

6.5 Boronia Renewal Strategy

SUMMARY: Senior Project Manager – Boronia, Yvonne Rust

A draft Boronia Renewal Strategy 2019 has been prepared to guide redevelopment of the Activity Centre over the next 20 years. This Strategy will supersede the Boronia Structure Plan 2006, including as a reference document in the Knox Planning Scheme. This document will act as the strategic foundation for Planning Scheme Amendment C178knox which will revise the planning controls for the Boronia Activity Centre.

RECOMMENDATION

That Council:

1. Adopt the following documents for the purpose of public exhibition:
 - a. Draft Boronia Renewal Strategy 2019 (Attachment 3);
 - b. Proposed Planning Scheme Amendment C178knox (Attachment 4) and associated Planning Scheme Amendment C178knox maps (Attachment 5).
2. Request officers to write to the Minister for Planning to request an extension of time to the interim controls contained within Design and Development Overlap Schedule 7 until the Planning Scheme Amendment C178knox is completed.
3. Write to the Minister for Planning seeking authorisation to prepare and exhibit Planning Scheme Amendment C178knox to the Knox Planning Scheme, noting the urgency to progress the amendment prior to December 2019 and the impending expiry of interim controls.
4. Subject to receiving authorisation from the Minister for Planning, place Planning Scheme Amendment C178knox on public exhibition for a period of at least one calendar month and aim to conclude exhibition prior to the Christmas period.
5. Request officers to prepare a comprehensive Communications and Engagement Plan, outlining key messages, media platforms that will be used, supporting material to be prepared, i.e. fact sheets, and a summary document that is easy for the community to understand and is accessible to a wide audience, that explains the main changes proposed as part of the proposed amendment.
6. Note the Community Engagement Report contained in Attachment 1 and make it available on Council's website.
7. Adopt the various studies and background reports listed in this report as the strategic basis for the Boronia Renewal Strategy 2019 and the planning controls proposed in Planning Scheme Amendment C178knox, as contained in Attachment 2, and note that these documents will be made available for public viewing during the exhibition period.
8. Authorise the Director City Development to:

- a. **Make minor changes to the draft Boronia Renewal Strategy 2019, including insertion of the final Foreword, where the changes do not alter the purpose or intent of the document;**
- b. **Make minor changes to Planning Scheme Amendment C178knox documentation, where the changes do not affect the purpose or intent of the Amendment;**
- c. **Make changes, where necessary, to the Planning Scheme Amendment C178knox documentation to align with the Planning Policy Framework translation (PPF) process currently being undertaken by the Department of Environment, Land, Water, and Planning; and**
- d. **Confirm that the final designed Boronia Renewal Strategy documents reflects that of the document adopted by Council.**

1. INTRODUCTION

The Boronia Renewal Strategy 2019 and proposed Planning Scheme Amendment C178knox have been prepared based on feedback gathered from the community and the Council over the past 24 months. A Community Engagement Report that details the extensive community consultation and engagement undertaken as part of developing the Boronia Renewal Strategy is included as Attachment 1.

This report provides an overview of these documents for Council's consideration and endorsement. This endorsement will enable Council to seek authorisation to commence the formal planning scheme amendment process as outlined in the Planning and Environment Act 1987.

Background reports and studies

Since the Boronia Renewal Project was last reported to Council at its meeting on 22 October 2018, two further studies have been commissioned are as follows:

- Boronia Activity Centre - Movement and Access Study, November 2018 prepared by GTA Consultants; and
- Boronia Renewal Strategy – Urban Structure Report, March 2019 prepared by Hansen Partnership.

These recent reports form part of a suite of background and technical reports used to inform and prepare the Boronia Renewal Strategy 2019, in particular, the theme chapters and the Planning Scheme Amendment C178knox being:

- Boronia – Economic Demand, Land and Site Options Analysis, November 2017 prepared by Hill PDA Consulting; and
- Boronia Community Services and Facilities Review, June 2018 prepared by Council officers.

Other supporting work completed during this period has been consolidated into the Boronia Renewal Project – Key Planning Issues and Analysis Report, July 2019 prepared by Council officers.

The above background reports are included as Attachment 2.

2. DISCUSSION

Draft Boronia Renewal Strategy 2019

The structure and content of the draft Boronia Renewal Strategy 2019 has been presented to Council previously as this document has evolved. The draft Boronia Renewal Strategy is included as Attachment 3.

The key Strategy features the following components:

- Vision, Key Directions and big Move Projects;
- Theme chapters relating to:
 - Economic Development and Investment;
 - Land Use and Built Form;
 - Movement and Access;
 - Public Realm; and
 - Community Wellbeing and Infrastructure.
- A detailed description of each Precinct within the Activity Centre boundary; and
- A high-level Implementation chapter.

The Renewal Strategy will deliver a range of benefits for the Boronia community including:

- The delivery of 'Big Move Projects', which will assist in delivering the vision for the Activity Centre through long term transformation;
- More people living and working in the town centre;
- Improved local economic conditions and more local jobs;
- A short term work program providing tangible short term change;
- Positive perceptions and experiences of Boronia;
- Efficiently managed Council's assets for the future;
- Planning controls that align redevelopment on private land with the community's and Council's Vision; and
- Stronger, more engaged and cohesive communities.

As the document is large, a Summary document and Implementation Plan will be prepared as separate stand-alone documents. The Summary will be a high-level document and will include the main proposed changes and form the basis of other visual material to be prepared as part of the exhibition process.

Draft Planning Scheme Amendment C178knox

A full set of the draft amendment documents is included in Attachment 4, and all draft maps are included in Attachment 5.

The proposed new planning controls, derived from the Renewal Strategy, affect a range of Clauses in the Knox Planning Scheme, including:

- Municipal Strategic Statement;
- Local Planning Policy Framework;
- Zones; and
- Overlays.

Activity Centre Zone Schedule 1

A draft Activity Centre Zone Schedule 1 (ACZ1) has been created to apply planning controls specifically for the Boronia Activity Centre. The State Government has identified the Activity Centre Zone as the preferred tool to guide and facilitate land use planning in activity centres and has strongly encouraged its application for the Boronia Activity Centre.

This approach is a departure from the current approach in the Knox Planning Scheme which has a range of different zones and schedules, as well as overlay controls, being used to manage the form of redevelopment within the Activity Centre. The ACZ1 has been prepared to apply across the whole Activity Centre to ensure a consistent approach is taken. This allows Council to specify local precinct variations in relation to land use controls, buildings and works requirements, permit exemptions, precinct specific objectives, and provide guidelines beyond that of the standard zones.

Proposed changes in the ACZ1

The land use and built form changes in the proposed ACZ1 can be summarised as follows:

- Revise the Activity Centre boundary by reducing the eastern and western edges in favour of a north-south expansion of the Activity Centre. The changes to the Activity Centre boundary help strengthen the integrity of the Dandenong Foothills by reducing policy conflicts between intent of the Activity Centre and that of the Foothills.
- Intensify mixed use development and redirect residential growth, in the form of apartments, above ground floor uses into the town centre core area within Precincts 1, 2 and 3. This change will also encourage activation at ground level and encourage passive surveillance from upper levels to the public realm.
- Create new public open spaces such as plazas, forecourts and a new town square in the town centre core area to improve amenity, increase landscaping and tree canopy, and attract people and investment into the Activity Centre.
- Rezone 257 Dorset Road (former Youth Hall site) to ACZ1 to enable future mixed use redevelopment and potentially social housing to occur, and for Council to investigate partnership opportunities.
- Adopt a scaled approach to change whereby taller buildings are directed towards the town centre core, and the built form is then scaled down to the surrounding residential areas.
- Retain views identified from Tormore Reserve, Boronia Park and Boronia Road, and allow taller buildings, up to a maximum of 8–10 storeys however subject to lot consolidation, around the intersection of Boronia and Dorset Roads.
- Allow buildings up to a maximum of 4 storeys in the residential neighbourhoods, to achieve a slightly taller built form with small footprint, allowing for additional tree canopy planting and landscaping through lot consolidation and application of minimum lot widths.
- Exempt some planning permit proposals from advertising/notice requirements.

Building heights and viewlines

Building heights and viewlines have been a key consideration in the preparation of new planning controls. A 3D model was prepared to test the impact of buildings at various heights and locations

in the town centre core area, on views to the Dandenong Ranges. An upper limit of 10 storeys was tested around the intersection of Dorset Road and Boronia Road. This analysis was undertaken for several reasons:

- This land is towards the low point in the town centre;
- The additional height and potential yield will create a critical mass for activation and a landmark location;
- Testing an extreme condition allows Council to be ready to respond to market pressure;
- It verified that views can be retained; and
- It supports the inclusion of mandatory height controls.

Results from this model demonstrated that the low-lying area near the intersection of Dorset and Boronia Roads can accommodate buildings up to 10 storeys without blocking the views from the western edge. Building heights of 5–8 storeys that transition away from this major intersection, were also tested at different locations in the town centre. This assessment confirmed that additional building heights could be accommodated in the core area without a significant impact on the views to the Dandenong Ranges.

The designated heights will ensure that anticipated growth can be accommodated within the Activity Centre, while providing Council with the ability to request mandatory height controls. If heights were lower, it is unlikely that mandatory height controls would be supported by the Department of Environment, Land, Water, and Planning (DELWP) and the Minister for Planning.

Notification required in the ACZ1

A key change of the ACZ is the ability to exempt certain planning permit proposals from the notice/advertising requirements currently applied. This Clause is intended to streamline the permit process for uses that fit with the objectives of the zone and precinct, as well as meet the prescribed requirements. An example would be a proposal for an office at ground level with several levels of apartments above in Precinct 1, that fits within the mandatory height controls and meets all the other design and development requirements – this proposal would not be notified/advertised. This limits the ability for objections to be lodged and prevents third party appeals to VCAT. This Clause does not negate the normal statutory planning and design assessment process or Council's ability to apply conditions or refuse a planning permit application.

Increasing the notice/advertising requirements in the ACZ must have a clear strategic justification and be supported by evidence of need. The zone controls have been drafted with conditions that require specific uses, such as a bottle shop, brothel, gambling premise or nightclub to be automatically notified/ advertised, as these uses are directly associated with existing and well documented issues in the area. In addition, all applications in residential precincts are proposed to be advertised.

Time extension for existing interim controls

In May 2019, the approach to the Planning Scheme Amendment C178knox changed from using existing zones to preparing a tailored Activity Centre Zone specifically for Boronia. This change was required in response to advice received from DELWP and to align with current activity centre planning principles. The additional time taken to prepare this new zone has resulted in a further delay in the overall amendment process. Subsequently there will be a gap between the expiry of existing controls (15 December 2019) and approval of C178knox. A letter to the Minister for

Planning, to seek a further extension of time to the interim controls will be required to cover the gap. This is recommended to be undertaken under section 20(4) of the Planning and Environment Act 1987 and is included as Attachment 6.

Planning Scheme Amendment C178knox timeline

The next steps for the Planning Scheme Amendment C178knox process have been adjusted based on the standard process as set out in the Planning and Environment Act 1987 and are summarised in Table 1 below. It should be noted that not all steps listed are completely within Council's control, and this reflects a best case scenario. For example, the amendment authorisation may not be provided by DELWP within 10 days, and may be subject to conditions requiring further work or explanation.

Council consideration to adopt draft Boronia Renewal Strategy and proposed Planning Scheme Amendment C178knox	26 Aug	
Submit application to DELWP for Authorisation	Early Sept	Send letter with draft documents
10 days for DELWP to authorise	Sept	With or without changes (Can impact on timelines)
Submit exhibition docs to DELWP 10 days prior to first notice	Mid Oct	Final package of amendment documents and maps
First notice to owner/occupiers	Late Oct	Letter to all affected parties, Ministers and Referral Authorities
Public notice in Knox Leader and Government Gazette	Late Oct	Required notice
Closing date for submissions	Early Dec	Minimum 1 calendar month from Government Gazette

Table 1 – Proposed C178knox amendment exhibition timetable

Upon receipt of authorisation, Officers will advise Council of any conditions attached to the authorisation and any actions/ changes to the proposed amendment necessary to meet the conditions and commence exhibition.

While the priority is on completing exhibition prior to the Christmas period there are several factors that may extend this timeframe further into 2020, i.e. varied exhibition period, time taken for Ministerial decisions and receipt of a large number of submissions. Following exhibition, all submissions will be reported to Council for consideration. At this later Council meeting, Council can decide whether to forward the submissions to an independent Planning Panel for review. The Panel Hearing will likely occur in the first part of 2020.

Knox Planning Scheme Planning Policy Framework translation

A separate process relevant to the Planning Scheme Amendment C178knox, is outlined as follows:

- DELWP introduced the Smart Planning program in 2018 which is intended to make Victoria's planning system more efficient, digital, and responsive.

- A new Planning Policy Framework (PPF) is being drafted for the Knox Planning Scheme to improve the operation and alignment of policy at State, Regional and Local levels as well as Municipal Strategic Statements. Councillors were advised of upcoming PPF changes in a memo dated 4 February 2019.
- The final draft of the PPF is yet to be received and there is no defined timeline for finalising this process.
- It is important to be aware that the format and content of Planning Scheme Amendment C178knox may be adjusted to align with the PPF translation if it comes into effect prior to exhibition.

3. CONSULTATION

- Insights gained from community views have played an important part in shaping the long-term vision for Boronia;
- A summary of the consultation and engagement undertaken has been presented to Council;
- Ongoing internal consultation through the Project Control Group has ensured the coordination and integration of objectives, strategies and actions;
- Further public consultation will be held during a four-week exhibition period that forms part of the Planning Scheme Amendment process; and
- The further consultation as part of the Planning Scheme Amendment process will be guided by a Communications and Engagement Plan, prepared in conjunction with the Communications Department.

4. ENVIRONMENTAL/AMENITY ISSUES

The Renewal Strategy includes:

- Strategies and actions that seek to improve the amenity of the public realm, including the enhancement of Boronia Park and street tree planting.
- Strategies and actions that will direct the design of future redevelopment and infrastructure to respond to identified environmental issues;
- Requirements for a high level of internal and external amenity for new developments while balancing the amenity of adjoining properties; and
- Application of an Environmental Audit Overlay where there is potentially contaminated land.

5. FINANCIAL & ECONOMIC IMPLICATIONS

This project has identified several financial and economic implications for Council as follows:

- Funding to implement projects will be required from a broad range of potential partners from the private sector, not-for-profit and State Government agencies;
- Further training may be required in the City Planning & Building team to apply the Activity Centre Zone provisions; and
- Identified Big Move Projects, capital works projects and actions will require business case preparation and will be subject to future budget planning considerations.

6. SOCIAL IMPLICATIONS

This project has identified the following social implications:

- A key objective of the Boronia Renewal Strategy is to create an Activity Centre that is the social and cultural heart of Boronia;
- The renewal and intensification of Boronia Activity Centre will increase the vibrancy and bring new businesses to the centre, therefore increasing jobs; and
- The Boronia Renewal Strategy and subsequent Implementation Plan will take a place-based approach to coordinating the planning for Council's interventions in the Activity Centre.

7. RELEVANCE TO KNOX COMMUNITY AND COUNCIL PLAN 2017-2021

Goal 1 - We value our natural and built environment

Strategy 1.1 - Protect and enhance our natural environment

Strategy 1.3 - Ensure the Knox local character is protected and enhanced through the design and location of urban development and infrastructure

Goal 2 - We have housing to meet our changing needs

Strategy 2.1 - Plan for a diversity of housing in appropriate locations

Strategy 2.2 - Encourage high quality sustainable design

Strategy 2.3 - Support the delivery of a range of housing that addresses housing and living affordability needs

Goal 3 - We can move around easily

Strategy 3.1 - Enable improved transport choices supported by integrated and sustainable transport systems and infrastructure

Strategy 3.2 - Improve bike and footpath connectivity, including identifying gaps between existing bike routes, footpaths and key places

Goal 4 - We are safe and secure

Strategy 4.1 - Encourage and support the community to take responsibility for their own safety, and the safety of others

Strategy 4.2 - Enhance community connectedness opportunities to improve perceptions of safety

Strategy 4.3 - Maintain and manage the safety of the natural and built environment

Goal 5 - We have a strong regional economy, local employment and learning opportunities

Strategy 5.1 - Attract new investment to Knox and support the development of existing local businesses, with particular focus on Advanced Manufacturing, Health, Ageing and Business Service sectors

Strategy 5.2 - Plan for a range of key strategic centres that provide a diversity of employment, services and amenities to support the changing needs of our community

Goal 7 - We are inclusive, feel a sense of belonging and value our identity

Strategy 7.3 - Strengthen community connections

Goal 8 - We have confidence in decision making

Strategy 8.2 - Enable the community to participate in a wide range of engagement activities

8. CONFLICT OF INTEREST

Under section 80c of the Local Government Act 1989 officers providing advice to Council must disclose any interests, including the type of interest.

Author – Senior Project Manager – Boronia, Yvonne Rust - In providing this advice as the Author, I have no disclosable interests in this report.

Author – Manager, City Futures, Anthony Petherbridge - In providing this advice as the Author, I have no disclosable interests in this report.

Officer Responsible – Director, City Development, Matt Kelleher - In providing this advice as the Officer Responsible, I have no disclosable interests in this report. Director, City Development, Matt Kelleher

9. CONCLUSION

This report presents the draft Boronia Renewal Strategy 2019 and the Planning Scheme Amendment C178knox for Council's consideration and adoption prior to commencing the formal planning scheme amendment process. In addition, a further time extension is required for the interim Design and Development Overlay (Schedule 7) that is due to expire in December 2019.

The Boronia Renewal Strategy 2019 is based on a comprehensive community engagement program, research, analysis and findings contained in several background reports that have been reported to the Council previously. This analysis provides Council with a robust rationale for substantial change within the town centre core area, which is required to trigger urban renewal. The Renewal Strategy serves as a foundation document and sets out the strategic justification for changes to the planning controls within the Knox Planning Scheme.

The proposed Planning Scheme Amendment C178knox uses the Activity Centre Zone, which enables planning controls to be tailored to achieve the desired outcomes in specific precincts within the Activity Centre.

Parallel to this process, a range of short term actions and several integration projects in the 2019/2020 work program will continue. These projects will deliver tangible outcomes for the community and maintain momentum for the Boronia Renewal Project.

10. CONFIDENTIALITY

There are no items of a confidential nature in this report.

Report Prepared By: Senior Project Manager – Boronia, Yvonne Rust

Report Authorised By: Director, City Development, Matt Kelleher

Attachments

1. Attachment 1 - Community Engagement Summary Report [**6.5.1** - 50 pages]
2. Attachment 2 - Background Reports [**6.5.2** - 388 pages]
3. Attachment 3 - Boronia Renewal Strategy [**6.5.3** - 158 pages]
4. Attachment 4 - C 178 knox - Combined Amendment documents [**6.5.4** - 177 pages]
5. Attachment 5- C 178 knox Combined maps for exhibition [**6.5.5** - 4 pages]



Boronia Renewal Project

Boronia Renewal Project
Community
Engagement Report

knox
Boronia
Renewal Strategy



We want to hear from you.

Boronia is changing and Knox City Council wants your feedback on our draft Boronia Renewal Strategy.





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1.0 Introduction

This report outlines the processes and findings of the community engagement undertaken as part of the Boronia Renewal Project. This project involved the review of the 10-year old Boronia Structure Plan with consideration of the current and future role of the Activity Centre for the next twenty years, particularly in regard to built form, social, economic and environmental issues, as well as examining future options for Council's aging infrastructure and services to the community.

The project scope sets out the following objectives in the table below.

OBJECTIVE	PROMISE
To involve stakeholders (including Councillors, Council staff and Community Organisations) in a Charrette/workshop to assist in identifying key directions to inform the development of the Boronia Renewal Strategy.	Involvement will inform the Key Direction Report being presented to Council.
To undertake appropriate targeted consultation with stakeholders in order to inform the development of the Boronia Renewal Strategy.	Targeted consultation is undertaken as part of evidence collection and key directions report Targeted consultation will be undertaken with: <ul style="list-style-type: none"> • Key departments across Council • Community Agency Stakeholders • Councillors
To inform community members and stakeholders through a range of communication methods on the project development.	Community members and stakeholders will be kept up to date regarding each stage of the project.
To seek feedback from community stakeholders on the Draft Boronia Renewal Strategy.	Feedback will be considered by Council.
To meet the statutory requirements to review and update the Planning Scheme Amendment.	Formal statutory process through public exhibition and Panel hearings.
To receive submissions on the proposed planning scheme amendment that implements changes to the Knox Planning Scheme.	Submissions will be considered by Council and referred to an independent Planning Panel, if required.

A proportion of the engagement for this project also involved seeking the views of Council officers and key State government stakeholders in relation to the current infrastructure, as well as social and cultural service environment and future service trends that would have been noted by these stakeholders. The main step, and purpose of this report, was the engagement with the community to understand the strengths, aspirations, needs and expectations of a future Boronia.

This information will then be used by officers to develop Council's draft Boronia Renewal Strategy to be exhibited for public comment along with the proposed Planning Scheme Amendment in mid-2019.

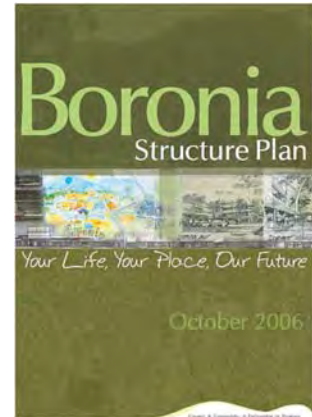
The following document provides a summary of the key outcomes from the external stakeholders and community engagement phase of the Boronia Renewal project.

2.0 Project Background

2.1 The Context

The Boronia Renewal Project commenced with Council responsibilities to review the Boronia Structure Plan 2006 and address identified issues for the Boronia Community as well as review Knox Planning Scheme controls that are due to expire in December 2019.

The original Structure Plan was aligned to the then State Government policy framework *Melbourne 2030: Planning for Sustainable Growth* which stretched across the wider Melbourne metropolitan area identifying where growth should occur. The metropolitan strategy identified Boronia as a Major Activity Centre, outlining several conditions that were necessary for the Centre to perform well.



This State Government metropolitan strategy eventually evolved to become *Plan Melbourne 2017-2050*, retaining Boronia as a Major Activity Centre but providing updated vision, guidelines and deliveries for the metropolitan area.



2.2 Project Drivers

Further analysis to reconsider the Activity Centre boundary and controls within the Knox Planning Scheme was requested by the Minister of Planning along with the recommendations of the *Department of Environment, Land, Water, and Planning* to review structure plans every four years.

Moreover, today's Boronia is very different from the Boronia of 2006 and the expedited rate of change will result in a vastly different place by 2036. Council assets are aging and nearing the end of their lifespan with the Boronia Activity Centre being under growth pressure from built, social, economic, and environmental issues. A review of the Boronia Structure Plan 2006 revealed that despite the bulk of the Structure Plan's action have been completed, some issues persisted. This highlighted that a "*business as usual*" approach will not break entrenched issues and negative perceptions affecting Boronia. As such, a realignment of past approaches with new thinking would be necessary to set a new vision to lead Boronia towards a safe and secure future.

2.3 The Project and Study Area

The Boronia Renewal Project works begun following its adoption in September 2017; aiming to create a Renewal Strategy that will be a Strategic Planning document which establishes key directions for the future of Boronia. A comprehensive approach has been favored in recognition of the need to initiate change on multiple fronts through a multi-disciplinary renewal strategy.

The Project comprises, although not limited to, consolidated Background Report, Technical Studies, Implementation Plan, Built Form guidelines, and the subsequent Planning Scheme Amendment.



Figure 1 – Boronia Activity Centre and surrounding study area.

The study area comprises the current Boronia Activity Centre and surrounding fringe.

Overall, there are four stages of delivery to the project namely:

STAGE	OUTPUT
<p>STAGE 1</p> <p>Background and research</p>	<ul style="list-style-type: none"> - Consolidated Background: <ul style="list-style-type: none"> o Movement and Access Study; o Car Parking Audit; o Land Use and Built Form Structure and Transformation; o Walkability; o Planning Advice to assist delivery of the Boronia Renewal Strategy (Planning controls, Activity Centre Boundary, Parking Overlay); o Boronia Economic Demand, Land & Site Options Analysis; o Knox City Heritage Advice; o Population growth, Social & Community Profile; o Assets, Community Service & Facility needs.

STAGE	OUTPUT
	- Community Consultations – (e.g. Boronia Future Community Survey, and other workshops).
STAGE 2 Strategy development	- Key Directions Report; - Creating a Safer Boronia Strategy: <ul style="list-style-type: none"> o Safer Communities Fund Grant; o Boronia CCTV renewal program. - Draft Boronia Strategic Community Plan; - Draft Planning Scheme Amendment; - Draft Boronia Park Civic Concept Plan.
STAGE 3 Implementation	- Final Boronia Strategic Community Plan; - Final Boronia Park Civic Concept Plan; - Planning Scheme Amendment.
STAGE 4 Ongoing service delivery	- Boronia Park Master Plan; - Upgrading lighting and walking paths.

As part of this, a new structure plan is required to guide and coordinate actions that will shape the future redevelopment of the Boronia Town Centre and its surrounding neighbourhood. This new Structure Plan will be implemented to the Knox Planning Scheme via a Planning Scheme Amendment.

The deliverable of this project to date has been a collaborative effort between:

- Knox City Council’s City Futures Team
- Knox City Council’s Community Infrastructure Team
- Knox City Council’s Sustainable Infrastructure Team
- Knox City Council’s Community Services Team
- Knox City Council’s Communications Team
- Hansen Partnership
- GTA Consultants
- Glossop Town Planning
- HillPDA Consulting

2.3.1 Aim

The purpose of this report is to provide an overview of the community engagement activities and communication that were taken as part of, or influenced, the Boronia Renewal Project. This report draws together ideas and feedback received from the community and a range of stakeholders with an interest in Boronia.

This report captures all the Community Engagement activity undertaken as part of Stage 1 - Background and Research, and Stage 2 – Strategy development of the Boronia Renewal Project, compiling the key findings that helped drawing the conclusion, i.e. the storyline, for Stage 3 of the project. Further Community Engagement Consultation will take place at Stage 3 – Implementation during the exhibition of the Planning Scheme Amendment and will comprise a separate addendum adding to this report at a later stage.

The Community Engagement Plan for the Boronia Renewal Project comprised a communication strategy which together with the purpose of the Boronia Renewal Project aimed:

- To inform identified key audiences about the project, its deliverables, and outcomes.

- To build long term relationships with the community and key stakeholders to support the preparation of a Renewal Strategy and its implementation.
- To share specific information about Boronia sourced from the Community and Council Plan and a review of the 2006 Boronia Structure Plan.
- To highlight facets of the project.
- To invite feedback from, and to give feedback to, the community, within agreed timeframe. And,
- To identify opportunities for community intervention and input on future priorities.

To help achieve this project Council identified key audiences, key messages and the most appropriate communication channels as part of the community engagement approach outlined below in section 3.

3.0 Engagement Methodology

Knox Council has an ongoing commitment to engaging with its community (particularly those who will be effected by a decision) to support well informed decision making, governance and democracy. The Boronia Renewal Project recognises the diversity of skills, views and expertise embedded in the community and these are being harnessed to improve planning and decision-making.

A Boronia Renewal Communications Strategy was developed to express the purpose, goals and measurement for engaging with identified key audiences about the project, its deliverable and outcomes. It also identifies key stakeholders, key messages and supporting messages of this project.

As this project addresses multiple issues in Boronia, it is important to reach as broad an audience as possible.

The following key actions and methodologies were identified for the community engagement process to gain input from Council staff, community members, stakeholders and partners in Boronia:

METHOD OF COMMUNICATION USED	EXAMPLE OF COMMUNICATION UNDERTAKEN
Web updates	<ul style="list-style-type: none"> • Dedicated Boronia Renewal Project webpage with regular updates and links to documents; • Ability to provide feedback through Knox “have your say” website. • Links to online surveys.
Subscriber bulletins	<ul style="list-style-type: none"> • Bi-monthly digital Boronia information bulletin emailed to subscriber (<i>voluntary subscription</i>).
Media releases and Local Community Paper	<ul style="list-style-type: none"> • Social media promotion reaching and feedback; • Local media and community paper article and advertisement with: <ul style="list-style-type: none"> ○ Knox Leader; ○ Boronia-Basin Community News. • Council’s ‘Knox Biz’ economic information bulletin.
Other Communications	<ul style="list-style-type: none"> • Promoting advertisement: <ul style="list-style-type: none"> ○ Bus shelters advertising; ○ Council lobby buildings advertising; • Distributed information Booklets and promotion postcards; • Radio Segment; • Social media advertising; • Focus project mail out to owners, residents and retailers; • Stakeholders’ electronic mailing lists.

METHOD OF COMMUNICATION USED	EXAMPLE OF COMMUNICATION UNDERTAKEN
Community Information Sessions	<ul style="list-style-type: none"> • Surveys; • Community Conversation Sessions and workshop; • Walking tours.
Focus Group and workshops	<ul style="list-style-type: none"> • Stakeholders workshops (Service providers - Government agencies); • Traders & Business workshop.
Council and Councillors meetings	<ul style="list-style-type: none"> • Councillors briefing; • Council meeting; • Council staff and Councillors workshop - walking tour; • EMT briefing.
Scheme Amendment Exhibition	<ul style="list-style-type: none"> • Refer to Addendum document.

3.1 Engagement Objectives

The overall community engagement objectives for the project were to:

OBJECTIVE	PROMISE
To seek advice from community members on their vision and aspirations for Boronia.	Community members and stakeholders will be kept up to date regarding each stage of the project.
To involve stakeholders (including Councillors, Council staff and Community Organisations) in a Charrette to assist in identifying key directions to inform the development of the Boronia Strategic Community Plan.	Involvement will inform the Key Direction Report being presented to Council.
To seek feedback from community members on the draft Key Directions.	Feedback will be considered by Council.
To inform community members and stakeholders through a range of communication methods on the project development.	Community members and stakeholders will be kept up to date regarding each stage of the project.
To seek feedback from community stakeholders on the Draft Boronia Strategic Community Plan.	Feedback will be considered by Council.
To receive submissions on the proposed planning scheme amendment that implements changes to the Knox Planning Scheme.	Submissions will be considered by Council and referred to an independent Planning Panel, if required.

The key message for all engagement in this project was:

‘Boronia is one of our oldest suburbs and is undergoing significant change. Council is committed to working with community to revitalise this much loved area.’

A mix of communication channels and methodologies were utilised in order to best match messages and ensure that they get to the right audience in a timely and effective fashion.

3.2 Engagement Planning and Activities

Engagement Plan Overview

KEY ENGAGEMENT	WHEN	PROJECT STAGE RELATED
Boronia Future Community Survey	Oct-Nov 2017	Stage 1 - Background and Research
Community Conversation Session	27 Oct 2017	Stage 1 - Background and Research
Workshop - Traders & Business workshop	6 Feb 2018	Stage 1 - Background and Research
Workshop - Service Providers	15 Feb 2018	Stage 1 - Background and Research
Workshop - Community Groups	15 Feb 2018	Stage 1 - Background and Research
Car parking Community Survey	Apr 2018	Stage 2 – Strategy development
Councillor ‘Wayfinding’ walking tour of Boronia	19 Apr 2018	Stage 1 - Background and Research
Instagram #Trees of Boronia	May 2018	Stage 2 – Strategy development
Safety Perceptions Survey	Jun 2018	Stage 2 – Strategy development
Creating Safer Boronia walking tours and workshops	9 to 11 Oct 2018	Stage 3 – Implementation Stage 4 – Ongoing service delivery
Community Information Drop-In Session and Draft Renewal Strategy Survey	13 Nov 2018 Nov-Dec 2018	Stage 2 – Strategy development
Youth Perspective Survey and, Young Children’s Views of Boronia	Nov-Dec 2018 Nov-Dec 2018	Stage 2 – Strategy development Stage 2 – Strategy development
Movement and Access Focus Group	19 Dec 2018	Stage 2 – Strategy development
Stakeholders one-on-one meetings	Various Date	Stage 2 – Strategy development
Planning Scheme Amendment Exhibition	TBA – Part 2	Stage 3 - Implementation

AUDIENCE/KEY STAKEHOLDERS	
Boronia property owners	Residential, business, investors.
Boronia residents	Tenants, Owner-occupiers.
Boronia retailers/traders	Business owners and operators.
Knox and Boronia community	Residents, visitors, workers, Boronia facility/service users (Early years centres, library).
Boronia community groups	Sporting, Seniors, Youth, Recreation/Leisure Groups, and faith-based groups.
Councillors and Council staffs City of Knox advisory committees	Local Councillors, Council, Senior Management, City Development, Corporate Services, Community Services, Engineering and Infrastructure; Community formed advisory committees.

AUDIENCE/KEY STAKEHOLDERS	
Local elected members	State and Federal representatives.
State and Federal government	Government Agencies and Authorities.
Agencies and service providers	Not-for-profit, social enterprise, utilities and infrastructure providers.

A detailed stakeholder database was developed to provide points of contact for the purpose of community engagement associated with the Boronia Renewal Project. The database comprises people from the following areas of interest/expertise in the following thematic:

- Local Knox Councillors and relevant officers;
- Local State and Federal politicians and relevant representatives;
- Traders and business operators in Boronia;
- Agencies and Service providers from Not for Profit organisations, State and Federal Government, Hard infrastructure providers;
- Community Groups in Boronia;
- Community members, visitors, owners and residents, who have registered an interest in the project for a recurring e-newsletter.

3.2 Previous Relevant Engagement

The community engagement builds on the extensive consultation undertaken as part of the preparation of the 2006 Structure Plan and other community engagement prior to the Boronia Renewal Project.

The following engagement activities occurred in Boronia over the past four years. Information from the local community on these projects has been helpful in gaining a better understanding of their thoughts on the key issues raised. The four projects were:

- Renew Boronia – a local economic renewal project (2014);
- Boronia Library Redevelopment Feasibility Study (2015);
- Boronia CCTV Project (2015);
- Knox Community and Council Plan (2017).

3.3 Online Surveys

3.3.1 Boronia Future Community Survey

Purpose and Audience

The Boronia Future Community Survey was initiated as a means of promoting the Boronia Renewal Project and gave a direct opportunity for the community to influence the directions of the project from its earliest stages. It provided people with the opportunity to stay informed about the project through receiving regular updates.

The survey audience was to consult with the community at large, especially people interested in the future of Boronia, and particularly people who live, work and play in Boronia. The survey was widely distributed and open to all, it was not a requirement that respondents had an immediate connection to Boronia in order to provide their thoughts and opinions.

Communication of Event

The survey was open from the 23 October to 17 November 2017, and administered through a combination of online and hard copy questionnaires. The online portal was the primary means for its convenience, efficiency in data collection, and

ease of distribution. However, hard copy questionnaires were available at the community conversations event, upon request, or through being combined with supported service provider interactions, particularly with aged care services.

The survey was publicised by Council through a combination of the following:

- Link posted on the Knox website for the duration of the survey, including;
 - The “*Haveyoursay*” Knox page;
 - The development of a Boronia Renewal Project page;
 - Announcement on the Knox City Council main page.
- Displayed on screen at Civic Centre Customer Service Counter for the duration of the survey;
- Paid advertisement in the Knox Leader during the week of 15 October 2017;
- Emails sent to Boronia community groups, service providers and agencies advising about the project with a link to the survey asking them to promote it to their members during the week of 23 October 2017;
- Social media advertisement (Facebook and Twitter) to a local area in Boronia on 24, 27, and 31 October and 15 November 2017;
- School newsletter notice for Boronia K-12, Boronia West and St Joseph’s Primary Schools during the week of 23 October 2017;
- In-person Community Conversation Sessions in front of Coles/Kmart and Dan Murphy’s in Boronia from 9 AM – 12 noon on Saturday, 28 October 2017 [refer to Section 3.7.1];
- Flyers with information and the survey web link left at key council facilities in the Activity Centre (e.g. Knox Leisureworks, Boronia Library, Park Crescent Child Care and Maternal and Child Health Centre, Boronia Senior Citizens, and Knox Infolink).

The most successful method was the social media advertisement on Facebook and Twitter. In addition to Council’s promotion and regular prompts, a community member posted a link to the online survey on Facebook, in response to a post by the Knox Leader related to their article about the Boronia Mall. This was at the time when the survey opened. It is likely that this independent community promotion, along with word of mouth in other forums, also helped contribute to the significant engagement levels that the survey generated.

Brief Description

The data collection tool for this phase of community engagement was a short, self-administered survey including both quantitative and qualitative open-ended questions. The survey comprised of ten questions, some with multiple parts, aimed at understanding what people most like and dislike about Boronia, how often people visit certain community facilities and places in Boronia, and people’s suggested recommendations for future planning.

Socio-demographic questions included age (service age groups), household size (number of people), and residential location (street name in Boronia or postcode outside Boronia). Information related to Aboriginal and Torres Strait Islander status and gender were not collected due to privacy concerns and potential impacts on participation.

In recognition of many people’s time constraints, the online survey was designed to be quick and easy for people to fill out at their convenience.

The response rate was very good with 527 surveys completed. This included approximately 487 completed on line and 40 hard copies (which were manually keyed in). It represented a good age range of people from 18 – 70+ years and was mildly comparable to the Boronia population. In particular there was:

- An under representation of the oldest age groups (70-84 and 85 and over) and the younger adults (18-24);
- An over representation of the 25-49 year olds ;
- A similar representation of 50-59 and 60-69 year olds;
- 300 respondents identified as Boronia residents.

Results and Key Findings

The lists below demonstrate the top feedback gathered from this consultation. These have been grouped as the five responses as to what people liked, disliked and what Council’s future planning should focus on.

The top 5 responses to what people like about Boronia were:

1. Environment, parks and open space (185)
2. Shopping, access and convenience (139)
3. Good access to public transport and major roads (124)
4. Central convenient location (91)
5. Close to the hills, country (72)

The top 5 responses to what people least liked about Boronia were:

1. Boronia Mall outdated- public behaviour – safety (164)
2. High density – over development (135)
3. Outdated and rundown buildings – shops – areas (99)
4. Drugs (88)
5. Crime and safety (85)

The top 5 responses to what people feel Council's future planning should be focused on were:

1. Rejuvenate Boronia Mall (150)*
2. No more housing development (108)
3. Vibrant shopping centre (106)
4. Retain and maintain open spaces and green (105)
5. More parking (82)

* This post was cross referenced in an earlier post from the Knox Leader about the Boronia Mall and included a link to the survey/webpage which may explain its popularity and possible impact on the Boronia Survey Results

The survey indicated that the top five services and venues visited weekly in Boronia are:

1. The Boronia Mall (38)
2. Boronia Basketball Stadium (16)
3. Knox Leisureworks (16)
4. Chandler Park Reserve (13)
5. Boronia Park (10)

The answers do highlight there is a shared view about particular issues regarding the condition of the town centre. The following matters were raised with a certain level of commonality.

- Importance of parks and open space, the range of shopping opportunities, and good transport connections across all age groups and household types surveyed.
- Concerns about poor amenity, public safety, and anti-social behavior around the shops, with a particular focus on drugs as a problem amongst people 18-24 years old.
- Frequent suggestions related to refurbishment of the Boronia Mall, particularly amongst people 18-49 years old.
- Perceived overdevelopment was a key concern driven primarily by people over the age of 50, though it was also mentioned by other respondents.
- Boronia Mall is relatively well patronized, with 38% of respondents reporting they visit weekly and only 6% reporting they don't visit at all.
- Basketball Stadium visits are mixed, with 16% of respondents reporting they visited weekly and 60% reporting they didn't visit at all.
- Facilities like the Boronia Progress Hall, Senior Citizens Centre, and St. Johns Ambulance hall may be underutilized, which suggests opportunities to improve or broaden access.

This exercise has also had secondary benefits to the Boronia Renewal Project by providing learnings outside its core purpose:

- A large number of respondents (250) registered their interest in participating in the project and this group can be harnessed as a touchpoint for gathering feedback on specific issues.
- The response has suggested a high digital literacy rate of the community, which could enable Council to make better use of social media platforms to generate project awareness, share information and make process adjustments to better respond to the community

3.3.2 Car parking survey

Purpose and Audience

One of the feedback of the Boronia Future Community Survey identified '*more car parking*' amongst the top five priority that should be focused on in Boronia. The car parking survey was initiated to investigate this topic closer with the intent to gather information on how the various parking spaces/locations are currently used, identify usage pattern and hotspots. This information is intended to be used to:

- Plan for future growth in and around the town centre;
- Provide feedback useful for the preparation of the Boronia Parking Management Plan; and
- Sow seeds for behaviour change to active modes.

The car parking issues in Boronia was also accompanied by a Car parking Audit undertaken by Council officers which, together with the Car parking Community Survey, will intend to guide the future development of a Parking Management Plan for Boronia.

The primary audience was that of any persons living, working, or travelling and commuting to/from/via Boronia, whether by any means of transportation, so as to draw an overall picture on car parking issues in particular but also on mobility in general.

Communication of Event

The survey was open from 1 April to 30 April 2018, and administered online. The survey was circulated initially to our 'Registered interest pool' of 300 email addressed and also drew on the traders and business operators database. The survey was set to coincide with an article in the April edition of the Boronia/Basin Community Newspaper and further promoted through the Boronia Renewal website.

The survey was publicised by Council through a combination of the following:

- Link posted on the Knox website for the duration of the survey, including:
 - The "*Haveyoursay*" Knox page;
 - The Boronia Renewal Project page;
 - Announcement on the Knox City Council main page.
- Boronia E-newsletter emailed to Community subscribers.
- Emails sent to community groups and traders/business operators.
- Article on April edition of the Boronia Basin Community News.
- Paid advertisement in the Knox Leader during the week of 17 April 2018.
- Displayed on screen at Civic Centre Customer Service Counter for the duration of the survey
- Social media advertisement (Facebook and Twitter) with post on Facebook on 7, 19, and 29 April 2018 and promotion via Twitter on 1 and 27 April 2018.



The most successful method of distribution was estimated to be Council E-Newsletter which drew 70 visits to the survey, accounting for approximately 1/5 of all respondents through this medium alone.

It is also noted that the social advertisement of the survey via Facebook received some attention. These comments are discussed at **Section 3.4.4**.

Brief Description

The data collection tool for this was a self-administered survey including mostly quantitative and some qualitative open-ended questions. The survey comprised a total of 41 questions overall with section dedicated to residents/visitors or to business/employees. The survey aimed at understanding usage patterns, identifying problematic areas, and demand in relation with behaviour.

Socio-demographic questions included: gender, age (service age groups), employment status, possession of a disable parking permit, household size (number of people, number of bedrooms), and residential location (suburb, if applicable - street in Boronia). Information about vehicle ownership and parking (type of vehicle, car parking provision), mode of travel, and parking behaviour within Boronia were also asked.

In recognition of many people's time constraints, the online survey was designed to be quick and easy for people to fill out at their convenience.

The response rate was good with 357 surveys completed online. It represented 50% of respondents living in Boronia for a total of 88% being Knox residents.

Results and Key Findings

The lists below demonstrate the top feedback gathered from this consultation. These have been grouped as the top five responses with regard to vehicle ownership per household, street parking, and car parking popularity.

Top three number of car ownership/Boronia household:

- 1- 2 cars (88 respondents)
- 2- 1 car (37 respondents)
- 3- 3 cars (25 respondents)

Top three number of bicycles ownership/Boronia household:

- 1- 2 bicycles (19 respondents)
- 2- 1 bicycles (19 respondents)
- 3- No bicycles (18 respondents)

Top 5 reasons for parking in the street (of 172 car owner respondent whom park on the street):

1. Only using space for a short time (31 respondents)
2. Not enough visitor parking (22 respondents)
3. Easier access (13 respondents)
4. There is limited space off street (9 respondents)
5. The parking space is used for storage (7 respondents)

Main method of transportation to visit Boronia Town Centre:

- 90.5% drive themselves.
- 55% identified they can find a car parking spaces within 5 minutes.
- 75% identified that the parking limitations are adequate.

Top 5 most used car park:

1. Dorset Square
2. Boronia Junction
3. Boronia Village
4. Dan Murphys
5. Coles multi-level

The answers do highlight the following matters:

- A high percentage of females completed the survey representing 65% of all respondents;
- Young adults and youth (less than 25 years of age) were unrepresented in this survey, being only 4% of respondents;
- In general, respondents who live in two or three person households, have more bedrooms than people. However, four and five person households have less bedrooms than people. For instance One-person households predominately live in two or three bedroom dwellings while respondents who live in four person households, mostly live in three bedroom dwellings.
- The average car ownership for Boronia residents equates to approximately 2.4 vehicles per person, making Boronia highly car dependent.

- Reasons for parking on the street was largely the residents' choice rather than by lack of private car parking spaces although 54% of respondents said there is not enough on street parking despite that 75% said they rarely park on the street.
- 58% of respondents said parking after 6pm was an issue, with the width/layout of street and parallel parking being the main problem identified as leading to busy and congested road. The limitations on the ability for vehicle to pass each other freely appears to be the main issue.

3.3.3 Safety Perceptions Survey

Purpose and Audience

The feedback of the Boronia Future Community Survey identified the following three items within the top five of what people least like about Boronia: Crime and safety, Drugs issues, and Outdated and rundown buildings – shops – areas, which can be deemed to impact on general safety perceptions. These items were identified by both residents and workers/businesses operators.

Council was keen to explore the experiences and perceptions of safety in Boronia to gain a better understanding of where and what these issues may be. The purpose of this survey was therefore to gather more information so as to help guide Council's future actions on this matter.

The primary survey target was with people who live, work, or own a business in Boronia but was opened to the community at large with an interest in Boronia.

Communication of Event

The survey was open from 28 June to 31 July 2018, and administered online. The survey was circulated to persons registered to the Boronia E-newsletter. The survey was also set to coincide with the June edition of the Boronia/Basin Community Newspaper and further promoted through the Boronia Renewal and Knox "haveyoursay" webpages.

The survey was publicised by Council through a combination of the following:

- Link posted on the Knox website for the duration of the survey, including
 - The "Haveyoursay" Knox page.
 - The Boronia Renewal Project page
 - Announcement on the Knox City Council main page
- Boronia - The Basin Community News article in the June and July 2018 editions
- Boronia E-newsletter bulletin emailed to subscribers on 4 July 2018
- Displayed on screen at Civic Centre Customer Service Counter and Boronia Library for the duration of the survey
- Email to members of Council Youth Advisory Committee
- Social media advertisement with post on Facebook on 6 July 2018
- Postcards left at local retailers

Council E-Newsletter drew 36 visits to the survey, consisting of approximately 1/10 of all respondents through this medium alone.

Brief Description

The data collection tool for this was a self-administered survey including mostly quantitative and some qualitative open-ended questions (2 questions). The survey comprised of 21 questions overall with section dedicated to perceptions and experiences. The survey aimed at understanding usage patterns, problematic areas, and demand in relation with behaviour.

Socio-demographic questions included: gender, age (service age groups), identification as whether of aboriginal or Torres Strait Islander background, and residential location (suburb, if applicable - street in Boronia).

In recognition of many people's time constraints, the online survey was designed to be quick and easy for people to fill out at their convenience.

The response rate was good with 271 surveys completed online, with 55% of respondents being Boronia residents (149 respondents).

Results and Key Findings

The lists below demonstrate the top feedback gathered from this consultation. These have been grouped as the top five responses with regard to perceptions of Boronia (all respondents and residents only), locations to avoid (night and day), and improvements.

Overall top five perceptions of the Boronia Town Centre (all respondents):

1. 74% are dissatisfied with the overall appearance;
2. 70% think drug use and drug dealings are a major problem;
3. 67% think that people hanging around in the street are a major problem;
4. 65% are dissatisfied with the general maintenance, cleanliness, and property maintenance of the Town Centre;
5. 64% are dissatisfied regarding feeling the safety in the Town Centre.

Overall top five perceptions of the Boronia Town Centre /Neighbourhood (Boronia Residents):

1. 45% are dissatisfied with the sufficiency of street lighting to allow to walk safely (31% neutral)
2. 44% are dissatisfied with the general maintenance, cleanliness, and property maintenance of the Town Centre (23% neutral);
3. 44% are dissatisfied with the overall appearance (24% neutral);
4. 37% identified anti-social behaviour as encountered breach that affected their safety;
5. 25% identified graffiti as encountered breach that affected their safety.

The additional two responses were also provided freely by respondents:

- Intimidation and aggressive behaviour related to drugs (6 references)
- Speeding vehicles (2 references)

Top five locations identified as unsafe and to be avoided during the night:

1. The whole of Boronia Town Centre (7 references)
2. Boronia Train Station (7 references)
3. Alleyways and Laneways (6 references)
4. Woolworths (5 references)
5. Kmart and Coles car parks (4 references)

Top five locations identified as unsafe and to be avoided during the day:

1. The whole of Boronia Town Centre (7 references)
2. Boronia Train Station (6 references)
3. Chandler Park and Boronia Park (2 references)
4. Coles (2 references)
5. Erica Ave pedestrian crossings – Floriston Ave footpath – Kmart multi-level car park – Taxi rank near Kmart – Woolworth (each with 1 reference)

Top five selected measures to improve safety in Boronia:

1. Increased police presence (139 responses)
2. Increased lighting (81 responses)
3. Alcohol restrictions (70 responses)
4. More CCTV cameras (64 responses)
5. Creating employment (37 responses)

The answers do highlight the following matters:

- A high percentage of females completed the survey representing 63% of all respondents;

- *Young adults and youth (less than 25 years of age) were unrepresented in this survey, being only 2% of respondents;*
- *The surrounding environment, layout, visual cues, and its physical quality, are likely increasing perceptions and fear of crime with even further entrenching views of threatening social behaviour occurring. As such, the sourcing of police data from the Crime Statistics Agency would be valuable to further evaluate the crime and safety profile for Boronia compared to perceptions that may be more entrenched by the visual environment.*
- *Actions that would involve input from people were not as supported within the top five selections - community events (7th place with 30 respondents); -neighbourhood watch (10th with 13 respondents).*
- *Top three social behaviours considered as problems in Boronia consisted of – Drug use (70% major problem and 24% minor problem); - People hanging around in the street (67% major problem and 26% minor problem); - Violence and aggressive behaviour (54% major problem and 39% minor problem).*
 - *People hanging around the street was considered as a major problem which would warrant further investigation with regard to the notion that a busier street life would allow for greater mutual surveillance.*
- *Top three appearance and structural issues considered as problems in Boronia consisted of – Rubbish (44% major problem and 43% minor problem); - Poorly lit bus stops (43% major problem and 40% minor problem); - Vandalism (39% major problem and 51% minor problem).*
- *People felt safest being in the town centre between 9am – 12pm.*
- *32% felt safe during the day at Dorset Square compared to 15% at night*
- *Only half of respondents are aware of CCTV cameras at the train station for just over a quarter being aware of CCTV cameras at car parks; all other safety measures being even less recognised.*
- *Increased police presence is considered a priority; further investigation as to whether the increased presence of Protective Safety Officers (PSO) throughout 2018 has improved safety perception at the train station.*

3.3.4 Draft Renewal Strategy Consultation

Purpose and Audience

This consultation involved the presentation of the Draft Boronia Renewal Strategy Key Directions report. The draft report incorporated the results identified from comprehensive consultation and community engagement that was undertaken as both part of Stage 1 and Stage 2 of the Boronia Renewal Project in its strategy and the outcome of numerous background research. The purpose of this consultation was to gather community input to each of the Key Directions developed for this Draft Strategy as to help inform the final direction of the Boronia Renewal Strategy.

The draft report was submitted for consultation to the community at large, by presenting the draft Vision and Key Directions for Boronia 2040 for feedback to anyone with interest in the future of Boronia, and particularly people who live, visit, work and play in Boronia.

Communication of Event

The feedback period was open from 30 October to 30 November 2018 and administered online via a survey. The communication method involved two parts:

- The presentation of the Draft Boronia Renewal Strategy prepared by Knox City Council for information.
- The gathering of any feedback on the Key Directions presented within the Draft Boronia Renewal Strategy.

The report and survey were publicised by Council through a combination of the following:

- Hard copies of the report on display at KCC, Boronia Library, Knox Leisureworks, Infolink.
- Link and digital copy of the report and survey posted on the website including:
 - Boronia Renewal webpage – copy of draft
 - ‘Haveyoursay’ webpage – link to survey
 - front page of Knox website
 - Council’s Intranet



- Displayed on screen at Civic Centre Customer Service Counter, Boronia Library, and Leisureworks Centre for the duration of the survey
- Social media advertisement with post on Facebook on 3 December 2018
- Boronia E-newsletter bulletin emailed to subscribers in November 2018;
- Boronia - The Basin Community News article and Advertisement in November 2018 edition;
- Advertisement in Knox Leader on 30 October and 20 November 2018;
- Mayoral interview and radio message on Eastern FM community radio;
- Email to members of Council Youth Advisory Committee;
- Postcards in Boronia retail areas;
- Posters in Boronia retail areas, Boronia library and Knox Leisureworks;
- Community information session held in Boronia in November 2018;
- Knox News Summer 2018 edition – hard copy and electronic bulletin.

Brief Description

The report set the scene via 9 key directions; identifying the current context, challenges, strategy for the future and questions for the community to think about and provide feedback.

The data collection tool for this was an online and hardcopy survey. The accompanying survey comprised a total of 37 questions overall with section dedicated to each of the Nine Key Directions presented within the Draft Boronia Renewal Strategy. The survey aimed at gathering perceptions and opinions towards each Key Directions statement, as well as suggestions and ideas. Socio-demographic questions included: gender, age (service age groups), identification as whether of aboriginal or Torres Strait Islander background, and residential location (suburb, if applicable - street and lifespan spent in Boronia).

The feedback questionnaire was also communicated and made available during the Community Drop-In session discussed at **Section 3.6.5**.

In recognition of many people's time constraints, the online survey was designed to be quick and easy for people to fill out at their convenience.

The response rate was good with over 90 responses feedback completed online and two more hardcopy survey completed with 54% of respondents being Boronia residents, of these, over a third of respondent have lived in Boronia for less than 3 years and a third have lived in Boronia for more than 10 years.

Results and Key Findings

The lists below demonstrate the top feedback gathered from this consultation. Between 78 and 87 people provided an indication of their level of support for each of the nine Directions outlined in the Draft Strategy.

Of the nine key directions, the one with the strongest support was *"Boronia is a green place with spaces to play"*, with almost two in three respondents giving this Direction the highest support rating (5), and another 19% giving it the second highest support rating (4). The second most supported Direction was *"Boronia is a healthy, active and connected community"*, with almost half of the respondents giving this Direction the highest support rating (5), and another 35% giving it the second highest support rating (4).

The top answers or suggestions to each key directions are grouped as follow:

- Boronia is a unique place
 - Expansion and improvement of green space, parkland, and garden (28%);
 - Retain, upgrade, and integrate the library/basketball stadium into a hub (22%);
 - Revamp, upgrade, and fill shops (19%).
- Boronia has quality living environments
 - Building appearances and materials (48%);

- Building heights (46%);
- Retain Heritage buildings / lighting of public places (both 43%);
- Water sensitive urban design (36%);
- Car parking spaces (34%).

- Boronia is a healthy, active and connected community
 - Provide activities and things to do (29%) – events, leisure, market, outdoor movies, youth activities, etc.;
 - Provide outdoor places (18%) – tables/chairs, alfresco dining, configuration of open spaces;
 - Provide safe public places (18%) – police, lighting, safe environment created;
 - Provide indoor community space (16%) – community centre, theater;
 - Brings the arts (16%) – funded program, local artists, and place to perform.

- Boronia is resilient
 - Listen and respond to the community (community led decision making, check Facebook comments, work together, etc.) – 9 respondents;
 - Stop inappropriate development (subdivision, apartment, overdevelopment) – 6 respondents;
 - Show the community some change (show actions, invest, take concrete actions) – 6 respondents.

- Boronia nurtures small to medium enterprises, micro-making and social enterprise
 - Evening activities and seasonal events (76%);
 - Leisure and entertainment options (72%);
 - Community groups that meet in Boronia, free activities and recreational or heritage walks (each 70%);

- Boronia is a green place with spaces to play
 - More canopy tree planting and create places to sit in the shades and rest in the town centre (both 76%);
 - Landscape areas along street and footpaths (75%);
 - Introduce tree protection controls (55%).

- Boronia is smart and digital
 - Street furniture including drinking fountains (67%);
 - Additional and improved pedestrian paths (51%);
 - Additional crossing points over busy roads (49%);
 - More street lighting (46%);
 - Improved drainage (37%);
 - NBN (33%).

- Boronia has an active nightlife
 - Market (78%);
 - Festival/fair (65%);
 - Live music events (27%);
 - Outdoor cinema and food trucks (both 19%).

- Boronia is growing through cohesive land use and urban infrastructure
 - Update the area (21%);
 - Remove drugs and ‘undesirables’ (19%);
 - Clean the area (19%);
 - Improve safety (12%);
 - More green space (10%).

3.3.5 Youth Perspective Survey and Young Children's workshops

Purpose and Audience

The Boronia Future Community Survey result revealed an under representation of the younger adults (18-24) age group. Youth and young adults were also under represented as participant in all subsequent consultation survey and consequently, it was deemed important to seek the views of this demographic for this important project. Council also recognised this gap and voted a motion on 23 July 2018 requesting that further consultation be undertaken with the Youth and Children age group as part of Stage 2 of the project.

The purpose of this consultation was to gather the thoughts, experiences, ideas and views of youth and young adult so to enhance decision-making with greater ownership of outcomes by the whole community. The purpose of engaging with children and young people regarding the Boronia Renewal Project is also to ensure that strategies and outcomes proposed are relevant, age appropriate and appealing to the whole community.

The target audience for this consultation was young people, to include 10 year old and ranging to 25 year old who live, study, work or play/frequent Boronia. However, because the survey was widely distributed and open to all it was not a requirement that respondents had an immediate connection to Boronia in order to provide their thoughts and opinions.

Communication of Event

Council Youth Services Department approached the Youth Advisory Committee (YAC) for their advice and input on developing a strategy for engaging with young people in Boronia. The survey was designed and distributed in collaboration with Knox Council's Youth Advisory Committee subsequent to brainstorming sessions with the committee.

The survey was promoted by Council and the Youth Advisory Committee through a combination of the following:

- Visits to schools (parts of the pop-up approach) at Boronia Heights and Boronia K-12;
- 'Pop-up' exhibit and consultation at Knox Carols Event, Leisureworks, and Boronia Library. Young people were tasked to promote the survey and approach potential respondents at two of the five pop-up consultations.

The survey was promoted during November 2018.

Brief Description

The data collection tool for this was a self-administered survey. The survey comprised of eleven open-ended questions. The survey aimed at understanding what people most like and dislike about specific parts of Boronia, how things could be improved, and young people's hopes for the future of Boronia.

Socio-demographic questions included: age, gender, Aboriginal and Torres Strait Islander status, and residential location (by suburb).

In recognition of many people's time constraints, the online survey was designed to be quick and easy for people to fill out at their convenience. Young people were given the choice of the Train Station, Dorset Square and Boronia Park, as to which area of Boronia they wanted to give feedback on.

The response rate was 265 completed surveys with 75% of respondents being Knox residents and 13% being Boronia residents. An additional 26 responses were gathered as group responses through visits at primary schools [totaling 291 responses].

Results and Key Findings

The lists below demonstrate the top feedback gathered from this consultation.

Of the 265 survey responses, the Train Station made up **48%** of responses, Dorset Square made up **23%**, Boronia Park made up **19%** and a further **10%** didn't choose a specific area. This provided an early indication about what areas mattered most too young people and also gave an idea as to what areas are most frequently used within this demographic.



Top answer to questions (planning effect answer)	TRAIN STATION	DORSET SQUARE	BORONIA PARK
What is liked most about area	Accessibility (36%)	Variety of shops, services, restaurants (63%)	Park facilities and playground (43%)
What is not liked about area	Social issues (32%) <ul style="list-style-type: none"> Worn out facilities (29%) 	Worn out facilities and buildings (27%)	Rubbish and littering (25%) <ul style="list-style-type: none"> Proximity to busy road (17%)
Ideas to fix it	More policing/security (40%) <ul style="list-style-type: none"> Renovate, introduce green spaces (24%) 	Redevelop Dorset Square – public space/events (33%)	Clean up litter (24%) <ul style="list-style-type: none"> Family friendly spaces (10%)
What would you want to see in the future	Renovated and modern train station (23%)	Newer updated shops with more street life (19%)	Improved current facilities (23%)

Overall, young people appreciate the variety of services and shops offered in Boronia but recognise that more attractive shops could be still be swayed into establishing in Boronia, particularly another anchor retailer. Young people principally recognise the rundown state of buildings and public infrastructure, with littering and safety (social issues) equally being as major issues. Street life and public activities, public squares space are noted as a desirable outcome.

The answers do highlight the following matters which were quoted from responses and consultation and considered worthwhile ideas:

- "Well Melbourne Street Art seems to be attracting people to the city. Why not do something similar at Boronia Mall except make it unique. I do have some ideas about that!";
- "Open aired walkways and family friendly areas";
- "Updating street furniture and greenery in the area - maybe providing more shade areas. Encouraging more events and activities in the area, possibly? I'm not sure what can be done to update the shops!";
- "A few bigger name stores perhaps a chemist warehouse and a Big W or Target. Outdoor dining sort of like Knox ozone could be another idea.";
- "A nice open space with nice attractions events and performers" and "Food festivals, craft festivals, arts and culture events";

- *“Organise another youth street art project - have young adults learn more about street art and community development whilst investing themselves in it - where people graffiti, create a canvas, where people litter, make a garden.” And “More art, edible gardens and other plants, more youth-made sculptures and other.”;*
- *“Redevelop it. Move the station underground and use the land above for a park that acts as a new “town square”, and then prepare to redevelop immediate surrounding property into mixed use residential/commercial mid-rise buildings.”;*
- *“Community and council work together one weekend to fix up the park”;*
- *“A dog park”;*
- *“A youth gym”.*

3.4 Promotion, Media releases, Social Medias and Online conversations

3.4.1 Media releases

Boronia and The Basin Community News (BBCN)

The Boronia and The Basin Community News is a monthly free community-run newspaper distributed to 12,000 properties in the suburbs of Boronia and The Basin. The medium has emphasis on local news, events, and issues presented from a local viewpoint.

Council recognizes the importance and involvement of this medium in the community and presented a series of articles newspaper about each key milestones of the Boronia Renewal Project.

- February 2018 edition – thanked the community for the active response to the Boronia Future Community Survey and included quick snapshot of the feedback received.
- March 2018 edition - comprised a half page article which summarises the milestone accomplished so far following the Boronia Future Community Survey and following targeted workshop. The article also invited community member to register to the e-newsletter to stay informed.
- April 2018 edition – as per the previous edition, the article provided feedback on the community survey and workshops, but particularly invited readers to partake the Car Parking Survey Consultation.
- May 2018 edition – elaborated on the ‘bush boulevard’ concept and further on the importance of the natural environment feeling as retrieved from the Boronia Future Community Survey. The article invited reader to provide information regarding favourite trees through the #treesofBoronia consultation.
- June 2018 edition – comprised a quarter page article which summarises the milestone accomplished so far such as the commencement of the CCTV installations, the conclusion of the #treesofBoronia consultation. The article also announces the federal grant received for safety improvement to install lighting and informs that further consultation will be held with regard to safety. The article also invites community member to register to the e-newsletter to stay informed.
- July 2018 edition – comprised a full page article which discussed about the results of previous consultation and the concerns raised about safety. It also provided a summary of the car parking survey result. The article further informed about ongoing CCTV installations and welcomed feedback on the safety survey. The article also invites community member to register to the e-newsletter to stay informed.
- August 2018 edition – comprised a half page article which summarized the projects key directions, the completion of the safety survey and detailed further steps of the project, particularly the youth consultation. The article also informed that the CCTV installations is now completed. The article also invites community member to register to the e-newsletter to stay informed.

- September 2018 edition – comprised a third page article on the noted effects of the CCTV installations and the outcome of the safety survey with preliminary results and forthcoming audits to address some issues. The article also invites community member to register to the e-newsletter to stay informed.
- October 2018 edition – announces the development of the Renewal Strategy vision which will be finalized and in consultation in the next month. It also announces the current safety audit walks and invite people to register their interests.
- November 2018 edition – comprised a full page article and promotion inviting people to participate in the “Draft Boronia Renewal Strategy” consultation and provided an update article detailing the steps of the project to date, including previous consultation that were undertaken with the “Create a safe Boronia” walking tour.
- February 2019 edition – summarises the consultation actions undertaken by Council and thank the community for participating. It provides an update on the scheduled finalization of the strategy.

Knox Leader

Knox Leader is a weekly community news presented in both hard copy and digital newspaper and owned by a media conglomerate. The newspaper is published as part of the “Leader Community Newspaper” group which is divided in municipal district covering the whole of metropolitan Melbourne.

Knox Leader is the part of this group dedicated to the municipal district of the City of Knox with a free distribution of 151,000 reach.

- Knox Leader paid advertising for the Boronia Future Community Survey Consultation on 15 October 2017.
- Knox Leader paid advertising for the Car parking Survey on 17 April 2018.
- Knox Leader half/quarter page advertising for the Draft Boronia Renewal Strategy Consultation – 30 October and 20 November 2018 edition which promoted the survey and invited prospective participants to consult Council’s ‘Haveyoursay’ and Boronia Renewal Project webpage.
- On 2 November 2018, Knox Leader published an article reporting on the renewal process which was titled: “*Knox Council’s draft Boronia Renewal Plan outlines ideas to boost the suburb*” which happened in the middle of the consultation feedback on the draft strategy. The article quoted certain aspect of the draft renewal strategy and the implications it may have on Boronia. It also included interviewed quote from local traders before inviting reader to consult and provide feedback to the draft Renewal Strategy.

3.4.2 Council Communication and Promotion

Knox Biz Business Life Bulletin

Knox Biz is bi-annual publication run by Council’s Economic Development Team and mailed/mailed to businesses located within the municipality. The bulletin seeks to showcase local businesses success stories and inform businesses of relevant Council projects, events and services.

The following issue of Knox Biz showcased some information related to the Boronia Renewal Project:

- Issue 61 – April 2018, comprised a brief description of the project within the Mayor’s Message, praising the community engagement and providing links to the Boronia Renewal Project webpage.
- Issue 62 – November 2018, comprised a descriptive summary article updating the business community on the Boronia Project and its current stage.

Knox News

Knox News is a seasonal news bulletin prepared by the City of Knox Council and distributed three times a year to Knox ratepayers.

- Knox News Summer 2017 edition bulletin – included an announcement in the Mayor’s Message component of the bulletin inviting people to consult the Boronia Renewal Project webpage and provide feedback. The bulletin also included an update of the Boronia Renewal Project with the ending of the “Boronia Future Community Survey” and invited people to consult the project webpage. Further promotion were also included in the Councillors message as part of the bulletin.
- Knox News Autumn 2018 edition bulletin –included a brief note of the Boronia Renewal Project in the Councillors message as part of the bulletin which informed about the delivery of the CCTV cameras project (pre-Boronia Renewal Project) and the outcome of the Boronia Future Community Survey.
- Knox News Winter 2018 edition bulletin – informed an update of the Boronia Renewal Project with the “create a safer Boronia” consultation that recently ended and invited people to visit the Boronia Renewal Project webpage and sign up for the newsletter. Further promotion were also included in the Councillors message as part of the bulletin, these particularly announced the importance of the forthcoming consultation with youth.
- Knox News Summer 2018 edition bulletin – included an update of the Boronia Renewal Project with the ongoing “Draft Boronia Renewal Strategy” consultation and invited people to consult hardcopy document at its centre or online and invited people to participate via the “*haveyoursay*” webpage. Further promotion were also included in the Councillors message as part of the bulletin.
- Knox News Autumn 2019 edition bulletin – Brief detail and promotion were included in the Councillors message as part of the bulletin.

Postcards

Hardcopy postcard size advertisement were published by Knox Council and deposit at various retail and locations around Boronia to promote the project and key consultation activities. The postcard comprised a one-side standard promotion of the Boronia Renewal Project with a flip-side including varying information inviting feedback at specific consultation stages.



Boronia E-newsletter

People were invited to leave their email during the Community Future Survey, workshops and conversation session if they wished to remain informed about the process and of further consultation. This database evolved into the development of the Boronia e-newsletter which was sent on a monthly basis from February 2018. Any further promotion and advertising on Council’s website, or via media notices, included an invitation to members of the public to register their interest to the Boronia E-newsletter. Throughout the consultation process, the interest evolved to include over 300 registrations.

The E-newsletter comprised a monthly summary update of the current stage of the process, directing people to sections of the Boronia Renewal Project webpage to consult in more details, or provide feedback to current ongoing consultation via the “*haveyoursay*” Council webpage.

Boronia Renewal Webpage

The Knox City Council website hosted a dedicated page to the Boronia Renewal Strategy Project which provided detailed information about different consultation, and actions related to this multifaceted project.



The webpage hosted draft documents of the developed Renewal Strategy, Council minutes of key decisions, but it also hosted all previous strategic and statutory documents of the original Boronia Structure Plan 2006, that people could retrieve and consult.

The webpage provided broad information resources and also allowed visitors to register to the E-newsletter should they wished to remain up-to-date to any changes that would be made to the page.

The page would also invite feedback during various survey engagement by linking directly to the relevant survey on the Council's "haveyoursay" webpage.

Bus Shelter Panels

To promote the project further, Council arranged for signage to be displayed at various bus shelter throughout Boronia and surrounding suburbs.

A post on 26 June 2018 on Knox CC Facebook page also promoted the Boronia Renewal Project by informing the community about the bus shelter advertising and inviting to notice them. The post aimed at stressing the nature of this advertising to the community.



3.4.3 Online Promotion and Social Media Communications from Council

Purpose and Audience

The purpose of Council's use of social media was to inform a broader audience via the use of modern technology about the project and invite their input at key points (e.g. *community session, survey*). As the project has progressed it has also been used interactively in association with decisions made by Council (e.g. *Boronia Basketball Stadium*) and article made by the Knox Leader news (e.g. *Boronia Mall*).

Communication methods

Council used a dedicated Boronia Renewal Project webpage on its website to inform people about the project and provide the opportunity for people to register their interest (as discussed in **Section 3.4.2**). The Knox website was updated regularly and provided feedback on the survey and other activities with direct promotion link to the Boronia Renewal Project page and to the Knox "Haveyoursay" page, which hosted links to the surveys, on the Knox City Council website during periods of consultation.

Councils Facebook and Twitter accounts were used to promote and broadcast about different activities and linked users to the webpage for further information and the opportunity to fill in the different surveys, provide feedback, and opt-in registration to the dedicated Boronia e-newsletters. The use of the Council account also provided the opportunity for users to share the post and widen the interest in the project. On all communication there was an invitation to stay in touch with the Project through the Knox website (Boronia Renewal Project webpage).

Brief Description

Council’s website and social media are a powerful and dynamic way of informing and hearing from the community. In addition, it naturally encourages the sharing of information and widening the audience. For a small fee, Council was able to pay for targeted advertising of a Facebook post. This allowed Council to reach different demographics and specifically in the local area.

The Boronia Renewal Project webpage allowed for Council to make all reference documents available to the public and also add information as the project moved forward. The ‘HaveyourSay’ page allowed to host and clearly link to surveys and stress that community feedback was sought.

Council organised online paid advertising via social media for the launching Boronia Future Community Session and Survey on 4 occasions (24th, 27th, 31st October and 15th November 2017).

Results and Key Findings

Through the response to social media posts, we were able to monitor the response from the community to the particular post related to the Boronia Future Community session and survey. The responses provided instant feedback and indicated how many times the post had been shared. Below is a table that outlines the results of the four posts:

DATE AND PURPOSE	RESULTS
October 24 2017* Promoting Project & Community Session	17 Shares 58 Responses 42 Comments
October 27 2017 Promoting Project & Survey	0 Shares 15 Responses 4 comments
October 31 2017 Promoting Project & Survey	12 Shares 32 Responses 10 Comments
November 15 2017 Promoting Project & Last promotion of Survey	15 Shares 39 Likes 28 Comments

** This post was cross referenced in an earlier post from the Knox Leader about the Boronia Mall and included a link to the survey/webpage which may explain its popularity and possible impact on the Boronia Survey Results*

3.4.4 Listening through Social Media

Purpose

On the other hand, feedback and comments shared through social media, albeit less formal, revealed pertinent point of views for Council to ‘read’ the community. A number of different issues flared through social media which had the opportunity to link with the Boronia Renewal Project either directly or indirectly. By listening to these informal community conversations further insights on the community’s attachment to Boronia were revealed, more so than a formal survey which asks “what do you think?” Some of the issues discussed are described below through a picked selection of noted social media posts.

Brief Description – Aldi Boronia Plan

On 27 July 2016, Knox Leader shared an article from the Herald Sun (*Aldi's grand plans to expand*) regarding the plans to develop a new Aldi grocery shop on Erica Avenue Boronia. The post received 79 comments and 28 shares with generally positive comments welcoming the news of further economic input ("*great news!!*", "*[...]Aldi stores that open the more permanent jobs [...]*") but also showing concerns or discussing the location at Erica Avenue with some believing a location inside the Boronia Mall would be best, or having concerns regarding car parking.

The news returned in following Herald Sun edition and Knox Leader posts as follow:

On 5 July 2017 (*Aldi finalizing expansion plans – Aldi finalising Boronia supermarket plans*), the post and article gave an update on the progress of the Aldi development and received 95 comments. The comments were generally enthusiastic about the new business arrival in Boronia, and the capacity to shop closer to home ("*[...] right near the station*", "*[...] just around the corner!*", "*[...] close by within walking distance!*").

On 27 May 2018 (*Aldi plans to go sky high*), the post and article provided further update on the Aldi development with the now redefined proposal and plans being refined to a multi-storeys development. The post received 92 comments. With more general details as to what type of development will occur, the comments took to a more negative angle with a mixture of opposition to the future apartments ("*[...] apartment that will look like an eyesore*"), cynicism towards redevelopment and Boronia context ("*[...] Poor Boronia – leave it alone*" or "*can't wait to see the quality of loiterers [...]*"), locational issue ("*[...] should be going in the mall*"), and car parking.

On 30 January 2019 (*Dream development for Aldi lovers*), the post and article related to the approval of the 5 storeys development and received 168 comments. With the project being closer to certainty subsequent to its approval, the comments returned to more polarized side and approach, with the original concerns or negative comments returning (e.g. *cynicism, wish to see the mall redeveloped, urban redevelopment, mixed-used and density dislike, car parking criticism*) but also with a return of the original excitement regarding the development of a new business, its proximity, and also more positive comments regarding the development itself, the renewal of what is existing ("*better than the ugly old shops that are there [...]*") and the appropriateness of its location.

Some commenter did however question how the proposal met regulations, criticizing the approval within discretionary decisional process rather than remaining within suggested height recommendations. Other commenters also directly attacked apartment living as a lifestyle, or the decision-making process, regulatory-regime, or the public consultation process (both for the approval of development or the Boronia Renewal consultation).

Brief Description –6 storeys redevelopment at Erica Ave

On 2 September 2016, Knox Leader shared another article from the Herald Sun regarding a 6-storey redevelopment proposal of the Busybodies gym land at Erica Avenue Boronia (*Proposal lodged for six-storeys building on Erica Ave in Boronia*). The post received 79 comments and 23 shares, with the majority being mostly criticism of redevelopment, density, car parking, and height. A couple comments were also noted as going opposite to such criticism.

On 23 November 2016 – Knox Leader reposted a follow-up article from the Herald Sun (*Building plans knocked back over parking, views*) regarding the 6 storeys redevelopment at Boronia by announcing Council decision to reject the proposal. The post attracted 16 comments, which comprised general support in the decision but still also take time to argue against density development, provided feedback on the poor quality of construction of new development and the need to redevelop the mall.

Brief Description – Boronia Mural on Cinema Lane

27 February 2017, Knox Leader made a post on its Facebook account consisting of a photograph of the Mural painted on the wall of the Metro Cinema building in Cinema Lane Boronia with the title “love this Boronia mural”.

The post received 8 comments and 8 shares consisting of positive feedback, appreciative of the display of such art.

While the amount of responses is very small, such post by a community media, and its support demonstrate that street art and in particular the improvement of blank wall through mural is positively perceived and considered an improvement of the urban realm.



Brief Description – Knox Leader posts about Boronia Junction Woolworth crime

Between April 2017 and June 2017, Knox Leader posted a series of commentary and articles regarding crime, anti-social behaviour and community safety fear.

On 6 April 2017, the Leader made a post seeking public comments for further investigation and reporting. The Leader asked the community whether the population had any issues regarding crime and other concerns surrounding Boronia Junction/Woolworth Precinct.

The post received over 124 comments providing feedback over their experience of the area and other comments. The Leader sought to explore the matter further with a news story.

On 18 April 2017, The Leader published a post referring to a Herald Sun article (*Safety fears sparks shopping centre crackdown*) about crime concerns and safety fears which are being addressed by Victoria Police amidst crackdown on anti-social behaviour. The post received 68 further comments and 16 shares.

The reporting series continued on 3 June 2017 with a final post referring to another Herald Sun article (*Crime Crackdown at problematic strip*) addressing the outcome of the Victoria Police crackdown with 11 persons charged. The Leader sought feedback from the community as whether the population had noticed any changes. The post received increase activities with over 260 comments and 45 shares.

While it is unclear if the Leader was responding to community concerns, exploring community’s response amidst Victoria Police plans, or swaying authority’s response through investigative reporting; the fact of the matter remain that this reporting series has provided an insight on the community perception, particularly with regarding for the Boronia Junction and Train Station area.

The comments have provided the following insight:

- *Boronia Station and the surrounding car parking spaces have made people feel unsafe, with incidents of anti-social behaviour, public drinking, drug usage quoted.*
- *The feeling is exacerbated at night.*
- *Speed in car park and car rage attitude (yelling, aggressiveness, etc.) has stressed and worried shoppers.*
- *The resulting increase in police presence was welcomed.*

Brief Description - Boronia Mall as discussed on the Knox Leader page

An article from the Knox Leader newspaper was published through the Leader’s Facebook on the 21 October 2017 and further on 2 November 2017 asking what needs to happen to bring Boronia back to life. The article followed a previous post on the Leader’s Facebook page on 4 February 2016 which simply identified the high level of vacancy within the mall. The response was enormous. It had 80 shares, 444 responses and 513 comments. It also had a link to the Boronia Future Community Survey.

Briefly the responses related to the following themes and comments:

- *Many people quite nostalgic about the Mall;*
- *Add some key 'anchor shops' such as Bunnings, Big W;*
- *Turn it into a spot where a permanent Market is held;*
- *Safety and feeling unsafe with drugs and public drinking;*
- *Realisation that shopping centres are struggling as a whole;*
- *Develop it into shops with apartments above;*
- *Focus more on activities for children and teenagers;*
- *Many were aware that the shops are individually owned which creates a problem;*
- *Just get rid of it.*

Overall, there were more positive suggestions than negative comments. Through these responses, the strong community connection with the Boronia town centre emerged. The extent of "shares" of this article linked to many past memories of when the centre was busier or people visiting there in their youth. This nostalgia highlighted that the connection with place extend across generations.

Brief Description - Council decision to move the basketball stadium

Council posted a media release on its Facebook account on 24 November 2017 indicating the result from the Council meeting about the Boronia Park Basketball Stadium. This started a high level of social media activity.

Subsequently the community became very engaged and in early December set up their own Facebook account titled 'Save Knox Stadium' with 467 likes and 470 followers¹.

On the Facebook site is a link to a petition titled 'Let Knox City Council Know We Want To Keep Knox Basketball Stadium And Not Move To State'². As of 20 February 2018 there were 4,756 signatures to the petition.

Brief Description – End of an era for Zagame

On 14 May 2018, Knox Leader reposted a realestate.com.au article on its Facebook account regarding the Zagame Corporation looking to dispose of its assets through the real estate market. In this instance, the Zagame portfolio comprises the Zagame's Tavern and Kids World premises at 112 Boronia Road Boronia.

The post drew a lot of activities with 686 comments and 84 shares. A number of comments were primarily sarcastic, ironic, or shocked by the potential this news might bring.

Briefly the responses related to the following themes and comments:

- *Cynicism towards the fact that it will become high rises apartments;*
- *A number of people enjoyed the bistro-pub offer, with hope it will remain a pub;*
- *Some other people acknowledge the market has changed and such premises are no longer suitable, preferred other establishment, or simply dislike the mixture of Kid's World with a gambling venue;*
- *For some people, such food and drink venue represented a meeting place.*

The overall response was lukewarm, a mixture of nostalgia towards the venue and branding to simply no particular affinity but the fact that good food and drink premises are good social places.

Brief Description – Car parking survey

Knox City Council promoted the car parking survey (*discussed at Section 3.3.2*) via its Facebook account through three different posts during April 2018. The posts received some attention with up to ten comments, feedback and sharing.

Briefly the responses related to the following themes were noted from these comments:

¹. <https://www.facebook.com/saveknoxstadium/>

². <https://www.change.org/p/knox-city-council-let-knox-city-council-know-we-want-to-keep-knox-basketball-stadium-and-not-move-to-state>

- *“Boronia mall car parking should be diagonal parking to facilitate the one way and make it easier to reverse! It’s council owned so it would be easy to do. Should’ve been done 25 years ago when first discussed with traders.”*
- *“As we are an ageing population and with people who need to park close to building entrances, councils will need to increase disability parking and become more efficient properly monitoring these parks either through employees or technology.”*
- *“Would be lovely if the council cleaned the car park on a regular basis. Just run the street swiper [SIC] over it properly. It really wouldn’t break the bank.”*
- *“Parking near both supermarkets is challenging due to the slope and access difficulties. I am concerned that older adults cannot manoeuvre their trolleys without assistance. This is exacerbated by the car park works next to Coles.”*

Brief Description – Lights, cameras, no action (Boronia bollards, lighting, and CCTV)

The Knox Leader and Herald Sun published this article which appeared in the Leader 19 June 2018 edition and on its Facebook account. The tabloid article reported on the announcement of the Federal grant for the installation of lighting and new bollards but it also reported on the faulty CCTV camera located in Boronia and their replacement. On Facebook, the news received little attention with 7 shares and solely attracted 7 comments, all being negative critics with little to no input retrieved.

Brief Description – Boronia’s ugly ground level car park

On 7 November 2018, Knox Leader made a post promoting a Herald Sun article (*Plan to boost Boronia’s retail hub*) which related to a publication also incorporated in the Knox Leader (*refer to article on 2 November 2018 discussed in Section 3.4.1*). The post and article elaborated on the potential of utilizing Dorset Square ground level car park to other community functions such as markets, concerts, cinemas. The Leader then enquired feedback as to what people think can be done to improve the suburb. The response was good with 87 comments and 15 shares to the story.

Briefly the responses related to the following themes and comments:

- *There is a need for redevelopment of area, particularly the mall;*
- *Anti-social behaviours need to be addressed.*

Results and Key Findings - Community views Themes and Outcomes

These sites are valuable community engagement tools as there are many responses indicating why a person has posted and/or signed the petition. It is acknowledged that social media will often result in the display of more negative, sarcastic, ironic, cynical commentary, or even trolling in some instances. In some case, decorum is less prevalent on social media and comments can be more raw and crude. Nonetheless, they also include information that can be extracted as a form of observational and derived data and provide some insight of how certain issues are perceived.

The comments reveal there is a vocal opposition to redevelopment, densification, height, and mixed-use which remains unaddressed. The comments however also reveal issues of insecurity, social issues, aged and dilapidated infrastructure/buildings that needs to be replaced. Both matters appears acknowledged, but comments have rarely, if at all, identified solutions with a holistic view on all items as to what the future of Boronia should actually look and feel like. They primarily polarize into the position that status quo is bad, and change is bad.

They do however allow Council to identify sensitive matters, and what are definitely liked. They allow to read between the lines and should help in developing a communication strategy to educate, inform, provide the bigger picture beyond a unique issue, and lead the way by showing options and direct effort toward constructive commentary in lieu of mere empty criticism.

There is a need to balance these views identifying that Boronia is in dire need of a revamp, that such revamping likely means that Boronia’s look, feels, and built form will be replaced with something new. This new future need to consider the following points generally highlighted from what’s been heard through Social Medias:

- **Height remain a sensitive issue**, however the issue behind height is rarely explicitly explained and it is unclear if opposition to height is simply based on fundament that *‘height is bad’*, or whether there is an specific collateral issue. It is possible to explain elements of building heights (overshadowing, impact on views from public realm, wind aspect) but also informing “what are as of right height, what can people, what can Council control” to debunk the issue of height and create a conversation of what height is acceptable, and what height is needed.

- **Construction quality is deemed poor.** The development of poor quality building, either in term of look, materials, colours, or even indoor living feed cynicism and create distrust that undermines decision-making process and the planning system. It is acknowledged that there is a need to '*lift the game*' in term of quality architecture and design and that such controls will need to be in place. However, it is important to set clear standards that avoid being too subjective as it would only create a battle of opinion. It is also acknowledged that it is impossible to make all buildings and all constructions 'look good' for everyone, since everyone is entitled to their own personal opinion.
- **Street life and street art are desired,** new or existing places that embellishes, provide new economic input and new places to interact and attract are clear wanted. There is a need to ensure any individual places are interconnected to create a desirable city network but also create public spaces that are used, active, safe and enhance social interactions and art.
- **Insecurity and crime are perceived rampant,** while other authorities are better positioned to address crime directly, it is noted that planning can do it the long way around to change the culture and social interactions with the urban form. It will be advantageous to inform how planning strategies, development, land use, or activities are networked to address this in the long term.
- **Car parking are loved,** there is potentially a connection and disconnect between the issue the car brings, and the issues that car allows people to escape from. The result and strategies coming from the car parking surveys and consultations made by Council will need to be communicated to debunk car parking perceived issues.
- **Apartment living is not for everyone,** there are polarized opponent to apartment lifestyle. There is a need to explain what apartment living consists of, what it depends on, what sort of upgrade needs to be created to ensure apartment living is a great outcome. This would also need to acknowledge that today's infrastructure and services are inadequate but also inform how a whole renewal and future services is being planned in parallel to address the needs of apartment living. Policies will also need to clarify how apartment living is also strategized to protect other form of living, and improve infrastructure that will also benefit other form of residential living.

3.5 Focus Groups

3.5.1 Councillor 'Wayfinding' walking tour of Boronia

Purpose and Audience

The purpose of this activity was to liaise with local ward Councillors and draw on local knowledge and evaluate pedestrian safety through an 'on-the-ground' tour and exchange.

The audience for this activity was the two local ward Councillors and any exchange with the public as encountered during the day.

Communication of Event

The event was briefed communicated and organized in collaboration with the ward Councillors.

