</i>	London plane	11-20	Mature
DS029	<i>Platanus xacerifolia</i>	London plane	60+	Juvenile
DS030	<i>Platanus xacerifolia</i>	London plane	60+	Juvenile
DS035	<i>Ulmus sp.</i>	Elm	21-30	Semi-mature
DS036	<i>Ulmus sp.</i>	Elm	31-60	Semi-mature
DS038	<i>Ulmus sp.</i>	Elm	1-5	Mature
DS039	<i>Ulmus sp.</i>	Elm	1-5	Mature
DS040	<i>Ulmus sp.</i>	Elm	1-5	Mature
DS041	<i>Ulmus sp.</i>	Elm	11-20	Semi-mature

No	Species	Common name	ULE	Age
DS042	<i>Ulmus sp.</i>	Elm	11-20	Mature
DS044	<i>Ulmus sp.</i>	Elm	6-10	Mature
DS045	<i>Ulmus sp.</i>	Elm	1-5	Mature
DS046	<i>Ulmus sp.</i>	Elm	11-20	Mature
DS047	<i>Ulmus sp.</i>	Elm	21-30	Semi-mature
DS048	<i>Ulmus sp.</i>	Elm	21-30	Semi-mature
DS049	<i>Ulmus sp.</i>	Elm	11-20	Semi-mature
DS146	<i>Ulmus procera</i>	English elm	60+	Semi-mature
DS147	<i>Ulmus procera</i>	English elm	11-20	Mature
DS148	<i>Ulmus procera</i>	English elm	11-20	Mature
DS149	<i>Ulmus procera</i>	English elm	1-5	Mature
DS150	<i>Ulmus sp.</i>	Elm	6-10	Over mature
DS151	<i>Ulmus sp.</i>	Elm	6-10	Mature
DS152	<i>Ulmus procera</i>	English elm	11-20	Mature
DS153	<i>Ulmus sp.</i>	Elm	11-20	Mature
Total number of trees				93

Table 82 Trees to be removed in St Kilda Road road reserve - City of Port Phillip

No	Species	Common Name	ULE	Age
Trees highlighted grey are semi-mature to over mature trees in the public realm with a ULE > 10years				
PH001	<i>Ulmus xhollandica</i>	Dutch elm	0	Over mature
PH002	<i>Ulmus xhollandica</i>	Dutch elm	1-5	Over mature
PH003	<i>Ulmus xhollandica</i>	Dutch elm	1-5	Mature
PH004	<i>Ulmus xhollandica</i>	Dutch elm	60+	Mature
PH005	<i>Ulmus procera</i>	English elm	1-5	Over mature
PH006	<i>Ulmus procera</i>	English elm	31-60	Semi-mature
PH007	<i>Ulmus procera</i>	English elm	60+	Semi-mature
PH008	<i>Ulmus procera</i>	English elm	21-30	Mature
PH009	<i>Ulmus procera</i>	English elm	60+	Juvenile
PH011	<i>Ulmus procera</i>	English elm	60+	Juvenile
PH012	<i>Ulmus procera</i>	English elm	1-5	Semi-mature
PH013	<i>Ulmus procera</i>	English elm	6-10	Semi-mature
PH014	<i>Ulmus procera</i>	English elm	1-5	Semi-mature
PH015	<i>Ulmus procera</i>	English elm	6-10	Mature
PH016	<i>Ulmus procera</i>	English elm	1-5	Mature
PH017	<i>Ulmus procera</i>	English elm	6-10	Mature
PH018	<i>Ulmus procera</i>	English elm	60+	Semi-mature
PH019	<i>Ulmus procera</i>	English elm	60+	Semi-mature
PH020	<i>Ulmus procera</i>	English elm	60+	Semi-mature
PH022	<i>Platanus xacerifolia</i>	London plane	6-10	Mature
PH023	<i>Platanus xacerifolia</i>	London plane	6-10	Mature
PH024	<i>Platanus orientalis</i>	Oriental plane	1-5	Mature
PH025	<i>Platanus xacerifolia</i>	London plane	1-5	Mature
PH026	<i>Platanus xacerifolia</i>	London plane	1-5	Mature
PH027	<i>Platanus xacerifolia</i>	London plane	1-5	Mature
PH028	<i>Platanus xacerifolia</i>	London plane	6-10	Mature
PH030	<i>Platanus xacerifolia</i>	London plane	11-20	Mature
PH031	<i>Platanus xacerifolia</i>	London plane	11-20	Mature
PH032	<i>Platanus xacerifolia</i>	London plane	11-20	Mature
PP130	<i>Ulmus procera</i>	English Elm	31-60	Juvenile
PP131	<i>Ulmus procera</i>	English Elm	31-60	Juvenile

No	Species	Common Name	ULE	Age
PH132	<i>Ulmus procera</i>	English elm	11-20	Mature
PH133	<i>Ulmus procera</i>	English elm	11-20	Mature
PH134	<i>Ulmus procera</i>	English elm	11-20	Mature
PH135	<i>Ulmus sp.</i>	Elm	31-60	Juvenile
PH136	<i>Ulmus procera</i>	English elm	6-10	Mature
PH137	<i>Ulmus procera</i>	English elm	11-20	Mature
PH138	<i>Ulmus procera</i>	English elm	21-30	Mature
PH139	<i>Ulmus procera</i>	English elm	31-60	Semi-mature
PH141	<i>Ulmus procera</i>	English elm	31-60	Semi-mature
PH142	<i>Ulmus procera</i>	English elm	21-30	Mature
PH143	<i>Ulmus sp.</i>	Elm	6-10	Mature
PH145	<i>Ulmus procera</i>	English elm	31-60	Juvenile
PH146	<i>Ulmus procera</i>	English elm	21-30	Semi-mature
PH147	<i>Ulmus procera</i>	English elm	11-20	Mature
PH149	<i>Ulmus procera</i>	English elm	31-60	Semi-mature
PH150	<i>Ulmus procera</i>	English elm	31-60	Semi-mature
PH151	<i>Ulmus hollandica</i>	Dutch elm	11-20	Semi-mature
PH152	<i>Ulmus hollandica</i>	Dutch elm	11-20	Mature
PH153	<i>Ulmus hollandica</i>	Dutch elm	11-20	Mature
PH154	<i>Ulmus hollandica</i>	Dutch elm	6-10	Mature
PH165	<i>Platanus ×acerifolia</i>	London plane	6-10	Semi-mature
PH166	<i>Platanus ×acerifolia</i>	London plane	11-20	Mature
PH167	<i>Platanus ×acerifolia</i>	London plane	11-20	Mature
PH168	<i>Platanus ×acerifolia</i>	London plane	11-20	Mature
PH169	<i>Platanus ×acerifolia</i>	London plane	11-20	Mature
PH170	<i>Platanus ×acerifolia</i>	London plane	11-20	Mature
PH171	<i>Platanus ×acerifolia</i>	London plane	11-20	Mature
PH173	<i>Platanus ×acerifolia</i>	London plane	11-20	Mature
PH174	<i>Platanus ×acerifolia</i>	London plane	11-20	Mature
PH175	<i>Platanus ×acerifolia</i>	London plane	6-10	Mature
PH176	<i>Platanus ×acerifolia</i>	London plane	11-20	Mature
PH177	<i>Platanus ×acerifolia</i>	London plane	11-20	Mature
PH178	<i>Platanus ×acerifolia</i>	London plane	11-20	Mature

No	Species	Common Name	ULE	Age
PH179	<i>Platanus xacerifolia</i>	London plane	11-20	Mature
PH180	<i>Platanus xacerifolia</i>	London plane	11-20	Mature
PH181	<i>Platanus xacerifolia</i>	London plane	6-10	Mature
PH182	<i>Platanus xacerifolia</i>	London plane	11-20	Mature
PH183	<i>Platanus xacerifolia</i>	London plane	21-30	Mature
PH189	<i>Plantus xacerifolia</i>	London plane	21-30	Semi-mature
PH190	<i>Plantus xacerifolia</i>	London plane	11-20	Semi-mature
PH191	<i>Plantus xacerifolia</i>	London Plane	21-30	Semi-mature
PH192	<i>Plantus xacerifolia</i>	London Plane	21-30	Mature
PH193	<i>Plantus xacerifolia</i>	London Plane	21-30	Mature
PH194	<i>Plantus xacerifolia</i>	London Plane	31-60	Semi-mature
PH195	<i>Plantus xacerifolia</i>	London Plane	21-30	Semi-mature
Total number of trees				76

13.6 Environmental Performance Requirements

Table 83 provides the recommended Environmental Performance Requirements and proposed mitigation measures for the precinct.

Table 83 Environmental Performance Requirements for the precinct

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
Domain Parklands (VHR H2304)	Temporary impacts on the Edmund Herring Oval associated with its use for construction purposes	<p>CH1 Design permanent and temporary works to avoid or minimise impacts on the cultural heritage values of heritage places.</p> <p>Consult as required with Heritage Victoria and/or the responsible authority (as applicable).</p> <p>AR1 During detailed design, review potential tree impacts and provide for maximum tree retention where possible.</p> <p>Prior to construction of main works or shafts, develop and implement a plan in consultation with the relevant local council that identifies all trees in the project area which covers:</p> <ul style="list-style-type: none"> ● Trees to be removed or retained ● Condition of the trees to be removed ● Options for temporary re-location of palms and reinstatement at their former location or another suitable location. <p>AR4 Prior to construction commencing of main works or shafts in affected areas, prepare and implement Tree Protection Plans for each Precinct in accordance with</p>	<p>Investigate relocation of vehicle access on Domain Road to east side of the Edmund Herring Oval to limit tree removals to juvenile Queensland Kauri and retain and protect mature Elms within the Shrine of Remembrance Reserve.</p> <p>Protect trees to be retained and implement Tree Protection Plan.</p> <p>Reinstate valued landscape character following works in construction with the City of Melbourne and the Shrine of Remembrances.</p>	HH30

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
		<p>AS4970-2009 Protection of Trees on Development Sites, addressing the detailed design and construction methodology of the project.</p> <p>Within precincts 1, 4 and 7, a Tree Protection Plan must be developed for each heritage place as relevant to the satisfaction of Heritage Victoria or the responsible authority.</p>		
Shrine of Remembrance (VHR H0848)	Temporary loss of significant trees, paths, and landscape quality as a result of the establishment of construction work site (including a TBM launch site) within the Shrine Reserve, extending the corner of Domain and St Kilda Roads, along Domain Road to the Edmund Herring Oval	<p>CH1 Design permanent and temporary works to avoid or minimise impacts on the cultural heritage values of heritage places.</p> <p>Consult as required with Heritage Victoria and/or the responsible authority (as applicable).</p> <p>CH4 Prior to construction of main works or shafts that affect heritage structures or places, develop detailed methodology in accordance with Australia ICOMOS Burra Charter and to the satisfaction of Heritage Victoria or the responsible authority (as applicable) where heritage fabric is required to be dismantled, stored and reconstructed. Work is to be documented and overseen by an appropriately qualified conservation practitioner.</p> <p>CH5 Prior to construction of main works or shafts that affect heritage structures or places, develop and implement appropriate</p>	<p>Review the extent of the construction work site and minimise the impact within the Shrine of Remembrance.</p> <p>Investigate relocation of vehicle access on Domain Road to east side of the Edmund Herring Oval to limit tree removals to juvenile Queensland Kauri and retain and protect mature Elms within the Shrine of Remembrance Reserve.</p> <p>All affected paths and roadways and any soft landscaping to be reinstated to match existing.</p> <p>If required for construction purposes, the Cobbers Memorial is to be carefully dismantled and relocated or stored and reinstated in accordance with good practice and in consultation with the Shrine of Remembrance. The preference is to retain and protect <i>in situ</i>.</p> <p>Where dismantling and reconstruction works are required document and perform these works with specialist input. This would likely include an assessment of condition, detailed methodology for the work, recording of the structure prior to dismantling, dismantling methodology, the numbering of component parts for storage, specification of secure storage arrangements, details of required repair and conservation works, if required, method for reinstating fabric including appropriate materials in the event fabric is required to be renewed or replaced.</p>	<p>HH29</p> <p>HH26</p>

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
	<p>Introduction of a new built element (station entry) within the heritage place, unrelated to the commemorative and educative functions of the place.</p>	<p>protection measures for heritage places and objects including sculptures, memorials, monuments and associated heritage fabric where retained in proximity to works. This is to be done to the satisfaction of Heritage Victoria or the responsible authority (as applicable).</p> <p>CH17 Replace removed trees as part of project delivery in accordance with relevant policy documents and to re-establish valued landscape character and in consultation with the City of Melbourne, the City of Port Phillip, the Shrine of Remembrance and Shrine Trustees and Heritage Victoria as applicable. Policy documents are as follows:</p> <ul style="list-style-type: none"> • Domain Parklands: Domain Parklands CMP (in preparation, Context, draft 2015-16) and the Domain Parklands Masterplan (in preparation) • Shrine of Remembrance: Shrine of Remembrance CMP (Lovell Chen, 2010) or any future review and the Shrine of Remembrance Landscape Improvement Plan (Rush Wright Associates, 2010) • South African Soldiers Memorial Reserve: Any relevant CMP for the South African Soldiers Memorial 	<p>In detailed design, and with specialist heritage input, review the siting height, scale and materiality of the design to limit its visual presence within the Reserve. Review functional requirements as part of this work. Consider the use of the Tynong granite (traditional material in use at the Shrine) in the new design.</p>	

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
		<ul style="list-style-type: none"> Fawkner Park: Fawkner Park Conservation Analysis (Hassell, 2002) and the Fawkner Park Masterplan (City of Melbourne, 2005). <p>CH18 To the satisfaction of Heritage Victoria, review the siting and design of the eastern Domain station entry in detailed design to ensure it is as recessive as possible in this location and has only a limited presence on the edge of the Reserve.</p> <p>The design needs to allow for the maintenance of an appropriate setting to the Macpherson Robertson Memorial Fountain.</p> <p>AR4 Prior to construction commencing of main works or shafts in affected areas, prepare and implement Tree Protection Plans for each Precinct in accordance with AS4970-2009 Protection of Trees on Development Sites, addressing the detailed design and construction methodology of the project.</p> <p>Within precincts 1, 4 and 7, a Tree Protection Plan must be developed for each heritage place as relevant to the satisfaction of Heritage Victoria or the responsible authority.</p>		

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
South African Soldier's Memorial (VHR H1374)	Permanent adverse impact on the setting and presentation (aesthetic significance) of the South African Soldiers Memorial as a result of its relocation on the site and the loss of trees on the site and the construction of a new station entry on the site.	<p>CH1 Design permanent and temporary works to avoid or minimise impacts on the cultural heritage values of heritage places.</p> <p>Consult as required with Heritage Victoria and/or the responsible authority (as applicable).</p> <p>CH4 Prior to construction of main works or shafts that affect heritage structures or places, develop detailed methodology in accordance with Australia ICOMOS Burra Charter and to the satisfaction of Heritage Victoria or the responsible authority (as applicable) where heritage fabric is required to be dismantled, stored and reconstructed. Work is to be documented and overseen by an appropriately qualified conservation practitioner.</p> <p>CH17 Replace removed trees as part of project delivery in accordance with relevant policy documents and to re-establish valued landscape character and in consultation with the City of Melbourne, the City of Port Phillip, the Shrine of Remembrance and Shrine Trustees and Heritage Victoria as applicable. Policy documents are as follows:</p> <ul style="list-style-type: none"> Domain Parklands: Domain Parklands CMP (in preparation, Context, draft 2015-16) and the Domain Parklands Masterplan (in preparation) 	<p>Re-establish an appropriate siting and setting on this site in preference to relocation to alternative site, ensuring a level of prominence for the structure and design for the surrounding reserve that can appropriately cater for the ongoing commemorative use and enjoyment of the memorial.</p> <p>Consider the findings and recommendations of the CMP for the heritage place (CoPP) in detailed design, and obtain specialist heritage advice to inform the design process.</p> <p>Where dismantling and reconstruction works are required document and perform these works with specialist input. This would likely include an assessment of condition, detailed methodology for the work, recording of the structure prior to dismantling, dismantling methodology, the numbering of component parts for storage, specification of secure storage arrangements, details of required repair and conservation works, if required, method for reinstating fabric including appropriate materials in the event fabric is required to be renewed or replaced.</p> <p>Incorporate recommendations in the CMP for repair and conservation works as part of the relocation documentation.</p> <p>Include retention / reinstatement of the drinking fountain and memorial plaque on the site.</p> <p>Retain/reinstate landscaped setting to the memorial.</p> <p>Investigate opportunities for retention or reinstatement of Elm plantings.</p> <p>Given its particular interest, the Oak should be vegetatively propagated and replanted (with its associated plaque) in a suitable location to allow for future growth into a mature specimen. The Queensland Fire Wheel Tree should also reinstated.</p>	HH27

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
		<ul style="list-style-type: none"> ● Shrine of Remembrance: Shrine of Remembrance CMP (Lovell Chen, 2010) or any future review and the Shrine of Remembrance Landscape Improvement Plan (Rush Wright Associates, 2010) ● South African Soldiers Memorial Reserve: Any relevant CMP for the South African Soldiers Memorial ● Fawkner Park: Fawkner Park Conservation Analysis (Hassell, 2002) and the Fawkner Park Masterplan (City of Melbourne, 2005). <p>CH19 To the satisfaction of Heritage Victoria, review the siting and design of the western Domain station entry in detailed design to ensure the South African Soldiers Memorial has an appropriate landscaped setting if relocated on this site. If no appropriate setting can be established, consider options for relocation of the memorial to an alternative site.</p> <p>AR4 Prior to construction commencing of main works or shafts in affected areas, prepare and implement Tree Protection Plans for each Precinct in accordance with AS4970-2009 Protection of Trees on Development Sites, addressing the detailed design and construction methodology of the project.</p>		

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
		<p>Within precincts 1, 4 and 7, a Tree Protection Plan must be developed for each heritage place as relevant to the satisfaction of Heritage Victoria or the responsible authority.</p>		
Tram Shelter (VHR H1869)	Possible temporary relocation as a result of proximity to construction work site	<p>CH1 Design permanent and temporary works to avoid or minimise impacts on the cultural heritage values of heritage places.</p> <p>Consult as required with Heritage Victoria and/or the responsible authority (as applicable).</p> <p>CH4 Prior to construction of main works or shafts that affect heritage structures or places, develop detailed methodology in accordance with Australia ICOMOS Burra Charter and to the satisfaction of Heritage Victoria or the responsible authority (as applicable) where heritage fabric is required to be dismantled, stored and reconstructed. Work is to be documented and overseen by an appropriately qualified conservation practitioner.</p> <p>CH5 Prior to construction of main works or shafts that affect heritage structures or places, develop and implement appropriate protection measures for heritage places and objects including sculptures, memorials, monuments and associated heritage fabric where retained in proximity to works. This is to be done to the satisfaction of Heritage</p>	<p>Preferably review the construction work site footprint and activities to allow for the retention and protection of the building <i>in situ</i>.</p> <p>In the event relocation is required, works to be documented and undertaken to the satisfaction of the Executive Director, Heritage Victoria.</p> <p>If temporary relocation is required in order to protect significant fabric, document and undertake works according to accepted conservation standards.</p> <p>Where dismantling and reconstruction works are required document and perform these works with specialist input. This would likely include an assessment of condition, detailed methodology for the work, recording of the structure prior to dismantling, dismantling methodology, the numbering of component parts for storage, specification of secure storage arrangements, details of required repair and conservation works, if required, method for reinstating fabric including appropriate materials in the event fabric is required to be renewed or replaced.</p>	HH31

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
St Kilda Road	Adverse impact of the loss of trees and permanent changes to the boulevard layout and plantings	<p>Victoria or the responsible authority (as applicable).</p> <p>CH1 Design permanent and temporary works to avoid or minimise impacts on the cultural heritage values of heritage places.</p> <p>Consult as required with Heritage Victoria and/or the responsible authority (as applicable).</p> <p>CH20 To the satisfaction of the City of Melbourne, City of Port Phillip and/or the responsible authority, as applicable replace removed trees in St Kilda Road to re-establish the boulevard formation.</p> <p>AR1 During detailed design, review potential tree impacts and provide for maximum tree retention where possible.</p> <p>Prior to construction of main works or shafts, develop and implement a plan in consultation with the relevant local council that identifies all trees in the project area which covers:</p> <ul style="list-style-type: none"> ● Trees to be removed or retained ● Condition of the trees to be removed ● Options for temporary re-location of palms and reinstatement at their former location or another suitable location. 	With specialist arboricultural and heritage inputs, seek to reinstate boulevard character and ensure road functional layout and station design are responsive to this requirement, allowing for the replacement of trees and reinstatement of medians to the greatest extent possible..	HH28

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
		AR2 Reinststate quality soils to sufficient volumes to support long-term viable growth of replacement trees.		
Historical archaeology (Entire precinct)	Subsurface excavation may damage unidentified historical archaeological sites	<p>CH6 To the satisfaction of Heritage Victoria:</p> <ul style="list-style-type: none"> • Develop archaeological management plans to manage disturbance of archaeological sites and values affected by the project • Undertake investigation in accordance with the Guidelines for Investigating Historical Archaeological Artefacts and Sites, Heritage Victoria 2014 (as amended or updated) and to the satisfaction of the Executive Director, Heritage Victoria • Develop and implement a protocol for managing previously unidentified historical archaeological sites discovered during project works. 	<p>For any archaeological sites or artefacts revealed or discovered during construction, the following measure would be implemented:</p> <ul style="list-style-type: none"> • stop any activity which may impact on the discovery • ensure that other people working in the area are aware of it and have also stopped work in the area • protect the artefact, or site feature(s) by, for example, erecting temporary fencing or other suitable enclosure • consult with a qualified cultural heritage consultant to determine the appropriate course of action • advise Heritage Victoria where the discovery was made and provide a description or photograph of the discovery • determine how to manage the find through consultation with Heritage Victoria and the heritage consultant • obtain the necessary Consent under the Heritage Act 1995, or other necessary approvals to protect, recover or remove the find. <p>Archaeological management may require a combination of testing, excavation, salvage and monitoring and related reporting.</p>	HH01
St Kilda Road Cable Tram archaeological area (VHI H7822-2220 and H7822-2246)	Construction of Domain station using cut and cover construction techniques and use of the entire area as a Construction	<p>CH6 To the satisfaction of Heritage Victoria:</p> <ul style="list-style-type: none"> • Develop archaeological management plans to manage disturbance of archaeological sites and values affected by the project • Undertake investigation in accordance with the Guidelines for Investigating Historical 	<p>The archaeological management plan would include the following:</p> <ul style="list-style-type: none"> • description and background history of Archaeological Area • statement of significance of Archaeological Area, in accordance with Guidelines for Conducting Historical Archaeological Surveys (Heritage Council of Victoria and Heritage Victoria 2008), Criteria for Assessing Cultural Heritage Significance (Heritage Council of Victoria 2008) and Victoria's Framework of Historical Themes (Heritage Council of Victoria 2010) 	HH02

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
	work site would require the complete destruction and removal of one VHI site (Track Precinct) and possible damage to part of the second VHI site (Engine House).	<p>Archaeological Artefacts and Sites, Heritage Victoria 2014 (as amended or updated) and to the satisfaction of the Executive Director, Heritage Victoria</p> <ul style="list-style-type: none"> Develop and implement a protocol for managing previously unidentified historical archaeological sites discovered during project works. 	<ul style="list-style-type: none"> research design, including research questions which will be addressed as a result of any archaeological investigations excavation methodology, including method to be used to excavate deposits, record spatial and stratigraphic information and recover artefacts and how these would help address the research design artefact retention policy, including how and why individual artefacts and types of artefact would be retained, discarded or sampled during the archaeological investigation artefact management proposal, including details of how recovered artefacts would be managed in the field and post-excavation (including materials conservation if required). <p>Through the development and implementation of the archaeological management plan, the research potential of the affected site can be realised and this would mitigate the impact of destruction or disturbance.</p>	
St Kilda Road reserve archaeological area (H7822-2341)	Construction of Domain station using cut and cover construction techniques and use of the entire area as a Construction work site have the potential to damage and destroy subsurface archaeological remains.	<p>CH6 To the satisfaction of Heritage Victoria:</p> <ul style="list-style-type: none"> Develop archaeological management plans to manage disturbance of archaeological sites and values affected by the project Undertake investigation in accordance with the Guidelines for Investigating Historical Archaeological Artefacts and Sites, Heritage Victoria 2014 (as amended or updated) and to the satisfaction of the Executive Director, Heritage Victoria Develop and implement a protocol for managing previously 	<p>The archaeological management plan would include the following:</p> <ul style="list-style-type: none"> description and background history of Archaeological Area statement of significance of Archaeological Area, in accordance with Guidelines for Conducting Historical Archaeological Surveys (Heritage Council of Victoria and Heritage Victoria 2008), Criteria for Assessing Cultural Heritage Significance (Heritage Council of Victoria 2008) and Victoria's Framework of Historical Themes (Heritage Council of Victoria 2010) research design, including research questions which will be addressed as a result of any archaeological investigations excavation methodology, including method to be used to excavate deposits, record spatial and stratigraphic information and recover artefacts and how these would help address the research design artefact retention policy, including how and why individual artefacts and 	HH02

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
		<p>unidentified historical archaeological sites discovered during project works.</p>	<p>types of artefact would be retained, discarded or sampled during the archaeological investigation</p> <ul style="list-style-type: none"> • artefact management proposal, including details of how recovered artefacts would be managed in the field and post-excavation (including materials conservation if required). <p>Through the development and implementation of the archaeological management plan, the research potential of the affected site can be realised and this would mitigate the impact of destruction or disturbance.</p>	

13.7 Conclusion

Located in St Kilda Road, the proposed Domain station is located at the edge of the VHR-registered Shrine of Remembrance and also intersects with the VHR-registered South African Soldiers Memorial on Albert Reserve at St Kilda and Albert roads. New entries are proposed on both these sites. In the case of the Shrine, as part of mitigation, a low-key design approach would be required to minimise the physical impacts and visual presence of the entry and ensure no adverse impact on the place as a whole. On the South African Soldiers Memorial site a more significant change to the setting and presentation of the memorial is likely to result from its relocation on the site and there would be a consequent adverse impact on its aesthetic values. There would also be significant construction impacts in this location and these would include tree removal and other works. These impacts are concentrated within St Kilda Road road reserve and the Albert Reserve where the African Soldiers Memorial is located, with little adverse impact in the Shrine Reserve or the VHR-registered Domain Parklands (where the works occur on the Edmund Herring Oval). St Kilda Road is not currently subject to statutory heritage controls and has been nominated to the VHR, is considered to be of state historical and aesthetic significance. Mitigation measures for St Kilda Road would include the reinstatement of the boulevard treatment and provision for replanting of trees.

14.0 Precinct 8 – Eastern Portal (South Yarra)

14.1 Project Components



Figure 191 Key heritage places at the eastern portal precinct

14.1.1 Infrastructure

The proposed permanent infrastructure associated with the Concept Design includes:

- an underground substation, ventilation shaft (former TBM retrieval box) and emergency access shaft to Osborne Street Reserve
- tunnel beneath the South Yarra Siding Reserve
- a portal and decline structure east of and at William Street
- widened rail corridor including retaining walls
- a replacement William Street bridge
- pedestrian bridge at Osborne Street
- a reinstated Lovers Walk
- a reinstated Siding Reserve

14.1.2 Construction

The proposed construction works are to occur:

- for occupation of the Osborne Street Reserve for TBM retrieval box, materials laydown and equipment storage
- for the establishment of works sites in the South Yarra Siding Reserve
- for demolition of the William Street bridge
- for closure of Lovers Walk during construction
- for earthworks for cut and cover tunnel to the South Yarra Siding Reserve
- for widening of the rail corridor, construction of retaining walls and new track laydown
- for a new bridge at Osborne Street for construction purposes (permanent pedestrian bridge)

N/A

14.2 Existing Conditions

The eastern portal precinct includes Toorak Road at its north, with the eastern arm of the precinct largely following the railway cutting the south-east. It partly includes the current and former South Yarra railway stations on its northern boundary, together with commercial and residential areas around the historic railway cutting. The Precinct extends into the neighbouring residential areas. Refer Figure 191.

The former South Yarra railway station (VHR H1068, Figure 192) at 165-167 Toorak Road, South Yarra is situated to the immediate west of the current South Yarra railway station. While no longer utilised for railway purposes, the retained building is included on the VHR for historical and architectural reasons as it demonstrates the establishment of Melbourne's railway network by private operators and for its rarity as one of only two private company-built stations surviving from this period.

The former South Yarra Post Office (VHR H0210, Figure 193) is situated opposite the former South Yarra railway station and on the south-east corner of Toorak Road and Osborne Street. The former post office was designed by the Public Work Department architect A J MacDonald and was completed in 1893. The picturesque three-storey red brick building is a stylistic synthesis incorporating Romanesque and Art Nouveau forms. It is of architectural significance at a State level for the incorporation of distinctly Australian floral and faunal motifs as applied to public buildings in the years preceding Federation. It is largely intact as built. The building is flanked to the west by Osborne Street and to the east by the rail cutting. To the immediate south of the post office is a large-scale recent development.



Figure 192 The Former South Yarra railway station (VHR H1068) with the current South Yarra railway station to the right of the image to the left



Figure 193 The Former South Yarra Post Office (VHR H0210) at 162 Toorak Road; note the recent development behind and to the south of the post office building

Two individually significant local heritage places identified in the Stonnington Planning Scheme are within the precinct boundary; Franklyn House Flats (HO447, Figure 194) and 21 William Street, South Yarra (HO462, refer Figure 195). Franklyn House Flats is graded as an A2 building and is of historic and architectural significance at a local level. The Flats are a high quality example of a conversion of a Victorian era building in the early twentieth century. The residence at 21 William Street is also architecturally and historically significant, as a fine example of a Victorian era villa and in evidencing the development of the former municipality. Both places are recent additions to the HO.

The Precinct extends partly into three HO precincts in the Stonnington Planning Scheme. Buildings and sites within these HO precincts are ascribed building gradings in the City of Stonnington's municipal heritage studies.

At the eastern edge of the precinct area is a commercial HO area, the HO126 Chapel Street Precinct. HO126 includes a number of one and two-storey commercial properties. The HO statement of significance was updated by the City of Stonnington in May 2012. The south-east corner of the eastern portal encroaches on the rear property boundary to five sites on Davis Street in HO131, the Fawkner Street/Davis Avenue Precinct. This precinct is of architectural significance for its intact streetscapes of nineteenth and early twentieth century commercial buildings, of historical significance as one of the most impressive of Melbourne's shopping strips associated with the cable tram networks, and of social significance as one of Melbourne's favourite shopping, recreational and entertainment areas for over a century.

A significant portion of HO150 Toorak Road (west of William and Claremont Streets) Precinct, South Yarra is included within the boundary of the eastern portal precinct. HO150 is significant for its intact streetscape comprising commercial buildings that are typically of a consistent low scale and for its association with a development phase that parallels the establishment of the railway line through South Yarra.

The HO encompasses part of the South Yarra Railway Station (Figure 196) and commercial properties in the vicinity including properties on both sides of Toorak Road to the east of the station, properties on the south side of Toorak Road opposite and to the west of the station, along with the railway cutting and railway reserve to the south of Toorak Road (Figure 197). Commercial buildings in this precinct are typically one and two-storied, though with the occasional taller building, and date to the late nineteenth century, Edwardian and interwar periods. The majority of these buildings are graded. Recent development is interspersed amongst the retained heritage building stock in this area.

The rail cutting was established in the early 1860s, as part of the Princes Bridge to Brighton line. It was widened in the late-1870s, when the South Yarra to Oakleigh section of the Gippsland line was established; this line branches to the east. There is access to the rail lines from the South Yarra Siding Reserve, which was formed by the branching of the lines (accessed from William Street). To the south of the access path, the land returns to natural ground level (Figure 198).

The City of Stonnington's precinct citation for HO150 is from the 1992 Prahran Conservation Study (Nigel Lewis). It does not include specific comment on the railway cutting in terms of its significance other than historically as demonstrating the relationship between the railway and the development of Toorak Road. The whole area is indicated as a C-graded place within the precinct, including the land between the two rail lines and the South Yarra Siding Reserve.

Historically, the north end of the rail reserve was used as tennis courts, with a pavilion located on the lower ground at the north. Properties addressing Portland Place and William Street were located on the southern section of this land. These properties have been demolished, as have the tennis courts themselves. The South Yarra Siding Reserve has a relatively undistinguished landscape character. Much of the vegetation consists of naturalised species, especially along the perimeter embankments of the railway reserve where suckering masses of Tree of Heaven (*Ailanthus altissima*) and Honey Locust (*Robinia pseudoacacia*) predominate. The central reservation also contains woody weeds and few notable trees save for a Sugar Gum (*Eucalyptus cladocalyx*) and a Canary Island Palm (*Phoenix canariensis*).

The only other notable vegetation within the broader precinct is a plantation of Ornamental Pear trees (*Pyrus calleryana*) along Osborne Street (Figure 199), and a mixed, mainly native tree plantation on the east side forming a buffer to the railway reserve. Here, eucalyptus and its allies are the main planted specimens (*Eucalyptus radiata*, *E. mannifera*, *Angophora costata*), as along with other native species such as Silver Wattle (*Acacia dealbata*) and Silky Oak (*Grevillea robusta*). Typical railway reserve plantings such as Southern Mahogany (*Eucalyptus botryoides*) and peppercorn (*Schinus areira*), many likely to be weeds, are located on the embankments in the east of the precinct.

There are two bridges within the eastern portal precinct, at Toorak Road and another traversing the cutting on the alignment of William Street. The William Street Bridge is of recent (twentieth century) construction. This double-width bridge with concrete decking has a central full-width pier support (Figure 198). The brick abutments of the bridge that it replaced (as indicated on the 1895 MMBW detail plan) are extant.

Lovers Walk, a footpath that connects Toorak Road with Chapel Street, follows the alignment of the north side of the rail cutting, and is assumed to be contemporary with the creation of the South Yarra to Oakleigh line in the late 1870s (Figure 200).

The area around the rail cutting is generally residential, including Osborne Street to the west of the cutting, William Street to the east. Outside of HO precincts, there are a substantial number of graded residential and commercial properties in the eastern portal precinct; to the north side of Toorak Road and the residential areas along Arthur, Chambers, and William streets. A small number of commercial buildings on Chapel Street are graded and included in the study area.



Figure 194 Franklyn House Flats (HO447), 137 Osborne Street, South Yarra



Figure 195 21 William Street (HO462), South Yarra



Figure 196 Current South Yarra railway station (A1 grade, Level 2 streetscape), viewed from the south-west



Figure 197 Rail cutting west of the William Street bridge, view looking to the north-east



Figure 198 South Yarra Siding Reserve, looking back toward William Street and the William Street bridge



Figure 199 Osborne Street Reserve, west of the rail line, looking south



Figure 200 Lovers Walk, looking to the north, from the entrance at William Street

14.2.1 Statutory heritage controls and listings

Statutory heritage controls in the eastern portal precinct are shown in the mapping at Map 14 of Appendices C and E and Map 18 of Appendix D.

14.2.1.1 Environment Protection and Biodiversity Conservation Act 1999

There are no sites subject to the provisions of the EPBC Act within the eastern portal precinct.

All NHL and CHL places within a one kilometre buffer of the proposed project boundary are listed in Appendix F.

14.2.1.2 Heritage Act 1995

There are two VHR registered places or objects within the eastern portal precinct (refer to Table 84).

Table 84 VHR places in the eastern portal precinct

VHR number	HO number	Place	Address
VHR H0210	HO107	Former South Yarra Post Office	162 Toorak Road, South Yarra
VHR H1068	HO106	Former South Yarra Railway Station	165-167 Toorak Road, South Yarra

There are no VHI sites within the eastern portal precinct.

14.2.1.3 Planning and Environment Act 1987

The VHR sites are reflected in site-specific HOs in the Stonnington Planning Scheme (refer to Table 84).

Individual HO places and HO precincts included in the Schedule to the HO of the Stonnington Planning Scheme in the eastern portal precinct are listed in Table 85.

Table 85 HO places in the eastern portal precinct – shaded places are the subject of impact assessment in the following section

HO number	Place	Address
HO447	Franklyn House Flats	137 Osborne Street, South Yarra
HO462	21 William Street, South Yarra	21 William Street, South Yarra
HO126	Chapel Street Precinct	South Yarra, Prahran and Windsor
HO150	Toorak Road (west of William and Claremont Streets) Precinct	South Yarra
HO131	Fawkner Street/ Davis Avenue Precinct	South Yarra

Individual sites within the HO precincts have been ascribed a grading (both for the place and streetscape value). Grading definitions are provided in the Stonnington Planning Scheme (refer Clause 22.04-3) are reproduced at Appendix F of this report.

Graded buildings that fall within this precinct are listed in Appendix F.

14.2.2 Potential additional heritage places

While not currently included in the Schedule to the HO, additional properties that have been assessed and graded in the City of Stonnington's municipal heritage studies are included in the study area. These are listed in Appendix F. The City of Stonnington has an ongoing programme of assessments of graded

buildings for the application of the HO. It would be usual practice for Council to consider the heritage implications of demolition applications in the case of A2 and A1 buildings.

The William Street Bridge is predominantly twentieth century but incorporates the earlier bridge abutments. The incorporation of earlier fabric in this manner is not unusual for rail and road infrastructure and the bridge is not considered to be of any heritage significance.

14.2.3 Historical archaeology

There are no identified archaeological sites on the VHI within the eastern portal precinct. Consideration has also been given to the potential for previously unidentified sites of archaeological significance to exist within the precinct (refer to Appendix B of this report). No additional sites were identified that warranted specific consideration in the impact assessment.

14.3 Key Issues

The key issues associated with the Concept Design are the construction works, and permanent above ground structures (vent and emergency access shaft) in an HO precinct associated with the underground substation, ventilation shaft and emergency access shaft to Osborne Street rail reserve.

14.4 Benefits and Opportunities

Table 86 Benefits and opportunities associated with the Concept Design

Concept Design	Benefits	Opportunities
South Yarra Siding Reserve is to be reinstated and upgraded.	-	The heritage interpretation strategy for the project could include interpretation at the South Yarra Siding Reserve. This could address the history of the development of the rail lines and the nearby South Yarra railway stations (original and current) as well as the use of the Siding Reserve itself, refer to the information included in Appendix B.

14.5 Impact Assessment

The following draft EES evaluation objectives and assessment criteria (and indicators where relevant) are relevant to this assessment.

Draft EES evaluation Objectives	Assessment Criteria
Cultural Heritage – To avoid or minimise adverse effects on ... historical cultural heritage values	Avoid or minimise impacts on historical cultural heritage values and places

The Concept Design is generally consistent with the draft EES evaluation objective to avoid or minimise impacts on post-settlement cultural heritage values and places as:

- The construction works in the railway reserve would not result in the demolition or removal of elements of heritage significance within the Toorak Road (west of William and Claremont Streets) precinct.
- The historical relationship between the railway cutting and Toorak Road would not be affected by the works, even though there would be a major physical change.
- Graded buildings to be demolished are not of a level of significance as to warrant the application of an HO control.

14.5.1 Toorak Road (west of William and Claremont Streets) Precinct (HO150)

14.5.1.1 Statutory heritage controls

The statutory heritage controls that apply are as follows:

Legislation	Relevant VHR/HO Number
Heritage Act	-
Planning and Environment Act	HO150 Toorak Road (west of William and Claremont Streets) Precinct (Stonnington Planning Scheme)

14.5.1.2 Heritage considerations

The Toorak Road (west of William and Claremont streets) Precinct (HO150) extends from Punt Road in the west to the South Yarra rail cutting. It is primarily linear, being oriented to the Toorak Road commercial strip. It also includes a residential section extending north to Avoca Street, and the rail cutting.

The citation for the Toorak Road Area Precinct (Lewis, 1983) includes the following in relation to the railway:

- In 1860 direct communication by rail with Melbourne was effected when a bridge was constructed across the Yarra and the railway station Gardiner's Creek (now South Yarra) was opened. When the South Yarra to Oakleigh section of the main Gippsland Line was constructed in 1879 it joined the single track Brighton line at South Yarra. Because both lines were set in deep cuttings a potentially dangerous junction was created and this was not alleviated until some years later when the embankment of the cutting [was] lowered to provide clearer vision for locomotive drivers.

The intent of this particular HO precinct appears to be to capture the railway cutting and South Yarra railway station as historically related to the development of South Yarra and this part of Toorak Road and as reflecting the expansion of the network in the latter part of the nineteenth century.

The City of Stonnington has advised it is likely to undertake a review of the extent and heritage values of HO150, however this was not available at the time of writing.

A more detailed overview of the historical development of the area from the 1850s, including the development of the rail infrastructure in this location) is provided in the predictive archaeological assessment at Appendix B (refer to section 12.2 of that report).

In this context, the arrangement of cuttings and rail lines and Lovers Walk is part of the heritage fabric of HO150. The railway cutting and infrastructure at South Yarra appear have been included within the precinct-based HO largely on the basis of historical associations and their relationship to the broader heritage place (precinct) rather than for particular identified physical elements, structures or landscape features. While features such as the rail lines, the Toorak Road Bridge and Lovers Walk are all of long standing, their fabric has not been identified as of significance. As for many other rail cuttings through the metropolitan area, the railway cutting at South Yarra is highly visible from the Toorak Road Bridge and is quite a dramatic landscape showing the branching of the two lines, a key development historically. The William Street bridge is immediately adjacent to but outside the HO precinct.

Relevant considerations under the Stonnington Planning Scheme include the HO decision guidelines at Clause 43.01 and the local Heritage Policy at Clause 22.04. Both are directed at the conservation of significant places and ensuring new development is sympathetic to the heritage values of the place. The policy at Clause 22.04 makes reference to the City of Stonnington's grading system. Similar to the City of Melbourne system, this employs letter gradings (A1, A2, B and C gradings). The railway cuttings and the landscaped reserve are mapped as C-graded (Lewis, 1992).

It is important to note that Clause 22.04 applies not only to heritage places included in the HO, but also to properties immediately abutting a HO place. In that context the policy seeks to ensure development adjacent to the HO place is responsive to the heritage values of that place. It is noted that the City of Stonnington has completed a review of its local heritage policy and it is likely that this would be subject of a planning scheme amendment in 2016.

14.5.1.3 Impact assessment

The works include the use of the Osborne Street rail reserve and South Yarra Siding Reserve for construction purposes (new cut and cover tunnel, portal and track works), the modification of rail cutting alignment and the occupation (closure) and reinstatement of the Lovers Walk (only the eastern length is included on the HO). There would be a new pedestrian bridge from Osborne Street to the Siding Reserve. The proposed decline structure and portal are outside of the HO precinct. Within the Toorak Road Precinct and in the Osborne Street Reserve, it is assumed that the permanent above ground project infrastructure (ventilation shaft and emergency access shaft) would be located at the TBM retrieval box site. The finished height and design of these elements is not described in the Concept Design, however, these are assumed to be of a similar scale to those referenced for other locations (one-two levels) and this would not pose an adverse impact, particularly in consideration of existing new development in this location (refer to Figure 201).

Considering the works (construction and permanent infrastructure) in the rail cutting and sidings reserve, there would be no adverse impacts on the values and presentation of the Toorak Road Precinct arising from these. The works would change the appearance of the cutting and sidings reserve, but would not affect the understanding and interpretation of the association between the railway and the balance of the Toorak Road Precinct. Lover's Walk would be reinstated. To the extent that there may be social heritage values associated with this pedestrian access, these would not be affected in the longer term. It would be desirable to include some heritage interpretation in the reinstatement of the park, this could be considered as part of the overall heritage interpretation for the project as a whole. The new bridge at Osborne Street, equally, would have no impact.

The proposed works would not have an adverse impact on the significance of the heritage precinct.

As noted above the fabric of the William Street bridge predominantly dates to the twentieth century but incorporates the earlier bridge abutments. The demolition and reinstatement of this structure would not impact on the heritage values associated with the Toorak Road Precinct. While it incorporates earlier fabric, the structure is not considered to be of heritage value in itself.



Figure 201 Osborne Street Reserve, west of the railway line looking to the north in the approximate location of the proposed TBM retrieval box: the recent modern addition to the south of the Former South Yarra Post Office (VHR H0210) is visible in the distance



Figure 202 South Yarra Siding Reserve, looking to the north

14.5.2 Graded buildings not included in the HO

14.5.2.1 Statutory heritage controls

The statutory heritage controls that apply are as follows:

Legislation	Relevant VHR/HO Number
Heritage Act	-
Planning and Environment Act	-

14.5.2.2 Heritage considerations

The HO control does not apply. The heritage policy at Clause 22.04 does apply however this is not directed at controlling the demolition of graded places outside of the HO, rather it is directed at new development on sites abutting HOs.

14.5.2.3 Impact assessment

The construction works would result in the demolition of one C-graded site outside the HO:

- 27 Arthur Street.

This site is graded at a level where it is unlikely it would ever be considered for the application of HO controls as part of a future planning scheme amendment. On this basis, the impact would be negligible in a local context.

14.5.3 Historical Archaeology

14.5.3.1 Statutory heritage controls

The statutory heritage controls that apply are as follows:

Legislation	Relevant HI/HO Number
Heritage Act	- Note the Heritage Act provides blanket protection for all historical archaeological sites more than 50 years in age.
Planning and Environment Act	-

14.5.3.2 Impact assessment

As there are no VHI sites or other known areas of significant archaeological potential identified within the eastern portal precinct, there would be no impact on known historical archaeological values or sites. A protocol for managing previously unidentified historical archaeological sites discovered during project works would be established.

14.6 Environmental Performance Requirements

Table 87 below provides the recommended Environmental Performance Requirements and proposed mitigation measures for the precinct.

Table 87 Environmental Performance Requirements for precinct

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
Toorak Road (west of William and Claremont Streets) Precinct (HO150)	Construction works within South Yarra Siding Reserve	<p>CH3 Prior to construction undertake archival photographic recording in accordance with Heritage Victoria Technical Note: Photographic Recording for Heritage Places and Objects where heritage places are to be demolished or modified.</p> <p>CH7 To the satisfaction of Heritage Victoria and the responsible authority, develop and implement a heritage interpretation strategy as part of detailed design as a whole which seeks to explore historical and Aboriginal cultural heritage themes. This must include but not be limited to the exploration of opportunities for interpretation at Arden station (referencing the use of this land for railways workshops and sidings), and at CBD South station (referencing the Port Phillip Arcade and the early Port Phillip Club Hotel).</p>	Explore opportunities to incorporate heritage interpretation in the reinstated South Yarra Siding Reserve. This could address the history of the development of the rail lines and the nearby South Yarra station (original and current) as well as the use of the South Yarra Siding Reserve itself, refer to the information included in Appendix B (predictive archaeological assessment).	HH32

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
Historical archaeology (Entire precinct)	Subsurface excavation may damage unidentified historical archaeological sites	<p>CH6 To the satisfaction of Heritage Victoria:</p> <ul style="list-style-type: none"> ● Develop archaeological management plans to manage disturbance of archaeological sites and values affected by the project ● Undertake investigation in accordance with the Guidelines for Investigating Historical Archaeological Artefacts and Sites, Heritage Victoria 2014 (as amended or updated) and to the satisfaction of the Executive Director, Heritage Victoria ● Develop and implement a protocol for managing previously unidentified historical archaeological sites discovered during project works. 	<p>For any archaeological sites or artefacts revealed or discovered during construction, the following measure would be implemented:</p> <ul style="list-style-type: none"> ● stop any activity which may impact on the discovery ● ensure that other people working in the area are aware of it and have also stopped work in the area ● protect the artefact, or site feature(s) by, for example, erecting temporary fencing or other suitable enclosure ● consult with a qualified cultural heritage consultant to determine the appropriate course of action ● advise Heritage Victoria where the discovery was made and provide a description or photograph of the discovery ● determine how to manage the find through consultation with Heritage Victoria and the heritage consultant ● obtain the necessary consent under the Heritage Act 1995, or other necessary approvals to protect, recover or remove the find. <p>Archaeological management may require a combination of testing, excavation, salvage and monitoring and related reporting.</p>	HH01

14.7 Conclusion

Construction activities and new infrastructure in the eastern portal precinct would include major works within a local HO precinct, the Toorak Road (west of William and Claremont Streets) Precinct. The majority occur in the rail reserve north of Toorak Road. While these works are significant in terms of their scale, there would be little or no adverse impact on the heritage values of the HO precinct as a result. The historical association between the railway and Toorak Road would be undiminished.

15.0 Precinct 9- Western Turnback

15.1 Project Components

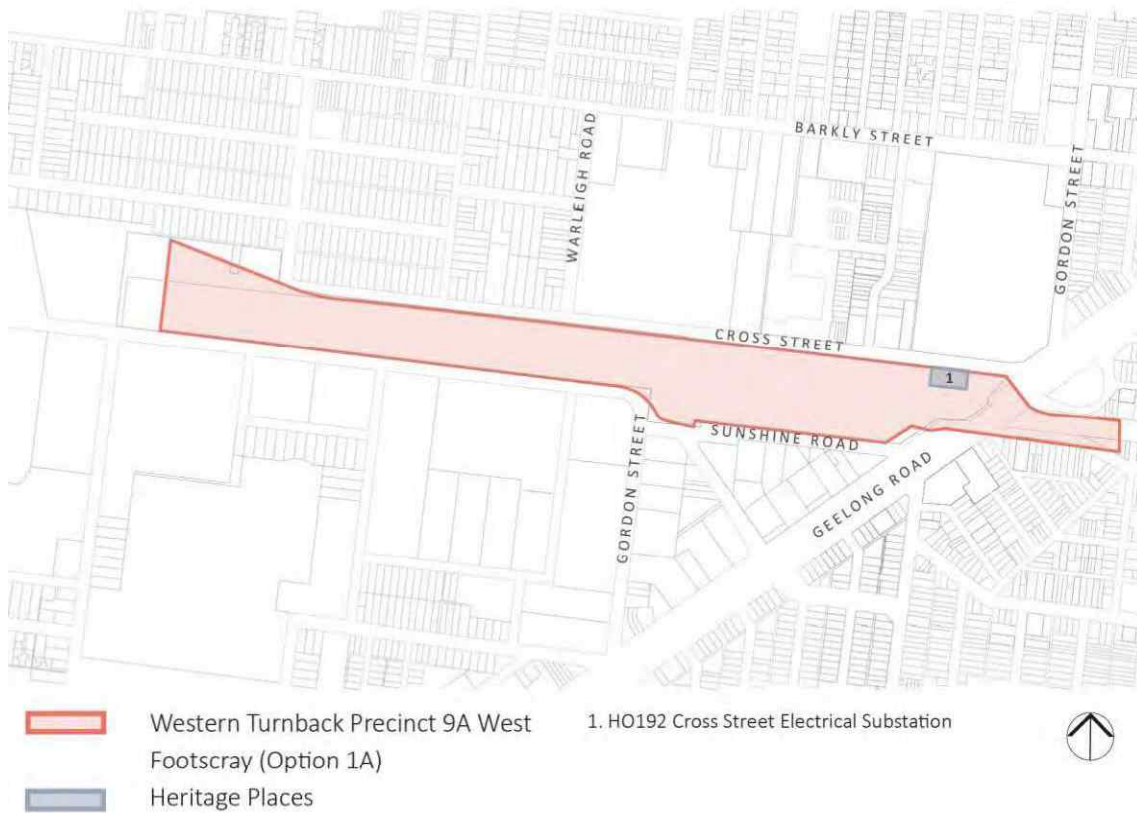


Figure 203 Key heritage places in the western turnback precinct

15.1.1 Infrastructure

On completion of the project the permanent infrastructure would include:

- A third platform at West Footscray station, with modifications to existing concourse
- New track and turnouts within the VicTrack corridor
- Car parking associated with West Footscray station.

15.1.2 Construction

Construction work sites including site establishment would include:

- Construction work sites includes HO192 Cross Street Substation
- Construction work site within the VicTrack corridor.

15.2 Alternative Design Options

15.2.1 Infrastructure

N/A

15.2.2 Construction

N/A

15.3 Existing Conditions

Precinct 9 – western turnback at West Footscray is an area that is largely characterised by the railway and station infrastructure (rails, platform and elevated concourse) and surrounding industrial usage. Recent residential development occupies the site of the interwar period (c. 1919 to c. 1939) Olympic Tyre and Rubber Factory (HO114, 56-84 Cross Street, West Footscray) and the sporting complex at Whitten Oval, both to the north of the precinct. Opposite the oval is the Cross Street Electrical Substation (HO192, Figure 206) and a single story brick office building dating to the late twentieth century. At its east is the major arterial road, Geelong Road. Small-scale residential places occupy the south-eastern corner of the site. Refer to Figure 203.



Figure 204 Olympic Tyre and Rubber Factory (HO114, office building) viewed from the south



Figure 205 Cross Street, opposite HO114, view looking west



Figure 206 Cross Street Electrical Substation (HO192) viewed from the north-west: the brick substation is at left with the concrete walls to the switching yard at right



Figure 207 Cross Street Electrical Substation (HO192) viewed from the north-east



Figure 208 Cross Street Electrical Substation (HO192) viewed from the south-west: note the concrete walls demarcating the former switching yard

15.3.1 Statutory heritage controls and listings

Statutory heritage controls applicable to the western turnback precinct are shown in the mapping at Appendices D, E and F.

15.3.1.1 Environment Protection and Biodiversity Conservation Act 1999

There are no sites subject to the provisions of the EPBC Act within the Precinct 9 - western turnback.

All NHL and CHL places within a one kilometre buffer of the proposed project boundary are listed in Appendix F of this report.

15.3.1.2 Heritage Act 1995

There are no VHR or VHI places in Precinct 9 (West Footscray).

15.3.1.3 Planning and Environment Act 1987

One site is subject to heritage controls under the Maribyrnong Planning Scheme in the western turnback precinct (refer Table 88).

Table 88 HO places in the western turnback precinct

HO number	Place	Address
HO192	Cross Street Electrical Substation	Part of the land known as Allotment 9, section 13 in the Parish of Cut-Paw-Paw (Cross Street, Footscray) Maribyrnong Planning Scheme

15.3.2 Potential additional heritage places

No potential additional heritage places were identified in the western turnback.

15.3.3 Historical archaeology

There are no VHI sites within the western turnback precinct (West Footscray). Due to the high level of recent development and disturbance, no further consideration is needed in the impact assessment (refer to Appendix B).

15.4 Key Issues

Key issues associated with the Concept Design are identified in the table below.

Table 89 Key issues associated with the Concept Design

Concept Design	Issue
Construction	
Construction work site on site of HO192 Cross Street Substation	Possible impact on locally significant heritage place

15.5 Benefits and Opportunities

None identified.

15.6 Impact Assessment

The following draft EES evaluation objectives and assessment criteria (and indicators where relevant) are relevant to this assessment.

Draft EES evaluation Objectives	Assessment Criteria
Cultural Heritage – To avoid or minimise adverse effects on ... historical cultural heritage values	Avoid or minimise impacts on historical cultural heritage values and places

The Concept Design is generally consistent with the draft EES evaluation objective to avoid or minimise impacts on post-settlement cultural heritage values and places as:

- If carefully managed, construction works on the site of HO192 would include the protection of the heritage place and result in no impact on its heritage values or building fabric.

15.6.1 Cross Street Electricity Substation

15.6.1.1 Statutory heritage controls

The statutory heritage controls that apply are as follows:

Legislation	Relevant VHI/HO Number
Heritage Act	- Note the Heritage Act provides blanket protection for all historical archaeological sites more than 50 years in age.
Planning and Environment Act	HO192 Maribyrnong Planning Scheme

15.6.1.2 Heritage considerations

Constructed in 1937, the substation has been assessed as of historical, technical and architectural reasons, including in a state context. It is related to a major historical theme of municipal provision of electricity and can be related historically to the expansion of the area in the interwar period and also to the widespread take-up of the use of electrical power in this period. It is also significant as a work of the architect Joseph Plottel and as an example of the Moderne style as applied to a utilitarian structure.

15.6.1.3 Impact assessment

If required, the impact of demolition would be the complete loss of the heritage values of this place.

While the construction work site as mapped includes the substation, demolition of the heritage place is not proposed. Land surrounding the structure would be occupied for construction purposes and it is recommended that protection measure be put in place to protect the heritage place.

15.6.2 Historical archaeology

15.6.2.1 Statutory heritage controls

The statutory heritage controls that apply are as follows:

Legislation	Relevant VHI/HO Number
Heritage Act	-
Planning and Environment Act	-

15.6.2.2 Impact assessment

As there are no VHI sites or other known areas of significant archaeological potential identified within the western turnback precinct (West Footscray), there would be no impact on known historical archaeological values or sites. A protocol for managing previously unidentified historical archaeological sites discovered during project works would be established.

15.7 Environmental Performance Requirements

Table 90 below provides the recommended Environmental Performance Requirements and proposed mitigation measures for the precinct.

Table 90 Environmental Performance Requirements

Asset / value	Impact	Environmental Performance Requirement	Proposed mitigations measures	Risk no
Historical archaeology (Entire precinct)	Subsurface excavation may damage unidentified historical archaeological sites	<p>CH6 To the satisfaction of Heritage Victoria:</p> <ul style="list-style-type: none"> Develop archaeological management plans to manage disturbance of archaeological sites and values affected by the project Undertake investigation in accordance with the Guidelines for Investigating Historical Archaeological Artefacts and Sites, Heritage Victoria 2014 (as amended or updated) and to the satisfaction of the Executive Director, Heritage Victoria Develop and implement a protocol for managing previously unidentified historical archaeological sites discovered during project works. 	<p>For any archaeological sites or artefacts revealed or discovered during construction, the following measure would be implemented:</p> <ul style="list-style-type: none"> stop any activity which may impact on the discovery ensure that other people working in the area are aware of it and have also stopped work in the area protect the artefact, or site feature(s) by, for example, erecting temporary fencing or other suitable enclosure consult with a qualified cultural heritage consultant to determine the appropriate course of action advise Heritage Victoria where the discovery was made and provide a description or photograph of the discovery determine how to manage the find through consultation with Heritage Victoria and the heritage consultant 	HH01

Asset / value	Impact	Environmental Performance Requirement	Proposed mitigations measures	Risk no
			<ul style="list-style-type: none"> obtain the necessary consent under the Heritage Act 1995, or other necessary approvals to protect, recover or remove the find. <p>Archaeological management may require a combination of testing, excavation, salvage and monitoring and related reporting</p>	
Cross Street Substation	Located within construction work site potential demolition	CH21 Retain and protect the Cross Street Electrical Substation in situ within or abutting proposed construction site.	Ensure building is adequately protected during works through appropriate definition of works area and physical barriers as part of construction management plan.	HH35

15.8 Conclusion

The establishment of the proposed construction work site for the western turnback includes the site of the Cross Street Electrical Substation (HO192); the demolition of this building would result in the complete loss of a place of local heritage value. It is recommended that the building be retained and protected during works.

16.0 Early Works

16.1 Project Components

16.1.1 Infrastructure

The early works program includes utility services relocation, removal and new works across all precincts in the study area, including:

- sewer
- telecommunications
- water
- gas
- electricity
- stormwater drainage.

Infrastructure includes underground mains, conduits and cabling; as well as overhead cabling and transmission lines.

Tramway infrastructure works are also proposed at Flinders and Elizabeth Streets in the CBD in addition to the construction of two tram stops for tram diversion works south of Domain station (on Toorak Road West).

Three access shafts are proposed to be located at Franklin and A'Beckett streets (CBD North station) and City Square (CBD South station).

16.2 Existing Conditions

Refer to individual precinct descriptions.

16.2.1 Statutory heritage controls and listings

Refer to individual precinct descriptions.

16.3 Key Issues

The key issues associated with the early works are:

- Though the detailed design is not yet available, the works would require the disturbance of the CBD VHI sites and the St Kilda Road road reserve VHI site through excavation for changes to services. Works would also have an impact on VHI sites in St Kilda Road which form part of the St Kilda Road Cable Tram archaeological area.
- Works at Parkville and Domain stations could have an impact on trees within the two VHR-registered sites (Royal Parade and the Shrine of Remembrance) and trees within St Kilda Road (assessed as of heritage value).

Historical archaeological impacts associated with the early works across the study area are addressed at Section 16.5.1, followed by a discussion of non-archaeological impacts on a precinct-by-precinct basis.

16.4 Benefits and Opportunities

There are no benefits and opportunities associated with the Concept Design from early works.

16.5 Impact Assessment

The following draft EES evaluation objectives and assessment criteria (and indicators where relevant) are relevant to this assessment.

draft EES evaluation Objectives	Assessment Criteria
Cultural Heritage – To avoid or minimise adverse effects on ... historical cultural heritage values	Avoid or minimise impacts on historical cultural heritage values and places

The Concept Design is generally consistent with the draft EES evaluation objective to avoid or minimise impacts on post-settlement cultural heritage values and places as far as practicable as:

- Additional impacts would occur in the case of trees as part of heritage places that are affected by the main construction works for the project.
- Potential impacts on additional trees as part of heritage places (otherwise not affected by the project) can be managed through adoption of appropriate methods for works.
- Potential physical impacts on the Main Entrance Gate and Pillar (VHR H0919) at the University of Melbourne can be avoided by the dismantling and reconstruction of the structure using an appropriate conservation methodology (dismantling of a section is already proposed as part of the main construction works for the station box).
- Historical archaeological impacts can be mitigated by the realisation of the research potential of the affected sites through appropriate management techniques.

In many cases, early works are proposed to be undertaken in locations where works for the construction of the project are proposed and there are impacts associated with these works. For some of these locations, the proposed early works would pose no *additional* impact and where this is the case this is noted.

16.5.1 Historical archaeology

The impacts and mitigation measures for the historical archaeology sites within or adjacent to areas of early works are presented below in Table 91.

