

EDITHVALE AND BONBEACH
LEVEL CROSSING REMOVAL PROJECTS
ENVIRONMENT EFFECTS STATEMENT

EES TECHNICAL REPORT L
Social Impact Assessment

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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 Environment Effects Statement (EES) was required.

This report addresses the Scoping Requirements of the EES in relation to potential impacts to existing social arrangements resulting from construction and operational activity including changes to amenity, access and community connectivity as a result of removing the level crossings.

Social context

A social impact assessment has been undertaken for the Edithvale and Bonbeach level crossing removal projects.

It is important to anticipate the outcomes of proposed changes, as a result of the projects, so that measures can be implemented to minimise adverse social impacts on residents, the community and social infrastructure.

Method

This report was prepared according to the following methodology:

- determine social study area
- establish existing social conditions including review of Australian Bureau of Statistics and other data and consultation to confirm desktop findings, and understand community values and key concerns
- undertake risk assessment and develop Environmental Performance Requirements
- undertake impact assessment.

Existing conditions

The existing conditions assessment provides an overview of the demographic and community characteristics of the study area, as well as a summary of the community infrastructure that has the potential to be directly or indirectly affected by the projects.

The key findings of the existing conditions assessment, based on interpretation of the demographic characteristics of the study area, are as follows:

- the coastline, Edithvale-Seafood Wetlands and Patterson River provide natural amenity and contribute to a large network of open space and recreation areas
- the rail line, Station Street and Nepean Highway running parallel to the foreshore limits east-west pedestrian movement and access to the beach is funnelled to a limited number of crossing points
- steady population growth is expected in Edithvale and Bonbeach over the next 20 years
- approximately 15 per cent of the population of both Edithvale and Bonbeach travel to work by train
- residents of the City of Kingston Local Government Area are concerned by congestion and parking issues

- there is a large amount of community infrastructure across Edithvale, Chelsea and Bonbeach, particularly child care centres and schools, aged care services, and open space and recreation facilities
- Chelsea is considered a welfare hub for the surrounding area with a number of health, wellbeing and social support services
- a number of community infrastructure facilities are located along the anticipated construction vehicle haul routes of Edithvale Road and Nepean Highway.

Impact assessment

The Edithvale and Bonbeach level crossing removal projects have the potential to temporarily impact social conditions during the construction phase by:

- reducing amenity for nearby residents and community infrastructure facilities due to combined impacts from increased noise and vibration, dust, odour, reduced visual amenity and changes to traffic conditions
- disrupting access to cycle paths, pedestrian walkways and pedestrian crossings leading to reduced opportunities for community interaction and active lifestyle
- disrupting rail and road operations during construction resulting in increased travel times for public transport users and other road users.

Social impacts from construction would be addressed through implementation of Environmental Performance Requirements as well as mitigation and management measures identified under other technical assessments within the EES.

Social impacts are primarily identified to occur during the construction phase of the projects, and are anticipated to be temporary in nature. Social impacts are not anticipated during the operational phase, on the contrary, there will be improvements to aspects of amenity and access and connectivity, resulting in some social benefits.

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
SC1	<p>Community and Stakeholder Engagement Management Plan</p> <p>Prior to construction (excluding preparatory work), prepare and implement a Community and Stakeholder Engagement Management Plan in consultation with Kingston City Council that includes the following:</p> <ol style="list-style-type: none"> identifies all project activities that potentially impact on community and business operations, and provides for a well-coordinated communication and engagement processes consults with and addresses needs of vulnerable groups that would be impacted by the project such as the elderly, socio-economically disadvantaged groups and children consults with and addresses needs of community facilities impacted by the project such as schools, child 	Construction

EPR ID	Environmental Performance Requirement	Stage
	<p>care, aged care, and caravan parks</p> <p>d. sets out processes and measures to provide advanced notice to key stakeholders and other potentially affected stakeholders of construction activities (including any staged works, early works, main works, or out of hours works), significant milestones, changed traffic conditions, interruptions to utility services, changed access and parking conditions, periods of predicted high noise and vibration activities, including contact details for enquiries/complaints</p> <p>e. provides for any interested stakeholder to register their contact details to ensure they are automatically advised of planned construction activities, project progress, mitigation measures and intended reinstatement measures where applicable</p> <p>f. documents a complaints management process (including processes and measures for registering, managing and resolving complaints) consistent with Australian Standard AS/NZS 10002: 2014 Guidelines for Complaint Management in Organisations.</p>	
SC2	<p>Respite and Relocation Policy</p> <p>Prior to construction (excluding preparatory works), prepare and implement a Respite and Relocation Policy to be offered to residents whose amenity is significantly affected by construction activities (e.g. out of hours works or sustained loss of amenity during the day for residences with special circumstances such as shift workers) or who are subject to loss of access. The Respite and Relocation Policy will only apply during the period in which residents are (or are likely to be) affected.</p> <p>The Policy must contain:</p> <p>a. the criteria that must be met for relocation to be offered to affected residents</p> <p>b. consideration of special circumstances such as language or cultural need, special needs related to health conditions or home businesses</p> <p>c. the type and duration of out-of-hours work covered by the policy.</p>	Construction
SC3	<p>Recreational facilities</p> <p>Where construction works directly impact on sports clubs or passive recreation users of directly impacted sporting and recreational facilities, work with affected sporting clubs and land managers to identify appropriate management measures including provision of alternative facilities for the period of disruption.</p>	Construction

Abbreviations

Term	Definition
ABS	Australian Bureau of Statistics
ACFE	Adult Community and Further Education
AFL	Australian Football League
CZ	Commercial Zone
CBCHS	Central Bayside Community Health Services
CRG	Community Reference Group
DELWP	Department of Environment, Land, Water and Planning
EES	Environment effects statement
EMF	Environmental Management Framework
EPRs	Environmental Performance Requirements
GRZ	General Residential Zone
IRSD	Index of Relative Socio-Economic Disadvantage
JV	AECOM-GHD Joint Venture
LGA	Local government area
LPO	Licensed post office
LSC	Life saving club
LXRA	Level Crossing Removal Authority
MUZ	Mixed Use Zone
PUZ	Public Use Zone
PPRZ	Public Park and Recreation Zone
RDZ	Road Zone
RSL	Returned and Services League
SEIFA	Socio-Economic Indexes for Areas
SES	State Emergency Service
SIA	Social impact assessment
SSC	State Suburbs
SUZ	Special Use Zone

Glossary

Term	Definition
Amenity	The overall quality of the built form and natural environment affecting the level of human enjoyment. In this assessment amenity includes noise and vibration, dust, odour, reduced visual amenity and changes to traffic conditions.
Community cohesion	The quantity and quality of interactions between community members, the extent to which members of a local community know and care about one another and the extent of attachment to a geographic community or a community of interest.
Community infrastructure	A building that accommodates a range of social, educational and recreational activities, meetings, health and support services.
Connectivity	The ability for people to access community and recreation facilities and their daily needs easily, safely and without being hindered by barriers.
Recreation facility	A building, formal or informal open space (including parks) used for passive recreation or sporting activities.

1 Introduction

1.1 Purpose

The Victorian Government is removing 50 of Melbourne's most dangerous and congested level crossings, inclusive of 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.

This report provides a Social Impact Assessment (SIA) for the Edithvale and Bonbeach level crossing removal projects.

1.2 Why understanding social impact is important

Changes in the urban environment can have intended and unintended impacts on the quality of life of individuals and communities. It is important to anticipate the outcomes of proposed changes so that measures can be implemented to minimise adverse social impacts and maximise benefits. This study focusses on the project's likely impacts on local communities and social infrastructure.

The Edithvale and Bonbeach level crossing removal projects are set within established residential areas in the outer southern suburbs of Melbourne. The suburbs are defined by the coastline running along the western boundary, and natural wetlands along the eastern boundary. While housing is the predominant land use in the area, there are also commercial strips along Nepean Highway, a network of parks and reserves and a number of community and recreational facilities.

The study area includes the suburbs directly affected by the proposed works; Edithvale and Bonbeach, where the level crossings are located, within the broader context of City of Kingston local government area (LGA). The proposed construction vehicle haul routes influence the nature and extent of the social impacts likely to be generated. Therefore, community and recreation facilities within the suburbs of Edithvale, Chelsea and Bonbeach were considered as areas likely to be affected by social impacts (including anticipated and perceived impacts).

1.3 Project description

1.3.1 Overview

Edithvale

The Level Crossing Removal Authority (LXRA) 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

LXRA 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 Glade. 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 railway 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 approximately 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.

1.3.4 Social considerations

Key social considerations have included:

- impacts on amenity of residents and community infrastructure facilities
- access and connectivity impacts on cyclists and pedestrians
- access and connectivity impacts on road and rail users.

Social impacts will play a role in the selection of haul routes.

1.4 Project area

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 construction 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

For the purposes of this assessment, three study areas have been defined: regional, local and community infrastructure.

The social study area is defined as follows:

- regional study area - includes the City of Kingston LGA
- local study area - includes the suburbs of Edithvale and Bonbeach where the level crossings are located
- community infrastructure - includes the suburbs of Edithvale, Chelsea and Bonbeach as community and recreation facilities across the three suburbs have the potential to be affected by the proposed works and temporary laydown areas.

Figure 3 and Figure 4 show the local and regional study areas.



Figure 1 Edithvale project area



Figure 2 Bonbeach project area

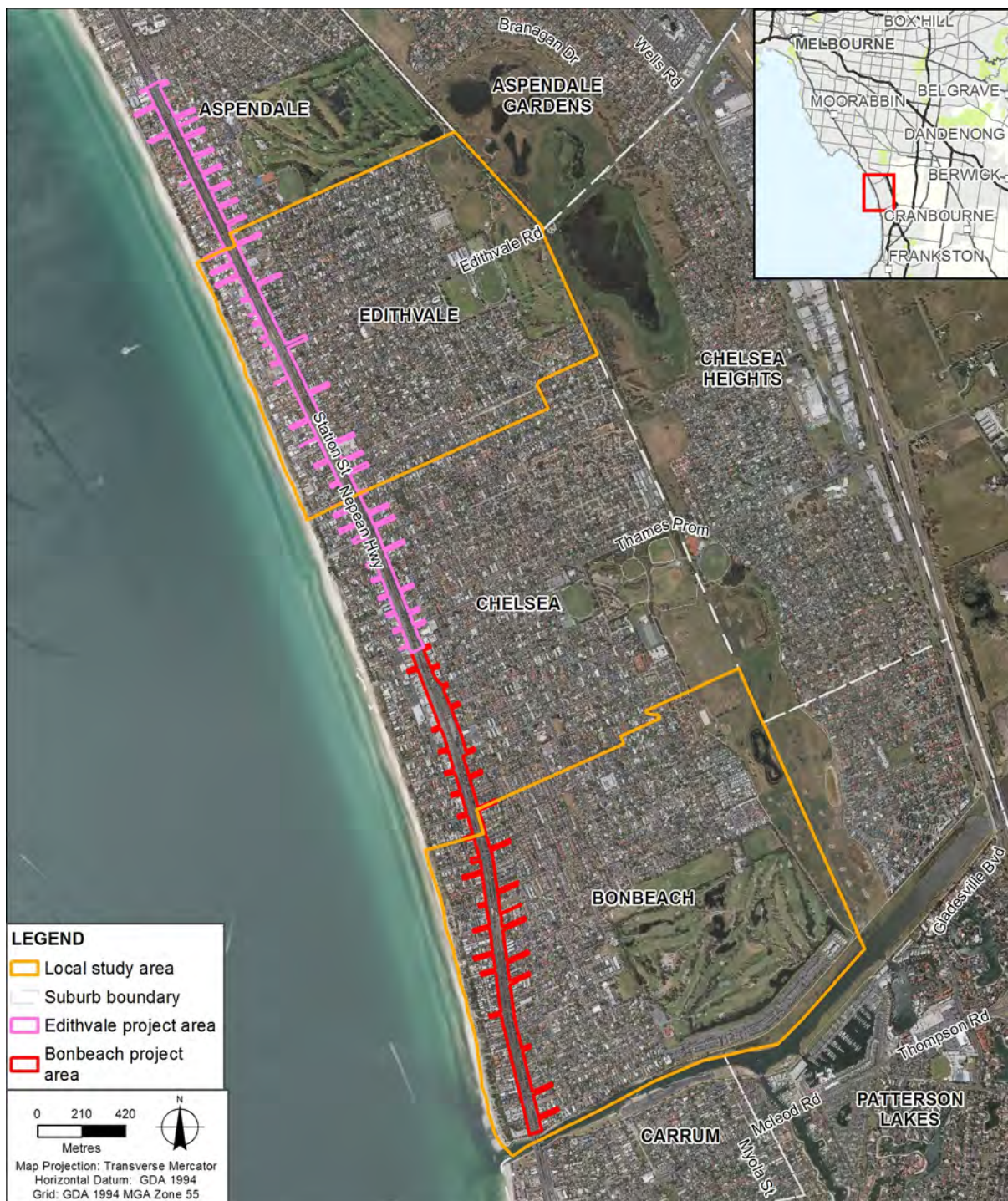


Figure 3 Local study area

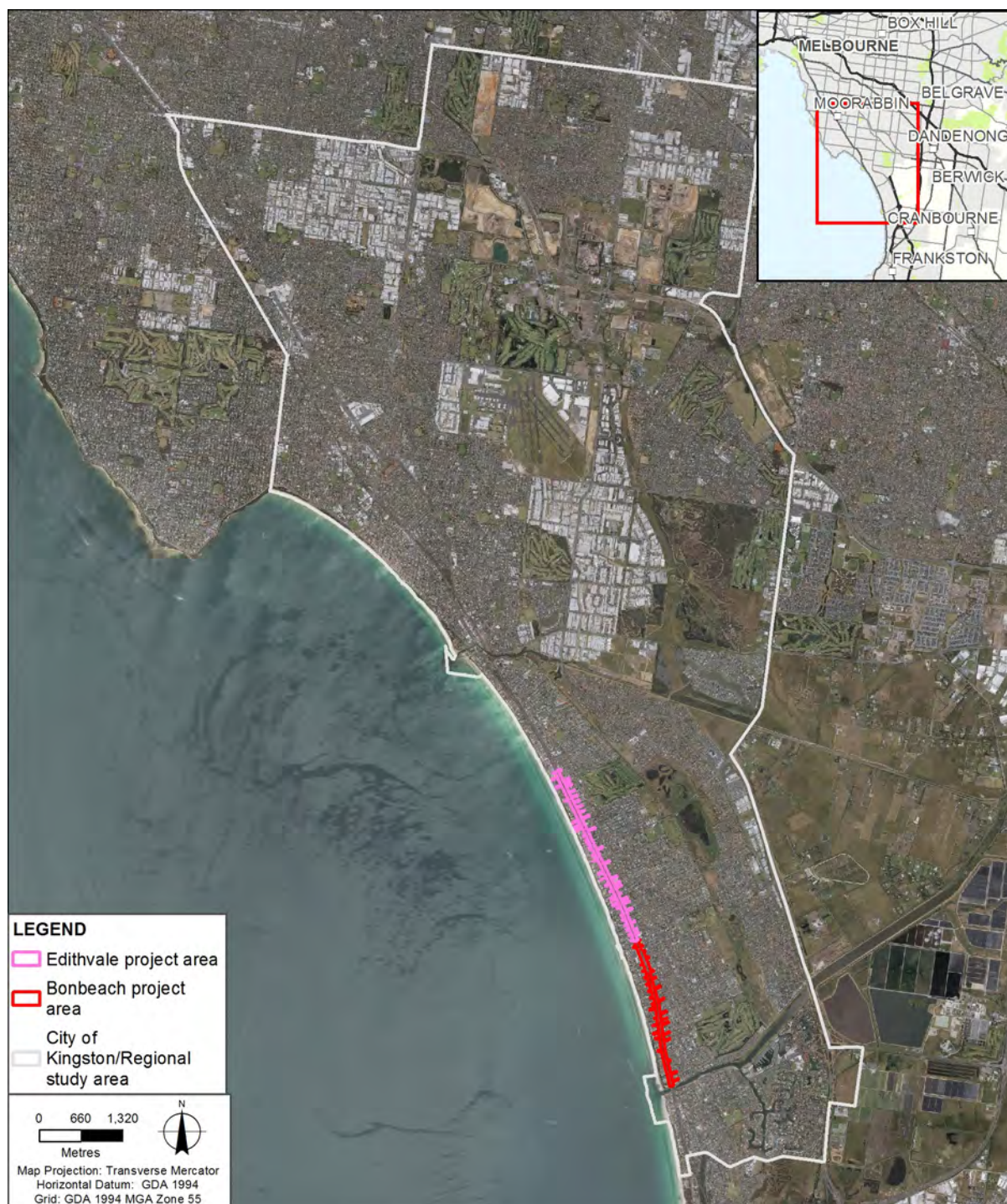


Figure 4 Regional study area

2 Scoping Requirements

In order to meet statutory requirements, protect environmental values and sustain stakeholder confidence, the EES will include an Environmental Management Framework (EMF). The EMF will 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:

- social outcomes

The following key issue of the biodiversity evaluation objective is also relevant to the social report:

- understanding community values associated with the Edithvale-Seaford Wetlands and the potential for indirect impacts on the community brought about by the project.

3 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 and required approvals. Descriptions of all relevant legislation are contained in Appendix A of this report.

Table 1 Primary legislation and associated information

Legislation/policy	Key policies/strategies	Implications for this project	Approvals required
Commonwealth			
<i>Disability Discrimination Act 1992 (DDA)</i>	<p>Section 23: Access to premises</p> <p>Section 24: Access to goods, services and facilities</p> <p>Section 26: Land</p> <p>The Act provides protection for everyone in Australia against discrimination based on disability.</p>	To facilitate access and ensure it is compliant, during both construction and operation.	No
State			
<i>Planning and Environment Act 1987</i>	<p>The Act provides a consistent and coordinated framework for planning schemes in Victoria.</p> <p>This Act establishes the framework for planning the use, development and protection of land in Victoria.</p> <p>It sets out the structure and administration of planning in Victoria and authorises the preparation, approval and adoption of planning schemes and planning scheme amendments by planning authorities.</p>	<p>The projects are subject to the requirements of the Kingston Planning Scheme. Under the controls of the Kingston Planning Scheme planning permits are required for buildings and works and the removal of native vegetation associated with the projects.</p> <p>Planning scheme amendments are being prepared pursuant to Section 20(4) of the <i>Planning and Environment Act 1987</i> for both projects which will exempt the projects from the requirements to obtain planning permits subject to specific conditions.</p>	Yes
<i>Environment Effects Act 1978</i>	Establishes an administrative process under which the Minister for Planning may require the proponent of a project to prepare an EES.	The Minister considers that the projects 'could reasonably be considered to have or to be capable of having a significant effect on the environment', and has therefore requested that an EES be prepared.	This SIA forms part of the EES.

Legislation/policy	Key policies/strategies	Implications for this project	Approvals required
<i>Transport Integration Act 2010</i>	The Act provides a legislative framework for transport in Victoria. The Act seeks to integrate land use and transport planning and decision-making by applying the framework to land use agencies whose decisions can significantly impact on transport. The Act requires agencies, including the Department of Economic Development, Jobs, Transport and Resources and Planning Authorities, to consider the potential impact of land use planning proposals on transport.	<p>The Act sets out six transport system objectives and eight decision-making principles.</p> <p>The objectives include triple bottom line assessment: economic prosperity, social and economic inclusion and environmental sustainability. Other objectives include:</p> <ul style="list-style-type: none"> • integration of transport and land use • efficiency, coordination and reliability • safety and health and wellbeing <p>The objectives and principles need to be considered in the evaluation of this project.</p>	No
<i>Public Health and Wellbeing Act 2008</i>	<p>The Act aims to promote and protect public health and wellbeing in Victoria.</p> <p>The most applicable section of the Act is Part 2, Section 4 relating to the objectives of the Act.</p>	<p>Overall policy guidance:</p> <ul style="list-style-type: none"> • Promoting and protecting the public health and wellbeing of persons in Victoria. 	No
State Planning Policy Framework	<p>The most relevant clauses for this assessment are:</p> <ul style="list-style-type: none"> • Clause 11.06-3 Integrated transport • Clause 11.06-5 Neighbourhoods • Clause 13.04-1 Noise abatement • Clause 13.04-2 Air quality • Clause 15.01-1 urban design • Clause 15.01-4 Design for safety • Clause 15.01-5 Cultural identity and neighbourhood character • Clause 18.01-2 Transport system • Clause 18.02-4 Management of the road system • Clause 19.02-2 	<p>The SPP provides a framework for integrated policy decision making with regards to how land is used and developed across the state.</p> <p>The State Planning Policy Framework seeks to ensure that the objectives of planning in Victoria are fostered through appropriate land use and development planning policies and practices which integrate relevant environmental, social and economic factors in the interests of net community benefit and sustainable development.</p>	No

Legislation/policy	Key policies/strategies	Implications for this project	Approvals required
	Education facilities		
Local			
Local Planning Policy Framework	MSS: <ul style="list-style-type: none"> • Clause 21.02 Municipal Profile (overview of City of Kingston) • Clause 21.11 Open Space • Clause 21.12 Transport, Movement and Access 	Provides strategic direction for planning, land use and development within City of Kingston.	No
Council Plan 2017-2021	Our well-planned, liveable city supported by infrastructure to meet future needs. Our free-moving safe, prosperous and dynamic city	Working with Council and the community to provide best outcomes.	No

4 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 5.

