

# HISTORIC HERITAGE IMPACT ASSESSMENT LEVEL CROSSING REMOVAL PROGRAM

EDITHVALE & BONBEACH LEVEL CROSSING REMOVAL PROJECTS

Prepared for:



JOINT VENTURE



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Prepared by:

**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

**Quality Assurance Register**

The following quality assurance register documents the development and issue of this report prepared by Lovell Chen Pty Ltd in accordance with our quality management system.

Project No	Issue no.	Description	Issue date

## Table of contents

<b>Executive Summary</b>	<b>v</b>
<b>Abbreviations</b>	<b>viii</b>
<b>1.0 Introduction</b>	<b>1</b>
1.1 Purpose	1
1.2 Why understanding historic heritage is important	1
1.3 Project description	1
1.4 Project areas	3
<b>2.0 Scoping requirements</b>	<b>6</b>
<b>3.0 Legislation, policy and guidelines</b>	<b>7</b>
<b>4.0 Method</b>	<b>9</b>
4.1 Existing conditions assessment	10
4.2 Risk assessment method	10
4.3 Impact assessment methods	11
4.4 Environmental performance requirements	11
<b>5.0 Existing conditions</b>	<b>12</b>
5.1 Edithvale	12
5.2 Bonbeach	22
<b>6.0 Risk assessment</b>	<b>33</b>
<b>7.0 Impact assessment</b>	<b>34</b>
7.1 Edithvale	34
7.2 Bonbeach	36
<b>8.0 Environmental performance requirements</b>	<b>38</b>
<b>9.0 Conclusion</b>	<b>39</b>
<b>10.0 References</b>	<b>40</b>
<b>Appendix A Statutory approvals process</b>	<b>A1</b>
<b>Appendix B Statements of significance for places included in the HO</b>	<b>B1</b>
<b>Appendix C Risk assessment</b>	<b>C1</b>

## Table Index

Table 1	Primary legislation and associated information	7
Table 2	HO site located within the Edithvale project area	18
Table 3	HO sites immediately adjoining the Edithvale project area	19
Table 4	Places identified in the City of Kingston Heritage Study Stage One Report adjoining the Edithvale project area	21
Table 5	HO site located within the Bonbeach project area	29
Table 6	HO sites immediately adjoining the Bonbeach project area	30
Table 7	Places identified in the City of Kingston Heritage Study Stage One Report adjoining the Bonbeach project area	32
Table 8	Historic heritage risks	33
Table 9	Edithvale and Bonbeach Environmental Performance Requirements	38
Table 10	Guide to quantification of likelihood	C1
Table 11	Consequence table used for historic heritage risk assessment	C2
Table 12	Risk register – historic heritage assessment	C3

## Figure Index

Figure 1	Edithvale project area	4
Figure 2	Bonbeach project area	5
Figure 3	Overview of impact and risk assessment process	9
Figure 4	Recent aerial image of the existing Edithvale level crossing	13
Figure 5	Edithvale Road level crossing, looking east from Nepean Highway	13
Figure 6	View north towards Edithvale Railway Station (Frankston bound station building to the right, Melbourne bound station building to the left of the image)	14
Figure 7	Edithvale Railway Station, Melbourne bound station building and platform (not included in the HO)	14
Figure 8	Edithvale Railway Station, Frankston bound station building and platform (not included in the HO)	15
Figure 9	Commercial buildings along the west side of Nepean Highway, west of the level crossing (view south)	15
Figure 10	Commercial buildings and former Edithvale Cinema (indicated) on the west side of Nepean Highway; Edithvale Railway Station is visible to the right of the image	16
Figure 11	Example of early twentieth century shops (not included in the HO) on the west side of Nepean Highway	16
Figure 12	War memorial in Beeson Reserve, Nepean Highway, west (outside of) the project area	17
Figure 13	Residential area on the east side of Station Street, east of the level crossing (view south)	17
Figure 14	Residential area on the east side of Station Street, east of the level crossing (view north); Edithvale Railway Station is visible to the left of the image	18
Figure 15	Plan identifying the Edithvale project area (red line), with the HO sites identified in orange hatch; the HO site included within the project area is indicated by the green arrow and those adjoining the project area are identified by the blue arrows	20
Figure 16	Recent aerial image of the existing Bonbeach level crossing	23
Figure 17	Station Street, Bonbeach, level crossing	24
Figure 18	View north towards Bonbeach railway station (Frankston bound station building to the right, Melbourne bound station building to the left of the image)	24
Figure 19	Bonbeach Railway Station, Melbourne bound station building and platform (not included in the HO)	25
Figure 20	Bonbeach Railway Station, Frankston bound station building and platform (not included in the HO)	25
Figure 21	Commercial streetscape along the western side of the Nepean Highway, looking north	26
Figure 22	Commercial streetscape along the western side of the Nepean Highway, looking south	26

Figure 23	Residential streetscape along the eastern side of Station Street, looking south from the level crossing	27
Figure 24	Residential streetscape along the eastern side of Station Street, looking north from the level crossing	27
Figure 25	Commercial streetscape along the eastern side of Nepean Highway opposite Chelsea Railway Station	28
Figure 26	Chelsea Railway Station, Melbourne bound building	28
Figure 27	Chelsea Railway Station, Frankston bound building (right)	29
Figure 28	Plan identifying the Bonbeach project area (red line), with the HO sites identified in orange hatch; the HO site included within the project area is indicated by the green arrow and those adjoining the project area are identified by the blue arrows	31
Figure 29	1945 aerial image of the Edithvale Road (then Springvale Road) level crossing; the previous railway station was located in the same location as the existing Edithvale Railway Station, immediately north of Edithvale Road	35
Figure 30	1945 aerial image of the Bondi Road level crossing; the previous railway station was located in the same location as the existing Bonbeach Railway Station, immediately north of Bondi Road	37

## **Executive Summary**

The Victorian Government is removing 50 of Melbourne's most dangerous and congested level crossings. The Edithvale Road, Edithvale and Station Street/Bondi Road, Bonbeach level crossing removal projects were referred to the Minister for Planning who decided an Environmental Effects Statement (EES) was required.

This report assesses potential impacts to historic heritage as a result of removing the level crossings.

## **Historic heritage context**

The Edithvale Road level crossing project area (Edithvale project area) extends generally between Lincoln Parade/Groves Street, Aspendale, and Chelsea Road, Chelsea. The Station Street/Bondi Road, Bonbeach level crossing removal project area (the Bonbeach project area) continues south, generally between Chelsea Road, Chelsea and the north bank of Patterson River. The project areas include the Frankston rail corridor, Edithvale, Chelsea and Bonbeach railway stations, all of Station Street and Nepean Highway to the east and west of the rail corridor and small sections of adjacent road reserves. The study area for the historic heritage assessment included the project areas identified above and properties immediately adjoining the project areas.

It is proposed to remove the Edithvale Road and Bondi Road level crossings by lowering the Frankston railway line into two separate trenches under the roads while maintaining Edithvale and Bondi roads at the current road levels. Two new station precincts (at Edithvale and Bonbeach) would be provided with access to the below-ground train platforms.

## **Method**

A desktop review of the Edithvale and Bonbeach project areas has been undertaken. This review included identification of sites and places subject to statutory heritage controls within the project areas or immediately adjoining these areas. A review of municipal heritage studies was also undertaken, including obtaining heritage citations for the identified heritage places.

The desktop review of the project areas identified a number of sites subject to heritage controls (included within the Heritage Overlay to the Kingston Planning Scheme) located within and immediately adjoining the project areas. This resulted in a site inspection of the Edithvale and Bonbeach project areas. The purpose of the site inspection was to inspect the Heritage Overlay (HO) sites within or adjoining the project area, inspect the sites which were identified in the municipal heritage studies, and additionally to identify elements or sites which may be considered to have potential heritage value in the immediate vicinity of the level crossing.

## **Impact assessment**

The Edithvale and Bonbeach project areas do not include, nor adjoin, any heritage places included on the National Heritage List (NHL), Commonwealth Heritage List (CHL), Victorian Heritage Register (VHR) or Victorian Heritage Inventory (VHI). The construction and operation/maintenance activities within the project area would have no impact on any heritage places listed on the NHL, CHL, VHR or VHI.

The Edithvale and Bonbeach project areas each include a single heritage place included in a HO. These places are the Chelsea Clock Tower (HO28, included in the Edithvale project area) and the Chelsea Railway Station (HO31, included in the Bonbeach project area). These HO places are outside the identified areas for the construction of the trenches in the respective project areas, and accordingly the construction works and ongoing operation of the line are unlikely to impact on the significance of the HO sites within the project areas.

The project areas also each adjoin three HO places, and in addition, several places identified as being of potential heritage significance in the municipal heritage study also adjoin the project areas. It is unlikely there would be an impact on the significance of the adjoining heritage places included in the HO or potential places of significance identified in the heritage study. The design of new buildings, barriers

and screening associated with the project would consider the principles and objectives of the Urban Design Guidelines (UDG) which would include reference to heritage considerations, including the adjoining heritage places, their setting and significance. Accordingly, new elements would be designed to avoid or minimise, as far as is practicable, adverse visual impacts on adjoining heritage places.

The works associated with the construction of the trenches are, however, identified as a risk as previously unidentified archaeological remains within the project areas may be disturbed during the works. It is recommended that a management protocol is developed for managing previously unidentified historical archaeological sites and remains discovered during construction works. This management protocol could be informed by the preparation of a predictive archaeological assessment which would ascertain the potential for archaeological remains or areas of high sensitivity within the project area prior to construction works commencing.

The existing Edithvale and Bonbeach railway station buildings and platforms date from the late twentieth century and have not been identified as heritage places. Their demolition as part of the project would have no heritage impact.