Brief Description

Council officers accompanied ward Councillors Peter Lockwood and John Mortimore (*also Knox Mayor at the time*) on a walking tour of the Boronia Activity Centre.

The tour occurred on 19 April 2018 and followed walkways looping around the core commercial areas, starting at Progress Hall and visiting key locations:

1. Progress Hall at 134 Boronia Road;
2. Vacant Shop at 116 Boronia Road;

3. Boronia Junction – landmark site;
4. Across Chandler Arcade to Dorset Square;
5. Vision Australia Building at 252 Dorset Road – meeting with landowner;
6. Dorset Arcade - The Drop-Inn café at 2/260 Dorset Road;
7. Boronia Mall – Etiko Fair Trade at Shop 22/50 Dorset Square;
8. Apartments at 1 and 3 Chandler Road;
9. Youth Hall at 257 Dorset Road;
10. Lupton Way and Boronia Train Station;
11. Train Station Park reserve;
12. PTV Commuter car park;
13. Erica Avenue; and,
14. Health Precinct at 148, 152 Boronia Road.

Way Finding Tour Map



Results and Key Findings

The tour allowed Councillors and Council officers to gain a better understanding of how community members use the centre on a daily basis, and to engage in discussions with community members about specific areas that could be improved.

Of particular note was the difficulty they experienced when crossing the many very busy streets and roads in the area and the tour allowed them to consider how and where signage could be improved to make this easier.

The information gathered will help Council plan with an on-the-ground perspective based on the reality so as to make walking around the town centre just that little bit easier for everyone.

3.5.2 Movement and Access Focus Group

Purpose and Audience

Following the conclusion of the background report on Movement and Access Study undertaken by GTA Consultants, Council sought feedback from the community towards the recommended changes emanating from this study.

A focus on obtaining feedback on three key proposed interventions of the Study was highlighted: *-the Green Spine; -Public Square, and -Realigned Bus Route.*

Council commissioned new**focus** pty ltd as a consultant to undertake focus group consultation with the aim to:

- Gauge the level of support for the recommendations in the study;
- Test/refine recommendations based on local knowledge and user conditions;
- Identify gaps or other ideas from community users.

The targeted audience was aimed at a mixture of residents or visitors that frequent Boronia and the recruitment was undertaken by new**focus** in accordance with the methodology developed.

Communication of Event

The consultant new**focus** undertook recruitment for the focus group consultation in accordance with a defined methodology.

Group 1 was selected via two sources:

- From lists provided by Council, i.e. community reference group data base;
- Supplemented by respondents from a new**focus** social media and random telephone recruitment.

Group 2 was selected via two sources:

- Via social media campaign run by new**focus** – prospective participants register interest to be involved in focus group;
- Random telephone recruitment.

Brief Description

The focus groups took place on 19 December 2018 at Knox Council's office for a period of 90 minutes with group 1 being at 5.30PM to 7.00PM and group 2 being at 7.15PM to 8:.45PM.

The consultant new**focus** designed a discussion guide that was implemented throughout the session. Stimulus material outlining the key aspects of the proposed outcomes along with some optional aspects to each key area of focus were prepared collaboratively for use during group discussions. Finally, input was sought from the participants. The sessions were moderated by a new**focus** research consultant.

The discussions during the focus groups helped establishing and explore the following items:

- Current perceptions of the Boronia Central area (reasons for visiting or avoiding the area, what would encourage them to frequent more, mobility perceptions, what might encourage them to use alternative transport).
- Overall perceptions of the Movement and Access Study outcomes (strength/weaknesses, impact on their travel behaviour, concerns, additional information).
- Commentary on the three specific items –green spine, -public square, -realigned bus route
- Suggestions.

Results and Key Findings

Initial perceptions towards the proposed outcomes were predominantly positive, some of the key results from the focus groups were:

- Something the area needs, adds pride and a sense of community spirit;
- Positively reflects Council's interest in the area and residents;
- The Public Square with perceived expansion of cafes, markets is seen as having potential to also change the retail mix and was considered the primary driver of increased visitation to the precinct – with potential for visitors to stay longer and spend more;
- The Green Spine was well regarded but seen as more for recreational cycling than function cycling into the centre itself;

- Whilst there was some potential to increased walking into the centre this was seen as likely more so by nearby residents – with residents from outer areas likely to continue to use cars (as opposed to public transport).

The key concerns and challenges were:

- Impact of loss of car parking in Dorset square with no evident reallocation of parking options – other than to push parking into nearby residential side streets – which would increase traffic congestion in those areas;
- Concerns over continued social issues which would negate the benefits (or simply move the social problems to other areas of Boronia);
- The continued physical disjointed and fragmented physical nature of the precinct – which in an ideal world would have included options that better join and link the sub areas that comprise the centre precinct.

Implications for Council:

- There would appear to be considerable community support for the proposed changes which Council should be encouraged by and which appear to support further development of the concepts;
- Based on initial responses, increased visitation into the precinct is a definite possibility – but driven by the Public Square. The Public Square is perceived as the centre piece of the concepts;
- From a travel mode perspective the Green Spine has potential to increase recreational cycling but not necessarily for commuting into the precinct itself;
- In terms of non-car travel options, the changes proposed appear to be more relevant for residents in walking/short cycling distance with residents in outer areas more likely to continue to use and prefer use of cars to visit the precinct rather than to move to use of public transport ;
- As a result car parking is still seen as an issue and without a parking solution being clearly conveyed may hold back support and full potential for the concepts.

3.6 Community Conversation Sessions and Workshops

3.6.1 Community Conversation Session

Purpose and Audience

The purpose of this session was to engage with the local community in their shopping area. It also provided an opportunity to let people know about the launch of the Boronia Renewal Project directly in person and to promote the project and Boronia Future Community survey.

A key message intended with this session was that *“Boronia is changing and Council is keen to hear your ideas for the future planning”* and show that Council is reachable and involved in managing this change in collaboration with its community.

The audience was that of people passing by the two dedicated spots on a Saturday morning. However, people hearing about the project through the communication of the event could complete the Boronia Future Community survey online in accordance with the methodology mentioned in **Section 3.3.1**.

Communication of Event

The event was communicated in the following ways:

- Emails sent to local community organisations advising them of the event and asking them to promote it to their members.
- Advertised in the Leader, the week prior to the event.
- Advertised to a local area on Facebook and Twitter on the 24th and 27th October 2017.
- Placed in the school newsletter for Boronia K-12, Boronia West and St Joseph’s Primary Schools
- Posted on the Knox website.

- Advertised on the customer service screen in the front office of Council.

The communication of this specific event also formed part of the communication strategy implemented for the Boronia Future Community Survey discussed in **Section 3.3.1**.

Brief Description

The community conversation session was held on Saturday 28 October 2017 from 9am – noon at two venues in Boronia. The two venues were:

1. Outside Coles/Kmart in Dorset Square Shopping area;
2. Outside Dan Murphy's in Boronia Village Shopping area.

Eight council officers and local wards Cr Mortimore and Cr Lockwood were available during the time to speak to local shoppers. A large current aerial map of Boronia and size posters with pictures of the current and past Boronia were displayed as a support for engagement with by-passers. These provided an interesting talking point and demonstrated how much Boronia has changed over the past 40-50 years.

A small handout outlining the project and asking for their input into the survey with the online address to the Council information and link to the Boronia Future Community Survey was given out. Electronic devices were also made available on-site for people to fill out the survey on the spot as well as hard copies of the Boronia Future Community Survey.

Approximately 20 hard copies of the survey with a reply paid envelope were handed out on the day as well. Overall, contact was made with approximately 100+ people during this session.

Results and Key Findings

Some of the key findings from the community conversations are:

- Changing character of Boronia with the new developments – some pointed out how they are 'wedged' between two developments;
- People feel a connection to the history of Boronia and seeing the changes taking place. Not all negative;
- Public toilet needed in Boronia Village/Junction area;
- New residents really liked living in Boronia;
- Concern about the drug problem around Boronia and Orchid Ave;
- Rubbish in shopping areas and streets, especially Dorset Square;
- A few people pointed out on the map where the existing or proposed development was effecting their property regarding outlook and views;
- The main concern related to the development occurring throughout Boronia.

3.6.2 Workshop - Service Providers and Agencies

Purpose and Audience

The purpose of this workshop was to:

- Raise awareness about the Boronia Renewal Project;
- Create a forum for information sharing and increasing the understanding of the variety of services and facilities available in Boronia; and
- Build a more comprehensive picture of Boronia and facilitate solutions for the complex issues facing the community.

The primary target group of the workshop was service providers and agencies operating or representing the community in Boronia. All social and technical fields' service providers were invited to participate.

Communication of Event

This event was communicated by personal invite. A database comprising 40+ agencies was created. The invitation provided information on the project. It highlighted that the discussion would focus on two focal points:

- The impact of recent population changes on facilities and services delivery;
- The impacts of the forecasted growth and population profile changes on future facility and service delivery.

Brief Description

The workshop took place on 15 February 2018 between 9:00 – 12:30am at St Paul Church venue.

The workshop was hosted by Knox City Mayor whom welcomed the participants. Each introduced themselves at their table and spoke briefly about the services they provide. In all, there were a diverse group of 16 services represented from health, education, training, migrant, police, legal, housing, mental, aged, family and children, disability and volunteer services.



The workshop comprised a short presentation outlining the changes taking place in Boronia as shown from the 2016 census, as well as the challenges and opportunities these changes present.

Following the presentation, each participants broke into small groups to gain an understanding around the thematic of:

- The changes their service has experienced over the years;
- The pressure points/constraints for their service;
- What additional/different services are necessary to meet the future community needs;
- What will help Boronia thrive.

Results and Key Findings

The discussions during the workshop helped identify opportunities to better utilise scarce resources in planning for Boronia. While the need for additional housing support, community safety and mental health services are required, the idea of a community hub with co-location of services for all age cohorts was one way to operate more efficiently and effectively. Currently there are a number of Not for Profits operating in Boronia at different locations which makes it difficult for people needing help finding them and the services they provide.

Many indicated the increase in the need for their service and the importance of volunteers to keep up with this need. The gap is growing putting more pressure on the existing volunteers.

The participants identified the following points to help Boronia thrive in the future:

- *A need for co-location of key services and supports – multi use facilities which would also allow for night time services and would require:*
 - *Parking,*
 - *Transport,*
 - *Affordable,*
 - *Family friendly,*
 - *All ages/abilities.*
- *Improve perception of community safety;*
- *Increased marketing and promotion of what is already available in Boronia – there is a lot! Use current spaces and places smarter;*
- *Facilities need to be accessible and in some cases updated so people don't leave Boronia and the municipality to go elsewhere;*
- *Boronia Park could be an opportunity for a community hub with increased open space and outdoor activity – skate park, half courts, outdoor seating, parkland, etc. designed for ALL ages;*
- *Need for more youth based activities in Boronia;*
- *The need for more volunteers to keep up with the demand on services;*
- *Activate the area at night through night events and outdoor dining, etc.;*

- *Better connections in Boronia – too disconnected. Need for additional signage and wayfinding strategies to get around.*

3.6.3 Workshop - Community Groups

Purpose and Audience

The purpose of this workshop was to:

- Raise awareness about the Boronia Renewal Project;
- Create a forum for information sharing and increasing everyone's understanding of the needs of community groups in Boronia; and
- Help shape the future strategic direction of Boronia.

The primary target group for the workshop was Community Groups representative and their members that are active with an interest or representation in Boronia.

Communication of Event

This event was communicated by personal invite. A database comprising 50+ community groups from the sporting, faith-based, recreational and local service groups was created. The invitation provided information on the project. It highlighted that the discussion would focus on two focal points:

1. The impact of recent population changes on facilities and community groups;
2. The impacts of the forecasted growth and population profile changes on future facilities and supporting community groups to be sustainable in the long term.

Brief Description

The workshop took place on 15 February 2018 at St Paul Church venue

The workshop was hosted by Knox City Mayor whom welcomed the participants. The workshop was set-up in small tables (4 at a table) with a council officer acting as a facilitator and scribe. Participants were invited to introduce themselves at their table and spoke briefly about the community group and function. A short presentation followed, which outlined the changes taking place as shown from the 2016 census, the challenges and opportunities these changes present.



A presentation putting the Boronia context was provided.

After this information, participants broke into small groups to gain an understanding of:

- What changes has your group experienced in recent years;
- What are the pressure points or constraints for your group;
- What additional or different facilities will be necessary to meet their future needs.

There were 18 participants from 15 diverse community groups, comprising the sporting, faith-based, scouting, housing activist, recreational and aged groups in Boronia.

The event provided the opportunity for participants to share their local knowledge, experiences, constraints and changes needed to help Boronia grow.

Results and Key Findings

Each participants represented community groups that have been established and active in Boronia for over 20+ years. However, some groups discussed experiencing recent difficulties in reaching the community for recruiting new members and volunteers to help run their group. There was discussions around people not feeling as safe around Boronia, especially where methadone clinic is dispensed. Also, a concern was raised about the noticeable increase in people

'sleeping rough', which was noted as demonstration of the lack of affordable housing in the locality. A number of participants also noted the increase housing development, which is effecting the traffic, parking and local environment.

With the diminution of connectivity between groups, and especially between the reach of these groups and the community; the importance of creating and providing a community hub space (indoor and outdoor) was seen as a way of creating a sense of local community in Boronia.

The participants identified the following points to help Boronia thrive in the future:

- The provision of a community/multi-purpose space (one-stop-shop) that can be used by various groups which are multi-generational, multi-cultural and multi- purpose;
- Improve perception of community safety ;
- Boronia Park area could house a multi-purpose which could cater for a range of sports and recreational activities (indoor and outdoor) including, basketball, badminton, chess, table tennis – activities which include the changing demographics of the area. Could have a separate area for service providers/community groups;
- Need to improve the quality of shops and clean up shop fronts – increase greenery around shops to make them more attractive and to provide a visual link to the different shopping areas in Boronia;
- Need more activity and open space to bring people together;
- The need for more young people to participate in the local sporting activities (football and cricket);
- Need smarter use of space and facilities to cater for future growth, both public and privately owned;
- Increase housing growth is creating parking and congestion on local streets;
- Improve parking, accessibility and transport to meet needs, especially parking for train commuters. Could include a community bus;
- Consolidate shopping areas to reduce the shopping and parking areas and create more open space;
- Promote Boronia as the Gateway to the Dandenong.

3.6.4 Workshop - Traders and Business Community

Purpose and Audience

The purpose of this workshop was to:

- Raise awareness about the Boronia Renewal Project;
- Create a forum for Traders and Business Owners to participate in the BRP and contribute ideas, establish/build good working relationship; and
- Share information and knowledge about the area to develop a deeper understanding and inform future decision-making.

A specific focus of the workshop related to the challenges associated with running a business in Boronia.

The audience was Traders and Business Owners in the Boronia Activity Centre. A database comprising 603 businesses and business owners in Boronia had been created and was used for this purpose.

Communication of Event

This workshop was communicated by personal invite from the Boronia traders, businesses and business owners' database.

From this database, 425 email and 178 letters were sent, informing them about the project and asking them to register their interest to attend the workshop.

Brief Description

The workshop took place on 6 February 2018 at St Paul Church venue.

The workshop was hosted by Knox City Mayor whom welcomed the participants. The workshop was set-up in small tables (4 at a table) with a council officer acting as a facilitator and scribe. Each participants were asked - to introduce themselves, their business and indicate what attracted them to set up in Boronia and how long have they been in Boronia.



A presentation putting the Boronia context was provided.

After this exchange, participants broke into small groups to gain an understanding of:

- What changes they have experienced in recent years;
- What will help Boronia to thrive; and
- What they think is unique about Boronia.

There were a total of 18 participants from a range of businesses including: Café/Restaurants, Professional Services, Employment and Training, Medical, Musical, Community and Auto Services.

Most of the participants represented small businesses in Boronia and had been located in Boronia for a number of years (10+). They chose Boronia because of a long-term association to the area, affordable, close to home and/or availability of public transport.

Participants were handed a feedback form at the end of the workshop where they could give more input and even request one-on-one meeting with Council officers.

Results and Key Findings

The key points raised were:

- The reliability of the internet is a big issue effecting businesses and customers;
- Anti-social behaviour is a problem and there are no local mental health services;
- Mental Health is presenting more in Secondary Schools, there is more pressure on young people and no support services in Boronia;
- Encourage youth activities and capture young people to break the generational unemployment in Boronia;
- Due to growth in demand a Local Medical Centre is continuing to grow and expand the range of services they offer and increase the sites they operate from in Boronia;
- A new local market in Boronia could attract more people to Boronia;
- Boronia has the potential to become the place to visit in the Eastern suburbs for dinner, coffee, movies etc.;
- Raise the profile of Boronia to encourage tourist stops on the way to the Dandenong;
- Individual and community safety is an issue especially relating to drugs, the methadone clinic and alcohol abuse;
- Need to improve the aesthetics of the shops to encourage people to shop in Boronia – Boronia looks old and need new modern look with refreshed infrastructure;
- Arcades could be made beautiful spaces, cleaned, lit, with the right type of business activities;
- Boronia needs quality food and drink premises, outdoor dining and boutique that caters for all;
- Promotion of the businesses in Boronia with map and parking guide;



- “When people do not have money in their pockets, then you have a problem”. Need to concentrate on increasing local employment, which helps local businesses, which helps the local community;
- Reduce the segmentation in Boronia by strengthening the collaboration between businesses;
- New active Boronia Traders Group with 35 traders;
- Provide better facilities for children and young people and keep the Boronia Basketball Stadium;
- More younger families are moving in and older people are moving out – selling to developers;
- Concern over the length of time the renewal of infrastructure takes which impacts and disrupts their business for too long;
- Businesses could benefit from big promotions/events and synergies generated but need help/expertise to organise these.

3.6.5 Community Information Drop-In Session

Purpose and Audience

This consultation involved the presentation of the Draft Boronia Renewal Strategy Key Directions report and aligns with the engagement identified in **Section 3.3.4** of this report.

The purpose of this consultation was:

- To explain the ideas behind the nine key directions in the draft strategy;
- To seek the community's feedback on the nine key directions.

The consultation was opened to anyone with interest in the future of Boronia, and particularly people who live, visit, work and play in Boronia.

Communication of Event

This consultation was communicated in the following ways:

- Emails sent to local community organisations advising them of the event and asking them to promote it to their members.
- Boronia E-newsletter bulletin emailed to subscribers.
- Advertised in the Leader on 30 October 2018.
- Posted on the Knox website.
- Mayor interview on Eastern FM community radio
- Advertised on the customer service screen in the front office of Council.

The communication of this specific event also formed part of the communication strategy implemented for the Draft Renewal Strategy discussed in **Section 3.3.4**.

Brief Description

The draft report incorporated the results identified from comprehensive consultation and community engagement that was undertaken as both part of Stage 1 and Stage 2 of the Boronia Renewal Project in its strategy and the outcome of numerous background research.

The Drop-In session was held on Tuesday 13 November 2018 at St Paul Church in Boronia.



Council officers were available during the time to discuss with attending visitors, introduce the matter, answer questions, and gather information and evaluation. The drop-in session operated as a free-roaming area. A large current aerial map of Boronia and size posters of the nine key directions of the renewal strategy with associated input space allowed people to respond and indicate their thoughts to the thematic and questions marked for each directions. The posters provided information on the strategy and future actions that may be associated with such strategy.

Handouts summary of the Draft Renewal Strategy were available with copies of the survey as well as electronic device to allow people to complete the survey online.



Overall, contact was made with approximately 30 people during this session.

Results and Key Findings

The audience had the opportunity to respond to each nine direction which comprised thematic and questions, some were more popular than others.

The top five theme which attracted the most interactions:

1. Boronia is a unique local place
2. Boronia has quality living environment
3. Boronia is a green place with spaces to play
4. Boronia is growing through cohesive land use and urban infrastructure
5. Boronia is a healthy, active and connected community

Sample points raised for each key directions were:

- What unique features or experiences of Boronia to be retained / Local events you would suggest:
 - Retain the character and some old houses with charm;
 - Avoid Box Hill type of development;
 - Community events on the ovals;
 - Night markets and other markets, pop-up events;
 - Expand library; Keep views to the Hill;
 - Revamp station similar to Ringwood.
- What character elements or features in new apartment that should be managed through urban design guidelines:
 - Sustainability, garden walls, embracing landscape as part of the design;
 - Diverse housing choices including larger apartments; height limitations;
 - Car parking spaces;
 - Social housings;
 - Emphasis on aesthetics and energy efficient;
 - More canopy trees, materials and colours that are natural.
- What opportunities for social gatherings and interactions / changes to help improve health and wellbeing:
 - Annual Boronia Festival and Art gallery;
 - Saving the Stadium space for the community;
 - Social rental accommodation;
 - Convert Genista Reserve into a village square;
 - Library events in the park;
 - More BBQ and cooking facilities in public spaces.
- How can Boronia be open to change to best capture opportunities / ways to be resilient / How to prepare for future key challenges and resources constraints:

- Facilitate ways to network and socialize;
- Helping the community to come together to build resilience;
- Support to youth and underemployed;
- Welcoming new ideas, and follow strategies and rules established.
- What information would you like to see in a Boronia Portal / what business opportunities exist / How can Boronia leverage on emerging social enterprise and health sector for job creation:’
 - Connection to Bayswater Business Precinct;
 - Community events;
 - Businesses that look inviting when viewed from the street.
- What are the best landscaping elements / What can be done to transform Boronia into a “town in a garden” / What does “green place with space to play” means to you:
 - Build over north end of railway tunnel with green community meeting space;
 - Retain trees and tree canopy and develop around them;
 - Keep Boronia a foothills community;
 - Apply garden area requirements;
 - Require more planting of canopy trees;
 - Reduce road width for more space for trees.
- What infrastructure is needed / How to attract digital and tech:
 - Keep Knox Basketball Stadium / redevelop Stadium as a mix use office/shop/residential;
 - More computers and books at Knox Library;
 - Better bike path along Erica Ave and Chandler Road;
 - A new community centre adjoined the library;
 - Develop Council investment and business partnerships.
- What activities/events would you like / What infrastructure change will encourage nightlife:
 - Regular markets;
 - Better trading experience (shops – cafés – restaurants);
 - Upgrading of train station and most central area;
 - Co-working spaces;
 - Community kitchen and using the local churches location to deliver services;
 - Art and craft precinct and pop-up veggie patch.
- What can be done to encourage more people to live, work and visit Boronia Town Centre in the future / to reduce barriers and improve amenity and public space / to encourage walking and cycling / to take actions to create a ‘town in a garden’:
 - Create pedestrian tunnels or fly-over;
 - Local bus network and provide bike lanes;
 - Open/air trading;
 - Bring the retarding basin underground with a park on-top / encourage park meet-up;
 - Retain large trees;
 - More elevated car park near the station.

3.6.6 #Trees of Boronia

Purpose and Audience

The Boronia Future Community Survey confirmed the general feeling that the environment is a number one feature most respondents liked about the area. The Boronia Renewal Project turned its attention to this topic and the natural environment around Boronia, in particular the trees, and asked the public to submit images of their favourite trees and fauna in Boronia.

The purpose was to gather images to help form a visual representation of Boronia’s natural environment, identify key elements of the natural environment highlighted by the community and help Council with planning while maintaining a focus on the ‘green and leafy’ suburban setting.

The consultation was opened to anyone with interest in the future of Boronia.

Communication of Event

This event was communicated in the following ways:

- Social media advertisement with post on Knox City Council Facebook;
- Boronia E-newsletter bulletin emailed to subscribers;
- Boronia - The Basin Community News article and Advertisement in May 2018 edition.

Brief Description

People were asked to submit their favourite tree snaps directly via the website or via Instagram using the hashtag #treesofboronia with information regarding the location of the tree is and what is good about it. They could alternatively send the information directly to Council electronically.

In recognition of people’s time constraints, this activity was designed to be quick and easy for people, managed electronically and at their own pace and convenience. It attempted to test a more dynamic approach with the digital world.

The activity was poorly engaged with only 1 respondent partaking the activity.

Results and Key Findings

Due to the poor reception of this activity, there is no relevant results. As such, any future similar activity may require more promotion and more engagement to draw interest and a different strategy would need to be implemented.

3.6.7 Stakeholders – Specific meetings

Brief Description

Council officers also engaged directly with key landowners and business operators in Boronia throughout the consultation process either at their specific request or following Council’s approach. These meetings allowed Council to engage with business stakeholder to inform of Council’s aspirations, introduce the project, discuss any investment plans or strategies they may have.

BUSINESS	PROPERTY	DATE OF MEETING	DETAILS AND NOTES
ESG Matchworks <i>(Recruitment agency based in Boronia)</i>	Floriston Ave	7 December 2017	Introduction to project;
Coles	Dorset Square	12 January 2018	Introduction to project, discussion regarding future investment plans of Coles, discussion and advice regarding car park investment;
Woolworths	Boronia Junction & Dan Murphys	24 January 2018	Introduction to project, discussion regarding future investment plans of Woolworths;

BUSINESS	PROPERTY	DATE OF MEETING	DETAILS AND NOTES
Peter Brown Architects <i>(designer)</i>	Aldi Site Erica Ave	1 May 2018	Meet & Greet, introduction to project, and invitation to the designer and company to stay engaged and aware of the consultation process
Adrian Atkins & Associates <i>(designer)</i>	N/A	10 May 2018	Introduction to project
Cypress Health	Cypress Ave & Boronia Road – Medical Precinct	19 July 2018	Introduction to project, and discussion regarding future investment
Prospective investor – Donut store Boronia Mall	Boronia Mall	10 October 2018	Introduction to project, discussion regarding potential investment
Boronia Junction Pty Ltd	Boronia Junction	31 October 2018	Introduction to project and discussion regarding future investment plans.
Smart Planning and Design <i>(owners representative)</i>	15 Chandler Road	18 December 2018	Introduction to project, invitation to the designer and landowner to engage in the consultation process, discussion regarding potential short term investment

3.6.8 Creating a safer Boronia walking tours and workshops

Purpose and Audience

The Safety Perceptions Survey identified a number of items raised by the community with amongst them; that street lighting was insufficient to feel safe at night. Council sought opportunity to quickly improve this matter fast.

Further to this, the Boronia Renewal Project was awarded a Federal Government grant of \$423,000 through the Safer Communities Fund, which upon further investigation would allow Council to install solar-powered lighting in the vicinity of the train station, Erica Avenue, Orchid Avenue and Tormore Reserve.

The purpose of these walking tours and workshop sessions was to conduct a safety audit with the community to identify and record issues highlighted by the community which could be improved by the installation of lights, but also evaluate any 'on-the-ground' improvements with the community before moving to draft design and tender stage.

The primary audience for these walking tours were business owners, traders, residents, property owners located within the identified pilot area comprising the vicinity of the Train Station, Erica Avenue, Orchid Avenue and Tormore Reserve. The workshop session were mainly aimed at business owners, traders as well as community groups and service providers with a general interest in mobility and safety. Community groups were also invited to participate in the walking tours.

Communication of Event

This walking tour was primarily communicated by a mail-out invitation to all residents, property owners, business owners and traders within study area which were sent on 20 September 2018.

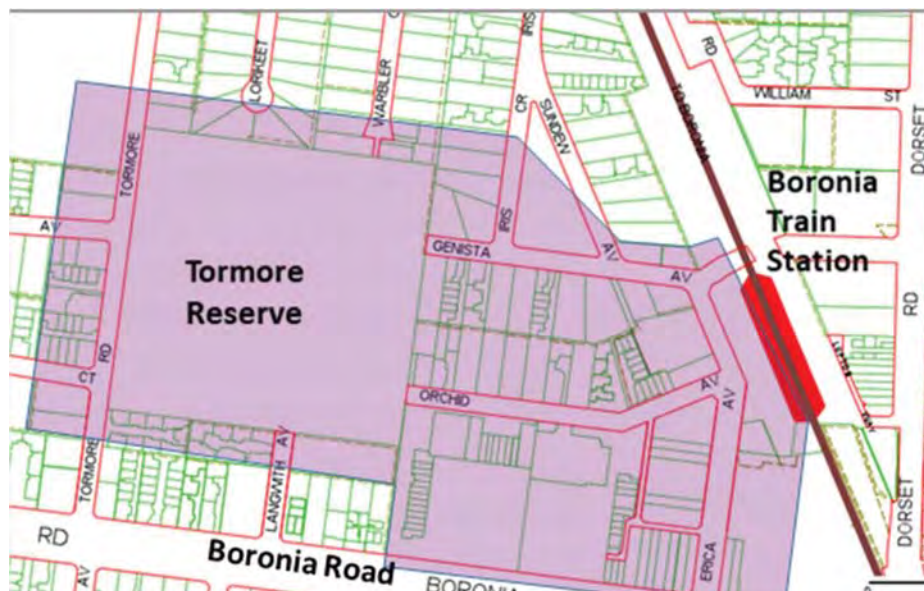


Figure 2. Target audience and study area within Boronia for the Creating a Safer Boronia Walking Tour

A workshop session opportunity was also communicated by mail-out to business owners and traders including over 300 owners, traders, or occupiers.

The invitation for both the walking tours and workshops was also circulated by email to community groups, agencies, and service providers taken out of our "reference email list".

People were asked to register their interest online to one of the date made available with registration open until 30 September 2018.

Two dates were offered for a walking tour:

- Tuesday 9 October 2018 at 6:30AM; and
- Thursday 11 October 2018 at 7:30PM.

Two dates were offered to business owners and traders for a workshop:

- Tuesday 2 October 2018 at 6PM; and
- Thursday 4 October 2018 at 7AM.

Brief Description

The federal grant was announced by the Federal Member for Aston, Alan Tudge MP on 1 June 2018, and will allow Council to install solar-powered lighting in the vicinity of the train station, Erica Avenue, Orchid Avenue and Tormore Reserve. The new lights is intended to be installed over the next two years following a period of community consultation and will aim to:

- Increase visibility at night;
- Improve perception of safety;
- Help deter anti-social behaviour.

A combination of workshop and walking tours were offered however only walking tours were held due to no registration for the workshops.

The walking tours took the form of Community Safety Audits (CSAs) which encompassed Erica, Genista and Orchid Avenues and included parts of Sundew and Iris Courts, Langwith Ave and Tormore Reserve (target area). People were invited to register electronically for attendance which ultimately resulted in a list for workshop attendees and a list for walking tour attendees.

Approximately 20 people attended the different walking tours.

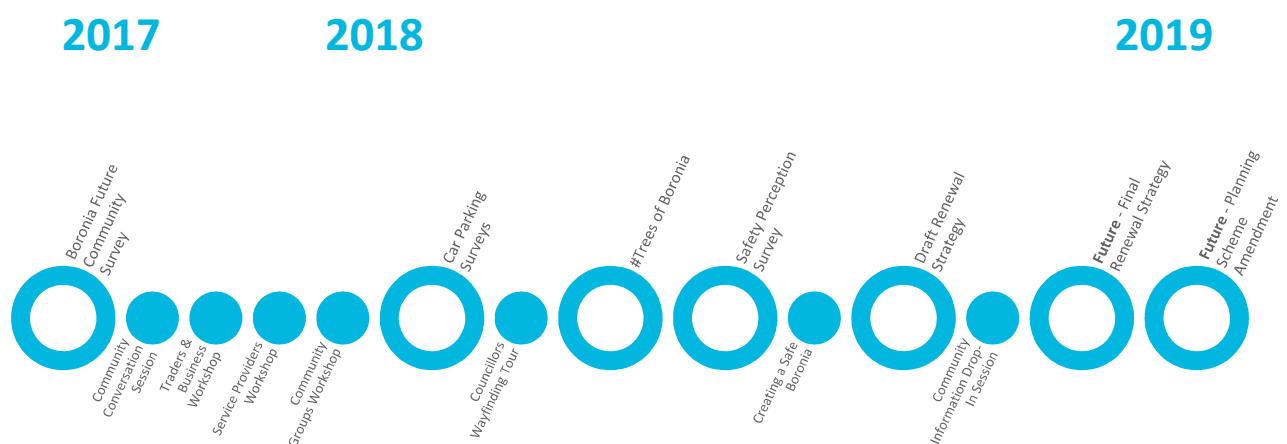
The CSA commenced at the intersection of Erica Avenue and Boronia Road. The group walked up Erica Avenue towards the railway station, reviewing the vicinity of the train station, bus interchange, and commuter car park before moving towards Genista Avenue. The area of Sundew and Iris Crescent surrounding Genista Reserve was visited before the walk continued to Tormore Reserve and further returned towards Erica Avenue via Orchid Avenue and the laneways separating Erica Avenue and Boronia Village.

Results and Key Findings

A number of actions required resulted from the CSA, with some of the actions requiring the cooperation of traders and/or property owners, while others would need to be undertaken by Council. If undertaken, these actions will enhance the amenity of the area, reduce the potential for criminal activity and/or anti-social behavior and improve perception of safety.

- That Council engage with local traders and commercial property owners to discuss opportunities for them to improve the amenity of their properties.
- That Council's Community Access, Equity & Safety Coordinator refer actions that fall under the responsibility of Council departments to the appropriate team for attention.
- That actions that are within the scope of this project and/or the Boronia Renewal project are referred to the consultant for consideration and/or inclusion in the proposed Concept Plan for the target area.
- That, issues which are outside the scope of the project should be referred to the appropriate Council Department.

3.8 Timelines of engagement



3.9 Participants

Listening to the community has been a pivotal point in this first stage of preparing a Renewal Strategy to guide redevelopment over the next 20 years.

The success of the Boronia Renewal Project does not sit with Knox Council alone; rather its success will depend on how the community and key stakeholders embrace the new vision and work collectively to implement the various strategies to make it a reality. This places added importance on the Community Engagement component and its contribution as an essential part of delivering the Boronia Renewal Project.

Through a targeted and intensive community consultation process in Stage 1 and Stage 2, a greater level of interaction with the community and key stakeholders was achieved which can be noted below.

EVENT AND MEDIUM	PARTICIPATION/OUTREACH
Boronia Future Community Survey	500+
Community Conversation Session	100+
Workshop - Traders & Business workshop	80+
Workshop - Service Providers	
Workshop - Community Groups	
Car parking Community Survey	360+
#Trees of Boronia	1
Safety Perceptions Survey	270+
Creating Safer Boronia walking tours and workshops	300+
Community Information Drop-In Session and Draft Renewal Strategy Survey	120+
Youth Perspective Survey	290+
Movement and Access Focus Group	18
Stakeholders one-on-one meetings	9+
Registration for Boronia E-Newsletter	300+
Social Media Reach	~400+/monthly
Regular Media Reach	100,000+
Website	~400+/monthly

The overall cumulative participation to all surveys and consultation sessions was in the order of 2000+ participants. It is acknowledged that some participants would have likely partaken more than one activities.

The overall outreach catchment via advertising was in the order of over 100,000 people through paper media with a more realistic interested outreach being in the vicinity of 10,000 people over time. The outreach was wide with advertising placed in the Knox Leader which can reach a distribution of over 150,000 potential people and the Boronia and The Basin Community News 12,000 people. In addition to this, it is estimated that Council's website frequentation for this project was in the order of 400 visitors/month, which provided an additional cumulative outreach over time.

It is acknowledged that despite such catchment not everyone would have been attentive or interested in the project or a consultation process and for example, despite a large distribution catchment paper media would not necessarily be read by all. Regardless, it is considered that the overall engagement in relation to the prospective catchment was good.

4.0 Findings and Lessons learnt

From all the various consultation events and process, the following emerging themes have come from the feedback received.

- The existing physical condition of the centre is generating a lot of negative perceptions while the community still highlight many attraction “gems”.
- People still like living in the area and particularly appreciate the potential it could have.
- Height, density, and construction quality are sensitive issues that concerns the community.
- The quality, and issues resulting, of recent residential development has undermined confidence.
- There is a recognition that Boronia needs to change, but there is an absence of leading vision that synergize the community. Such hesitation is perceivable with items being viewed in isolation and not with a holistic approach, leaving the ‘dots’ unconnected and interpreted in silos or extrapolated to other unrelated issues.
- The vision of a different future with changed attitude and behaviour is not well-understood or shared.
- The articulating the best fit or right form of growth is an ongoing challenge for the community to come to terms with.
- The locational attributes are a very big part of the centre identity and sense of place.
- Movement around the centre and its fragmented nature are issues that were raised in the 2006 SP process that remain prominent now.
- Crime and anti-social behaviour is perceived as rampant and creates insecurity. There is still a belief that increase development will exacerbated this. Linkage between physical environment and anti-social behaviour are only partially made.
- There is a need to address such feeling of insecurity through -appropriate design, -activation of street life and interactions opportunities, -increased services, -visual cues, -nightlife activities and compatible land use, -prioritized pedestrian-friendly environment, -clean of littering, and with proper lighting, to support other authorities addressing anti-social issues.
- Car parking access is still perceived as an issue in commercial areas. There is however a need to review street design pattern on residential streets to amalgamate all users movement and on-street car park and alleviate conflict between these occupations.
- The need to plan for and adapt to cater to the needs of the existing and future communities.
- Need for Council to educate and inform about the baseline concepts, the decision-making process, and the interconnections between various issues that influence outcomes.
- There is a need to give feedback to the community post consultation, to close the loop and give advice of the outcomes of different steps in the process were. This is an important action that demonstrated the feedback received is valued and how it has informed the project. It is acknowledged that this step has not been completed for each engagement action.

5.0 Conclusion

We would like to thank all participants who provided input to this community engagement and helped shape future of Boronia.

The community and stakeholder views and ideas highlighted in this report will assist Council to understand and plan for the needs and aspirations of the community, and inform a new strategy for renewal of Boronia and Planning Scheme Amendment as part of the third stage of the project throughout 2019.

Whilst the focus of collecting this information is to support development of this Renewal Strategy, input from this engagement process will also help to inform a range of other strategic planning, community development, asset management and capital works activities over the coming years.

There is the opportunity to look at Boronia through a few different lenses to trigger renewal, inform and be the leader of appropriate change.

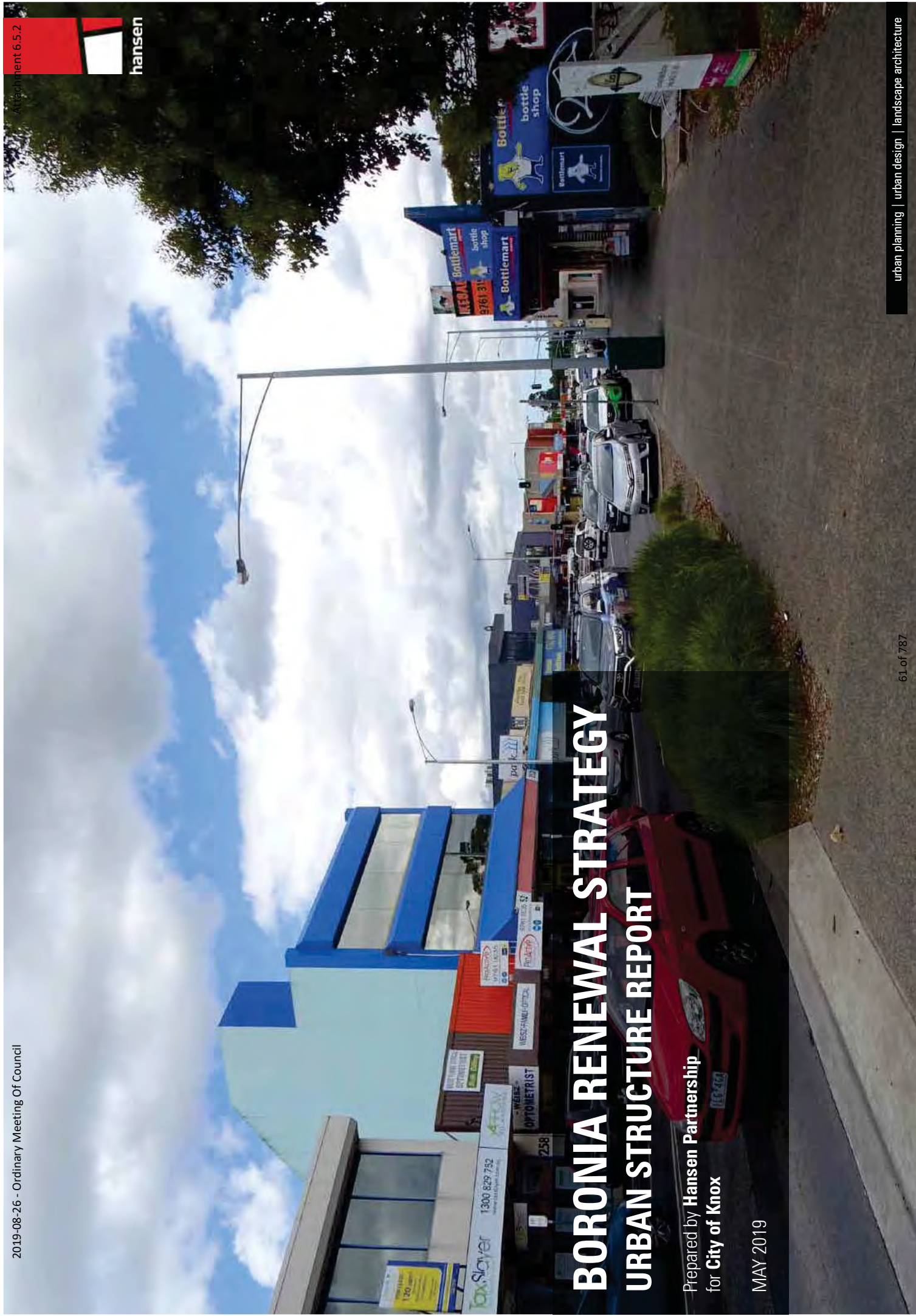
Community members and key stakeholders will have the opportunity to have their say on the subsequent draft Planning Scheme Amendment when it is placed on public exhibition in 2019.

For more information on this project, please contact the Boronia Renewal Project team on 03 9298 8000 or email boroniarenewal@knox.vic.gov.au





hansen



BORONIA RENEWAL STRATEGY URBAN STRUCTURE REPORT

Prepared by **Hansen Partnership**
for **City of Knox**

MAY 2019

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Version #	Chapters 1-5	Chapters 1-7	Chapters 1-7 B
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1.0 Introduction

1.1 Project History & Process

The Boronia Town Centre is one of the key Activity Centres within the City of Knox.

The current Structure Plan was prepared in 2006 to guide development within the defined Activity Centre area. This Structure Plan underpins the key planning policy which guides development and built form outcomes within Boronia, being Design and Development Overlay - Schedule 7 (DDO7). However, this built form control is due to expire on 15 December 2019. Therefore, Council is in the midst of preparing a new Structure Plan for Boronia, to guide the future evolution and renewal of the Activity Centre. This strategic project is known as the Boronia Renewal Strategy. This urban design and built form work is to form part of this overall Renewal Strategy process.

1.2 Purpose of Report

Knox City Council has engaged Hansen Partnership to prepare the Boronia Urban Structure Report. This built form review will set a long term strategic framework to consider the potential future redevelopment scale and character for the Boronia Town Centre. This will incorporate preferred overall building heights, street wall profiles and interface treatments. It will also seek to establish a stronger sense of local character, responding to Boronia's position at the threshold between suburban Melbourne and the Dandenong Ranges.

The Boronia Urban Structure Report will form part of the broader Boronia Renewal Strategy which is being undertaken by the Knox City Council.



Figure 1. The study area (red) and commercial core (blue)

1.3 Scope

To date this Urban Structure Report has been informed by a review of background documents, the Planning Scheme, site inspections, desktop spatial analysis and an awareness recently approved and current development proposals within the town centre.

The following background reports have informed our knowledge and understanding of Boronia:

- Boronia Commercial and Retail Needs Assessment – Ratio (2005);
- Boronia Activity Centre Structure Plan – Access Review – AAA (2005);
- Boronia Social Environment Study – Springboard Social Planning (2005);
- Boronia Structure Plan (2006);
- Knox Housing Strategy (2015);
- Knox Employment Forecasts to 2036 – Urban Enterprise (2016);
- Land for Business Assessment Areas – Employment Land and Activity Centres – Urban Enterprise (2016);
- Profile of Businesses within Buffer Areas for Boronia Activity Centre and Burwood Highway East – Urban Enterprise (2017);
- Boronia – Economic Demand, Land and Site Options Analysis – HILPDA (2017);
- Boronia Mapping and Audit of Council Owned Assets – (2017);
- Playground Assets in Boronia Structure Plan Area (2017);
- Road and Drainage Assets in Boronia Structure Plan Area (2017);
- Draft Boronia Community Services and Facilities Review (2017);
- Boronia Activity Centre Movement and Access Study – GTA (2017); and
- Draft Land Use and Planning Background report – (2017)

1.4 Brief History

Boronia was named in 1915 by the local Councillor A. E. Chandler. The settlement was named 'Boronia' after a plant which grew on his property nearby at The Basin. Prior to this the area was considered to be part of Bayswater and was predominantly an orchard and market garden based settlement at the base of the Dandenong Ranges.

The opening of the train station and post office in 1920 led to a rapid increase in population and the creation of a township.

During the 1960s and 1970s Boronia experienced its next wave of rapid growth and change as it was merged into the expanding urban fringe. This saw the introduction of supermarkets at the edge of the then Dorset Road and Boronia Road strip shops and resulted in the creation of competing retail anchors separated by the main junction of Dorset and Boronia Roads as well as the rail line.

In 1998 the railway line was grade separated, resulting in a new station and bus interchange, as well as the Boronia Junction Shopping Centre and extension of Erica Avenue to link across the northern end of the station and connect through to Dorset Road and Chandler Avenue.

In 2008 the Dorset Square (car-park) underwent significant public realm enhancement to green and improve the appearance and function of the otherwise large surface car park which serves the Boronia Village and Boronia Mall shopping centres.

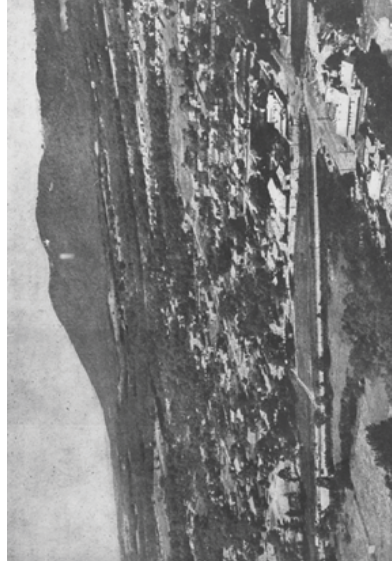


Figure 2. Historical aerial image looking toward Dandenong Ranges

2.0 Background Information

2.1 Strategic & Planning Context

The 2006 Boronia Structure Plan has allowed for moderate levels of change within the centre.

Boronia Structure Plan

The Structure Plan (October 2006), provided a series of guiding principles and a point of reference for Council when making decisions, planning and managing new development. The Structure Plan was translated into planning controls in the Knox Planning Scheme and therefore provides guidelines for future building height and where activity and development should be located.

As part of the State Government's metropolitan strategy, Melbourne 2030, Council was required to develop a Structure Plan to direct any future development within the commercial area of Boronia and its surrounds. The Structure Plan responded to the following issues in Boronia:

- Variety of land uses within the Activity Centre;
- Variety of housing types available;
- Need for improved use of non-motorised and public forms of transport;
- Need for more community gathering places and focal points within the area.

The Structure Plan study area is loosely based on a 500m walkable distance from adjoining commercial areas.

Timeline of the Boronia Structure Plan and associated land planning framework:

- 2005 – Boronia Structure Plan prepared;
 - 2006 – Boronia Structure Plan adopted by Council;
 - 2009 – Planning Scheme Amendment C62 proposed by Council. Minister for Planning expressed initial concern that building heights in the centre were too restrictive;
 - 2011 – Amendment C62 approved by Minister for Planning; and
 - 2015 – Amendment C133 proposed by Council to address land use planning conflicts in the Activity Centre. Minister for Planning approved the Amendment on an interim basis, expressing concern that building heights are too restrictive.
 - 2019 – DD07 is set to expire 15 December 2019.
- Given the impending expiry of DD07 a new regime of built form control is required for the Boronia Activity Centre.



Figure 3. Current DDO control



2006 Boronia Structure Plan

- **Design and Development Overlay – Schedule 7 (DD07)**
Implements the 2006 Structure Plan into the Knox Planning Scheme and seeks to guide built form outcomes for the Activity Centre. It contains the following Design objectives:
 - To maintain views toward the Dandenong Ranges National Park from current and future public places on the western ridge of the study area, particularly the key views from Tomare Reserve and from Boronia Village.
 - To recognise that within the Foothills areas the environmental and landscape significance outweighs the need for urban consolidation.
 - To reinforce opportunities for terraced forms of development in the south-east section of the centre, where a multiplicity of views can be shared by residents.
 - To visually offset increases in building height through substantial canopy planting of indigenous trees along nature strips, between buildings and the site's street frontage.
 - To develop underutilised land along the railway line where higher scale development can be built without direct streetscape, amenity or overshadowing concerns.
 - To establish Boronia as an environmentally sustainable centre incorporating best practice ecologically sustainable design principles.
 - To ensure that residential development provides an outstanding level of architectural quality, incorporating materials and finishes reflective of the indigenous character of the area and achieving an outstanding rating of ecologically sustainable design principles.
 - To ensure the interface between the public realm and new development has regard to the human scale and perceived safety of these environments through active edges and opportunities for passive surveillance.
 - To recognise Boronia's heritage including buildings representative of significant periods of Boronia's development.
 - To ensure quality design outcomes and 'inviting' environments for all members of the community.
 - To design building heights and form with regard to the topographical form and characteristics of the local area.
 - To ensure that new residential development provide for transitional built form between changes in building heights as shown at Map 1 of this schedule.

2.2 Boronia Renewal Strategy

Boronia Renewal Strategy

The Boronia Renewal Strategy is a Council lead review of the Boronia Structure Plan (2006) and sets a new Vision to lead Boronia towards 2040. The draft Boronia Renewal Strategy outlines an emerging Vision and 9 Key Directions to guide changes and redevelop the Boronia town Centre and surrounding neighbourhoods.

The emerging Vision is as follows.

Boronia:

A connected and resilient place that values its history and environment and embraces its forward-thinking community to realise its potential for future generations.

The 9 Key Directions are as follows:

1. *Boronia is a unique local place.*
2. *Boronia has quality living environments.*
3. *Boronia is a healthy, active and connected community.*
4. *Boronia is resilient.*
5. *Boronia nurtures small to medium enterprises, micro-making and social enterprise.*
6. *Boronia is a green place with spaces to play.*
7. *Boronia is smart and digital.*
8. *Boronia has an active nightlife.*
9. *Boronia is growing through cohesive land use and urban structure.*



Figure 4. Existing planning zones



Figure 5. Existing planning overlays

3.0 Existing Conditions Analysis

3.1 Urban Structure

Lot Size

- The lot size analysis reveals the extent of subdivision that has occurred in the residential areas bounding the commercial core, particularly to the south-west. While there are some cases of dual-occupancies, the major form of development is 3+ townhouses with shared driveways.
- The commercial core presents the greatest development opportunity with the presence of large lots and rows of consecutive medium sized allotments presenting the potential for land amalgamation.
- Some urban blocks in the residential area have almost completely undergone subdivision for townhouse development, such as the residential block abutting the southern edge of Tormore Reserve and the residential block abutting the southern edge of Boronia K-12 College.
- Heavily strata-titled allotments within the commercial core and generally found in clusters, creating development potential for consecutive larger and wider lots.

Lot Frontage

- While there is a clear presence of fine grain allotments within the commercial core (<10 and as narrow as 5m), there are generally wider and larger lots present, yet to undergo subdivision.
- Narrower lots within the commercial core are generally located near the main junction and along the Dorset Road commercial strip, contributing to the 'village' nature of the strip shopping precinct.
- Unless significant land amalgamation was to be achieved, the 12 rounded lots at the south-west corner of the main junction are unlikely to change in the short-medium term future.

Lot Depth

- Lots fronting Boronia Road are generally deeper (50-70m) presenting greater development capacity.
- There is a clear pattern of north-south oriented lots running deeper (50-70m)
- Fine grain commercial allotments along Dorset Road are shallower (30-50m).
- Many of the deepest lots (> 70m) have already undergone subdivision.

Key Implications

- The significant extent of subdivision that has occurred in the surrounding residential streets indicates areas unlikely to undergo change.
- The commercial core contains a mix of fine grain allotments and larger sites without strata-title.
- Larger commercial sites without strata-title indicate areas likely to undergo change.



Figure 6. Lot frontage width analysis



Figure 7. Lot depth width analysis



*Assumes that non-developable land - is needed for public/community use - contains building constructed from year 2000 onwards - has valid planning permit.

hansen partnership Pty Ltd
Level 4 138 Elizabeth St
Melbourne VIC 3000
t 61 3 8954 8344 f 61 3 8954 8388
e info@hansenpartnership.com.au
w www.hansenpartnership.com.au

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Revision: B



Figure 8. Lot size analysis

3.2 Access & Movement

- Boronia Road provides the major vehicular movement through the study area to/from Melbourne in the west and the Dandenong Ranges National Park to the east.
- Dorset Road provides a arterial vehicular movement through the study area to/from Ferntree Gully to the south and Croydon to the north catering for truck movement to the Bayswater industrial area.
- This high degree of vehicular movement creates a threshold at the intersection between of Boronia Road and Dorset Road. The intersection involving 18 lanes of traffic creates a significant challenge for pedestrian connectivity and amenity.
- Pedestrian amenity approaching and at the intersection is further compromised due to the vastness and lack of human scale caused by the width of the movement corridors and expanded by supermarket car parking at the street edge and the rail corridor to the south. This results in large distances of up to 105m between building, resulting in a highly exposed pedestrian environment.
- A number of laneways and internal arcades increase pedestrian permeability between the Dorset Road commercial spine and Dorset Square, as well as the public transport precinct.
- The double fronted buildings fronting Dorset Square and Dorset Road creates some conflict regarding loading and back of house functions with public realm. There is little to no surveillance from buildings to the public realm, with rear fencing and blank building interfaces forming the street edge.
- The primary connection to the train station and bus interchange, Lupton Way, is poor in pedestrian amenity, flanked by back of house functions of Dorset Road and also predominantly vehicle oriented.
- Lower order pedestrian streets generally contain one or no pedestrian paths, allowing grassed verges to extend to the curb.
- Narrow commercial properties which lack access to a service lane are unlikely to redevelop.
- The section of Dorset Road through the commercial core has a 40kpn speed limit.
- Boronia boasts a considerable number of pedestrian laneways and arcade links, which connect the large car parks through to the traditional main street shops and businesses.

Key Implications

- Boronia Road provides the major movement corridor, climaxing at the Dorset Road intersection.
- The junction presents a pedestrian connectivity challenge due to its vehicle dominance.
- Lupton Way presents a poor pedestrian environment to public transport commuters.
- Despite its narrower profile, Dorset Road has poor pedestrian amenity and is in places fenced to restrict crossing.
- The commercial core is generally permeable with a number of arcades and lanes providing connection to the transit hub and between commercial blocks.



The landscape setting and views to Danderongs form the western entrance.



Existing laneway within the commercial core.



The grade separated Boronia Railway Station

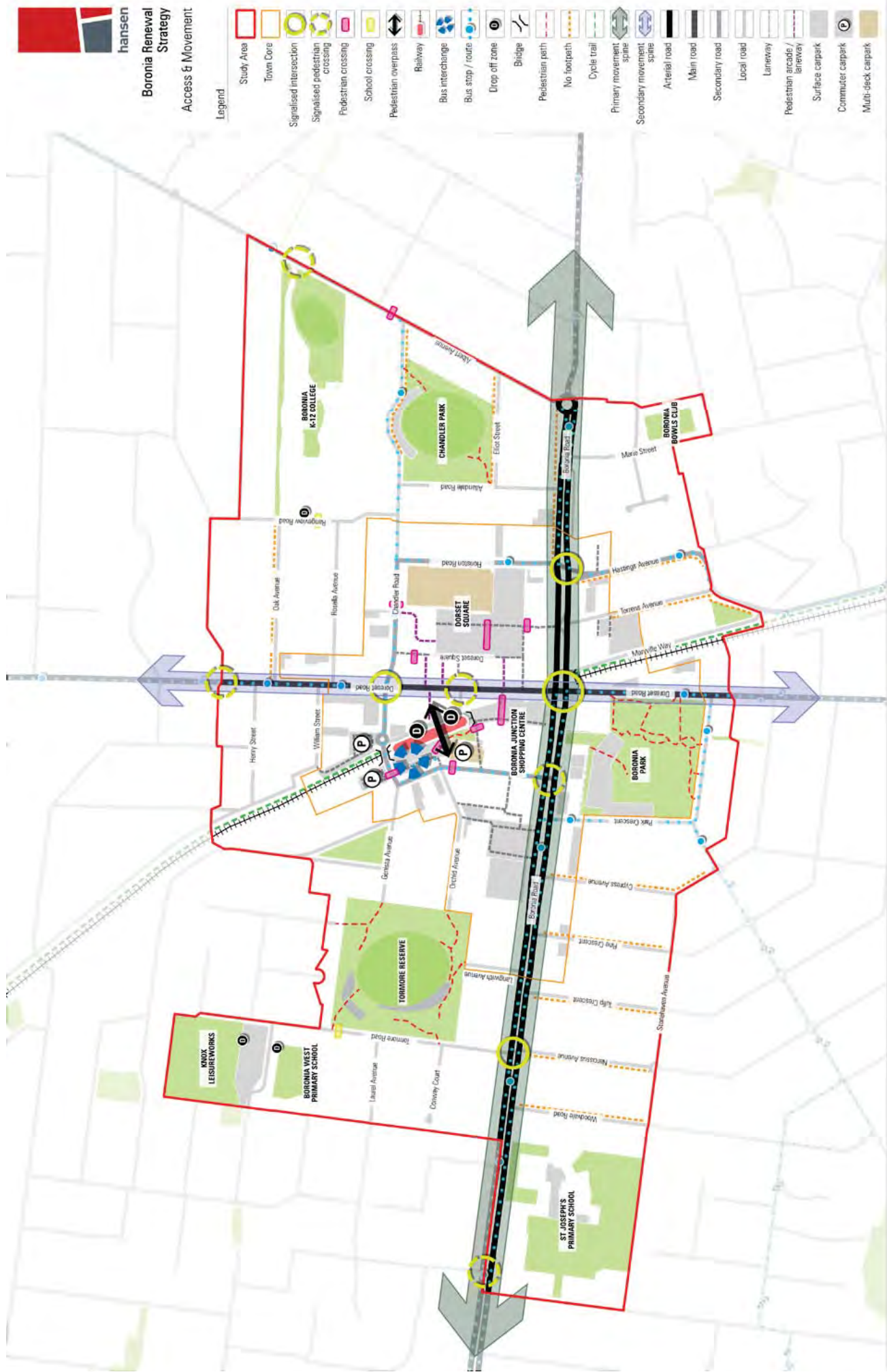


Figure 9. Access & Movement

3.3 Land Use & Activity

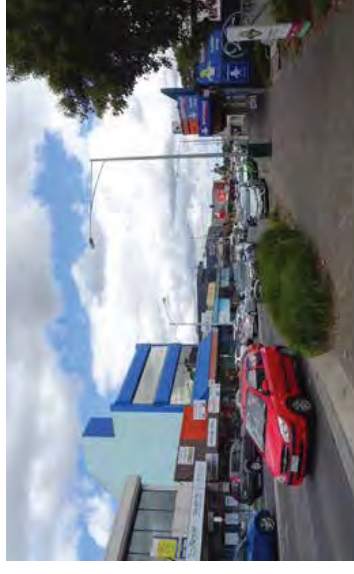
- There are three major retail nodes in the study area being Boronia Junction shopping Centre, Boronia Central and the Village shopping strip. The pedestrian connection between these nodes are generally confined to main roads or through lanes/arcades along Dorset Road. Greater legibility between the activity nodes could foster a more interactive precinct.
- While there is a high level of commercial activity leading to the junction along Boronia and Dorset Roads, it declines at the intersection due to the large car park at the north-western corner, train corridor and hostile pedestrian environment.
- Varying activity types have implication on the continuity on street edges, with customer parking of large format retail pushing buildings away from the street upwards of 60-80m, where as commercial streets built to the edge have a more consistent edge to the public realm.
- Dorset Road north of Boronia Road represents a more traditional commercial street typology with a consistent and active building edge to either side of the street.
- Dorset Square presents a challenge of servicing and loading to double fronted lots fronting the car park and Dorset Road.
- While Dorset Road and Boronia Road contain segments of commercial strip shopping typology, the more common format is large format retail or strips of shops fronting large surface car parking such as Dorset Square, Boronia Junction and the shops at Cypress Avenue.
- There is limited activity fronting movement to the train station and bus interchange, which generally comprises back-of-house functions.
- The transit hub generally has a poor relationship with the commercial core despite being located within immediate proximity.
- Commercial properties fronting Boronia Road generally contain servicing and back-of-house functions to Boronia Park.
- Most community based activities such as recreation and schools are not located immediately centrally, but surrounding the commercial core.
- Boronia has a high proportion of stand-alone independent shops, salons and small businesses, which are often located along the secondary movement routes in the arcades, laneways and Boronia Mall.

Key Implications

- Activity tapers at the main junction due to large surface car parking, the train corridor and hostile pedestrian environment.
- Surface car parking pushes activity away from street edges, upwards of 80m from the public realm.
- Dorset Road (north) represents a more intimate and tradition commercial shopping spine.
- Dorset square presents a challenge of dual loading properties fronting the street and car park.
- There is a lack of integration between the transit hub and commercial core despite its immediate proximity.



The eastern edge of Dorset Road / Dorset Square commercial allotments.



The western edge of Dorset Road / Dorset Square commercial allotments.



Recent public realm works at Boronia Park.

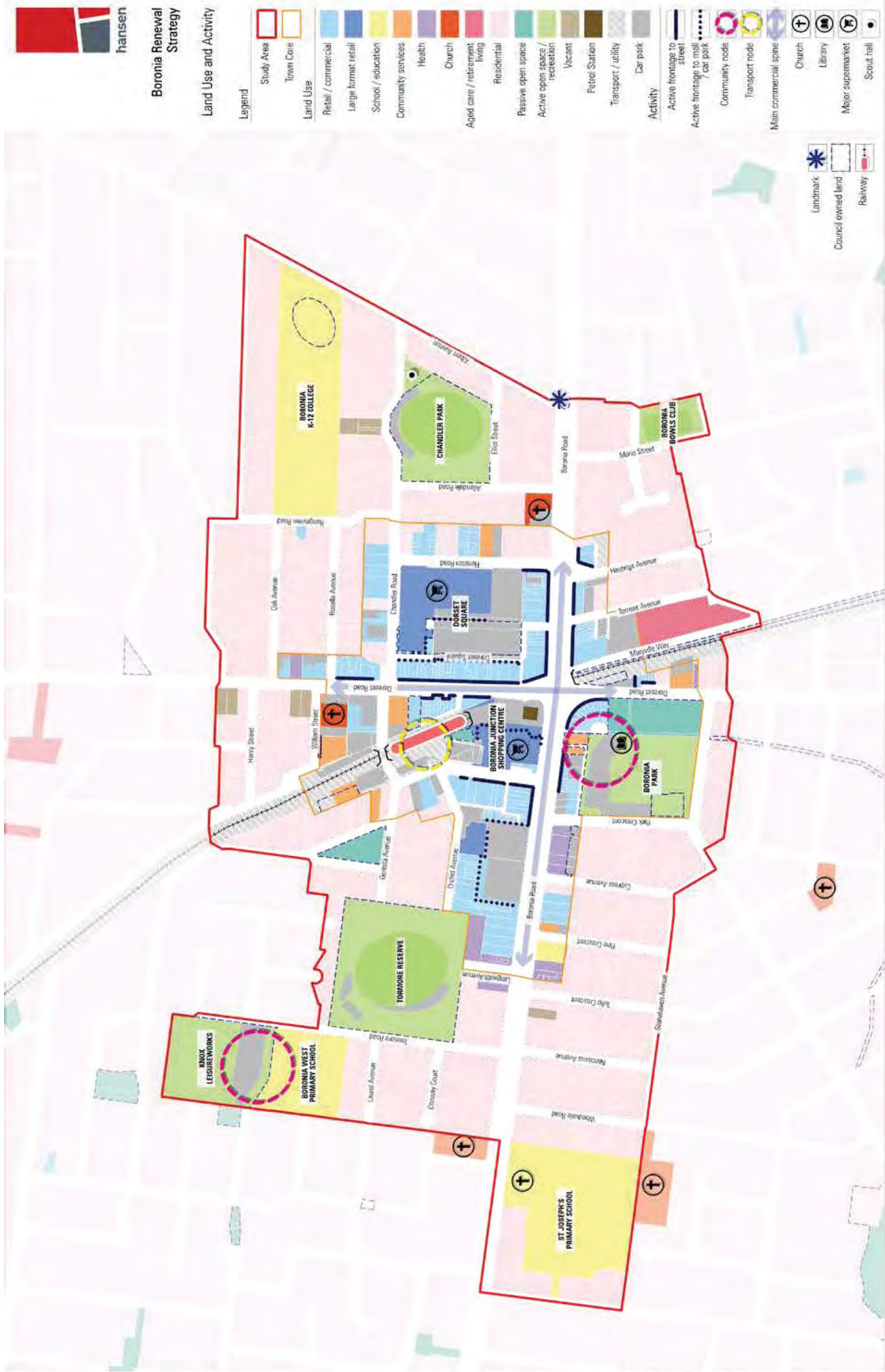


Figure 10. Activity & Land Use

3.4 Built Environment

- Generally, a low-rise built form character predominates within the Activity Centre and largely still comprises the original commercial buildings, representing both the initial era if development within the township and the later period of suburbanisation.
- There are no identified heritage buildings within the town centre, although the timber Progress Hall, positioned on the south side of Boronia Road and the former Woolworth's supermarket building (now Dan Murphy's) are of historical merit and may warrant future protection.
- Along the southern side of Boronia Road the commercial properties largely comprise only single storey form, while the commercial properties to either side of Dorset Road comprise a mix of 1-2 storey forms, with a single 3 storey form.
- Commercial properties fronting either Boronia Road or Dorset Road predominantly contain verandas or awning over the footpaths for weather protection.
- The are limited landmark forms, with the highest and most visual prominent elements within the town centre being signage, such as the tall structures associated with the Boronia Junction and Boronia Central shopping centres and the Metro Cinemas building on Dorset Road, which also comprises prominent signage.
- The scale and proliferation of such signage, reinforces the car dominated nature of the town centre and the need for businesses to advertise to the motorist rather than the pedestrian.
- However, the lack of prominent and tall buildings, ensures that the natural elements and 'backdrop' of the nearby Dandenong Ranges is a defining and valued characteristic of Boronia.
- Recent development activity within the town centre has occurred at the fringe, in the form of 3-4 storey apartment buildings particularly behind Boronia Central, while there are a number of current planning application along Erica Avenue. To date, very limited redevelopment as occurred along either of the Boronia Road or Dorset Road corridors. This is primarily due to vehicle access challenges, as well as the smaller and generally fine grain parcels requiring consolidation in order to achieve viable developments.
- The existence of expansive surface car park, associated with the larger format retail store as resulted in considerable 'gaps' or breaks in the build form and street wall definition within the town centre.

- There is a single dwelling convent which exists along Marie Street and Rubida Court which has restricted residential redevelopment within this south-east pocket of the study area. However, elsewhere within the residential zoned streets the vast majority of original single dwellings with large backyards have already been transformed into runs of townhouses. These new and medium density forms of housing, have generally maintained the green and suburban character of this residential street, through the retention of front garden setback and provision of landscaping, including canopy trees.
- However, due to their tight arrangements and requirement of car parking often results in poor ground level presentation and streetscape full or parked cars.
- Given the configuration of these recent developments with ground floor parking provision and a number of unbuilt permits comprising basements (for car storage) it would appear that the maturity of the property market that apartment development viability is marginal.

Key Implications

- The vehicle dominant environment in the commercial core is reflected in built form outcomes, with a number of buildings addressing large car parks rather than the public realm.
- There are limited 'landmark forms', allowing natural elements such as views to the dandenongs to define the setting.
- Large areas of surface car parking results in 'voids' in the built form fabric of the commercial core.
- New townhouse developments generally have poor ground level interfaces dominated by vehicular entrances and ground level parking.
- Landscaped front setbacks in the residential areas are key to their landscape character.



Example of recent development with a ground level vehicle interface.



Recent 3 storey development along Dorset Road



Example of residential townhouse development.



Figure 11. Built Form & Development

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 Revision: B



hansenpartnership pty ltd
 Level 4, 138 Elizabeth St
 Melbourne VIC 3000
 t 61 3 9554 8344 f 61 3 9554 8388
 e info@hansenpartnership.com.au
 w www.hansenpartnership.com.au

* Data current as of October 2018

3.5 Interface Conditions

Mapping the existing site interfaces provides insight to the range of sensitivities that exist in the study area which can assist in informing future development responses. Nine existing interface typologies have been identified. These are:

- Condition 1: Residential (direct abuttal)**
 - This interface occurs at the direct boundary between commercial allotments and adjoining residential allotments.
 - Future development controls should include interface management techniques in order to limit amenity impacts and achieve an appropriate transition to low scaled residential settings.
- Condition 2: Residential (street separation)**
 - This interface condition occurs where a street separates the commercial boundary from residential allotments.
 - Future development controls should include interface management techniques in order to limit amenity impacts to the public realm and the character of established residential settings.
- Condition 3: Residential streetscape**
 - This interface condition occurs in residential streetscapes where both sides of streets contain land zoned Residential.
 - Future development controls should include interface management techniques to ensure the preferred character of residential and landscape settings are not compromised by poor interface responses.
- Condition 4: Open Space (direct abuttal)**
 - This interface condition occurs where an allotment directly abuts an open space. Across the study area this only occurs to the rear or sides of allotments.
 - Future development controls should include interface management techniques in order to provide surveillance to open spaces and limit amenity impacts.
- Condition 5: Open Space (street separation)**
 - This interface condition occurs where an allotment is separated from an open space by a street.
 - Future development controls should include interface management techniques in order to provide surveillance to open spaces and limit amenity impacts.

- Condition 6: Main Road**
 - This interface condition occurs along main commercial roads such as Boronia Road and Dorset Road.
 - Future development controls should include interface management techniques in order to provide active ground level responses and limit amenity impacts such as overshadowing to pedestrian areas.
- Condition 7: Commercial Street**
 - This interface condition occurs along lower order commercial streets such as Erica Avenue.
 - Future development controls should include interface management techniques in order to provide active ground level responses and limit amenity impacts such as overshadowing to pedestrian areas.
- Condition 8: Commercial Laneway**
 - This interface condition occurs where an allotment adjoins an existing laneway in the commercial core.
 - Future development controls should include interface management techniques in order to provide safe connections and equitable development.
- Condition 9: Rail Corridor**
 - This interface condition occurs where allotments directly adjoin the rail corridor.

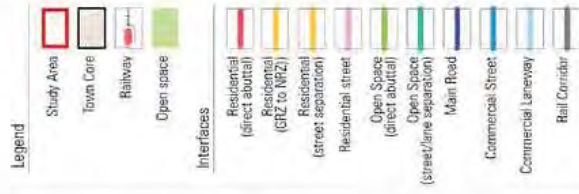
Key Implications

- There are a large number of commercial properties directly abutting sides and rears of adjoining residential allotments.
- The interface between the commercial core and residential areas occurs mostly mid-block rather than across streetscapes.
- Where the commercial core is separated by a street to residential areas, dwellings typically front back-of-house commercial functions.
- The potentially strong commercial spine of boronia road is compromised by buildings set back from the street due to customer parking.



Boronia Renewal Strategy

Interfaces



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 Revision: A



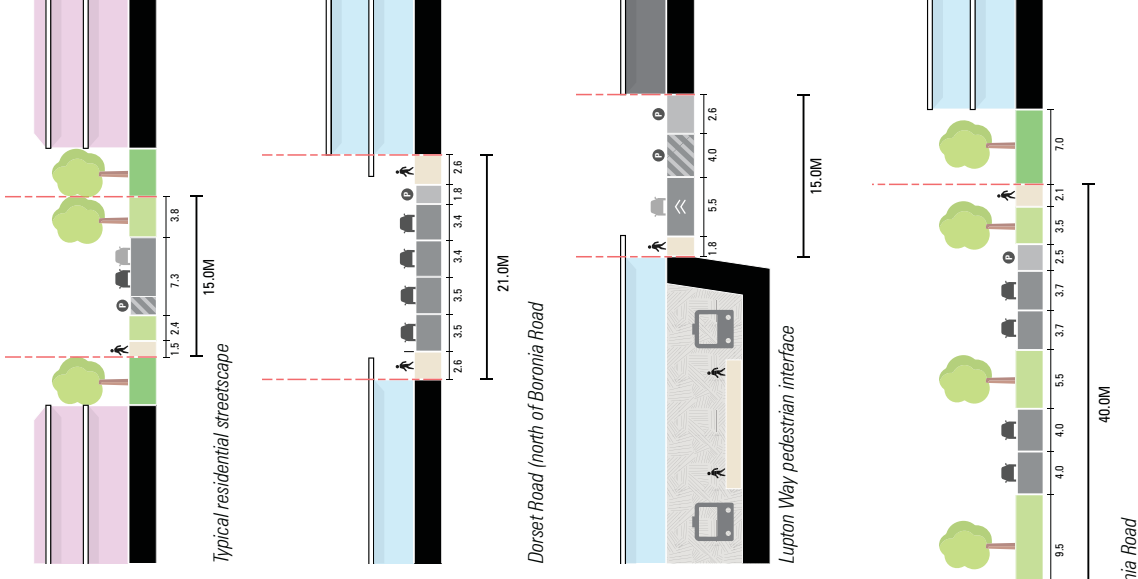
hansenpartnership pty ltd
 Level 4, 138 Elizabeth St
 Melbourne VIC 3000
 t 61 3 9554 6344 f 61 3 9554 6388
 e info@hansenpartnership.com.au
 w www.hansenpartnership.com.au

Figure 12. Interface Conditions

3.6 Landscape & Public Realm

- The green character of the study area is largely due to trees planted in private property in front and rear setbacks. In residential streets, street trees are either lacking or small, while the green character of streets is owed to mature canopy trees in front yards of residential allotments.
- Aside from Boronia Park, the Commercial Core presents a void in the surrounding soft and green character. Hard surfaces, and a lack of street trees particularly in and around the junction of Boronia Road and Dorset Road creates a harsh environment.
- Large car parks and the paved bus interchange with little vegetation contribute to the hard experience of the commercial core.
- Amenity along the commercial spine of Dorset Road is poor, with little to no vegetation and high volumes of traffic and parallel parking resulting in fencing for pedestrian safety to an otherwise narrow footpath.
- Avenue planting of established canopy trees are key to the arrival and departure into the commercial core from Boronia Road and Dorset Road, however this is not continued through the junction due to the vehicular dominance.
- The green character of lower order residential streets is strengthened by grassed verges extending to the curb and dwellings set back with generous front gardens containing established canopy trees and vegetation.
- Active commercial edges orient toward the junction and main roads with back of house functions generally occurring to the rear, with the exception of Dorset Square shops that double-front Dorset Road.
- Large format retailers such as K-Mart and Boronia Junction contain large segments of blank interfaces (high solid walls), offering little interaction with public realm.
- Aside from the entrance, the northern component of Boronia Central mall is mostly internal with minimal interaction with the public realm attributes of Dorset Square and Chandler Road.
- While the commercial core generally contains a large amount of active building edges, many of these are setback from streets due to customer parking, resulting in a disrupted street edge and intermittent street activity.
- Public parks are generally generously populated with clusters of established canopy vegetation.

Typical Streetscapes



Key Implications

- While the Boronia & Dorset Road entrances provide the foundation for a densely vegetated setting, the commercial core is a hard environment lacking in greenery.
- Vehicle dominance in streetscapes restricts opportunity for street greening as demonstrated particularly in the Dorset Road commercial strip.
- Views to the dandenongs define the entrance from the west along Boronia Road.
- Panoramic views to the dandenongs are pivotal to the setting of Tommore Reserve.
- Surrounding residential streets have a distinct green character due to canopy trees in front setbacks complementing wide grassed verges and street trees.



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hansen partnership pty ltd
 Level 4, 195 Coleraine St
 Melbourne VIC 3000
 t 61 3 9554 8934 f 61 3 9554 8088
 e info@hansenpartnership.com.au
 w www.hansenpartnership.com.au

Figure 13. Landscape & Public Realm

4.0 Urban Foundation Synthesis

This chapter seeks to distil the analysis and key findings to form the Urban Foundation which will help formulate the key gestures in the Urban Form Vision, as the final output for this background and urban analysis report. Key themes of the Urban Foundation are as follows:

- Landscape & Public Realm
- Built Form & Development
- Movement
- Influences

Landscape & Public Realm

- The arrival and departure via Boronia Road is defined by the 'Bush Boulevard' setting owed to established canopy vegetation on wide grassed verges and central grassed median strips. As the road traverses through to the commercial core, there is a distinct departure from this landscape setting, with the dominance of cars and hard paved surfaces, smaller setbacks quickly becoming prevalent.
- Residential streetscapes perpendicular to Boronia Road have a distinct landscape character due to wide grassed verges and front garden setbacks allowing opportunity for canopy tree plantings. Outside of the commercial core, this landscape character seamlessly blends with the 'Bush Boulevard' but terminating at the commercial edge.
- The setting within the commercial core is distinctly hard and impervious due to streetscape profiles dominated by car lanes and large surface car parks. There is a lack in variety and softness on the ground plane, with generally narrow footpaths competing for space with parallel parking and traffic lanes.

Built Form & Development

- The extent of subdivision that has occurred in the residential areas (in the form of dual occupancies and strata title development) surrounding the urban core is significant, and indicates there is a lack in capacity for low-medium density development to continue to occur in these areas.
- Large portions of land within the commercial core are occupied by surface car parking, resulting in 'voids' in the built form fabric and disruptions to street edges and street frontage activity.
- Recent development applications within the commercial core are seeking greater heights upwards of 5 storeys.
- Dorset Road north of the 'junction' contains a more consistent built form edge to the street. Boronia Road west of the 'junction' has a varied built form edge, comprising sections of zero setbacks as well as significant setbacks for surface car parks which create 'gaps' to the street.

Movement

- The 'junction' of Boronia Road and Dorset Road presents the most hostile pedestrian environment due to the number of traffic lanes and lack of human scale with vast distances between building edges, particularly across Boronia Road.
- The visual experience to the Dandenong Ranges defines the entrance to the commercial core from the west by forming a dominant visual 'backdrop' to the centre. While the return to the 'Bush Boulevard' typology to the east defines the entrance/exit towards the foothills, through 'strong' landscape character.
- Lupton Way has a poor pedestrian experience due to challenging land ownership patterns presenting a back-of-house interface, as well as large areas within the street profile used for servicing and car parking.

Influences

- The major influences at the edges of the study area is the presence of the Dandenong Ranges in the landscape setting, as well as the established residential areas surrounding.
- The visual presence of the Dandenong Ranges emphasises the study area's setting as a unique, local place nestled in the landscape with a strong sense of seclusion within the landscape setting.
- The established green character of the surrounding residential areas owed to wide grassed verges and canopy vegetation in streetscapes and within front setbacks filters into the study area, but ceases at the edge of the commercial core.
- The presents of established canopy trees within residential streets is also important in reinforcing Boronia's position at the foothills of the Dandenong Ranges.
- The residential areas that tightly bound the study area represent a sensitive interface for the future urban form of Boronia to respond to.



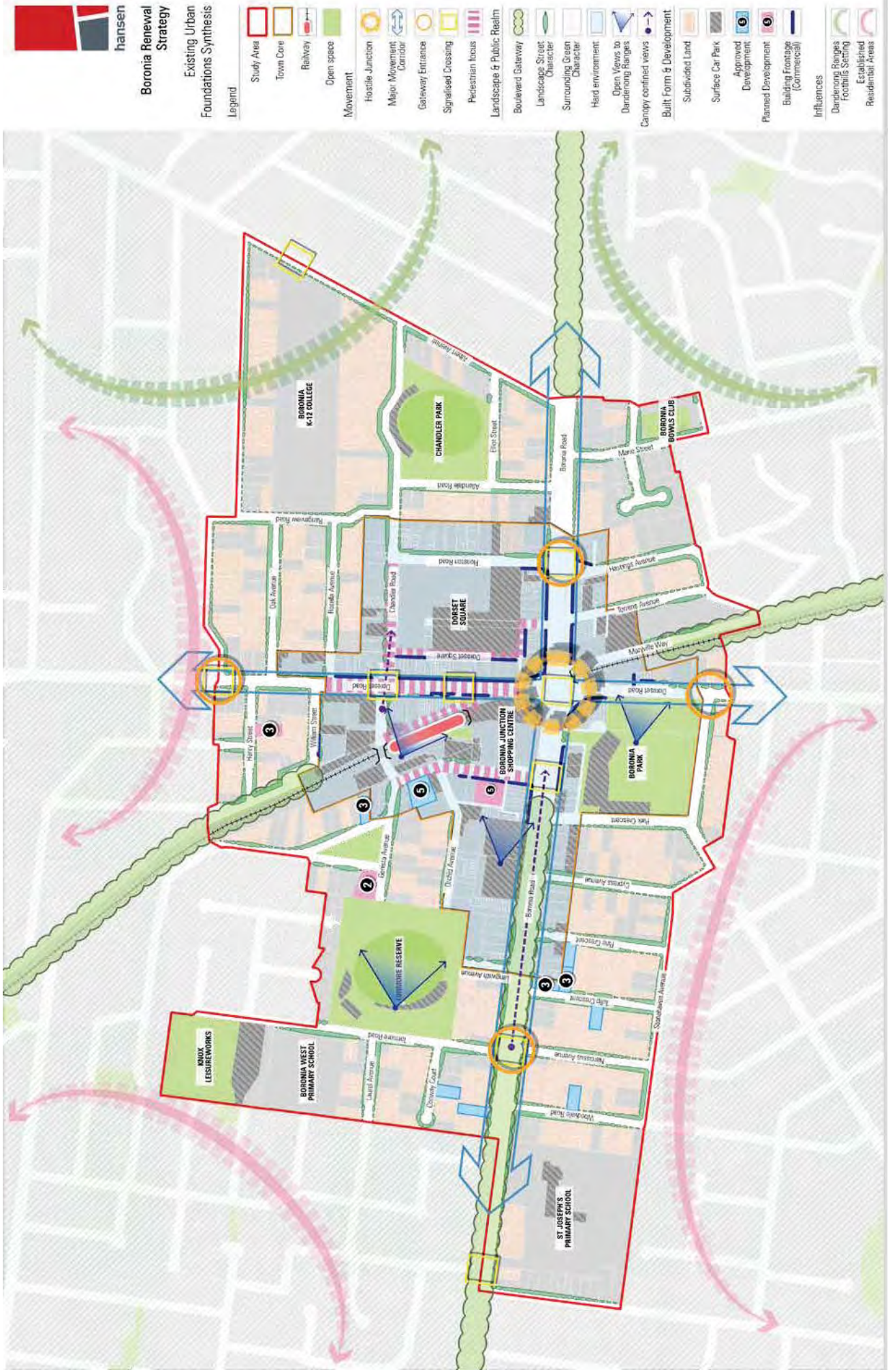


Figure 14. Foundations Diagram

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hansenpartnership pty ltd
 Level 4, 138 Elizabeth St
 Melbourne VIC 3000
 t 61 3 9554 8344 f 61 3 9554 8388
 e info@hansenpartnership.com.au
 w www.hansenpartnership.com.au

5.0 Urban Form Vision

Key Gesture 1: Green Boronia Road

- Seek to continue the existing and valued bush boulevard character through the Activity Centre, as a strong and defining public realm character. This includes encouraging the green and leafy condition of the residential side street continuing into the Boronia Road profile. Given the different built form character of the Activity Centre, from the surrounding residential areas it is likely that the provision of landscape planting is likely to be provided via canopy tree planting within a central median, complemented by small shrubs and ground covers along or within the footpath.

Key Gesture 2: Anchor the junction

- The expansive road junction of Dorset and Boronia Roads is the central point of Boronia and requires a stronger definition, through more prominent buildings and an enhanced and expanded public realm provision. Presently a car dominated environment, it requires investigation to enhance the public realm, address localised flooding issues and link to four corners of the junction closer together to encourage increased pedestrian movements. Such traffic calming measures should be continued northward along Dorset Road to Chandler Road to reinforce the existing 'main street' function and qualities of this section of Dorset Road.

Key Gesture 3: Define Dorset Road main street

- Dorset Road comprises the foundation of a main street condition, including a relatively narrow road reserve, fine-grain subdivision pattern and associated commercial properties. It is also strategically well positioned between key retail anchors and in close proximity to the train station. Encouraging a stronger built form character and enhanced public realm provision along this section of Dorset Road is recommended to 'bridge' the gap between the east and west areas of the town centre and foster connectivity for local movement.

Key Gesture 4: Strengthen pedestrian connections

- Boronia already comprises a considerable network of laneway and arcade links. These links generally provide convenient pedestrian access from the traditional main street, strip shop areas through to the more recent car based large format retail anchors. This network of local connections is to be strengthened as a unique element of the Boronia town centre structure as they serve an important function in both the local movement network and foster small business activities.