Table 91 Historical archaeological sites within or adjacent to proposed early works

Precinct	Asset	Description of asset	Early work activity concept description	VHI Site / Area of Archaeological Potential
Parkville	Telecommunications	Telstra Optical Fibre conduits and cables, including NBN cables both sides of Royal Parade and Nextgen east side	Cables relocated in new conduits installed along Elizabeth Street, Pelham Street and Leicester Street including road crossings	City Ford Archaeological Area, if trenching in footpath VHI7822-2340
CBD North	Stormwater drainage	DN100 drain on northern side of A'Beckett Street, west of Swanston Street intersection	Drain relocated northwards outside station section 'cut and cover' excavation area	Location to which drain is to be relocated is unclear. Potential for archaeological impacts

Precinct	Asset	Description of asset	Early work activity concept description	VHI Site / Area of Archaeological Potential
CBD North	Electrical	CitiPower high voltage cables laid east/west along Franklin Street (CN-S01)	Existing cables to be relocated in new conduits around northern side of City Baths via Swanston Street and Victoria Street	Swanston Street H7822-1966
CBD North	Electrical	CitiPower HV & LV cables laid along A'Beckett Street, west of Swanston Street intersection	HV & LV cables relocated if necessary, with cables relocated closer to the building line	Exact location to which cables to be relocated is unclear. There are six VHI sites on north side of A'Beckett Street, and ten VHI sites on the south side of the street. Potential for archaeological impacts in footpaths if laid closer to building lines
CBD North	Electrical	CitiPower LV cables laid along La Trobe Street, west of Swanston Street intersection	LV cables diverted around southern side of station box as required	Exact location for cables to be diverted is unclear. If in La Trobe Street roadway, then no archaeological impacts
CBD North	Gas	DN150 high pressure gas main on edge of station box on eastern end of A'Beckett Street (CN-G03)	Gas main within station 'cut and cover' section abandoned and replaced with new DN150 high pressure line along A'Beckett Street across Elizabeth Street intersection. New HP to LP regulator west of station. New DN50 HP connections on north and south of A'Beckett Street, west of "cut and cover" section; on north side of A'Beckett Street from Swanston Street intersection. New DN150 low pressure connection on western side of "cut and cover" section	Elizabeth Street H7822-1965

Precinct	Asset	Description of asset	Early work activity concept description	VHI Site / Area of Archaeological Potential
CBD North	Telecommunications	Multiple telco conduits along northern side of La Trobe Street, west of Swanston Street (CN-T08)	New conduit installed on southern side of La Trobe Street and across Swanston Street. Cables diverted via new conduits away from abandoned conduits	Swanston Street H7822-1966
CBD North	Water	DN100 City Baths water connection (CN-W05)	Water connection across Franklin Street abandoned; new DN150 main laid alongside southern and western edges of City Baths building from Franklin Street/Victoria Street intersection, together with road crossing of Swanston Street to new connection to existing water main on western side of Swanston Street (CWW Pipe ID 1691)	Swanston Street H7822-1966
CBD South	Sewer	MEL Main Sewer (DN900 Brick) running along Flinders Street, west of Swanston Street (CS-S02)	New sewer along Flinders Street to be laid parallel to existing alignment, with existing sewer to be abandoned	Flinders Street H7822-1959
CBD South	Sewer	DN150 Sewer serving property on north side Flinders Street to lane at rear of Young and Jacksons Hotel (CS-S08)	Sewer connection diverted via new DN150 sewer on eastern side of pedestrian link	Flinders Street H7822-1959
CBD South	Sewer	DN525 sewer laid along Swanston Street (CS-S15)	Affected sewer may require protection or raising following settlement investigations and confirmation of construction methodology	Flinders Street H7822-1966

Precinct	Asset	Description of asset	Early work activity concept description	VHI Site / Area of Archaeological Potential
CBD South	Telecommunications	Telstra telecommunications cable on the north of Flinders Street, between Elizabeth Street and Swanston Street/ St Kilda Road	Existing services temporarily supported during construction	Flinders Street H7822-1959
CBD South	Stormwater drainage	DN1200 stormwater drain running from south along Swanston Street (western carriageway) (CS-D01)	Existing DN1200 drain abandoned and new pipe constructed in Swanston Street, between Flinders Lane and Flinders Street, continuing westwards into Flinders Street to new manhole east of Degraeves Street	Flinders Street H7822-1959 Swanston Street H7822-1966
CBD South	Stormwater drainage	DN300 pipe laid along northern side of Flinders Street, west of Swanston Street intersection (CS-D08)	Existing pipe (City of Melbourne asset no 1127952) abandoned during pedestrian link construction, and reinstated prior to completion	Flinders Street H7822-1959
CBD South	Electrical	Flinders Street station box section - CitiPower LV cables laid along Flinders Street on western side of Swanston Street intersection (CS-E01)	LV cables supported during construction	Flinders Street H7822-1959
CBD South	Gas	Low pressure gas mains along Flinders Street within station box, and along Swanston Street from Flinders Street to connection to trunk mains near Flinders Lane, including multiple property connections and branch behind Young & Jackson Hotel (CS-G03)	Gas connection on northern side Flinders Street affected by station pedestrian entrance construction abandoned; new DN150 low pressure main constructed along Degraeves Street and northern side of Flinders Street	Flinders Street H7822-1959

Precinct	Asset	Description of asset	Early work activity concept description	VHI Site / Area of Archaeological Potential
CBD South	Water	DN300 MSCL/DICL main on south side of Flinders Street, across southern extent of station box (CS-W05)	Affected water pipes renewed and temporarily supported during underpass construction; internal water pipe network within Flinders Street Station may require revision	Flinders Street H7822-1959
CBD South	Water	DN225 MSCL/DICL main on north side of Flinders Street, across southern extent of station box (CS-W06)	Affected water pipes renewed and temporarily supported during underpass construction	Flinders Street H7822-1959
Domain	Sewer	DN1875 South Yarra Main Sewer – runs along Domain Road and crosses the proposed station box running south-west along Albert Road (DM-S01)	Sewer to be relocated via new DN1900 diversion sewer under the station box, with new upstream and downstream manholes constructed on the existing sewer	St Kilda Road Reserve H7822-2341
Domain	Water	DN225 MSCL main along southern side of St Kilda Road, between Bowen Lane and Bowen Crescent intersections (DM-W03)	DN225 main and connections protected during construction.	St Kilda Road Reserve H7822-2341

Of the above sites, the implementation of early works activities would require subsurface excavation and has the potential to damage three VHI sites and one archaeological area identified during this assessment. All four of these sites are situated within road reserves and due to the similarity in the nature of likely potential and archaeological remains and the types of works proposed, they would be managed as a single entity.

The key mitigation measure would be the preparation of an archaeological management plan to detail the archaeological investigation of the sites. The archaeological management plans would be prepared in accordance with *Guidelines for Investigating Historical Archaeological Artefacts and Sites* (Heritage Victoria 2014) and in consultation with Heritage Victoria.

It is noted that for a number of the locations for early works, more wholesale subsurface disturbance is proposed as part of the main construction for the project and recommendations for the management of archaeological impacts are made in this report. In such cases, recognising the staging of works, the archaeological management plans for early works should be prepared in consideration of future construction impacts and a co-ordinated approach to archaeological testing should be developed.

Subject to confirmation of the nature and location of early works, some other sites may also be affected. Further assessment may be required.

Table 92 Impact assessment and mitigation measures for CBD street VHI sites and St Kilda Road road reserve

Archaeological area	CBD Street VHI Sites and St Kilda Road road reserve
Listings for Archaeological Places	VHI H7822-1959 – Flinders Street (Near Batman’s Hill to Exhibition Street) VHI H7822-1960 – Collins Street VHI H7822-1966 – Swanston Street VHI H7822-2341 - St Kilda Road Reserve
Archaeological Potential	Early maps indicate the presence of settlement prior to the Hoddle Grid current street layout, which may now occur within the current road corridor of Flinders Street, Collins Street and Swanston Street. The remains of potential structures which may be found within these streets include early buildings, significant services (hydraulics, water etc) and other peripheral undocumented structures such as privies and pits. While road and tram construction may have damaged or destroyed earlier evidence, there is potential for archaeological remains dating to the earliest non-Aboriginal settlement of Melbourne to occur in the CBD. There is the potential for cable tram structures still to be present in the St Kilda Road reserve. There is also the potential for evidence of earlier road treatments.
Significance	The archaeological investigation of the remains would likely provide information on the initial settlement and of the evolution and alteration of the city through known historic phases of settlement, expansion, rapid growth, urbanisation, and other activity. The archaeological remains may be expected to record and reflect the processes of urban growth and development in Melbourne from the 1830s to the present. As one of the early major thoroughfares in Melbourne and the location of early construction of cable tramways, St Kilda Road is of historical significance. The presence of evidence of early road and tram infrastructure has the potential to provide information about the technology, construction and operation of the cable tramway, and of early road construction.
Heritage Impact Assessment	Proposed works within the archaeological area: Early works including electrical, sewer and water upgrades and relocations This would require the destruction and removal of sections of the CBD VHI sites and St Kilda Road road reserve through excavation for changes to services.
Mitigation Measures	Archaeological management plan, providing details of proposed monitoring/test/salvage excavation and artefact analysis

16.5.2 Precinct 2 - Western portal

16.5.2.1 Heritage considerations

Works are predominantly outside the HO9 Kensington Precinct. Where within the HO, works are generally within the roadway reserve.

16.5.2.2 Impact assessment

Where they fall within the HO9 Kensington Precinct, the early works proposed for the western portal precinct would be within the range of works that are typically undertaken in upgrading utilities and services. There would be no adverse heritage impacts on the heritage values of HO9 arising from the proposed early works.

16.5.3 Precinct 3 - Arden station

16.5.3.1 Heritage considerations

Early works proposed in the Arden station precinct are generally confined to the northern part of the site. Drainage and electrical works are concerned with the abandonment of existing services across the site and consolidation and relocation to Barwise Street. Telecommunications works are to the site boundary on Laurens Street.

The site includes, in part, the Railways Reserve Precinct proposed for inclusion in the Melbourne Planning Scheme as HO1093 (Amendment C207).

16.5.3.2 Impact assessment

There would be no heritage impacts arising from the early works proposed within the Arden station precinct. It is likely that the works could be managed so as to avoid physical impacts on buildings within the proposed Railways Reserve Precinct. Additionally, it is noted that these buildings are proposed for demolition to make way for the new station. The early works proposed would pose no additional impact.

16.5.4 Precinct 4 - Parkville station

16.5.4.1 Heritage considerations

Services works for the early works phase include the installation of new, abandonment of existing and relocation of services within Royal Parade (VHR H2198), proximate to Main Entrance Gates and Pillar (VHR H0918) and Gatekeeper's Cottage (VHR H0919) at the University of Melbourne and to Grattan Street, part of HO1 Carlton Precinct.

Within Royal Parade early services works include modifications to existing sub-surface drainage, electricity, sewerage, telecommunications and water supply services are proposed within Royal Parade.

16.5.4.2 Impact assessment

In terms of adverse heritage impact to individual heritage places it is noted that part of the Main Entrance Gate and Pillar (VHR H0919) may need to be dismantled at the commencement of works and reconstructed during the project (for the construction of the Parkville station station box). Depending on detailed design and works methods adopted, it is possible that the early works proximate to this structure may have a similar impact, in that the risk of damage to the heritage fabric may be such that dismantling and reconstruction may be preferable to protect the fabric. It is also possible that a greater extent of the heritage fabric may need to be taken down and reconstructed than could be required for the station box. Providing the appropriate methodology is adopted for the works, however, there would be no additional heritage impacts arising from the early works undertaken proximate to VHR H0919.

There do not appear to be any other impacts to other heritage buildings and structures in the precinct. Where proposed, works in proximity to buildings and structures should use methods such as boring at depth to avoid direct physical impacts. Works are predominantly within the roadways and would not impact upon locally significant places within the Carlton Precinct (HO1).

Unmanaged excavation within the tree protection zones of the elm plantation in Royal Parade (VHR H2198) has the potential to significantly impact on the health and viability of trees within the registered place. A number of registered trees are proposed for removal to make way for the construction of the station and the establishment of a future functional road layout incorporating the proposed tram stop. These are to be reinstated following completion of the project. The proposed early works, however could impact on additional trees not affected by the project works. The potential additional impact of early works can be mitigated against by utilising horizontal boring or non-destructive excavation methodologies within nominated tree protection zones (TPZs), in accordance with the tree protection measures of the City of Melbourne *Tree Protection Fact Sheet*.

16.5.5 Precinct 5 - CBD North station

16.5.5.1 Heritage considerations

The CBD North station precinct contains a number of VHR-registered places and places subject to heritage controls under the Melbourne Planning Scheme. Proposed services works and the construction access shafts are predominantly located within the roadways adjacent to the VHR and HO places.

16.5.5.2 Impact assessment

There would be no heritage impacts arising from the proposed services works. Impacts caused by excavation activities associated with the construction of the shafts, are adequately captured by the impact assessment for CBD North. Refer to Section 11.6.

16.5.6 Precinct 6 – CBD South station

16.5.6.1 Heritage considerations

The CBD South station precinct contains a substantial number of VHR-registered places in addition to a number of locally significant places and heritage precincts subject to heritage controls in the Melbourne Planning Scheme. Works proposed would be mostly located within the roadways and would be outside of the extents of registration for VHR places. The exception to this is Flinders Street Railway Station Complex (VHR H1083) where the extent of registration includes Flinders Street along the northern length of the complex and Swanston Street long the eastern length. The early works scope of works includes upgrades/re-routing of sewer and water services to Flinders Street Station Railway Complex on Flinders Street.

Tram works would be located within Swanston and Flinders streets and would include the construction of triple tracks within the roadway, retention of existing tram stops to Swanston and Flinders streets, overhead wiring, installation of tram poles, road markings and signalling changes. These works would be within the extent of registration for VHR H1083.

While the proposed access shaft is proposed to be located in the City Square, the City Square is not subject to heritage controls.

16.5.6.2 Impact assessment

While partly within the extent of registration for VHR H1083, the services works within Flinders Street would not impact on the heritage values of the Flinders Street Railway Station Complex. Works to the sewer and water connections within Flinders Street Station Complex are considered to be minor and subject to confirmation of the detail of these, would be unlikely to result in an adverse heritage impact on the fabric.

While within the extent of registration for VHR H1083, the proposed tram infrastructure works are also considered to have no heritage impact. It is noted that these works would be considered exempt from the requirement for a Heritage permit under the Heritage Act 1995, with the following exemption applying:

- All works associated with operating and maintaining the existing road and public transport infrastructure including all tramways, roadways, footpaths, kerbs and channels, traffic lights, tram stops, railings, car parks, signs, fire hydrants, parking meters, street lighting, seating, shelters, speed humps, pedestrian refuges and splitter islands.

Impacts caused by excavation activities associated with the construction of the shaft, are adequately captured by the impact assessment for CBD South. Refer to Section 12.6.

16.5.7 Precinct 7 – Domain station

16.5.7.1 Heritage considerations

Early works to the Domain station precinct are predominantly located within the roadways however sewer, water, drainage, gas and telecommunications lines are proposed to be located in the south-western corner of the Shrine of Remembrance Reserve (VHR H0848) in the vicinity of existing trees and to the site of Melbourne Grammar School (VHR H0019). Works would also be required in the St Kilda Road road reserve and these would also be in the vicinity of the trees forming part of the boulevard.

Works are also proposed at the southern end of the Domain station precinct for tram diversion works, where the no. 8 tram is to be diverted along Toorak Road. Works in this location would involve limited tree removal (two elms) from the St Kilda Road outer (eastern) row, and minor changes to medians and works within the roadway itself. Two new tram stops are located at:

- Toorak Road West, east of St Kilda Road
- Toorak Road West, east of Park Street.

The tram stops comprise new platforms, tracks, overhead wiring, signalling, alteration to roadway layout and kerbing and associated infrastructure. Works are predominantly contained within the road reserves to St Kilda Road and Toorak Road West.

Of the two tram stop sites, only one is subject to heritage controls under the Melbourne Planning Scheme, being the Toorak Road West, east of Park Street. This site is included in HO6 South Yarra Precinct.

The removed elms could be replaced with new trees consistent with the approach for the broader construction site at Domain.

As noted, there is no adopted statement of significance for the South Yarra Precinct HO6. The City of Melbourne has developed a draft statement for the precinct (<http://participate.melbourne.vic.gov.au/local-heritage>). The draft statement makes reference to the historical importance of the major roads through the precinct, including Toorak Road West, and also comments on its treed character.

16.5.7.2 Impact assessment

As for early works services in the Parkville precinct, services should be bored beneath nominated TPZs in accordance with the City of Melbourne *Tree Protection Fact Sheet*, or otherwise use non-destructive excavation such as hydro excavation.

In the case of the trees in the Shrine Reserve, some trees in proximity to early works may also be affected by construction works for the Domain station eastern entry and in the case of these trees, there would be no additional impact. Similarly, the trees in St Kilda Road are proposed to be removed for the establishment of the construction work site for the proposed new station. In both cases, mitigation measures are specified in this report. Some impacts are anticipated in St Kilda Road to facilitate the diversion of the No. 8 tram route down Toorak Road West including the removal of two additional trees for the construction of the tram stop to St Kilda Road, these are listed at Table 93 and shown at Figure 209. The impact of the loss of a juvenile (DK072) and mature (DK073) elm from the St Kilda Road avenue, in isolation, would be considered low. However, it is noted that these are in addition to the already extensive tree removals that would be required to the immediate north of the Toorak Road West intersection for the Domain station construction work site and changes to road functional layout.

Table 93 Trees to be removed in St Kilda Road road reserve - City of Melbourne

No	Species	Common name	ULE	Age
DK072	<i>Ulmus sp.</i>	Elm	6-10	Juvenile
DK073	<i>Ulmus sp.</i>	Elm	6-10	Mature

Trees highlighted grey are semi-mature to over mature trees in the public realm with a ULE > 10years (MLTV Trees)

If required, works within the VHR extent of registration for Melbourne Grammar would not have a heritage impact. While no permit exemption applies for services works, a request for a permit exemption can be made to Heritage Victoria under s.66 of the Heritage Act 1995.

Infrastructure works associated with the construction of the two tram stops are contained within the existing roadways. Where within HO6, works associated with the construction of the tram stop would include the modification of the existing kerb and channel arrangement, though this is of a minor nature. While there are a number of significant heritage buildings on Toorak Road West, the tram works would have no adverse impact on the heritage values of these or of the precinct HO6.

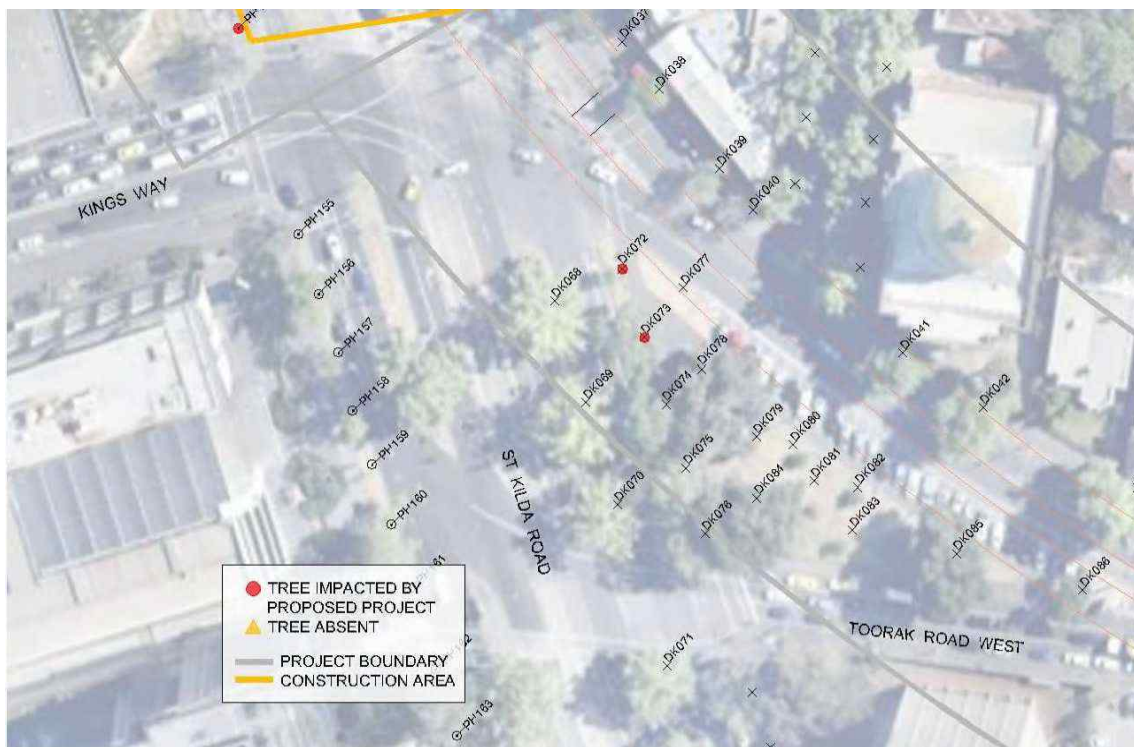


Figure 209 St Kilda Road tree removal associated with the tram diversion works: trees to be removed are DK072 and DK073

16.5.8 Precinct 8 – Eastern portal

16.5.8.1 Heritage considerations

Early works in this precinct are located within HO150 Toorak Road Precinct, however these would be located within roadways. The fabric of the roadways is not referenced as significant in the precinct citation and there is no adverse heritage impact identified.

16.5.8.2 Impact assessment

There would be no heritage impacts arising from the proposed services works.

16.6 Environmental Performance Requirements

Table 94 provides the recommended Environmental Performance Requirements and proposed mitigation measures for the precinct.

Table 94 Environmental Performance Requirements for early works

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
Royal Parade (VHR H2198) in the Parkville Station precinct Shrine of Remembrance (VHR H0848) in the Domain Station precinct St Kilda Road	Possible damage to trees through installation and upgrade of services.	<p>CH8 To the satisfaction of Heritage Victoria and the responsible authority (as applicable) undertake all underground service works beneath or within heritage places or tree protection zones (TPZs) for trees as part of heritage places to avoid, minimise and mitigate impacts to the heritage fabric.</p> <p>AR4 Prior to construction commencing of main works or shafts in affected areas, prepare and implement Tree Protection Plans for each Precinct in accordance with AS4970-2009 Protection of Trees on Development Sites, addressing the detailed design and construction methodology of the project.</p> <p>Within precincts 1, 4 and 7, a Tree Protection Plan must be developed for each heritage place as relevant to the satisfaction of Heritage Victoria or the responsible authority.</p>	<p>Obtain specialist arboriculture / heritage advice on works methodology to ensure significant fabric is protected.</p> <p>Subsurface works to take place non-destructively and at depths consistent with the protection and preservation of heritage fabric and tree roots including at depths nominated in the City of Melbourne <i>Tree Protection Fact Sheet</i>, or utilising preliminary non-destructive excavation, to determine the location of existing roots.</p>	HH33
Entire project	Subsurface excavation may damage unidentified historical archaeological sites	<p>CH6 To the satisfaction of Heritage Victoria:</p> <ul style="list-style-type: none"> Develop archaeological management plans to manage disturbance of archaeological sites and values affected by the project Undertake investigation in accordance with the Guidelines for Investigating Historical Archaeological Artefacts and 	<p>For any archaeological sites or artefacts revealed or discovered during construction, the following measure would be implemented:</p> <ul style="list-style-type: none"> stop any activity which may impact on the discovery ensure that other people working in the area are aware of it and have also stopped work in the area 	HH01

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
		<p>Sites, Heritage Victoria 2014 (as amended or updated) and to the satisfaction of the Executive Director, Heritage Victoria</p> <ul style="list-style-type: none"> Develop and implement a protocol for managing previously unidentified historical archaeological sites discovered during project works. 	<ul style="list-style-type: none"> protect the artefact, or site feature(s) by, for example, erecting temporary fencing or other suitable enclosure consult with a qualified cultural heritage consultant to determine the appropriate course of action advise Heritage Victoria where the discovery was made and provide a description or photograph of the discovery determine how to manage the find through consultation with Heritage Victoria and the heritage consultant obtain the necessary Consent under the Heritage Act 1995, or other necessary approvals to protect, recover or remove the find. <p>Archaeological management may require a combination of testing, excavation, salvage and monitoring and related reporting.</p>	
<p>CBD Street VHI Sites and St Kilda Road road reserve</p>	<p>Early works including electrical, sewer and water upgrades and relocations would require the destruction and removal of sections of the CBD VHI sites and St Kilda Road road reserve through excavation for changes to services.</p>	<p>CH6 To the satisfaction of Heritage Victoria:</p> <ul style="list-style-type: none"> Develop archaeological management plans to manage disturbance of archaeological sites and values affected by the project Undertake investigation in accordance with the Guidelines for Investigating Historical Archaeological Artefacts and Sites, Heritage Victoria 2014 (as 	<p>The archaeological management plan would include the following:</p> <ul style="list-style-type: none"> description and background history of Archaeological Area statement of significance of Archaeological Area, in accordance with Guidelines for Conducting Historical Archaeological Surveys (Heritage Council of Victoria and 	<p>HH02</p>

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
		<p>amended or updated) and to the satisfaction of the Executive Director, Heritage Victoria</p> <ul style="list-style-type: none"> Develop and implement a protocol for managing previously unidentified historical archaeological sites discovered during project works. 	<p>Heritage Victoria 2008), Criteria for Assessing Cultural Heritage Significance (Heritage Council of Victoria 2008) and Victoria's Framework of Historical Themes (Heritage Council of Victoria 2010)</p> <ul style="list-style-type: none"> research design, including research questions which will be addressed as a result of any archaeological investigations excavation methodology, including method to be used to excavate deposits, record spatial and stratigraphic information and recover artefacts and how these would help address the research design artefact retention policy, including how and why individual artefacts and types of artefact would be retained, discarded or sampled during the archaeological investigation artefact management proposal, including details of how recovered artefacts would be managed in the field and post-excavation (including materials conservation if required). <p>Through the development and implementation of the archaeological management plan, the research potential of the affected site can be realised and this would mitigate the impact of destruction or disturbance.</p>	

Asset / value	Impact	Environmental Performance Requirements	Proposed mitigation measures	Risk no
<p>University of Melbourne Main Entrance Gates (Gate 6), Pillars and Fence (VHR H0918)</p>	<p>Services are located immediately abutting the fence and there may be a direct physical impact or risk of damage (subject to detailed design)</p>	<p>CH1 Design permanent and temporary works to avoid or minimise impacts on the cultural heritage values of heritage places.</p> <p>Consult as required with Heritage Victoria and/or the responsible authority (as applicable).</p> <p>CH4 Design permanent and temporary works to avoid or minimise impacts on the cultural heritage values of heritage places.</p> <p>Consult as required with Heritage Victoria and/or the responsible authority (as applicable).</p>	<p>Review detailed design and works methodology to avoid impact or risk of impact on significant fabric if possible.</p> <p>Where dismantling and reconstruction works are required document and perform these works with specialist input. This would likely include an assessment of condition, detailed methodology for the work, recording of the structure prior to dismantling, dismantling methodology, the numbering of component parts for storage, specification of secure storage arrangements, details of required repair and conservation works, if required, method for reinstating fabric including appropriate materials in the event fabric is required to be renewed or replaced.</p>	<p>HH34</p>

16.7 Conclusion

The impact of early works is largely archaeological, but with some potential impacts on buildings and structures, and on trees as part of heritage places.

In some cases, the works would pose an impact in locations and on heritage places that would also be affected by the main construction works for the Concept Design and in a number of these cases, the proposed early works would not pose additional heritage impacts.

Where additional heritage impacts would be possible, these appear, on the basis of the information available, to be impacts that can be avoided, minimised or mitigated. This is the case for the University of Melbourne Main Entrance Gates (Gate 6), Pillars and Fence (VHR H0918) and Royal Parade VHR H2198). The exception is at St Kilda Road, where an additional two elms would be required to be removed for the tram diversion works at Toorak Road West.

It is noted that the early works are shown in concept form only, however and it is possible that there may be other-archaeological and non-archaeological impacts associated with early works.

Works are proposed as part of the Concept Design close to, abutting or extending into a number of VHR sites (including the Flinders Street Station Complex). More detail on the works would be required in order to confirm the nature of any additional impacts, however given the nature of the works (services works), it would be expected these would be minor and adverse impacts could be avoided through detailed design and care in undertaking the works.

17.0 Environmental Performance Requirements

This section provides a comprehensive list of the recommended Environmental Performance Requirements and proposed mitigation measures identified as a result of this impact assessment. Table 95 provides the Environmental Performance Requirements which apply across the project and on a precinct basis, linked to the draft EES evaluation objective.

For the purposes of this report, heritage places are defined as:

- Places that are subject to statutory heritage controls under the EPBC Act, the Heritage Act and the Planning and Environment Act, [including] historical archaeological sites over 50 years in age, whether known or unknown
- Places identified as of heritage value but not currently subject to statutory heritage controls, including sites of archaeological potential, graded buildings not subject to HO controls, and St Kilda Road.

Table 95 Environmental Performance Requirements

Draft EES evaluation objective	Impact	Environmental Performance Requirements	Proposed mitigation measure	Precinct	Timing
Cultural heritage: - To avoid or minimise adverse effects on Aboriginal and historic cultural heritage values	All potential heritage impacts	CH1 Design permanent and temporary works to avoid or minimise impacts on the cultural heritage values of heritage places. Consult as required with Heritage Victoria and/or the responsible authority (as applicable).	In detailed design for permanent and temporary works including construction activities, review the impact assessment in this report, obtain specialist heritage advice and consult with Heritage Victoria where applicable.	All	Prior to, during and after works
	Potential damage to heritage buildings and structures as a result of construction or operational vibration or ground settlement.	CH2 To avoid or minimise impacts on the cultural heritage values of heritage places: <ul style="list-style-type: none"> • Perform works in accordance with the following noise and vibration and ground movement Environmental Performance Requirements as 	Should construction vibration be determined to be a risk to a heritage place mitigation measures may include, as relevant, use of alternative construction equipment/construction methodology as identified in the Noise and Vibration assessment (Technical Appendix I)	All	Prior to, during and after works

Draft EES evaluation objective	Impact	Environmental Performance Requirements	Proposed mitigation measure	Precinct	Timing
		<p>related to heritage places: NV2, NV5, NV6, NV11, GM2, GM4, GM5, GM6.</p> <ul style="list-style-type: none"> Undertake condition assessments of heritage places prior to commencement of construction where located within the identified vibration and ground settlement zones of sensitivity and monitor as per NV6, GM4 and GM5 <p>Should damage occur to a building or structure on the Victorian Heritage Register or that is subject to a Heritage Overlay as a result of works, undertake rectification works in accordance with accepted conservation practice (with reference to the Australia ICOMOS Burra Charter 2013) to the satisfaction of Heritage Victoria or the responsible authority, as applicable.</p>	<p>Should ground movement be determined to be a risk to a heritage place mitigation measures may include, as relevant, permeation grouting, underpinning and structural strengthening or other techniques as identified in the Ground Movement Impact Assessment (Technical Appendix P)</p> <p>See section 6.2.</p>		
	Demolition or alteration of heritage places	<p>CH3 Prior to construction undertake archival photographic recording in accordance with Heritage Victoria Technical Note: Photographic Recording for Heritage Places and Objects where heritage places are to be demolished or modified.</p> <p>CH7 To the satisfaction of Heritage Victoria and the responsible authority, develop and implement a heritage interpretation strategy as part of detailed design as a whole which seeks to explore historical and Aboriginal</p>	<p>Avoid demolition where possible and minimise the loss of significant fabric consistent with CH1.</p> <p>Lodge copies of archival photographic records with the State Library of Victoria and other suitable local repositories as appropriate for each affected heritage place. Archival photography may also be used to support site interpretation.</p> <p>Site interpretation at different locations would take a wide range of forms, from conventional plaques, panels and markers to installations and interactive digital presentations and online resources. Structural</p>	All, individual places as specified in the precinct assessments	Prior to works commencing (recording) Detailed design (site interpretation)

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		cultural heritage themes. This must include but not be limited to the exploration of opportunities for interpretation at Arden station (referencing the use of this land for railways workshops and sidings), and at CBD South station (referencing the Port Phillip Arcade and the early Port Phillip Club Hotel).	elements, reclaimed materials, salvaged artefacts and commissioned artworks are other options. Choices are informed by the use of the place, audience expectations, physical constraints and other place-specific considerations. Explore opportunities for oral and community history sources. To be developed in consultation with relevant stakeholders and with reference to any conservation management plans or other policy documents.		
	Temporary or permanent relocation of heritage fabric where affected by construction activities or permanent infrastructure	CH4 Prior to construction of main works or shafts that affect heritage structures or places, develop detailed methodology in accordance with Australia ICOMOS Burra Charter and to the satisfaction of Heritage Victoria or the responsible authority (as applicable) where heritage fabric is required to be dismantled, stored and reconstructed. Work is to be documented and overseen by an appropriately qualified conservation practitioner.	Investigate the retention and protection <i>in situ</i> of affected heritage fabric as the preference consistent with CH1. Where dismantling and reconstruction works are required document and perform these works with specialist input. This would likely include an assessment of condition, detailed methodology for the work, recording of the structure prior to dismantling, dismantling methodology, the numbering of component parts for storage, specification of secure storage arrangements, details of required repair and conservation works, if required, method for reinstating fabric including appropriate materials in the event fabric is required to be renewed or replaced.	Precincts 1, 4, 6 and 7, individual places specified in the precinct assessments	Prior to construction works, reinstatement at an appropriate time during or after the main construction works.
	Damage to heritage places as a result of works in proximity	CH5 Prior to construction of main works or shafts that affect heritage structures or places, develop and implement appropriate	Physical protection works to be designed as part of construction management plan.	All, but particularly Precincts 1, 4,	Prior to construction works

Draft EES evaluation objective	Impact	Environmental Performance Requirements	Proposed mitigation measure	Precinct	Timing
		<p>protection measures for heritage places and objects including sculptures, memorials, monuments and associated heritage fabric where retained in proximity to works. This is to be done to the satisfaction of Heritage Victoria or the responsible authority (as applicable).</p>	<p>Risk assessment to be undertaken for all heritage places in proximity to works.</p>	<p>5, 6, 7</p>	
	<p>Damage to significant trees as part of heritage places as a result of works in proximity</p>	<p>AR1 During detailed design, review potential tree impacts and provide for maximum tree retention where possible.</p> <p>Prior to construction of main works or shafts, develop and implement a plan in consultation with the relevant local council that identifies all trees in the project area which covers:</p> <ul style="list-style-type: none"> • Trees to be removed or retained • Condition of the trees to be removed • Options for temporary re-location of palms and reinstatement at their former location or another suitable location. <p>AR4 Prior to construction commencing of main works or shafts in affected areas, prepare and implement Tree Protection Plans for each Precinct in accordance with AS4970-2009 Protection of Trees on Development Sites, addressing the detailed design and construction methodology of the project.</p>	<p>Works to be undertaken in accordance with the tree protection plan.</p>	<p>Precincts 1, 4, 7</p>	<p>Prior to construction works</p>

Draft EES evaluation objective	Impact	Environmental Performance Requirements	Proposed mitigation measure	Precinct	Timing
		<p>Within precincts 1, 4 and 7, a Tree Protection Plan must be developed for each heritage place as relevant to the satisfaction of Heritage Victoria or the responsible authority.</p>			
	<p>Disturbance or destruction of unknown archaeological sites during construction</p>	<p>CH6 To the satisfaction of Heritage Victoria:</p> <ul style="list-style-type: none"> • Develop archaeological management plans to manage disturbance of archaeological sites and values affected by the project • Undertake investigation in accordance with the Guidelines for Investigating Historical Archaeological Artefacts and Sites, Heritage Victoria 2014 (as amended or updated) and to the satisfaction of the Executive Director, Heritage Victoria • Develop and implement a protocol for managing previously unidentified historical archaeological sites discovered during project works. 	<p>For any archaeological sites or artefacts revealed or discovered during construction, the following measure would be implemented:</p> <ul style="list-style-type: none"> • Stop any activity which may impact on the discovery • Ensure that other people working in the area are aware of it and have also stopped work in the area • Protect the artefact, or site feature(s) by, for example, erecting temporary fencing or other suitable enclosure • Consult with a qualified cultural heritage consultant to determine the appropriate course of action • Advise Heritage Victoria where the discovery was made and provide a description or photograph of the discovery • Determine how to manage the find through consultation with Heritage Victoria and the heritage consultant • Obtain the necessary Consent under the Heritage Act 1995, or other necessary approvals to protect, recover or remove the find. 	<p>All</p>	<p>Construction</p>

Draft EES evaluation objective	Impact	Environmental Performance Requirements	Proposed mitigation measure	Precinct	Timing
			Archaeological management may require a combination of testing, excavation, salvage and monitoring and related reporting.		
	Disturbance or destruction of archaeological sites listed on the VHI	<p>CH6 To the satisfaction of Heritage Victoria:</p> <ul style="list-style-type: none"> • Develop archaeological management plans to manage disturbance of archaeological sites and values affected by the project • Undertake investigation in accordance with the Guidelines for Investigating Historical Archaeological Artefacts and Sites, Heritage Victoria 2014 (as amended or updated) and to the satisfaction of the Executive Director, Heritage Victoria • Develop and implement a protocol for managing previously unidentified historical archaeological sites discovered during project works. 	<p>The archaeological management plan will include the following:</p> <ul style="list-style-type: none"> • Description and background history of Archaeological Area • Statement of significance of Archaeological Area, in accordance with Guidelines for Conducting Historical Archaeological Surveys (Heritage Council of Victoria and Heritage Victoria 2008), Criteria for Assessing Cultural Heritage Significance (Heritage Council of Victoria 2008) and Victoria’s Framework of Historical Themes (Heritage Council of Victoria 2010) • Research design, including research questions which will be addressed as a result of any archaeological investigations • Excavation methodology, including method to be used to excavate deposits, record spatial and stratigraphic information and recover artefacts and how these will help address the research design • Artefact retention policy, including how and why individual artefacts and types of artefact will be retained, discarded or sampled during the archaeological investigation 	Precincts 1, 3, 4, 5, 6, 7	Prior to construction works

Draft EES evaluation objective	Impact	Environmental Performance Requirements	Proposed mitigation measure	Precinct	Timing
			<ul style="list-style-type: none"> Artefact management proposal, including details of how recovered artefacts will be managed in the field and post-excavation (including materials conservation if required) <p>Through the development and implementation of the archaeological management plan, the research potential of the affected site can be realised and this would mitigate the impact of destruction or disturbance.</p>		
	Damage to heritage fabric and trees as a result of subsurface works including services relocation works	CH8 To the satisfaction of Heritage Victoria and the responsible authority (as applicable) undertake all underground service works beneath or within heritage places or tree protection zones (TPZs) for trees as part of heritage places to avoid, minimise and mitigate impacts to the heritage fabric..	Obtain specialist arboriculture / heritage advice on works methodology to ensure significant fabric is protected. Subsurface works to take place non-destructively and at depths consistent with the protection and preservation of heritage fabric and tree roots including at depths nominated in the City of Melbourne Tree Protection Fact Sheet, or utilising preliminary non-destructive excavation, to determine the location of existing roots.	All	Construction
	New development may have an adverse visual impact on existing heritage places.	CH1 Design permanent and temporary works to avoid or minimise impacts on the cultural heritage values of heritage places. Consult as required with Heritage Victoria and/or the responsible authority (as applicable).	Design of new works within and in proximity to heritage places to be developed with specialist heritage advice and with reference to relevant planning scheme policies and conservation management plans as applicable, and consistent with the Urban Design Strategy.	All	Detailed design

Draft EES evaluation objective	Impact	Environmental Performance Requirements	Proposed mitigation measure	Precinct	Timing
		CH9 To the satisfaction of Heritage Victoria and the responsible authority (as applicable), ensure new development is responsive to heritage places in terms of height, massing, form, façade articulation and materials.			
	Potential impact from the establishment of construction work sites at the former Kensington Glueworks, Hobsons Road Kensington	CH10 To the satisfaction of the responsible authority, ensure no direct impact on heritage buildings on the former Glueworks site in Kensington.	Protect heritage buildings from physical impacts, physical protection work to be designed as part of construction management plan.	Precinct 2	Detailed design Construction
	Potential impact on pumping station for substation option at Langford Street. North Melbourne	CH11 To the satisfaction of the responsible authority, retain and protect Langford Street pumping station (part of proposed Moonee Ponds Creek and Infrastructure Precinct) as part of the design for the new substation.	Review siting of new substation to allow retention and protection of the heritage building in situ. Protect heritage building from physical impacts, physical protection work to be designed as part of construction management plan.	Precinct3	Detailed design
	Royal Parade: Construction of station Tree removals New entries have visual impact Removal of bluestone to flanking carriageway Modification of medians including form and significant concrete kerbing	CH1 Design permanent and temporary works to avoid or minimise impacts on the cultural heritage values of heritage places. Consult as required with Heritage Victoria and/or the responsible authority (as applicable). CH3 Prior to construction undertake archival photographic recording in accordance with Heritage Victoria Technical Note: Photographic Recording for Heritage Places and Objects where heritage places are to be demolished or modified.	The location of each tree proposed to be removed would need to be surveyed and photographed prior to removal. Replacement to be undertaken in consultation with the City of Melbourne. In detailed design further review road functional layout to minimise impact on the significant trees and optimise the opportunities for replanting In detailed design re-use and/or reproduce concrete kerbing detail to modified medians.	Precinct 4	Detailed design and construction

Draft EES evaluation objective	Impact	Environmental Performance Requirements	Proposed mitigation measure	Precinct	Timing
		<p>CH12 To the satisfaction of Heritage Victoria and the responsible authority, replace removed Elm trees in Royal Parade as part of project delivery using appropriate species and re-establish the boulevard formation.</p> <p>Provide suitable soil conditions to facilitate the growth of new trees to reach the size of the existing mature trees in the boulevard.</p> <p>AR4 Prior to construction commencing of main works or shafts in affected areas, prepare and implement Tree Protection Plans for each Precinct in accordance with AS4970-2009 Protection of Trees on Development Sites, addressing the detailed design and construction methodology of the project.</p> <p>Within precincts 1, 4 and 7 a Tree Protection Plan must be developed for each heritage place as relevant to the satisfaction of Heritage Victoria or the responsible authority.</p>	<p>In detailed design investigate the potential to introduce new surface over retained bluestone (in preference to removal)</p>		
	<p>New station entry in proximity to the Gatekeeper's Cottage may have an adverse visual impact</p>	<p>CH1 Design permanent and temporary works to avoid or minimise impacts on the cultural heritage values of heritage places.</p> <p>Consult as required with Heritage Victoria and/or the responsible authority (as applicable).</p>	<p>The design should be developed consistent with the Urban Design Strategy and the referenced EPRs and with specialist heritage advice to achieve a sympathetic relationship with the heritage place.</p>	<p>Precinct 4</p>	<p>Detailed design</p>

Draft EES evaluation objective	Impact	Environmental Performance Requirements	Proposed mitigation measure	Precinct	Timing
		<p>CH9 To the satisfaction of Heritage Victoria and the responsible authority (as applicable), ensure new development is responsive to heritage places in terms of height, massing, form, façade articulation and materials.</p> <p>CH13 To the satisfaction of Heritage Victoria, in detailed design ensure the eastern Parkville station entry is set no less than 8-10 metres from the original Gatekeeper’s Cottage and an appropriate boundary treatment is retained or re-established for the heritage building.</p>			
	<p>Works within Flinders Street Station complex could have an adverse impact on the significant fabric and presentation of the station</p>	<p>CH1 Design permanent and temporary works to avoid or minimise impacts on the cultural heritage values of heritage places.</p> <p>Consult as required with Heritage Victoria and/or the responsible authority (as applicable).</p> <p>CH3 Prior to construction undertake archival photographic recording in accordance with Heritage Victoria Technical Note: Photographic Recording for Heritage Places and Objects where heritage places are to be demolished or modified.</p>	<p>Design and manage the construction process to limit extent of demolition, including for the introduction of escalators into position.</p> <p>Ensure the design is developed with specialist input to minimise visual impacts on the external presentation of the building and to limit physical impact on significant internal fabric.</p>	Precinct 6	Detailed design
	<p>Demolition of the Port Phillip Arcade within the Flinders Gate Precinct</p>	<p>CH3 Prior to construction undertake archival photographic recording in accordance with Heritage Victoria Technical Note: Photographic Recording for Heritage Places and Objects</p>	<p>Active site interpretation should explore the history of the two key buildings that have existed on this site, the Port Phillip Club Hotel and the Port Phillip Arcade. This should include reference to long-term</p>	Precinct 6	Detailed design

Draft evaluation objective	EES Impact	Environmental Performance Requirements	Proposed mitigation measure	Precinct	Timing
	(H0505)	<p>where heritage places are to be demolished or modified.</p> <p>CH4 Prior to construction of main works or shafts that affect heritage structures or places, develop detailed methodology in accordance with Australia ICOMOS Burra Charter and to the satisfaction of Heritage Victoria or the responsible authority (as applicable) where heritage fabric is required to be dismantled, stored and reconstructed. Work is to be documented and overseen by an appropriately qualified conservation practitioner</p> <p>CH7 To the satisfaction of Heritage Victoria and the responsible authority, develop and implement a heritage interpretation strategy as part of detailed design as a whole which seeks to explore historical and Aboriginal cultural heritage themes. This must include but not be limited to the exploration of opportunities for interpretation at Arden station (referencing the use of this land for railways workshops and sidings), and at CBD South station (referencing the Port Phillip Arcade and the early Port Phillip Club Hotel).</p> <p>CH14 To the satisfaction of the responsible authority, in detailed design for the CBD South station, incorporate the Charles Bush sculpture into the design for the new building on the</p>	<p>occupants of the arcade, and could include the use of oral history. The sculpture should be integrated into the design and the subject of active interpretation.</p> <p>Where dismantling and reconstruction works are required document and perform these works with specialist input. This would likely include an assessment of condition, detailed methodology for the work, recording of the structure prior to dismantling, dismantling methodology, the numbering of component parts for storage, specification of secure storage arrangements, details of required repair and conservation works, if required, method for reinstating fabric including appropriate materials in the event fabric is required to be renewed or replaced.</p>		

Draft EES evaluation objective	Impact	Environmental Performance Requirements	Proposed mitigation measure	Precinct	Timing
		Port Phillip Arcade site, preferably in a prominent position on the Flinders Street façade.			
	Relocation of Burke and Wills monument	<p>CH1 Design permanent and temporary works to avoid or minimise impacts on the cultural heritage values of heritage places.</p> <p>Consult as required with Heritage Victoria and/or the responsible authority (as applicable).</p> <p>CH3 Prior to construction undertake archival photographic recording in accordance with Heritage Victoria Technical Note: Photographic Recording for Heritage Places and Objects where heritage places are to be demolished or modified.</p> <p>CH4 Prior to construction of main works or shafts that affect heritage structures or places, develop detailed methodology in accordance with Australia ICOMOS Burra Charter and to the satisfaction of Heritage Victoria or the responsible authority (as applicable) where heritage fabric is required to be dismantled, stored and reconstructed. Work is to be documented and overseen by an appropriately qualified conservation practitioner.</p> <p>CH5 Prior to construction of main works or shafts that affect heritage structures or places,</p>	<p>If relocation on this site or an alternative site is proposed the site should be appropriate to the status of the memorial and resolved with the City of Melbourne.</p> <p>If temporary relocation is required in order to protect significant fabric, document and undertake works according to accepted conservation standards.</p> <p>A detailed methodology for the recording, dismantling, storing and reconstruction of the statue would be required. This should include a condition assessment and specify active conservation and repair works, should these be required.</p>	Precinct 6	Detailed design

Draft EES evaluation objective	Impact	Environmental Performance Requirements	Proposed mitigation measure	Precinct	Timing
		<p>develop and implement appropriate protection measures for heritage places and objects including sculptures, memorials, monuments and associated heritage fabric where retained in proximity to works. This is to be done to the satisfaction of Heritage Victoria or the responsible authority (as applicable).</p> <p>CH15 In the event the permanent relocation of the Burke and Wills Monument from its current site is required, resolve the final location of the monument to the satisfaction of the appropriate responsible authority and/or in consultation with the City of Melbourne prior to the commencement of construction.</p>			
	Removal of the bluestone pillar and cast iron fencing at the University of Melbourne site in Parkville	<p>CH1 Design permanent and temporary works to avoid or minimise impacts on the cultural heritage values of heritage places.</p> <p>Consult as required with Heritage Victoria and/or the responsible authority (as applicable).</p> <p>CH4 Prior to construction of main works or shafts that affect heritage structures or places, develop detailed methodology in accordance with Australia ICOMOS Burra Charter and to the satisfaction of Heritage Victoria or the responsible authority (as applicable) where</p>	Incorporate the feature into the design for the entry and preferably develop active site interpretation which references the historical boundary treatment to Parkville campus.	Precinct 4	Detailed design

Draft EES evaluation objective	Impact	Environmental Performance Requirements	Proposed mitigation measure	Precinct	Timing
		<p>heritage fabric is required to be dismantled, stored and reconstructed. Work is to be documented and overseen by an appropriately qualified conservation practitioner.</p> <p>CH16 Integrate the bluestone pillar and cast iron fencing at the corner of Grattan Street and Royal Parade into the design for the station entry and surrounds in consultation with the University of Melbourne.</p>			
	<p>Impact on trees and heritage structures as a result of ground improvement in Tom's Block</p>	<p>AR1 During detailed design, review potential tree impacts and provide for maximum tree retention where possible.</p> <p>Prior to construction of main works or shafts, develop and implement a plan in consultation with the relevant local council that identifies all trees in the project area which covers:</p> <ul style="list-style-type: none"> • Trees to be removed or retained • Condition of the trees to be removed • Options for temporary re-location of palms and reinstatement at their former location or another suitable location. <p>AR2 Reinstatement quality soils to sufficient volumes to support long-term viable growth of replacement trees.</p>	<p>Utilise strict monitoring of volume loss, TBM operations and ground monitoring during tunnelling eliminating or, as far as possible, reducing the extent of soil stabilisation works.</p> <p>Tree removals within Domain Parklands to be minimised as far as possible. Replacement plantings to be designed in consultation with the City of Melbourne.</p> <p>Re-establish landscape character following works in consultation with the City of Melbourne.</p> <p>In preference retain heritage structures <i>in situ</i>. If temporary relocation is required in order to protect significant fabric, document and undertake works according to accepted conservation standards.</p> <p>A detailed methodology for the recording, dismantling, storing and reconstruction of the heritage structures would be required.</p>	<p>Precinct 1 and others if applicable</p>	<p>In association with ground improvement works if required.</p>

Draft EES evaluation objective	Impact	Environmental Performance Requirements	Proposed mitigation measure	Precinct	Timing
		<p>CH17 Replace removed trees as part of project delivery in accordance with relevant policy documents and to re-establish valued landscape character and in consultation with the City of Melbourne, the City of Port Phillip, the Shrine of Remembrance and Shrine Trustees and Heritage Victoria as applicable. Policy documents are as follows:</p> <ul style="list-style-type: none"> • Domain Parklands: Domain Parklands CMP (in preparation, Context, draft 2015-16) and the Domain Parklands Masterplan (in preparation) • Shrine of Remembrance: Shrine of Remembrance CMP (Lovell Chen, 2010) or any future review and the Shrine of Remembrance Landscape Improvement Plan (Rush Wright Associates, 2010) • South African Soldiers Memorial Reserve: Any relevant CMP for the South African Soldiers Memorial <p>Fawkner Park: Fawkner Park Conservation Analysis (Hassell, 2002) and the Fawkner Park Masterplan (City of Melbourne, 2005).</p>			
	Construction work site for the emergency access shaft within the Queen Victoria Gardens is in	CH5 Prior to construction of main works or shafts that affect heritage structures or places, develop and implement appropriate protection measures for heritage places and	Protect memorial from physical impacts, physical protection work to be designed as part of construction management plan.	Precinct 1	Detailed design

Draft evaluation objective	EES Impact	Environmental Performance Requirements	Proposed mitigation measure	Precinct	Timing
	close proximity to the King Edward VII Memorial	objects including sculptures, memorials, monuments and associated heritage fabric where retained in proximity to works. This is to be done to the satisfaction of Heritage Victoria or the responsible authority (as applicable).			
	Construction of the new station entry within the Shrine Reserve requires tree removals, mature Elm trees on Domain Road would be removed for the access to the construction work site at the Edmund Herring Oval.	<p>AR1 During detailed design, review potential tree impacts and provide for maximum tree retention where possible.</p> <p>Prior to construction of main works or shafts, develop and implement a plan in consultation with the relevant local council that identifies all trees in the project area which covers:</p> <ul style="list-style-type: none"> ● Trees to be removed or retained ● Condition of the trees to be removed ● Options for temporary re-location of palms and reinstatement at their former location or another suitable location. <p>CH17 Replace removed trees as part of project delivery in accordance with relevant policy documents and to re-establish valued landscape character and in consultation with the City of Melbourne, the City of Port Phillip, the Shrine of Remembrance and Shrine Trustees and Heritage Victoria as applicable. Policy documents are as follows:</p>	<p>Investigate relocation of vehicle access to east side of Oval to limit tree removals to juvenile Queensland Kauri and retain and protect mature Elms within the Shrine Reserve. Tree replanting to be undertaken in consultation with the City of Melbourne and the Shrine of Remembrance.</p> <p>Protect trees to be retained and implement Tree Protection Plan.</p>	Precinct 7	Detailed design

Draft evaluation objective	EES Impact	Environmental Performance Requirements	Proposed mitigation measure	Precinct	Timing
		<ul style="list-style-type: none"> Domain Parklands: Domain Parklands CMP (in preparation, Context, draft 2015-16) and the Domain Parklands Masterplan (in preparation) Shrine of Remembrance: Shrine of Remembrance CMP (Lovell Chen, 2010) or any future review and the Shrine of Remembrance Landscape Improvement Plan (Rush Wright Associates, 2010) South African Soldiers Memorial Reserve: Any relevant CMP for the South African Soldiers Memorial Fawkner Park: Fawkner Park Conservation Analysis (Hassell, 2002) and the Fawkner Park Masterplan (City of Melbourne, 2005). 			
	<p>Eastern entry to Domain Station within the Shrine Reserve may have an adverse impact on the Shrine of Remembrance</p>	<p>CH1 Design permanent and temporary works to avoid or minimise impacts on the cultural heritage values of heritage places.</p> <p>Consult as required with Heritage Victoria and/or the responsible authority (as applicable).</p> <p>CH9 To the satisfaction of Heritage Victoria and the responsible authority (as applicable), ensure new development is responsive to heritage places in terms of height, massing, form, façade articulation and materials</p> <p>CH18 To the satisfaction of Heritage Victoria,</p>	<p>All affected paths and roadways and any soft landscaping to be reinstated to match existing.</p> <p>If required for construction purposes, the Cobbers Memorial is to be carefully dismantled and relocated or stored and reinstated in accordance with good practice and in consultation with the Shrine of Remembrance. The preference is to retain and protect <i>in situ</i>.</p> <p>In detailed design and with specialist heritage input, review the siting height, scale and materiality of the design to limit its visual presence within the Reserve. Review functional requirements as part of this work.</p>	Precinct 7	Detailed design

Draft EES evaluation objective	Impact	Environmental Performance Requirements	Proposed mitigation measure	Precinct	Timing
		<p>review the siting and design of the eastern Domain station entry in detailed design to ensure it is as recessive as possible in this location and has only a limited presence on the edge of the Reserve.</p> <p>The design needs to allow for the maintenance of an appropriate setting to the Macpherson Robertson Memorial Fountain.</p>	<p>Consider the use of the Tynong granite (traditional material in use at the Shrine) in the new design.</p>		
	<p>Western entry to the Domain Station may have an adverse impact on the South African Soldiers Memorial</p>	<p>CH1 Design permanent and temporary works to avoid or minimise impacts on the cultural heritage values of heritage places.</p> <p>Consult as required with Heritage Victoria and/or the responsible authority (as applicable).</p> <p>CH9 To the satisfaction of Heritage Victoria and the responsible authority (as applicable), ensure new development is responsive to heritage places in terms of height, massing, form, façade articulation and materials</p> <p>CH19 To the satisfaction of Heritage Victoria, review the siting and design of the western Domain station entry in detailed design to ensure the South African Soldiers Memorial has an appropriate landscaped setting if relocated on this site. If no appropriate setting can be established, consider options for relocation of the memorial to an alternative site.</p>	<p>Re-establish an appropriate siting and setting on this site in preference to relocation to alternative site, ensuring a level of prominence for the structure and design for the surrounding reserve that can appropriately cater for the ongoing commemorative use and enjoyment of the memorial.</p> <p>Consider the findings and recommendations of the CMP for the heritage place (CoPP) in detailed design, and obtain specialist heritage advice to inform the design process.</p> <p>If temporary relocation is required in order to protect significant fabric, document and undertake works according to accepted conservation standards.</p> <p>A detailed methodology for the recording, dismantling, storing and reconstruction of the memorial would be required.</p> <p>Incorporate recommendations in the CMP for repair and conservation works as part of the relocation documentation.</p>	<p>Precinct 7</p>	<p>Detailed design</p>

Draft EES evaluation objective	Impact	Environmental Performance Requirements	Proposed mitigation measure	Precinct	Timing
		<p>CH17 Replace removed trees as part of project delivery in accordance with relevant policy documents and to re-establish valued landscape character and in consultation with the City of Melbourne, the City of Port Phillip, the Shrine of Remembrance and Shrine Trustees and Heritage Victoria as applicable. Policy documents are as follows:</p> <ul style="list-style-type: none"> • Domain Parklands: Domain Parklands CMP (in preparation, Context, draft 2015-16) and the Domain Parklands Masterplan (in preparation) • Shrine of Remembrance: Shrine of Remembrance CMP (Lovell Chen, 2010) or any future review and the Shrine of Remembrance Landscape Improvement Plan (Rush Wright Associates, 2010) • South African Soldiers Memorial Reserve: Any relevant CMP for the South African Soldiers Memorial <p>Fawkner Park: Fawkner Park Conservation Analysis (Hassell, 2002) and the Fawkner Park Masterplan (City of Melbourne, 2005).</p>	<p>Include retention / reinstatement of the drinking fountain and memorial plaque on the site.</p> <p>Retain/reinstate landscaped setting to the memorial.</p> <p>Investigate opportunities for retention or reinstatement of Elm plantings.</p> <p>Given its particular interest, the Oak should be vegetatively propagated and replanted (with its associated plaque) in a suitable location to allow for future growth into a mature specimen. The Queensland Fire Wheel Tree should also reinstated.</p>		
	Tree removal in St Kilda Road could impact on the valued boulevard	CH20 To the satisfaction of the City of Melbourne, City of Port Phillip and/or the responsible authority, as applicable replace	With specialist arboricultural and heritage inputs, seek to reinstate boulevard character and ensure road functional layout and station design are responsive to this requirement, allowing for the	Precinct 7	Detailed design

Draft EES evaluation objective	Impact	Environmental Performance Requirements	Proposed mitigation measure	Precinct	Timing
	character	<p>removed trees in St Kilda Road to re-establish the boulevard formation.</p> <p>AR1 During detailed design, review potential tree impacts and provide for maximum tree retention where possible. Prior to construction of main works or shafts, develop and implement a plan in consultation with the relevant local council that identifies all trees in the project area which covers:</p> <ul style="list-style-type: none"> • Trees to be removed or retained • Condition of the trees to be removed • Options for temporary re-location of palms and reinstatement at their former location or another suitable location. <p>AR2 Reinstatement quality soils to sufficient volumes to support long-term viable growth of replacement trees.</p>	replacement of trees and reinstatement of medians to the greatest extent possible.		
	Tree removal within Fawkner Park could impact on the heritage values	<p>AR1 During detailed design, review potential tree impacts and provide for maximum tree retention where possible.</p> <p>Prior to construction of main works or shafts, develop and implement a plan in consultation with the relevant local council that identifies all trees in the project area which covers:</p>	Minimise the number of trees to be removed. In particular investigate retention of the Bunya-bunya Pine (Tree F238) on the western side of the Fawkner Park East emergency access shaft construction work site. Replacement plantings to be designed in consultation with the City of Melbourne.	Precinct 1	Detailed design

Draft evaluation objective	EES Impact	Environmental Performance Requirements	Proposed mitigation measure	Precinct	Timing
		<ul style="list-style-type: none"> ● Trees to be removed or retained ● Condition of the trees to be removed ● Options for temporary re-location of palms and reinstatement at their former location or another suitable location. <p>CH17 Replace removed trees as part of project delivery in accordance with relevant policy documents and to re-establish valued landscape character and in consultation with the City of Melbourne, the City of Port Phillip, the Shrine of Remembrance and Shrine Trustees and Heritage Victoria as applicable. Policy documents are as follows:</p> <ul style="list-style-type: none"> ● Domain Parklands: Domain Parklands CMP (in preparation, Context, draft 2015-16) and the Domain Parklands Masterplan (in preparation) ● Shrine of Remembrance: Shrine of Remembrance CMP (Lovell Chen, 2010) or any future review and the Shrine of Remembrance Landscape Improvement Plan (Rush Wright Associates, 2010) ● South African Soldiers Memorial Reserve: Any relevant CMP for the South African Soldiers Memorial 			

Draft EES evaluation objective	Impact	Environmental Performance Requirements	Proposed mitigation measure	Precinct	Timing
		<ul style="list-style-type: none"> Fawkner Park: Fawkner Park Conservation Analysis (Hassell, 2002) and the Fawkner Park Masterplan (City of Melbourne, 2005). 			
	Construction work site at the western turnback site in West Footscray could include the demolition of the Cross Street Electrical Substation	CH21 Retain and protect the Cross Street Electrical Substation in situ within or abutting proposed construction site.	Ensure building is adequately protected during works through appropriate definition of works area and physical barriers as part of construction management plan.	Precinct 9	Detailed design
	Early works including sub-surface works for services relocation could impact on heritage places and trees	CH8 To the satisfaction of Heritage Victoria and the responsible authority (as applicable) undertake all underground service works beneath or within heritage places or tree protection zones (TPZs) for trees as part of heritage places to avoid, minimise and mitigate impacts to the heritage fabric.	<p>Obtain specialist arboriculture / heritage advice on works methodology to ensure significant fabric is protected.</p> <p>Subsurface works to take place non-destructively and at depths consistent with the protection and preservation of heritage fabric and tree roots including at depths nominated in the City of Melbourne <i>Tree Protection Fact Sheet</i>, or utilising preliminary non-destructive excavation, to determine the location of existing roots.</p>	All	Detailed design and construction

18.0 Conclusion

This report documents the outcomes of an assessment of the risks to historical cultural heritage from activities associated with the construction of Melbourne Metro.

18.1 Relevant draft EES evaluation objective

The following draft EES evaluation objective is relevant to this assessment:

Draft EES evaluation objective	Key legislation
Cultural Heritage - To avoid or minimise adverse effects on Aboriginal and historic cultural heritage values.	Aboriginal Heritage Act 2006 Heritage Act 1995 Planning and Environment Act 1987

18.2 Impact assessment summary

To inform the risk and impact assessment the following was undertaken:

- Identification of all heritage places that are subject to statutory heritage controls under Australian or Victorian legislation.
- Desktop review of relevant studies and assessments and site inspections to identify additional places and sites within the Melbourne Metro study area which may have historical heritage value but are not currently subject to statutory heritage controls.
- Historical research and site inspections to identify and assess sites or precincts of potential archaeological sensitivity for historic cultural heritage values.
- Review of relevant legislation and guidelines and place-specific assessments and management plans.
- Consultation with stakeholders including Heritage Victoria, the City of Melbourne, City of Port Phillip, City of Stonnington and the Shrine of Remembrance.

A risk assessment process was adopted that identified potential impact pathways based on definitions of potential consequences for historical heritage values and likelihood of impacts. Risk to values was determined as the combination of consequence and likelihood. Where possible, mitigation measures were identified to reduce risks.

Key issues considered in the assessment were:

- Physical impact on heritage places and sites (full or partial demolition or removal of significant fabric, alteration and adaptation works)
- Visual impact associated with permanent infrastructure and development as part of Melbourne Metro at or in proximity to heritage places and sites
- Disturbance or removal of archaeological sites (both identified and unknown)
- Damage to heritage places as a result of construction or operational vibration or ground settlement.

The focus of the assessment is on those areas of the project which are at or close to the surface where direct physical impacts could occur as a result of construction works or activities or where the permanent infrastructure for the project could have adverse heritage impacts including visual impacts.

It is recognised that there could be impacts associated with construction vibration or ground settlement over or in proximity to tunnelling activities and this could affect heritage places anywhere along the alignment. This is an issue that exists and is referenced in this report but the technical requirements for

the management and mitigation of this identified risk to historical heritage values (and to other proximate buildings and structures, whether heritage or not) are addressed in the noise and vibration assessment and the ground settlement and land stability assessment. These assessments include measures which are directed at addressing the risk to heritage buildings and structures. There are no identified risks to heritage buildings from operational vibration.

All other non-archaeological impacts associated with the project would be localised to particular heritage places and sites along the proposed alignment as the project comes to or close to surface and interacts with these places and sites. Impacts occur at the portals, at and around the stations, emergency access shafts where new structures are planned and where there are associated changes such as those to road functional layouts and relocation/renewal of services infrastructure or tram lines. There are also impacts associated with the construction process itself, including construction work sites and the TBM launch sites.

This is a project of scale and complexity which extends through large areas of inner metropolitan Melbourne including areas of very high heritage sensitivity (Parkville, the central city and South Yarra). In this context, the heritage issues and impacts are generally well managed. There remain some adverse heritage impacts which would be likely to occur notwithstanding all mitigation measures.

Notwithstanding, these impacts are in most cases would be relatively limited in their scope and severity, relating to the demolition of limited numbers of buildings of local heritage significance and to the alteration or other adverse impact on places of state significance.

In the case of locally listed or recognised places to be demolished, these are mix of individual sites and sites in larger HO precincts, the majority are relatively low in terms of their local heritage study grading. Their demolition represents a loss but one that is localised and of limited scale.

For the VHR registered sites - Royal Parade, Flinders Street Station Complex, the South African Soldiers Memorial, the Shrine of Remembrance and the Domain Parklands - the impacts and issues vary. In all cases, there is a need for further and more detailed design and planning work to be directed at minimising the heritage impacts of the works. In most cases, this work could confirm the efficacy of the mitigation measures proposed in this impact assessment and further minimise impacts. This further work could be in the form of the consideration of alternative solutions or in detailed design to minimise impacts, and is the subject of detailed recommendations in the impact assessment.

There are significant archaeological issues and impacts associated with the project and there would be a series of archaeological sites that would be completely removed as part of the works. However it is considered that these archaeological issues can be addressed and managed through the measures identified in this report (further investigations, including archaeological management plans specifying requirements for testing, monitoring and salvage activities as appropriate). In this way the research value of sites to be removed or damaged would be fulfilled with the benefits this offers in terms of adding to current knowledge of past practices and developments, particularly in the central city.