### Environmental Performance Requirements

The following Environmental Performance Requirements are recommended for the Edithvale and Bonbeach level crossing removal projects:

EPR ID	Environmental Performance Requirement	Stage
HH1	<b>Unidentified historical archaeological sites</b> Minimise impacts on any unidentified historical archaeological sites and values discovered during construction through the development and implementation of an archaeological discovery protocol. The management protocol would be consistent with the <i>Heritage Act 2017</i> and developed in consultation with Heritage Victoria, and include a procedure for ceasing work if remains are discovered, notifying Heritage Victoria, obtaining consent and dealing with remains.	Construction
HH2	<b>Heritage overlay sites</b> Avoid adverse impacts to the Chelsea Clock Tower and Chelsea Railway Station during construction through the implementation of no-go zones through the Construction Environmental Management Plan if required. Undertake a pre-condition survey in accordance with <b>EPR reference GM1</b> .	Construction
HH3	<b>Heritage values</b> Avoid or minimise, to the extent practicable, adverse visual impacts on adjoining heritage places, and maintain landscape character and significant heritage precinct values (where relevant) by applying the Urban Design Framework and project specific Urban Design Guidelines during the design development process.	Design/Operational
UDI1	<b>Urban Design Guidelines</b> Design projects in accordance with the LXRA Urban Design Framework and project specific Urban Design Guidelines. The Urban Design Guidelines must consider: a) identity b) connectivity and wayfinding c) urban integration d) resilience and sustainability e) amenity	Operational



EPR ID	Environmental Performance Requirement	Stage
	<ul style="list-style-type: none"> <li>f) vibrancy</li> <li>g) safety</li> <li>h) accessibility</li> </ul> <p>Seek the advice of the LXRA Urban Design Advisory Panel (chaired by the Office of the Victorian Government Architect, and includes officers of Kingston City Council) during the preparation of detailed design to ensure an appropriate response to the LXRA Urban Design Framework.</p>	

## Abbreviations

Term	Definition
CHL	Commonwealth Heritage List
EES	Environmental Effects Statement
EMF	Environmental Management Framework
EPBC	Environment Protection and Biodiversity Conservation Act 1999
EPR	Environmental performance requirements
HO	Heritage Overlay
JV	AECOM-GHD Joint Venture
LXRA	Level Crossing Removal Authority
NHL	National Heritage List
UDG	Urban Design Guidelines
VHI	Victorian Heritage Inventory
VHR	Victorian Heritage Register

## **1.0 Introduction**

### **1.1 Purpose**

The Victorian Government is removing 50 of Melbourne's most dangerous and congested level crossings, including the level crossings at Edithvale Road, Edithvale (Edithvale) and Station Street/Bondi Road, Bonbeach (Bonbeach).

The level crossing removal projects have three core objectives. To provide:

- improved productivity from more reliable and efficient transport networks
- better connected, liveable and thriving communities
- safer communities.

The Edithvale and Bonbeach level crossing removal projects were referred to the Minister for Planning on 9 March 2017. On 5 April 2017, the Minister issued a decision determining that an Environment Effects Statement (EES) is required for the projects due to the potential for a range of significant environmental effects.

The purpose of this report is to assess and address historic heritage impacts resulting from the removal of the level crossings at Edithvale Road, Edithvale (Edithvale) and the Station Street/Bondi Road, Bonbeach (Bonbeach). This report relates specifically to post-contact historic heritage (referred to below as 'heritage') and does not include reference to indigenous or Aboriginal cultural heritage.

### **1.2 Why understanding historic heritage is important**

Post-contact historic heritage, including built form and archaeological remains, provide a connection to the history and identity of a place. The appropriate management of heritage places ensures that the heritage value of the places, and their contribution to the local area, is conserved for present and future generations.

### **1.3 Project description**

#### **1.3.1 Overview**

#### **Edithvale**

The Level Crossing Removal Authority proposes to remove the level crossing by lowering the Frankston railway line into a trench under Edithvale Road while maintaining Edithvale Road at the current road level. The trench would be located between Lochiel Avenue and Berry Avenue. It would be up to 1,300 metres in length and 14 metres wide at its narrowest point, widening to up to 24 metres (including pile widths) at the new Edithvale station platforms.

The rail track would be approximately eight metres below ground level, and sit above the trench base slab and infrastructure to collect and divert rain water from the trench. The maximum depth of the excavation would be 15 metres. Pile depths would be a maximum of 24 metres at the deepest point of the trench.

Barriers, fencing and screening would be erected along the trench at road level to prevent unauthorised access by vehicles or people. Decking above the rail trench would provide for the new station building, car parking and a new substation required to ensure sufficient power is available for passenger services on the Frankston railway line. New pedestrian bridges would be constructed to retain pedestrian access across the railway line. A new station is to be constructed with lift, ramp and stair access to the below-ground train platforms.

#### **Bonbeach**

The Level Crossing Removal Authority proposes to remove the level crossing by lowering the Frankston railway line into a trench under Bondi Road while maintaining Bondi Road at the current road level. The trench would be located between Golden Avenue and The Glad. It would be up to 1,200 metres in

length and 14 metres wide at its narrowest point, widening to up to 24 metres (including pile widths) at the new Bonbeach station platforms.

The rail track would be approximately eight metres below ground level, and sit above the trench base slab and infrastructure to collect and divert rain water from the trench. The maximum depth of the excavation would be 15 metres. Pile depths would be a maximum of 24 metres at the deepest point of the trench.

Barriers, fencing and screening would be erected along the trench at road level to prevent access by vehicles or people. Decking above the rail trench would provide for the new station building and car parking. New pedestrian bridges would be constructed to retain pedestrian access across the railway line. A new station building would be constructed with lift, ramp and stair access to the below-ground train platforms.

### *1.3.2 Construction*

The key construction activities for the Edithvale and Bonbeach level crossing removal projects include:

- site establishment including:
  - clearing of vegetation and ground levelling
  - establishment of site fencing, staff facilities and temporary construction areas
- protection and/or relocation of utility services
- excavation for piling, foundations and the rail trench
- on site waste management including removal, management and appropriate disposal of excavated soil, rock, stormwater and groundwater
- transport of spoil, excavated material and groundwater offsite
- demolition of existing stations and removal of existing rail and road infrastructure
- construction of bridge/deck structures to support Edithvale Road and Station Street/Bondi Road where they cross the rail line
- construction of base slab and waterproofing, including stormwater tanks
- construction of new station infrastructure including platforms and buildings
- construction of pedestrian overpasses and decking over the rail trench
- installation and commissioning of new rail infrastructure including ballast, overhead line equipment and rail.

In preparation for the main rail occupation, the existing Edithvale and Bonbeach stations would be closed approximately four weeks in advance. Both projects would be constructed concurrently under the same rail closure which is anticipated to take six weeks.

During the closure of the rail corridor, construction activities would occur 24 hours per day, seven days per week. Additional periodic road closures and lane closures would be required and access along adjacent streets could be restricted. Additional weekend rail shutdowns would likely be required prior to and after the main rail occupation. Construction is expected to be completed within an 18 month period.

### *1.3.3 Operations and maintenance*

Following the construction of the Edithvale and Bonbeach level crossing removal projects, the key operation and maintenance phase activities would include:

- operation – monitoring, controlling and operation of the asset in accordance with the rail and road network requirements
- maintenance – routine inspection and monitoring of the condition of the asset, planned routine maintenance and refurbishment work, and unplanned intervention and repair of the asset.

Operation and maintenance activities would be consistent with existing practices and subject to the evolving operational demands of the road and rail networks.

## **1.4 Project areas**

### **1.4.1 Edithvale**

The Edithvale Road, Edithvale level crossing project investigation area (Edithvale project area) extends from Lincoln Parade, Aspendale to Chelsea Road, Chelsea. It includes the rail corridor and all of Station Street and Nepean Highway to the east and west of the rail corridor, and small sections of adjacent road reserves. Refer to Figure 1.

### **1.4.2 Bonbeach**

The Station Street/Bondi Road, Bonbeach level crossing removal project area (Bonbeach project area) extends from Chelsea Road, Chelsea to Patterson River, Bonbeach. It includes the rail corridor and all of Station Street and Nepean Highway located to the east and west of the rail corridor, and small sections of adjacent road reserves. Refer to Figure 2.

### **1.4.3 Temporary laydown areas**

Specific construction laydown areas have not been identified at this time. Temporary laydown areas would be used for site offices, storing materials, plant and equipment, parking for construction works and construction traffic standby.

### **1.4.4 Study area**

The study area relating to both the Edithvale Road and Station Street/Bondi Road level crossing removal projects included the project areas (identified above at Sections 1.4.1 and 1.4.2) and the properties immediately adjoining this project area.



Figure 1 Edithvale project area  
Source: AECOM-GHD Joint Venture





Figure 2 Bonbeach project area  
Source: AECOM-GHD Joint Venture

## **2.0 Scoping requirements**

In order to meet statutory requirements, protect environmental values and sustain stakeholder confidence, the EES would include an Environmental Management Framework (EMF). The EMF would provide a transparent framework with clear accountabilities for managing and monitoring environmental effects and hazards associated with the construction and operational phases of the projects.

Section 3.5 of the Scoping Requirements (issued September 2017), states 'Environmental Performance Requirements (EPRs) should be clearly described in the EMF'. The proposed objectives, indicators and monitoring requirements to be described that are relevant to this study are:

- historic heritage values.



### 3.0 Legislation, policy and guidelines

Table 1 summarises the relevant primary legislation that applies to the Edithvale and Bonbeach level crossing removal projects as well as the implications associated with obtaining the required approvals from a heritage perspective.