Key Gesture 5: Create green spines, linking public open spaces

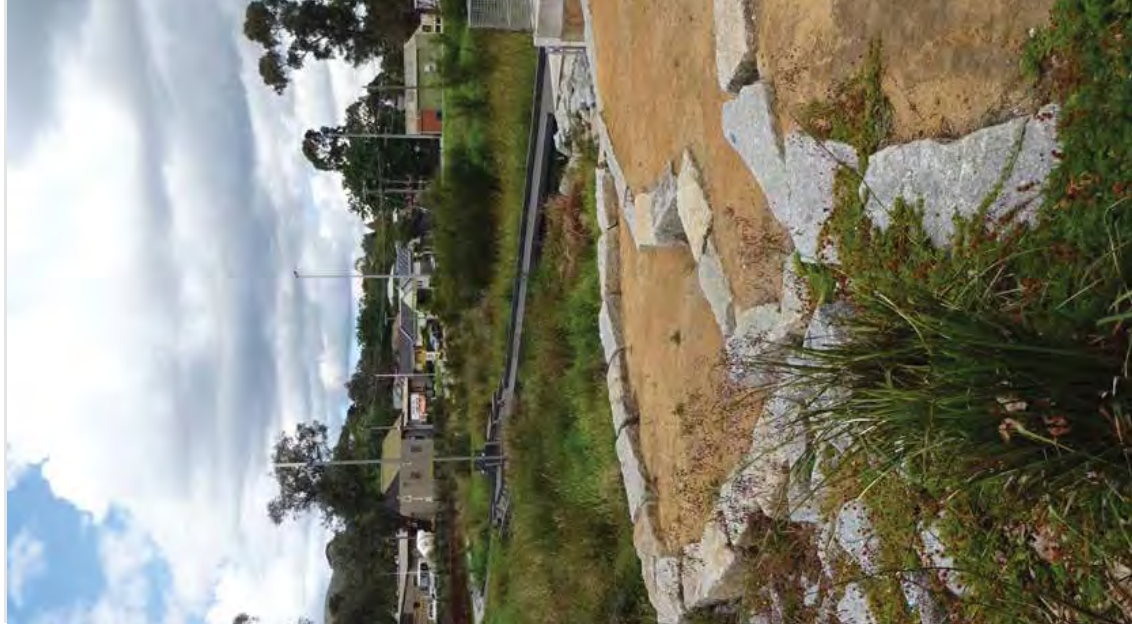
- Encouraging a secondary network of east-west connections is recommended, in order to complement the gestures within the core retail and to link together Boronia existing green and public open space assets. Consequently, to creation of two 'green spines' is recommended, one within the northern reaches of the Activity Centre, that would link the Boronia Leisure Centre, Boronia West Primary School, Tormore Reserve, Genista Avenue reserve and Chandler Park along a single east-west spine, which also passes the train station. The second 'green spine' would define the southern extent of the Activity Centre and link St Josephs Primary School to Boronia Park and tie in with a cycle line along Springfield Road, to the broader Blind Creek trail.

Key Gesture 6: Connect the activity nodes

- The Boronia town centre, due to its evolution comprises a number of distinct active nodes and anchors along the northern side of Boronia Road. The central anchor is the train station and bus interchange which provides a key point of arrival into the town centre as well as a destination for commuters. The main retail anchors are the Boronia Village, Boronia Junction and Boronia Central shopping centres. These primarily car-based centres are presently poorly linked. Therefore, creating a network of high-quality pedestrian connections, with associated small public nodes is recommended.

Key Gesture 7: Optimise development potential within the core

- Seek to reinforce the natural hierarchy and existing regime of development intensity within the 'core' of the Activity Centre. Including realisation of 'spot' redevelopment potential on key sites that have capacity to successfully accommodate taller forms, without impacting upon the defined views and vistas towards the Dandenong Ranges profile or existing residential properties. Built form scale should gradually transition down to more modest forms towards the edge of the commercial areas and result in the creation of future consistent streetscape character.



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Strategy
 Urban Form Vision

- Legend**
- Study Area
 - Commercial Core
 - Railway
 - Open space
 - Key Junction
 - Activity Spine
 - Traffic Route
 - Green Link
 - Link to bicycle network
 - Arrival Gateway
 - Bush Boulevard
 - Bush Boulevard (Urban)
 - Filter green character into spine
 - Key Activity Node
 - Improve inter-nodal connections
 - Create public realm opportunities in nodes
 - Village Node
 - Station Node
 - Junction Node
 - Mall Node
 - Strengthen commercial edge
 - Retain community/medical
 - Retain fine grain commercial setting
 - Modest residential infill
 - Make most of undeveloped land
 - Explore substantial development
 - Consider careful expansion of threshold
 - Established residential surrounds

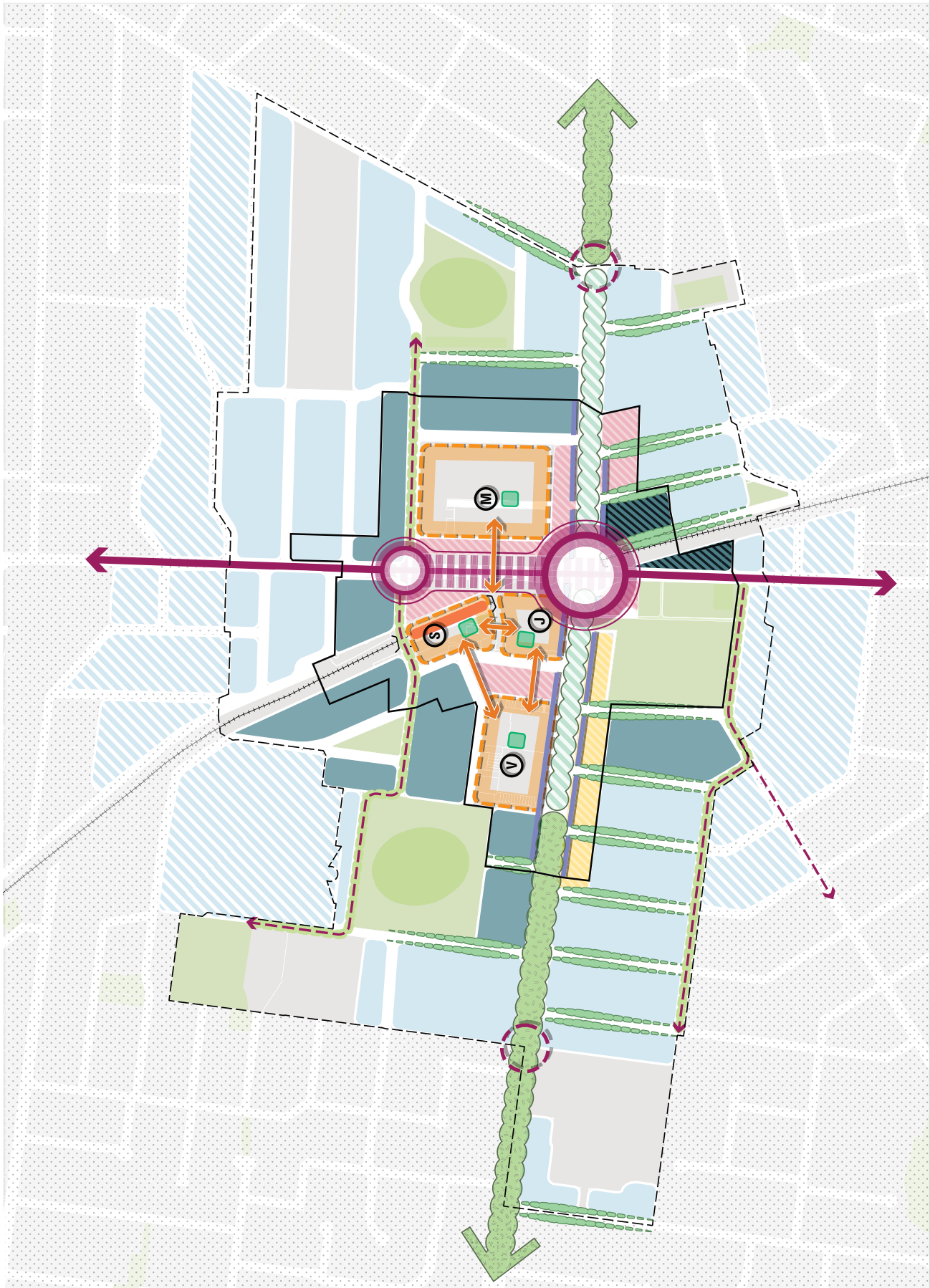


Figure 15. Urban Form Vision

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hansen partnership pty ltd
 Level 4, 138 Exhibition St
 Melbourne VIC 3000
 t 61 3 9854 8844 f 61 3 9854 8088
 e info@hansenpartnership.com.au
 w www.hansenpartnership.com.au

6.0 Built Form Proposition

6.1 Basis of Height Parameters

The Built Form Proposition for the Boronia Renewal Strategy sets street by street parameters for the Activity Centre's evolution. The parameters identified are neither fixed or absolute, but intended as benchmarks to guide built form change and the next evolution of Boronia. They are represented in Figure 16 and are derived from the Urban Foundation, Urban Vision and the following basis:

- Street Role & Character
- Street Corners & Junctions
- Street Walls & Upper Levels
- Transition
- Slope
- Architectural Considerations
- Solar Access
- Active and Semi-Active Frontages
- Local Views & Vistas
- Pedestrian Links
- Public Realm Opportunities
- Service Laneway Interfaces

Street Role & Character

The Boronia Activity Centre comprises a range of street characters, generally defined by their role and landscape attributes. The Built Form Proposition seeks to retain and where necessary, enhance the prevailing street characters. Boronia Road and Dorset Road are important movement corridors, accommodating significant through-traffic movement. As a general urban design principle, taller buildings line the higher order streets and movement corridors while respecting transition to more sensitive adjoining land uses.

While the movement corridors are particularly wider in street profile, particularly Boronia Road, and therefore can accommodate greater building heights that are proportionate to the street width. This also reinforces their role as movement corridors and activity spines. The frontages of these primary commercial streets are defined by buildings built to their street boundary (zero setback), which should be reinforced by future development to capitalise on pedestrian movement and continue providing activity to the footpath. Exception to this is where a landscape setback is required on Boronia Road to contribute to the 'Bush Boulevard' character.

Secondary commercial streets such as Erica Avenue or within Dorset Square and Village Shopping Centre should also respond to their commercial character with zero ground level street setbacks, but defining their role as secondary to the major movement corridors can be achieved through a lower street walls (3-4 storeys) and building heights tapering away from the primary Activity Centre junction.

Key to the street character of the Boronia Activity Centre and surrounds is the established green character in streets, particularly along Boronia Road as it enters the Activity Centre, and in adjoining side streets. Ground level setbacks ranging from 3m – 6m are recommended to capture the 'Bush Boulevard' setting at the entrances to the Activity Centre and to continue the established green character of residential streetscapes into the commercial core.

Street Corners & Junctions

The definition of street junctions and local corners assists in the legibility of an area. The 'junction' of the primary movement corridors Dorset Road and Boronia Road marks an important threshold at the centre of the Activity Centre, which can be reflected in the street profile with a higher street wall response (6 storeys). At other corner locations, it is also important that buildings address both street frontages and are designed to 'wrap' around the corner and present a generally consistent presentation to both streets.

Street Walls & Upper Levels

In urban areas, urban design guidelines seek to introduce a 'street wall' and 'upper level front setback measures.' The purpose of such a distinction and separation is to ensure predominance of traditional forms and parapets within the streetscape, while enabling the provision of new and greater building heights in a recessive fashion. Thereby maintaining the prevailing street character and pedestrian scaled experience. While there are limited heritage attributes within the Boronia Activity Centre, the existing fine grain building stock along commercial spines such as Dorset Road represent the traditional form of the precinct. The visual distinction between street walls and upper levels is important in relation to new street walls. A default 6m setback to upper levels above a new street wall is encouraged to:

- Provide a clear separation between the street wall and upper forms;
- Ensure upper levels do not visually dominate streetscapes or overwhelm the pedestrian scaled experience;
- Ensure a level of consistency in upper level setbacks along streetscapes; and
- Enforce the visual dominance of street walls

Transition

The geometry of the Activity Centre is defined by the commercial core punctuated by its central junction, gradually transitioning out to the tightly bounding established residential areas in each direction. Broadly, while the commercial core on site, its lower plane of topography has the potential to absorb greater building heights, a future built form proposition must demonstrate a clear transition in building height to its adjoining residential areas.

Where the commercial core immediately abuts adjoining residential land, specific site responsive measures are required to provide an appropriate transition between areas of varying degrees of potential change, sensitively responding to the residential abutal. While the ResCode B17 profile provides a provisional envelope to treat sensitive interfaces, it is recommended that in order to avoid undesirable 'wedding cake forms,' minimal 'steps' in built form massing is encouraged along transitional interfaces. Transitions in scale within this envelope should occur in paired levels, as a minimum.

Slope

The topography of Boronia is key to its landscape character and in framing views and vistas to the Dandenong Ranges National Park. New development should respond to the topography of Boronia, particularly on sites with broad street frontages or spanning the breadths of entire urban blocks.

New development on sites which 'span' an entire urban block and contain frontages to multiple streets should be designed to ensure that topographic change between the street interfaces is managed within the design and floor levels to ensure new buildings address all street frontages at natural ground level.

Consideration to the Slope of the Activity Centre is closely tied with consideration to transition and views. The 'junction' of Boronia Road and Dorset Road sits on the lower reaches of the Activity Centre, with land rising as it moves away toward the north, east and west. This provides the opportunity for the 'junction' to accommodate a greater scale of building height, before tapering down to transition toward the lower scale residential edges and to protect views to the Dandenong Ranges National Park.

Architectural Considerations

To street frontages expansive blank walls should be avoided and where visible from within the public realm. Any blank walls need to be visually divided into small elements through architectural treatments to reduce visual mass.

Fenestration patterns and facade solid to void proportions need to reflect the prevailing streetscape rhythm and presentation. New forms should 'fit' within the prevailing streetscape character. Avoid overly busy and complex architectural expressions.

The design of upper levels set back behind a street wall should:

- Be well articulated to 'break up' building mass;
- Distinguish between podium and upper levels through materiality and articulation;
- Provide passive surveillance of adjacent streets and open space;
- Demonstrate design legibility to side walls to ensure they read as part of the overall building design and do not detract from the streetscape when viewed from direct and oblique views along the streetscape.

Solar Access

In urban areas and Activity Centres such as Boronia, sunlight to public realm and key pedestrian spaces is vital to the 'life' of the streetscape experience. The Urban Design Guidelines for Victoria contains the following objective and guidelines relating to solar access in Activity Centres:

- Objective 5.1.1: To ensure buildings in Activity Centres provide equitable access to daylight and sunlight; and
- Guideline 5.1.3a: Locate and arrange the building to allow daylight and winter sun access to key public spaces and key established street spaces. In Boronia, it is recommended that solar access is ensured to pedestrian pathways opposite new development to avoid overshadowing, as follows:
 - Southern footpaths between 11am and 2pm at the Spring Equinox (September 23);
 - Western and eastern footpaths between 11am and 2pm at the Spring Equinox (September 23).

To ensure that the amenity of existing and future open spaces is protected, it is recommended that development should not cause overshadowing to at least 50% of open spaces between 11am and 2pm at the Winter Solstice (June 22).

Active & Semi-Active Frontages

In Activity Centres of mixed-use, buildings must provide sufficient activation at street level to foster 'life' on the street and provide opportunities to maximise safety via passive surveillance. Along the key movement corridors of Boronia Road and Dorset Road, active ground frontages are encouraged. Active frontages along these streets need to incorporate doors, and transparent windows at ground level which enable visual interaction and engagement between the inside of buildings and the street.

Along the local streets and within the Activity Centre such as Chandler Road, Floriston Road and Orchid Avenue, semi-active frontages are more appropriate. As these less active frontages still maintain an appropriate level of passive surveillance to occur, while also providing more privacy and seclusion to the inside of the building, befitting the nature of the use being either primarily office or dwelling. Direct pedestrian entry into ground floor uses is encouraged, particularly on larger sites with broad frontages. Upper levels also provide 'eyes on the street' and contribute to passive surveillance of the public realm. Windows and balconies that orientate towards the street are encouraged.

Local Views & Vistas

The built form proposition has been largely derived from the protecting views to the Dandenong Ranges National Park from the following key public locations:

- Tommore Reserve (western car park straddling sporting oval)
- Boronia Park (west)
- Western gateway (Boronia Road & Tommore Road intersection)

This is a consistent approach to that of the existing DD07 control. However, two of the above identified views (Boronia Park and Western gateway) are not currently considered by the current control. While, any views from within private land were dismissed as it was considered too restrictive to limit future development scale, based on existing views from on private land. Even if the private land is used as a publicly accessible surface car park. These key views have been identified in the Existing Conditions Analysis, with proposed building heights and setbacks tempered through built form testing to ensure that views to the Dandenong Ranges National Park are not unreasonably overwhelmed or compromised by future development. As found in the Existing Conditions Analysis, the presence of the Dandenong Ranges are integral to the landscape setting of Boronia and should remain as a prominent backdrop within the Activity Centre.

Pedestrian Links

The Boronia Activity Centre is already subject to a number of pedestrian links (in the form of either public laneways or arcades in private ownership), that increase mid-block permeability. Future development should seek to retain and enhance these existing links, and in larger urban blocks create new ones to strengthen the overall pedestrian network, and strengthen cross-modal connections between the pedestrian and public transport networks. Future development abutting future pedestrian connections should respond with equitable development responses consistent with other laneway recommendations outlined in this report. Opportunities for new pedestrian connections exist through potential future development at:

- Boronia Junction site;
- Boronia Central site;
- Village Shopping Centre site;
- Southern boundary of Zagame's site adjoining the existing aged care service at Mercy Place.

Active and Semi-Active Frontages

In Activity Centres and areas of mixed-use, buildings must provide sufficient activation at street level to foster 'life' on the street and provide opportunities to maximise safety via passive surveillance. Along the key movement corridors of Boronia Road and Dorset Road, active ground floor frontages are encouraged. Active frontages along these streets need to incorporate doors, and transparent windows at ground level which enable visual interaction and engagement between the inside of buildings and the street.

Along the local streets and within the Activity Centre, such as Chandler Road, Floriston Road and Orchid Avenue, semi-active frontages are more appropriate. As these less active frontages still maintain an appropriate level of passive surveillance to occur, while also providing more privacy and seclusion to the inside of the building, befitting the nature of the use being either primarily office or dwelling. Direct pedestrian entry into ground floor uses is encouraged, particularly on larger sites with broad frontages. Upper levels also provide 'eyes on the street' and contribute to passive surveillance of the public realm. Windows and balconies that orientate towards the street are encouraged.

Service Laneway Interfaces

Existing and future laneway/pedestrian links provide an increase in pedestrian permeability as well as the opportunity for servicing buildings. For a cohesive Activity Centre, new development should provide a design response that considers the equitable development opportunity for adjacent properties abutting an existing or future laneway/pedestrian connection. To provide equitable outlook, daylight and solar access to windows, development should be set back from common boundaries to provide separation between buildings at the upper levels:

- A minimum of 4.5m from the boundary where a habitable room window is proposed
 - A minimum 3m from the boundary where a non-habitable window or commercial window is proposed;
 - A minimum for 4.5m from the edge of a proposed balcony or terrace.
 - Ensure a minimum 9m building separation of upper levels.
- Where the common side or rear boundary is a laneway, the setback is measured from the centre of the laneway.

6.2 Urban Design Principles

Based on existing contextual analysis described in the previous chapters, a series of Urban Design Principles have been prepared to guide the development of the Built Form Proposition for the Boronia Activity Centre, and to develop a succinct set of Built Form Objectives to be included in a future Design & Development Overlay (DDO). In response to varied fabric of the Centre the future profile of the Centre will continue to build on this very diversity, encouraging consolidation within its commercial core and gradual transition along its edges to the established residential surroundings. These Urban Design Principles include:

1 Activity Centre Definition	<p>Objectives</p> <ul style="list-style-type: none"> To define the Activity Centre as a urban form that is distinct from its low density residential surrounds, through built form typologies that correspond to the MAC status. To define the Activity Centre's edges and improve its image and legibility. To encourage land consolidation and development within the commercial core of Boronia. To encourage development of high-quality built form and landscape values that heightens the sense of arrival at the Boronia Activity Centre at key junctions and entries into the centre. To define the Boronia Road and Dorset Road intersection with prominent built form.
3 Transition	<p>Objectives</p> <ul style="list-style-type: none"> To ensure that new development abutting residential land provides for appropriate transition between changes in building heights as shown in Figure 16. For new development abutting residential land, to encourage the consolidation of upper level setbacks within the ResCode B17 profile to avoid repetitive stepped forms and to limit visual bulk. To ensure that new development abutting residential land provides for appropriate transition between changes in building heights as shown in Figure 16. To ensure a rear setback at the edge of the Activity Centre to provide provision of canopy trees.
5 Amenity	<p>Objectives</p> <ul style="list-style-type: none"> To ensure building heights do not result in the impact of unreasonable overshadowing impact on private land and public (footpaths and open space). To ensure future development maintains solar access to footpaths between 11.00 to 14.00 at the equinox (22 September). To ensure future development minimises overshadowing impact to existing and future open space between 11.00 to 14.00 at the winter solstice (22 June). To provide separation between buildings (above street wall/podium) to facilitate outlook and amenity for existing and future building occupants.
4 Landscape & Environment	<p>Objectives</p> <ul style="list-style-type: none"> To retain the established garden setting of residential streets and filter it into the commercial core through new tree planting in front and side landscape setbacks. To maintain views toward the Dandenong Ranges National Park from current and future public places on the western ridgeline of the study area, particularly the key views from Tormore Reserve, western Boronia Park and the western Activity Centre entrance along Boronia Road. To support increased development intensity on larger sites, without diminishing the importance of the environmental and landscape significance of the Foothills area. To visually offset increases in building height through substantial canopy planting of indigenous trees along nature strips, between buildings and the site's street frontage. To retain and strengthen the bush boulevard character of Boronia Road and rail corridor approaches to the Activity Centre through canopy tree planting in front landscape setbacks and streetscapes. To enhance existing open spaces and provide opportunity for new open space on redevelopment sites.
6 Development	<p>Objectives</p> <ul style="list-style-type: none"> To encourage site specific development responses on particularly large or strategic sites. To explore new transit-oriented development opportunities above the rail corridor and bus interchange to encourage higher density development, new public realm opportunities and a more connected and cohesive Activity Centre. To encourage new public pedestrian links through large or strategic development sites. To develop underutilised land along the railway line where higher scale development can be built without direct streetscape, amenity or overshadowing concerns. To encourage consolidation of smaller sites to create viable sites to accommodate mixed use/apartment development.
2 Street Definition	<p>Objectives</p> <ul style="list-style-type: none"> To encourage new development with a clear street wall that is proportionate to its abutting street width. To adopt upper level setbacks above the street wall to emphasise the prevailing street wall effect at street level. To encourage continuous street edges with active ground floor frontages. To locate servicing, loading and vehicle access located away from primary frontages. To encourage utilisation and extension of the existing laneway network for pedestrian connections and services, through ground level setback to achieve widened lanes and increased permeability through the Activity Centre. To ensure the interface between the public realm and new development has regard to the human scale and perceived safety of these environments through active edges and opportunities for passive surveillance.

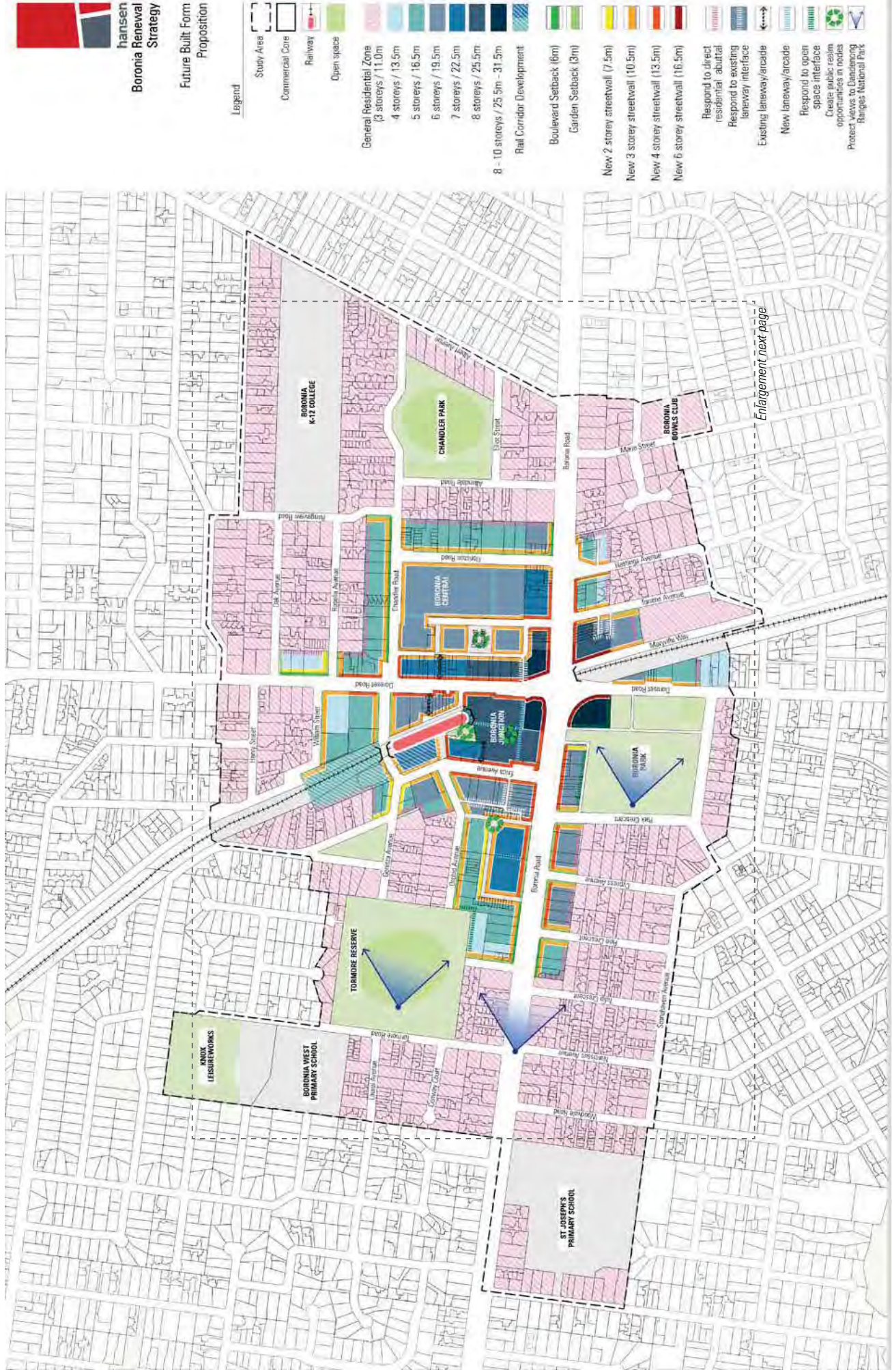
6.3 Recommended Built Form Objectives

Given Council's desire to replace DDO7 with a new DDO control, to guide the future built form of Boronia and the guidance of Practice Note No. 60 : Height and Setback Controls for Activity Centres) to require clear and concise design objectives. To assist Council in formulating such objectives (to implement the Boronia Renewal Structure Plan) we have drafted the following 6 objectives:

Draft Built Form Objectives

- To maintain key views toward the Dandenong Ranges National Park from defined public locations within Tormore Reserve and Boronia Park.
- To encourage urban consolidation and development within the commercial core of Boronia.
- To enhance the 'bush boulevard' character along Boronia Road.
- To define the Boronia Road and Dorset Road intersection with prominent forms.
- To strengthen the pedestrian connections between Boronia's key retail anchors and the train station, through a network of high-quality public laneways and arcades.
- Identify and seek to protect Boronia's built form heritage.

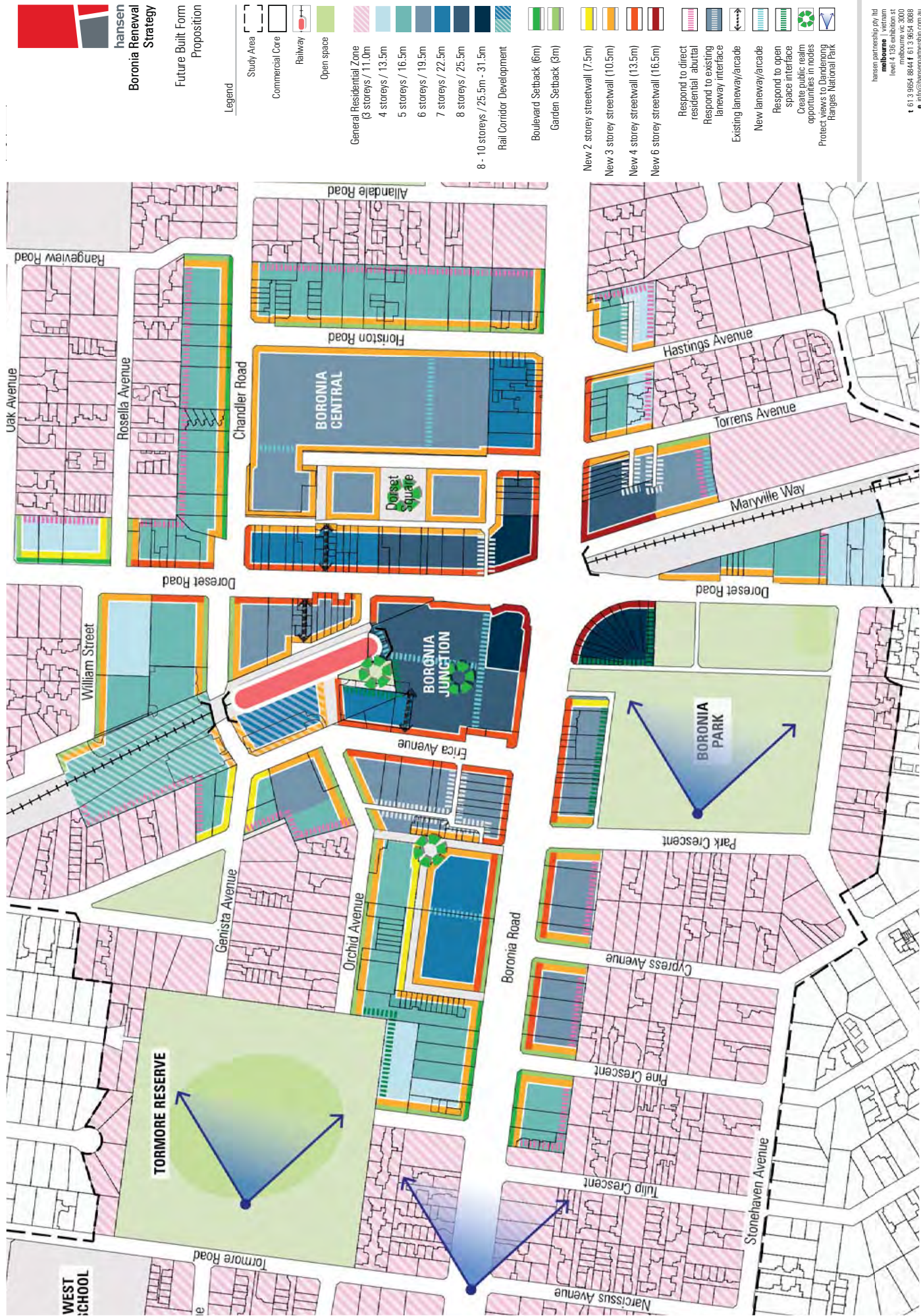




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Hansen Partnership Pty Ltd
 Level 4 138 Exhibition St
 Melbourne VIC 3000
 t 61 3 9654 8944 f 61 3 9554 8288
 e info@hansenpartnership.com.au
 w www.hansenpartnership.com.au



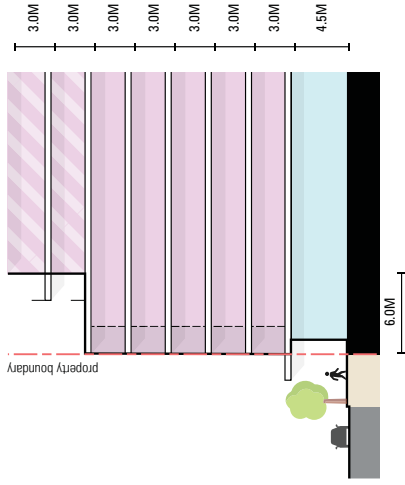
hansen partnership pty ltd
 10/100
 level 4, 130 exhibition st
 melbourne vic 3000
 t 61 3 9854 8844 f 61 3 9854 8888
 e info@hansenpartnership.com.au
 w www.hansenpartnership.com.au

Figure 17. Urban Form Vision (Commercial Core)

6.4 Typical Interface Treatments

This section illustrates recommended development outcomes at specific street, laneway and rear interface conditions.

Treatment 1 - Key Junction



Application

- Street frontages of allotments located at the intersection of Boronia Road and Dorset Road.

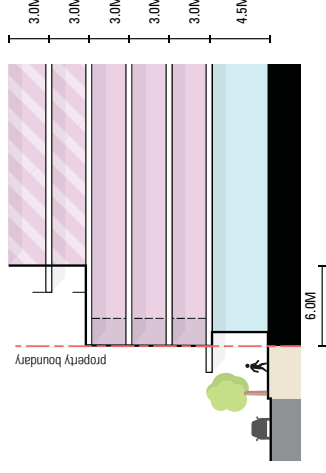
Interface Response

- 6 storey (19.5m) street wall.
- Ground floor setback along pedestrian priority routes where footpath/ verge is less than 4m.
- Setback behind street walls/ podiums:
 - Minimum 6m.
 - Greater than 6m on sites subject to overshadowing of footpaths (at equinox between 11.00- 14.00).

Rationale

- To demarcate the major 'junction' of the Activity Centre with a prominent street edge condition.
- To adopt a street wall response that is proportionate to its street width.
- To adopt upper level setback above the street wall to emphasise the prevailing street wall/ podium effect at street level to create a wider footpath condition.
- To encourage continuous street edges which invite active ground floor frontages conducive to main streets and commercial areas.
- To create a wider footpath condition in commercial areas.
- To avoid overshadowing of footpaths on Boronia Road (south side) and Dorset Road (both sides) between 11.00-14.00 at Spring equinox.

Treatment 2 - Commercial Street



Application

- Other commercial streets with focus on activation and street definition.
- Pedestrian priority routes.
- Non residential streetscapes.

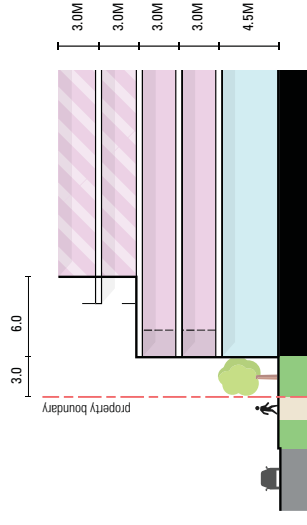
Interface Response

- 3 storey (10.5m) - 4 storey (13.5m) street wall.
- Ground floor setback along pedestrian priority routes where footpath/ verge is less than 4m.
- Setback behind street walls/ podiums:
 - Minimum 6m.
 - Greater than 6m on sites subject to overshadowing of footpaths (at equinox between 11.00- 14.00).

Rationale

- To adopt a street wall response that is proportionate to its street width.
- To adopt upper level setback above the street wall to emphasise the prevailing street wall/ podium effect at street level.
- To encourage continuous street edges which invite active ground floor frontages conducive to main streets and commercial areas.
- To avoid overshadowing of footpaths on Boronia Road (south side) and Dorset Road (both sides) between 11.00-14.00 at Spring equinox.
- To create a wider footpath condition in commercial areas.

Treatment 3 - Landscape Setback



Application

- Sidages to local streets (typically 15m wide).
- Residential streetscapes.

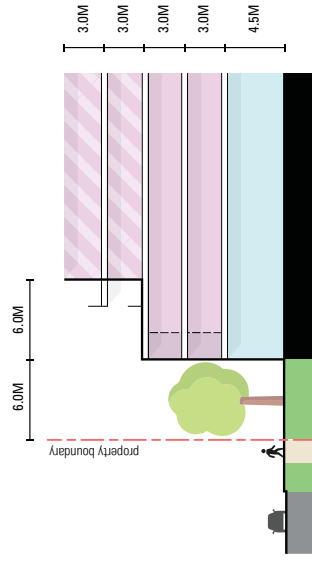
Interface Response

- 3 storey (10.5m) - 4 storey (13.5m) street wall.
- 3m ground level setback from street frontage.
- Minimum 6m setback above podium.

Objectives

- To filter the established green setting of the surrounding residential streets into the commercial core.
- To retain and enhance the established garden setting of residential streets.
- To provide opportunities for new landscaping including additional street trees and understory vegetation.
- To adopt upper level setback above the street wall to emphasise the prevailing podium effect at street level.
- To provide appropriate transition at the edge of the commercial core and the residential surrounds.

Treatment 4 - Bush Boulevard Setback



Application

- Boronia Road spine at Activity Centre entrances.

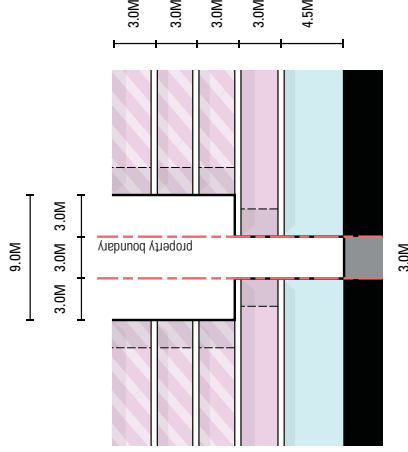
Interface Response

- 3 storey (10.5m) street wall.
- Minimum 6m setback above podium.
- Discourage car parking in the front setback.

Rationale

- To retain and strengthen the Bush Boulevard character of Boronia Road, signposting the arrival into the Activity Centre.
- To adopt upper level setback above the street wall to emphasise the prevailing street wall/podium effect at street level.
- To achieve a legible transition to residential precinct.

Treatment 4 - Existing / New Laneway



Application

- Existing and future laneway/ mid-block pedestrian links, typically 3-4m wide (ie. Chandler Arcade).

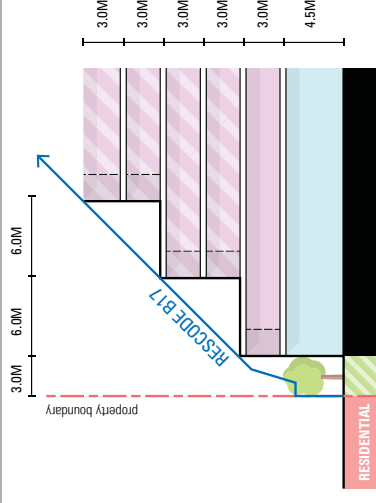
Interface Response

- 2 storey (7.5m) building base/ podium.
- Minimum 1.5m ground level setback from centreline of laneway.
- 3m upper level setback above building base/ podium for a minimum 9m building separation between upper levels of balconies and habitable room windows.

Objectives

- To encourage utilisation and extension of existing laneway network for pedestrian connection and passive surveillance through upper level activities.
- To provide separation between buildings (above street wall/ podium) to facilitate outlook and amenity to existing and future building occupants (residents/ workers).

Treatment 7 - Direct Abuttal to GRZ



Application

- Where an Activity Centre allotment directly abuts the rear or side boundary of land zoned Residential.

Interface Response

- 2 storey podium (7.5m) with a minimum 3m ground level setback from boundary to GRZ.
- Levels above the podium must be consolidated into a maximum of 2 setbacks within a the ResCode B17 profile.
- Development adjoining a side boundary of land zoned Residential must comply with the ResCode 'North-facing windows' Standards A13 and B20.

Rationale

- To achieve a legible transition to residential precinct.
- Specifying a specific ground level setback avoids built form immediately abutting residential properties, increasing the sense of space.
- To provide the integration of landscaping for screening and transition to the residential surrounds.
- To provide space for provision of canopy trees within the rear setback.

7.0 Built Form Testing

7.1 Modelling Assumptions

This section illustrates and describes the outcomes of the 3-Dimensional testing. In determining appropriate building heights and setbacks, visual testing from the 3 key viewpoints identified in the Built Form Proposition was completed. The workflow of this exercise was as follows:

- Modelling the existing DDO7 building envelopes;
- Incrementally adding/subtracting additional levels until key views to the Dandenong Ranges were overwhelmed or dominated by additional form;
- Applying setbacks based on the Urban Design Objectives and typical interface responses discussed in Chapter 6;
- Lowering envelope levels that caused inconsistencies with the Urban Design Objectives discussed in Chapter 6 (ie. overshadowing of pedestrian paths or open spaces)
- Presenting and discussing visual testing with Council Project Working Group, at a workshop session.

Formula for deriving numerical building heights

The maximum building height have been calculated to accommodate higher than minimum floor to floor heights, in order to:

- Allow for greater than minimum building standards and provide flexibility for future uses;
 - Encourage provision of higher floor to ceiling dimensions to enhance internal amenity; and
 - Allowance for other design elements to be accommodated, such as parapets, railings and roof features.
- The following numerical floor to floor dimensions were employed:

- Ground Floor: 4.5m
- First floor and above: 3m

Height (Storeys)	Height (Metres)
1	4.5m
2	7.5m
3	10.5m
4	13.5m
5	16.5m
6	19.5m
7	22.5m
8	25.5m
10	31.5m

Building envelopes for residential areas abutting the commercial core were modelled to provide accurate context for the foreground of view testing. Building envelopes for the residential areas comply with their relevant zoning, except where potential rezoning (General Residential Zone to Residential Growth Zone) was indicated by Council.

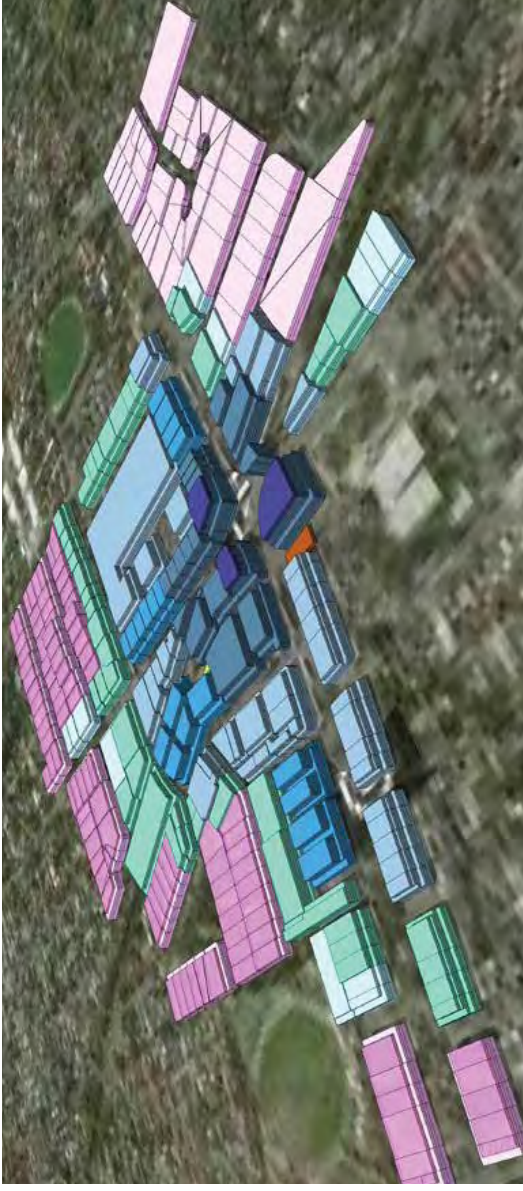


Figure 18. 3D perspective image of Built Form Proposition looking north-east.

Balconies

Provision of balconies is assumed to occur within the defined street walls, with recessed balconies. At upper levels (above the street wall) balconies may project a maximum of 2m forward of the building façade.

Roof Top Terraces

Provision of roof top terraces is encouraged. However, for the purposes of built form modelling it was assumed their provision would occur within the defined heights and number of storeys. Depending of detailed design considerations, roof top terraces could be provided 'on top' of the defined heights provided that the terrace:

- Does not constitute a 'level' or storey;
- Is setback from the storey below;
- Is not visible from standing eye level of the opposite side of the street; and
- Does not impact of the key views towards the Dandenong Ranges National Park.

Top Floor Depth

For the purpose of determining the maximum height for properties not constrained by the identified views towards the Dandenong Ranges, a minimum depth of 10m has been used for the upper most level. This dimension is based on the top level being able to accommodate a typical apartment depth and corridor access.

Car Parking

Provision of car parking is assumed to occur at either:

- Basement level; or
- At ground level, provided it is not visible from the street frontage and a viable building depth (sleeve) is provided to the street to ensure appropriate ground floor activation.
- Basement car parking is encouraged.
- Podium level car parking is not encouraged, unless above the rail corridor.

7.2 View testing

This section documents the outcomes of key view testing exercises. By way of comparison the below massing illustrates potential future building mass envelopes and those currently within the DDO7 provisions, comparing them to the Proposed Built Form Proposition.

View 1: Western Gateway

Key Findings

- Speckles of urban settlement on the foothills of the Dandenong Ranges are visible in the existing view.
- The proposed additional heights within the Built Form Proposition do not overwhelm or significantly encroach into views of the Dandenong Ranges more so than the existing DDO7 control.
- Proposed 'Landscape' and 'Bush Boulevard' ground level setbacks under the Built Form Proposition contribute to providing a wider viewshed in framing views toward the Dandenong Ranges.
- The topography of the Activity Centre sloping down toward the 'junction' of Boronia Road and Dorset Road allows greater heights to be accommodated in the lower reaches of the commercial core without overwhelming the Dandenong Ranges in the viewshed.
- The additional heights are recessive, due to their setbacks and do not impact on the profile of the Dandenong Ranges.

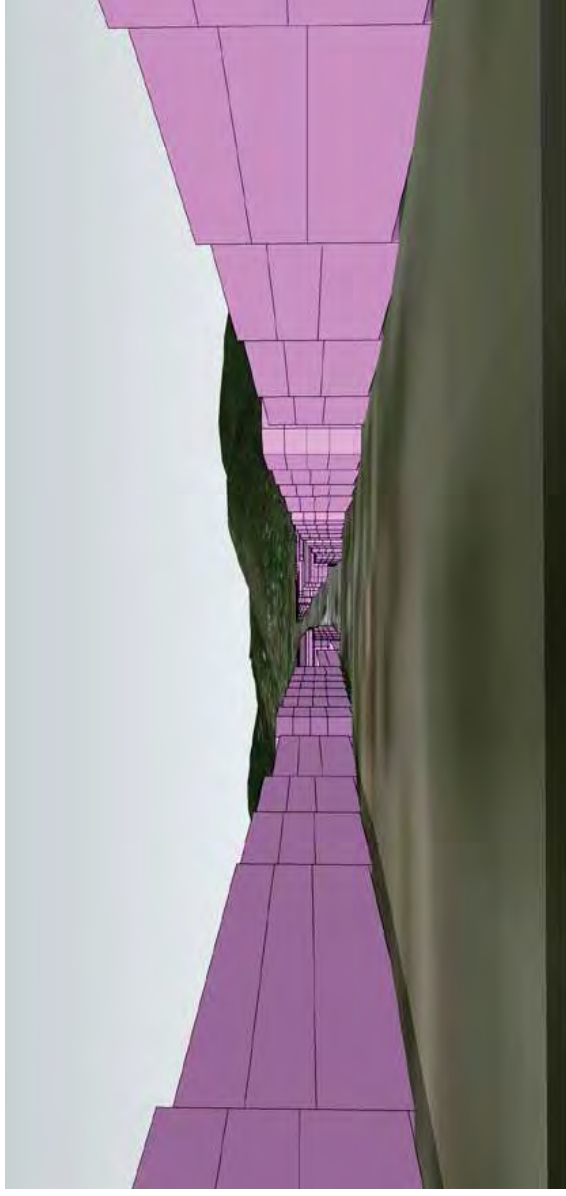
Note: Visual testing is confined to envelopes and topography, not inclusive of existing canopy vegetation along Boronia Road.



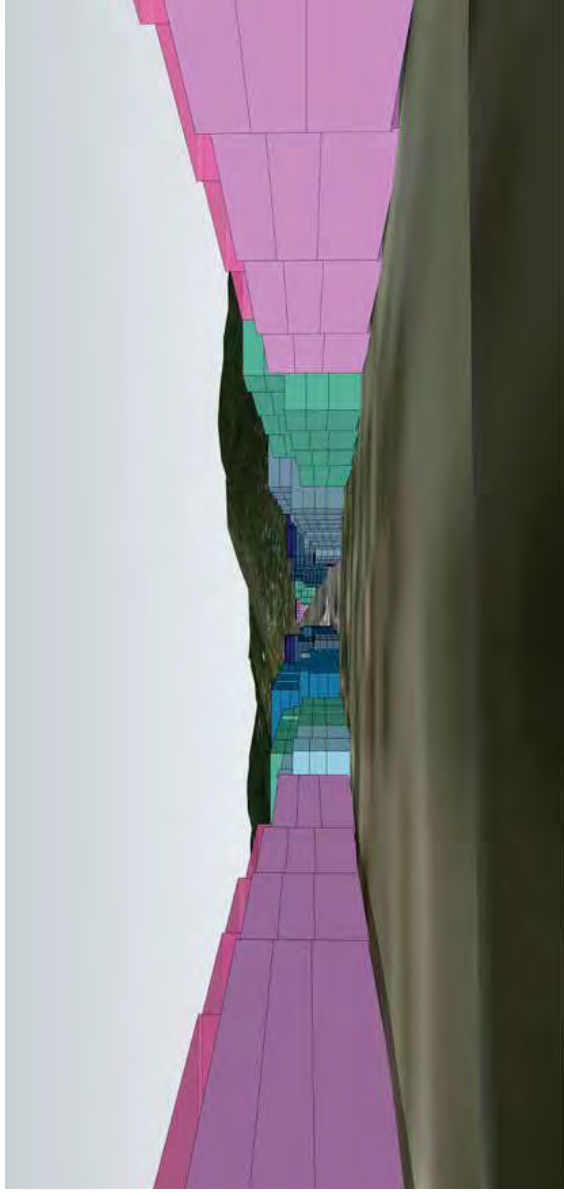
View Location



Existing View (approximate)



Existing DDO7 Control



Proposed Built Form Proposition

View 2: Tormore Reserve (West)

Key Findings

- The proposed additional heights within the Built Form Proposition do not overwhelm or significantly encroach into views of the Dandenong Ranges more so than the existing DD07 control.
- The additional level applied to residential land in the foreground (under a potential rezoning to Residential Growth Zone), creates visual screening to taller elements in the background, ie. 7-8 storeys along Dorset Road.
- Views toward the Dandenong Ranges are considered to be equally prominent from the viewpoint under both the existing DD07 envelopes and the proposed Built Form Proposition.

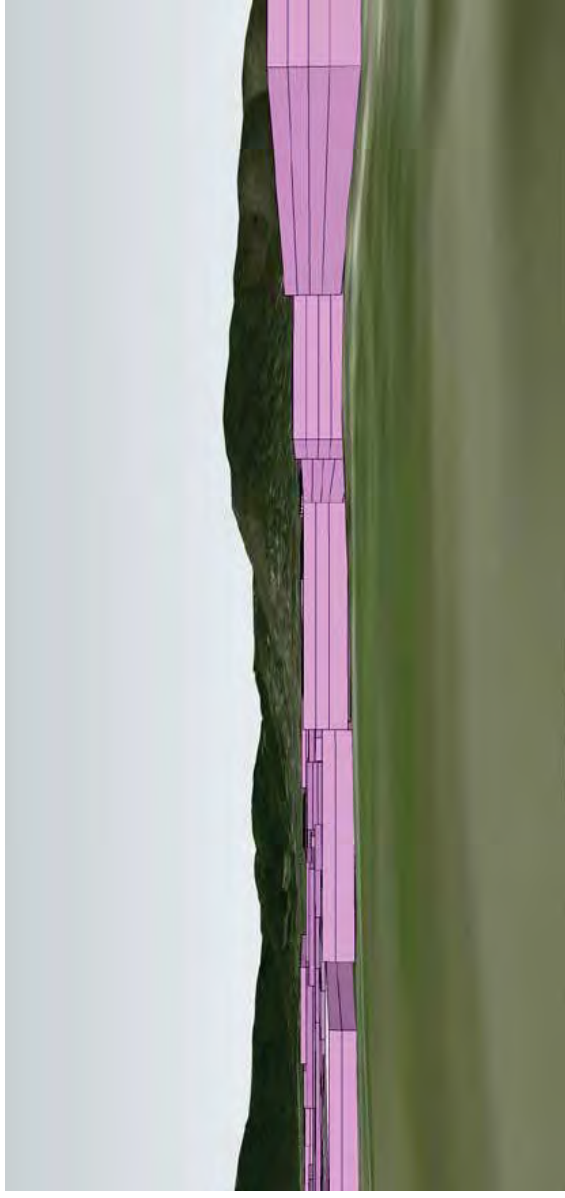
Note: Visual testing is confined to envelopes and topography, not inclusive of existing canopy vegetation along the western boundary of Tormore Reserve.



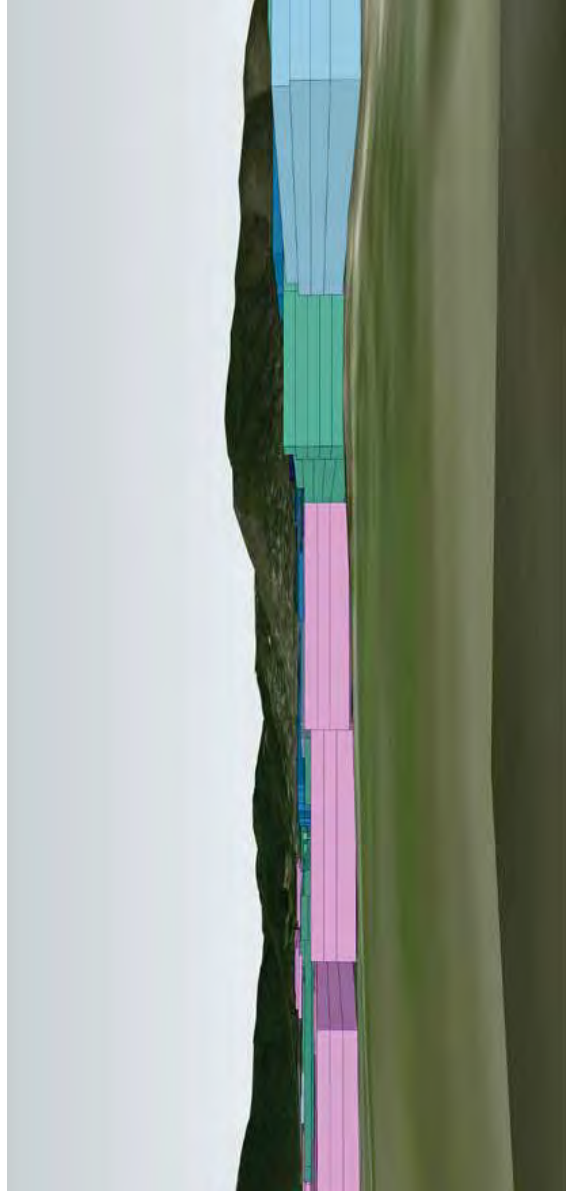
View Location



Existing View (approximate)



Existing DD07 Control



Proposed Built Form Proposition

View 3: Boronia Park (West)

Key Findings

- The proposed additional heights within the Built Form Proposition do not overwhelm or significantly encroach into views of the Dandenong Ranges more so than the existing DD07 control.
- Views towards the higher ridgelines (right of screen) are considered to be equally prominent from the viewpoint under both the existing DD07 envelopes and the proposed Built Form Proposition.
- While glimpses to lower ridgelines have been lost under the Built Form Proposition (left of view), these were not considered to be integral to the setting after the application of the current DD07 control, particularly at the junction where greater heights can be accommodated in the remaining two key viewpoints.

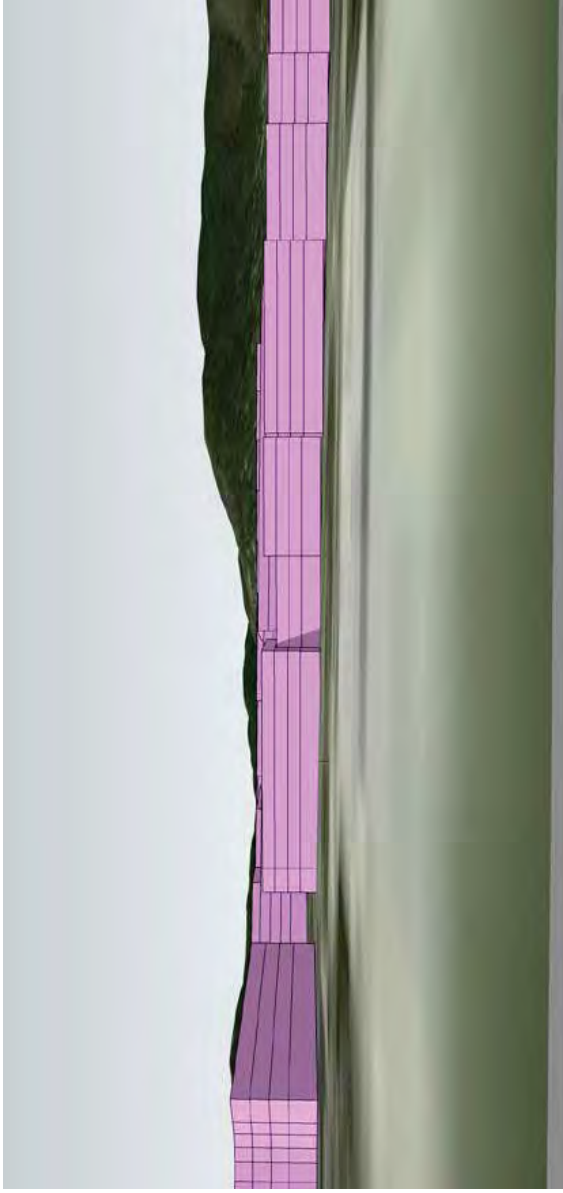
Note: Visual testing does not consider the existing structures (Basketball Stadium or Library) or canopy vegetation within Boronia Park.



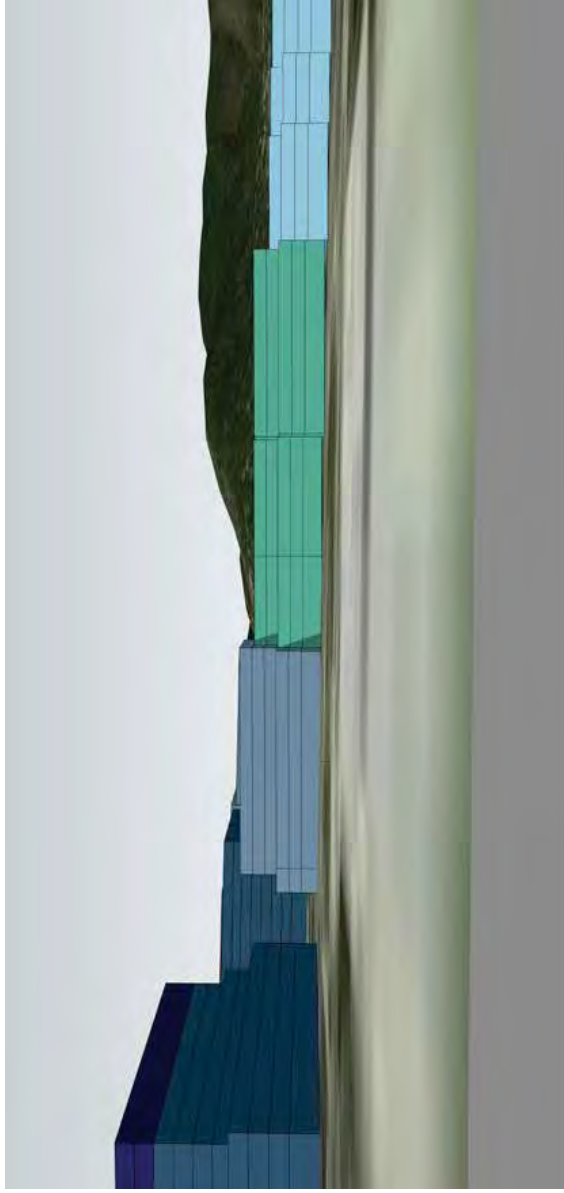
View Location



Existing View (approximate)



Existing DD07 Control



Proposed Built Form Proposition

7.3 Indicative Yield Study

This section details the findings of an indicative yield study completed to provide Council with an indicative number of dwellings that can be achieved under the heights proposed in the Built Form Proposition.

Yield Calculation Assumptions

From the outset of this project, Council had a strategic yield target of accommodating 2173 dwellings within the suburb of Boronia and at least 60% of these dwellings (or approximately 1305 dwellings) with the Boronia Activity Centre. Council also wants to encourage apartment style dwellings within the Activity Centre.

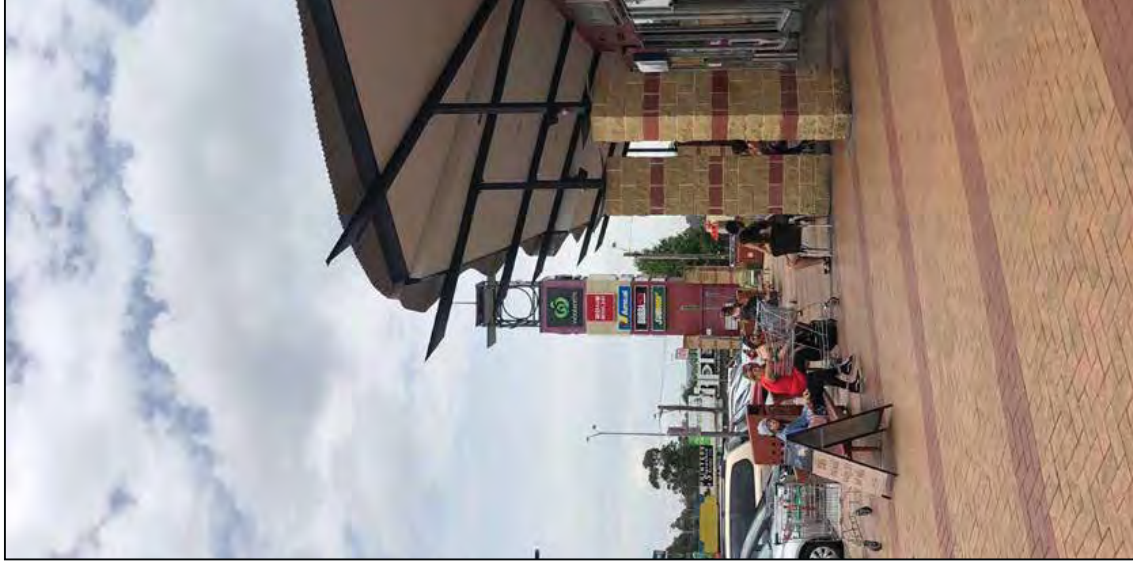
Assumption	Value	Description
Net Saleable Area (NSA)	80%	Absorbs inefficiencies such as shared circulation and servicing.
Average Dwelling Size	80m ²	Considered to be a standard area for a two bedroom apartment.
Coverage Type A	50%	Site with residential and landscape interface treatments. Or large strategic site requiring internal access, open spaces, separation.
Site Coverage Type B	60%	Site with either residential or landscape interface treatments.
Site Coverage Type C	70%	Site in secondary commercial streets not constrained by residential or landscape interface treatments.
Site Coverage Type D	80%	A Site in primary commercial streets not constrained by residential or landscape interface treatments.

- Yield calculation generally applies to land within 'Commercial Core' (existing C1Z and MUZ)
- Excludes allotments identified by Council GIS mapping as already having undergone recent development.
- Ground floors are not included in yield calculation to assume the provision of commercial uses and car parking at ground level only.
- Calculation method is as follows:
 - Lot area x estimated site coverage (varying between 50%-80% depending on factors such as ground/upper level setbacks/transition/ solar access) = residential Gross Floor Area (GFA).
 - Residential GFA x NSA rate (80%)
 - NSA / average dwelling size (currently using 80sqm to factor in a mix of apartments and townhouses).
- This is not a lot-by-lot yield given the expanse of the study area, but achieved through the clustering of adjoining lots of the same proposed height.

Yield Summary

Precincts	SUMMARY			
	100% uptake	75% Uptake	50% Uptake	25% Uptake
Precinct 1	144	108	72	36
Precinct 2	1,213	910	607	303
Precinct 3	396	297	198	99
Precinct 4	1,906	1,430	953	477
Precinct 5	678	508	339	169
Precinct 6	998	749	499	250
Precinct 7	754	566	377	189
Precinct 8	511	383	256	128
Precinct 9	112	84	56	28
Total	6,713	5,035	3,357	1,678

Given the predictive nature of a yield study for an entire Activity Centre, comprising many properties (of diverse attributes) and multiple landowners it is impossible to accurately anticipate future land speculation and development activity. Therefore, our yield calculation comprises 4 scenarios based on 'uptake' of sites and development. We consider that an uptake of 50% to best represent the level of change and development within the Boronia Activity Centre into a 20 year horizon. Based on this uptake rate, we predict approximately 3,357 dwellings can be accommodated within the Boronia Activity Centre.



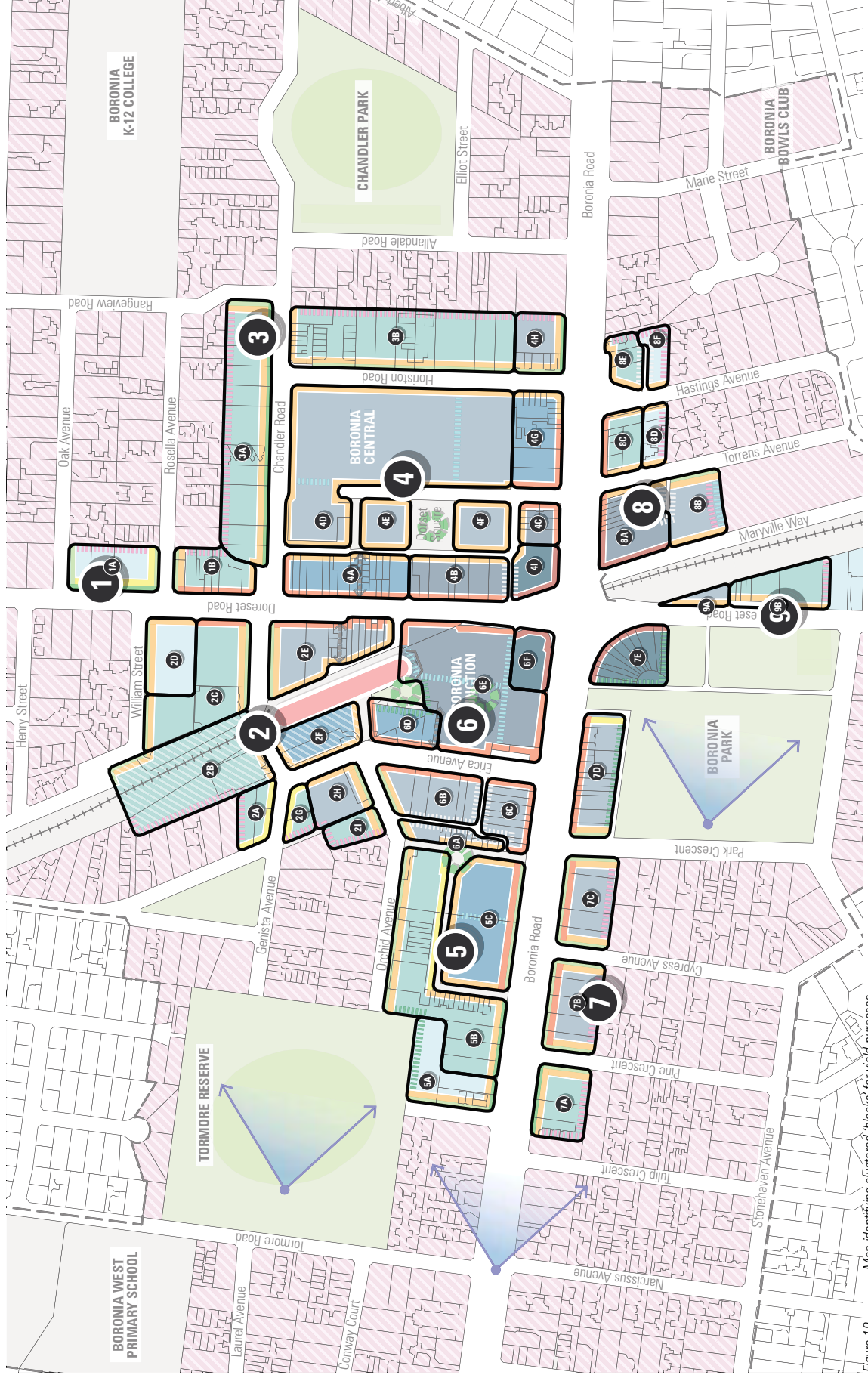


Figure 19. Map identifying clustered 'blocks' for yield purposes.

APPENDIX A

DETAILED YIELD SUMMARY

Appendix A: Detailed Yield Summary

Yield breakdown

This appendix provides the findings of the indicative yield study in greater detail. Blocks are identified in Figure 19 in Chapter 7.3.

Block	Area	Com. Storeys	Res. Storeys	Storeys	Site Coverage	Res. GFA	Res. NSA	Dwellings
PRECINCT 1								
1A	4,165	1	3	4	B	7,497	5,997	75
1B	3,442	1	4	5	B	6,885	5,508	69
TOTAL								144
PRECINCT 2								
2A	2,029	1	4	5	A	4,058	3,246	41
2B	11,431	1	4	5	A	22,863	18,290	229
2C	8,004	1	4	5	C	22,411	17,929	224
2D	3,904	1	3	4	C	8,198	6,568	82
2E	6,462	1	5	6	D	25,849	20,679	258
2F	7,049	1	6	7	C	29,607	23,686	296
2G	1,312	1	4	5	B	3,148	2,519	31
2H	609	1	5	6	B	1,826	1,461	18
2I	1,403	1	4	5	B	3,367	2,683	34
TOTAL								1,213
PRECINCT 3								
3A	8,569	1	4	5	A	17,138	13,710	171
3B	11,227	1	4	5	A	22,453	17,963	225
TOTAL								396
PRECINCT 4								
4A	5,481	1	6	7	D	26,307	21,046	263
4B	4,429	1	7	8	D	24,802	19,841	248
4C	1,720	1	7	8	D	9,631	7,705	96
4D	26,464	1	5	6	A	66,160	52,928	662
4E	2,541	2	4	6	C	7,114	5,691	71
4F	2,733	1	5	6	C	9,565	7,652	96
4G	4,874	1	6	7	D	23,395	18,716	234
4H	3,047	1	5	6	A	7,619	6,095	76
4I	2,227	1	9	10	D	16,033	12,827	160
TOTAL								1,906
PRECINCT 5								
5A	4,599	1	3	4	B	8,278	6,622	83
5B	12,420	1	4	5	B	29,809	23,847	298
5C	8,247	1	6	7	B	29,691	23,753	297
TOTAL								678

Block	Area	Com. Storeys	Res. Storeys	Storeys	Site Coverage	Res. GFA	Res. NSA	Dwellings
PRECINCT 6								
6A	1,719	1	5	6	C	6,017	4,814	60
6B	2,171	1	5	6	C	7,599	6,079	76
6C	2,321	1	5	6	C	8,122	6,498	81
6D	2,651	1	6	7	C	11,133	8,906	111
6E	14,995	1	7	8	A	52,481	41,985	525
6F	2,013	1	9	10	D	14,496	11,597	145
TOTAL								998
PRECINCT 7								
7A	2,934	1	4	5	A	5,867	4,694	59
7B	4,879	1	5	6	A	12,198	9,758	122
7C	4,886	1	5	6	A	12,215	9,772	122
7D	5,067	1	5	6	D	20,270	16,216	203
7E	3,952	1	9	10	D	24,898	19,919	249
TOTAL								754
PRECINCT 8								
8A	4,155	1	7	8	C	20,358	16,287	204
8B	4,442	1	5	6	B	13,326	10,661	133
8C	2,532	1	4	5	C	7,089	5,672	71
8D	1,525	1	3	4	B	2,746	2,197	27
8E	1,772	1	4	5	C	4,961	3,969	50
8F	1,474	1	3	4	B	2,653	2,122	27
TOTAL								511
PRECINCT 9								
9A	847	1	5	6	D	3,389	2,711	34
9B	2,784	1	4	5	C	7,796	6,237	78
TOTAL								112
TOTAL								
TOTAL								6,713

APPENDIX B

SHADOW TESTING

Appendix B: Shadow Testing

Spring Equinox 11am



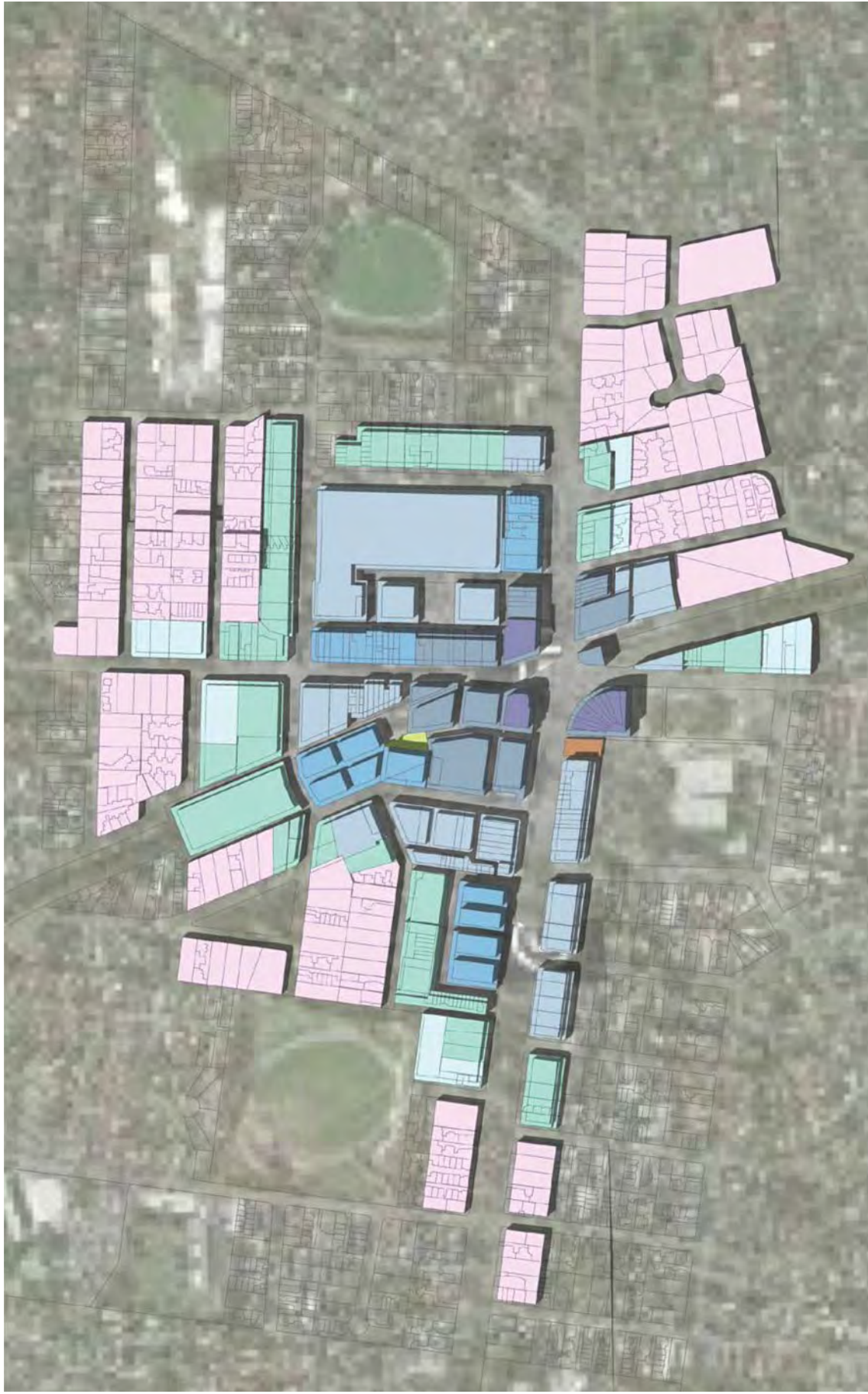
Spring Equinox 12pm



Spring Equinox 1pm



Spring Equinox 2pm



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hansen partnership pty ltd

Melbourne | Vietnam
level 4, 136 exhibition st
melbourne vic 3000
t. 61 3 9654 8644 | f. 61 3 9654 8088
e. info@hansenpartnership.com.au
w. hansenpartnership.com.au
ABN 20 079 864 | ACN 079 864 716t

Boronia Renewal Project Key Planning Issues and Analysis Report

CITY FUTURES – KNOX CITY COUNCIL

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Purpose of this document

Knox City Council is undertaking a review of the current structure plan for Boronia in order to provide a contemporary planning framework for this Major Activity Centre in the form of a renewal strategy. This Boronia Renewal Strategy encompasses a coordinated multi-disciplinary Council strategy for Boronia that goes beyond structure planning.

The purpose of this document is to provide a background contextual analysis and description of Boronia, particularly with regard to known issues and the current legislative/policy context that apply to Boronia.

The report also reviews existing studies/policies with recommendations and directions provided to feed into the Boronia Renewal Strategy, which then may be the launching pad for a new Structure Plan.

This paper used the following sources to collate these issues:

- Boronia Structure Plan 2006;
- Knox Planning Scheme;
- Various research studies commissioned by Council, whether internal or external;
- Adopted Council strategies and plans;
- Consultation with Council staffs;
- Best Practice standards, Planning Advisory Notes and Practices Notes issued by the State Government;
- Knox Community Demographics and forecast;
- On-site observations; and
- Plan Melbourne 2017-2050.

This report does not provide a conclusive review of all work undertaken, and other subject will need to refer to specialist reports undertaken as part of the Boronia Renewal Strategy. This report seeks to synthesise information that is pertinent to the current conditions of the Boronia Activity Centre and provide guidance and recommendations.

The report addresses each theme independently allowing to read them separately, as such, the report is not intended as one continuous read.

Housing and Demography

Boronia is a suburb on the eastern edge of Metropolitan Melbourne, within the City of Knox and covering an area of 1,126ha (~11km²). The 2017 Estimated Resident Population for Boronia is 23,365, with a density of 20.75 persons per hectare¹.

Plan Melbourne 2017-2050 identifies the primary commercial district of Boronia located alongside the train station holding the suburb’s namesake as a Major Activity Centre. This Activity Centre provides a range of services for the suburb and surrounding areas.



Figure 1. IdCommunity – map of Boronia suburb

Population Growth and Capacity²

Source: IdCommunity demographics resources - City of Knox population forecast

Between 2016 and 2041, the City of Knox projects a population increase by 32,272 new residents for the municipality (representing a 20.09% growth), at an average annual change of +0.73%.

The 2016 population census indicates a Boronia suburb population of 22,993 residents (with a 2019-forecast set at 23,579 residents). The prediction indicates the Boronia population will grow to 27,262

¹ Idcommunity demographic resources – retrieved February 2019. <http://www.knox.vic.gov.au/demographics>

² Idem.

residents by 2041; being an increase of 4,269 new residents from 2016 for the suburb. This represents a 13.2% slice of the total forecast population increase for the municipality of Knox that would locate in Boronia.

It further represents a 15.62% population growth for the suburb of Boronia, making Boronia the fourth fastest growing suburb of Knox City Council behind Bayswater, Scoresby, and Wantirna South.

The changes in population will also result in other important demographic changes, namely:

- **Households:** In 2016, the dominant household type in Boronia was 'Couple families with dependents', and by 2026, the largest forecast increase is in 'Lone person households'.
 - By 2041, household types will be primarily: Couple families with dependents (35.5%), Couple without dependents (27.1%), Lone person households (22.1%).

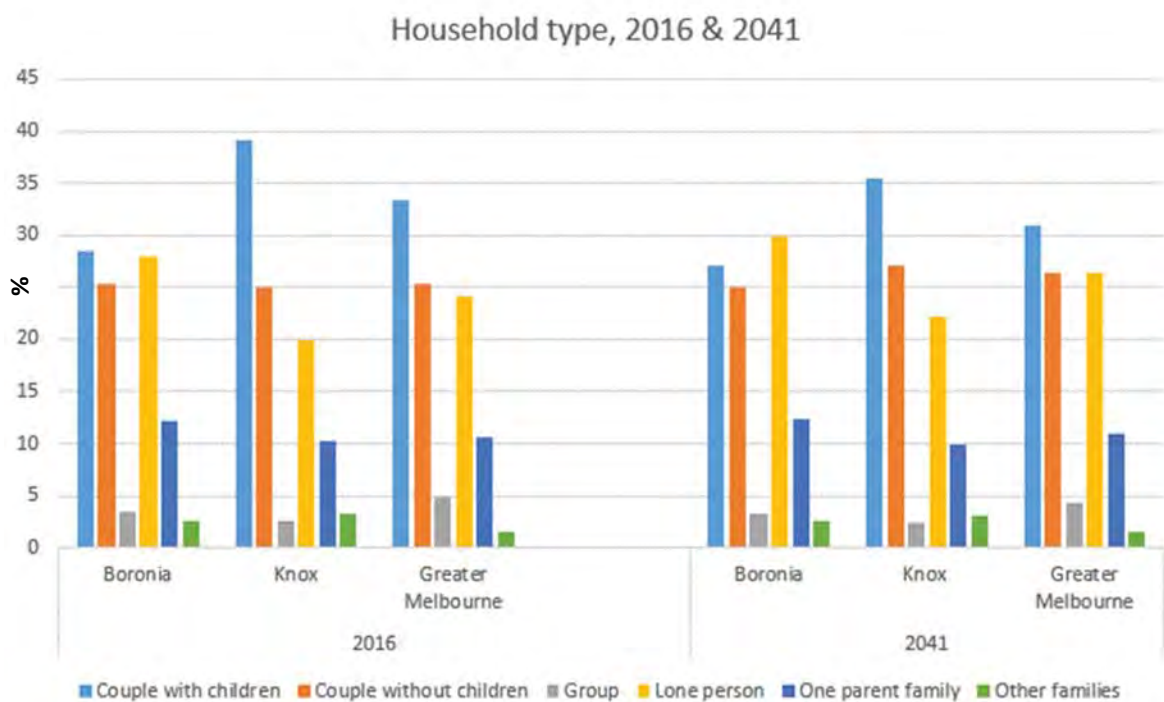


Figure 2. Household Type Profile (% variation 2016-2041 Boronia – Knox – Melbourne Metro), Knox City Council, January 2019

- **Age:** Between 2016 and 2026, the age structure forecasts for the City of Knox indicate a 7.3% increase in population under working age, a 37.5% increase in population of retirement age, and a 2.3% increase in population of working age.

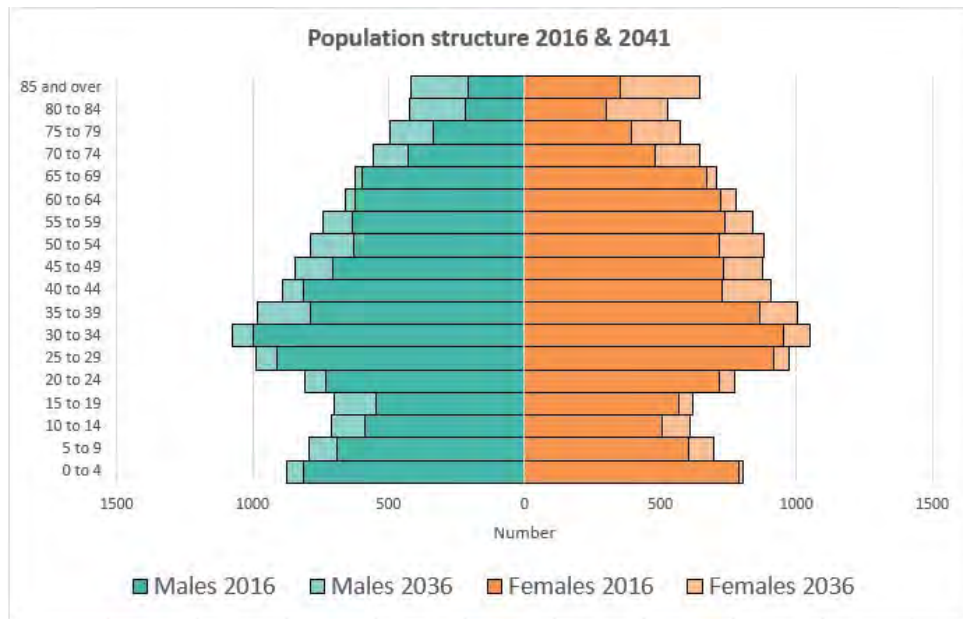


Figure 3. Population profile comparative 2016-2036 – Boronia Suburb, Knox City Council January 2019

Forecast age structure - Service age groups

Boronia - Total persons	2016		2026		2041		Change between 2016 and 2041
Age group (years)	Number	%	Number	%	Number	%	Number
Babies and pre-schoolers (0 to 4)	1,605	7.0	1,614	6.4	1,677	6.2	+72
Primary schoolers (5 to 11)	1,741	7.6	1,970	7.8	2,031	7.4	+289
Secondary schoolers (12 to 17)	1,303	5.7	1,468	5.8	1,552	5.7	+249
Tertiary education and independence (18 to 24)	1,900	8.3	1,935	7.6	2,122	7.8	+223
		28.6				27.1	
Young workforce (25 to 34)	3,778	16.4	3,849	15.2	4,088	15.0	+310
Parents and homebuilders (35 to 49)	4,628	20.1	5,207	20.6	5,507	20.2	+879
Older workers and pre-retirees (50 to 59)	2,717	11.8	2,925	11.6	3,246	11.9	+529
Empty nesters and retirees (60 to 69)	2,609	11.3	2,540	10.0	2,765	10.1	+156
Seniors (70 to 84)	2,155	9.4	2,986	11.8	3,212	11.8	+1,058
Elderly aged (85 and over)	557	2.4	804	3.2	1,062	3.9	+504
Total persons	22,993	100.0	25,297	100.0	27,262	100.0	+4,269

Figure 4. Population and household forecasts, 2016 to 2041, prepared by .id consulting, the population experts, May 2018.

- *Dwellings*: By 2041, the number of dwellings will have increased to 11,796 representing an addition of 2,173 additional new dwellings compared to 2016.³

³ Idcommunity demographic resources – retrieved February 2019. <http://www.knox.vic.gov.au/demographics>

In summary, the key changes are as follow for Boronia

	2017	2041	Changes
Population	22,933	27,262	+4,269
Dwellings	9,623	11,796	+2,173

The forecast demonstrate that Boronia will see changes both in terms of its demographics, but particularly in term of growth. The population growth may be sprawled throughout the suburb. Although, the fact that Boronia is identified as a Major Activity Centre with access to public transport and services, and is an established commercial precinct twinned with aging building infrastructure all join up to identify the Boronia Activity Centre as an area destined for redevelopment and to receive the bulk of the growth through further densification.

The suburb is generally break down in the following area:

Boronia	1,126ha
Undevelopable land	
Arterial and Train Line	~60ha
Parkland and Flood Zone	~70ha
Industrial	62.4ha
Public Land	~15ha
Outside Growth Boundary	40.4ha
Remaining Land	878.2ha

Foothills Area	~450ha
Site of Biological Significance	~86ha
Low Density	11 ha
Residential – Bushfire Prone	~120ha

Growth Potential Area (including local road network)	
Activity Centre	~90ha
Residential – Other	~250ha

The concentration of the growth within the Activity Centre will benefit the urban planning strategy for Knox (*e.g. Knox Housing Strategy*), the Plan Melbourne 2017-2050, and the support and rationalization of existing infrastructure and services. This will also alleviate development pressure on other residential areas and help protect the local character.