This approach is consistent with the specified EES Scoping Requirements, which provide guidance on key issues for historic heritage values and describe the approach to the assessment of likely effects (impact assessment) including:

- the development of design and mitigation measures to avoid or mitigate potential adverse effects
- the approach to management of performance to further mitigate or manage residual effects.

In this report, these requirements have been addressed through the development of Environmental Performance Requirements for the project as a whole and specific recommendations for possible mitigation measures for particular heritage places and sites consistent with these. In all cases, these are directed at minimising impacts to historical cultural heritage values.

The project is generally consistent with the draft EES evaluation objective for Cultural Heritage (historical cultural heritage) in that adverse effects on historic cultural heritage values are avoided or minimised as far as is practicable.

Accepting this general comment, the project extends through areas of considerable historical cultural heritage sensitivity in inner and central Melbourne. Works are proposed to occur at or close to the surface within dense and constrained urban environments with high concentrations of heritage buildings and sites, as well as sites and areas recognised for their heritage landscape qualities. In this context, even accepting that the majority of the project is proposed to be located underground, there would be some adverse impacts associated with the construction phase and permanent infrastructure which would occur and could not be fully avoided or mitigated. These are localised to particular sites along the alignment.

The risk assessment concluded that with mitigation measures implemented the majority of risks could be reduced to residual ratings of Low or Medium. A number of risks remain at High with some adverse impacts (typically demolition or loss of significant fabric) that could not be fully mitigated and a high likelihood rating (Almost Certain). Notwithstanding these residual ratings, with the mitigation measures specified, the impacts associated with these risk pathways are not considered to be of such severity as to be considered unacceptable in heritage terms, particularly in the context of a project of this scale. Several of these risk pathways require further design refinement in order to deliver a good heritage outcome.

18.3 Historical context

When considering the potential heritage impacts associated with Melbourne Metro it is of relevance to consider the historical context of major infrastructure projects that have been delivered in the metropolitan area, including within the central city.

The most directly comparable project in terms of its scale, the nature of the works and issues raised is the Melbourne Underground Rail Loop (City Loop). Constructed over a 14 year period (1971-1985), this project delivered three new underground stations on the eastern and northern sides of the central city, connected to existing stations via four separate tunnels, and with a new viaduct between Flinders Street Station and Spencer Street (now Southern Cross) station (<http://ptv.vic.gov.au/about-ptv/victoria-s-pt-network/history/city-loop-history/>). Of the three stations, one, Museum (now Melbourne Central) station was constructed using cut and cover methods. This involved re-routing of La Trobe Street around the construction work site, with approximately one hectare of land cleared on the south side of La Trobe Street. Parliament and Flagstaff stations were constructed using mining techniques. Extensive works were also required to tie into the existing network, including the construction of the portals, ramps and retaining walls on the northern and eastern sides of the city, alterations to existing infrastructure (stations, bridges, tracks, other unrelated services and signalling and communications). Construction challenges included the proximity of tunnels to one another and to adjacent buildings. Tunnels were constructed using different machines including a Jarva tunnel boring machine. Concrete linings were introduced to permanently stabilise and support the tunnels. (Watson, 1975).

Very similar issues arose to those that are now under consideration for Melbourne Metro. The City Loop stations were constructed in urban environments which were highly constrained, where there was very limited space to establish construction work sites and in close proximity to heritage buildings and other places of a high order of significance. Parliament Station, for example, is located close to the Princess Theatre, the Windsor Hotel and Parliament House, the construction project for Melbourne Central Station occurred a short distance west of the State Library of Victoria and the retained Coops Shot Tower, and Flagstaff Station is close to the Royal Mint on the south-eastern corner of La Trobe and William Streets and Flagstaff Gardens. Like Melbourne Metro, there were also works which affected the city's historic gardens, with above-ground vent structures constructed in both Flagstaff and Treasury Gardens. These are low-scale and of relatively understated design and are not prominent within these landscapes. See Figure 210 - Figure 212. Also of relevance to the current Melbourne Metro project, in 1886 the Burke and Wills Monument (1865) was relocated from its original position in Collins Street to

the Gillott Reserve in Spring Street for work associated with the cable tram network (Downer, 2008, refer Figure 213). In 1973 it was relocated a second time to allow for the construction of Parliament Station, with the Age commenting that it was to ‘cease its wandering and grace the City Square’ (The Age, 9 October, 1979: 5).

The works associated with the City Loop project were very substantial both below ground and at surface level. While not investigated in detail, there were heritage losses and impacts associated with the project (large numbers of buildings were demolished for the station sites at Melbourne Central and Flagstaff). Nevertheless, it shows that an infrastructure project of this scale and nature can be managed and successfully delivered in close proximity to important heritage assets, including buildings and landscapes. It also shows that the permanent above-ground structures can be responsive to these heritage places.



Figure 210 Station entry within Flagstaff Gardens



Figure 211 Vent structure within Flagstaff Gardens



Figure 212 Vent structure on the eastern edge of the Treasury Gardens

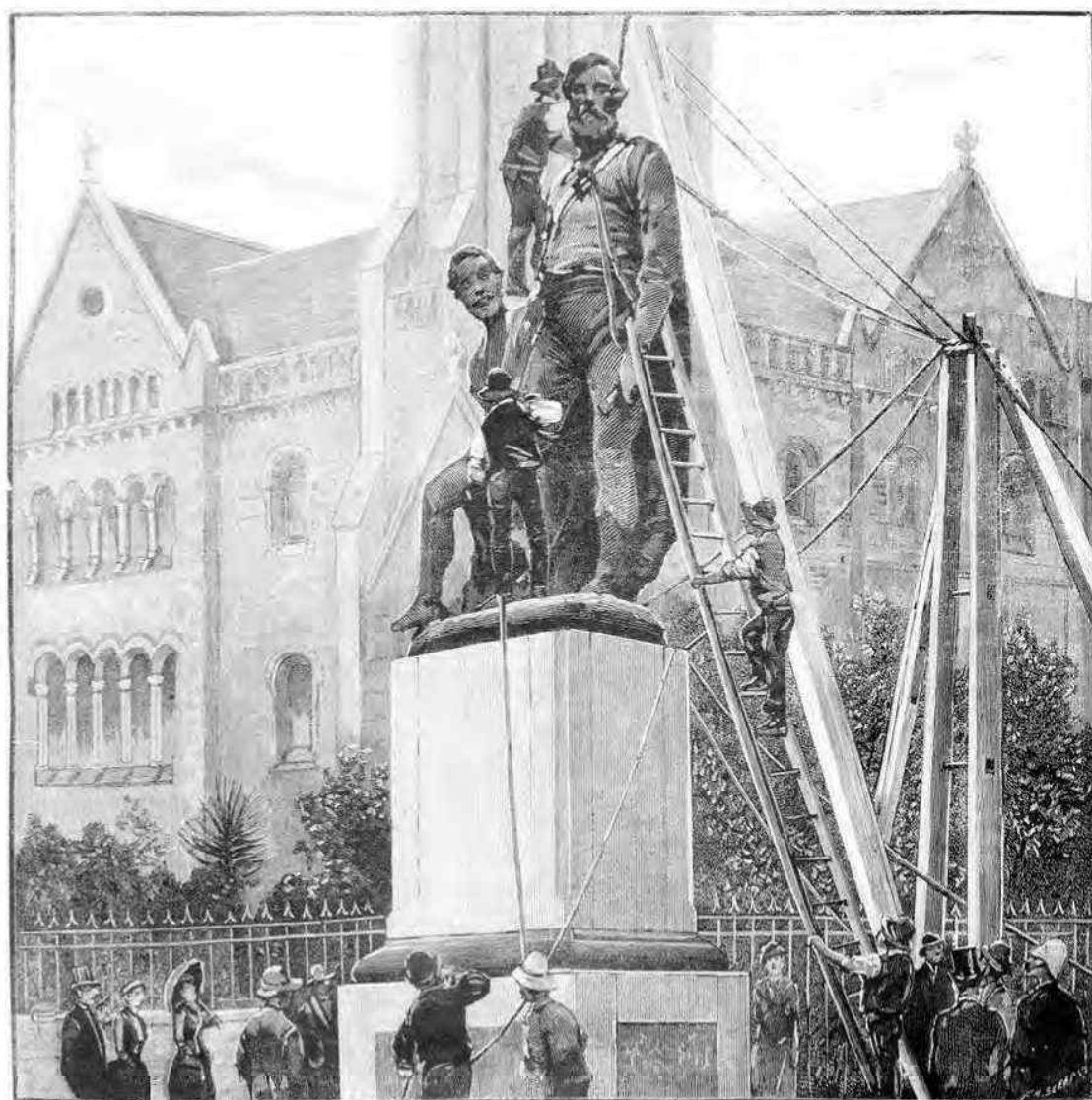


Figure 213 Burke and Wills relocation works, 1886.
Source: State Library of Victoria (Illustrated Australian News)



Excavation for Museum station under-street structure followed the placing of soldier piles around the perimeter. Earlier contracts provided for demolition of buildings and diversion of roadway and services.

Figure 214 Excavation for Museum station, unknown date (but c. 1974)
Source: P Lovell collection

18.4 Project Opportunities

Finally, while there are some impacts associated with the project, there would be some opportunities within the scope of the project to achieve positive heritage outcomes. These include:

Site interpretation:

An interpretation plan is a plan which sets out a proposal for site interpretation for a place or area. Interpretation is defined as ‘all the ways of presenting the cultural significance of a place’ (Article 1.17, Burra Charter). The aim of interpretation is to reveal and help retain the significance—natural, cultural or both—of that place. Interpretation can take a wide range of forms, from conventional plaques, panels and markers to installations and interactive digital presentations and online resources. Structural elements, reclaimed materials, salvaged artefacts and commissioned artworks are other options.

Effective interpretation reinforces and sustains connections between communities and heritage places, and enhances an understanding of their significance. The process has the potential to assist in place making, wayfinding and establishing an identity for heritage places undergoing change. On occasion site interpretation is required when places are demolished, as a way to continue awareness of the history of a particular location.

Repair and conservation works:

There may be cases where active conservation works are undertaken to the heritage place associated with the works. This occurs in many projects where significant change is proposed and where that change can provide the impetus or resources for needed repair and/or active conservation works. In the case of Melbourne Metro, there may be opportunities to undertake necessary repair and/or conservation works where physical interventions are required or temporary or permanent relocation of structures is proposed. This could include heritage landscapes. These works have not been scoped or considered in detail in this impact assessment.

Archaeological investigations:

As noted elsewhere in this report, while the sites themselves could be damaged or destroyed, the archaeological investigations to be undertaken for affected sites (and sites that may be encountered as part of the works) would result in the realisation of the research potential of these sites and a greater understanding of aspects of our history. There is also the potential for community involvement in this process.

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**MELBOURNE METRO RAIL
PROJECT
HISTORICAL HERITAGE
IMPACT ASSESSMENT
APPENDICES**

Prepared for
Melbourne Metro Rail Authority

With sub consultants
Jacobs (Australia) Pty Ltd
and
John Patrick Pty Ltd, Landscape Architects

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LOVELL CHEN

ARCHITECTS & HERITAGE CONSULTANTS

LEVEL 5, 176 WELLINGTON PARADE
EAST MELBOURNE 3002
AUSTRALIA
TEL +61 (0)3 **9667 0800**
FAX +61 (0)3 9416 1818
enquiry@lovellchen.com.au
www.lovellchen.com.au

1.0 State Government

1.1 Legislation

1.1.1 Heritage Act 1995

The main purpose of the *Heritage Act 1995* is to provide for the protection and conservation of places and objects of cultural heritage significance. Related to this the Heritage Act establishes two registers, the Victorian Heritage Register (VHR) and the Victorian Heritage Inventory (VHI). The Heritage Act is relevant to Melbourne Metro as there are numerous places within the investigation area which are included in the VHR and the VHI. Sites on the VHR and VHI are uniquely numbered.

Victorian Heritage Register

The VHR includes heritage places and heritage objects, as well as shipwrecks. Heritage places can include buildings, trees, parks and gardens, streetscapes, archaeological sites, precincts, land associated with any of these things and shipwrecks. Heritage objects are generally moveable and could include furniture, signs, shipwreck relics, archaeological artefacts, equipment, vehicles and many other features. The VHR includes a legal extent of registration for any registered place or object and 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.

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 subdivision and any physical works, unless specifically determined to be exempt from the requirement for a permit. Use of a heritage place is not controlled under the Heritage Act.

Victorian Heritage Inventory

The Victorian Heritage Inventory (VHI) is a register of known historical (non-Aboriginal) archaeological sites in Victoria. The VHI enables Heritage Victoria to record and monitor archaeological sites that are not considered to be of State significance or where the significance is unknown. Places that are assessed as archaeological significance at a State level are included in the VHR.

The two levels of listing (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 or its objects included on the VHI must have first obtained the consent of Heritage Victoria. Section 129 of the Heritage Act sets out the process for the issuing of consents.

It is noted that all archaeological sites more than 50 years in age in Victoria are protected by the Heritage Act, regardless of whether they are included in the VHI. As for the VHR, there are enforcement provisions for unlawful activities in relation to archaeological relics and places.

Review of the Heritage Act

In June 2015, the Victorian Government announced a review of the Heritage Act. A discussion paper on the Act and potential changes was released and public consultation on the review occurred between July and August 2015.

1.2 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 archaeology.

2.0 Local government

2.1 Legislation

2.1.1 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 State and local government authorities 3.4.1 through planning schemes. The legislation governing these controls is the *Planning and Environment Act 1987*. Planning schemes contain standard provisions (Heritage Overlays (HO), 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 or in close proximity to the Melbourne Metro investigation area. These are identified in the Melbourne, Port Phillip, Stonnington and Maribyrnong Planning Schemes.

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).

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 State planning policy.

Cl. 10.02 - 'Goal' - 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 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.

The policy for 'Settlement' at Cl. 11.04-4 of the SPPF – 'Liveable communities and neighbourhoods' - also makes reference to the need to consider and protect cultural heritage in planning for the Melbourne metropolitan area. One of the strategies identified is:

- Maintain central Melbourne's high quality parks and gardens, heritage places, conference and exhibition facilities, museums, concert halls and art galleries and other public buildings and high standards of urban design.

Under Cl. 10.04 Integrated decision making, State policy also recognises that on occasions there would be a need to balance conflicting planning objectives 'in favour of net community benefit and sustainable development for the benefit of present and future generations'.

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 in Clause 21 - Municipal Strategic Statement (MSS) and Clause 22 – Local Planning.

Local planning policies for historical heritage are generally considered when determining a planning application under the HO and are known as the Local Planning Policy Framework (LPPF). 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 in terms of new development.

In many cases, the LPPF lists Reference Documents and Incorporated Documents that need to be considered when assessing a planning application under the HO. Examples include local municipal heritage studies, some of which contain place-specific citations and building or place gradings within a particular municipality. Building or place gradings can reflect on the relative significance of individual buildings and places and recognise that they may contribute to the significance of a precinct. 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 Planning Practice Note Applying the Heritage Overlay (July 2015) confirms that letter gradings should not be used. The Practice Note notes that the appropriate threshold 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' / 'individually significant' places can also be contributory to a precinct.

A summary of the LPPFs for heritage in the Melbourne, Port Phillip, Stonnington and Maribyrnong Planning Schemes follows.

Melbourne Planning Scheme

The Melbourne Planning Scheme includes a policy for Built Environment and Heritage at Cl. 21.06. This contains a policy for Heritage (at Cl. 21.06-2) which has a single overarching objective:

'[t]o conserve and enhance places and precincts of identified cultural heritage significance'

It also includes a series of eight supporting strategies for heritage. These strategies address the conservation of heritage fabric as well as references to a diverse range of heritage issues and actions, including those of visual prominence of heritage buildings and landmarks, subdivision patterns, significant parks, gardens, waterways and other open spaces, protection against visual intrusion of new built form and development and the need to protect the setting of key heritage places such as the Shrine of Remembrance and the Royal Exhibition Building and Carlton Gardens.

While not specifically noted as related to heritage, the Urban Design policies at Cl. 21.06-1 also reference heritage including at Objective 3, which is '[t]o protect iconic views' including views to a series of heritage

places: the Shrine of Remembrance, Parliament House, the Old Treasury Building and the Royal Exhibition Building.

The LPPF for heritage also includes more detailed local policies for HO places within the municipality as follows:

- Cl. 22.04 Heritage Places within the Capital City Zone
- Cl. 22.05 Heritage Places outside the Capital City Zone

There are incorporated and reference documents in the Melbourne Planning Scheme which are relevant to a consideration of heritage. Amongst other things, these documents provide gradings for individual buildings within HOs. These gradings have implications for the application of the local heritage policies.

Incorporated documents listed in Cl. 80.01 are as follows:

Clause	Incorporated documents
Cl. 22.04 Heritage Places within the Capital City Zone	Central City (Hoddle Grid) Heritage Review: Statements of Significance June 2013
	City North Heritage Review: Statements of Significance June 2013
Cl. 22.05 Heritage Places Outside the Capital City Zone	Heritage Places Inventory June 2015
	City North Heritage Review: Statements of Significance June 2013
	Kensington Heritage Review Statements of Significance October 2014

Reference documents include a series of municipal heritage study reports as follows:

Cl. 22.04 Heritage Places within the Capital City Zone

- Urban Conservation in the City of Melbourne 1985
- Central Activities District Conservation Study 1985
- Harbour, Railways, Industrial Conservation Study 1985
- South Melbourne Conservation Study 1985
- Central City (Hoddle Grid) Heritage Review 2011
- Bourke Hill Precinct Heritage Review Amendment C240 2015
- City North Heritage Review, RBA Architects 2013

Cl. 22.05 Heritage Places Outside the Capital City Zone

- East Melbourne & Jolimont Conservation Study 1985
- Parkville Conservation Study 1985
- North & West Melbourne Conservation Study 1985 and 1994
- Flemington & Kensington Conservation Study 1985
- Carlton, North Carlton and Princes Hill Conservation Study 1994 & 1985
- South Yarra Conservation Study 1985
- South Melbourne Conservation Study 1985 & 1998
- Harbour, Railway, Industrial Conservation Study 1985

- Kensington Heritage Review, Graeme Butler 2013
- Review of Heritage Buildings in Kensington: Percy Street Area, Graeme Butler 2013
- City North Heritage Review, RBA Architects 2013

It is noted that the policies at Cl. 22.04 and Cl. 22.05 are currently under review by the City of Melbourne as is the current heritage grading system. This is as part of Council's Local Heritage Policy Review. An outcome of this review it is likely there will be substantial changes to these policies and gradings, to be implemented through a planning scheme amendment process (proposed Amendment C258 to the Melbourne Planning Scheme). The project is currently undergoing community consultation until 14 February 2016 (<http://participate.melbourne.vic.gov.au/local-heritage>). Draft documentation includes draft precinct statements of significance and proposed new gradings and policies. It is proposed that the A-E grading system will be replaced by a Significant, Contributory, Non-contributory system, as is required by the Victorian Planning Provisions Practice Note: Applying the Heritage Overlay (July 2015).

Notwithstanding this strategic planning work, current applicable gradings and streetscape levels are defined as follows at Cl. 22.04:

'A' Buildings

'A' buildings are of national or state importance, and are irreplaceable parts of Australia's built form heritage. Many will be either already included on, or recommended for inclusion on the Victorian Heritage Register or the Register of the National Estate.

'B' Buildings

'B' buildings are of regional or metropolitan significance, and stand as important milestones in the architectural development of the metropolis. Many will be either already included on, or recommended for inclusion on the Register of the National Estate.

'C' Buildings

'C' buildings. Demonstrate the historical or social development of the local area and /or make an important aesthetic or scientific contribution. These buildings comprise a variety of styles and building types. Architecturally they are substantially intact, but where altered, it is reversible. In some instances, buildings of high individual historic, scientific or social significance may have a greater degree of alteration.

'D' Buildings

'D' buildings are representative of the historical, scientific, architectural or social development of the local area. They are often reasonably intact representatives of particular periods, styles or building types. In many instances alterations will be reversible.

They may also be altered examples which stand within a group of similar period, style or type or a street which retains much of its original character. Where they stand in a row or street, the collective group will provide a setting which reinforces the value of the individual buildings.

Level 1 Streetscapes

Level 1 streetscapes are collections of buildings outstanding either because they are a particularly well preserved group from a similar period or style, or because they are highly significant buildings in their own right.

Level 2 Streetscapes

Level 2 streetscapes are of significance either because they still retain the predominant character and scale of a similar period or style, or because they contain individually significant buildings.

Level 3 Streetscapes

Level 3 streetscapes may contain significant buildings, but they will be from diverse periods or styles, and of low individual significance or integrity.¹

Port Phillip Planning Scheme

The Port Phillip Planning Scheme addresses heritage as part of its 'Built Form' policy at Cl. 21.05-1. Key heritage issues are set out here; these include:

- the recognition and protection of all heritage places, including contributory buildings within heritage areas
- the maintenance of a sense of place created by buildings, public places and spaces and heritage landmarks and icons.

Objectives and strategies follow based on the identified heritage issues. More detailed policy guidance is provided in the 'Heritage Policy' at Cl. 22.04. This policy contains a series of general policies which address issues of conservation of heritage places, and guide new development. These include specific guidance on the use of a contextual design approach and preference for responsive contemporary architecture. More detailed policies and performance measures follow on:

- Additions and/or Alterations to Heritage Places
- New Development in HO Areas
- Demolition
- Car Parking
- Laneways, Kerbs and Channels
- Street Furniture

A key role in this LPPF is played by the Incorporated and Reference documents as follows:

Incorporated document:

- Port Phillip Heritage Review – Volumes 1 – 6 (Version 17, 2015) (includes the City of Port Phillip Heritage Policy Map and the City of Port Phillip Neighbourhood Character Policy Map).

Reference documents:

- Port Phillip Design Manual, 2000 including Fishermans Bend Guidelines (Update 2010), Garden City Guidelines (Updated 2010), Dunstan Estate Guidelines (2007), Heritage Kerbs, Channels and Laneways Guideline (2006).
- Review of HO 3, Heritage Alliance (2009) and Built Heritage (2010).
- Review of HO 1 Port Melbourne – Outcomes and Recommendations (Lovell Chen, July 2011).
- Review of Heritage Overlay 1 Port Melbourne – Stage 2 Review – Summary Report (Lovell Chen, December 2012).
- Fishermans Bend Heritage Study (Biosis Pty Ltd, 2013).
- Fishermans Bend additional heritage place assessments (Biosis Pty Ltd, 2015).

Of these, the Port Phillip Heritage Policy Map is particularly important as it identifies Significant and Contributory heritage places, and Non-contributory properties within HO places and areas. Definitions and gradings are as follows:

¹ Melbourne Planning Scheme, Clause 22.05

Heritage place is a place that has identified heritage value and could include a site, area, building, group of buildings, structure, archaeological site, tree, garden, geological formation, fossil site, habitat or other place of natural or cultural significance and its associated land.

Significant heritage places include buildings and surrounds that are individually important places of either State, regional or local heritage significance and are places that together within an identified area, are part of the significance of a Heritage Overlay. These places are included in a Heritage Overlay either as an area or as an individually listed heritage place and are coloured “red” on the City of Port Phillip Heritage Policy Map in the Port Phillip Heritage Review, Volume 1-6.

Contributory heritage places include buildings and surrounds that are representative heritage places of local significance which contribute to the significance of the Heritage Overlay area. They may have been considerably altered but have the potential to be conserved. They are included in a Heritage Overlay and are coloured “green” on the City of Port Phillip Heritage Policy Map, in the Port Phillip Heritage Review, Volume 1-6.

Non-contributory properties are buildings that are neither significant nor contributory. They are included in a Heritage Overlay and have no colour on the City of Port Phillip Heritage Policy Map in the Port Phillip Heritage Review, Volume 1-6. However any new development on these sites may impact on the significance of the Heritage Overlay, and should therefore consider the heritage characteristics of any adjoining heritage place and the streetscape as covered in this policy.²

Pursuant to Clause 22.04 ‘Heritage Policy’ in the Port Phillip Planning Scheme, under ‘New Development in Heritage Overlay Areas’, consideration must be given to adjacent heritage place/s.

Stonnington Planning Scheme

The Stonnington Planning Scheme also addresses heritage as part of its MSS.

Clause 21.06 focuses on ‘Built Environment and Heritage’ with a specific a policy for ‘Heritage’ at Cl. 21.06-10. This policy contains a general objective underpinned by a series of more detailed strategies addressing conservation of heritage places, and responsive new development at or in proximity to heritage places. The policy also specifies policy implementation measures. These include reference to ongoing strategic work, through the continued implementation of Council’s Heritage Strategy Action Plan (2006).

A further local heritage policy is found at Clause 22.04 of the Stonnington Planning Scheme. It is important to note that this policy applies not only to properties affected by the HO but also to properties immediately abutting these properties.

The policy sets out Council’s grading system and provides definitions. In Stonnington a four-tiered grading system is still in place, A1, A2, B (significant buildings) and C (Contributory buildings). The policy provides relatively general guidance regarding the approach to conservation and new works. Gradings are as follows:

A1 Buildings - are of national or state importance, irreplaceable parts of Australia’s built form heritage.

A2 Buildings - are of regional or metropolitan significance, and stand as important milestones in the architectural development of the metropolis.

B Buildings - make an architectural and historic contribution that is important within the local area.

C Buildings - are either reasonably intact representatives of particular periods or styles, or they have been substantially altered but stand in a row or street that retains much of its original character and are considered to have amenity or streetscape value.

2

Port Phillip Planning Scheme, Clause 22.04

Significant buildings be defined as A1, A2 and B graded buildings. Contributory buildings be defined as C graded buildings.³

Reference Documents are listed as follows:

- Prahran Conservation Study, Conservation Controls (Nigel Lewis) 1983
- Prahran Data Base, Prahran Conservation Study Listing (Nigel Lewis) 1992
- Prahran Character and Conservation Study (Prahran City Council) 1992
- Conservation Review, City of Prahran Volumes 1-4 (Context Pty Ltd) 1993
- Heritage Guidelines City of Stonnington 2002
- HO Citations (Stonnington City Council)
- Stonnington Thematic Environmental History (Context Pty Ltd), 2006
- Stonnington Thematic Environmental History: Update 1 Addendum (Context Pty Ltd), March 2009
- City of Stonnington HO Gap Study, Heritage Overlay Precincts Final Report (Bryce Raworth), March 2009

These documents variously contain the statements of significance and gradings for individual places. The *Stonnington Heritage Guidelines* document is particularly important as it addresses issues relating to design, building form, height, setback, car parking and landscaping for existing buildings and places, and provides advice on new development suitable to heritage areas.

The City of Stonnington has undertaken a review of its local heritage policy framework and proposes to introduce a new Heritage Policy and make amendments to its MSS as related to heritage. The proposed changes include the conversion of the current alphabetical grading system to a new system of 'significant,' 'contributory' and 'ungraded' buildings and places. These changes will be subject to a planning scheme amendment (Amendment C132 to the Stonnington Planning Scheme), proposed to be exhibited in 2016.

The *Stonnington Heritage Guidelines* are currently being revised and are expected to be finalised in 2016.

Maribyrnong Planning Scheme

As with other municipalities, the Maribyrnong Planning Scheme considers historic heritage in the MSS as Clause 21.06 'Built Environment and Heritage'. Specifically, Clause 21.06-3 'Heritage' contains three objectives and associated strategies that address the conservation of heritage places and landscapes/elements, retention of views to and management of change to heritage places.

At Clause 22.01 'Cultural Heritage Policy,' the Maribyrnong Planning Scheme provides a general policy applicable to all heritage places in addition to policy tailored to individual heritage precincts. The latter reflect the key values and fabric of heritage precincts. In addition to this, the Clause 22.01 also includes an Industrial Heritage Policy at 22.01-6 for industrial sites that continue to operate for industrial purposes.

The Maribyrnong Planning Scheme also includes a number of incorporated documents specific to heritage places within the municipality, these places are not affected by the proposed project and are as follows:

- Bradmill Site, 341-351 Francis Street, Yarraville: HO 125 Incorporated Plan
- Former Cuming Smith site, 221A Whitehall Street, Yarraville: HO179 Incorporated Plan
- Former Mt Lyell site, 295 Whitehall Street, Yarraville: HO184 Incorporated Plan
- Graham Campbell Ferrum, 260 Geelong Road, West Footscray: HO128 Incorporated Plan
- Historical Archaeological Management Plan, 2006 (amended 2013).

3 Stonnington planning Scheme, Clause 22.04

- Peppercorn tree avenues, railway reserve north of Seddon Station: HO98 Incorporated Plan
- Yarraville Terminal Station, 308 Hyde Street, Yarraville: HO 130 Incorporated Plan

Reference Documents are listed as follows:

- Australia ICOMOS Inc, The Burra Charter, (The Australia ICOMOS Charter for Places of Cultural Significance), 1999
- Jill Barnard, Graeme Butler, Francine Gilfedder & Gary Vines, Maribyrnong Heritage Review, Volumes 1 –7, 2001
- Biosis Research, Aboriginal Heritage Study, Maribyrnong City Council, 2001
- Graeme Butler and Associates, Footscray Conservation Study, 1989
- Ecology Australia Pty Ltd & Environmental Geosurveys Pty Ltd, Natural Heritage Study, Maribyrnong City Council, 2001
- HLA-Envirosciences Pty Ltd, Archaeological Management Plan: Early Post Contact Sites, Maribyrnong City Council, 2001
- Maribyrnong City Council, The Heritage Plan, 2001
- Trevor Westmore for Footscray City Council, Yarraville Village Enhancement Study, 1990
- Heritage Victoria, The Heritage Overlay: Guidelines for Assessing Planning Permit Applications, 2007
- Heritage Alliance and Graeme Butler and Associates, Footscray CAA Heritage Citations, Maribyrnong City Council, 2013
- The reference documents include thematic histories of the municipality, statements of significance for individual heritage places and heritage precincts and gradings.

2.1.2 Planning overlays

Heritage Overlay

Places of recognised local significance are listed for protection in planning schemes by HOs.

HOs also include places included in the VHR under the *Heritage Act 1995*. Although places listed in the VHR are also listed in the schedules to the HO, these places are subject to the requirements of the *Heritage Act 1995*, and not the HO provisions of the relevant planning scheme. Heritage Victoria is the responsible authority for these places.

The HO provisions are set out at Cl. 43.01 of all Victorian planning schemes. 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:

- some are site-specific relating to individually significant heritage places and
- others are precinct-based HOs which can extend over larger areas and include multiple individual properties. Site specific places may be located within precincts.

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. On occasion, the requirements of the HO may be moderated by incorporated plans which are referenced in the Schedule to the HO.

Decision guidelines for heritage matters are set out at Cl. 43.01-4 of all Victorian planning schemes. Broadly, the focus of these is on whether there would be any adverse impact on the significance of the heritage place

and whether the proposed development or new building is in keeping with the heritage significance, character and appearance of adjacent buildings and the heritage place.

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Places of recognised local significance are listed for protection in planning schemes by HOs.

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

3.0 Other standards and guidelines

3.1 The Burra Charter

An industry standard which is most 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.

3.2 Conservation Management Plans

Conservation Management Plans (CMPs) are typically prepared for places included in the Victorian Heritage Register 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 clarify 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.

CMPs have been prepared for many of the heritage places and buildings within the investigation area. These will need to be reviewed where places are affected by Melbourne Metro.

3.3 Heritage Victoria

The Heritage Council and Heritage Victoria provide a number of policy and guideline references to assist in the assessment and management of heritage places and archaeological sites. Documents relevant to the project include:

- The Victorian Heritage Register Criteria and Threshold Guidelines, 2014
- Guidelines for Investigating Historical Archaeological Artefacts and Sites, 2014
- Guidelines for Conducting Historical Archaeological Surveys, 2008
- Heritage Victorian and Heritage Council of Victoria Policy Guideline Matters to be considered in determining a permit application under section 73(1)(b) of the *Heritage Act 1995*, 2012
- Technical Note Photographic Recording for Heritage Places and Objects, 2007
- Works and alterations to Registered Heritage Places and Objects, 2016

Appendix B Predictive Archaeological Assessment

PREDICTIVE ARCHAEOLOGICAL ASSESSMENT

Prepared for
AJM Joint Venture

With sub consultants
Jacobs

20 April 2016

LOVELL CHEN

ARCHITECTS & HERITAGE CONSULTANTS

LEVEL 5, 176 WELLINGTON PARADE
EAST MELBOURNE 3002
AUSTRALIA
TEL +61 (0)3 **9667 0800**
FAX +61 (0)3 9416 1818
enquiry@lovellchen.com.au
www.lovellchen.com.au

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This report should be read in full and no excerpts are to be taken as representative of the findings.

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1.0 Introduction

The following predictive archaeological assessment has been prepared as part of the historical heritage impact assessment for the Melbourne Metro Rail Project (Melbourne Metro). The purpose of the report is to review archaeological sites included on the Victorian Heritage Inventory (VHI), the nine precincts in the study area, and to assess the potential for additional previously unmapped post-settlement (ie, non-Indigenous) sites at these locations. This is on the basis the Heritage Act provides blanket protection for archaeological sites over 50 years in age. Consideration is also given to the proposed early works which are in proximity to VHI sites.

1.1 Background and scope

The focus of this investigation is on areas within each precinct where there is the potential for archaeology which will be affected by the proposed works. The areas investigated include identified archaeological sites on the VHI, and sites which have not previously been identified.

Areas were identified for further assessment where ground level disturbance activities are proposed to occur, such as in construction sites and station entrance construction. Where ground disturbance is proposed, site visits were undertaken to ascertain the physical potential for historical archaeology. Areas were removed from consideration for archaeological potential where significant ground disturbance had previously taken place, including in the form of building basements or below ground car parks. No additional research was undertaken on HI sites where works are proposed to be at such a depth that impact on archaeological sites is unlikely. Further research to establish earlier land use patterns and construction methods was undertaken on areas/properties where site visits had identified that ground level disturbance had not occurred at a sufficient level to eliminate the potential for archaeology. The site visits and research informed an assessment of archaeological potential and significance, and the identification of additional sites recommended for inclusion in the VHI.

Consideration has also been given to the potential significance of sites which are not included in the VHI. Where such sites exist, they will be referred to Heritage Victoria for inclusion in the VHI.

This work involved a review of existing assessments and reports for VHI sites, and historical research to establish the likelihood of archaeology to be located at sites where works are proposed. The historical research was undertaken to establish patterns of development and occupation, and levels of disturbance on sites. A range of sources were consulted in preparing the predictive assessment. The VHI was consulted for each of the nine precincts. A full bibliography is included at the end of this report.

1.2 Fieldwork

Limited fieldwork was undertaken for the report. This included an inspection on-foot of sites and areas within the project area, focussing on those which were considered to have archaeological potential. No inspection of privately owned sites was undertaken and no buildings have been inspected internally.

2.0 Precinct 1 - Tunnels

2.1 Introduction

Fawkner Park (Domain station to eastern portal) was considered to be one area which could be affected by works and where there may be some archaeological potential.

2.2 Historical research

From the arrival of British settlers, Aboriginal people camped in the north-west corner of the area which was to become Fawkner Park until as late as 1849 (Presland 1994). By the latter half of the nineteenth century, the residential and commercial development within this area was well established. Fawkner Park was first reserved in 1862, and the pathway system and avenues were laid out in 1875 by the City of Melbourne Parks and Gardens Curator Nicholas Bickford. In the early 1860s, land fronting St Kilda Road was excised from the reserve for private development and during the 1940s another portion of land fronting Toorak Road was excised for use as a Child Welfare Centre (Figure 1-Figure 3) (City of Melbourne 2005). The earliest dated plan showing the path layout of Fawkner Park, from 1885, shows almost all the pathways in their current locations, indicating that the layout of the Park is substantially intact. From this and a second 1885 plan, there appears to be no paths shown which do not currently exist in Fawkner Park (Hassell 2002:21).

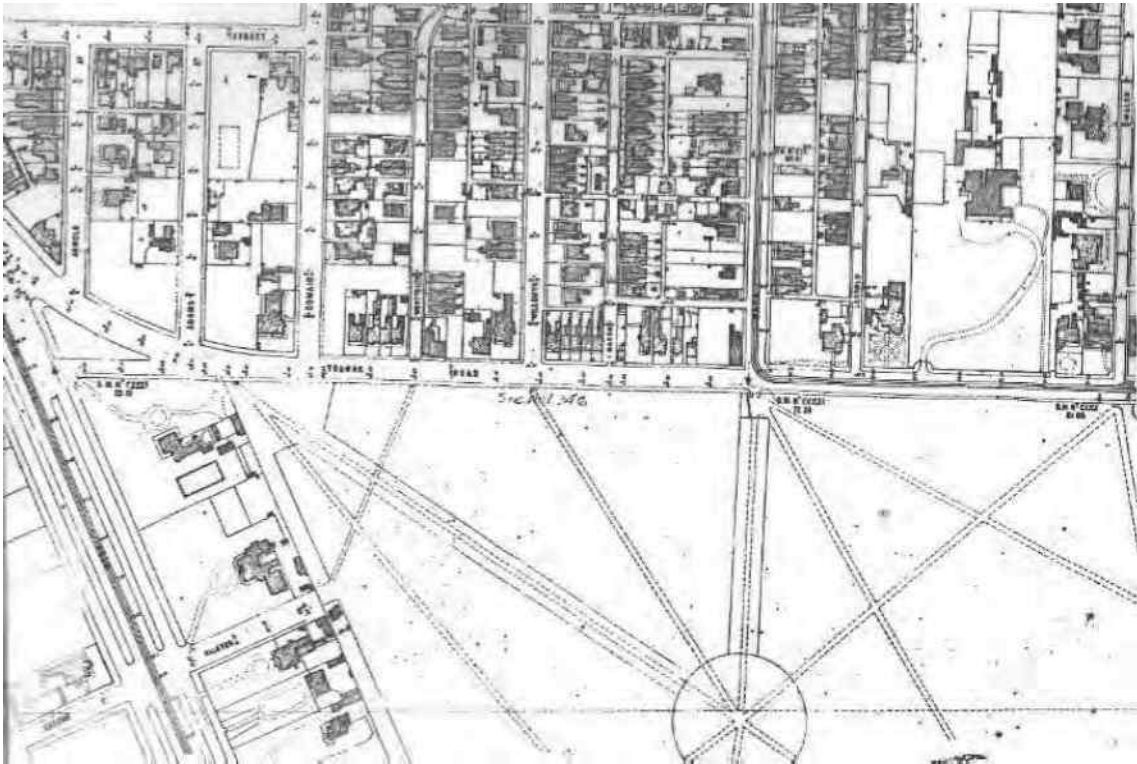


Figure 1 c. 1894 MMBW Plan No. 21, South Melbourne and Melbourne, showing northern portion of Fawkner Park

Source: State Library of Victoria Maps Collection

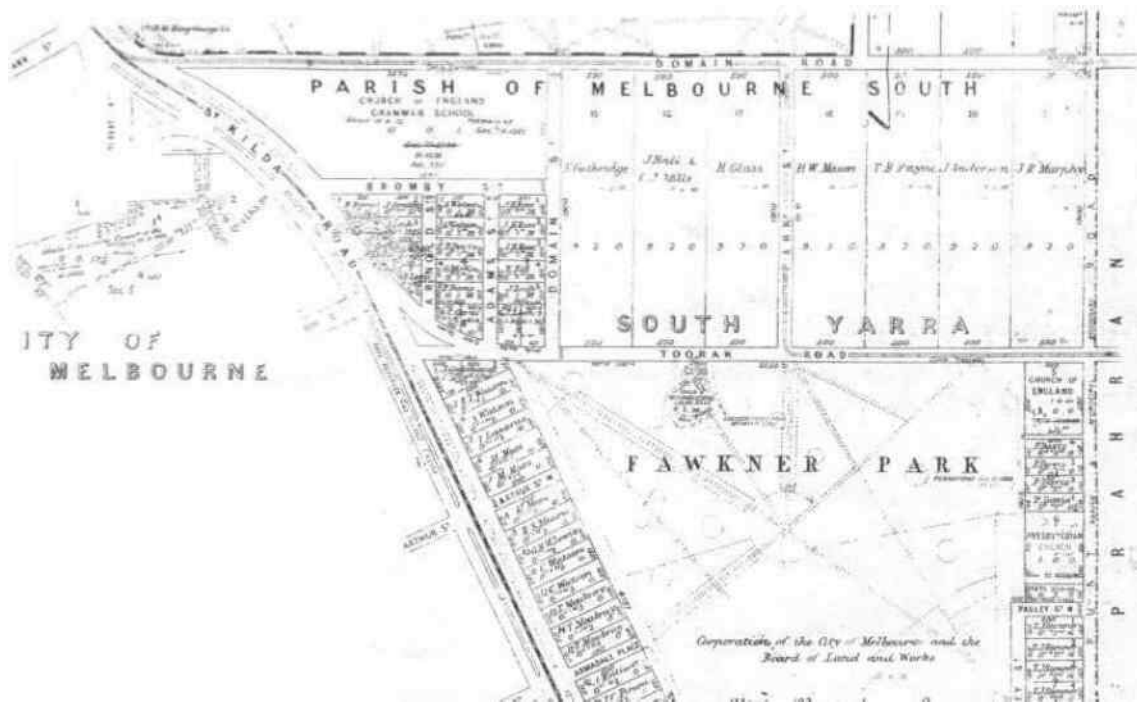


Figure 2 Parish Plan, Melbourne South (updated to c. 1950s) showing the land excised from Fawknor Park for use as a Child Welfare Centre
 Source: PROV VPRS 16171 Parish and Township plans



Figure 3 1945 aerial view of the northern section of Fawknor Park
 Source: Melbourne Photo-Map, Melbourne University Maps Collection

Various sporting facilities have been constructed in Fawknor Park during the early part of the twentieth century including tennis courts, and a putting green. During World War II trenches were excavated along the Toorak Road frontage of the park. Between 1943 and 1946 the Army occupied a 3 acre area of the Park with over 700 members of the Australian Women's Army Service housed in huts built by the United States military personnel. The huts were also used as a camp of Netherlands East Indies servicemen, and following the war were used for emergency housing for British migrants transferring to country Victoria

or interstate. Most of the huts were removed from the park and the area was restored to parkland in 1951 (Hassell 2002:5-13).

2.3 Predictive analysis

Given the relatively unchanged nature of the park layout, there is a low likelihood that early paths, garden beds or other features exist beneath the current ground surface. While the occupation of the park during World War II may have seen the deposition of artefacts (such as domestic items, food-related items, personal items), the short term occupation and the subsequent transient nature of such remains were likely to be have been removed or destroyed when the huts were removed from the park. Therefore, there is low likelihood that physical archaeological evidence of the World War II occupation of the park still exist.

Despite the relatively unchanged nature of the layout of Fawkner Park, there is a likelihood that early paths, garden beds or other features not documented in historical plans exist beneath the current ground surface. The occupation of the park during World War II may also have seen the deposition of artefacts (such as domestic items, food-related items, personal items), though disturbance of these may have occurred during removal of the World War II camp in 1951. There may also be evidence of the ‘community’ air raid shelter trenches that are known to have been dug in the park in 1942, including along the Toorak Road frontage of the site. There is also potential for archaeological evidence related to the earlier, historical period occupation of the park are by Aboriginal people. On this basis, the predictive archaeological assessment has is recommended that Fawkner Park be included for listing on the VHI for its archaeological values.



Figure 4 Hermes map of Fawkner Park showing VHI boundary in green
Source: Heritage Victoria, Land Victoria base

2.4 Recommendations

Due to the recommendation of this report the whole of Fawkner Park has been listed on the VHI as place number H7822-2342 (Figure 4). As such, the archaeological values of the park must be managed and protected during construction.

Fawkner Park is potentially subject to impacts from the proposed works, therefore the preparation of an archaeological management plan is required to manage and mitigate impacts. The archaeological management plans will be prepared in accordance with *Guidelines for Investigating Historical Archaeological Artefacts and Sites* (Heritage Victoria 2014) and in consultation with Heritage Victoria. The archaeological management plan will include the following:

- description and background history of archaeological area
- statement of significance for archaeological area, in accordance with *Guidelines for Conducting Historical Archaeological Surveys* (Heritage Council of Victoria and Heritage Victoria 2008), *Criteria for Assessing Cultural Heritage Significance* (Heritage Council of Victoria 2008) and *Victoria's Framework of Historical Themes* (Heritage Council of Victoria 2010)
- research design, including research questions which will be addressed as a result of the archaeological investigations
- excavation methodology, including method to be used to excavate deposits, record spatial and stratigraphic information and recover artefacts and how these will help address the research design
- artefact retention policy, including how and why individual artefacts and types of artefact will be retained, discarded or sampled during the archaeological investigation
- artefact management proposal, including details of how recovered artefacts will be managed in the field and post-excavation.

It is further recommended that the whole of Fawkner Park be included on the VHR for its other heritage values.

3.0 Precinct 2 - Western Portal (South Kensington)

3.1 Introduction

While there are no VHI sites within the precinct, consideration has been given to the potential for archaeological sites that are not included in the VHI and have not been previously identified to be affected by works within the western portal precinct. This is on the basis the Heritage Act provides blanket protection for archaeological sites over 50 years in age.

3.2 Historical research

With the exception of the railway line (Figure 5) and the South Kensington railway station (constructed in c. 1891 and shown in Figure 6), land in the vicinity of the western portal decline and construction sites were largely undeveloped in the late nineteenth century. Two private sidings were located to the north and east of the station, such as those for the NZ Loan and Mercantile Agency Co Stores (shown in Figure 6 and Figure 7). To the west, a number of buildings associated with the meat industry had been constructed between Hobson's Road and the Maribyrnong River by the 1870s (Figure 8).

The street layout north of the railway line between Footscray Road (now Kensington Road) and Ormond Road is shown on plans from the c. 1880s, but by 1911 the area was still largely undeveloped with dwellings contained almost exclusively between Ormond and Tennyson streets (Figure 9).

The site of the nineteenth century Kensington Glue Factory (west of Hobsons Road) appears to have been acquired in the late 1920s by a New Zealand-based company, Davis Gelatine Pty Ltd, and developed for a new factory complex to be known as 'Glues and By-products Pty Ltd'. Construction on the site was undertaken between 1928 and the late 1930s / early 1940s, and several buildings along Hobsons Road remain on this site (Figure 10).

The present JJ Holland Park has been open space since at least 1945, with more recent development including landscaping works and oval/soccer field construction (Figure 11 and Figure 12).

3.3 Predictive analysis

The land included in and adjacent to the western portal decline and Hobsons Road construction site was extensively disturbed in the mid-late twentieth century, and more recently, by the works to increase the number of rail lines between South Kensington and Footscray, the removal of the private rail sidings and the creation of the JJ Holland Park.

The land between Ormond and Tennyson streets was vacant in the late nineteenth century, and several dwellings - those that stand today - had been constructed in this area by 1911 (Figure 9). There is moderate potential for archaeological deposits or features related to twentieth century domestic occupation to be present within the yards or other open areas of the existing residences. There is unlikely to be archaeological remains related to any early phase of development due to the limited amount of historical activity at the site. While there may be archaeological remains present, these are unlikely to be of historical significance as they are not related to a particular event or important phase of Victoria's history. They are unlikely to provide much information that is not already available from other historical and oral sources. Due to the low level of cultural heritage significance, this area is not further considered in the impact assessment.

East of Tennyson Street is the site of the former NZ Loan & Mercantile Agency Co. Stores (shown in Figure 7 and Figure 11). This site has been extensively redeveloped with a number of factory buildings and it is considered that this level of disturbance will almost certainly have destroyed any nineteenth century building remains associated with the NZ Loan & Mercantile Agency Co. Stores.

West of Hobsons Road is land developed in the nineteenth century for the Kensington Glue Works and expanded and overbuilt in the 1920s-1940s period by Glues and By-Products Pty Ltd (Figure 10). The nineteenth century Kensington Glue Works was located some distance to the north-west of the proposed Hobsons Road construction site and would be unaffected. Substantial buildings associated with the Glues and By-Products Pty Ltd complex remain. Within the open land in the middle of the site,

there is some potential for archaeological evidence of demolished elements related to the interwar complex, including lime pits, oil and tallow refining and storage buildings. While there is potential for physical archaeological remains to be present at the site, these are unlikely to be of significance as they are unlikely to provide much information about the occupation and use of the site that is not already available from historical or oral history sources, or from the key buildings and structures still present at the site. Due to the low level of cultural heritage significance, this area is not further considered in the impact assessment.

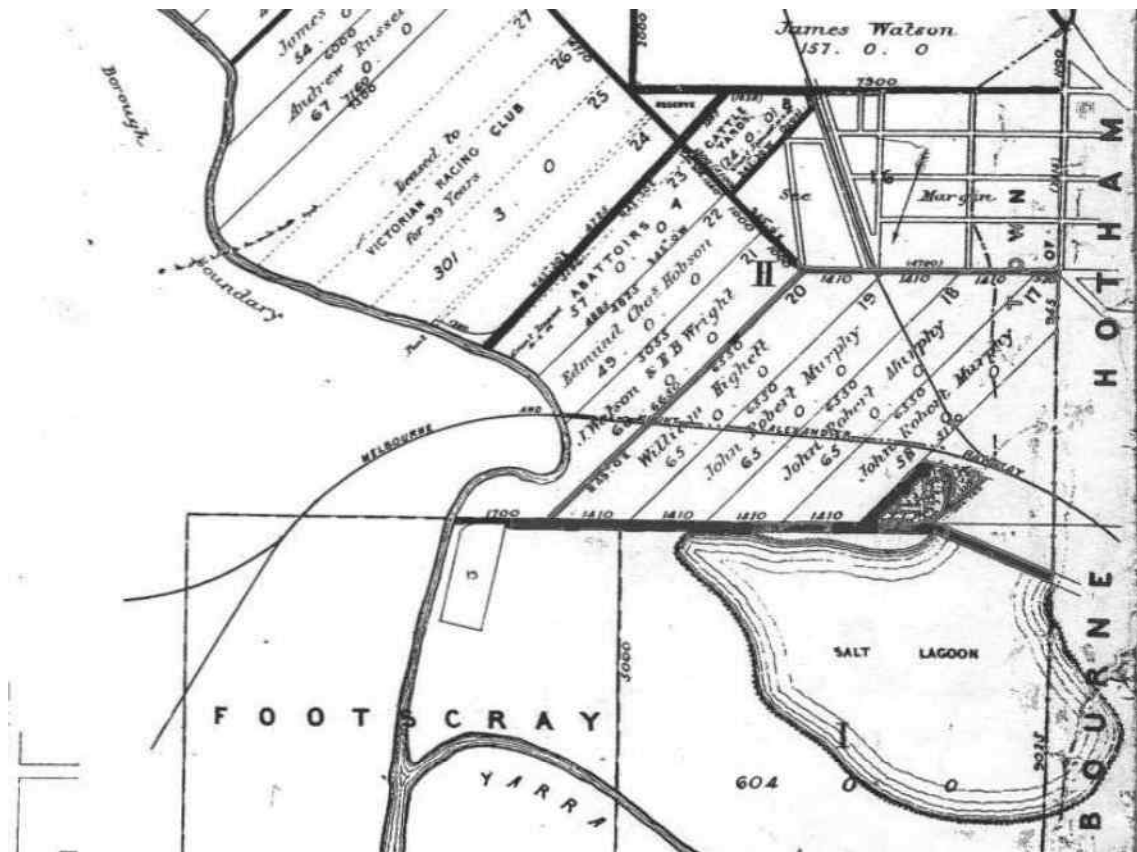


Figure 5 1877 Parish Plan for Doutta Galla, showing the Melbourne and Mount Alexander railway line
 Source: PROV VPRS 15899 Historic Plans Collection 1836-1984

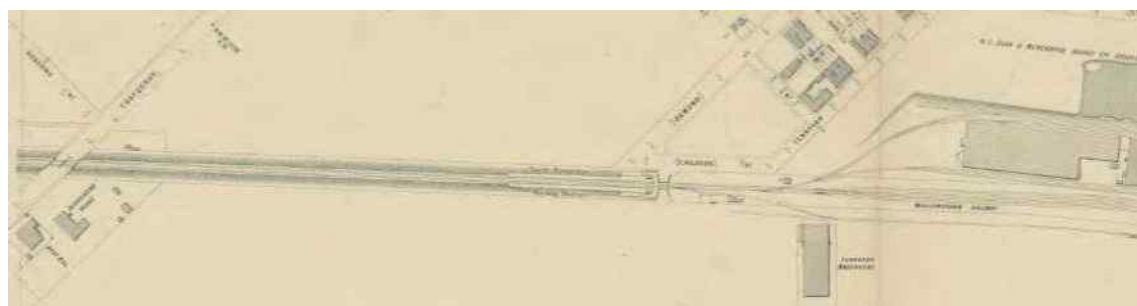


Figure 6 1895 MMBW Plan No. 33 Flemington and Kensington showing the area between Kensington Road and Ormond Street. The South Kensington railway station (constructed in c. 1891) is shown south of Ormond Street, and the NZ Loan & Mercantile Agency Co Stores buildings are located east of Tennyson Street
 Source: State Library of Victoria Maps Collection

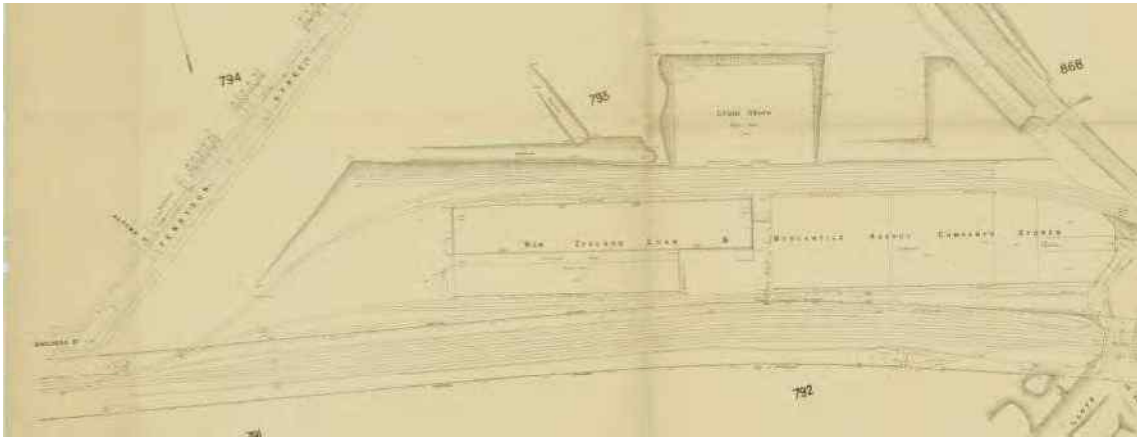


Figure 7 1897 MMBW Detail Plan No. 793 Borough of Flemington & Kensington, east of Tennyson Street showing the layout of the NZ Loan & Mercantile Agency Co Stores buildings
Source: State Library of Victoria Maps Collection

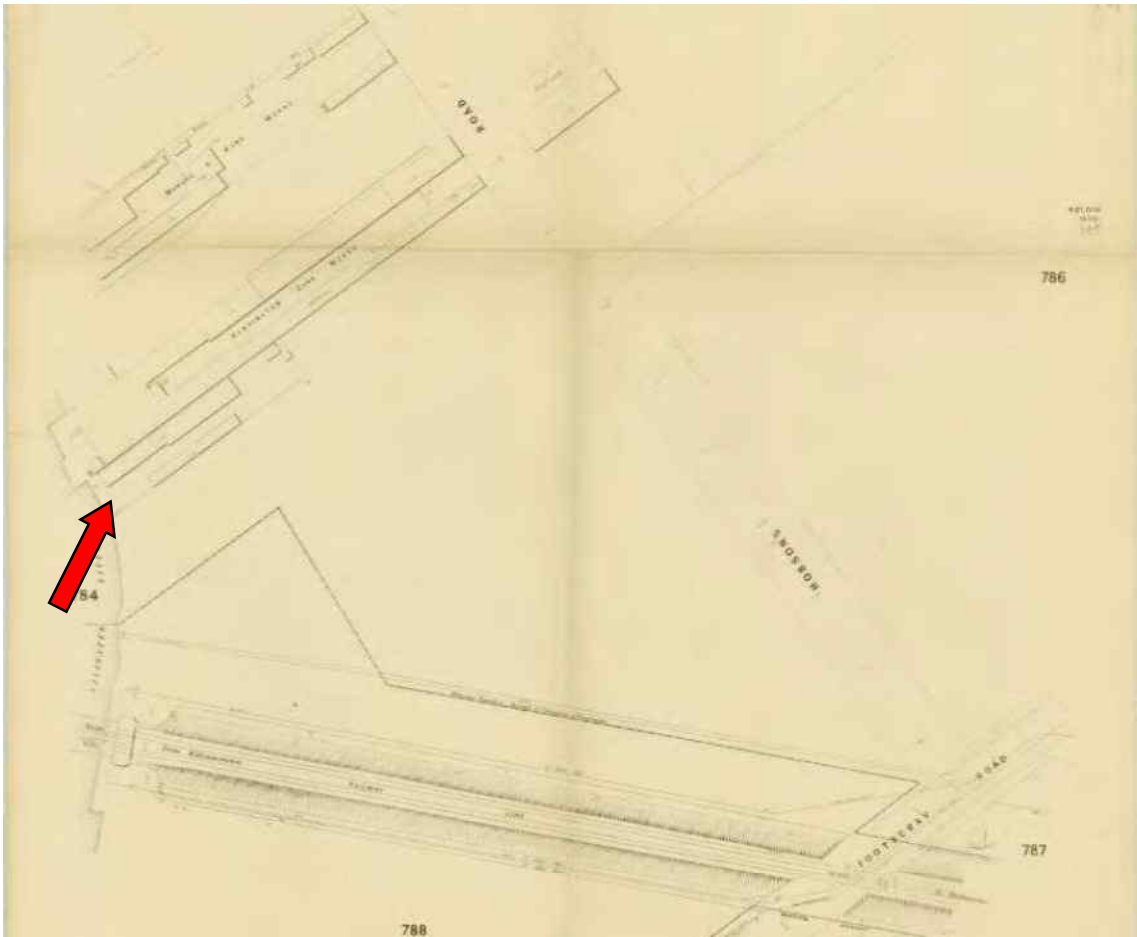


Figure 8 1902 MMBW Detail Plan No. 785 Borough of Flemington and Kensington, showing the site of the former Kensington Glue Works west of Hobsons Road and north of the proposed Hobsons Road construction site
Source: State Library of Victoria Maps Collection

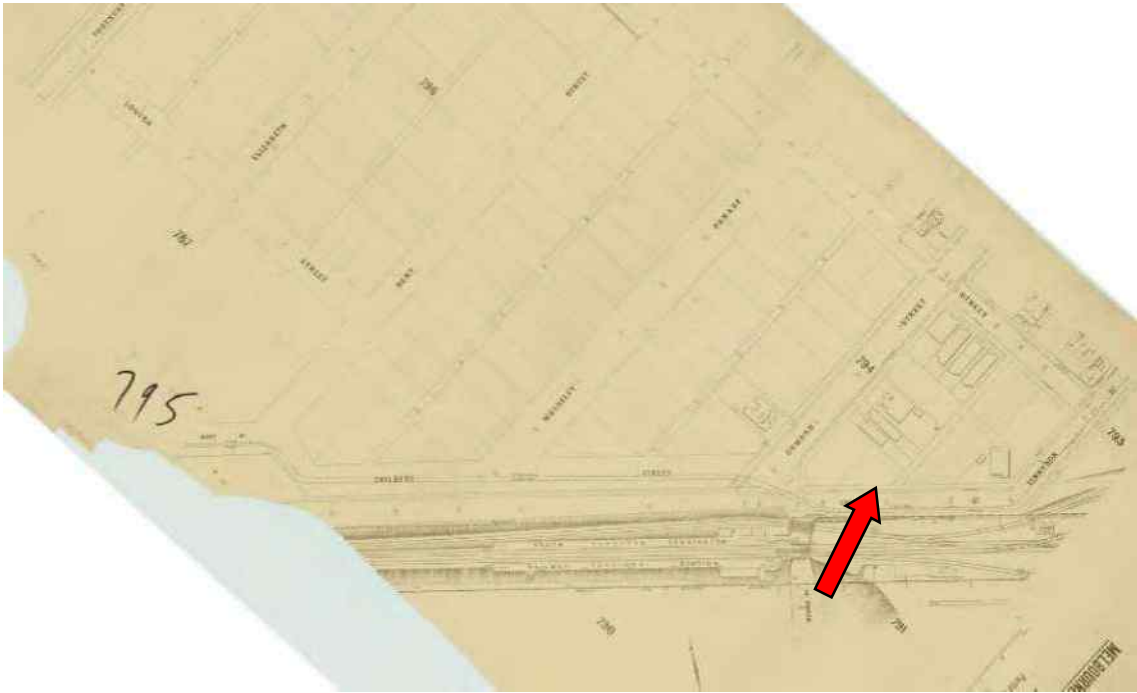


Figure 9 1911 MMBW Detail Plan 795, 794 & 796, City of Melbourne showing several dwellings located between Ormond and Tennyson streets (indicated)
Source: State Library of Victoria Maps Collection

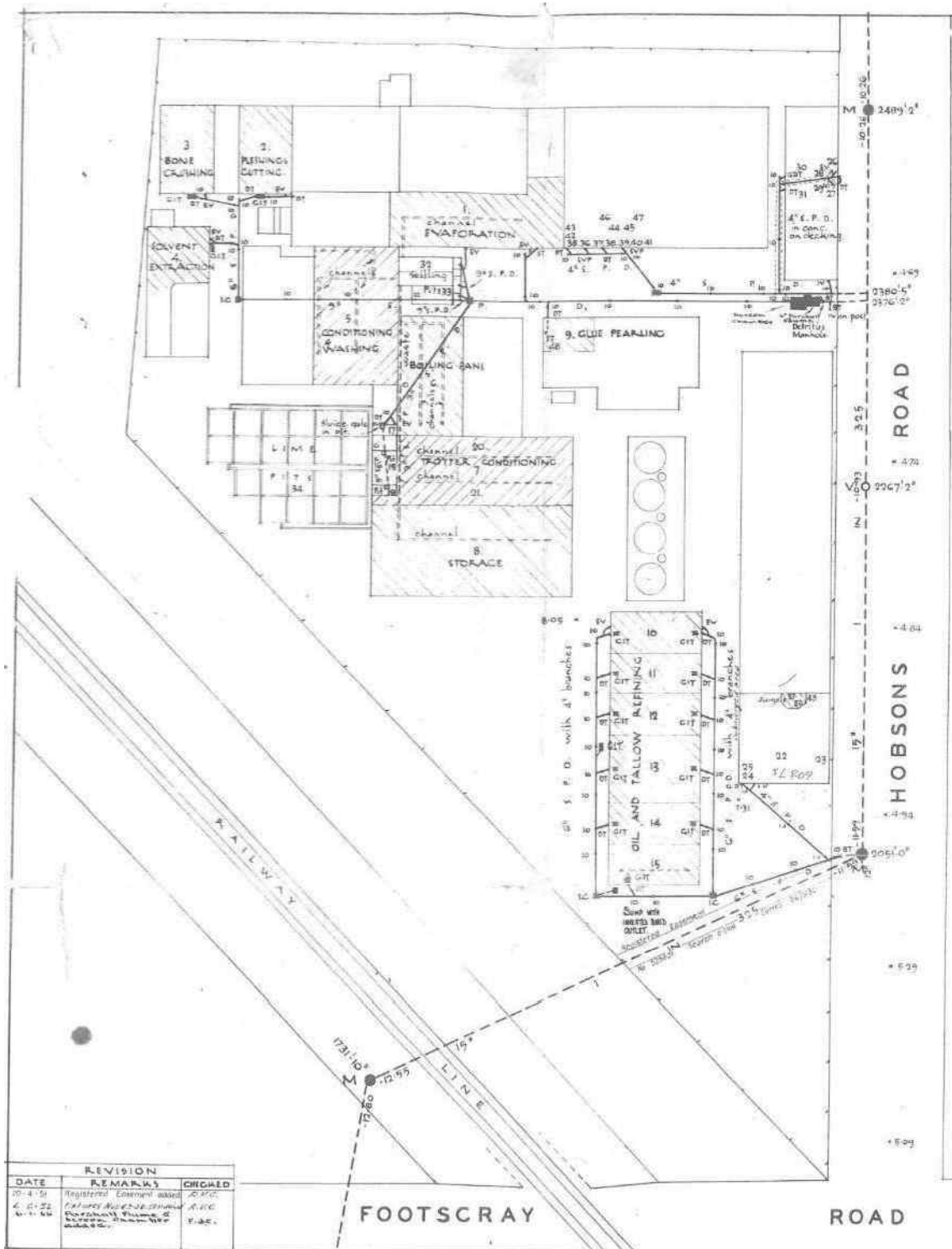


Figure 10 1949 MMBW Plan showing the location of buildings associated with the Glues & By-Products Pty Ltd, developed from the 1920s at Hobsons Road South Kensington
Source: Lovell Chen Archives



Figure 11 1945 aerial view of the western portal precinct
Source: Melbourne Photo-Map, Melbourne University Maps Collection



Figure 12 September 2015 aerial image of the western portal precinct and JJ Holland Park
Source: Nearmap

3.4 Recommendations

As there are no areas of archaeological potential identified within the western portal precinct there are no new VHI sites identified for listing. Additionally as there are no VHI sites within the precinct, no further management or mitigation of impacts on historical archaeological values is required.