Table 1 Primary legislation and associated information

Legislation/policy	Key policies/strategies	Implementations for this project	Approvals required
Commonwealth			
Environment Protection and Biodiversity Conservation Act 1999	<b>National Heritage List (NHL):</b>  The NHL, established under the EPBC Act, is a list of natural, historic and Indigenous places of outstanding significance to the nation. National heritage places are protected under the EPBC Act – any action which is likely to have a significant impact on a National heritage place would require approval under the EPBC Act.	There are no NHL sites within or immediately adjoining the project areas.	No approval is required from a heritage perspective under the EPBC Act, however the broader project is a controlled action under the EPBC Act for environmental reasons.
	<b>Commonwealth Heritage List (CHL):</b>  The CHL, established under the EPBC Act, is a list of natural, historic and Indigenous places of heritage significance owned or controlled by the Australian Government. Places included on the list have been identified as having heritage values to the Commonwealth and actions which are likely to impact on these values require approval under the EPBC Act.	There are no CHL sites within or immediately adjoining the project areas.	
State			
Heritage Act 2017	<b>Victorian Heritage Register (VHR):</b>  The VHR is a list of places, objects and shipwrecks of state significance. Statutory heritage controls apply under the <i>Heritage Act 2017</i> to all registered places, objects and shipwrecks.	There are no VHR sites within or immediately adjoining the project areas.	No approval is required under the <i>Heritage Act 2017</i> .
	<b>Victorian Heritage Inventory (VHI):</b>  The VHI is a register of known non-indigenous historical archaeological sites in Victoria. Significant archaeological sites which are more than 75 years old (this includes all	There are no VHI sites within or immediately adjoining the project area.	For VHI sites as well as archaeological sites not included in the VHI, Section 132 of the <i>Heritage Act 2017</i> specifies

Legislation/policy	Key policies/strategies	Implementations for this project	Approvals required
	archaeological sites which are more than 75 years old except sites which are determined to be of low archaeological value), as well as all approved sites of archaeological value which are less than 75 years old are protected by the <i>Heritage Act 2017</i> .		that it is an offence to disturb an archaeological site or artefact unless approval (by way of consent) has been obtained from the Executive Director of Heritage Victoria. Any works which disturb an archaeological site must immediately cease and Heritage Victoria must be notified.  A description of the <i>Heritage Act 2017</i> consent requirements is provided at Appendix A.
<i>Planning and Environment Act 1987</i>	<b>Heritage Overlay (HO)</b>  Places of heritage significance to a local municipality are identified in the HO of the relevant municipal planning scheme, and can include individual places and broader precinct areas. Statutory heritage controls apply to HO places under the <i>Planning and Environment Act 1987</i> and the relevant municipal planning scheme.	There is one HO site included within (HO28) and three HO sites which adjoin the Edithvale project area (HO47, HO48 and HO27).  There is one HO site included within (HO31) and three HO sites which adjoin the Bonbeach project area (HO32, HO35 and HO110).	Where works would impact on HO sites included within the project area, an approval would be required under the <i>Planning and Environment Act 1987</i> , either by way of an incorporated document or through a planning permit approval process (refer Appendix A).

4.0 Method

This section describes the method that was used to assess the potential impacts of the Edithvale and Bonbeach level crossing removal projects.

A systematic risk based approach was applied to understand the existing environment, potential impacts of the projects and how to avoid, minimise or manage the risk of impact.

The iterative nature of the assessment is illustrated in Figure 3.

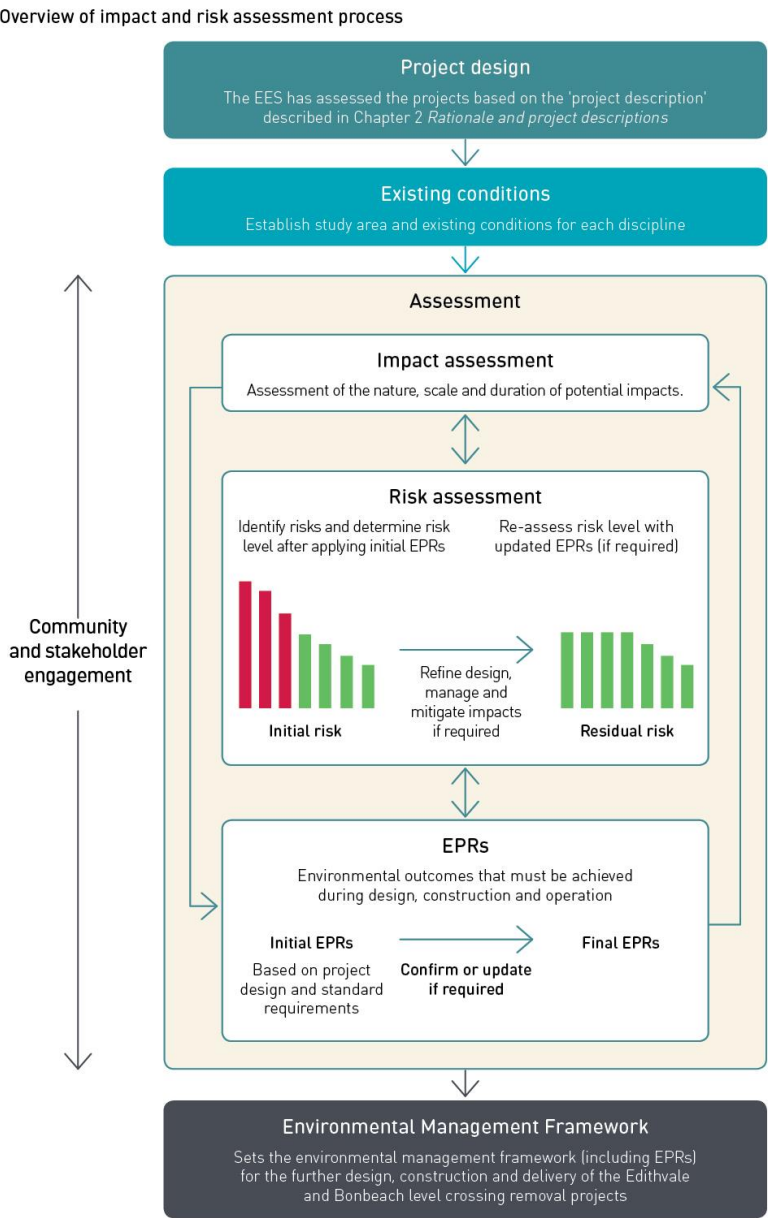


Figure 3 Overview of impact and risk assessment process  
Source: AECOM-GHD Joint Venture

The following sections outline the methodology for the historic heritage impact assessment.

#### **4.1 Existing conditions assessment**

A desktop review of the Edithvale and Bonbeach project areas has been undertaken. This review included:

- Identification of heritage sites and places within the project areas or immediately adjoining these areas, listed on the:
  - National Heritage List (NHL)
  - Commonwealth Heritage List (CHL)
  - Victorian Heritage Register (VHR)
  - Victorian Heritage Inventory (VHI)
  - Heritage Overlay (HO)
- Review of Kingston heritage studies, including obtaining heritage citations for the heritage places located within or immediately adjoining the project areas.
- Reference to the Kingston Planning Scheme and Heritage Victoria's HERMES mapping.

The desktop review of the project areas identified a number of sites subject to heritage controls (included within the Heritage Overlay to the Kingston Planning Scheme) located within or immediately adjoining the project areas. This resulted in a site inspection of the Edithvale and Bonbeach project areas. The purpose of the site inspection was to inspect the HO sites within or adjoining the project area, inspect the sites which were identified in the municipal heritage studies, and additionally to identify potential elements or sites which may be considered to have potential heritage value in the immediate vicinity of the project areas.

This inspection was undertaken from publicly accessible land within the project area, including footpaths and the surrounding street network but excluding the rail reserve and corridor. Edithvale, Chelsea and Bonbeach railway stations, to the extent of the station platforms, carparks and associated gardens/land were also inspected.

#### **4.2 Risk assessment method**

The risk-based approach is integral to the EES as required by Section 3 of the Scoping Requirements for the EES.

The risk management approach adopted for the Edithvale and Bonbeach EES is consistent with AS/NZ ISO 3100: 2009 Risk Management Process and involves the following steps:

- establishment of the context of the risk assessment – this identifies the boundaries of the projects including the project definition, the duration of construction and operation, the design and environmental controls that would be in place (initial Environmental Performance Requirements (EPRs).
- risk identification – identification of risk pathways by specialists in each relevant discipline area.
- risk analysis – assessment of risk for each risk pathway, whereby risk is a combination of:
  - The likelihood of an event and its associated consequences occurring
  - The magnitude of potential consequences of the event.
- risk evaluation – review key risks posed by the projects to focus effort in terms of impact assessment and mitigation.
- risk treatment – identification of additional management and mitigation where required to reduce risk levels where possible.

An initial risk assessment was undertaken to assess potential risks to the environment arising from the implementation of the projects. Where risks were minor or above, further mitigation was explored. Risks were re-assessed to determine the residual risk based on further mitigation.

A more detailed description of each step in the risk assessment process is provided in EES Attachment II *Environment Risk Report*.

This technical report describes the risks associated with the projects in relation to historic heritage.

#### **4.3 Impact assessment methods**

The assessment of impacts for both the construction and operation phases of the projects is based on the initial desktop review, identification of heritage places within and immediately adjoining the project areas, the site inspections of these places, and an assessment of the extent of the project description and potential construction areas. As part of the assessment it was determined whether the project description/construction areas would result in any potential impacts on the identified heritage places, or whether there were any risks associated with the project description.

The impact assessment is provided in Section 7.0 of this report.

##### **4.3.1 Limitations and assumptions**

The purpose of the site inspection was to inspect HO sites or sites identified in the municipal heritage studies located within or immediately adjoining the project area, and to identify elements or sites which may be considered to have potential heritage value in the immediate vicinity of the level crossings. The entirety of the Edithvale and Bonbeach project areas (identified in Figure 1 and Figure 2) was not inspected.