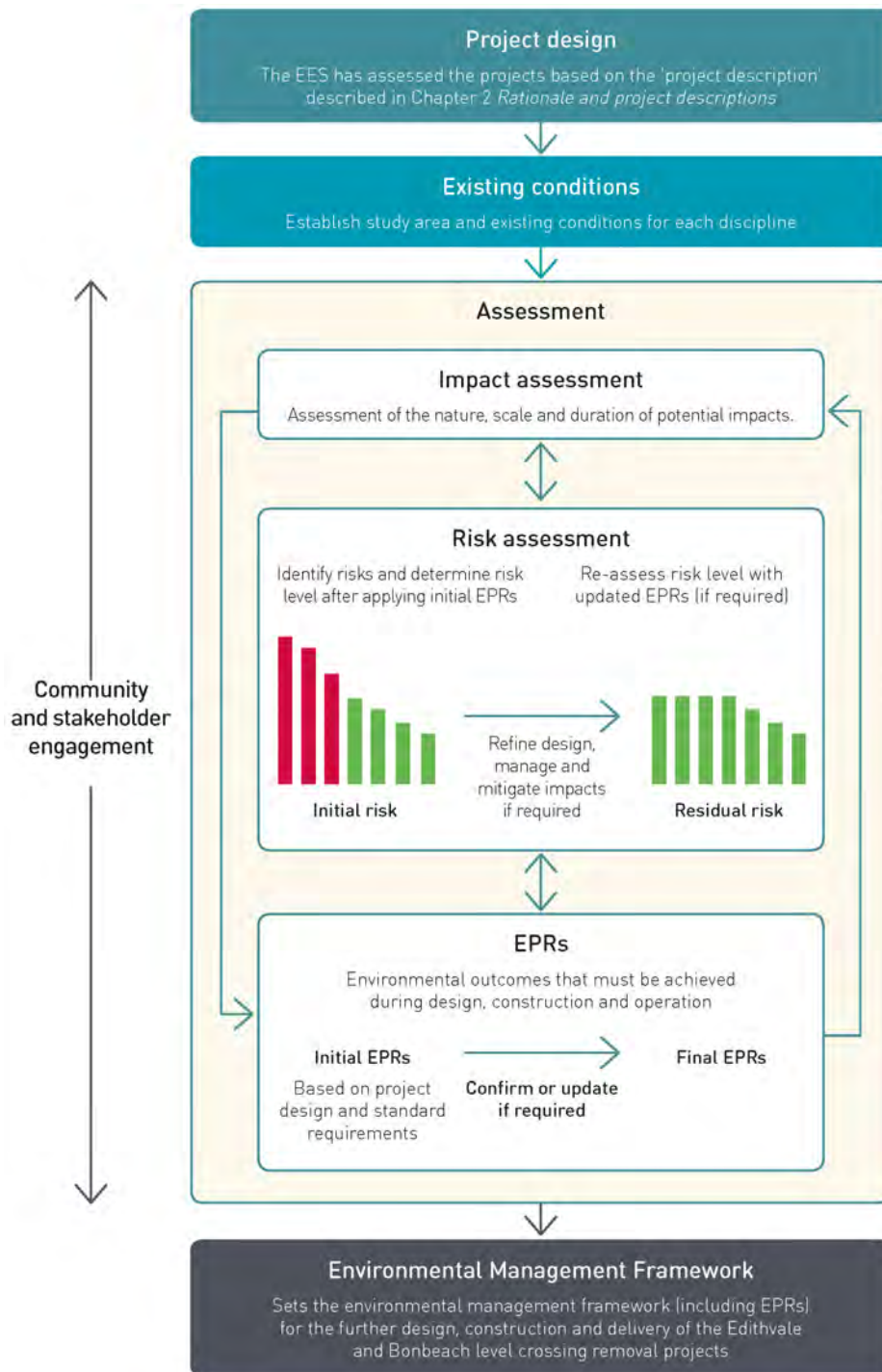


Figure 5 Overview of assessment process

The following sections outline the methodology for the social impact assessment.

4.1 Existing conditions assessment

The existing conditions assessment was used to establish a baseline of the study area and provide a profile of the current social environment.

The following community attributes were studied:

- demographic characteristics
- community values
- the location and type of community infrastructure facilities
- existing land uses
- access and connectivity including travel patterns.

Activities undertaken to understand the existing conditions included:

- identification of study area
- desktop review of the following:
 - Australian Bureau of Statistics (ABS) 2016 Census data.
 - Other data sources including profile.id, forecast.id, ABS Index of Relative Socio-economic Disadvantage (SEIFA), crime data from the Victorian State Government, and Community Wellbeing Indicators Victoria
 - the City of Kingston policies, strategies and plans
- site visit to observe community interactions at the level crossings, location of community infrastructure facilities, key transport routes, and overall characteristics of the study area
- consultation with the City of Kingston, participation in the project design community workshop, and inputs from the wider project communication and engagement activities to validate the desktop existing conditions assessment.

4.2 Risk assessment

A 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/NZS ISO 31000:2009 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) – refer to Section 8), and the location of the projects
- 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 *Environmental Risk Report*.

This technical report describes the social risks associated with the projects.

4.3 Impact assessment

Social impacts identified in Section 7 were determined for the projects through research, the risk assessment process, stakeholder consultation, information from other EES technical assessments and review of project design with a focus on the identified risks. The impact assessment was undertaken for the construction and operation phases of the project, with a focus on likely impacts on local communities and community infrastructure facilities. Impacts on businesses are assessed in EES Technical Report K *Business*.

The assessment is presented by impact themes and, where required, locations of the impacts are specified in the description. Impact themes include the following:

- reduced amenity due to combined impacts from increased noise and vibration, dust, odour, reduced visual amenity, changes to traffic conditions
- reduced opportunities for community interaction and active lifestyle for cyclists and pedestrians
- increased travel times for public transport users and other road users.

The assessment draws on a number of mitigation and management measures recommended in other technical studies within the EES for the project. In addition, relevant management strategies to minimise negative impacts and maximise benefits, were developed from research and consultation.

4.4 Stakeholder inputs

A program of engagement with stakeholders and the community has supported preparation of the EES and is summarised in Chapter 12 *Community and stakeholder engagement*.

Stakeholder inputs that have informed this assessment include:

- stakeholder consultation notes from the design and options assessment phase undertaken in 2016
- meeting with representatives from the City of Kingston on 24 July 2017
- phone meetings with key individuals from the City of Kingston's parks and recreation, and planning development areas (7 and 8 September 2017)
- Observation at a community workshop at Patterson River Golf Club on 14 September 2017, which provided an update on the design and sought feedback on key topics of interest.

These methods of stakeholder input have assisted the SIA project team understand community values and capture key concerns.

4.5 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 (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.

4.5.1 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.

4.5.2 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.

4.5.3 Final EPRs

The EPRs recommended for the projects are outlined in Section 8 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.

4.6 Linkage to other technical reports

This report relies on, or informs the following technical assessments:

- Technical Report B *Ecology: Wetlands and Groundwater Dependent Ecosystems*
- Technical Report F *Land Use*
- Technical Report G *Traffic*
- Technical Report H *Noise and Vibration*
- Technical Report I *Air Quality*
- Technical Report J *Landscape and Visual*
- Technical Report K *Business*.

5 Existing conditions

5.1 Introduction

This section provides an overview of the demographic and community characteristics of the study area (refer to Figure 3 and Figure 4). It also provides a summary of the community infrastructure that have the potential to be directly or indirectly affected by the projects.

The regional study area is defined as the City of Kingston LGA, while the local study area is defined as the suburbs of Edithvale and Bonbeach, where the level crossings are located. The local study areas have been considered for the purposes of demographic analysis, with data on the regional study area provided for comparison.

The projects would potentially have a wider influence on the local community and therefore community infrastructure, access and connectivity, and existing land use sections have also included the suburb of Chelsea, located between Edithvale and Bonbeach.

This existing conditions assessment has been undertaken through review of publicly available quantitative data, primarily ABS Census data; and has been complemented by qualitative information drawn from various strategic planning documents and policies, as well as information obtained during the stakeholder consultation process.

5.2 Overview of the study area

5.2.1 Regional study area – City of Kingston LGA

The City of Kingston LGA is located approximately 20 kilometres from Melbourne CBD and covers an area of 91 square kilometres in the outer southern suburbs of Melbourne (City of Kingston, 2017b; Profile.id, 2016). The LGA had a population of 151,389 persons at the time of the 2016 ABS Census, spread across 22 suburbs (ABS, 2016). Diversity in the LGA is high with residents from over 150 countries, speaking 120 languages and following more than 28 faiths (City of Kingston, 2017b). City of Kingston LGA is planning for anticipated population growth, with an expected 185,214 persons by 2036 (City of Kingston, 2017b).

The LGA is characterised by its beachside location, densely populated, well established residential suburbs as well as substantial pockets of industrial and commercial areas (City of Kingston, 2011). The municipality is one of the state's main employment centres having one of the largest and most concentrated industrial sectors in Victoria (City of Kingston, 2017b). It contains a network of parks, gardens and reserves, sport and recreation facilities, and significant conservation areas including natural wetlands and 13 kilometres of coastline (City of Kingston, 2011). The Patterson River runs through the southern part of the City (City of Kingston, 2011).

The suburbs of Edithvale and Bonbeach are located at the southern end of the LGA and have been selected as the local study area for this assessment, as the level crossings are located in these two suburbs.

5.2.2 Local study area – Edithvale

The Edithvale local study area consists of the State Suburb defined area.

Edithvale had an estimated resident population of 5,806 persons at the time of the 2016 ABS Census (ABS, 2016b). The suburb covers an area of approximately two square kilometres within the City of Kingston LGA (Profile.id, 2016). The suburb is predominately residential, with a commercial area along Nepean Highway (Profile.id, 2016). The suburb has experienced

steady growth with an increase of approximately 815 persons in the last ten years (ABS, 2006b; ABS, 2016b).

The suburb is bounded by Port Phillip Bay in the west, Regents Park and Rosedale Golf Club in the north, Edithvale-Seaford Wetlands in the east, and residential land to the south (Profile.id, 2016). Key features of the area include the Edithvale Beach and foreshore, Edithvale Public Golf Course, Edithvale Recreation Reserve, Edithvale Common and Edithvale Primary School (Profile.id, 2016).

5.2.3 Local study area – Bonbeach

The Bonbeach local study area consists of the state suburb defined area.

Bonbeach is an established residential suburb with a population of approximately 6,416 persons, at the time of the 2016 Census (ABS, 2016a). The population of Bonbeach has increased gradually since 2006, with an increase of 1,424 persons over the period (ABS, 2006a; ABS, 2016a).

The suburb covers an area of 279 hectares (approximately three square kilometres) within the City of Kingston LGA (Profile.id, 2016). The suburb is bounded by wetlands to the east, Patterson River to the south, Bonbeach beach and foreshore to the west, and residential land and Bicentennial Park to the north. Major features of the suburb include the beach, Bonbeach Life Saving Club, Patterson River Golf Club, Bonbeach Sports Reserve, Chelsea Pony Club and Bonbeach Primary School (Profile.id, 2016).

5.2.4 Local amenity and character

Community characteristics including amenity and lifestyle provide an indication of the values of a community. A project may impact on these aspects of a community through changes in noise and air quality levels, visual amenity, traffic and access, barriers to movement across the community and use and enjoyment of community spaces.

As discussed above, the suburbs of Edithvale and Bonbeach are defined as the local study area. The beach stretching along the length of the western boundary of the suburbs, the Edithvale-Seaford Wetlands including the bird hide, and the Patterson River provide natural amenity for the area.

The Kingston Foreshore has been recognised for its ecological value with the presence of local, regional and state significant flora species (City of Kingston, 2017c). The Aspendale to Carrum Foreshore Reserve extends for 8.5 kilometres and forms one of two key sections of Kingston Foreshore (City of Kingston, 2017c). The importance of the foreshore as an environmental, ecological and social asset is recognised by Local Planning Policy 21.08 of the Kingston Planning Scheme. One objective of Clause 21.08 is *'to promote a wide range of social, recreational and coastal experiences which seek to optimise community enjoyment of the foreshore'*. The formation of the Friends of Bonbeach Foreshore to help maintain and protect the foreshore further highlights the importance of this area for the local community (City of Kingston, 2017c).

The Edithvale-Seaford Wetlands offer a number of avenues for community activities, such as recreational bird watching on weekends, educational tours for schools and other groups, community tree planting and opportunities for volunteering with the Friends of Edithvale Seaford Wetlands and opportunities for social networking, especially for elderly age groups. In August 2017, the bird hide celebrated its one year anniversary of reopening. During the same time, the group was noted to have 41 volunteers (the youngest is 11 years old and the oldest is 79 years old) who open the hide on week-ends and have recorded approximately 2,050 visitors (including 14 groups) over the year (Friends of Edithvale Seaford Wetlands, 2017). It is noted that the

wetlands are not discussed further throughout this assessment since significant impacts to the ecological values of the wetlands were not identified in Technical Report B *Ecology: Wetlands and Groundwater Dependent Ecosystems*.

Coastal vegetation along the foreshore areas of Edithvale and Bonbeach attribute to the setting of the foreshore area which is frequented by a large number of local residents and visitors from other areas of Melbourne. Other vegetation within the project areas is also valued by the community due to its aesthetic value, including vegetation planted by local community groups. Impacts associated with the potential loss of this vegetation are assessed in Technical Report J *Landscape and Visual*.

A number of parks, walking/cycling paths, and sport and recreation facilities foster an active, outdoor lifestyle for residents. These facilities are used by the community, and visitors, for both passive and active recreation.

Community feedback from consultation undertaken in 2016 has indicated that the rail line is a barrier to movement in the suburb, particularly for the community on the eastern side of the rail line to accessing the beach and shopping strip. The beach is a main drawcard for people choosing to live in the area, and access to the beach and across the rail line is vital.

5.3 Demographic characteristics

Key demographic characteristics of Edithvale (SSC) and Bonbeach (SSC), compared to the City of Kingston LGA, are summarised in the following sections. Detailed demographic data for the suburbs and LGA is provided in Appendix A.

The information presented in this section has been sourced from the ABS Census data unless otherwise stated.

5.3.1 Edithvale

The key demographic and community characteristics of the Edithvale community are summarised below.

Population

- At the time of the 2016 Census the total population of Edithvale was 5,806 persons, compared with 5,450 persons in 2011. The population of City of Kingston LGA also increased across the period from 142,425 persons in 2011 to 151,389 persons in 2016.
- By 2036, the population of Edithvale is projected to increase to 6,113 persons. Population growth is also anticipated across the LGA, which is forecast to reach 185,214 persons by 2036 (Forecast.id, 2015).

Age and gender profile

- Edithvale reported a female population of 51.2 per cent and a male population of 48.8 per cent (ABS, 2016b). The LGA had a similar gender split with 51.4 per cent female and 48.6 per cent male (ABS, 2016c).
- The largest proportion of females was in the 45 to 49 age group (8.4 per cent) while the largest percentage of males was in the 40 to 44 age group (8.2 per cent) (ABS, 2016b).
- The median age of the population was 40 years in Edithvale and City of Kingston LGA (ABS, 2016b; ABS, 2016c).
- Edithvale had a slightly higher proportion of people aged under 18 years (21.6 per cent compared to 20.9 per cent in the LGA) and a slightly higher proportion of people aged 25 to 59 (50.4 per cent compared to 48.3 per cent in the LGA) (ABS, 2016b; ABS, 2016c).

- All age groups (25-34, 35-49 and 50-59) were distributed relatively evenly for both the suburb and the LGA. (ABS 2016b; ABS, 2016c).
- There was a marginally larger percentage of people aged 85 and over in Edithvale (3.2 per cent) compared to City of Kingston LGA (2.7 per cent). (ABS, 2016b; ABS, 2016c).

Cultural and ethnic composition

- Aboriginal and Torres Strait Islander people made up 0.5 per cent of the Edithvale population with 30 persons (ABS, 2016b). This was consistent with the Aboriginal and Torres Strait Islander population of 0.4 per cent recorded for the LGA (ABS, 2016c).
- In Edithvale, 25.9 per cent of the population were born overseas. The most common other countries of birth were England (4.5 per cent), New Zealand (1.8 per cent) and China (1.2 per cent) (ABS, 2016b). The LGA recorded a larger percentage of the population born overseas (36.7 per cent) (ABS, 2016c).
- In Edithvale, 11.5 per cent of people spoke a language other than English at home. Other common languages spoken at home include Greek (1.4 per cent), Mandarin (1.2 per cent), Italian (0.8 per cent) and Russian (0.8 per cent) (ABS, 2016b). This was considerably lower than the 26.0 per cent recorded for the LGA (ABS, 2016c).

Family composition and household structure

- According to ABS Census 2016 data, there were a total of 2,166 households in Edithvale. Family households comprised 69.3 per cent of households, 27.5 per cent were lone person households, and group households made up 3.1 per cent. In City of Kingston LGA, a higher number of family households were recorded at 71.4 per cent, fewer lone person households (25.6 per cent), and equal group households (three per cent).
- Of the total 1,522 families in Edithvale, 46.5 per cent were couple families with children, 37.0 per cent were couple families without children, and 15.0 per cent were one parent families (ABS, 2016b). This was generally consistent with the percentages recorded for the LGA (ABS, 2016c).
- Both the average number of bedrooms (2.9 bedrooms per dwelling compared to three bedrooms per dwelling) and the average household size (2.5 persons per dwelling) was consistent in Edithvale and the LGA (ABS, 2016b; ABS, 2016c).

Housing and accommodation

- Of occupied private dwellings in Edithvale, 49.8 per cent were separate house dwellings, 28.9 per cent were flats, units or apartments and 12.7 per cent were semi-detached, terrace housing (ABS, 2016b). City of Kingston recorded a higher percentage of separate houses (54.9 per cent), less than half the percentage of flats, units or apartments (12.4 per cent) and a higher percentage of semi-detached, terrace houses (23.6 per cent) (ABS, 2016c).
- Home ownership data from ABS Census 2016 was consistent between the suburb and LGA, with 33.7 per cent of fully owned housing, compared to 35.7 per cent, and 39.8 per cent of housing owned with a mortgage in Edithvale compared to 38.1 per cent in City of Kingston. The proportion of persons renting was also consistent at 26.5 per cent for Edithvale and 26.2 per cent for the LGA.
- There was a lower proportion of social housing tenants in state owned housing authority in the suburb compared to the LGA (4.8 per cent compared to 6.4 per cent) (ABS, 2016b; ABS, 2016c).

Education and training

- Edithvale had a lower rate of high school completion (56.1 per cent) compared to the LGA (58.2 per cent) (ABS, 2016b; ABS, 2016c) as well as a lower proportion of people without post-school qualifications (34.5 per cent compared to 38.6 per cent) (ABS, 2016b; ABS, 2016c).

Unemployment

- The rate of unemployment in Edithvale was lower than the LGA at 5.2 per cent compared to 5.4 per cent (ABS, 2016b; ABS, 2016c).

Labour force by industry and occupation

- Employment data shows that Edithvale had a total labour force of 3,049 persons aged 15 years and over (64.6 per cent). This compared to a labour force participation rate of 62.9 per cent in the LGA.
- Of the total labour force in Edithvale, 64.2 per cent worked full-time and 32.1 per cent worked part-time (ABS, 2016b). This was consistent with the percentages recorded for the LGA (62.3 per cent and 32.9 per cent respectively) (ABS, 2016c).
- The dominant industry of employment in Edithvale was construction which accounted for 19.2 per cent of employment. This was followed by manufacturing (9.7 per cent), professional, scientific and technical services (9.2 per cent), and retail trade (8.3 per cent).
- The most common occupations in Edithvale included professionals (24.9 per cent), clerical and administrative workers (15.2 per cent) and managers (15.0 per cent) (ABS, 2016b).

Income

- The median weekly personal income for people aged 15 years and over in Edithvale was \$788. This was higher than the average income reported for City of Kingston LGA which was \$704. Compared to the LGA, average household incomes in Edithvale were higher with \$1,662 compared to \$1,537 (ABS, 2016b; ABS, 2016c).

Community health and safety

- In Edithvale, 5.8 per cent of the population required assistance according to 2016 Census data. This was higher than the 5 per cent reported for the LGA.
- The ABS Socio-Economic Indexes for Areas (SEIFA) consists of four indexes that rank areas in Australia according to relative socio-economic advantage and disadvantage. Index of Relative Socio-economic Advantage and Disadvantage (IRSAD) summarises information about the economic and social conditions of people and households within an area, including both relative advantage and disadvantage measures. Using deciles, a score of 1 indicates an area is highly disadvantaged, while a score of 10 indicates an area is highly advantaged.
- The SEIFA IRSAD ranked Edithvale at decile 7 within Victoria, compared with a rank of 8 for the LGA. This indicated that the suburb and LGA are relatively advantaged.
- The largest percentage of offences in Edithvale was in the Crimes Against the person category (33.5 per cent compared to 61.8 per cent in the LGA). The lowest percentage of offences in Edithvale was in the Drug Offences category (4.1 per cent compared to 5.4 per cent in the LGA) (Victorian State Government, 2017).

- In the LGA, subjective wellbeing was relatively high (77.5 per cent); and perceptions of safety were high during the day (96.6 per cent) compared to night time (68.1 per cent) (Community Indicators Victoria, 2011).

Transport and travel behaviour and mobility

- In Edithvale, 375 people (14.0 per cent) travelled to work by train, compared with 13.2 per cent across the LGA (ABS, 2016b; ABS, 2016c).
- There were lower levels of active transport usage in the suburb compared to the LGA, including cycling (0.7 per cent compared to 0.8 per cent) and walking (1.2 per cent compared to 1.8 per cent) (ABS, 2016b; ABS, 2016c).
- Edithvale had lower levels of car usage (76.1 per cent compared to 76.4 per cent) compared to the LGA; however, the suburb also reported a lower proportion of households without a motor vehicle (6.2 per cent compared to 6.6 per cent in the LGA) (ABS, 2016b; ABS, 2016c).
- There was a lower proportion of people who had lived at the same address one year ago (78.0 per cent and 79.1 per cent) and five years ago (51.2 per cent and 55.0 per cent) in Edithvale compared to the LGA (ABS, 2016b; ABS, 2016c).

5.3.2 Bonbeach

The key demographic and community characteristics of Bonbeach community area summarised below.

Population

- At the time of the 2016 Census the total population of Bonbeach was 6,416 persons, compared with 5,733 persons in 2011. The population of City of Kingston LGA also increased across the period from 142,425 persons in 2011 to 151,389 persons in 2016.
- By 2036, the population of Bonbeach is expected to increase to 6,655 persons. Population growth is also anticipated across the LGA which is forecast to reach 185,214 persons by 2036 (Forecast.id, 2015).

Age and gender profile

- Bonbeach reported a female population of 51.6 per cent and a male population of 48.4 per cent (ABS, 2016a). The LGA had a similar gender split with 51.4 per cent female and 48.6 per cent male (ABS, 2016c).
- The largest proportion of females was in the 35 to 39 age group (9.2 per cent) and the largest percentage of males was in the same 35 to 39 age group (9.4 per cent) (ABS, 2016a).
- The median age of the population was 40 years in Bonbeach and City of Kingston LGA (ABS, 2016a; ABS, 2016c).
- Bonbeach had a lower proportion of people aged 18 years and under (18.5 per cent compared to 20.9 per cent in the LGA) (ABS, 2016a).
- A slightly higher proportion of persons aged between 25 and 59 (51.9 per cent compared to 48.3 per cent) (ABS, 2016a).
- There was a marginally larger percentage of people aged 85 and over in Bonbeach (2.9 per cent) compared to City of Kingston LGA (2.7 per cent) (ABS, 2016a; ABS, 2016c).