4.0 Precinct 3 – Arden Station

4.1 Introduction

While there are no VHI sites within the Arden station precinct, consideration has been given to the potential for archaeological sites that are not included in the VHI and have not been previously identified to be affected by works within the Tunnel precinct. This is on the basis the Heritage Act provides blanket protection for archaeological sites over 50 years in age.

4.2 Historical research

The history of development of the Arden station site essentially occurred over three phases. In the late nineteenth/early twentieth centuries, the site of the Railway Reserve north of Queensberry Street was largely unoccupied, with land south of Queensberry Street occupied by several railway sidings and a number of timber stores/buildings (Figure 13-Figure 18). Late 1890s MMBW detail plans show a drain extending east-west across the site in line with Queensberry Street (Figure 15-Figure 16).

By 1928, extensive construction had occurred over the entire Railway Reserve (both north and south of Queensberry Street) and additional railway sidings had been constructed. At least one of the smaller nineteenth century timber structures remained on site at this time, but the site was extensively developed and it appears that many of the nineteenth century structures were replaced with the existing buildings (Figure 17).

A 1945 aerial photograph (Figure 19) and 1970 site plan (Figure 18) shows the further development of the site over the mid-late twentieth century, with some of the c. 1920s structures having been altered and extended or replaced. Many of the 1920s structures remain extant on site.



Figure 13 1888 Plan of Melbourne and Suburbs, showing the undeveloped Arden station precinct site

Source: State Library of Victoria Maps Collection

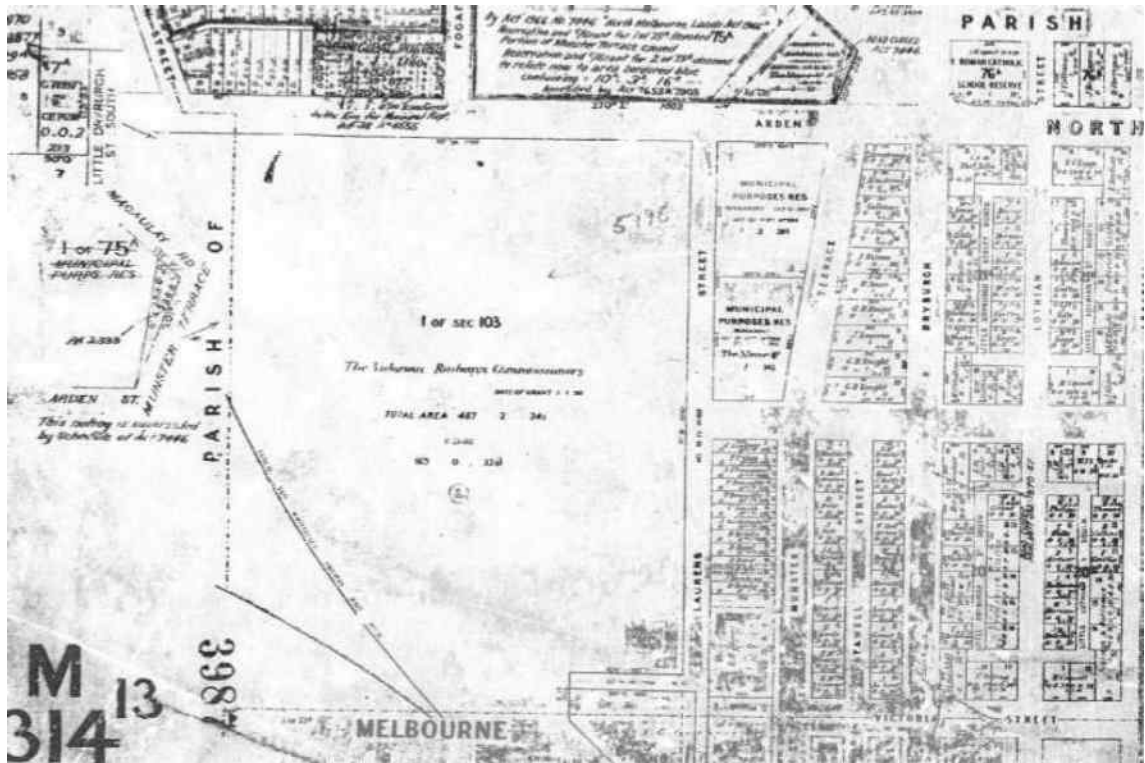


Figure 14 Parish Plan, Jika Jika (updated to c. 1960s), showing the total area of the Railway Reserve
 Source: VPRS 16171 Parish and Township plans, Public Record Office Victoria

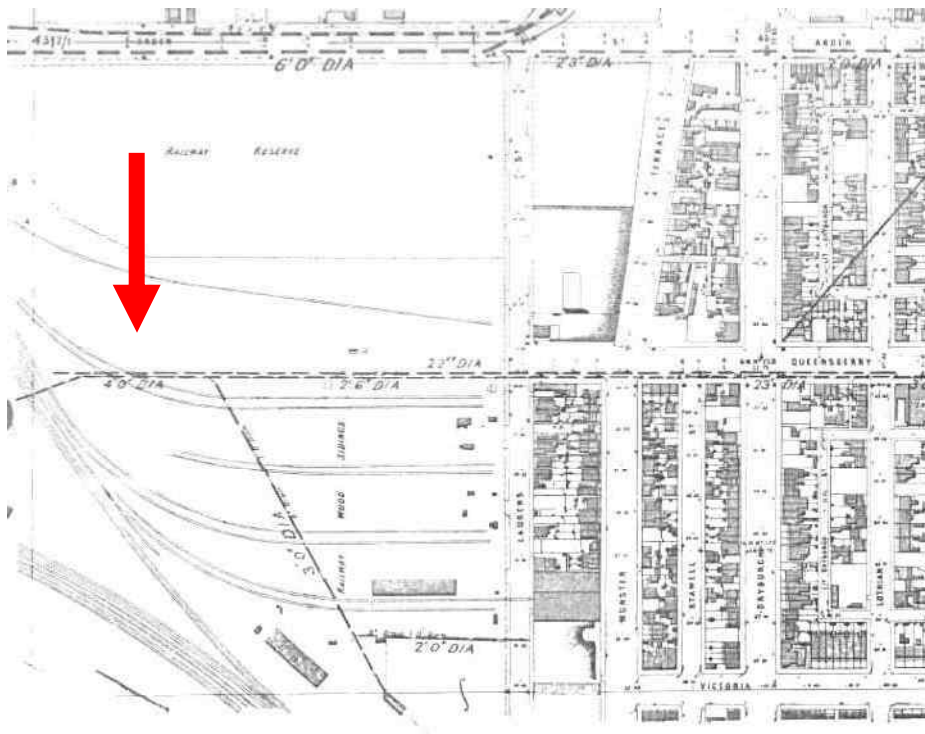


Figure 15 c. 1895 MMBW Plan No. 31, Melbourne and North Melbourne, showing the Railway Reserve north of Queensberry Street and Railway Wood Sidings and timber structures to the south. Location of drain indicated
 Source: State Library of Victoria Maps Collection

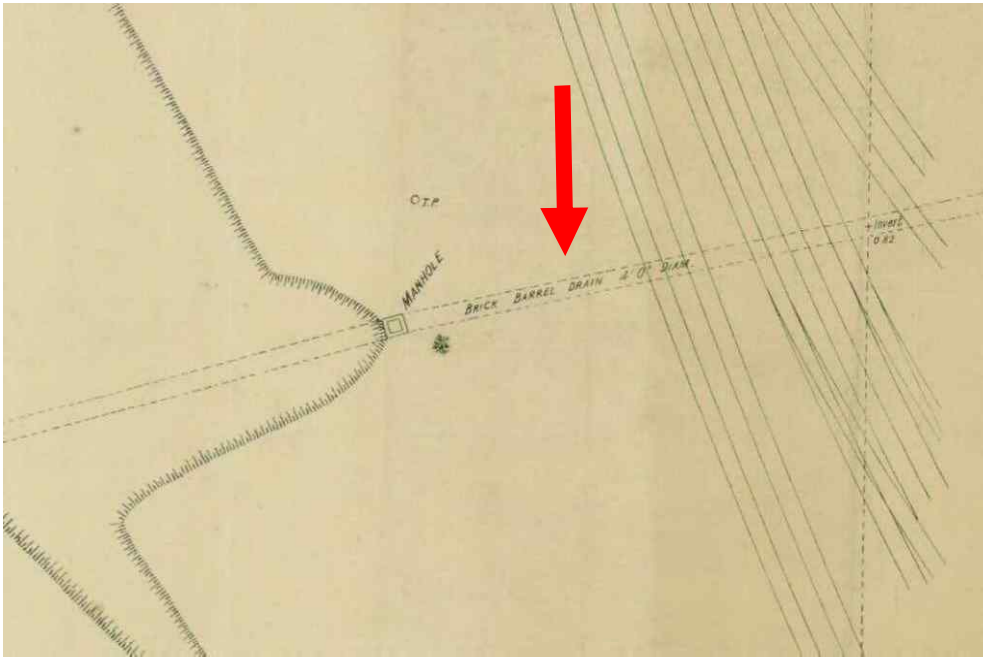


Figure 16 Part of MMBW detail plan no. 701, 1897, showing 'brick barrel drain 4'0" diam.' (indicated)
 Source: State Library of Victoria

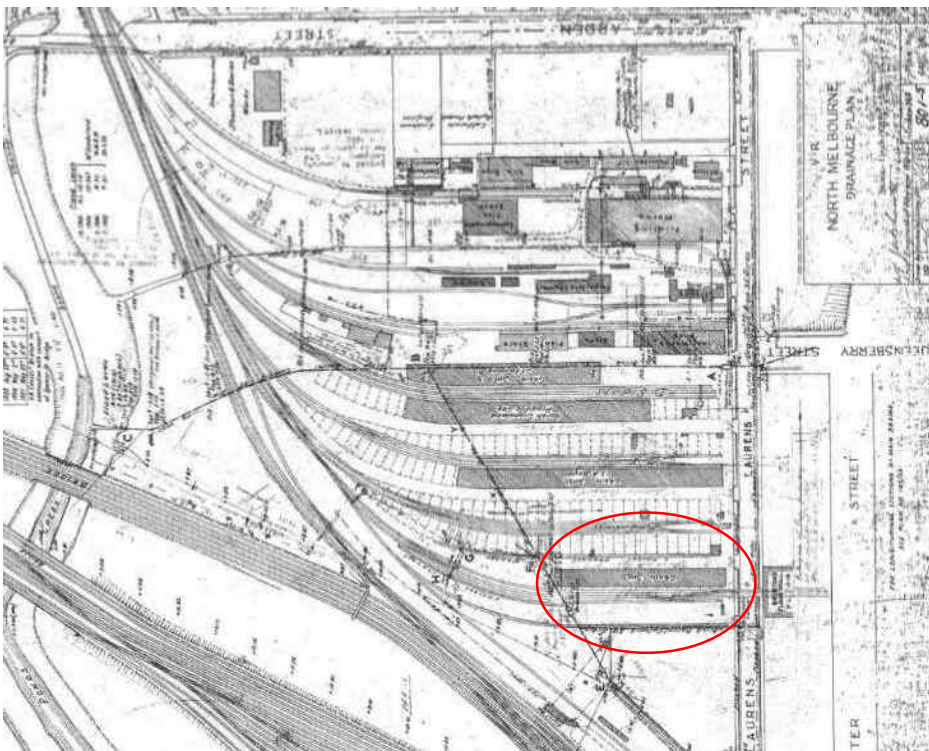


Figure 17 1928 plan of the Arden station precinct site, showing the development of the Railway Reserve for Railways Department workshops, and additional grain sheds/stores south of Queensberry Street (extant nineteenth century building indicated)
 Source: Department of Transport Drawing Management System

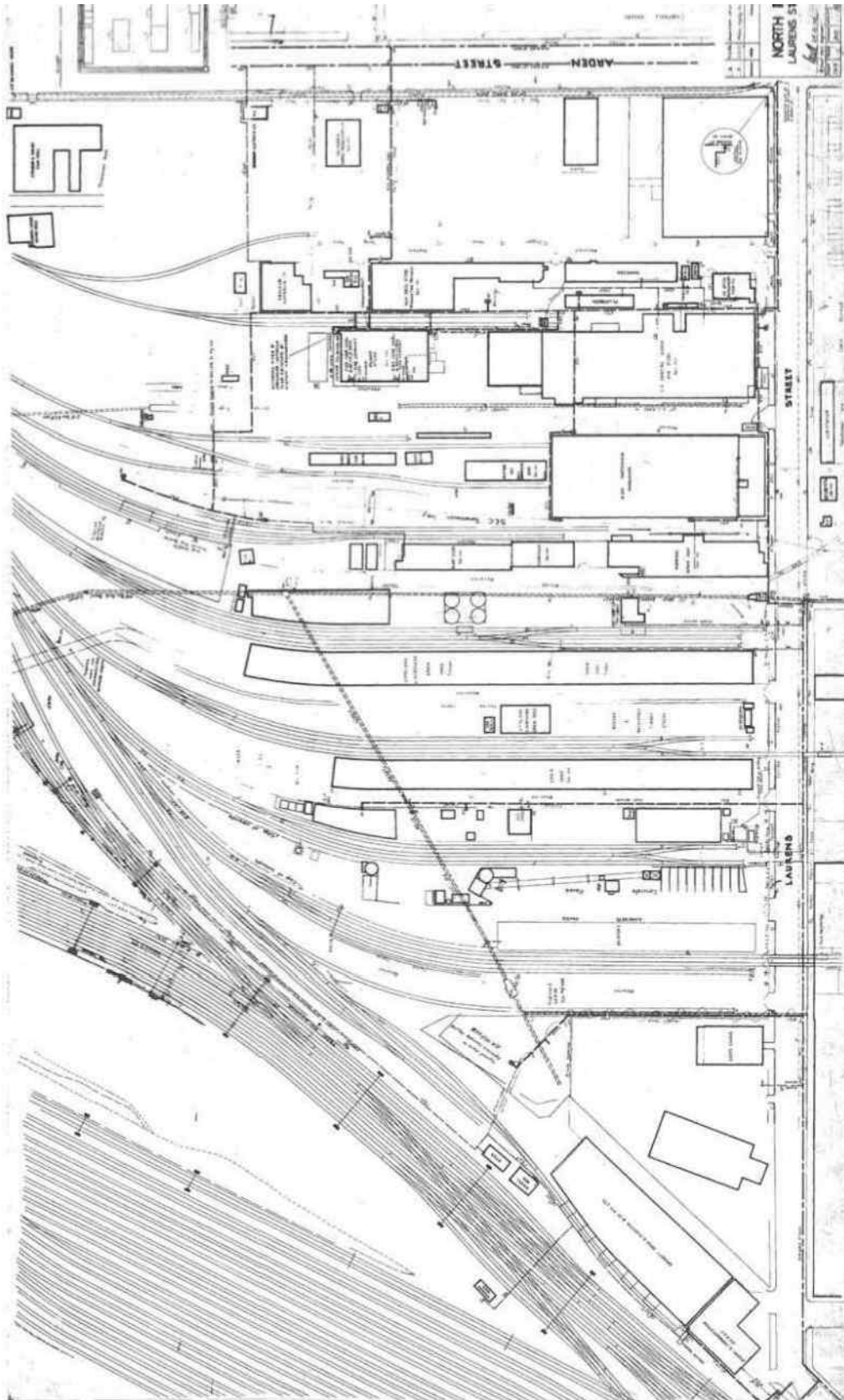


Figure 18 1970 plan showing the mid-late twentieth century development of the Arden station precinct site
Source: Department of Transport Drawing Management System



Figure 19 1945 aerial view of the Arden station precinct
Source: Melbourne Photo-Map, Melbourne University Maps Collection

4.3 Predictive analysis

The Railway Reserve south of Arden Street has been extensively developed over the last century. Although at least one of the smaller nineteenth century timber structures remained on the site in the 1920s (south of D siding), the alteration and gradual replacement of the earlier structures with the existing buildings is likely to have resulted in the disturbance of the majority of the site (Figure 20).

Due to this disturbance, most of the site is unlikely to have any physical archaeological remains still remaining below the current ground surface.

There is a single zone within the site where it is considered possible that there may be evidence surviving of earlier (nineteenth century) structures. This zone is located on the eastern edge of the site, south of Queensberry Street. The remains of earlier buildings may exist within or alongside the footprint of the existing buildings in this zone, however it is considered more likely that the disturbance of the site due to the construction of the existing buildings will have destroyed any structural remains.

The proposed construction works include the relocation of a 1200 millimetre brick stormwater drain. This appears to be a drain described in the 1897 MMBW plan as a four feet diameter brick barrel drain, which may actually be of an earlier construction date. Archaeological investigation of early brick barrel drains are able to provide information that may not be available in documented sources. Due to the likely early nature of this infrastructure it has the potential to provide information about early infrastructure and construction technology for essential services.

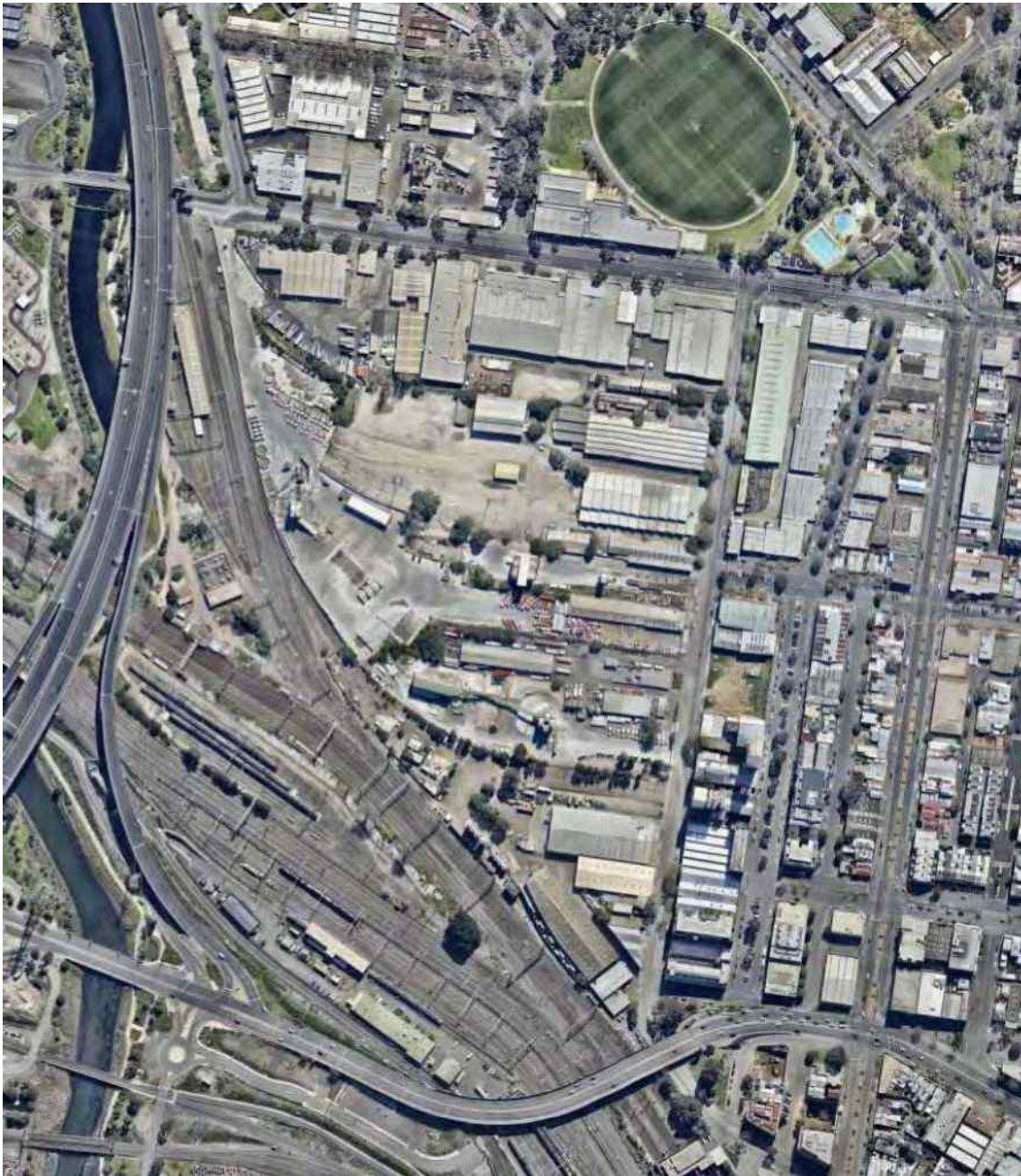


Figure 20 September 2015 aerial image of the Arden station precinct
Source: Nearmap

4.4 **Recommendations**

The brick stormwater drain was recommended for inclusion in the VHI. It was found not to merit inclusion on the VHI, as such no further management or mitigation of archaeological impacts is required.

5.0 Precinct 4 – Parkville Station

5.1 Introduction

While there are no VHI sites located within the Parkville station precinct, consideration has been given to the potential for archaeological sites that are not included in the VHI and have not been previously identified to be affected by works within the Parkville station precinct. This is on the basis the Heritage Act provides blanket protection for archaeological sites over 50 years in age.

5.2 Historical research

From the mid-1850s until 1939, the land to the north-west of the Grattan Street/Royal Parade intersection was known as the Northern Market, and comprised cattle, horse and pig markets (Figure 21). The only surviving elements of the Northern Market (which are located outside the Parkville Station site) are sections of the brick boundary wall along Story Street, Park Drive and Flemington Road. Over a comparable period, the triangular site to the south of the Northern Market, bounded by Royal Parade, Flemington Road and Grattan Street, was a hay market. From the mid twentieth century the Northern Market and hay market were developed, respectively, for the Royal Melbourne Hospital, the Dental Hospital and Dental School. The Dental Hospital was demolished in 2010.

The University of Melbourne, to the north-east of the Grattan Street/Royal Parade intersection, was developed from 1853. The Medicine Building, addressing Grattan Street at the south of the University grounds, was constructed in the 1960s. The south-east corner of the Grattan Street/Royal Parade intersection, previously developed for housing, was replaced with Ampol House in 1958. The land to the south of this block, bordered by Berkeley Street, Pelham Street and the Haymarket roundabout, was also developed as housing, generally being replaced with larger structures related to the automotive industry in the second half of the twentieth century. The two townhouses at 226-228 Pelham Street are remnants of this early phase of development.

Other than for the road reserve itself, the land included in the Parkville Station precinct has been extensively developed for the construction of the Royal Melbourne Hospital, the Dental Hospital (now demolished) and the Medicine Building at the south-western corner of the University grounds, and accordingly, this location is not considered to be an area of archaeological potential. Any remains from the market sites north and south of Grattan Street will have been destroyed during the construction of the hospital buildings.

The late twentieth century development of the land bordered by Berkeley Street, Pelham Street and the Haymarket roundabout will likewise have destroyed much of the nineteenth century residential remains within this area. Depending on construction methods, where large-scale development has been undertaken, there is limited potential for archaeological remains to have survived. There are however, some areas of at-grade asphalt surfaces (City Ford car yard) where there is more potential for archaeological remains from the nineteenth century occupation of the site.

This part of Carlton developed from the late 1850s and 1860s. During the gold rush period from the early 1850s, the extension of Elizabeth Street to the north-west of the city grid was, with Flemington Road, part of one of the main routes to the goldfields, and it was the location of numerous businesses relating to the transport of goods. The block bounded by Elizabeth Street, Pelham Street and Berkeley Street appears to have been developed commencing in 1859 with residential development along Berkeley Street by the mid-1860s including a mix of small wooden cottages and brick houses.

The north side of Pelham Street, between Elizabeth and Berkeley streets, developed in the mid-1860s, comprised brick houses, a wooden shop, and an engineer's shop. There were a number of buildings along the east side of Elizabeth Street, north of Pelham Street including the brick Junction Hotel then operated by William Lawrence; brick cottages, and a brick corn store. By the early-mid 1870s both Pelham and Berkeley streets had developed a predominantly residential character. Elizabeth Street, meanwhile, comprised businesses relating to its role as a transport route, including the Junction Hotel and a hay and corn dealers, as well as some residential properties. This pattern continued into the

1880s, with further residential development in Pelham Street and commercial development in Elizabeth Street, including a tent manufacturer and a 'monumental yard' for a stone mason.

From the late 1920s, the nineteenth century residences began to be replaced with factory and warehouse buildings, initially along Berkeley Street. The residences fronting Pelham Street (within the City Ford car yard boundary) were replaced by a warehouse in c. 1950s, after the properties were purchased by motor parts company Holstock & Jamieson. The Junction Hotel (situated on the corner of the City Ford car yard) operated into the 1970s, and appears to have been demolished in the early 1980s to make way for a motor showroom at 712 Elizabeth Street, although it is unclear if this development took place as the corner site is currently an open asphalted car yard area with an adjacent modern motor showroom situated to the north.



Figure 21 1888 Plan of Melbourne and Suburbs, showing a hay market south of Grattan Street and a horse and pig market in the City Depot north of Grattan Street
Source: State Library of Victoria Maps Collection

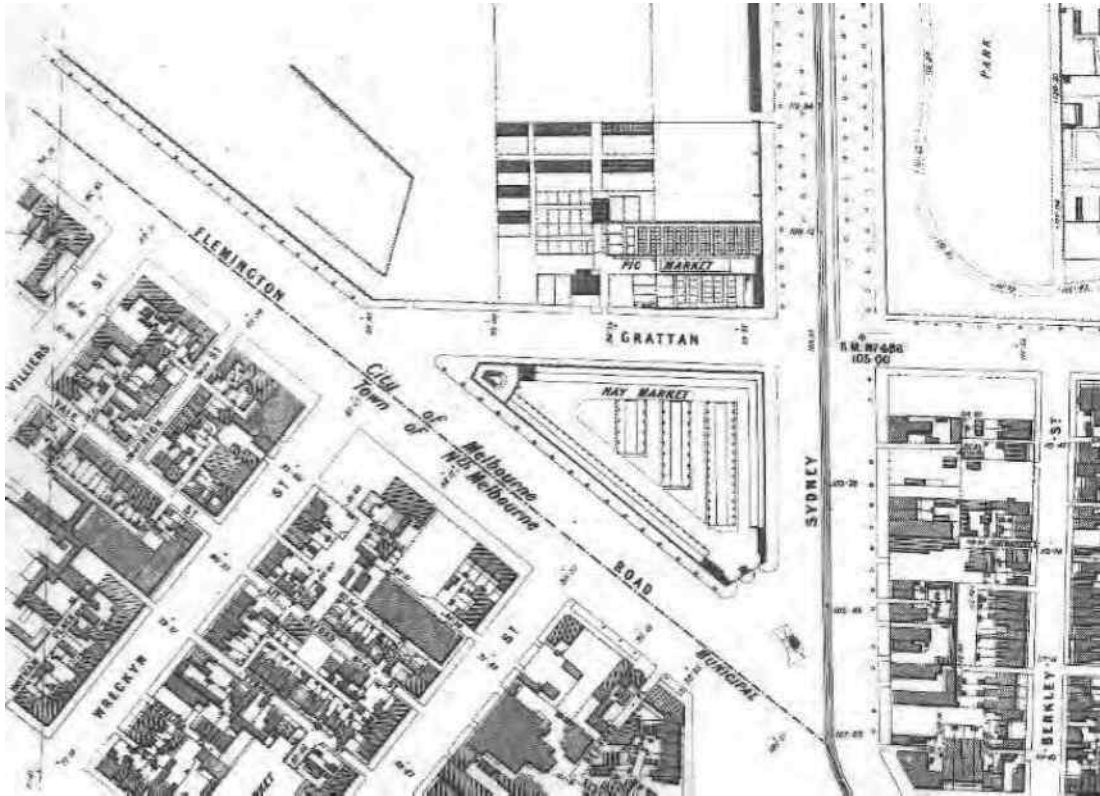


Figure 22 c. 1896 MMBW Plan No. 30, City of Melbourne, showing the structures associated with the hay and pig markets and development on the block west of Berkley Street
Source: State Library of Victoria Maps Collection

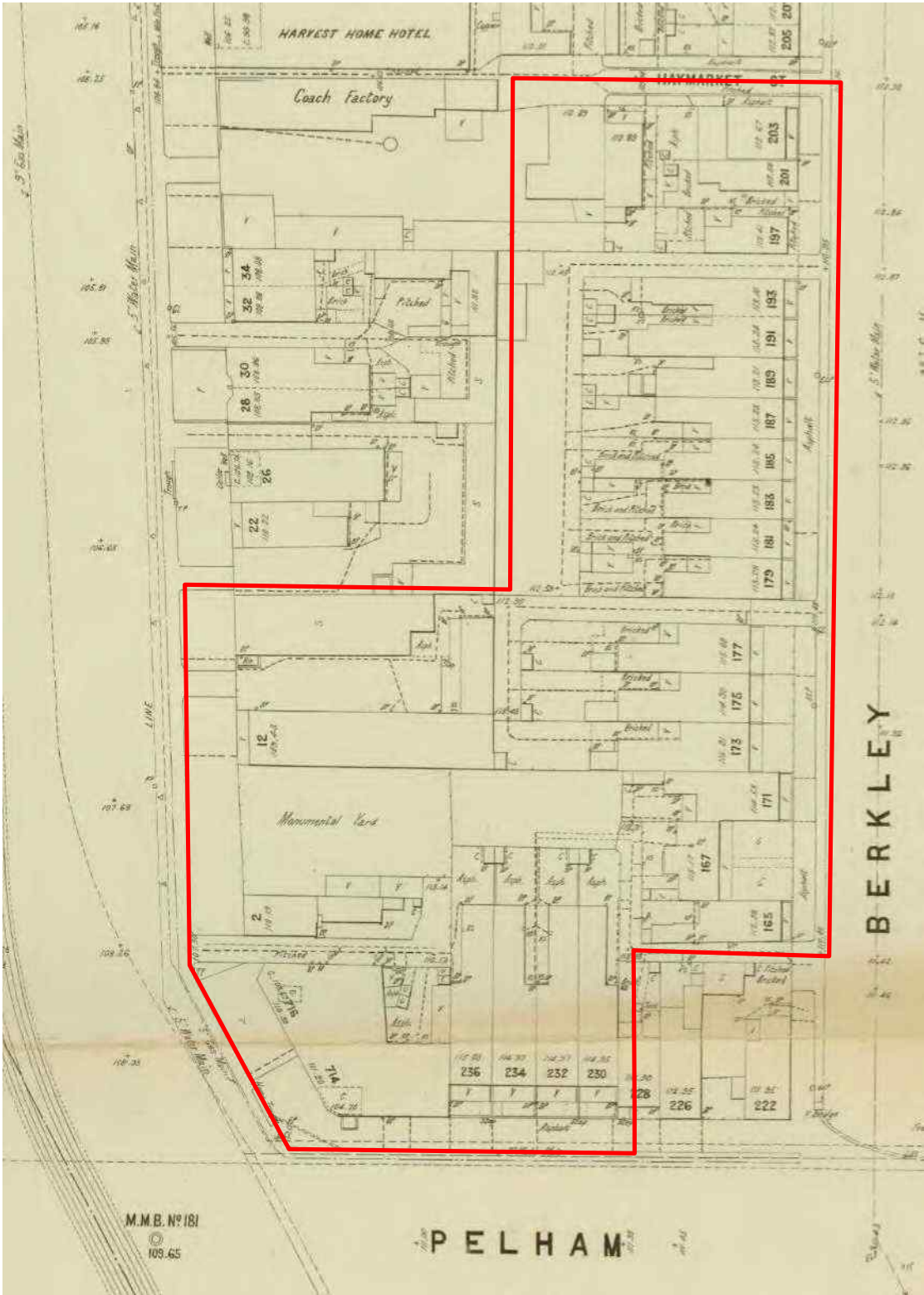


Figure 23 MMBW detail plan no. 1176, 1896, with subject site indicated
 Source: State Library of Victoria

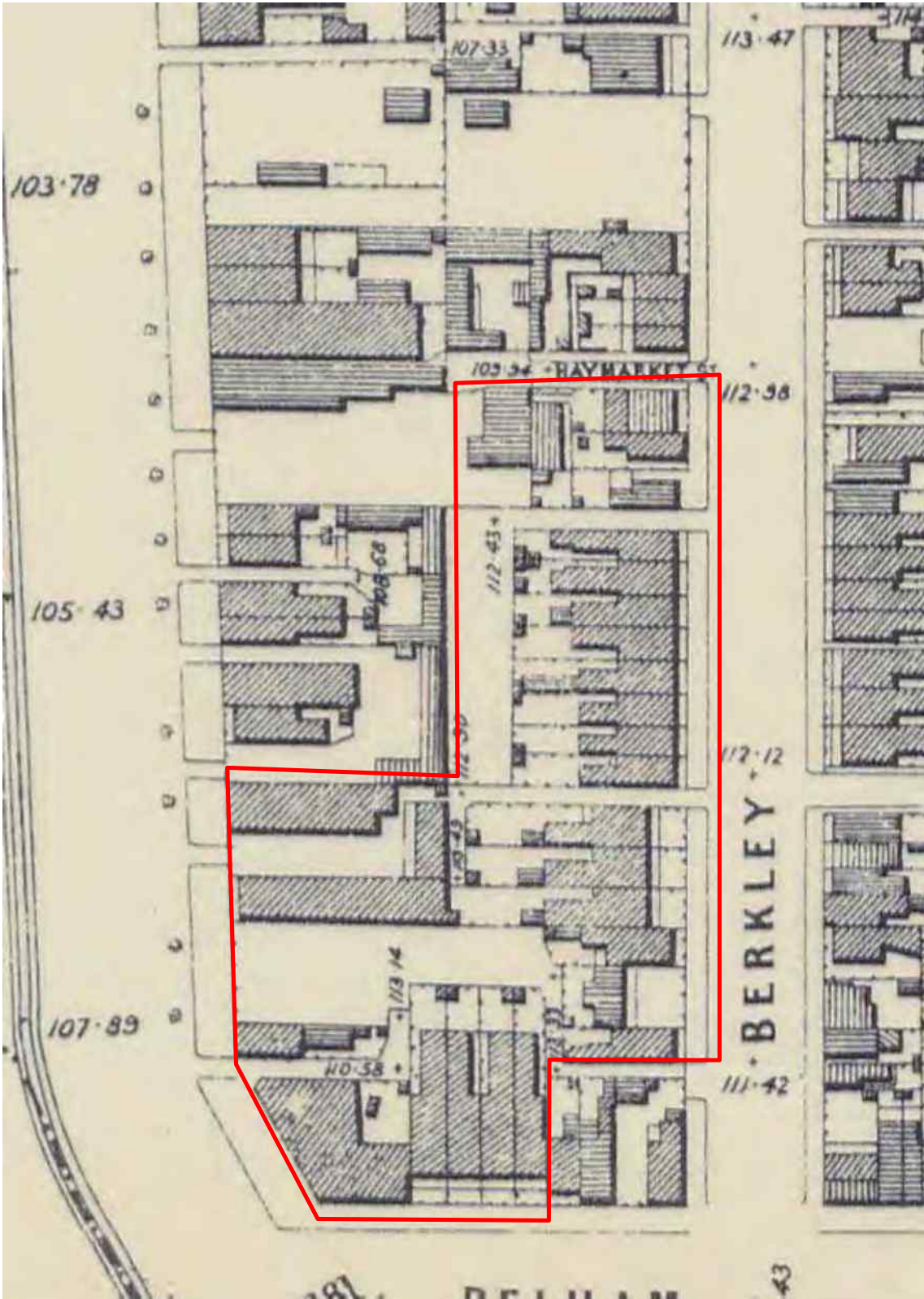


Figure 24 MMBW 160':1" plan, no. 30, 1894, with subject site indicated
Source: State Library of Victoria

5.3 Predictive analysis

The current City Ford car yard site (bounded by Pelham Street, Berkeley Street and the Haymarket/Elizabeth Street) was considered to be one area which could be affected by works and where there may be some archaeological potential.

Based on the known history of the City Ford car yard site, there is archaeological potential related to both commercial and residential occupation of the site. While the exact nature and condition of the deposits are not known, there is a high likelihood that the remains of the footings of the brick Junction Hotel are present along with the potential for associated artefact deposits related to the continual use of the building as a hotel dating from at least the 1860s. The remains of the nineteenth century Junction Hotel likely present in the asphalted car yard area due to the nature of the original construction of the hotel and there apparently being no subsequent construction apart from an open asphalted car yard. The former Junction Hotel site is of historical significance in relation to its early and continued use as a hotel, particularly its location on a major route from the city of Melbourne to the Victorian goldfields. The site has scientific significance in that archaeological investigation of the site may provide information about the operation and patrons of an early city-fringe hotel on the route to the Victorian goldfields. Due to its long operation as a hotel, it may also provide information over time of the changing social nature of the surrounding area up into the late twentieth century.

There is also likely to be archaeological remains present related to the nineteenth century residential occupation of the car yard site, adjacent to the former Junction Hotel site. Given the construction of a warehouse on the site in the 1950s, but no subsequent development, there is a moderate likelihood for remains of the footings of the brick housing to be present along with the potential for associated artefact deposits within the building footings and in the rear yards that were present on the site. The site is of historical significance related to its early domestic occupation of the Melbourne city fringe. It has scientific significance in that archaeological investigation of the site may provide information about early domestic activities and ways of life of nineteenth century Melbourne residents.

A summary of the likelihood and significance of archaeological remains being physically present at various locations within the Parkville station precinct are presented in Table 1. The area of archaeological potential is shown at (Figure 25).

Table 1 Likelihood of archaeological remains in Parkville station precinct

Location	Likelihood of archaeological remains	Comment	Significance
Properties fronting Berkeley Street	Low / None	Earlier nineteenth century remains likely destroyed due to subsequent mid to late twentieth century construction	n/a
230-236 Pelham Street	Moderate	Earlier nineteenth century residential remains possible remain due to minimal 1950s warehouse construction, and subsequent open area asphalted car yard	Early domestic occupation of the Melbourne city fringe, including an understanding of early domestic activities and ways of life of nineteenth century Melbourne residents
Former Junction Hotel site, corner of Pelham Street and Elizabeth Street/Haymarket	High	Remains of nineteenth century Junction Hotel likely present in the asphalted car yard area due to the nature of the original	Early and continued commercial occupation, particularly due to its location on a major route

Location	Likelihood of archaeological remains	Comment	Significance
		construction of the hotel and there apparently being no subsequent construction apart from an open asphalted car yard	<p>from the city of Melbourne to the Victorian goldfields</p> <p>Potential for information about the operation and patrons of an early city-fringe hotel on the route to the Victorian goldfields</p> <p>Potential to provide information over time of the changing social nature of the surrounding area up into the late twentieth century.</p>
Royal Parade (VHR H2198)	Moderate	Possible that there is evidence surviving of earlier road treatments within the road reserve itself	Potential for information about early road construction techniques



Figure 25 Hermes map of the City Ford Archaeological area: VHI sites are in green
Source: Heritage Victoria, Land Victoria base

5.4 Recommendations

The City Ford archaeological area was recommended for inclusion and subsequently included in the VHI for its archaeological values (H7822-2340). As such the site must be managed and protected during construction. City Ford archaeological area is potentially subject to impacts from the proposed works, therefore the preparation of an archaeological management plan is required to manage and mitigate impacts. The archaeological management plans will be prepared in accordance with *Guidelines for Investigating Historical Archaeological Artefacts and Sites* (Heritage Victoria, 2014) and in consultation with Heritage Victoria. The archaeological management plan will include the following:

- description and background history of archaeological area
- statement of significance of archaeological area, in accordance with *Guidelines for Conducting Historical Archaeological Surveys* (Heritage Council of Victoria and Heritage Victoria 2008), *Criteria for Assessing Cultural Heritage Significance* (Heritage Council of Victoria 2008) and *Victoria's Framework of Historical Themes* (Heritage Council of Victoria 2010)
- research design, including research questions which will be addressed as a result of the archaeological investigations
- excavation methodology, including method to be used to excavate deposits, record spatial and stratigraphic information and recover artefacts and how these will help address the research design
- artefact retention policy, including how and why individual artefacts and types of artefact will be retained, discarded or sampled during the archaeological investigation
- artefact management proposal, including details of how recovered artefacts will be managed in the field and post-excavation.

A consent from Heritage Victoria will be required for works within City Ford archaeological area once the site has been listed on the VHI.

6.0 Precinct 5 – CBD North Station

6.1 Introduction

Previous predictive archaeological investigations of the central city in the *Melbourne Central Activities District: Archaeological Management Plan* (Fels et al., 1992) are reflected in the VHI sites in this location and show the CBD North Station precinct to be an area of very high potential for historical archaeology. There are 29 VHI sites within the CBD North station precinct. Of these, only four will be subject to project works as they are situated within the construction site on the corner of Swanston Street and La Trobe Street, and the alternative construction site option at 22-44 A'Beckett Street. The four sites are identified for their archaeological potential in Fels et al. (1992), and their history from various documentary sources (presented in Table 2).

Table 2 Summary of archaeological potential for individual sites

VHI no	Address	Archaeological potential and history
H7822-2128	204-206 La Trobe Street	<p>Potential (area)</p> <p>Buildings/businesses identified within this site on 1857 plan (building on La Trobe street frontage), 1864 directory (wholesale grocers, wine and spirit merchants), 1866 map (building on La Trobe Street frontage), 1873 rate books (brick store), 1873 directory (wholesale druggist), 1866 isometric plan (building), 1880 Panorama (two storey building), 1888 directory (carriage builders), 1890 rate books (brick store), 1890 directory (importers of carriage material), 1895 MMBW plan (building), 1901 directory (tinsmiths), 1920 directory (printers and stationers), 1925 Mahlstedt plan (two storey building), 1940 directory (printers), 1962 Mahlstedt plan (two storey building)</p>
H7822-2129	208-210 La Trobe Street	<p>Potential (area)</p> <p>Buildings/businesses identified within this site on 1857 plan (vacant), 1864 directory (vacant), 1866 isometric plan (possibly vacant), 1873 directory (ironworkers workshop), 1875 photo (building), 1880 Panorama (single storey building), 1888 directory (ironworkers), 1890 directory and rate book (cabinetmaker, brick house), 1895 MMBW plan (building), 1901 directory (ornamental iron worker, building and contractor), 1905 plan (single storey building), 1920 directory (ironworkers, 1925 Mahlstedt plan (single storey building), 1928 building application (two storey building – extant), 1940 directory (manufacturer's agent), 1962 Mahlstedt plan (two storey building - extant)</p>

VHI no	Address	Archaeological potential and history
H7822-2130	377-391 Swanston Street / 188-196 La Trobe Street	<p>Potential/disturbed</p> <p>Buildings/businesses identified within this site on 1857 plan (buildings on corner), 1857 directory (merchant, butchers, clothiers, upholsterer), 1864 directory (china dealer, ironmongers, fishmonger, tailor, dressmaker, stationer, solicitor, grocer), 1866 isometric plan (single storey buildings on corner), 1873 directory (manufacturers, fishmonger and oyster saloon, cane chairmaker), 1873 rate books (brick and stone shops), 1875 photos (single storey buildings), 1880 Panorama (indistinct), 1885 directory (printer and law stationer, financial agent, paint company, ironmonger), 1890 directory (printer, leather merchant, French polisher, oven manufacturer), 1890 rate books (stone stores), 1895 MMBW plan (buildings on corner), 1901 directory (wood turner, iron merchant, printer, metal spinner, wood carver, signwriter, machinist), 1905 plan (several single storey buildings), 1920 directory (wood turner, motor cycle importers, bootmaker, plumber, cycle manufacturer), 1925 Mahlstadt plan (three storey retail building – extant), 1940 directory (mantle manufacturers, tile manufacturers, frock manufacturers, hire/drive yourself service) tyre dealers, tea rooms, booth repair, chemist)</p>
H7822-2082	22-44 A'Beckett Street	<p>Potential (area)</p> <p>Buildings/businesses within this site on 1857 plan (buildings on streetfront), 1858 directory (baker, coach building, sawmills, timber yard, undertaker), 1864 directory (joiner, produce merchants, machine maker, plumber), 1866 plan (buildings on streetfront and along western boundary including smokestack), 1873 directory (timber merchants, shop and workshop, blacksmith, sheet lead and gas pipe manufacturers), 1873 rate books (brick shops and workshops, iron forge), 1885 directory (blacksmiths, carpenter, engineer, flock manufacturer, furniture factory), 1890 directory (workshops, refrigerator manufacturers, house, smithy, wood turners, furniture manufacturer), 1890 rate books (iron workshop, brick workshop, brick house, iron smithy, brick workshop with machinery), 1895 plan (multiple sheds and other buildings across entire site), 1910 directory (engineers, machinists, iron forge, cigar manufacturers), 1910 rate books (brick workshops, iron forge, brick warehouse), 1925 plan (tobacco manufacturer, including single storey office and box making building, and three and four storey manufacturing and warehouse buildings), 1927-28 plan (tobacco warehouse buildings), 1930 directory (tobacco and cigar manufacturers), 1930 rate books (brick offices, brick factory and frontage to Stewart Street), early 1960s plan (single, three and four storey buildings still on site), 1965 plan (car park), 1967 directory (car park).</p>

6.2 Historical research

6.2.1 *Swanston and La Trobe streets*

By the mid-1850s, the Swanston and La Trobe streets sites had been developed with a number of one and two-storey brick or stone buildings constructed to the street frontage, with a central laneway running parallel to La Trobe and Little La Trobe streets. These buildings were occupied by businesses including merchants, provision stores and light industry, such as ironmongers. The buildings at this time were simply detailed single-storey shops or store buildings built of stone to the corner of La Trobe and Swanston streets. These early buildings appear to have remained through the nineteenth century.

The sites retained a generally service and light industrial character into the twentieth century, with basket manufacturer, bootmaker, hardware merchants and furniture makers listed in the 1920 Sands & McDougall directory. However, by 1925, some nineteenth century buildings had been demolished and replaced with larger buildings. This includes the three-storey retail building at the corner of Swanston and La Trobe streets (H7822-2130), which appears not to have a basement. Further development of the sites and replacement of buildings was undertaken through the twentieth century, including the two-storey reinforced concrete factory building at 208 La Trobe Street (H7822-2129). Both of these buildings still stand.

6.2.2 *A'Beckett Street*

The A'Beckett Street site (H7822-2082) was originally sold in November 1849 as Crown Allotments 5, 6 and 7 of Section 38 of Melbourne. By the late-1850s, Stewart Street (along the eastern boundary of the construction site) had been formed and there were a number of small buildings fronting A'Beckett Street on the subject site. In 1858 there was a baker, saw mills and timber yard and an undertaker, as well as a single residence, in this section of A'Beckett Street. As the street numbering in this period is unclear, it is not known if all of these listings relate to the subject site, but are listed between Colgin Place and Stewart Street. The site had an early character of both light industrial and residential development. Such buildings were present in 1866 with two residences close to Stewart Street, and small factory and warehouse buildings adjacent. This light industrial and residential use of the site continued through the nineteenth century with workshops, forges, factories, sheds and residences being present.

Between 1910 and 1920, the subject site was acquired by the British and Australasian Tobacco Company, and the cigar manufacturers, States Tobacco Company. By 1925 the site had been developed with single-storey brick office and box making room, larger sawtooth roofed warehouses, and a laneway access from Stewart Street. A brick warehouse from the 1890s may have been extended in 1918 as part of this development, and is a three and four-storey building by 1925. A brick store was constructed in 1919, likely the building at the rear of the site. The company also owned two other buildings adjacent to the site, to the east of Stewart Street and fronting both A'Beckett and Swanston streets. The tobacco warehouse buildings on the subject site are still present in the early 1960s. After the departure of British and Australian Tobacco in the 1950s, W D & H O Wills tobacco merchants occupied the site until c. 1963.

In c. 1965, all buildings on the site were demolished and the site became used as a commercial car park, Westside Parking. In 2014, the car park site was redeveloped as the RMIT Urban Square, which includes sports courts and landscaping.

6.3 Predictive analysis

6.3.1 *Swanston and La Trobe streets*

The built form of the sites at 204-206 La Trobe Street, 208-210 La Trobe Street and 377-391 Swanston Street/188-196 La Trobe Street is predominantly twentieth century. However, given the lack of basements as shown on the 1962 Mahlstedt plans, there is potential for the archaeological remains of nineteenth century commercial and residential occupation of the sites.

This area comprises a history of commercial and light industrial occupation from the 1850s with a wide range of commercial/industrial activities taking place. The nineteenth century structures were replaced in around the 1920s with buildings that do not appear to have basements, therefore there is potential for archaeological remains from the mid-late nineteenth and early twentieth centuries to exist in this location.

The archaeological investigation of the remains will likely provide information on the initial settlement and of the evolution and alteration of the city through known historic phases of settlement, expansion, rapid growth, urbanisation, and other activity. The archaeological remains may be expected to record and reflect the processes of urban growth and development in Melbourne from the 1830s to the present.

6.3.2 A'Beckett Street

Given the early twentieth century development of A'Beckett Street site did not appear to have basement levels, and the lack of substantial development of the site after the demolition of these buildings in the 1960s, there is potential for the archaeological remains of both nineteenth and twentieth century light industrial and residential occupation of the site.

This area comprises a history of mainly light industrial with some residential occupation from the 1850s with a wide range of industrial activities taking place. The nineteenth century structures were replaced in the early twentieth century with buildings that do not appear to have basements, therefore there is potential for archaeological remains from the mid-late nineteenth to exist in this location. The early twentieth century buildings were demolished in the 1960s but have only been replaced with an open asphalted/concreted area with little subsurface construction. Therefore there is also potential for the remains of the early twentieth use and occupation of the site to exist.

The archaeological investigation of the remains will likely provide information on the initial settlement and of the evolution and alteration of the city through known historic phases of settlement, expansion, rapid growth, urbanisation, and other activity. The archaeological remains may be expected to record and reflect the processes of urban growth and development in Melbourne from the 1830s to the present.

6.4 Recommendations

As all four VHI sites are potentially subject to impacts from the proposed works, the preparation of an archaeological management plan is required to manage and mitigate impacts. The archaeological management plans will be prepared in accordance with *Guidelines for Investigating Historical Archaeological Artefacts and Sites* (Heritage Victoria 2014) and in consultation with Heritage Victoria. The archaeological management plan will include the following:

- description and background history of archaeological area
- statement of significance of archaeological area, in accordance with *Guidelines for Conducting Historical Archaeological Surveys* (Heritage Council of Victoria and Heritage Victoria 2008), *Criteria for Assessing Cultural Heritage Significance* (Heritage Council of Victoria 2008) and *Victoria's Framework of Historical Themes* (Heritage Council of Victoria 2010)
- research design, including research questions which will be addressed as a result of the archaeological investigations
- excavation methodology, including method to be used to excavate deposits, record spatial and stratigraphic information and recover artefacts and how these will help address the research design
- artefact retention policy, including how and why individual artefacts and types of artefact will be retained, discarded or sampled during the archaeological investigation

- artefact management proposal, including details of how recovered artefacts will be managed in the field and post-excavation.

It is recommended that the adjoining VHI sites in Swanston and La Trobe streets be treated as a single archaeological area, and the A'Beckett Street HI site be treated as a second archaeological area, and an archaeological management plan for each be developed. Heritage consents will be required to be obtained from Heritage Victoria for all four properties with the two designated archaeological areas.

7.0 Precinct 6 – CBD South Station

7.1 Introduction

Previous predictive archaeological investigations of the central city in the *Melbourne Central Activities District: Archaeological Management Plan* (Fels et al., 1992) are reflected in the VHI sites in this location and show the CBD South station precinct to be an area of very high potential for historical archaeology. There are 34 VHI sites within the CBD South station precinct.

In addition to the identified sites, the Fels archaeological management plan references the potential presence of early service infrastructure in the central city and recommended further work be completed on the identification of related structures and features. Extensive services infrastructure is known to exist below Swanston Street including a telecommunications tunnel, and this will require investigation. Of relevance it is noted that recent tramways works in Collins Street uncovered a late nineteenth/early twentieth century brick sewer pit.

Of the 34 VHI sites in the precinct, only eight will be subject to project works as they are situated within the construction site on the corner of Swanston Street and Flinders Street, the potentially included site at 65-73 Swanston Street and within the roadway reserve of Flinders Street. The eight sites are identified for their archaeological potential in Fels et al. (1992), and their history from various documentary sources (presented in Table 3).

Table 3 Summary of archaeological potential for individual sites

VHI no	Address	Archaeological potential and history
H7822-1904	9-11 Swanston Street	<p>Potential (area).</p> <p>Buildings identified within this site on 1839 plan, 1864 directory and rate book (ironmongers, large stone store, 2 floors), 1866 isometric plan (two storey building), 1873 directory and rate book (ironmongers, stone store, 3 floors), 1875 and 1877 Plans (three storey building on streetfront and single storey building at rear, Whitney, Chambers and Co Ironmongers), 1885 directory (architect, wholesale grocers and wine and spirit merchant), 1888 plan (two storey building on streetfront, two storey and one storey buildings at rear, Warehouseman’s Trading Co), 1890 directory and rate book (architect, contractors, trading company, brick office, brick shop), 1901 directory (dentist, office, draper), 1905 plan (two x two storey buildings), 1910 and 1925 plans (two storey building on streetfront, one storey and three storey buildings at rear, no basements, JJ Foster Dentist), 1948 plan (two storey building across whole allotment), current building (three storeys).</p>

VHI no	Address	Archaeological potential and history
H7822-1905	13 Swanston Street	<p>Remnant Structure, Potential (area).</p> <p>Buildings identified within this site on 1839 plan (building), 1864 directory and rate book (wine, spirit and produce merchant, Freemasons Hotel, stone store, 2 floors), 1866 isometric plan (two storey building), 1873 directory and rate book (wine and spirit merchants, fish and oyster saloon, architects, surveyors, Freemasons Hotel, stone store with 2 floors and cellars, brick hotel), 1875 plan (three storey building on streetfront, three storey building with side yard, and one storey building at rear, Freemasons Hotel), 1877 plan (three storey building), 1885 directory (grocers, wine and spirit merchants, Gippsland Hotel), 1888 plan (two storey building on streetfront, three storey, one storey and two storey building at rear, Gippsland Hotel), 1890 directory (Gippsland Hotel), 1895 plan (Gippsland Hotel), 1905 plan (two storey building), 1901 directory (Gippsland Hotel), 1910 plan (two storey building, with partial basement), 1925 plan (two storey building with partial basement, Bates Sweet Shop), 1948 plan (two storey building with partial basement).</p>
H7822-1906	15-19 Swanston Street	<p>Potential (area).</p> <p>Buildings identified within this site on 1839 plan (building), 1864 directory and rate books (wholesale grocers, land agents, solicitors, brick store with offices over), 1866 isometric plan (two storey buildings), 1873 directory (solicitor and commissioner), 1875 plan (two x two storey buildings on streetfront, combination of three x two storey, and one x one storey buildings at rear, N McLean & Sons, Pownceby Books), 1877 plan (two x three storey buildings), 1885 directory (printers, pork butcher), 1888 plan (two x two storey buildings on streetfront, one x one storey building, and one x two storey building at rear, N McLean and Sons Merchants, H Hearne Pork Butcher), 1890 directory and rate books (one building vacant, grocers, brick shop and offices, brick warehouse), 1895 plan (part basements), 1901 directory (printer and publisher, tea and coffee merchants, wholesale grocers), 1910 plan (two x two storey buildings across allotment), 1925 plan (two x two storey buildings across allotment, Lyons Continental Café, Hearne Butcher), 1948 plan (two x two storey buildings with one three storey section).</p>

VHI no	Address	Archaeological potential and history
H7822-1907	21-25 Swanston Street	<p>Potential (area).</p> <p>Buildings identified within this site on 1857 plan (building), 1864 directory and rate books (wholesale grocer, Bible and Tract Societies, large store and offices), 1866 isometric plan (three storey building), 1873 directory (wholesale grocers, wine and spirit merchants), 1875 plan (two x two storey buildings at streetfront, two x one storey buildings and yards at rear, Lyell and Brown Grocers, Book Depot), 1885 directory (wholesale grocers, wine spirit and provision merchants), 1888 plan (two x two storey buildings on streetfront, three one storey buildings at rear, RG Wilson and Co, Religious Tract Society), 1890 directory and rate books (Religious Tract Society, Queen Building Society, whole sale grocers, brick shop, stone warehouse), 1895 plan (building with small shed at side rear), 1901 directory (fruiterers, hat shop, wholesale grocers, pork butcher), 1910 plan (two x two storey buildings at streetfront, two x one storey buildings at rear), 1925 plan (two storey building at streetfront, one storey building at rear, Criterion Cafe), 1948 plan (two storey buildings at streetfront, one storey across rest of site, partial basement).</p>
H7822-1908	27-41 Swanston Street / 221-235 Flinders Lane (part – 27 Swanston Street only)	<p>Potential, partially disturbed.</p> <p>Buildings identified within this site (27 Swanston Street only) on 1857 plan (building), 1864 directory and rate books (Leeds Arms Hotel, brick house, late Beehive Hotel), 1866 isometric plan (three storey building), 1874 directory and rate books (Religious Tract Society of Victoria, Fishmongers Arms Hotel), 1875 plan (three storey building on streetfront, two x one storey buildings in middle, and three storey building at rear, Stewart's Hotel), 1885 directory (glass and china importer, Bell Hotel, Religious Tract Society), 1888 plan (one x three storey building on streetfront, three x one storey buildings at rear), 1890 directory and rate books (MA Alexander tobacconist, four vacant floors, brick shop and offices), 1895 plan (one building across entire allotment with cellar under whole of building), 1901 directory (tobacconist, auctioneer and estate agent, importer, manufacturers agents), 1910 plan (five storey building with basement), 1925 photograph (MA Alexander building, five storeys), 1925 plan (five storey building, Alexander Buildings), 1939 (Alexander Building demolished), 1948 plan (three storey building with basement).</p>

VHI no	Address	Archaeological potential and history
H7822-1959	Flinders Street (Near Batman's Hill to Exhibition Street) (part)	<p>Potential (area).</p> <p>Early maps indicate:</p> <p>Presence of Pre Grid settlement within the (later) road corridor</p> <p>Batman's Privy (west of Spencer Street)</p> <p>Surveyors' tents</p> <p>Armstrong house/yards</p> <p>Additional potential:</p> <p>For significant services (hydraulics, water etc); known to include 1854 water pipe from Eastern Reservoir</p> <p>Potential for other (undocumented) peripheral structures (privies, pits etc)</p>
H7822-1811	65 Swanston Street	<p>Buildings identified within this site in 1864 directory and rate books (two brick shops and eight rooms), 1866 isometric plan (two storey building), 1873 directory and rate books (plumber and exporter), 1875 plan (two storey building), 1885 directory (café), 1890 directory and rate books (café/restaurant, brick building), 1901 directory (confectioner), 1904 advertisement (construction of three storey brick shops across 65 and 67-73), 1910 plan (three storey buildings with basement level), 1920 directory and rate books (café, brick building), 1950 newspaper (adjoining 67-73 damaged in explosion and demolished), current building (three storey with basement level).</p>

VHI no	Address	Archaeological potential and history
H7822-1812	67-73 Street Swanston	Buildings identified within this site in 1864 directory and rate books (commercial chambers including solicitors, tailor, engravers, architect, house agent, and wine and spirit merchant, druggist, wholesale provision merchants, fruiterers), 1866 isometric plan (three storey buildings), 1873 directory and rate books (commercial chambers including book binders, engraver and import/export company, and hotel, warehousemen and importers, alcohol merchants), 1875 plan (three storey buildings), 1885 directory (solicitor, architects, surveyors, estate agents, hotel, boot importer, piano and organ importer), 1890 directory and rate books (brick shops, hotel and offices, boot importer, optician, cigarette manufacturer, land agents, billiard saloon, hotel), 1901 directory (bootmaker, oyster saloon and dining rooms, land agents, hotel), 1904 advertisement (construction of three storey brick shops across 65 and 67-73), 1910 plan (three storey buildings with basement level), 1920 directory and rate books (brick shops, brick hotel, boot manufacturers, tailor, hotel), 1950 newspaper (building damaged in explosion and demolished, adjoining no 65 retained), 1950s plans (eight storey building with two basements and a sub-basement), current building (eight storeys with basements).

The properties from 9 to 27 Swanston Street and 65 to 73 Swanston Street are listed on the VHI (Figure 26).



Figure 26 Hermes map of CBD South precinct showing VHI sites in in green, and subject sites indicated by red line
Source: Heritage Victoria, Land Victoria base

7.2 Historical research

7.2.1 9-27 Swanston Street

By the mid-1850s this area was occupied by a number of buildings of varying size. The area had a mixed commercial character with businesses including grocers, wholesale merchants, hotels, stores and offices occupying the buildings. By 1863 there were four large store buildings on the block, which were occupied by wholesale merchants, including grocers and wine dealers. A number of solicitors and agents occupied the top floor of what was then no. 13, now no. 15 Swanston Street. Two hotels had also been established. In 1888 most of the buildings were of two storeys, aside from the hotel at the 23 Swanston Street which comprised three storeys. At this time there were also a number of additions to the buildings at the rear, of varying heights, from one to three storeys.

By 1890, the area had assumed a more broadly retail character, although stone warehouses remained. Businesses included tobacconists, grocers, and hotels, with M Alexander's five-storey building at no. 27, apparently recently constructed, with offices still vacant. Plans from 1895 indicate the location of cellars at the Gippsland Hotel (no. 13), nos 15, 19 and 27, and under the whole of the Alexander Building.

From 1910 through to 1925 there was some consolidation of rear buildings, but the area still retained its predominantly nineteenth century built form. The five storey Alexander Building (27 Swanston Street)

was demolished in 1939. In 1940 a three storey building was constructed in place of the Alexander Building. The two-storey building at 21-25 had also been replaced by this time. A new building was constructed at no. 9-11, which has since been altered with the addition of another level. None of these new buildings appear to have incorporated a basement. The extant building at 13 Swanston Street, the former Gippsland Hotel, appears to date from the early twentieth century. The buildings at nos 15-19 were replaced in 1983. As these six sites are listed on the VHI, they are deemed to be of heritage significance.

7.2.2 65-73 Swanston Street

The current buildings at this site include one extant shop of a former four-shop row from 1904 and the former Town Hall Hotel, constructed in c. 1954.

In the nineteenth century, this site comprised a number of commercial premises (shop, warehouse) with offices over, and a hotel which was established as early as the mid-1860s. These were three-storey buildings at numbers 67-73 and two-storey building at number 65, in a generally two-storey streetscape. In 1875 the site was occupied by a cafe (no. 65), warehouse (no. 67-69) and the Town Hall Hotel (no. 71-73). The property at no. 65 remained a café in the 1880s and 1890s. Occupants at the properties at nos. 67-73 in the latter part of the nineteenth century included solicitors, architects, agents, boot importers, and cigarette manufacturers. In 1895 a brick restaurant is listed at no. 65, brick shops at nos 67-69 and the Town Hall Hotel and offices at no. 73.

In 1904, architects Hyndman & Bates advertised that tenders had been accepted for the construction of brick premises at 65-73 Swanston Street. The extant building at 65 Swanston Street is a remnant part of the row of four three-storey brick shops at nos 65-73 which was owned by Sir Samuel Gillott, a former mayor of the City of Melbourne and minister for Labor under Thomas Bent. During demolition of what were reportedly 'some of the oldest shops in the city', a large brick oven was found below the footpath (Figure 27). The shops were each of three storeys with a basement level. In 1910 the Town Hall Hotel was situated in the northernmost shop at no. 71-73, and occupied the upper levels of no. 69. Retail outlets, including tailor, boot shop, oyster saloon, confectioner and cafe, variously operated from the ground level shops.