#### **4.4 Environmental performance requirements**

The environmental outcomes that must be achieved during design, construction and operation of the projects are referred to throughout the EES as Environmental Performance Requirements (EPRs). EPRs must be achieved regardless of the construction methodology or design solutions adopted. Measures identified in this EES to avoid or minimise environmental impacts have formed part of the recommended EPRs for the projects.

The development of a final set of EPRs for the project has been iterative.

##### **4.4.1 Initial EPRs**

Environmental performance requirements were identified to inform the assessment of initial risk ratings (where appropriate). These initial EPRs were based on compliance with legislation and standard requirements that are typically incorporated into the delivery of construction contracts for rail projects.

##### **4.4.2 Confirm or update EPRs**

The risk assessment either confirmed that these EPRs were adequate or identified the need for further refinement.

EPRs were updated or new EPRs were developed for any initial risk that could not be appropriately managed by standard requirements. The risk and impact assessment processes confirmed the effectiveness of new or updated EPRs to determine the residual risk rating.

##### **4.4.3 Final EPRs**

The EPRs recommended for the projects are outlined in Section 8.0 of this report and are included in the EES Environmental Management Framework.

The EPRs are applicable to the final design, construction approach and operation and provide certainty regarding the environmental performance of the projects.

## **5.0 Existing conditions**

### **5.1 Edithvale**

#### *5.1.1 Overview*

The Edithvale Road level crossing is located approximately in the centre of the Edithvale project area (Figure 4 and Figure 5). Immediately north of the level crossing, and within the project area, is Edithvale Railway Station (Figure 6). The station is comprised of two platforms, one single-storey station building on the Melbourne bound platform (Figure 7), and a brown brick shelter on the Frankston bound platform (Figure 8). Both structures are of late twentieth century construction. Edithvale Railway Station is not included in the HO. To each side of the railway line, the rail reserve is vegetated.

The area to the west of the level crossing, along Nepean Highway, generally comprises low scale commercial buildings. These buildings appear to date from the interwar and post war periods with some more recent infill buildings (Figure 9 to Figure 11). The former Edithvale Cinema (HO48, refer Figure 10 and Section 5.1.3), which adjoins the project area, is located within this commercial streetscape. Beeson Reserve also forms part of this streetscape. Within the reserve is a sandstone and basalt war memorial which was installed in 2011 as part of an initiative to revive the reserve (Figure 12). Beeson Reserve and the memorial are not included in the HO. Further west is the foreshore and Port Phillip Bay.

The area to the east of the level crossing, along Station Street and the length of the project area, is generally residential in character. This area predominantly comprises one and two-storey houses and townhouse developments (Figure 13 and Figure 14). None of these houses are included in the HO, although a number were identified as being of potential cultural heritage significance (refer Section 5.1.4). A number of churches (including HO47, St Columba's Anglican Church, refer Section 5.1.3), former municipal buildings and a school are also located in these areas. Further east is the Edithvale Wetlands, Edithvale Recreation Reserve and Regents Park.

At the southern end of the project area, the Chelsea Hotel (HO27, refer Section 5.1.3) is located within the commercial streetscape along Nepean Highway, adjoining the project area. The Chelsea Clock Tower (HO28, refer Section 5.1.2); located on the west side of the rail corridor, and included within the project area, is opposite the Chelsea Hotel.





Figure 4 Recent aerial image of the existing Edithvale level crossing  
Source: Nearmap, image date February 2017



Figure 5 Edithvale Road level crossing, looking east from Nepean Highway





Figure 6 View north towards Edithvale Railway Station (Frankston bound station building to the right, Melbourne bound station building to the left of the image)



Figure 7 Edithvale Railway Station, Melbourne bound station building and platform (not included in the HO)





Figure 8 Edithvale Railway Station, Frankston bound station building and platform (not included in the HO)



Figure 9 Commercial buildings along the west side of Nepean Highway, west of the level crossing (view south)



Figure 10 Commercial buildings and former Edithvale Cinema (indicated) on the west side of Nepean Highway; Edithvale Railway Station is visible to the right of the image



Figure 11 Example of early twentieth century shops (not included in the HO) on the west side of Nepean Highway





Figure 12 War memorial in Beeson Reserve, Nepean Highway, west (outside of) the project area



Figure 13 Residential area on the east side of Station Street, east of the level crossing (view south)



Figure 14 Residential area on the east side of Station Street, east of the level crossing (view north); Edithvale Railway Station is visible to the left of the image

#### 5.1.2 Heritage Overlays within the project area

There is one HO site located within the Edithvale project area (Table 2). The heritage listing, details and statement of significance for this place is included in Appendix B of this report.

Table 2 HO site located within the Edithvale project area

Place name	HO	Image
Chelsea Clock Tower, Nepean Hwy, Chelsea	HO28 (Figure 15)	

### 5.1.3 Heritage Overlays adjoining the project area

There are three HO sites which immediately adjoin the Edithvale project area (Table 3). The heritage listing, details and statement of significance for each place is included in Appendix B of this report.

Table 3 HO sites immediately adjoining the Edithvale project area

Place name	HO	Image
St Columba's Anglican Church, 6 Lochiel Avenue, Edithvale	HO47 (Figure 15)	
Former Edithvale Cinema, 254-258 Nepean Hwy, Edithvale	HO48 (Figure 15)	
Chelsea Hotel, 380 Nepean Hwy, Chelsea	HO27 (Figure 15)	





Figure 15 Plan identifying the Edithvale project area (red line), with the HO sites identified in orange hatch; the HO site included within the project area is indicated by the green arrow and those adjoining the project area are identified by the blue arrows  
Source: LXRA WebGIS



#### 5.1.4 Municipal Heritage Study

A review of the *City of Kingston Heritage Study Stage One Report* prepared by Living Histories in 2000 indicates that a number of places which adjoin the Edithvale project area were identified as having potential cultural heritage significance (refer Table 4). The study does not clarify why these sites were included in the Stage One report, however it is likely due to their construction dates, as well as the style and relative intactness of these places. The HO was not, however, applied to these places.

Table 4      Places identified in the *City of Kingston Heritage Study Stage One Report* adjoining the Edithvale project area

Place name	Image
House, 235 Station Street, Edithvale	
House, 243 Station Street, Edithvale	
Bush Nursing Hospital, 256 Station Street, Chelsea	



Place name	Image
Council Chambers (fmr City of Chelsea), 316 Station Street, Chelsea	
Historical Society Marker, Station Street (Town Hall), Chelsea	

## 5.2 Bonbeach

### 5.2.1 Overview

The Station Street/Bondi Road level crossing is located in the southern section of the Bonbeach project area (Figure 16 and Figure 17). Immediately north of the level crossing, and within the project area, is Bonbeach Railway Station (Figure 18). The station is comprised of two platforms, one single-storey station building on the Melbourne bound platform (Figure 19), and a brown brick shelter on the Frankston bound platform (Figure 20). Both structures are of late twentieth century construction. Car parking associated with the station is located along the western side of Station Street to the south of the level crossing. Bonbeach Railway Station is not included in the HO.

The area to the west of the level crossing, along the Nepean Highway generally comprises two-storey commercial buildings. These buildings appear to have been constructed during the mid to late twentieth century (Figure 21 and Figure 22). A number of infill buildings have recently been completed, or are under construction. The house at 3 Lord Weaver Grove (HO110, refer Section 5.2.3) is located in the residential area between Nepean Highway and Port Phillip Bay and adjoins the project area.

The area to the east of the level crossing, along Station Street, generally comprises one and two-storey houses. These predominantly brick houses are of mid to late twentieth century construction with front gardens and fences (Figure 23 to Figure 25). At the northern end of the project area, and to the west, is



a small commercial streetscape opposite the railway station, which includes the former Mason's Picture Theatre (HO32, refer Section 5.2.3).

Beyond the project area, to the east of Station Street and west of the Nepean Highway, the surrounding street network is predominantly residential. A number of churches (including HO35, St Joseph's Roman Catholic Church, refer Section 5.2.3), and a school are also located in these areas. Further east of the project area is Bicentennial Park, the Bonbeach Sports Reserve and Patterson River Golf Club. Further west is the foreshore and Port Phillip Bay.

At the northern end of the project area is Chelsea Railway Station and signal box (HO31, refer Section 5.2.2). The station comprises a single-storey weatherboard station building with an integrated signal box on the Melbourne bound platform, and a single-storey weatherboard building incorporating a goods shed on the Frankston bound platform (Figure 26 and Figure 27). An underpass providing a connection between Nepean Highway and Station Street is located to the south of the platforms.

At the south end of the project area is the western extent of Patterson River, where the river enters Port Phillip Bay.



Figure 16 Recent aerial image of the existing Bonbeach level crossing  
Source: Nearmap, image date February 2017



Figure 17 Station Street, Bonbeach, level crossing



Figure 18 View north towards Bonbeach railway station (Frankston bound station building to the right, Melbourne bound station building to the left of the image)





Figure 19 Bonbeach Railway Station, Melbourne bound station building and platform (not included in the HO)



Figure 20 Bonbeach Railway Station, Frankston bound station building and platform (not included in the HO)



Figure 21 Commercial streetscape along the western side of the Nepean Highway, looking north



Figure 22 Commercial streetscape along the western side of the Nepean Highway, looking south





Figure 23 Residential streetscape along the eastern side of Station Street, looking south from the level crossing



Figure 24 Residential streetscape along the eastern side of Station Street, looking north from the level crossing



Figure 25 Commercial streetscape along the eastern side of Nepean Highway opposite Chelsea Railway Station



Figure 26 Chelsea Railway Station, Melbourne bound building





Figure 27 Chelsea Railway Station, Frankston bound building (right)

### 5.2.2 Heritage Overlays within the project area

There is one HO site located within the Bonbeach project area (Table 5). The heritage listing, details and statement of significance for this place is included in Appendix B of this report.