Social and Affordable Housing

Policy review source: Knox Affordable Housing Action Plan 2015-2020 – (KAHAP)⁴

The Knox Affordable Housing Action Plan commits Knox Council's aspirations for an improved access to housing affordability, and adequate provision of social housing, for its residents. The sharp increase in median house prices across Knox⁵, unmet by the equivalent increase in household incomes, is recognized as one factor affecting household ability to address mortgage repayment or rent without financial stress and risk of default. The size of this gap is increasing and action is required to halt its increase and further reduce this gap wherever possible, especially in locations that are close to services and public transport such as Activity Centres. The purpose of the Action Plan is to increase supply of social and affordable housing, as well as to guide Council in achieving this by directly intervening in the market with a key focus on increasing the supply of social housing in partnership with social housing providers.

Since the adoption of the KAHAP by Knox City Council in 2015, the Victorian Government amended the *Planning and Environment Act 1987* to include a definition of 'affordable housing' with additional reference of 'social housing' as defined within the *Housing Act 1983*.

- **Affordable Housing:** 'Housing including social housing, that is appropriate for the housing needs of very low, low and moderate income households' *Planning and Environment Act 1987* Section 3AA (1)ⁱ.
- **Social Housing:** 'public housing, and housing owned, controlled or managed by a participating registered agency' *Housing Act 1983* Section 4 (1)ⁱⁱ.

Housing affordability:

With 9% of Knox's household being in **housing stress** (*i.e. dedicating 30% or more of the gross weekly income to rent or mortgage*), some of Knox's suburbs are within the Melbourne Top-10 for highest number of households experiencing housing stress⁶.

In 2011, the median cost of purchasing a house in Knox was \$471,000 for a house and \$380,000 for a unit. In comparison to the 2011 standard household earning in Knox, the shortfall was 40% and 26% respectivelyⁱⁱⁱ.

These costs have significantly increased over time to now reach \$750,000 for a house and \$575,000 for a unit in Boronia⁷ while the income levels have not increased at the same pace.

⁴ http://www.knox.vic.gov.au/Page/Page.aspx?Page_Id=4244

⁵ Knox's median house prices rose by 243% between 2001 and 2011 (increased by \$277,000), while median household incomes over the same period have only increased by \$21,000, from \$51,428 to \$72,600 (*ABS Census 2011*) [*Knox Affordable Housing Action Plan 2015-2020 Page 5*]

⁶ In 2011, one in every 11 Knox households (9% or 4755) was likely to be in housing stress, whether renting or making mortgage repayments. Around one in nine households paying off a mortgage (10.8% or 2520) and one in four households that rent (24% or 2235) were in housing stress (*ABS Census, 2011*). Proportionately, renters make up the majority of those in housing stress. [*Knox Affordable Housing Action Plan 2015-2020 Page 7*]

⁷ Source: as of 2018 – realestate.com.au

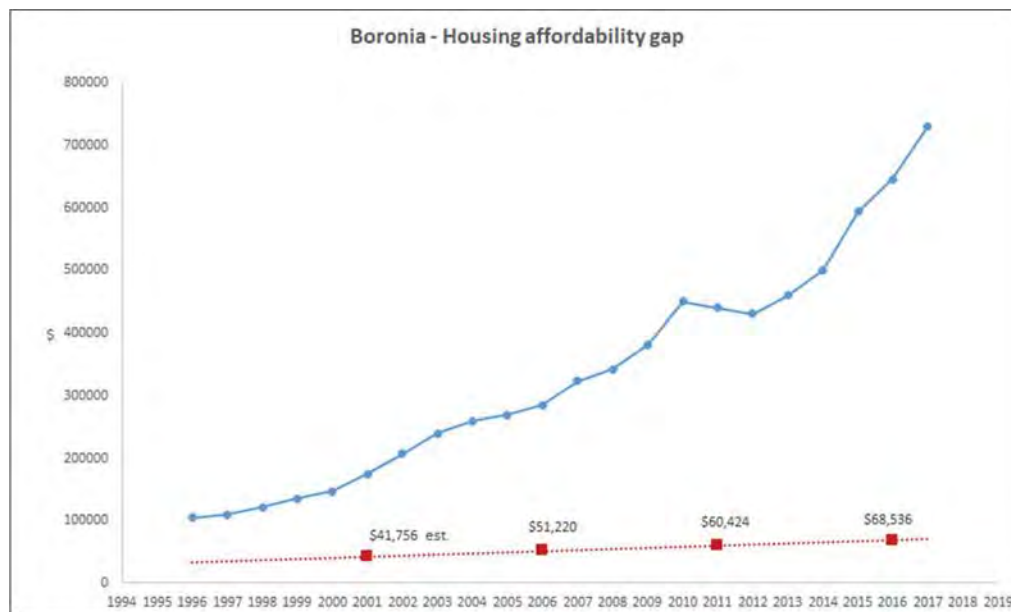


Figure 3 - Boronia household income and average housing cost variation 1996-2016³

Once a greenfield area mostly developed within the 1960s-70s, Knox's housing stock consists mostly of established dwellings. New residential development is now usually in the form of infill development, typically townhouses. In light of this, it is noted that 16.9% of Knox households are rental tenants. The current housing stock provides principally large detached dwellings shows a lack in diversity to accommodate all sizes and types of households. This limited supply indirectly impacts the rental market (*and associated rent cost*) across the municipality through the lack of sufficiently smaller more affordable units and reduces housing opportunity for tenants.

Social Housing:

The supply of social housing (*i.e. provided via not-for-profit community providers, or State government public housing²*) is also below the Metropolitan average⁸. Despite an increase of 260 social houses between 2006 and 2011⁹ to meet an existing deficit, the number of households within the lower income range has grown during the same period resulting in a greater demand and affecting the overall net gain in the supply of social housing.

Further Council research indicates that 390 additional social housing is required to fill the current gap and that, by 2036 an additional minimum supply of 860 dwellings will be needed¹⁰. It is noted that such forecast is provided as a minimum supply and not an optimum supply to address the overall supply issue.

⁸. 2.1% of housing stock in Knox is social housing. This compares with 2.9% for Metropolitan Melbourne [*Knox Affordable Housing Action Plan 2015-2020 Page 7*]

⁹. *Knox Affordable Housing Action Plan 2015-2020 Page 3, 5, and 7 (ABS Census 2011)*

¹⁰. Council research (2014) shows that 390 additional social housing dwellings are now required in Knox to achieve a minimum supply, and by 2036, 860 additional dwellings will be needed. [*Knox Affordable Housing Action Plan 2015-2020 Page 6 and 7*]

Referring to Knox City Council research:

- 2014, Affordable housing profile
- 2014, Defining affordable housing and a minimum supply of social housing for Knox updated figures

The Knox Community and Council Plan 2017-2021 also include Goal 2 which involves "housing that meet our changing needs". The resulting target aims to an increase in social and affordable housing in Knox. As consequence, the KAHAP specifies the supply above as the social housing target proposed by Council in its Council Plan. It is noted that the updated figure for 2016 now indicates a need of 460 additional social housing.

Council Actions

Council is committed via its Affordable Housing Action Plan and other policies^{iv} to advocate for more social housing by:

- Acknowledging housing affordability and choice are significant influencers to community health and wellbeing issues and that supply is to be appropriately close to services and facilities; and, acknowledging the definition of “affordable housing” and “social housing” as set in the action plan^[refer to footnotes i and ii];
- Providing social services and programs to residents, allowing them to ‘age-in-place’;
- Continuing its Housing Monitoring Program to provide baseline data and understand the housing needs in Knox (remain up to date);
- Advising and informing the community and developers of the housing affordability issue within Knox and of the targets⁵ set by Knox Council;
- **Negotiating with private developers on a voluntary, site-by-site, basis for the inclusion of social housing in residential development;**
- **Identifying strategic sites for inclusion of social housing supply, including sites set out in the Knox Housing Strategy [January 2015];**
- **Providing a minimum of 5% social housing supply on Council owned land development;**
- **Implementing statutory responsibilities that help on the diversity, type, location, and quality of housing; which:**
 - **Implement the scaled approach to housing through Knox Housing Strategy promoting higher density in areas of good access;**
 - **Ensure affordable/social housing is considered in strategic plans for activity centres with appropriate guidance included**
- **Supporting the aspirations for affordable housing through land use strategies;**
- **Promoting a dispersed supply approach in appropriate locations throughout the municipality;**
- **Supporting and implementing the introduction of obligatory contributions to affordable housing on larger-scale development through inclusionary zoning if/when the Victorian Government provides legislative support for such measures.**
- Partaking in an advocacy role and develop/host partnership with the all relevant stakeholders, particularly with the Eastern Affordable Housing Alliance.

[^Bolded items – relate to Land Use Planning affected items]

Knox City Council has recently commenced the ‘Laying a Social Housing Pipeline’ in Knox project (part of Social Housing Investment Planning – SHIP) funded through the Department of Health and Human Services (DHHS) Social Housing Investment Planning 2017-18 Local Government Grants. The project comprises two major initiatives:

- A **Strategic and Surplus Sites Framework** – to scope and establish an internal working framework for the identification of strategic and surplus sites in Knox, and the delivery of social housing on these sites; and
- A **Social Housing Futures Fund Investigation** – to explore the establishment of a social housing fund that levies and collects, and then invests and allocates developer contributions towards the delivery of social housing outcomes.

The SHIP project will also incorporate an evaluation of the financial threshold viability for integrating social housing requirements to future housing development across Knox. This will evaluate both private development and development on publicly owned land as a pilot so as to determine sustainable financial thresholds that can be extrapolated to guide Social Housing requirements in residential development.

In addition to the SHIP project, Knox City Council has been working to achieve social and affordable housing outcomes for decades and is still pursuing further actions. A summary list of different strategies, actions, and projects undertaken by Knox can be consulted in **Appendix 1**.

Plan Melbourne

Plan Melbourne guides the planning strategy and vision for the future of Metropolitan Melbourne and also guides municipal Planning Schemes. Social housing and affordability are also noted issues within Plan Melbourne and KAHAP helps realise some of the principles, outcomes and directions guiding the vision of Plan Melbourne.

Outcome 2: Melbourne provides housing choice in locations close to jobs and services.

Direction 2.3: Increase the supply of social and affordable housing; and

Direction 2.5: Provide greater choice and diversity of housing.

Directions 2.1, 2.2, and 2.4 also express the need to ensure housing are closer to jobs, public transports and appropriate location.

It is also noted that Policy 2.3.3 of Plan Melbourne aims at strengthening the role of planning in facilitating and delivering the supply of social and affordable housing where Plan Melbourne identifies the need for a planning reform resulting in stronger planning controls to facilitate an increase in social and affordable housing.

Knox Planning Scheme

Council is also guided by the Knox Planning Scheme which comprise policies and actions that further support and entrench the Knox Affordable Housing Action Plan.

First of all, the Victorian Planning Policy Framework, at Clause 16 (Housing), 16.01-15 (Integrated housing), and 16.04-4S (Housing affordability), highlight the importance of addressing the issue of both social housing and affordability by:

- Ensuring planning for housing considers the provision of land for affordable housing.
- Facilitating the delivery of high quality social housing.
- Ensuring supply meets the demand.
- Promoting good design, increase choice in housing type, encourage affordable housing options at appropriate locations.

The Policy further refers to the *'Homes for Victorians – Affordability, Access and Choice (Victorian Government, 2017)*.

The Knox Affordable Action Plan (KAHAP) and the Housing policies objectives and strategies reflected by the Victorian Framework above are further entrenched in the Knox Planning Scheme by its Municipal Strategic Statement (MSS). The MSS acknowledges the existing issues of low supply of social housing, as well as the need for diverse and increased housing supply in activity areas (*Clause 21.01-2*).

The Housing section of the MSS provides further guidance with regard to the provision of social housing on identified strategic investigations sites and diverse housing choices throughout Knox (*Clause 21.06-1 and -2*). The Community Development section of the MSS further identify the need to create livable neighbourhood with good walkability, safe and good access to services, facilities and employment in which affordable housing options are maintained (*Clause 21.08-1*).

These have been reflected into all Activity Centre within the municipal district of Knox (*Clause 21.10*) has further specific objectives and strategies. In this instance, the Boronia Activity Centre (*Clause*

21.10-3) Strategic Statement seeks to diversify housing choice options in future development within the centre area. It also seeks to improve good design and particularly sustainable design.

The Scheme also comprises Environmentally Sustainable Development Policy which requires development achieve good practice which ultimately will have a positive effect on the running expenses in residential development (*Clause 22.04*).

Knox Residential Development Policy (*Clause 22.07-9*) also comprises guideline to provide affordable housing options, including social housing in its “Housing for aged persons” policy which forms part of the overall scaled residential approach to urban growth. The Scheme also comprises particularly provisions (Comprehensive Development Zone and Development Plan Overlay) which applies to identify strategic sites with specific requirements of social housing provisions.

Boronia

In Boronia, there is a small amount of social houses provided by DHHS for people on low incomes, as well as some other registered providers, e.g.:

- Loddon Mallee Housing Services Ltd,
- Bapcare Affordable Housing Limited,
- Community Housing (Vic) Ltd,
- Scope (Vic) Ltd,
- Common Equity Housing Ltd,
- Housing Choices Australia Limited, and
- Salvation Army (Vic) Property Trust

Boronia is identified as a Major Activity Centre, well connected to transport (Boronia Train Station), services (variety of local retail and expanse of commercial zone land), and jobs, (retail, proximity to Bayswater Industrial Precinct). As such, Boronia is the appropriate location for an increase supply of housing, with appropriate diversity in the choice of housing, in close proximity to services (walkability)

Recommendations:

The Boronia Renewal Strategy (and its Structure Plan) should:

- ***Acknowledge that insufficient amount of Social Housing and Housing Affordability hardship are significant issues affecting Knox and Boronia in particular.***
- ***Recognise the appropriateness of the activity centre as a location to increase housing diversity, promote affordability via varied typology, and integrate social housing close to facilities and services.***
- ***Recognise that smaller household types will represent just short of half of all household forecasted by 2041.***
- ***Acknowledge that proximity to public transport and the development of buildings that incorporate environmental sustainable design features will support a reduction in ongoing costs to residents in the long run, positively helping in reducing housing stress.***
- ***Support development comprising a variety of dwelling size, inclusive of one and two bedrooms options, within the activity centre and designed as accessible for people with limited mobility.***
- ***Incorporate the above points as a social housing, housing diversity, and housing affordability objective and strategy to the Boronia Local Area policy of the Scheme.***

- ***Recognise that the outcome of the SHIP project will inform Council's expectation of future social housing requirements and thresholds to be implemented, via Scheme Amendment or inclusionary zoning, to residential development regardless whether this development is on private or public land.***
- ***Impose an interim requirement for the provision of social housing to large scale residential development until the outcome of the SHIP project are known.***
 - ***Define a threshold for "large scale residential development" for both the interim and future requirement for clarification.***
- ***Pushes for the redevelopment of excess Victrack land for more mixed-use development integrating social housing under the principle of Policy 2.3.1 of Plan Melbourne.***
- ***Work with DHHS to investigate opportunities for improvements into their social housing sites and increased supply.***
- ***Explore and support possible opportunities to integrate outcome of the "Greening the Greyfields project" on suitable residential areas of Boronia, in partnership with Swinburne University.***

Economic Development & Investment

Source: HillPDA Consulting “Boronia – Economic demand, land and site options analysis” 2017.

Boronia economic and retail analysis primarily refer to the Economic Analysis undertaken in the HillPDA Consulting “Boronia – Economic demand, land and site options analysis” 2017 and is not reviewed as part of this paper.

Recommendations

- **Refer to HillPDA Consulting “Boronia – Economic demand, land and site options analysis” 2017.**
- **Retain Commercial Zoned land for the purpose of commercial functions to ensure an adequate supply exists in accordance with Policy 1.1.7 of Plan Melbourne.**
- **Ensure planning controls retain commercial activities at ground floor, and improve the provision of mixed used office space/residential in upper storeys within the core area.**
- **Ensure there is a no net loss of current commercial space within mixed use areas.**
- **Ensure planning controls support and prioritise development with ground floor commercial activities within mixed use areas.**

Economic Development - Job Forecast and density

The following information presents current and future jobs data for the Boronia Activity Centre.

Current Jobs & Jobs Density

An industry segmentation was undertaken to reclassify current job levels in Boronia Activity Centre. This considered four industry classifications¹¹.

Table 1 – Jobs in Boronia – Current levels

Industry classification	Jobs	%
Business Services	734	24%
Retail & Hospitality	989	32%
Creative & Cultural	91	3%
Other	1288	42%
Total	3103	

Jobs density figures for the Boronia Activity Centre were available and are presented in **Appendix 1A**¹².

A business as usual and a growth scenario were considered to assess jobs and the density jobs in the Boronia Activity Centre. The Dorset Square destination was taken as the benchmark for the activity centre. This zone contributes **979** jobs to overall jobs in Boronia. From a land area of approximately 14ha, the employment per hectare within the zones is estimated at just under 70 jobs per hectare.

¹¹ The “Creative & Cultural” segment presented in the table below is based upon work the ABS had undertaken that considers culture and creative industries in broader terms by including a range of web design, fashion production and computer systems job classifications.

¹² The information is drawn from REMPLAN using the density of jobs by destination zones.

Table 2 – Jobs in Boronia – Ratio of jobs to hectare by industry classification

Industry classification jobs per hectare	Jobs
Business Services	18
Retail & Hospitality	30
Creative & Cultural	4
Other	17
Total	70

Future Jobs & Jobs Density

Population growth has been used as the principal driver of jobs growth in a future economic scenario. Specifically forecast growth was estimated based on a 1000 dwellings being established in Boronia by 2041, with each dwelling bringing 2.1 persons per dwelling.

At the rate of growth which is higher than current population forecasts under the “Business as Usual” forecasts that Council’s ID.profile data shows the following scenarios could occur:

Table 3 – Population in Boronia – Growth scenario of 1000 dwellings

Population - Growth scenario	2016	2026	2036	2041
	22,993	25,997	27,239	27,962
Growth rate by time interval	-	3,004	1,242	723
Growth rate time interval				0.216109

This growth rate was applied to jobs. Under this growth scenario, the following estimates can be forecast:

- Jobs in Boronia with this influx of 1000 dwellings could grow to 4588 as opposed to 3679 in the business as usual scenario.
- This correlates to almost a threefold growth of jobs to 1,485 jobs compared to 2016 levels.

The same growth rate was applied to the Boronia figures that show the distribution of jobs per hectares. From the current figures of 70 jobs per hectare under the growth scenario job in Boronia could grow to **85 jobs per hectare** based on an influx of 1000 new dwelling in the town centre. This rate would be one of the highest in the LGA but still not higher than the major activity of Knox Central.

Development Contributions Plan

Source: DELWP – Understanding Development Contribution¹³

A Development Contributions Plan (DCP) is a mechanism that can be applied through Part 3B of the *Planning and Environment Act 1987* to land so as to impose a community infrastructure levy to fund projects. It is one of three mechanisms under which contribution can be sought and collected under the *Planning and Environment Act 1987*, the other two being voluntary agreements, and planning permit conditions.

¹³ <https://www.planning.vic.gov.au/policy-and-strategy/planning-reform/development-contributions-plans>

A DCP allows Council to collect development contributions from new development of land (*e.g. new dwellings, commercial/industrial development*) to partially fund the cost of assets, facilities, or infrastructure nominated by Council over the life of the DCP, which is usually 15 to 20 years. New development funds its share of the cost of the infrastructure that Council has nominated in the Plan. Council is committed to deliver during the life of the Plan whether the development occurs or not.

Development contributions can either take the form of payments or work-in-kind towards the provision of proposed infrastructure or facility. An adopted DCP helps formalising payment for provision of infrastructure in a transparent way that may not otherwise be possible via other methods.

Knox City Council is currently investigating preparation of a DCP that would be likely to apply to all land in the municipality, which includes Boronia Activity Centre.

A DCP is a significant strategic planning policy for Council with several approval hurdles for incorporation in the Knox Planning Scheme. The Plan must be prepared in accordance with State government guidelines and Ministerial Directions¹⁴. Council approves its adoption into the Planning Scheme by way of an amendment to the Scheme, and the Minister of Planning has the final say on the DCP's effect. This Planning Scheme Amendment will be prepared separately to the amendment for Boronia Renewal Strategy and the DCP project is currently at business case stage.

Consequently, the Boronia Renewal Strategy could recognise that a separate DCP may come to effect in the future and provide partial funding to nominated assets/facilities project identified (and supported by Capital Works) in Knox, and possibly within the Boronia Activity Centre.

Recommendations:

The Boronia Renewal Strategy (and its Structure Plan) should:

- ***Acknowledge the DCP as a helpful tool in supporting the financing of new assets and recommend that Council pursue exploring the implementation of a DCP within the Knox Planning Scheme.***
- ***Request that the DCP project prioritise any assets identified within the Boronia Activity Centre that would support and help achieving the objectives of the Boronia Renewal Strategy.***

Strategic Asset and Investment Strategy

Source:

- ***Knox Community and Council Plan 2017-2021¹⁵;***

The Strategic Assets and Investment Strategy (SAIS) is an evidence-based approach intended to inform long-term investment decisions in assets, in particular for facilities, car parks and open space.

The SAIS has considered assets based on their locational value, and included scoring them for their proximity to transport, activity centres, and open space so as to continue to have positive impacts within the Knox community for the next twenty years. Positive impacts also primarily relate to provision of infrastructure for social housing, affordable housing, lifelong learning and mental and physical health.

¹⁴ Ministerial direction on the preparation and content of development contributions plans and Department of Environment, Land, Water, and Planning guides and practice notes: www.planning.vic.gov.au

¹⁵ <http://www.knox.vic.gov.au/communityplan>

To assist Council in its decision making about the future impact potential of an asset, the SAIS will employ four designations:

1. *Investment* in an asset if it is well located but could function better;
2. *Conversion* of an asset to an alternative community use if the asset is strategically better located for that alternative use; or
3. *Divestment* of an asset (land and/or building) to realise revenue in order to fund other community uses.
4. *Acquisition* of a new asset (land and/or building) to address an identified gap in Knox's assets provision/impact if there are no other Knox assets which can address that gap.

The SAIS will give Council and the community confidence concerning future investment decisions for strategic assets. It will take a strategic view to optimise Council's assets portfolio, aligning assets to key Community and Council Plan objectives, with consideration to community needs and asset condition, and in so doing highlight where assets are best located to work harder for the community.

Council's strategic assets within the Boronia Activity Centre are:

- 257 Dorset Road
- Boronia Park
- Infolink
- Boronia Progress Hall
- Park Crescent Children and Family Centre
- Dorset Square Car park
- Bellbird Senior Citizens Club (Building only)
- Leisure works
- Tormore Reserve
- Chandler Park.

This project is ongoing and not currently finalised but once finalised, it will provide the framework for Council's future financial and operative actions in terms of assets expenditure. The SAIS will mutually inform future investment and be informed by and the overarching objectives of the Boronia Renewal Strategy.

Recommendations:

The Boronia Renewal Strategy (and its Structure Plan) should:

- ***Acknowledge the SAIS will form Council's investment tools for future assets expenditure based on the expenditure.***
- ***Recognise the outcome of the SAIS will identify the status of Council's strategic assets in Boronia, which will guide the future of such assets.***
- ***Request that any assets identified in the SAIS that is located within the Boronia Activity Centre as investment, conversion, divestment, or that any new assets to be acquired considers the objectives of the Boronia Renewal Strategy and be raised as a priority within capital works program.***

Movement and Transport

Source: GTA Consultants “Boronia Activity Centre–Movement and Access Study” 2018

Boronia movement and transport analysis primarily refer to the Movement and Access study undertaken in the GTA Consultants “Boronia Activity Centre–Movement and Access Study” 2018 and is not reviewed as part of this paper.

Recommendations

- **Refer to GTA Consultants “Boronia Activity Centre–Movement and Access Study” 2018 and apply a Movement and Access strategy to Boronia.**
- **Ensure future strategy is aimed to prioritise a pedestrian friendly and safe environment over car. This can be achieved by:**
 - **Formalising pedestrian crossing;**
 - **Giving pedestrian priority at intersection through physical design;**
 - **Prioritise design of court and no through traffic road as “Home zones” where vehicular traffic is subservient to any other mode;**
 - **Increasing pedestrian linkages;**
 - **Following desired path;**
 - **Providing wide and unobstructed path.**

Car Parking

Sources:

- **Glossop Town Planning “Planning advice to assist delivery of the Boronia Renewal Project Strategy” September 2018**
- **PPN22 Using the car parking provisions¹⁶**
- **PPN57 The Parking Overlay¹⁷**

Boronia Car Parking analysis primarily refer to car parking audit and parking strategy developed by Council’s Traffic Engineering team and which are not reviewed as part of this paper.

In addition to this, Glossop Town Planning provided a preliminary advice via its “Planning advice to assist delivery of the Boronia Renewal Project Strategy” September 2018 which relates to Planning Scheme VC148 and the parking overlay.

The advice introduce a quick guidance on the tool that can be used for the development and application of a Parking Overlay to the Knox Planning Scheme. The advice discuss the following items:

- Reference to the relevant Practice Notes related to Parking Overlays.
- The Special Rate Scheme identified in Clause 21.10-3 which affects part of Boronia abutting Dorset Square.

This Special Rate Scheme is identified within strategies (5.8 and 5.9 of Clause 21.10-3) of the Boronia local planning policies with defined criterion, which allows for the exemption of the provision of car parking spaces for development meeting these criterion.

5.8 Facilitate two storey buildings which occupy 100 per cent of the property area without the need to provide onsite car parking provided that the ground floor of the

¹⁶ https://www.planning.vic.gov.au/_data/assets/pdf_file/0024/97152/PPN22-Using-Car-Parking-Provisions.pdf

¹⁷ https://www.planning.vic.gov.au/_data/assets/pdf_file/0027/97317/PPN57-The-Parking-Overlay.pdf

building is used as "Retail Premises" and the first floor is used solely as "Office, or both floors are used as "Office" in accordance with Figure 5 of this clause (Boronia Special Rates Schemes 1967 and 1977).

5.9 Facilitate single storey buildings which occupy 100 per cent of the property area without the need to provide onsite car parking, provided that the single floor of the building is used solely as "Retail Premises" in accordance with Figure 5 of this clause (Boronia Special Rates Scheme 1967 and 1977).

Buildings that would not meet these requirements (either by different use or by additional storeys) would not be subject to such special rate scheme exemption. A question lingers whether part of the building that meets this criteria could be considered exempted (*e.g. the ratio of car parking must only be provided for the additional storeys while the first two floors remain exempted*). Such approach may be valuable in giving flexibility in negotiating development outcomes. If this were the case, the wording of the strategy would need to be adjusted to reflect it.

- The impact of the introduction of VC148 and the Priority Public Transport Network (PPTN). The PPTN now applies to a radius of 400m around the Boronia train station with the result of allowing future development to follow Column B of Clause 52.06 of the Scheme as the ratio of car parking to be provided. This covers most of the Commercial and Mixed Use Zone land of Boronia, however small pockets of Commercial Zone are not affected. The recommendation made in the Glossop report has strong merit to avoid unfairness via the application of double car parking rates. Introducing a car parking overlay to ensure an equal rates would resolve this issue for Mixed Use and Commercial Zone (core precincts area).

Recommendations

- ***Consider a Car Parking Overlay to avoid double car parking rates on land within the core area as per - Glossop Town Planning "Planning advice to assist delivery of the Boronia Renewal Project Strategy" 2018, p.34***
- ***Require that Council's Traffic Engineering Department continue the development of a parking strategy for Boronia.***
- ***Support an innovative approach with regard to street parking in the parking strategy which designs and manages street in consideration to the "Place and Movement" strategy incorporated in the GTA Consulting report.***
- ***Further explore the legal implications of the Special Rate Scheme 1967 and 1977 in relation to redevelopment and particularly redevelopment that exceeds the criterion identified in strategies 5.8 and 5.9 of Clause 21.10-3.***
- ***Rewrite the strategies 5.8 and 5.9 so to merge them into one strategy and clarifies whether the exempted part should be retained for taller development.***
- ***Pursue the development and implementation of a Parking Overlay in the Knox Planning Scheme for the Boronia Activity Centre (parts of) generally in accordance with the Glossop advice.***
- ***Consider the implementation of an interim Parking Overlay as part of the Renewal Strategy on land as identified in the Glossop advice.***

Sustainable Transport

Boronia Sustainable Transport opportunities and recommendations assessment primarily refer to works done and developed by Council's Traffic Engineering team and which are not reviewed as part of this paper.

However, recommendations with regard to sustainable transport in relation to development can also be referred to in the Environmental Sustainable Design section of this paper.

Walkability

Source:

- **City of Portland 20-minute Neighbourhood Concept Analysis.**¹⁸
- **Victoria: Guidelines for developing Principal Pedestrian Networks May 2015.**¹⁹
- **WalkScore.com**
- **Plan Melbourne 2017-2050**²⁰
- **Knox Planning Scheme**²¹
- **Knox Community and Council Plan 2017-2021**
- **Practice Note 58 - DELWP**²²

Council undertook a walkability analysis of Boronia to review the accessibility, catchment, and pedestrian permeability throughout the Activity Centre.

The development of a walkability index for Boronia was inspired from current best practices and policies. In specific it relied on:

- Plan Melbourne Direction 3.3 which seeks to improve local travel options in support of 20-minute neighbourhoods and Direction 5.1 which aims to create a city of 20-minute neighbourhoods.
- Knox Planning Scheme which identifies as key issues and influences
 - o 21.02-2 - Providing integrated transport options to reduce high rates of private car usage
 - o 21.02-2 - Linking and providing quality infrastructure for walking and cycling
 - o 21.02-2 Improving accessibility and mobility for people of all abilities
 Amongst other clause identifying the great level of car dependency within Knox.

The walkability model relied on the premise that: *“Accessibility to services through walkability is a prime and paramount factor that makes a 20-minute neighbourhood”* and that *“good walkability to destination helps a reduction of car dependency/usage and should be favoured for densification”*.

Plan Melbourne and the Scheme [as well as Practice Note 58] remain conceptual on the pragmatic determination and definition of a “20-minute neighbourhood”. It does not incorporate a detailed methodology and indicators providing a tangible approach in determining walkability. Portland Oregon has however pioneered this concept, having moved forward a clear quantitative walkability methodology and indicator in developing the Portland Plan Atlas as part of its 2030 Climate Action Plan and it was the main source of inspiration for the Boronia model. The following documents were therefore sourced to give more clarity in developing an approach for Boronia:

- Portland 20-minute, Plan Melbourne, and WalkScore, which helped guiding indicators for this analysis.

¹⁸ <http://www.portlandonline.com/portlandplan/index.cfm?a=288098&c=52256>

¹⁹ <http://www.victoriawalks.org.au/Assets/Files/5.%20Kristie%20Howes%20Principal%20Pedestrian%20Networks%20.pdf>

²⁰ <https://www.planmelbourne.vic.gov.au/>

²¹ <http://planningschemes.dpcd.vic.gov.au/schemes/knox>

²² https://www.planning.vic.gov.au/_data/assets/pdf_file/0029/97319/PPN58-Structure-planning-for-activity-centres.pdf

The Boronia model considered a pragmatic and realistic walkable catchment as pedestrian move on the ground, following footpaths, crossings, and integrating obvious desire paths. It did not aim to create a catchment 'as the crow flies' but rather followed realistic path as accessible on the ground. The catchment was developed for seven indicators from which walking distance was measured. The indicators are:

1. **Train station (public transport)**
2. **Conveniences (shops/restaurant, bakery, laundromat, specialist grocers)**
3. **Supermarket (full service groceries)**
4. **Commercial core (employment and services)**
5. **Public Primary School (education)**
6. **Public Parks (green space/leisure)**
7. **Medical Premises (services)**

The threshold distance measured was:

- **400m catchment**
- **800m catchment**

These distances were considered as opportune as they are well within a 20-minute pedestrian catchment [refer to estimated travel time below], this is despite the fact that a 20-minute walking catchment would extend up to 1600m. These distances also align with DELWP Activity Centre boundary criteria as identified within Planning Practice Note 58 [PPN58] in the review of activity centre boundary.

- In the case of the **Train Station, the additional 1000m catchment** was also measured with the view that people are more likely to walk longer distance to reach hard infrastructure Public Transport. This distance is still within 20-minute catchment for the train station and PPN58 also recognise that 'proximity to public transport' is an important criteria to determining activity centre boundary. As such, it has been considered that 1000m is a good proximity criteria.

The model aimed to determine:

- How far people need to walk to access destinations based on the topology of the street and existing pedestrian network [developing a catchment]. This distance was calculated using the destination as a starting point and radiating from it, with the destinations being the indicators identified above.

The purpose of the walkability index is to allow the gathering of information that:

- Helps identify gaps in the pedestrian networks or infrastructure, such as footpath, or new formal crossing.
- Helps identify areas that can be considered for improving pedestrian permeability between precincts.
- Identifies areas with good pedestrian access which can be considered for higher density development and zoning.
- Identifies pathways to be maintained and retained as priority for good pedestrian access.

Figure 4. Estimated travel time by mobility mode and approximate catchment distance:

	Pedestrian	Cycling	PT Bus	PT Train	Driving (<i>urban conditions</i>)
400	5-7min	1-3min	N/A	N/A	1-3min
800	10-15min	3-5min	N/A	N/A	1-7min
1000	12-17min	5-7min	N/A	N/A	2-7min
1600	20min	9-14min	N/A	N/A	3-9min
20 minutes distance	1600m	2500m	7km	15km	10-15km

Negative influences to walkability were noted as:

- Absence of safe road crossing (some local roads, Dorset Road, Boronia Road)
- High gradient topography (in the south-east)
- Absence of footpath (along local street)
- Inadequate pedestrian permeability (enclave - most direct route/associated with the desired line concept – No through road)

Qualitative influences also need consideration but did not form part of this information gathering:

- Safety
- Lighting
- Surveillance

The following gaps in the model resulted from a timeframe which did not allow to refine and complete the full potential of a walkability model for Boronia:

- Merging the 7 indicators into one single walkability map for Boronia was not completed, as a result, each seven indicators are considered and viewed individually.
- Giving weighting purpose to each destination within an indicator was not developed, nor giving weighting to each indicators when balanced against each other's [in the case of merging]. As a result, the indicators show catchment on equal merit without a prioritisation of certain destinations over the other. There is no scaling of more important destinations compared to another within an indicator.
- Incorporating handicap scoring of elements that negatively impact on all access walkability such as the absence of footpath or topography.

It is acknowledged that the walkability model may be considered incomplete in term of its full potential as a guide for density. It is nonetheless accomplishing its task in analysing linkages and movement.

General issues and assessment:

Quick observations:

- The absence of footpaths on either side of the road along Cypress, Pine, Tulip, Narcissus, Woodvale, and Stonehaven is considered as limitative facto
- Lack of footpath to the south-east precinct of Boronia Activity Centre limits accessibility.
- Lack of direct access to Coles from the East side limits catchment expanse
- The following roads are considered mobility barriers between neighbourhoods:
 - Albert
 - Boronia
 - Dorset
 - Erica/Chandler next to station
 - Boronia Village access points
 - Tormore
 - Belgrave Train line

And greater attention would need to be considered for pedestrian crossing, particular with regard to location which should considered appropriate desire path.

- Number of footpaths and crossing are designed as non-standard (width, angle) across the centre (e.g. Genista Avenue/Erica Avenue)

The walkability catchment maps for each indicator can be viewed in **Appendix 2**. The following pages summarises notes and issues.

➤ **Train station (public transport) – Refer to Map 30A**

This map shows the 400-800-1000m catchment of the Boronia train station. The location of bus stops has also been indicated as well as the outline of the Priority Public Transport Network 400m bird view calculation.

➤ **Conveniences (shops/restaurant, bakery, laundromat, specialist grocers) – Refer to Map 30F**

This map shows the 400-800m catchment of properties currently occupied and used as a convenience. A convenience is considered as: a business that offers services or goods for everyday uses by local residents.

The location of all convenience shops, liquor stores, convenience restaurant/pub, café, and bakery, laundromat, and specialist grocers was pinpoint on the map and the catchment was measured from the door of these premises.

Restaurants & Take Away

Boronia Village

Carlos Cantina - 18-19/163 Boronia Rd
Village Fish&Chip – 17/163 Boronia Rd
Jacky's Kitchen – 15/163 Boronia Rd
Dumpling house – 10/163 Boronia Rd

Station Arcade

Jimmyz Kebabs – 2/255 Dorset Rd

Boronia Junction

Subway - 1-2/123 Boronia Rd
Just Wok – 3/123 Boronia Rd
Bubba Pizza – 4/123 Boronia Rd
Meat'n Bun – 5/123 Boronia Rd
Bangkok Gardens - 8-9/159 Boronia Rd
Great Indian Wave – 1/144 Boronia Rd
Bert's Singapore – 146A Boronia Rd
Boronia Thai – 110 Boronia Rd
Wong's Chinese – 106 Boronia Rd
Gomi Pizza – 98 Boronia Rd
Lipari Pizza – 249 Dorset Rd
Kingsland Chinese – 3/94 Boronia Rd
Chris's Fish&Chip – 75 Boronia Rd
Kim 'n Chi – 91A Boronia Rd
Warm & Cozy – 200A Dorset Rd
District 5 Bistro RSL – 198 Dorset Rd
McDonalds – 267 Dorset Rd
Big Al's Pizza – 1/211 Scoresby Rd
Kebabbiiz – 286 Boronia Rd
Nandos – 1/287 Boronia Rd

Cafes & Bistro

Mum's Burger Kitchen - 5/159 Boronia Rd
Boronia Junction
Marco's Café – 7/123 Boronia Rd

Dorset Sq

Prime Pizza – Boronia Mall
Paul's Kitchen – 5/246 Dorset Rd
Chicken on Flames – 26 Dorset Sq
Captain Gummy's – 24 Dorset Sq
Siam Terrace – 240 Dorset Rd
Craves – 236 Dorset Rd
Noodle Canteen – 218 Dorset Rd
Taco Bill – 218 Dorset Rd
Wot a Kebab – 224 Dorset Rd

Pubs & Bars

Zagames – 112 Boronia Rd
Hoops Sports Bar – 4/241 Dorset Rd

Caltoria Brewery – 31 Holloway Dr

The Dog Café – 120 Dorset Rd
Forage Food Store – 153-157 Boronia Rd
Elsa & Gray – 9 Rangeview Rd
The Hub Play Café – 59 Boronia Rd

Boronia Village

Mt Village Coffee Lounge – 16/163 Boronia Rd
 Hilda 's Café – 11/163 Boronia Rd
 Fontana Café – 2/163 Boronia Rd

Dorset Sq

New Mall Café – Boronia Mall
 Coffee @ Windsor – Boronia Mall
 Café Romano – Boronia Mall

Convenience Shops & Liquor Stores**Boronia Junction**

BWS Boronia – 123 Boronia Rd
 Boronia Station Convenience – Train Station

Dan Murphy's – 159 Boronia Rd
 7 Eleven – 200 Dorset Rd
 J Mart 251 Dorset Rd

Specialist Grocers**Boronia Village**

Asian Grocer – 7/163 Boronia Rd
 NQR Boronia – 8/163 Boronia Rd
 Farmer's Joe Market – 9/163 Boronia Rd

Serendib Food Sri Lankan Grocer - 221 Dorset Rd
 Masagana Philipino Asian Grocer - 12/159 Boronia Rd

Bakery**Boronia Village**

Blue Hills Bakehouse – 5/163 Boronia Rd
 Hot Bread – 3/163 Boronia Rd

Boronia Junction

Baker's Delight – 8/123 Boronia Rd

Laundromat**Boronia Village**

Heng Seng Coin Laundry - 20/163 Boronia Rd
 Boronia Laundrette – 81 Boronia Rd

The Drop in Café – 5/260 Dorset Rd – Dorset Arcade

MishMash Café – 228 Dorset Rd

Station Arcade

Café – 4/255 Dorset Rd
 Two Cats – 9/255 Dorset Rd

Café Maisa – 3/157 Scoresby Rd

Station Arcade

Bottlemart – 3/255 Dorset Rd

Dorset Sq

Liquorland – Shop 2 Dorset Sq
 Australia Post – Boronia Mall
 Cellarbrations – 10/109 Boronia Rd

Dim Sim - 3/159 Boronia Rd

Dorset Sq

Market – 19 Dorset Sq
 Hao Di Asian – 2/262A Dorset Rd
 Guru Bazaar – Boronia Mall

Dorset Sq

Boronia Mall Bakery – Boronia Mall
 The Cheesecake Shop – 2/89 Boronia Rd
 Gluten Free4U – 243 Dorset Rd

The above premises were considered, when premises were grouped together, distance was measured from the closest one to the prospective catchment. The location of public toilets (*Tormore Reserve, Boronia Station, Dorset Square, Boronia Junction, and Boronia Park*) are also indicated on the map, but distances are not measured from such facility.

➤ **Supermarket (full service groceries) - Refer to Map 30B**

This map shows the 400-800m catchment of Coles (Dorset Square – Boronia Mall) and Woolworths (Boronia Junction) constituting the two major supermarket chains operating in Boronia. This indicator completes the convenience aspect of the walkability index. The prospective catchment extension for the proposed Aldi supermarket at 1-11 Erica Ave is also indicated.

➤ **Commercial core (employment and services) – Refer to Map 30C**

This map shows the 400-800m catchment from of the commercial area of Boronia (commercial core constituted of Commercial 1 and Mixed Use Zone, particularly calculate from the access to retail core e.g. the door to a shop).

➤ **Public Primary School (education) – Refer to Map 30D**

This map shows the 400-800m catchment from the two local public primary schools being Boronia K12 and Boronia West Primary School. The location of kindergarten (*Goodstart Early Learning – 15-17 Boronia Rd, Top Kids – 172 Boronia Rd, Mission Australia – 78 Albert Ave*) and preschool (*Knox Park Crescent Children Services*) as well as private school (*St. Joseph's Primary*) has been indicated but the distances are not measures from these premises.

This map may serve as a guide in helping the development of a “walk2school program” and improvement of safety features along the way.

➤ **Public Parks (green space/leisure) – Refer to Map 30G**

This map shows the location of all public parks within Boronia (and surrounds) and the expanse of their 400 and 800m catchment. It reveals how many properties are within walking distance of parkland (400 or 800) and which properties are not serviced within 800m from a park.

It may serve as a guide for the future improvement or acquisition of land for new parkland to ensure good services are provided. The Boronia Station Reserve was disqualified as an effective open space for the calculation of this catchment. With regard to Public Parks indicator, the Open Space analysis at Section XX provide an in-depth analysis of walkability to Parks.

➤ **Medical Premises (services) – Refer to Map 30E**

This map shows the 400-800m catchment from medical centre located in Boronia consisting of:

- . Boronia Medical Centre & MIA Radiology and Cypress Health Specialist Centre located at 152 to 160 Boronia Road.
- Boronia Mall Clinic located at Boronia Mall.
- Greater Knox Family Practice located at 41-43 Boronia Road.

Other premises are also indicated but catchment was not calculated from these premises. These consist of:

- Boronia Vet – 181-183 Boronia Rd
- Lap Surgery Australia – 2 Langwith Ave
- Dorset Consultant Centre – 282 Dorset Rd
- Body@Boronia – 3A/148 Boronia Rd
- Dentists at: 286 Dorset Rd; 4/5 Chandler Rd, 1/175 Boronia Rd, 1/178 Boronia Rd
- Pharmacies at: 3/148 Boronia Rd, Boronia Junction – 9/123 Boronia Rd, 20 Dorset Sq, Boronia Mall – 47 Dorset Sq

The following table indicates quick observations and a SWOT analysis for each indicators

(Figure 5).

Station	Supermarket	Retail Core	Convenience	Medical	School	Parks
<p>Observation</p> <p>On ground readability issues in term of pedestrian access/egress from the station to surrounding places:</p> <ul style="list-style-type: none"> - Through parking lot, or bus exchange, the pathway isn't direct or clear. Absence of clear signage. 	<ul style="list-style-type: none"> - Boronia Park is serviced within 400m - Access via Boronia Mall is paramount to retain good access to Coles from the North-East 	<ul style="list-style-type: none"> - Extremity of existing AC not within catchment (Rankins and Bambury) 	<ul style="list-style-type: none"> - Concentration within the retail core with Boronia Village – Boronia Junction and Dorset Rd - Small detached convenience improve date for each quadrant - Existing AC generally serviced 	<p>Three core medical centre area</p> <ul style="list-style-type: none"> - Albert - Boronia Rd/Park - Boronia Mall/Chandler <p>Agglomeration of counselling office around Boronia Rd precinct and Boronia Mall</p>	<p>Two public schools, one in each northern quadrant</p> <ul style="list-style-type: none"> - One private school in SW quadrant - Kindergarten facilities: 2 within the SW quadrant (including one public) and 2 in the eastern foothills outside study area. - Poor pedestrian connection or linkage to kindergarten facilities 	<ul style="list-style-type: none"> - All areas within Activity Centre well serviced by park
<p>Strength</p>	<ul style="list-style-type: none"> - Laneway to Boronia Village ensure that whole of Boronia Village is within the 400m distance 		<ul style="list-style-type: none"> - Local detached convenience in out of centre location (eg. Rangeview) - Little boronia precinct (corner scoresby) improves scoring from the West - Café in the NE - Convenience along Dorset Road St 	<ul style="list-style-type: none"> - Medical precinct and employment pole 		<ul style="list-style-type: none"> - Parks outside study area improve access - Good distribution of small parks in the NW - Rail crossing improve Central Ave

Weaknesses						
<ul style="list-style-type: none"> - Absence of formal pedestrian access via Coles Car park affects and obstruct properties off Floriston Crossing Dorset - Crossing and access to Boronia Road through Boronia Junction - Access to West through bus station and crossing Erica St Dorset crossing next to Boronia Village would extend the 400m and 800m distance to the south west 	<ul style="list-style-type: none"> - Boronia Mall access not necessarily available – hours of access to path, same with arcade - Supermarket entrances designed as car centric and not facing street. 		<ul style="list-style-type: none"> - Lack of direct access from Boronia Village to Tormore Reserve and further north / west - Crossing Boronia - SW services lack - Northern area lacks 	<p>Boronia Rd – Poor linkage between either side of the road and convenience of Boronia Village</p>	<ul style="list-style-type: none"> - Poor connectivity to St-Joseph school other than Boronia Road. - No N/S access to Boronia K12 - Poor walkability northwards from Boronia Height (Herbert/Norwich) - Poor footpath condition along Boronia Rd - Knox kindergarten facility intended to be removed in the future: limit accessibility for southern catchment. - Dorset Rd/Rail lots caught with poor accessibility 	<ul style="list-style-type: none"> - Small part of Elisis Rd outside scope of park access. - Central Ave area with limited park access. - Poor Connection in the north between Woodmason and Central - Poor connection across Dorset

Opportunities					
<ul style="list-style-type: none"> - A walking track on the western side of the railway would collect all properties along Iris Crescent (east) improving walkability access and further extend to Herbert St. - An access between Norwich and Leisureworks would open up Norwich - An access between Grevillea and Tormore would open up Grevillea to the 800m distance - Better and more direct pedestrian interface crossing Erica along the station/car park/bus station would improve the length westward and northwestward. Particularly around Chandler/Genista/Erica - A path along the west side of the railway would bring Alfred and extend nearly till Reve within the 800m - An access at the end of Conway to Zeising would open up Zeising to good distance - A crossing next to Progress Hall would bring the library and Tennis Court within 400m. 	<ul style="list-style-type: none"> - Aldi will further extend the 400 and 800 distance to the west and south-west - Access from Woolworth to the West would open further area and reduce the loop around since the entrance faces east - Rear access to Coles Floriston and along Level Car park would open up further land along the 400m mark to the East 	<ul style="list-style-type: none"> - Consolidation of out of centre convenience into neighbourhood precinct - Improvement of access from tormore reserve to boronia village - Industrial area services for the daytime for northern area. - Leisureworks land or Tormore reserve for further services 	<ul style="list-style-type: none"> - Albert St Medical consolidation - Consolidation of Boronia Road as a precinct - Consolidation of the Mall medical precinct 	<ul style="list-style-type: none"> - Consideration of private school improves the SW - 30 Herbert St owned by DHHS, possibility of access through Leisureworks - Kindergarten facility in centre, near station to cover the 800 between both school and service the north. - Network across Dorset Road south/Rail to connect southern loop using the hexagonal streets (albeit beyond 800m) 	<ul style="list-style-type: none"> - School grounds (or Jenssen Centre) would improve 400m access distance - Access at end of Conway would improve walkability for Zeising

Threats	<ul style="list-style-type: none"> - Number of access and egress to Boronia Village accentuate the number of conflict between cars and pedestrian - Laneway between Erica and Boronia Village could be developed or not made advantage of - Arcade to Dorset Sq could be inaccessible - Dorset Road extension and type of future traffic that will travel through. 	<ul style="list-style-type: none"> - Aldi supermarket not going ahead as a mixed use - Hours of access to arcade and Boronia Mall can be limited - Supermarket relocating 		<ul style="list-style-type: none"> - Poor quality of convenience services - Inappropriate location - Lack of access consideration and pedestrian permeability in future development - Hours of operation for some services (e.g.cafe or industrial area shops or rangeview) which are clientele specific and not local residents 		<ul style="list-style-type: none"> - Limited facilities to meet the demand and poor connectivity to other services (disallowing multiple activities in one trip) 	<ul style="list-style-type: none"> - Foothills reduction of vegetation cover or increase density would not be beneficial as great walkability to park, which means larger lot reduce the need to multiple park - Rail crossing at grade not safe and infrastructure not updated (Central Ave)
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Pedestrian Permeability

This section reviews gaps and strength related to pedestrian permeability.

○ **North-West and North Permeability**

- Accessibility would be improved by opening pedestrian access via Conway Ave to Zeising Court. This would bring Zeising Court within a better distance catchment for most of the indicators.



- North of Central Ave is dependent to existing Devenish railway crossing towards Farnham Reserve. An evaluation of the quality, width, and safety of the crossing need assessment.
- Boronia Road crossings are paramount in servicing the South-West towards Tormore.
- Direct access to Boronia Village from Tormore Reserve would be beneficial and improve catchment to the South-West for many indicators.
- Direct access between Boronia Junction and Boronia Park would improve catchment distance to the South-West.
- Access between Orchid and Genista (at southern end of Tormore Reserve) should be designed and formalized in a more direct way towards Genista Reserve (by providing a north-south mobility through Tormore Reserve).



- Future access easement between Lorikeet and Tormore Reserve to be considered early and noted for the moment redevelopment of these lands will occur (or the redevelopment of Tormore Reserve).



- Direct Access from Herbert to Leisureworks and Tormore Road to improve north-south movement.
 - 30 Herbert Street can be considered for such venture as this property is owned by DHHS and appropriate located.
 - This would open direct passage to Leisureworks/Tormore Reserve – towards Boronia Village for properties to the north. And also improve access to Cardiff reserve from the south.



- Railway crossing from Northern Area to Iris would improve access to Genista Reserve.
- A pathway along the rail reserve on the Iris Crescent side, would increase the 400m station catchment to the north.





- The redevelopment of Boronia Village should consider pedestrian permeability from Tormore Reserve to allow a better pedestrian exchange between this commercial area and the North-West district. This would bring more properties within the 400m retail catchment.
 - Any future redevelopment of the Warbler Estate should comprise a master plan designed to improve internal walkability (Sandpiper to Lyrebird) and connection to Iris Crescent. Pedestrian Connection to Herbert, and Tormore Reserve (via Lorikeet) are also to be considered.
 - Pedestrian connection from Norwich to Penrith (Leisureworks) should be considered as well as from Grevillea to Penrith (Boronia West School).
 - Pedestrian crossing should be designated across Tormore Road from Laurel towards Tormore Reserve and other crossing should align with gate access to Tormore Reserve.
 - Pedestrian Access between Central Avenue and Woodmason Road should be considered (through Coogee, or Tunstall) to improve accessibility to parkland north of Woodmason but also access to Bayswater Industrial Precinct for employment.
 - Pedestrian Access across Dorset Road to Girdwood Reserve should be considered to improve open space access for the northern neighbourhood.
 - Lupton should be redesigned as a “woonerf/home zone” with priority to pedestrian movement.
 - Footpath along Short Street are to be provided.
 - Footpath along Genista to Chandler are to be improved and crossing of Dorset Road formalised.
- **South-West Permeability**
- Utilizing the drainage easement running south may help in improvement catchment towards parks services and be more south and should be considered to be developed as a flood friendly pedestrian track.
 - Provision of another park along that easement associated with a walking track could be beneficial.
 - Crossing Park Crescent could become more difficult as traffic increases and priority design for pedestrian should be considered.
 - Failure of providing adequate footpath (width) and both side of the road affects mobility. This is particularly exacerbates in instances of vehicles parked on road reserve or during construction phase when tradesperson’s vehicles obstruct road frontage.
 - Absence of linkage across Dorset Road disallow synergy between the two areas (along the train station and towards Boronia Park).
 - The redevelopment of the area between Dorset Road and the train line should take advantage of the existing laneway reserve that are currently undeveloped and should be used as pedestrian/cyclist focus paths (Douglas, Alfred, Reve).
 - Railway pedestrian crossing should be investigated in the vicinity of Douglas Street.
 - Crossing of Boronia Road to Tormore Reserve is paramount.

- **North-East:**

- Pedestrian laneway should be considered behind 69 to 87 Boronia Road, acquiring the common property, expanding the current partial laneway, and connect Floriston to Dorset Square along the Coles Car park. This would improve exchange between Floriston and Dorset Square.



- Footpath and track through Chandler Park should be formalised (along Chandler Road, along Elliott Street, and north-south between Elliott and Chandler.)
- Pedestrian crossing should be formalised clearly across Floriston and Chandler.
- Arcade to Dorset Road are paramount to keep good mobility east-west. While AEC Arcade could be closed, it should be done in favour of restructuring a new arcade that matches the pedestrian crossing to the station. New redevelopment should maintain arcade and make it a principal characteristic of the development.

- **South and South-East:**

- Stairwell and service lane along Boronia Road should be formalised as more pedestrian friendly and designed as pedestrian priority place.
- Crossing over Boronia Road should be considered around Floriston Ave.

Recommendations:

- **Consider the completion of the walkability index, by filling the gaps identified in the methodology that were not finalised as part of this process.**
- **Recommend that pedestrian permeability be improved in consideration of the observations made in this paper with the intent to improve catchment distance and favour pedestrian permeability. Consider as a priority:**
 - **Improvement to Tormore Reserve and connection over Tormore Road**
 - **Lobby DHHS for the possibility to create a connection through Leisureworks and 30 Herbert Ave.**
 - **Consider connection through Leisureworks from Norwich Street in any future redevelopment or renovation works of Leisureworks**
 - **Lobby DOE and West Boronia Primary School for the establishment of a connection to Grevillea Ave.**
 - **Incorporate pedestrian connection to Tormore Reserve in any redevelopment of Boronia Village**
 - **Incorporate pedestrian connection in any redevelopment of the Warbler Estate**
 - **Lobby VicRoads for the addition of new pedestrian crossings over Boronia Road and Dorset Road.**
 - **Lobby VicTrack for more pedestrian linkages over the railway track and the development of a path alongside the rail easement.**
 - **Acquire land for the development of a laneway south of the Coles Carpark**

- ***Retain arcade and laneways as paramount to good pedestrian mobility throughout the centre.***
- ***Zone RGZ all residential land within a 400m catchment of the train station.***
- ***Excludes Rankins Road from the Activity Centre***
- ***Consider northwards and southwards expansion of the Activity Centre.***
- ***Ensure pedestrian facilities are built for all users, and particularly that catchment around medical centre are built to the highest standard and designed with the mindset of people with limited mobility. A mobility audit should be undertaken on the ground to identify gaps.***

Public Realm and Open Space

Community facilities

Map 12.3 – Existing Community Services & Facilities at Appendix 2 identifies the location of community oriented facilities and the existing active network (pedestrian/cyclist) within the city centre.

Numerous community health services and leisure-oriented businesses are located within the commercial core of Boronia, with primary/secondary educational and Council's public leisure facilities or space being located more on the fringe of the downtown area.

Poor pedestrian linkages exists between the four main quadrants of Boronia outside the set crossing around the Boronia/Dorset intersection.

Legend

Community Services & Facilities

Boronia Scout Group & District Guides*
 Boronia RSL
 St Johns Ambulance*
 St Joseph Catholic Primary School
 St Joseph Catholic Church
 St. Pauls Anglican Church
 Boronia Road Uniting Church
 Top Kids Childcare & Preschool
 Boronia Bowls Club
 Good Start Early Learning Boronia
 Church of Christ
 Insight for Living
 Janssen Spirituality Centre

Council owned facility

Knox Leisureworks
 Tormore Reserve
 Boronia Park
 Marie Chandler MCH Centre
 Park Crescent Children & Family Centre
 Boronia Basketball Stadium
 Boronia Library
 Boronia Progress Hall
 Public Tennis Court
 Boronia Radio Controlled Car Club
 Chandler Park

Boronia BellBird Senior Citizens Centre & Dance Activities**
 Boronia Community Youth Hall

Government operated facility

Boronia West Primary School
 Boronia K-12 College & Early Learning
 Centrelink
 Australia Post
 Boronia Station & Bus Interchange
 VicPol Boronia

NGO operated facility

Infolinks*
 Boronia CWA Hall
 EACH
 Eastern Community Legal Centre
 Scope
 Relationships Australia Victoria Counselling
 Interchange Outer East

Private facility

ZONE BOWLING Boronia
 Metro Cinema Boronia
 Kids World Indoor Playground Boronia
 Jetts Boronia
 Busybodies Health & Fitness Centre
 Melbourne Taekwondo Centre
 Eastern Kung Fu Academy Wing Chun & Tai Chi
 Eastern District Pool League
 Eastern Suburbs School of Music
 Boronia Veterinary Clinic and Hospital
 Mercy Place Boronia
 Marshere Dance Studios
 Employ Ease

Health & Therapy

TOWN Clubs of Victoria
 Body@Boronia
 Rebalance Pilates and Yoga
 Universal Insight 777
 Autism Counselling
 Lap Surgery Australia
 Hearing Professionals Boronia
 Boronia Medical Centre & MIA Radiology
 Cypress Health Specialist Centre
 Dorset Consultant Centre
 Boronia Mall Clinic
 Greater Knox Family Practice

OpShop and Fair Trade

Adra OpShop
 RSPCA OpShop
 Salvos Stores
 Aussie Veterans OpShop
 All Sorts OpShop
 Here & There Makers

Recreation

<i>Pet Ownership (registration 2016-17) Boronia Suburb</i>	2976 dogs 1158 cats
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Source: Domestic Animal Management Plan 2017-21²³

The Domestic Animal Management Plan recognises the need for additional dog play parks may be valuable within Boronia. There is currently no dog parks within Boronia to satisfy any current demand. Further densification of the centre of Boronia will increase the demand by apartments household to walk their furry kids.

Recommendations:

- **Considers the inclusion of enclosed dog play areas within parks of Boronia [Tormore, Chandler, Boronia Park] and ensure that any park master planning reserve space for dog owners.**

Open Spaces

Source: Knox Open Space Plan²⁴ until 2022 and the Knox Play Space Plan Draft²⁵ until 2023

Criterion

- The provision of playground and park (*play space and open space*) based on statement that supply should favourably be within walking distance (*up to 500m*) of residences.
- The provision of park infrastructure also considers the following factors in term of priorities:
 - Areas of high level of social disadvantage (proximity);
 - Higher housing density (availability);
 - Household component (demand);
 - Quality areas and infrastructure (supply and quality).

Current open spaces within the Activity Centre and the Study Area

Within Activity Centre			Quality Infrastructure
Genista Avenue Reserve	Local Open Space ○ Play space Passive	NW	Yes - Playground and remnant native reserve
Tormore Reserve	Neighbourhood Open Space ○ Play space Active	NW	Yes - Sports Ground (oval) and playground / walkway
Boronia Park	Municipal Open Space ○ Play Space ○ Community Hub Active	SW	Yes - Playground / Walkway – Community infrastructure and indoor sports
Chandler Reserve	Neighbourhood Open Space ○ Play space Active	NE	Yes - Sports Ground and playground / walkway
Train Station Reserve	Local Open Space ○ Play Space Passive	NE	No - Remnant grass space

²³ <http://www.knox.vic.gov.au/damplan>

²⁴ http://www.knox.vic.gov.au/Page/Page.aspx?Page_Id=3157

²⁵ http://www.knox.vic.gov.au/Files/MeetingsCouncil/2014_Item_8_3_App_A_Part_1.pdf

Outside Activity Centre			
Penrith Street Reserve	Local Open Space ○ Play space Passive	NW	Yes - Playground and Bushland reserve
Cardiff Street Reserve	Local Open Space ○ Play space Passive	NW	Yes - Playground and Bushland reserve
Knox Jaycees Reserve	Local Open Space ○ Play space Passive	NW	Yes - Playground and remnant native reserve
Farnham Road Reserve - Bayswater	Local Open Space ○ Play space Passive	NW	Yes - Playground and remnant native reserve
Faraday Street Reserve	Local Open Space ○ Play space Passive	NW	Yes - Playground
Girdwood Road Reserve	Local Open Space ○ Play space Passive	NE	Yes - Playground
Stoneleigh Avenue Reserve	Local Open Space ○ Play space Passive	NE	Yes - Playground
Melbourne Old Joes Creek Reserve	Melbourne Water Local Open Space Passive	NE	No – Bushland reserve and walkway
Holloway Reserve – Bayswater	Local Open Space Passive	N	No - Walkway
Woodmason Reserve	Local Open Space ○ Play space Passive	N	Yes - Playground
Parker/Taranto Reserve	Local Open Space Passive	SE	No
Blind Creek Corridor and Reta Matthews Reserve	Creek Corridors Passive and Active	SW	Yes – Walkway – Bushland reserve Cycling way – Sports ground (Tennis)

Notes:

The variability in distance between the **Knox Play Space Plan Draft** criteria (500m) and the Boronia Renewal walkability indicator (400m) is considered in the assessment with the proper understanding that the walkability index is more restrictive.

The Knox Open Space Plan includes ranking criteria sheet score to be used for rating of park space in accordance with the policy.

Walkability and Demand in relation to Open Spaces

Catchment distance**Activity Centre**

- The activity centre is generally well-served, within 400m of existing open spaces with following gaps identified:

	400m to 500m consideration
Bambury St (NE)	No – most of the eastern part of the street not covered.
Part of Pine Cr, Tulip Stonehaven Ave and Woodvale (SW)	Yes - Improved coverage when considered 500m with limited area not covered
Eastern portion of the Dorset Rd South	No – the extra 100m distance has little to no positive impact.
William St and Power Rd (N – extending to Central Ave)	No - Central portion still remains outside the 500m scope.
Part of Dorset Sq	Yes - Improved coverage when considered 500m
Part of Oak, Rosella, and Elsis St (NE)	Yes - Are covered within 500m
Rubida, Gwyn, Marie, Hastings (SE)	No - the 500m has little to no positive impact

Outside Activity Centre

	400m to 500m consideration
Elsis Street / Brown Street (NE)	No – most of the eastern part of the street not covered.
Tulip Cr and Hazelwood Rd (SW) Stonehaven Ave and Woodvale (SW)	No – the 500m coverage has limited improvement to the lower central portion of Tulip Crescent. The inclusion of a path through the drainage easement would resolve this however.
Eastern portion of the Dorset Rd South	No – the extra 100m distance has little to no positive impact.
Central Ave, Catherine St and Power Rd (N)	No - Central and Catherine St portion still remains outside the 500m scope.

- All areas are within 800m accessibility in term of foot distance, apart for a small area of Elsie Street.

Open Space and building density

Household Component (demand – 2016 ABS Data) – Within Activity Centre

	SAL Digit	Population	0-4 year old population	Population Density
North-West	2144636	518	17 (3.2%)	16.48/ha
North	2144629	304	14 (4.6%)	20.28/ha
North-East	2144613 2144607	397 769	14 (3.5%) 57 (7.4%)	17.66/ha 30.66/ha
		Total: 1166	Total: 71 (6%)	
South-East	2144632	466	27 (5.7%)	19.97/ha

South	2144628	259	26 (10%)	20.20/ha
South-West	2144601	469	25 (5.3%)	21.46/ha

Source: General community profile 2016 ABS Census for Statistical Area Level (SAL)

Note: SAL boundaries do not necessarily match activity centre boundaries and will result in some overlap with area outside the activity centre area

Household Component (demand – 2016 ABS Data) – Outside Activity Centre

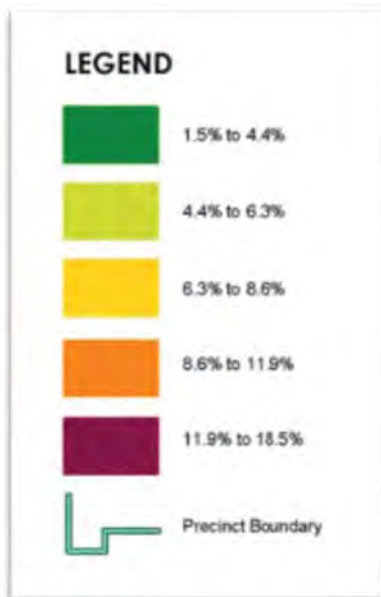
	SAL Digit	Population	0-4 year old population	Population Density
North-West	2144650	455	25 (3.2%)	24.94/ha
	2144639	255	16 (6%)	26.34/ha
	2144617	580	49 (8.4%)	24.68/ha
		Total: 1290	Total: 90 (6.9%)	
North	2144630	776	54	31.60/ha
North-East	2144625	557	35	21.66/ha
South-East	X	X	X	X
South	X	X	X	X
South-West	2144603	326	41 (12%)	30.81/ha
	2144623	457	36 (7%)	29.86/ha
	2144620	488	33 (6.7%)	20.09/ha
		Total: 1271	Total: 110 (8.6%)	

Source: General community profile 2016 ABS Census for Statistical Area Level (SAL)

Note: SAL boundaries do not necessarily match activity centre boundaries and study area and will result in some overlap with area outside study area

Below: Legend from Knox Play Space Plan Draft regarding concentration of children (0-4 years)

- o Higher the percentage is higher the demand



o **North-West:**

- Only Genista Reserve provides playground and open space facilities in the core area, particularly when excluding the substandard Train Station Reserve from this review. The playground of Tormore Reserve is located on the opposite side of the park, which accentuates the distance and is best designed to serve a catchment to the West of Tormore Reserve.
- The 2016 statistical area level data shows the density for 0-4 year old within the Activity Centre NE is approximately 3%, which demonstrates that Genista Reserve may be of sufficient provision in term of demand.
- Genista Reserve is generally within 400m walking distance of the whole of the appropriate Activity Centre statistical area level data for the Northeast.
- Genista Reserve is surrounded by roads, which means road crossing is a requirement to access the park. An adjustment of the traffic capacity surrounding Genista Reserve with better

visual access cues/safe crossing, adjustment of street parking, and direction of traffic may be beneficial.

- Outside the current Activity Centre:

- o NW district is well-serviced by a network of open spaces and playgrounds within 400m accessibility.
- o Parks outside study area have positive impact to accessibility.

- o All areas are within 800m accessibility.
- o Zeising Ct only area primarily outside 400m threshold.

Built form density	
<p>Erica – Sundew – Genista – Iris – Orchid</p>	<p>Primarily boundary-to-boundary urban commercial core (Erica) – No backyard and currently no residential occupation.</p> <p><u>Sundew – Genista – Iris and Orchid</u> Increasing multistorey development (townhouse/apartments) for Sundew, Genista, and Orchid reliant on balcony with little to no backyard spaces. (12%)</p> <p>High number of multi-dwellings (dual occupancy and villa development) with limited secluded private open space (SPOS) of approximately 35 to 80sqm clear to sky open space. (35%)</p> <p>Single detached dwellings with high footprint of ancillary outbuildings (5%)</p> <p>Single detached dwellings or dual occupancies with over 100sqm SPOS. (37%).</p> <p>Vacant or Commercial (11%) <i>(% of 54 properties)</i></p>
<p>Langwith – Tormore – Conway – Laurel - Boronia</p>	<p>Primarily consisting of townhouses with SPOS reliant on balcony (newer estates), and multi-dwelling development with maximum 30-40sqm of SPOS, or large footprint dual occupancy comprising little to not effective backyard. (57%)</p> <p>Multi-Storey Apartments. (5%)</p> <p>Remaining detached dwelling with effective private open space. (31%)</p> <p>Vacant or non-residential property. (7%) <i>(% of 38 properties)</i></p>
<p>Lorikeet – Warbler – Lyrebird – Sandpiper</p>	<p>Primarily consisting of single detached dwellings on 700sqm sized lot comprising backyard SPOS space. 80%</p> <p>Villa Units development with limited outdoor space. (1%)</p> <p>Dual occupancy and single detached dwellings comprising large building footprint leaving limited backyard space. (19%)</p> <p><i>(% of 78 properties)</i></p>
<p>Herbert – Cardiff – Norwich – Penrith – Grevillea – Rowson – Zeising – Laurel – Rose – Joyce</p>	<p>Primarily single detached dwellings with backyard, and setbacks to all boundaries. (86%)</p> <p>Dual occupancy with 50-100sqm SPOS retained. (2%)</p> <p>Large composite villa development with ample common space. (1%)</p>

	<p>Non-Residential (1%)</p> <p>Multi dwellings villa development and large footprint dual occupancy with limited backyard SPOS area. (10%) <i>(% of 155 properties)</i></p>
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○ **North:**

- Absence of open space and playground within the area.
- Nearest facilities requires either -crossing Dorset Road to Girdwood Reserve or -walking to Genista Reserve. Walking permeability to these reserves is poor and indirect which accentuates the distance, especially with the absence of a footpath on the south side of Henry Street.
- The 2016 statistical area level data shows the density for 0-4 year old within the Activity Centre North is approximately 4.6%, which would show an unsupplied demand in need of evaluation.
- The statistical area extends beyond the Activity Centre to include Central Ave, an area also identified as poorly supplied with open spaces.
- The urban area to the south, immediately to the east of the train station, falls within both the 400m catchment of Genista Reserve and Chandler Reserve in term of distance.
- The northern area is identified as “underserved” within the Knox Open Space Plan (P.31 – as of 2011).
- Improved connections across roads have been identified as necessary for this area (e.g. Dorset Road) within the Knox Open Space Plan (P.31 – as of 2011).
 - Outside the current Activity Centre:
 - All areas are within 800m accessibility.
 - The demand appears well supplied in the north-west and along Woodmason.
 - Park across railway (Farnham Reserve) contributes positively to catchment along Power Rd and part of Central Ave.

Built form density	
Williams – Henry - Central – Catherine – Power – Short	<p>Primarily townhouses with tight boundary to boundary development, and limited but variable private open space from 30sqm to 50 sqm. (29%)</p> <p>Remaining detached dwellings, particularly between Catherine and Central Ave or alongside Power Street on lots of approximately 1000sqm. (33%)</p> <p>Dual occupancy dwelling either in the form of duplex or rear dwellings with average private open space varying between 55sqm and 70sqm. (15%)</p> <p>Villa units with varied typology either sharing large common property space (20 Central Ave) or more akin to townhouses development with limited private open space. (15%)</p> <p>Others (8%) <i>(% of 136 properties)</i></p>

Woodmason area - Dorset	<p>Primarily townhouses or villa units with either duplex/multiplex shared wall or joined by garages, leaving limited private open space (around 30sqm). (39%)</p> <p>Dual occupancy dwelling either in the form of duplex or rear dwellings with average private open space varying between 55sqm and 70sqm. (25%)</p> <p>Remnant detached dwellings, primarily along Dorset Road, Jema Court, and Power Road end of Woodmason area on lots between 800-100sqm. (35%)</p> <p>Vacant/other (1%) (% of 115 properties)</p>
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o **North-East:**

- Playground located in the southern portion of Chandler Reserve accentuates the distance to northern part of the Activity Centre (Oak, Rosella, Elsis, and Bambury).
- Accessibility to open space is also generally limited by distance. However, areas of Elsis and Bambury North are characterised by large private open space. An evaluation of supply needs with regard to the demand may be required.
- Parks located East of Dorset Road are identified as within area of biological significance. As such, biodiversity and ecosystems are a paramount criteria for parkland.

Built form density	
Chandler – Floriston – Allandale – Boronia Road – Rosella – Rangeview – Oak - Dorset	<p>Primarily townhouses (28%) or villa units (31%) with variable open space (balconies for townhouses)</p> <p>Remnant single dwellings on 1000sqm lots (21%)</p> <p>Residual old dual occupancy dwelling as dwelling at the rear on 500sqm lot. (4%)</p> <p>New apartments (4%) Others (12%) % of 126 properties</p>
Elsie – Bambury – Girdwood	<p>Primarily detached dwellings on 1000sqm lots (45%)</p> <p>Intruded townhouses/villas development either older types (villas) or newer townhouses with 30-40sqm POS (31%)</p> <p>Dual dwellings occupancy (19%)</p> <p>Others (4%) Recent apartment (1%) % 107 properties</p>

○ **South-East:**

- No playground provided in the area. Parker/Taranto Reserve retained in the area but without any infrastructure.
- The access to Chandler is difficult with limited footpath provisions in the area and limited crossing of Boronia Road.
- An evaluation of the supply is required.

Built form density	
Rubida – Marie – Gwyn – Boronia Road	Primarily detached dwellings (72%) on 700-900sqm lots Dual occupancy dwellings in the form of rear dwellings (9%) Villa/townhouses/apartment along Boronia Road with 30 sqm POS (17%) Other (2%) % of 34 properties
Hastings – Torrens – Boronia Road	Residual detached or dual dwellings on 1000sqm lot (29%) Primarily townhouses/villas with 30sqm POS (59%) Others (12%) % of 17 properties

○ **South:**

- No open spaces provided, and with a demand of 10%, an evaluation of the supply is significantly required.
- Access to Boronia Park is limited to the west due to Dorset Road and the railway restrict access to the east.
- The southern area is identified as “underserved” within the Knox Open Space Plan (P.31 – as of 2011).
- Improved connections across roads have been identified as necessary for this area (e.g. Dorset Road) within the Knox Open Space Plan (P.31 – as of 2011).

Built form density	
Douglas – Alfred – Reve – Dorset	Primarily detached dwellings on 700 to 1000sqm lots (47%) Dual occupancy dwelling in the form of rear dwellings or duplex (37%) Recent villa and townhouses with 40-50sqm POS (16%) % of 37 properties

○ **South-West:**

- Only Boronia Park provides facilities, located at the southern side of the Park (along Park Crescent) for a catchment extending along Springfield, Cypress, and Pine.
- The area further west (alongside Boronia Rd) falls within the catchment of Tormore Reserve and safe crossing of Boronia Road is paramount.
- The supply appears to address the 5% demand but footpath access will be required.
 - Outside the current Activity Centre:
 - All areas are within 800m accessibility

- Blind Creek Corridor improve accessibility from a southern aspect.
- Blind Creek Reserve is the open space catchment for the southern area. The area however lacks the provision of playgrounds.
- Areas closer to Rankin Road falls within the catchment of Faraday Street Reserve, again across Boronia Road.
- Area closer to Dorset Road (e.g. Tulip) lacks good accessibility and with a higher demand (12%).
- The topography may cause a slight impediment to mobility along Stadbroke Road with a slight, but more accentuated fall compared to surroundings.

Built form density	
Park – Cypress – Pine – Tulip – Narcissus – Woodvale – Stonehaven – Boronia Road side	Primarily new villa/townhouses built closer to Boronia Road with balconies or up (37%) and Residual detached dwellings (34%) New apartments (3%) New townhouse (10%) Dual dwellings (13%) 8 others (3%) % of 217 properties
Springfield - Park – Cypress – Pine – Tulip – Narcissus – Woodvale – Hazelwood – Stradbroke – Dorset Road side	49 detached (24%) 56 dual (27%) 1 apartment (1%) 3 others (2%) 92 townhouses/villa (46%) % of 201 properties

Ratio of parks per distance per inhabitant

Green Park Area	Current Total Area	Approximate effective area available for Informal Outdoor Recreation (excluding specialised facilities limited to specific users e.g. building and sports facilities)	Catchment population current (500m level) (Estimated)
Tormore Reserve	5.4ha	2ha	~1700
Boronia Park	3.1ha	1.8ha	~1000
Chandler Reserve	3.1ha	0.7ha	~1000
Genista Reserve	0.4ha	0.4ha	~800
Penrith Reserve + Leisureworks	1.8ha	0.5ha	~500
Herbert/Cardiff Reserve	0.3ha	0.3ha	~500
Station Reserve	0.08ha	NIL	N/A

Girdwood Reserve	0.17ha	0.17ha	~700
Taranto Reserve	0.07ha	0.07ha	~466
Mineral Public places			
Dorset Square	0.7ha	NIL	N/A

Improvements within or surrounding reserve

Within Activity Centre	Recommendations
Genista Avenue Reserve	<ul style="list-style-type: none"> ○ Review vehicle access arrangement along Genista/Iris and consider making road one-way ○ As per above, consider parking arrangement alongside reserve with reduced width of road and traffic calming alongside park. ○ Improve pedestrian access from the East with access at northern and southern end of Sundew by allowing direct path and access through fence. ○ Improve pedestrian crossings of all surrounding road with clear marking design giving priority to pedestrian over vehicles. ○ Consider opportunity for direct pedestrian access through Sundew Ave land to rear of Bellbird Senior Homes (so as to create direct pedestrian link between reserve and future residential development on rail reserve). ○ Improve pedestrian access width alongside Genista/Erica/Chandler and improved pedestrian crossing and linkage to train station. ○ Include vehicle turning area at end of Genista. ○ Include curb extension footpath onto road (reduced carriageway width) at crossing.
Tormore Reserve	<ul style="list-style-type: none"> ○ Consider low level lighting for night walk-through ○ Consider duress light area with connection to emergency. ○ Include vehicle turning area at end of Orchid and Genista ○ Review vehicle turning area at end of Langwith ○ Design end of streets (Orchid, Genista, Langwith) with markings and pavers that are pedestrian/cycling friendly/priority over vehicles ○ Include direct pedestrian connection link between Genista and Orchid ○ Consider direct pathway Langwith to Orchid ○ Consider option for future pedestrian connection to Lorikeet Court ○ Consider space for Dog Park with opportunity to link with local Vet as stakeholder ○ Provide bicycle racks alongside well light place. ○ Improve directional signage marking, also indicating location of public toilet amenities ○ Consider future linkage to South-East corner for future opening through to Boronia Village. ○ Provision of drinking fountains

	<ul style="list-style-type: none"> ○ Provision of public tables and potentially BBQ in areas with good vistas to hillside ○ Provision of an active open air training/stretching facilities across the park. ○ Improve pedestrian crossing visibility of Tormore Road at each path/road junction. ○ Design pedestrian crossing as “all-mobility, pedestrian focused” hub. ○ Evaluate further pedestrian through Conway to Zeising, through Leisureworks to Herbert, along Penrith (car park) and clear designed access to Leisureworks entrances. ○ Consider bicycle path design as East-West thorough fare through Tormore with adequate ground design, marking and avoiding conflict. ○ Consider pedestrian connections from Norwich and Grevillea. ○ Evaluate possibility for restricted vehicle access from Genista through Tormore (e.g. PT mini-bus/emergency vehicles) should provision of public transport be improved by such direct link to Leisureworks ○ Include curb extension footpath onto road (reduced carriageway width) at crossing. ○ Design dead end streets (Langwith/Genista/Orchid) with the Home Zones concept with a visual cues to vehicles that road is no car friendly and no through. ○ Provide waste/recycling bins, including dog poo bins at each exit points
<p>Boronia Park</p>	<p>Evaluation required due to:</p> <ul style="list-style-type: none"> ○ Future drainage work ○ Future of Library ○ Future of Basketball Stadium ○ Future of parental building <p>Consideration</p> <ul style="list-style-type: none"> ○ Traffic calming alongside Park Crescent, particularly at the approach of Springfield road. ○ Traffic calming to not impede on buses movement ○ Improved bicycle connection/wayfinding and movement from/to Springfield Road and Boronia ○ Improved pedestrian/cycling crossing of Park Crescent at Springfield Road junction, and Boronia/Park Junction and Dorset/Park Junction. ○ Dorset road pedestrian crossing to service area tucked between railway and Dorset Road. ○ Improved width and accessibility alongside Dorset Road footpath (reduce conflict pedestrian/cyclist and improve safety feeling alongside heavy vehicle traffic.) Allow space to walk side-by-side. ○ Improve planting alongside Dorset Road frontage to improve vegetation buffer. ○ Improve wayfinding signage, including signage to public toilet facilities and major cycling connections.

	<ul style="list-style-type: none"> ○ Design Park Crescent as low traffic way, traffic calming, pavers and design discouraging through traffic in a way that is less impeding for cyclist and buses. ○ Retain large significant native vegetation ○ Improve visibility and connection between rear laneway of Boronia Road shop and Park (pedestrian connection to car park) and design laneway as pedestrian/cycling friendly). ○ Improve vehicle turning area at end of southern parking lot ○ Relocate/design recycling/opshop bin collection as a formal space, with drop-off parking space only. With added lighting and security camera to deter illegal dumping (from various angle) but using this as a community recycling driven option with appropriate stakeholder ○ Consider integrating community garden within space of Boronia Park ○ Consider tables and public BBQ. ○ Provide drinking fountains and bicycle racks. Bicycle repair station may also be considered. ○ Formally close part of the road reserve way running through the park/retention basin. Formalise the thoroughfare (Lot 27) as a laneway. ○ Consolidate Lots 22 to 27 altogether with the land of the park and/or basin ○ Ensure paving/design matches allotment lines and property status between roadway/crossing through other land. Example, access between laneways behind Progress hall to be differentiated without any use of asphalt. ○ Provide waste/recycling bins, including dog poo bins at each exit points
Chandler Reserve	<ul style="list-style-type: none"> ○ Improve pedestrian access alongside Chandler Road (south side) as a continuous path with clear wayfinding design path on ground over car parking space. Priority clear marking to pedestrians. Connection through Scouts halls and further along Chandler. ○ Improve pedestrian crossing/traffic calming on Chandler due to poor visibility at bend. ○ Reduced traffic speed on Chandler. ○ Pedestrian track on eastern side of Chandler reserve and connection to Elliott Street. ○ Pathway alongside Elliott Street / South Side of Chandler Reserve. ○ Improve pedestrian crossing of Allandale, designed as pedestrian priority with clear marking both at Chandler junction and Elliott Junction. ○ Include curb extension footpath onto road (reduced carriageway width) at crossing. ○ Consider low level lighting for night walk-through ○ Provide waste/recycling bins, including dog poo bins at each exit points ○ Provide drinking fountains ○ Provide toilet facilities

Train Station Reserve	<ul style="list-style-type: none"> ○ Complete redesign and extension of the reserve space, including its infrastructure must be considered ○ Target a functionality to this reserve and design accordingly. Identify users, public and provide infrastructure (seating/table etc) ○ Increase space of reserve, evaluate valuable vistas, and improve views. ○ Evaluate whether area remain transient or whether a catchment is possible. ○ Consider the addition of a foodtruck in adjacent parking to create life and nexus between the reserve and the surrounding no man's land. ○ Consider low level lighting for night walk-through ○ Include artworks ○ Design for vandals proof. ○ Provide waste/recycling bins at each end
Outside Activity Centre	Recommendations
Penrith Street Reserve	<ul style="list-style-type: none"> ○ Improve pedestrian connection design ○ Include curb extension at pedestrian crossing to join south side of Penrith. ○ Ensure vehicles' bonnet of surrounding car parking space do not encroach over footpath ○ Create direct pedestrian connection to Norwich through leisureworks land.
Cardiff Street Reserve	<ul style="list-style-type: none"> ○ Consider low level lighting for night walk-through ○ Consolidate lots and address of property.
Knox Jaycees Reserve	NIL
Farnham Road Reserve - Bayswater	NIL
Faraday Street Reserve	<ul style="list-style-type: none"> ○ Consider low level lighting for night walk-through
Girdwood Road Reserve	<ul style="list-style-type: none"> ○ Improve access by creating gate from Dorset Road; ○ Improve walkability within reserve by creating path ○ Improve maintenance of reserve (grass cutting etc.) ○ Increase planting along edge of reserve (buffer to Dorset Road and to residences to the north. Leaving an open play space in the middle, ○ Improve pedestrian crossing of Girdwood by increasing pedestrian priority at junction of Girdwood/Dorset and immediately across park gate to southern side footpath. ○ Evaluate Dorset Road crossing to Short Street. ○ Include curb extension footpath onto road (reduced carriageway width) at crossing. ○ Provide waste/recycling bins, including dog poo bins at each exit points
Stoneleigh Avenue Reserve	<p>NIL</p> <ul style="list-style-type: none"> ○ Consolidate lots
Melbourne Old Joes Creek Reserve	<ul style="list-style-type: none"> ○ Provide waste/recycling bins, including dog poo bins at each exit points ○ Evaluate direct pedestrian access to Stewart Street ○ Consider consolidation of land with adequate boundaries and ownership, allocate street address

Holloway Reserve – Bayswater	<ul style="list-style-type: none"> ○ Improve vehicle turning facility at the end of Freedman. ○ Design end of streets (Freedman) with markings and pavers that are pedestrian/cycling friendly/priority over vehicles. ○ Design dead end streets with the Home Zones concept with a visual cues to vehicles that road is no car friendly and no through. ○ Consider low level lighting for night walk-through ○ Evaluate users during the day (whether uses by surrounding workers) and provide adequate sitting facilities if necessary ○ Give street address.
Woodmason Reserve	<p>NIL</p> <ul style="list-style-type: none"> ○ Allocate street address – review street addressing for whole of Woodmason
Parker/Taranto Reserve	<ul style="list-style-type: none"> ○ Complete as Bushland reserve ○ Consider diagonal path ○ Improve crossing of Hastings Ave. ○ Evaluate if surplus land to be sold for development ○ Evaluate biological status of vegetation on land ○ Consider alternative land with larger area for development of a new park in the SE ○ Consider pedestrian/cycling crossing of Railway to join towards Dorset Road.
Blind Creek Corridor and Reta Matthews Reserve	<ul style="list-style-type: none"> ○ Improve cycling connection between Springfield/Blind Creek ○ Formalise end of Springfield Road. ○ Provide wayfinding signage for pedestrian and cyclist at entrances – including direction to Boronia Services, including signage to drinking fountains, local shop district, public toilets, and bus stops. ○ Provide waste/recycling bins, including dog poo bins at each exit points ○ Improve wayfinding signage alongside Hazelwood ○ Evaluate pedestrian connection between Narcissus and Blind Creek Path ○ Consider provisions of drinking fountains. ○ Consider connectivity with future development south of Blind Creek. ○ Improve cycling space/marking along Hazelwood and Springfield. ○ Consider using the drainage reserve as a pedestrian connection between Boronia Park and Blind Creek (via Stradbroke) ○ Consider northern cycling path connection design via Woodvale or Narcissus (from Springfield) towards Tormore with appropriate signing. ○ Consolidate lots or Reta Matthews Reserve and review addressing
GENERAL	<ul style="list-style-type: none"> ○ Provide waste/recycling bins, including dog poo bins at each exit points at relevant locations ○ Provide bicycle facilities ○ Space for dog walking ○ Space for community garden

	<ul style="list-style-type: none"> ○ Space for recycling stations drop-off ○ Space for community hub/ cultural activities (whether outdoor/indoor) ○ Community hall spaces options ○ Space for public art, space for aboriginal arts and arts display that recognised past activities within the land or surrounding. Consider the past social communities as well as the present ones. ○ Option for occupying public space for activities (yoga classes, picnic, art session, outdoor training, outdoor movies). Identify spaces for multi-function within parks. ○ Spaces with power points for multi-uses and future functions/activities retrofit. ○ Options for rental incomes. ○ Options for electric vehicles parking with charging station (Tormore – Boronia – Chandler) ○ Appropriate wayfinding signs and regulatory signs, well designed. And artistically designed can be considered. ○ Parks that leaks onto surrounding local road making surrounding road subservient to their environment. ○ PT connection or signage to nearest connecting point – access nexus between bus stops and proximity to parks
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Recommendations:

- **Retain existing parkland**
- **Consider the acquisition of land for a new parkland in the north (Central), south (Douglas) and/or South-East (Torrens).**
- **Acknowledge that with further densification the pressure and demand on park assets will increase over time.**
- **Ensure good walkability to parks by improving pedestrian linkages including dedicated crossing over Belgrave Train Line, and VicRoads Arterial.**
- **Consider the development of new mineral plaza around the station and Dorset Square by gaining public space over car park.**

Land Use and Built Form

Source: Hansen Partnership “Boronia Renewal Project – urban design proposition workshop” 2019

This section primarily refer to the Urban Design proposition undertaken by Hansen partnership 2019 and is not reviewed as part of this paper.