No major alterations to this building appear to have taken place in the early twentieth century however by 1925 the Town Hall Hotel had taken over the shops at nos 67-73, with no. 65 remaining separate premises. Although a 1925 plan shows no. 65 as a separate building to no. 67-73, this does not appear actually to be the case in photographic evidence from 1950, shows the row of shops as generally intact to their 1904 construction design.

In 1950, a gas leak was believed to have caused an explosion which significantly damaged the Town Hall Hotel. Three of the four buildings in the row were demolished to make way for a new hotel building. By the 1950s the new hotel building is described as eight storeys, with two basements and a sub-basement. Although alterations have since been made at ground level to both buildings at no. 65 and no. 67-73, both buildings remain generally intact externally.



Figure 27 Brick oven located during construction works, 1904
Source: *Leader*, 16 April 1904, p. 33

7.3 Predictive analysis

7.3.1 9-27 Swanston Street

The properties from 9-27 Swanston Street are listed on the VHI. This area comprises a history of commercial and retail occupation from the 1850s with a wide range of activities taking place. Most of the nineteenth century structures were replaced in around the 1920s with buildings that do not appear to have basements. Later development occurred in the 1930s-1940s with a new building with a basement at 27 Swanston Street, and in the 1980s with a new building at 15-19 Swanston Street. While the archaeological potential will vary across the site, there is potential for archaeological remains from the mid-late nineteenth and early twentieth centuries to exist in this location.

The archaeological investigation of the remains will likely provide information on the initial settlement and of the evolution and alteration of the city through known historic phases of settlement, expansion, rapid growth, urbanisation, and other activity. The archaeological remains may be expected to record and reflect the processes of urban growth and development in Melbourne from the 1830s to the present.

7.3.2 65-73 Swanston Street

The two properties from 65-73 Swanston Street are listed on the VHI. By the 1860s the site was generally commercial in nature including shops, cafes and hotel, followed later by solicitors, architects, importers and manufacturers offices. The sites remained as commercial and retail premises even after reconstruction of the site in 1904. An earlier subsurface brick oven was found during these construction works, but presumably destroyed when a basement level was constructed as part of the works. Following a gas explosion in 1950, significantly damaged buildings at 67-73 Swanston Street were replaced with an eight storey building with two basements and a sub-basements.

Based on the construction of a basement level at no 65 and two basements and a sub-basement at no 67-73 it would be unlikely that archaeological evidence dating from pre-1904 would still remain at the sites. Physical investigation of the basements levels at both 65 and 67-73 Swanston Street have not

been undertaken as part of this assessment, however such inspection could reveal the presence of archaeological evidence from later periods.

The archaeological investigation of the sites will likely provide information on the twentieth century development of the city including urbanisation and other activities, from the early twentieth century to the present.

7.3.3 Flinders Street HI site

Early maps indicate the presence of settlement prior to the Hoddle Grid current street layout, which may now occur within the current road corridor of Flinders Street. While a range of potential structures are indicated along the entire length of Flinders Street, those of particular relevance to the proposed works area include two buildings near the corner of Swanston Street, significant services (hydraulics, water etc) and other peripheral undocumented structures such as privies and pits. While road and tram construction may have damaged or destroyed earlier evidence, there is potential for archaeological remains dating to the earliest non-Aboriginal settlement of Melbourne to occur.

The archaeological investigation of the remains will likely provide information on the initial settlement and of the evolution and alteration of the city through known historic phases of settlement, expansion, rapid growth, urbanisation, and other activity. The archaeological remains may be expected to record and reflect the processes of urban growth and development in Melbourne from the 1830s to the present.

7.4 Recommendations

As all eight VHI sites are subject to impacts from the proposed works, the preparation of an archaeological management plan is required to manage and mitigate impacts. The archaeological management plans will be prepared in accordance with Guidelines for Investigating Historical Archaeological Artefacts and Sites (Heritage Victoria 2014) and in consultation with Heritage Victoria. The archaeological management plan will include the following:

- description and background history of archaeological area
- statement of significance of archaeological area, in accordance with Guidelines for Conducting Historical Archaeological Surveys (Heritage Council of Victoria and Heritage Victoria 2008), Criteria for Assessing Cultural Heritage Significance (Heritage Council of Victoria 2008) and Victoria's Framework of Historical Themes (Heritage Council of Victoria 2010)
- research design, including research questions which will be addressed as a result of the archaeological investigations
- excavation methodology, including method to be used to excavate deposits, record spatial and stratigraphic information and recover artefacts and how these will help address the research design
- artefact retention policy, including how and why individual artefacts and types of artefact will be retained, discarded or sampled during the archaeological investigation
- artefact management proposal, including details of how recovered artefacts will be managed in the field and post-excavation.

It is recommended that the two sets of adjoining VHI sites be treated as two archaeological areas, and Flinders Street HI site be treated as a third archaeological area, and an archaeological management plan for each be developed. Heritage consents will be required to be obtained from Heritage Victoria for all eight properties with the three designated archaeological areas.

8.0 Precinct 7 – Domain Station

8.1 Introduction

There are two VHI sites within the Domain station precinct – Former St Kilda Road Tram Engine House Track Precinct (H7822-2220) and the associated Engine House (H7822-2246). Additionally consideration is made of areas within the Domain station precinct for the physical potential for archaeological remains – the corner of St Kilda Road and Domain Road (within the Shrine of Remembrance Reserve) and the St Kilda Road road reserve.

8.2 Historical research

8.2.1 *St Kilda Road Tram Engine House and Track Precinct*

The first type of tram that was in use in Melbourne was the horse tram, however, due to their inefficiencies, these were replaced with cable trams in 1883. The Melbourne Tramways Trust was created to build tracks and powerhouses the same year. The cable trams were based on the designs by Andrew Hallidie for the San Francisco network, which commenced operating in 1873. Each of the tram sets had two cars; the front car was open and contained the mechanism which would connect the tram to the cable which was below the road surface. The cable moved continuously, driven by the cable tram engine houses, so the tram driver was required to connect and disconnect from the cable to allow the tram to stop, cross other tram lines and to turn corners. The trams were able to continue moving for short distances using momentum, without being connected to the cable. To construct infrastructure for the cable trams, the road had to be excavated to a depth of 4 feet (1.2 m) and tunnels were constructed to house the cables running in both directions (Carroll 2001, Yarra Trams 2015). The Brighton cable tram route (running along St Kilda Road and Brighton Road) which was run from the engine house on the corner of St Kilda Road and Bromby Street was opened in October 1888, the same month as the Prahran route (running along Swanston Street, St Kilda Road, Domain Road, Park Street, Toorak Road and Chapel Street) (Vines 2011).

The VHI citation for the Former St Kilda Road Tram Engine House Track Precinct notes that ‘the remains in the tram track precinct are highly significant as they display how Melbourne’s cable tram system operated’). The site has potential to contain significant nineteenth century archaeological remains such as double tram tracks, wood blocked and/or stone setts paving, deep concrete cable tunnels centred under each track, inspection manholes and cast iron covers, large brick pits for the historical sheaves and possibly traces of equipment (VHI citation, H7822-2220). While the cable trams had long since been replaced by electric trams, the cable pit in St Kilda Road was still present below the ground surface in 1925, with the eastern section of the pit not filled in until 1941 (Figure 28).

While the site of the actual St Kilda Road Tram Engine House, adjacent to the Track Precinct, is no longer extant, the original walls of the engine house were incorporated into the VHR listed Former Kellow Falkiner Showrooms (VHR H0668) (currently Royce Hotel) (The Argus, 5 Nov 1928). Based on potential at other tram engine houses in Melbourne, and 1896 MMBW plans (Figure 29), the site has archaeological potential for nineteenth century remains including deep brick lined pits, cable races, and foundations of other features such as chimney stack, well and weigh bridge.

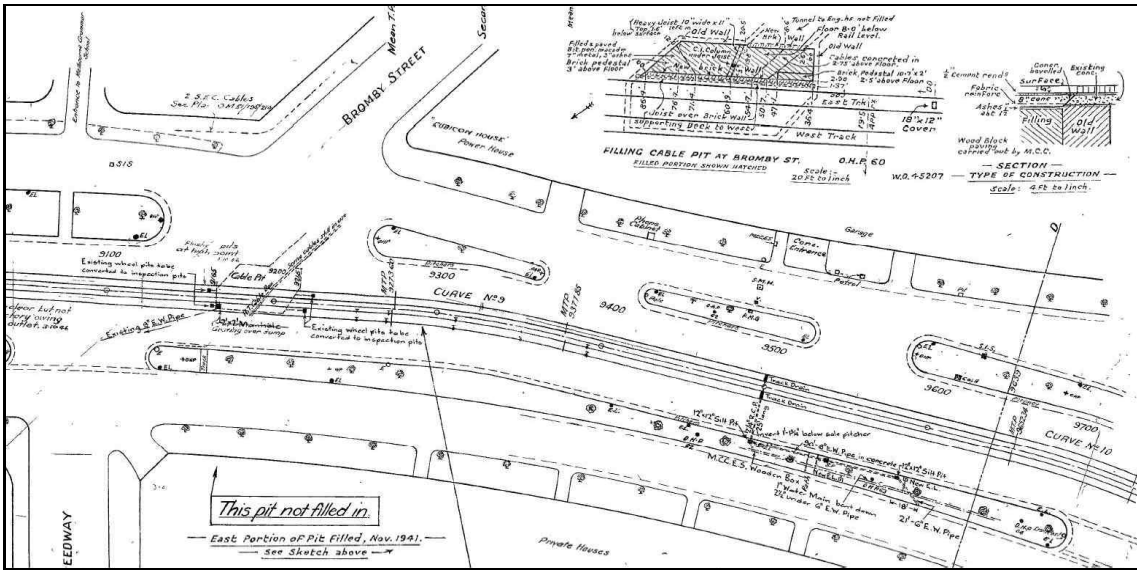


Figure 28 Melbourne and Metropolitan Tramways Board (MMTB) plans, June 1925 (PTV P411_039P)
 Source: Public Transport Victoria Drawing Management System

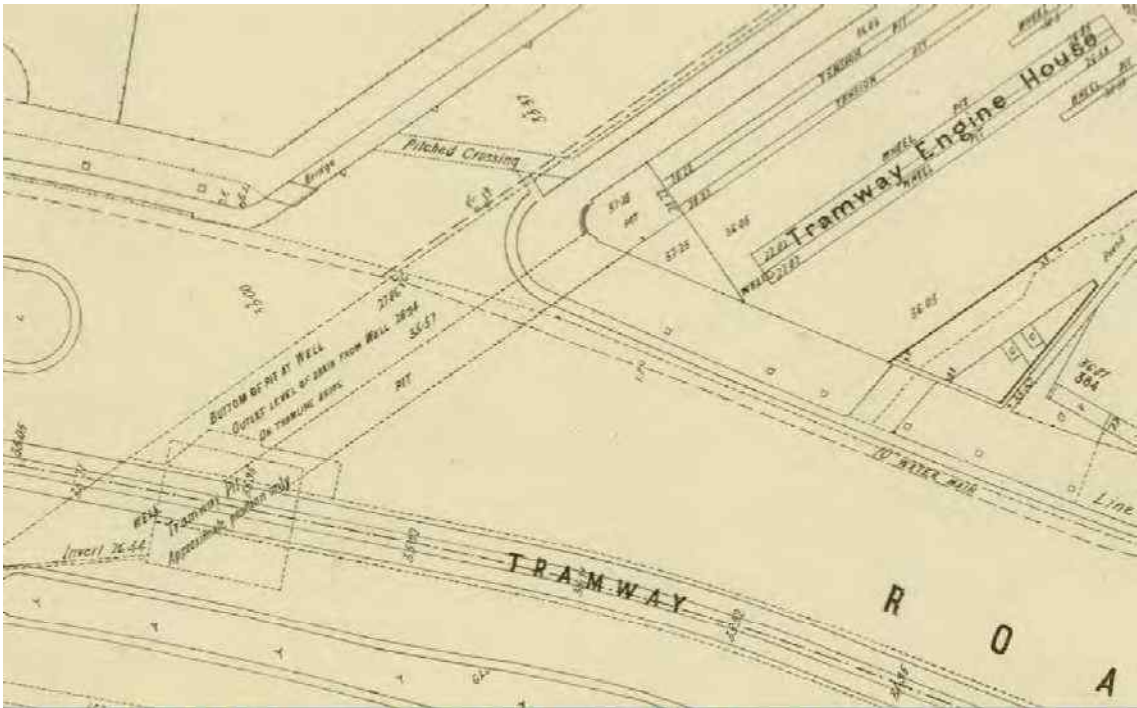


Figure 29 Melbourne Metropolitan Board of Works (MMBW) detail plans 896 and 897 of St Kilda Road Cable Tram infrastructure, 1896
 Source: State Library of Victoria

8.2.2 Domain Road and St Kilda Road intersection – The Grange

A large residence was built on the corner of Domain Road and St Kilda Road in 1866 for the Commanding Officer of Her Majesty's Forces in Australia, Major General Chute. This was sold into private ownership in 1871 and later became known as the Grange. The Government Astronomer's Residence was to the north of this allotment (Figure 30-Figure 33). By the early twentieth century the Grange was a deserted mansion and in 1912 the Government purchased the property and reserved it as public parkland. The mansion was demolished and the site was graded with 1,200 loads of clay and soil being removed, and a triangular area cut off at the corner of St Kilda Road and Domain Road (John Patrick and Allom Lovell and Associates 2003:11, 29).

8.3 St Kilda Road road reserve

The alignment of the present St Kilda Road was known in the late-1830s as Baxter's Track, a reference to Captain Baxter, Melbourne's first postmaster. The route between Melbourne and St Kilda (township proclaimed in 1842) remained a rough unmade track until the 1850s. By the mid-1860s, St Kilda Road in the vicinity of the Domain Station precinct included the Observatory (to the north-east of the site, within the present Shrine Reserve) and Melbourne Grammar School (established in this location in 1858), with the 'Military Barracks' (Victoria Barracks) to the north. The principal east-west roads were established by this time, including Toorak Road (known as Gardiners Creek Road), Domain Road and Albert Road.

St Kilda Road was the route for the earliest establishment of cable trams including the Prahran route and the Brighton route from 1888. The MMTB plan from 1941 (Figure 34) shows the proposal to fill in the original cable tunnels in reconstructing the tram track construction at approximately 4 feet (1.2 m) below the road surface.

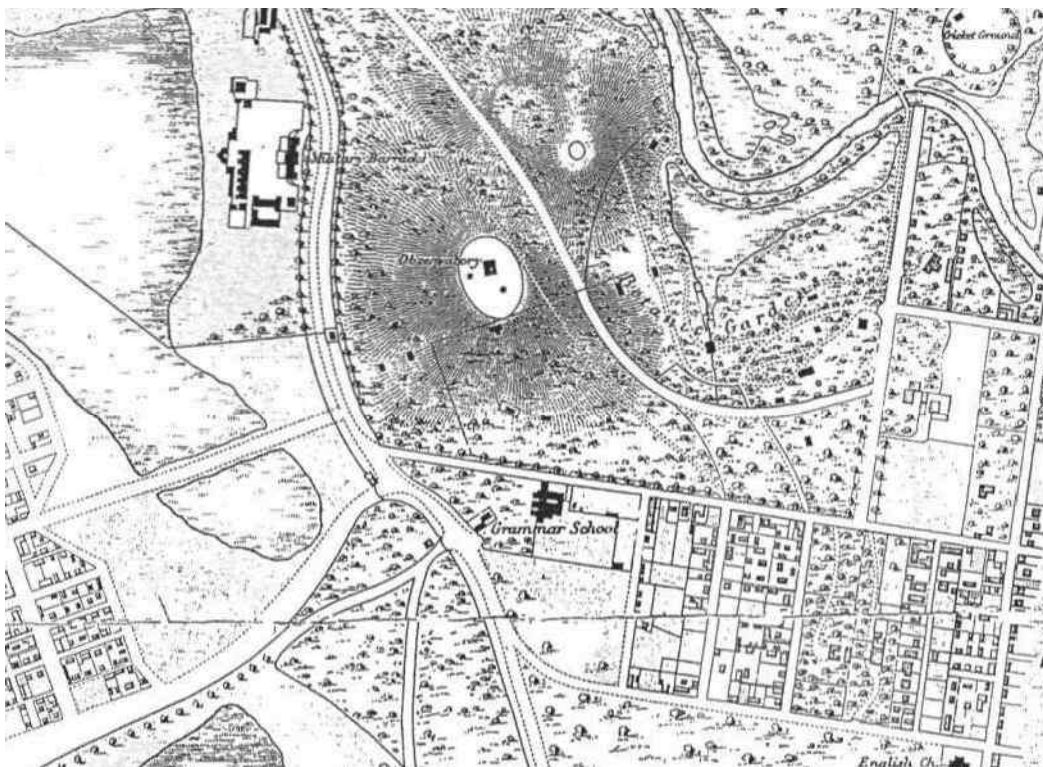


Figure 30 1866 plan of Hobson Bay and River Yarra leading to Melbourne, surveyed by H.L. Cox, at the location of the Domain station site
Source: State Library of Victoria Maps Collection



Figure 31 1885 Sands & McDougall's Directory Map of Prahran, showing development in the Botanic Gardens and along the east side of St Kilda Road, adjoining Fawcner Park: The Grange is indicated
 Source: State Library of Victoria Maps Collection

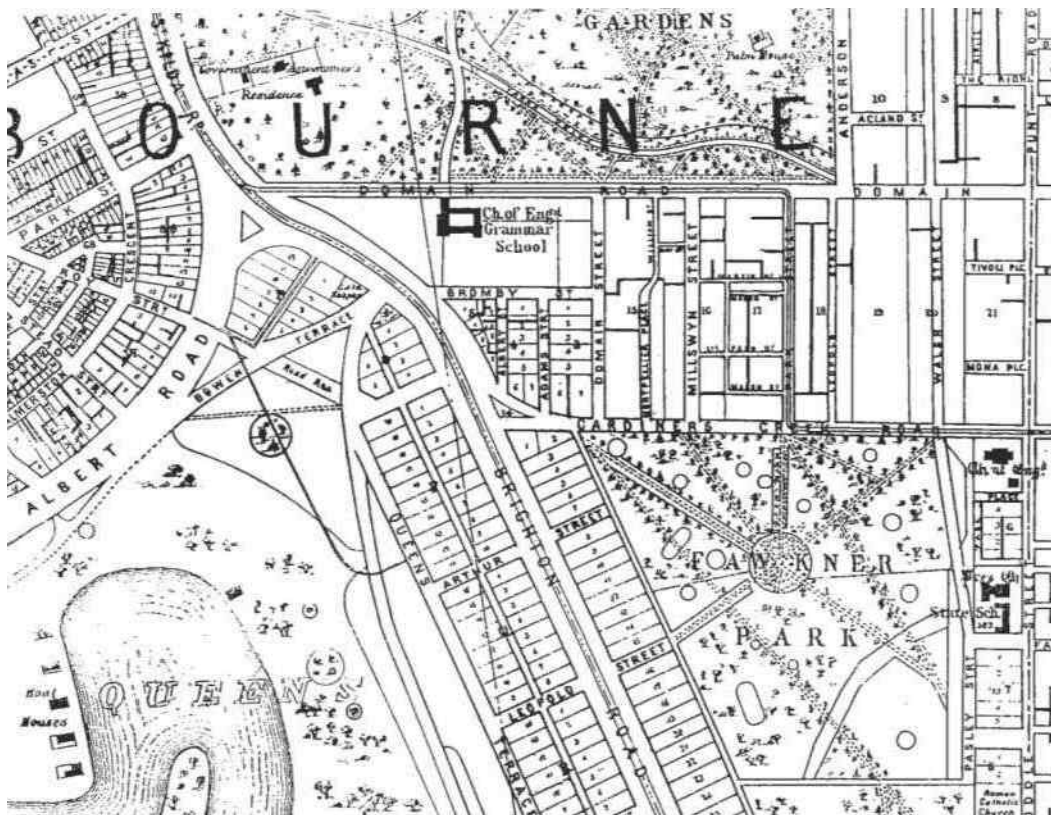


Figure 32 1888 Plan of Melbourne and Suburbs showing the location of the Government Astronomer's Residence in the south-western corner of the Botanic Gardens
 Source: State Library of Victoria Maps Collection



Figure 33 c. 1894 MMBW Plan No. 21, South Melbourne and Melbourne, showing the Botanic Gardens and the north side of Domain Road: The Grange is indicated
Source: State Library of Victorian Maps Collection

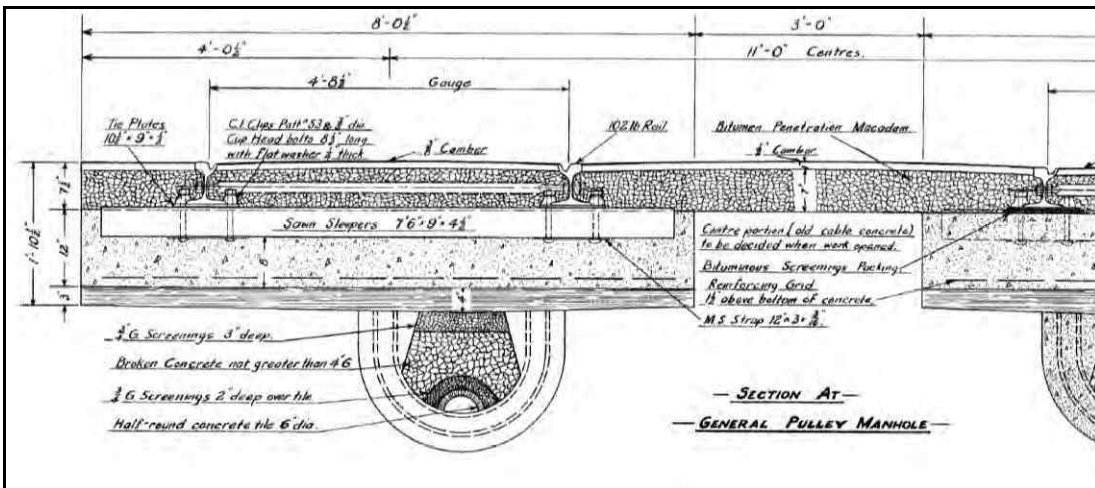


Figure 34 MMTB plan, 1941, reconstruction St Kilda Road between Park Street and St Kilda Road Junction (PTV P9032_049C).
Source: Public Transport Victoria Drawing Management System

8.4 Predictive analysis

8.4.1 St Kilda Road Tram Engine House and Track Precinct

The site has potential to contain significant nineteenth century archaeological remains such as double tram tracks, wood blocked and/or stone setts paving, deep concrete cable tunnels centred under each track, inspection manholes and cast iron covers, large brick pits for the historical sheaves and possibly traces of equipment. Some of this physical evidence may also extend into the engine house boundary in the adjacent footpath.

The remains in the tram track precinct and associated engine house are highly significant as they have the potential to provide information on how Melbourne's cable tram system operated

8.4.2 Domain Road and St Kilda Road intersection – The Grange

The Domain station precinct, the Tunnel precinct and the associated construction site overlap the southern corner of the Shrine of Remembrance (VHR H0848), close to the intersection of Domain and St Kilda Roads, including the location of The Grange. Completed in 1934, the Shrine of Remembrance is included in the VHR to the full extent of the Shrine Reserve. Considerable earthworks were required to create the gradual rise from St Kilda Road, and the design necessitated the removal of some of the original planted trees to create the axial approaches to the Shrine (John Patrick and Allom Lovell and Associates 2003:33). The construction of the Shrine's base required thousands of tons of earth to be moved with the initial works apparently being confined to raising a central area of ground for the construction of the Shrine. The landscaping proper was undertaken after the construction was completed. A steep embankment ran along the western side along St Kilda Road, above which the land rose gently to the east (Lovell Chen 2010:17, 51). Due to the disturbance from the demolition of the Grange and later construction of the Shrine of Remembrance, there is unlikely to be any physical archaeological remains of The Grange still present.

8.4.3 St Kilda Road road reserve

There is the potential for cable tram structures still to be present in the St Kilda Road road reserve. There is also the potential for evidence of earlier road treatments.

As one of the early major thoroughfares in Melbourne and the early construction of cable tramways, St Kilda Road is of historical significance. The presence of evidence of early road and tram infrastructure has the potential to provide information about the technology, construction and operation of the cable tramway, and of early road construction.

8.5 Recommendations

There is no archaeological potential at the Grange site, therefore no further recommendations for further assessment or management.

The St Kilda Road road reserve archaeological area was recommended for inclusion and subsequently included in the VHI for its archaeological values (H7822-2341). As such the site must be managed and protected during construction (Figure 35). The St Kilda Road road reserve is potentially subject to impacts from the proposed works, therefore the preparation of an archaeological management plan is required to manage and mitigate impacts. Likewise, an archaeological management plan is required for the St Kilda Road Tram Engine House and Track Precinct. The archaeological management plans will be prepared in accordance with *Guidelines for Investigating Historical Archaeological Artefacts and Sites* (Heritage Victoria 2014) and in consultation with Heritage Victoria.

The archaeological management plan will include the following:

- description and background history of archaeological area
- statement of significance of archaeological area, in accordance with Guidelines for Conducting Historical Archaeological Surveys (Heritage Council of Victoria and Heritage Victoria 2008), Criteria for Assessing Cultural Heritage Significance (Heritage Council of Victoria 2008) and Victoria's Framework of Historical Themes (Heritage Council of Victoria 2010)
- research design, including research questions which will be addressed as a result of the archaeological investigations
- excavation methodology, including method to be used to excavate deposits, record spatial and stratigraphic information and recover artefacts and how these will help address the research design
- artefact retention policy, including how and why individual artefacts and types of artefact will be retained, discarded or sampled during the archaeological investigation

- artefact management proposal, including details of how recovered artefacts will be managed in the field and post-exavation.

Heritage consents will be required to be obtained from Heritage Victoria for the designated archaeological areas.



Figure 35 Hermes map of St Kilda Road Reserve showing VHI sites in in green, with subject site indicated by arrow
Source: Heritage Victoria, Land Victoria base

9.0 Precinct 8 – Eastern Portal (South Yarra)

9.1 Introduction

There are no identified archaeological sites on the VHI within the eastern portal precinct.

Despite this, the historical archaeological potential of the area has been considered in the South Yarra Siding Reserve, situated north of Arthur Street, South Yarra and between the Sandringham railway line and Frankston/Cranbourne/Pakenham railway line.

9.2 Historical background

Melbourne's railway network was established during the 1850s by private companies, and the South Yarra Railway Station (then known as Gardiner's Creek Road Station) was in operation by the end of 1860. The creation of the rail line through from Gippsland was completed in 1879, with the expansion of the railway line resulting in the removal of a number of dwellings – which had been constructed between Osborne and William Streets by the mid-1850s – and in cuttings within the rail reserve.

From 1855 allotments to the south of Toorak Road were developed with a mix of large properties and small cottages (Figure 36). The land on which the 1860 railway line to Windsor (Sandringham line) was constructed was undeveloped, aside from one small building. The later line to Oakleigh (Frankston/Cranbourne/Pakenham line), developed in the 1870s, required the demolition of a number of residences (Figure 37). The land now forming the South Yarra Siding Reserve was similarly undeveloped in 1855. On William Street at this time, there were two small outbuildings to residences, and the garden to the rear of the property fronting Toorak Road, all of which were apparently removed as part of the 1870s railway development.

Following the construction of the railway lines, the Victorian Railway Commissioners sold excess rail reserve land, which saw the formation of the northern end of Portland Place and additional residential allotments (Figure 38, Figure 39). From 1884 until at least the mid-1970s, the South Yarra Siding Reserve was occupied by asphalt tennis courts.

South Yarra (later Royal South Yarra) Tennis Club was established in late 1884, after the Melbourne Cricket Club had constructed an asphalt court in 1878 and the Geelong Lawn Tennis Club was established in 1882. An agreement was reached with the Victorian Railways Commissioners in December 1884 for a parcel of land to be leased by the South Yarra Lawn Tennis and Bowling Club 'from year to year', for the purpose of a tennis ground and bowling green. The three asphalt courts were opened on 31 January 1885, and a timber pavilion, comprising two dressing rooms and a committee room, was constructed in 1891. The club was based at the site until the early 1920s, when it purchased land in Verdant Avenue, which could accommodate additional courts and facilities.

By 1896 the tennis courts were located at the end of Portland Place, with the pavilion and another outbuilding to the north (Figure 40, Figure 41). The South Yarra tennis club did not undertake any further development of the site prior to their move to Verdant Avenue. By 1945 the location of tennis courts had been rearranged within the reserve, with two located immediately to the west of the railway line, and another to the north of the earlier courts (Figure 42). The original pavilion and outbuilding were demolished by this date, and work was undertaken on the early courts, appearing as a large flat area. The site continued to be used for tennis into the 1970s. By the early 2000s the tennis courts had been removed and it had been converted to the South Yarra Siding Reserve.

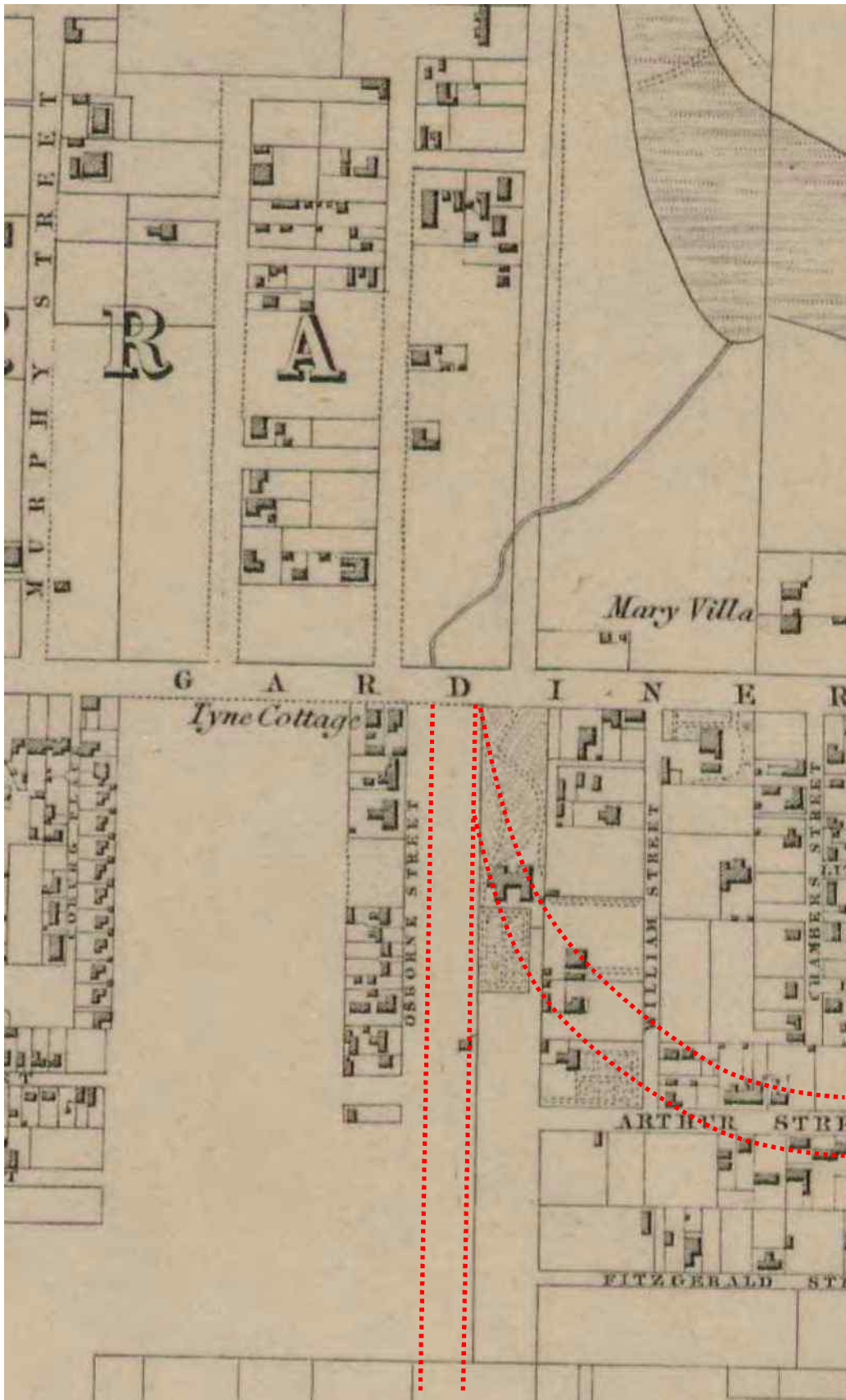


Figure 36 Kearney plan of 1855, showing development in South Yarra north and south of Toorak Road (then Gardiners Creek Road); approximate location of later rail reserves indicated by red lines
 Source: State Library of Victoria

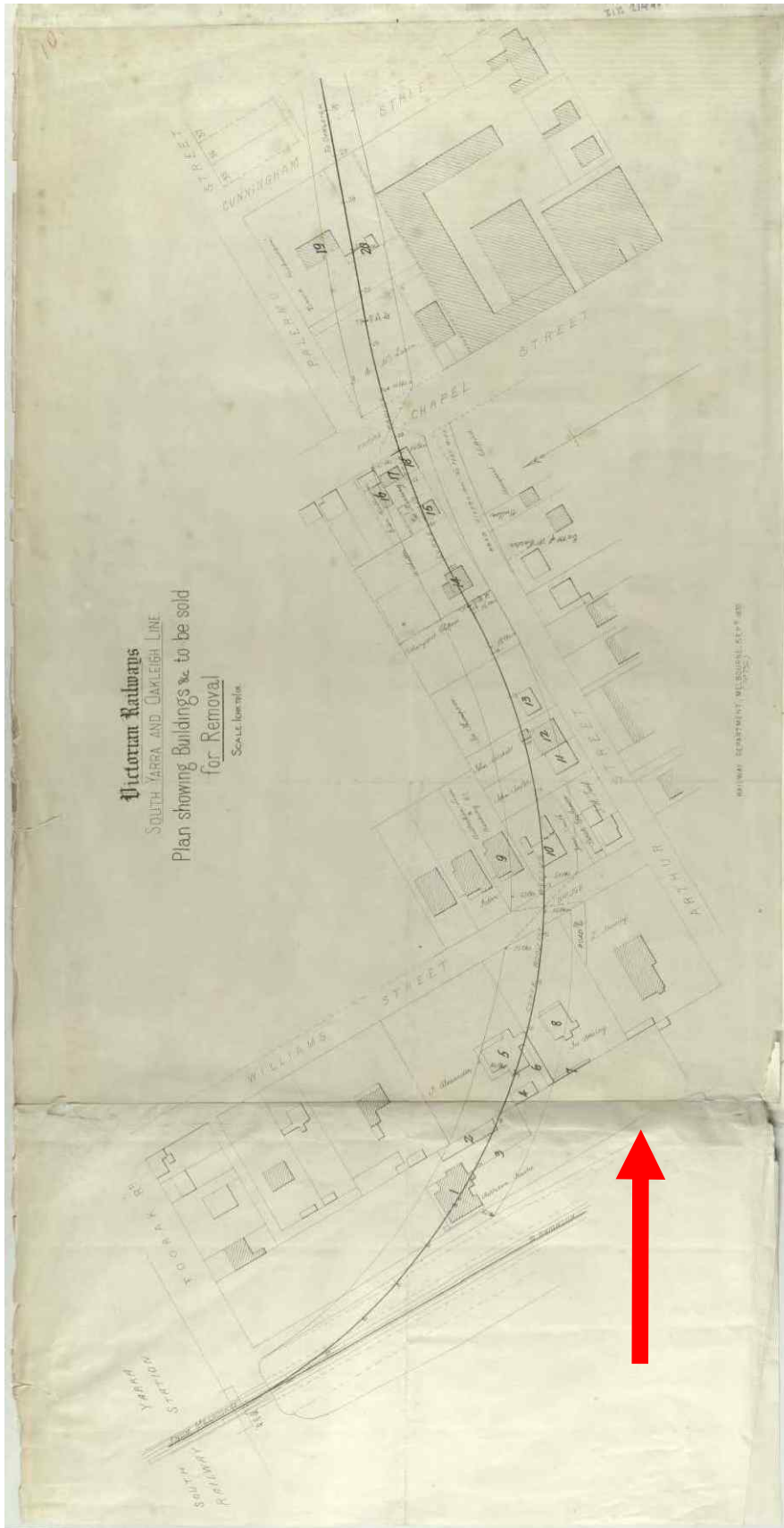


Figure 37 Victorian Railways plan of 1878 showing buildings to be removed at South Yarra as part of development of Oakleigh railway, reserve indicated by arrow; north is to the bottom left of the image
 Source: State Library of Victoria

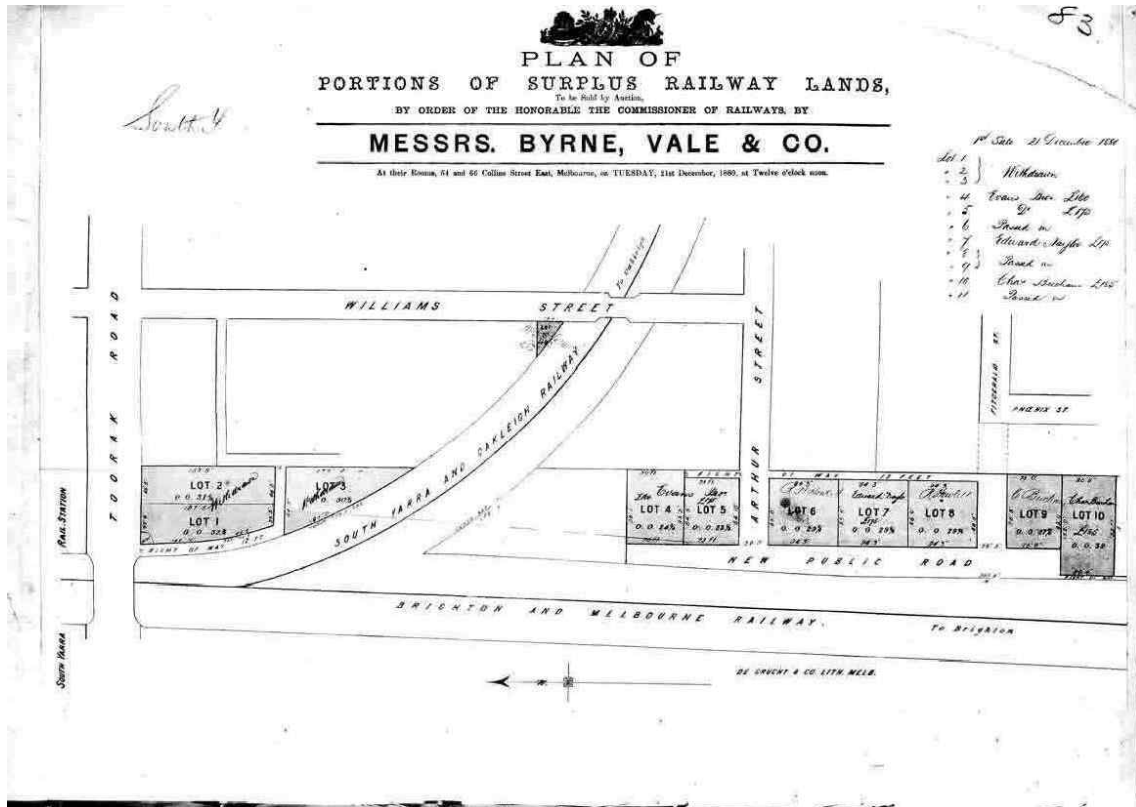


Figure 38 'Plan of Portions of Surplus Railway Lands' auctioned in 1880, showing development of Portland Place
Source: P11901, Stonington History Centre



Figure 39 Plan of portions of surplus railway lands, 1880
Source: State Library of Victoria

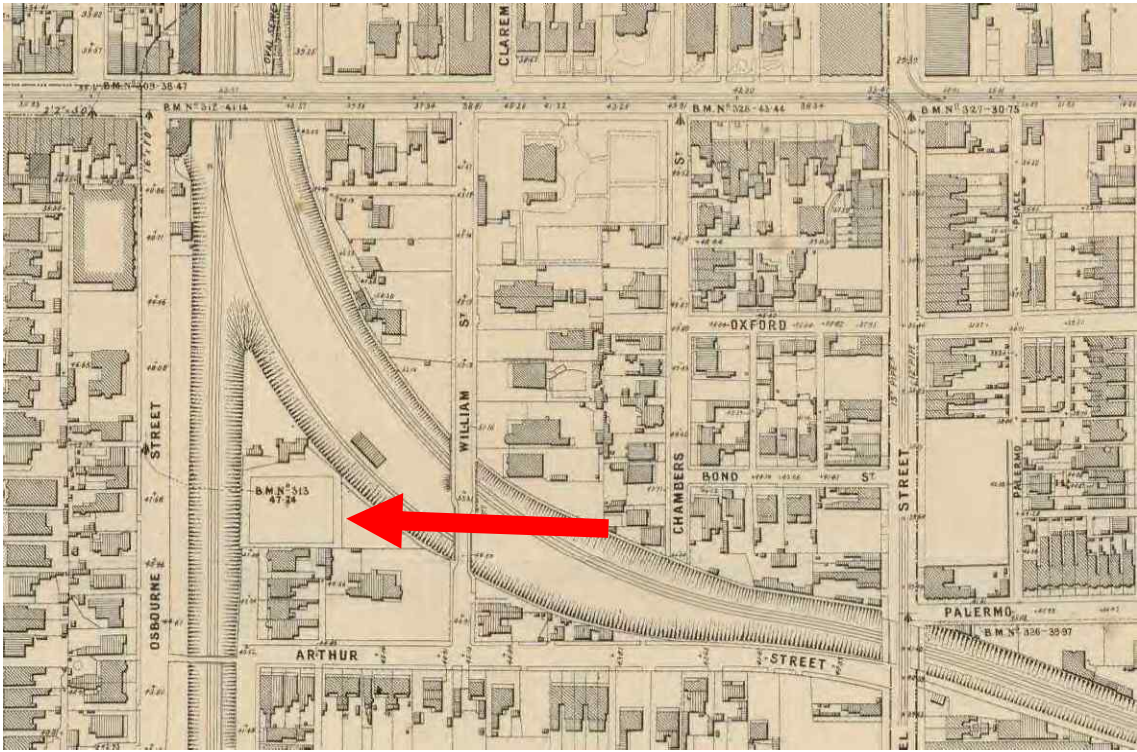


Figure 40 MMBW 160' to 1" plan, no 37, 1895 showing location of tennis courts and pavilion
 Source: State Library of Victoria

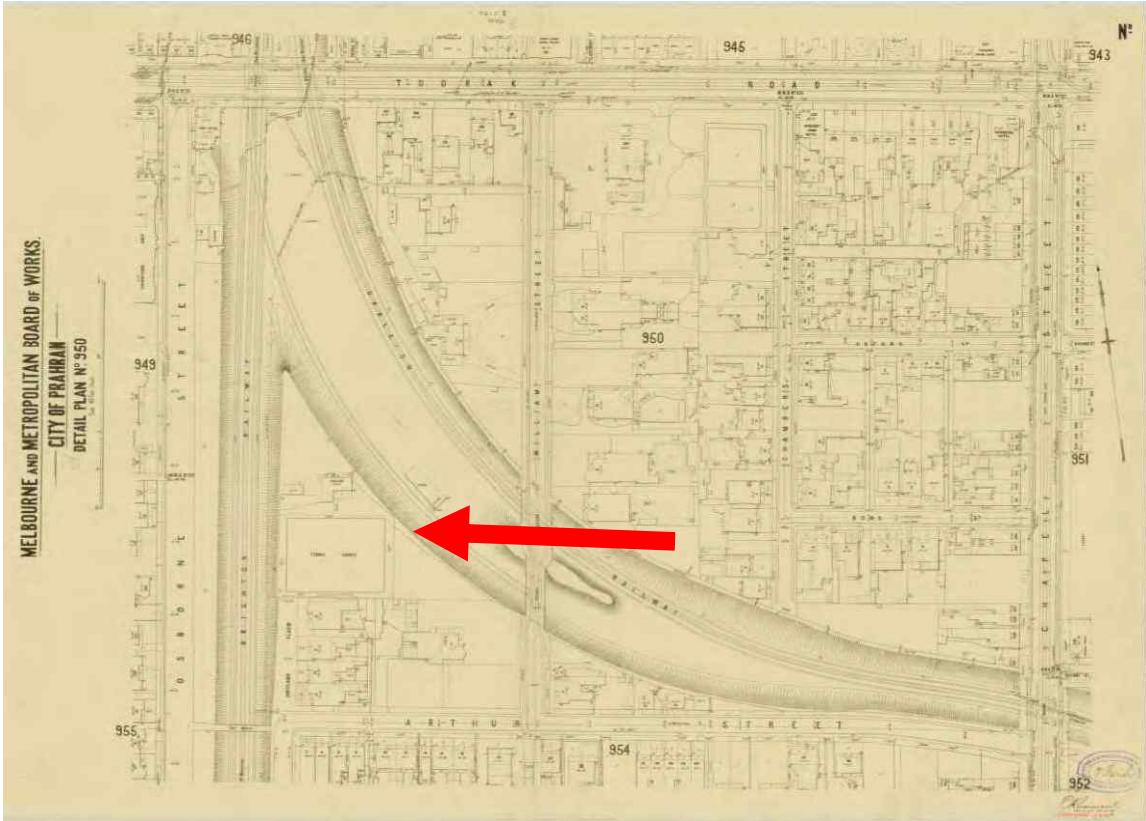


Figure 41 MMBW detail plan 950, showing location of tennis court and pavilion in rail reserve
 Source: State Library of Victoria



Figure 42 Aerial photograph of subject site of 1945, indicated; note rearrangement of tennis courts
Source: Land Channel, www.land.vic.gov.au

9.3 Predictive analysis

There is low potential for physical archaeological evidence of the original tennis courts and associated pavilion to be present in the South Yarra Siding Reserve due to subsequent changes to the site. Even if archaeological remains do exist, these are unlikely to be of significance as they are unlikely to provide much information that would contribute to an understanding of Victoria's history. Due to the low level of cultural heritage significance, this area is not further considered in the impact assessment.

9.4 Recommendations

There is no archaeological potential, therefore no further recommendations for further assessment or management.

10.0 Precinct 9: Western Turnback

10.1 Historical archaeology – predictive assessment

10.1.1 Western turnback Precinct 9A

There are no VHI sites within the Western Turnback precinct (West Footscray option). Due to the high level of recent development and disturbance there are also no further areas considered for assessment of archaeological potential.

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Land Victoria

Nearmap

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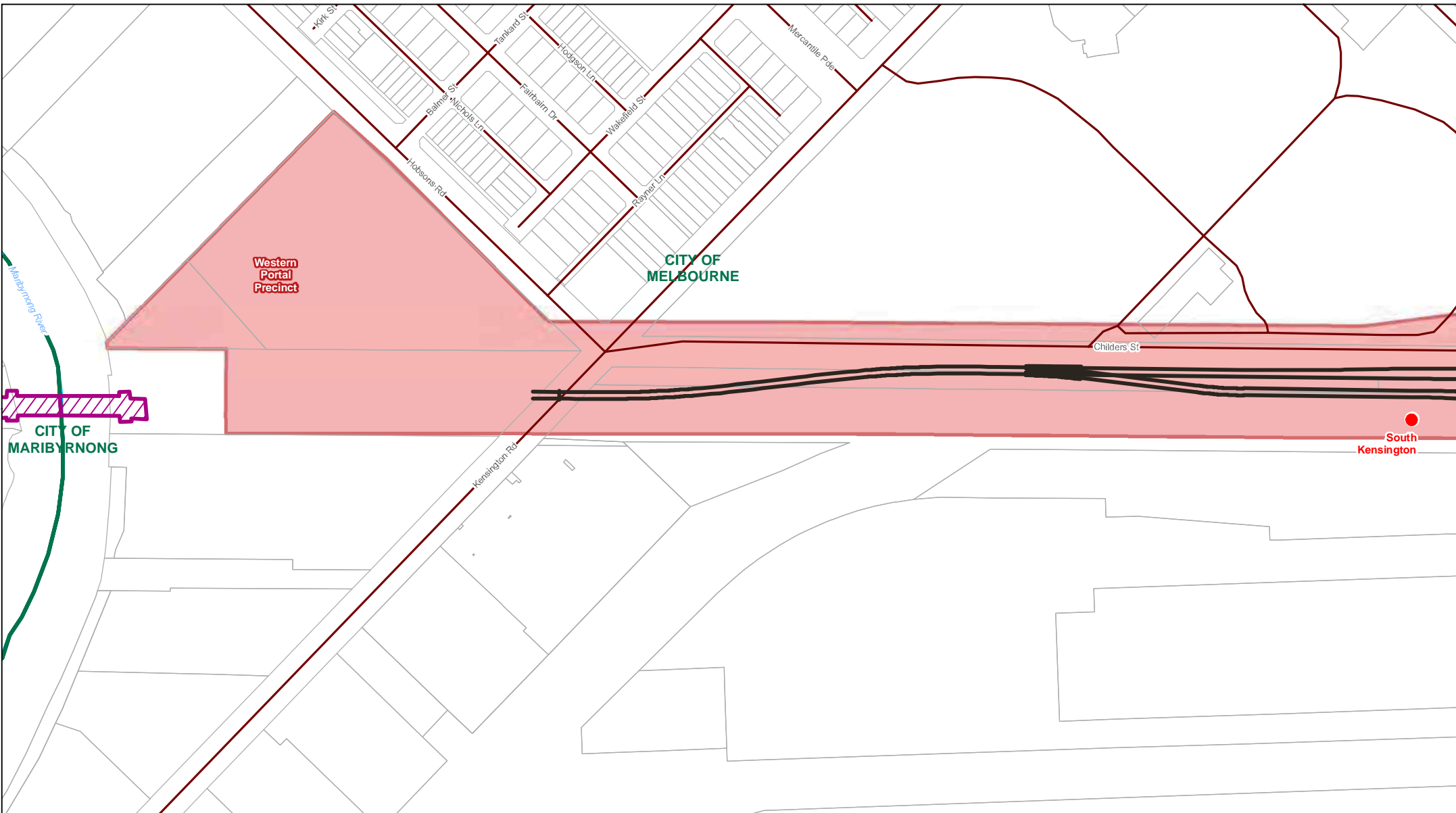
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Legend

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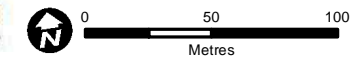
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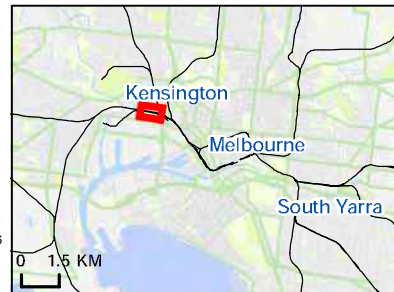
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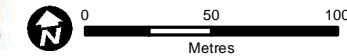


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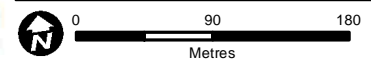
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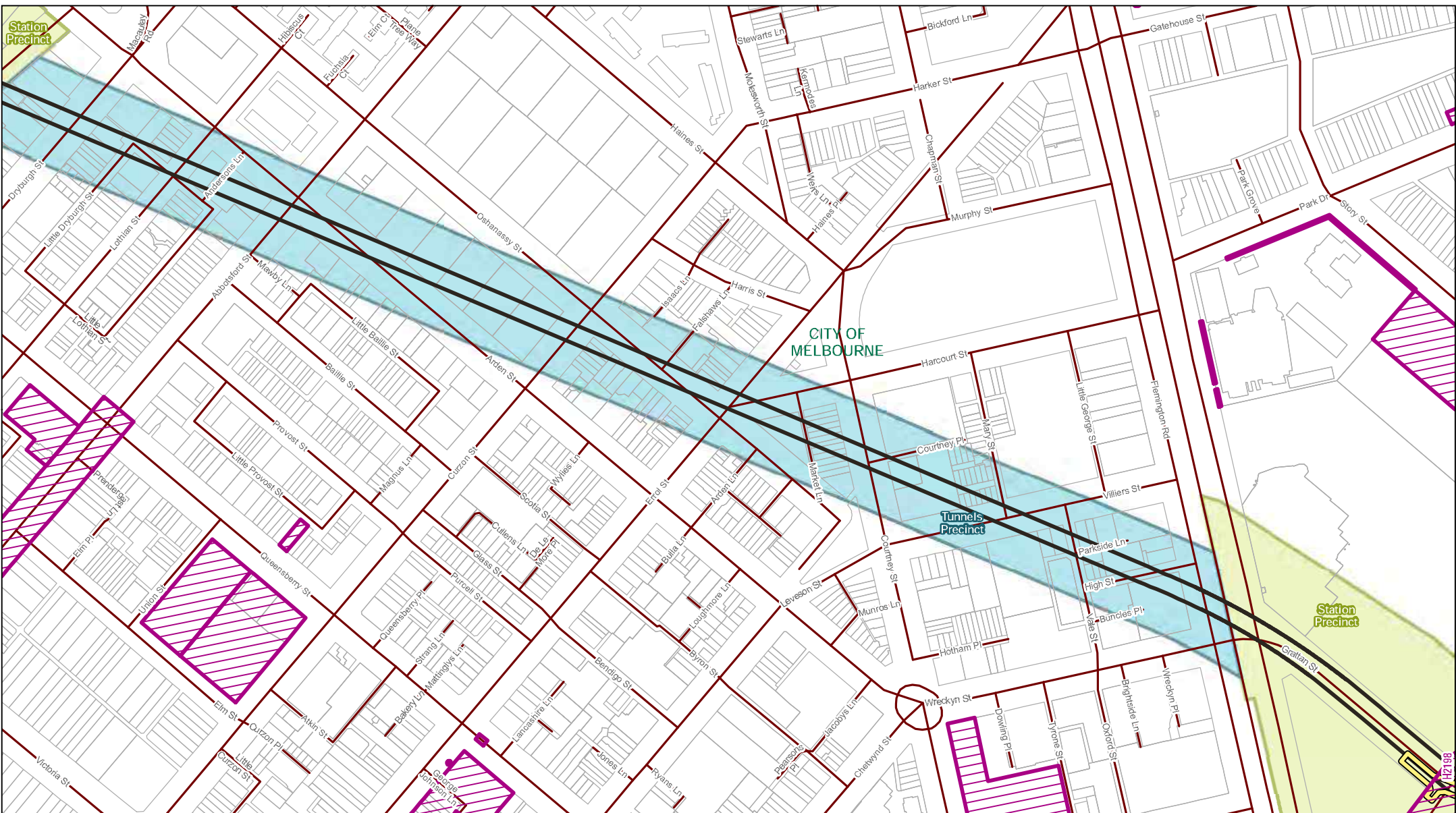
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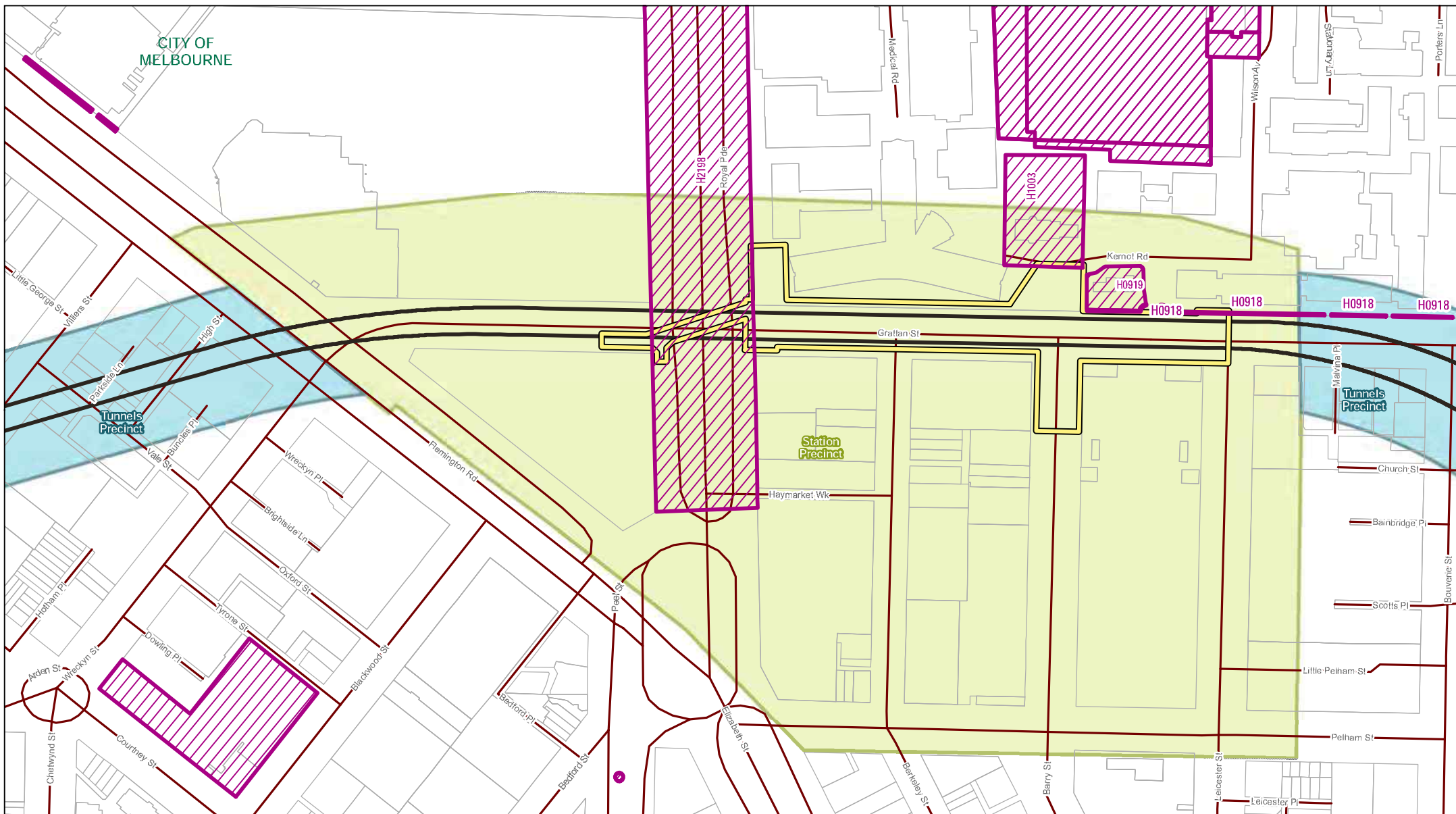
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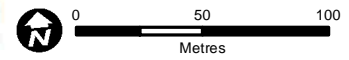
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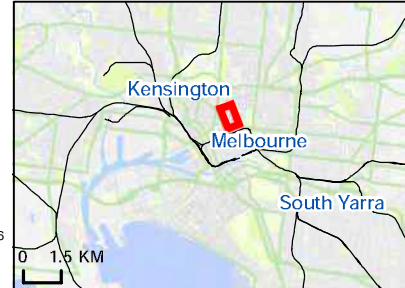