Table 5 HO site located within the Bonbeach project area

Place name	HO	Image
Chelsea Station and Signal Box, Station Street, Chelsea	HO31 (Figure 28)	

### 5.2.3 Heritage Overlays adjoining the project area

There are three HO sites which immediately adjoin the Bonbeach project area (Table 6). The heritage listing, details and statement of significance for each place is included in Appendix B of this report.

Table 6 HO sites immediately adjoining the Bonbeach project area

Place name	HO	Image
Mason's Picture Theatre, 318 Station Street, Chelsea	HO32 (Figure 28)	
St Joseph's Roman Catholic Church, 362 Station Street, Chelsea	HO35 (Figure 28)	
House, 3 Lord Weaver Grove, Bonbeach	HO110 (Figure 28)	



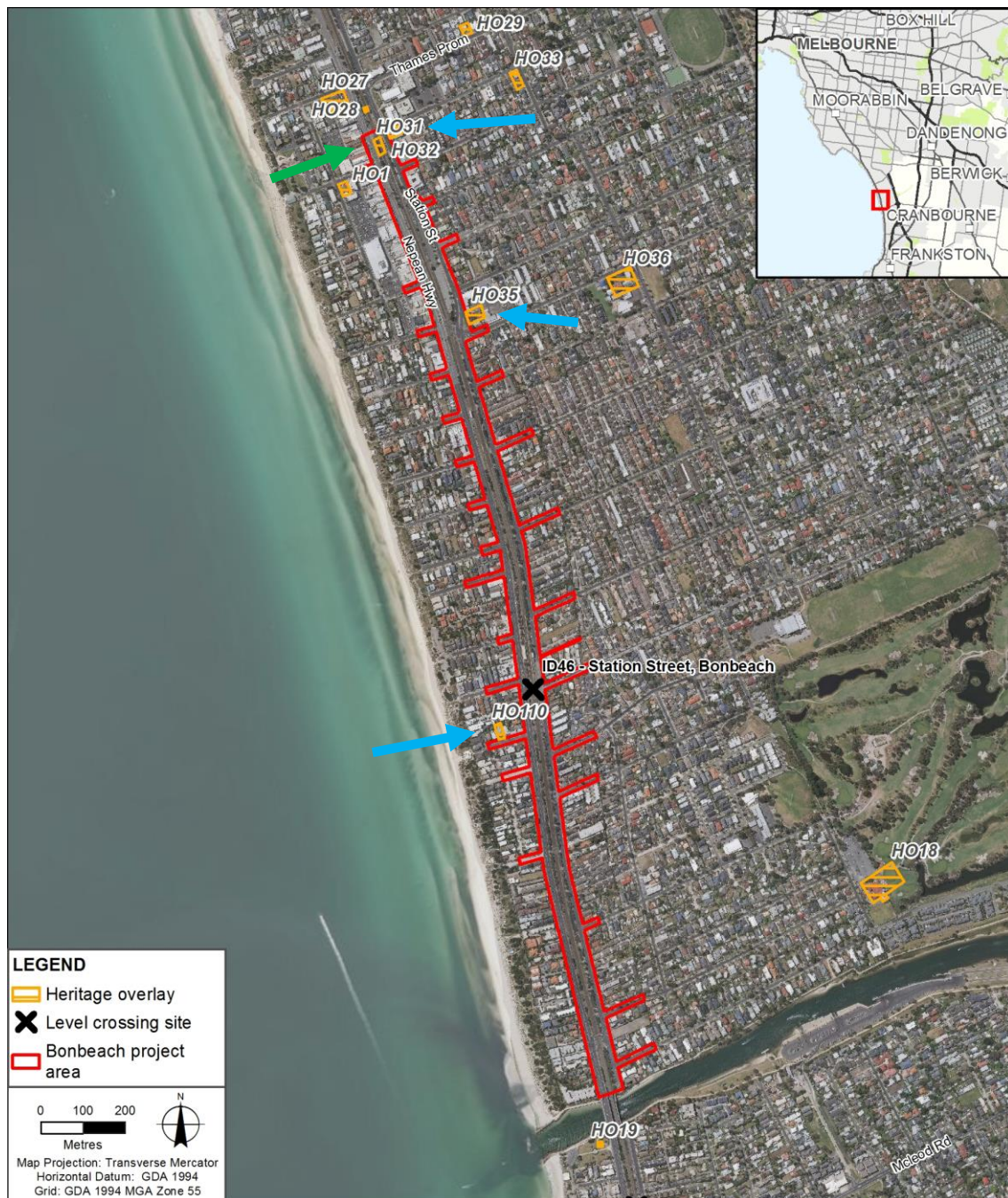



Figure 28 Plan identifying the Bonbeach project area (red line), with the HO sites identified in orange hatch; the HO site included within the project area is indicated by the green arrow and those adjoining the project area are identified by the blue arrows  
Source: LXRA WebGIS

#### 5.2.4 Municipal Heritage Study

A review of the *City of Kingston Heritage Study Stage One Report* prepared by Living Histories in 2000 indicates that one places which adjoin the Bonbeach project area were identified as having potential cultural heritage significance (refer Table 7). The study does not clarify why this site was included in the Stage One report, however it is likely due to the construction dates, as well as the style and relative intactness of this place. The HO was not, however, applied to this place.

Table 7      Places identified in the *City of Kingston Heritage Study Stage One Report* adjoining the Bonbeach project area

Place name	Image
Shop, 460 Nepean Highway, Chelsea	

## 6.0 Risk assessment

A risk assessment of project activities was performed in accordance with the methodology described in Section 4.2. Risks were assessed for the construction and design/operation phases (where relevant).

The historic heritage risks during the construction and operation phases of the projects are listed in Table 8. The likelihood and consequence ratings applied during the risk assessment process are provided in Appendix C. There was no change in the initial risk and final risk levels for historic heritage.

Table 8 Historic heritage risks

Risk ID	Risk name	Risk pathway	Final EPR	Residual Risk level
<b>Construction risks</b>				
HH4	Disturbance of identified historic heritage	Disturbance of identified historic heritage places (included in the Heritage Overlay) resulting in loss of heritage value	HH2	Negligible
HH5	Disturbance of non-identified historic heritage	Disturbance of not previously identified historic heritage places and sites (archaeological places and sites not included in the Victorian Heritage Inventory) resulting in loss of heritage value	HH1	Negligible
<b>Operation risks</b>				
HH6	Visual impact on historic heritage	Visual impact on the setting and character of historic heritage	HH3	Negligible

For further details refer to the EES Attachment II *Environmental Risk Report* which includes the full risk register, with initial EPRs and the final EPRs assigned to each risk.

## **7.0 Impact assessment**

### **7.1 Edithvale**

#### *7.1.1 Construction impacts*

##### *7.1.1.1 Disturbance of non-identified historic heritage*

While there are no VHI sites included in the project area, any archaeological remains over 75 years in age are currently protected by the *Heritage Act 2017* regardless of inclusion in the VHI.

The works associated with the construction of the trench are identified as a risk, albeit a negligible risk, as previously unidentified archaeological remains within the project area may be disturbed during the works (refer **risk HH5** in Section 6.0). If the construction activities do disturb an archaeological site, these activities must immediately cease and Heritage Victoria must be notified.

The existing Edithvale Railway Station is located in a similar location to an earlier station (Figure 29). It is likely that the construction works associated with the existing station disturbed any remains of the original station, however this portion of the project area may be of a higher level of archaeological sensitivity.

#### *Management and mitigation*

To minimise the risk of disturbing previously unidentified archaeological remains during construction works, consideration should be given to the preparation of a predictive archaeological assessment. This would ascertain the potential for archaeological remains or areas of high sensitivity within the project area prior to construction works commencing, particularly where significant subsurface works are proposed.

It is also recommended that a management protocol is developed for managing previously unidentified historical archaeological sites and remains discovered during construction works (refer **EPR\_HH1** in Section 8.0). This protocol could be informed by the preparation of a predictive archaeological assessment.

##### *7.1.1.2 Disturbance of identified historic heritage*

The Edithvale project area does not include any heritage places included on the NHL, CHL, VHR or VHI. Accordingly, the construction activities within the Edithvale project area would have no impact on any identified heritage places listed on the NHL, CHL, VHR or VHI.

The Edithvale project area does include one heritage place included in the HO. This place is the Chelsea Clock Tower (HO28), which is located at the southern end of the project area. This HO place is outside the area identified for the construction of the trench, and accordingly the construction works are unlikely to impact on the significance of the HO site (refer **risk HH4** in Section 6.0).

The Edithvale Railway Station buildings and platforms date from the late twentieth century and have not been identified as a heritage place (either through inclusion in the HO or in the *City of Kingston Heritage Study Stage One Report*). The station complex is not of heritage significance, and its demolition as part of the project would have no heritage impact.

#### *Management and mitigation*

It is identified that there would be no impact on the Chelsea Clock Tower associated with the construction works (refer **EPR\_HH2** in Section 8.0). However, in order to manage and mitigate the risk associated with the disturbance of identified historic heritage the following actions are recommended:

- Retain the Chelsea Clock Tower and protect the structure (where necessary) during construction works.





Figure 29 1945 aerial image of the Edithvale Road (then Springvale Road) level crossing; the previous railway station was located in the same location as the existing Edithvale Railway Station, immediately north of Edithvale Road  
Source: University of Melbourne 1945 aerial

#### 7.1.2 *Operational impacts*

##### 7.1.2.1 *Visual impact on historic heritage*

The Edithvale project area does not immediately adjoin any heritage places included on the NHL, CHL, VHR or VHI. The Edithvale project area does, however, immediately adjoin three individual heritage places included in the HO, and an additional five places identified as being of potential heritage significance in the *City of Kingston Heritage Study Stage One Report* (refer **risk HH6** in Section 6.0). The heritage places included in the HO, and those identified as being of potential heritage significance in the heritage study would be retained. Accordingly, it is unlikely there would be an impact on the significance of the adjoining heritage places included in the HO or potential places of significance identified in the heritage study.