Recommendations

- **Refer to GTA Consultants “Boronia Renewal Project – urban design proposition workshop” 2019 with regards to building height and form for the Boronia Commercial Core.**
- **Minimally apply the standard residential height for land within residential zones.**

The main arterials axis separate Boronia in 4 quadrants, with the train line axis adding a NW-SE diagonal cut through 2 of these quadrant within the study area.

Commercial

- The commercial core is primarily developed following the path and junction of the two major arterials of Dorset and Boronia roads, albeit mostly off-balanced to the north-east with a greater build form density along Dorset Road, south of the train station along Boronia Road/Erica Avenue, and wrapping around Dorset Square.
- The structure is characterised by continuous build form with a mixture of single and double storey buildings with scattered examples of three storeys buildings across the commercial core.
- Commercial uses are characterised with ground floor shop and food and drink premises, along Dorset Road, Dorset Square, or Boronia Road. There is also a distinct expanse of ground floor spaces used for offices and private community uses within the commercial core.
- Larger retail footprint characterises the area abutting the southern end of the train station and eastern side of Dorset Square.
- Secondary and tertiary commercial have developed along Boronia Road to complement the southern edge of the road and along the western entrance (Boronia Village).
- The main concentration of office uses (*including medical centre*) are located along the Western Boronia Road approach and the outer rim of Dorset Square (Chandler/Floriston) or the southern side of Boronia Road.
- Large expanse of land are used for car parking within each quadrant of the City Centre, particularly north of Boronia Road.

Residential

- Residential uses surround the Commercial Core of Boronia and was original characterised by single dwelling on a 900sqm lot. This land use typology is still characteristic of the south-eastern corner of Boronia.
- Through the years further density in residential development has occurred with no discernible pattern noted. The development of rear lot for single storey multi-units occurred randomly throughout the north and south-west side of the Boronia Centre, though with the following history pattern:
 - Dwellings development to the rear of the existing dwelling in the frontage throughout the seventies and continuing until the noughties which was mostly characterised around Boronia Park resulting in dwellings on 300sqm lots.
 - Knockdown-rebuild of all new single storey multi-units villas in a strata form characteristic of the eighties. This was particularly marked north of the station and

partly along the north-west, with some examples on the southern Dorset Road approach. These resulted in 100 to 200sqm lots.

- Recent knockdown-rebuild of multi-storey townhouses on the western fringe of Boronia and area of Chandler Road resulting in a new built form with 200sqm lot size.
- And sporadic new multi-storey apartment multi-family rising density west of the station and along Chandler Road.
- Residential buildings use existing on the south-eastern part of Boronia.

Institutional, Community & Parks

- Primary and secondary education facilities are dotted across the area with large amount of green spaces accompanying these uses.
- Public open spaces and recreational infrastructure are dotted throughout the study area with the majority being used for active recreational facilities (*Leisure Works, Boronia Park, Tormore Reserve, Chandler Reserve*) or for car parking (*Dorset Square*).
- Each of the north-east, south, west, and north-west are represented with educational facilities and green public open spaces.
- Community facilities are primarily concentrated alongside Boronia Park on the South-West corner of the study area with other public institutions or churches dotted across the commercial fringe.
- Residual passive open space exists in the vicinity of the train station.
- Part of Boronia Park alongside Dorset Road is retained as a basin for stormwater management.

Heritage

The Boronia Activity Centre does not currently hold any properties affected by a Heritage Overlay. There is also no identified Heritage Overlay within the study area surrounding the current Activity Centre boundary

The Victorian War Heritage Inventory identifies the following two items in its database:

- Boronia RSL Honour Roll (Boronia War Memorial)
Located at 198 Dorset Road (Boronia RSL) this memorial comprises of a small obelisk and is dedicated to all those who paid the supreme sacrifice in wartime.
- Boronia Honour Roll (Second World War)
Allegedly located at St Paul's Anglican Church at 273 Dorset Road, this honour roll records the names of service personnel in the Second World War.

These two items are not protected by any statute.

Council undertook an assessment of the heritage significance of selected places of potential heritage significance previously identified as part of the 2006 Boronia Activity Centre structure plan in 2012. The resulting Knox City Heritage Advice December 2011 report from Context Pty Ltd identified the following places:

Heritage place	Note
Shops at "The Crossing" – 217-229 Dorset Road and 114-132 Boronia Road	Report did not recommend protection as lack integrity, low aesthetic value, and do not meet the threshold for local significance.

Group of California bungalow at 8, 10, 12 Park Crescent	Recommended individual protection to these bungalows at 8 to 12 Park Crescent due to their intact example and rarity.
The advice also identified 18 Stonehaven Avenue as another intact example, and other properties were subject to a desktop assessment	<i>Since the advice 10 and 12 Park Crescent have been demolished in 2014 and 2016 respectively. Only 8 Park Crescent remains.</i> No recommendations were made about other bungalows
Former Safeway Building at 159 Boronia Road	Recommended heritage protection be put in place as local historic significant
The Boronia Mall	Recommended protection of heritage significance of the interior (tile mosaic and ceiling) and consider heritage protection to the whole of the mall as historical, aesthetical and social significance with more community consultation.
Boronia Progress Hall	Recommended local historic and social significance protection of the hall Also recommended review of the significance of the surrounding park and recreation ground.

The conclusion of the Heritage advice were presented to Council at its meeting of 26 June 2012. Council officers supported all recommendations presented in the report but Council ultimately resolved to not apply Heritage protection to any of the places in Boronia as identified above.

As such Council then determined by resolution to not support the recommendation.

Recommendations

- ***NIL current actions regarding Heritage.***
- ***Continue to monitor any future recommendations that may come from the community.***

Cultural Heritage (Aboriginal Heritage)

There is no known artefact or aboriginal places within the Boronia Activity Centre. This was confirmed via a consultation to the Aboriginal Heritage Register and Information System (ACHRIS) on 11/01/2019.

A Cultural Sensitivity Overlay is identified on the area along the Blind Creek south of the Activity Centre. This statutory overlay is managed by the Aboriginal Heritage Act 2006 (and its regulation) and may trigger the requirement for a Cultural Heritage Management Plan (CHMP) prior to any development (and issuance of a permit) for non-exempt activities.

It is noted that the development of 3 dwellings and more constitute a non-exempt activities and recent examples of such development within the Cultural Sensitivity Overlay has occurred along the southern part of Woodvale Road, Springfield Road, Hazelwood Road, Tulip Crescent, and Narcissus Avenue. CHMP were prepared for these properties. A consultation on sample of these CHMP and ACHRIS revealed that no artefacts appears to have been discovered on these properties.

Recommendations:

- ***Avoid area of Cultural Sensitivity Overlay in future potential expansion of the Activity Centre boundary.***

Environment and Sustainability

Flood Mapping

Source: Council's Stormwater Team

There are currently no flood overlays affecting the Activity Centre of Boronia, flooding controls exist further north (Dandenong Creek catchment – Old Joes retention basin through Bayswater Industrial Precinct) and further south (Blind Creek catchment).

New flood modelling has been done for Boronia and identified the current path of prospective stormwater surge flooding. These modelling have not yet been translated into planning controls.



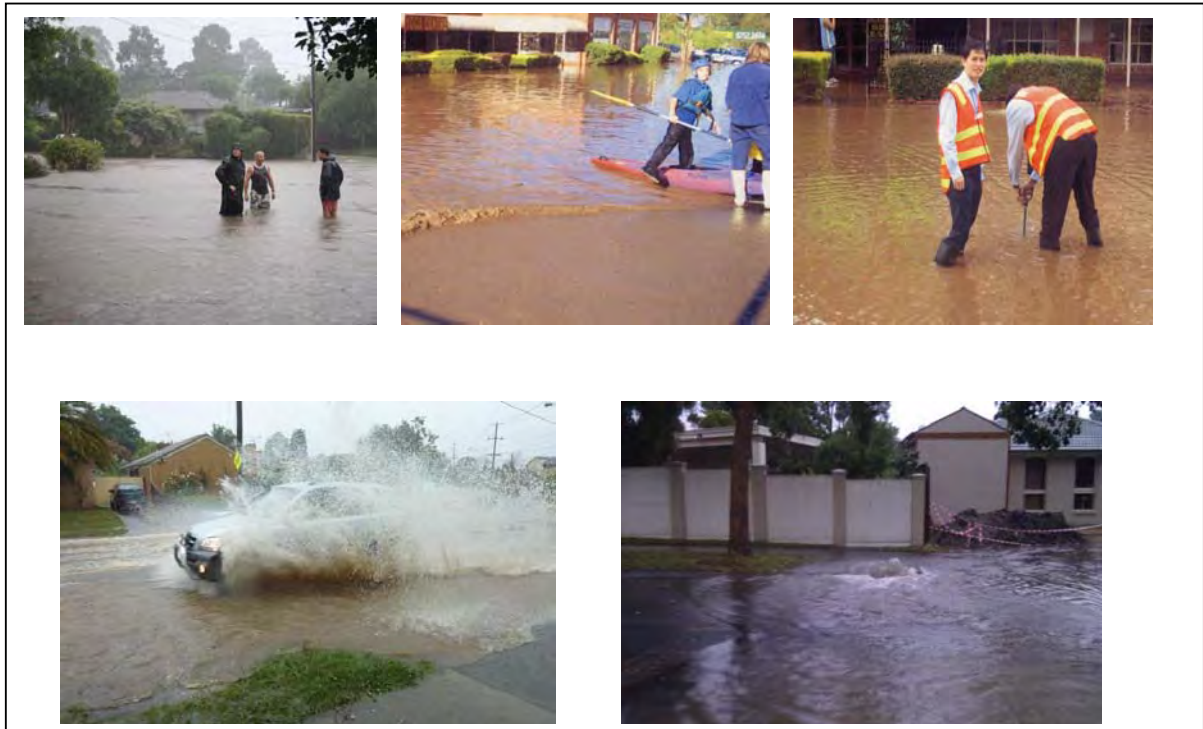
Recommendations:

- **Recognise the flooding impact and the likelihood of a flooding overlay being introduced at a later stage with a particular impact on height requirements in the residential zones.**
- **Recommend that completion of modelling review into a planning scheme amendment for the introduction of a Special Building Overlay to ensure proper mitigation with regard to flooding.**
- **Avoid current existing flood area subject to flood controls in any future expansion of the activity centre boundary.**

Boronia Park Retarding Basin and Wetlands Function - Background

Boronia Park at the corner of Dorset and Boronia Roads, Boronia is the location of the Melbourne Water owned flood retarding basin (RB).

Council worked closely with Melbourne Water over a period of 2 years, following the major 100 year flood event of February 2011 (see image 1), to identify ways to improve the storage capacity of the RB for residential flood protection, without losing a much-valued park site for all to enjoy.



- More useable areas in the park to walk, meet and contemplate – with new north and west facing sloping lawns to maximise sunny areas to sit and rest
- New multipurpose plaza space at the entry to the Boronia Library and Basketball Stadium



Image 2: Boronia Park Retarding Basin and Wetlands system – works completed in April 2015 showing improved park features and path links to the northern retail/transport hub and south to residential areas.

Issues

- The overarching future of Boronia Park will primarily need to account for the flood protection/risk management needs of the area as first principles (i.e. further expansion of the current retarding basin – RB).
- RB receives flood flows from 83 Ha of urbanised land areas (residential, commercial, retail, transport hubs and major arterials/local road network) – predominantly sealed surfaces generating higher volumes of stormwater runoff.
- There is significantly limited green space (soil surfaces) or public open space areas upstream of the RB that can absorb stormwater, hence the higher runoff volumes we see regularly.
- Expansion to the RB in 2014-15 took it from a 1 in 7 year storm protection; to the 1 in 37 yr ARI (storm protection) only when the RB footprint could only be increased by approx. 30% due to limited space within the park
- Provision of a 1 in 100 yr ARI flood protection to downstream residents/businesses etc would likely involve a doubling of the existing footprint of the RB in a westerly direction and some northerly expansion.
- Given the nature of the land development footprint upstream of the RB (largely hard surfaces – roofs, roads, car parks, rail) this RB's role in protecting those downstream, is most critical.
- The Boronia Park RB is the only retarding system we have for flood protection (from its headwaters (start of Blind Creek at top of Perra St, FTG on fringe of Parks Vic Dandenong Ranges land), and the only land space with the potential to provide the protection standards needed for existing areas and expanding residential areas further downstream.
- The next RB is located at rear of Westfield within Lewis Park. That RB only has a 1 in 20 yr protection standard currently. Hence, Blind Creek has a lot of challenges for flooding, and gets worse when it meets up at rear of Westfield, where it then joins the Dandenong Creek a little further on (i.e. at the former Boral Quarry site).
- Both the Caravan Park and the Boral Quarry site are currently up for urban development. This will result in the loss of these currently “open land spaces” / undeveloped land, which will become housing/roads (more hard surfaces). Thus, the Boronia RB has greater importance in delivering flood protection (from the upper reaches of this catchment) to reduce the excess runoff volumes to existing and future downstream residential areas.
- Expansion of RB at Boronia Park means the location of the existing buildings (library and basketball stadium) compromise our ability to provide flood protection to residents downstream (south of Boronia Park site).
- The existing Childcare Centre is also compromised by overland flows emanating off the car park to the west, and making its way down the slope to the building foundations – past drainage works have not been able to prevent ongoing exposure. The siting and cutting in of the childcare centre into the pre-existing surface, has basically left it in a compromised/higher risk location, no matter what we try to do.
- Shops on the corner of Dorset Rd and Boronia Rd sit approx. 2 mts below the finished surface of the intersection and are continually subject to flooding

- Shops along the northern boundary of park site (along Boronia Rd) are also subject to flooding impacts during larger storms, as the natural overland flow path into the RB is constricted to the path between the shops and the Community Hall (Progress Hall??).
- Car park fall (grade) currently directs overland flows directly towards the entrance of the library and basketball stadium.
- Works to create a levee/garden bed areas to divert flows, has seemed to work for the library entrance (sits slightly higher on site) but not for the basketball stadium or childcare centre (sits lower on site); and car park surfaces direct flows towards the existing buildings/and restrict areas for runoff to soak into the ground as well.

Opportunities:

- As part of the Lewis Park Master Plan, Council will be working with Melbourne Water to investigate possibility of also increasing the flood protection standards of the RB behind Westfield, to cater for properties further downstream from Westfield.
- Council could consider purchasing corner shops on Dorset/Boronia Rds and build upwards, a tower like fit for purpose “offices/consulting suites/future civic centre”, with piers to allow natural overland flows to pass beneath building and into RB.
- Relocating the Progress Hall to allow natural overland flows in large storms to enter the RB from the northern commercial/retail/transport hub; and under potential future tower-like (fit for purpose designed) building on corner; with surface shaping to encourage flows to the further expanded RB.
- This will protect shops on northern frontage to Boronia Rd from overland flows/flooding currently being experienced.
- Boronia Rd frontage can therefore remain in situ (subject to confirmation modelling), if overland flow path is expanded to the eastern side of these shops.
- Overland flows from the western side of these shops (Park Cres and Boronia Rd corner) can be re-directed, with surface shaping, into the park precinct (current car parking area), into a series of “staging ponds” to hold flows as they make their way to the expanded RB proper. Concept Plans for this option have been developed (2015-16) and scenario-modelled to test feasibility.
- Expansion would therefore mean the library and bulk of basketball stadium is in direct physical conflict with the RB works.
- Similarly, a large proportion of the existing carpark (central areas) and most northerly sections, would require redevelopment into staging “ponds” to provide detention capacity for flood management; and water quality treatment, in line with State Govt requirements.
- Further expansion of the RB to provide adequate protection to local areas, would require the RB footprint to expand in a westerly and northerly direction. This is to optimise capture of flows readily, and ensure the RB can drain freely to downstream pipe network. Note: the site is constrained by relatively flat grades downstream, and shallow depth of the drainage network.

- Current location of the remote control club is limited to its current footprint (expansion would not be possible), given the tennis court land, in an enlarged RB would (and should) form part of the future expansion of the RB/spillway – overflow management from the RB to the 1500 metre long, above ground drainage reserve down to its outfall to Blind Creek.
- Remote Control Club could stay if deemed appropriate, however, there is no option to expand. Does the RC club fit in a future “all public access” Central Park concept? Does it add value? Is it a nuisance (noise pollution) to residents, or park users in future, or wildlife at the RB? Is it the appropriate place for them now?

Future Vision:

- Boronia Park could become a future “Central Park” for the city centre – a meeting place in a hub location that links the north to the south of Boronia and transitional movements east to west Boronia
- Provision of a cooling/wet/treed area in the heart of a hard, urban, high heat island impact location would be critically beneficial for workers/visitors/shoppers and residents in this precinct
- High level of impervious areas causing increased runoff could be better managed safely, reducing flood risks.
- The “staging ponds” could form quite an aesthetically pleasing visual amenity (and natural cooling to the hard areas of Boronia Central – a reprieve for people to visit in summer), and likely to attract local wildlife; allow for community interaction with the wet spaces; and potential for remote controlled boats for all-community use / families, is possible.
- A series of walkways, mini bridge crossings, and meandering paths throughout the site (linking north-south; east-west) and in amongst the staging ponds and landscaping features, could indeed create a highly valued Central Park for Boronia and immediate surrounds (complementing the attributes of the Tim Neville Aboretum, FTG).
- Opportunities to provide information sessions (outdoors) to the community about what we do; or balancing urban and natural areas, wildlife values/G4W talks, living with water extremes (flood to drought) etc.
- Buskers...or organised musicians on weekends, poetry readings/book clubs, talks by staff from different depts., story-telling by local elders, community art activity stations for install at other parks/POS areas across the city - all possibilities by turning the site into a cooler, greener meeting place for people to meet/come together.
- Such a precinct park would fulfil the requirements of the recently released Integrated Water Management (IWM) Framework for Melbourne (Sept 2017) which promotes water in the urban context for improved health, well-being and liveability standards.
- This would further support Council’s own partnership to the DELWP IWM CEO’s Forum for the Dandenong Catchment and the recently Ministerial endorsed Strategic Directions Statement (SDS, Sept 2018).

Recommendations:

- **Acknowledge the impact the retention basin will have on the future of Boronia Park and that such basin should form part of the consideration for master planning of Boronia Park.**

Land contamination

The Department of Environment, Land, Water, and Planning's planning practice note 30 (PPN30)²⁶ provide guidance regarding potentially contaminated land. This further accord with Ministerial Direction No.1 which identifies what is a potentially contaminated land and also require planning authorities to have due consideration of such issue through the Planning Scheme amendment process²⁷.

The study area comprised two allotments that have been identified as including, or having historically included, uses with potential effect on land contamination.

- 121 Boronia Road, comprises a service station currently operating as a Caltex petrol station located on commercial land.



The land is identified within a Commercial 1 Zone, it is unlikely that the proposed amendment would rezone this parcel of land into a zone that would allow sensitive uses to operate 'as of right'.

- 158 Dorset Road which operated until recently as a motor vehicle service and repair business identified as "Boronia Roadworthy Centre" or "Windscreen" business. The built form on the land is also characterised by the typical canopy and space for bowser and petrol delivery to vehicle.



April 2018

²⁶ https://www.planning.vic.gov.au/_data/assets/pdf_file/0020/12764/PPN30-Potentially-Contaminated-Land.pdf

²⁷ https://www.planning.vic.gov.au/_data/assets/pdf_file/0019/27127/Ministerial-Direction-Section-12-No.1-Potentially-contaminated-land.pdf



May 2017



April 2013.



January 2010



- January 2010 - Bowers

A quick review of historical data reveal that fuel bowsers were still in place as late as January 2010 and disappeared sometimes between January 2010 and April 2013. The land is currently 981sqm zoned Neighbourhood Residential Zone Schedule 1 (NRZ1), and affected by a Design and Development Overlay Schedule 2 (DDO2), Significant Landscape Overlay Schedule 3 (SLO3), and Public Acquisition Overlay Schedule 1 (PAO1).

It is acknowledged that the NRZ1 allows the use of the land for a single dwelling 'as of right', a sensitive use, the limitations in term of site coverage (max 40%) and subdivision (min lot size 500sqm) effected by the DDO2 are limiting the intensification of such sensitive use.

A search on the Environment Protection Authority interaction portal did not indicate that environmental audit has been taken for the above land in Boronia.

In accordance with the PPN30, service stations/fuel storage are identified as high potential for contamination. Considering the available information regarding the two properties identified above about the risk of potential land contamination, the application of the principle of precaution, the Ministerial Direction No. 1 it is warranted for Council to consider that application of an Environmental Audit Overlay on 158 Dorset Road Boronia pending the implications the Amendment may have on this land.

Recommendations:

- **Acknowledge the impact the use of the land as a Service Station/Fuel Storage, as a use with high potential to contamination of land, may have in future redevelopment of land for 121 Boronia Road and 158 Dorset Road.**
- **Retain 121 Boronia Road within Commercial 1 Zone, identify the risk within the Boronia Renewal Strategy and allow the appropriate level of assessment to be undertaken through a planning permit application.**
- **Apply an Environmental Audit Overlay to 158 Dorset Road on the potential for land contamination through the historical uses of the land, to ensure loss of knowledge is avoided and due diligence is considered for future redevelopment that would intensify the establishment of a sensitive use.**

Environmental Sustainable Development (ESD)

ESD policies are currently addressed via Clause 21.05-5 (Municipal Strategic Statement – MSS) and 22.04 of the Knox Planning Scheme, which were integrated to the Scheme via Amendment C150 in December 2017. These policies apply to the whole of the municipality by addressing Council’s commitment to an environmentally sustainable city and standard for sustainable building design that will ultimately:

- Support passive design and compliance with eco-energy requirements in building regulation;
- Improve affordability via reduced running cost;
- Improve amenity;
- Integrate sustainable water management;
- Result in an overall sustainable urban form.

The policies appropriately achieve these goals for certain type of development with little to no change required on the overall intent. The ESD policies of Knox City Council also enable and support the overarching goals of the Resilient Melbourne Strategy, a current metropolitan and international strategy for which Knox City Council is signatory. It is also consistent with Goal 2, Strategy 2.2 of Knox Community and Council Plan 2017-2021²⁸.

Review

Clause 21.05-5 of the MSS provides general guidance to require and encourage the incorporation of best practice environmentally sustainable design to new development of two and more dwellings and non-residential buildings and additions of 500sqm or more. Its main objective is to help achieve environmentally sustainable development within Knox.

The Clause 22.04 ESD policy applies to development proposal in accordance with the Table of Clause 22.04-4 as a specific requirements (through the provision of Sustainable Design Assessment or similar Management Plan). It does provide more specific objectives with regard to: energy performance, water resources, indoor environment quality, stormwater management, transport, waste management, and urban ecology. It is noted that the requirement for applicable management plan in this policy applies for development of three and more dwellings.

There is a noted discrepancy between strategy 8.1 of Clause 21.05-5 and the policy requirement of Clause 22.04-4 as one guide the application of good practices to two and more dwellings, while the other requires the application on three and more dwellings.

Furthermore, the requirement for a Sustainable Design Assessment for development of three or more dwellings and residential buildings is enshrined as a specific requirement in the Schedule to the following zones:

- Residential Growth Zone (Schedules 1, 2, 3)
- General Residential Zone (Schedules 2, 3, 4)

These schedules allow for a clear indication that a Sustainable Design Assessment is a mandatory application requirement rather than solely relying on Clause 22.04 to provide the trigger, or clause 21.05 to encourage applicants. Clause 22.04 provides the reference to prepare, assess, and implement

²⁸. Knox City Council Community and Council Plan 2017-2021 p.35

http://www.knox.vic.gov.au/Files/Plans/Knox_Community_and_Council_Plan_2017_2021_Final.pdf

environmental sustainable design requirements to help applicants and planners on the thresholds and deliverables.

It is noted that the Environmental Sustainable Development Policy and Statement are not the only sustainable-oriented statement of the Knox Planning Scheme and other clauses, policies, or ordinances also directly and indirectly achieve such goals. There are notably:

- Clause 21.03 of the MSS provides objectives and strategies to elements such as biodiversity, landscaping, and native vegetation [urban ecology].
- Clause 21.05-5 of the MSS (Objective 8 – Strategy 8.1) with regards to integrated water management.
- Clause 21.09 of the MSS provides objectives and strategies to elements such as sustainable transport, and integrated water management [stormwater management, transport].
- Clause 52.34 of the Victorian Planning Provisions set the statutory requirements for the provision of bicycle facilities and associated amenities for certain types of development [transport].
- Rescode comprises a number of performance standards through clauses 54, 55, and 58 of the Victorian Planning Provisions for dwellings and apartments having regards to:
 - o Site coverage, permeability, energy efficiency, solar access, energy efficiency, and indoor environment quality for dwellings (through clause 54 which applies to dwelling on lot less than 300sqm, and clause 55 which applies to the development of more than one dwelling). Clause 55.07 also applies to apartments of less than 5 storeys and address energy efficiency amongst other items.
 - o Better Apartments Design Standards and the Apartment Design Guidelines for Victoria 2017 for apartments, which also promotes ESD performance for such development (applies to apartments in commercial/activity centre zone, or to apartments of 5 or more storeys in residential zones).

In effect, the ESD policy supports good urban and building designs particularly by ensuring internal amenity and the environmental footprint of a development is positive.

Assessment

Overall, the existence of the ESD policy in its current form helps achieving its overarching objective in support to State Planning Policies (as set in the Planning Policy Framework) for Sustainable Development (Clause 15.02), Transport (Clause 18), Infrastructure (Clause 19).

It is noted that trends in electrification and alternative mode of transport should be better reflected and highlighted in the transport strategy and objective of these policies to support a better outcome and focus of this important issue.

Car dependency and mobility are identified as key issues for the municipality. It is mentioned at Clauses 21.01-2, 21.02, 21.05-5, 21.08, 21.09 of the Municipal Strategic Statement for the municipality. It is also reflected in the strategic directions of Knox Community and Council Plan 2017-2021 forming the vision of a future Knox and being a reference document to the planning scheme. The Draft Boronia Renewal Strategy further identified the expanse of the issue for Boronia proper by identifying a suburb with high level of car ownership and pedestrian mobility issues, particularly across neighbourhood.

For example, the objectives of the ESD policies in relation to transport aim (Clause 22.04-2):

- To facilitate built environment that is designed to promote the use of walking, cycling, and public transport in that order;
- To minimise car dependency;
- To support the use of low emissions vehicle technologies and supporting infrastructure.

However the policy fails to bring more focus on the following points to further guide decision makers, designers and developers on the importance of the transport aspect:

- Objective 8 of Clause 21.05-5 should further highlight the support of development designed:
 - o To promote the use of walking and cycling,
 - By ensuring permeable walkability for all proposed units throughout the site, especially in cases of transversal lot, including common property walkway with effect to prioritise the shortest route for pedestrian towards nearby services and facilities.
 - By ensuring default space for bicycle facilities to each dwellings/premises are integrated in the development, as well as shown on plans, to provide the option to future residents to consider sustainable transport alternative marketed as part of the design. This is a low cost rendition that can be requested beyond the requirement of Clause 52.34 and strongly encouraged/required on development that do trigger 52.34 and where the location is appropriate.
 - o To ensure apartments, and large residential development, particularly when comprising common property parking, are design to integrate electric vehicle charging point or designed to allow an easy retrofitting of such facility.
- The policy basis of 22.04-1 should highlight the need for resilience via the above items, and the Transport policy at Clause 22.04-2 should at least reflect the ability for apartment development to retrofit electric charging station.
- It may be valuable to also integrate the above point in the decision guidelines of Clause 22.04-5.
- The decision guidelines should also reflect the need for all development plan to be consistent with ESD plan, performance, and standards so as to avoid legal discrepancies.

Furthermore, Integrated Water Management (stormwater management and water sensitive urban design) currently relies on the MSS at Clause 21.05-5 Objective 8 Strategy 8.1, as well as, relevant Integrated Water and Stormwater Management objectives and standards for apartments, set out in clauses 55.07-5 and 58.03-8 (standards B39 and D13 respectively) [Better Apartment Design Guidelines (BADs) provisions]. Additionally, Council's ESD Policy objectives, detailed under clause 22.04-2 pertaining to 'Water resources' and 'Stormwater management', draw reference to such considerations. Furthermore, VC154, gazetted in October 2018, included a predominant focus on Integrated Water Management and its applicability for a range of development types coordinated as a State level implementation, supporting the translation of local policy water sensitive urban design (WSUD) frameworks, where applicable [refer to subsequent section regarding PPF translation of MSS].

In the current Council practice application requirement and statutory process rely on this clause for the assessment of applications and the requiring that applicants address providing an Integrated Water Management (IWM) solution for their proposed development. This should encompass addressing a proposed development's potable water demand, ensuring water efficiency, inclusion of rainwater tanks and associated reliability and management of overflow of such system(s), ensuring

stormwater quality in line with the Urban Stormwater Best Practice Environmental Management Guidelines (BPEMG) 1999 (CSIRO) and controlling peak discharge and flow through on-site detention. There is a risk that the PPF translation could undermine this and more clear application requirement or decision guidelines may be a solution within schedules to the zone or DDO.

The ESD policy of Clause 22.04 is currently due to expire in June 2019. The policy should be retained and extended. However, the policy is also being rewritten (as well as the MSS) in the Smart Planning - Planning Policy Framework (PPF) translation converting MSS and LPPF altogether with State Policy in one single unified policy framework.

Smart Planning – Planning Policy Framework Translation

The PPF translation process will likely result in a diluted policy by reducing content primarily to 'objectives' and 'guidelines' only. This will effectively remove application requirements and process making the policy more of a guidance and recommendation than mandatory.

The policy may become more of reference for good practices but the absence of clear requirement may undermine clarity for developers and professionals designing or assessing proposals. At this stage, it is unclear how much weight in the decision-making will be given to ESD performance, whether planning professionals will incorporate them as standard practice, or if the matter will require to be ultimately clarified by the Tribunal. Since the translation process has not finalised and the interpretation of new PPF is not daily practice, it is difficult to affirm how the market will react and how comfortable Council officers will be with the new policies.

Boronia

In the commercial zones:

- ESD requirements will apply to apartments of more than 5 storeys via Clause 58, and less than 5 storeys via Clause 55.07, as well as the existing ESD policy of Clause 22.04.
- Other form of development are covered by the existing ESD policy of Clause 22.04 when applicable.

In residential zones:

- ESD requirements will apply to apartments of 5 or more storeys via Clause 58 and the existing ESD policy of Clause 22.04.
- Apartments of less than 5 storeys are covered by Rescode Clause 55.07.
- Other form of development are covered by the existing ESD policy of Clause 22.04 when applicable and the schedule to the zone in the RGZ and GRZ. It is noted that the RGZ2 and GRZ4 in Boronia have the requirement for a sustainable development assessment as part of an application. The Mixed Use Zone however, does not.
- Other form of development within the MUZ are covered by the existing ESD policy of Clause 22.04 when applicable.

Note that the PPF translation will likely remove the application requirement of Clause 22.04 and therefore those mentioned above will no longer apply, leaving only the schedule to the zone or Rescode as trigger.

Recommendations:

- ***Retain ESD policy at Clause 22.04 and lobby the State Government for a removal of the expiry date or an extension to the expiry date, or explore impact the PPF translation will effectively have.***

- **Identify that a review of Clause 21.05-5 should be undertaken to consider strengthening the strategy of Objective 8 with regard to ‘transport’ as mentioned above in the report, but also to review the discrepancy caused by Strategy 8.1 with regard to the requirement of the zones and Clause 22.04 [Potentially addressed via the PPF translation process].**
- **Include objectives strategies within the Boronia Renewal Strategy and Structure Plan that supports and strongly encourage the implementation of ESD performance standard as noted in the current Clause 22.04 and demonstrated at time of application, but also, as applicable:**
 - **Incorporate pre-connection steps for future retrofitting to future electrification of transport (charging station) to common property parking, if not already provided;**
 - **Considers car sharing options whether within the subject land or nearby public realm, especially in any potential cases of car parking waivers.**
 - **Ensure bicycle facilities spaces are provided to each dwellings, or the option for future residents to easily incorporate or use bicycle facilities is built-in.**
 - **Ensure that pedestrian connectivity is integral to development throughout a site for all proposed units.**
 - **Require that recycling be integrated to waste management during construction stage via appropriate construction management plan.**
 - **Push for green waste management being incorporated to development, including composting and management of landscaping waste throughout the life of the building.**
- **Retain ESD application requirements (SDA, SMP, and Green Travel Plan) within the Schedules to the RGZ and GRZ.**
- **Explore integrating Water Management requirements [integrated water management/WSUD] into the schedule to the controls and Structure Plan [decision guidelines or application requirement to be demonstrated] to ensure new building are performing well and do not exacerbate potential flooding issues.**
- **Integrate further ESD application requirements to the schedule to the Mixed Use Zone.**
- **Integrate ESD application requirements, which reflects type of assessment specified at Clause 22.04 (SDA, SMP, and Green Travel Plan) as relevant to the schedule of the RGZ and GRZ.**
- **Integrate ESD application requirements, which reflects type of assessment specific at Clause 22.04 to the DDO to cover other form of development within the Commercial 1 Zone.**

Solar energy

The provisions of renewable solar energy technology to buildings, whether for electricity or hot water heater, is a component of sustainable design in support of efficient and resilient energy usage. Such renewable energy helps improve the overall energy performance of buildings while reducing load on electricity grid. It also strengthens household resilience in term of energy consumption, helps in reducing impact of greenhouse gas emissions while providing economic benefit in the long term.

The State Planning Provisions ascertain this benefit via Clause 15.02-1S which seeks to encourage development that is energy and resource efficient and minimises greenhouse gas emissions. Renewable energy also forms a component of Council’s Environmental Sustainable Development policy at Clause 22.04 supported through energy performance of a development besides passive design.

In addition to this, the Victorian Government currently provides financial support to households via the Solar Homes Package for the installation of Solar Panels (Solar PV system) or replacement of hot water systems with solar hot water²⁹.

Amendment VC149 was introduced in October 2018 to further provide guidance and protection against impact of development on existing residential rooftop solar system, particularly with regard to overshadowing.

The introduction of VC149 helped strengthen the government's approach to promote solar energy by ensuring the effort of installing solar panels is not undermined by adjacent development. The amendment has introduced new decision guideline to the Mixed Used Zone, Residential Growth Zone, General Residential Zone, Activity Centre Zone, and Commercial 1 Zone as well as other residential zones considering:

- *The impact of overshadowing on existing rooftop solar energy facilities on dwellings on adjoining lots in a GRZ, MUZ, NRZ, RGZ, or TZ.*

Such decision guideline has the benefit to protect existing investment in solar energy and the objective of encouraging renewable energy with further guidance on the matter provided to developers, professionals, and landowners through Planning Practice Note 88 (PPN88) and the home owners guide to managing overshadowing risk when installing a rooftop solar system.³⁰

It is noted that the impact of VC149 is the effect it may have on the capacity to develop with height on certain instances due to the resulting overshadowing impact.

Boronia

There has been approximately 1209 solar panels installations within the suburb of Boronia³¹ between 2008 and 2018. This represents approximately a ratio affecting up to 12.5% of dwellings within Boronia that have solar panels. It is noted that this ratio is indicative as the number of solar panels installations does not exclude commercial or industrial properties and the solar water heater is not included. It is assumed however that such ratio can only grow with time.

It is noted that solar water heater forms now the standard for six stars residential construction required to meet Building Regulation eco-energy requirements. As such, it is likely that solar hot water system will be widely installed as standards in the development or new residential homes.

A visual assessment, based on aerial identification of solar panels for the vicinity of the Boronia Activity Centre showed that solar panels are spread across most of the area but with a particular concentration to:

- Dwellings part of the Warbler/Lyrebird Estate
- Dwellings south of Stonehaven
- New dwellings built in the South-Western part of Boronia Activity Centre.

²⁹ <https://www.solar.vic.gov.au/>

³⁰ <https://www.planning.vic.gov.au/policy-and-strategy/reducing-overshadowing-on-rooftop-solar-panels>

³¹ Australian PV Institute PV installations by postcode <http://pv-map.apvi.org.au/postcode>



Developable properties located to the south, east, or west of a property with solar panels could find themselves negatively impacted with regard to potential height. [refer to map 32 in Appendix 2]

Recommendations:

- **Consider the location and concentration of rooftop solar panels on residential properties may have while reviewing height controls for Boronia.**

Urban heat island effect

The urban heat island effect (UHIE) refers to the way built up areas trap heat. It results from a lot of activity in the one area and from the dense, dark and solid surfaces in urban environments which absorb heat compared to more vegetated or rural areas where canopy covers helps in cooling temperature. The majority of the heat will result from the sun heating up built areas such as roads, footpaths, paved areas, buildings during the day. It is acknowledged however that other activities may also result in heat production to a lesser extent such as the heat producing structures and plants, internal combustion engines (vehicles), and human activities.

The heat trapped then gets released or deflected, particularly at night, resulting in significant warmer temperature or expanding the hot period throughout the night.

This change in local temperature can have various impacts depending of its scale, extent and local environment. This extends to:

- Secondary effects on local meteorology: temperature difference, alteration of local wind patterns, changes to humidex and evaporation, impact on precipitations.
- Impact on biodiversity: alterations to species range of habitat, removal of native species/increase in exotic species, alterations of behaviour or reproductive patterns, death of species.
- Increased energy consumption: extended usage of air conditioning systems through the night, water consumption for watering.
- Impact on air quality: dust particles, retention of pollutants at ground level.
- Health effect, whether or not related to the above: heat exhaustion, respiratory issues.

Boronia

While there is currently no thermal imagery data available for Boronia, the overall concept, understanding, and implications of UHIE are known and relatively universal. The potential solutions are also well documented.

With Boronia being an urban area, there is not denial that UHIE impacts the area to a certain degree. The expanse of car parking, road pavement, concrete surface and footpath, as well as built form, and to some degree new buildings darker roof will be attracting and retaining heat.



Screenshot of Boronia: Expanse of car parking spaces and width of Boronia Road are easily noticeable on the centre of the image, new dwellings with darker roof are also noted on the lower left corner.

The proximity to rural area (i.e. Dandenong Ranges National Park) may have a positive effect on attenuating the impact the urban area.

Current strategies, such as the Bush Boulevard (Clause 21.05-3 of the Scheme) which aims to increase canopy covers along certain major arterial as well as protection of vegetation and landscaping requirements (Rescode, VPO, Clause 21.03), are likely resulting in positive impact by increasing shade or reducing expanse of clear-to-sky pavement. As such, these strategies and controls should be retained or enhanced. The inclusion of other solutions should be explore through planning controls that increases landscaping (and a reduced site coverage on private land), the inclusion of water sensitive urban design, or design objectives that seek to alleviate the use of dark roof colours, or actions seeking to increase canopy cover of the public realm.

Recommendations:

- ***Investigate the impact of UHIE in Boronia further by completing a thermal and canopy cover assessment of Boronia to better understand the extent of the issue at this location, highlight problematic areas, provide recommendations, and seek to implement such recommendations.***
- ***Lobby Council to consider adopting an Action Plan regarding UHIE which would be inspired from current practices (e.g. Moreland CC Urban Heat Island Effect Action Plan).***
- ***Retain current provisions of the Scheme that positively impact on urban heat and explore the inclusion of further controls or strategies to ensure the issue does not intensify (e.g. incorporate requirement regarding external roof cladding colours that are of lighter material with a control on maximum and minimum solar absorption – This should not be to the detriment of glares affecting residences located in the Foothills).***

Planning Framework

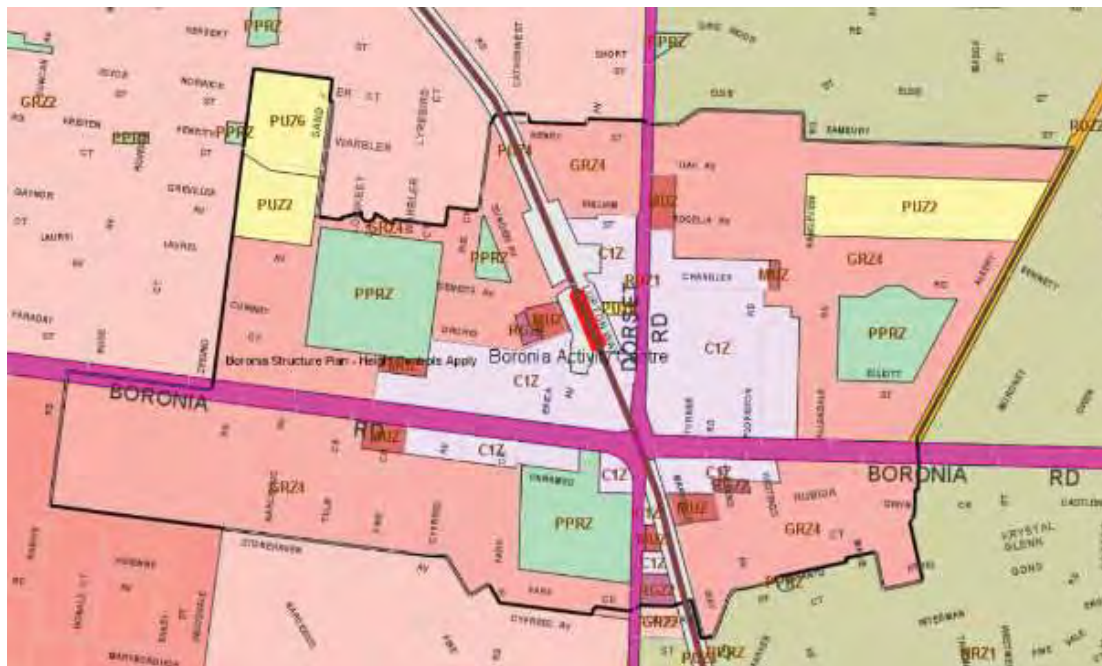
Introduction

The current Boronia Major Activity Centre as delimited by the 2006 Boronia Structure Plan boundary, comprises an area of approximately 129ha is affected by a number of zones:

- Commercial 1 Zone (C1Z) – approximately 20.5ha;
- Mixed Use Zone (MUZ) – approximately 2.2ha;
- Residential Growth Zone – Schedule 2 (RGZ2) – approximately 0.6ha, and;
- General Residential Zone Schedule 4 (GRZ4) – approximately 67ha.

The centre also contains allotments in the:

- Public Park and Recreation Zone (PPRZ) – 17ha;
- Public Use Zones for education (PUZ2 – Education), (PUZ4- Public Transport) and (PUZ6 - Local Government) – 14 ha ; and;
- Road Zone Category 1 (RDZ1 – Dorset Road, Boronia Road) and Category 2 (RDZ2 – Albert Avenue).



Zoning map - Boronia

The entire activity centre is comprises a specific Design and Development Schedule 7 (DDO7), and has a local planning policy (Boronia Major Activity Centre) at Clause 21.10-3 of the Knox Planning Scheme.

Other overlays that apply, in part, to the centre include the Environmental Significance Overlay (ESO2), Vegetation Protection Overlay (VPO1, VPO2, VPO3, and VPO4), Public Acquisition Overlay (PAO), and the Significant Landscape Overlay (SLO3). The Dandenong Foothills Local Policy of Clause 21.10-1 of the Scheme also applies to the periphery of the site (particularly along Elsie Street and Bambury Street).

Since the adoption of the structure plan and its introduction in to the Knox Planning Scheme, a number of new planning zones and controls have been introduced which may provide better

planning outcomes for the centre, including the Activity Centre Zone (ACZ) and the Commercial 3 Zone (C3Z). Given the significant land use policy directions proposed as part of the 2019 Boronia Renewal Strategy, some investigation in to the application of the zones, along with the use of the MUZ and RGZ on specific sites is be required.

This section reviews the appropriateness of each zone, including the extent of current controls and provisions as available through the Victorian Planning Provisions 'toolbox' for potential application on the land use planning framework. It also reviews the overlays controls particularly as they currently affect Boronia and its surrounding. It provides a particular emphasis on height controls and the implications

This paper also builds on previous work done with regard to Boronia, namely:

- ***Draft Land Use & Planning Background Report (2017) – Knox City Futures***
- ***Planning advice to assist delivery of the Boronia Renewal Project Strategy (2018) - Glossop***

Zoning Analysis

There are a number of options to address zoning within activity centres, including a combination of the 'standard' suite of residential and commercial zones and overlay controls (particularly Design and Development (DDO) and Development Plan Overlays (DPO), or the Activity Centre Zone (ACZ).

The Boronia Major Activity Centre is currently subject to the Commercial 1 Zone (C1Z), Mixed Use Zone (MUZ), General Residential Zone Schedule 4 (GRZ4) and the Residential Growth Zone – Schedule 2 (RGZ2).

A desktop review of these controls indicates that they are still generally effective in achieving the objectives of the structure plan and local planning policy with the support of a Design and Development Overlay (DDO). However, discussions with the DELWP has demonstrated that the use of the Activity Centre Zone is the preferred approach in accordance with the relevant practices notes. The following approach has therefore considered first, the application of standard planning zones (commercial, mixed, residential) which forms the basis for each precincts. A proposed Activity Centre Zone will therefore seek to translate this underlying provision into a new ACZ schedule.

Activity Centre Zone (ACZ)

The preferred State Government approach as articulated through Planning Practice Note 56 (PPN56 the Activity Centre Zone) is to apply the ACZ to the entire activity centre. The ACZ allows for a precinct based approach to the application of land use provisions and built form controls affecting design (height, setbacks, materials, access, landscaping etc.) in the form of a 'one-stop shop', however these controls should not conflict with the standard controls in the current commercial and residential zone suite.

Use of land	Developed by Council to determine what uses will be as-of-right, require a permit, or prohibited. It can also comprises conditions associated with the proposed use
Development	Default – permit required for buildings and works unless specifically exempted in the schedule. Clause 62.02 continue to apply
Signage	Default – Category 1 unless specified otherwise in the schedule
Notice and Review rights	Default – exempted unless specified otherwise in the schedule

VicSmart implications for ACZ [refer to Appendix 3]
<p>Subdivision - VicSmart criteria applies to some subdivision of land pursuant to the required conditions being met, this means</p> <ul style="list-style-type: none"> - Small boundary realignment - Subdivision of existing buildings - Subdivision of construction site up to 2 lots <p>Buildings and works under the zone – VicSmart criteria applies to the development of land up to \$500,000 pursuant to the following conditions being met:</p> <ul style="list-style-type: none"> - The building/works is not within 30m of a residential zoned land (not a road) - It is not associated with a uses with adverse amenity potential as stated in Clause 53.10. <p>The VicSmart threshold for the ACZ is the same as for the Commercial Zones and commentaries of the implications of VicSmart are available in Appendix 3.</p>

Activity Centre Zone	
Pros	Cons
Ability to specify outcomes tailored to the centre and drafted by precinct	Complexity in design and time required for the preparation and review.
Ability to develop specific controls and direct specific uses within or away from particular precinct (precinct based approach)	Complexity in interpretation and understanding (particularly by the community).
	May contradict market driven trends and undermining precinct based aspirations.
Ability to merge design outcome and land use under one schedule.	Risk of errors in drafting.
Ability to link to a framework plan with defined statement of objectives to be achieved.	May result in a series of control hardly dissimilar to the standard series of zones.
Ability to schedule out other clauses of the Scheme (37.08-11)	Scheduled flexibility of 'standard' zones altogether with other policies and controls also allow to achieve defined outcomes.
Flexibility in controls and permit triggers for uses (37.08-2), buildings and works (37.08-5), and signage (37.08-10)	Requires defined knowledge and vision of outcome sought as a way to sway the market.
Ability to develop design controls as mandatory or discretionary (37.08-6), may be able to include garden area requirements threshold.	No default garden area requirements
	Will not apply to PUZ, and therefore not address VicTrack land potential redevelopment.
- Notice and review rights are exempt by default and can be varied by a schedule (37.08-8)	

The purpose of the ACZ can be referred to in Attachment 2.

Since the advent of the ACZ, significant changes have been made to commercial and residential zones which provides greater flexibility in these zones, including the ability to specify height limits in the residential zones.

The Boronia Activity Centre is characterised by a defined commercial core with residential surrounding. The commercial core has not exhibited trends that would necessarily require a list of specific usage controls different than what the standard zones allow in potential contradiction to the market.

- The medical precinct located along Boronia Road is a concentration of use that happened as primarily market-driven, and is unaffected by the standard zones.
- The Draft Boronia Renewal Strategy contains a key direction aspiring to ‘create an active nightlife’. However, this aspiration is not currently based on an identified location. As such, there is currently no area identified by Council or the Community that would merit the attention of specific controls to sway the market via the use of an ACZ.

Despite Council’s position on the application of the Activity Centre Zone favouring the standard suite of zones, DEWLP encouraged the use of the Activity Centre Zone (ACZ) as the preferred tool for the Boronia Major Activity Centre.

The ‘DRAFT planning advice to assist delivery of the Boronia Renewal Project Strategy (2018)’ prepared by Glossop also provided an analysis of the ACZ with recommendations at pages 20-21. The overall recommendation also concluded that the ACZ was not the appropriate zone for Boronia.

Given the relative unsuitability of the ACZ for the Boronia Activity Centre, an assessment of the capacity to retain the current commercial and residential zone suite is preferable.

Recommendation:

- ***The use of the Activity Centre Zone may be premature at this stage for Boronia Activity Centre and the standard suite of zoning may be preferable from a Council’s perspective.***
- ***Regardless, explore the application of the ACZ based on underlying precincts reflecting the standard provisions (Commercial 1 Zone, Mixed Use Zone, Residential Growth Zone and General Residential Zone).***

Commercial Zone Suite

The Boronia Activity Centre contains approx. 20.5ha of Commercial 1 Zone (C1Z) land within the commercial core along Dorset and Boronia Roads.

Commercial 1 Zone (C1Z)

The purpose of this zone is to create vibrant mixed use commercial, business, office, entertainment, and community use while still allowing complementary residential uses. It represents primarily uses and development found within main street and centre of town comprising a variety of retails and office uses. Boronia’s commercial core is currently zoned C1Z, similarly is Knoxfield Shopping Centre in Wantirna South, or the CBD area of the majority of Victorian town (e.g. Warragul, Mornington, Ballarat, Healesville).

Use of land	Default – Refer to Attachment XX
Development	Default – permit required for buildings and works Clause 62.02 applies
Signage	Default – Category 1
Notice and Review rights	Default – subdivision and buildings and works exempted pursuant to conditions
VicSmart	Subdivision - VicSmart criteria applies to some subdivision of land pursuant to required conditions being met. Buildings and works under the zone – VicSmart criteria applies to the development of land up to \$500,000 pursuant to the conditions being met: <ul style="list-style-type: none"> - The building/works is not within 30m of a residential zoned land (not a road). - Not a brothel or sex shop.

	<ul style="list-style-type: none"> - It is not associated with a uses with adverse amenity potential as stated in Clause 53.10. <p>Commentaries of the implications of VicSmart are available in Attachment 1.</p>
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Commercial 1 Zone	
Pros	Cons
Standard Suite requiring no changes, applied as default	Inability to adjust controls
Generally well understood by the community	Schedule cannot be modified in Metropolitan Melbourne
Restricts dwellings at ground level	

The purpose and decision guidelines of the C1Z can be referred to in Attachment 2.

The zone cannot be altered and the schedule to the zone only allows for setting up maximum leasable floor area for office and shop. The impact of this is unclear as it would aim solely to ensure offices and shops retain small tenancies as as-of-right, and large floor area would be subject to a permit. However as per requirement of DELWP, the schedule cannot be modified within Metropolitan Melbourne.

The ‘DRAFT planning advice to assist delivery of the Boronia Renewal Project Strategy (2018)’ prepared by Glossop also provided comments regarding the C1Z at pages 22 that reflected the above.

Overall, this zone continues to efficiently address the retail and commercial needs for the centre and particularly when compared to the ACZ. Therefore it is considered there is no need to further review this zone in term of its primary intent regarding use and development.

Commercial 2 Zone (C2Z)

The purpose of this zone relates principally to supporting office spaces, light industries or bulk retails. It represents primarily uses and development found at the fringe of urban areas along arterial roads comprising large tenancy bulk retail type (e.g. home-making centre), factory outlets; or found within smaller industrial estates (e.g. warehouses) and office park with bigger amenity protection due to the proximity to residential or environmental features. An example of Commercial 2 Zone is Caribbean Gardens Office/Industrial Park in Scoresby.

The C2Z resulted from changes to Victorian Planning Provisions created the zone by replacing the Business 3 and 4 Zone in 2013.

From a commercial point of view, this zone slightly restricts retail (by making some types as section-2 uses) while allowing more warehouse and industrial activities as of right. On the other, the C2Z prohibits most form of accommodation.

The C2Z is inadequate for Boronia Activity Centre as it does not meet the intent of the 2006 Boronia Structure Plan to create a vibrant mixed use – all functionality commercial centre, and consequently should not be considered.

It is further noted that previous C2Z area along Erica Avenue was removed via Amendment C145 in 2016 with the Planning Panels commenting “*intent of the Structure Plan is that Erica Avenue is to play a greater role within the pedestrian function of the wider Boronia Activity Centre with an*

emphasis on improving the built form and providing more active uses at the street frontage with offices or residential development on the upper floors.”

Commercial 3 Zone (C3Z)

Another zoning option that could be considered is the recently introduced Commercial 3 Zone. This zone includes the following purposes:

- *To provide for a range of industrial, commercial, office and other employment generating uses which support the mixed-use employment function of the area.*
- *To promote collaborative and high-quality working environments which support the area through good urban design and high-amenity, accessible and well-connected places.*

The zone represents primarily uses and development focus on light industry and employment of a more emerging, technological, artisans, or artists’ style work studios that may or may not be found amongst other type of uses. It allows for a residential component (i.e. dwellings as Section-2 use with limited gross floor area) particularly when nexus to the employment uses is demonstrated. The zone fills the gap between the Mixed Use Zone (residential oriented) and the other commercial zones, particularly the Commercial 2 Zone (industry oriented).

However, the zone strongly discourages most accommodation and retail uses and therefore would be inappropriate for the Boronia Activity Centre. There is currently also no particular history or typology of development or usage that would justify the use of the C3Z to achieve an outcome that cannot be achieved via the C1Z or MUZ in Boronia.

Recommendations:

- ***The C2Z and C3Z are inadequate for Boronia’s commercial core and therefore should not be considered.***
- ***The C1Z currently achieves the outcome sought and should be retained as the underlying provision within Boronia’s commercial core.***

Residential Zone Suite

The current Boronia renewal strategy places a strong emphasis on increasing residential density and design quality within the activity centre.

In order to address this a review of the provisions of the current suite of residential zones and associated schedules in the Knox Planning Scheme is required.

Mixed Use Zone (MUZ)

The MUZ is a type of residential use which has the particularity of allowing greater ‘melting pot’ of uses as reflected in the purpose of the zone:

- *To provide for a range of residential, commercial, industrial and other uses which complements the mixed-use function of the locality.*
- *To provide for housing at higher densities.*

The MUZ provides a good transition (e.g. buffer) between commercial zones (or industrial zones) and purely residential zone. There are currently pockets of MUZ in Boronia that are located at the fringe of the C1Z.

Previous commentary in the *Draft Land Use & Planning Background Report (2017)* identified that there may be some opportunities to apply the Mixed Use Zone to some strategic sites where more intensive development could be supported, such as the Boronia Mall (*to facilitate future bulky goods and other development*) and along Dorset Road / railway line / Maryville Road (*South of Boronia Rd*).

The MUZ is considered more appropriate as an intermediary buffer between residential and commercial zone as it can gradually soften the type of use that may be found or operate within it. It is acknowledged that by being essentially a residential zone, the MUZ will primarily result in residential function allowing variety of uses rather than a commercial function allowing residential uses.

The MUZ is currently used in small pockets around Boronia, abutting the Commercial 1 Zone and covering about 2.2ha in area. The MUZ is not scheduled separately and therefore the current schedule to the MUZ applies to the whole of Knox.

Contrary to previous comments made in the *Draft Land Use & Planning Background Report (2017)*, the rezoning of Boronia Mall to MUZ wouldn't be considered as a facilitating a bulky goods or other development of this site. There is no reasons such outcome could not be achieved via the C1Z. It is determined as inadequate to consider a rezoning of C1Z that forms part of the core commercial activity (e.g. Boronia Mall), unless that land is located on the fringe and upon adequate evaluation of the current trend and transition with its surrounding use.

In terms of dwellings and other development, the zone primarily offers a development controls function for multi-dwellings proposal with the schedule to the zone allowing:

- Design objectives
- Variation of some Rescode standard requirements (*minimum street setback, site coverage, permeability, landscaping, side and rear setbacks, walls on boundaries, private open space, front fence*)
- Maximum building height
- Exemptions from public notice and VCAT review
- Specific application requirements
- Additional decision guidelines
- Sign category requirement.

Development would be subject to the Rescode standards and objectives assessment. The zone (*if scheduled*) also propose height requirements [refer to Section 4 regarding height].

Mixed Use Zone	
Pros	Cons
Transitional Zone allowing a variety of uses migrating from commercial to residential	May result in primarily residential amenity and residential development/use
Schedule can allows for public notice and review rights exemption	Policy guidance required to ensure inadequate Land use for Boronia are not appearing within MUZ
Good variety of land use allowed particularly via permit	
Schedule allows Rescode variations, design objectives, maximum building height, decision guidelines and specific application requirements	No garden area requirements

The purpose and decision guidelines of the MUZ can be referred to in Attachment 2.

The 'DRAFT planning advice to assist delivery of the Boronia Renewal Project Strategy (2018)' prepared by Glossop also provided a brief analysis of the MUZ with recommendations at pages 22-23. The recommendation particularly noted that the schedule is blank and that Council should take full advantage of the ability to tailor the schedule of the MUZ.

There is also advantage to review the land that are currently zoned MUZ so as to their relevance and whether it should be extended to other allotments. One noted discrepancy involves land at 198 to 200 Dorset Road which are set as follow:

198 Dorset Road (RSL)	C1Z
198B Dorset Road (Residential Apartment)	MUZ
200A to 200D Dorset Road (Retail, Sex Shop, and Food and drink premises)	MUZ
200 Dorset Road (Convenience store)	C1Z

The MUZ actively cut two pockets of C1Z in two resulting in a planning oddity. It also resulted in making the Sex Shop at 200B-C Dorset Road as a prohibited use subject to existing use rights. This could be rectified by effectively making a more logical zone transition (Commercial → Mixed → Residential) and also considering the existing typology and use of the land.

Recommendations:

- **Utilise the schedule to the MUZ to provide further guidance and appropriateness in controls by creating a Boronia Schedule, and more precisely by applying the underlying intent of the MUZ to transition part abutting the core area and located along arterial road..**
- **Evaluate expansion of area to be zoned MUZ at the fringe of the core area as relevant:**
 - o **181-183 Boronia Road and 275-283 Dorset Road**
 - o **Area of 9 Rangeview Road (if supported by Boronia Renewal Strategy and relevant for the development of a neighbourhood service area based on the existing café)**
 - o **1 Hastings Avenue (Telstra facility)**
 - o **Floriston Street pending conclusion of the Retail demand assessment and Land for business strategy**
 - o **Other neighbourhood service area around the fringe of the activity centre boundary.**
- **Rectify the situation at 198-200 Dorset Road by making 200A-D and 200 within the C1Z and 198-198B within the MUZ. This may be considered for 194-196 Dorset Road.**

Residential Zones (GRZ and RGZ)

The Knox Planning Scheme currently contains the three residential zones as prescribed in the Victorian Planning Provisions (VPP's). These zones and their associated schedules have been in turn applied to the Boronia Activity Centre as follows:

- Residential Growth Zone – Schedule 2 (RGZ2) – approximately 0.6ha, and;
- General Residential Zone - Schedule 4 (GRZ4) – approximately 67ha.

Other residential zones are also found outside the activity centre boundary:

- Neighbourhood Residential Zone- Schedule 1 (NRZ1) – immediately to the east and south of the activity centre boundary.
- General Residential Zone – Schedule 2 and 5 (GRZ2 and GRZ5) – immediately to the north, south, and west of the activity centre boundary.

The Neighbourhood Residential Zone is not considered adequate for the Activity Centre due to its low density purpose and therefore will not be assessed as part of this report.

These zones and the residential controls for the Boronia Activity Centre have undergone significant change since the adoption of the 2006 Boronia Structure Plan.

Evolution of the General Residential Zone:

The General Residential Zone came to final effect in Victoria through VC116 on 1 July 2014 and mostly replaced the Residential 1 Zone in Boronia. Prior to VC116, the R1Z did not comprise maximum building height requirements and simply referred to the Standards of Rescode. At the time of its introduction, the GRZ did not comprise a maximum building height requirement and therefore also referred to the Standards of Rescode.

The GRZ4 was introduced to the residential parts of Boronia via C131 on 17 March 2016 but did not change the height requirements as previously in effect. VC110 introduced on 27 March 2017 applied new maximum height and number of storey, which currently applies to the centre.

The GRZ primary purpose is to encourage a diversity of housing that respects the character of the area. The GRZ is the default residential land intended for dwellings with limited other uses.

In terms of dwellings, the zone primarily offers a development controls function for multi-dwellings proposal with the schedule to the zone allowing:

- Neighbourhood character objectives
- Extending the permit requirement for single dwelling up to 500sqm lot
- Variation of some Rescode standard requirements (*minimum street setback, site coverage, permeability, landscaping, side and rear setbacks, walls on boundaries, private open space, front fence*)
- Maximum building height
- Specific application requirements
- Additional decision guidelines
- Exempt garden area requirement

Development would be subject to the Rescode standards and objectives assessment, but also must meet garden area requirements. The zone (*and its schedule*) also propose height requirements [*refer to Section 4 regarding height*].

The purpose and decision guidelines of the GRZ can be referred to in Attachment 2.

The 'DRAFT planning advice to assist delivery of the Boronia Renewal Project Strategy (2018)' prepared by Glossop also provided a brief analysis of the GRZ with recommendations at pages 24-26. The recommendations includes to exempt garden area requirement, and to make full use of the schedule to the zone before exploring outcomes via other controls.

Garden Area Requirement

Garden area is a relatively new mandatory requirement applied to the General Residential Zone and the Neighbourhood Residential Zone, which came to effect with VC110 on 27 March 2017. The provision details minimum garden area requirement as a percentage of a lot that must be set aside as open garden space. This means proposals lodged after the effect of the garden area provision must demonstrate greater ground coverage retained as garden area (resulting in smaller footprint),

a feature that did not apply to earlier development and any application that was lodged prior to VC110.

The garden area provision includes exemptions including the ability to exempt garden area requirement via the schedule to the zone, but also on “lot designated as a medium housing site in [...] an approved equivalent strategic plan [e.g. equivalent to a precinct structure plan on Greenfield sites]”.

While there is no definition of what an ‘approved equivalent strategic plan’ is, the Planning Practice Note PPN84 – Applying the minimum garden area requirement – provides limited clarity by explaining this section applies to precinct structure plans on greenfield sites and to older strategic documents that are recognised as the equivalent to a precinct structure plan. A conversation with DELWP confirmed that it is intended that structure plan would be considered as an equivalent that automatically exempts garden area if areas of that plan are identified as ‘medium housing site’.

“medium housing site” is however not defined and it is unclear what may be considered as a medium housing site. It is estimated that Local Living and Activity Area of Knox housing policy would be considered as favouring medium housing site and therefore garden area would not apply to these areas. It may also simply mean that area needs to be explicitly identified as such on the structure plan.

As it is noted that garden area requirements can be exempted via a schedule to the zone, but cannot be modified (increased or decreased) as referred in the Planning Practice Note PPN84.

General Residential Zone	
Pros	Cons
Possibility to exempt entirely garden area requirements.	No possibility to vary (increase/decrease) the garden area requirements
	Cannot address design issues such as: <ul style="list-style-type: none"> - Colours and materials, - View lines - Public Realm Improvement

While the garden area requirements can be scheduled out (to the benefit of wide site coverage), this would be to the detriment of space kept for landscaping and open space at ground level. While the schedule can impose different Rescode requirement (e.g. landscape, and POS), the ability to discretionary vary these requirements remain and would be unlikely to effect changes in design and developers attitude.

Furthermore, the Draft Boronia Renewal Strategy comprises key directions that are aimed at retained a green character (“Boronia is a green place with spaces to play”, “Boronia has quality living environment”) and the retention of the garden area requirement will be a tool required to ensure design proposals achieves this in a non-tokenistic way.

Consequently, the recommendation made in Glossop’s *DRAFT planning advice to assist delivery of the Boronia Renewal Project Strategy (2018)* to schedule out the garden area requirement should not be considered. This is however greatly reliant on a review of height requirements imposed by the DDO [refer to height assessment in Section 4].

Evolution of the Residential Growth Zone:

The Residential Growth Zone came to final effect in Victoria through VC116 on 1 July 2014 and was implemented to parts of Boronia via C131 (RGZ2) on 17 March 2016 that were previously R1Z/GRZ. The RGZ introduced the height requirement as currently applies on 17 March 2016 (C131).

The RGZ primary purpose is to encourage a diversity of housing in locations with good access to services and transport and with a scale of development that provides a transition between intensive areas and other residential land.

It is similar to the GRZ in the sense that it is intended for dwellings with other limited use. It is also similar to the MUZ in the sense that it can function as an adequate buffer between commercial core and other residential land but only in term of density of development rather than a variety of usage as achieved by the MUZ.

In terms of dwellings, the zone primarily offers a development controls function for multi-dwellings proposal with the schedule to the zone allowing:

- Design objectives
- Variation of some Rescode standard requirements (*minimum street setback, site coverage, permeability, landscaping, side and rear setbacks, walls on boundaries, private open space, front fence*)
- Maximum building height
- Specific application requirements
- Additional decision guidelines

Development would be subject to the Rescode standards and objectives assessment. The zone (*and its schedule*) also propose height requirements [refer to Section 4 regarding height].

The purpose and decision guidelines of the RGZ can be referred to in Attachment 2.

It is noted that the RGZ does not comprise garden area requirements.

Residential Growth Zone	
Pros	Cons
Transitional Zone allowing a high density residential development	May have issues at interface with other residential zone or fringe of activity centre boundary.
	No garden area requirements

The 'DRAFT planning advice to assist delivery of the Boronia Renewal Project Strategy (2018)' prepared by Glossop also provided a brief analysis of the RGZ with recommendations at pages 23-24.

Recommendations:

- **Retain the garden area requirements for the GRZ, if the residential zone is used, with the purpose to achieve greater green outcome. And,**
 - o **Ensure an objective or strategy clearly stipulate the intent of Council that garden area applies on GRZ land.**
 - o **Consider the use of different schedule of GRZ, including a specific schedule for land affected by the Dandenong Foothills Policy at the precinct surrounding Chandler Park.**

- **Implement a transitional approach C1Z (core), MUZ (transition)/ RGZ (transition), GRZ (sensitive residential) within the Activity Centre Boundary through appropriate precinct boundary,**
- **Ensure the residential precincts (or GRZ) act as an adequate buffer between NRZ and other precincts/zones of the activity centre.**
- **Make full use of the Schedules to the GRZ and RGZ.**
- **Extend land under RGZ (transition precinct) (e.g. Orchid, Genista, Sundew, Rosella, William)**
 - o **Consider 800m walkability to train station as primary factor for RGZ.**
- **Consider the General Residential Zone to areas that are beyond 800m walkability to the train station.**

Overlays Analysis

Design and Development Overlay Schedule 7 (DDO7)

Schedule 7 of the DDO was introduced via C62 on 9 September 2012 effected the height requirement currently applicable by the overlay. A sunset clause was later introduced and renewed via C133 on 03 December 2015 until December 2019.

Pursuant to a DDO, a planning permit is required for buildings and works unless the schedule exempts it or for a swimming pool unless a schedule requires a permit for a swimming pool. A permit is also required for fence if a schedule requires it. It is noted that Clause 62 exemptions remain applicable. Applications can vary a requirement of the DDO unless the schedule specifically states that a requirement cannot be varied with a permit.

This overlay also addresses the design and setbacks for new development in the activity centre and applies to the whole of the area within the Activity Centre boundary.

The 'DRAFT planning advice to assist delivery of the Boronia Renewal Project Strategy (2018)' prepared by Glossop also provided a brief analysis of the DDO with recommendations at pages 26-27 which can be referred to. The recommendations include:

- that built form outcome cannot be addressed within the C1Z and consequently the DDO is an important tool for such zone.
- Subjective terms (such as outstanding architectural design) should be avoided unless clearly defined.
- The DDO7 already exists and will likely reduce the level of strategic justification required for a proposed rewritten DDO.

It is noted that preliminary discussion with the Department of Environment, Land, Water, and Planning has indicated that the application of a DDO on land zoned GRZ would unlikely be supported and that the schedule to the zone should be used instead for the control of height and other elements that can be achieved.

In conjunction with the current local planning policy, the schedule could be retained on C1Z, RGZ and MUZ land and modified to reflect the objectives of the Boronia Renewal Strategy.

Recommendations:

- **Retain the fact that a DDO applies in Boronia and completely rewrite DDO7 into a new DDO that will apply to the C1Z and possibly to the RGZ and MUZ as well**

- ***Evaluate the possibility to address materials, colours, view lines, site coverage/garden area/landscaping, public realm improvement via a DDO to the C1Z, MUZ, RGZ.***
- ***Implement the DDO with the above points, setbacks, upper storey recess, signage, height to the C1Z.***
- ***Eliminate subjective terms, or provide definition to all terms in the rewriting of the DDO.***
- ***Refer materials, colours, design, view lines, and recess [etc] within the GRZ via planning policies.***
- ***Incorporate application requirements, which includes ESD reports.***

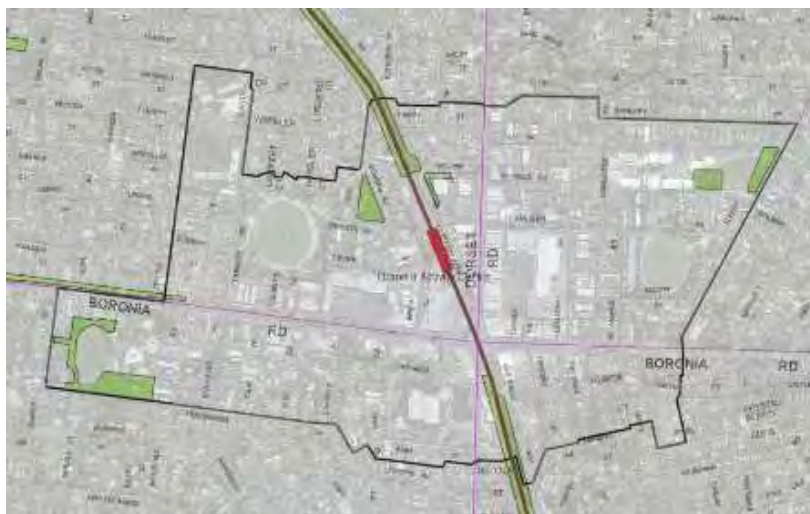
Environmental Significance and Significant Landscape Overlays

Environmental Significance Overlay Schedule 2 (ESO2)

Schedule 2 of the ESO applies to part of the Activity Centre, primarily on small pockets of public land identified as sites of biological significance in Knox. The primary purpose is for the appropriate management and protection of biodiversity.

A permit is required for buildings and works pursuant to the ESO unless it is specifically exempted. The intent of the controls is to manage an appropriate balance between the retention of exemplary native vegetation and space for biodiversity to thrive and development.

The application of the ESO2 relied on the 2010 'Sites of Biological Significance in Knox' which was an important strategic research undertaken for this purpose. There is no need at this stage to review this work.



Land affected by ESO2

Environmental Significance Overlay Schedule 3 (ESO3)

Schedule 3 to the ESO applies outside the current activity centre boundary, within part of the Dandenong Foothills. The area covered by the ESO was identified in the Sites of Biological Significance in Knox 2010.

Significant Landscape Overlay Schedule 2 (SLO2)

Significant Landscape Overlay Schedule 3 (SLO3)

Schedules 2 and 3 of the SLO applies to part of the north-east fringe of the Activity Centre, primarily along Elsie and Bambury Street being places also affected by the Dandenong Foothills policy. The primary purpose is for the appropriate design and siting of development within the scenic backdrop of the foothills.

A permit is required for buildings and works pursuant to the SLO unless it is specifically exempted. The intent of the controls is to manage an appropriate balance between the retention of vegetation, scenic integration of the built form, and assessment of the height impact.

As such it carries a height control of 7.5m in the sense that a permit is not required if the building is less than 7.5m in height, but discretion applies through the issuance of a permit above 7.5m.

There is also no need to review the application of the SLO onto land that would be removed from the Activity Centre Boundary as the strategic justification for the SLO2-3 lies in the Dandenong Foothills policy which remains unchanged in that regard. However, land for which the Dandenong Foothills Policy would no longer apply should have the SLO removed, this apply to land within the activity centre and land to be rezoned along Reve Street.



Land affected by SLO3

Recommendations:

- **Retain the ESO as current with no changes.**
- **Remove the SLO from land included within the Activity Centre Boundary and which are removed from the Foothills Policy area.**

Vegetation Protection Overlay (VPO)

Schedules 1, 2, 3, and 4 of the VPO affects parts of the Boronia Activity Centre and beyond Boronia.

VPO1 – Remnant overstorey vegetation of 5m or more (native only)

The VPO1 consists primarily of 4 pockets located around the train station and Boronia Village.

These were identified via the 1998 'vegetation assessment and protection strategy for Knox'. There does not seem to have been any review of these controls or accuracy of its mapping.

There is some discrepancy in mapping that may need to be reviewed.

VPO2 – Significant exotic and non-indigenous native trees (any vegetation - specified only)

These were identified via the 1997 'management strategy for riparian/flood plain vegetation' and 1998 'vegetation assessment and protection strategy for Knox'. There does not seem to have been any review of these controls or accuracy of its mapping.

The overlay triggers a permit for the removal of vegetation listed in the schedule by reference to a general address (street name and melway reference) and a specific tree (species and number). There is a complete discrepancy between the planning mapping and the overlay schedule information identifying the specific tree which makes it impossible to cross-reference as:

- The street address does not match the mapping
- The melway reference comprises error
- The mapping does not necessarily refer to a location on the schedule.

Further to this, the mapping often applies on land with no trees, causing further confusion. Overall this overlay is impractical and impossible to implement diligently and also discredit the control.

VPO3 – Remnant overstorey vegetation of 8m of more (native only)**VPO4 – Canopy tree protection (native and any vegetation specified)**

These two VPO covers wider area primarily east of Dorset Road (and also along Herbert Ave for VPO3 and Rankins area for VPO4). These controls are more contemporary, however it is noted that the VPO3 covers the commercial core of Boronia, while there may not be any trees that qualifies for protection as intended by the VPO.

The VPO4 was identified in the Sites of Biological Significance in Knox 2010 and implemented as a result of this study. It is noted that it complements areas affected by the ESO3.

A mapping review may be relevant to identify trees precisely and map accordingly.

The 'DRAFT planning advice to assist delivery of the Boronia Renewal Project Strategy (2018)' prepared by Glossop also provided a brief analysis of the VPO with recommendations at pages 29.

The recommendations are:

- Review the VPO2 to remove redundancy
- Investigate further the VPO1 and VPO3 with a view to remove redundant controls
- Retain the VPO4

It is noted that Clause 21.03 of the Scheme identifies as future strategic works the review of overlays to ensure all significant vegetation is afforded appropriate protection. There is currently a business case for the 2019-20 budget recommending a review of the VPO controls in Knox which would address any gaps and issues in the vegetation protection overlays.

Recommendations:

- **Further investigation, including on-site review is necessary for the VPO to increase the accuracy and credibility of the control. This investigation can be undertaken within the review of the Vegetation Protection Overlay for which a business case is currently prepared. More specifically this business case may also consider the following:**
 - o **Retain VPO2 but identify that a full review will be required.**
 - o **Review VPO1 mapping.**
 - o **Evaluate whether VPO1 can be merged with VPO4.**

- **Review mapping accuracy and extent of coverage for VPO3, particularly by evaluating whether 8m native vegetation exists on the land it covers and whether VPO3 should only affect land where vegetation the relevant vegetation is identified.**
- **Retain the VPO4, including on land removed from the Activity Centre.**
- **In the interim, a review of the mapping of the VPO2 as a desktop review and remove mapping on land where no vegetation exists (e.g. 180 Boronia Road, and 8 Woodvale)**



Land affected by VPO

Public Acquisition Overlay (PAO)

The PAO applies to parts of land abutting Dorset Road for the benefit of the acquiring Authority (VicRoads) with a view of a future enlargement of the road reserve. There is no need to review this control.



Land affected by PAO

The application of PAO to create pedestrian linkages and resolve vehicle turning point at the end of no-through road may be considered.

Other overlays currently not applying in Boronia.

Heritage Overlay (HO) – There is currently no heritage overlay affecting the Activity Centre. It is not considered that a HO will likely be implemented.

Land Subject to Inundation (LSIO)/Special Building Overlay (SBO) – There is currently no flood controls affecting the Activity Centre. There area however land that are impacted by SBO further away from the Activity Centre Boundary being:

- Blind Creek Catchment (comprises LSIO and SBO) which affects properties along Hazelwood Road and the lower part of Springfield Road.
- Dandenong Creek Catchment (comprises SBO) which affects properties north of Woodmason Road.

The Activity Centre comprises the main drainage retention basin which is located in Boronia Park, collecting stormwater from most of the Activity Centre Area with an outlet towards Blind Creek. A second Melbourne Water retention basin is located further north at Old Joes Creek with an outlet flowing towards Dandenong Creek.

However, surface drainage flooding has been noted on the southern part of Boronia particularly from the outlet of the Boronia Park retarding basin (Park Crescent, Pine Crescent, Cypress Crescent) and around its input (Boronia Road and Dorset Road junction). These are currently subject to further modelling and may separately result in flooding controls being implemented.

Parking Overlay (PO) – The PO is currently not implemented in Knox, a separate review of its implementation within Boronia Activity Centre should for a subsequent implementation allowing variation to the parking controls.

Development Contribution Plan Overlay (DCPO) – The DCPO is currently being evaluated at a municipal wide level for a subsequently implementation.

Incorporated Plan Overlay (IPO) – The IPO is not currently implemented in Knox, it is not considered that the IPO would be a relevant tool for Boronia.

The ‘DRAFT planning advice to assist delivery of the Boronia Renewal Project Strategy (2018)’ prepared by Glossop also provided a brief overview of other controls at pages 28 to 30 which can be referred to.

Current Height Controls

The main point of contention for development in the Boronia Activity Centre is the current and future height limit controls for new development. The Activity Centre is located in the Dandenong Foothills and the protection of the views of the Dandenong Ranges is an important community value.

The Knox Planning Scheme provides several options to control building height and other design controls – mainly through schedules to the Residential and Mixed Use Zones and the Design and Development and Development Plan Overlays. Guidance is also provided through the Rescode provisions at Clause 54 and 55. Table 1 below provides a summary of these controls.

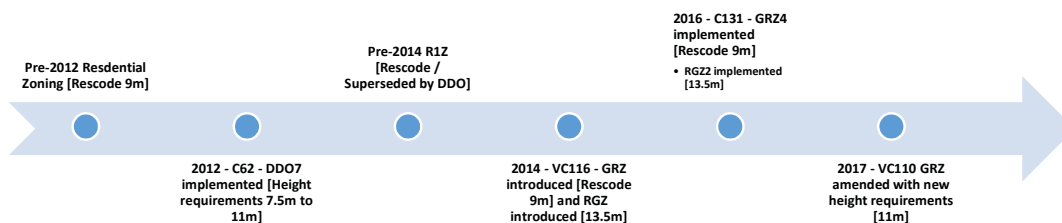
Zones	
General Residential Zone	Clause 32.08-10 of the zone specifies a maximum building height which can be varied by the schedule to the zone,

	<p>but if no maximum height is specified the default zone height is applicable:</p> <ul style="list-style-type: none"> - Maximum 11 metres - Maximum of 3 storeys <p>Further exemptions apply that may allow in certain circumstances a specific building to exceeds the maximum height or number of storeys being:</p> <ul style="list-style-type: none"> - Vesting rights, including replacement building; - Building on either side (or side corner) exceeds the maximum building height; - Transitional provisions applies; - Exceeds by at most 1m if the topography of the land is greater than 2.5 degrees. - On land subject to flooding, height measurements calculation differ.
Schedule 4 to the GRZ	The schedule does not specify alternative maximum building height or number of storeys and therefore the default of Clause 32.08-10 apply.
Residential Growth Zone	<p>Clause 32.07-9 of the zone specifies a maximum building height which can be varied by the schedule to the zone, but if no maximum height is specified the default zone height is applicable as a discretionary maximum:</p> <ul style="list-style-type: none"> - Discretionary maximum 13.5 metres - No restriction to number of storeys <p>Further exemptions apply that may allow in certain circumstances a specific building to exceeds the maximum height being:</p> <ul style="list-style-type: none"> - Vesting rights, including replacement building; - Building on either side (or side corner) exceeds the maximum building height; - Transitional provisions applies; - Exceeds by at most 1m if the topography of the land is greater than 2.5 degrees. <p>On land subject to flooding, height measurements calculation differ.</p>
Schedule 2 to the RGZ	The schedule does not specify alternative maximum building height and therefore the default of Clause 32.07-9 apply.
Mixed Use Zone	<p>Clause 32.04-11 of the zone specifies a maximum building height as specified in a schedule to the zone.</p> <p>Further exemptions apply that may allow in certain circumstances a specific building to exceeds the maximum height being:</p> <ul style="list-style-type: none"> - Vesting rights, including replacement building; - Building on either side (or side corner) exceeds the maximum building height; - Transitional provisions applies; - Exceeds by at most 1m if the topography of the land is greater than 2.5 degrees. <p>On land subject to flooding, height measurements calculation differ.</p>

Schedule to the MUZ	The schedule does not specify maximum building height and therefore the standard of Rescode or other controls apply ⁽¹⁾ .
Commercial 1 Zone	The Commercial 1 Zone does not specify maximum building height, and the decision guidelines to the zone refers to Rescode for guidance.
Zone Status Summary	<ul style="list-style-type: none"> - The GRZ specifies a maximum building height at clause 32.08-10 which supersedes Rescode; - The RGZ specifies a maximum building height at clause 32.07-9 which supersedes Rescode; - The MUZ does not specify a maximum building and therefore Rescode apply⁽¹⁾; - The C1Z does not specify a maximum building height and refers to Rescode for its decision guidelines at clause 34.01-8 (discretionary);
Overlays	
Significant Landscape Overlay Schedules 2 and 3	The SLO2 and SLO3 apply to parts of the Boronia Activity Centre and extends further onto the Dandenong Foothills area. The SLO2 and SLO3 comprise a permit trigger for buildings that are 7.5m and more and a decision guideline on whether a building exceeding the height requirement will have a detrimental impact on key elements of the landscape.
Design and Development Overlay 7	<p>The DDO7 overrides the GRZ requirements by specifying further limitations and criteria.</p> <p>The DDO7 creates five categories related to height and number of storey within the Activity Centre boundary:</p> <ul style="list-style-type: none"> - Maximum 4.5m – single storey* - Maximum 7.5m – double storey* - Maximum 9m – 2-3 storeys - Maximum 11m – 3 storeys* - Maximum 14m – 4 storeys* <p><i>*Indicates discretionary height requirement may be varied by a permit. The 9m – 2-3 storeys bracket is however a compulsory requirement.</i></p> <p>Areas of GRZ generally falls within the following brackets:</p> <ul style="list-style-type: none"> - Maximum 7.5m – double storey* <ul style="list-style-type: none"> o North-East and South-East quadrant) o North of train station - Maximum 9m – 2-3 storeys <ul style="list-style-type: none"> o North-West and South-West quadrant - Maximum 11m – 3 storeys* <ul style="list-style-type: none"> o Parts of North-East quadrant (Albert Ave) o Part of North-West and South-West quadrant (Boronia Road) o Part of South-East quadrant (Hastings and Torrens Ave) <p>The DDO7 supersedes Rescode on building height for the whole of the Boronia Activity Centre;</p>

Other controls affecting height:	
Rescode⁽¹⁾ Standards A4 (Clause 54), B7 (Clause 55)	Based on the building height rescode standard, a building should not exceed the maximum height specified in zone, schedule to the zone, or an overlay that applies to the land. - If no maximum height is specified then Rescode specifies discretionary height of 9m , unless the slope of the land exceed 2.5 degrees or more in which case the discretionary height is 10m
Other influences	<p>Rescode Standard B17 – Side and rear setbacks</p> <ul style="list-style-type: none"> - Ensure that height and setback respects character and limit the impact on amenity of existing dwellings <p>Rescode Standard B18 – Walls on boundary</p> <ul style="list-style-type: none"> - Ensure the location, length, height of a wall on boundary respects character and limit the impact on amenity of existing dwellings <p>Rescode Standard B20 – North facing windows</p> <ul style="list-style-type: none"> - Ensure to allow adequate solar access to existing north facing habitable room windows <p>Rescode Standard B20 – North facing windows</p> <ul style="list-style-type: none"> - Ensure buildings do not significantly overshadow existing secluded private open space <p>Decision guidelines to the Zones which comprises to ensure that the following is considered: Impact of overshadowing on existing rooftop solar energy facilities on dwellings on adjoining lots in a GRZ, MUZ, NRZ, TZ, or RGZ.</p>

Residential zones height timeline



Review of Height

The Boronia Activity Centre controls provides for heights up to 14m / 4 storeys within the commercial core and 7.5m/2storeys and 9m/2-3storeys in the existing residential areas through the current DDO.