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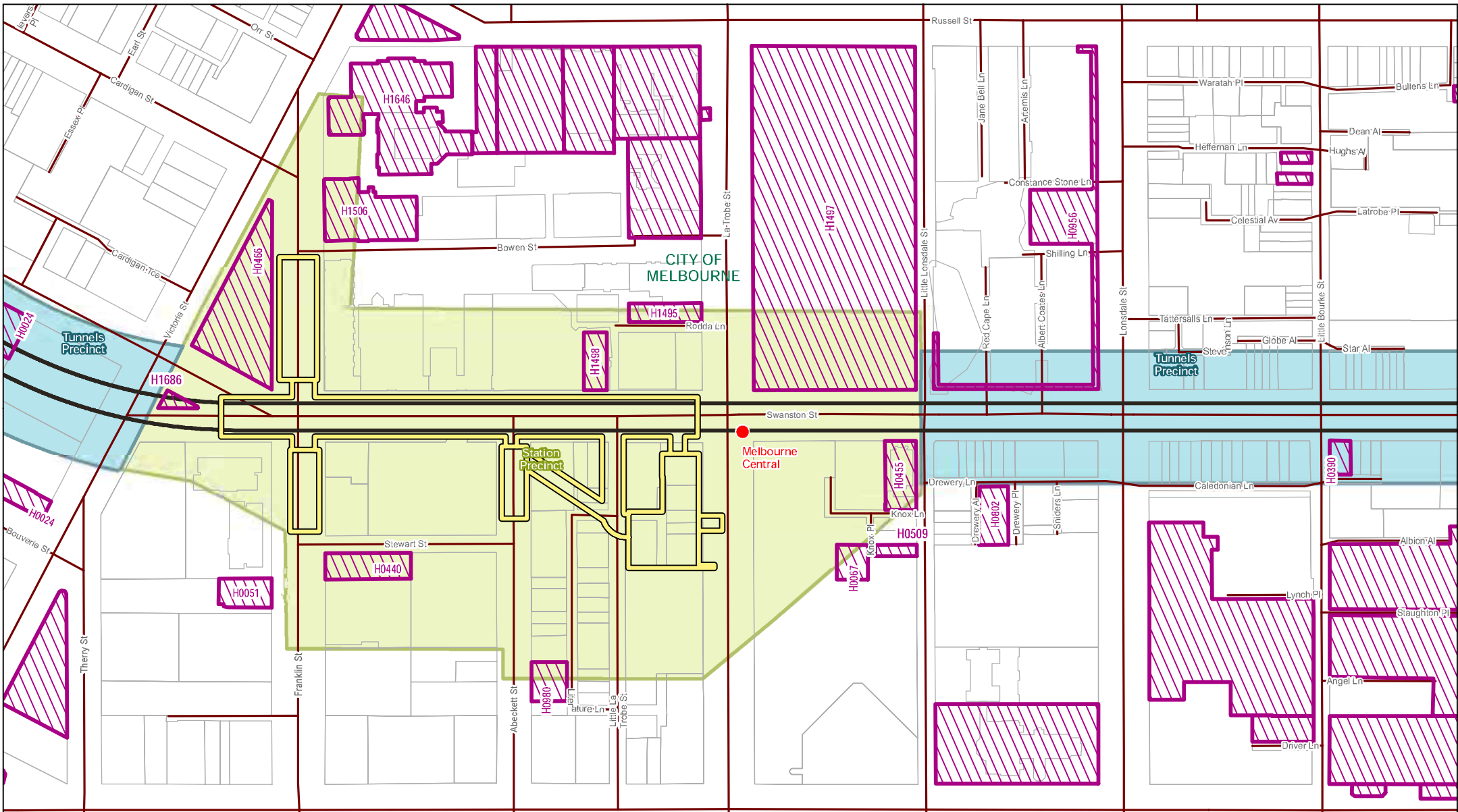
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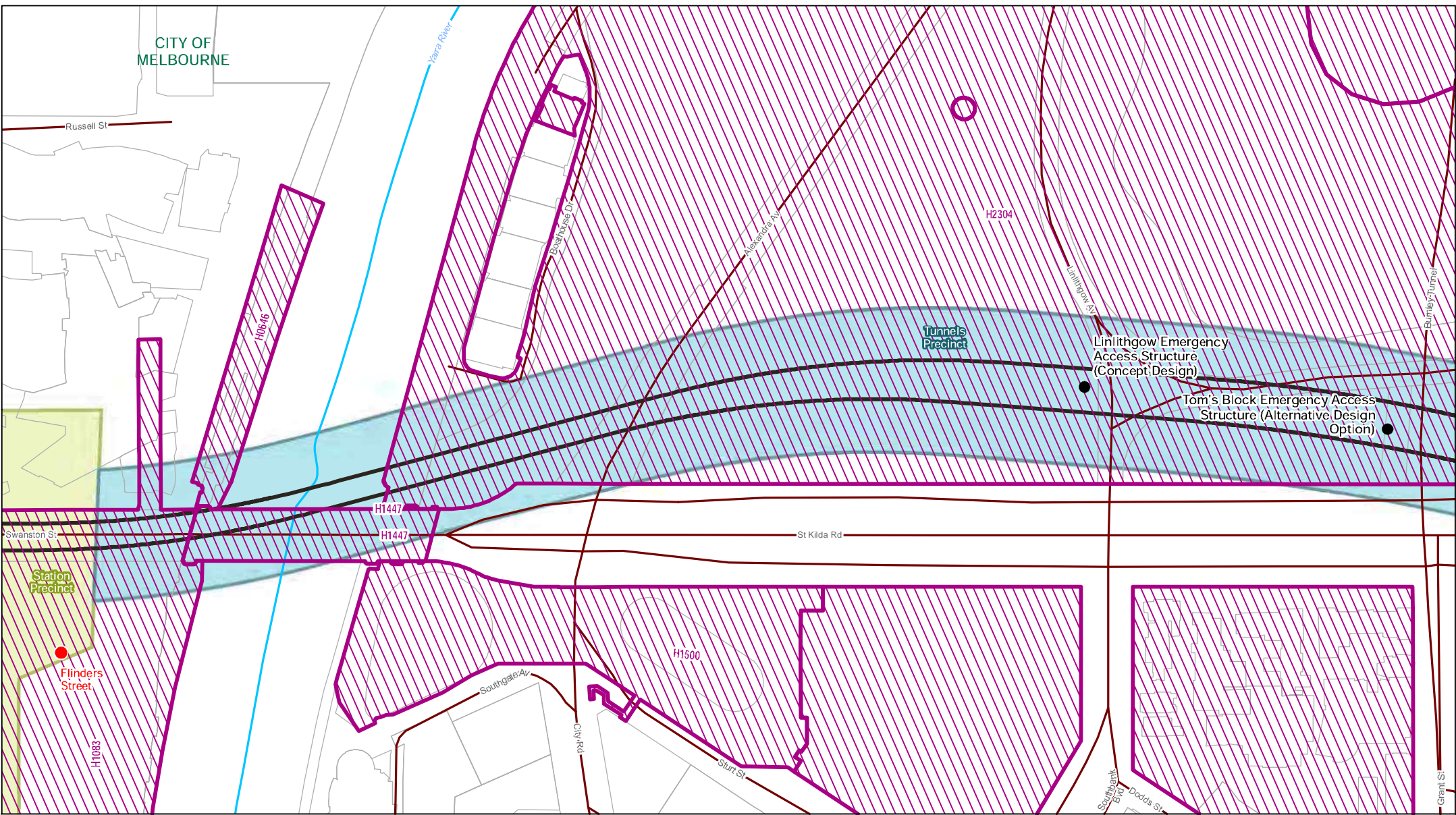
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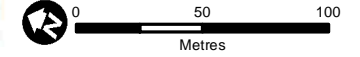
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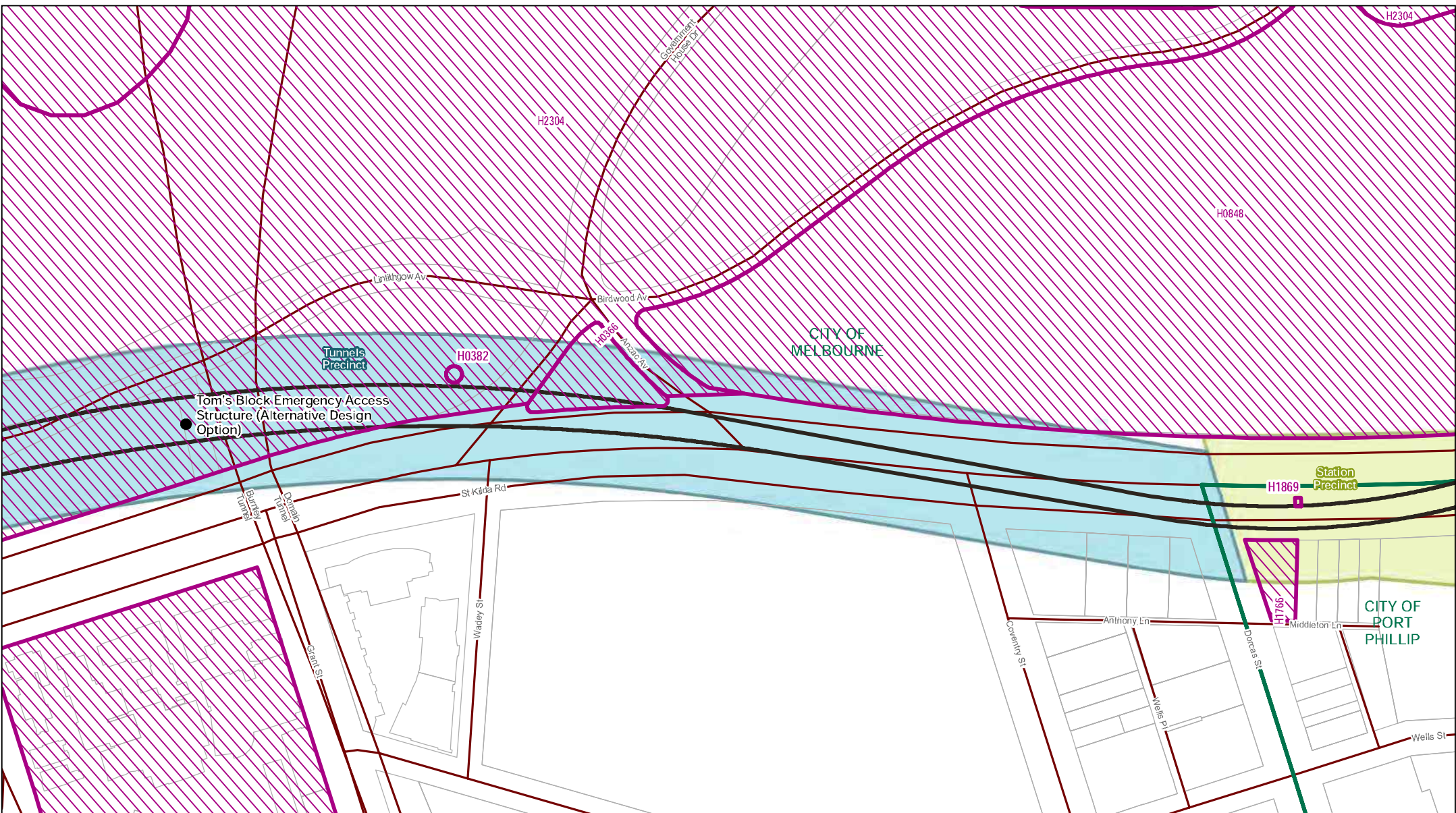


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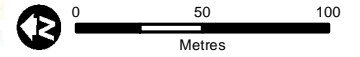
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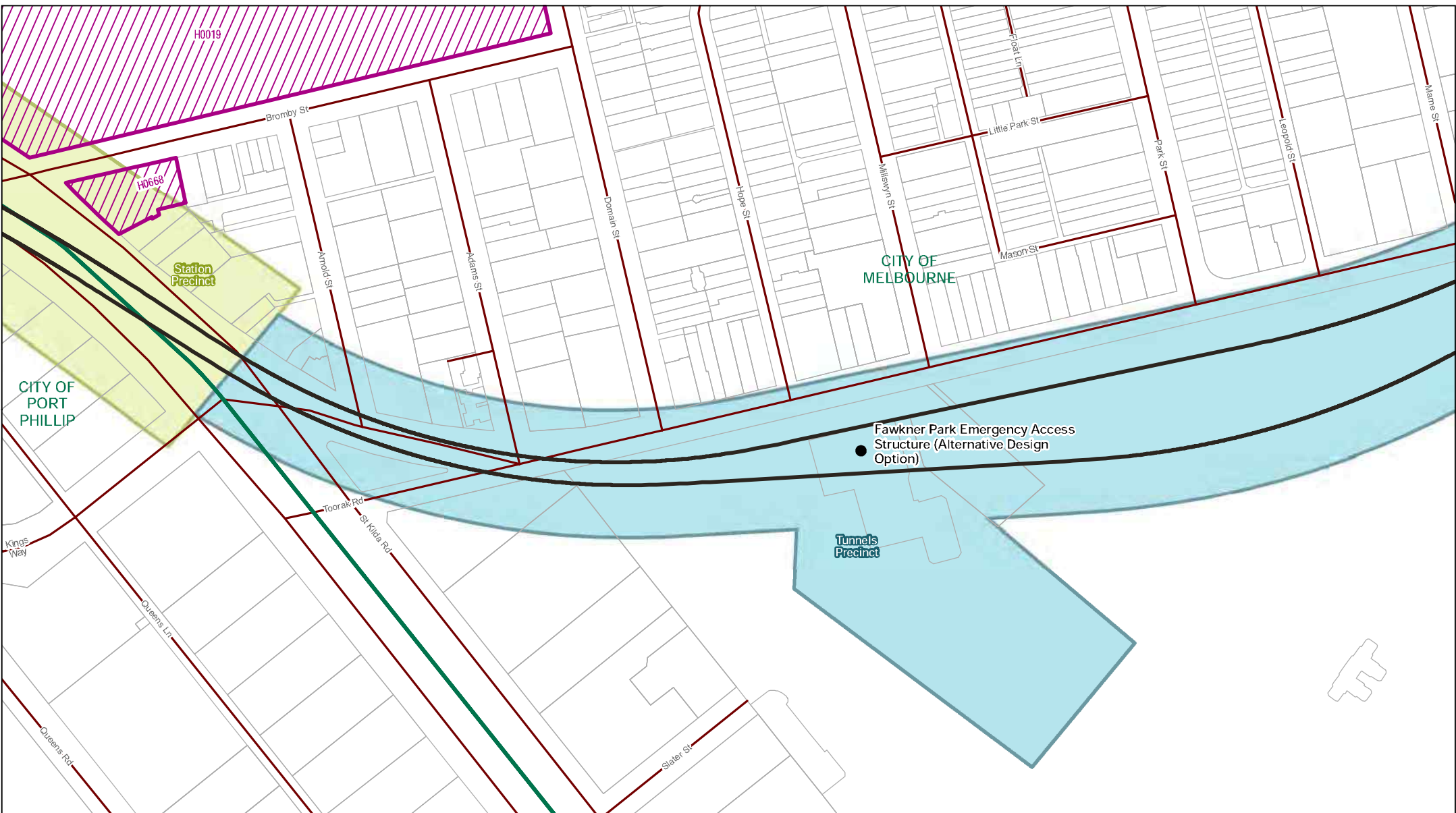
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- Station Precinct
 - Tunnels Precinct

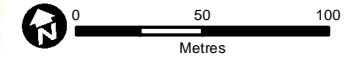
Map 12 of 15

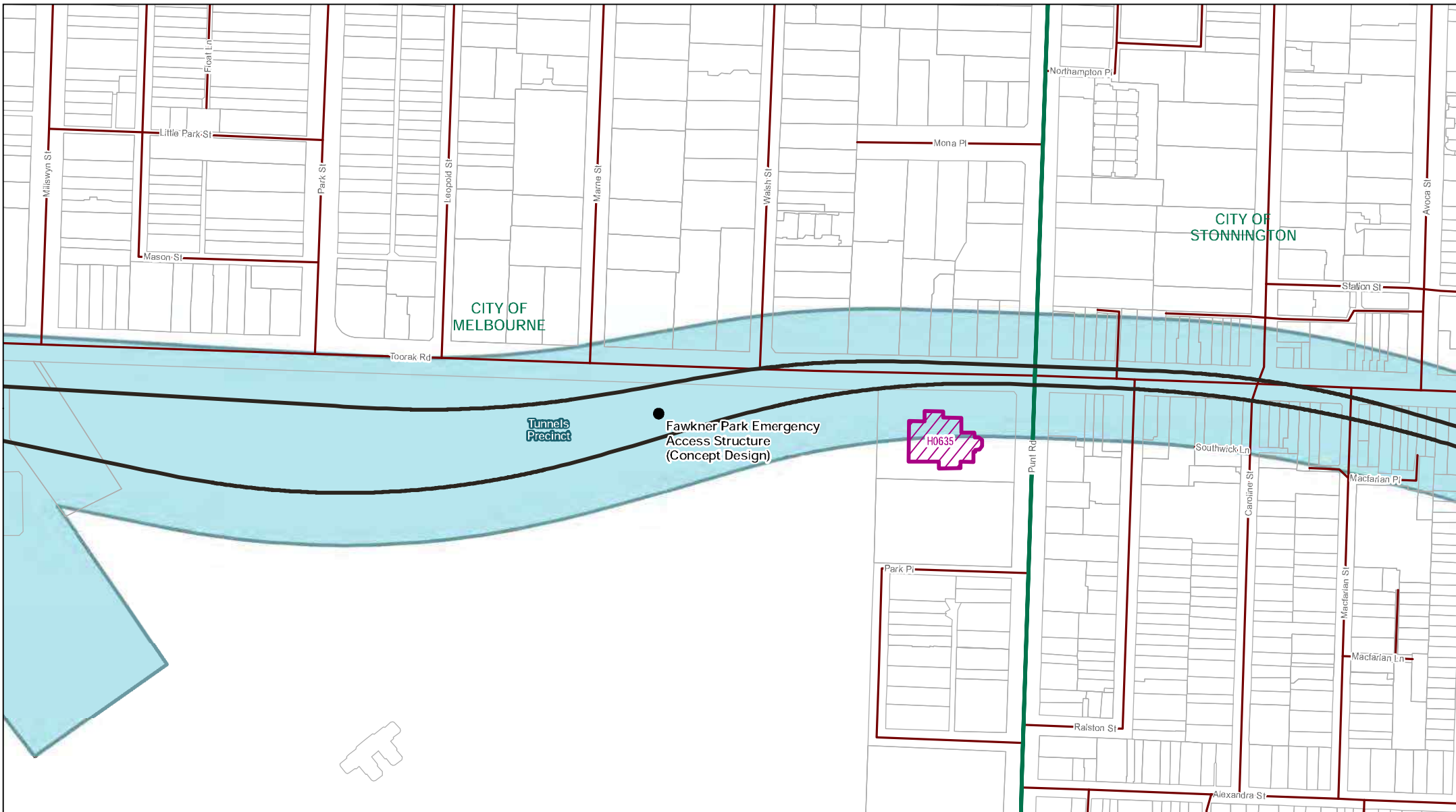
Data Sources:
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Drawing Number: MMR-AJM-PWAA-MP-ND-500323		Revision: P1	
Drawn By: A.Berman	Approved By: S.Zahra	Date: 14/04/2016	Map Size: A4

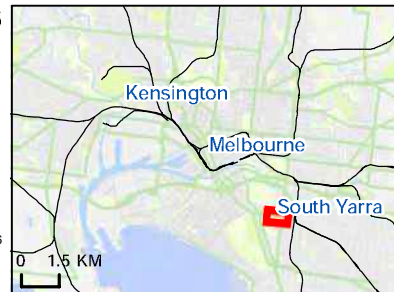




Legend

- Emergency Access Structure (Indicative)
- Proposed alignment
- Road
- Local Government Area (LGA)
- Victorian Heritage Register
- Cadastre
- Environmental and Planning Precincts
- Tunnels Precinct

Map 13 of 15



Data Sources:
 Proposed Infrastructure: AJM 2015/2016
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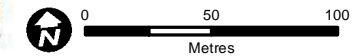


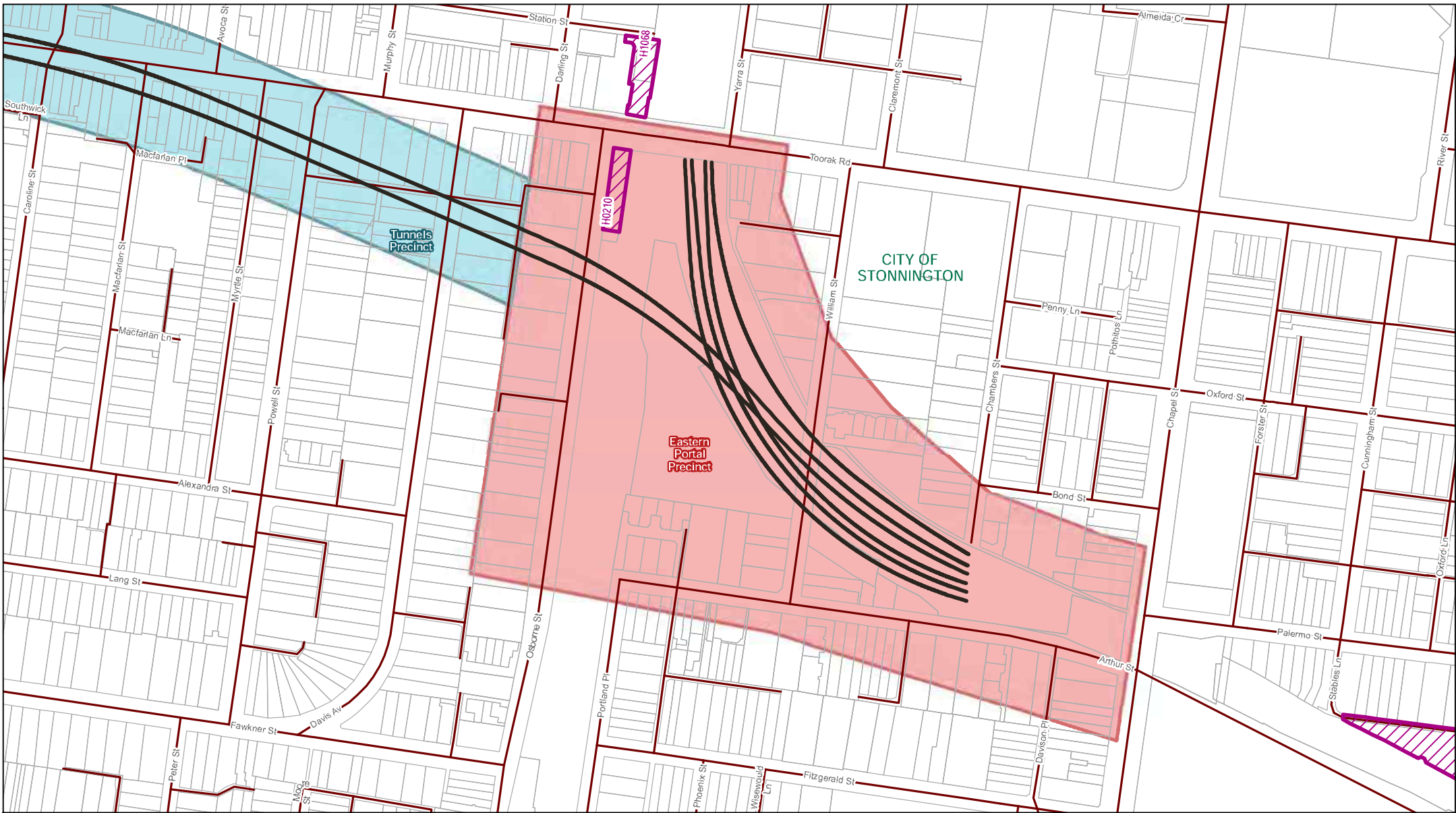
Melbourne Metro Rail Project

Title:
 Victorian Heritage Register

Drawing Number: MMR-AJM-PWAA-MP-ND-500323
 Revision: P1

Drawn By: A.Berman
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Legend

-  Proposed alignment
-  Road
-  Local Government Area (LGA)
-  Victorian Heritage Register
-  Cadastre
- Environmental and Planning Precincts**
-  Portal Precinct
-  Tunnels Precinct

Map 14 of 15

Data Sources:
 Proposed Infrastructure: AJM 2015/2016
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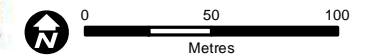


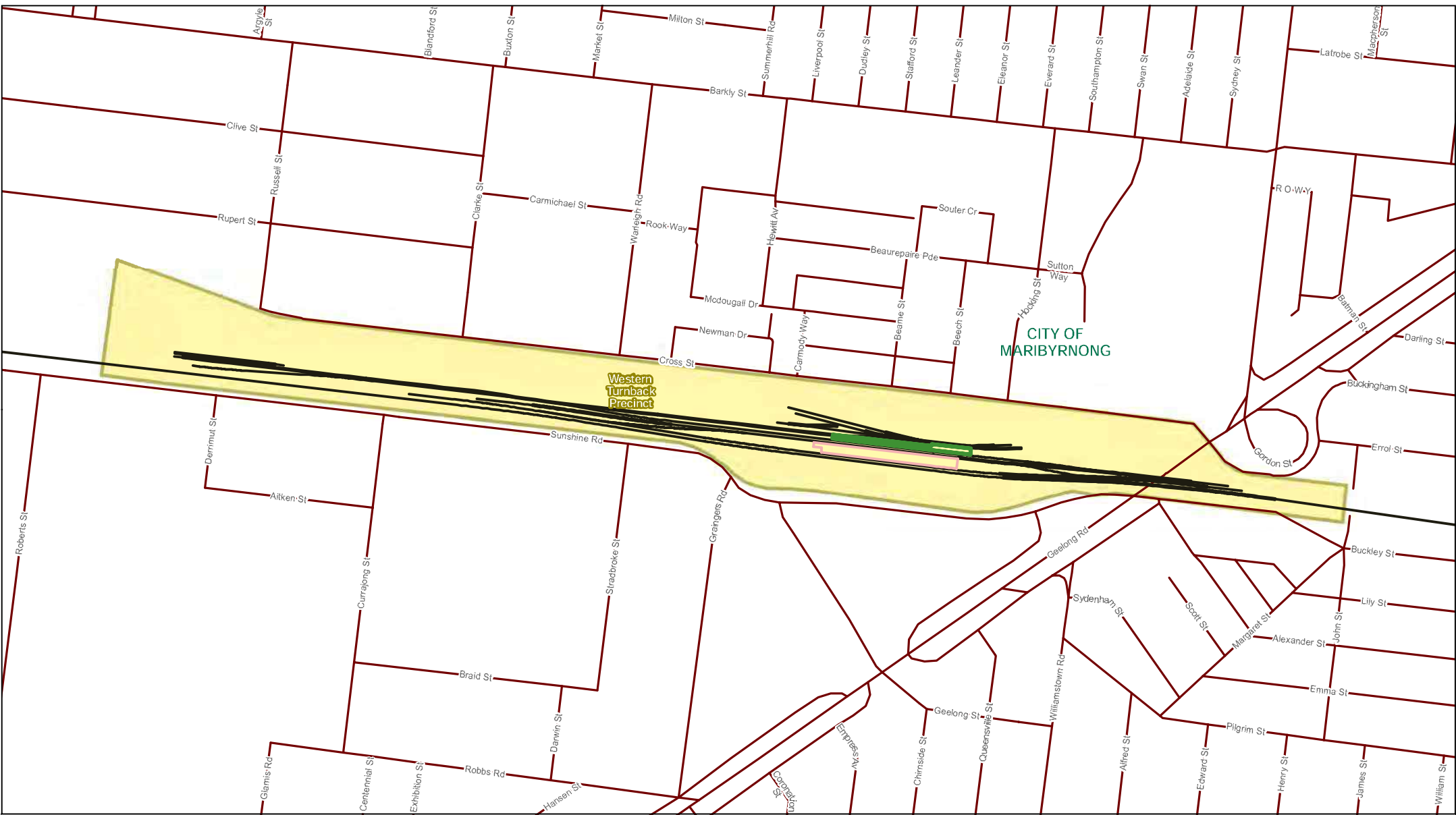
Melbourne Metro Rail Project

Title:
 Victorian Heritage Register

Drawing Number: MMR-AJM-PWAA-MP-ND-500323
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Drawn By: A. Berman
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 Date: 14/04/2016
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CITY OF
MARIBYRNONG

Western
Turnback
Precinct

Legend

- Proposed Turnback Design - West Footscray
- Existing platform
- Proposed platform
- Proposed alignment
- Road
- Local Government Area (LGA)
- Environmental and Planning Precincts
- Western Turnback Precinct

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Map 15 of 15



Melbourne Metro Rail Project

Title:
Victorian Heritage Register

Drawing Number:
MMR-AJM-PWAA-MP-ND-500323

Revision:
P1

Drawn By:
A.Berman

Approved By:
S.Zahra

Date:
14/04/2016

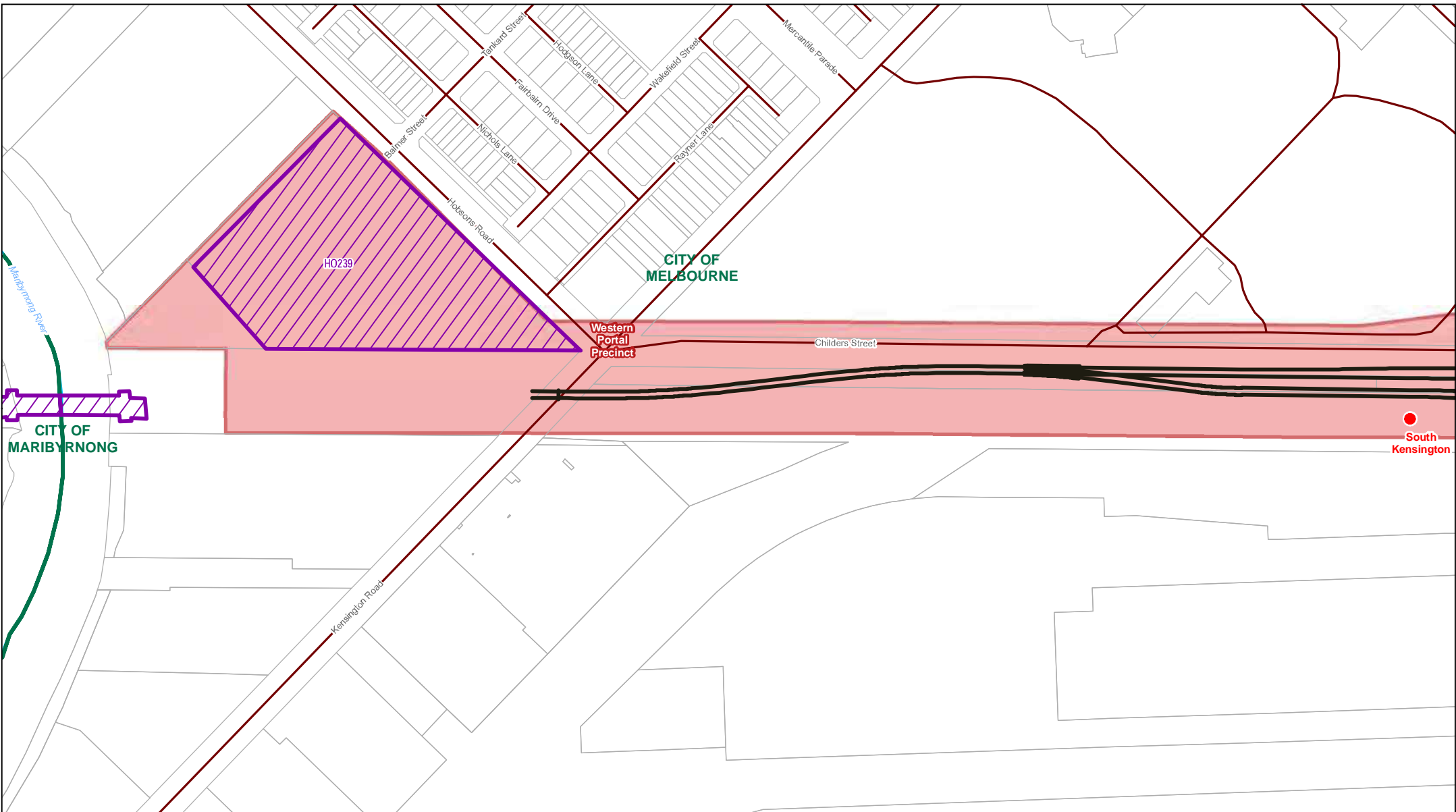
Map Size:
A4

MELBOURNE METRO RAIL AUTHORITY

aurecon JACOBS

AJM Multi Macdonald Joint Venture GRIMSHAW

0 110 220 Metres



- Legend**
- Existing Rail Station
 - Proposed alignment
 - Road
 - Watercourse
 - Local Government Area (LGA)
 - Cadastre
 - HO - Heritage Overlay
 - Environmental and Planning Precincts**
 - Portal Precinct

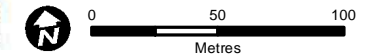
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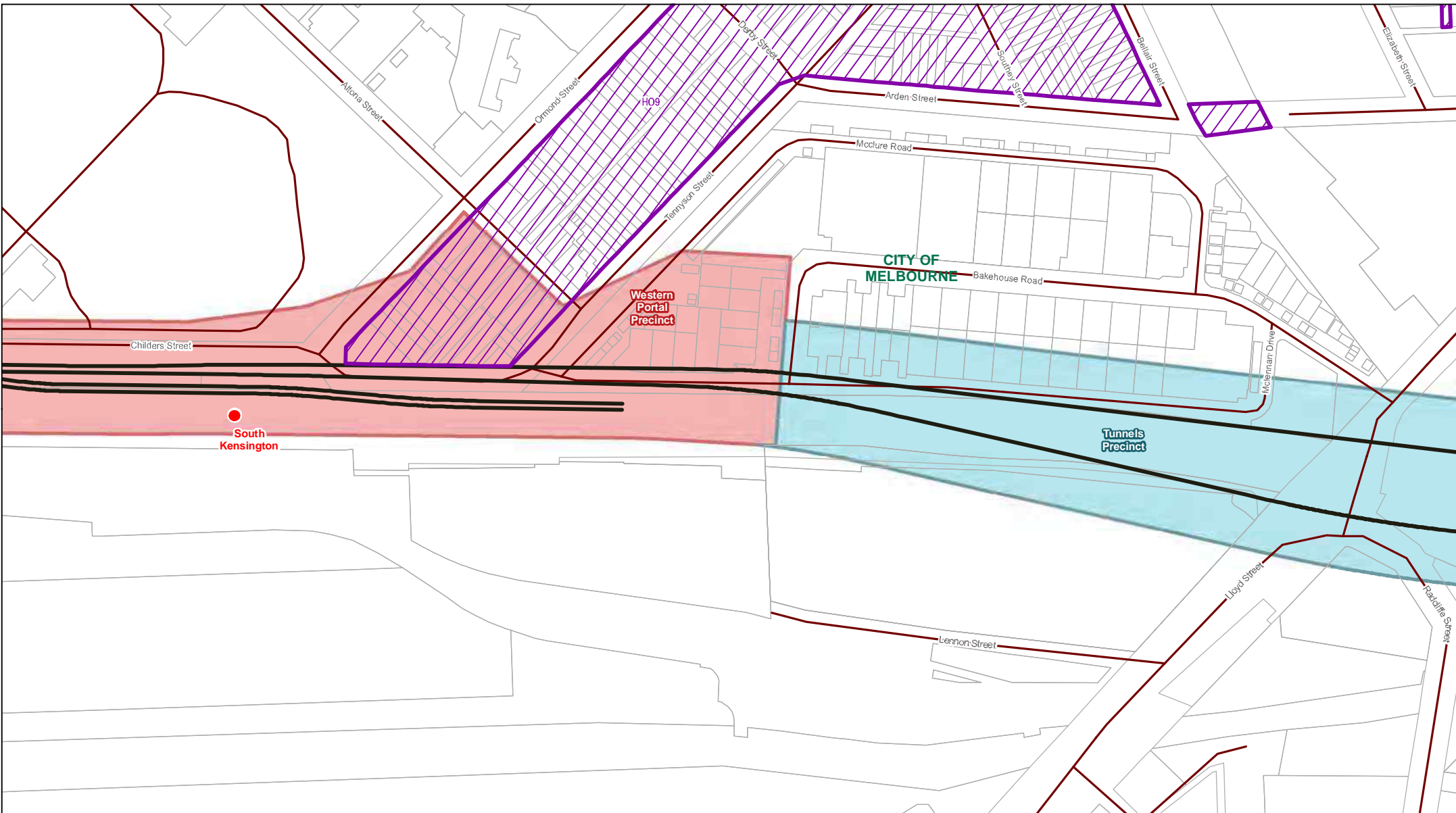
Data Sources:
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Legend

- Existing Rail Station
- Proposed alignment
- Road
- Local Government Area (LGA)
- Cadastre
- HO - Heritage Overlay
- Environmental and Planning Precincts**
- Portal Precinct
- Tunnels Precinct

Map 2 of 15

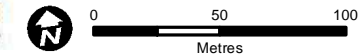


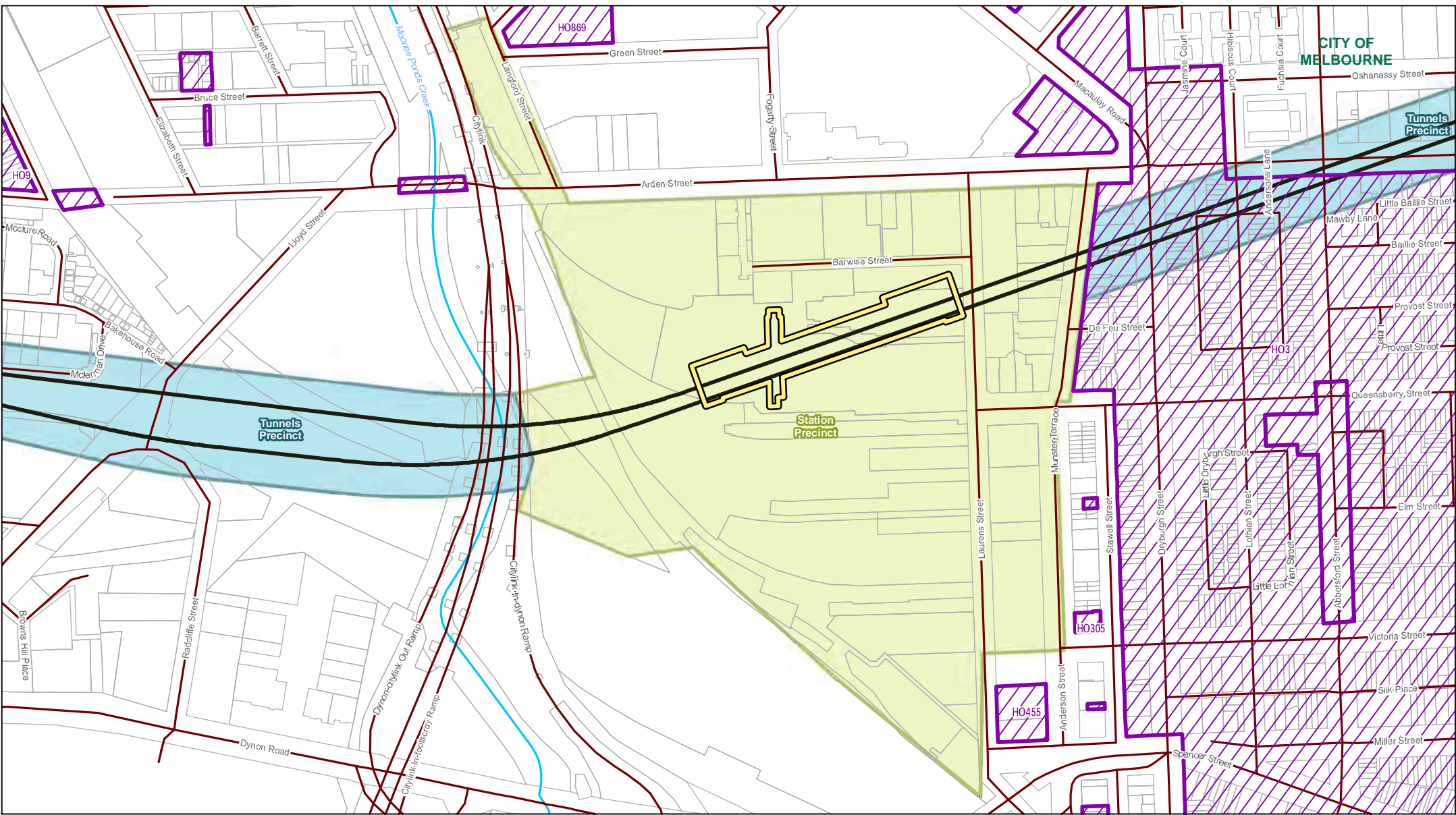
Data Sources:
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Title: Heritage Overlay			
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- Legend**
- Proposed Station Extent
 - Proposed alignment
 - Road
 - Watercourse
 - Local Government Area (LGA)
 - Cadastre
 - HO - Heritage Overlay
- Environmental and Planning Precincts**
- Station Precinct
 - Tunnels Precinct

Map 3 of 15

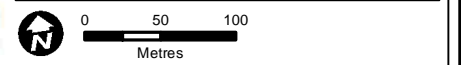
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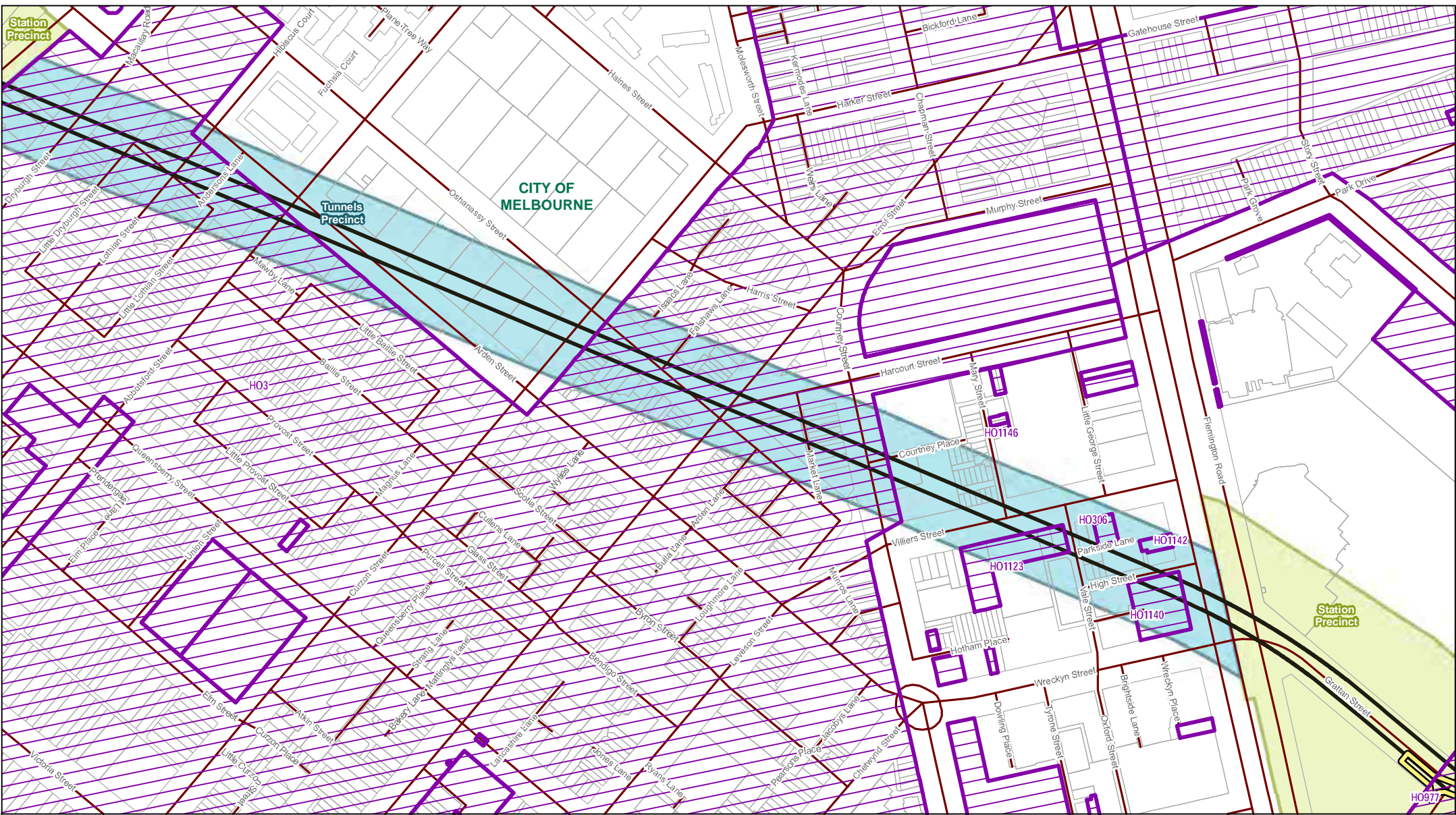


Melbourne Metro Rail Project

Title:
Heritage Overlay

Drawing Number: MMR-AJM-PWAA-MP-ND-500321	Revision: P1
Drawn By: A.Berman	Approved By: S.Zahra
Date: 14/04/2016	Map Size: A4





- Legend**
- Proposed Station Extent
 - Proposed alignment
 - Road
 - Local Government Area (LGA)
 - Cadastre
 - HO - Heritage Overlay
 - Environmental and Planning Precincts**
 - Station Precinct
 - Tunnels Precinct

Map 4 of 15

Data Sources:
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0 50 100
Metres



Map 5 of 15

Legend

- Proposed Station Extent
- Proposed alignment
- Road
- Local Government Area (LGA)
- Cadastre
- HO - Heritage Overlay

Environmental and Planning Precincts

- Station Precinct
- Tunnels Precinct

Data Sources:
 Proposed Infrastructure: AJM 2015/2016
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Heritage Overlay

Drawing Number:
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Revision:
P1

Drawn By:
A.Berman

Approved By:
S.Zahra

Date:
14/04/2016

Map Size:
A4

0 50 100
Metres

MELBOURNE METRO RAIL AUTHORITY

aurecon JACOBS
AJM Molt MacDonald
Joint Venture GRIMSHAW



- Legend**
- Proposed Station Extent
 - Proposed alignment
 - Road
 - Local Government Area (LGA)
 - Cadastre
 - HO - Heritage Overlay
- Environmental and Planning Precincts**
- Station Precinct
 - Tunnels Precinct

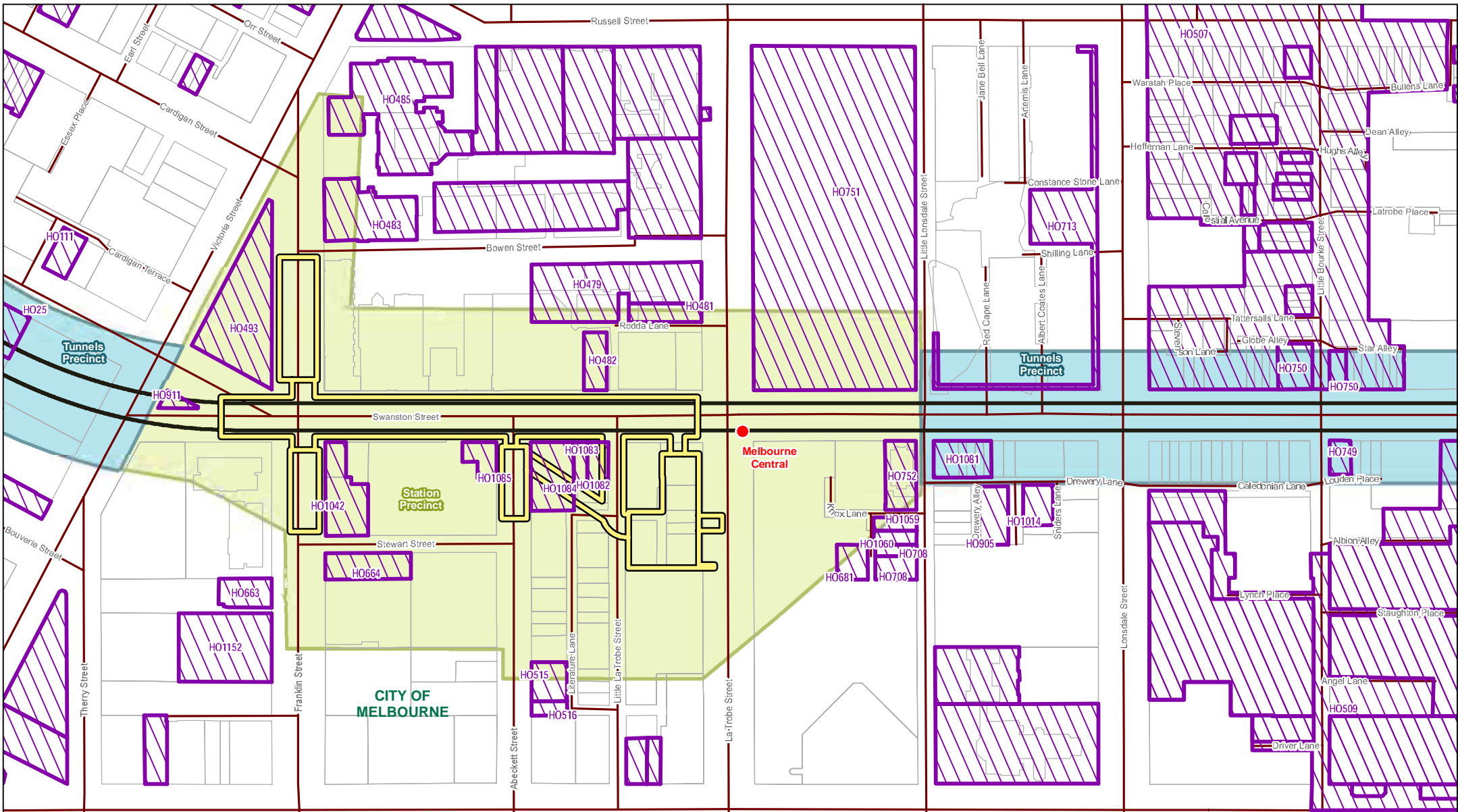
Map 6 of 15

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Drawn By: A. Berman	Approved By: S. Zahra	Date: 14/04/2016	Map Size: A4
0 1.5 KM		0 50 100 Metres	



- Legend**
- Existing Rail Station
 - Proposed Station Extent
 - Proposed alignment
 - Road
 - Local Government Area (LGA)
 - Cadastre
 - HO - Heritage Overlay
- Environmental and Planning Precincts**
- Station Precinct
 - Tunnels Precinct

Map 7 of 15

Data Sources:
 Proposed Infrastructure: AJM 2015/2016
 Heritage Victoria: January 2016
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MELBOURNE METRO RAIL AUTHORITY

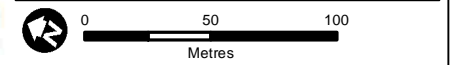
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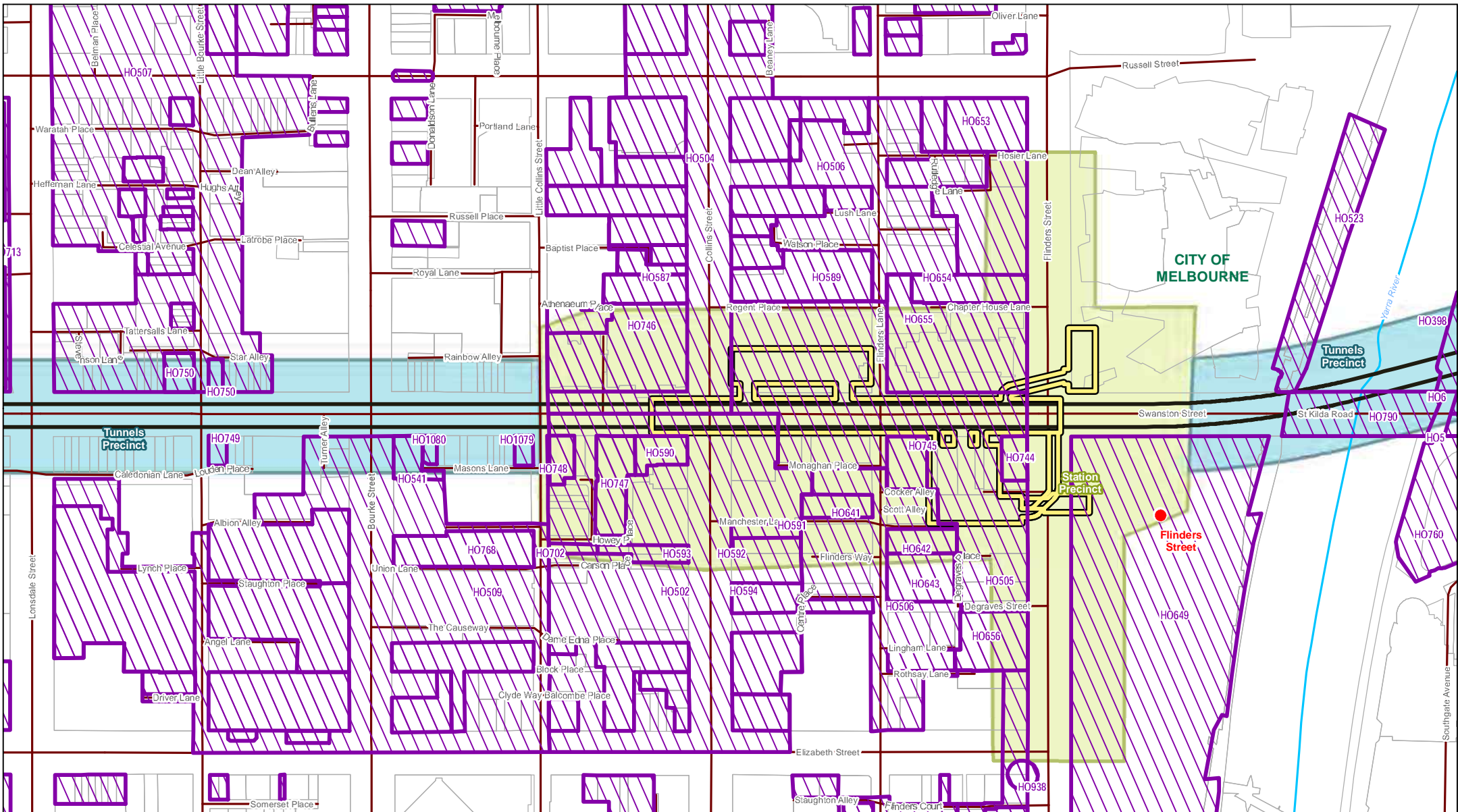
AJM Melt MacDonald
 Joint Venture GRIMSHAW

Melbourne Metro Rail Project

Title: Heritage Overlay

Drawing Number: MMR-AJM-PWAA-MP-ND-500321	Revision: P1
Drawn By: A.Berman	Approved By: S.Zahra
Date: 14/04/2016	Map Size: A4





- Legend**
- Existing Rail Station
 - Proposed Station Extent
 - Proposed alignment
 - Road
 - Watercourse
 - Local Government Area (LGA)
 - Cadastre
 - HO - Heritage Overlay
 - Station Precinct
 - Tunnels Precinct
- Environmental and Planning Precincts**

Map 8 of 15

Data Sources:
 Proposed Infrastructure: AJM 2015/2016
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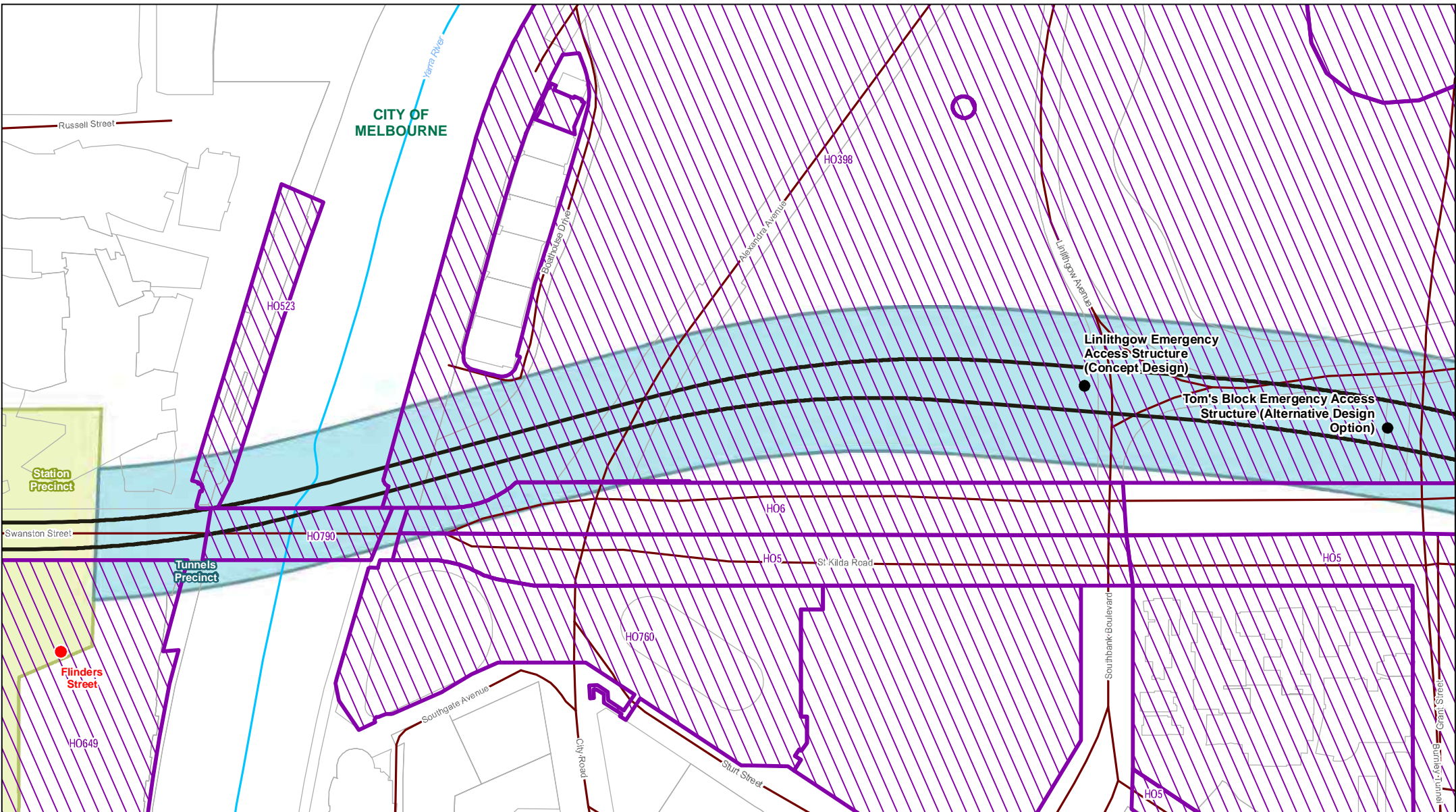
Melbourne Metro Rail Project

Title: Heritage Overlay

Drawing Number: MMR-AJM-PWAA-MP-ND-500321 Revision: P1

Drawn By: A.Berman	Approved By: S.Zahra	Date: 14/04/2016	Map Size: A4
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- Legend**
- Existing Rail Station
 - Emergency Access Structure (Indicative)
 - Proposed alignment
 - Road
 - Watercourse
 - ▭ Local Government Area (LGA)
 - ▭ Cadastre
 - ▭ HO - Heritage Overlay
- Environmental and Planning Precincts**
- ▭ Station Precinct
 - ▭ Tunnels Precinct

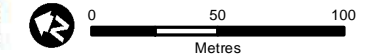
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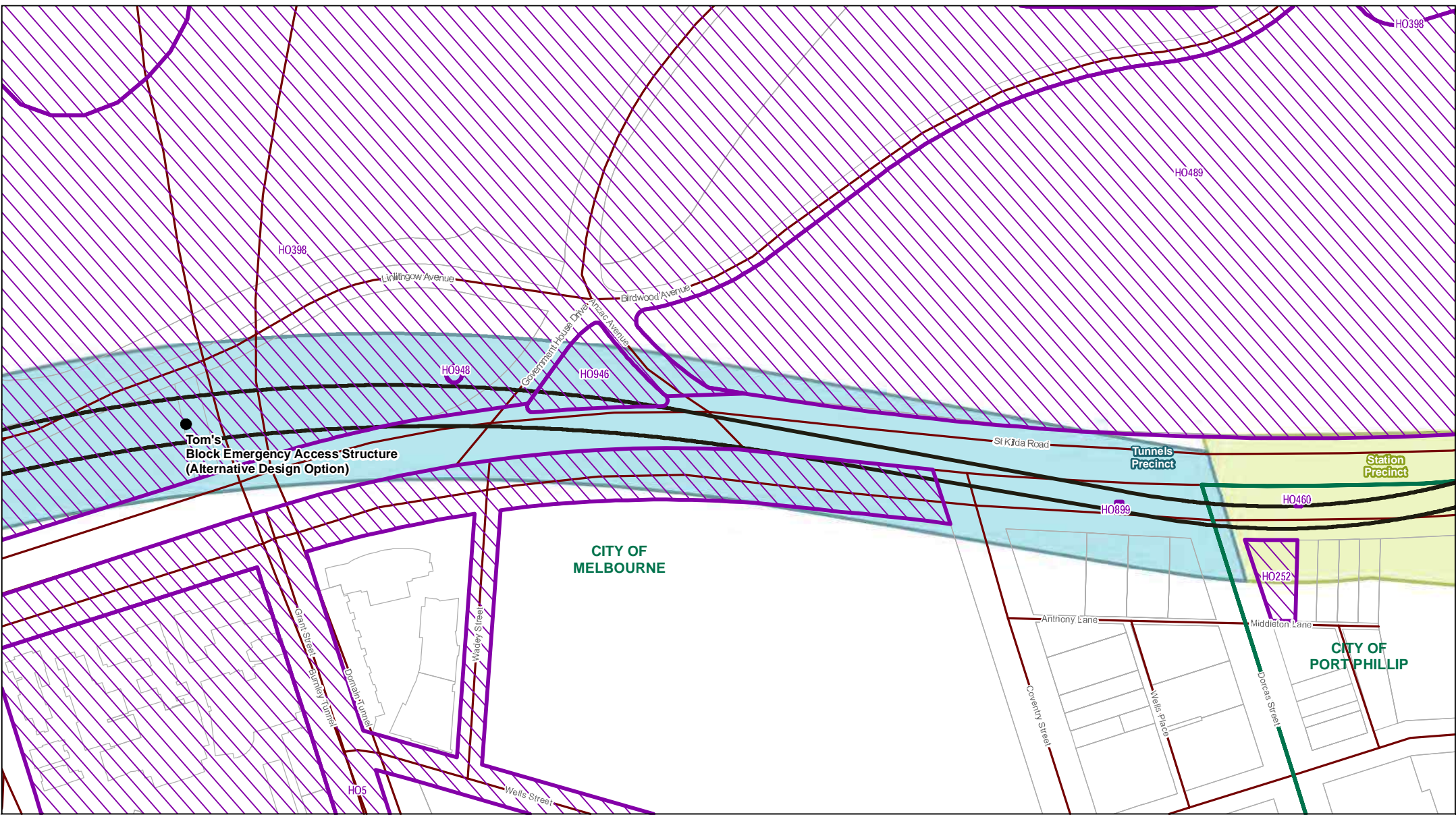
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- Legend**
- Emergency Access Structure (Indicative)
 - Proposed alignment
 - Road
 - ▭ Local Government Area (LGA)
 - ▭ Cadastre
 - ▭ HO - Heritage Overlay
 - Environmental and Planning Precincts**
 - ▭ Station Precinct
 - ▭ Tunnels Precinct

Map 10 of 15

Data Sources:
 Proposed Infrastructure: AJM 2015/2016
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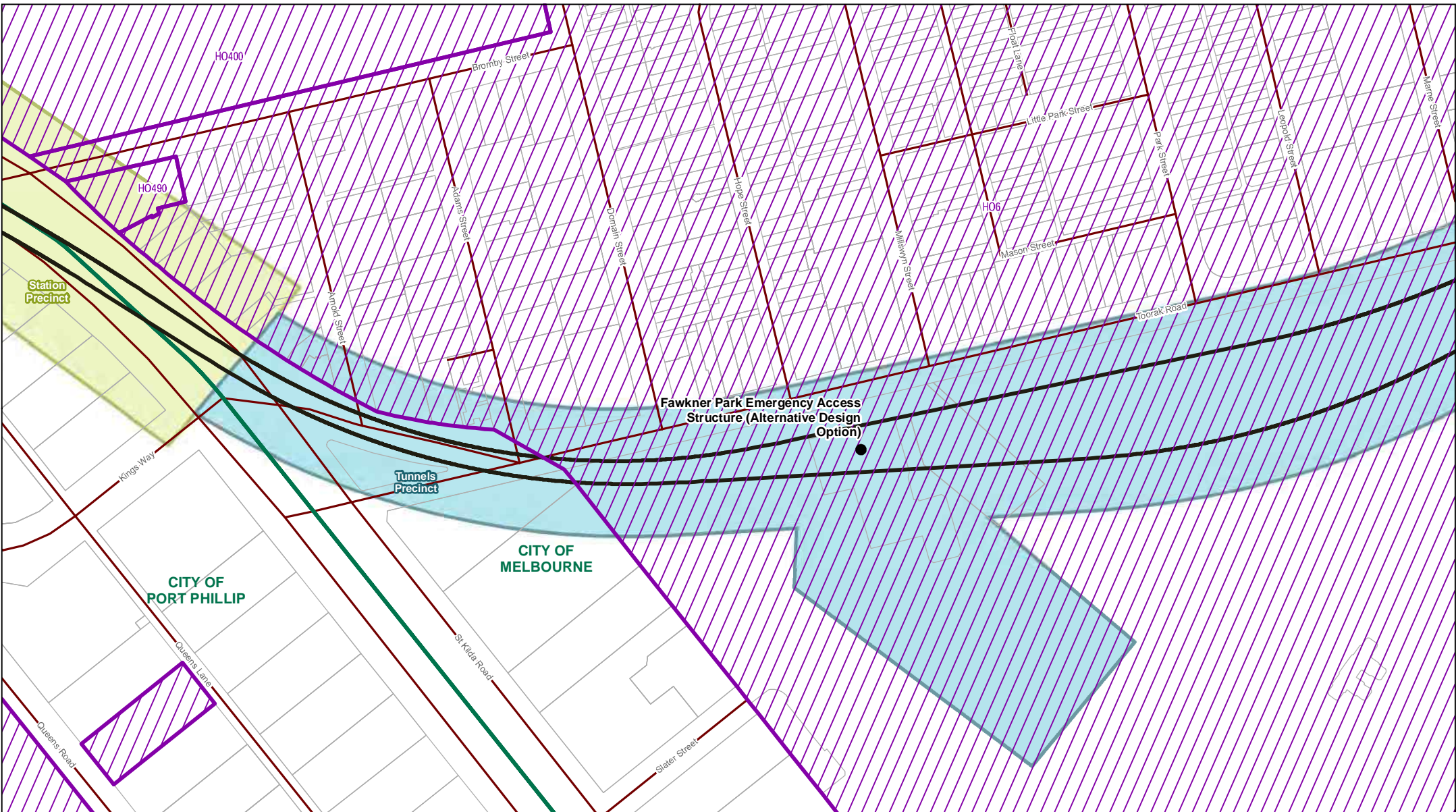
Melbourne Metro Rail Project

Title: Heritage Overlay

Drawing Number: MMR-AJM-PWAA-MP-ND-500321 Revision: P1

Drawn By: A.Berman	Approved By: S.Zahra	Date: 14/04/2016	Map Size: A4
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- Legend**
- Emergency Access Structure (Indicative)
 - Proposed alignment
 - Road

- Local Government Area (LGA)
 - Cadastre
 - HO - Heritage Overlay
- Environmental and Planning Precincts**
- Station Precinct
 - Tunnels Precinct