Cultural and ethnic composition

- Aboriginal and Torres Strait Islander people made up 0.5 per cent of the Bonbeach population with 35 persons (ABS, 2016a). This was consistent with the Aboriginal and Torres Strait Islander population of 0.4 per cent recorded for the LGA (ABS, 2016c).
- In Bonbeach, 31 per cent of the population were born overseas. The most common other countries of birth were England (5.4 per cent), New Zealand (2.5 per cent) and China (one per cent) (ABS, 2016a). The LGA recorded a larger percentage of the population born overseas (36.7 per cent) (ABS, 2016c).
- In Bonbeach, 11.8 per cent of people spoke a language other than English at home. Other common languages spoken at home include Russian (1.5 per cent), Mandarin (1.2 per cent) and Greek (0.8 per cent) (ABS, 2016a). This was considerably lower than the 26.0 per cent recorded for the LGA (ABS, 2016c).

Family composition and household structure

- According to ABS Census 2016 data, there were a total of 2,606 households in Bonbeach. Family households comprised 63.5 per cent of households, 32.3 per cent were lone person households and group households made up 4.1 per cent. In City of Kingston LGA, a higher number of family households were recorded at 71.4 per cent, and fewer lone person (25.6 per cent) and group households (three per cent).
- Of the 1,672 families in Bonbeach, 41.6 per cent were couple families with children, 40.3 per cent were couple families without children, and 16.3 per cent were one parent families (ABS, 2016a). This was generally consistent with the percentages recorded for the LGA (ABS, 2016c).
- Both the average number of bedrooms (2.7 bedrooms per dwelling compared to three bedrooms per dwelling) and the average household size (2.2 persons per dwelling compared to 2.5 per dwelling) were similar in Bonbeach and the LGA (ABS, 2016a; ABS, 2016c).

Housing and accommodation

- Of occupied private dwellings in Bonbeach, 43.8 per cent were semi-detached, townhouse dwellings, 34.0 per cent were separate houses, and 7.7 per cent were flats, units or apartment dwellings (ABS, 2016a). City of Kingston recorded a higher percentage of separate housing (54.9 per cent), around half the percentage of semi-detached, townhouse dwellings (23.6 per cent), and more flats, units or apartments (12.4 per cent) (ABS, 2016c).
- Home ownership data from ABS Census 2016 was similar between the suburb and LGA with 30.4 per cent of fully owned housing compared to 35.7 per cent, and 37.4 per cent of housing owned with a mortgage in Bonbeach, compared to 38.1 per cent in City of Kingston. The proportion of persons renting was higher in Bonbeach at 32.2 per cent compared to 26.2 per cent for the LGA.
- There was a lower proportion of social housing tenants in state owned housing authority in the suburb compared to the LGA (4.3 per cent compared to 6.4 per cent in the LGA) (ABS, 2016a; ABS, 2016c).

Education and training

- Bonbeach had a lower proportion of people who completed year 12 (or equivalent) (53.4 per cent) compared to the LGA (58.2 per cent) (ABS, 2016a; ABS, 2016c), and a lower proportion of people without post-school qualifications (33.2 per cent compared to 38.6 per cent) (ABS, 2016a; ABS, 2016c).

Unemployment

- The rate of unemployment in Bonbeach was 5.2 per cent compared to the LGA which was 5.4 per cent (ABS, 2016a; ABS, 2016c).

Labour force by industry and occupation

- Employment data shows that Bonbeach had a total labour force of 3,355 persons aged 15 years and over (62.7 per cent). The labour force participation rate was of 62.9 per cent in the LGA.
- Of the total labour force in Bonbeach, 64.9 per cent worked full-time and 29.7 per cent worked part-time (ABS, 2016a). This was consistent with the percentages recorded for the LGA (62.3 per cent and 32.9 per cent respectively) (ABS, 2016c).
- Construction was the dominant industry of employment in Bonbeach at 21.8 per cent. This was followed by manufacturing (11.7 per cent) and professional, scientific and technical services (8.1 per cent).
- The most common occupations in Bonbeach included professionals (24.0 per cent), clerical and administrative workers (16.3 per cent) and technicians and trades workers (15.5 per cent) (ABS, 2011a).

Income

- The median weekly personal income for people aged 15 years and over in Bonbeach was \$793. This was higher than the average income reported for City of Kingston LGA which was \$704. Compared to the LGA, average household incomes in Bonbeach were lower at \$1,461 compared to \$1,537 (ABS, 2016a; ABS, 2016c).

Community health and safety

- In Bonbeach, 4.9 per cent of the population required assistance according to 2016 Census data. This was marginally lower than the 5 per cent reported for the LGA.
- The ABS Socio-Economic Indexes for Areas (SEIFA) consists of four indexes that rank areas in Australia according to relative socio-economic advantage and disadvantage. Index of Relative Socio-economic Advantage and Disadvantage (IRSAD) summarises information about the economic and social conditions of people and households within an area, including both relative advantage and disadvantage measures. Using deciles, a score of 1 indicates an area is highly disadvantaged, while a score of 10 indicates an area is highly advantaged.
- The SEIFA IRSAD ranked Bonbeach at decile 6 within Victoria, compared with a rank of 8 for the LGA. This indicated that the suburb was closer to an average level of advantage, while the LGA was relatively advantaged.
- The largest percentage of offences in Bonbeach was in the Crimes Against the person category (50.8 per cent compared to 61.8 per cent in the LGA). The lowest percentage of offences in Bonbeach was in the Public Order and Security Offences category (8.8 per cent compared to 6 per cent in the LGA) (Victorian State Government, 2017).
- In the LGA, subjective well-being was relatively high (77.5 per cent); and perceptions of safety were high during the day (96.6 per cent) compared to night time (68.1 per cent) (Community Indicators Victoria, 2011).

Transport and travel behaviour and mobility

- In Bonbeach, 378 people (13.1 per cent) travelled to work by train compared to 13.2 per cent across the LGA (ABS, 2016a; ABS, 2016c).
- There were marginally lower level of active transport usage in the suburb compared to the LGA, including cycling (0.5 per cent compared to 0.8 per cent) and walking (1.0 per cent compared to 1.8 per cent) (ABS, 2016a; ABS, 2016c).
- Bonbeach had higher level of car usage (78.7 per cent compared to 76.4 per cent) compared to the LGA. Bonbeach has a slightly higher proportion of households without a motor vehicle (7.7 per cent compared to 6.6 per cent in the LGA) (ABS, 2016a; ABS, 2016c).
- There was a lower proportion of people who had lived at the same address one year ago (72.8 per cent compared to 79.1 per cent) and five years ago (44.0 per cent compared to 55.0 per cent) in Bonbeach compared to the LGA (ABS, 2016a; ABS, 2016c).

5.4 Community infrastructure

Community infrastructure close to the proposed works that may potentially be impacted by the projects are listed in, and shown on:

- For Edithvale: Table 2 and Figure 6
- For Chelsea: Table 3 and Figure 7
- For Bonbeach: Table 4 and Figure 8.

Note that this section also includes the community infrastructure facilities located in Chelsea because of its proximity of the study areas of Edithvale and Bonbeach. Consultation with the City of Kingston indicated that residents within these three suburbs have strong interconnections due to a number of social infrastructure facilities being located in Chelsea. Chelsea is considered a welfare hub for the surrounding area as it has a number of health, wellbeing and social support services. It has therefore been included to understand the social infrastructure conditions within the study area. The community infrastructure study area is also identified in Section 1.4.4.

Table 2 Community Infrastructure in Edithvale

Community infrastructure	Address	Comment
Child care and playgroups		
Edithvale Family and Children's Centre	122 Edithvale Road, Edithvale	The Edithvale Family and Children's Centre was an addition to Council's existing Edithvale Recreation Reserve Master-plan. Children's day care centre for 0-5 year olds.
Education		
Edithvale Primary School	42-54 Edithvale Road, Edithvale	Public school catering for years F-6. Access from Edithvale Road and French Avenue.
Edithvale Preschool	29-31 Fraser Avenue, Edithvale	Children's day care centre for 3-4 year olds, offering educational programs also. Accessed from Fraser Avenue.

Community infrastructure	Address	Comment
Aged care		
Bupa Aged Care Edithvale	256-260 Station Street, Edithvale	Aged care home providing residential care, specialised dementia care and respite care. Three resident communities, each caring for around 40 people. Also has a specialist dementia community caring for up to 16 people.
Southern Cross Care Northcliffe Home	10-12 Northcliffe Road, Edithvale	Accommodates 30 residents. Provides specialist dementia services, pastoral care services, ancillary services including GP, podiatrist, physiotherapist and nutritionist, and hairdressing services.
Open space, sport and recreation		
Edithvale foreshore	Edithvale	Coastline beach and vegetated strip in front of developed land. Includes iconic wooden beach huts and Life Saving Club.
Edithvale Recreation Reserve	88-120 Edithvale Road, Edithvale	<p>The reserve has a recreation ground consisting of sporting fields and facilities. The grounds service baseball, a cycle track, an athletics field, onsite parking accessed from Edithvale Road and the Edithvale Family and Children's Centre and playground equipment.</p> <p>Recently upgraded. Multi-use including soccer, baseball, cycling- velodrome, athletics, playground.</p>
Edithvale Bowling Club	109 Edithvale Road, Edithvale	Three bowling greens with several membership types available. Accessible via Edithvale Road.
Edithvale Common	Edithvale Road, Edithvale	Includes Aspendale Edithvale RSL Memorial Oval. Used for soccer games and cricket in summer.
Cycling Track	88-120 Edithvale Road, Edithvale	Cycling track/loop around the athletics field of the Edithvale Recreation Reserve.
Edithvale Public Golf Course (Formerly Chelsea Public Golf Course)	Fraser Avenue, Edithvale	<p>Nine hole golf course.</p> <p>City of Kingston's only public golf course.</p>
Edithvale-Seaford Wetlands	Edithvale Road, Edithvale	Wetland/swamp area including a bird hide in Edithvale Road.
Beeson Reserve	Nepean Highway/The Esplanade, Edithvale	<p>Edithvale Station located at one end and Edithvale Life Saving Club at the other end.</p> <p>Park with grassed area, seating, War memorial which holds dawn service on Anzac Day.</p>

Community infrastructure	Address	Comment
Community facility		
Australia Post - Edithvale LPO	253 Nepean Highway, Edithvale	Post Office open Monday to Saturday 8:00 am to 5:00 pm and closed Sunday.
Place of worship		
Uniting Church in Australia Chelsea	24 Clydebank Road, Edithvale	Access from Clydebank Road and Edithvale Road. Church Office that collects papers for mission, run an op shop and a book club.
Health		
Edithvale Family Medical Practice	267 Station Street (near corner of Berry Ave), Edithvale	Small general practitioner clinic open Monday to Saturday.
Emergency and justice		
Edithvale Life Saving Club	The Esplanade, Edithvale	Edithvale LSC Inc. provide voluntary patrols of the Edithvale beach in summer. Council plans for rebuilding. Demolition expected to take place in October/ November 2017 (pending approvals), with construction commencing shortly afterward. New facility anticipated to be completed for club's centenary celebrations in 2019.
Fire Station: Edithvale	206 Station Street, Edithvale	A volunteer brigade operates the station year round, offering firefighting services. A new CFA station is due to be completed in December 2017.
Pedestrian/cycling crossings and access		
Two pedestrian road crossings	Edithvale Road, Edithvale	Traffic lights along Edithvale Road provide pedestrian and cyclist road crossing.
Pedestrian crossings over the railway	Denman Avenue, Edithvale Fraser Avenue, Edithvale Berry Avenue, Edithvale	Pedestrian Crossing.
Accessible beach access	Bank Road, Edithvale	There is an accessible boardwalk providing beach access at the end of Bank Road.

Source: City of Kingston, 2016; Google Maps, 2017.

Table 3 Community Infrastructure in Chelsea

Community infrastructure	Address	Comment
Child care and playgroups		
Kindy Patch Chelsea	71 Blantyre Avenue, Chelsea	A full service childcare centre that operates between the hours of 7:00 am and 6:30 pm for children aged 0 to 6 years old.
Chelsea Occasional Child Care	8-10 Swanpool Avenue, Chelsea	Childcare centre offering playgroup for children under 6 years old, Kinder Activity Sessions for children aged 3 to 5, and flexible short-term childcare. Swanpool Avenue Playgroup is also run out of this location. It is a parent/carer-run centre and playgroup.
Chelsea World of Learning 1	29 Woodbine Grove, Chelsea	Chelsea World of Learning 1 provides education and care for children aged up to 2.5 years old.
Chelsea World of Learning 2	31 Woodbine Grove, Chelsea	Chelsea World of Learning 2 provides care and education for children aged 2.5 to 6 years. The centre is open from 6:30 am to 6:30 pm.
Chelsea Heights Community Centre (Occasional Care)	160 Thames Promenade, Chelsea Heights	Childcare for 0 to 5 years old. Open Wednesdays and Thursdays.
Education		
St Joseph's School	357-360 Station Street	Catholic education for children up to grade 6.
Chelsea Primary School	34-44 Argyle Avenue	A public school provide education for children in prep to grade 6. Also provides Chelsea Primary School Playgroup on Wednesday mornings.
Chelsea Kindergarten	36 Glenola Road, Chelsea	Childcare and early learning centre for children aged 3 and 4.
Chelsea Heights Kindergarten	Temporarily operating out of 71 Catherine avenue, Chelsea while 27-33 Third Avenue, Chelsea Heights is being renovated.	Due to return to Third Avenue in 2018. Kindergarten for children aged 3 and 4.

Community infrastructure	Address	Comment
Aged care		
Argyle Court Hostel (Lifeview Residential Care)	81-83 Argyle Avenue, Chelsea	45 bed aged care facility in close proximity to Bicentennial Park. Services such as hairdressers, physiotherapists and library borrowing services are facilitated in the hostel.
BlueCross Gardenia Nursing Home and Hostel	87 Argyle Avenue, Chelsea	Provides quality permanent, respite (short term aged care in a nursing home) and dementia care for 73 people.
Chelsea Manor Hostel (BlueCross Chelsea Manor)	7-11 Beardsworth Avenue, Chelsea	Provides permanent care with ageing in place and dementia specific accommodation as well as respite care (short term accommodation in a nursing home) to 70 residents.
Open space, sport and recreation		
Chelsea Bicentennial Park (Dog off leash area)	84-130 Thames Promenade, Chelsea	Also Known As: Bicentennial Park Description: Signs within the park indicate the off leash areas. Closest entry point is Argyle Avenue. Area includes dog exercise equipment. Includes Chelsea Sports Women's Centre; netball courts; Chelsea Junior Football Club; Chelsea Football Club, Bonbeach Baseball Club
Bicentennial Park Playground	Thames Promenade and Scotch Parade	Playground equipment, barbeque and soccer facilities, as well as toilet blocks.
Chelsea Skate Park	Thames Promenade and Scotch Parade	Large skate park with shade cloth over the area.
Victory Park	8-12 Camp Street, Chelsea	Playground equipment in close proximity to the beach.
Chelsea Recreation Reserve	13 Beardsworth Avenue, Chelsea	AFL and Rugby sporting field with small grand stand, Chelsea Bowling Club, Chelsea Lawn Tennis Club, Tom Johnston Pavilion.
Chelsea Beach	Chelsea	Coastline beach and vegetated strip of land with iconic wooden beach huts.

Community infrastructure	Address	Comment
Community facility		
Chelsea Library	1 Chelsea Road, Chelsea	Chelsea library is open 7 days a week. The City of Kingston community bus service provides transport to Chelsea Library every second Wednesday and a home library service is also offered.
Chelsea Community Support Services	1A Chelsea Road, Chelsea	Chelsea Community Support Services provides information, support and financial relief to struggling individuals and families in the area.
Longbeach Place	13-15 Chelsea Road, Chelsea	A not-for-profit community based organisation which provides community members with opportunities for lifelong learning and skills development. Facility offering Adult Community and Further Education (ACFE) programs to assist people aged 15 to 90. Community groups also meet at the facility during the week.
Chelsea Heights Community Centre	160 Thames Promenade, Chelsea Heights	The centre offers a large hall space with playgroup and dance sessions. The Childcare room is used for playgroup, yoga classes, and art and crafts group. The centre has a wetlands education room and a community garden.
A.T. Nieman Hall	14 Baxter Avenue, Chelsea	The hall has a 100 person capacity; the hall has a dance floor and a kitchen facility suitable for small functions.
Chelsea RSL (Longbeach RSL)	4 Thames Promenade, Chelsea	The RSL offers 80 seat dining, function rooms and a gaming room.
Chelsea Activity Hub	3-5 Showers Avenue, Chelsea	Provides a range of social, health and educational programs and activities for residents, managed by volunteers.
Place of worship		
St Chad's Anglican Church	12-14 Thames Promenade, Chelsea	<p>St Chad's is one of two churches a part of the Longbeach Parish. Services, bible study and small community group activities are led by St Chad's.</p> <p>Matt's Place provides free community meals at the church on Tuesday between 11:30 am and 1:00 pm.</p>

Community infrastructure	Address	Comment
Church of Christ Chelsea	3 Blantyre Avenue, Chelsea	<p>Church service on Sundays and church games night on Fridays. The Church also runs a book club and playgroup.</p> <p>Chelsea Careworks is the outreach arm of the Church of Christ Chelsea. It provides activities and programs to assist those within the community who may be isolated and struggling or who wish to learn various life skill strategies. Also provides free breakfast on Wednesdays and morning tea on Thursdays.</p>
Chelsea Uniting Church	2-4 Sherwood Avenue, Chelsea	Worship Time: 9:30 am Sunday Morning
St Joseph's Church	362 Station Street, Chelsea	Service and Parish office hours available to the wider public, but the St Joseph's School community is involved in regular masses.
Freeway Baptist Church	Level 1, Chelsea Market Building, 450 Nepean Highway, Chelsea	Baptist Church offers Sunday worship, a crèche, playgroup and youth group.
Oasis Baptist Church	The Alan Nieman Hall, 14 Baxter Avenue, Chelsea	Church services held on Sunday and mid-week the church runs a prayer meeting.
Health		
Chelsea Beach Medical Centre	391 Nepean Highway, Chelsea	General Practice across from Chelsea Station. Open Monday to Saturday.
Bonbeach and Chelsea Medical Centre	363 Station Street, Chelsea	Medical Centre
Chelsea Arcade Medical	Shop 10 and 11, 426 Nepean Hwy, Chelsea	Open 7 days a week; bulk billing practice
Central Bayside Community Health Services (CBCHS)	3/1 The Strand, Chelsea	CBCHS provides a wide range of health, wellbeing and social support services. These include GPs and specialist medical services, dental and allied health, nursing and counselling services as well as aged care and disability programs.
Chelsea Maternal and Child Health Centres	312 Station Street, Chelsea	Guidance and support to new mothers/parents by registered nurses with Midwifery, Maternal and Child Health qualifications.
Chelsea Dental Group	8 The Strand, Chelsea	Dental practice open Monday to Saturday
Chelsea Dental	1/442 Nepean Highway	Dental practice open Monday to Saturday

Community infrastructure	Address	Comment
Emergency and justice		
Chelsea Longbeach Surf Life Saving Club	The Strand, Chelsea	The Club is open from November through to April.
Police Station: Chelsea Police Station	312 Station Street, Chelsea	24 hour police station.
Pedestrian/cycling crossings		
One pedestrian road and rail crossing	Swanpool Avenue, Chelsea Road, Argyle Avenue	Road level crossing with pedestrian and cyclist rail crossing.
Pedestrian crossings over the railway	Golden Avenue/Chadwell Grove, Chelsea Showers Avenue	Pedestrian crossings

Source: City of Kingston, 2016; Google Maps, 2017.

Table 4 Community Infrastructure in Bonbeach

Community infrastructure	Address	Comment
Education		
Bonbeach Pre School	29-63 Breeze Street, Bonbeach	Pre-school education for 3 and 4 year olds.
Bonbeach Primary School	29-63 Breeze Street, Bonbeach	Pre-school on the same site, through to Year 6.
Aged care		
BUPA Bonbeach	53-59 Broadway, Bonbeach	Aged care facility with short-term care, residential care, respite care and specialised dementia care. The facility runs arts and crafts, exercise classes, group games and in-home concerts for the residents.
Bonbeach Residential Care	440-441 Station Street, Bonbeach	Nursing home providing 24 hour care, respite care, short term care and dementia and palliative care.
Open space, sport and recreation		
Bonbeach Beach	Bonbeach	Coastline beach and vegetated strip in front of developed land. Includes iconic wooden beach huts, Life Saving Club, car parking, toilets and change room facilities.
Bonbeach Sports Reserve (dog off leash area)	101 Scotch Parade, Bonbeach	Designated off-leash area for dogs in the Bonbeach Sports Reserve ground. Reserve also holds NAB AFL Auskick. Council identified plan for upcoming upgrade works.

Community infrastructure	Address	Comment
Bonbeach Basketball Stadium	53 Cannes Avenue, Bonbeach	<p>Located within Bonbeach Sports Reserve.</p> <p>The stadium is used by the Basketball Association 7 days a week. Other groups such as local schools, Netball Association, Roller derby, soccer and Badminton Association use the stadium during hours not already occupied by basketball teams.</p> <p>City of Kingston delivers meal kitchen out of complex.</p>
Chelsea Pony Club	Adjacent to Bicentennial Park	The club offers tuition based memberships for horse-riding lessons. The Club grounds offer Clubrooms, a kitchen/canteen, a Cross Country Course, Jumping facilities, Dressage and Jumping sand arena and an enclosed grass arena.
Patterson River Golf Club	The Fairway, Bonbeach	15 hectare golf course
Place of worship		
Chelsea Baptist Church	67 Bondi Road, Bonbeach	Church in Bonbeach holds a Sunday service.
Emergency and justice		
Bonbeach Life Saving Club	Beach Reserve, Bonbeach	Bonbeach LSC provide patrols of the Bonbeach beach in summer.
Victorian State Emergency Service Chelsea Unit	107 Scotch Parade, Bonbeach	Victoria SES Chelsea Unit.
Pedestrian/cycling crossings		
Pedestrian crossing over the railway	Corner of Wellwood Road and Nepean Highway	Pedestrian can cross the railway line using this concrete path. Pedestrians can enter and exit this path near Wellwood Road on one side, and onto Station Street on the other side.
Pedestrian crossing over the railway	Corner of The Glade and Nepean Highway	Pedestrian can cross the railway line using this concrete path. Pedestrians can enter and exit this path near The Glade on one side, and onto Station Street on the other side, near Bonbeach Residential Care.

Community infrastructure	Address	Comment
Pedestrian crossing over the railway	Bondi Road	<p>Pedestrian can cross the railway line using this concrete path. Pedestrians can enter and exit this path from Bondi Road on one side, and onto the Nepean Highway on the other side, near some small shops and residential buildings.</p> <p>There is an accessible boardwalk providing beach access and change rooms at the end of Harding Avenue.</p>
Pedestrian crossing over the railway	Between Mernda Avenue and Mascot Avenue	<p>Pedestrian can cross the railway line using this concrete path. Pedestrians can enter and exit this path near Mascot Road on one side, and cross to the other side of Nepean Highway.</p>
Other		
Chelsea Holiday Park	100 Broadway, Bonbeach	<p>The caravan park offers powered sites, cabins and apartments for short and long term stays. Home to 190 permanent residents.</p>

Source: City of Kingston, 2016; Google Maps, 2017.