Taken alone, the C1Z and MUZ zones provide for development with no height limits, while the RGZ restricts development to 13.5m (unless scheduled), and the GRZ to 11m/3storeys (unless scheduled). Rescode serves as a guidance on decision making for the C1Z and MUZ.

Under the current schedules, any development in the GRZ4 – the specific control for the Boronia Activity Centre cannot exceed 9m and 13.5m in the RGZ2.

The evolution of height controls made mandatory through the zones has come to the point of surpassing the mandatory and discretionary height set in 2012 within the DDO7.

The DDO further restricts the height requirements in the residential areas to lower than that marked on the zone. This means the height specified in the zone is subjugated to that of the DDO instead of what may be presented in the zone or Rescode.

In some instances, this means the height requirement impacted by the DDO is more restrictive or, at best, similar to that of residential land situated outside the Activity Centre boundary. This may eventuate in an effective lack of distinction between the built form of the Activity Centre and its surrounding suburb. It could result in instances where a building outside the Activity Centre will be taller than that of an abutting building within the Activity Centre, regardless of views. The best example is a comparative of 11 and 13 Iris Crescent (refer to examples identified further below).

As a result, the main difference in density of development between surrounding suburb and the Activity Centre is likely to be gained against site coverage due to the limitation in height, with the housing character policy governing discretion. This means the current control impacts as follow:

- The desire for greater yield and density may:
 - Likely be sought by greater coverage, to the detriment of vegetation and landscaping.
 - Likely be sought by providing smaller units, resulting in limited offer, and consequently reduced diversity of dwelling types, but also to the detriment of internal amenities.
 - Likely seek reduction of ancillary elements such as communal space, excess car parking, visitor car parking, storage space, and private open space left to the minimum. Or,
 - That the differences between Local Living and Knox Neighbourhood in term of height will be unnoticeable apart for the provision of open space and landscaping.
- A review of height requirements be reevaluated for the GRZ area due to the opposite outcome sought by:
 - The local living character seeking to enhance green and leafy character but limits provision of medium density housing through increased height.
 - By provision of minimum landscape area
 - By seeking a landscaped front yard
 - By seeking retention of existing vegetation
 - By provision of required setbacks
 - By requiring rear dwelling to be single storey
 - By requiring POS in accordance with three options

The sum of the local living character, GRZ4, and DDO passes the message that development sought is medium density mostly boundary to boundary with green streetscape.

- The activity area character seeking to balance “green and leafy” character when viewed from the street whilst allowing more intensive residential development.
 - It does not include improvement of landscaped area in the policy but does require landscaping requirement within the schedule to the zone.
- The commercial areas do not have “green” or specific landscaping requirement which are also not specified within Clause 22.06.

Interface Zones

The Boronia Activity Centre is surrounded by a residential area with varying levels of development intensity, and height limits. These limits need to be further considered, if the development level is to be increased in the Activity Centre.

Zones on the fringe of the Boronia Activity Centre

The following zones currently abuts the Activity Centre boundary and form the suburban area outside of it:

- Neighbourhood Residential Zone (NRZ1) - East:
 - o Clause 32.09-10 of the zone specifies a maximum building height which can be varied by the schedule to the zone, but if no maximum height is specified the default zone height is applicable being a maximum of 9 metres and a maximum of 2 storeys;
 - o The same exemptions as per the GRZ applies.
 - o Schedule 1 comprises a maximum building height of 8m with discretion for further height of architectural features of a building.
- General Residential Zone (GRZ2) – North and South:
 - o Schedule 2 comprise a maximum building height of 9m
- General Residential Zone (GRZ5) – South-West:
 - o Schedule 5 comprise a maximum building height of 9m

Comparative of abutting examples

- **1 Springfield Road** – within Activity Centre, GRZ4 and DDO7 has a mandatory limit of 9m for 2-3 storeys as applied by the DDO
- **3 Springfield Road** – outside Activity Centre, GRZ2 has a mandatory limit of 9m as applied by the Schedule to the zone. And 3 storeys as indicated by the Zone.
- **36 Park Crescent** - within Activity Centre, GRZ4 and DDO7 has a mandatory limit of 9m for 2-3 storeys as applied by the DDO, *affected by flood but not currently recognised by planning controls.*
- **37 Cypress Avenue** – outside Activity Centre, GRZ2 has a mandatory limit of 9m as applied by the Schedule to the zone. And 3 storeys as indicated by the Zone, *affected by flood but not currently recognised by planning controls.*

Should the flood issue result in an SBO being implemented in the future, the GRZ2 would allow for a greater as the height would be calculated from the freeboard level. The DDO7 does not include such option.

- **58 Boronia Road** - within Activity Centre, GRZ4, SLO2, and DDO7 has a discretionary limit of 7.5m for 2 storeys as applied by the DDO and SLO.
- **56 Boronia Road** - outside Activity Centre, NRZ1, SLO2 has a mandatory limit of 8m as applied by the Schedule to the zone and discretionary limit of 7.5m as applied by the SLO. Dandenong Foothills Policy applies.
- **289 Dorset Road** - within Activity Centre, GRZ4 and DDO7 has a discretionary limit of 11m for 3 storeys as applied by the DDO.
- **291 Dorset Road** - outside Activity Centre, GRZ2 has a mandatory limit of 9m as applied by the Schedule to the zone. And 3 storeys as indicated by the Zone.

- **11 Iris Crescent** – within Activity Centre, GRZ4 and DDO7 has a discretionary limit of 7.5m for 2 storeys as applied by the DDO.
- **13 Iris Crescent** - outside Activity Centre, GRZ2 has a mandatory limit of 9m as applied by the Schedule to the zone. And 3 storeys as indicated by the Zone.
- **20 Woodvale Road** – within Activity Centre, GRZ4 and DDO7 has a mandatory limit of 9m for 2-3 storeys as applied by the DDO.
- **22 Woodvale Road** - outside Activity Centre, GRZ5 has a mandatory limit of 9m as applied by the Schedule to the zone. And 3 storeys as indicated by the Zone.
- **44 Bambury Street** – within Activity Centre, GRZ4, SLO3 and DDO7 has a discretionary limit of 7.5m for 2 storeys as applied by the DDO and 7.5m as applied by the SLO. Dandenong Foothills Policy applies.
- **43 Bambury Street** - outside Activity Centre, NRZ1 has a mandatory limit of 8m as applied by the Schedule to the zone and discretionary limit of 7.5m as applied by the SLO. DDO1 also applies (controls of site coverage) and Dandenong Foothills Policy applies.



Location of comparative sites

Conclusion/Recommendations

It is recommended that:

- Use the schedule to the MUZ, RGZ and GRZ. Or apply the ACZ as relevant.
- Review the DDO7 in term of height to avoid discrepancy with allowable height outside the activity centre.
 - Rewrite the DDO and retain it for C1Z, MUZ, RGZ
 - Ensure terms are not subjective and provide definition, or
 - Delete the DDO in favour of an ACZ.
- Retain garden area for GRZ
 - Consider different GRZ schedule for land affected by Dandenong Foothills
- C1Z be retained for the commercial core of the centre

- **Review the area of RGZ and MUZ and rezone as appropriate along the commercial core as a transition buffer to standard residential area.**
- **Release more RGZ2 , expand such as along Dorset, Orchid/Genista**
- **Review MUZ along Dorset Road south tucked between C1Z areas**
- **Create MUZ along Rangeview local shop**
- **Avoid creating C1Z pockets separated by MUZ (e.g. Dorset Road South)**
- **MUZ be applied along Dorset Road/ railway line / Maryville Road (South of Boronia Rd)**
- **The DDO7 and Local Planning Policy be reviewed for clarity, efficiency and remove redundant provisions etc.**
- **Remove redundant VPO mapping which do not cover trees**
- **Refer to Appendix 6 for an in-depth analysis of the Scheme.**

STRATEGIC OPPORTUNITY SITES (SOS)

Overview

The Council asked that the review also include the identification of strategic sites for redevelopment opportunities and to investigate options for how it can best use its assets in the activity centre to support the long term renewal.

Need to review, renew ageing and/or failing infrastructure in Boronia Activity Centre

A range of initiatives are currently underway or being investigated with regard to the state of infrastructure in and around the Boronia Activity Centre, including the following:

- *Knox Basketball Stadium (failing building, flooding issues)*
- *Boronia Library (additional floor space required, flooding)*
- *Retarding basin (need to expand by approx. 50% to alleviate flooding concerns across Boronia)*
- *Park Crescent childcare (refurbishment needed, building lifespan up to 10 years)*
- *Bellbird Senior Citizens Centre (Council lease this site from VicTrack, current proposal to end lease and decommission site in the long term)*
- *Knox Leisureworks (ageing facilities).*

Possible Asset disposal/leverage or redevelopment opportunities

In addition, there are a number of sites that may offer opportunities for asset disposal/leverage or development opportunities, including:

- *Boronia Youth Hall (257 Dorset Rd) - Currently vacant (Public Use Zone) (potential high value and rezoning into commercial given its central location)*
- *Potential sale of part of Boronia Park to fund other infrastructure needs*
- *Dorset Square – Council owns approximately 1ha of land within the centre of Boronia. Dorset Square provides vital car parking and has been the focus of significant streetscape upgrades (approx. 5 years ago). However, the large expanse of parking in the square provides a redevelopment opportunity or at least the integration of alternative activities. Recent interest by Coles to redevelop their multi deck carpark could offer alternative parking options.*

Boronia town Centre has a number of opportunity sites that possess attributes that make them favourable for redevelopment for a mix of uses as well as higher density residential development.

Site identification (criteria)

The redevelopment of a site within the Boronia Town centre could be considered a strategic opportunity for a number of reasons. The inclusion of some or all of the following characteristics contribute to making a strategic opportunity. These criteria represent an assessment at a particular point in time and should be applied noting that the context for considering an opportunity may change over time and the failure to meet a criteria does not necessarily mean a site cannot be a strategic opportunity site.

Ownership

- **Single or contiguous allotment under one ownership;** or
 - Comprise different ownership with the potential to be consolidated easily with limited negotiation required (*e.g. max up to three landowners involved*);

Size

- **Over 1,000m² in lot size outside the town centre commercial core area;**
- **Over 700m² inside the town centre core commercial area;** or
 - has dimensions that make an efficient development parcel (*width and depth including with potential consolidation*);

Controls

- **Located in a zone that permits commercial, mixed use, or residential use (e.g. C1Z, MUZ, and Residential Zones);** and
 - Not constrained by a Heritage Overlay;
 - Not constrained by flooding impact;
 - Not subject to a vegetation protection overlay;

Context/location

- Fronts an arterial road and/or is within Principal Public Transport Network area (train station);
- Comprise a dual road frontage/access points (e.g. transversal lot) or on a corner site;
- Is within 400m walkability distance of train station;
- Is adjacent or across the road from open space/park (inclusive of public square and/or park – i.e. easy access to public spaces);
- Is sited at a strategic location (i.e. at Boronia / Dorset Road intersection, Erica Avenue, Train Station vicinity, Dorset Square);

Activity/Land use

- has not recently been developed for medium or high density dwellings (post-2000 development, e.g. 3+ townhouses/villas and apartments)
- Was not recently strata subdivided (e.g. post-2000) or previously subdivided with similar tenure arrangements resulting in different ownerships (*refer to ownership – max three landowners involved*);
- Existing development/building is not underperforming and achieving its potential (*e.g. in terms of economic return or contribution to the town centre function through vacancy or underutilisation of space*) or,
 - is not an inefficient use of land with regard to planning controls, infrastructure and opportunity of the site (*e.g. lack vertical density, aged/dilapidated infrastructure building/land occupation ratio, at grade car parks may be considered underutilisation or an essential land use*)
- Capacity to accommodate higher density dwellings above ground floor level (not constrained by mandatory height controls as currently identified in DDO7);
- Currently supports ongoing business activity within commercial/mixed use zones, whether vacant or not, and does not create potential displacement issues (e.g. loss of business space, particularly through redevelopment)

Other factors

- Is not relied on to meet statutory obligations or that there are alternate means of meeting these requirements (e.g. part of a special levy, or meeting car parking requirements under planning regulations), if known.
- Not constrained by established infrastructure currently in use and that cannot be easily moved or reconfigured, if known (Telstra building, substation, overhead power lines, drainage ROW, train line below etc.)

Therefore, as a short term priority for directing development, the Strategy has placed a filter over the sites by putting an emphasis on encouraging development on sites that exhibit a number of the above criteria.

Site visits and desktop analysis also revealed that a number of the sites identified through GIS analysis were occupied by uses that are more important to the community than the need for redevelopment. These include:

- Medical facilities that are well established or have clear links or dependencies with other uses nearby;
- Public Open Space or garden space that should be retained as contributing to local amenity;
- Schools, child care and aged care facilities that serve a specific catchment and are difficult to relocate.

Similarly, there are other non-residential and non-commercial uses on these sites which have limited locational flexibility but are desirable in the community and serve a specific local catchment. These include:

- Police and emergency services, ambulance, fire station;
- Child care centres/kindergartens and aged care facilities – many of these facilities are located on large sites and on main roads near residential areas to be near their client base. The main location requirements are accessibility (by car and public transport) and often these uses have a requirement for a certain amount of outdoor space.
- Churches and faith-based facilities – many churches are long established and core services have often expanded to encompass the delivery of social services and in some cases, small businesses, e.g. opportunity shops, function rooms, or child care.
- Council owned-land and facilities – the key function is to provide services and facilities for meeting community needs. There are also some community facilities that serve a regional or municipal function as well such as LeisureWorks.

SOS selection

Once the above commercial and non-commercial uses were excluded a list of 11 primary strategic opportunity sites and 20 secondary primary strategic sites remain (refer site list below.)

Address	Site Property	Site Selection criterion	Design Features
121-127 Boronia Road	Boronia Junction and associated car park	Location	Pedestrian connectivity

		Conditions Potential	Activation and surveillance Density redevelopment Open space
103-109 Boronia Road 202-210 Dorset Road	Chandler Arcade	Location Conditions Potential	Pedestrian connectivity Activation and surveillance Density development Use and function
112 Boronia Road 2 Torrens Ave	Zagame's and associated car park	Conditions Potential	Redevelopment
224 Dorset Road	AEC Arcade	Location Conditions Potential	Pedestrian connectivity Activation and surveillance
230 Dorset Road 17-19 Dorset Square		Location Conditions Potential	Density development Use and function
236-238 Dorset Road	Craves and associated private laneway	Location	
260 Dorset Road	Dorset Arcade	Location Conditions Potential	Pedestrian connectivity Activation and surveillance Density development
264-268 Dorset Road	Kmart service centre	Conditions	
280 Dorset Road	Hanmoore Financial Centre	Conditions	
286-288 Dorset Road	The Smile Clinic	Potential	
2-4 Rosella Ave		Conditions Potential	
17-19-21 Chandler Road		Conditions Potential	
267 Dorset Road	McDonald's	Conditions Location	Activation and surveillance Density development

		Potential	
5-7 Genista Ave		Potential	
1-11A Erica Ave		Location Conditions Potential	Pedestrian connectivity Activation and surveillance Density development Use and function
31-39 Erica Ave		Conditions Potential	Activation and surveillance Density development
139-141 Boronia Road		Conditions	Activation and surveillance Density development Use and function
159 Boronia Road	Dan Murphy's and associated car park	Location Potential	Pedestrian connectivity Activation and surveillance Density development Open space
9/163 Boronia Road 163 Boronia Road	Market Boronia Village and associated car park	Location Potential	Pedestrian connectivity Activation and surveillance Density development Open space
5-7 Iris Crescent		Conditions	
4 Sundew Ave		Conditions	
2 Langwith Ave	Langwith Consulting Suites	Conditions	Activation Redevelopment/Density
152-160 Boronia Road 2 Park Crescent	Boronia Medical Centre Cypress Health Specialist Centre	Conditions Potential	Use/Function Redevelopment
217-229 Dorset Road 114-132 Boronia Road	The Intersection	Location	Activation redevelopment

83 Boronia Road		Potential	
87 Boronia Road			
212 Boronia Road 22 Woodvale Road	St Joseph Primary School Janssen Spirituality Centre	Potential	Pedestrian connectivity Density development Open space Environmental
257 Dorset Road	Council's property Former Youth Hall site	Location	Activation and surveillance Density development
2 Chandler Road	VicTrack Land and associated car parks Bellbird Centre	Location Potential	Pedestrian connectivity Activation and surveillance Density development Open space Use and function

It is also noted that further prioritisation of these sites for future strategic work is also undertaken based on additional local knowledge and conversations with landowners briefing outlined in examples below:

Coles multi-deck car park

In 2018 Coles made a significant investment, approximately valued at \$9M, to upgrade and refurbish its multi-deck car park located on the eastern edge of Dorset Square. Works included realignment of vehicle ramps, installation of trolley escalators, digital real time parking availability information and repainted structure and reconfigured car parking spaces.

Aldi proposal at 1-11 Erica Avenue

An amended planning application was lodged with Council for the development of a 5 storeys mixed used apartment and ground commercial building at the above land. The proposal has received Council approval with a notice of decision to approve a planning permit issued in January 2019.

Site analysis

Two groups of SOS – A) could be redeveloped independent of Council and B) Council has a direct interest in a particular site.

The following analysis framework has been prepared with the second list in mind and has resulted in set of consideration in the form of questions to be used to gauge the level of interest and

subsequently what actions Council might take in relation to sites that can directly deliver specific policy outcomes. In particular, sites may be of interest to Council because:

- They further the implementation of Council policies
- Redevelopment of a site in a certain way will help address a community need;
- A future opportunity needs to be protected to ensure that a scarce resource is managed to realise its full potential. Stop short term quick return uses from negating long term potential and underdevelopment
- A site offers a short term window of opportunity to gain alignment that may not be there in the future
- The land owner has expressed an interest in working with council

Proposed Activity Centre Boundary

Knox Council was directed to review and consider potential realignment to the Boronia Activity Centre boundary as part of the Minister for Planning's approval of Amendment C133. This was in response to a number of conflict points raised during the previous panel hearings and changes to the General Residential Zone since its application in the activity centre area. Additional policy conflict also exists by the overlapping and conflicting policy directions within the Activity Centre boundary, such as the Foothills and the intent of the Activity Centre.

Further adjustments to the Activity Centre boundary have been made to clearly direct growth into this area to support the regeneration of the town centre.

The proposed activity centre boundary modifies the existing area as set by the 2006 Boronia Structure Plan and includes consideration of the interface with the foothills area to the east of the centre. Part of the Activity Centre is affected by the Dandenong Foothills Policy and the Significant Landscape Overlay (e.g. applying the Foothills) this has caused a conflicting outcome with regard to the purpose of the Activity Centre, and other controls such as the Housing Policy and the Design and Development Overlay.

The following assumptions are made in determining the activity centre boundary:

- The remaining capacity of the residential areas to accommodate future growth;
- Walkability is a paramount factor which comprises the sum of good walkability to Retail, Train Station, and Conveniences within 800m.
 - o New path connections and pedestrian access which would improve walkability access to those services
 - o Proximity to the train station within 1000m
 - o Physical barriers, such as train line and arterial road, as well as topography, are considered within walkability index.
 - o The opportunity to provide neighbourhood based hub and its impact on overall walkability
- Opportunity for growth and development within the walkability index
- The level of existing amenity and how development may improve or negatively affect such amenity, including the proximity of arterial road, or the retention of local character.
- Physical and natural limitations such as flood, and retention of large expanses of vegetation.
- The existing settlement pattern and its relation to a more dense and developed activity centre.
- The current controls and policies affecting the surrounding areas.

Recommendations

The following changes to the boundary are recommended:

- ***Rectify policy and controls inconsistencies by reducing the boundary on the South-eastern quadrant by removing all lots addressing Gwyn Court, Marie Street, and Rubida Court,***
 - o ***Rezone the above lots from GRZ4 to NRZ and adjust the Housing Strategy to show these lots as Bush suburban. Remove DDO7 and consider the purpose of the DDO1-2 when drafting the Schedule.***
- ***Retain 58 to 66 Boronia Road within Activity Centre, remove from SLO2 and Dandenong Foothills Policy***

The justification are, in order of importance:

- These lots are affected by a single dwelling covenant registered on the title which restricts multi-dwellings development. There has been no attempt at removing the covenant and no development proposal has been sought to date (except for Boronia frontage). However, properties facing Boronia Road which are also affected by the covenant have successfully applied to remove or vary the covenant.
- These lots are located within the Dandenong Foothills Policy area, and are subject to the VPO and SLO overlays which adds to the level of complexity for higher density development within activity centre.
- These lots immediately abut the areas of NRZ, DDO1, and Bush Suburban policy which restricts redevelopment. This results in an abrupt division with little or no transition between the rest of the Foothills and the Activity Centre. The removal from the Activity Centre would allow for controls providing a typology transition between the NRZ and the AC.
- These properties are on the south-eastern edge of the Activity Centre, with greater distance in terms of walkability and pedestrian access due to the crossing limitations imposed by Boronia Road. The effective walkability distance is result in >800m from the train station and >400m from nearest convenience (94 Boronia Road, including weight of slopes. The nearest pedestrian crossings to reach the core of the commercial areas or nearby parks are further east via the roundabout junction of Albert Road (*non-prioritised*) or west via Hastings Road which includes a sudden drop of 5-6m (14% slope) which is not conducive to safe all-users access.
- Retain 58 to 66 Boronia Road within the Activity Centre with an understanding that land facing an arterial road carries lesser amenity, however explore the use of the Schedule to Clause 52.02 to alleviate the restriction of the covenant.

Recommendations:

- ***Reduce the boundary on the South-Western quadrant by removing properties along Rankin Road,***
 - ***Return these lots to the purpose of the GR25 – Bush Suburban with no changes to overlays.***
- ***Set the boundary to either include 216 to 228 Boronia Road or somewhere within these lots that can be retained as part of the large St Joseph area.***

The justifications are:

- The properties along Rankin Road abuts St Joseph School land with a natural backdrop remnant vegetation along school land boundary. In addition, these lots have good retention of canopy coverage within front and rear setbacks. This is further protected by the VPO4.
- There has been no development proposal to date on properties along Rankins which has retained its original character.
- These lots immediately abut the areas of GR25 and Bush Suburban policy which all comprise good level of amenity control. This results in an abrupt division with little to no transition with the Activity Centre, the removal from the Activity

Centre can allow for the placement of controls providing a smoother density and typology transition. It will also ensure a greater protection of the vegetation in line with the statement of significance of the VPO4.

- The majority of lots alongside Rankins Road are identified as affected by the 1/100 year Flood Extent draining towards Blind Creek at Scoresby Road vicinity.
- The properties along Boronia Road have already been developed (or comprise permit allowing the development) and would effectively remain unaffected by this change.
- The lots alongside Rankins Road are all outside the walkability index in terms of distance, being >1000m from the train station, >800m from the retail and commercial core.

Alternatively,

- Retain 216 to 224 forming part of the larger St Joseph School land retention.

Recommendations

- **Address development performance of Bambury and Elsie via appropriate controls and policies by:**
 - **Rezone these lots within the NRZ and consider its own schedule.**
 - **Retain 17 Rangeview Road within the Activity Centre to retain a clear activity centre boundary, and remove SLO2 and Foothills Policy from this lot**

The justifications are:

- While there is a conflict between housing policy, activity centre, Dandenong Foothills, and DDO7/SLO2 which has caused headache in interpretation both by Council officers and at VCAT; it is important to note that determinations from the Tribunal has indicated that Bambury Street is unique and that it should not be treated as per other residential areas within the activity centre.
 - There will be scope to highlight this via Scheme policies and structure plan and possibly even clarify the controls.
 - The DDO and SLO would need to be highlighted as the development of this area should provide for a particular outcome that is dissimilar to both the core of the activity centre, and the foothills area. It is a transitional area and the typology of townhouses or villa units reflects this.
 - The majority of redevelopment permits took place prior to the implementation of garden area requirements (<2016) which saw wider site coverage being attained, further proposal on undeveloped land will have to meet garden area requirements which will help providing an outcome more sympathetic to the foothills policy (albeit transitional) with more green space and possibly more front setback landscaping.
- Removal from the Activity Centre will result in unfairness to landowners of properties that have not redeveloped. At this stage, 4 properties (and 4 more facing Albert Street) have no permit or not redeveloped. This means these landowners may lose the benefit of redeveloping their land (pursuant to controls) and yet abut densely developed land. This will result in a lose/lose situation for them.

- In any case, Elsie Street properties are within good walking distance to the core and train station and it would be recommended that 6-10 and 17 Rangeview and properties south of Elsie Street be retained but with more accurate determination of the design outcome sought on the fringe with the NRZ.
 - The topography and wide nature strip of Elsie Road has the benefit to better integrate development than Bambury, appropriate setback requirements for landscaped buffer at the front of the street, planning controls and placement within alternative housing policy may provide the desired transition. Properties along Rangeview should be consolidated around a neighbourhood precinct with local services and easy access to school, parks, and retail services and therefore retained at this effect.

Alternatively,

- The issue of Bambury Street was also identified at the Planning Panels for Amendment C62 related to the Boronia Structure Plan. VCAT decisions have further highlighted this [as mentioned above]
- The lack of transition between the north side and south side of the street has resulted in disparities in the form of development in the streetscape, with the street acting as the buffer. However, it is noted that multi-dwellings is not an unknown occurrence on the northern side of the street, with villa units and dual occupancies representing 50% of the existing typology within the northern side of Bambury Street (within NRZ and foothills).
- The eastern part of Bambury Street is outside the walkability index for both the retail and access to the train station. The access to convenience is however achieved within 400m 9 Rangeview Street.
- Extends the above logic regarding the disparity of controls to the south side of Elsie Street and 6-10 and 17 Rangeview.
- Preferably if the boundary is to be revisited, Bambury may be removed while Elsie is retained.

Recommendations:

- ***Retain St. Joseph School and considers the inclusion of Janssen spiritual Centre located at 22 Woodvale in the long term.***

The justifications are:

- These properties are currently zoned residential and could see development occurring particularly should their current occupation cease. Altogether they represent 5.8ha of developable land.
- These land comprise large amount of remnant vegetation that would be best protected and pedestrian linkages could be improved between Rankins, Donald, Vivienne, Woodvale, and Boronia Road through integrated strategic planning.
- The area would also be opportune to improve neighbourhood services by dedicating a neighbourhood hub.
- The area will be considered on the edge of the walkability index, but the provision of neighbourhood hub would improve immediate distance to essential services.

Alternatively:

- Janssen Spirituality centre is not included (22 Woodvale) but may be considered at a later stage.
- Consider the St. Joseph School area to be rezoned as individual significant site outside the Activity Centre with a Development Plan Overlay.

Proposed future expansion

It is acknowledged that most of the expansion to the activity centre boundary will be difficult to achieve this late in the process as:

- Studies made as part of the background research have not considered this.
- It has not been hinted during consultation process
- Relevant authorities have not been consulted (VicRoads/Melbourne Water etc.)

As such it is considered most expansion capacity will be for consideration upon:

- Potential increase in capacity if the capacity cannot be achieved within the commercial core or elsewhere in the activity area.
- Walkability index
- Later consideration during a 5 years review.

Recommendations:

- ***Expands North along Iris Crescent and including Lyrebird, Warbler, Sandpiper, and Lorikeet in the short term.***

The justifications are:

- o Iris Cr is within walking distance to the train station and the urban core
- o The eastern side of Iris Cr is already within activity centre, the expansion will simply bring the western side in as well.
- o The Warbler Estate can be included for future planning redevelopment within a scope of 2030-2040 and beyond. The residential stock is currently in still early to mid-lifespan having been built around 1999-2001. By 2040, it is likely the residential stock may be close to redevelopment status and it would be paramount to ensure an integrated redevelopment this close to the urban core and train station. Further improvement would need to be marked, particularly consisting of the improvement to the pedestrian network as a priority (Lorikeet to Tormore, Lyrebird to Herbert, Sandpiper to Lorikeet. Master Planning should be considered over this Estate to ensure proper redevelopment in the future with a higher density, and possibly via consolidated lots.
- o This expansion should occur to rationalising the shape of the boundary area.

Recommendations:

- ***Expands southward along Dorset Road, Douglas/Alfred Street, Springfield and Stonehaven***
 - o A southward expansion can include areas within good walkability.
 - o Limits the expansion are defined by topography which drops south of Pine Crescent, areas of CHMP and flood near the Blind Creek.
 - Areas of stormwater flood along Narcissus Street.

- Other problematic area to consider are flood constraints along Cypress and Pine.
- The expansion on the eastern side of Dorset Road would provide for approximately 2ha of potential redevelopment land, in walking distance of the station and retail area and for which laneway paths exists in the cadastre and could be built. The residential stock in the area has seen limited development and is comprises dwellings which are potentially at the end of their useful life. The area is within the NRZ and Dandenong Foothills policy but has reduced amenity due to its location tucked between arterial and train line.
- An old garage/petrol station at 158 Dorset Road could be reconverted as a neighbourhood service hub, it is noted that the previous history of this land could mean it is contaminated imposing limitations on its future development for a sensitive use. The Reve Street Area is however noted as being outside the walkability catchment to the train station and may be slightly too far to justify its inclusion within the Activity Centre.

Recommendations:

- ***Expands North along Power Road, including Central and Catherine.***
- ***Expands North along Dorset Road.***
 - A northward expansion can include areas with good walkability to station and retail core
 - The northernmost limit allow to retain a buffer between the activity centre and the Bayswater Industrial Precinct
 - Land along Central Avenue has already been heavily developed with villa and townhouses typology which is more akin to a centre's density than that of surrounding suburbia, while there is little to no opportunity for further development, land along Catherine St comprise redevelopment opportunity
 - Pedestrian Permeability towards Woodmason need to be considered
 - The provision of a park need to be considered.

Summary of recommendations:

- ***Remove properties of the Marie Street Estate***
 - ***Address DDO1-2 issue resulting and apply appropriate schedule***
 - ***Retain other overlays.***
- ***Remove 58-66 Boronia Road or identify a strategy to apply Schedule to Clause 52.02***
- ***Remove properties of Rankins Road***
- ***Retain Elsie/Bambury boundary as current and address via appropriate zone schedule***
- ***Include properties of Iris Crescent and Warbler Estates but subject to appropriate structure/precinct planning for a horizon of 15-30 years.***
- ***Incorporate a 5 years review for further expansion of boundary north and south within the walkable catchment.***
- ***Rezone Reve Street by removing Foothills Policy and SLO2 and integrate to Knox Neighbourhood to allow for transitional redevelopment of this street as a buffer to the Bush Suburban area.***

Appendix 1 – Social and Affordable Housing

Examples of Knox City Council's commitment to social and affordable housing (in no particular order)

Source: Knox City Council, Community Wellbeing Department

Knox City Council has been working to achieve social and affordable housing outcomes for its City since the 1950s. Council has moved from donating land to more appropriate and sophisticated strategies, which match current need and align to the roles approved by Council that are set out in its Housing Strategy and Affordable Housing Action Plan.

1. Knox Community and Council Plan 2017-21

The Knox Community and Council Plan (head of power) confirms Council's commitment to social housing as follows:

- Goal 2 – We have housing to meet our changing needs.
- Council target – An increase in social and affordable housing in Knox
- Council Initiative 2.3.1 – Implement the Affordable Housing Action Plan including advocacy for an increase of the supply of social and affordable housing at key strategic sites and across the municipality.

Link: [Knox Community and Council Plan 2017-21](#)

2. Knox Housing Strategy 2015

The Knox Housing Strategy 2015 states 'Council does have roles to play as a planner, provider, partner and advocate in increasing housing affordability in Knox'.

Link: [Knox City Council Knox Housing Strategy January 2015](#)

3. Knox Affordable Housing Action Plans

Two Action Plans have been developed by Council since 2007:

- *Knox Affordable Housing Action Plan 2007-12*
- *Knox Affordable Housing Action Plan 2015-20* – the key focus of the Plan is to increase the supply of social housing by:
 - strengthening our advocacy – by Council and through the Eastern Affordable Housing Alliance (Note: Council has continued to send correspondence and meet with relevant Ministers concerning social housing in Knox, particularly focusing on increasing the supply of social housing and the introduction of inclusionary zoning)
 - continued engagement/partnerships with social housing providers
 - negotiation with developers for a voluntary contribution of 5 % to social housing on larger-scale development sites
 - Council to provide at least 5 % social housing on Council-owned development sites
 - Ensuring that affordable and social housing is considered and addressed in structure plans and other place-based strategic plans
 - the Housing Monitoring Program to measure changes in the supply of social housing
 - raising community awareness of the need for greater diversity and affordability of housing.

Link: [Knox Affordable Housing Action Plan 2015-20](#)

4. Key affordable housing research

- *Toward an Affordable Housing Growth Strategy for the City of Knox* (2008)
- *Defining Affordable Housing and a Minimums Supply of Social Housing for Knox* (2011)
Formula: Minimum supply = non-home-owning households in need – social housing + affordable private lettings.

Link: [Defining affordable housing and a minimum supply of social housing for Knox - A methodology for meeting social housing needs 2010-30](#)

- *Minimum Supply of Social Housing, Knox* (2016-2036) – This research forecasts that 860 additional social housing dwellings are needed to meet the minimum supply by 2036 to meeting the minimum supply requirements. It should be noted that this figure relates to a *minimum* supply only, rather than an *optimum* supply.
[Refer to Attachment 2 of this document.](#)
- *Minimum Supply of Social Housing, Eastern Metro Region* (2016-2036) – This research forecasts that 11,420 additional social housing dwellings are needed in the Eastern Metropolitan Region by 2036 to meet the minimum supply requirements.
- Knox Affordable Housing Profile (2016)

5. Knox City Council's Sale of Land and Buildings policy

The policy includes a social component, which weights decisions concerning the sale of Council's land and buildings in accordance with its social agenda and policies, which includes social and affordable housing.

6. Recent negotiations for the inclusion of social housing on development sites

Council negotiates with developers on a case-by-case basis for the voluntary inclusion of 5% social housing in strategic investigation and larger-scale developments sites. The following sites are recent examples – which are at various stages of negotiation and/or advocacy.

Private

- Harcrest site (Mirvac), Wantirna South (7 social housing dwellings)
- Kingston Links (PASK) – agreement for 20 social housing dwellings and a cash contribution Jenkins Orchard – on hold (3 % social housing)
- Norvel Road Quarry – rezoning application lodged. Early discussions have commenced concerning the provision of social housing on this site.
- Boral Quarry – rezoning required. Early discussions have commenced with Boral Property Group concerning the provision of social housing on this site.

State Government

- Crn. Scoresby Rd and Burwood Hwy site – advocacy for 5% social housing
- Former Wantirna Heights site – advocacy for 5% social housing

Former Boronia Heights site – part of the 'inclusionary housing' pilot included in the Victorian Government's Homes for Victorians strategy – advocacy for inclusion of social housing

Council-owned

- Stamford Park – 9 social housing dwellings on 3 lots. Site was sold to Stockland. The Contract of Sale of Real Estate requires 5% of the total number of dwellings on the site to be offered to

Registered Housing Associations/Providers (RHA/P) for an agreed construction value – cost of constructing the dwellings only, no land charges. The preferred RHA/P will agree to take title of the social housing dwellings subject to the terms of a Section 173 agreement, which includes the continued use of the social housing lots for social housing to Council's satisfaction.

- Other Council-owned surplus land to be explored.

7. Strategic Asset Investment Strategy (SAIS)

Knox is currently preparing a Strategic Asset Investment Strategy (SAIS), which will identify the optimal locations for certain classes of strategic assets in the municipality and assess how Council can best ensure the provision of these assets in those areas.

One of the priority areas of the SAIS is social and affordable housing. Through the application of the ENVISION mapping tool (see below), Council aims to map the optimal locations for social housing within the municipality.

8. Greening the Greyfields (GTG) Project

The GTG Project is a partnership between Knox, Maroondah and Whitehorse Councils and Swinburne University and aims to use the ENVISION tool/technology to normalise lot amalgamation and precinct scale development. Council's specific interest is in looking at the application of ENVISION in meeting its affordable and social housing goals. The tool will be used to identify which parts of the municipality are in greatest need of intervention and then design a program around the building of a community investment partnership.

9. Partnership with DHHS

Council meets regularly with DHHS to discuss public housing supply in Knox. Council and DHHS are currently developing a MOU between Council and the Director of Housing and Deputy Secretary (Finance and Infrastructure Division) to define the nature and approach to our partnership. Council has also identified a number of public housing sites in Knox, across a range of price points, which have tangible redevelopment potential.

10. Social housing referral protocols

Council led the development of *referral protocols* with Women's Housing Limited and Community Housing Limited to clarify the allocation process of social housing for people referred by Council.

11. Closure and redevelopment of the Wantirna Caravan Park

Council led the development of a network and process to support Wantirna Caravan Park tenants to be relocated to appropriate affordable housing.

12. Knox City Council's 'The Untitled House' Arts Project 2017

In partnership with Swinburne University of Technology, the Arts Project communicated social themes relating to housing affordability, access and suburban living.

Link: [Knox City Council's Untitled House Arts Project 2017](#)

13. Homelessness Protocol

Council is developing a Homelessness Protocol in liaison with staff, homelessness service providers, not-for-profit agencies and other key stakeholders. The Protocol will set out appropriate

intervention procedures for a broad range of arising homelessness matters, for example, rough sleeping and queries from homeless people and older people seeking assistance from Council's Housing Support Service etc.

14. Establishment of the Eastern Affordable Housing Alliance (Alliance)

In 2009, Knox City Council established the Alliance to 'advocate for increased affordable housing in the Eastern Metro Region of Melbourne to meet the needs of our communities for safe, secure and affordable housing now and into the future'. The Alliance comprises six Councils from the Eastern Metro Region. Knox City Council contributes \$15,000 per year to the Alliance (recently increased from \$7,000 pa) and hosts, supervises and supports the Alliance's secretariat position.

Link: [Eastern Affordable Housing Alliance](#)

15. Laying a Social Housing Pipeline in Knox project

The Project is funded by a grant through the *Social Housing Investment Planning 2017-18 Grants for Local Government* (SHIP Grant) from the Victorian Department of Health and Human Services.

The Project comprises three major outputs:

- **A Strategic and Surplus Sites Framework** – to scope and establish an internal working framework for the identification of strategic and surplus sites in Knox, and the delivery of social housing on these sites;
- **A Social Housing Futures Fund (and other options) Investigation** – to explore the establishment of a social housing fund (and other options) that levies and collects, and then invests and allocates developer and other contributions towards the delivery of social housing outcomes; and
- **A Laying a Social Housing Pipeline in Knox Report** – a report that brings together the overarching framework and approach for laying a social housing pipeline in Knox, which includes recommendations and estimated costs and resource requirements for implementation.

16. Metropolitan Development Advisory Panel – Affordable and Social Housing Working Group

The Panel is exploring planning mechanisms that can be used to address the social and affordable housing needs in Melbourne. Knox City Council participated in a workshop held on 5 October 2018 to advise the Panel on social/affordable housing needs in Melbourne.

17. Application to the Voluntary Affordable Housing Agreement Grant Program (DELWP) *(Unsuccessful)*

In October 2018 Council applied for a *Voluntary Affordable Housing Agreement Grant Program* to:

- Review and design Knox City Council's affordable and social housing policy framework; and
- Renew its affordable and social housing targeted data and forecast to 2041 to align with Homes for Victorians the recent amendments to the Planning and Environment Act and other emerging trends relevant to Knox.

18. Knox City Council affordable and social housing policy, planning and relationship building workshop series

Knox City Council will conduct a series of three workshops on affordable and social housing in Knox with Swinburne University. The aims of the workshops are to:

- Inform the review and design of Knox City Council's affordable and social housing policy framework;
- Achieve horizontal and vertical alignment of social and affordable housing policy and legislation in Knox;
- Identify emerging trends, opportunities and blockages in policy, legislation and delivery options;
- Identify tangible social and affordable housing delivery opportunities for Knox ;
- Build a common language that enables improved affordable and social housing communication; and
- Strengthen effective relationships with and between key affordable and social housing sector agents.

The first workshop will be held on 23 January 2019. The workshop series will also build strategic relationships and partnerships between government, industry, academic and community sector stakeholders.

Appendix 1A – Boronia Job Data

Industry Name	Jobs	%	Industry Application	Jobs	%	Payroll \$M	2018	2019	2020	2021
Other (Total)	5,879	1.57%	Other (Total)	5,879	1.57%	11,000	11,000	11,000	11,000	11,000
Trade & Retail Business Activities	303	0.78%	Trade & Retail Business Activities	303	0.78%	1,100	1,100	1,100	1,100	1,100
Professional, Scientific & Technical Services	171	0.44%	Professional, Scientific & Technical Services	171	0.44%	1,100	1,100	1,100	1,100	1,100
Health Care & Social Assistance	114	0.29%	Health Care & Social Assistance	114	0.29%	1,100	1,100	1,100	1,100	1,100
Accommodation & Food Services	56	0.14%	Accommodation & Food Services	56	0.14%	1,100	1,100	1,100	1,100	1,100
Other Services (except cleaning)	55	0.14%	Other Services (except cleaning)	55	0.14%	1,100	1,100	1,100	1,100	1,100
Financial & Insurance Services	49	0.12%	Financial & Insurance Services	49	0.12%	1,100	1,100	1,100	1,100	1,100
Education & Training	44	0.11%	Education & Training	44	0.11%	1,100	1,100	1,100	1,100	1,100
Rental, Hiring & Real Estate Services	40	0.10%	Rental, Hiring & Real Estate Services	40	0.10%	1,100	1,100	1,100	1,100	1,100
Information Media & Telecommunications	37	0.09%	Information Media & Telecommunications	37	0.09%	1,100	1,100	1,100	1,100	1,100
Administrative & Support Services	37	0.09%	Administrative & Support Services	37	0.09%	1,100	1,100	1,100	1,100	1,100
Manufacturing	20	0.05%	Manufacturing	20	0.05%	1,100	1,100	1,100	1,100	1,100
Arts & Recreation Services	13	0.03%	Arts & Recreation Services	13	0.03%	1,100	1,100	1,100	1,100	1,100
Public Administration & Safety	11	0.03%	Public Administration & Safety	11	0.03%	1,100	1,100	1,100	1,100	1,100
Construction	9	0.02%	Construction	9	0.02%	1,100	1,100	1,100	1,100	1,100
Transport, Postal & Warehousing	5	0.01%	Transport, Postal & Warehousing	5	0.01%	1,100	1,100	1,100	1,100	1,100
Wholesale Trade	0	0.00%	Wholesale Trade	0	0.00%	1,100	1,100	1,100	1,100	1,100
Electricity, Gas, Water & Waste Services	0	0.00%	Electricity, Gas, Water & Waste Services	0	0.00%	1,100	1,100	1,100	1,100	1,100
Mining	0	0.00%	Mining	0	0.00%	1,100	1,100	1,100	1,100	1,100
Agriculture, Forestry & Fishing	0	0.00%	Agriculture, Forestry & Fishing	0	0.00%	1,100	1,100	1,100	1,100	1,100
Total	3,720	0.96%	Total	3,720	0.96%	1,100	1,100	1,100	1,100	1,100
Hectares	14,020									
Jobs per hectare	0.27									

Jobs - Boronia - density

The following information is drawn from REMPLAN using the density of jobs by destination zones. It uses data for Dorset Square as the benchmark.

The Boronia Dorset Square destination zone contributes 979 jobs (1.5%) to total employment. From a land area of 14,020 Ha, the employment per hectare within the Boronia is estimated at 69.793 jobs. This is greater than the Knox (C) estimate of 5.515 jobs per hectare.

BAU Sector	Jobs	%	Proportion of jobs per hectare	Industry classification jobs per hectare	Info
Retail Trade	359	36.60%	26	Business Services	18
Professional, Scientific & Technical Services	139	12.10%	8	Retail & Hospitality	30
Health Care & Social Assistance	110	11.80%	8	Creative & Culture	1
Accommodation & Food Services	56	6.00%	5	Other	16
Other Services	55	5.90%	4		
Financial & Insurance Services	49	5.00%	3		
Education & Training	44	4.50%	3		
Rental, Hiring & Real Estate Services	40	4.10%	3		
Information Media & Telecommunications	37	3.80%	3		
Administrative & Support Services	37	3.80%	3		
Manufacturing	20	2.00%	1		
Arts & Recreation Services	13	1.30%	1		
Public Administration & Safety	11	1.10%	1		
Construction	9	0.90%	1		
Transport, Postal & Warehousing	5	0.50%	0		
Wholesale Trade	0	0.00%	0		
Electricity, Gas, Water & Waste Services	0	0.00%	0		
Mining	0	0.00%	0		
Agriculture, Forestry & Fishing	0	0.00%	0		
Total	979				
Hectares	14,020				
Jobs per hectare	70				

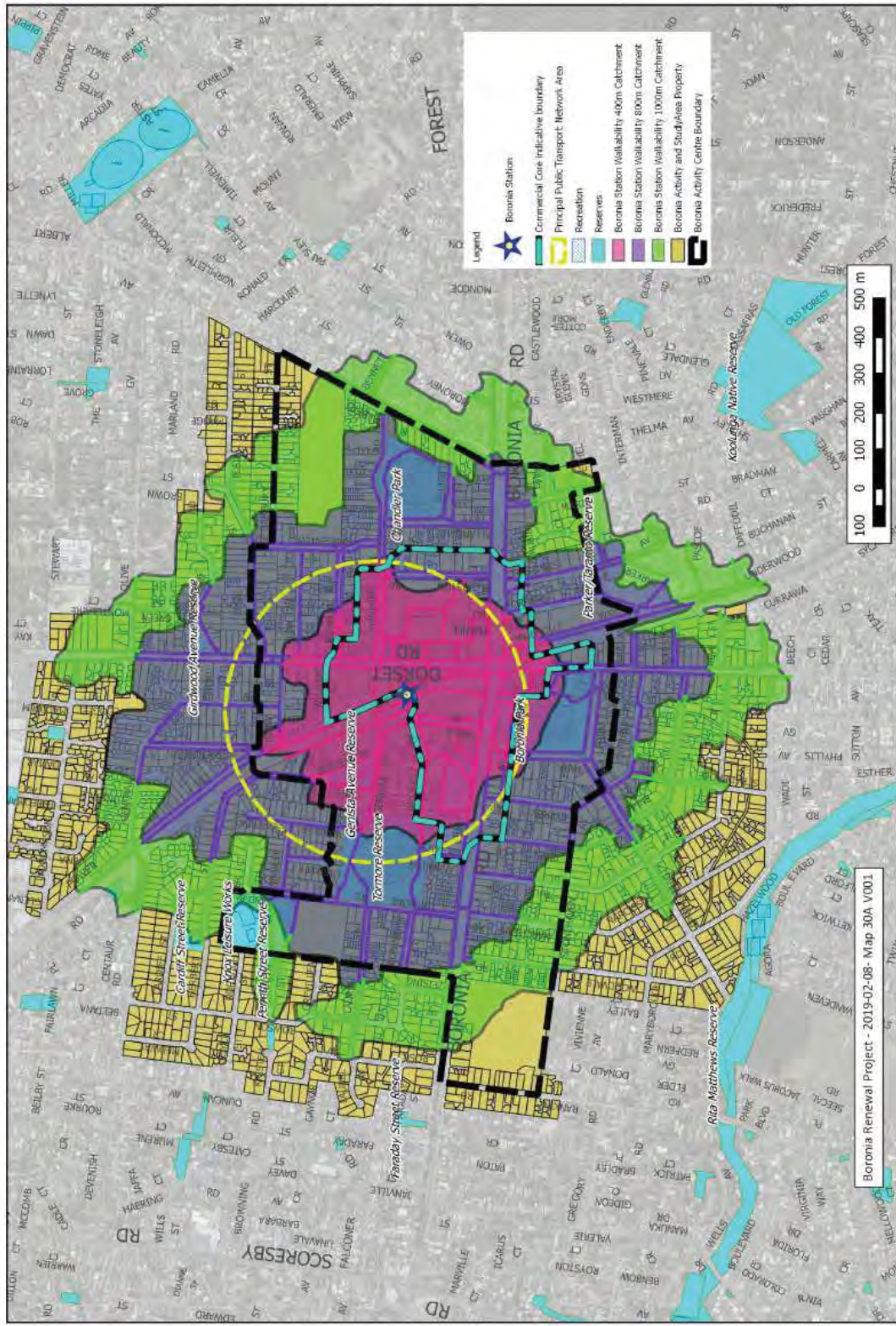
Industry	Jobs	Proportion of jobs	Industry	Jobs
Retail Trade	416	18.65%	IT Hardware Services	25
Healthcare & Social Assistance	144	12.19%	Retail & Wholesale	14
Health Care & Social Assistance	140	11.82%	Creative & Cultural	4
Accommodation & Food Services	81	6.82%	Other	20
Other Services	67	5.82%		
Professional & Business Services	60	5.22%		
Education & Training	54	4.82%		
Health, Fitness & Recreational Services	49	4.31%		
Professional Services & Technical Services	45	3.92%		
Administrative & Support Services	40	3.52%		
Manufacturing	37	3.22%		
Auto & Transport Services	34	2.92%		
Public administration & safety	33	2.92%		
Construction	21	1.82%		
Transport, Postal & Warehousing	6	0.52%		
Other services	0	0.00%		
Electricity, gas, water & waste services	0	0.00%		
Mining	0	0.00%		
Agriculture, Forestry & Fishing	0	0.00%		
Total	2221			
Unemployed	1420			
Jobs per hectare	25			

In 2019, the Council will be able to provide a supplementary 100 jobs per hectare for the South Island. The amount of jobs per hectare is based on the jobs per hectare in the 2019 Census. The amount of jobs per hectare is based on the jobs per hectare in the 2019 Census. The amount of jobs per hectare is based on the jobs per hectare in the 2019 Census. The amount of jobs per hectare is based on the jobs per hectare in the 2019 Census.

Appendix 2 – Reference Maps

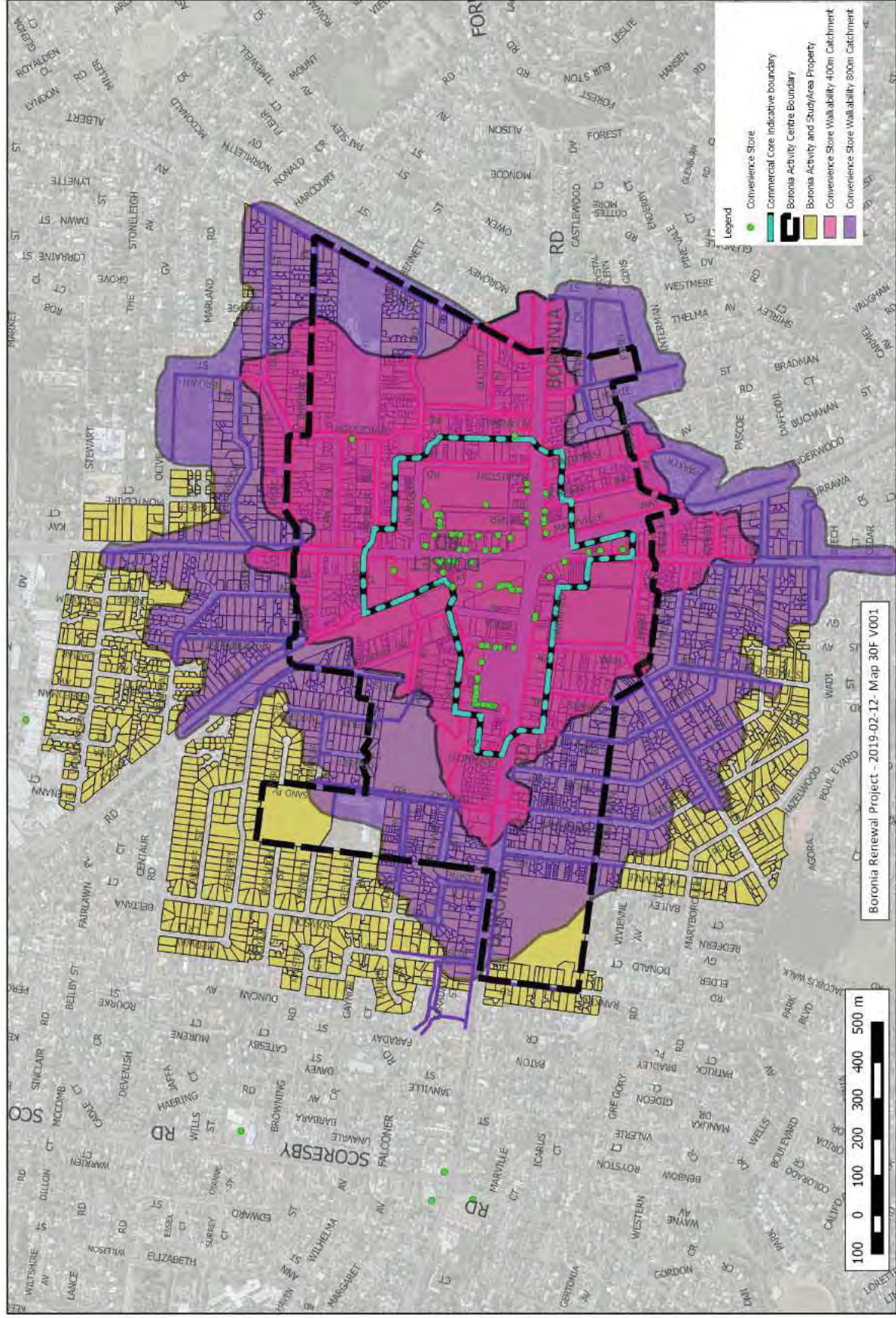
Map 30A – Train Station Walkability Map

Train Station Walkability Map



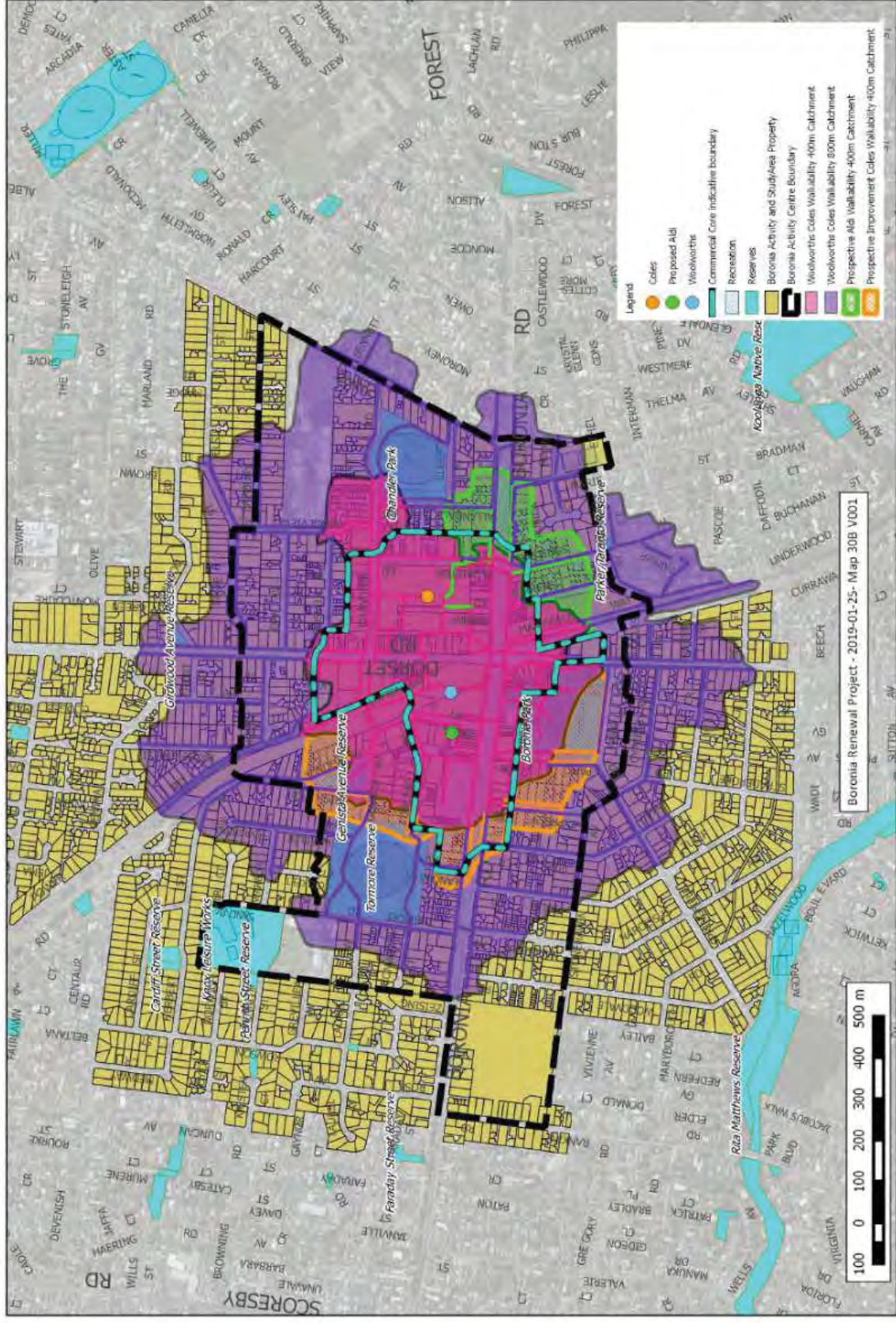
Map 30F – Conveniences Walkability Map

Convenience Store Walkability Map



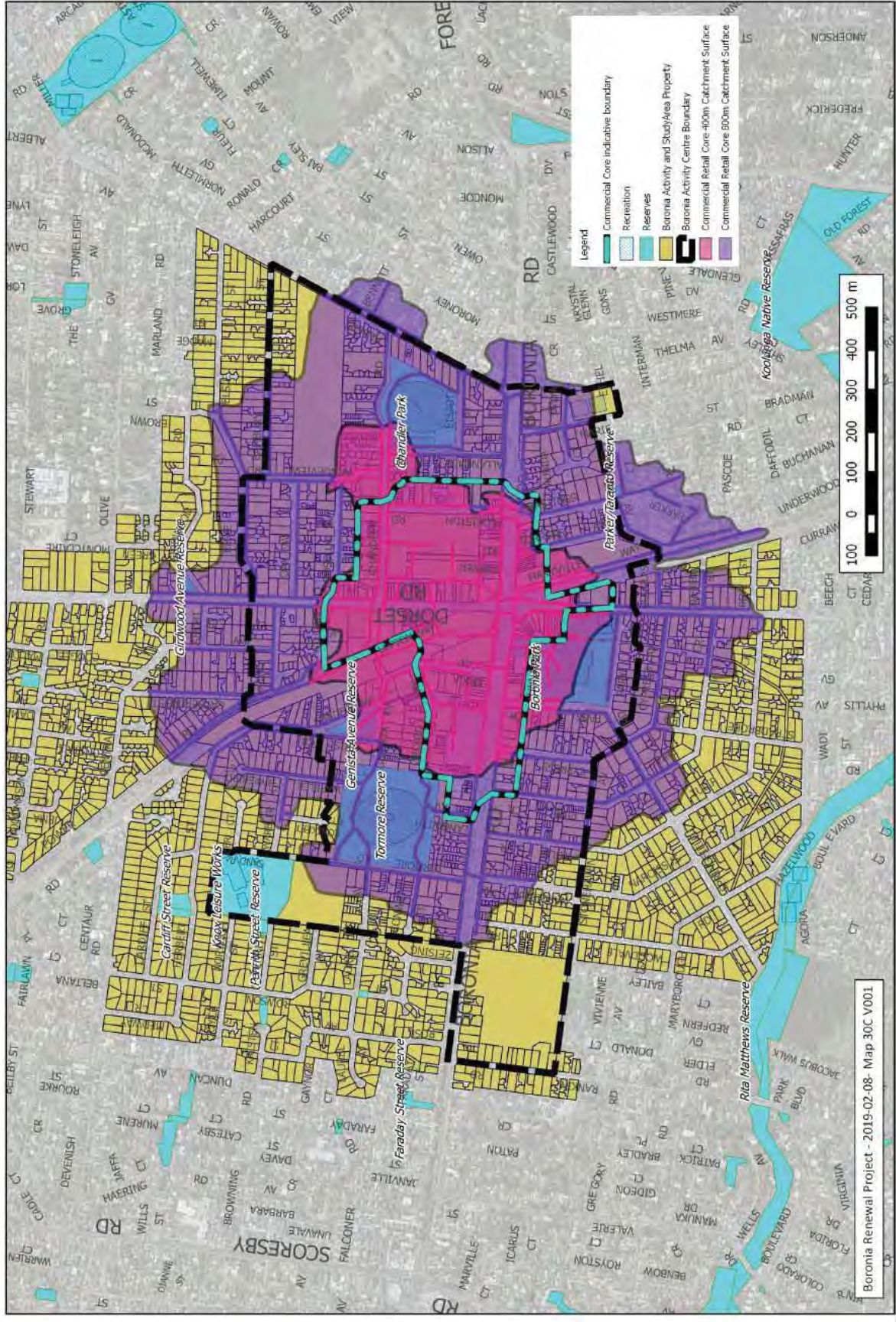
Map 30B – Groceries Walkability Map

Grocery Walkability Map



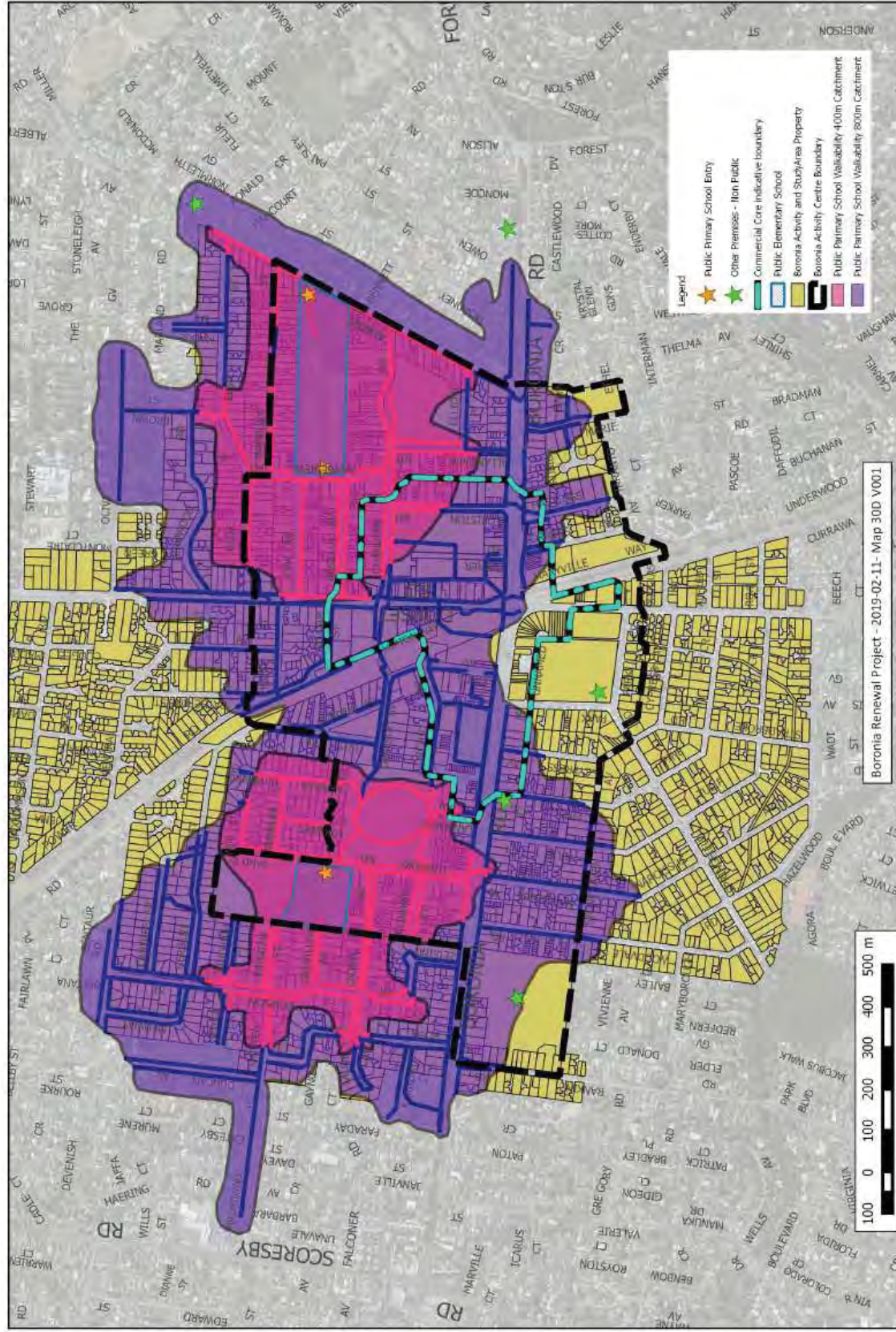
Map 30C - Commercial Core Walkability Map

Commercial Retail Core Walkability Map



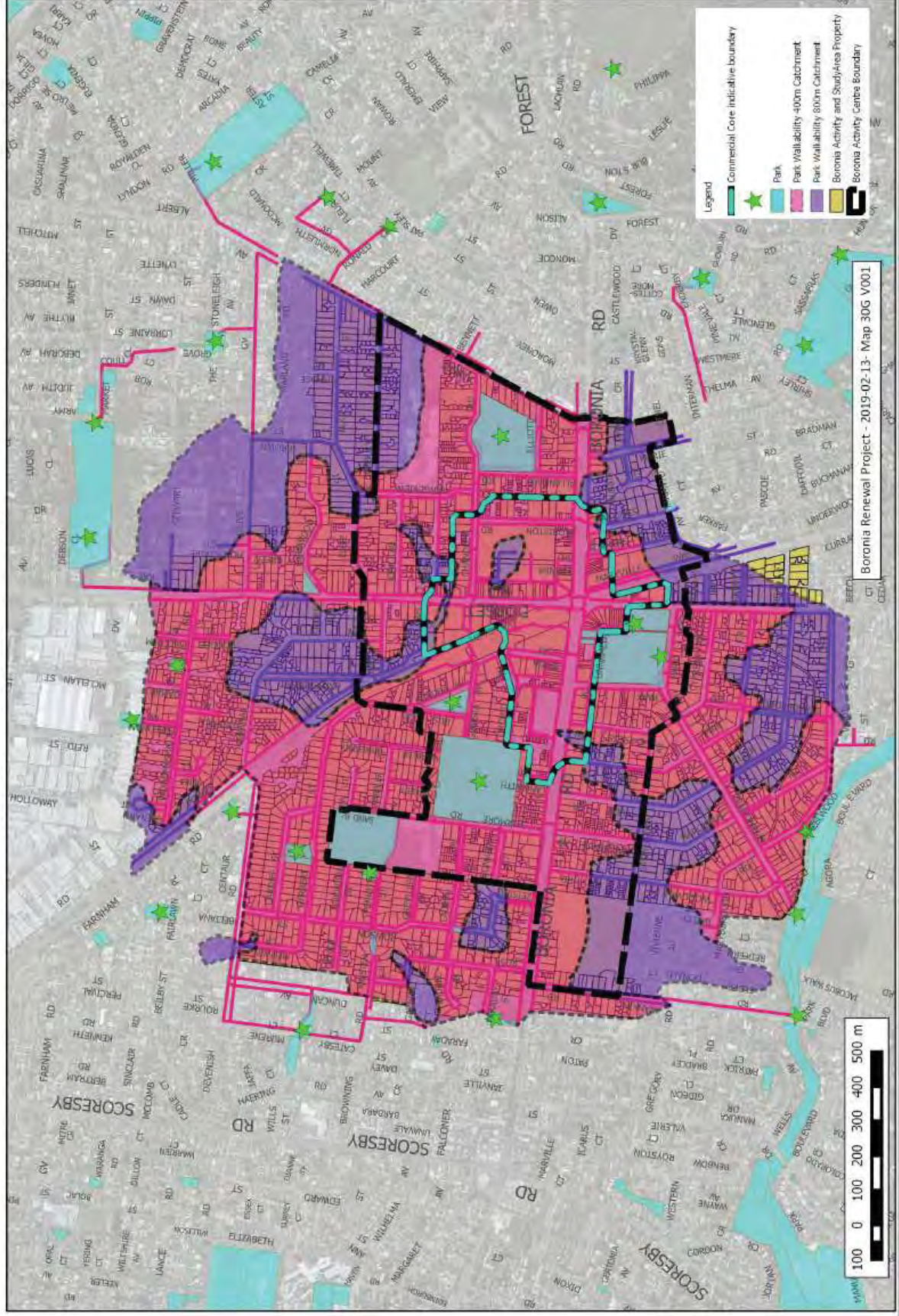
Map 30D – Public Primary School Walkability Map

Public Primary School Walkability Map



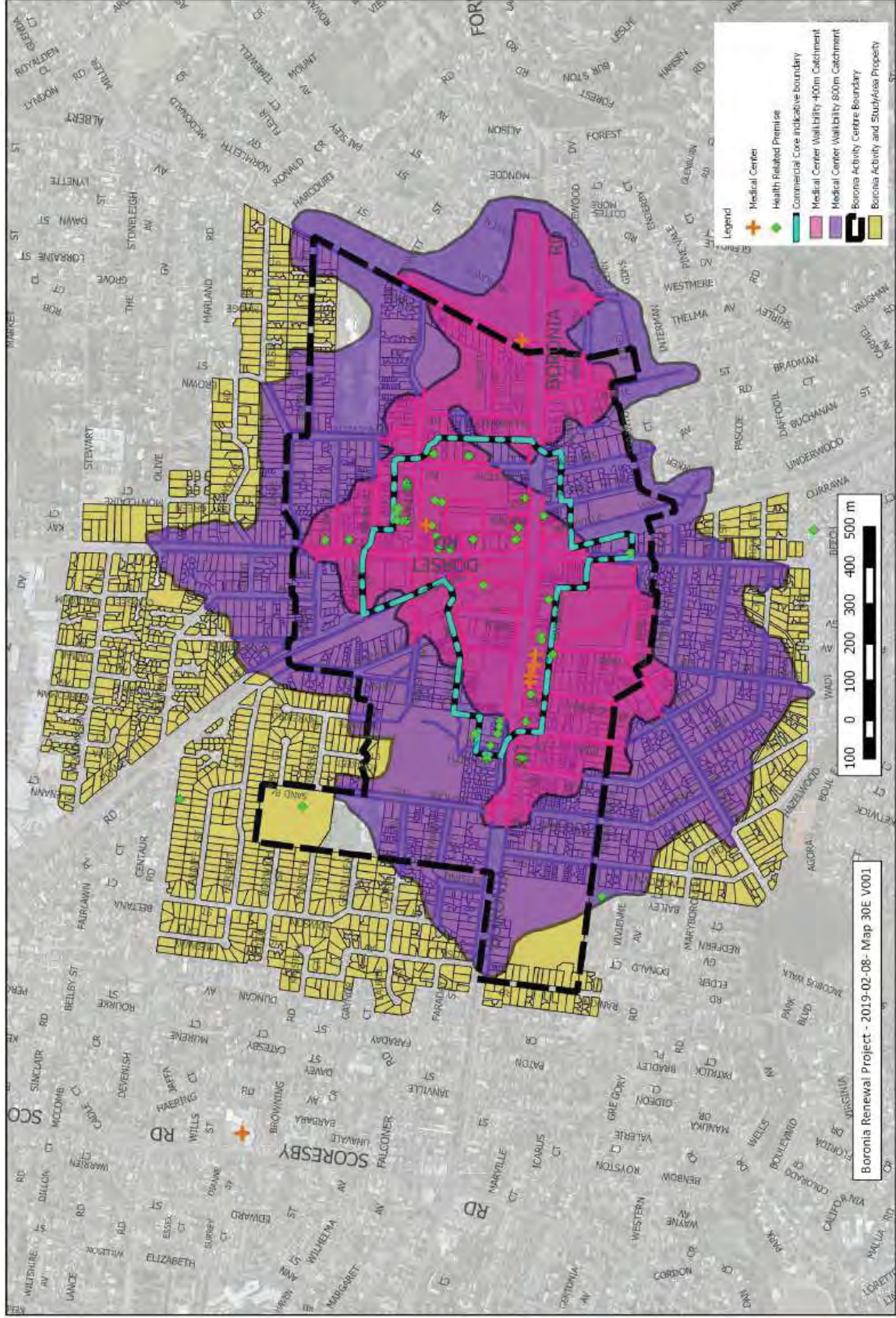
Map 30G – Public Parks Walkability Map

Park Walkability Map



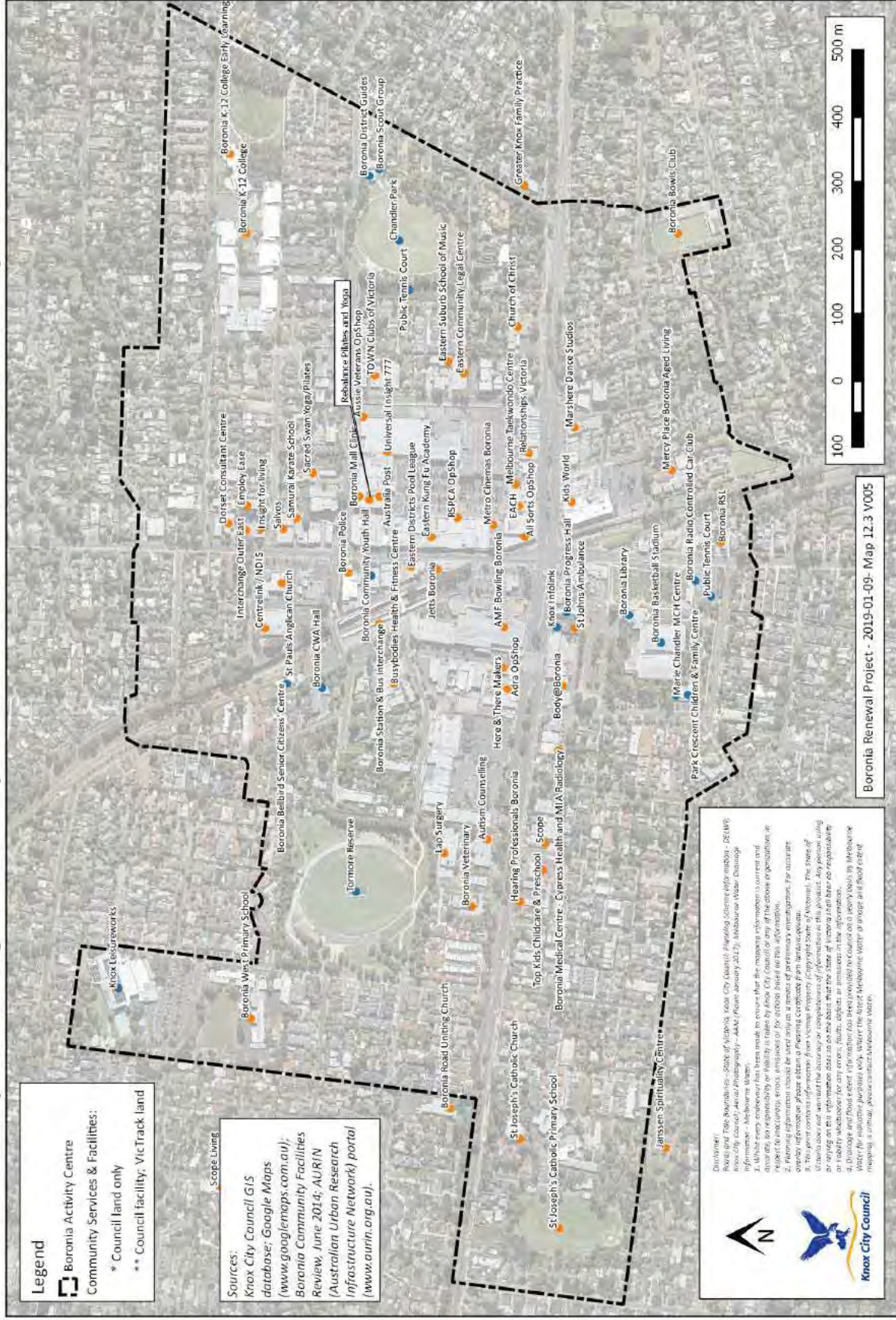
Map 30E – Medical Premises Walkability Map

Medical Center Walkability Map



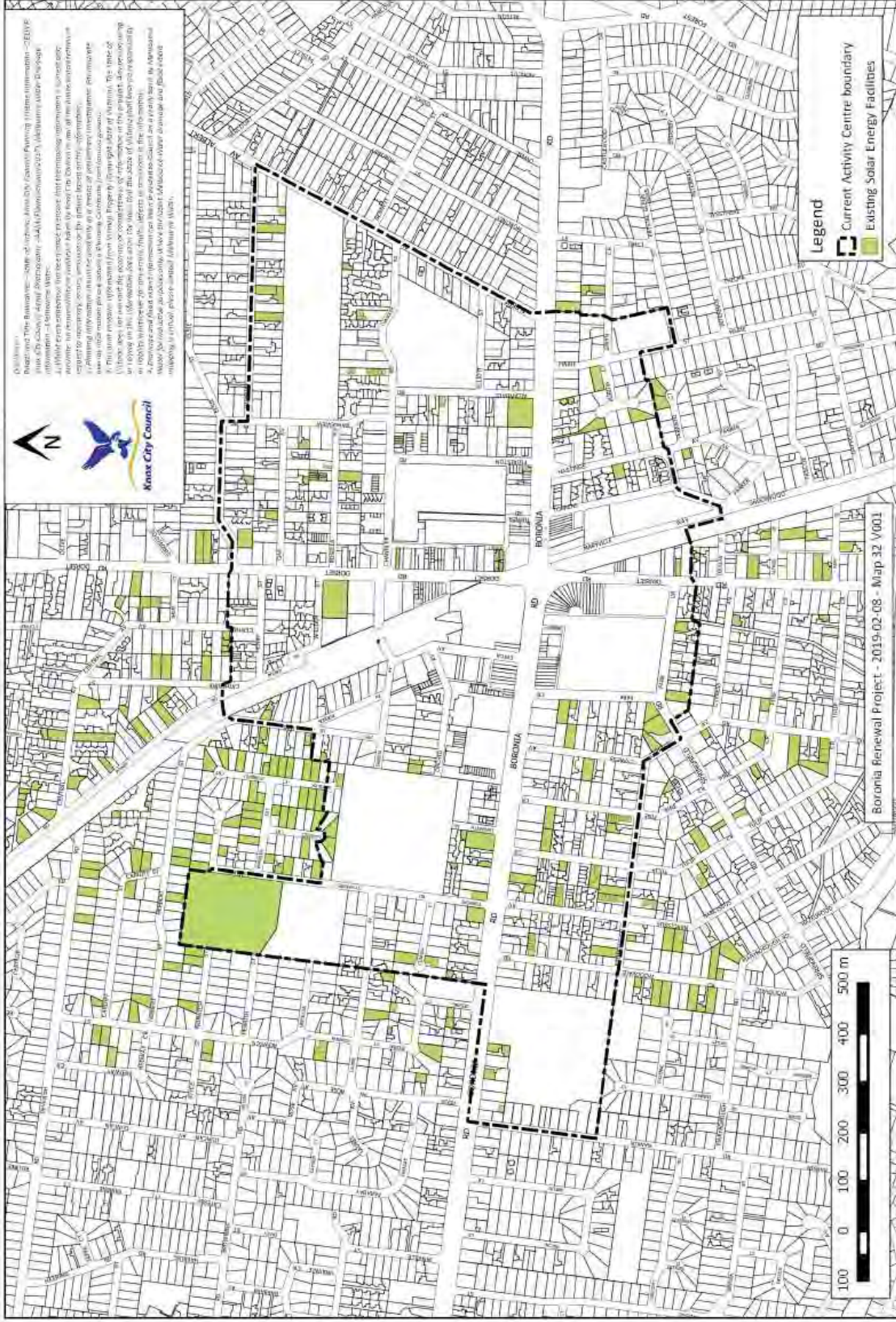
Map 12.3 - Community Services & Facilities map – Boronia Activity Centre

Map 3: Existing Community Services & Facilities - Boronia Activity Centre



Map 32 – Existing solar energy facilities map

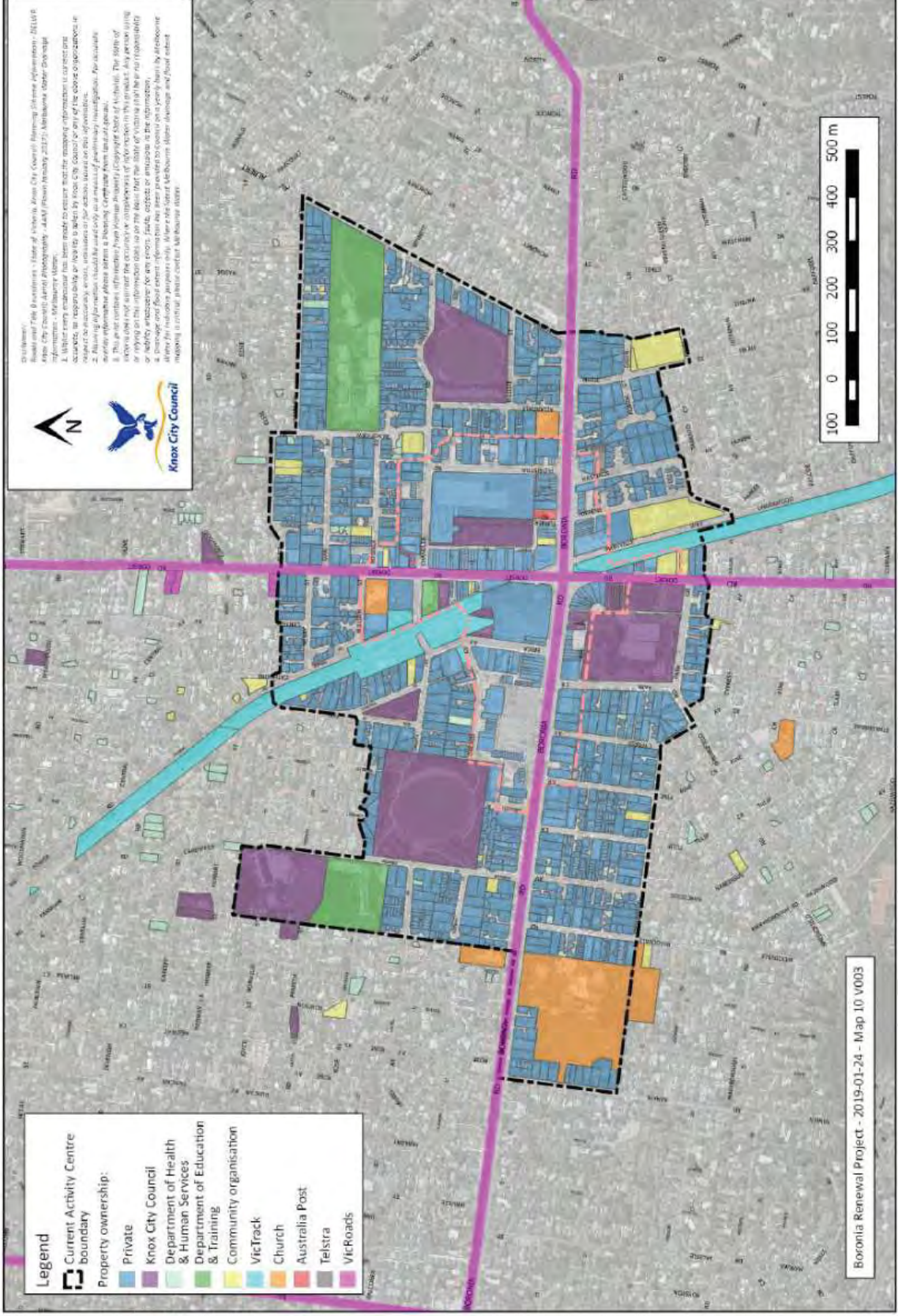
Existing Solar Energy Facilities Map



Other relevant maps

Map 10A - Property ownership by category

Property ownership



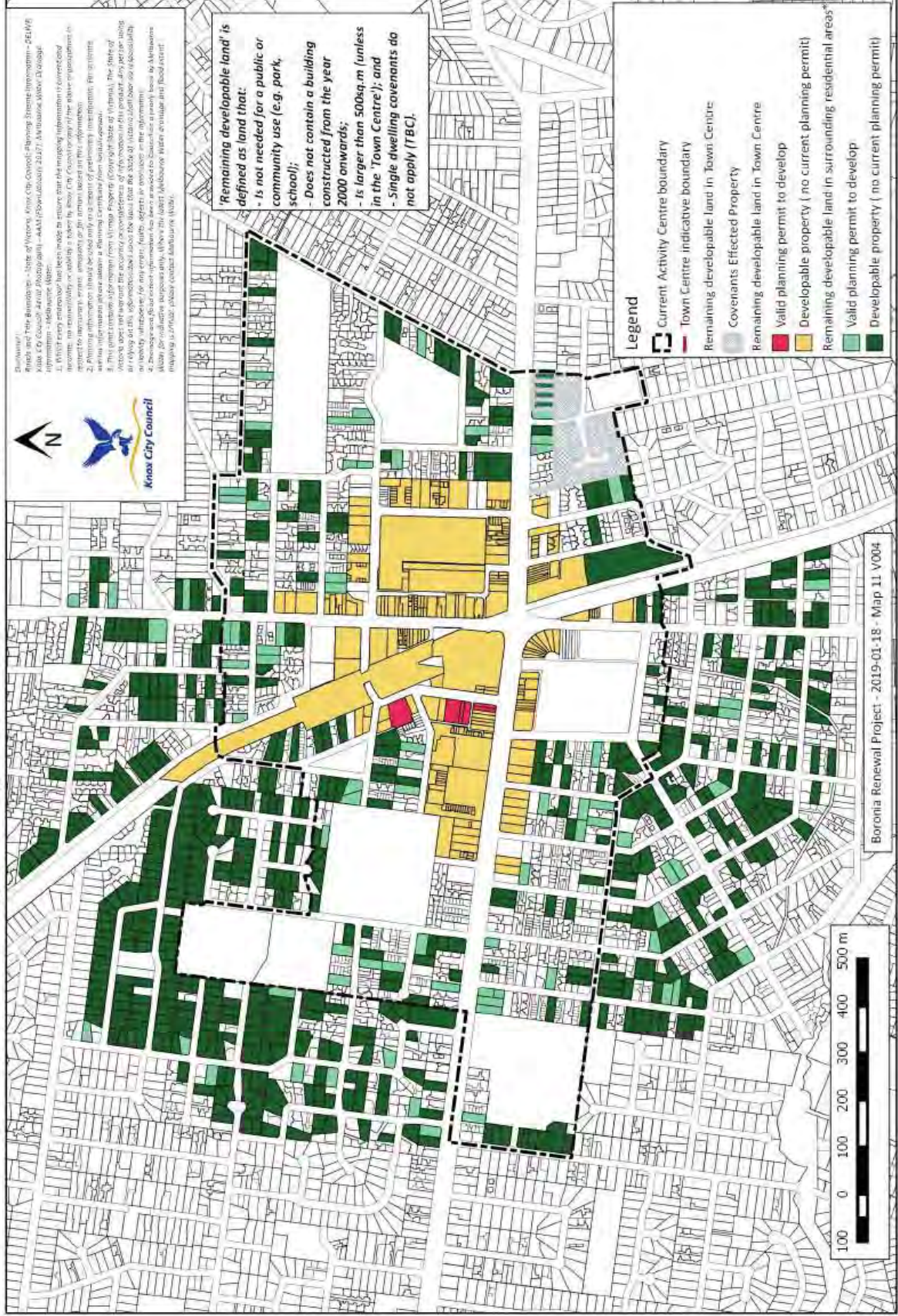
Map 11.1A - Age of building construction

Age of building construction



Map 11.3A - Remaining developable land: town centre and surrounds

Remaining developable land: town centre and surrounds



Appendix 3 - VicSmart

“VicSmart is a streamlined assessment process for straightforward planning permit applications. Classes of application are identified in the planning scheme as being VicSmart and have specified requirements for information, assessment processes and decision guidelines.