Map 12 of 15



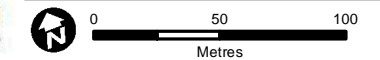
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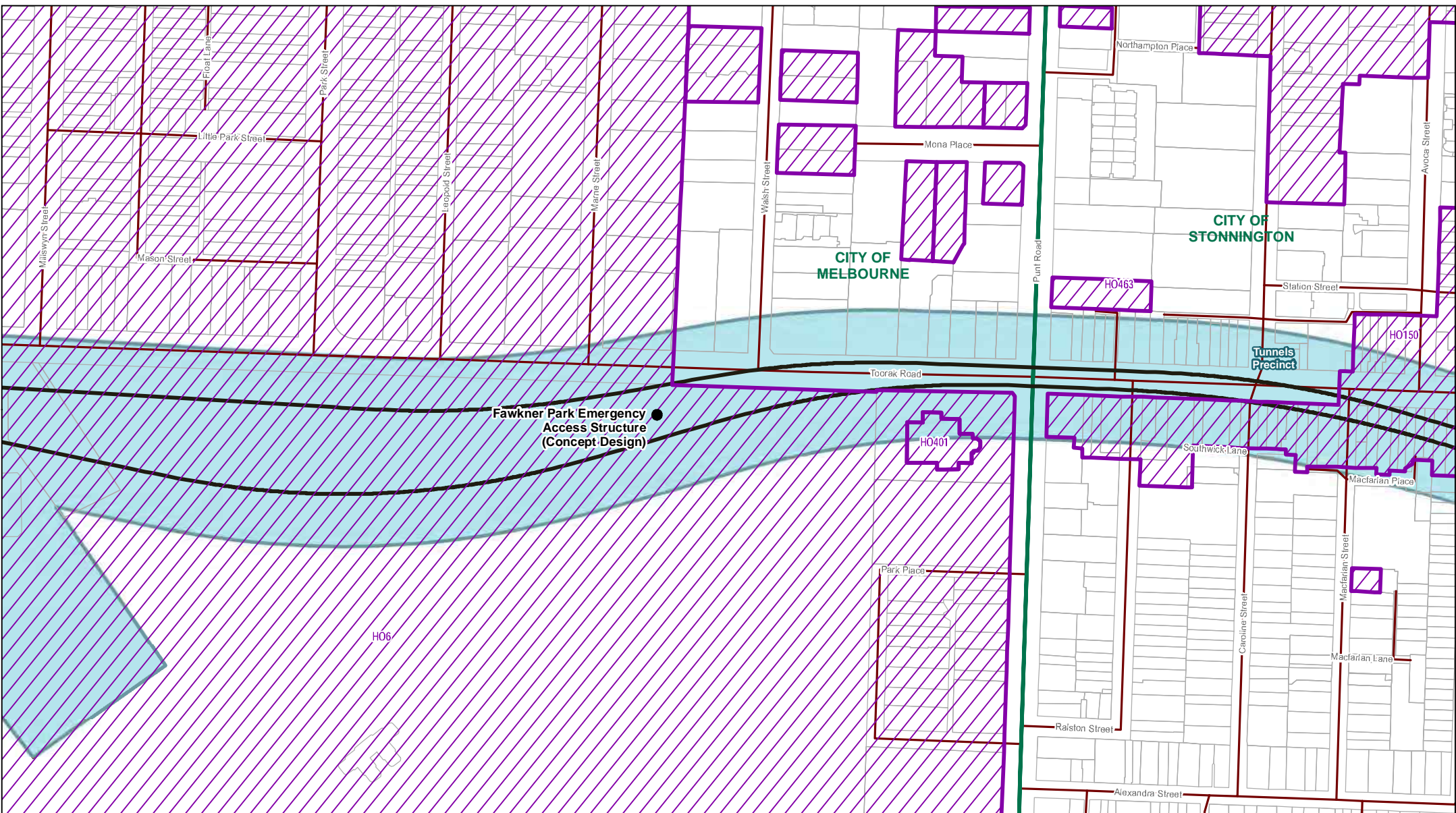
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Revision:
P1

Drawn By: A.Berman	Approved By: S.Zahra	Date: 14/04/2016	Map Size: A4
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- Legend**
- Emergency Access Structure (Indicative)
 - Proposed alignment
 - Road
 - Local Government Area (LGA)
 - Cadastral
 - HO - Heritage Overlay
 - Environmental and Planning Precincts**
 - Tunnels Precinct

Map 13 of 15

Data Sources:
 Proposed Infrastructure: AJM 2015/2016
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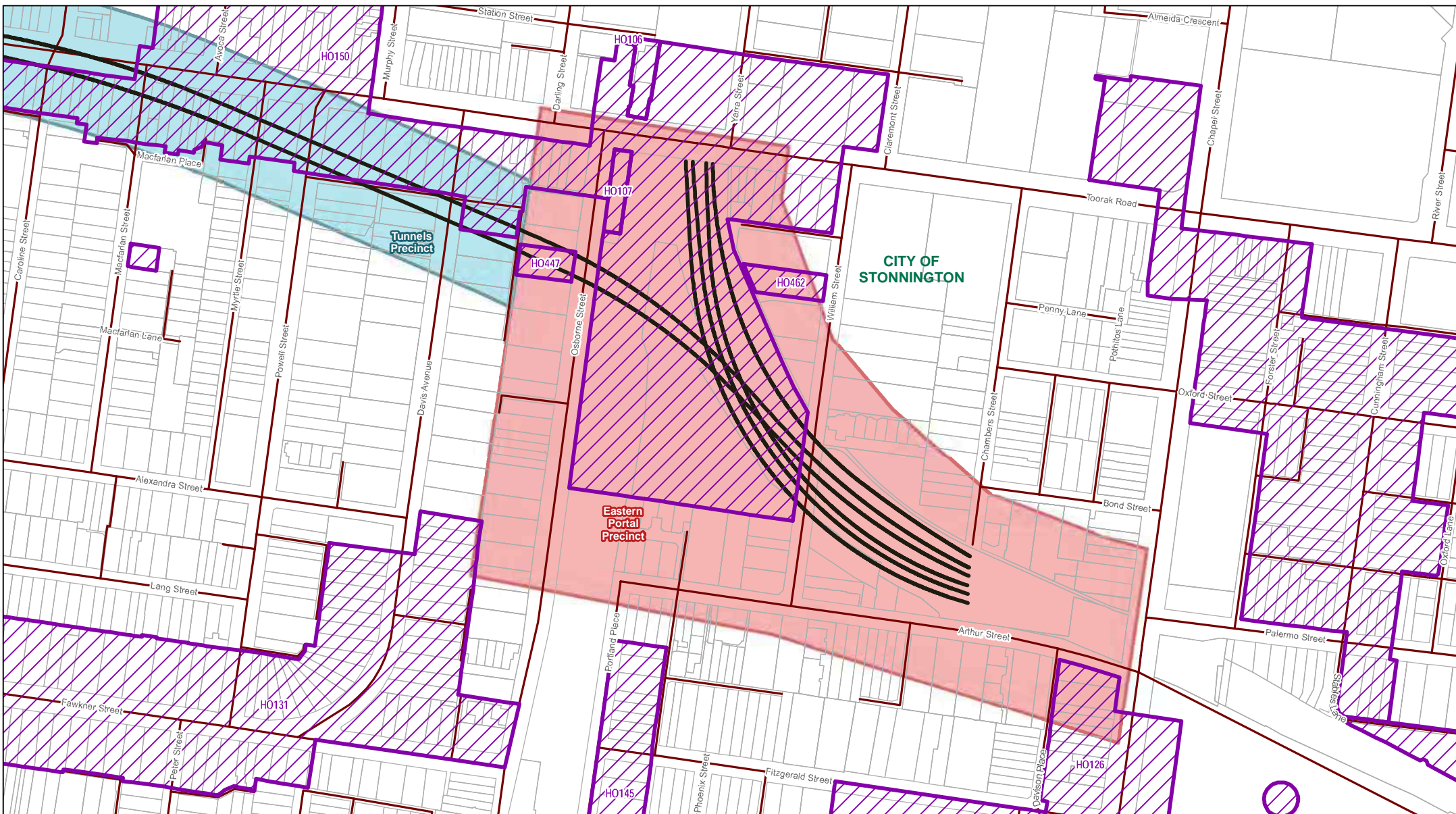


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Title:
Heritage Overlay

Drawing Number: MMR-AJM-PWAA-MP-ND-500321	Revision: P1
Drawn By: A.Berman	Approved By: S.Zahra
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Legend

- Proposed alignment
- Road
- Local Government Area (LGA)
- Cadastre
- HO - Heritage Overlay
- Environmental and Planning Precincts**
- Portal Precinct
- Tunnels Precinct

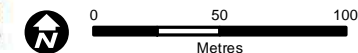
Map 14 of 15

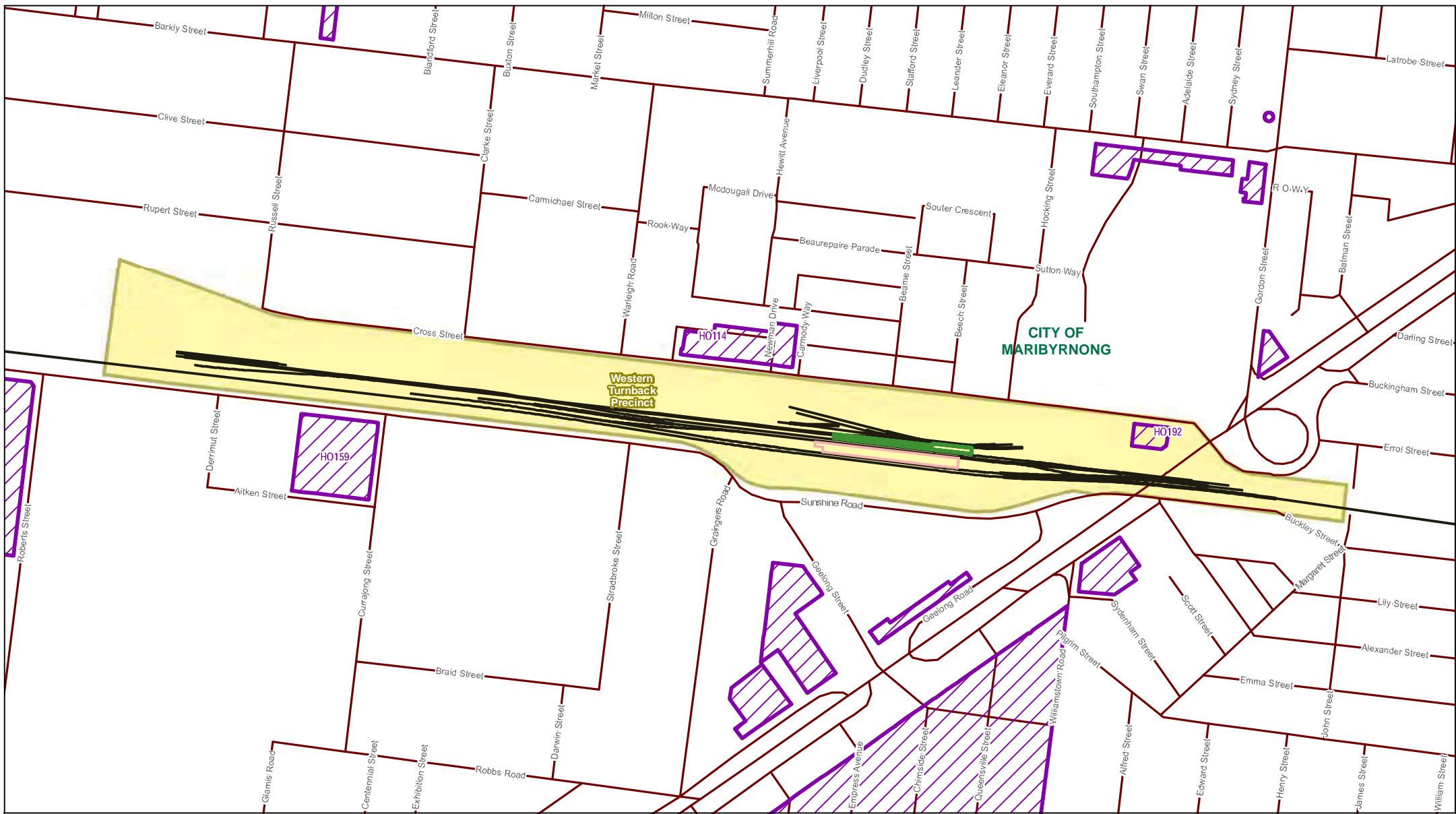
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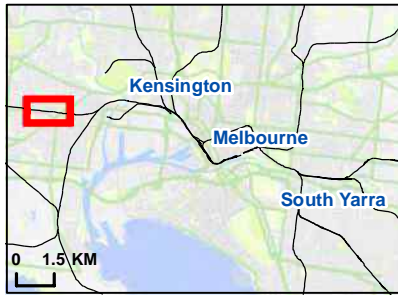




- Legend**
- Local Government Area (LGA)
 - Existing platform
 - Proposed platform
 - Proposed alignment
 - Road
 - HO - Heritage Overlay
 - Environmental and Planning Precincts
 - Western Turnback Precinct

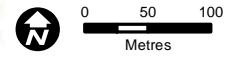
Map 15 of 15

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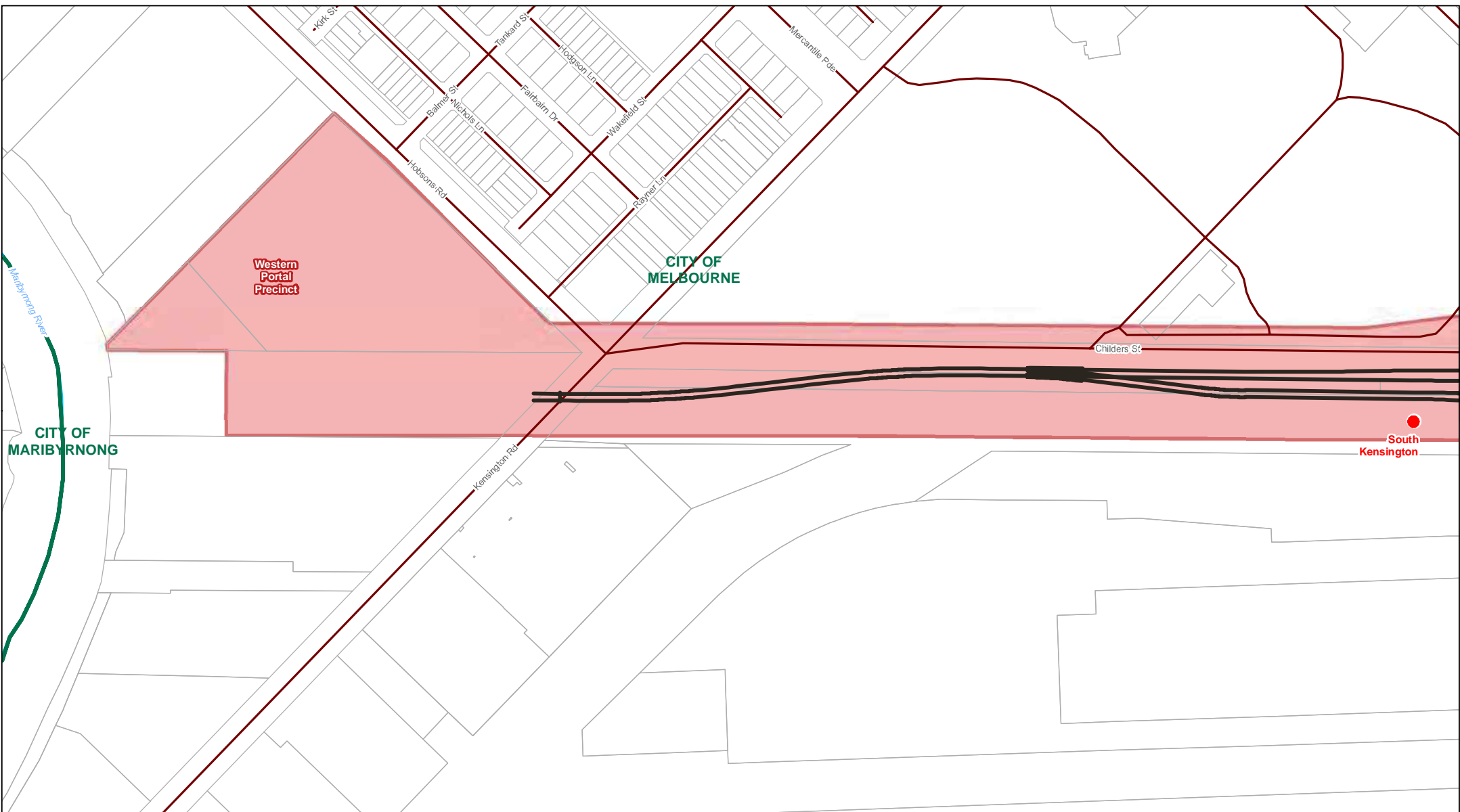
Melbourne Metro Rail Project

Title: Heritage Overlay			
Drawing Number: MMR-AJM-PWAA-MP-ND-500321		Revision: P1	
Drawn By: A. Berman	Approved By: S. Zahra	Date: 14/04/2016	Map Size: A4



APPENDIX D

Victorian Heritage Inventory sites



- Legend**
- Existing rail station
 - Local Government Area (LGA)
 - Proposed alignment
 - Cadastre
 - Road
 - Watercourse
 - Environmental and Planning Precincts
 - Portal Precinct

Map 1 of 20

Data Sources:
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Title: Victorian Heritage Inventory			
Drawing Number: MMR-AJM-PWAA-MP-ND-500322		Revision: P1	
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Legend

- Existing rail station
- Proposed alignment
- Road
- Local Government Area (LGA)
- Cadastre
- Environmental and Planning Precincts**
- Portal Precinct
- Tunnels Precinct

Map 2 of 20

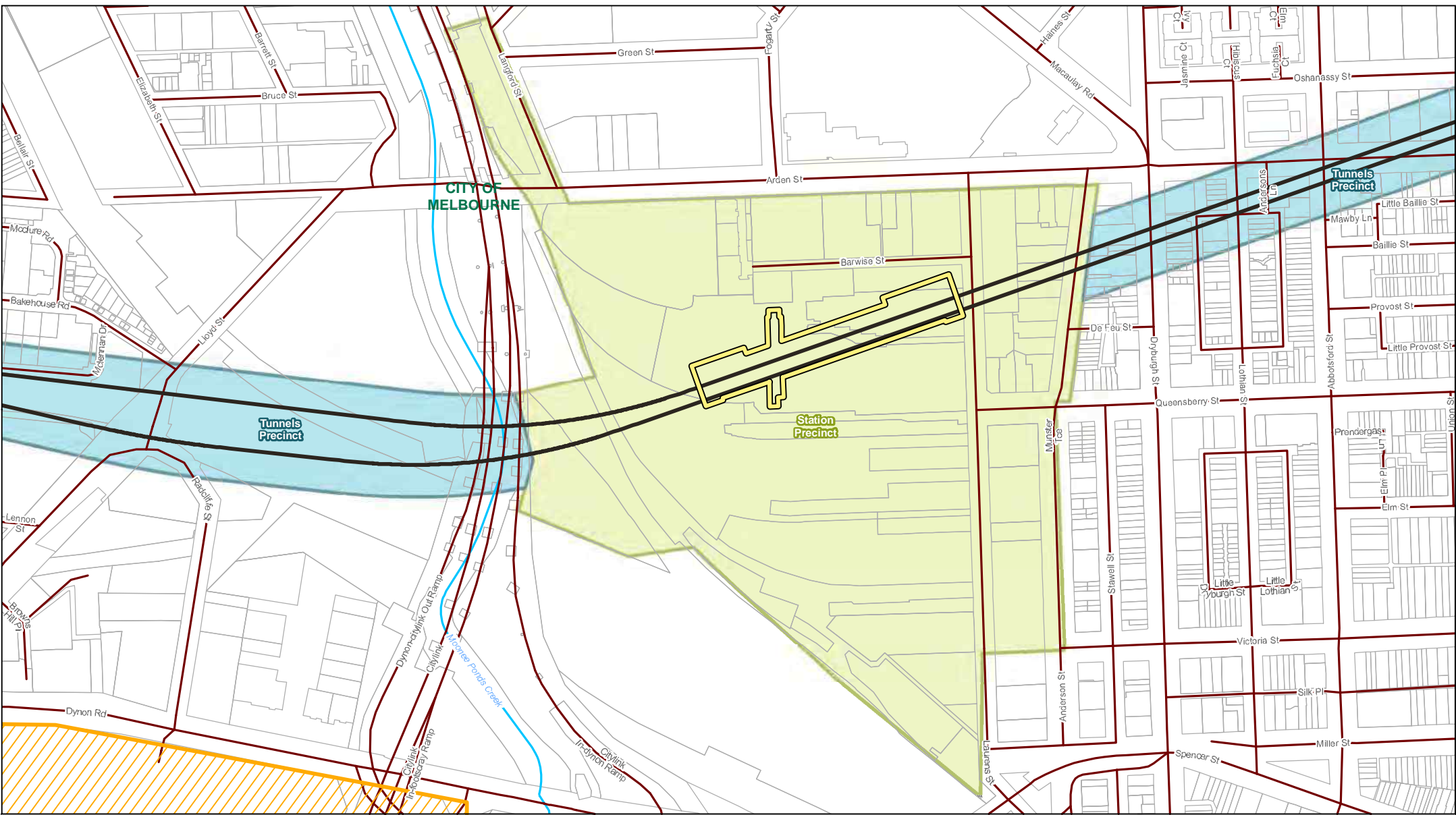
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Title: Victorian Heritage Inventory			
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- Legend**
- Proposed Station Extent
 - Proposed alignment
 - Road
 - Watercourse
 - Local Government Area (LGA)
 - Victorian Heritage Inventory
 - Cadastre
 - Environmental and Planning Precincts**
 - Station Precinct
 - Tunnels Precinct

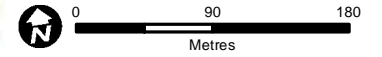
Map 3 of 20

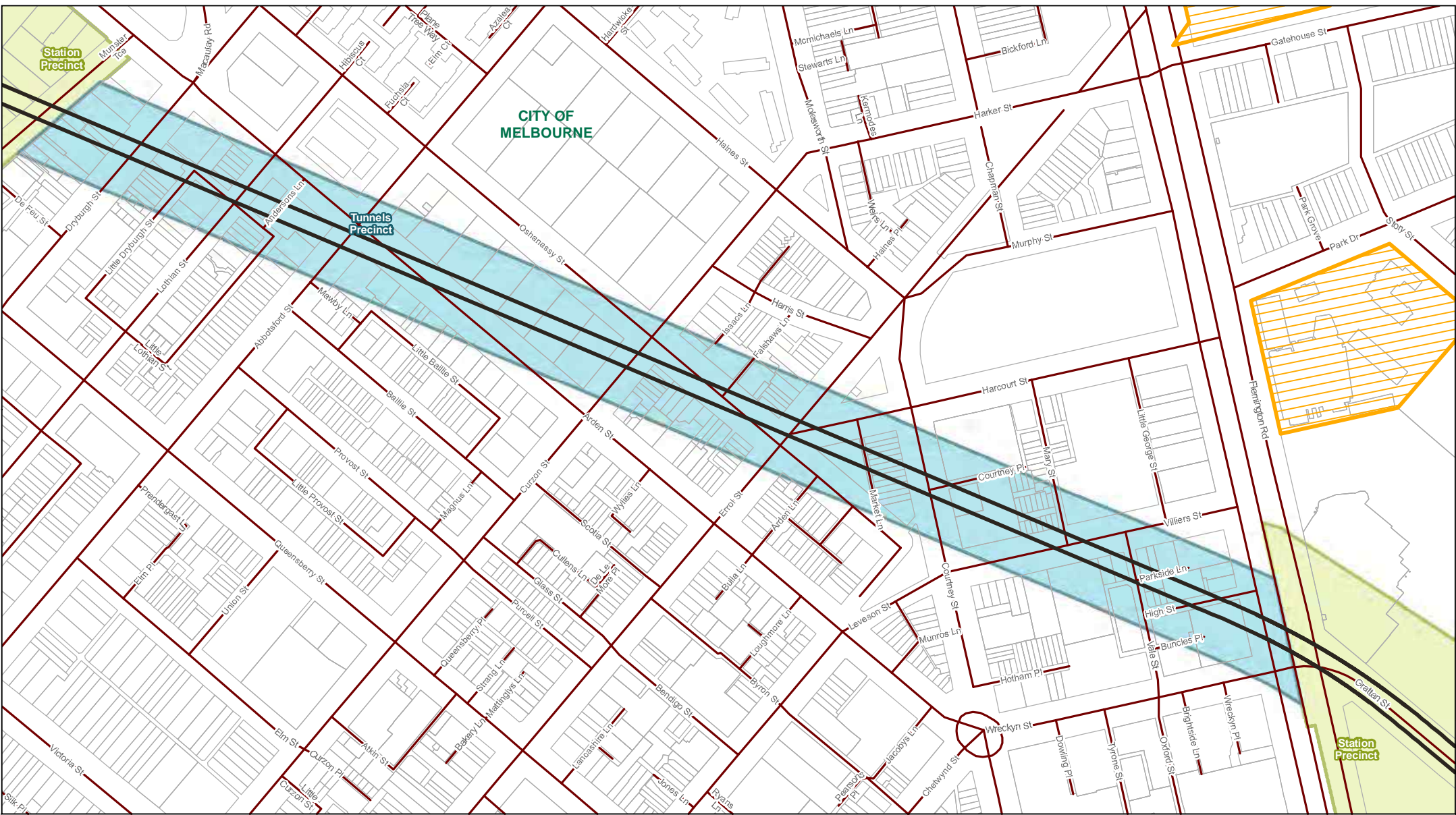
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Title: Victorian Heritage Inventory			
Drawing Number: MMR-AJM-PWAA-MP-ND-500322		Revision: P1	
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- Legend**
- Proposed alignment
 - Road
 - Local Government Area (LGA)
 - Victorian Heritage Inventory
 - Cadastre
 - Environmental and Planning Precincts**
 - Station Precinct
 - Tunnels Precinct

Map 4 of 20



Data Sources:
 Proposed Infrastructure: AJM 2015/2016
 Heritage Victoria: January 2016
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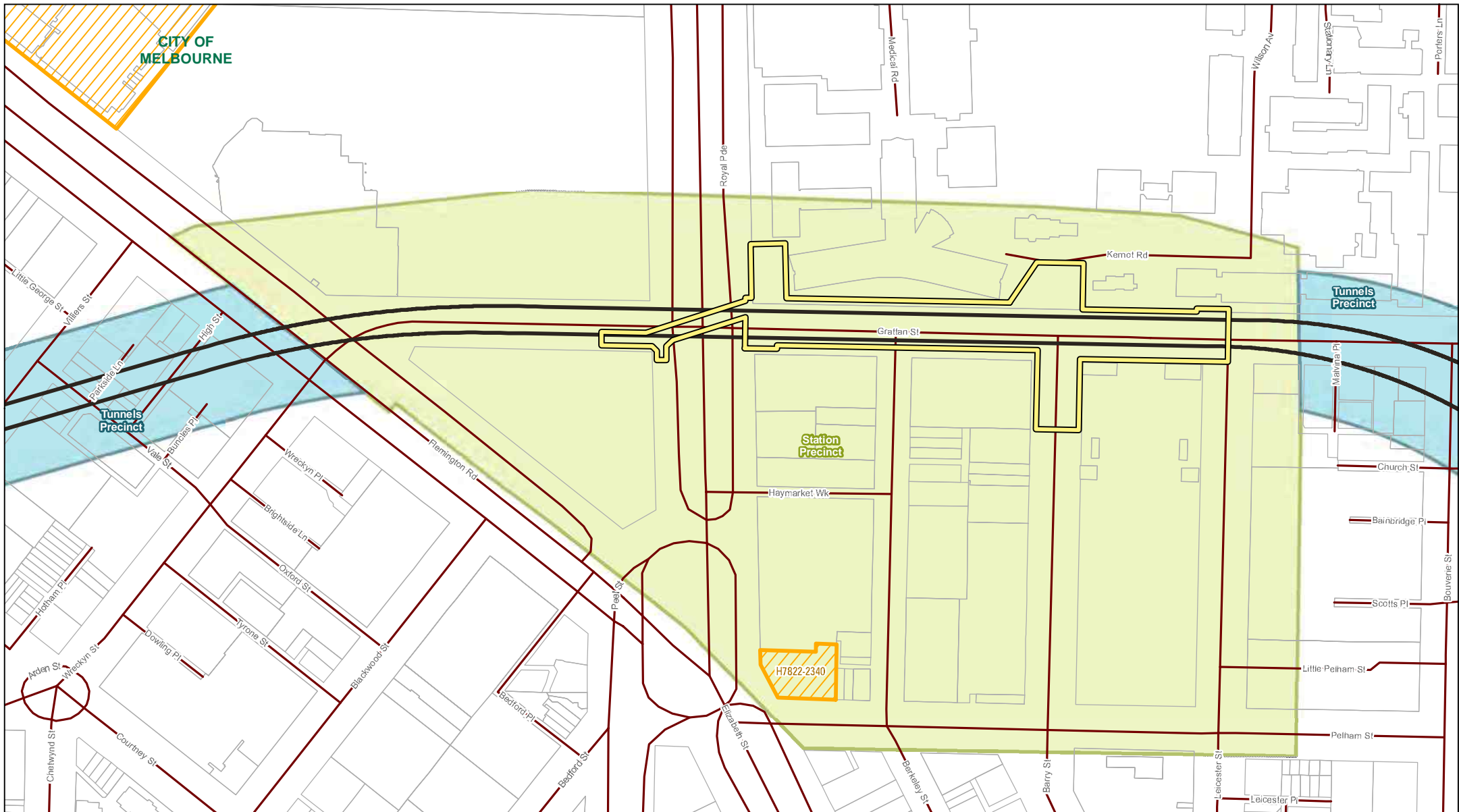
Melbourne Metro Rail Project

Title:
Victorian Heritage Inventory

Drawing Number: MMR-AJM-PWAA-MP-ND-500322	Revision: P1
Drawn By: A. Berman	Approved By: S. Zahra
Date: 14/04/2016	Map Size: A4

0 75 150 Metres

CITY OF MELBOURNE



Legend

-  Proposed Station Extent
-  Proposed alignment
-  Road
-  Local Government Area (LGA)
-  Victorian Heritage Inventory
-  Cadastre
- Environmental and Planning Precincts**
-  Station Precinct
-  Tunnels Precinct

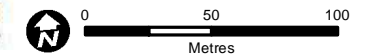
Map 5 of 20

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- Legend**
- Proposed Station Extent
 - Proposed alignment
 - Road
 - Local Government Area (LGA)
 - Victorian Heritage Inventory
 - Cadastre
 - Environmental and Planning Precincts**
 - Station Precinct
 - Tunnels Precinct

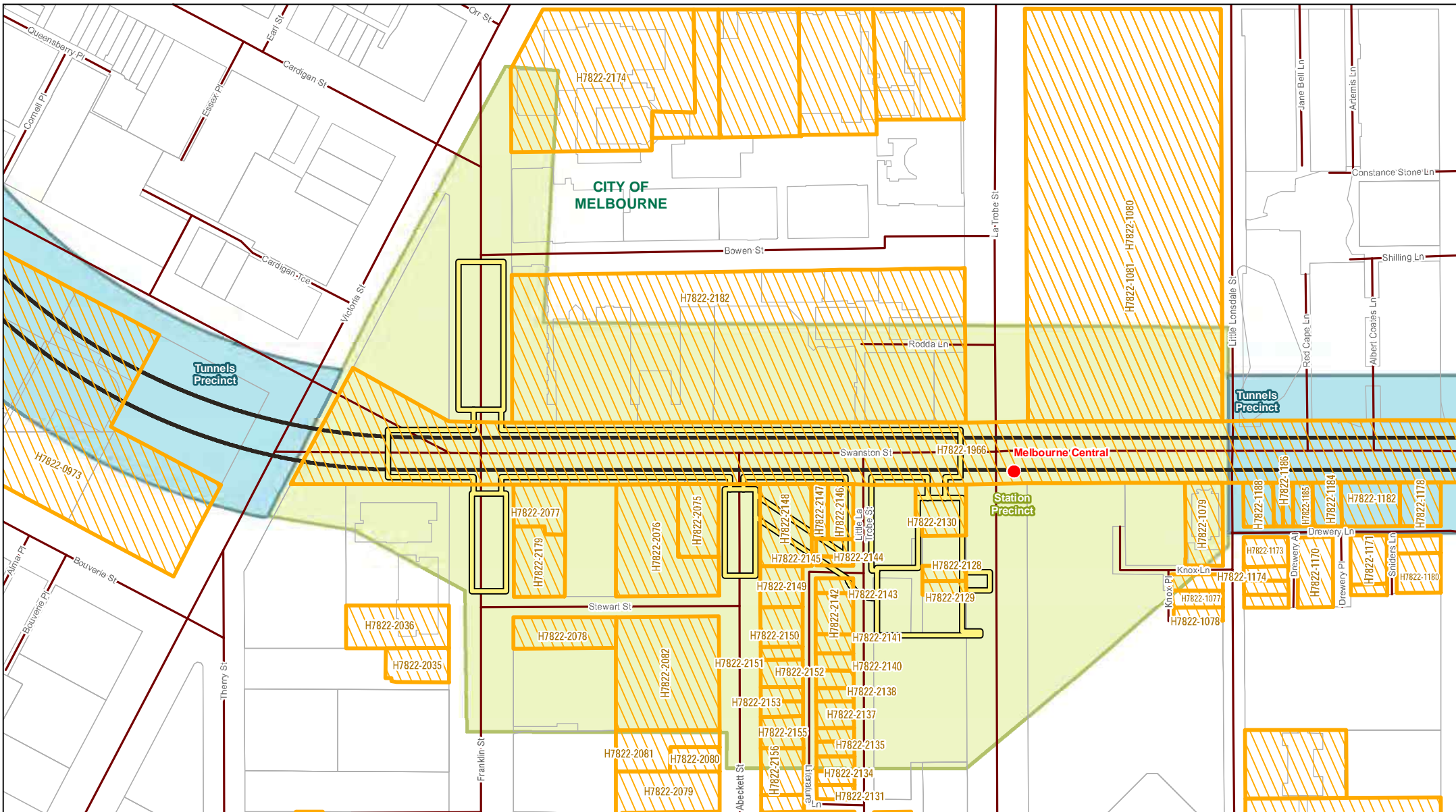
Map 6 of 20

Data Sources:
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Drawn By: A.Berman	Approved By: S.Zahra	Date: 14/04/2016	Map Size: A4



Map 7 of 20

- Legend**
- Existing rail station
 - Proposed Station Extent
 - Proposed alignment
 - Road
 - Local Government Area (LGA)
 - Victorian Heritage Inventory
 - Cadastre
 - Environmental and Planning Precincts**
 - Station Precinct
 - Tunnels Precinct

Data Sources:
 Proposed Infrastructure: AJM 2015/2016
 Heritage Victoria: January 2016
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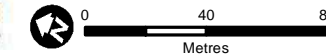


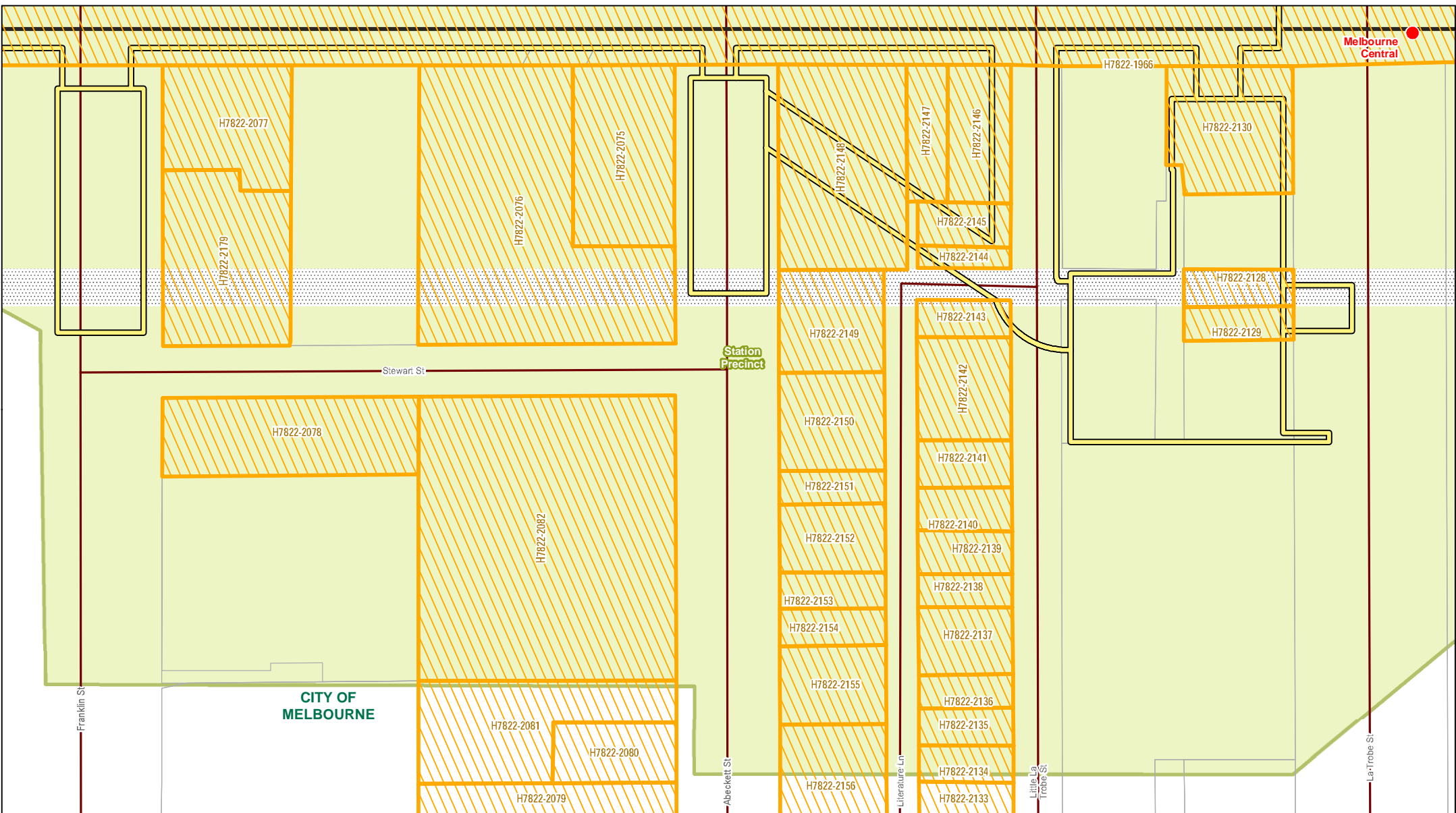
Melbourne Metro Rail Project

Title:
 Victorian Heritage Inventory

Drawing Number: MMR-AJM-PWAA-MP-ND-500322
 Revision: P1

Drawn By: A. Berman
 Approved By: S. Zahra
 Date: 14/04/2016
 Map Size: A4





- Legend**
- Existing rail station
 - Proposed Station Extent
 - Proposed alignment
 - Road
 - Local Government Area (LGA)
 - Victorian Heritage Inventory
 - Cadastre
 - Environmental and Planning Precincts**
 - Station Precinct

Map 8 of 20

Data Sources:
 Proposed Infrastructure: AJM 2015/2016
 Heritage Victoria: January 2016
 Contains Vicmap Information
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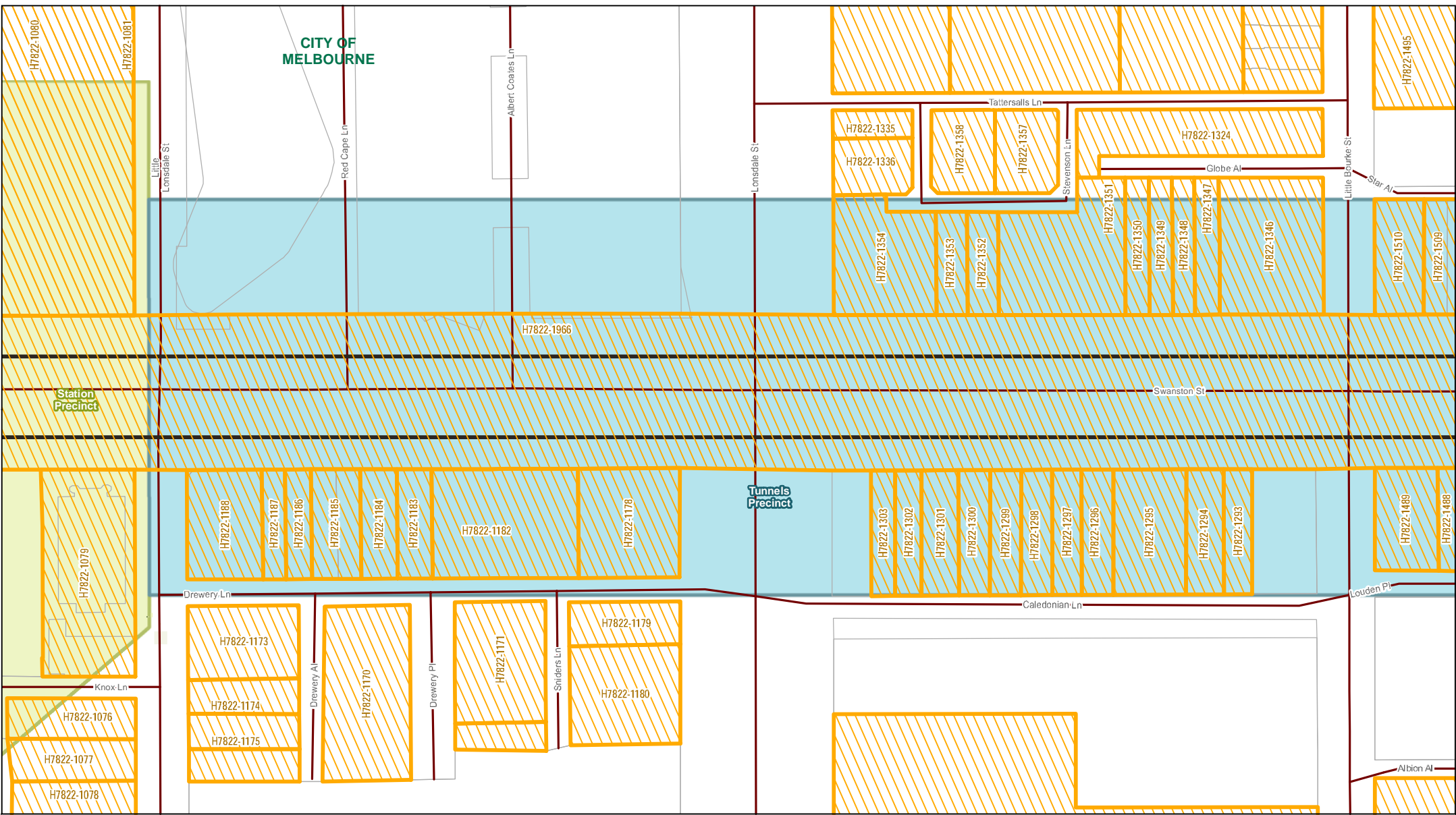


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CITY OF MELBOURNE

Station Precinct

Tunnels Precinct

- Legend**
- Proposed alignment
 - Road
 - Local Government Area (LGA)
 - Victorian Heritage Inventory
 - Cadastre
 - Environmental and Planning Precincts**
 - Station Precinct
 - Tunnels Precinct

Map 9 of 20

Data Sources:
 Proposed Infrastructure: AJM 2015/2016
 Heritage Victoria: January 2016
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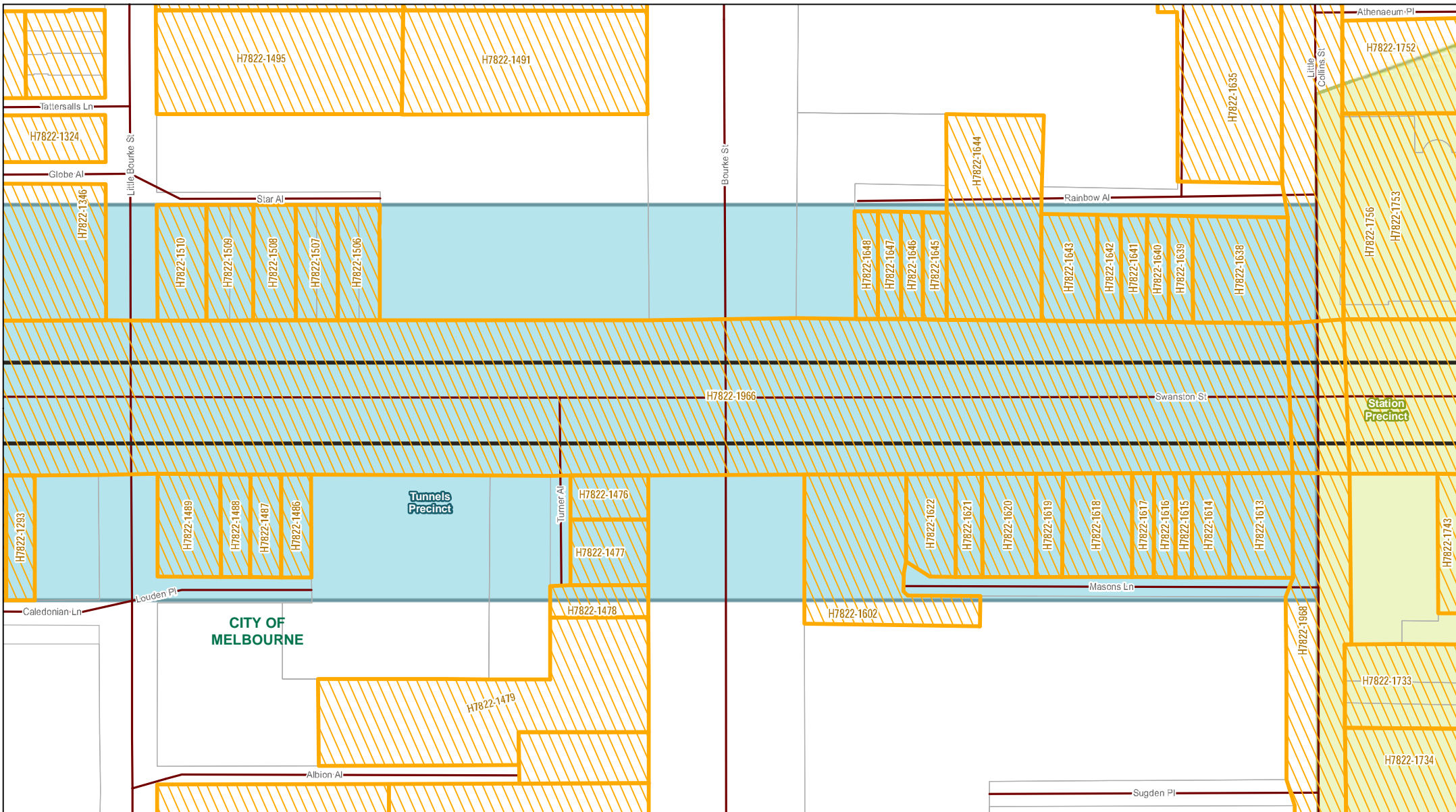
Melbourne Metro Rail Project

Title:
Victorian Heritage Inventory

Drawing Number: MMR-AJM-PWAA-MP-ND-500322 Revision: P1

Drawn By: A.Berman	Approved By: S.Zahra	Date: 14/04/2016	Map Size: A4
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0 10 20 Metres



Legend

- Proposed alignment
- Road
- Local Government Area (LGA)
- Victorian Heritage Inventory
- Cadastre
- Environmental and Planning Precincts**
- Station Precinct
- Tunnels Precinct

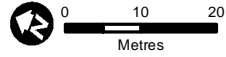
Map 10 of 20

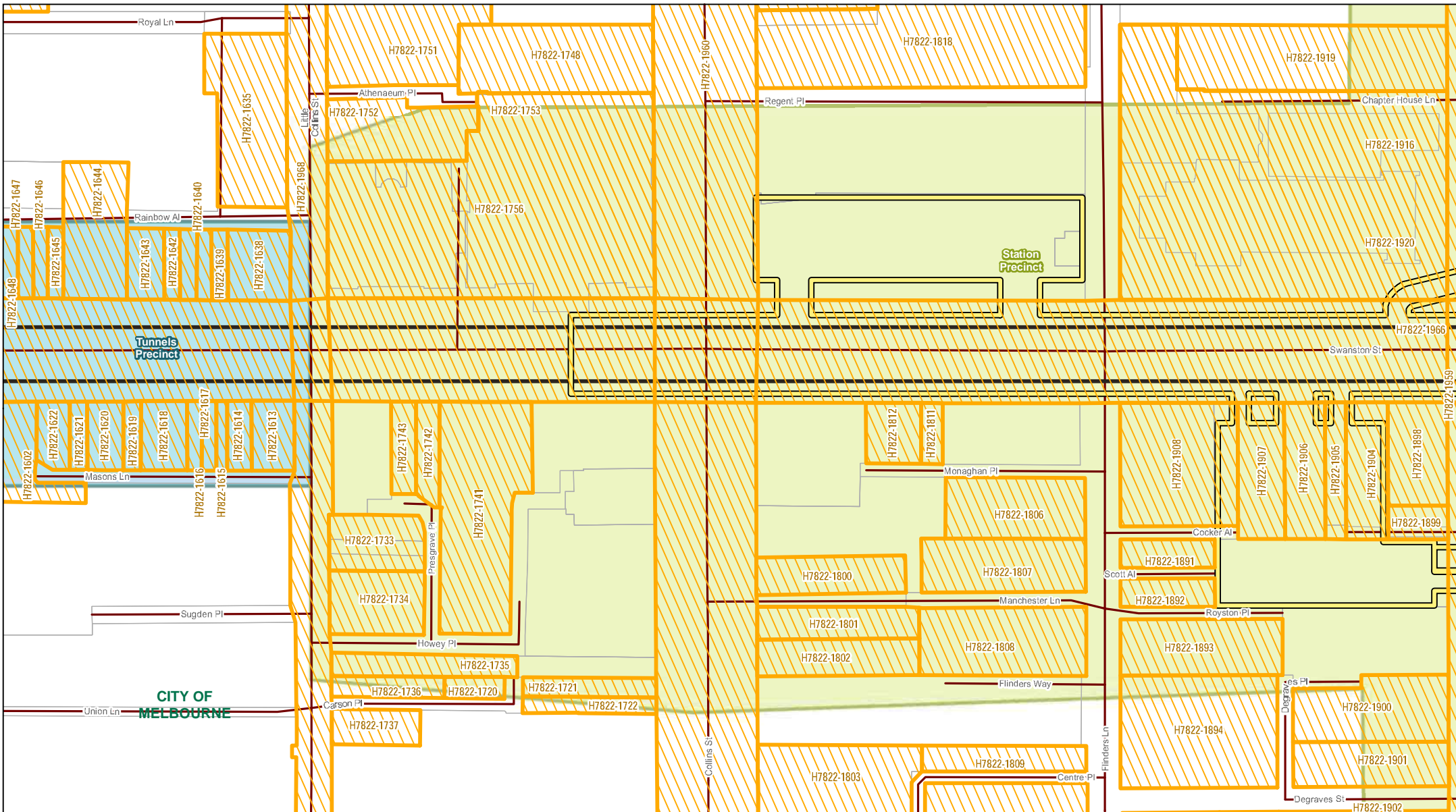
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Legend

- Proposed Station Extent
- Proposed alignment
- Road
- Local Government Area (LGA)
- Victorian Heritage Inventory
- Cadastre
- Environmental and Planning Precincts**
- Station Precinct
- Tunnels Precinct

Map 11 of 20

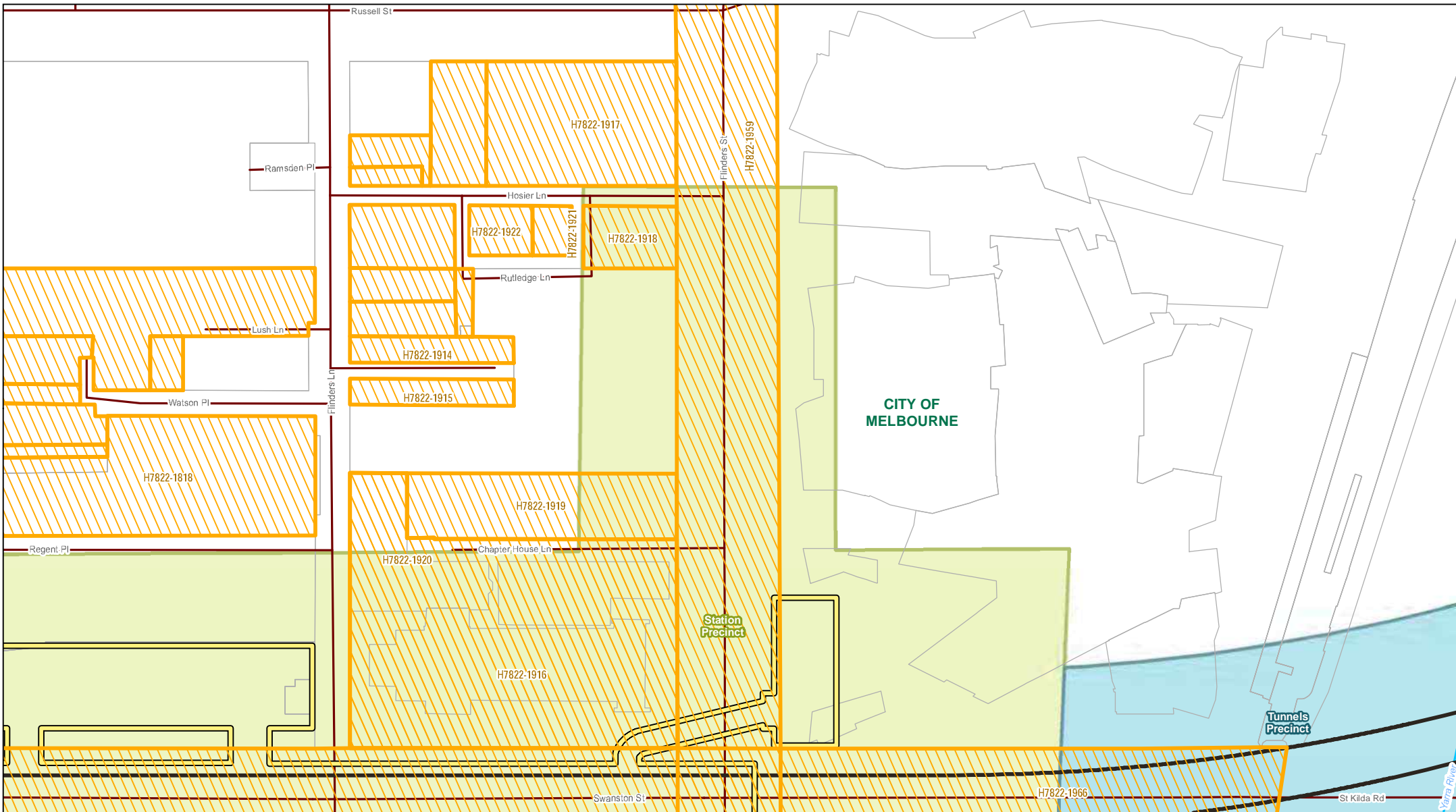
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Legend

- Proposed Station Extent
- Proposed alignment
- Road
- Watercourse
- Local Government Area (LGA)
- Victorian Heritage Inventory
- Cadastre
- Environmental and Planning Precincts**
- Station Precinct
- Tunnels Precinct

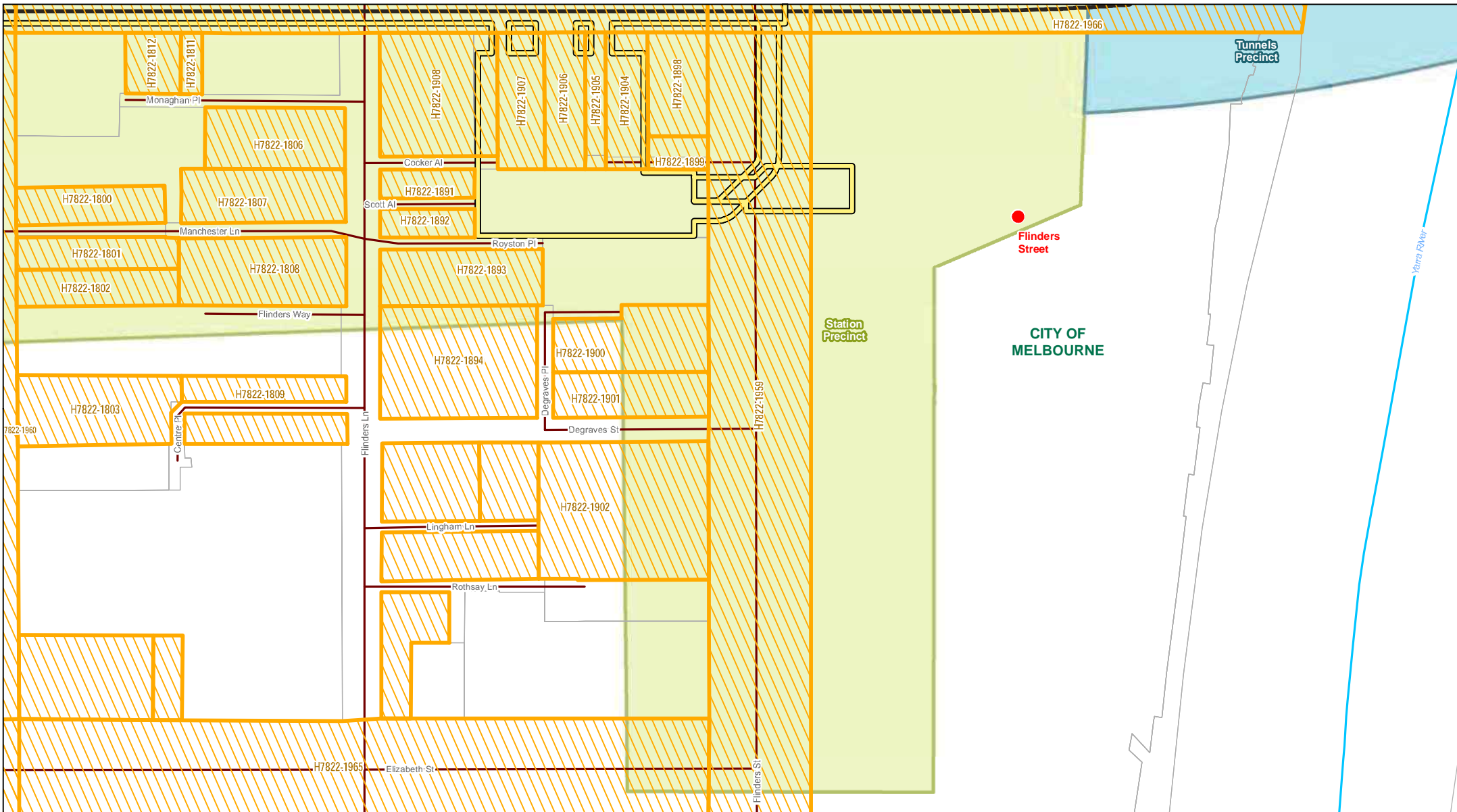
Map 12 of 20

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Legend

- Existing rail station
- Proposed Station Extent
- Proposed alignment
- Road
- Watercourse
- Local Government Area (LGA)
- Victorian Heritage Inventory
- Cadastre
- Environmental and Planning Precincts**
- Station Precinct
- Tunnels Precinct

Map 13 of 20

Data Sources:
 Proposed Infrastructure: AJM 2015/2016
 Heritage Victoria: January 2016
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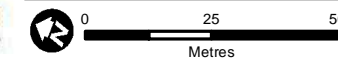


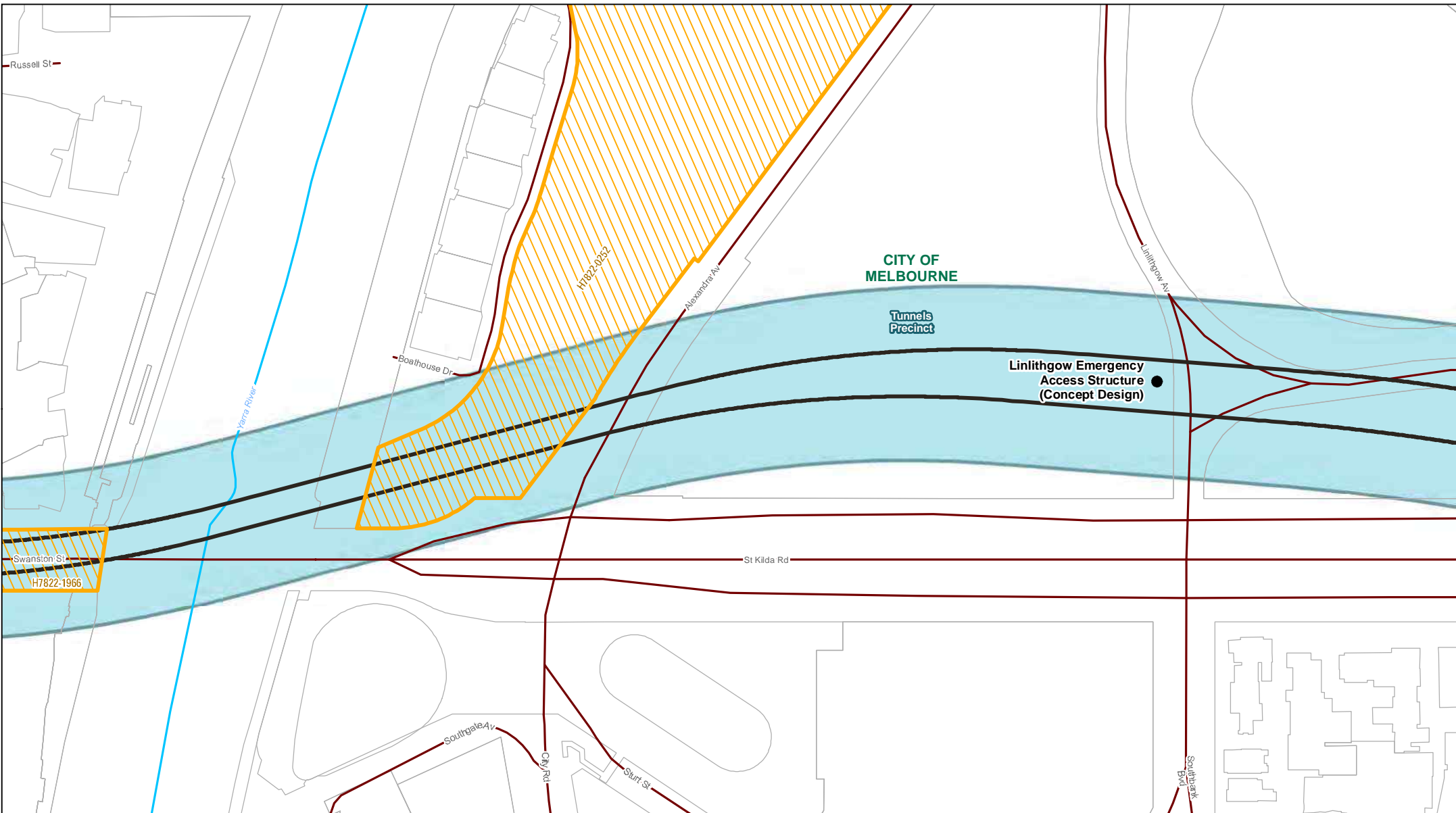
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Drawn By: A.Berman	Approved By: S.Zahra	Date: 14/04/2016	Map Size: A4
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Legend

- Emergency Access Structure (Indicative)
- Proposed alignment
- Road
- Watercourse
- Local Government Area (LGA)
- Victorian Heritage Inventory
- Cadastre
- Environmental and Planning Precincts**
- Tunnels Precinct