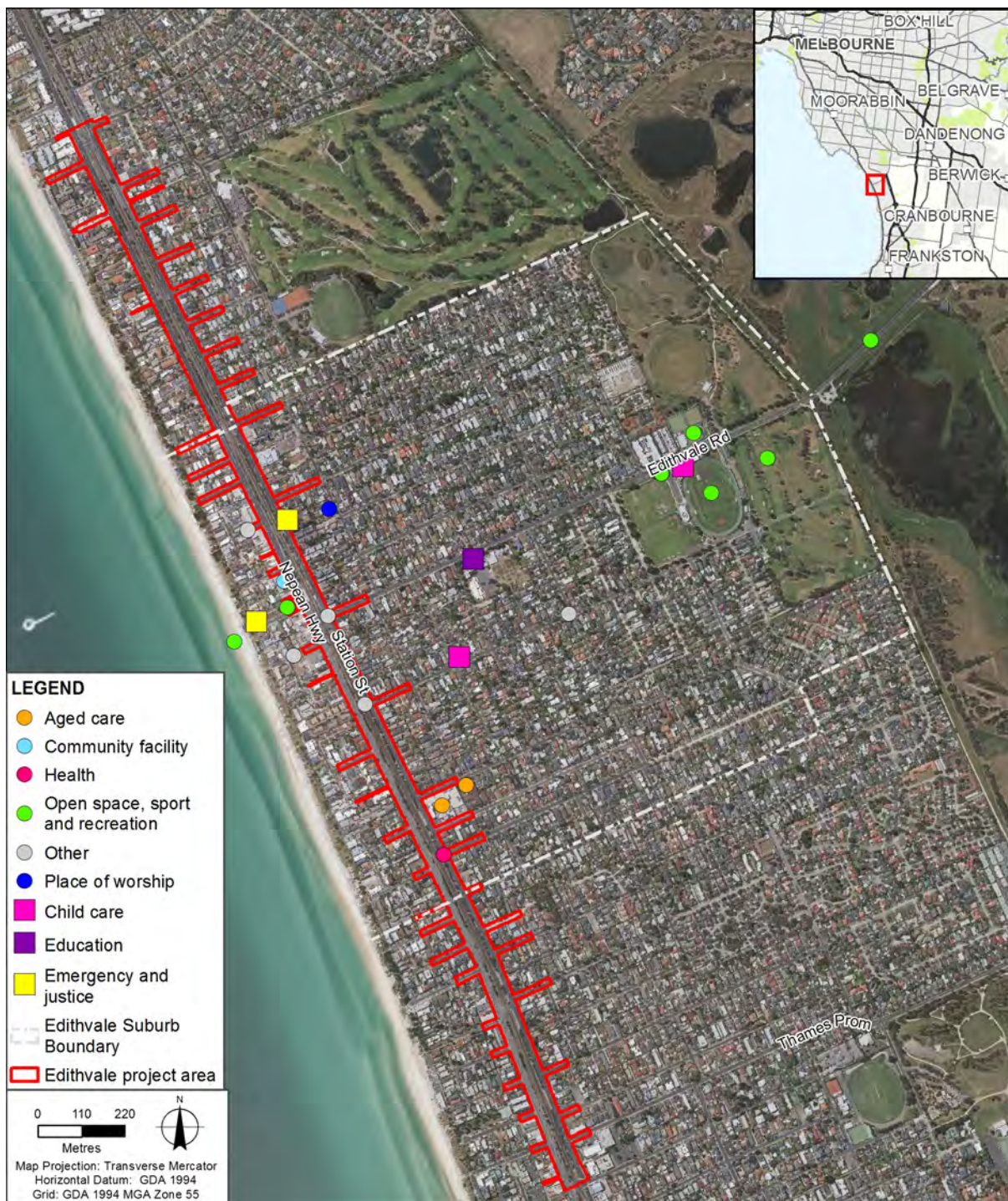


Figure 6 Community infrastructure in Edithvale

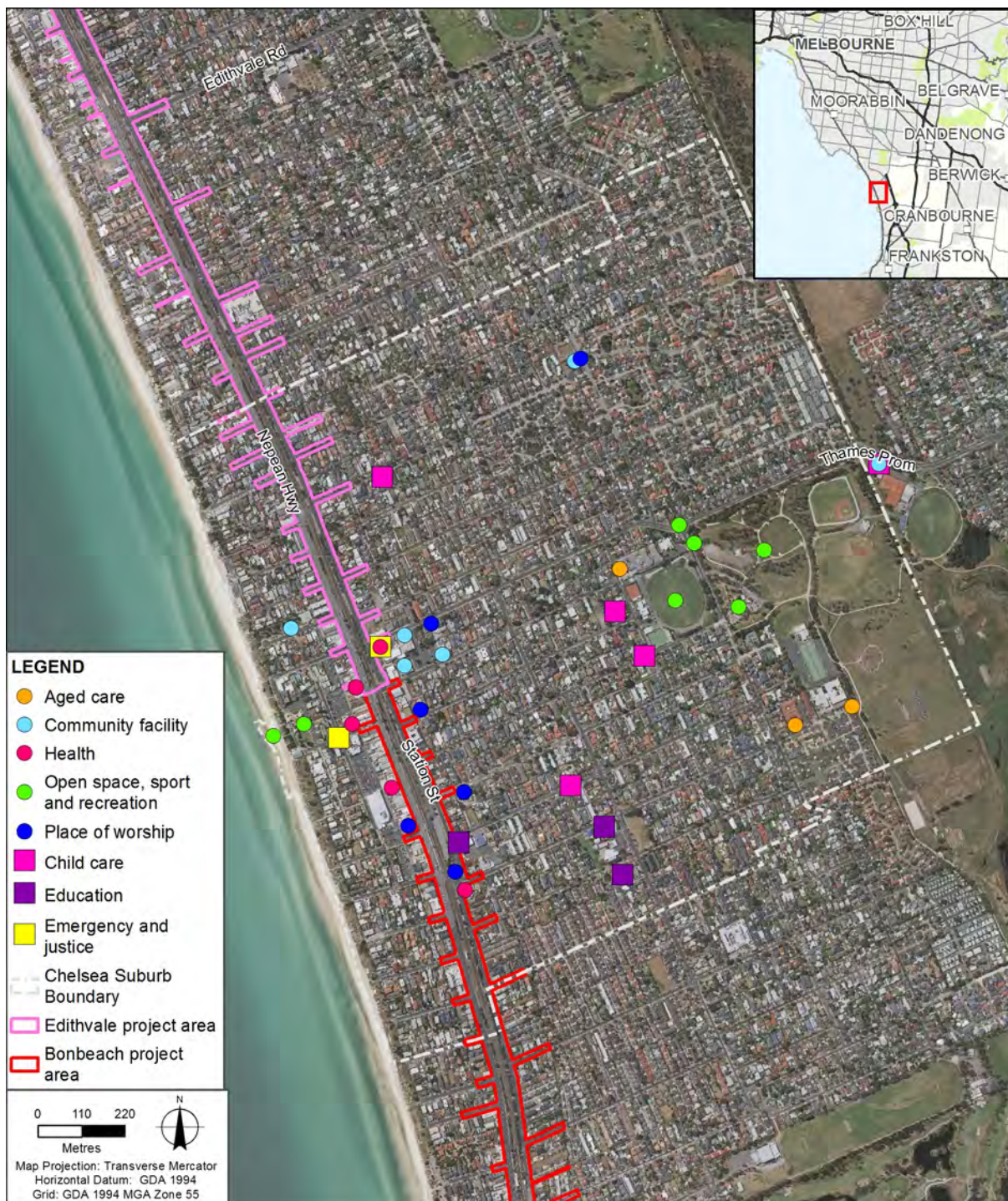


Figure 7 Community infrastructure in Chelsea

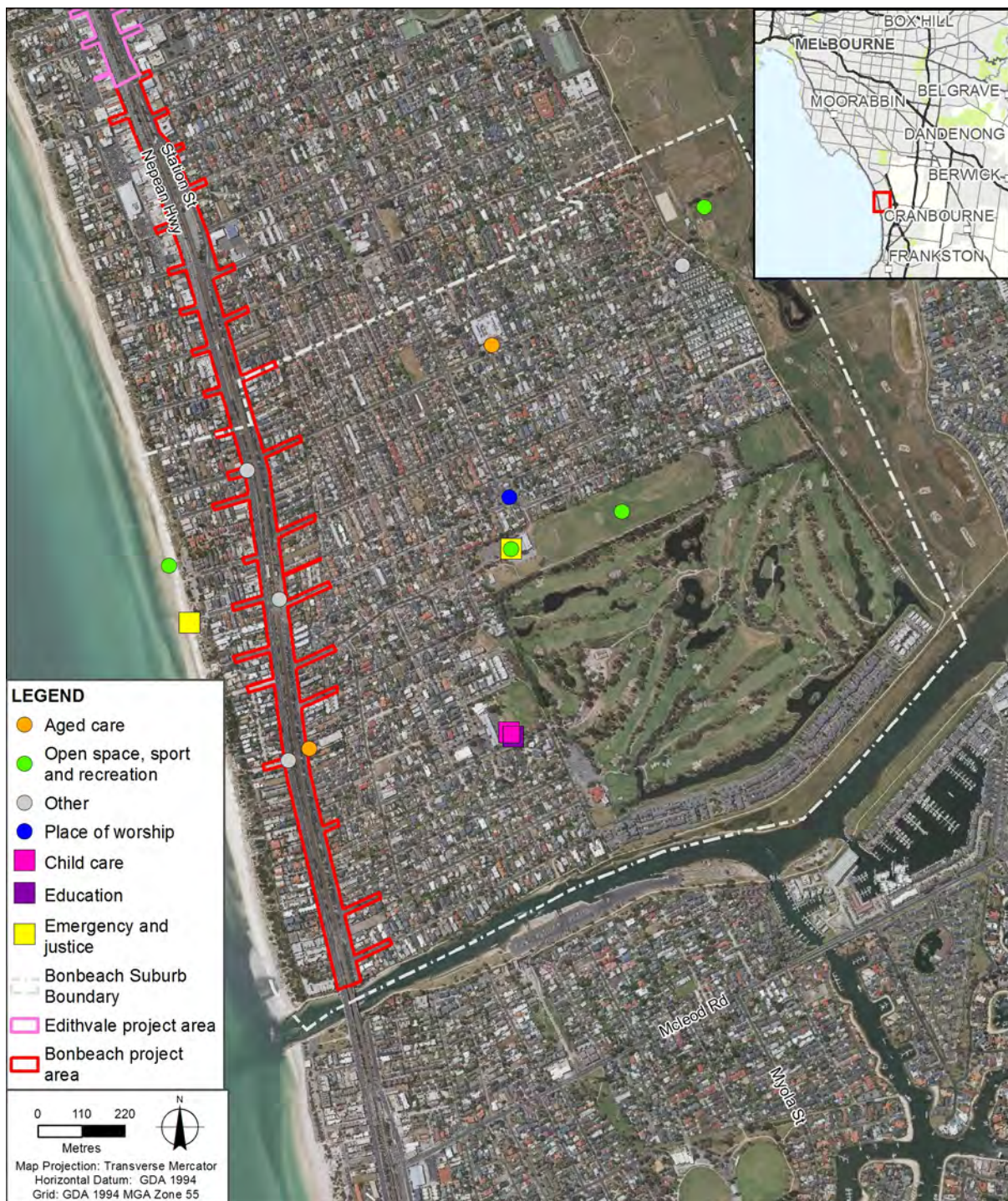


Figure 8 Community infrastructure in Bonbeach

5.5 Access and connectivity

The Frankston railway line runs the full length of Edithvale, Chelsea and Bonbeach suburbs, and sits with the Nepean Highway to the west and Station Street to the east. Through community consultation in 2016, the local community identified the rail line as a barrier to accessing the beach and Nepean Highway.

The City of Kingston has seen an increase in the number of cars on the roads and a greater demand for parking across the area (City of Kingston, 2017a). As a result, the road network surrounding the projects currently experiences traffic congestion and delay, particularly at key intersections and level crossings during peak periods. Consultation with the City of Kingston indicated that parking in local residential roads, particularly in peak summer times, is an issue for residents. These issues are likely to worsen in the future as traffic volumes continue to increase in line with predicted population growth.

Edithvale Road and the Nepean Highway are the only VicRoads managed roads across the three suburbs. Key road connections in Edithvale include Edithvale Road, Lochiel Avenue, Nepean Highway and Station Street. More than 12,000 motorists travel through the level crossing between Edithvale Road and Nepean Highway each day (Level Crossing Removal Authority, 2017b). The boom gates at the crossing are down for an average of 42 minutes during the weekday peak (between 7:00 am and 9:00 am), significantly impacting travel times for these commuters (Level Crossing Removal Authority, 2017b). There is designated commuter parking area on Station Street. The City of Kingston noted that Station Street carries a high volume of traffic, particularly in peak times due to a number of schools located in the study area and to the north.

Key road connections in Bonbeach include Bondi Road, Nepean Highway and Station Street. The Bonbeach level crossing is located between Bondi Road and Station Street and provides a major connection to the Nepean Highway and the beach. The boom gates at the level crossing are down for an average of 45 minutes during the weekday peak (between 7:00 am and 9:00 am), impacting travel times for motorists, with an average 4,400 vehicles travelling through the crossing each day (Level Crossing Removal Authority, 2017a). Bonbeach Station has designated commuter parking on Station Street (Level Crossing Removal Authority, 2017a).

The railway line runs parallel to the foreshore and is considered to be a barrier to east-west pedestrian movement. Pedestrian crossings across the rail line are located at Golden Avenue, Wellwood Road, The Glade and Bondi Road within Bonbeach and at Lochiel Avenue, Denman Avenue and Fraser Avenue, Berry Avenue in Edithvale. These crossings provide essential access to the beach. The suburbs also have a considerable amount of pedestrian movement due to the number of schools and child care facilities. A frequently used walking trail (Long Beach Trail) extends from Mordialloc in the north through to the Patterson River and runs along the eastern boundary of the suburbs. Nepean Highway and Station Street are also frequently used routes for cyclists.

5.6 Key findings

The key findings of the existing conditions assessment, based on interpretation of the demographic characteristics of the study area are as follows:

- the coastline, Edithvale-Seafood Wetlands and Patterson River provide natural amenity and contribute to a large network of open space and recreation areas, with the beaches in particular a significant attractor for the area
- the rail line, Station Street and Nepean Highway running parallel to the foreshore limits east-west pedestrian movement and access to the beach is funnelled to a limited number of crossing points
- steady population growth is expected in Edithvale and Bonbeach over the next 20 years
- approximately 15 per cent of the population of both Edithvale and Bonbeach travel to work by train
- residents in the City of Kingston LGA are generally concerned about congestion and parking issues
- there is a large amount of community infrastructure across Edithvale, Chelsea and Bonbeach, particularly child care centres and schools, aged care services, and open space and recreation facilities
- Chelsea is considered a welfare hub for the surrounding area with a number of health, wellbeing and social support services
- a number of community infrastructure facilities are located along the anticipated construction vehicle haul routes of Edithvale Road and Nepean Highway.

6 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).

There were no social impacts identified for the operation phase. The residual social risks associated with the projects are listed in Table 5. 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 social.

Table 5 Social risks

Risk ID	Event name	Potential impact pathway	EPR ID	Risk level
Construction risks				
S34	Amenity	Construction activities lead to reduced amenity for nearby residents and social infrastructure facilities due to combined impacts from increased noise and vibration, dust, odour, reduced visual amenity, changes to traffic conditions.	EPR SC1 Community and Stakeholder Engagement Management Plan EPR SC2 Respite and Relocation Policy	Moderate
S35	Lifestyle disruption (cyclists and pedestrians)	Disruption to cycle paths and pedestrian walkways and pedestrian crossings leading to reduced opportunities for community interaction and active lifestyle.	EPR SC1 Community and Stakeholder Engagement Management Plan EPR T1 Transport Management Plan	Minor
S36	Lifestyle disruption (rail and road users)	Disruption to rail and road operations during construction resulting in increased travel times for public transport users and other road users.	EPR SC1 Community and Stakeholder Engagement Management Plan EPR T2 Public Transport Disruption Management Plan	Minor

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 Impact assessment

This section provides an assessment of the impacts for the social risks determined during the risk assessment.

It should be noted that if construction activities were to follow on from each other at adjacent level crossing removal sites, this could potentially prolong the identified impacts. At present, the timing of construction for the various level crossing removals is unknown.

7.1 Construction impacts

7.1.1 Amenity impacts

Construction activities are likely to increase noise, vibration and dust, and result in changes to traffic and the visual amenity for residents and social infrastructure facilities located near the project sites (**risk S34**).

Impacts related to each of the amenity attributes have been identified and discussed in detail in respective technical studies undertaken as part of the EES, refer to:

- Technical report F *Land Use*
- Technical report G *Traffic*
- Technical report H *Noise and Vibration*
- Technical report I *Air Quality*
- Technical report J *Landscape and Visual*
- Technical report K *Business*.

It is recognised that when combined, impacts associated with amenity changes are likely to temporarily disturb local residents from going about their daily lives and may affect their enjoyment of indoor and outdoor spaces in the vicinity of the project area. This could be through such things as needing doors and windows of people's homes or community infrastructure facilities to be closed even on warm days, which may lead to annoyance and frustration; or construction equipment and fencing leading to reduced visual amenity.

Such impacts are most likely to be experienced by residents, businesses, and community infrastructure along Station Street, Nepean Highway, haul routes, and the area surrounding temporary construction compounds.

Management and mitigation

A level of disruption during construction would be unavoidable, however these impacts are expected to be temporary for the duration of construction, with some peaks during the main works periods while the rail line is closed.

The potential amenity impacts are individually addressed under other technical studies within the EES, including traffic, landscape and visual, air quality, and noise and vibration. Amenity impacts would be managed through implementation of EPRs and through adherence to appropriate regulatory standards for issues such as noise and air quality. Appropriate management plans for noise, air quality and traffic will be prepared and implemented to minimise construction impacts.

The combined impact from amenity changes would be managed through the preparation and implementation of a Relocation Policy and Community and Stakeholder Management Plan.

The Relocation Policy would be prepared and implemented to manage situations where construction activities are likely to cause significant and sustained loss of amenity for residents, such as temporary loss of street access to homes or noisy out of hours works that may inhibit sleep (**EPR_SC2**). The plan will detail circumstances and eligibility criteria and relocation measures.

The preparation and implementation of a Community and Stakeholder Management Plan will ensure regular and ongoing communication and engagement with residents and advanced notification of construction activities and potential disruptions (**EPR_SC1**). The plan will also include procedures for handling and investigating complaints and enquiries.

Adopting these controls would maintain the risk of amenity impacts at a moderate rating.

7.1.2 Lifestyle disruption for cyclists and pedestrians

The projects will cause disruption to cycle paths and pedestrian walkways and pedestrian crossings, leading to reduced opportunities for active living and community interaction (**risk S35**). This, in turn, may impact on community identity and local values.

Access across the existing level crossing is likely to be closed during the main occupation period (six weeks) and potentially at other times during the construction works (i.e. when piling is occurring in the vicinity). Community feedback from consultation undertaken in 2016 has indicated that the rail line is a barrier to movement in the suburb, particularly for the community on the eastern side of the rail line to accessing the beach and shopping strip. It will be necessary to ensure that works do not further divide the community east and west of the railway by maintaining access over the rail corridor during construction. Maintaining this connection is important for the daily lives of residents accessing the beach, shops and local businesses along Nepean Highway. Further, residents on the western side need access to community infrastructure predominately located on the eastern side of the railway line.

The disruption to walking and cycling paths and crossings will impact areas in close proximity to the projects and potentially along construction vehicle haul routes. Although alternative routes and detours will be identified through careful traffic management planning, these disruptions may affect residents and visitors that rely on the crossings or routes. The use of detours has the potential to increase travel time.

Impacts to crossings could also potentially result in a reduction in visitors to the beach from other areas of Melbourne, as people would park on the east side of the railway line and use the pedestrian crossings to access the beach.

Management and mitigation

The lifestyle disruption from changes to pedestrian and cycling paths and access will be temporary and may be felt at various stages of the construction phase.

A Transport Management Plan (TMP) will be developed and implemented (**EPR_T1**). The plan will include measures to minimise disruption to pedestrian and bicycle movements to the extent practicable. The TMP would include provision for suitable routes for vehicles, cyclists and pedestrians to maintain connectivity for road and footpath users. As suggested in the Traffic Impact Assessment, there are a number of options to consider for provision of safe pedestrian crossings across the railway line during construction, while DDA compliant, crossings will be provided during operation.

A Community and Stakeholder Management Plan will be prepared and implemented (**EPR_SC1**). The plan would provide a framework for project communication and engagement to ensure advance notification of disruption to the pedestrian and cycle network. The plan will also include procedures for handling and investigating complaints and enquiries.

Planned works and advance notice would enable residents to be able to adjust their journey and find an alternate route if required. Appropriate signage indicating disruptions and proposed detour routes would be implemented.

Potential impacts to traders during construction are addressed in the EES Technical Report K *Business*.

Adopting these controls would maintain the risk of lifestyle disruption at a minor risk.

7.1.3 Lifestyle disruption for rail and road users

The stations would be closed for approximately four weeks prior to the main construction phase and occupation of the railway line to facilitate demolition of the station buildings and platforms and complete piling in these areas. Occupation of the railway will be for approximately six weeks. During the closure of the rail line, construction activities would occur 24 hours per day, seven days per week in order to reduce the duration of disruption to rail users. Road and some lane closures are expected to be required during this time; and access along adjacent streets could be restricted. Impacts may be expected during the main rail occupation, as discussed in Technical Report G *Traffic*.

Further weekend rail and road shutdowns are also anticipated prior to and after the main six week rail closure. Overall construction is expected to be completed within 18 months.

During closure periods a Public Transport Disruption Management Plan will be in place (**EPR_T2**). A bus replacement service will be implemented during the rail closures for daily commuters and people relying on rail transport for their travel needs, though commuters may choose to find alternative modes of transport.

During rail closures, the bus replacement services may result in commuters queuing for buses, and additional traffic on roads in the study area may lead to delays during peak hours prompting road and bus users to allow additional travel time (**risk S36**). Changes in travel arrangements may cause frustration for daily commuters and stress and anxiety for some, especially vulnerable groups such as the elderly and school children.