Key features of VicSmart include:

- ***a 10 day permit process***
- ***applications are not advertised***
- ***information to be submitted with an application and what council can consider is pre-set***
- ***the Chief Executive Officer of the council or delegate decides the application.”***

Source: <https://www.planning.vic.gov.au/permits-and-applications/vicsmart>

In short, VicSmart means:

- The applicant may expect a permit within 10 statutory days, or benefit of failure to determine appeal rights. The applicant must provide all information required by the Scheme, including all determination by statutory referral authorities to be eligible to VicSmart.
- VicSmart applications are not advertised and there is no third-party appeal rights.
- Council officers have 4 days of receipt to determine whether the application is complete and request further information. Council officers are limited in the information they may request, but also in the decision guidelines to determine an application.
 - o E.g. the Planning Policy Framework (e.g. MSS – LPPF) are not considered.
- The limited timeframe for decision (or requesting information) means that internal specialist department referral input are unlikely to occur.
 - o Issues may arise requiring corrective measures by another branch of Council if not identified; particularly if corrective measure is not required by a valid condition on the permit.
 - o This requires Departments to be proactive and determinative in the outcome and standard sought as it may not be possible to negotiate or require information from the applicant.
 - o More pressure is left to the Planning officer to make an appropriate and determinative decision that considers holistic issues/solutions, amenity, and will benefit the community.
- More than one VicSmart triggers can be included but an application does not benefit of the VicSmart process if it comprises another permit trigger which is not VicSmart eligible.
- VicSmart classes of permit can be created by Council.
- VicSmart classes of permit are delegated to officers (via the CEO) and are not eligible to call-in/determination by Council.

VicSmart for buildings and works under the zone (Commercial, and ACZ)

Under the ACZ and Commercial Zone, proposal for buildings and works that are less than \$500,001 in cost, for which a permit is not required for the use or under any other provisions of the Scheme (not VicSmart eligible) could be applied under the VicSmart process if the proposal triggered a permit for the development (as default, or by the schedule).

Large scale development would generally imply cost higher than \$500,000 and not be eligible but development up to this amount can still have significant impact as example:

- There will no regard to a requirement, objective, or guidance that is solely identified in the MSS/LPPF.
- Proposal may not necessarily satisfy other statutes (e.g. waste management associated with food premises, building regulations).

It is important to note that other VicSmart categories also includes signage [**type of sign and location**] and car parking [**waiver of up to 10 spaces**].

Attachment – Fact Sheet Zone

(major differences highlighted)

MAIN FEATURES	ACTIVITY CENTRE ZONE	COMMERCIAL 1 ZONE	MIXED USE ZONE
OVERVIEW OF ZONE	This zone applies to Activity Centre and encourage a mixture of uses and the intensive development of the activity centre.	It allows a wide range of commercial and accommodation activities without a permit, including a supermarket or shop	This zone provides for a range of residential, commercial, industrial and other uses and is suitable for areas with a mixed use character.
'PURPOSE' OF ZONE (as specified in zone provisions)	<ul style="list-style-type: none"> To encourage a mixture of uses and the intensive development of the activity centre: <ul style="list-style-type: none"> As a focus for business, shopping, working, housing, leisure, transport and community facilities. To support sustainable urban outcomes that maximise the use of infrastructure and public transport. To deliver a diversity of housing at higher densities to make optimum use of the facilities and services. To create through good urban design an attractive, pleasant, walkable, safe and stimulating environment. To facilitate use and development of land in accordance with the Development Framework for the activity centre. 	<ul style="list-style-type: none"> To create vibrant mixed use commercial centres for retail, office, business, entertainment and community uses. To provide for residential uses at densities complementary to the role and scale of the commercial centre. 	<ul style="list-style-type: none"> To provide for a range of residential, commercial, industrial and other uses which complement the mixed-use function of the locality. To provide for housing at higher densities. To encourage development that responds to the existing or preferred neighbourhood character of the area. To facilitate the use, development and redevelopment of land in accordance with the objectives specified in a schedule to this zone.
LAND USE PROVISIONS			
As-of Right Uses Examples of uses where a planning permit is not required (Section 1 use)	<ul style="list-style-type: none"> Discretionary table of use created by Council Office Retail / Shop Accommodation (max 2m ground level frontage) Note: Refer to Commercial 1 Zone clause for full list of uses. 		
Permit Required Uses Examples of uses where a planning permit is required (Section 2 use)	<ul style="list-style-type: none"> Discretionary table of use created by Council Accommodation (if at ground level) Industry Place of Assembly Note: Refer to Commercial 1 Zone clause for full list of uses. 		
Prohibited Uses Examples of uses which are prohibited	<ul style="list-style-type: none"> Discretionary table of use created by Council Note: Refer to Commercial 1 Zone parent clause for full list of prohibited uses. 		
DEVELOPMENT CONTROLS			
Building Heights (NB. heights apply only to buildings used for dwellings or residential buildings)	<p>Discretionary height to be set by Council.</p> <p>NIL Default Zone Controls.</p> <ul style="list-style-type: none"> Set by Council in a Schedule <p>Some exemptions to the mandatory building heights apply, please see the Mixed Use Zone parent clause.</p>		

MAIN FEATURES	RESIDENTIAL GROWTH ZONE	GENERAL RESIDENTIAL ZONE	NEIGHBOURHOOD RESIDENTIAL ZONE
<p>OVERVIEW OF ZONE</p>	<p>The Residential Growth Zone is designed to enable new housing growth and diversity near activity centres, train stations and other areas suitable for increased housing activity. This means greater heights and a mix of townhouses, flats and apartments.</p> 	<p>The General Residential Zone is designed to enable a number of different types of housing stock to be built (e.g. a mix of single dwellings, units and some townhouses).</p> 	<p>The Neighbourhood Residential Zone is designed to protect areas of mostly single dwellings, heritage and consistent neighbourhood character.</p> 
<p>‘PURPOSE’ OF ZONE (as specified in zone provisions)</p>	<ul style="list-style-type: none"> To provide housing at increased densities in buildings up to and including four storey buildings. To encourage a diversity of housing types in locations offering good access to services and transport including activity centres and town centres. To encourage a scale of development that provides a transition between areas of more intensive use and development and other residential areas. To ensure residential development achieves design objectives specified in a schedule to this zone. To allow educational, recreational, religious, community and a limited range of other non-residential uses to serve local community needs in appropriate locations. 	<ul style="list-style-type: none"> Encourage development that respects the neighbourhood character of the area. Encourage a diversity of housing types and housing growth particularly in locations offering good access to services and transport. To allow educational, recreational, religious, community and a limited range of other non-residential uses to serve local community needs in appropriate locations. 	<ul style="list-style-type: none"> Recognise areas of predominantly single and double storey residential development. To manage and ensure that development respects the identified neighbourhood character, heritage, environmental or landscape characteristics. To allow educational, recreational, religious, community and a limited range of other non-residential uses to serve local community needs in appropriate locations.
<p>LAND USE PROVISIONS</p>			
<p>As-of Right Uses Examples of uses where a planning permit is not required (Section 1 use)</p>	<ul style="list-style-type: none"> Use of a building as an dwelling Home occupation Medical centre and place of worship up to 250sqm Food and drink premises (other than a convenience restaurant, hotel or tavern) and shop up to 100sqm^{1,2}. <p>Note: Refer to Residential Growth Zone parent clause for full list of uses.</p>	<ul style="list-style-type: none"> Use of a building as an dwelling Home occupation Medical centre and place of worship up to 250sqm² Bed and breakfast (up to 10 persons) Residential aged care facility <p>Note: Refer to General Residential Zone parent clause for full list of uses.</p>	<ul style="list-style-type: none"> Use of a building as an dwelling Home occupation Bed and breakfast (up to 10 persons) Medical centre and place of worship up to 250sqm² Residential aged care facility <p>Note: Refer to Neighbourhood Residential Zone parent clause for full list of uses.</p>
<p>Permit Required Uses Examples of uses where a planning permit is required (Section 2 use)</p>	<ul style="list-style-type: none"> Office up to 250sqm¹. Hotel or Tavern Shop (including a convenience shop if it exceeds 100sqm)^{1,2}. Convenience restaurant¹. Medical centres or places of worship (if Section 1 condition is not met) <p>Note: Refer to Residential Growth Zone parent clause for full list of uses.</p>	<ul style="list-style-type: none"> Convenience restaurant or takeaway food premises². Convenience shop Hotel or Tavern Medical centres or places of worship (if Section 1 condition is not met) <p>Note: Refer to General Residential Zone parent clause for full list of uses.</p>	<ul style="list-style-type: none"> Convenience shop with a leaseable floor area not exceeding 80sqm Convenience restaurant or takeaway food premises.² Hotel or Tavern Medical centres or places of worship (if Section 1 condition is not met) <p>Note: Refer to Neighbourhood Residential Zone parent clause for full list of uses.</p>

MAIN FEATURES	RESIDENTIAL GROWTH ZONE	GENERAL RESIDENTIAL ZONE	NEIGHBOURHOOD RESIDENTIAL ZONE
<p>Prohibited Uses</p> <ul style="list-style-type: none"> • Adult sex bookshop • Brothel • Bottle shop • Office, shop or convenience restaurants (if the Section 2 conditions are not met) <p>Note: Refer to Residential Growth Zone parent clause for full list of prohibited uses.</p>	<ul style="list-style-type: none"> • Adult sex bookshop • Brothel • Bottle shop • Office (other than medical centre) • Retail premises (other than a community market, convenience shop, food and drink premises) • Convenience restaurant or takeaway food premises (if the Section 2 conditions are not met) <p>Note: Refer to General Residential Zone parent clause for full list of prohibited uses.</p>	<ul style="list-style-type: none"> • Adult sex bookshop • Brothel • Bottle shop • Office (other than medical centre) • Retail premises (other than a community market, convenience shop, food and drink premises) • Convenience shop, convenience restaurant or takeaway food premises (if the Section 2 conditions are not met) <p>Note: Refer to Neighbourhood Residential Zone parent clause for full list of prohibited uses.</p>	<p>NEIGHBOURHOOD RESIDENTIAL ZONE</p>

¹. Located within 100m of a commercial or mixed use zone

². Adjoins or has access to a road in the road zone

DEVELOPMENT CONTROLS

<p>Building Heights (NB. heights apply only to buildings used for dwellings or residential buildings)</p>	<p>Default Zone Controls:</p> <ul style="list-style-type: none"> • Maximum (discretionary¹) height of 13.5m – 4 storeys (unless specified otherwise in a local schedule to the zone). 	<p>Default Zone Controls:</p> <ul style="list-style-type: none"> • Maximum height must not exceed the height specified in a schedule. If no height is specified, the maximum height must not exceed 11m (3 storeys). <p>Some exemptions to the mandatory building heights apply, please see the General Residential Zone parent clause.</p>	<p>Default Zone Controls:</p> <ul style="list-style-type: none"> • Maximum height must (mandatory) not exceed the height specified in the schedule. If no height is specified, the maximum height must not exceed 9m (2 storeys). <p>Some exemptions to the mandatory building heights apply, please see the Neighbourhood Residential Zone parent clause.</p>
<p>Site Density Controls (Number of dwellings per lot)</p>	<p>Default Zone Controls:</p> <ul style="list-style-type: none"> • Does not specify a limit on the number of dwellings on a lot. 	<p>Default Zone Controls:</p> <ul style="list-style-type: none"> • Does not specify a limit on the number of dwellings on a lot. 	<p>Default Zone Controls:</p> <ul style="list-style-type: none"> • Does not specify a limit on the number of dwellings on a lot.
<p>Dwelling Coverage Tool</p>	<p>Default Zone Controls:</p> <ul style="list-style-type: none"> • Does not specify a requirement for a 'garden area' to be provided. 	<p>Default Zone Controls:</p> <ul style="list-style-type: none"> • Development of a dwelling or residential building on a lot, and/or subdivision that creates vacant lots, must ensure each lot contains the minimum garden area: o 400-500sqm – 25% o 501-650sqm – 30% o 651+sqm – 35% 	<p>Default Zone Controls:</p> <ul style="list-style-type: none"> • Development of a dwelling or residential building on a lot, and/or subdivision that creates vacant lots, must ensure each lot contains the minimum garden area: o 400-500sqm – 25% o 501-650sqm – 30% o 651+sqm – 35%
<p>Construction and extension of one dwelling on a lot</p>	<p>Default Zone Controls:</p> <ul style="list-style-type: none"> • A planning permit is required to construct or extend a dwelling on a lot 300sqm or less. • There is no ability to specify a larger lot size (e.g. 500sqm) in the schedule to the zone. 	<p>Default Zone Controls:</p> <ul style="list-style-type: none"> • A planning permit is required to construct or extend a dwelling on a lot 300sqm or less. • There is the ability to change this requirement to 500sqm or less in a schedule to the zone. 	<p>Default Zone Controls:</p> <ul style="list-style-type: none"> • A planning permit is required to construct or extend a dwelling on a lot 300sqm or less. • There is the ability to specify a larger lot size (e.g. 800sqm) in the schedule to the zone.

Appendix 5 - Summary of Use controls for Boronia Structure Plan Area

USE	ACZ1-1	ACZ1-2	ACZ1-3	ACZ1-4/5/6	C1Z	C2Z	C3Z	MUZ	RGZ	GRZ
Clause 62.01	S1 C	S1 C	S1 C	S1 C	S1 C	S1 C	S1 C	S1 C	S1 C	S1 C
Accommodation	S1 C	S1 C	S1 C	S2	S1 C	S3	S3	S2	S2	S2
Camping and caravan park	S3	S3	S3	S3	Same	Same	Same	Same	Same	Same
Corrective institution	S3	S3	S3	S3	S3	Same	Same	Same	Same	Same
Dependent person's unit	S1 C	S1 C	S1 C	S1 C	S1 C	Same	Same	S1 C	S1 C	S1 C
Dwelling	S1 C	S1 C	S1 C	S1	Same	Same	S2 C	S1	S1	S1
Bed and Breakfast	S1 C	S1 C	S1 C	S1 C	Same	Same	Same	S1 C	S1 C	S1 C
Caretakers house	S1 C	S1 C	S1 C	S1	Same	S2	Same	S1	S2	S1
Group accommodation	S1 C	S1 C	S1 C	S2	Same	S3	S3	S2	Same	S2
Host farm	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Residential aged care facility	Same	Same	Same	S1	Same	Same	Same	S1	S1	S1
Residential building	S1 C	S1 C	S1 C	S2	Same	Same	S2 C	S2	S2	S2
Community care accommodation	S1 C	S1 C	S1 C	S1 C	S1 C	Same	Same	S1 C	S1 C	S1 C
Residential hotel	S1 C	S1 C	S1 C	S2	Same	S2	Same	S2	S2	S2
Motel	S1 C	S1 C	S1 C	Same	Same	S2	Same	Same	Same	Same
Rooming house	S1 C	S1 C	S1 C	S1 C	S1 C	S3	Same	S1 C	S1 C	S1 C
Residential Village	Same	Same	Same	S2	Same	Same	S3	S2	S2	S2
Retirement Village	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Agriculture	S2	S2	S2	S2	S2	S2	S2	Same	Same	Same
Animal husbandry	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Animal keeping	S1 C	S1 C	S1 C	S1 C	Same	Same	Same	S1 C	S1 C	S1 C
Animal boarding	Same	Same	Same	Same	Same	Same	Same	S2	S3	S3
Dog breeding	Same	Same	Same	Same	Same	Same	Same	S1 C	S1 C	S1 C
Racing dog breeding	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Animal production	S3	S3	S3	S3	S3	S3	Same	S3	S3	S3
Grazing animal production	Same	Same	Same	Same	S2	S2	Same	S2	S2	S2
Intensive animal production	Same	Same	Same	Same	S3	S3	Same	S3	S3	S3
Cattle feedlot	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Intensive dairy farm	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Pig farm	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Poultry farm	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Broiler farm	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Poultry hatchery	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Animal training	S2	S2	S2	S2	S2	S2	Same	S2	Same	Same
Horse riding school	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Racing dog training	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Apiculture	62.01	62.01	62.01	62.01	62.01	62.01	62.01	62.01	62.01	62.01
Horse stables	S3	S3	S3	S3	S2	S2	S2	S2	S3	S3
Aquaculture	S2	S2	S2	S2	Same	Same	Same	Same	S2	S2
Crop raising	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Horticulture	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Market garden	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Rice growing	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Timber production	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Child care centre	S1 C	S1 C	S1	Same	S1 C	Same	Same	Same	Same	Same
Kindergarten	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Education	S1	S1	S1	Same	S1	Same	S1	Same	Same	Same
Employment training centre	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Primary school	Same	Same	Same	Same	Same	Same	S2	Same	Same	Same
Secondary school	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Tertiary education	Same	Same	Same	Same	Same	Same	S1	Same	Same	Same
Industry	S2 C	S2 C	S3	S3	S2 C	S1 C	S1 C	S2 C	S3	S3
Materials recycling	S3	S3	S3	S3	Same	S2	S2	S3	Same	Same
Refuse disposal	Same	Same	Same	Same	Same	S1 C	S1 C	S2 C	Same	Same
Research and development	S2 C	S2 C	Same	Same	Same	Same	Same	Same	Same	Same
Rural industry	S3	S3	Same	Same	Same	Same	Same	Same	Same	Same
Abattoir	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Sawmill	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Service industry	S2 C	S2 C	Same	Same	Same	Same	Same	Same	Same	Same
Car wash	Same	Same	Same	Same	Same	Same	Same	Same	S2 C	S2 C
Dry cleaner	Same	Same	Same	Same	Same	Same	Same	Same	S3	S3
Motor repairs	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Panel beating	S3	S3	Same	Same	Same	Same	Same	Same	Same	Same
Transfer station	Same	Same	Same	Same	Same	S2 C	S2	S3	Same	Same
Leisure and recreation	S2	S2	S2	S2	S2	S2	S2	S2	S2	S2
Major sports and recreation	S3	S3	S3	S3	S3	S3	S3	Same	Same	Same
Race course	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Minor sports and recreation	S2	S2	S2	S2	S2	S2	S2	Same	Same	Same
Indoor recreation facility	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Dancing school	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same

USE	ACZ1-1	ACZ1-2	ACZ1-3	ACZ1-4/5/6	C1Z	C2Z	C3Z	MUZ	RGZ	GRZ
Informal outdoor recreation	S1	S1	S1	S1	S1	S1	S1	S1	S1	S1
Open sports ground	S2	S2	S2	S2	S2	S2	S2	S2	S2	S2
Outdoor recreation facility	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Amusement park	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Golf course / golf driving range	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Paintball games facility	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Zoo	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Restricted recreation facility	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Motor racing track	S3	S3	S3	S3	S3	S3	S3	Same	S3	S3
Earth and energy resources industry	62.01	62.01	62.01	62.01	62.01	62.01	62.01	62.01	62.01	62.01
Mineral exploration / extraction	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Stone exploration / extraction	Same	Same	Same	Same	Same	Same	Same	S3	Same	S3
Greenhouse gas sequestration / exploration	Same	Same	Same	Same	Same	Same	Same	62.01	Same	62.01
Geothermal energy exploration / extraction	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Petroleum exploration / extraction	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Office	S1 C	S1 C	S1 C	S2	S1 C	S1	S1	S1 C	S3	S3
Bank	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Electoral office	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Medical centre	Same	Same	Same	Same	Same	Same	Same	S1 C	S1 C	S1 C
Real estate agency	Same	Same	Same	Same	Same	Same	Same	S1 C	S3	S3
Travel agency	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Place of assembly	S2	S2	S2	S2	S2	S2	S1 C	S2	S2	S2
Amusement parlour	Same	Same	Same	Same	Same	Same	Same	Same	S3	S3
Carnival	62.01	62.01	62.01	62.01	62.01	62.01	62.01	62.01	62.01	62.01
Cinema	S1	S2	S2	S2	S1	S1 C	S1 C	S2	S2	S2
Circus	62.01	62.01	62.01	62.01	62.01	62.01	62.01	62.01	62.01	62.01
Drive-in theatre	S2	S2	S2	S2	S2	S2	S1 C	S2	S2	S2
Exhibition centre	S1	S1	S1	S1	S1	Same	Same	Same	Same	Same
Art gallery	Same	Same	Same	Same	Same	S1	Same	S1	Same	Same
Museum	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Function centre	S2	S2	S2	S2	S2	S2	Same	S2	Same	Same
Conference centre	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Reception centre	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Hall	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Library	S1	S1	S1	Same	Same	Same	Same	Same	Same	Same
Nightclub	S2 C	S3	S3	S3	Same	Same	Same	Same	S3	S3
Place of worship	S1 C	S1 C	S1 C	S1 C	S1 C	Same	S2 C	S1 C	S1 C	S1 C
Restricted place of assembly	S2	S2	S2	S2	S2	Same	S1 C	S2	S2	S2
Recreational boat facility	Same	Same	Same	Same	Same	Same	S2	Same	Same	Same
Boat launching facility	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Boat ramp / slipway	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Marina	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Jetty / mooring pole / pier / pontoon	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Retail premises	S1	S1	S1	S3	S1	Same	S3	Same	S3	S3
Food and drink premises	Same	Same	Same	S1 C	Same	S1 C	S1 C	S1 C	S2	S2
Convenience restaurant	Same	Same	Same	S2 C	Same	Same	Same	Same	S2 C	S2 C
Hotel	Same	Same	Same	S2	Same	Same	Same	Same	S2	S2
Restaurant	Same	Same	Same	S1 C	Same	Same	Same	Same	Same	Same
Take away food premises	Same	Same	Same	S1 C	Same	Same	Same	Same	S2 C	S2 C
Tavern	Same	Same	Same	S2	Same	Same	Same	Same	S2	S2
Gambling premises	S2	S2	S2	S3	Same	S2	S3	S2	S3	S3
Betting agency	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Gaming premises	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Landscaping gardening supplies	S1	S1	S1	Same	Same	Same	Same	Same	Same	Same
Garden supplies	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Plant nursery	Same	Same	Same	Same	Same	Same	Same	Same	S2	S2
Manufacturing sales	Same	Same	Same	Same	Same	Same	S1	Same	S3	S3
Market	Same	Same	Same	S2	Same	Same	Same	Same	S2	S2
Motor vehicles boat or caravan sales	Same	Same	Same	Same	Same	Same	S3	Same	S3	S3
Car sales	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Postal agency	Same	Same	Same	S1 C	Same	S1	S1	Same	Same	Same
Primary produce sales	S1	S1	S1	Same	Same	S2	S3	Same	Same	Same
Trade supplies	Same	Same	Same	Same	Same	S1	Same	Same	Same	Same
Timber yard	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Shop	Same	Same	Same	S1 C	S1 C	S2	S2 C	S1 C	Same	Same
Adult sex product shop	S2 C	S2 C	S2 C	S3	Same	Same	S2 C	S3	Same	Same
Beauty salon / hairdresser	S1	S1	S1	S1 C	Same	Same	S2 C	S1 C	Same	Same
Bottle shop	S1 C	S1 C	S1 C	S3	Same	Same	Same	Same	Same	Same

USE	ACZ1-1	ACZ1-2	ACZ1-3	ACZ1-4/5/6	C1Z	C2Z	C3Z	MUZ	RGZ	GRZ
Convenience shop	S1	S1	S1	S1 C	Same	Same	Same	Same	S2	S2
Dry cleaning agent	Same	Same	Same	Same	Same	Same	Same	Same	S3	S3
Department store	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Laundromat	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Restricted retail premises	S3	S3	S3	S3	Same	S1	Same	Same	Same	Same
Equestrian supplies	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Party supplies	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Supermarket	S1	S1	S1	S1 C	Same	S1 C	Same	Same	Same	Same
Transport terminal	S2	S2	S2	S2	S2	S2	S2	S2	Same	Same
Airport	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Bus terminal	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Heliport	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Railway station	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Railway	S1	S1	S1	S1	S1	S1	S1	S1	S1	S1
Road freight terminal	S2	S2	S2	S2	S2	S2	S2	S2	S3	S3
Wharf	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Utility installation	Same	Same	Same	Same	Same	Same	Same	Same	S2	S2
Minor utility installation	62.01	62.01	62.01	62.01	62.01	62.01	62.01	62.01	62.01	62.01
Water retarding basin	62.01	62.01	62.01	62.01	62.01	62.01	62.01	62.01	62.01	62.01
Reservoir	S2	S2	S2	S2	S2	S2	S2	S2	S2	S2
Telecommunications facility	62.01	62.01	62.01	62.01	62.01	62.01	62.01	62.01	62.01	62.01
Warehouse	S3	S3	S3	S3	S2 C	S1 C	S2 C	S2 C	S3	S3
Commercial display area	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Fuel depot	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Liquid fuel depot	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Solid fuel depot	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Mail centre	Same	Same	Same	Same	Same	S1	Same	Same	Same	Same
Milk depot	Same	Same	Same	Same	Same	S1 C	Same	Same	Same	Same
Store	S2 C	S2 C	S2 C	S2 C	Same	Same	Same	Same	S2 C	S2 C
Boat and caravan storage	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Freezing and cool storage	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Rural store	S3	S3	S3	S3	Same	Same	Same	Same	Same	Same
Shipping container storage	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Vehicle store	S2 C	S2 C	S2 C	S2 C	Same	Same	Same	Same	Same	Same
Renewable energy facility	S2	S2	S2	S2	S2	S2	S2	S2	S2	S2
Wind energy facility	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Unnested										
Art and craft centre	S1	S1	S1	S2	S1	S1	S1	S2	S2	S2
Brothel	S2 C	S2 C	S2 C	S3	S2	S2	S2	S3	S3	S3
Car park	S2	S2	S2	S2	Same	Same	Same	S2	S2 C	S2 C
Cemetery	Same	Same	Same	Same	Same	Same	Same	Same	S2	S2
Cinema based entertainment facility	S1	S2	S2	S2	S1	S1 C	Same	Same	S3	S3
Crematorium	S2	S2	S2	S2	S2	S2	Same	Same	S2	S2
Display home	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Emergency services facility	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Freeway service centre	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Funeral parlour	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Helicopter landing site	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Home based business	S1	S1	S1	S1	S1	Same	Same	S1	S1	S1
Hospital	S2	S2	S2	S2	S2	S3	Same	S2	S2	S2
Natural systems	62.01	62.01	62.01	62.01	62.01	62.01	62.01	62.01	62.01	62.01
Research centre	S2	S2	S2	S2	S2	S2	S1	S2	S2	S2
Saleyard	Same	Same	Same	Same	Same	Same	S2	Same	S3	S3
Service station	S2 C	S2 C	S2 C	S2 C	Same	Same	Same	Same	S2 C	S2 C
Sign	62.01	62.01	62.01	62.01	62.01	62.01	62.01	62.01	62.01	62.01
Tramway	S2	S2	S2	S2	S1	S1	S1	S1	S1	S1
Veterinary centre	Same	Same	Same	Same	S2	S2	S2	S2	S2	S2
Winery	Same	Same	Same	Same	Same	Same	Same	Same	Same	Same
Innominate	S2	S2	S2	S2	S2	S2	S2	S2	S2	S2
Buildings and works	PR Unless scheduled off	PR Unless scheduled off	PR Unless scheduled off	PR Unless scheduled off	PR	PR	PR	PR S2	PR S2	PR S2
Clause 62.02-2	NPR	NPR	NPR	NPR	NPR	NPR	NPR	NPR	NPR	NPR
Signs	Cat1	Cat1	Cat1/3	Cat3	Cat 1	Cat 1	Cat 1	Cat 3	Cat 3	Cat 3

Control Purpose	ACZ	CIZ	CZZ	C3Z	MUZ	RGZ	GRZ	DDO7
	This zone applies to Activity Centre and encourage a mixture of uses and the intensive development of the activity centre.	It allows a wide range of commercial and accommodation activities without a permit, including a supermarket or shop	This zone encourages offices and associated business and commercial services together with appropriate industry and retailing.		This zone provides for a range of residential, commercial, industrial and other uses and is suitable for areas with a mixed use character.	housing at increased densities up to 4 storeys	To encourage development that respects the neighbourhood character of the area. To encourage a diversity of housing types and housing growth particularly in locations offering good access to services and transport.	Design objectives: To maintain views toward the Dandenong Ranges National Park, To recognise Foothills significance, To reinforce opportunities for terraced forms of development in the south-east section of the centre, To develop underutilised land along the railway line for higher scale development, To recognise Boronia's heritage, To design building heights and form with regard to the topographical form and characteristics of the local area.
General Application	Activity Centre	This zone is applied in mixed use commercial centres for retail, office, business, residential, entertainment and community uses.	Bulky goods, office, light industry		Periphery of activity centres, strategic redevelopment sites?	This zone is intended to be used in locations near activity centres, train stations and other areas suitable for increased housing	This is usually the main zone to be applied in new or established residential areas where there are minimal constraints to residential development.	across entire centre
Height limit	Nil	Nil	Nil		Nil unless scheduled	default 13.5m (4 storeys), unless scheduled	default 11m (3 storeys), unless scheduled (9m in GRZ2, GRZ3)	Heights range from 4.5m (1 storey), 7.5m (2 storey), 9m (2-3 storeys), 11m (3 storey), 14m (4 storey)
S1 uses		office, retail, shop, accommodation (under 2m at ground floor level)	office, restricted retail premises, trade supplies		dwelling (other than bed and breakfast), food and drink premises (under than 150sqm), medical centre (under 250sqm, office (under 250sqm), shop (under 150sqm)	dwelling (other than b+b), home occupation, medical centre (under 250sqm), food and drink (other than convenience restaurant, hotel and tavern, (100m of and/or same frontage as C1Z or MUZ, access to RDZ, under 100sqm), shop (other than adult shop and bottle shop (100m of and/or same frontage as C1Z or MUZ, access to RDZ, under 100sqm), accommodation (except dependent persons, dwelling and residential aged care), convenience restaurant, convenience shop (if \$1 shop conditions aren't met - must have access to RDZ), hotel, office (not medical centre - 100m of same frontage as C1Z, under 250sqm), place of assembly (except amusement parlour, carnival, circus, nightclub and place of worship), bookshop, Bottle shop and Convenience shop – if the Section 1 conditions are not met, 100m of and same frontage as C1Z and MUZ),	dwelling (other than B+B), home occupation, medical centre (under 250sqm, meets 52.06, access to RDZ), place of worship (under 250sqm, access to RDZ), residential aged care facility	N/A
S2 uses		accommodation, industry (must meet 52.10), place of assembly (except carnival, cinema, exhibition centre and place of worship)	agriculture, caretakers house, motel, residential hotel, place of assembly (except carnival, cinema and circus), Retail premises (other than Food and drink premises, Postal agency, Restricted retail premises, Supermarket and Trade supplies),		accommodation (except dependent persons unit, dwelling and residential aged care), industry assembly (except carnival, circus and place of worship), retail premises (other than food and drink premises and shop),	accommodation (except dependent persons, dwelling and residential aged care), convenience restaurant, convenience shop (if \$1 shop conditions aren't met - must have access to RDZ), hotel, office (not medical centre - 100m of same frontage as C1Z, under 250sqm), place of assembly (except amusement parlour, carnival, circus, nightclub and place of worship), bookshop, Bottle shop and Convenience shop – if the Section 1 conditions are not met, 100m of and same frontage as C1Z and MUZ),	accommodation (except dependent persons, dwelling and residential aged care), convenience restaurant (access to RDZ), convenience shop, food and drink (other than convenience restaurant and take away food), ace of assembly (except amusement parlour, carnival, circus, nightclub and place of worship), take away food (access to RDZ)	N/A

S3 uses		corrective institution, intensive animal husbandry, major sports and recreation facility, motor racing track	Accommodation (other than caretakers house, motel and residential hotel), hospital, intensive animal husbandry	Adult bookshop, brothel, materials recycling, transfer station, stone extraction.	adult book shop, amusement parlour, bottle shop, brothel, cinema based entertainment facility, industry, nightclub, Retail premises (other than Community market, Food and drink premises, Plant nursery and Shop)	amusement parlour, brothel, cinema based entertainment facility, industry, nightclub, office (other than medical centre), Retail premises (other than Community market, Convenience shop, Food and drink, Plant nursery)	N/A
Construction and extension of 1 dwelling on a lot No permit is required	N/A		N/A	Permit required	Permit required	Permit required - must meet minimum garden requirements,	N/A
Construction and extension of 2 or more dwellings on a lot	N/A		N/A		Permit required	Permit required	N/A
54+55 requirements	N/A		N/A		Standard list	Standard list	N/A
B+W abutting other res zone	N/A		N/A	must met CI 55.04-1, 55.04-2, 55.04-3, 55.04-5 and 55.04-6 along affected boundary	must met CI 55.04-1, 55.04-2, 55.04-3, 55.04-5 and 55.04-6 along affected boundary		N/A
B+ w Permissions	permit required, exemptions for atm, alterations to building façade	permit required, exemptions for atm, alterations to building façade	permit required, atm, alterations to building façade	permit required for b+w in association with S2 use,	permit required for b+w in association with S2 use,	no permit required for railway works, to extend existing dwelling or construct b+w ancillary to dwelling if under 7.5m,	
Neighbourhood and site description and design response	Yes	Yes	N/A	N/A	Yes	N/A	
Design Controls	site, landscape and elevation plans	site, landscape and elevation plans	site, landscape and elevation plans	site, landscape and elevation plans (b+w associated with S2 use only)	Specified in Schedules	Specified in Schedules	relating to dwelling types, heritage, safety, ESD, character, foothills views, colours and materials, landscape design, signage
relevance for Boronia	retain for commercial core, some scope for future mixed use areas?	retain for commercial core, some scope for future mixed use areas?	NIL	application on sites over 4 storeys, Boronia Mall? Zagames site, other strategic development sites?	Retain Schedule for Boronia, apply to current MUZ areas that have been developed or periphery of centre, Orchid Ave/ Erica Ave cnr	Retain Schedule for Boronia, apply to current MUZ areas that have been developed , some areas could be converted to MUZ/ RGZ	retain for entire centre, reword for clarity, redundant provisions etc.

Appendix 6 – Planning Scheme Amendment Analysis

First iteration

Local Planning Policy Framework

(Future incorporation within the Planning Policy Framework – it is understood that the process of PPF translation will impact any future changes and may render them useless)

Municipal Strategic Statement (MSS)	Issues	Notes	Actions	Implications	Outcomes
<p>Clause 21.01-1 – Snapshot of Knox</p>	<p>Pre-2016 census data represented in the snapshot, data is out of date.</p> <p>State of Knox process undertaken by Council relies on own-grown data from idconsulting and not Victoria in future as written in the MSS</p>	<p>Update demographic data</p> <ul style="list-style-type: none"> - This section of the Scheme will be removed from the MSS with the PPF translation and integrated in the Municipal statement which is not part of the Scheme. 	<p>State of Knox is being updated, which is a reference document, but the process will not extend to correct the information as written in the scheme. There would be a larger policy impact to rewrite this beyond just the numbers and actually also involve source)</p> <p>Final action: no action, and retain for ppf translation review or other scheme amendment update once the State of Knox is completed, and PPF so that it can be rewritten in the new format.</p>	<p>Out of date information depicted in the Scheme</p>	<p>Nil change</p>
<p>Clause 21.01-2 - key issues and influences</p>	<p>The key issues does no clearly identify:</p> <ul style="list-style-type: none"> - Housing affordability (housing) - Pedestrian permeability and connectivity (transport) <p>to form the basis of subsequent policies</p>	<p>Optional</p> <p>Housing – inclusion of affordability</p> <p>Transport – rewrite the dot points to be clearer in the intent behind quality infrastructure and improving mobility. Although connectivity may be underlying to an improvement of accessibility and mobility and therefore, the issue may be redundant. It is more a matter of stressing the walkability issue under a different look.</p> <ul style="list-style-type: none"> - This section of the Scheme will be removed through the PPF translation 	<p>No Action</p> <ul style="list-style-type: none"> - Incorporate these issue of walkability and affordability into Boronia Policy specific to these issues as found in Boronia rather than at the MSS level 	<p>Changes to these key issues and influences would have potential municipality wide implications that may not necessarily be considered as policy neutral.</p> <p>These matters are highlighted in other parts of the Scheme but not appropriately stressed as influences for future rectification.</p>	<p>Nil change</p>
<p>Clause 21.02-1 - Strategic Framework Plan</p>	<p>Changes to the housing policy mapping, commercial/mixed used zone, and AC boundary will render this figure out of date.</p>	<p>Policy Neutral – factual</p> <p>Update figure 1 to depict the updated AC boundary for Boronia and update housing policy section colours to reflect housing policy map and mixed used areas within Boronia AC as reflected in the strategy and other documents</p>	<p>Figure 1 update</p>	<p>Boronia Renewal Strategy, and rezoning implications will result in changes to the information depicted in the figure.</p>	<p>Policy Neutral update of figure as a result of the Boronia Strategy.</p> <ul style="list-style-type: none"> - Include this change through the amendment as defined by the strategy <p>Changes to:</p> <ul style="list-style-type: none"> - AC Boundary - Housing Character - Foothills boundary
<p>Clause 21.03 – Environmental and Landscape Value</p>	<p>The policy could be strengthened to incorporate current concept with regards to connected canopy cover, explore connectivity support via private or public land (so to create green/biolink)</p> <p>It could also strengthen the method to address new vegetation via landscape plan with highlighting that "growth</p>	<p>21.03-1</p> <p>Objective 1 – landscape value highlight importance of garden area for landscaping and incorporation of new vegetation; through highlighted setback for greenery (front/rear)</p> <p>Objective 1.4 – highlight method via landscape plan, and need for appropriate space for tree to grow.</p> <p>21.03-2</p>	<p>Status quo – Nil</p>	<p>Changes to these objectives and strategies are municipal wide. The aim to improve and strengthen aspirations with regards to canopy covers, landscaping and a green Knox may be best addressed within a VPO review.</p>	<p>Policy Neutral update of figure as a result of the Boronia Strategy. Implies change to the:</p> <ul style="list-style-type: none"> - Foothills boundary

	Issues	Notes	Actions	Implications	Outcomes
<p>Clause 21.05 - Built Environment and Heritage</p>	<p>space" is required to achieve a treed city.</p> <p>Methodology for new vegetation for "greening" the area isn't really stressed, whether support is for frontage, rear or side planting (setback)</p> <p>Objective 2 identifies visual interest and appropriate scale to street frontage, this however does not include other form of public realm... such as parks, or maybe even laneways, square which should also have an adequate presentation</p> <p>Obj 5 Boronia is the only example of activity centre that will be the transition from bush blvd to path to the hill. It will be difficult and unclear to determine where the transition happens and how it happens</p>	<p>Key issues - stress the disappearance of connected linked coverage (with limited gaps – biolink/green link concept)</p> <p>Incorporate in objective 3 – refer to a strategy, particularly connection between Site BS with corridor, a system allowing an overall linear connectivity of pockets</p> <p>Incorporate in future strategic works</p> <p>21.05-2 Objective 2.2 highlight visual interest to street frontage AND public realm (path/reserve)</p> <p>21.05-3 Objective 5.1 and 5.2 Highlight the within Boronia transition between bush blvd and path to the hill (connection between the two need and what format, how – street level)</p> <p>21.05-4 Objective 6 - Require business to provide street surveillance, present to the street, and ensure shop front windows are not entirely obscured by signage (6.8, 6.1, 6.5 extended to public path, 6.3)</p> <p>- Boronia laneway to present with visual interactions (6.1, 6.2, 6.3, 6.4, 6.5)</p> <p>- Support design that incorporate presentation to public infrastructure (e.g. bus stop – 6.9, 6.4 public bench so as to have visual interactions</p> <p>21.05-5 ESD key issues, add lack of inclusion of modern alternative transport mode, lack of spaces dedicated (e.g. electrification, lack of bicycle parking to dwellings, appropriate location to shop</p> <p>Objective 8 Add support alternative mode of transport (car share) and inclusion of bicycle facility in ESD requirement</p> <p>Require development to incorporate bicycle? Or require development to incorporate ability to easily retrofit to electrification of transport if not provided immediately.</p> <p>21.05-7 Issues Managing the impact of electronic display sign, trailer sign, and other bunting signs</p> <p>Objective 11 - Avoid sign which nature of advertisement is unrelated with environment or customer catchment / support sign that address</p>	<p>Status quo</p> <p>Or Boronia</p> <p>Include</p> <ul style="list-style-type: none"> - Laneway/arcade surveillance - Shopfront presentation with limited signage to retain good surveillance - Rectify Figure 1 to highlight a special 'transition bush to paths' in Boronia structure plan <p>Incorporate these issue into Boronia Policy specific to these issues as found in Boronia.</p>	<p>There is a risk of discrepancy if not clarified for figure 1 – as Boronia is transition.</p> <p>With crime perceived in Boroia, the narrowing down of further strategy to improve surveillance should be considered.</p>	<p>Policy Neutral update of figure as a result of the Boronia Strategy.</p> <p>Implies change to the:</p> <ul style="list-style-type: none"> - Foothills boundary

	Issues	Notes	Actions	Implications	Outcomes
Clause 21.06 - Housing	<p>Social housing:</p> <ul style="list-style-type: none"> Remain a priority issue that may need further refined strategies <p>Boronia not mentioned in the design and character policy for local living and activity centre and strategy 4.1 would be best improved as the reading is dependent to other section of the scheme but it is not clear</p> <p>There is no defined character for mixed use areas as identified on the housing plan.</p> <p>The interface between Boronia AC and foothills would be best better clarified. It has been a recurrent issue in decision making.</p> <p>Convenience restaurants is not included in the policy for non-residential uses but convenience stores is. A pizzeria/small café would form a type of non-residential use that would be adequate to provide local services.</p>	<p>customer catchment appropriately by location, size, type</p> <ul style="list-style-type: none"> Support advertising signs that do not impede on Objective 6 and the ability to retain visual surveillance with the public realm at ground level / avoid sign that remove all capacity to retain mutual surveillance. <p>Policy guidelines</p> <ul style="list-style-type: none"> What are accessibility guidelines – clarify <p>Figure 1</p> <p>Part optional</p> <p>Changes to 21.06-2 – social housing</p> <p>New policy neutral correction</p> <p>Objective 4</p> <p>21.06-5</p> <p>Boronia specific policy</p> <p>Changes to 21.06-3</p> <p>Objective 5</p> <p>21.06-6</p> <p>Reference and Figure 1</p> <p>-----</p> <p>21.06-2</p> <p>Fourth paragraph typo</p> <p>Objective 2</p> <p>2.3 support development that includes social housing components, particularly in activity centre, SIS and other large scale sites</p> <p>New strategy identifying require social housing on large scale development of XX units and more (or refer to KAHAP and water down)</p> <p>21.06-3</p> <p>Local living – incorporate Boronia</p> <p>Activity centre – incorporate Boronia</p> <p>Objective 4</p> <p>4.1.incorporate reference to 21.03 to close the loop in what it means</p> <p>Objective 5</p> <p>Incorporate new strategy regarding Boronia and Bambury Foothills area</p> <p>21.06-5 include convenience restaurants?</p> <p>21.06-6</p> <p>Apply zone to Boronia</p> <p>Reference document Boronia renewal strategy</p> <p>Figure 1 map update</p> <p>21.07-2</p> <p>Objective 5</p>	<p>Figure 1 housing map to be updated</p> <p>Design and character of Clause 21.06-3 to be updated with corrected information regarding the area covered for each housing policy area.</p> <p>Application of zones and overlays to reflect the changes made to Boronia AC and remain consistent with the current application advice.</p>	<p>Application of zones to be detailed to be consistent with requirement and corrected, implications on housing policy and zone to be applied</p> <p>Figure 1 would be out of date in the scheme and in the housing policy</p> <p>Correction to design and character to ensure a more consistent reading of the definition and application of areas of housing policy which appears incomplete</p>	<p>Policy Neutral description of what mixed use areas are included in the design and character clause</p> <p>Policy Neutral update of figure as a result of the Boronia Strategy.</p> <p>Implies change to the:</p> <ul style="list-style-type: none"> Foothills boundary Activity Centre Boundary Housing character Mixed use character
Clause 21.07 – Economic Development	<p>There is a risk of discrepancy between the strategy and the hierarchy table information which should be consistent</p>		<p>Changes to Table 1 Boronia which is Boronia specific and will flow from the strategy for consistency to highlight:</p>	<p>Policy neutral, will only affect Boronia Activity Centre as specified.</p>	<p>Amend Clause 21.07 Table 1 Boronia description to</p>

Issues	Notes	Actions	Implications	Outcomes
<p>Objective 5 could further reflect a support of neighbourhood based services to help achieve place-based planning, reduce car dependency, and work towards 20min neighbourhood improvement.</p>	<p>5.7 also highlight, which may impact on local amenity New – support neighbourhood based services grouped in catchment with uses that are designed to intend to service local neighbourhood outside commercial core of activity centre Table 1 Boronia Role – highlight a precinct based approach (refer to place based of 2.1.05-1 Strategic directions - Support densification and redevelopment of core commercial area into mixed use including above retail residential, and above retail offices - Support place-based approach improving nighttime activities</p>	<p>In the role and function: the precinct based approach (linking to the place based approach of 2.1.05) - In the strategic direction: update the reference of the clause as needed. Highlight the support for densification and redevelopment of the core commercial area as mixed use (including above commercial residential). No action regarding objective 5</p>	<p>The table 1 would be updated to reflect the strategic direction of the renewal strategy or there would be a risk of different language between the two. The changes to objective 5 would be of municipal wide implications and also affect other council services delivery.</p>	<p>retain an up to date reference. Policy Neutral changes</p>
<p>Clause 21.08 – Community Development The policy identifies liveability as an important features to neighbourhood amenity, and also raises poor walkability as an issue. The associated objective however does not give strategies to address poor walkability on existing neighbourhood but seemingly address large scale redevelopment instead. Particularly to help supporting cutting through dead end street for pedestrian of existing areas. Objective 5 uses terms without defining it or giving a threshold. It is unclear of what constitutes a larger residential development sites. Clause 21.08-7 addresses amenity issues between residential and Licensed premises by discourage the concentration of late night trading around residential area. In the instance of Boronia, the strategy aims to improve night-life but also to bring mixed used development within commercial areas. This may result in conflict between these two objectives and undermine them.</p>	<p>Objective 1 New support development of transversal lot with internal permeability walkability with accessibility to services New require development of dead to allow pedestrian permeability, especially for future access Objective 5 5.1 large residential development sites Definition? Objective 7 7.2 – what about residential within commercial New encourage trading if in conjunction with another function (cinema, restaurant, serving of food etc) Boronia nightlife precinct consideration? Discourage concentration of packaged liquor outlet Optional items Liquor management consideration for Boronia that may be best addressed in the local policy</p>	<p>Status quo – municipal wide implications Or Boronia Include - Juggle nightlife and residential amenity Incorporate these issue into Boronia Policy specific to these issues as found in Boronia.</p>	<p>Will be rewritten as part of the PPF translation. The absence of clarity for: - “large development sites” makes it difficult to understand what is the exact threshold. - Objective 7 – licensed premises may result in argument in term of interpretation between trying to active the centre and providing residential mixity in it. This can be clarified if the specific rules always override the more general strategy, if not, there is an issue.</p>	<p>Nil change</p>
<p>Clause 21.09 – Transport and Infrastructure</p>	<p>Status quo</p>	<p>Status quo</p>	<p>NIL</p>	<p>Nil change</p>

Issues	Notes	Actions	Implications	Outcomes
<p>Clause 21.10-1 – Dandenong Foothills</p> <p>The Dandenong Foothills policy applies to part of the Activity Centre (Elsie, southern terraces, and Bambury). There is a light discrepancy between the AC objectives and the DF objectives which could be improved and appropriately addressed. This was noted as causing interpretation and preceding issues for decision makers and developers.</p> <p>The Marie street area is subject to single dwelling covenant and would be best returned to bush suburban.</p>	<p>Key issues – Boronia transition Cross check with 22.07</p> <p>Specify that objectives 2 does not apply, so as to not cause discrepancy with subdivision cases.</p> <p>objective 2 – precinct 2 and 3 incorporate Boronia transition figure 1 – highlight Boronia AC</p> <ul style="list-style-type: none"> - Ensure policy is well cross referred with anything in 22.07 (consistency) 	<p>Policy Neutral or Boronia Specific policy adjustment</p> <ul style="list-style-type: none"> - Figure 1 adjusted to highlight/identify the AC boundary therefore identifying the properties in transition to AC and foothills - Objective 3 of 21.10-1 incorporate a specific strategy that highlight the characteristic of the Foothills/AC transition area (precinct 2 and 3 only) - If avenue of specific GRZ schedule is considered – identify it in the local area implementation or make a specific entry regarding foothills area that falls within AC. 	<p>Impact with regard to housing policy and interpretation of future applications, clarify transition between the unusual case of bambury</p>	<p>Remove Marie st from AC, rezone and change housing policy</p> <p>Develop schedule for this area.</p> <p>Retain Bambury but develop own schedule and retain in local living only.</p>
<p>Clause 21.10-3 – Boronia Activity Centre</p> <p>The BAC section of the MSS was written in relation to the 2006 structure plan, the new renewal strategy will result with new objectives and a different outcomes making the policy redundant as it currently stands. It must be rewritten to give way for the new strategy.</p>	<p>Rewrite and figure update</p>	<p>Complete rewrite</p> <p>Incorporate: Walkability and affordability key issues</p> <ul style="list-style-type: none"> - Clarification on objective 7 of 21.08 - Clarify figure 1 of 21.05 - Objective 6 of 21.05 <p>No action</p> <p>The monitoring will be best included in the structure plan strategy itself.</p>	<p>Complete rewrite with new precinct required, the PPF translation will result in another changes at a later stage.</p>	<p>New rewritten policy with updated reference. Some items may be retained if they are still relevant.</p>
<p>Clause 21.11 – Monitoring and Review</p> <p>Should a review of the strategy be stressed out in the commitment to monitoring</p> <p>There is no other monitoring requirement within the LPPF/MSS</p>	<p>Add bullet point about review of Boronia SP performance and whether boundary or other actions need review</p>	<p>No action</p> <p>The monitoring will be best included in the structure plan strategy itself.</p>	<p>This does not exist for Knox Central, it would create a discrepancy in commitment.</p>	<p>Nil change</p>
Local Planning Policies (LPP)				
<p>Clause 22.01 – Advertising signs</p> <p>In Boronia, the occupation of shop front windows filled with signage limits the capacity to create mutual interactions between businesses and street which affects safety feeling and surveillance capacity.</p> <p>Other types of sign can negatively affect amenity and street presentation and are not addressed in the VPP: electronic trailer sign</p> <p>There is also a way to give character by defining type of sign character you want</p>	<p>Applies 22.01-2 objective</p> <p>New dot points highlighting 21.05-4 surveillance and safety especially with regard to shop front windows</p> <p>22.01-3 policy</p> <p>Not support repetition</p> <p>Sign that hinder street surveillance through shop front, sign that covers whole facade windows, obstruct windows, windows to remain primarily for surveillance</p> <p>Trailer signs</p>	<p>Incorporate element of 21.05-4 surveillance with regard to shop front windows signage so as to not have signage obstructing ability to provide mutual surveillance to arcade, street etc.</p> <p>Other optional</p> <p>No actions</p>	<p>This policy is municipality wide and would have wider implications.</p> <p>Appropriate signage controls appears impossible in Victoria and generally not desired by the population and authorities and so would have no chance of success.</p> <p>Integrate specific policies within the Boronia strategy in the hope they get picked up by planners.</p>	<p>Nil changes</p>

Issues	Notes	Actions	Implications	Outcomes
at a location in term of material, look and feel while still allowing the identification of business.	Commercial – support old style signs, murals (graffiti deterrent), carved wood etc that enhances the character Cat 4 – internally illuminated, electronic, trailer Decision guidelines - Whether sign remove the capacity of mutual street surveillance App requirement – existing signs location and total advertising area for the land and business Applies Include café/convenience restaurant? Objectives New proximity to public transport? Policy regarding place based network scale to create small neighbourhood service precinct? Impose limit in policy by street frontage maximum to address the cumulative impact	Optional No action	Has implications in future approach and strategy to developing a neighbourhood service/walkability to service approach, it may change the philosophy on how Council approaches residential neighbourhood and has implications municipality wide, therefore it is not suitable for this amendment	Nil Changes
Non residential uses in proximity to residential areas (as within) can help create small service hubs to support walkable neighbourhood. The current policy is good to that effect but, the type of uses stressed misses: - Café and convenience restaurant type services which would be good services to walk to instead of driving and which does not exclusively need to be located within commercial centre. Although are best concentrated in mini hub together - To address the issue of 'risk to create commercial centre', a limit to maximum street frontage could address cumulative impact while still creating a hub. - Criteria of proximity to public transport should be integrated in the land use planning and decision making for this.	Optional Expiry date to be extended Applies Expiry date extended Policy basis new dot point - Resilience through availability of alternative means of transport, particularly cycling Applies	No action – This policy is beyond the scope of Boronia having been developed as a group of council. Advocacy for its improvement should be considered through its own proper platform including its extension. Status quo	Nil NIL	Nil changes Nil changes
Clause 22.03 – Non-residential uses in residential areas	Not applicable to activity centre	NA – Status quo	NIL	Nil changes
Clause 22.04 – Environmentally Sustainable Development				
Clause 22.05 – Gaming Premises and Gaming Machines				
Clause 22.06 – Residential Land Use and				

Issues	Notes	Actions	Implications	Outcomes
Development Within the C1Z	Clarification of reference to housing policy necessary at 22.06-4, maybe refer to abutting 'local living' etc. What about bush suburban? No real height difference between knox and local living Cross refer to housing policy term or mention in 21.07 economic to link it all			
Clause 22.07 – Development in Residential Areas and Neighbourhood Character	Removal of DDO from residential land will mean this policy now applies to residential land in AC. Does not apply to DDO land However removal of DDO to GRZ will mean this policy applies Meaning consideration must be put to local living or activity centre identification on map Area within Dandenong foothills policy (bambury) should probably be within local living or knox neighbourhood Local living – typology for Boronia Activity centre won't apply if ddo (e.g. rgz) Apply 22.07-7-8-9 even on ddo land?	Remove DDO for retained GRZ land Review local living and activity centre policy Activity centre on land with DDO Incorporate Boronia typology Bambury specific case	The removal of the DDO will mean this policy now applies to the activity centre. The housing policy guide will need to be updated.	Inclusion of content for Boronia Mixed Use area character
Provisions				
Schedule to the GRZ	Schedule split from Bayswater - New schedule - Update bayswater schedule to new format - Schedule for foothills - Schedule for rankins - Schedule for Reve Street similar to Foothills Area			
Schedule to the MUZ	If schedule created must be separated than rest of municipality, as no schedule 1 exists, it must be created (Admin)			
Schedule to the RGZ	Schedule split from Bayswater			
Schedule to NRZ	Schedule for marie street			
Grid Area 2				
DDO	Do not apply to GRZ - Remove	Do not apply to GRZ - Remove		
VPO1	Status Quo	Status Quo		
VPO2	Status Quo	Remove SLO part on land along Reve Street and within Activity Centre where Foothills do not apply		
VPO3	Status Quo	Status Quo		
VPO4	Status quo	Status Quo		
Zone	Expand RGZ and MUZ, incorporate new GRZ, RGZ, MUZ, changes schedule GRZ, RGZ, MUZ GRZ to area removed - Apply ACZ with precinct following first draft standard zone	Expand RGZ and MUZ, incorporate new GRZ schedule for foothills, GRZ and RGZ and MUZ NRZ to area removed Apply ACZ with precinct following first draft standard zone		
		EAO	Apply to 158 Dorset Road	
Grid Area 3				
DDO	Do not apply to GRZ - Remove	Do not apply to GRZ - Remove		
VPO1	Status Quo	Status Quo		
VPO2	Status Quo	Remove SLO part on land along Reve Street and within Activity Centre where Foothills do not apply		
VPO3	Status Quo	Status Quo		
VPO4	Status quo	Status Quo		
Zone	Expand RGZ and MUZ, incorporate new GRZ, RGZ, MUZ, changes schedule GRZ, RGZ, MUZ GRZ to area removed - Apply ACZ with precinct following first draft standard zone	Expand RGZ and MUZ, incorporate new GRZ schedule for foothills, GRZ and RGZ and MUZ NRZ to area removed Apply ACZ with precinct following first draft standard zone		
		EAO	Apply to 158 Dorset Road	

Appendix 7 - Review of planning decisions and VCAT commentary (Inclusive of previous notes in Glossop Report) North West

Application/ Permit	Address	Purpose	Decision	Activity Centre	Commentary	Notes
P/2017/6597	6 Henry Street, Boronia	Development of the land for seven (7) double storey dwellings and the waiver of one (1) visitor parking space Objections <ul style="list-style-type: none"> - Vegetation - Car parking - Traffic - Overdevelopment 	Refusal VCAT Overturned	Yes	<p>The application was refused for</p> <ul style="list-style-type: none"> - being inconsistent with State and Local Planning Policies, including Clause 21.06 (Housing) and Clause 21.10-3 (Boronia Activity Centre); - not meet the design standards of the Design and Development Overlay – Schedule 7; and, - not provide the required number of parking spaces or dwelling diversity. <p>VCAT Hearing January 2019</p>	<p>Conclusion of hearing pending</p> <p>The site is now affected by PPTN re. car parking</p> <ul style="list-style-type: none"> - DDO7 impact regarding perception of single dwelling from the street. DDO7 indicate 11m/3 storeys - Height and impact on fringe of AC - Decision in relation to Rattray-Wood v Knox CC [2018] VCAT 460 <p>The intention of presenting one building per lot to the street. This is to maintain the building spacing and rhythm of the streetscape. A careful reading of this recommendation reveals that it is design objectives to maintain the perception from the street of a single dwelling permit lot, particularly in areas proposed for two storeys or less. The review site is in an area where the recommended maximum height is 11 metres and three storeys, not two storeys or less.</p> <p>The perception of one dwelling on the frontage should not be read to mean in all circumstances. The proposal presents six double storey dwellings to Central Avenue, the second street frontage. This street frontage has a length of 57.3 metres. To limit the perception of one dwelling to such a long frontage goes against the intention of the zone and the Boronia Activity Centre.</p> <p>http://www6.austlii.edu.au/cgi-bin/sign.cgi/au/cases/vic/VCAT/2019/134</p>
P/2014/6255 A Rattray-Wood v Knox CC [2018] VCAT 460	275-277 Dorset Road, Boronia	Amend Planning Permit P2014/6255 (issued for the construction of a three (3) storey mixed use building and alterations to access to a Category 1 Road) for the construction of a fourth storey Objections <ul style="list-style-type: none"> - Visual bulk and height - Traffic impact - Car parking - Overshadowing - Neighbourhood character 	Refusal VCAT Affirmed	Yes	<p>The application to amend a permit for 3 storeys building was refused for:</p> <ul style="list-style-type: none"> - Concerns with public vista (Tormore) obstruction to Dandenong Range, height and scale, variation to DDO7 and character. <p>VCAT affirmed Council's decision that no planning permit be issued:</p> <ul style="list-style-type: none"> - The additional level and overall height does not achieve the relevant design objectives of the Design and Development Overlay – Schedule 7 (DDO7), and would not allow for an appropriate transition between the precincts within the DDO7. - The variation sought to the preferred height is not an architectural feature which adds to the architectural features of the building, nor is the building of outstanding architectural excellence. - The additional level would be visible from the adjoining properties to the west, and given the small secluded private open space areas of these dwellings, the proposal must comply with Standard B17 of Rescode. 	<p>Additional height above DDO7 discretionary on fringe with interface area outside AC was not well received</p> <p>Interaction with areas outside AC and height transition is indicated paramount planning outcome.</p> <p>Requirement of Rescode are paramount, including setbacks</p> <p>Question “outstanding architectural” as subjective terminology, was raised and discussed with no outcome.</p> <p>Decision has ascertained the height transition logic of the structure plan in lieu of setbacks and in relation with topography</p>

P/2016/6199 Fidias Pty Ltd v Knox CC [2017] VCAT 932	31-39 Erica Avenue, Boronia	The construction of a five (5) storey building containing 52 dwellings, three (3) shops and a medical centre, and reduction in car parking Objections: - Car parking and traffic issues - Non-compliance with DDO7 - Impact on neighbourhood character and views - Waste and infrastructure (stormwater) - Overlooking and overshadowing - Noise and disturbance during construction - Accessibility and Pedestrian safety	Refusal VCAT Overturned	Yes	<p>Outstanding architectural design (Peter Brown Architects Pty Ltd v Knox CC [2012] VCAT 1006) considered the height transition from the core of the centre to the residential boundaries of the centre.</p> <ul style="list-style-type: none"> - We do not consider that the messages and outcomes for the Boronia activity centre are unclear or lack certainty. The Structure Plan envisages an urban form that scales down toward its edges moving to the residential areas that are within the activity centre. While it is true that DDO7 does not articulate or prescribe setbacks, street walls and other elements of a building envelope, the outcomes focus on maintaining heights that relate to the topography of the activity centre; transition down to the higher locations and residential areas; and achieve key views across and beyond the activity centre..... - The DDO7 seeks to implement the Boronia Structure Plan. The Council explained in detail the background to the preparation of this document. The DDO7 clearly sets out the expectations for built form including height and scale expected across the precinct. It comprises a suite of controls that generally seek to transition height down from the core of the activity centre radiating out towards the existing residential areas that sit outside the overlay area. - Council refused the application (6 storeys) due to concerns with the scale and height of the proposed building, its level of compliance with the Design and Development Overlay, State and Local Planning Policy, the Guidelines for Higher Density Residential Development, and the impact on the surrounding character. VCAT overturned: <ul style="list-style-type: none"> - The tribunal found that the height of the proposed development was acceptable given the site context, within an activity centre with good access to transport and services, and that the development did not significantly exceed the height limit. Interestingly, the Tribunal did not consider the proposal to be of outstanding architectural merit. In terms of landscaping outcomes, the tribunal agreed with Council that the proposed landscaping outcome was not sufficient, and included a planning permit condition that more landscaping be provided in the public realm, at the developers cost. Other conditions aim to improve the built form. Given the above, the Tribunal directed that Council's decision be overturned, and that a Planning Permit be issued. 	<p>http://www6.austlii.edu.au/cgi-bin/sign.cgi/au/cases/vic/VCAT/2018/460</p>
P/2016/6175 /A	1-11 Erica Avenue, Boronia	Development of the land for a supermarket and a shop, reduction in car parking requirements and erection of internally illuminated business identification signs (3 storeys) Amendment	Approved Amendment ongoing		<ul style="list-style-type: none"> - Done as Scheme Amendment changing C2Z to C1Z <p>Previous Panels comments <i>It is [therefore] clear to the Panel that the intent of the Structure Plan is that Erica Avenue is to play a greater role within the pedestrian function of the wider Boronia Activity Centre with an emphasis on improving the built form and providing more active uses at the street frontage with offices or residential development on the upper floors. The Panel agrees that retention of the [now former] business 3 Zone is not consistent with the directions contained</i></p>	<p>Application amended and issued for 5 storeys</p> <ul style="list-style-type: none"> - Hearing provided support documentation for discretionary height in relation to Tormore Reserve views as per DDO7 - The location context within the AC and close to transport accentuated the need for high rises, less focus put on the outstanding aspect but articulation and presentation still an important variable, improvement was required by conditions - Landscape not perceived as a focus in the scheme, Erica not being identified as a landscape corridor justifying greater setbacks. It was therefore left for the public realm. <p>http://www6.austlii.edu.au/cgi-bin/sign.cgi/au/cases/vic/VCAT/2017/952</p> <ul style="list-style-type: none"> - Panel comments are clear on future of Erica - The original development was of low scale <p>Inclusion of offices at upper level is an important element to retain close to the station to allow train commuters to come to work in Boronia, and allow ground level shop for a demand of services with new cash flow.</p>

		Amending the permit description and endorsed plans to include 50 dwellings within a 5 storey building, basement car parking and two retail shops Objections: - Block view to Boronia Village shops - Colours and materials - Traffic congestion on Erica - Excessive height	Approved	Yes	<p><i>in the Structure Plan and therefore not appropriate, particularly given 'Accommodation' is a prohibited use within the zone; and the zone needs to be reviewed."</i></p> <p>Amendment C145 will resolve an anomaly The proposal is compliant.</p> <p>Amendment: Council officers recommended refusal on the ground that the excess height could not be justified on ground of outstanding architectural design. Council resolved to approve the development.</p>	
P/2016/6929	139 – 141 Boronia Road, Boronia	Use and development of the land for a restaurant and 20 dwellings within a four storey building, basement carpark and waivering of carpark requirements Objections - Traffic/car parking - Impact on views to Dandenong - Height and number of storeys - Out of character - Too many restaurants	Approved	Yes	<ul style="list-style-type: none"> - The proposal is consistent with the controls and policy, with a condition requiring the height to be reduced from 14.3m to 14m in accordance with DDO7. 	<ul style="list-style-type: none"> - Met the DDO requirements with no discretionary changes
P/2015/6370 Karfarm Holdings Pty Ltd v Knox CC [2016] VCAT 1204	14 Zeising Court, Boronia	Development of the land for three double storey dwellings Objections - Car parking and Traffic Bulk and Outlook - Character - Overlooking - Overshadowing - Overdevelopment - Loss garden space - Noise	Refusal VCAT Overturned	Study	<p>Council refused as not meeting Knox Neighbourhood policy</p> <ul style="list-style-type: none"> - The Tribunal found that the context in which the proposal is situated provided an opportunity for development of villa units consistent with the intent and objectives of the urban design and housing policies and the application of the GR22 to the land under the recent C131 amendment. The tribunal also outlined that the size of the lot (1,005m2) and the surrounding character of the neighbourhood affords some discretion to allow a double storey dwelling at the rear of the lot. - The Tribunal further questions the nature of the single storey policy at the rear "it is only where three or more dwellings are proposed that the single storey height is sought. If this were a proposal for two dwellings, this element of the design guideline would not be relevant and a two storey form in the rear of the lot would be acceptable under this policy guidance. It would seem that this element of the policy is directed to addressing potential impacts from the extent of development across the site rather than two storey building form per se. This begs the question, what is the impact of such building form that is of concern where it is acceptable in some situations and not in others." 	<ul style="list-style-type: none"> - Comment of housing policy on rear dwelling being single storey.

P/2018/6089	18 Zeising Court, BORONIA VIC 3155	Development of the land for three (3) double store Objections - Car parking and traffic - Neighbourhood character - Social cohesion	Approval	Study	<ul style="list-style-type: none"> - Given the overall statement of neighbourhood character and the submissions from the Council on this point it would seem the concerns arise from such building form in more intensely developed proposals resulting in limited boundary setbacks, correspondingly smaller open space areas and more dominant building form. - If this is so, the combination of the modified open space standards of Clause 55 in GR22 and policy direction for development of three or more dwelling being directed to larger lots seem sufficient to address such concerns. • Proposal supported as: <i>Each proposed dwelling is double storey, however as the site is located on the corner of Zeising Court, the site constraints mean no dwelling is considered to the 'rear' of the site. Both Dwelling 1 and 3 have been designed to have significantly smaller upper level building footprints, with significant setbacks to each site boundary to minimise impacts on adjoining properties. Adequate landscaping provided.</i> 	<ul style="list-style-type: none"> • Housing policy regarding rear dwelling and corner block, and associated articulation and recess of upper storey
P/2010/6453 Orcone Pty Ltd v Knox CC [2011] VCAT 1136	37 Central Avenue, Boronia	Construction of nine dwellings (seven double storey and two single storey dwellings) Objections: - Overlooking - Loss of amenity and fencing - Car parking - Bulk - noise	Refusal VCAT Overturned	Study	<p>Supported by officer, refused by Council PRIOR TO HOUSING POLICY</p> <ul style="list-style-type: none"> - <i>"The site is not within a preferred area for medium density housing. Rather, it is within a 'dispersed' residential location, reflecting the first of the Council's reasons for declining to support the proposal. I am not however persuaded that this site is not an acceptable one from a strategic or locational viewpoint."</i> - VCAT went on to consider that a number of locational and policy attributes favoured increased density in this location, including the presence of other medium density development and the consideration that 700 metres was still 'easy walking distance' to the activity centre. It concluded that the policy position to support medium density development within 400 metres of an activity centre did not of itself mean an unfavourable consideration of medium density development beyond the 400 metre threshold. - What these conclusions suggest is that the Council is misapplying or misunderstanding the policy position. The policy states that medium density applications will be "favourably considered" when within 400 metres of an activity centre. There is no accompanying policy statement which specifically discourages medium density development beyond that threshold. 	<p>Outside AC but surrounding context and character has impact regardless of policy</p> <p>Lack of restraint of medium density in areas that are outside favoured areas</p> <p>Council officers decision overturned by Council; VCAT determined that a site greater than 400m from an activity centre does not mean site cannot be appropriate for medium density housing, subject to neighbourhood character considerations</p>
P/2010/6020 Roynic v Knox CC [2010] VCAT 1720	42 Central Avenue, Boronia	Development of five (5) dwellings to the rear of existing dwelling (total of six (6) dwellings). Objections: - Accumulation of car parking issues for all units	Refusal VCAT Overturned		<p>As per above</p> <ul style="list-style-type: none"> - A consistent outcome was determined by VCAT in Roynic v Knox CC, where the subject site was approximately 600m to the edge of the Boronia Major Activity Centre, approximately 650m to the Boronia railway station and approximately 700m to the Bayswater railway station. 	<p>Council overturned officer recommendation; VCAT determined proposal met neighbourhood character requirements at CI 22.07; decision generally in accordance with original officer recommendation; no policy issues</p>
P/2017/6763	8 Genista Avenue and 1 Iris Crescent,	Development of the land for 14 double storey dwellings Objections:	Approved	Yes	<ul style="list-style-type: none"> - Application considered consistent with broad urban consolidation, articulation and adequate landscaping, car parking meets requirements including that of PPTN. Height within the DDO7 acceptable discretion and the variation is deemed minimal and acceptable. 	<p>No commentary</p>

P/2017/6517	BORONIA VIC 3155 19 & 21 Iris Crescent, Boronia	<ul style="list-style-type: none"> - Waiver of visitor car parking – traffic - Too many dwellings / density - Parking and crossovers - Landscaping <p>Development of eight (8) dwellings (seven double and one single storey)</p> <p>Objections:</p> <ul style="list-style-type: none"> - Car parking - Street parking impact and congestion - Privacy and overlooking - High density leads to crime - Insufficient landscaping - Waste management, littering - Overshadowing - Overdevelopment, bulk and design 	Refusal VCAT appeal withdrawn	Study	<p>The application was refused for:</p> <ul style="list-style-type: none"> - Inconsistency with the design objectives/guidelines of Clause 22.07 (Knox Neighbourhood) upper elements, inadequate setbacks to the side and rear site boundaries and inadequate spacing around dwellings for private open space and landscaping. - massing of the built form, use of flat roof, with Clause 15.01-2, Clause 21.05-2 and Clause 22.07 - fails to achieve architectural and urban design outcomes that contribute positively to the preferred neighbourhood character - The proposal does not satisfy Clause 55, Neighbourhood Character, Landscaping, Private open space, Solar access to open space, Design detail - The proposal is an overdevelopment of the site. <p>The VCAT appeal was withdrawn by the applicant.</p>	Related to inconsistency with housing policy guidelines resulting in overdevelopment.
P/2016/6772	3 Tormore Road, BORONIA VIC 3155	<p>Development of the land for two (2) three storey and seven (7) two storey dwellings (total nine (9) dwellings)</p> <p>Objections:</p> <ul style="list-style-type: none"> - Overlooking - Safety (traffic) and car parking - Overshadowing - Density and character - noise 	Approval	Yes	Subject to conditions the proposal is considered to meet the policy and DDO requirements, conditions regarding improvement on landscaping	
P/2016/6478	11 Iris Crescent Boronia	<p>The construction of seven (7) double storey dwellings</p> <p>Objections:</p> <ul style="list-style-type: none"> - Overlooking - Loss of character and overdevelopment - Traffic and parking - Vegetation issues - setbacks 	Approval	Yes	The proposal satisfies the policy and requirement and is within the height requirements of the DDO. • The proposed built form of the new dwellings will be generally respectful of the built form requirements of the Schedule to the overlay relating to the street presentation of the development, articulation of the two-storey built form, materials of construction and landscaping.	
P/2011/6295	6 Sundew Avenue, Boronia	Three storey apartment building containing 18	Refusal	Yes	In Peter Brown Architects Pty Ltd v Knox CC7, the lack of definition on exactly what 'outstanding architectural design' means, was again considered. In this matter, the Tribunal highlighted that DDO7 has 'no specific design direction	Question "outstanding architectural" subjective terminology, therefore rely on policies being in case, the objectives of the DDO and of the Boronia Structure plan.

<p>Peter Brown Architects Pty Ltd v Knox CC [2012] VCAT 1006</p>		<p>dwellings and a semi-basement car park</p> <p>Objections:</p> <ul style="list-style-type: none"> - Neighbourhood character - Bulk and height - Traffic and parking - Lack of landscaping, vegetation issues - Overdevelopment - Inconsistency with Rescode - Waste - Overlooking - Pedestrian safety 	<p>VCAT Overturned</p>	<p>guided within the Overlay. On this matter the Tribunal commented that where no specific guidance is provided quantified it must consider State and Local planning policy directions. Specifically it said:</p> <p>The key consideration is therefore whether the proposal enables development of an outstanding architectural design that fulfils the design objectives in the schedule, and the Boronia Structure Plan vision.</p> <p>As I found in 43 Chandler Road v Knox CC the definition of design excellence or outstanding architectural quality remain difficult to quantify but there are elements to a design that can be clearly assessed based on the provisions of the planning scheme to give an indication of whether good design is achieved. In particular State and Local policy directs that development should address its site context and neighbourhood character. It should also provide good amenity for adjoining properties and future occupants of the development.</p>	<p>http://www6.austlii.edu.au/cgi-bin/sign.cgi/au/cases/vic/VCAT/2012/1006</p> <p>Council policy was not supported: Council decision overturned; Council's preferred max height of 7.5m in DDO7 not supported -VCAT determined proposal had balanced landscape objectives with the need for more intensive housing in activity centres, and it was of sufficient design excellence to warrant approval; 9m high building would not impact on views to Dandenong Ranges.</p>
<p>P/2011/6618 K Chaya v Knox CC & Ors [2013] VCAT 915</p>	<p>196 Boronia Road, Boronia</p>	<p>The construction of a three storey apartment building (three levels above ground) containing 17 dwellings, associated semi-basement car parking and alteration to access on a Road Zone Category 1</p> <p>Objections:</p> <ul style="list-style-type: none"> - Character - Overdevelopment - Pedestrian safety and traffic - Overlooking - Car parking - Noise and amenity - Waste - Views - Value - Flooding and infrastructure - Social impacts - Vegetation 	<p>Refusal VCAT Affirmed</p>	<p>Yes</p> <p>Language within the Design and Development Overlay – Schedule 7 was further reviewed. What was highlighted in this appeal was that there was confusion as to whether sites were considered to be within a 'dispersed infill residential' area or an area suited for 'increased residential density'. The Tribunal was hindered in determining the appropriate policy context for these sites given the lack of definition within the control. In regard to this, the Tribunal commented:</p> <ul style="list-style-type: none"> - The DDO7 does not provide any direction as to the differentiation of these terms, but I find there must be some differentiation as to the policy terms, other than height, given the height restriction is the same. Policy at clause 22.06 has direction to "accommodate 'increased residential density' development in limited areas within immediate proximity of the commercial environs", although it does not clarify what this term means, compared to 'Dispersed Infill Residential' areas. The Boronia Structure Plan, is a reference document to the policy and DDO7, provides some clearer direction that the 'Increased Residential Density' areas "provide a transition into adjoining lower scale 'dispersed infill residential' areas. The same boundaries are identified between the precincts and height provisions in the policy and structure plan for this area. This would indicate that a lesser intensity of form is expected in the Dispersed Infill Residential areas, than in the Increased Residential Density areas. Plain English reading of the phrases also suggests such a differentiation. This also correlates with the policy map that indicates the Dispersed Infill Residential areas sit further away from the activity centre retail and transport core than the Increased Residential Density areas. Dispersed Infill Residential areas also include land to the direct south of the site that has a nine metre height provision in DDO7. 	<p>Council refusal supported based on non-compliance with amenity/visual bulk; VCAT raised issue with the wording of DDO7, regarding whether meeting the height limit means the policy context has been met b/c there were different residential areas ("dispersed infill residential" and "increased residential density") but both had the same height limit (Note: Am C95, approved Nov 2013, has now addressed a number of policy wording conflicts in DDO7)</p>

South West

Application/ Permit	Address	Purpose	Decision	Activity Centre	Commentary	Notes
P/2017/6472	21 Narcissus Avenue, Boronia	Construction of two (2) double storey dwellings and one (1)	Refusal	Study	<p>The application was refused for:</p> <ul style="list-style-type: none"> - The design outcome is not considered to be respectful of the existing or preferred neighbourhood character, due to scale, siting and massing of 	<p>http://www6.austlii.edu.au/cgi-bin/sign.cgi/au/cases/vic/VCAT/2019/239</p>

<p>Warrington Homes v Knox CC [2019] VCAT 239</p>		<p>single storey dwelling (Total three (3) dwellings)</p> <p>Objections:</p> <ul style="list-style-type: none"> - Vegetation - Overlooking - Impact on boundary (vegetation and wall) - Traffic and car parking - Neighbourhood character. 	<p>VCAT overturned</p>	<p>buildings and resultant impact on the amenity of adjoining residential properties.</p> <ul style="list-style-type: none"> - The proposal is inconsistent with the Landscape requirements of the General Residential Zone – Schedule 2. - The proposal does not satisfy Clause 55-- Neighbourhood Character— Landscaping--- Dwelling Entry— Safety - Inappropriate balance between the need for additional housing within an established residential area, the amenity of occupants and adjoining residents. - Insufficient space has been made available to provide for meaningful landscaping
<p>P/2017/6534 Aryan v Knox CC [2018] VCAT 1785</p>	<p>17 Narcissus Avenue, Boronia</p>	<p>The construction of two (2) double storey and one (1) single storey dwelling (total 3 dwellings)</p> <p>Objection:</p> <ul style="list-style-type: none"> - Traffic and car parking 	<p>Refusal VCAT Affirmed</p>	<p>VCAT Hearing January 2019</p> <p>The application was refused for:</p> <ul style="list-style-type: none"> - Massing of the built form and inadequate setback - proposal fails to achieve architectural and urban design outcomes that contribute positively to the preferred neighbourhood character and does not respond positively to the characteristics of the surrounding area. - extensive paved area - Inconsistency with the design objectives and design guidelines of Clause 22.07 of the Scheme relating to development within a Knox Neighbourhood Area because of the extent of built form across the site, extensive first-floor elements of the double storey dwellings, reverse-living style of two of the dwellings and inadequate spacing around dwellings for landscaping. - Overdevelopment - VCAT supported - The two side-by-side two-storey dwellings are large, and both use a reverse living format. I agree with Mr Deitrich that one could understand why a reverse living format might be proposed on the opposite side of this street in order to capture views of the Dandenongs but it is not obvious why the reverse living format is used on this site. - I recognise that the site is close to the Boronia activity centre and that the neighbourhood contains many medium density developments. However, I accept Mr Deitrich's submissions that the Knox Strategic Framework Plan at clause 21.02 differentiates between the area containing the review site and land north of Stonehaven Avenue. This allows a sleeve of more intensive residential development between Boronia Road and Stonehaven Avenue (Knox Local Living Area). It is reflected in the zoning of the land where Schedule 4 to the General Residential Zone applied north of Stonehaven Avenue, while Schedule 2 to the General Residential Zone applies to the area containing the review site. - This distinction works against the applicants. They cannot rely on the more intensive built form north of Stonehaven Avenue due to the difference in zoning. Rather they need to apply a more tempered approach that accommodates the landscaping outcome sought by policy. - In conclusion, I agree with Mr Deitrich that this site should be able to accommodate three dwellings, yet this must occur in a design response that strikes an appropriate balance between landscaping and built form. As the proposal before me does not achieve this balance, I will not grant a permit.