New buildings would be constructed, including a substation, and barriers and screening would be introduced along the edge of the trench which would alter the streetscape setting of the heritage places adjoining the project area. The heritage places are already viewed in the context of a varied streetscape, which includes buildings dating from the mid to late twentieth century and early twenty-first century. These buildings, barriers and screening elements would be separated from the heritage places (typically by a road) and would be unlikely to visually impact the individual presentation and heritage significance of the heritage places.

#### *Management and mitigation*

The design of new buildings, barriers and screening would consider the principles and objectives of the Urban Design Guidelines (UDG) (refer **EPR\_UD1** in Section 8.0) which would include reference to heritage considerations, including adjoining heritage places, their setting and significance (refer **EPR\_HH3** in Section 8.0). New elements would be designed in accordance with the UDG to avoid or minimise, as far as is practicable, adverse visual impacts on adjoining heritage places.

## 7.2 Bonbeach

### 7.2.1 Construction impacts

#### 7.2.1.1 Disturbance of non-identified historic heritage

While there are no VHI sites included in the project area, any archaeological remains over 75 years in age are currently protected by the *Heritage Act 2017* regardless of inclusion in the VHI.

The works associated with the construction of the trench are identified as a risk, albeit a negligible risk, as previously unidentified archaeological remains within the project area may be disturbed during the works (refer **risk HH5** in Section 6.0). If the construction activities do disturb an archaeological site, these activities must immediately cease and Heritage Victoria must be notified.

The existing Bonbeach Railway Station is located in a similar location to an earlier station (Figure 30). It is likely that the construction works associated with the existing station disturbed any remains of the original station, however this portion of the project area may be of a higher level of archaeological sensitivity.

#### *Management and mitigation*

To minimise the risk of disturbing previously unidentified archaeological remains during construction works, consideration should be given to the preparation of a predictive archaeological assessment. This would ascertain the potential for archaeological remains or areas of high sensitivity within the project area prior to construction works commencing, particularly where significant subsurface works are proposed.

It is also recommended that a management protocol is developed for managing previously unidentified historical archaeological sites and remains discovered during construction works (refer **EPR\_HH1** in Section 8.0). This protocol could be informed by the preparation of a predictive archaeological assessment.

#### 7.2.1.2 Disturbance of identified historic heritage

The Bonbeach project area does not include any heritage places included on the NHL, CHL, VHR or VHI. Accordingly, the construction activities within the Bonbeach project area would have no impact on any identified heritage places listed on the NHL, CHL, VHR or VHI.

The Bonbeach project area does include one heritage place included in the HO. This place is the Chelsea Railway Station, which is located at the northern end of the project area. This HO place is outside the area identified for the construction of the trench, and accordingly the construction works are unlikely to impact on the significance of the HO site (refer **risk HH4** in Section 6.0).

The Bonbeach Railway Station buildings and platforms date from the late twentieth century and have not been identified as a heritage place (either through inclusion in the HO or in the *City of Kingston Heritage Study Stage One Report*). The station complex is not of heritage significance, and its demolition as part of the project would have no heritage impact.

#### *Management and mitigation*

It is identified that there would be no impact on the Chelsea Railway Station associated with the construction works (refer **EPR\_HH2** in Section 8.0). However, in order to manage and mitigate the risk associated with the disturbance of identified historic heritage the following actions are recommended:

- Retain the Chelsea Railway Station and protect the structure (where necessary) during construction works.



Figure 30 1945 aerial image of the Bondi Road level crossing; the previous railway station was located in the same location as the existing Bonbeach Railway Station, immediately north of Bondi Road  
Source: University of Melbourne 1945 aerial

## 7.2.2 Operational impacts

### 7.2.2.1 Heritage places adjoining the project area

The Bonbeach project area does not immediately adjoin any heritage places included on the NHL, CHL, VHR or VHI. The Bonbeach project area does, however, immediately adjoin three individual heritage places included in the HO, and one place identified as being of potential heritage significance in the *City of Kingston Heritage Study Stage One Report* (refer **risk HH6** in Section 6.0). The heritage places included in the HO, and that identified as being of potential heritage significance in the heritage study, would be retained. Accordingly, it is unlikely there would be an impact on the significance of the adjoining heritage places included in the HO or potential places of significance identified in the heritage study.

New buildings would be constructed and barriers and screening would be introduced along the edge of the trench which would alter the streetscape setting of the heritage places adjoining the project area. The heritage places are already viewed in the context of a varied streetscape, which includes buildings dating from the mid to late twentieth century and early twenty-first century. These buildings, barriers and screening elements would be separated from the heritage places (typically by a road) and would be unlikely to visually impact the individual presentation and heritage significance of the heritage places.

#### *Management and mitigation*

The design of new buildings, barriers and screening would consider the principles and objectives of the Urban Design Guidelines (UDG) (refer **EPR\_UD1** in Section 8.0) which would include reference to heritage considerations, including the adjoining heritage places, their setting and significance (refer **EPR\_HH3** in Section 8.0). New elements would be designed in accordance with the UDG to avoid or minimise, as far as is practicable, adverse visual impacts on adjoining heritage places.

## 8.0 Environmental performance requirements

The EPRs required for the projects are summarised in the table below. The EPRs are applicable to the final design and construction approach and provide certainty regarding the environmental performance of the projects.

Table 9 Edithvale and Bonbeach Environmental Performance Requirements

EPR ID	Environmental Performance Requirement	Stage
HH1	<b>Unidentified historical archaeological sites</b> Minimise impacts on any unidentified historical archaeological sites and values discovered during construction through the development and implementation of an archaeological discovery protocol. The management protocol would be consistent with the Heritage Act 2017 and developed in consultation with Heritage Victoria, and include a procedure for ceasing work if remains are discovered, notifying Heritage Victoria, obtaining consent and dealing with remains.	Construction
HH2	<b>Heritage overlay sites</b> Avoid adverse impacts to the Chelsea Clock Tower and Chelsea Railway Station during construction through the implementation of no-go zones through the Construction Environmental Management Plan if required. Undertake a pre-condition survey in accordance with <b>EPR reference GM1</b> .	Construction
HH3	<b>Heritage values</b> Avoid or minimise, to the extent practicable, adverse visual impacts on adjoining heritage places, and maintain landscape character and significant heritage precinct values (where relevant) by applying the Urban Design Framework and project specific Urban Design Guidelines during the design development process.	Design/Operational
UD1	<b>Urban Design Guidelines</b> Design projects in accordance with the LXRA Urban Design Framework and project specific Urban Design Guidelines. The Urban Design Guidelines must consider: <ul style="list-style-type: none"> <li>a) identity</li> <li>b) connectivity and wayfinding</li> <li>c) urban integration</li> <li>d) resilience and sustainability</li> <li>e) amenity</li> <li>f) vibrancy</li> <li>g) safety</li> <li>h) accessibility</li> </ul> Seek the advice of the LXRA Urban Design Advisory Panel (chaired by the Office of the Victorian Government Architect, and includes officers of Kingston City Council) during the preparation of detailed design to ensure an appropriate response to the LXRA Urban Design Framework.	Operational



## 9.0 Conclusion

A historic heritage impact assessment has been undertaken for the Edithvale and Bonbeach level crossing removal projects to determine the impacts on historic heritage as a result of the projects and to identify management and mitigation options in order to reduce potential risks of the projects.

### Existing conditions

The Edithvale and Bonbeach project areas each include one heritage place identified in the Heritage Overlay to the Kingston Planning Scheme, and each project area immediately adjoins three HO places. In addition, several places identified as being of potential heritage significance in the *City of Kingston Heritage Study Stage One Report* also adjoin the project areas.

### Impact assessment

The removal of the level crossings at Edithvale Road (within the Edithvale project area) and Station Street/Bondi Road (within the Bonbeach project area) would be unlikely to have an impact on the significance of the identified heritage places within and adjoining the respective project areas. The two HO places included within the project areas are outside the identified areas for the construction of the trenches, and accordingly the construction works would not impact on the significance of these HO places. Where necessary, these places should be protected during the construction works.

### Residual risk

While there are no VHI sites included in the project area, any archaeological remains over 75 years in age are currently protected by the *Heritage Act 2017* regardless of inclusion in the VHI. The works associated with the construction of the trenches are, however, identified as a risk as previously unidentified archaeological remains within the project areas may be disturbed during the works. It is recommended that a management protocol is developed for managing previously unidentified historical archaeological sites and remains discovered during construction works. This management protocol could be informed by the preparation of a predictive archaeological assessment which would ascertain the potential for archaeological remains or areas of high sensitivity within the project area prior to construction works commencing.

It is unlikely there would be an impact on the significance of the adjoining heritage places included in the HO or potential places of significance identified in the heritage study. The design of new buildings, barriers and screening associated with the project would consider the principles and objectives of the Urban Design Guidelines (UDG) which would include reference to heritage considerations, including the adjoining heritage places, their setting and significance. Accordingly, new elements would be designed to avoid or minimise, as far as is practicable, adverse visual impacts on adjoining heritage places.

## 10.0 References

Living Histories, 2000. *City of Kingston Heritage Study Stage One Report*, prepared for the City of Kingston, Victoria.