Management and mitigation

The disruption to rail users would be limited as much as possible through piling and other works while trains are still in operation, and any impacts would be temporary. Replacement buses would be used as an alternative transport option.

LXRA has adopted Public Transport Disruption Management Plan on other level crossing removal projects that are being constructed and will be constructed prior to the Edithvale and Bonbeach projects. This has allowed, and will continue to allow, LXRA to learn from previous experiences and improve planning and implementation of the management plans at Edithvale and Bonbeach.

The preparation and implementation of a Community and Stakeholder Management Plan will ensure regular and ongoing communication and engagement with residents and advance notification of rail closure periods and associated disruptions (**EPR_SC1**). The plan will also include procedures for handling and investigating complaints and enquiries.

The alternative services provided will still allow people to get to their desired destination. Adopting these controls would maintain the risk of lifestyle disruption to road and rail users at a minor risk.

7.2 Operational impacts

The operation of the project will deliver a number of social benefits, including:

- improved amenity:
 - urban design improvements – provision of design opportunities such as new station buildings and public realm improvements in station forecourts and streetscapes surrounding the projects
 - new station precinct – new infrastructure and modern station facilities to improve the general look and feel of the area
 - noise – the trench itself, acts as a noise barrier, and results in reduced average rail noise levels
- improved access and connectivity:
 - pedestrian ramps and overpasses maintain access across the rail corridor and improve safety as crossings would be grade-separated and DDA compliant
 - less congestion – no waiting time and congestion of traffic at existing level crossings
 - improved connections with, and access to, the beach; as well as east-west links for access to local shops/businesses and community infrastructure
 - option for shared pathway, pedestrian and cycle infrastructure and linkages
 - station access improved
 - envisage station safety will be improved – CCTV, more access points and implementation of Crime Prevention Through Environmental Design (CPTED) principles.

Indirect community values associated with the Edithvale-Seaford Wetlands – as per the scoping requirements, these impacts have been considered in conjunction with the EES Technical Report B *Ecology: Wetlands and Groundwater Dependent Ecosystems* prepared as part of the EES. The report concludes that impacts on the extent of habitat and therefore on waterbird diversity and abundance, and impacts to its capacity to meet the Ramsar listing criteria are not expected as a result of the level crossing removal projects at Edithvale and Bonbeach. In light of no potential ecological impacts to the wetlands, the community activities and values associated with the wetlands as described in Section 5.2.4 are unlikely to be impacted and activities could be carried on as per usual.

7.3 Temporary construction and laydown areas impact assessment

The construction phase of the projects would require the temporary use of site offices and construction laydown areas. To date, no site offices and construction laydown areas have been identified.

The sites selected for this purpose would be managed to minimise access and connectivity impacts, amenity impacts, and impact to existing land uses within and adjacent to the identified areas. The selected areas would also be required to be reinstated to enable previous land uses to recommence.

The following social elements should be considered during selection of laydown areas:

- sites which avoid displacement of community facilities
- impacts on amenity of residents and community infrastructure facilities
- viability and function of community infrastructure facilities and residences, particularly in relation to access.

Where construction activities directly impact on sports clubs or passive recreation users of directly impacted sporting and recreational facilities, projects must work with affected sporting clubs and land managers to identify local alternative facilities for the period of disruption (**EPR_SC3**).

Additionally, the implementation of standard construction practices, EPRs and mitigation measures would be required to minimise any potential impact from the location of temporary laydown areas.

8 Environmental Performance Requirements

The EPRs required for the projects to achieve acceptable environmental outcomes are summarised in Table 6 below. The EPRs are applicable to the final design and construction approach and provide certainty regarding the environmental performance of the projects.

Table 6 Edithvale and Bonbeach Environmental Performance Requirements

EPR ID	Environmental Performance Requirement	Stage
SC1	<p>Community and Stakeholder Engagement Management Plan</p> <p>Prior to construction (excluding preparatory work), prepare and implement a Community and Stakeholder Engagement Management Plan in consultation with Kingston City Council that includes the following:</p> <ol style="list-style-type: none"> identifies all project activities that potentially impact on community and business operations, and provides for a well-coordinated communication and engagement processes consults with and addresses needs of vulnerable groups that would be impacted by the project such as the elderly, socio-economically disadvantaged groups and children consults with and addresses needs of community facilities impacted by the project such as schools, child care, aged care, and caravan parks sets out processes and measures to provide advanced notice to key stakeholders and other potentially affected stakeholders of construction activities (including any staged works, early works, main works, or out of hours works), significant milestones, changed traffic conditions, interruptions to utility services, changed access and parking conditions, periods of predicted high noise and vibration activities, including contact details for enquiries/complaints provides for any interested stakeholder to register their contact details to ensure they are automatically advised of planned construction activities, project progress, mitigation measures and intended reinstatement measures where applicable documents a complaints management process (including processes and measures for registering, managing and resolving complaints) consistent with Australian Standard AS/NZS 10002: 2014 Guidelines for Complaint Management in Organisations. 	Construction

EPR ID	Environmental Performance Requirement	Stage
SC2	<p>Respite and Relocation Policy</p> <p>Prior to construction (excluding preparatory works), prepare and implement a Respite and Relocation Policy to be offered to residents whose amenity is significantly affected by construction activities (e.g. out of hours works or sustained loss of amenity during the day for residences with special circumstances such as shift workers) or who are subject to loss of access. The Respite and Relocation Policy will only apply during the period in which residents are (or are likely to be) affected.</p> <p>The Policy must contain:</p> <ol style="list-style-type: none"> the criteria that must be met for relocation to be offered to affected residents consideration of special circumstances such as language or cultural need, special needs related to health conditions or home businesses the type and duration of out-of-hours work covered by the policy. 	Construction
SC3	<p>Recreational facilities</p> <p>Where construction works directly impact on sports clubs or passive recreation users of directly impacted sporting and recreational facilities, work with affected sporting clubs and land managers to identify appropriate management measures including provision of alternative facilities for the period of disruption.</p>	Construction

8.1 List of other relevant EPRs

EPRs listed in other technical assessments within the EES that are relevant to this SIA include:

- Technical Report G *Traffic* (**EPR_T1, EPR_T2, EPR_T3, EPR_T4, EPR_T6**)
- Technical Report I *Air Quality* (**EPR_AQ1**)
- Technical Report H *Noise and Vibration* (**EPR_NV1, EPR_NV2**)
- Technical Report F *Land Use and Planning* (**EPR_LP1**)
- Technical Report J *Landscape and Visual* (**EPR_LV7**)
- Technical Report K *Business* (**EPR_B3**)

9 Conclusion

A social impact assessment has been undertaken for the Edithvale and Bonbeach level crossing removal projects to determine the potential impacts on local communities and social infrastructure 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 existing conditions assessment was used to establish the study area and provide a baseline assessment of the current social environment.

The key findings of the existing conditions assessment, based on interpretation of the demographic characteristics of the study area, are as follows:

- the coastline, Edithvale-Seafood Wetlands and Patterson River provide natural amenity and contribute to a large network of open space and recreation areas
- as the rail line runs parallel to the foreshore it is considered a barrier to east-west pedestrian movement and restricts essential access to the beach
- steady population growth is expected in Edithvale and Bonbeach over the next 20 years
- approximately 15 per cent of the population of both Edithvale and Bonbeach travelled to work by train
- the number of cars on the roads has increased in the City of Kingston LGA and residents are concerned by congestion and parking issues
- there is a large amount of community infrastructure across Edithvale, Chelsea and Bonbeach, particularly child care centres and schools, aged care services, and open space and recreation facilities
- Chelsea is considered a welfare hub for the surrounding area with a number of health, wellbeing and social support services
- a number of community infrastructure facilities are located along the identified construction vehicle haul routes of Edithvale Road, Argyle Street and Thames Promenade.

Impact assessment

Social impacts were determined for the projects through research, consultation, information from other technical assessments, and reviewing the design with a focus on the identified risks. The assessment considered impacts, rather than project or suburb, as the identified impacts are not project specific or restricted to suburb area.

The social impacts identified were limited to the construction phase of the projects and are therefore temporary in nature. Identified impacts included:

- amenity
- access, connectivity, cohesion, lifestyle disruption for cyclists and pedestrians
- access, connectivity, cohesion, lifestyle disruption for rail and road users.

As impacts are not avoidable, they are proposed to be minimised through design and application of EPRs, particularly the development and implementation of a Community and Stakeholder Management Plan.

Residual risk

Construction of the Edithvale and Bonbeach level crossing removal projects has the potential to impact residents, the community and social infrastructure within the area. Identified post mitigation risk levels during construction range from minor to moderate. The EPRs set out parameters for the construction methodology to reduce social impacts. Management and mitigation of social impacts also rely on EPRs and regulatory standards identified in other technical assessments within the EES.

10References

- Australian Bureau of Statistics. (2006a). Census QuickStats Bonbeach SSC. Available at: http://www.censusdata.abs.gov.au/census_services/getproduct/census/2006/quickstat/SSC21091?opendocument [Accessed 10 July 2017].
- Australian Bureau of Statistics. (2006b). Census QuickStats Edithvale SSC. Available at: http://www.censusdata.abs.gov.au/census_services/getproduct/census/2006/quickstat/SSC21245?opendocument&navpos=220 [Accessed 10 July 2017].
- Australian Bureau of Statistics. (2011a). Community Profile Bonbeach SSC. Available at: http://www.censusdata.abs.gov.au/census_services/getproduct/census/2011/communityprofile/SSC20151?opendocument [Accessed 12 July 2017].
- Australian Bureau of Statistics. (2011b). Community Profile Edithvale SSC. Available at: http://www.censusdata.abs.gov.au/census_services/getproduct/census/2011/communityprofile/SSC20446?opendocument&navpos=230 [Accessed 12 July 2017].
- Australian Bureau of Statistics. (2011c). Community Profile Kingston LGA. Available at: http://www.censusdata.abs.gov.au/census_services/getproduct/census/2011/communityprofile/LGA23430?opendocument&navpos=230 [Accessed 12 July 2017].
- Australian Bureau of Statistics. (2016a). Community Profile Bonbeach SSC. Available at: http://www.censusdata.abs.gov.au/census_services/getproduct/census/2016/communityprofile/SSC20277?opendocument [Accessed 12 July 2017].
- Australian Bureau of Statistics. (2016b). Community Profile Edithvale SSC. Available at: http://www.censusdata.abs.gov.au/census_services/getproduct/census/2016/communityprofile/SSC20842?opendocument [Accessed 12 July 2017].
- Australian Bureau of Statistics. (2016c). Community Profile Kingston LGA. Available at: http://www.censusdata.abs.gov.au/census_services/getproduct/census/2016/communityprofile/LGA23430?opendocument [Accessed 12 July 2017].
- Australian Bureau of Statistics: Abs.Stat. (2011). SEIFA by Local Government Area (LGA). Available at: http://stat.data.abs.gov.au/Index.aspx?DataSetCode=ABS_SEIFA_LGA [Accessed 13 July 2017].
- City of Kingston. (2011). Active Leisure Plan 2011. Available at: <http://www.kingston.vic.gov.au/About-Us/Plans-Policies-and-Publications/Strategies-and-Plans> [Accessed 13 July 2017].
- City of Kingston. (2016). What's Near Me?. Available at: <http://www.kingston.vic.gov.au/Outdoors/Search-Local-Area/What39s-Near-Me> [Accessed 14 July 2017].
- City of Kingston. (2017a). Council Plan 2017-21. Available at: <http://www.kingston.vic.gov.au/About-Us/Plans-Policies-and-Publications/Council-Plan-and-Budget> [Accessed 13 July 2017].
- City of Kingston. (2017b). City, Population and History. Available at: <http://www.kingston.vic.gov.au/About-Us/City-of-Kingston/City-Population-and-History> [Accessed 10 July 2017].
- City of Kingston. (2017c). Foreshore. Available at: <http://www.kingston.vic.gov.au/Places-and-Events/Foreshore-and-Environment/Foreshore?BestBetMatch=foreshore%20reserve|dcec5831-1d54-49d2-a3ad-25ff60fc8db4|1f087410-7b2f-4c24-a9ec-a19500ca423b|en-AU> [Accessed 13 November 2017].

Community Indicators Victoria. (2011). Kingston Wellbeing Report. Available at: http://www.communityindicators.net.au/wellbeing_reports/kingston [Accessed 13 July 2017].

Forecast.id. (2015). City of Kingston, Population Forecast 2016. Available at: <http://forecast.id.com.au/kingston/population-households-dwellings?WebID=200> [Accessed 13 July 2017].

Friends of Edithvale Seaford Wetlands, 2017, August 2017 Newsletter, available at <http://www.edithvale-seaford-wetlands.org/newsletters.html>

Google Maps. (2017). Available at: <https://www.google.com.au/maps/> [Accessed 14 July 2017].

Level Crossing Removal Authority. (2017a). Bondi Road, Bonbeach. Available at: <http://levelcrossings.vic.gov.au/crossings/bondi-road-bonbeach> [Accessed 14 July 2017].

Level Crossing Removal Authority. (2017b). Edithvale Road, Edithvale. Available at: <http://levelcrossings.vic.gov.au/crossings/edithvale-road-edithvale> [Accessed 14 July 2017].

Profile.id. (2016). City of Kingston Community Profile. Available at: <http://profile.id.com.au/kingston> [Accessed 10 July 2017].

Victorian State Government. (2017). Crime Statistics Victoria. Available at: <https://www.crimestatistics.vic.gov.au/explore-crime-by-location> [Accessed 13 July 2017].

Victorian State Government: Department of Environment, Land, Water and Planning (DELWP). (2017). Planning Maps Online. Available at: <http://services.land.vic.gov.au/maps/pmo.jsp> [Accessed 13 July 2017].

Appendix A – Relevant legislation and policy

Commonwealth

Disability Discrimination Act 1992

The *Disability Discrimination Act 1992* provides legal protection for everyone in Australia against discrimination based on disability. The relevant objectives for this assessment are:

- a. *to eliminate, as far as possible, discrimination against persons on the ground of disability in the areas of:*
 - (i) *work, accommodation, education, access to premises, clubs and sport; and*
 - (ii) *the provision of goods, facilities, services and land; and*
 - (iii) *existing laws; and*
 - (iv) *the administration of Commonwealth laws and programs; and*
- b. *to ensure, as far as practicable, that persons with disabilities have the same rights to equality before the law as the rest of the community; and*
- c. *to promote recognition and acceptance within the community of the principle that persons with disabilities have the same fundamental rights as the rest of the community.*

Environment Protection and Biodiversity Conservation Act 1999

The *Environment Protection and Biodiversity Conservation Act 1999* is the Australian Government's key piece of environmental legislation. It provides a legal framework to protect and manage nationally and internationally significant flora, fauna, ecological communities and heritage places- defined as Matters of National Environmental Significance. The objectives of the EPBC Act are:

- d. *to provide for the protection of the environment, especially those aspects of the environment that are matters of national environmental significance; and*
- e. *to promote ecologically sustainable development through the conservation and ecologically sustainable use of natural resources; and*
- f. *to promote the conservation of biodiversity; and*
- g. *to provide for the protection and conservation of heritage; and*
- h. *to promote a co-operative approach to the protection and management of the environment involving governments, the community, land-holders and indigenous peoples; and*
- i. *to assist in the co-operative implementation of Australia's international environmental responsibilities; and*
- j. *to recognise the role of indigenous people in the conservation and ecologically sustainable use of Australia's biodiversity; and*
- k. *to promote the use of indigenous peoples' knowledge of biodiversity with the involvement of, and in co-operation with, the owners of the knowledge.*

State

Planning and Environment Act 1987

The purpose of the *Planning and Environment Act 1987* is to establish a framework for planning the use, development and protection of land in Victoria. The main functions of the Act are to:

- *set the broad objectives for planning in Victoria*
- *set the main rules and principles for how the Victorian planning system works*
- *set up the key planning procedures and legal instruments in the Victorian planning system*
- *define the roles and responsibilities of the Minister, councils, government departments, the community and other stakeholders in the planning system.*

Environmental Effects Act 1978

The Environmental Effects Act 1978 requires environmental assessment of the potential environmental impact or effects of proposed projects that are capable of having a significant effect on the environment.

The Minister for Planning decides whether an Environmental Effects Statement (EES) is required, and the project proponent is responsible for preparing the EES and undertaking the necessary investigations.

The Ministerial Guidelines for Assessment of Environmental Effects under the *Environment Effects Act 1978* detail the matters to be examined and documented in an EES.

Transport Integration Act 2010

The *Transport Integration Act 2010* provides a key legislative context for the assessment of transport projects in Victoria. The Act lists a range of themes and uses relevant to transport.

The Act:

- Aims to ensure that transport agencies work together towards the common goal of an integrated and sustainable transport system
- Makes it clear that the transport system needs to be sustainable on a triple bottom line basis - in economic terms, in environmental terms and in social terms
- Provides a framework - a vision, objectives and principles, along with coordinated institutional arrangements - for integrated transport policy and operations
- Recognises that the transport system should be conceived and planned as a single system performing multiple tasks rather than separate or competing transport modes
- Integrates land use and transport planning and decision making by extending the policy framework to land use agencies which significantly impact on the transport system
- Establishes transport bodies with consistent charters to deliver outcomes aligned to the overall vision and objectives.

The objectives of the Act for the transport system are:

- social and economic inclusion
- economic prosperity
- environmental sustainability
- integration of transport and land use
- efficiency, coordination and reliability

- safety, health and wellbeing.

Public Health and Wellbeing Act 2008

The *Public Health and Wellbeing Act 2008* outlines the state's role in promoting, protecting and reducing inequalities in public health and wellbeing.

Also applicable is the Public Health and Wellbeing Regulations 2009 which assist Victoria achieve a high standard of public health and wellbeing.

Public health and wellbeing include the absence of disease, illness, injury, disability or premature death, and the collective state of public health and wellbeing.

State Planning Policy Framework

The State Planning Policy context provides a framework for integrated policy decision making with regards to how land is used and developed across the state. This framework is consistent across the state and is contained within the local municipal planning scheme.

The State Planning Policy Framework seeks to ensure that the objectives of planning in Victoria (as set out in Section 4 of the *Planning and Environment Act 1987*) are fostered through appropriate land use and development planning policies and practices which integrate relevant environmental, social and economic factors in the interests of net community benefit and sustainable development.

Local

Local Planning Policy Framework

The Local Planning Policy Framework consists of Councils Municipal Strategic Statement (MSS) and Local Planning Policies (LPP's).

The MSS is a concise statement of the key strategic planning, land use and development objectives for the municipality and the strategies and actions for achieving the objectives.

LPP's are tools used to implement the objectives and strategies of the MSS.

The City of Kingston – Council Plan 2017-2021

The vision of the City of Kingston *Council Plan 2017-2021* is 'a diverse, dynamic community where we all share a sustainable, safe, attractive environment and a thriving economy'. The plan acts as a roadmap for implementation of the vision by providing accountability to the community, directing the organisation and helping to guide decision making.

The Council Plan identifies five goals:

- Our well-planned, liveable city supported by infrastructure to meet future needs
- Our sustainable environment with accessible open spaces
- Our connected, inclusive, healthy and learning community
- Our free moving safe, prosperous and dynamic city
- Our well-governed and responsive organisation.

The Council Plan is supported by the Living Kingston 2035 vision.

The City of Kingston – Active Leisure Plan 2011

The City of Kingston's *Active Leisure Plan 2011* provides a plan for increasing active leisure opportunities. The aim of the plan is to provide opportunities for residents to become more active, with successful outcomes providing physical, mental and social benefits to the community.

The plan has a five year lifespan with clearly defined objectives and principles around existing and potential future leisure facilities, programs and services as well as open space.