Map 14 of 20

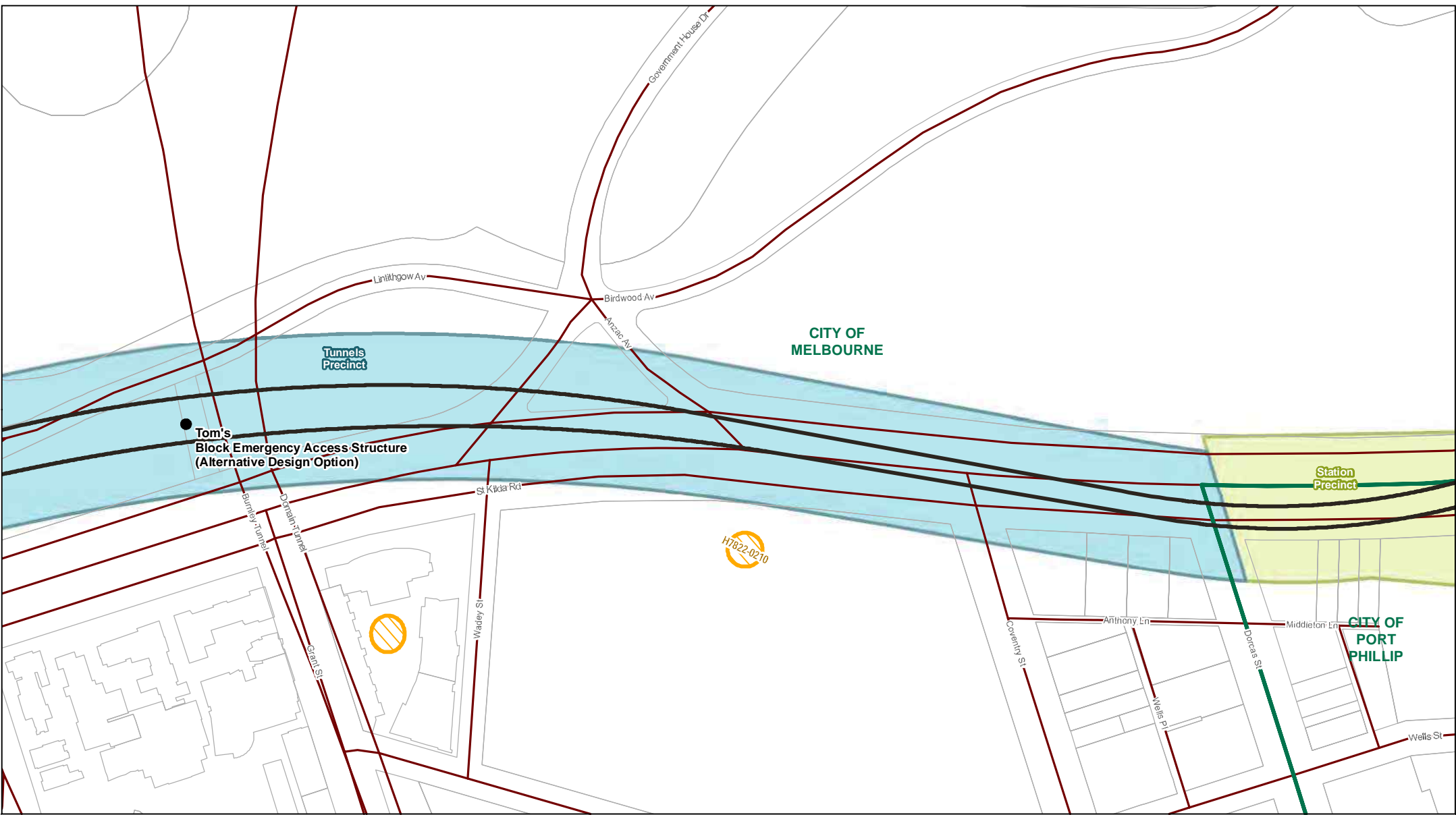
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- Legend**
- Emergency Access Structure (Indicative)
 - Proposed alignment
 - Road
 - Local Government Area (LGA)
 - Victorian Heritage Inventory
 - Cadastre
- Environmental and Planning Precincts**
- Station Precinct
 - Tunnels Precinct

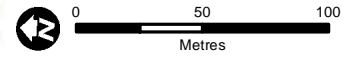
Map 15 of 20

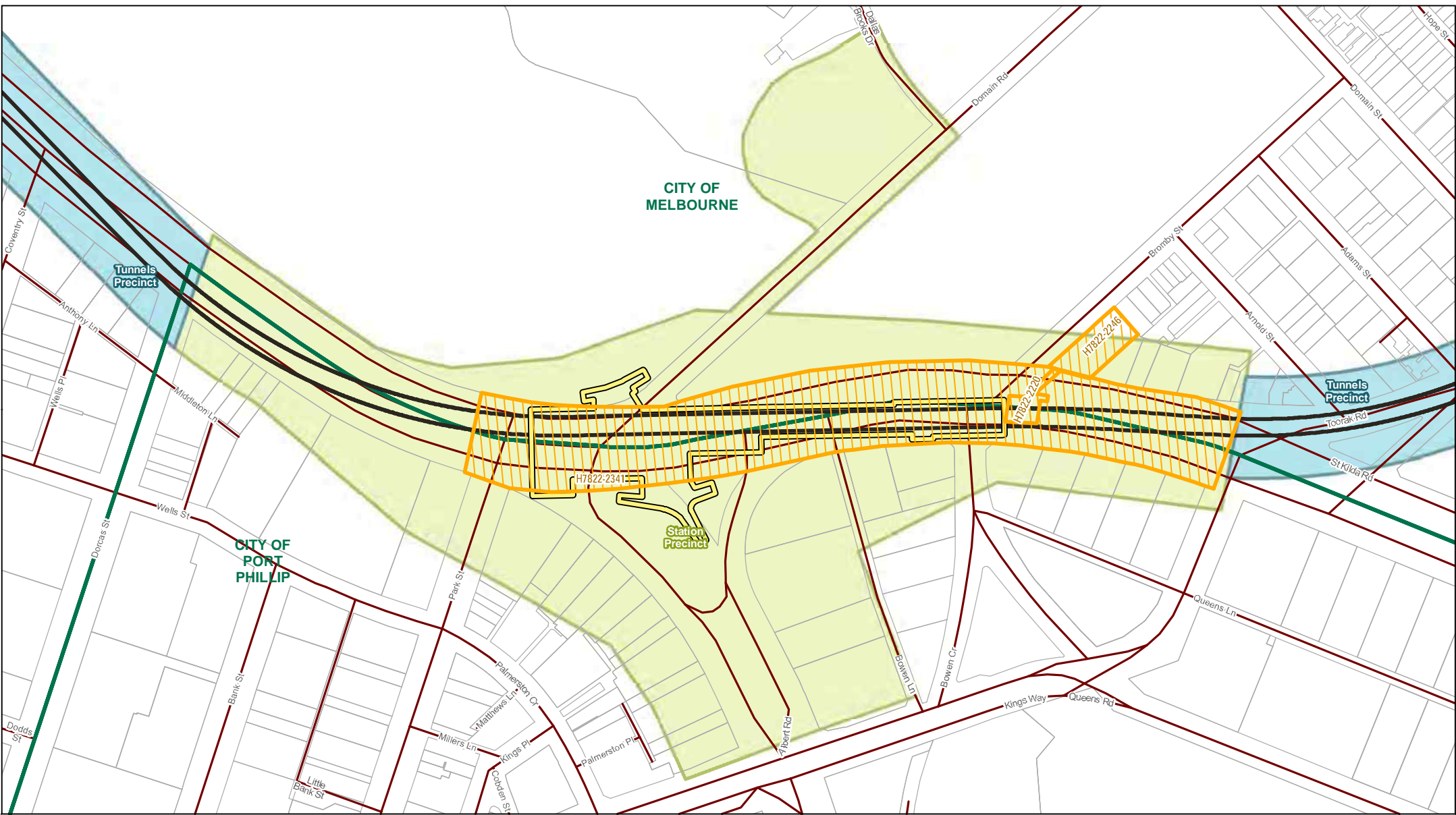
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- Legend**
- Proposed Station Extent
 - Proposed alignment
 - Road
 - Local Government Area (LGA)
 - Victorian Heritage Inventory
 - Cadastre
 - Environmental and Planning Precincts**
 - Station Precinct
 - Tunnels Precinct

Map 16 of 20

Data Sources:
 Proposed Infrastructure: AJM 2015/2016
 Heritage Victoria: January 2016
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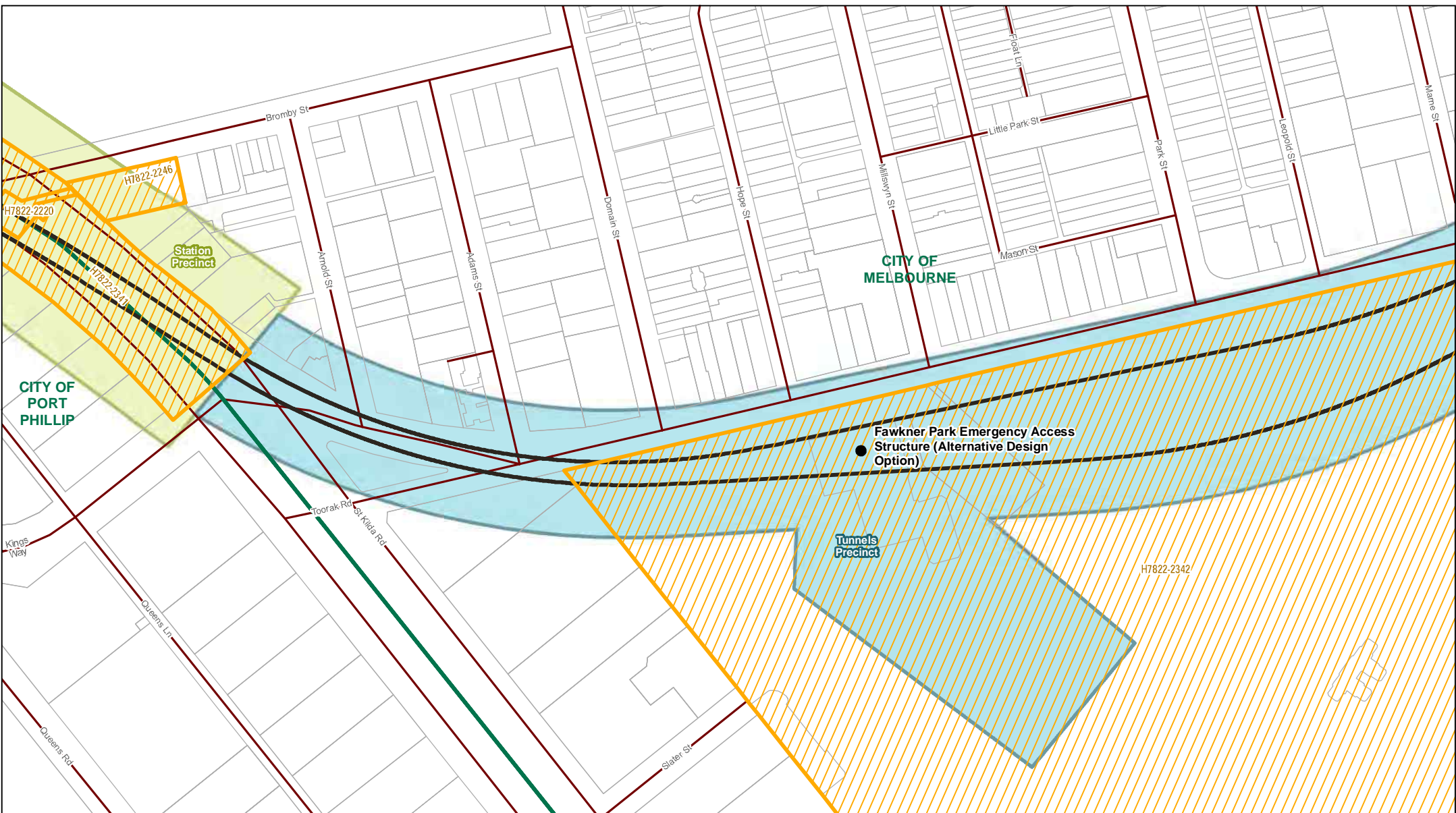


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0 70 140 Metres



- Legend**
- Emergency Access Structure (Indicative)
 - Proposed alignment
 - Road

- Local Government Area (LGA)
 - Victorian Heritage Inventory
 - Cadastre
- Environmental and Planning Precincts**
- Station Precinct
 - Tunnels Precinct

Map 17 of 20

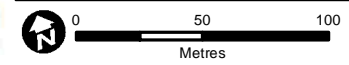
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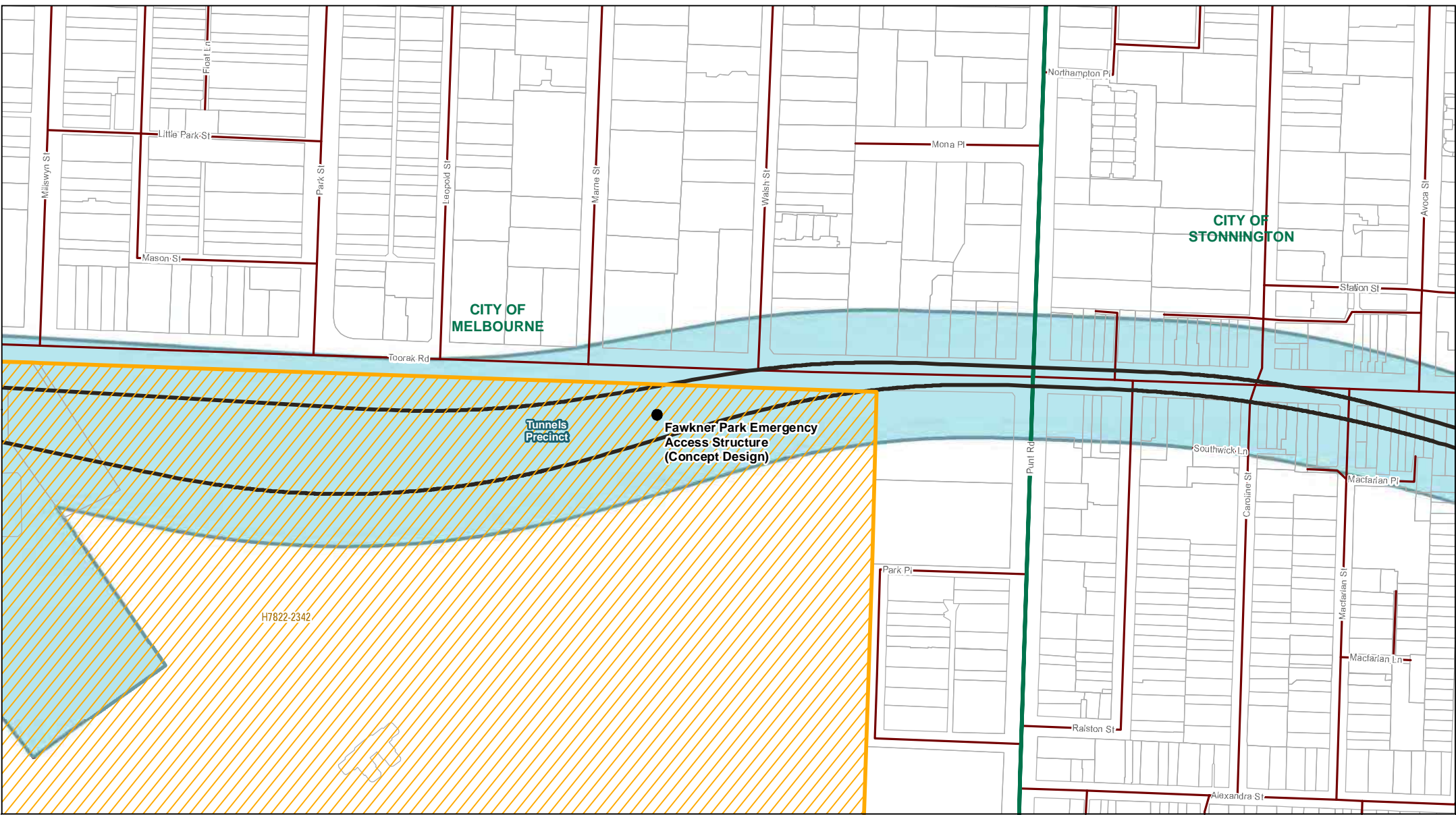


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Title:
Victorian Heritage Inventory

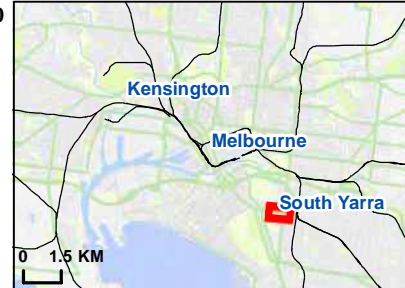
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Drawn By: A.Berman	Approved By: S.Zahra
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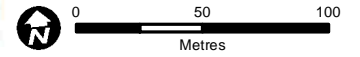
- Legend**
- Emergency Access Structure (Indicative)
 - Proposed alignment
 - Road
 - Local Government Area (LGA)
 - Victorian Heritage Inventory
 - Cadastral
 - Environmental and Planning Precincts**
 - Tunnels Precinct

Map 18 of 20

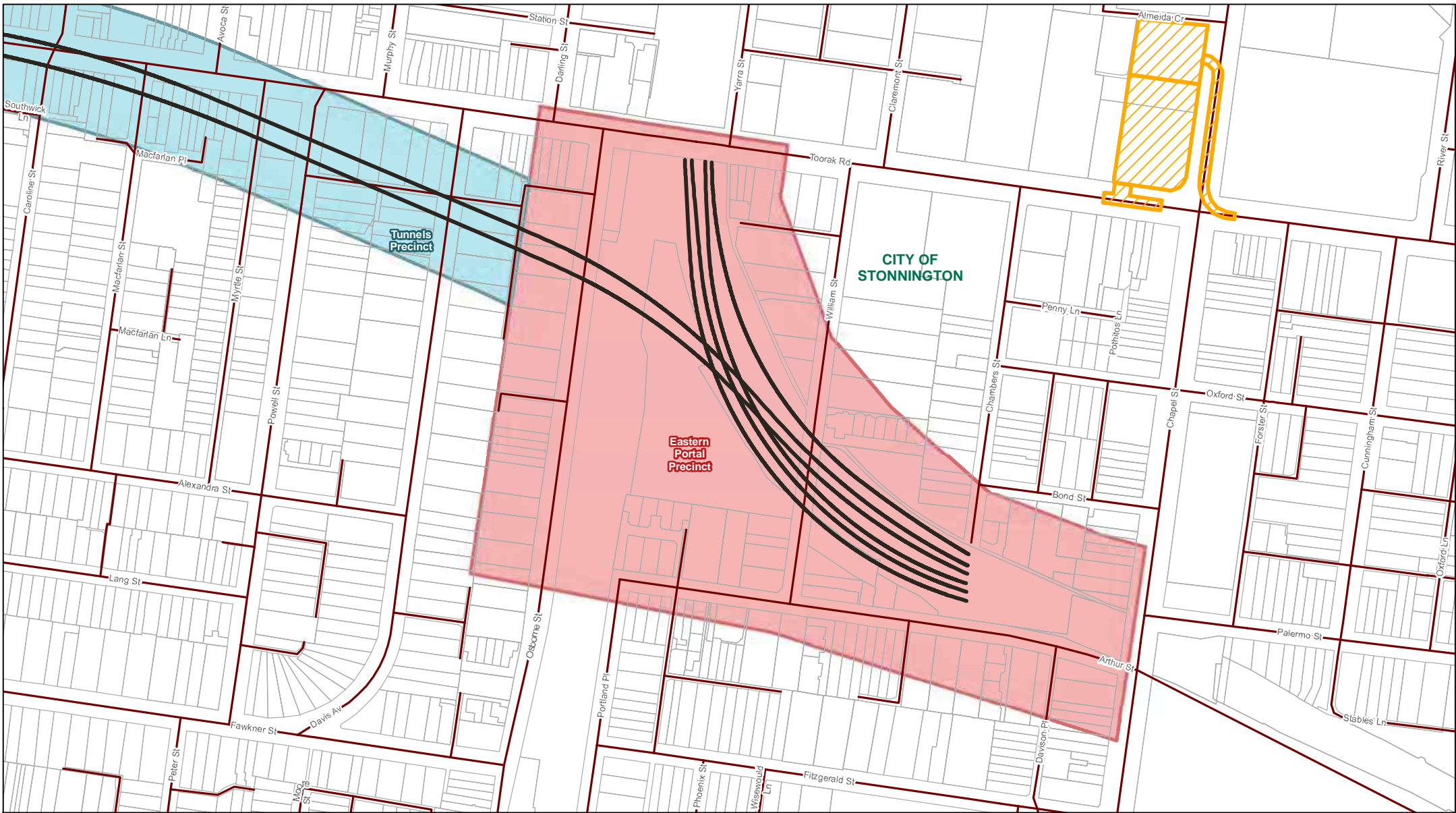


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Proposed Infrastructure: AJM 2015/2016
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Legend


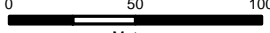
-  Proposed alignment
-  Road
-  Local Government Area (LGA)
-  Victorian Heritage Inventory
-  Cadastre
- Environmental and Planning Precincts**
-  Portal Precinct
-  Tunnels Precinct

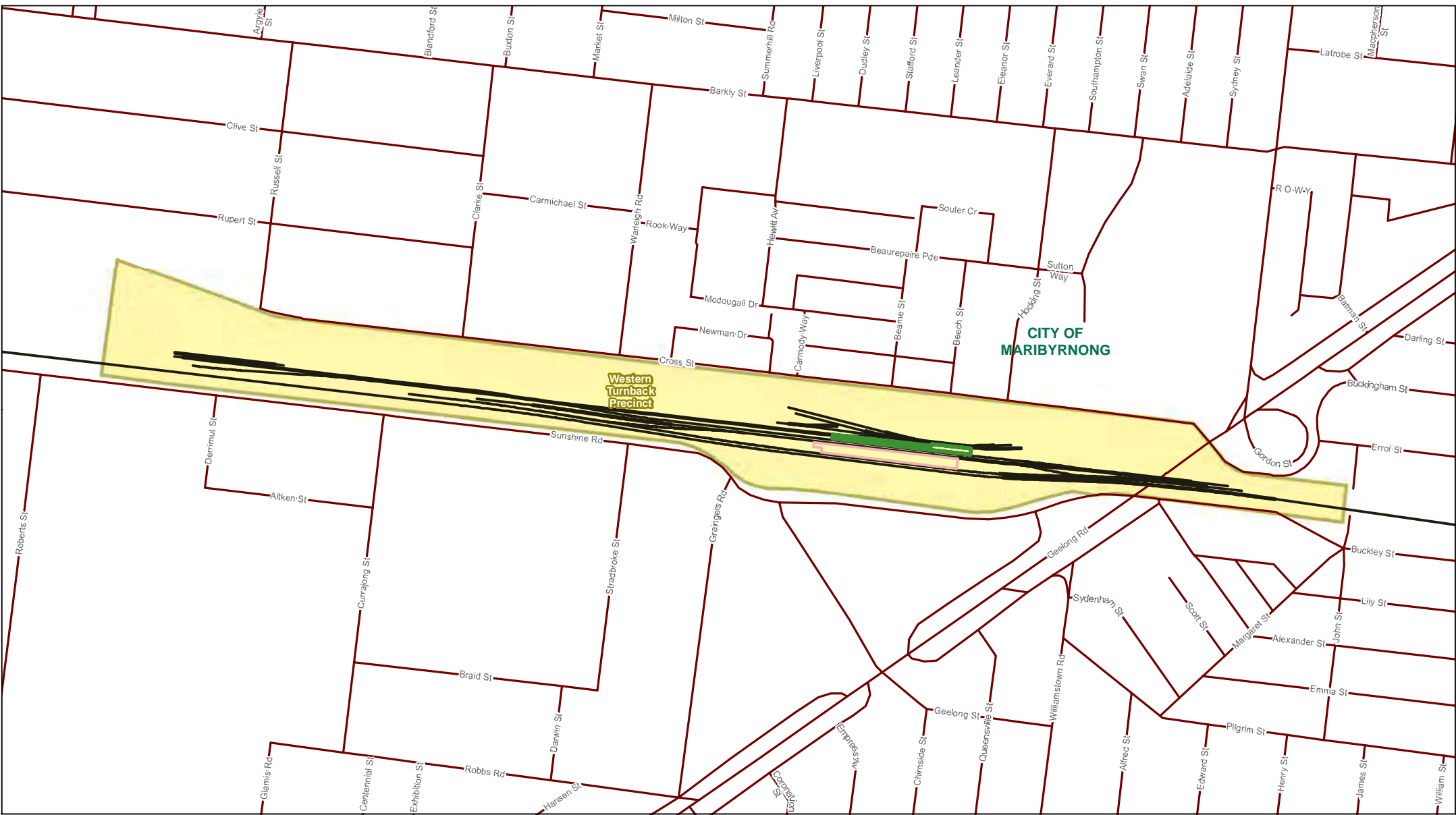
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- Legend**
- Proposed Turnback Design - West Footscray
 - Existing platform
 - Proposed platform
 - Proposed alignment
 - Road

- Local Government Area (LGA)
- Environmental and Planning Precincts
- Western Turnback Precinct

Map 20 of 20



Melbourne Metro Rail Project

Title: Victorian Heritage Inventory			
Drawing Number: MMR-AJM-PWAA-MP-ND-500322		Revision: P1	
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Data Sources:
 Proposed Infrastructure: AJM 2015/2016
 Heritage Victoria: January 2016
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National Heritage List Places

Table 1 NHL places within a 1km radius of the Concept Design

NHL Number	Place	Address	Location
105896	High Court of Australia (Former)	450 Little Bourke Street, Melbourne	CBD North Station to CBD South Station Tunnel
105747	ICI Building (Former)	1-4 Nicholson Street, East Melbourne	CBD North Station to CBD South Station Tunnel
105739	Newman College	887 Swanston Street, Parkville	Parkville Station to CBD North Station Tunnel
105885	Melbourne Cricket Ground	Brunton Avenue, Jolimont	CBD South Station to Domain Station Tunnel
105708 (Also on the Australia's World Heritage List 105143)	Royal Exhibition Building and Carlton Gardens	Victoria Street, Carlton	Parkville Station to CBD North Station Tunnel
105743	Sidney Myer Music Bowl	Linlithgow Avenue, Melbourne	CBD South Station to Domain Station Tunnel
105232	Victoria Barracks Precinct	St Kilda Road, Southbank	CBD South Station to Domain Station Tunnel
105922	Flemington Racecourse	448 Epsom Road, Flemington	Western Portal

Precinct 1: Tunnels CHL, VHR, VHI and HO places

Table 2 CHL places in precinct 1

CHL place	Address	Place ID
Victoria Barracks A Block	St Kilda Road, Southbank	105167
Victoria Barracks C Block	St Kilda Road, Southbank	105171
Victoria Barracks F Block	St Kilda Road, Southbank	105170
Victoria Barracks G Block	St Kilda Road, Southbank	105168
Victoria Barracks Guardhouse (former)	St Kilda Road, Southbank	105173
Victoria Barracks J Block	St Kilda Road, Southbank	105172
Victoria Barracks Precinct	St Kilda Road, Southbank	105232
Victoria Barracks, The Keep	St Kilda Road, Southbank	105169

Table 3 VHR sites in precinct 1

VHR Number	Place	Address	Location in Tunnel precinct
VHR 0918	Main Entrance Gates (University of Melbourne)	155-192 Grattan Street, Melbourne	Parkville station to CBD North station
VHR H0024	The Former Carlton and United Brewery	2-76 Bouverie Street and Swanston Street, Carlton	Parkville station to CBD North station
VHR H2138	Cast Iron Urinal	Queensberry Street, Carlton	Parkville station to CBD North station
VHR H0956	Former Queen Victoria Hospital Tower and Perimeter Fence	180-222 Lonsdale Street and 278-300 Swanston Street, Melbourne	CBD North station to CBD South station
VHR H0390	Former ANZ Bank	219-225 Swanston Street, Melbourne	CBD North station to CBD South station
VHR H1083	Flinders Street Railway Station Complex	207-361 Flinders Street, Melbourne	CBD North station to CBD South station CBD South station to Domain station
VHR H1447	Princes Bridge	Over Yarra River, Swanston Street and St Kilda Road, Melbourne	CBD South station to Domain station
VHR H0366	Marquis Of Linlithgow Statue	St Kilda Road and Government House Drive and Anzac Avenue, Melbourne	CBD South station to Domain station
VHR H0382	Boer War Monument	Kings Domain, St Kilda Road and Government House Drive, Melbourne	CBD South station to Domain station

VHR Number	Place	Address	Location in Tunnel precinct
VHR H0646	Princes Walk Vaults	1-9 Batman Avenue, Melbourne	CBD South station to Domain station
VHR H2304	Domain Parklands	St Kilda Road and Domain Road, Melbourne	CBD South station to Domain station
VHR H1320	Former No 3 Carlton Fire Station	644-658 Swanston Street, Carlton	Parkville station to CBD North station
VHR H0848	Shrine of Remembrance	2-42 Domain Road, Melbourne	CBD South station to Domain station
VHR H0635	Christ Church	683-701 Punt Road, South Yarra	Domain station to Eastern Portal
VHR 848	Shrine of Remembrance	2-42 Domain Road	Domain station to Eastern Portal

Table 4 VHI sites in precinct 1

VHI Number	Place	Address	Location in Tunnel precinct
H7822-0973	Former Carlton and United Brewery Site	Bouverie Street and Victoria Street and Queensberry Street Carlton and Swanston Street, Melbourne	Parkville station to CBD North station
H7822-1178		258-268 Lonsdale Street (also 281-287 Swanston Street)	CBD North station to CBD South station
H7822-1182		289-299 Swanston Street	CBD North station to CBD South station
H7822-1183		301-303 Swanston Street	CBD North station to CBD South station
H7822-1184		305-307 Swanston Street	CBD North station to CBD South station
H7822-1185		309-311 Swanston Street	CBD North station to CBD South station
H7822-1186		313-315 Swanston Street	CBD North station to CBD South station
H7822-1187		317 Swanston Street	CBD North station to CBD South station
H7822-1188		319-321 Swanston Street	CBD North station to CBD South station
H7822-1293		237 Swanston Street	CBD North station to CBD South station
H7822-1294		239-241 Swanston Street	CBD North station to CBD South station

VHI Number	Place	Address	Location in Tunnel precinct
H7822-1295		243-249 Swanston Street	CBD North station to CBD South station
H7822-1296		251-253 Swanston Street	CBD North station to CBD South station
H7822-1297		255 Swanston Street	CBD North station to CBD South station
H7822-1298		257-259 Swanston Street	CBD North station to CBD South station
H7822-1299		261-263 Swanston Street	CBD North station to CBD South station
H7822-1300		265-267 Swanston Street	CBD North station to CBD South station
H7822-1301		269 Swanston Street	CBD North station to CBD South station
H7822-1302		271 Swanston Street	CBD North station to CBD South station
H7822-1303		273 Swanston Street	CBD North station to CBD South station
H7822-1346	Latham House	230-238 Swanston Street	CBD North station to CBD South station
H7822-1347		240 Swanston Street	CBD North station to CBD South station
H7822-1348		242 Swanston Street	CBD North station to CBD South station
H7822-1349		244 Swanston Street	CBD North station to CBD South station
H7822-1350		246 Swanston Street	CBD North station to CBD South station
H7822-1351		248-256 Swanston Street	CBD North station to CBD South station
H7822-1352		260-262 Swanston Street	CBD North station to CBD South station
H7822-1353		264-266 Swanston Street	CBD North station to CBD South station
H7822-1354		268-274 Swanston Street (also 247-253 Lonsdale Street)	CBD North station to CBD South station
H7822-1476		270-272 Bourke Street (also 179-183 Swanston Street)	CBD North station to CBD South station

VHI Number	Place	Address	Location in Tunnel precinct
H7822-1477		274-278 Bourke Street	CBD North station to CBD South station
H7822-1478		280-282 Bourke Street	CBD North station to CBD South station
H7822-1486		207-209 Swanston Street	CBD North station to CBD South station
H7822-1487		211-213 Swanston Street	CBD North station to CBD South station
H7822-1488		215-217 Swanston Street	CBD North station to CBD South station
H7822-1489		219 Swanston Street (also 255-257 Little Bourke Street)	CBD North station to CBD South station
H7822-1506		208-210 Swanston Street	CBD North station to CBD South station
H7822-1507		212-214 Swanston Street	CBD North station to CBD South station
H7822-1508		216-218 Swanston Street	CBD North station to CBD South station
H7822-1509		222-224 Swanston Street	CBD North station to CBD South station
H7822-1510		226-228 Swanston Street	CBD North station to CBD South station
H7822-1602	The Leviathan	271-281 Bourke Street (also 167-173 Swanston Street)	CBD North station to CBD South station
H7822-1613		135-137 Swanston Street	CBD North station to CBD South station
H7822-1614		139-141 Swanston Street	CBD North station to CBD South station
H7822-1615		143 Swanston Street	CBD North Station to CBD South Station
H7822-1616		145 Swanston Street	CBD North station to CBD South station
H7822-1617		147 Swanston Street	CBD North station to CBD South station
H7822-1618		149-153 Swanston Street	CBD North station to CBD South station
H7822-1619		155 Swanston Street	CBD North station to CBD South station

VHI Number	Place	Address	Location in Tunnel precinct
H7822-1620		157-159 Swanston Street	CBD North station to CBD South station
H7822-1621		161 Swanston Street	CBD North station to CBD South station
H7822-1622		163-165 Swanston Street	CBD North station to CBD South station
H7822-1638		134-142 Swanston Street	CBD North station to CBD South station
H7822-1639		144 Swanston Street	CBD North station to CBD South station
H7822-1640		146 Swanston Street	CBD North station to CBD South station
H7822-1641		148 Swanston Street	CBD North station to CBD South station
H7822-1642		150 Swanston Street	CBD North station to CBD South station
H7822-1643		154-156 Swanston Street	CBD North station to CBD South station
H7822-1644		158-164 Swanston Street	CBD North station to CBD South station
H7822-1645		166 Swanston Street	CBD North station to CBD South station
H7822-1646		168 Swanston Street	CBD North station to CBD South station
H7822-1647		172 Swanston Street	CBD North station to CBD South station
H7822-1648		174 Swanston Street	CBD North station to CBD South station
H7822-1966	Swanston Street	Swanston Street	CBD North station to CBD South station
H7822-1968	Little Collins Street	Little Collins Street	CBD North station to CBD South station
H7822-0252	Alexandra Gardens	Alexandra Avenue	CBD South station to Domain station
H7822-2342	Fawkner Park	24-88 Commercial Road	Domain station to Eastern Portal

Table 5 VHR places included in the Schedule to the HO in precinct 1

HO Number	Place	Address	Planning Scheme/ Tunnel Precinct
HO115 VHR H1320	Former No 3 Carlton Fire Station	644-658 Swanston Street, Carlton	Melbourne Parkville station to CBD North station
HO25 VHR H0024	The Former Carlton and United Brewery	2-76 Bouverie Street and Swanston Street, Carlton	Melbourne Parkville station to CBD North station
HO927 VHR H2138	Cast Iron Urinal	Queensberry Street, Carlton	Melbourne Parkville station to CBD North station
HO713 VHR H0956	Former Queen Victoria Hospital Tower and Perimeter Fence	180-222 Lonsdale Street and 278-300 Swanston Street, Melbourne	Melbourne CBD North station to CBD South station
HO749 VHR H0390	Former ANZ Bank	219-225 Swanston Street, Melbourne	Melbourne CBD North station to CBD South station
HO649 VHR H1083	Flinders Street Railway Station Complex	207-361 Flinders Street, Melbourne	Melbourne CBD North station to CBD South station CBD South station to Domain station
HO523 VHR H0646	Princes Walk Vaults	1-9 Batman Avenue, Melbourne	Melbourne CBD South station to Domain station
HO790 VHR H1447	Princes Bridge	Over Yarra River, Swanston Street and St Kilda Road, Melbourne	Melbourne CBD South station to Domain station
HO343 VHR 0918	Main Entrance Gates (University of Melbourne)	155-192 Grattan Street, Melbourne	Parkville station to CBD North station
HO946 VHR H0366	Marquis Of Linlithgow Statue	St Kilda Road and Government House Drive and Anzac Avenue, Melbourne	Melbourne CBD South station to Domain station
HO948 VHR H0382	Boer War Monument	Kings Domain, St Kilda Road and Government House Drive, Melbourne	Melbourne CBD South station to Domain station

HO Number	Place	Address	Planning Scheme/ Tunnel Precinct
HO489 VHR H0848	Shrine Of Remembrance	2-42 Domain Road, Melbourne	Melbourne CBD South station to Domain station
HO398 VHR H2304	Domain Parklands	St Kilda Road and Domain Road, Melbourne	Melbourne CBD South station to Domain station
HO401 VHR H0635	Christ Church	683-701 Punt Road, South Yarra	Melbourne Domain station to Eastern Portal

Table 6 Local HO places in precinct 1

HO Number	Place	Address	Planning Scheme/ Tunnel Precinct
HO306	48-50 Villiers Street, North Melbourne		Melbourne Arden station to Parkville station
HO1123	Villiers Street Precinct	14-42 Villiers Street, North Melbourne	Melbourne Arden station to Parkville station
HO1140	Chelsea House	55 Flemington Road, North Melbourne	Melbourne Arden station to Parkville station
HO1142	Pair of Shops	65-67 Flemington Road, North Melbourne	Melbourne Arden station to Parkville station
HO108	Queensberry Hotel	593-597 Queensberry Street, Carlton	Melbourne Parkville station to CBD North station
HO112	508-512 Swanston Street, Carlton		Melbourne Parkville station to CBD North station
HO113	554-556 Swanston Street, Carlton		Melbourne Parkville station to CBD North station
HO810	599 Swanston Street, Carlton		Melbourne Parkville station to CBD North station

HO Number	Place	Address	Planning Scheme/ Tunnel Precinct
HO82	96 Pelham Street, Carlton		Melbourne Parkville station to CBD North station
HO811	630 Swanston Street, Melbourne		Melbourne Parkville Station to CBD North Station
HO1128	Former Pittman Books Building	158—164 Bouverie Street, Carlton	Melbourne Parkville station to CBD North station
HO1129	House	166-170 Bouverie Street, Carlton	Melbourne Parkville station to CBD North station
HO1079	135-137 Swanston Street, Melbourne		Melbourne CBD North station to CBD South station
HO1080	163-165 Swanston Street, Melbourne		Melbourne CBD North station to CBD South station
HO1081	309-325 Swanston Street, Melbourne		Melbourne CBD North station to CBD South station
HO541	271-281 Bourke Street, Melbourne		Melbourne CBD North station to CBD South station
HO750	226-238 Swanston Street, Melbourne		Melbourne CBD North station to CBD South station
HO150	Toorak Road (West of William and Claremont Streets) Precinct South Yarra		Stonnington Domain station to Eastern Portal
HO447	Franklyn House Flats	137 Osborne Street, South Yarra	Stonnington Domain station to Eastern Portal
HO1	Carlton Precinct		Melbourne Parkville station to CBD North station

HO Number	Place	Address	Planning Scheme/ Tunnel Precinct
HO3	North & West Melbourne Precinct		Melbourne Arden station to Parkville station
HO5	South Melbourne Precinct		Melbourne CBD South station to Domain station
HO6	South Yarra Precinct		Melbourne Domain station to Eastern Portal
HO507	Little Bourke Street Precinct		Melbourne CBD North station to CBD South station
HO509	Post Office Precinct		Melbourne CBD North station to CBD South station

Table 7 Proposed HO places C207

HO Number	Place	Address	Grading
HO1092	Moonee Ponds Creek and Infrastructure Precinct	Kensington and North Melbourne	C

Precinct 2: Western Portal graded places

Table 8 Graded places precinct 2

Address	Grading
1 Altona Street, Kensington	D3
3 Altona Street, Kensington	D3
5 Altona Street, Kensington	D3
9-11 Altona Street, Kensington	D3
15 Altona Street, Kensington	D3
17 Altona Street, Kensington	D3
19 Altona Street, Kensington	D3
21-23 Altona Street, Kensington	D3
1 Childers Street, Kensington	D3
3 Childers Street, Kensington	D3
5-7 Childers Street, Kensington	D3
123 Ormond Street, Kensington	D2
125 Ormond Street, Kensington	D2
127 Ormond Street, Kensington	D2
131 Ormond Street, Kensington	D2
133 Ormond Street, Kensington	D2

Precinct 4: Parkville Station VHR, VHI and HO places

Table 9 VHR places precinct 4

VHR Number	Place	Address
VHR H2198	Royal Parade	Royal Parade, Parkville and Royal Parade, Carlton North and Elizabeth Street, Melbourne
VHR H1003	Vice Chancellors House	The University of Melbourne, 156-292 Grattan Street, Parkville
VHR H0918	Main Entrance Gates (Gate 6), Pillars and Fence	The University of Melbourne, 156-292 Grattan Street, Parkville
VHR H0919	The Gatekeeper's Cottage	The University of Melbourne, 156-292 Grattan Street, Parkville

Table 10 VHI places in precinct 4

VHI Number	Place	Address
H7822-2340	City Ford Archaeological Area	734 Elizabeth Street, Melbourne

Table 11 VHR places reflected on the HO precinct 4

HO Number	Place	Address
HO977 VHR H2198	Royal Parade	Royal Parade, Parkville and Royal Parade, Carlton North and Elizabeth Street, Melbourne
HO821 VHR H1003	Vice Chancellors House	The University of Melbourne, 156-292 Grattan Street, Parkville
HO343 VHR H0918	Main Entrance Gates (Gate 6), Pillars and Fence	The University of Melbourne, 156-292 Grattan Street, Parkville
HO338 VHR H0919	The Gatekeeper's Cottage	The University of Melbourne, 156-292 Grattan Street, Parkville

Table 12 HO places in precinct 4

HO Number	Place	Address
HO83	Former Residence	226 Pelham Street, Carlton
HO346	Old Engineering Building (1889 section only)	University of Melbourne
HO1120	Former Ramsay Surgical Precinct	182-210 Berkeley Street, Carlton
HO1149	Former Gladstone Motors Building	213-221 Berkeley Street, Carlton
HO1121	Little Pelham Precinct	168-180 Leicester Street, Carlton (183-195 Bouverie & 150-170 Pelham Street)
HO1159	House	228 Pelham Street

HO Number	Place	Address
HO1	Carlton Precinct	

Table 13 Exceptional Tree Register for precinct 4 (ESO2)

Exceptional Tree Register No	Tree	Comment
99	<i>Corymbia citriodora</i> (Lemon-scented Gum)	Adjacent to the Medicine Building, University of Melbourne
87	<i>Eucalyptus biostata</i> (Victorian Blue Gum)	Adjacent to the Medicine Building, University of Melbourne
58	<i>Salix babylonica</i> (Weeping Willow)	North of the Vice-Chancellor's Residence, University of Melbourne

Precinct 5: CBD North Station VHR, VHI, HO and graded places

Table 14 VHR places in precinct 5

VHR Number	Place	Address
VHR H1686	Tramway Signal Cabin, Waiting Shelter and Conveniences	Swanston Street and Victoria Street
VHR H0466	City Baths	420 Swanston Street, 39-41 Victoria Street, and 2-6 Franklin Street
VHR H0440	Currie and Richards Warehouse	79-81 Franklin Street
VHR H1498	Storey Hall	344-346 Swanston Street
VHR H1495	Former Foresters Hall	168-170 Latrobe Street
VHR H1479	State Library of Victoria	304-328 Swanston Street
VHR H0455	Church of Christ	329-333 Swanston Street
VHR H1506	RMIT Building 9	1-55 Franklin Street
VHR H1646	Emily McPherson College	379-405 Russell Street
VHR H0980	Warehouse	61-69 A'Beckett Street
VHR H0067	Coops Shot Tower and Flanking Building	Knox Place

Table 15 VHI places in precinct 5

VHI Number	Place	Address
H7822-1079	Church Of Christ	327-333 Swanston Street
H7822-1966	Swanston Street	
H7822-2075	Oxford Hotel (Former)	427-433 Swanston Street
H7822-2076	437-447 Swanston Street	
H7822-2077	Gateway House	459-469 Swanston Street
H7822-2078	Currie & Richards Building	79-81 Franklin Street and 3 Stewart Street
H7822-2082	22-44 A'Beckett Street	22-44 A'Beckett Street
H7822-2128	204-206 La Trobe Street	204-206 La Trobe Street
H7822-2129	208-210 La Trobe Street	
H7822-2130	377-391 Swanston Street	377-391 Swanston Street (also 188-196 La Trobe Street)
H7822-2134	62-64 Little La Trobe Street	62-64 Little La Trobe Street
H7822-2135	58-60 Little La Trobe Street	58-60 Little La Trobe Street
H7822-2136	54 Little La Trobe Street	54 Little La Trobe Street
H7822-2137	50-52 Little La Trobe Street	50-52 Little La Trobe Street
H7822-2138	46-48 Little La Trobe Street	46-48 Little La Trobe Street

VHI Number	Place	Address
H7822-2139	42-44 Little La Trobe Street	42-44 Little La Trobe Street
H7822-2140	38-40 Little La Trobe Street	38-40 Little La Trobe Street
H7822-2141	34-36 Little La Trobe Street	34-36 Little La Trobe Street
H7822-2142	22-32 Little La Trobe Street	22-32 Little La Trobe Street
H7822-2143	18-20 Little La Trobe Street	18-20 Little La Trobe Street
H7822-2144	16 Little La Trobe Street	16 Little La Trobe Street
H7822-2145	12-14 Little La Trobe Street	12-14 Little La Trobe Street
H7822-2146	401-403 Swanston Street	401-403 Swanston Street and 2-10 Little La Trobe Street
H7822-2147	Druid's House	407-409 Swanston Street
H7822-2148	1-17 A'Beckett Street	1-17 A'Beckett Street
H7822-2149	19-29 A'Beckett Street	19-29 A'Beckett Street
H7822-2150	31-37 A'Beckett Street	31-37 A'Beckett Street
H7822-2151	39 A'Beckett Street	39 A'Beckett Street
H7822-2152	41-45 A'Beckett Street	41-45 A'Beckett Street
H7822-2153	47-49 A'Beckett Street	47-49 A'Beckett Street
H7822-2154	51-53 A'Beckett Street	51-53 A'Beckett Street
H7822-2155	55-59 A'Beckett Street	55-59 A'Beckett Street
H7822-2081	46-50 A'Beckett Street	46-50 A'Beckett Street
H7822-2179	Gossard Building	63-37 Franklin Street
H7822-2182	342-348 Swanston Street	342-348 and 334-336 Swanston Street
H7822-1080	National Museum	285-321 Russell Street
H7822-1081	State Library & National Museum Complex	304-328 Swanston Street
H7822-1076	194-196 Little Lonsdale Street	194-196 Little Lonsdale Street
H7822-1077	198-200 Little Lonsdale Street	198-200 Little Lonsdale Street
H7822-2156	Aban's Printing	61-69 A'Beckett Street
H7822-2174	Emily McPherson College	369-405 Russell Street

Table 16 VHR places reflected on the HO in precinct 5

HO Number	Place	Address
HO911 VHR H1686	Tramway Signal Cabin Waiting Shelter and Conveniences	Swanston Street and Victoria Street, Melbourne

HO Number	Place	Address
HO493 VHR H0466	City Baths	420-438 Swanston Street, 39-41 Victoria Street and 2-6 Franklin Street, Melbourne
HO664 VHR H0440	Currie and Richards Warehouse	79-81 Franklin Street and 3 Stewart Street, Melbourne
HO482 VHR H1498	Storey Hall	344-346 Swanston Street, Melbourne
HO481 VHR H1495	Former Foresters Hall	168-170 La Trobe Street, Melbourne
HO751 VHR H1479	State Library of Victoria	304-328 Swanston Street and 179-181 La Trobe Street, Melbourne
HO483 VHR H1506	RMIT Building 9	1-55 Franklin Street
HO485 VHR H1646	Emily McPherson College	379-405 Russell Street
HO515 VHR H0980	Warehouse	61-69 A'Beckett Street
HO681 VHR H0067	Former Coops Shot Tower and Flanking Building	Knox Place
HO752 VHR H0455	Church of Christ	327-333 Swanston Street and 178-190 Little Lonsdale Street, Melbourne

Table 17 HO places in precinct 5

HO Number	Place	Address
HO479	Building No. 4 RMIT	Bowen Street
HO1082	401-403 Swanston Street	401-403 Swanston Street
HO1083	Druids House	407-409 Swanston Street
HO1084	411-423 Swanston Street	411-423 Swanston Street
HO1085	The Oxford Hotel	427-433 Swanston Street
HO1042	Cyclone Woven Fence Co. Factory	63-67 Franklin Street
HO1059	194-196 Little Lonsdale Street	194-196 Little Lonsdale Street
HO1060	198-200 Little Lonsdale Street	198-200 Little Lonsdale Street

Table 18 Graded places in precinct 5 (no statutory controls)

Address	Grading	Comment
330-334 Swanston Street, Melbourne RMIT Building 22	C2	
459-469 Swanston Street, Melbourne RMIT Campus (Gateway House)	D	
335-347 Swanston Street, Melbourne (Unilodge)	C	
19-37 A'Beckett Street	D	Replaced by modern building
19-39 A'Beckett Street	C	Replaced by modern building
34-36 Little Latrobe Street	D	
38-40 Little Latrobe Street	D	
62-64 Little Latrobe Street	D	

Precinct 6: CBD South Station VHR, VHI, HO and graded places

Table 19 VHR places in precinct 6

VHR Number	Place	Address
VHR H0001	Melbourne Town Hall and Administrative Buildings	90-130 Swanston Street, Melbourne
VHR H0471	Capitol Building	109-117 Swanston Street, Melbourne
VHR H0411	Manchester Unity Building	91-107 Swanston Street, Melbourne
VHR H2250	Century Building	125-133 Swanston Street, Melbourne
VHR H1542	Former Fourth Victoria Building	241-245 Collins Street, Melbourne
VHR H0447	Newspaper House Mosaic	247-249 Collins Street, Melbourne
VHR H0018	St Pauls Cathedral Precinct	24-40 Swanston Street and 198-202 Flinders Street, Melbourne
VHR H2119	Nicholas Building	31-41 Swanston Street, Melbourne
VHR H0708	Young and Jacksons Princes Bridge Hotel	1-7 Swanston Street, Melbourne
VHR H0627	Ross House	247-251 Flinders Lane, Melbourne
VHR H1083	Flinders Street Railway Station Complex	207-361 Flinders Street, Melbourne
VHR H2094	Hosies Hotel Mural	1-5 Elizabeth Street
VHR H0438	(Forum) Former State Theatre	150-162 Flinders Street

Table 20 VHI places in precinct 6

VHI Number	Place	Address
H7822-1720	Vesta House	Carson Place
H7822-1721	254 Collins Street	
H7822-1722	256 Collins Street	
H7822-1733	267-271 Little Collins Street	
H7822-1734	Presgrave Building	273-279 Little Collins Street
H7822-1735	Halladale House	281-283 Little Collins Street
H7822-1736	285 Little Collins Street	
H7822-1741	Capitol House	109-117 Swanston Street
H7822-1742	119-121 Swanston Street	
H7822-1743	123 Swanston Street	
H7822-1752	Victoria Private Hotel	223-231 Little Collins Street
H7822-1800	239 Collins Street	
H7822-1801	241-245 Collins Street	
H7822-1802	Newspaper House	247-249 Collins Street

VHI Number	Place	Address
H7822-1806	226-232 Flinders Lane	
H7822-1807	234-236 Flinders Lane	
H7822-1808	238-244 Flinders Lane	
H7822-1811	65 Swanston Street	
H7822-1812	67-73 Swanston Street	
H7822-1891	237-239 Flinders Lane	
H7822-1892	241-243 Flinders Lane	
H7822-1893	Ross House	247-251 Flinders Lane
H7822-1894	253-265 Flinders Lane	
H7822-1898	Young & Jacksons Hotel	210-220 Flinders Street
H7822-1899	224-226 Flinders Street	
H7822-1900	244-248 Flinders Street	
H7822-1904	9-11 Swanston Street	
H7822-1905	13 Swanston Street	
H7822-1906	15-19 Swanston Street	
H7822-1907	21-25 Swanston Street	
H7822-1908	27-41 Swanston Street (also 221-235 Flinders Lane)	
H7822-1960	Collins Street	Collins Street
H7822-1966	Swanston Street	Swanston Street
H7822-1968	Little Collins Street	Little Collins Street
H7822-1753	Council Chambers	233-247 Little Collins Street
H7822-1756	Town Hall	90-130 Swanston Street
H7822-1916	Chapter House St Pauls	197-203 Flinders Lane
H7822-1920	St Paul's Cathedral	200-208 Flinders Street
H7822-1959	Flinders Street (Near Batman's Hill To Exhibition Street)	Flinders Street
H7822-1965	Elizabeth Street	Elizabeth Street
H7822-1901	250-254 Flinders Street	250-254 Flinders Street and 6-20 Degraves Street
H7822-1902	256-268 Flinders Street	256-268 Flinders Street
H7822-1917	150-162 Flinders Street	150-162 Flinders Street
H7822-1918	164-170 Flinders Street	164-170 Flinders Street
H7822-1919	Gas & Fuel Corporation	194-196 Flinders Street

Table 21 VHR places reflected on the HO in precinct 6

HO Number	Place	Address
HO746 VHR H0001	Melbourne Town Hall and Administrative Buildings	90-130 Swanston Street, Melbourne
HO747 VHR H0471	Capitol Building	109-117 Swanston Street, Melbourne
HO590 VHR H0411	Manchester Unity Building	91-107 Swanston Street, Melbourne
HO748 VHR H2250	Century Building	125-133 Swanston Street, Melbourne
HO591 VHR H1542	Former Fourth Victoria Building	241-245 Collins Street, Melbourne
HO592 VHR H0447	Newspaper House Mosaic	247-249 Collins Street, Melbourne
HO655 VHR H0018	St Pauls Cathedral Precinct	24-40 Swanston Street and 198-202 Flinders Street, Melbourne
HO745 VHR H2119	Nicholas Building	31-41 Swanston Street
HO744 VHR H0708	Young and Jacksons Princes Bridge Hotel	1-7 Swanston Street, Melbourne
HO642 VHR H0627	Ross House	247-251 Flinders Lane, Melbourne
HO649 VHR H1083	Flinders Street Railway Station Complex	207-361 Flinders Street, Melbourne
HO938 VHR H2094	Hosie's Hotel Mural	1-5 Elizabeth Street
HO653 VHR H0438	(Forum) Former State Theatre	150-162 Flinders Street

Table 22 Individual HOs and heritage precinct in precinct 6

HO Number	Place	Address
HO593	250-252 Collins Street, Melbourne	250-252 Collins Street, Melbourne
HO641	234 Flinders Lane, Melbourne	234 Flinders Lane, Melbourne

HO Number	Place	Address
HO643	253-265 Flinders Lane, Melbourne	253-265 Flinders Lane, Melbourne
HO702	281-283 Little Collins Street, Melbourne	281-283 Little Collins Street, Melbourne
HO656	Former Empire Arcade	256-268 Flinders Street, Melbourne
HO654		194-169 Flinders Street
HO502	The Block Precinct	
HO504	Collins East Precinct	
HO505	Flinders Gate Precinct	
HO506	Flinders Lane Precinct	
HO509	Post Office Precinct	

Table 23 Graded places in HO502

Address	Grading
267 Little Collins Street	D3
269 Little Collins Street	D3
271 Little Collins Street	D3
273-279 Little Collins Street	C3
228-232 Collins Street, Former Albany Court	C1
221-231 Collins Street, Bank of NSW Building	D3
233-239, Collins Street, The Age Building	D3
234-248 Collins Street	Ungraded
250 Collins Street, Former Lyric House	B
119-121 Swanston Street	B2
123 Swanston Street	D2

Table 24 Graded places in HO505

Address	Grading
9-11 Swanston Street	Ungraded
13 Swanston Street	E0
15-25 Swanston Street	Ungraded
27-29 Swanston Street, Commercial Banking Co	D0
43-63 Swanston Street	Ungraded
65 Swanston Street	D0
67-73 Swanston Street	E0
42-88 Swanston Street	Ungraded
222-224 Flinders Street	C2
228-236 Flinders Street, Port Phillip Arcade	D0
238-244 Flinders Street	C0
244-248 Flinders Street	D
250-254 Flinders Street	C
164-170 Flinders Street	B
172-192 Flinders Street	B
194-196 Flinders Street	B

Table 25 Graded places HO506

Address	Grading
226-232 Flinders Lane, Invicta House	D2
238-244 Flinders Lane	C2
237-239 Flinders Lane	C1
241-243 Flinders Lane	D1

Precinct 7: Domain Station VHR, HO and graded places

Table 26 VHR places in precinct 7

VHR Number	Place	Address
VHR H0019	Melbourne Grammar School	345-369 & 355 St Kilda Road, 93-151 Domain Street, 2-124 Bromby Street and 1-99 Domain Road, Melbourne
VHR H0668	Former Kellow Falkiner Showrooms	375-385 St Kilda Road, Melbourne
VHR H0848	Shrine of Remembrance	2-42 Domain Road, Melbourne
VHR H1374	South African Soldiers Memorial	29A Albert Road, South Melbourne
VHR H1766	First Church Of Christ Scientist Melbourne	336-340 St Kilda Road, Melbourne
VHR 1869	Tram Shelter	St Kilda Road and Dorcas Street, Melbourne
VHR H2304	Domain Parklands	St Kilda Road and Domain Road, Melbourne

Table 27 VHI places in precinct 7

VHI Number	Place	Address
H7822-2220	Former St Kilda Road Cable Tram Engine House Track Precinct	St Kilda Road and Bromby Street, Melbourne
H7822-2246	Former St Kilda Road Cable Tram Engine House	375-385 St Kilda Road, Melbourne
H7822-2341	St Road Reserve	St Kilda Road and St Kilda Road, Melbourne

Table 28 VHR places reflected in the HO for precinct 7

HO Number	Place/Planning Scheme	Address
HO 252 VHR H1766	First Church Of Christ Scientist Melbourne	336-340 St Kilda Road, Melbourne
HO400 VHR H0019	Melbourne Grammar School Melbourne Planning Scheme	345-369 & 355 St Kilda Road, 93-151 Domain Street, 2-124 Bromby Street and 1-99 Domain Road, Melbourne
HO460 VHR H1869	Tram Shelter	St Kilda Road and Dorcas Street, Melbourne
HO490 VHR H0668	Former Kellow Falkiner Showrooms Melbourne Planning Scheme	375-385 St Kilda Road, Melbourne
HO489 VHR H0848	Shrine of Remembrance Melbourne Planning Scheme	2-42 Domain Road, Melbourne
HO12 VHR H1374	South African Soldiers Memorial Port Phillip Planning Scheme	29A Albert Road, South Melbourne

Table 29 HO places in precinct 7

HO Number	Place	Address	Planning Scheme
HO319	Former BP House	1-29 Albert Road, Melbourne	Port Phillip Planning Scheme
HO320	Offices	31-33 Albert Road, Melbourne	Port Phillip Planning Scheme
HO334	Former Residence	42 Albert Road, Melbourne	Port Phillip Planning Scheme
HO460	Tram Shelter	St Kilda Road and Dorcas Street, Melbourne	Port Phillip Planning Scheme
HO6	South Yarra Precinct	South Yarra	Melbourne Planning Scheme

Table 30 Graded places in precinct 7

Address	Grading
391 St Kilda Road, Melbourne	D
403 St Kilda Road, Melbourne	D
405 St Kilda Road, Melbourne	B

Precinct 8: Eastern Portal VHR, HO and graded places

Table 31 VHR places in precinct 8

VHR Number	Place	Address
VHR H0210	Former South Yarra Post Office	162 Toorak Road, South Yarra
VHR H1068	Former South Yarra Railway Station	165-167 Toorak Road, South Yarra

Table 32 VHR places reflected in the HO for precinct 8

VHR Number	Place	Address
HO107 VHR H0210	Former South Yarra Post Office	162 Toorak Road, South Yarra
HO106 VHR H1068	Former South Yarra Railway Station	165-167 Toorak Road, South Yarra

Table 33 HO places in precinct 8

HO Number	Place	Address
HO447	Franklyn House Flats	137 Osborne Street, South Yarra
HO462	21 William Street, South Yarra	21 William Street, South Yarra
HO126	Chapel Street Precinct	South Yarra, Prahran and Windsor
HO150	Toorak Road (west of William and Claremont Streets) Precinct	South Yarra
HO131	Fawkner Street/ Davis Avenue Precinct	South Yarra

Table 34 Graded places in HO126 Chapel Street Precinct

Address	Grading
515 Chapel Street, South Yarra	B
517 Chapel Street, South Yarra	A2
519 Chapel Street, South Yarra	B2
523 Chapel Street, South Yarra	B2
525 Chapel Street, South Yarra	B2
527 Chapel Street, South Yarra	B2

Table 35 Graded places in HO150 Toorak Road (West of William and Claremont Streets)

Address	Grading
148 Toorak Road, South Yarra	B2
150 -152 Toorak Road, South Yarra	B2
154 Toorak Road, South Yarra	A2

Address	Grading
155 Toorak Road, South Yarra	A1, 2
156 Toorak Road, South Yarra	A1, 2
158 Toorak Road, South Yarra	A2, 2
160 Toorak Road, South Yarra	A2, 2
162 Toorak Road, South Yarra	A1, 2
165-167 Toorak Road, South Yarra	A1, 2
166 Toorak Road, South Yarra	A1, 2
168 Toorak Road, South Yarra	A2, 2
169-175 Toorak Road, South Yarra	A2, 2
172-174 Toorak Road, South Yarra	A2, 2
176 Toorak Road, South Yarra	C, 2
177-185 Toorak Road, South Yarra	B2

Table 36 Graded places in HO131 Fawkner Street/Davis Avenue Precinct

Address	Grading
18 Davis Avenue, South Yarra	B2
20 Davis Avenue, South Yarra	B2
22 Davis Avenue, South Yarra	B2
24 Davis Avenue, South Yarra	B2

Table 37 Graded places in precinct 8

Address	Grading
10 Arthur Street, South Yarra	C
12 Arthur Street, South Yarra	C
14 Arthur Street, South Yarra	C
16 Arthur Street, South Yarra	C
18 Arthur Street, South Yarra	C
2 Arthur Street, South Yarra	B3
20 Arthur Street, South Yarra	C
22 Arthur Street, South Yarra	C
23 Arthur Street, South Yarra	C
25 Arthur Street, South Yarra	C
26 Arthur Street, South Yarra	C

Address	Grading
27 Arthur Street, South Yarra	C
30 Arthur Street, South Yarra	C
32 Arthur Street, South Yarra	C
34 Arthur Street, South Yarra	C
36 Arthur Street, South Yarra	C
38 Arthur Street, South Yarra	C
4 Arthur Street, South Yarra	C3
40 Arthur Street, South Yarra	C
42 Arthur Street, South Yarra	C
44 Arthur Street, South Yarra	C
46 Arthur Street, South Yarra	C
50 Arthur Street, South Yarra	A2
6 Arthur Street, South Yarra	C3
62 Arthur Street, South Yarra	Ungraded, 2
64 Arthur Street, South Yarra	Ungraded, 2
66 Arthur Street, South Yarra	Ungraded. 2
8 Arthur Street, South Yarra	C3
11 Chambers Street, South Yarra	C3
13 Chambers Street, South Yarra	A1, 3
2 Chambers Street, South Yarra	C3
3 Chambers Street, South Yarra	A2, 3
4 Chambers Street, South Yarra	C
5 Chambers Street, South Yarra	C
6 Chambers Street, South Yarra	C
7 Chambers Street, South Yarra	C
8 Chambers Street, South Yarra	C
514 Chapel Street, South Yarra	B2
522 Chapel Street, South Yarra	A2, 3
531 Chapel Street, South Yarra	C
533 Chapel Street, South Yarra	C
535 Chapel Street, South Yarra	C
537 Chapel Street, South Yarra	C
539 Chapel Street, South Yarra	C

Address	Grading
543 Chapel Street, South Yarra	C
545 Chapel Street, South Yarra	C
113 Osborne Street, South Yarra	C
115 Osborne Street, South Yarra	C
119 Osborne Street, South Yarra	C
121 Osborne Street, South Yarra	C
137 Osborne Street, South Yarra	C
139 Osborne Street, South Yarra	C
29 Osborne Street, South Yarra	C3
147 Toorak Road, South Yarra	Ungraded, 3
151 Toorak Road, South Yarra	Ungraded, 3
152 Toorak Road, South Yarra	B2
153 Toorak Road, South Yarra	Ungraded, 3
1 William Street, South Yarra	Ungraded, 2
10 William Street, South Yarra	A2, 3
12 William Street, South Yarra	Ungraded, 3
14 William Street, South Yarra	A2,3
15 William Street, South Yarra	C
16 William Street, South Yarra	A2, 3
17 William Street, South Yarra	C3
19 William Street, South Yarra	C3
2 William Street, South Yarra	C
23 William Street, South Yarra	Ungraded, 3
3 William Street, South Yarra	Ungraded, 2
4 William Street, South Yarra	C
5 William Street, South Yarra	Ungraded, 2
8 William Street, South Yarra	Ungraded, 3
26 Davis Avenue, South Yarra	Ungraded, 2
28 Davis Avenue, South Yarra	A2, 2
30 Davis Avenue, South Yarra	Ungraded, 3
32 Davis Avenue, South Yarra	Ungraded, 3
34 Davis Avenue, South Yarra	C, 3
36 Davis Avenue, South Yarra	B, 3

Address	Grading
38 Davis Avenue, South Yarra	B, 3

Precinct 9: Western Turnback HO places

Table 38 HO places in precinct 9

HO Number	Place	Address
HO192	Cross Street Electrical Substation	Part of the land known as Allotment 9, section 13 in the Parish of Cut-Paw-Paw (Cross Street, Footscray) Maribyrnong Planning Scheme