Commonwealth Heritage List: <http://www.environment.gov.au/heritage/places/commonwealth-heritage-list>

Heritage Victoria, Archaeology and Heritage Inventory: <https://www.heritage.vic.gov.au/archaeology-and-shipwrecks/archaeology-and-heritage-inventory>

Kingston Planning Scheme: <http://planning-schemes.delwp.vic.gov.au/schemes/kingston>

National Heritage List: <http://www.environment.gov.au/heritage/places/national-heritage-list>

Urban Initiatives: <http://www.urbaninitiatives.com.au/projects/pedestrian-space/beeson-reserve/>

Victorian Heritage Database: <http://vhd.heritagecouncil.vic.gov.au/>

## Appendix A      Statutory approvals process

### Victorian Heritage Inventory

The VHI is a register of known non-indigenous historical archaeological sites in Victoria. The *Heritage Act 2017* defines an archaeological site as a place (other than a shipwreck) which:

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

While no VHI sites are included in, or abut, the project areas identified in this report, significant archaeological sites which are more than 75 years old are protected by the *Heritage Act 2017* regardless of whether they are included in the VHI (this includes all archaeological sites which are more than 75 years old except sites which are determined to be of low archaeological value as assessed by Heritage Victoria). In addition, approved sites of archaeological value which are less than 75 years old (and included on the VHI) are similarly protected by the Act. Section 132 of the *Heritage Act 2017* specifies that it is an offence to disturb an archaeological site or artefact unless approval (by way of consent) has been obtained from the Executive Director of Heritage Victoria.

In order to determine the potential for archaeological remains within a site and where ground disturbance is proposed (regardless of inclusion on the VHI), a predictive archaeological assessment may be undertaken. This assessment would determine the potential for archaeological remains within the site and, if the potential is high, would assist in determining whether the site meets the threshold for inclusion in the VHI. This assessment would generally comprise historical research to establish the progressive development and evolution of a given site over time, as well as an assessment of the current site conditions. This assessment would identify areas of the site which have been subject to disturbance, and consequently areas of greater or lesser archaeological potential. This predictive assessment assists to ensure that all archaeological remains are appropriately managed. If the assessment determines that there is archaeological potential, the predictive archaeological assessment would form part of an application to Heritage Victoria for consent to carry out works, and would also inform future works on the site.

If required, a consent application would also require the following archaeological investigation documentation to be submitted to Heritage Victoria:

- Outline of proposed development works, identifying the area of heritage impact
- Statement of Significance for the Heritage Inventory site
- Research Design
- Excavation Methodology
- Artefact Retention Policy
- Artefact Management Proposal
- Curriculum Vitae of the Project Archaeologist and Conservator
- Letter detailing engagement of Project Conservator.
- Consent application fee

Archaeological consent for works to historical archaeological sites will incur fees depending on the type of work proposed (i.e. uncover and expose an archaeological site, excavate an archaeological site or part of an archaeological site, damage and disturb an archaeological site, test archaeological investigations, or consent to possess or dispose of archaeological artefacts).

It is also noted that Section 126 of the *Heritage Act 2017* includes provision for the Heritage Council to review a determination by the Executive Director to impose conditions on a consent or refuse to issue a consent (note that refusals of consent applications are rare).

## **Planning and Environment Act 1987**

If works are to encroach into a HO site, an approval would be required under the *Planning and Environment Act 1987*, either under the provisions of an Incorporated Document or the Heritage Overlay.

If an incorporated document is not introduced to the planning scheme, and a planning permit under the Heritage Overlay is required, the section below provides a brief summary of the relevant heritage provisions which require consideration.

The relevant heritage related Clauses that apply to all sites within Victoria which are included in the Heritage Overlay are:

- Clause 15 Built Environment and Heritage
- Clause 43.01 Heritage Overlay

The relevant municipal planning scheme may also include relevant heritage related clauses in the Local Planning Policy Framework (LPPF) section of the scheme. A brief summary of the local heritage provisions for each of the municipalities is provided below.

### *Kingston*

The relevant local Clause 21.13 of the Kingston Planning Scheme provides an overview of heritage, and identifies the key issues, objectives and strategies for heritage within the municipality. The decision guidelines included in Clause 43.01 are the most relevant considerations in assessing the impacts of a proposal on the heritage significance of an identified place, together with the local heritage policy included in Clause 22.16 of the Kingston Planning Scheme. This policy applies to 'all land covered by the Heritage Overlay and where a permit is required, properties adjoining a heritage place affected by a Heritage Overlay'. This Clause provides policy with regard to subdivision; demolition; new buildings and additions in heritage areas and places; the use of a heritage place; carports, garages and other additions for residential heritage places; new buildings and works and additions for industrial and commercial heritage places; restoration and conservation; and more general policy. This policy relates more directly to residential and commercial development and, other than the general policy, would be of limited assistance in considering major infrastructure works.

## **Appendix B      Statements of significance for places included in the HO**

### **Heritage Overlays within the project area**

#### *HO28 – Chelsea Clock Tower*

The Chelsea Clock Tower, Nepean Hwy, Chelsea, is identified as HO28 in the Schedule to the Heritage Overlay of the Kingston Planning Scheme. The Schedule identifies that external paint controls apply to the place.

The Chelsea Clock Tower was identified in the *City of Kingston Heritage Study*, prepared by Bryce Raworth in 2001. The statement of significance included in this study is as follows:

The Chelsea clock tower, constructed in 1934 and rebuilt in c.1996 is of local architectural and significance for its handsome design and as a valued local landmark. It is of some historical significance for its associations with Victoria's centenary celebrations.<sup>1</sup>

#### *HO31 – Chelsea Station and Signal Box*

The Chelsea Station and Signal Box, Station Street, Chelsea, is identified as HO31 in the Schedule to the Heritage Overlay of the Kingston Planning Scheme. The Schedule identifies that external paint controls apply to the place.

The railway station and signal box were identified in the *City of Kingston Heritage Study*, prepared by Bryce Raworth in 2001. The statement of significance included in this study is as follows:

Both station buildings at Chelsea Railway Station (excluding the tubular steel additions) and the Signal Box are of social and architectural and historical significance at a local level. The group is socially significant for its long association with the local community. It is architecturally significant as an example of early twentieth century railway architecture. It is historically significant for its associations with the early development of Chelsea and the broader region.<sup>2</sup>

### **Heritage Overlays adjoining the project areas**

#### *HO27 – Chelsea Hotel*

Chelsea Hotel, 380 Nepean Hwy, Chelsea, is identified as HO27 in the Schedule to the Heritage Overlay of the Kingston Planning Scheme. The Schedule identifies that external paint controls apply to the place.

The hotel was identified in the *City of Kingston Heritage Study*, prepared by Bryce Raworth in 2001. The statement of significance included in this study is as follows:

Opened in 1937, the Chelsea Hotel is of local historical and architectural significance as the first licensed hotel in Chelsea and an early example of the Moderne style within the area. The building has been altered but generally retains the form and much of the character of the original development.<sup>3</sup>

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<sup>1</sup> Bryce Raworth Pty Ltd, Chelsea Clock Tower citation, *City of Kingston Heritage Study Place Identification Form*, 2001, p. 2.

<sup>2</sup> Bryce Raworth Pty Ltd, Chelsea Station and Signal Box citation, *City of Kingston Heritage Study Place Identification Form*, 2001, p. 2.

<sup>3</sup> Bryce Raworth Pty Ltd, Chelsea Hotel citation, *City of Kingston Heritage Study Place Identification Form*, 2001, p. 2.



#### HO29 – House

The house, 21 Thames Promenade, Chelsea, is identified as HO29 in the Schedule to the Heritage Overlay of the Kingston Planning Scheme. The Schedule identifies that external paint controls apply to the place.

The house was identified in the *City of Kingston Heritage Study*, prepared by Bryce Raworth in 2001. The statement of significance included in this study is as follows:

Constructed c.1920, the house at 21 Thames Promenade, Chelsea is of historical and architectural significance at a local level as one of a small number of extant early dwellings in the area. Despite some additions, the early architectural character and significance of the dwelling survives. The residence derives some additional significance as the former residence of local Councilor [sic], Frank Shillinglaw.<sup>4</sup>

#### HO32 – Mason’s Picture Theatre

Mason’s Picture Theatre, 318 Station Street, Chelsea, is identified as HO32 in the Schedule to the Heritage Overlay of the Kingston Planning Scheme. The Schedule identifies that external paint controls apply to the place.

The theatre was identified in the *City of Kingston Heritage Study*, prepared by Bryce Raworth in 2001. The statement of significance included in this study is as follows:

Constructed c.1923 by real estate agent and builder WG Mason, the former Mason’s Picture Theatre is historically, socially and architecturally significant at a local level. It is historically significant as one of the first cinemas constructed in the Municipality and as the oldest surviving example of a purpose built cinema within the locality. It is socially significant as a focus of the local community as a theatre and more recently as a bingo hall. It is architecturally significant as an unusual building type and the only example of a single screen, purpose built cinema in the Municipality.<sup>5</sup>

#### HO34 – Traffic Lights

The Traffic Lights located within Bicentennial Park, Scotch Parade, Chelsea, are identified as HO34 in the Schedule to the Heritage Overlay of the Kingston Planning Scheme. The Schedule identifies that external paint controls apply to the place.

The traffic lights were identified in the *City of Kingston Heritage Study*, prepared by Bryce Raworth in 2001. The statement of significance included in this study is as follows:

Marshall traffic clocks, constructed on the Nepean Highway in the early 1950s and relocated to Centennial park during the 1980s, are of enduring historical and technical significance despite the loss of their original highway context. They are unusual heritage assets that offer insights into the development of traffic control

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<sup>4</sup> Bryce Raworth Pty Ltd, 21 Thames Promenade citation, *City of Kingston Heritage Study Place Identification Form*, 2001, p. 2.

<sup>5</sup> Bryce Raworth Pty Ltd, Mason’s Picture Theatre citation, *City of Kingston Heritage Study Place Identification Form*, 2001, p. 2.

technology and assist in an understanding of traffic movements in the developing Municipality.<sup>6</sup>

#### *HO35 – St Joseph’s Roman Catholic Church*

St Joseph’s Roman Catholic Church, 362 Station Street, Chelsea, is identified as HO35 in the Schedule to the Heritage Overlay of the Kingston Planning Scheme. The Schedule identifies that external paint controls apply to the place.