Appendix B – Demographic information

	Bonbeach GCP_SSC20277.xls		Edithvale GCP_SSC20842.xls		Kingston LGA GCP_LGA23430.xls	
	No	% within file	% of precinct	No	% within file	% of precinct
Persons born in Non Main English Speaking countries	866	13.5%	2.3%	632	10.9%	1.7%
Language spoken at home other than English	760	11.8%		665	11.5%	
Speaks English Only	5089	79.3%		4744	81.7%	
Speaks other language and speaks English very well or well	507	7.9%		393	6.8%	
Household Characteristics:						
Family households	1656	63.5%	3.8%	1502	69.3%	3.5%
Lone person household	842	32.3%	5.3%	596	27.5%	3.8%
Group household	108	4.1%	5.8%	68	3.1%	3.6%
Average household size (number of persons)	2.2			2.5		
Family Characteristics:						
Total families	1672		3.8%	1522		3.5%
Couple family with children	695	41.6%	3.3%	708	46.5%	3.4%
Couple with children under 15 years	518	31.0%	3.7%	517	34.0%	3.7%
Couple with children over 15 years	184	11.0%	2.6%	199	13.1%	2.8%
Couple family without children	674	40.3%	4.3%	563	37.0%	3.6%
One parent family	272	16.3%	4.1%	228	15.0%	3.4%
One parent with children under 15 years	114	41.9%	4.5%	92	40.4%	3.6%

	Bonbeach GCP_SSC20277.xls		Edithvale GCP_SSC20842.xls		Kingston LGA GCP_LGA23430.xls	
	No	% within file	% of precinct	No	% within file	% of precinct
One parent with children over 15 years	156	57.4%	3.8%	134	58.8%	3.2%
Other family	26	1.6%	3.6%	19	1.2%	2.6%
Other characteristics:						
Need for assistance	317	4.9%	3.8%	336	5.8%	4.1%
Dwellings:						
Separate House	977	34.0%	2.7%	1174	49.8%	3.3%
Semi-detached, terrace house, townhouse	1259	43.8%	7.9%	299	12.7%	1.9%
Flat, unit or apartment	220	7.7%	2.6%	681	28.9%	8.0%
Other dwellings	150	5.2%	30.8%	4	0.2%	0.8%
Not stated	8	0.3%	3.6%	4	0.2%	1.8%
Total occupied private dwellings	2608	90.7%	4.3%	2164	91.7%	3.6%
Unoccupied private dwellings	267	9.3%	4.9%	195	8.3%	3.6%

Bonbeach GCP_SSC20277.xls				Edithvale GCP_SSC20842.xls				Kingston LGA GCP_LGA23430.xls			
No	% within file	% of precinct		No	% within file	% of precinct		No	% within file	% of precinct	
Tenure Type:											
Fully owned	775	30.4%	3.7%	713	33.7%	3.4%		19355	35.7%	92.9%	
Owned with a mortgage	954	37.4%	4.3%	842	39.8%	3.8%		20627	38.1%	92.0%	
Rented (Total):	821	32.2%	5.3%	560	26.5%	3.6%		14200	26.2%	91.1%	
Real estate agent	590	71.9%	5.2%	441	78.8%	3.9%		10247	72.2%	90.9%	
State or territory housing authority	35	4.3%	3.6%	27	4.8%	0.0%		908	6.4%	93.6%	
Person not in same household	110	13.4%	4.3%	75	13.4%	0.0%		2346	16.5%	0.0%	
Housing co-operative/community/church group	5	0.6%	2.4%	3	0.5%	0.0%		198	1.4%	0.0%	
Other landlord type	81	9.9%	22.1%	3	0.5%	0.0%		283	2.0%	0.0%	
Landlord type not stated	6	0.7%	2.5%	11	2.0%	0.0%		220	1.5%	0.0%	
Other Tenure Type	9	1.1%	2.1%	4	0.7%	0.9%		419	3.0%	97.0%	
Not stated	63	7.7%	4.1%	45	8.0%	2.9%		1435	10.1%	93.0%	
Individual Income:											
Median Individual Income (\$/weekly)	793			788				704			
Negative/Nil Income	334	6.3%		382	8.1%			11642	9.3%		
\$1-\$149	193	3.6%		196	4.1%			5741	4.6%		
\$150-\$299	269	5.0%		274	5.8%			8081	6.5%		
\$300-\$399	381	7.1%		312	6.6%			9801	7.9%		

	Bonbeach GCP_SSC20277.xls			Edithvale GCP_SSC20842.xls			Kingston LGA GCP_LGA23430.xls		
	No	% within file	% of precinct	No	% within file	% of precinct	No	% within file	% of precinct
\$400-\$499	436	8.2%		346	7.3%		9933	8.0%	
\$500-\$649	383	7.2%		319	6.8%		8963	7.2%	
\$650-\$799	387	7.3%		326	6.9%		9177	7.4%	
\$800-\$999	473	8.9%		393	8.3%		10394	8.3%	
\$1,000-\$1,249	498	9.3%		377	8.0%		10965	8.8%	
\$1,250-\$1,499	403	7.6%		348	7.4%		7970	6.4%	
\$1,500-\$1,749	310	5.8%		283	6.0%		6897	5.5%	
\$1,750-\$1,999	238	4.5%		238	5.0%		4803	3.9%	
\$2,000-\$2,999	295	5.5%		322	6.8%		7016	5.6%	
\$3,000 or more	129	2.4%		138	2.9%		3586	2.9%	
Individual income not stated	607	11.4%		470	9.9%		9621	7.7%	
Household Income:									
Median Household income (\$/weekly)	1461			1662			1537		
Negative/Nil income	28	1.1%		29	1.3%		793	1.4%	
\$1-\$149	20	0.8%		12	0.6%		424	0.8%	
\$150-\$299	55	2.1%		41	1.9%		1001	1.8%	
\$300-\$399	75	2.9%		57	2.6%		1477	2.6%	
\$400-\$499	180	6.9%		121	5.6%		3482	6.2%	

	Bonbeach GCP_SSC20277.xls		Edithvale GCP_SSC20842.xls		Kingston LGA GCP_LGA23430.xls	
	No	% within file	% of precinct	No	% within file	% of precinct
\$500-\$649	126	4.8%		84	3.9%	4.1%
\$650-\$799	162	6.2%		113	5.2%	6.4%
\$800-\$999	176	6.7%		127	5.8%	6.3%
\$1,000-\$1,249	201	7.7%		172	7.9%	7.7%
\$1,250-\$1,499	195	7.4%		146	6.7%	7.1%
\$1,500-\$1,749	146	5.6%		134	6.2%	5.9%
\$1,750-\$1,999	161	6.1%		131	6.0%	5.7%
\$2,000-\$2,499	301	11.5%		259	11.9%	11.2%
\$2,500-\$2,999	192	7.3%		190	8.7%	7.6%
\$3,000-\$3,499	123	4.7%		121	5.6%	5.0%
\$3,500-\$3,999	103	3.9%		96	4.4%	4.0%
\$4,000 or more	126	4.8%		153	7.0%	6.8%
Partial income stated(c)	177	6.8%		147	6.8%	7.2%
All incomes not stated(d)	72	2.7%		41	1.9%	2.3%

Bonbeach GCP_SSC20277.xls				Edithvale GCP_SSC20842.xls				Kingston LGA GCP_LGA23430.xls			
No	% within file	% of precinct	No	% within file	% of precinct	No	% within file	% of precinct	No	% within file	% of precinct
Labour Force:											
Labour force participation	3,355	62.7%	4.0%	3,049	64.6%	3.6%	78,347	62.9%	92.4%		
Total employed	3,187	95.0%		2,884	94.6%		74,103	94.6%			
Employed full-time	2,069	64.9%		1,852	64.2%		46,192	62.3%			
Employed part-time	948	29.7%		927	32.1%		24,369	32.9%			
Unemployed persons	175	5.2%	3.8%	159	5.2%	3.5%	4,247	5.4%	92.7%		
Not in labour force	1,488	27.8%		1,392	29.5%		39,402	31.6%			
Occupation:											
Managers	397	12.5%	3.5%	432	15.0%	3.9%	10,367	14.0%	92.6%		
Professionals	766	24.0%	3.9%	719	24.9%	3.7%	18,034	24.3%	92.4%		
Technicians and trades	493	15.5%	4.5%	417	14.4%	3.8%	9,927	13.4%	91.6%		
Community and personal service	309	9.7%	4.0%	285	9.9%	3.7%	7,185	9.7%	92.4%		
Clerical and administrative	519	16.3%	4.2%	440	15.2%	3.6%	11,292	15.2%	92.2%		
Sales	285	8.9%	3.4%	270	9.3%	3.2%	7,763	10.5%	93.3%		
Machinery operators and drivers	147	4.6%	4.2%	114	3.9%	3.3%	3,240	4.4%	92.5%		
Labourers	224	7.0%	4.1%	164	5.7%	3.0%	5,126	6.9%	93.0%		
Not Stated	48	1.5%	3.8%	47	1.6%	3.8%	1,155	1.6%	92.4%		
Key Industry:											

	Bonbeach GCP_SSC20277.xls			Edithvale GCP_SSC20842.xls			Kingston LGA GCP_LGA23430.xls		
	No	% within file	% of precinct	No	% within file	% of precinct	No	% within file	% of precinct
Agriculture, Forestry and Fishing	5	0.3%	2.7	9	0.6%	4.9%	169	0.4%	92.3%
Mining	6	0.4%	6.2	4	0.3%	4.1%	87	0.2%	89.7%
Manufacturing	190	11.7%	4.0	145	9.7%	3.1%	4,406	11.5%	92.9%
Electricity, Gas, Water and Waste Services	15	0.9%	2.9	24	1.6%	4.6%	487	1.3%	92.6%
Construction	352	21.8%	5.5	287	19.2%	4.5%	5,717	14.9%	89.9%
Wholesale Trade	72	4.4%	3.5	69	4.6%	3.3%	1,928	5.0%	93.2%
Retail Trade	120	7.4%	3.2	124	8.32%	3.3%	3,492	9.1%	93.5%
Accommodation and Food Services	51	3.2%	2.4	59	3.9%	2.7%	2,047	5.3%	94.9%
Transport, Postal and Warehousing	86	5.3%	3.7	64	4.3%	2.8%	2,148	5.6%	93.5%
Information Media and Telecommunications	36	2.2%	3.5	44	2.9%	4.3%	952	2.5%	92.2%
Financial and Insurance Services	62	3.8%	3.4	65	4.3%	3.5%	1,722	4.5%	93.1%
Rental, Hiring and Real Estate Services	26	1.6%	4.2	19	1.3%	3.0%	578	1.5%	92.8%
Professional, Scientific and Technical Services	131	8.1%	3.5	137	9.2%	3.7%	3,471	9.0%	92.8%
Administrative and Support Services	50	3.1%	3.5	52	3.5%	3.6%	1,325	3.5%	92.9%
Public Administration and Safety	98	6.1%	4.9	88	5.9%	4.4%	1,802	4.7%	90.6%
Education and Training	89	5.5%	4.1	88	5.9%	4.1%	1,976	5.1%	91.8%
Health Care and Social Assistance	58	3.6%	3.4	58	3.9%	3.4%	1,588	4.1%	93.2%

	Bonbeach GCP_SSC20277.xls			Edithvale GCP_SSC20842.xls			Kingston LGA GCP_LGA23430.xls		
	No	% within file	% of precinct	No	% within file	% of precinct	No	% within file	% of precinct
Arts and Recreation Services	29	1.8%	3.0	31	2.1%	3.3%	892	2.3%	93.7%
Other Services	53	3.3%	3.4	52	3.5%	3.3%	1,455	3.8%	93.3%
Inadequately described/Not stated	89	5.5%	3.9	77	5.1%	3.3%	2,137	5.6%	92.8%
Educational attainment:									
Completion of Year 12 (or equivalent)	2,855	53.4%	3.7%	2,648	56.1%	3.4%	72,508	58.2%	92.9%
Without post-school qualifications	1776	33.2%		1628	34.5%		48104	38.6%	
Educational institution attending:									
Total	1,727			1,620			43,373		
Pre-school attending:									
Pre-school	106	24.1%		113	27.6%		2,634	28.9%	
Infants/Primary education attending:									
Government	293	68.6%		287	60.0%		7,779	64.6%	
Catholic	103	24.1%		140	29.3%		3,294	27.4%	
Other Non Government	30	7.0%		50	10.5%		961	8.0%	
Total	427	90.1%		478	95.4%		12,035	94.8%	
Secondary education attending:									
Government	140	55.1%		159	51.1%		4,894	54.5%	
Catholic	84	33.1%		106	34.1%		2,531	28.2%	
Other Non Government	31	12.2%		50	16.1%		1,566	17.4%	

Bonbeach GCP_SSC20277.xls				Edithvale GCP_SSC20842.xls				Kingston LGA GCP_LGA23430.xls						
No	% within file	% of precinct		No	% within file	% of precinct		No	% within file	% of precinct				
Total			254	93.0%				311	89.9%			8,985	91.9%	
Technical or Further Educational Institution(a):														
Full-time student:														
Aged 15-24 years			23	22.8%			19	21.1%			708	27.1%		
Aged 25 years and over			15	14.9%			18	20.0%			456	17.5%		
Part-time student:														
Aged 15-24 years			20	19.8%			19	21.1%			560	21.4%		
Aged 25 years and over			37	36.6%			32	35.6%			873	33.4%		
Full/Part-time student status not stated			0	0.0%			0	0.0%			18	0.7%		
Total			101	1.9%			90	1.9%			2,613	2.1%		
University or other Tertiary Institution attending:														
Full-time student:														
Aged 15-24 years			79	37.8%			110	48.9%			3,992	55.7%		
Aged 25 years and over			49	23.4%			41	18.2%			1,235	17.2%		
Part-time student:														
Aged 15-24 years			11	5.3%			16	7.1%			449	6.3%		
Aged 25 years and over			69	33.0%			53	23.6%			1,457	20.3%		
Full/Part-time student status not stated			0	0.0%			3	1.3%			40	0.6%		
Total			209	3.9%			225	4.8%			7,169	5.8%		

Bonbeach GCP_SSC20277.xls			Edithvale GCP_SSC20842.xls			Kingston LGA GCP_LGA23430.xls		
No	% within file	% of precinct	No	% within file	% of precinct	No	% within file	% of precinct
Other type of educational institution attending:								
Full-time student	14	26.9%	11	31.4%		441	33.2%	
Part-time student	38	73.1%	25	71.4%		865	65.1%	
Full/Part-time student status not stated	0	0.0%	0	0.0%		25	1.9%	
Total	52	1.0%	35	0.7%		1,328	1.1%	
Type of educational institution not stated	580	10.8%	369	7.8%		8,603	6.9%	
Mobility:								
Lived at same address 1 year ago	4,674	72.8%	4,526	78.0%		119,798	79.1%	
Lived at same address 5 years ago	2,821	44.0%	2,975	51.2%		83,204	55.0%	93.5%
Transport:								
Households without a motor vehicle	197	7.7%	130	6.2%		3,579	6.6%	91.6%
One motor vehicle	1,044	41.0%	789	37.3%		20,224	37.2%	91.7%
Two motor vehicles	1,020	40.1%	902	42.7%		21,943	40.4%	91.9%
Three motor vehicles	205	8.1%	208	9.8%		5,858	10.8%	93.4%
Four or more motor vehicles	78	3.1%	84	4.0%		2,740	5.0%	94.4%
Journey to work (by one method only):								
Train	378	13.1%	375	14.0%		9,050	13.2%	92.3%
Bus	8	0.3%	20	0.7%		814	1.2%	96.7%

	Bonbeach GCP_SSC20277.xls			Edithvale GCP_SSC20842.xls			Kingston LGA GCP_LGA23430.xls		
	No	% within file	% of precinct	No	% within file	% of precinct	No	% within file	% of precinct
Ferry	0	0.0%	0.0%	0	0.0%	0.0%	12	0.0%	100.0%
Tram (includes light rail)	13	0.5%	3.8%	18	0.7%	5.3%	308	0.5%	90.9%
Taxi	9	0.3%	8.0%	0	0.0%	0.0%	103	0.2%	92.0%
Car, as driver	2,178	75.8%	4.1%	1,958	72.9%	3.7%	49,242	72.0%	92.3%
Car, as passenger	84	2.9%	2.6%	85	3.2%	2.7%	3,012	4.4%	94.7%
Truck	14	0.5%	3.4%	14	0.5%	3.4%	381	0.6%	93.2%
Motorbike/scooter	9	0.3%	3.3%	16	0.6%	5.9%	247	0.4%	90.8%
Bicycle	14	0.5%	2.4%	18	0.7%	3.1%	545	0.8%	94.5%
Other	4	0.1%	1.1%	17	0.6%	4.6%	345	0.5%	94.3%
Walked only	29	1.0%	2.2%	33	1.2%	2.6%	1,228	1.8%	95.2%
Worked at home	135	4.7%	4.0%	132	4.9%	3.9%	3,105	4.5%	92.1%

Table B2 ABS Census 2011 data

	Kingston LGA BCP_LGA23430.xls		Bonbeach BCP_SSC20151.xls		Edithvale BCP_SSC20446.xls	
	No	% within file	% of precinct	No	% within file	% of precinct
Population:						
Total Persons	142425	100.0%	92.7%	5733	100.0%	3.7%
Age groups:						
0 to 4 years	9098	6.4%	92.1%	375	6.5%	3.8%
5 to 11 years	11301	7.9%	93.7%	353	6.2%	2.9%
12 to 17 years	9694	6.8%	93.4%	283	4.9%	2.7%
18 to 24 years	11980	8.4%	93.4%	419	7.3%	3.3%
25 to 34 years	18849	13.2%	92.1%	909	15.9%	4.4%
35 to 49 years	32537	22.8%	92.5%	1320	23.0%	3.8%
50 to 59 years	18123	12.7%	93.0%	739	12.9%	3.8%
60 to 69 years	14152	9.9%	92.8%	596	10.4%	3.9%
70 to 84 years	13139	9.2%	92.6%	553	9.6%	3.9%
85 and over years	3551	2.5%	91.0%	186	3.2%	4.8%
Under 18 years	30093	21.1%	93.1%	1011	17.6%	3.1%
15 years and over	117327	82.4%	92.6%	4876	85.1%	3.9%
Median Age (years)	39			40		

	Kingston LGA BCP_LGA23430.xls			Bonbeach BCP_SSC20151.xls			Edithvale BCP_SSC20446.xls		
	No	% within file	% of precinct	No	% within file	% of precinct	No	% within file	% of precinct
Cultural Diversity:									
Indigenous persons	380	0.3%	89.4%	21	0.4%	4.9%	24	0.4%	5.6%
Persons born in Non Main English Speaking countries	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%
Language spoken at home other than English	35105	24.6%		678	11.8%		525	9.6%	
Speaks English Only	101614	71.3%		4681	81.7%		4731	86.8%	
Speaks other language and speaks English very well or well	20029	14.1%		429	7.5%		311	5.7%	
Household Characteristics:									
Family households	37,881	70.9%	92.8%	1,477	61.1%	3.6%	1,442	69.3%	3.5%
Lone person household	13,914	26.0%	90.8%	838	34.7%	5.5%	580	27.9%	3.8%
Group household	1650	3.1%	91.1%	102	4.2%	5.6%	59	2.8%	3.3%
Average household size (number of persons)	2.5			2.2			2.4		
Family Characteristics:									
Total families	38,653		92.9%	1,488		3.6%	1,456		3.5%
Couple family with children	18,478	47.8%	93.7%	563	37.8%	2.9%	680	46.7%	3.4%
Couple with children under 15 years	12,098	31.3%		402	27.0%		484	33.2%	
Couple with children over 15 years	6,380	16.5%		161	10.8%		196	13.5%	

	Kingston LGA BCP_LGA23430.xls			Bonbeach BCP_SSC20151.xls			Edithvale BCP_SSC20446.xls		
	No	% within file	% of precinct	No	% within file	% of precinct	No	% within file	% of precinct
Couple family without children	13,739	35.5%	92.2%	649	43.6%	4.4%	511	35.1%	3.4%
One parent family	5,762	14.9%	92.1%	257	17.3%	4.1%	237	16.3%	3.8%
One parent with children under 15 years	2,285	39.7%	91.6%	108	42.0%	4.3%	102	43.0%	4.1%
One parent with children over 15 years	3,477	60.3%	92.4%	149	58.0%	4.0%	135	57.0%	3.6%
Other family	674	1.7%	93.5%	19	1.3%	2.6%	28	1.9%	3.9%
Other characteristics:									
Need for assistance	6,667	4.7%	90.6%	350	6.1%	4.8%	338	6.2%	4.6%
Dwellings:									
Separate House	35,880	62.0%	93.3%	1,121	42.4%	2.9%	1,450	64.0%	3.8%
Semi-detached, terrace house, townhouse	9052	15.6%	87.9%	872	33.0%	8.5%	378	16.7%	3.7%
Flat, unit or apartment	8079	14.0%	93.6%	314	11.9%	3.6%	235	10.4%	2.7%
Other dwellings	424	0.7%	77.7%	105	4.0%	19.2%	17	0.8%	3.1%
Not stated	10	0.0%	76.9%	3	0.1%	23.1%	0	0.0%	0.0%
Total occupied private dwellings	53445	92.3%		2415	91.4%		2080	91.8%	
Unoccupied private dwellings	4453	7.7%	91.5%	227	8.6%	4.7%	186	8.2%	3.8%

	Kingston LGA BCP_LGA23430.xls		Bonbeach BCP_SSC20151.xls		Edithvale BCP_SSC20446.xls	
	No	% within file	% of precinct	No	% within file	% of precinct
Tenure Type:						
Fully owned	19,322	37.5%	93.1%	737	31.4%	3.6%
Owned with a mortgage	19,647	38.1%	92.0%	885	37.7%	4.1%
Rented (Total):	12,606	24.4%	91.1%	724	30.9%	5.2%
Real estate agent	8,414	66.7%	90.5%	524	72.4%	5.6%
State or territory housing authority	961	7.6%	93.3%	33	4.6%	3.2%
Person not in same household	2,474	19.6%		112	15.5%	
Housing co-operative/community/church group	162	1.3%		3	0.4%	
Other landlord type	356	2.8%		48	6.6%	
Landlord type not stated	239	1.9%		4	0.6%	
Other Tenure Type	398	3.2%	97.1%	5	0.7%	1.2%
Not stated	1471	11.7%	93.2%	64	8.8%	4.1%
Individual Income:						
Median Individual Income (\$/weekly)	597			659		
Negative/Nil Income	9,687	8.3%		298	6.1%	
\$1-\$199	8,884	7.6%		288	5.9%	
\$200-\$299	11,110	9.5%		386	7.9%	
\$300-\$399	11,469	9.8%		484	9.9%	

	Kingston LGA BCP_LGA23430.xls			Bonbeach BCP_SSC20151.xls			Edithvale BCP_SSC20446.xls		
	No	% within file	% of precinct	No	% within file	% of precinct	No	% within file	% of precinct
\$400-\$599	13,390	11.4%		555	11.4%		472	10.6%	
\$600-\$799	12,341	10.5%		506	10.4%		500	11.3%	
\$800-\$999	10,142	8.6%		404	8.3%		387	8.7%	
\$1,000-\$1,249	10,040	8.6%		510	10.5%		371	8.4%	
\$1,250-\$1,499	7,056	6.0%		319	6.5%		270	6.1%	
\$1,500-\$1,999	7,944	6.8%		345	7.1%		372	8.4%	
\$2,000 or more	6,817	5.8%		222	4.6%		282	6.4%	
Individual income not stated	8,444	7.2%		558	11.4%		317	7.1%	
Household Income:									
Median Household income (\$/weekly)	1,292			1,142			1,299		
Negative/Nil Income	637	1.3%		34	1.5%		23	1.2%	
\$1-\$199	778	1.6%		27	1.2%		22	1.1%	
\$200-\$299	1,292	2.6%		71	3.1%		53	2.7%	
\$300-\$399	3,367	6.8%		192	8.5%		131	6.8%	
\$400-\$599	4,748	9.6%		240	10.6%		185	9.6%	
\$600-\$799	4,251	8.6%		206	9.1%		189	9.8%	
\$800-\$999	4,134	8.3%		207	9.1%		151	7.8%	
\$1,000-\$1,249	4,221	8.5%		218	9.6%		166	8.6%	

	Kingston LGA BCP_LGA23430.xls			Bonbeach BCP_SSC20151.xls			Edithvale BCP_SSC20446.xls		
	No	% within file	% of precinct	No	% within file	% of precinct	No	% within file	% of precinct
\$1,250-\$1,499	3,845	7.7%		157	6.9%		144	7.4%	
\$1,500-\$1,999	6,225	12.5%		285	12.5%		255	13.2%	
\$2,000-\$2,499	4,841	9.8%		209	9.2%		188	9.7%	
\$2,500-\$2,999	4,473	9.0%		171	7.5%		183	9.5%	
\$3,000-\$3,499	2,642	5.3%		104	4.6%		105	5.4%	
\$3,500-\$3,999	1,149	2.3%		45	2.0%		39	2.0%	
\$4,000 or more	1,540	3.1%		40	1.8%		64	3.3%	
All incomes not stated	1,498	3.0%		65	2.9%		38	2.0%	
Labour Force:									
Labour force participation	73,743	62.9%	92.6%	3,020	61.9%	3.8%	2,869	64.7%	3.6%
Total employed	70,391	95.5%		2,878	95.3%		2,743	95.6%	
Employed full-time	44,805	63.7%		1,925	66.9%		1,737	63.3%	
Employed part-time	21,497	30.5%		784	27.2%		845	30.8%	
Unemployed persons	3,352	4.5%	92.6%	142	4.7%	3.9%	126	4.4%	3.5%
Not in labour force	38,024	32.4%		1,480	30.4%		1,401	31.6%	

Kingston LGA BCP_LGA23430.xls			Bonbeach BCP_SSC20151.xls			Edithvale BCP_SSC20446.xls			
No	% within file	% of precinct	No	% within file	% of precinct	No	% within file	% of precinct	
Occupation:									
Managers	9,089	12.9%	92.7%	350	12.2%	3.6%	363	13.2%	3.7%
Professionals	15,713	22.3%	92.7%	610	21.2%	3.6%	630	23.0%	3.7%
Technicians and trades	10,114	14.4%	91.8%	470	16.3%	4.3%	434	15.8%	3.9%
Community and personal service	6,232	8.9%	92.1%	276	9.6%	4.1%	262	9.6%	3.9%
Clerical and administrative	11,616	16.5%	92.4%	502	17.4%	4.0%	454	16.6%	3.6%
Sales	7,331	10.4%	93.1%	271	9.4%	3.4%	276	10.1%	3.5%
Machinery operators and drivers	3,654	5.2%	93.8%	148	5.1%	3.8%	94	3.4%	2.4%
Labourers	5,092	7.2%	93.2%	197	6.8%	3.6%	175	6.4%	3.2%
Not Stated	1,547	2.2%	93.5%	54	1.9%	3.3%	53	1.9%	3.2%
Key Industry:									
Agriculture, forestry & fishing	161	0.2%	92.5%	6	0.2%	3.4%	7	0.3%	4.0%
Mining	97	0.1%	85.8%	12	0.4%	10.6%	4	0.1%	3.5%
Manufacturing	8,882	12.6%	93.3%	336	11.7%	3.5%	302	11.0%	3.2%
Electricity, gas, water & waste services	731	1.0%	91.3%	39	1.4%	4.9%	31	1.1%	3.9%
Construction	5,951	8.5%	90.8%	305	10.6%	4.7%	295	10.8%	4.5%
Wholesale trade	3,995	5.7%	93.4%	163	5.7%	3.8%	118	4.3%	2.8%
Retail trade	7,774	11.0%	93.5%	275	9.6%	3.3%	263	9.6%	3.2%

	Kingston LGA BCP_LGA23430.xls				Bonbeach BCP_SSC20151.xls				Edithvale BCP_SSC20446.xls			
	No	% within file	% of precinct		No	% within file	% of precinct		No	% within file	% of precinct	
Accommodation & food services	3,545	5.0%	94.0%		116	4.0%	3.1%		111	4.0%	2.9%	
Transport, postal & warehousing	2,818	4.0%	94.2%		90	3.1%	3.0%		83	3.0%	2.8%	
Information media & telecommunications	1,490	2.1%	93.7%		53	1.8%	3.3%		48	1.8%	3.0%	
Financial & insurance services	3,407	4.8%	92.8%		137	4.8%	3.7%		127	4.6%	3.5%	
Rental, hiring & real estate services	993	1.4%	91.3%		50	1.7%	4.6%		45	1.6%	4.1%	
Professional, scientific & technical services	5,708	8.1%	93.0%		224	7.8%	3.7%		204	7.4%	3.3%	
Administrative & support services	2,409	3.4%	92.0%		98	3.4%	3.7%		111	4.0%	4.2%	
Public administration & safety	3,560	5.1%	91.1%		178	6.2%	4.6%		171	6.2%	4.4%	
Education & training	5,564	7.9%	92.0%		224	7.8%	3.7%		258	9.4%	4.3%	
Health care & social assistance	7,722	11.0%	92.1%		332	11.5%	4.0%		334	12.2%	4.0%	
Arts & recreation services	1,185	1.7%	91.8%		56	1.9%	4.3%		50	1.8%	3.9%	
Other services	2,631	3.7%	92.8%		103	3.6%	3.6%		100	3.6%	3.5%	
Not Stated	1765	2.5%	91.7%		81	2.8%	4.2%		79	2.9%	4.1%	

	Kingston LGA BCP_LGA23430.xls		Bonbeach BCP_SSC20151.xls		Edithvale BCP_SSC20446.xls	
	No	% within file	% of precinct	No	% within file	% of precinct
Educational attainment:						
Completion of Year 12 (or equivalent)	61,958	52.8%	93.1%	2,346	48.1%	3.5%
Without post-school qualifications	50028	42.6%	93.0%	1994	40.9%	3.7%
Educational institution attending:						
Total	39,926			1,485		1,457
Pre-school attending:						
Pre-school	2,568	28.2%		98	26.1%	97
Infants/Primary education attending:						
Government	6,341	61.2%		238	71.3%	221
Catholic	3,147	30.4%		78	23.4%	135
Other Non Government	879	8.5%		18	5.4%	29
Total	10,367	91.7%		334	94.6%	385
Secondary education attending:						
Government	4,634	54.3%		133	56.8%	175
Catholic	2,454	28.7%		68	29.1%	108
Other Non Government	1,448	17.0%		33	14.1%	62
Total	8,536	88.1%		234	82.7%	345
Technical or Further Educational Institution(a):						

	Kingston LGA BCP_LGA23430.xls			Bonbeach BCP_SSC20151.xls			Edithvale BCP_SSC20446.xls		
	No	% within file	% of precinct	No	% within file	% of precinct	No	% within file	% of precinct
Full-time student:									
Aged 15-24 years	816	26.6%		28	21.5%		21	17.9%	
Aged 25 years and over	460	15.0%		22	16.9%		16	13.7%	
Part-time student:		0.0%							
Aged 15-24 years	729	23.8%		28	21.5%		26	22.2%	
Aged 25 years and over	1,024	33.4%		52	40.0%		50	42.7%	
Full/Part-time student status not stated	37	1.2%		0	0.0%		4	3.4%	
Total	3,066	2.6%		130	2.7%		117	2.6%	
University or other Tertiary Institution attending:									
Full-time student:									
Aged 15-24 years	3,131	54.8%		64	38.8%		86	46.0%	
Aged 25 years and over	816	14.3%		24	14.5%		24	12.8%	
Part-time student:									
Aged 15-24 years	349	6.1%		8	4.8%		10	5.3%	
Aged 25 years and over	1,385	24.3%		69	41.8%		67	35.8%	
Full/Part-time student status not stated	29	0.5%		0	0.0%		0	0.0%	
Total	5,710	4.9%		165	3.4%		187	4.2%	
Other type of educational institution attending:									
Full-time student	348	30.3%		8	20.5%		9	20.9%	

Kingston LGA BCP_LGA23430.xls						Bonbeach BCP_SSC20151.xls			Edithvale BCP_SSC20446.xls		
No	% within file	% of precinct	No	% within file	% of precinct	No	% within file	% of precinct	No	% within file	% of precinct
Part-time student	773	67.4%		31	79.5%		30	69.8%			
Full/Part-time student status not stated	26	2.3%		0	0.0%		4	9.3%			
Total	1,147	1.0%		39	0.8%		43	1.0%			
Type of educational institution not stated	8,532	7.3%		485	9.9%		283	6.4%			
Mobility:											
Lived at same address 1 year ago	118,540	83.2%		4,444	77.5%		4,472	82.1%			
Lived at same address 5 years ago	82,156	57.7%		2,587	45.1%		2,974	54.6%			3.4%
Transport:											
Households without a motor vehicle	4,134	8.0%		229	9.8%		151	7.4%			3.3%
One motor vehicle	19,497	37.6%		1,057	45.2%		797	39.3%			3.7%
Two motor vehicles	20,514	39.6%		824	35.2%		839	41.4%			3.8%
Three motor vehicles	5,312	10.3%		162	6.9%		166	8.2%			2.9%
Four or more motor vehicles	2,367	4.6%		66	2.8%		74	3.7%			3.0%

	Kingston LGA BCP_LGA23430.xls		Bonbeach BCP_SSC20151.xls		Edithvale BCP_SSC20446.xls	
	No	% within file	% of precinct	No	% within file	% of precinct
Journey to work (by one method only):						
Train	7,882	12.4%	91.0%	429	16.4%	5.0%
Bus	878	1.4%	97.1%	13	0.5%	1.4%
Ferry	7	0.0%	70.0%	3	0.1%	30.0%
Tram (includes light rail)	322	0.5%	91.0%	15	0.6%	4.2%
Taxi	114	0.2%	100.0%	0	0.0%	0.0%
Car, as driver	46,295	72.6%	92.7%	1,880	72.1%	3.8%
Car, as passenger	3,103	4.9%	94.3%	90	3.5%	2.7%
Truck	469	0.7%	92.9%	16	0.6%	3.2%
Motorbike/scooter	256	0.4%	92.8%	10	0.4%	3.6%
Bicycle	553	0.9%	93.6%	22	0.8%	3.7%
Other	271	0.4%	90.9%	13	0.5%	4.4%
Walked only	1,239	1.9%	95.1%	31	1.2%	2.4%
Worked at home	2,403	3.8%	92.7%	86	3.3%	3.3%

Table B3 ABS Census 2016 data

	Bonbeach GCP_SSC20277.xls			Edithvale GCP_SSC20842.xls			Kingston LGA GCP_LGA23430.xls		
	No	% within file	% of precinct	No	% within file	% of precinct	No	% within file	% of precinct
Population:									
Total Persons	6416	100.0%	3.9%	5806	100.0%	3.5%	151389	100.0%	92.5%
Age groups:									
0 to 4 years	439	6.8%	4.4%	409	7.0%	4.1%	9110	6.0%	91.5%
5 to 11 years	474	7.4%	3.5%	501	8.6%	3.7%	12691	8.4%	92.9%
12 to 17 years	273	4.3%	2.6%	346	6.0%	3.3%	9773	6.5%	94.0%
18 to 24 years	388	6.0%	3.0%	411	7.1%	3.2%	12209	8.1%	93.9%
25 to 34 years	963	15.0%	4.5%	810	14.0%	3.8%	19798	13.1%	91.8%
35 to 49 years	1555	24.2%	4.2%	1358	23.4%	3.7%	33980	22.4%	92.1%
50 to 59 years	815	12.7%	3.9%	760	13.1%	3.6%	19368	12.8%	92.5%
60 to 69 years	723	11.3%	4.2%	536	9.2%	3.1%	15947	10.5%	92.7%
70 to 84 years	590	9.2%	3.8%	507	8.7%	3.3%	14374	9.5%	92.9%
85 and over years	184	2.9%	4.1%	184	3.2%	4.1%	4141	2.7%	91.8%
Under 18 years	1186	18.5%	3.5%	1256	21.6%	3.7%	31574	20.9%	92.8%
15 years and over	5351	83.4%	4.0%	4721	81.3%	3.5%	124595	82.3%	92.5%
Median Age (years)	40			40			40		
Cultural Diversity:									
Indigenous persons	35	0.5%	5.5%	30	0.5%	4.7%	575	0.4%	89.8%

	Bonbeach GCP_SSC20277.xls			Edithvale GCP_SSC20842.xls			Kingston LGA GCP_LGA23430.xls		
	No	% within file	% of precinct	No	% within file	% of precinct	No	% within file	% of precinct
Persons born in Non Main English Speaking countries	528	8.2%	3.3%	371	6.4%	2.3%	15239	10.1%	94.4%
Language spoken at home other than English	760	11.8%		665	11.5%		39352	26.0%	
Speaks English Only	5089	79.3%		4744	81.7%		104407	69.0%	
Speaks other language and speaks English very well or well	507	7.9%		393	6.8%		22998	15.2%	
Household Characteristics:									
Family households	1656	63.5%	3.8%	1502	69.3%	3.5%	40014	71.4%	92.7%
Lone person household	842	32.3%	5.3%	596	27.5%	3.8%	14338	25.6%	90.9%
Group household	108	4.1%	5.8%	68	3.1%	3.6%	1689	3.0%	90.6%
Average household size (number of persons)	2.2			2.5			2.5		
Family Characteristics:									
Total families	1672		3.8%	1522		3.5%	40850		92.7%
Couple family with children	695	41.6%	3.3%	708	46.5%	3.4%	19725	48.3%	93.4%
Couple with children under 15 years	518	31.0%	3.7%	517	34.0%	3.7%	13005	31.8%	92.6%
Couple with children over 15 years	184	11.0%	2.6%	199	13.1%	2.8%	6728	16.5%	94.6%
Couple family without children	674	40.3%	4.3%	563	37.0%	3.6%	14261	34.9%	92.0%
One parent family	272	16.3%	4.1%	228	15.0%	3.4%	6179	15.1%	92.5%
One parent with children under 15 years	114	41.9%	4.5%	92	40.4%	3.6%	2334	37.8%	91.9%

	Bonbeach GCP_SSC20277.xls			Edithvale GCP_SSC20842.xls			Kingston LGA GCP_LGA23430.xls		
	No	% within file	% of precinct	No	% within file	% of precinct	No	% within file	% of precinct
One parent with children over 15 years	156	57.4%	3.8%	134	58.8%	3.2%	3843	62.2%	93.0%
Other family	26	1.6%	3.6%	19	1.2%	2.6%	680	1.7%	93.8%
Other characteristics:									
Need for assistance	317	4.9%	3.8%	336	5.8%	4.1%	7610	5.0%	92.1%
Dwellings:									
Separate House	977	34.0%	2.7%	1174	49.8%	3.3%	33536	54.9%	94.0%
Semi-detached, terrace house, townhouse	1259	43.8%	7.9%	299	12.7%	1.9%	14392	23.6%	90.2%
Flat, unit or apartment	220	7.7%	2.6%	681	28.9%	8.0%	7565	12.4%	89.4%
Other dwellings	150	5.2%	30.8%	4	0.2%	0.8%	333	0.5%	68.4%
Not stated	8	0.3%	3.6%	4	0.2%	1.8%	212	0.3%	94.6%
Total occupied private dwellings	2608	90.7%	4.3%	2164	91.7%	3.6%	56036	91.8%	92.2%
Unoccupied private dwellings	267	9.3%	4.9%	195	8.3%	3.6%	5029	8.2%	91.6%
Tenure Type:									
Fully owned	775	30.4%	3.7%	713	33.7%	3.4%	19355	35.7%	92.9%
Owned with a mortgage	954	37.4%	4.3%	842	39.8%	3.8%	20627	38.1%	92.0%
Rented (Total):	821	32.2%	5.3%	560	26.5%	3.6%	14200	26.2%	91.1%
Real estate agent	590	71.9%	5.2%	441	78.8%	3.9%	10247	72.2%	90.9%
State or territory housing authority	35	4.3%	3.6%	27	4.8%	0.0%	908	6.4%	#REF!
Person not in same household	110	13.4%	4.3%	75	13.4%	0.0%	2346	16.5%	0.0%

	Bonbeach GCP_SSC20277.xls				Edithvale GCP_SSC20842.xls				Kingston LGA GCP_LGA23430.xls			
	No	% within file	% of precinct		No	% within file	% of precinct		No	% within file	% of precinct	
Housing co-operative/community/church group	5	0.6%	2.4%		3	0.5%	0.0%		198	1.4%	0.0%	
Other landlord type	81	9.9%	22.1%		3	0.5%	0.0%		283	2.0%	0.0%	
Landlord type not stated	6	0.7%	2.5%		11	2.0%	0.0%		220	1.5%	0.0%	
Other Tenure Type	9	1.1%	2.1%		4	0.7%	0.9%		419	3.0%	97.0%	
Not stated	63	7.7%	4.1%		45	8.0%	2.9%		1435	10.1%	93.0%	
Individual Income:												
Median Individual Income (\$/weekly)	793				788				704			
Negative/Nil Income	334	6.3%			382	8.1%			11642	9.3%		
\$1-\$149	193	3.6%			196	4.1%			5741	4.6%		
\$150-\$299	269	5.0%			274	5.8%			8081	6.5%		
\$300-\$399	381	7.1%			312	6.6%			9801	7.9%		
\$400-\$499	436	8.2%			346	7.3%			9933	8.0%		
\$500-\$649	383	7.2%			319	6.8%			8963	7.2%		
\$650-\$799	387	7.3%			326	6.9%			9177	7.4%		
\$800-\$999	473	8.9%			393	8.3%			10394	8.3%		
\$1,000-\$1,249	498	9.3%			377	8.0%			10965	8.8%		
\$1,250-\$1,499	403	7.6%			348	7.4%			7970	6.4%		
\$1,500-\$1,749	310	5.8%			283	6.0%			6897	5.5%		
\$1,750-\$1,999	238	4.5%			238	5.0%			4803	3.9%		

	Bonbeach GCP_SSC20277.xls			Edithvale GCP_SSC20842.xls			Kingston LGA GCP_LGA23430.xls		
	No	% within file	% of precinct	No	% within file	% of precinct	No	% within file	% of precinct
\$2,000-\$2,999	295	5.5%		322	6.8%		7016	5.6%	
\$3,000 or more	129	2.4%		138	2.9%		3586	2.9%	
Individual income not stated	607	11.4%		470	9.9%		9621	7.7%	
Household Income:									
Median Household income (\$/weekly)	1461			1662			1537		
Negative/Nil income	28	1.1%		29	1.3%		793	1.4%	
\$1-\$149	20	0.8%		12	0.6%		424	0.8%	
\$150-\$299	55	2.1%		41	1.9%		1001	1.8%	
\$300-\$399	75	2.9%		57	2.6%		1477	2.6%	
\$400-\$499	180	6.9%		121	5.6%		3482	6.2%	
\$500-\$649	126	4.8%		84	3.9%		2283	4.1%	
\$650-\$799	162	6.2%		113	5.2%		3565	6.4%	
\$800-\$999	176	6.7%		127	5.8%		3538	6.3%	
\$1,000-\$1,249	201	7.7%		172	7.9%		4304	7.7%	
\$1,250-\$1,499	195	7.4%		146	6.7%		4001	7.1%	
\$1,500-\$1,749	146	5.6%		134	6.2%		3305	5.9%	
\$1,750-\$1,999	161	6.1%		131	6.0%		3198	5.7%	
\$2,000-\$2,499	301	11.5%		259	11.9%		6249	11.2%	
\$2,500-\$2,999	192	7.3%		190	8.7%		4261	7.6%	

	Bonbeach GCP_SSC20277.xls			Edithvale GCP_SSC20842.xls			Kingston LGA GCP_LGA23430.xls		
	No	% within file	% of precinct	No	% within file	% of precinct	No	% within file	% of precinct
\$3,000-\$3,499	123	4.7%		121	5.6%		2827	5.0%	
\$3,500-\$3,999	103	3.9%		96	4.4%		2223	4.0%	
\$4,000 or more	126	4.8%		153	7.0%		3789	6.8%	
Partial income stated(c)	177	6.8%		147	6.8%		4009	7.2%	
All incomes not stated(d)	72	2.7%		41	1.9%		1305	2.3%	
Educational attainment:									
Completion of Year 12 (or equivalent)	2855	53.4%	3.7%	2648	56.1%	3.4%	72508	58.2%	92.9%
Educational institution attending:									
Total	1727			1620			43373		

Bonbeach GCP_SSC20277.xls		Edithvale GCP_SSC20842.xls		Kingston LGA GCP_LGA23430.xls	
No	% within file	% of precinct	No	% within file	% of precinct
Pre-school attending:					
Pre-school	106	24.1%	113	27.6%	28.9%
Infants/Primary education attending:					
Government	293	68.6%	287	60.0%	64.6%
Catholic	103	24.1%	140	29.3%	27.4%
Other Non Government	30	7.0%	50	10.5%	8.0%
Total	427	90.1%	478	95.4%	94.8%
Secondary education attending:					
Government	140	55.1%	159	51.1%	54.5%
Catholic	84	33.1%	106	34.1%	28.2%
Other Non Government	31	12.2%	50	16.1%	17.4%
Total	254	93.0%	311	89.9%	91.9%
Technical or Further Educational Institution(a):					
Full-time student:					
Aged 15-24 years	23	22.8%	19	21.1%	27.1%
Aged 25 years and over	15	14.9%	18	20.0%	17.5%
Part-time student:					
Aged 15-24 years	20	19.8%	19	21.1%	21.4%
Aged 25 years and over	37	36.6%	32	35.6%	33.4%

	Bonbeach GCP_SSC20277.xls			Edithvale GCP_SSC20842.xls			Kingston LGA GCP_LGA23430.xls		
	No	% within file	% of precinct	No	% within file	% of precinct	No	% within file	% of precinct
Full/Part-time student status not stated	0	0.0%		0	0.0%		18	0.7%	
Total	101	1.9%		90	1.9%		2613	2.1%	
University or other Tertiary Institution attending:									
Full-time student:									
Aged 15-24 years	79	37.8%		110	48.9%		3992	55.7%	
Aged 25 years and over	49	23.4%		41	18.2%		1235	17.2%	
Part-time student:									
Aged 15-24 years	11	5.3%		16	7.1%		449	6.3%	
Aged 25 years and over	69	33.0%		53	23.6%		1457	20.3%	
Full/Part-time student status not stated	0	0.0%		3	1.3%		40	0.6%	
Total	209	3.9%		225	4.8%		7169	5.8%	
Other type of educational institution attending:									
Full-time student	14	26.9%		11	31.4%		441	33.2%	
Part-time student	38	73.1%		25	71.4%		865	65.1%	
Full/Part-time student status not stated	0	0.0%		0	0.0%		25	1.9%	
Total	52	1.0%		35	0.7%		1328	1.1%	
Type of educational institution not stated	580	10.8%		369	7.8%		8603	6.9%	
Transport:									
Households without a motor vehicle	197	7.7%	5.0%	130	6.2%	3.3%	3579	6.6%	91.6%

	Bonbeach GCP_SSC20277.xls				Edithvale GCP_SSC20842.xls				Kingston LGA GCP_LGA23430.xls			
	No	% within file	% of precinct	No	% within file	% of precinct	No	% within file	% of precinct	No	% within file	% of precinct
One motor vehicle	1044	41.0%	4.7%	789	37.3%	3.6%	20224	37.2%	91.7%			
Two motor vehicles	1020	40.1%	4.3%	902	42.7%	3.8%	21943	40.4%	91.9%			
Three motor vehicles	205	8.1%	3.3%	208	9.8%	3.3%	5858	10.8%	93.4%			
Four or more motor vehicles	78	3.1%	2.7%	84	4.0%	2.9%	2740	5.0%	94.4%			