The church was identified in the *City of Kingston Heritage Study*, prepared by Bryce Raworth in 2001. The statement of significance included in this study is as follows:

Completed in 1940, St Joseph’s Roman Catholic Church, Chelsea is of local social, architectural and spiritual significance. It is socially significant for its long association with the local Catholic community and for its role in the development of Catholic education in the City of Kingston. It is architecturally significant for its handsome design, its landmark stature and for the way in which it demonstrates the impact of Mediterranean and other architectural traditions on local ecclesiastical design. It is spiritually significant as the focus of local worship for the Catholic community.<sup>7</sup>

#### *HO36 – Chelsea Primary School*

The Chelsea Primary School, 34-44 Argyle Avenue, Chelsea, is identified as HO36 in the Schedule to the Heritage Overlay of the Kingston Planning Scheme. The Schedule identifies that external paint controls apply to the place, and defines the heritage place as including ‘the building works dating from the 1912 and 1927 constructions, and their setback from Argyle Avenue and Fowler Street’.

The school was identified in the *City of Kingston Heritage Study*, prepared by Bryce Raworth in 2001. The statement of significance included in this study is as follows:

Chelsea Primary School is of social and architectural significance at a local level. It is of social significance for its long association with the local community. It is of local architectural significance as a fine example of PWD architectural work during the 1910s.<sup>8</sup>

#### *HO47 – St Columba’s Anglican Church*

St Columba’s Anglican Church, 6 Lochiel Avenue, Edithvale, is identified as HO47 in the Schedule to the Heritage Overlay of the Kingston Planning Scheme. The Schedule identifies that external paint controls apply to the place.

The church was identified in the *City of Kingston Heritage Study*, prepared by Bryce Raworth in 2001. The statement of significance included in this study is as follows:

Completed in 1913, St Columba’s Church, Edithvale is of social, architectural and spiritual significance at a local level. It is socially significant for its long association with the local congregation. It is architecturally significant for its timber construction as few early timber churches survive in Municipality. It derives some

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<sup>6</sup> Bryce Raworth Pty Ltd, Traffic lights citation, *City of Kingston Heritage Study Place Identification Form*, 2001, p. 2.

<sup>7</sup> Bryce Raworth Pty Ltd, St Joseph’s Roman Catholic Church citation, *City of Kingston Heritage Study Place Identification Form*, 2001, p. 2.

<sup>8</sup> Bryce Raworth Pty Ltd, Chelsea Primary School citation, *City of Kingston Heritage Study Place Identification Form*, 2001, p. 2.

additional significance for its simple, almost residential design with references to more conventional church designs limited to its unusual window detailing. It is spiritually significant as the focus of local worship for the Catholic community.<sup>9</sup>

#### *HO48 – Former Edithvale Cinema*

The Former Edithvale Cinema, 254-258 Nepean Hwy, Edithvale, is identified as HO48 in the Schedule to the Heritage Overlay of the Kingston Planning Scheme. The Schedule identifies that external paint controls apply to the place.

The former cinema was identified in the *City of Kingston Heritage Study*, prepared by Bryce Raworth in 2001. The statement of significance included in this study is as follows:

The former Plains Hall is architecturally significant at a local level as a purpose built community hall and for its Streamline Modern stylings. Although its traditional use as a hall and later as a cinema have been lost, the place retains some historical and social significance for its relationship with the Edithvale community.<sup>10</sup>

#### *HO50 – Edithvale Primary School*

The Edithvale Primary School, 42-54 Edithvale Road, Edithvale, is identified as HO50 in the Schedule to the Heritage Overlay of the Kingston Planning Scheme. The Schedule identifies that external paint controls apply to the place, and defines the heritage place as ‘the 1942 school building and its setbacks from Edithvale Road and French Avenue’.

The school was identified in the *City of Kingston Heritage Study*, prepared by Bryce Raworth in 2001. The statement of significance included in this study is as follows:

Dating from 1942, the earliest building of the Edithvale Primary School is of local social significance for its long association with the local community. It is also of some architectural significance as an example of the Modernist designs of PWD Architect Percy Everett. The remainder of the fabric on the site is of little significance.<sup>11</sup>

#### *HO51 – House*

The house, 67 Edithvale Road, Edithvale, is identified as HO51 in the Schedule to the Heritage Overlay of the Kingston Planning Scheme. The Schedule identifies that external paint controls apply to the place.

The house was identified in the *City of Kingston Heritage Study*, prepared by Bryce Raworth in 2001. The statement of significance included in the citation for the building at 67 Edithvale Road is as follows (although the statement refers to the incorrect address):

Built c.1910s, the dwelling at 50 Clydebank Avenue [sic], Edithvale, is of architectural significance as an early building of an unusual and handsome design

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<sup>9</sup> Bryce Raworth Pty Ltd, St Columba’s Anglican Church citation, *City of Kingston Heritage Study Place Identification Form*, 2001, p. 2.

<sup>10</sup> Bryce Raworth Pty Ltd, Former Edithvale Cinema citation, *City of Kingston Heritage Study Place Identification Form*, 2001, p. 2.

<sup>11</sup> Bryce Raworth Pty Ltd, Edithvale Primary School citation, *City of Kingston Heritage Study Place Identification Form*, 2001, p. 2.

which incorporates some aspects of the lightweight building traditions associated with the development of the [sic] Edithvale as a holiday destination.<sup>12</sup>

#### *HO110 – House*

The house at 3 Lord Weaver Grove, Bonbeach, is identified as HO110 in the Schedule to the Heritage Overlay of the Kingston Planning Scheme. The Schedule identifies that external paint controls apply to the place.

The house was identified in the *City of Kingston Heritage Study*, prepared by Bryce Raworth in 2001. The statement of significance included in this study is as follows:

The dwelling at 3 Lord Weaver Grove, Bonbeach is of architectural and historical significance at a local level as one of a small number of extant early holiday homes in the area with associations with the early development of the area as a holiday destination.<sup>13</sup>

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<sup>12</sup> Bryce Raworth Pty Ltd, 67 Edithvale Road citation, *City of Kingston Heritage Study Place Identification Form*, 2001, p. 2.

<sup>13</sup> Bryce Raworth Pty Ltd, House citation, *City of Kingston Heritage Study Place Identification Form*, 2001, p. 2.





## Appendix C Risk assessment

Table 10 Guide to quantification of likelihood

Qualitative descriptions	Probability over a given time period	Basis
A. Certain	1 (or 0.999, 99.9%)	Certain, or as near to as makes no difference
B. Almost certain	0.2 – 0.9	One or more incidents of a similar nature has occurred here
C. Highly probable	0.1	A previous incident of a similar nature has occurred here
D. Possible	0.01	Could have occurred already without intervention
E. Unlikely	0.001	Recorded recently elsewhere
F. Very unlikely	$1 \times 10^{-4}$	It has happened elsewhere
G. Highly improbable	$1 \times 10^{-5}$	Published information exists, but in a slightly different context
H. Almost impossible	$1 \times 10^{-6}$	No published information on a similar case

Source: Bowden, A.R., Lane, M.R. and Martin, J.H., 2001, *Triple Bottom Line Risk Management – Enhancing Profit, Environmental Performance and Community Benefit*, Wiley and Sons, New York, p 314.

Table 11 Consequence table used for historic heritage risk assessment

Qualitative Descriptor	Negligible		Minor		Moderate		Major	Extreme
	0.1	0.3	1	3	10	30		
Consequence Description	Minimal, if any impact for some communities. Potentially some impact for a small number (<10) of individuals.		Low level impact for some communities, or high impact for a small number (<10) of individuals.		High level of impact for some communities, or moderate impact for communities area-wide.		High level of impact for communities area-wide.	High level of impact State-wide.
SOCIAL Non-Aboriginal Heritage	No measurable alterations to existing natural and human processes already impacting on heritage sites.	0.3	0.1	3	10	30	100	1000
			Detectable impact to State or Commonwealth significant site with heritage values largely intact. OR Partial reduction in heritage value intrinsic to non-State / Commonwealth significant site.		Partial reduction in heritage value intrinsic to State or Commonwealth significant site. OR Substantial reduction in heritage value intrinsic to non-State / Commonwealth significant site.		Substantial reduction in heritage value intrinsic to State or Commonwealth significant site. OR Complete loss of heritage value intrinsic to non-State / Commonwealth significant site.	Complete loss of heritage value intrinsic to State or Commonwealth significant site.

Table 12 Risk register – historic heritage assessment

Risk ID	Risk name	Risk pathway	EPR ID (initial)	Initial risks			EPR ID (final)	Residual risk		
				Likelihood	Consequence	Risk		Likelihood	Consequence	Risk
Construction risks										
HH 4	Disturbance of identified HH	Disturbance of identified historic heritage places (included in the Heritage Overlay) resulting in loss of heritage value	EPR HH2 Heritage overlay sites	Highly improbable	Moderate	Negligible	As initial EPR	Highly improbable	Moderate	Negligible
				Unlikely	Minor	Negligible		Unlikely	Minor	Negligible
				Unlikely	Minor	Negligible		Unlikely	Minor	Negligible
HH 5	Disturbance of non-identified HH	Disturbance of not previously identified historic heritage places and sites (archaeological places and sites not included in the Victorian Heritage Inventory) resulting in loss of heritage value	EPR HH1 Unidentified historical archaeological sites	Highly improbable	Moderate	Negligible	As initial EPR	Highly improbable	Moderate	Negligible
				Unlikely	Minor	Negligible		Unlikely	Minor	Negligible
				Unlikely	Minor	Negligible		Unlikely	Minor	Negligible
Operation Risks										
HH 6	Visual impact on HH	Visual impact of new buildings and barriers along the length of trench to the setting of heritage places.	EPR HH3 Heritage values	Unlikely	Minor	Negligible	As initial EPR	Unlikely	Minor	Negligible
				Unlikely	Minor	Negligible		Unlikely	Minor	Negligible
				Unlikely	Minor	Negligible		Unlikely	Minor	Negligible