Table B4 ABS Census 2011 data

	Kingston LGA BCP_LGA23430.xls		Bonbeach BCP_SSC20151.xls		Edithvale BCP_SSC20446.xls	
	No	% within file	% of precinct	No	% within file	% of precinct
Population:						
Total Persons	142425	100.0%	92.7%	5733	100.0%	3.7%
Age groups:						
0 to 4 years	9098	6.4%	92.1%	375	6.5%	3.8%
5 to 11 years	11301	7.9%	93.7%	353	6.2%	2.9%
12 to 17 years	9694	6.8%	93.4%	283	4.9%	2.7%
18 to 24 years	11980	8.4%	93.4%	419	7.3%	3.3%
25 to 34 years	18849	13.2%	92.1%	909	15.9%	4.4%
35 to 49 years	32537	22.8%	92.5%	1320	23.0%	3.8%
50 to 59 years	18123	12.7%	93.0%	739	12.9%	3.8%
60 to 69 years	14152	9.9%	92.8%	596	10.4%	3.9%
70 to 84 years	13139	9.2%	92.6%	553	9.6%	3.9%
85 and over years	3551	2.5%	91.0%	186	3.2%	4.8%
Under 18 years	30093	21.1%	93.1%	1011	17.6%	3.1%
15 years and over	117327	82.4%	92.6%	4876	85.1%	3.9%
Median Age (years)	39			40		

Kingston LGA BCP_LGA23430.xls			Bonbeach BCP_SSC20151.xls			Edithvale BCP_SSC20446.xls			
No	% within file	% of precinct	No	% within file	% of precinct	No	% within file	% of precinct	
Cultural Diversity:									
Indigenous persons	380	0.3%	89.4%	21	0.4%	4.9%	24	0.4%	5.6%
Persons born in Non Main English Speaking countries	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%
Language spoken at home other than English	35105	24.6%		678	11.8%		525	9.6%	
Speaks English Only	101614	71.3%		4681	81.7%		4731	86.8%	
Speaks other language and speaks English very well or well	20029	14.1%		429	7.5%		311	5.7%	
Household Characteristics:									
Family households	37,881	70.9%	92.8%	1,477	61.1%	3.6%	1,442	69.3%	3.5%
Lone person household	13,914	26.0%	90.8%	838	34.7%	5.5%	580	27.9%	3.8%
Group household	1650	3.1%	91.1%	102	4.2%	5.6%	59	2.8%	3.3%
Average household size (number of persons)	2.5			2.2			2.4		
Family Characteristics:									
Total families	38,653		92.9%	1,488		3.6%	1,456		3.5%
Couple family with children	18,478	47.8%	93.7%	563	37.8%	2.9%	680	46.7%	3.4%
Couple with children under 15 years	12,098	31.3%		402	27.0%		484	33.2%	
Couple with children over 15 years	6,380	16.5%		161	10.8%		196	13.5%	
Couple family without children	13,739	35.5%	92.2%	649	43.6%	4.4%	511	35.1%	3.4%

	Kingston LGA BCP_LGA23430.xls			Bonbeach BCP_SSC20151.xls			Edithvale BCP_SSC20446.xls		
	No	% within file	% of precinct	No	% within file	% of precinct	No	% within file	% of precinct
One parent family	5,762	14.9%	92.1%	257	17.3%	4.1%	237	16.3%	3.8%
One parent with children under 15 years	2,285	39.7%	91.6%	108	42.0%	4.3%	102	43.0%	4.1%
One parent with children over 15 years	3,477	60.3%	92.4%	149	58.0%	4.0%	135	57.0%	3.6%
Other family	674	1.7%	93.5%	19	1.3%	2.6%	28	1.9%	3.9%
Other characteristics:									
Need for assistance	6,667	4.7%	90.6%	350	6.1%	4.8%	338	6.2%	4.6%
Dwellings:									
Separate House	35,880	62.0%	93.3%	1,121	42.4%	2.9%	1,450	64.0%	3.8%
Semi-detached, terrace house, townhouse	9052	15.6%	87.9%	872	33.0%	8.5%	378	16.7%	3.7%
Flat, unit or apartment	8079	14.0%	93.6%	314	11.9%	3.6%	235	10.4%	2.7%
Other dwellings	424	0.7%	77.7%	105	4.0%	19.2%	17	0.8%	3.1%
Not stated	10	0.0%	76.9%	3	0.1%	23.1%	0	0.0%	0.0%
Total occupied private dwellings	53445	92.3%		2415	91.4%		2080	91.8%	
Unoccupied private dwellings	4453	7.7%	91.5%	227	8.6%	4.7%	186	8.2%	3.8%

Kingston LGA BCP_LGA23430.xls				Bonbeach BCP_SSC20151.xls				Edithvale BCP_SSC20446.xls			
No	% within file	% of precinct	No	% within file	% of precinct	No	% within file	% of precinct	No	% within file	% of precinct
Tenure Type:											
Fully owned	19,322	37.5%	93.1%	737	31.4%	3.6%	699	34.4%	3.4%		
Owned with a mortgage	19,647	38.1%	92.0%	885	37.7%	4.1%	822	40.5%	3.8%		
Rented (Total):	12,606	24.4%	91.1%	724	30.9%	5.2%	510	25.1%	3.7%		
Real estate agent	8,414	66.7%	90.5%	524	72.4%	5.6%	360	70.6%	3.9%		
State or territory housing authority	961	7.6%	93.3%	33	4.6%	3.2%	36	7.1%	3.5%		
Person not in same household	2,474	19.6%		112	15.5%		95	18.6%			
Housing co-operative/community/church group	162	1.3%		3	0.4%		3	0.6%			
Other landlord type	356	2.8%		48	6.6%		7	1.4%			
Landlord type not stated	239	1.9%		4	0.6%		9	1.8%			
Other Tenure Type	398	3.2%	97.1%	5	0.7%	1.2%	7	1.4%	1.7%		
Not stated	1471	11.7%	93.2%	64	8.8%	4.1%	44	8.6%	2.8%		
Individual Income:											
Median Individual Income (\$/weekly)	597			659			647				
Negative/Nil Income	9,687	8.3%		298	6.1%		292	6.6%			
\$1-\$199	8,884	7.6%		288	5.9%		351	7.9%			
\$200-\$299	11,110	9.5%		386	7.9%		389	8.8%			
\$300-\$399	11,469	9.8%		484	9.9%		433	9.8%			
\$400-\$599	13,390	11.4%		555	11.4%		472	10.6%			

	Kingston LGA BCP_LGA23430.xls			Bonbeach BCP_SSC20151.xls			Edithvale BCP_SSC20446.xls		
	No	% within file	% of precinct	No	% within file	% of precinct	No	% within file	% of precinct
\$600-\$799	12,341	10.5%		506	10.4%		500	11.3%	
\$800-\$999	10,142	8.6%		404	8.3%		387	8.7%	
\$1,000-\$1,249	10,040	8.6%		510	10.5%		371	8.4%	
\$1,250-\$1,499	7,056	6.0%		319	6.5%		270	6.1%	
\$1,500-\$1,999	7,944	6.8%		345	7.1%		372	8.4%	
\$2,000 or more	6,817	5.8%		222	4.6%		282	6.4%	
Individual income not stated	8,444	7.2%		558	11.4%		317	7.1%	
Household Income:									
Median Household income (\$/weekly)	1,292			1,142			1,299		
Negative/Nil Income	637	1.3%		34	1.5%		23	1.2%	
\$1-\$199	778	1.6%		27	1.2%		22	1.1%	
\$200-\$299	1,292	2.6%		71	3.1%		53	2.7%	
\$300-\$399	3,367	6.8%		192	8.5%		131	6.8%	
\$400-\$599	4,748	9.6%		240	10.6%		185	9.6%	
\$600-\$799	4,251	8.6%		206	9.1%		189	9.8%	
\$800-\$999	4,134	8.3%		207	9.1%		151	7.8%	
\$1,000-\$1,249	4,221	8.5%		218	9.6%		166	8.6%	
\$1,250-\$1,499	3,845	7.7%		157	6.9%		144	7.4%	
\$1,500-\$1,999	6,225	12.5%		285	12.5%		255	13.2%	

	Kingston LGA BCP_LGA23430.xls			Bonbeach BCP_SSC20151.xls			Edithvale BCP_SSC20446.xls		
	No	% within file	% of precinct	No	% within file	% of precinct	No	% within file	% of precinct
\$2,000-\$2,499	4,841	9.8%		209	9.2%		188	9.7%	
\$2,500-\$2,999	4,473	9.0%		171	7.5%		183	9.5%	
\$3,000-\$3,499	2,642	5.3%		104	4.6%		105	5.4%	
\$3,500-\$3,999	1,149	2.3%		45	2.0%		39	2.0%	
\$4,000 or more	1,540	3.1%		40	1.8%		64	3.3%	
All incomes not stated	1,498	3.0%		65	2.9%		38	2.0%	
Labour Force:									
Labour force participation	73,743	62.9%	92.6%	3,020	61.9%	3.8%	2,869	64.7%	3.6%
Total employed	70,391	95.5%		2,878	95.3%		2,743	95.6%	
Employed full-time	44,805	63.7%		1,925	66.9%		1,737	63.3%	
Employed part-time	21,497	30.5%		784	27.2%		845	30.8%	
Unemployed persons	3,352	4.5%	92.6%	142	4.7%	3.9%	126	4.4%	3.5%
Not in labour force	38,024	32.4%		1,480	30.4%		1,401	31.6%	

Kingston LGA BCP_LGA23430.xls				Bonbeach BCP_SSC20151.xls				Edithvale BCP_SSC20446.xls			
No	% within file	% of precinct	No	% within file	% of precinct	No	% within file	% of precinct	No	% within file	% of precinct
Occupation:											
Managers	9,089	12.9%	92.7%	350	12.2%	3.6%	363	13.2%	3.7%		
Professionals	15,713	22.3%	92.7%	610	21.2%	3.6%	630	23.0%	3.7%		
Technicians and trades	10,114	14.4%	91.8%	470	16.3%	4.3%	434	15.8%	3.9%		
Community and personal service	6,232	8.9%	92.1%	276	9.6%	4.1%	262	9.6%	3.9%		
Clerical and administrative	11,616	16.5%	92.4%	502	17.4%	4.0%	454	16.6%	3.6%		
Sales	7,331	10.4%	93.1%	271	9.4%	3.4%	276	10.1%	3.5%		
Machinery operators and drivers	3,654	5.2%	93.8%	148	5.1%	3.8%	94	3.4%	2.4%		
Labourers	5,092	7.2%	93.2%	197	6.8%	3.6%	175	6.4%	3.2%		
Not Stated	1,547	2.2%	93.5%	54	1.9%	3.3%	53	1.9%	3.2%		
Key Industry:											
Agriculture, forestry & fishing	161	0.2%	92.5%	6	0.2%	3.4%	7	0.3%	4.0%		
Mining	97	0.1%	85.8%	12	0.4%	10.6%	4	0.1%	3.5%		
Manufacturing	8,882	12.6%	93.3%	336	11.7%	3.5%	302	11.0%	3.2%		
Electricity, gas, water & waste services	731	1.0%	91.3%	39	1.4%	4.9%	31	1.1%	3.9%		
Construction	5,951	8.5%	90.8%	305	10.6%	4.7%	295	10.8%	4.5%		
Wholesale trade	3,995	5.7%	93.4%	163	5.7%	3.8%	118	4.3%	2.8%		
Retail trade	7,774	11.0%	93.5%	275	9.6%	3.3%	263	9.6%	3.2%		
Accommodation & food services	3,545	5.0%	94.0%	116	4.0%	3.1%	111	4.0%	2.9%		

	Kingston LGA BCP_LGA23430.xls				Bonbeach BCP_SSC20151.xls				Edithvale BCP_SSC20446.xls			
	No	% within file	% of precinct		No	% within file	% of precinct		No	% within file	% of precinct	
Transport, postal & warehousing	2,818	4.0%	94.2%		90	3.1%	3.0%		83	3.0%	2.8%	
Information media & telecommunications	1,490	2.1%	93.7%		53	1.8%	3.3%		48	1.8%	3.0%	
Financial & insurance services	3,407	4.8%	92.8%		137	4.8%	3.7%		127	4.6%	3.5%	
Rental, hiring & real estate services	993	1.4%	91.3%		50	1.7%	4.6%		45	1.6%	4.1%	
Professional, scientific & technical services	5,708	8.1%	93.0%		224	7.8%	3.7%		204	7.4%	3.3%	
Administrative & support services	2,409	3.4%	92.0%		98	3.4%	3.7%		111	4.0%	4.2%	
Public administration & safety	3,560	5.1%	91.1%		178	6.2%	4.6%		171	6.2%	4.4%	
Education & training	5,564	7.9%	92.0%		224	7.8%	3.7%		258	9.4%	4.3%	
Health care & social assistance	7,722	11.0%	92.1%		332	11.5%	4.0%		334	12.2%	4.0%	
Arts & recreation services	1,185	1.7%	91.8%		56	1.9%	4.3%		50	1.8%	3.9%	
Other services	2,631	3.7%	92.8%		103	3.6%	3.6%		100	3.6%	3.5%	
Not Stated	1765	2.5%	91.7%		81	2.8%	4.2%		79	2.9%	4.1%	
Educational attainment:												
Completion of Year 12 (or equivalent)	61,958	52.8%	93.1%		2,346	48.1%	3.5%		2,244	50.6%	3.4%	
Without post-school qualifications	50028	42.6%	93.0%		1994	40.9%	3.7%		1767	39.9%	3.3%	
Educational institution attending:												
Total	39,926				1,485				1,457			
Pre-school attending:												

Kingston LGA BCP_LGA23430.xls		Bonbeach BCP_SSC20151.xls		Edithvale BCP_SSC20446.xls	
No	% within file	% of precinct	No	% within file	% of precinct
Pre-school	2,568	28.2%	98	26.1%	24.1%
Infants/Primary education attending:					
Government	6,341	61.2%	238	71.3%	57.4%
Catholic	3,147	30.4%	78	23.4%	35.1%
Other Non Government	879	8.5%	18	5.4%	7.5%
Total	10,367	91.7%	334	94.6%	94.6%
Secondary education attending:					
Government	4,634	54.3%	133	56.8%	50.7%
Catholic	2,454	28.7%	68	29.1%	31.3%
Other Non Government	1,448	17.0%	33	14.1%	18.0%
Total	8,536	88.1%	234	82.7%	86.9%

Kingston LGA BCP_LGA23430.xls			Bonbeach BCP_SSC20151.xls			Edithvale BCP_SSC20446.xls		
No	% within file	% of precinct	No	% within file	% of precinct	No	% within file	% of precinct
Technical or Further Educational Institution(a):								
Full-time student:								
Aged 15-24 years	816	26.6%	28	21.5%		21	17.9%	
Aged 25 years and over	460	15.0%	22	16.9%		16	13.7%	
Part-time student:		0.0%						
Aged 15-24 years	729	23.8%	28	21.5%		26	22.2%	
Aged 25 years and over	1,024	33.4%	52	40.0%		50	42.7%	
Full/Part-time student status not stated	37	1.2%	0	0.0%		4	3.4%	
Total	3,066	2.6%	130	2.7%		117	2.6%	
University or other Tertiary Institution attending:								
Full-time student:								
Aged 15-24 years	3,131	54.8%	64	38.8%		86	46.0%	
Aged 25 years and over	816	14.3%	24	14.5%		24	12.8%	
Part-time student:								
Aged 15-24 years	349	6.1%	8	4.8%		10	5.3%	
Aged 25 years and over	1,385	24.3%	69	41.8%		67	35.8%	
Full/Part-time student status not stated	29	0.5%	0	0.0%		0	0.0%	
Total	5,710	4.9%	165	3.4%		187	4.2%	
Other type of educational institution attending:								

	Kingston LGA BCP_LGA23430.xls			Bonbeach BCP_SSC20151.xls			Edithvale BCP_SSC20446.xls		
	No	% within file	% of precinct	No	% within file	% of precinct	No	% within file	% of precinct
Full-time student	348	30.3%		8	20.5%		9	20.9%	
Part-time student	773	67.4%		31	79.5%		30	69.8%	
Full/Part-time student status not stated	26	2.3%		0	0.0%		4	9.3%	
Total	1,147	1.0%		39	0.8%		43	1.0%	
Type of educational institution not stated	8,532	7.3%		485	9.9%		283	6.4%	
Mobility:									
Lived at same address 1 year ago	118,540	83.2%		4,444	77.5%		4,472	82.1%	
Lived at same address 5 years ago	82,156	57.7%	93.7%	2,587	45.1%	2.9%	2,974	54.6%	3.4%
Transport:									
Households without a motor vehicle	4,134	8.0%	91.6%	229	9.8%	5.1%	151	7.4%	3.3%
One motor vehicle	19,497	37.6%	91.3%	1,057	45.2%	5.0%	797	39.3%	3.7%
Two motor vehicles	20,514	39.6%	92.5%	824	35.2%	3.7%	839	41.4%	3.8%
Three motor vehicles	5,312	10.3%	94.2%	162	6.9%	2.9%	166	8.2%	2.9%
Four or more motor vehicles	2,367	4.6%	94.4%	66	2.8%	2.6%	74	3.7%	3.0%

Kingston LGA BCP_LGA23430.xls			Bonbeach BCP_SSC20151.xls			Edithvale BCP_SSC20446.xls		
No	% within file	% of precinct	No	% within file	% of precinct	No	% within file	% of precinct
Journey to work (by one method only):								
Train	7,882	12.4%	91.0%	429	16.4%	5.0%	347	14.4%
Bus	878	1.4%	97.1%	13	0.5%	1.4%	13	0.5%
Ferry	7	0.0%	70.0%	3	0.1%	30.0%	0	0.0%
Tram (includes light rail)	322	0.5%	91.0%	15	0.6%	4.2%	17	0.7%
Taxi	114	0.2%	100.0%	0	0.0%	0.0%	0	0.0%
Car, as driver	46,295	72.6%	92.7%	1,880	72.1%	3.8%	1,746	72.2%
Car, as passenger	3,103	4.9%	94.3%	90	3.5%	2.7%	99	4.1%
Truck	469	0.7%	92.9%	16	0.6%	3.2%	20	0.8%
Motorbike/scooter	256	0.4%	92.8%	10	0.4%	3.6%	10	0.4%
Bicycle	553	0.9%	93.6%	22	0.8%	3.7%	16	0.7%
Other	271	0.4%	90.9%	13	0.5%	4.4%	14	0.6%
Walked only	1,239	1.9%	95.1%	31	1.2%	2.4%	33	1.4%
Worked at home	2,403	3.8%	92.7%	86	3.3%	3.3%	103	4.3%

Appendix C – Risk Assessment

Table C1 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	1×10^{-4}	It has happened elsewhere
G. Highly improbable	1×10^{-5}	Published information exists, but in a slightly different context
H. Almost impossible	1×10^{-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, 314 pp.

Table C2 Consequence table used for the social risk assessment

Qualitative descriptor	Negligible		Minor		Moderate		Major		Extreme
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
	0.1	0.3	1	3	10	30	100	300	1000
SOCIAL Land Use Planning	Negligible impact on existing and potential future land uses. Land use changes consistent with planning policies and zoning.		Minor impact on existing and potential future land uses. Land use changes result in minor inconsistency with local or State planning policies and zoning.		Moderate impact on existing and potential future land uses. Land use changes result in significant inconsistency with local planning policies and zoning.		Major impact on existing and potential future land uses. Land use changes result in significant inconsistency with State planning policies and zoning.		Catastrophic and permanent impact on existing and potential future land uses. Land use changes result in complete inconsistency with local or State planning policies and zoning.
	Construction - noise is just audible. Operation - no increase in noise level.		Construction - noise is audible but within project noise criteria. Operation - noise levels increase but comply with project criteria.		Construction - noise is occasionally above project criteria at sensitive receptors. Operation - noise levels increase slightly and are greater than project criteria.		Construction - noise levels above project criteria for extended periods of time at sensitive receptors. Operation - noise levels increase significantly and are greater than project criteria.		Construction - not applicable. Operation - noise levels significantly above criteria on a permanent basis.
SOCIAL Vibration	Construction - vibration is within applicable limits - no damage to structures. Operation - vibration is within applicable limits - no damage to structures.		Construction - isolated exceedances of project limits - no damage to structures. Operation - isolated exceedances of project limits - no damage to structures.		Construction - extended periods of exceedances of project limits - superficial damage to structures. Operation - extended periods of exceedances of project limits - superficial damage to <3 structures.		Construction - long-term exceedances of project limits - structural damage. Operation - long-term exceedances of project limits - superficial damage to >3 structures, structure damage to <3 structures, damage to heritage structure.		Construction - vibration causes widespread structural damage. Operation - vibration levels significantly above project limits on a permanent basis. Vibration causes widespread structural damage.

Qualitative descriptor	Negligible			Minor			Moderate	Major	Extreme
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
	0.1	0.3		1	3		10	100	1000
SOCIAL Amenity (Recreation)	Short term interruptions in recreational use (1 to 2 days).			Activities restricted in a localised area for short-term periods (months).			Restriction on whole or parts of communities to pursue personal recreational pursuits when visiting the area during construction period. No impact post construction.	Long term inability for whole communities to pursue personal recreational pursuits when visiting the area post construction (> 2 yrs).	Long-term inability for the general community to pursue personal recreational pursuits when visiting the area post-construction (> 10 yrs).
SOCIAL Amenity (Traffic/ air/noise/odour/visual impacts)	Short term impacts that alter perception of area as a high amenity place to live / visit.			Short term (months) localised impacts that alter perception of area as a high amenity place to live / visit.			Medium term (1-2 years) regional impacts that alter perception of area as a high amenity place to live / visit.	Community perception that the area is significantly damaged.	Community perception that the area has experienced major damage.
	Region still seen as attractive place to live.			Region not locally seen as attractive place to live.			Region not widely seen as attractive place to live.	Area loses appeal as residential area. Recovery > 2 yrs.	Area is a place to be avoided. Recovery, if at all, >10 yrs.

Table C3 Social risks

Risk ID	Risk name	Risk pathway	EPR ID (initial)	Initial risk			EPR ID (final)			Residual risk		
				Likelihood	Consequence	Risk	Likelihood	Consequence	Risk	Likelihood	Consequence	Risk
Construction risks												
S 34	Amenity	Construction activities lead to reduced amenity for nearby residents and social infrastructure facilities due to combined impacts from increased noise and vibration, dust, odour, reduced visual amenity, changes to traffic conditions.	EPR SC1 Community and Stakeholder Engagement Management Plan EPR SC2 Respite and Relocation Policy	Certain	Moderate	Moderate	As initial EPR	Certain	Moderate	Moderate		
S 35	Lifestyle disruption (cyclists and pedestrians)	Disruption to cycle paths and pedestrian walkways and pedestrian crossings leading to reduced opportunities for community interaction and active lifestyle.	EPR SC1 Community and Stakeholder Engagement Management Plan EPR T1 Transport Management Plan	Certain	Minor	Minor	As initial EPR	Certain	Minor	Minor		
S 36	Lifestyle disruption (rail and road users)	Disruption to rail and road operations during construction resulting in increased travel times for public transport users and other road users.	EPR SC1 Community and Stakeholder Engagement Management Plan EPR T2 Public Transport Disruption Management Plan	Certain	Minor	Minor	As initial EPR	Certain	Minor	Minor		