<p>P/2018/6180</p>	<p>12 Woodvale Road, BORONIA</p>	<p>Development of the land for six (6) double storey dwellings and removal of vegetation</p> <p>Objections:</p> <ul style="list-style-type: none"> - Congestion - Carparking - Style of development - Medium density development shouldn't happen 	<p>Refusal</p>	<p>Yes</p>	<p>The application was refused for</p> <ul style="list-style-type: none"> - The design outcome is not considered to be respectful of the existing or preferred neighbourhood character, due to scale, siting and massing of buildings and resultant impact on the amenity of adjoining residential properties. - The proposal is inconsistent with the requirements of the DDO7 and does not achieve the design standards required. - The proposal would not provide an acceptable level of internal amenity to future residents due to reduced bedroom sizes and reduced living spaces in some units. - The proposal does not satisfy the objectives of Clause 55 – Neighbourhood Character – Residential Policy - Safety - Landscaping – Dwelling Entry - Storage - Design Detail - Site Services - The proposal does not satisfy the objectives of Clause 52.06, Car parking of the Knox Planning Scheme, in particular: <ul style="list-style-type: none"> a) Design Standard 5: Urban Design b) Design Standard 7: Landscaping - inappropriate balance between the need for additional housing within an established residential area, the amenity of occupants and adjoining residents, and the landscape character of the area. 	
<p>P/2017/6272 Muir v Knox cc & Ors</p>	<p>20 Springfield Road, Boronia</p>	<p>Development of land for four (4) dwellings (three (3) double storey and one (1) single storey dwellings)</p> <p>Objections:</p> <ul style="list-style-type: none"> - Vegetation removal - Car parking and traffic hazards - Fencing - Overdevelopment - Infrastructure 	<p>Refusal VCAT Overturned</p>	<p>Study</p>	<ul style="list-style-type: none"> - This application was refused as it was not considered to be respectful of the existing or preferred neighbourhood character, due to scale, siting and massing of buildings and resultant impact on the amenity of adjoining residential properties. The proposal was also considered to be inconsistent with the purpose and requirements of the General Residential Zone – Schedule 2 and failed to satisfy the objectives of Clause 55 of the Knox Planning Scheme. <ul style="list-style-type: none"> . VCAT determined that the proposed design is respectful of the neighbourhood character of the area and supported the removal of vegetation subject to replacement native vegetation and that the traffic generation is acceptable. Amended plans were submitted to VCAT. - I find that in terms of architectural form, the proposed development is generally consistent with a number of these as the development proposes the construction of three single storey brick dwellings with concrete tiled roofs, which is consistent with the neighbourhood character of the area. - One area of non-compliance is the proposed use of a double crossover to Springfield Road. Whilst I consider the safety aspects of the crossover later in my decision, I find that the appearance of the adjoining double garage doors will have an adverse impact on the streetscape, and I consider that it is better that the double garage doors be redesigned to be reduced to single garages with a tandem visitor space. I have required this as a condition of permit. - The proposed development provides the number of spaces required by the planning scheme for this development. Whilst visitors to the site will need to park on street, there is no reason to consider that this cannot occur safely. Under the current road rules, a person cannot park within ten metres of the intersection, which does reduce the ability for cars to park along the frontage of the site. This capacity will be further reduced by the introduction of the new crossovers. However, parking in both streets is unrestricted and there is no evidence before me that the visitors 	<p>-</p>

P/2016/6650 Newground Pty Ltd v Knox City Council [2017] VCAT 2046	11 Pine Crescent & 12 Cypress Avenue, Boronia	Construction of twelve three (3) storey dwellings and vegetation removal Objections: - Overlooking - Poor architectural outcome	Refusal VCAT Affirmed	Yes	- - associated with these dwellings cannot be comfortably accommodated within the existing street network. - The application was refused by Council on the basis that the proposal was not consistent with the Boronia Major Activity Centre Local Policy, the development had unacceptable and major encroachments into the tree protection zone of a significant tree protected by the Vegetation Protection Overlays – Schedule 2 (VPO2) and non-compliance with the car parking and accessway design requirements and ResCode requirements relating to side and rear setbacks, private open space areas and design detail. - The Tribunal found that the proposal was not acceptable and agreed with Council's position that the encroachment in the TPZ of the significant tree, the built form, setbacks, car parking and vehicular access and private open space provision were not appropriate. The Tribunal therefore affirmed the Council decision and directed that no permit be issued.	-
P/2016/6314 M & Lord Investments Pty Ltd & Siavas Pty Ltd v Knox CC [2017] VCAT 909	58 Woodvale Road, Boronia	The development of the land for the construction of four (4) dwellings, comprising three (3) double storey dwellings and one (1) single storey dwelling and associated vegetation removal Objections: - Shadows on solar panels - Drainage - Traffic - Noise and construction - Environmental impacts	Refusal VCAT Overturned	Study	- Council refused the application primarily due to the proposal being inconsistent with the purpose of the Vegetation Protection Overlay (Schedule 4), that the development will detract from the landscape character of the neighbourhood, and that the proposal does not provide an appropriate intensity and built form on a site outside of a Major Activity Centre. - It was outlined by the tribunal that although the site was within a Bush Suburban area, that this does not totally rule out villa unit developments. The telling quote within the decision is as follows "Policy can never be more than a guideline, it should not be applied as if it is a mandatory limitation on the exercise of discretion provided by the scheme." The tribunal found that the proposed development provided an appropriate balance between landscaping and built form. Therefore tribunal determined to set aside Council's decision to the refuse the application, and directed that a planning permit be issued.	-
P/2016/6386	202-206 Boronia Road, Boronia	Development of the land for 22 dwellings (fourteen (14) two storey and eight (8) three storey), vegetation removal and alteration of access to Road Zone Category 1 Objections: - Parking and traffic - Overshadowing - Accidents increased - Noise - Height and structure plan - Vegetation	Refusal VCAT - consent order for the revised proposal	Yes	The proposal fails to comply with character and bulk through balconies with insufficient ground space retained for vegetation. Insufficient space has been made available to provide for meaningful landscaping to integrate the development into the area and maintain the landscape character of the area. It is unclear if suitable waste collection methods can be adopted onsite, without a redesign of the proposal. The proposal is inconsistent with the objectives and decision guidelines of the Design and Development Overlay – Schedule 7. Permit be issued for the development of 18 dwellings on the land upon negotiation at Compulsory Conference.	-
P/2017/6171	1 & 2/192 Boronia Road, Boronia	Development of the land for six (6) dwellings and creation	Refusal	Yes	- refused by Council due to neighbourhood character, built form, non-compliant garden area, Rescode compliance, car parking (proposed turntable) and insufficient areas for tree planting.	-

		of access to a road in a Road Zone Category 1 Objections: - Character and height - Overlooking - Overshadowing - Traffic - Car parking - Views on Dandenong - Internal amenity - Setbacks - Landscaping - Noise	VCAT - consent order for the revised proposal		- Compulsory Conference at VCAT: it was considered that the additional garden area and room for landscaping also addressed neighbourhood character concerns . Vic Roads also agreed to the proposed timetable. Given the above, the parties agreed to settle the matter at the conference. VCAT therefore directed that a planning permit be issued.
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South East

Application/ Permit	Address	Purpose	Decision	Activity Centre	Commentary	Notes
P/2017/6434	72 Boronia Road, Boronia	Removal of Covenant 2300922 Objection - By covenant beneficiaries - Precedent to overdevelopment	Refusal	Yes	Covenant regards to single dwelling and type of construction - Test of the Act not met and application refused.	
P/2017/6557	7 Hastings Avenue Boronia	Development of land for 10 dwellings (including double and three storeys), and vegetation removal Objections: -	Decision pending	Yes	-	-
P/2017/6327	66 Boronia Road BORONIA VIC 3155	Development of land for six double storey dwellings and alteration (removal) to a Road Zone Category 1 Objection: - Neighbourhood character - Noise - Traffic - Overdevelopment - Services - Covenant - Foothills	Approved	Yes	- Covenant previously removed by the Supreme Court - Previous permit P/2011/7014 issued for two storey apartments (11 dwellings)- extension refused - Application deemed to satisfy requirements of the policy and controls.	P/2011/7014 - VCAT determined that proposal responds well to Council policies of higher densities in Activity Centres and that design and scale are appropriate to the DDO7 built form controls; no policy issues – extension was however refused later on.
P/2017/6722	62 Boronia Road BORONIA VIC 3155	Removal of restrictive covenant No. 2260305 Objection: -	Refusal	Yes	- Council requested that the application also include notice within the local gazette (Leader newspaper) for a period of two weeks. This requirement does not appear to have been undertaken and the Statutory Declaration confirms as such. - Test not met, application refused	-

		<ul style="list-style-type: none">- Increase incursion of medium density housing- Traffic- Breach of covenant				
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North East

Application/ Permit	Address	Purpose	Decision	Activity Centre	Commentary	Notes
P/2017/6529 Cosdea Group PLV Knox CC	18 Bambury Street, Boronia	The construction of six (6) double storey dwellings and removal of vegetation Objection <ul style="list-style-type: none"> - Neighbourhood character - Accessibility - Open space - DDO7 - Vegetation and landscaping - Overlooking - Drainage - Densification of streets - Parking and traffic 	Refusal VCAT Overtur ned	Yes	<p>The application was refused by Council on the basis that the proposal was not consistent with State and Local Planning Policy, the proposal was not consistent with the neighbourhood character of the area, the Design and Development Overlay, the Significant Landscape Overlay, the Dandenong Foothills Policy, as well as a number of ResCode design concerns. The applicant lodged an appeal at VCAT against Council's refusal of the application.</p> <ul style="list-style-type: none"> - The Tribunal felt that the proposal was satisfactory subject to conditions that addressed issues associated with private open space provision, the provision of garden area, and an amended waste management plan. The Tribunal therefore overturned Council's decision and directed that a planning permit be issued. - VCAT didn't seem convinced by the issues regarding the swept paths, noting that the plans for 14 and 20 Bambury St had similar setbacks and access and were approved by Council. - The application of policy is a matter of balancing diversity and development against landscape character and the DFA. This side of Bambury St has many medium density developments (previous VCAT decisions against development in Bambury St related mainly to apartment development). Most of the medium density developments in the area have no landscape breaks (and the breaks in those that do are minimal). - Diversity in dwellings doesn't have to apply to the particular site. There is diversity in the area and the proposal provides diversity, with compact 2 bedroom dwellings. - The car access appears to be acceptable and is comparable to the developments at 14 and 20 Bambury St. - The upper floor facade of unit 1 is not an issue. It presents as a single dwelling and (although it could be recessed further) articulation is not an issue and the balcony provides setbacks to the facade, to the east. - The balcony of 8sqm is an acceptable size for secluded private open space and it is unclear why 15sqm is the size required under the standard given that 8sqm is normally required. Plus, the 8sqm balcony will be supplemented by a ground level side service yard area. 	<ul style="list-style-type: none"> - Bambury is a balanced approached
P/2016/6043	15 Albert Avenue, Boronia	The construction of seven (7) three storey dwellings Objection <ul style="list-style-type: none"> - Overlooking 	Refusal	Yes	<ul style="list-style-type: none"> - The car parking layout and access arrangements are inconvenient and unsafe for residents and visitors and would compromise the operation of the surrounding road network. - The building provides an inadequate level of internal amenity for future residents, with insufficient areas of private open spaces provided, a poor outlook offered to living spaces and insufficient storage and waste facilities provided. - The development including its setbacks, massing, lack of landscaping and lack of architectural quality would result in an undesirable urban design outcome that would have an adverse effect on the amenity of neighbouring properties. - The dwellings are poorly integrated with its communal spaces and would create an unsafe and undesirable space for residents and visitors. 	-

P/2011/6349 43 Chandler Road Pty Ltd v Knox CC [2012] VCAT 715	43 Chandler Road, Boronia	<p>The construction of fourteen 3-storey dwellings and one 2-storey dwelling and the removal of vegetation</p> <p>Objections</p> <ul style="list-style-type: none"> - Neighbourhood character - Traffic and parking - Safety - Noise - Overlooking - Overdevelopment - Overshadowing - Impact on infrastructure - Waste - Vegetation - Crime and crowding 	Failure to Determine VCAT Refusal	Yes	<ul style="list-style-type: none"> - The proposal fails to achieve a reasonable level of compliance with the objectives and standards of Clause 55 of the Knox Planning Scheme (ResCode). - The proposal is considered inconsistent with applicable objectives for residential development as contained within the State and Local Planning Policy Framework of the Knox Planning Scheme. The proposed development is inconsistent with the building heights contained within the Design and Development Overlay (Schedule 7) of the Knox Planning Scheme. - The proposal demonstrates several fundamental deficiencies when assessed against the objectives of Clause 55 of the Knox Planning Scheme (ResCode). - VCAT considered the language and interpretation of the Design and Development Overlay – Schedule 7. The primary consideration within the decision was what constituted ‘outstanding architectural design’, as it was undefined language within the Planning Scheme. The key issue raised within this appeal was the language used within the DDO7, was subjective and overall difficult to evaluate design responses in a quantifiable method against the overlay. <p>Subsequent permit issued for Development of the land for 15 double storey dwellings and the removal of vegetation P/2012/6811</p>	<ul style="list-style-type: none"> - http://www6.austlii.edu.au/cgi-bin/sign.cgi/au/cases/vic/VCAT/2012/715 <p>Council refusal based on non-compliance with DDO7 (building height exceeding 7.5m); Council decision supported</p>
P/2010/6772 James W Sadler Pty Ltd v Knox CC (Correction) [2012] VCAT 257	1 Oak Avenue Boronia	<p>Construction of a three level building containing up to fourteen dwellings, variation of building height under the schedule 7 to the Design and Development Overlay and removal of vegetation generally in accordance with the endorsed plans.</p> <p>Objections</p> <ul style="list-style-type: none"> - Height, density and bulk - Neighbourhood character - Overshadowing - Appearance of basement - Trees and wildlife - Traffic and safety - Car parking and street - Noise - Risk, construction, amenity - Property devaluation 	Refusal VCAT Overturned	Yes	<ul style="list-style-type: none"> - ‘Outstanding architectural design’ is a term which is not defined in the planning scheme. The Council submits that this term relates to the appearance of the building, in terms of its architectural qualities. I accept that the appearance of the building is one of the factors to take into account, however, it is unclear as to what makes a building ‘outstanding’ from an architectural viewpoint. The term is subjective and somewhat unhelpful if it is not considered in the context of the outcome envisaged by factors such as policy, the purpose of the zone and various objectives including those at Clause 55 and DDO7. - It would be inappropriate, for example, to conclude that a building of strong architectural quality must only mean a building that makes a strong architectural statement that sets it apart from others. This is particularly so given the requirements of the planning scheme, including the policies within the both the state and local section of the scheme, the purpose of the zone and the provisions of clause 55 which call for development that is respectful of the neighbourhood character. It may be that a somewhat subdued architectural response is required in response to the neighbourhood character context. Such a response may not, in isolation, be regarded by some as reflecting outstanding architecture, but it may be entirely appropriate to the context. 	<ul style="list-style-type: none"> - Debate over outstanding architectural design, subjective and a design may not necessarily be relevant to local character context. Term considered to not only represent an architectural statement - http://www6.austlii.edu.au/cgi-bin/sign.cgi/au/cases/vic/VCAT/2012/257 <p>Amended plans lodged at VCAT reducing building height. Council supported amended plans subject to compliance with 7.5m height limit in DDO7 - VCAT expressed concern about reference to "outstanding architectural design" in DDO7 - there is no definition of what this is and DDO7 does not assist in its interpretation; VCAT determined building above 7.5m was still acceptable; other assessment based on CI 55 (Rescode) standards;</p>

P/2017/6564	45-47 Chandler Road BORONIA VIC 3155	Use and development of the land for a child care centre, associated parking, tree removal and business identification signage Objections: - Traffic - Car parking - Fencing - Development of Chandler Road - Vegetation	Approved	Yes	- The development is low scale (single storey) and has due regard to topographical form and local area characteristics. It supports the significant tree through good design outcomes. The colours proposed are not strongly reflective of the indigenous character of the area. A condition on the permit will request colours and materials which are more earth based.	-
P/2017/6104	39 Chandler Road, BORONIA VIC 3155	The construction of eight (8) double storey dwellings and the removal of vegetation Objections: - Loss of views to Mt Dandenong.	Approved	Yes	- The proposed design is a good sustainable outcome given the constraints of a long narrow site with a north-south orientation. It minimises water usage with provision of rainwater tanks and minimises energy use. Although vegetation does require to be removed replacement indigenous vegetation can be achieved in the landscaped areas. A redesign of the development has been done in order to retain 1 large eucalyptus tree to the rear. This proposed design is of high quality and is considered to be an acceptable response to the DDO7.	-
P/2017/6152	1/27 Chandler Road, BORONIA & 2A Rangeview Road, BORONIA	The development of the land for seven (7) two storey dwellings and removal of associated vegetation Objections: - Overlooking - Overshadowing - Water tanks - Landscaping - Car parking - Traffic - Noise	Approved	Yes	- The proposal is also considered to be consistent with the preferred neighbourhood character as set out in the requirements of the local policy on Boronia Activity Centre as the proposed development will make a positive contribution to the character of the activity centre. - The proposed built form is consistent with the requirements of the DDO Schedule and surrounding area as it achieves adequate setbacks allowing for landscaping, and uses a combination of external materials. Dwellings are orientated towards the street which will assist in ensuring an active frontage to the street. A condition of any permit issued will ensure the development is constructed in accordance with the endorsed Sustainable Design Assessment report.	-

Appendix 8 – Redevelopment Sites / Strategic Opportunity Sites identification framework matrix

Refer to attached for:

- Analysis matrix (Kx: D19-32606)
- Map 33 of Strategic Opportunity Sites

Footnotes and commentary:

i. It is noted that the KAHAP definition of affordable housing is more specific with its criteria than that of the State Government as established within the *Planning and Environment Act 1987*. The intent is however similar.

ii. The definition of Social housing aligns between both the Planning and Environment Act 1987 and KAHAP.

	Median Multiple Incomes	Median house price Boronia	Median household income
1996		105000	
1997		110000	
1998		121300	
1999		135000	
2000		147000	
2001	4.1	175000	41750
2002		207000	
2003		240050	
2004		260000	
2005		270000	
2006	3.6	285000	51220
2007		324000	
2008		343000	
2009		382000	
2010		450000	
2011	7.1	440000	60424
2012		430000	
2013		459500	
2014		500500	
2015		554000	
2016	9.4	646000	68536
2017		713500	

iii. Evolution of Median House Price and Household Income for Boronia

iv. Knox Affordable Housing Action Plan 2015-2020
 Knox Community and Council Plan 2017-2021
 Knox Housing Strategy 2015
 Knox Community Health and Wellbeing Strategy (now: Integrated City Strategy and Implementation Plan)
 Knox Planning Scheme
 Also refer to Appendix 1.

v. Knox Housing Monitoring Report: http://www.knox.vic.gov.au/Page/Page.aspx?Page_Id=1057
 It is noted that the data findings of the Housing Monitoring Report relies on approved planning permits [e.g. *Knox Housing Policy Monitoring and Review Program 2017, Page 14*]. The consequences of such findings is that it can result in deceitful interpretation on the amount of dwellings actually built vs. approvals that lapses and are not consequently built.



BORONIA ACTIVITY CENTRE

MOVEMENT AND ACCESS

Executive Summary: Context

Boronia Activity Centre is an area in transition with many advantages that need to be supported and developed to provide more activity, a better amenity and improved livability for those accessing it.

The Boronia Activity Centre has changed over recent years, with growth in population but a shift away from retail uses toward the food services industry. The area suffers from a number of issues in terms of how it is laid out, the dominance of the car and its disparate offerings. The nearby Knox Central shopping centre has had an impact on Boronia's attractiveness. Meanwhile, residential provision is changing from traditional single-storey offerings to townhouses, medium density apartments and block divisions. This is leading to a growth in the residential population bringing with it a series of other challenges.

The current environment does not offer a sustainable long term future for the centre which unless addressed will lead to increased congestion, and reducing amenity, viability and livability. The Boronia Railway Station provides a key connection to the wider Victorian transport network and needs to be integrated within an ongoing vision for the area.

People will need to change how they access the Boronia Activity Centre in order to futureproof its vibrancy and amenity as a place and key destination. How the road network is set out needs to change to support this vision, and it needs to promote a more vibrant and active outcome for the businesses, residents and visitors. Boronia has many advantages and aspects including its proximity to the Dandenongs, the railway station and its vibrant community, which need to be supported.

This report has been developed over several stages to provide an understanding of the existing conditions and issues of the area, prior to identifying interventions and opportunities. It uses the Movement and Place approach as a framework to give a better balance to the movement needs of the area and the place aspects associated with the activities that will happen into the future. In this way, it sets out a more balanced approach to how the area should operate.

Executive Summary: Existing Issues

A number of issues are prevalent within the study area, which are outlined by mode below.



Pedestrians

- 2% of people working in Boronia walked to work
- Pedestrian crossings are inadequate or non-existent
- Long wait times to cross at intersections
- Narrow, uneven or no footpaths provided
- Dark and narrow arcades, that close in the evenings
- Pedestrian connectivity between the four quadrants is poor
- Fencing along main roads preventing pedestrians from crossing mid-block
- It is easier and quicker to drive between the four key quadrants than it is to walk
- Lack of consistent wayfinding signage in the centre



Cyclists

- 0.4% of people working in Boronia cycled to work
- No safe east-west cycling options
- North-south shared path is disconnected at Boronia Road / Dorset Road intersection
- Parkiteer is provided at station, though underutilised. There is also conflict with buses or car park entrance to access facility
- Bicycle hoops are provided, but are used as parking barriers and for shop storage
- Lack of wayfinding signage within the centre. Where provided it is scattered and shows inconsistent information



Public Transport

- 7% of Boronia workers arrive on public transport
- Boronia train station is well used
- The bus network is comprehensive and provides access to key areas surrounding Boronia, however services are indirect, infrequent and not well timed with one another
- Bus stops near the retail core are located outside of the complex, rather than inside adjacent to the uses
- The lack of activity around the station reduces the amenity and safety of the station
- There is an undersupply of seating and shelter at most bus stops and the train station



Road Network

- The arterial road network provides key connections through Boronia
- Boronia Road allocates 85% of its space to vehicles and only 12% to pedestrians.
- The road network is not at capacity, with Google Maps Historical Traffic Data indicating most of the network is flowing well at peak times
- Roads dominate the landscape, with vast amounts of space provided, including hard surfaces, reducing the safety and amenity for pedestrians and cyclists
- Poor intersection and road design has resulted in drivers making unsafe movements



Car Parking

- A significant amount of land within the study area is car parking, with most provided in the retail core
- Car parking is provided adjacent to active frontages
- Most car parks are at-grade
- Parking for community facilities is often provided adjacent to these uses
- On-street parking is provided, though conflicts with pedestrian safety, accessibility and amenity
- Car park accessways frequently have poor visibility to pedestrians
- There is limited directional signage for car parks
- It is easier and quicker to drive between the four key quadrants than it is to walk

Executive Summary: Vision and Objectives

The Vision and Objectives have formed the starting point in which Movement has been applied to Boronia

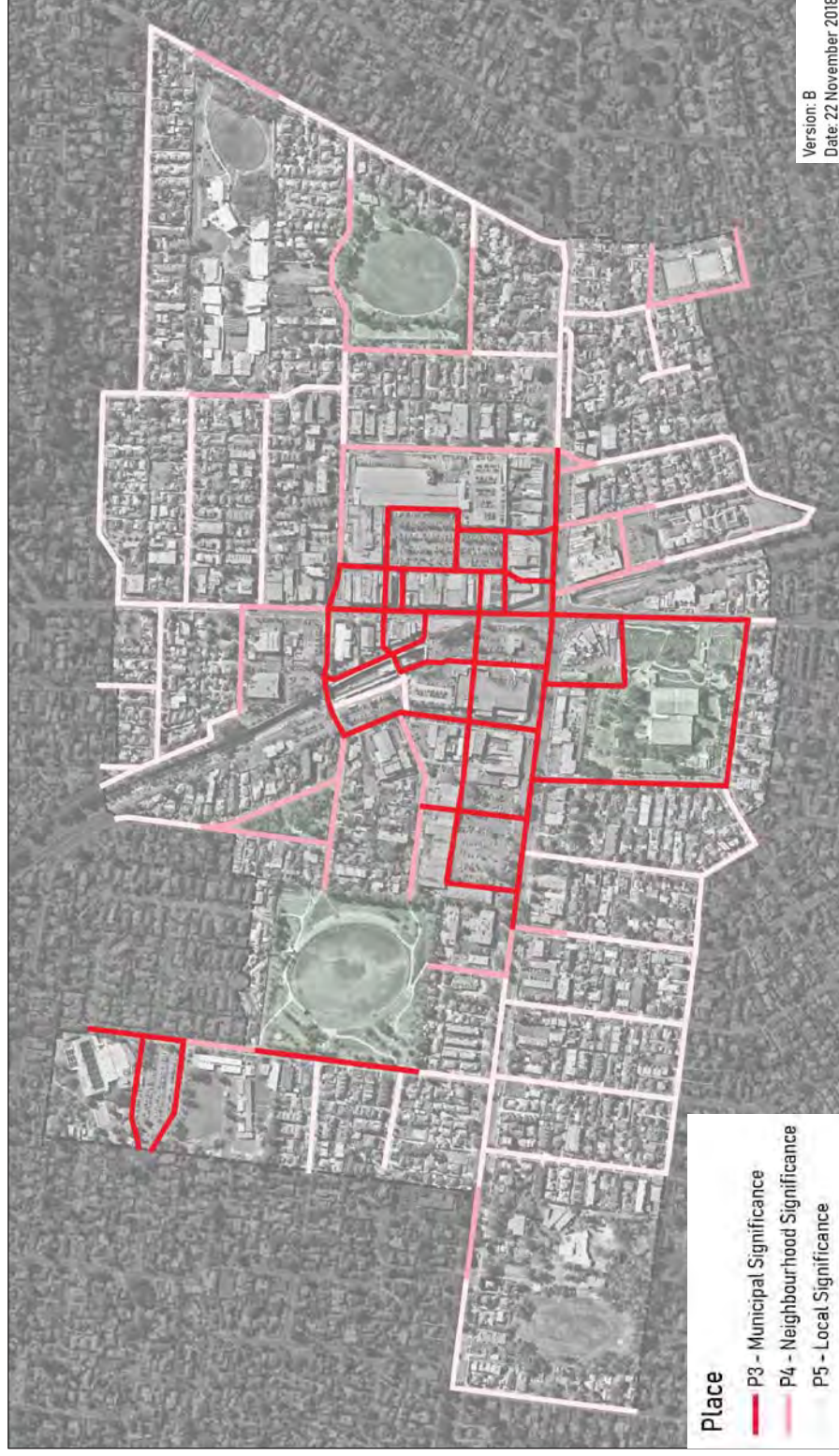
A vibrant and active Boronia as a destination and gateway to the Dandenongs, that supports safe access by all modes

Objectives

- Improve amenity, connectivity and legibility of the pedestrian network to, and within the Boronia Activity Centre.
- Support increased use of Boronia Activity Centre for leisure, recreation, commercial and visitor use.
- Provide a connected bicycle network with dedicated facilities linking key destinations with Boronia.
- Reduce impact of car parking and associated activity on the amenity and environment.
- Efficiently manage the road network, particularly along Boronia Road and Dorset Road.

Executive Summary: Place Network

The Vision and Objectives were the foundation of applying Place to Boronia

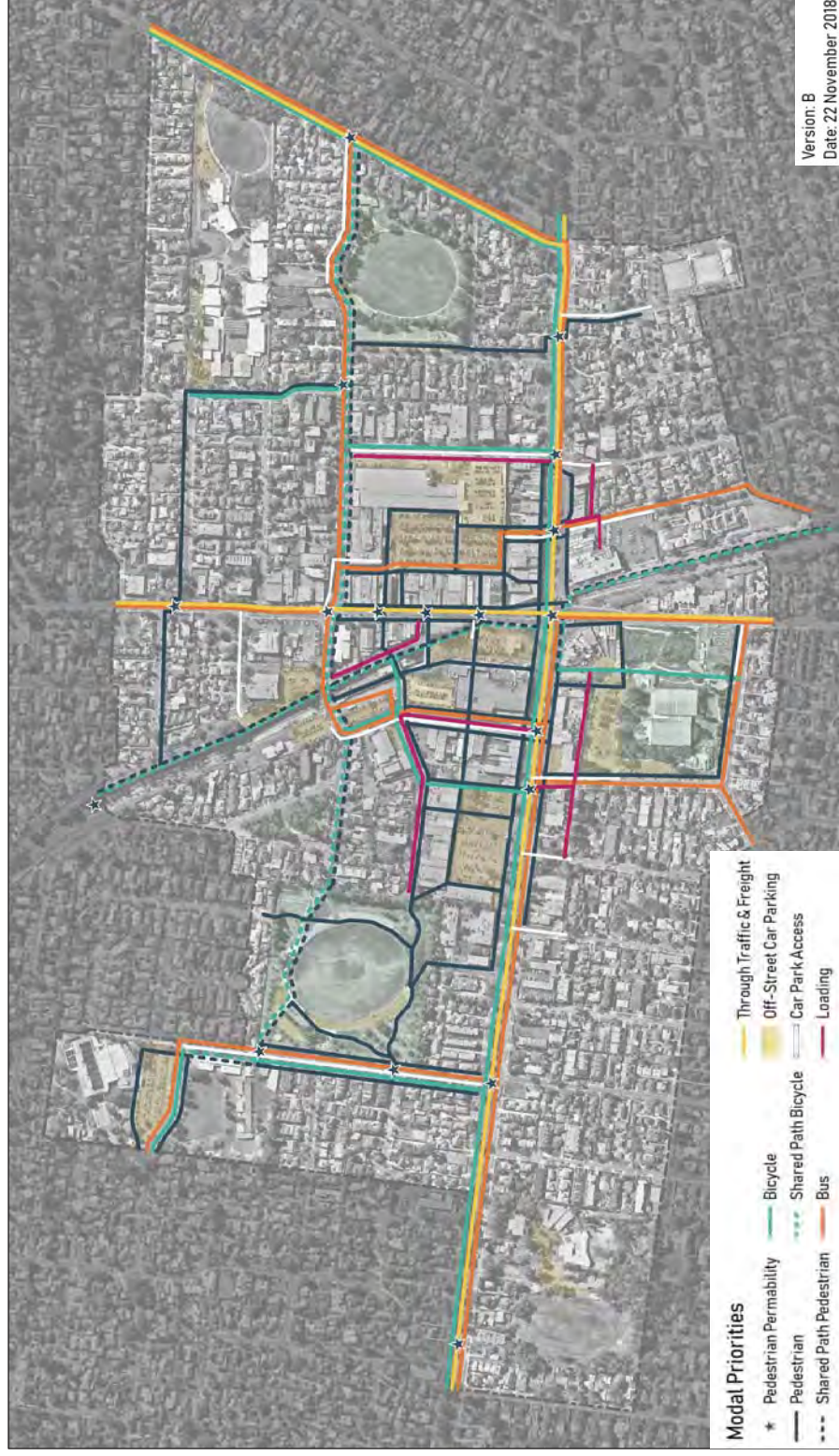


Each section of road and laneways within the study area was assigned a Place value. Most of the Town Centre core has been classified as a P3, with the exception of streets that do not offer any activity or reason to dwell. Outside of the core, streets were categorised based on their level of significance on the Movement and Place scale, that is, on the Municipal (P3), Neighbourhood (P4) or Local (P5) significance.

The classification applied is aspirational and may include some streets or laneways that do not currently exist. The outcome sought is creating a street where people want to linger and dwell.

Executive Summary: Movement Network

The Vision and Objectives and Place network allowed the modal priorities to be determined



The Movement function relates to how people travel through, to or within the street. Within the Movement classification is an underlying set of modal priorities which helps establish which modes to prioritise to support either the Movement function, or indirectly the Place aspect.

Boronia is currently dominated by the high movement function associated with cars and trucks. To achieve the Vision and Objectives, an understanding of the modal priorities is required.

Executive Summary: Proposed Interventions

A number of opportunities actions have been identified to help achieve the objectives of this strategy



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01

Introduction, Purpose & Process

The Boronia Activity Centre has changed over recent years, with growth in population but a shift away from retail uses toward the food services industry

Context

The Boronia Activity Centre is located approximately 28km east of the Melbourne CBD and is listed as a Major Activity Centre in Plan Melbourne.

The centre has changed significantly in recent years, with rapid growth in population and number of dwellings within the area.

Boronia Railway Station has also seen an increase in patronage, particularly during the commuter peak hours, with the private vehicle remaining the most convenient way to access the railway station. Boronia is one of three centres within Knox to be served by trains.

Overspill from the station car park is continuing to extend further into the residential areas, likely as a result of the low frequency of bus services between the station and surrounding suburbs, along with the indirect nature of certain routes.

A Parkiteer facility is provided at Boronia Railway Station, along with several bicycle hoops provided within various car parks across the Activity Centre.

The local shopping strips along Boronia Road and Dorset Road adjacent to the station, were traditionally occupied by retail uses, though in recent years have seen a shift toward food services, including cafes, restaurants and supermarkets, and clinical uses such as medical centres.



People will need to change how they access the Boronia Activity Centre in order to futureproof its vibrancy and amenity as a place and key destination

01

Introduction, Purpose & Process

Attachment 6.5.2

The recent growth and shift in land use mix has resulted in a significant increase in the number of trips travelling into and through the Boronia Activity Centre.

While many of these trips are contained locally, some trips are derived from nearby catchments and others are through movements to surrounding employment and entertainment activity. This increase in trips has resulted in a rise in a perception of congestion on many roads within and connecting the centre, not only along Boronia Road and Dorset Road, but also on many of the local roads.

As most of these trips are occurring by private vehicle, car parking within the centre has also increased over time. Limited availability of car parking spaces, increased demand for trips and poor perceptions of pedestrian safety has seen a high number of vehicles circulating around the centre, rather than walking, adding to in the network.

The current layout and associated congestion has a poor outcome for the activity centre with poor place making, amenity, severance, street activation, and impact on economic viability.

The role of streets is arguably the most important aspect in place-making and planning. Roads play a multi-faceted role in the transport network, promoting local connectivity with high amenity and safety, encouraging sustainable and active transport modes and facilitating throughput across the precinct.

Key Questions to be Answered

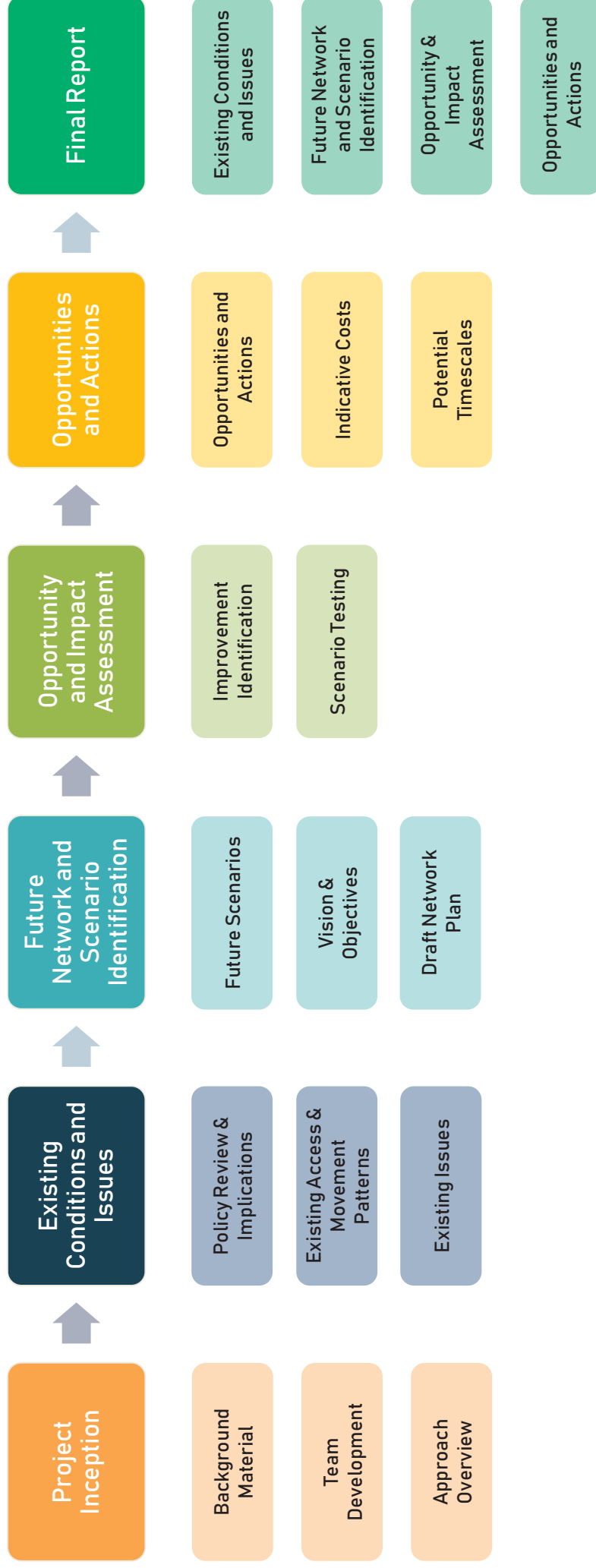
What type of transport network do we want / need to support increasing access demands and help create a sense of place?

How do we break the current high reliance on private car use and encourage more space efficient transport modes?

Where should alternative transport modes be, and what type of facilities and services should be provided?

This report has been developed over several stages to provide an understanding of the existing conditions and issues prior to identifying interventions and opportunities

Process



02

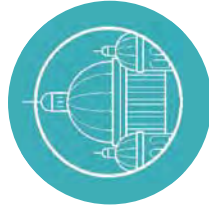
Policy Review & Implications

State policy focuses on integration of transport and land use in order to provide convenient and safe access for users undertaking their daily activities

02

Policy Review & Implications

Attachment 6.5.2



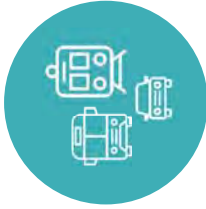
Plan Melbourne, 2017 – 2050 Victorian State Government, 2016

The Victorian Government released Plan Melbourne in 2016 (update of the previous plan released in 2014). The Plan looks to build on Melbourne's reputation as a global city of opportunity and choice, as it caters for an almost doubling of the population over the next 35 years (i.e. out to 2051).

The Plan includes the following key concepts to cater for the anticipated population growth:

- o protecting the suburbs by delivering density in defined locations
- o delivering a pipeline of large scale, city shaping infrastructure and urban renewal projects
- o better use of existing assets, including increasing efficiency of road based transport and transport – land use integration
- o 20 minute neighbourhoods – places where people have access to local shops, schools, parks, jobs and a range of community services within 20 minutes of their home.

The Plan identifies Boronia Activity Centre as an Major Activity Centre. This suggests that Boronia will provide a suburban focal point for services, employment, housing, public transport and social interaction.



Transport Integration Act, 2010 Victorian State Government, 2010

The Transport Integration Act is the primary transport statute for Victoria, and has caused significant change to the way transport and land use authorities make decisions and work together. The Act enshrines a triple bottom line approach to decision making about transport and land use matters. Decision makers must have regard to the following objectives and principles:

- o social and economic inclusion
- o economic prosperity
- o environmental sustainability

The Act requires that all transport agencies work together to achieve an integrated and sustainable transport system, and that land use agencies such as the DEDJTR take account of transport issues in land use decisions. The Act has been effective to date in changing the focus of organisations that traditionally only considered a single transport mode.



Metropolitan Rail Network Development Plan Public Transport Victoria, 2012

Public Transport Victoria (PTV) have examined how Melbourne's train system needs to evolve to meet the needs of the city and of train passengers in the short, medium and long term. They have assessed how travel needs are likely to change as Melbourne grows, how the demand for train travel will evolve and ways of expanding the network to meet these needs.

The plan is designed to:

- o expand the capacity of the existing network to meet the growing needs of Metropolitan Melbourne
- o re-design train services to maximise opportunities for seamless coordination with buses and trams; and
- o extend the network to areas currently not served by metropolitan rail.

This plan will result in additional train services to and from Boronia, along with better, more timely connections between the rail services and the buses at the station. Ultimately this will provide a more cohesive and reliable network for people to utilise, ideally reducing peoples reliance on the private car to get around.

The motion of providing new infrastructure that follows the movement and place approach is becoming more prevalent in recent State Government policies



Victoria's 30-Year Infrastructure Strategy Infrastructure Victoria, 2016

This is Victoria's first ever 30-year infrastructure strategy. It is a state-wide, evidence-based plan covering all types of infrastructure. It sets out a pipeline of initiatives to be delivered over the next three decades to help create the best possible future for the state.

The Strategy has been created for the community, developed through consultation and delivered to Parliament. It is a product of the input of people from all over Victoria on how to create a future where everyone has good access to jobs, education and services, where communities and businesses thrive and where the environment is valued.



Victorian Infrastructure Plan Victorian State Government, 2017

The Victorian Infrastructure Plan aims to provide world-class infrastructure strengthens Victoria as a globally connected economy, an equitable society and an environmental leader. The document is the State Government's response to the Infrastructure Victoria Strategy and their approach recognises the importance of strengthening our infrastructure resilience in partnership with government, the public and the private sectors.

The plan contains commitments to a number of schemes, including the following in the short-term:

- Level Crossing Removal Program
- Western Suburbs Road Package
- Mernda Rail Extension
- Mordialloc Bypass
- Strengthening of walking and cycling networks
- Melbourne Metro Rail Tunnel
- West Gate Tunnel



Network Development Strategy (NDS) Victorian State Government, 2017

The State Government released the NDS, providing an overview of the key components and strategic approach to development of the transport network and system. It identifies five key phases to deliver the strategic approach, noting that people should be held at the centre of each of these phases.

The NDS also states that a "review of the transport system is underway to apply the concepts of the network development strategic approach and develop options," and that this work, which incorporates the organising and design principles of the NDS.



Movement and Place VicRoads, 2018

VicRoads has superseded their SmartRoads policy with a new Movement and Place approach. The Movement and Place approach, based on the original Link and Place book produced in 2007 (Jones), recognises that transport links performs two functions: movement of people and goods, and serving as a place (a destination in its own right). The movement function is about minimising travel time and throughput whilst the place function is about a destination in its own right and seeking to dwell and spend time in the location.

There is often an inherent conflict between the two. The Movement and Place approach seeks to recognise the competition between movement and place uses and decide on the balance that needs to be achieved for each of these functions at the desired locations.

This approach forms the foundation for the Boronia Movement and Access Study.

The current City of Knox transport strategies aim to increase active travel modes for both commuting and recreational purposes



City of Knox Integrated Transport Plan 2015-2025 City of Knox, 2015

The Knox Integrated Transport Plan provides a framework for both the development and management of an integrated transport network to service the future needs of the Knox community and business. The Plan seeks to review the transport needs in Knox and identify key priorities and initiatives that will best deliver on these.

The Transport Integration Act 2010 provides a framework with six transport system objectives which Victorian transport agencies must have regard to when making decisions. This framework provides a well-grounded basis for articulating transport aspirations for Knox. For this Integrated Transport Plan, each Transport Integration Act objective has been replicated below with themes and actions, as identified through the consultation process, to achieve desired outcomes:

- o Social and Economic Inclusion
- o Economic Prosperity
- o Environmental Sustainability
- o Integration of Transport & Land Use
- o Efficiency, Coordination and Reliability
- o Safety and Health and Wellbeing



City of Knox Pedestrian Plan City of Knox, 2005

The Knox Pedestrian Plan developed out of a desire to encourage more people to walk both as a leisure activity and as a mode of transport. The vision of the plan is to enhance the walkability of Knox.

The Plan identifies the main characteristics if a walkable environment as:

- o Interesting and attractive environments,
- o Supporting infrastructure e.g. signage and seating,
- o Continuous links between major destinations,
- o Overlooked streets from shops and residential properties,
- o Frequent opportunities to meet, sit and rest, and
- o Improved safety by lighting and footpath maintenance.



City of Knox Bicycle Plan Review City of Knox, 2008

Knox City Council undertook a review of the Knox Bicycle Plan in 2008, with the vision that *“the City of Knox will, through well planned bicycle networks and programs, increase the use of bicycles for commuting and recreation in a safe, convenient and sustainable manner for residents and visitors.”*

The objectives of the review were to consider the progress of bicycle facility implementation since the last review, identify the underlying principles for future development, consider the community's needs, develop new programs for bicycle facilities and encourage and support an increase in the use of bicycles as a means of transport throughout the City of Knox.

As part of the investigations into the Bicycle Plan Review a series of recommendations relating to future directions, encouragement, education, enforcement and planning have been identified.



City of Knox Parking Policy City of Knox, 2018

The Knox Parking Policy aims to facilitate the provision of on-street parking and parking in Council owned and/or controlled car parks. It aims to prioritise the differing needs of parking user groups while improving parking management within activity centres and the surrounding residential areas.

The purpose of the policy is to:

- o Establish a framework that Council will follow in order to apply parking restrictions, permits and other parking measures.
- o Support access and movement for road and parking users.
- o Ensure the equitable use of available parking spaces across the municipality.
- o Provide safe and accessible parking for residents, employees and visitors to the municipality.
- o To inform and support the development of parking management plans.
- o To inform and educate residents, employees and visitors to activity centres and trip attractors as to Council's approach to managing competing parking demands.

03

Existing Access & Movement Patterns

The Boronia Activity Centre is a Major Activity Centre of Melbourne, and provides a number of key transport, community, retail facilities to the outer east

03

Existing Access & Movement Patterns

Attachment 6.5.2

Boronia is listed as a Major Activity Centre in Plan Melbourne and is centred around, and divided by Boronia Road and Dorset Road. These roads provide access to the centre, while also segmenting it into four main areas.

The Retail Core is served by arterial roads, and primarily located to the north of Boronia Road, with Boronia Mall and Dorset Square to the east and Boronia Junction and Boronia Village to the west. These centres include large anchor stores, which are supplemented by local small scale retail.

To the south-west of the study area, there are community facilities, including Boronia Park which contains the Boronia Library.

Further afield, a number of schools are located in all directions, along with Knox Leisureworks to the north-west corner of the study area.



According to ABS, in 2016, over 4,100 people live and over 1,300 people work within the Boronia Activity Centre, which is a higher density than the remainder of the City of Knox

03

Existing Access & Movement Patterns

At the 2016 Census, there was a residential population of 4,000 in the within the Boronia Activity Centre. This equates to a population density of 21 people per hectare, which is higher than the Greater Melbourne Average.

A total of 1,734 dwellings were located within the Activity Centre at the 2016 Census, which means that there is an average of 2.4 people per dwelling.

Across these dwellings, there were 2,525 vehicles which equates to an average of 1.5 vehicles per household within the Boronia Activity Centre. This is lower than the City of Knox average of 2 vehicles per household. Over 3% of households stated they had 4 or more vehicles.

10% of dwellings (171) within the Boronia Activity Centre reported having no motor vehicle at the 2016 Census, which is higher than the entire City of Knox where only 4% had no motor vehicle.

Job densities in the area are very low compared to the CBD. At the 2016 Census, there were over 1,300 employees in the Boronia Activity Centre, which represents a density of 17 jobs per hectare.

Population	ABS 2016	Area (ha)	Population Density (people/ha)
Boronia Activity Centre	4,127	194.5	21
City of Knox	154,109	11,392	14
Melbourne (suburb)	47,285	650	73
Greater Melbourne	4,485,211	999,251	4

Source: 2016 ABS Census

Employment	ABS 2016	Area (ha)	Employment Density (jobs/ha)
Boronia Activity Centre	1,329	0.76	17
City of Knox	55,496	11,392	5
Melbourne CBD	199,221	2.37	841
Greater Melbourne	1,762,781	999,251	2

Source: 2016 ABS Census

There is currently a high level of car use in accessing the Boronia Activity Centre and City of Knox more broadly for work, with both being higher than the metropolitan average

03

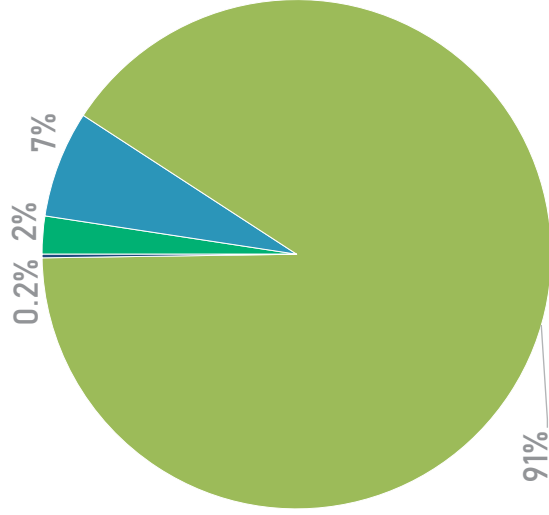
Existing Access & Movement Patterns

Those travelling to the Boronia Activity Centre for work currently use more than twice as much public transport (7%) than those in working in the City of Knox (3%), but significantly less than those within the entire Greater Melbourne area (19%).

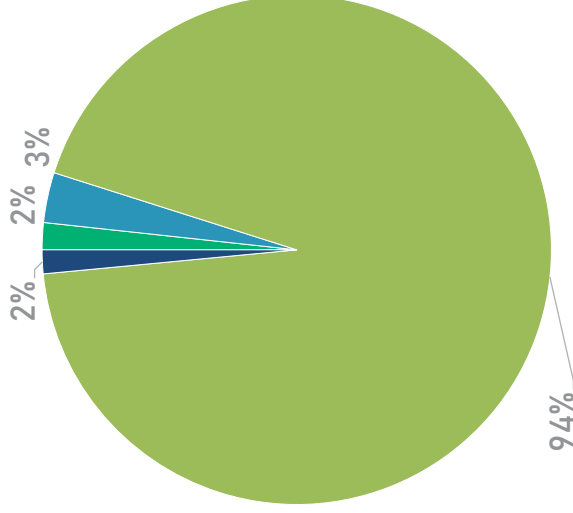
Conversely, car use to work is currently very high for those travelling to jobs in the Boronia Activity Centre (91%), which is higher than in all of Greater Melbourne (74%), but slightly lower than everyone working in the City of Knox (94%).

The higher public transport use to Boronia compared with the rest of Knox is due to the train station being at the centre of Boronia, whereas other centres are more reliant on buses or limited public transport options.

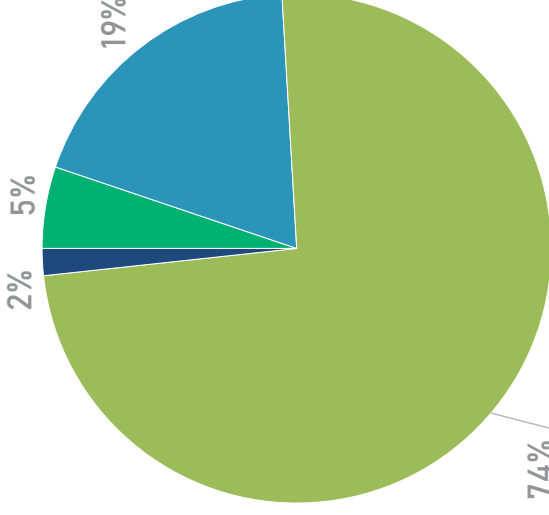
Boronia Activity Centre



City of Knox



Metropolitan Melbourne



- Active Travel
 - Walking
 - Cycling
- Public Transport
 - Bus
 - Train
- Private Car
 - Driver
 - Passenger
- Other
 - Motorbike
 - Worked at home

Source: 2016 ABS Census Journey to Work Data based on Place of Work

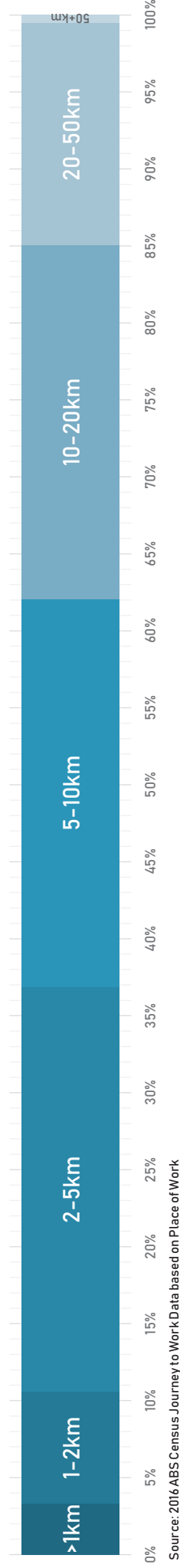
03

Existing Access & Movement Patterns

A third of Boronia's workers travel less than 5km to get to work, which is a suitable distance for active travel modes

More than 35% of workers travel less than 5km to get to the Boronia Activity Centre for work.

- 3% of workers travel less than 1km
- 7% travel between 1km and 2km
- 26% travel between 2km and 5km



Typically, less than 2km is considered appropriate to walk to work and between 2km and 5km is considered appropriate to cycle to work. However, some users would consider these modes for greater distances. In Holland, the rise of e-bikes has led to an increase in average bike commutes to more than 10km.

Therefore, 35% of workers could be utilising active travel modes, however only 2.4% currently do (with 2% walking and 0.4% cycling).

03 Existing Access & Movement Patterns

The pedestrian network within the Retail Core of the Boronia Activity Centre is not prioritised, and accessibility beyond this area is poor, with narrow or non-existent footpaths

Pedestrian crossing points are provided along Boronia and Dorset Roads, allowing for connectivity across the busy street using signals. However, they are far apart, crossing points are not located on all legs of the intersection, and wait times are lengthy.

Parts of both Boronia and Dorset Roads are fenced off, likely for safety, however this prevents pedestrians from crossing mid-block, at key pedestrian desire lines.

Pedestrian connectivity between the four quadrants is poor, with some car parks not providing dedicated routes or safe permeability for pedestrians. As a result, it is commonly easier and quicker to drive between each quadrant, as opposed to walking.

Chandler Road appears to be an important east-west pedestrian link on both sides of the railway line, connecting Knox Leisureworks, Boronia West Primary School and Tormore Reserve in the west, via the Bus Interchange, Railway Station in the centre, to Boronia Mall, Boronia Shopping Centre, Dorset Square, Chandler Park and Boronia K-12 College in the east. However, conditions along Chandler Road are quite poor with narrow footpaths on both sides, several high conflict side roads and access points and dangerous sight lines to pedestrians.

The map above highlights key access, crossing points and connectivity for pedestrians, and also locations of missing footpaths.



The bicycle facilities within Boronia are limited and disconnected, with unsafe connections over major roads and no existing east-west link provided

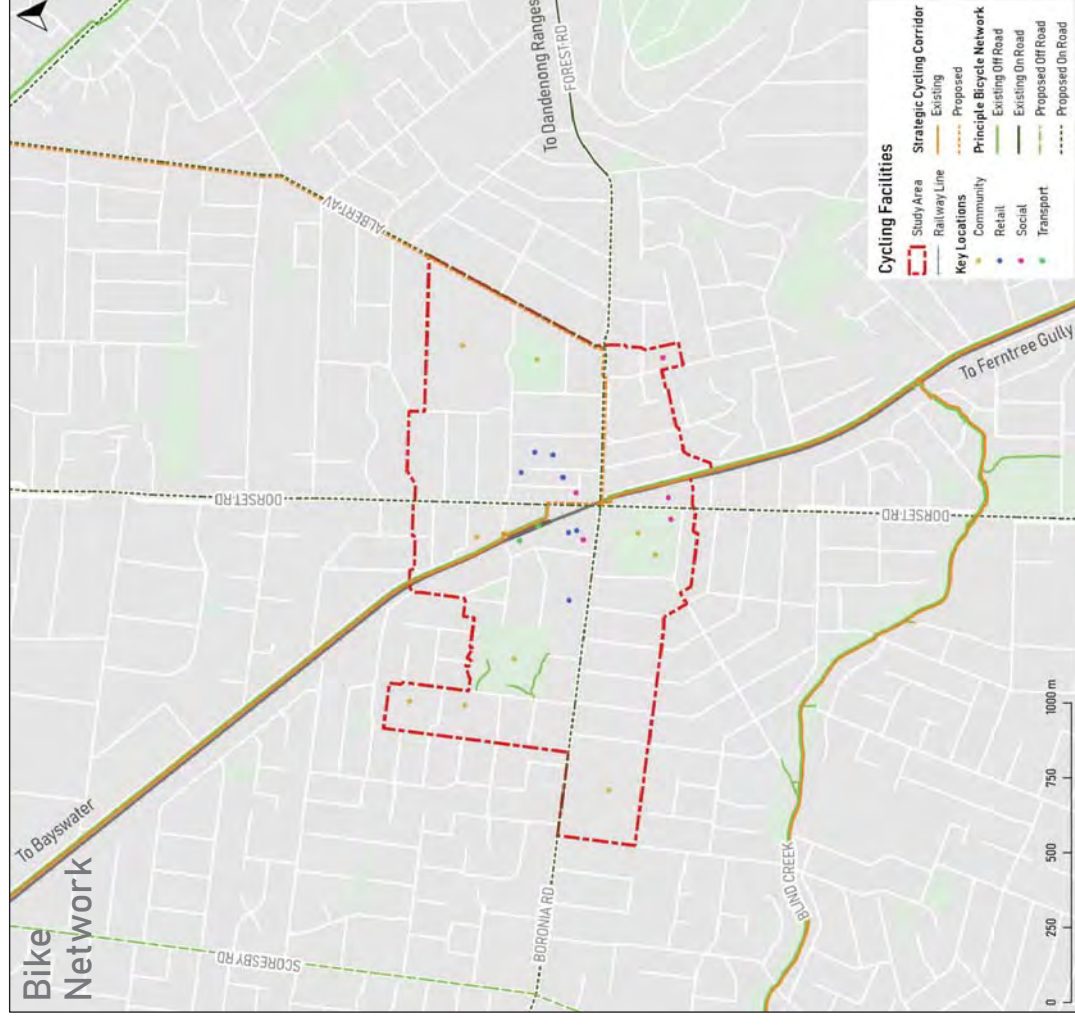
Connectivity for cyclists within and around Boronia is poor, with limited and unattractive options, including riding along and/or crossing various high speed and high traffic volume roads, such as Boronia Road and Dorset Road. There are no on-road lanes provided within the study area.

The only route that exists within the study area is an off-road shared path that travels along the railway line from north to south, through the middle of the Activity Centre. This route is a Strategic Cycling Corridor (SCC).

This shared path, however, has inadequate connectivity through the Activity Centre, between the railway station and the Boronia Road / Dorset Road intersection. Cyclists are required to dismount through the Boronia Junction car park then continue along the western side of Dorset Road on the footpath. There is no defined cyclist path across the Dorset Road / Boronia Road intersection.

A Parkiteer cage is provided at the station, which allows users to cycle as opposed to drive, though it is often underutilised, highlighting that there is an incomplete network of dedicated, safe and direct cycle routes connecting the surrounding area.

Several bicycle hoops are provided within various car parks across the Activity Centre.



Boronia Railway Station provides mass transit access to the study area and wider network for those living along the rail corridor, with bus services filling some gaps in other areas

03

Existing Access & Movement Patterns

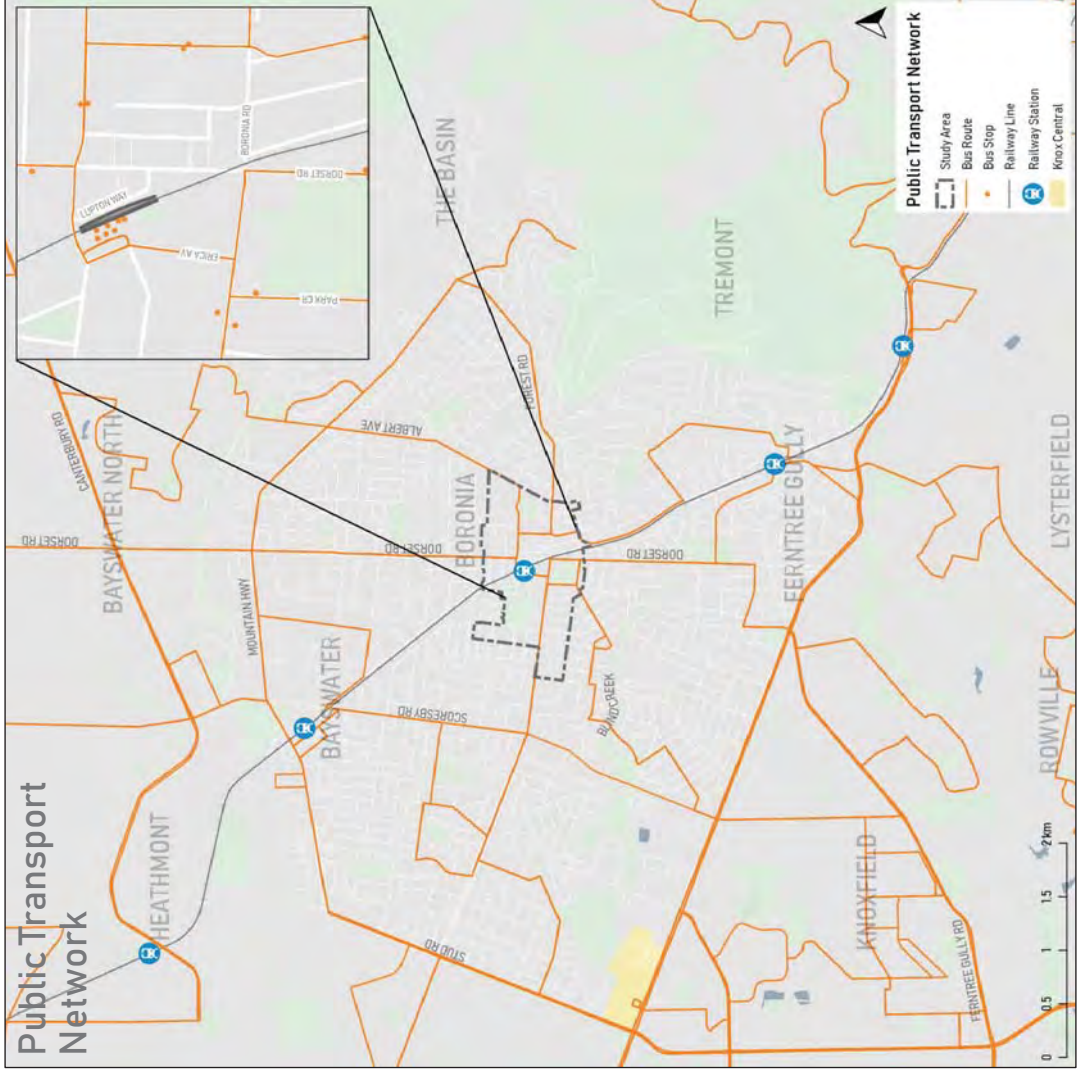
Boronia Station is located on the Belgrave rail line and is well utilised, with comparable patronage to Mordialloc Station or Sunbury Station. The Belgrave line connects to key employment hubs including Ringwood, Box Hill, Camberwell and the CBD.

A number of key bus routes provide connections to the surrounding areas including Bayswater, Ferntree Gully, Knox Central and Rowville.

A night bus also passes nearby the Activity Centre, on Albert Avenue, along the eastern boundary of the study area, which connects the Glen Waverley Railway Station to Bayswater, via Boronia, however is quite indirect.

Within the Boronia Activity Centre, bus stops are located at the railway station, where many passengers transfer between train and bus.

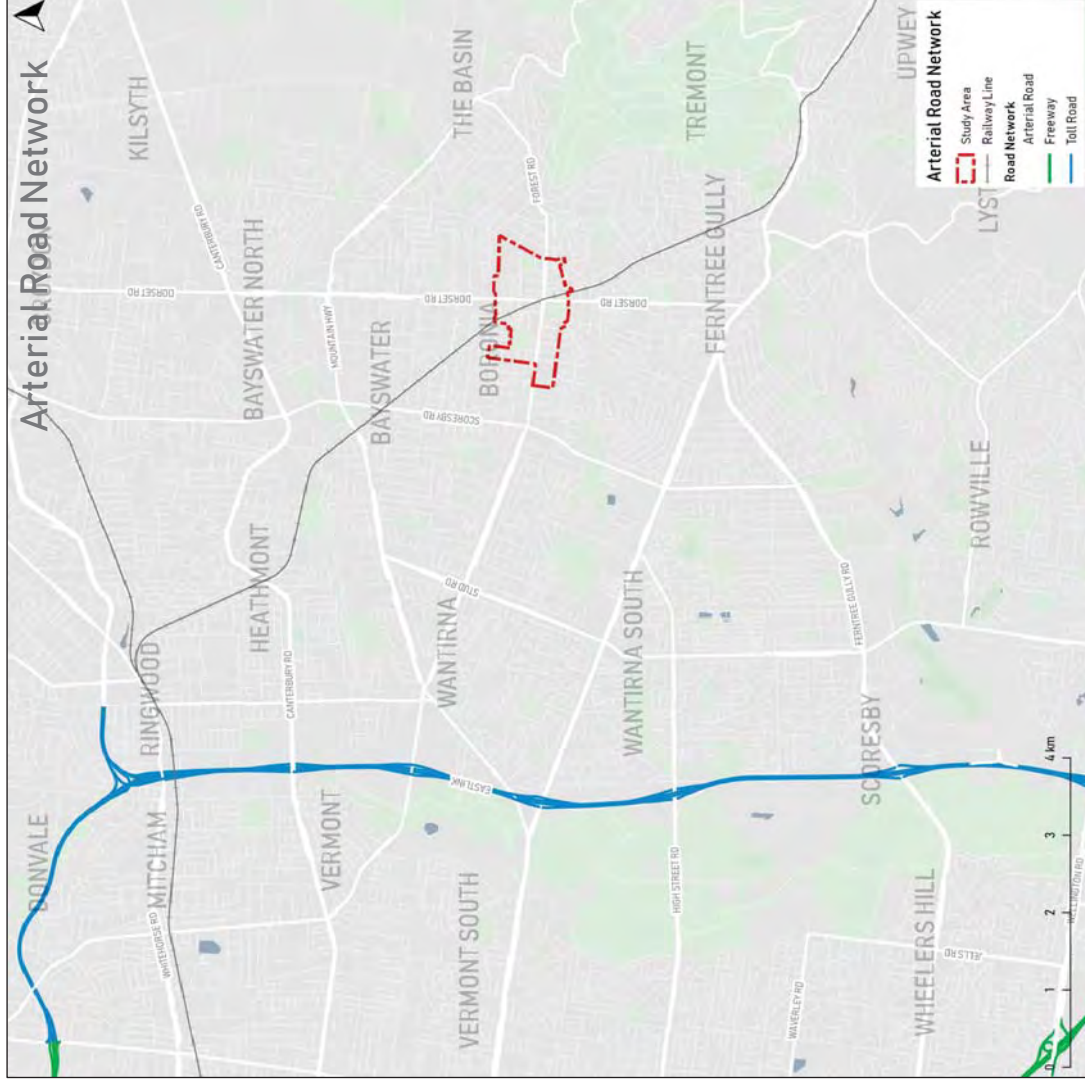
There are also some bus stops located along Chandler Road and Floriston Road, which service the northern and eastern edges of the town, however these are located on the outside of the Dorset Square complex.



The arterial road network within and around Boronia is quite uniform, allowing good accessibility in all directions, but ultimately directs traffic into the Boronia Activity Centre

03

Existing Access & Movement Patterns



The Boronia Activity Centre is located approximately 6km east of Eastlink, along Boronia Road.

The uniform grid-patterned arterial road network west of the area means the area is well-connected, allowing vehicle movements in all directions.

The key roads within Boronia are Dorset Road and Boronia Road:

- Dorset Road is the easternmost north-south spine within Metropolitan Melbourne, providing access from Croydon North to Ferntree Gully
- Boronia Road provides a key link from Eastlink to the Dandenongs.

Both of these roads are important arterials from a regional perspective, however within the Boronia Town Centre, they conflict with the Activity Centre uses.

There is also a well developed local road network. Chandler Road, Erica Avenue, Floriston Road and Park Crescent are often used as a ring-road, though otherwise, rat-running in the area is relatively low compared to other activity centres.

However, this also means vehicles accessing the Centre tend to use the arterial roads to do so.

In the previous five-year period, a total of 66 accidents were recorded in Study Area, 30% of these involving vulnerable road users: 11 involved pedestrians and 8 involved cyclists*



A review of the latest available five-year period of CrashStats* has been sourced for the Study Area. A total of 66 crashes were recorded within and surrounding the town centre, of which 19 involved pedestrians and/or cyclists.

Of these pedestrians and/or cyclists crashes, six were of a serious nature whereby at least one individual went to hospital.

There were 11 incidents within the study area involving pedestrians, four of which were serious. The majority of these (64%) occurred within the Retail Core. Four of these crashes were recorded along Boronia Road, at signals, at other intersections and mid-block, potentially indicating the lack of safe and direct crossing locations for pedestrians.

In addition, eight incidents involved cyclists, with most of these (63%) occurring along Boronia Road. This highlights the lack of safe east-west infrastructure for cyclists.

Note: Not all crashes are accounted for, as accidents without any injury are not reported, especially those involving vulnerable road users such as cyclists and pedestrians. In addition, VicRoads only report data for VicRoads managed roads. Data for incidents occurring on local roads are not reflected in the above statistics.

There are several car parks located within Boronia, with each anchor store having its own car park. Some of these are underutilised, and others appearing near capacity

03

Existing Access & Movement Patterns

Attachment 6.5.2

Approximately 9% of the land within the Study Area is off-street car parking that facilitates access to the station, community, retail and commercial uses of the area.

The publicly available retail spaces are primarily located in three at-grade and one multi-deck car parks. These spaces cater for those accessing the shops and services within the retail core. These car parks each service a different anchor store, within each quadrant, allowing visitors to easily park at each of their destinations. It is commonly easier and quicker to drive between car parks than it is to walk.

Several commuter car parks are provided for those using Boronia Railway Station, which are located along Erica Avenue and Chandler Road.

Both the retail and commuter car parks can be accessed by the local ring-road network consisting of Chandler Road, Erica Avenue, Floriston Road and Park Crescent.

There is also ample parking provided for the community facilities, adjacent to each of these land uses. In addition, there are on-street spaces provided along Dorset Road, Boronia Road, Erica Avenue, Floriston Avenue and Chandler Road.



Boronia Road is currently serving both through and local vehicle movements, as well as trying to provide a supportive environment for retail customers – no one is winning

03

Existing Access & Movement Patterns

Attachment 6.5.2

In the wider network, Boronia Road functions as an east-west link, connecting the Dandenong Ranges in the east to the Eastlink freeway in the west.

At a local level Boronia Road facilitates the connection between the retail and community activities of the Boronia Activity Centre.

The current 40m wide carriageway allocates 85% of its space (34.1m) to vehicles, and only 12% (4.95m) to pedestrians. There are no dedicated cycle facilities.

The Boronia Road corridor has inconsistent lanes throughout and beyond the study area, varying from as little as one lane in each direction to up to six in each direction. In various locations, Boronia Road only has two lanes in each direction, which does not appear at capacity.

The locations where additional lanes are provided conflicts with the retail and community activities, and reduces the amenity and safety for pedestrians using the centre.

Existing Cross Section

(At Boronia Junction pedestrian entrance, 50m west of Dorset Road intersection, looking east)



03 Existing Access & Movement Patterns

The volumes and speeds within the study area highlight that the road is the priority over the safety and amenity of pedestrians and cyclists

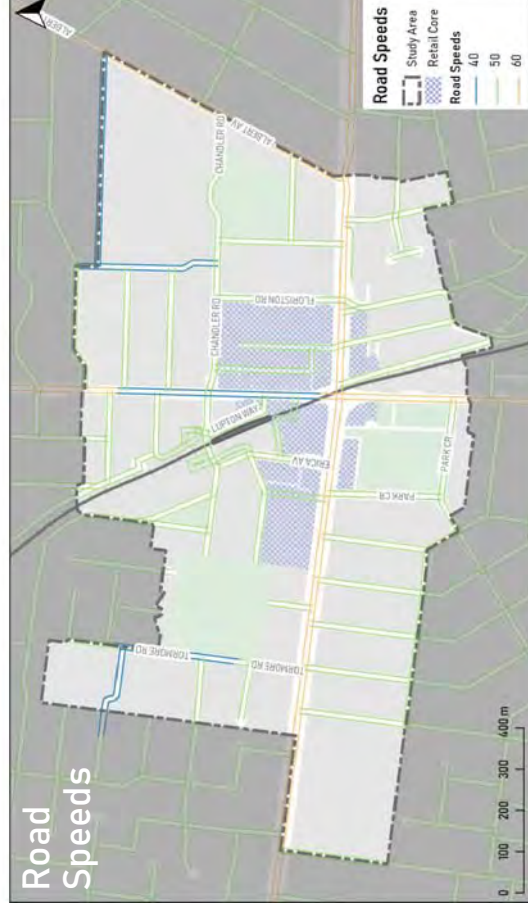
Volumes within the study area appear inconsistent with the lanes provided. For example, Dorset Road south of Boronia Road has two-way volumes of 34,000 vehicles per day*, but there are only two lanes in each direction, south of the intersection.

Compared with Boronia Road west of the intersection, which has fewer vehicles, with two-way volumes of 30,000 vehicles per day, but up to nine, and frequently six lanes. While Boronia Road carries more traffic at peak times rather than over the whole day like Dorset Road, there is a potential over supply of lanes along Boronia Road, where daily volumes do not match the number of lanes provided.

The current road speeds within the study area are between 40km/hr and 60km/hr:

- Boronia Road is 60km/hr, except adjacent to schools
- Dorset Road is 60km/hr south of the Boronia Road/Dorset Road intersection and 40km/hr north of it.
- Residential streets are 50km/hr, except adjacent to schools

The speeds along Boronia Road adjacent to the retail core are indicating that the road has a priority over the retail accessibility for pedestrians and cyclists.



*Source: VicRoads Traffic Volume Data: <https://vicroads.opendata-vicroadsmaps.opendata.arcgis.com/datasets/traffic-volume>

04 Existing Issues

2019-08-26 Ordinary Meeting Of Council Pedestrians within Boronia are faced with many challenges, including no crossing provision, lack of, inadequate or unsafe footpaths and dark and uninviting arcades

04

Attachment 6.5.2

Existing Issues



Boronia Rd at Erica Ave

Pedestrian crossings are not provided at all sets of traffic lights, resulting in long delays for users having to cross twice, rather than once



Looking down Henry St at William St

Footpaths around the study area, especially in the residential areas, are quite narrow, or in some cases, do not exist (see right side of street)



Boronia Rd north of Turner Rd

Footpaths are constructed with inconsistent materials, which is difficult for some users to navigate, and creates an unsafe surface for many



Crossing William St, north of Henry St



Pedestrian laneway between Dorset Sq and Dorset Rd



Pedestrian laneway between Dorset Sq and Dorset Rd

Many arcades connect Dorset Road to the Dorset Square shops and car park, but these can feel dark, narrow and uninviting, with some of them closing in the evening

Provision for cyclists within Boronia is lacking, there is no dedicated cycling network, and poor or no signage and bike parking is provided to primarily block cars from the footpath



Bicycle hoops are provided in some areas, though these are being used as parking barriers, and as physical support for shopkeepers' products



There are no on- or off-road bicycle paths in an east-west direction along, or adjacent to Boronia Road



There is a significant lack of wayfinding signage for cyclists throughout the centre. Existing signage is placed in low visibility locations, and directs people along the existing shared path.

There is no cyclist wayfinding to guide cyclists around the centre



Shared Path on footpath at entry to Boronia Junction



Shared Path on footpath at entry to Boronia Junction

The existing north-south shared path along the railway line stops at the railway station, where cyclists must dismount through a car park, continue on a footpath of poor quality, then navigate the large Boronia Road /Dorset Road intersection

The public transport network is located along the edge of the retail core, with stops not located directly adjacent to retail activity and inadequate seating and shelter provided at stops

04

Existing Issues



Bus stops are well-utilised, but not enough seating and shelter is provided for those waiting at the stops



A significant amount of the train station is not undercover, and the lack of activity around the station itself reduces the amenity and safety of the station for users

Bus stops are located on the outside of the active retail frontages, though car parks are located directly adjacent

The road network is dominating the landscape, with large amounts of space provided to cars and poor design resulting in unsafe movements by drivers

04

Existing Issues



Southbound on Dorset Rd at Chandler Rd



Northbound on Dorset Rd at Boronia Rd

Arterial roads and intersections are taking up vast amounts of space, reducing the amenity and safety for pedestrians and cyclists within the centre



Vehicles exiting Turner Rd right onto Boronia Rd



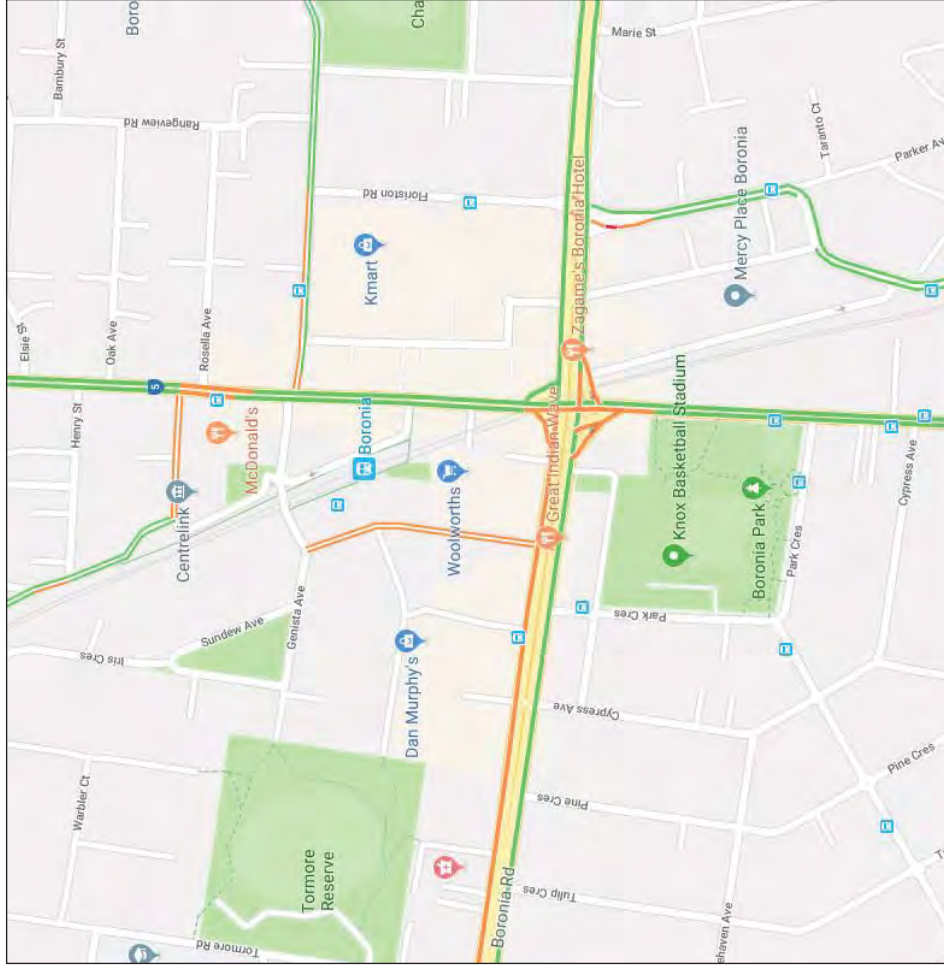
Erica Ave intersection at Boronia Rd

Poor intersection and road design has resulted in lack of clarity of right of way, unsafe movements by drivers, including vehicles turning a one lane road into two lanes

04

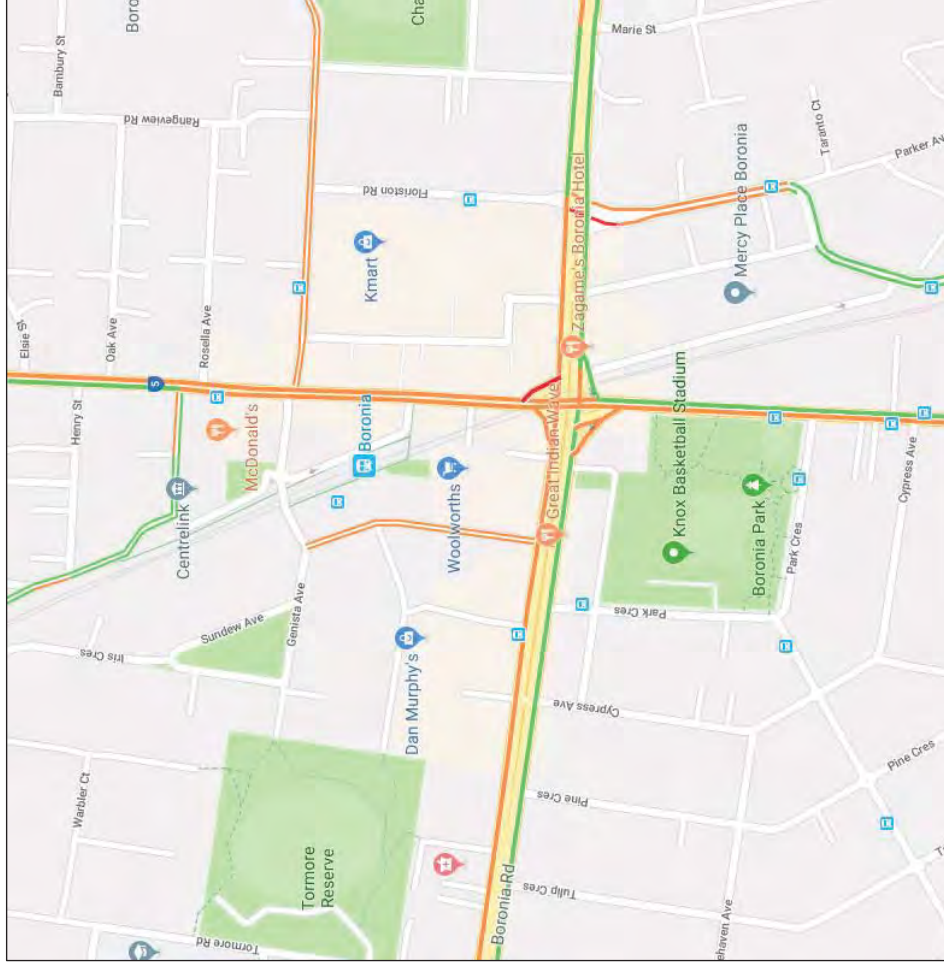
Existing Issues

The road network is currently not at capacity, with very few parts of the network showing slow traffic during peaks



Typical Thursday at 8am

Source: Google Maps Historical Traffic Data



Typical Thursday at 6pm

Parking is a dominant feature within the Boronia Activity Centre, with limited directional signage and often compromising the safety and accessibility of other users

2019-08-26 Ordinary Meeting Of Council

04

Attachment 6.5.2

Existing Issues



McDonalds Accessway on Chandler Rd

Car park accessways have poor visibility to pedestrians, resulting in potential for conflict between vehicles and pedestrians



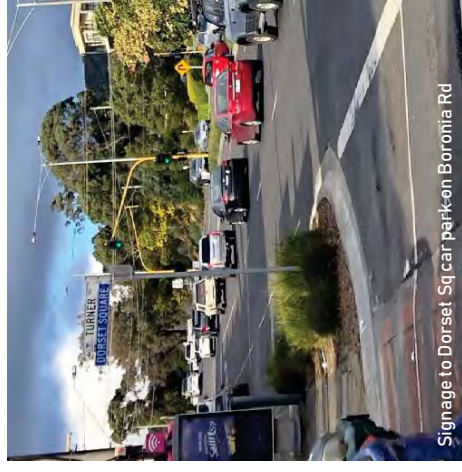
Car Park within Dorset Sq

Car park designs increase vehicle conflicts where vehicles are forced to unnecessarily cross each others paths



Slip lane north-westbound from Dorset Rd into Boronia Rd

On-street parking is prioritised over pedestrian accessibility, amenity and safety



Signage to Dorset Sq car park on Boronia Rd

There is very limited, and where it is provided, low-profile and hard to see directional signage from the road network to car parks



Signage to Dorset Sq car park on Boronia Rd

The Boronia Road and Dorset Road intersection and surrounds are particularly difficult for pedestrians to navigate, and confusing for drivers

2019-08-26 Ordinary Meeting Of Council

Attachment 6.5.2

04

Existing Issues



It is important to weigh up the safety and amenity of vulnerable road users and ensure that road space is suitably allocated throughout the Study Area

Existing Issues



Pedestrians

- 2% of people working in Boronia walked to work
- Pedestrian crossings are inadequate or non-existent
- Long wait times to cross at intersections
- Narrow, uneven or no footpaths provided
- Dark and narrow arcades, that close in the evenings
- Pedestrian connectivity between the four quadrants is poor
- Fencing along main roads preventing pedestrians from crossing mid-block
- It is easier and quicker to drive between the four key quadrants than it is to walk
- Lack of consistent wayfinding signage in the centre



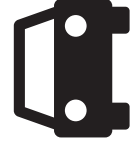
Cyclists

- 0.4% of people working in Boronia cycled to work
- No safe east-west cycling options
- North-south shared path is disconnected at Boronia Road/Dorset Road intersection
- Parkiteer is provided at station, though underutilised. There is also conflict with buses or car park entrance to access facility
- Bicycle hoops are provided, but are used as parking barriers and for shop storage
- Lack of wayfinding signage within the centre. Where provided it is scattered and shows inconsistent information



Public Transport

- 7% of Boronia workers arrive on public transport
- Boronia train station is well used
- The bus network is comprehensive and provides access to key areas surrounding Boronia, however services are indirect, infrequent and not well timed with one another
- Bus stops near the retail core are located outside of the complex, rather than inside adjacent to the uses
- The lack of activity around the station reduces the amenity and safety of the station
- There is an undersupply of seating and shelter at most bus stops and the train station



Road Network

- The arterial road network provides key connections through Boronia
- Boronia Road allocates 85% of its space to vehicles and only 12% to pedestrians.
- The road network is not at capacity, with Google Maps Historical Traffic Data indicating most of the network is flowing well at peak times
- Roads dominate the landscape, with vast amounts of space provided, including hard surfaces, reducing the safety and amenity for pedestrians and cyclists
- Poor intersection and road design has resulted in drivers making unsafe movements



Car Parking

- A significant amount of land within the study area is car parking, with most provided in the retail core
- Car parking is provided adjacent to active frontages
- Most car parks are at-grade
- Parking for community facilities is often provided adjacent to these uses
- On-street parking is provided, though conflicts with pedestrian safety, accessibility and amenity
- Car park accessways frequently have poor visibility to pedestrians
- There is limited directional signage for car parks
- It is easier and quicker to drive between the four key quadrants than it is to walk

05

Vision & Objectives

A vision has been developed for Boronia, with a number of supporting objectives to help guide the application of the Movement and Place methodology

A vibrant and active Boronia as a destination and gateway to the Dandenongs, that supports safe access by all modes

Objectives

- Improve amenity, connectivity and legibility of the pedestrian network to, and within the Boronia Activity Centre.
- Support increased use of Boronia Activity Centre for leisure, recreation, commercial and visitor use.
- Provide a connected bicycle network with dedicated facilities linking key destinations with Boronia.
- Reduce impact of car parking and associated activity on the amenity and environment.
- Efficiently manage the road network, particularly along Boronia Road and Dorset Road.

Movement and Place is the notion that you can classify streets on how people move through it and how people dwell within its place, and use this to reduce conflicts

Vision & Objectives

The Boronia Activity Centre is a perfect candidate for the Movement and Place classification that is currently being rolled out by VicRoads.

Movement and Place is based on the philosophy that transport links performs two functions:

- The movement of people and goods, and
- Serving as a place, a destination in its own right.

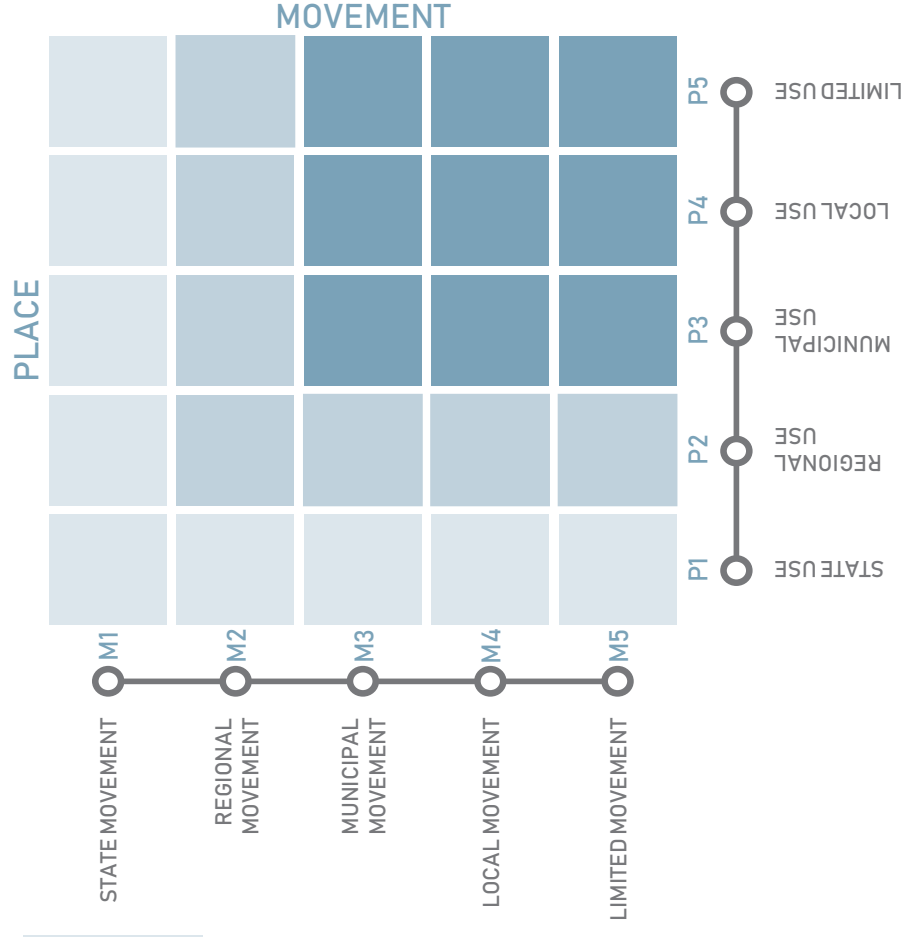
The movement function is about minimising travel time and maximising throughput whilst the place function is about the destination and people seeking to dwell and spend time in the location.

These two functions are vying for the same amount of road space, and thus are in conflict with one another.

In order to better manage these conflicts, it is proposed to classify the streets within the Boronia Activity Centre on the Movement and Place matrix.

Movement and Place proactively establishes a Vision to achieve that is not based on a numbers driven predict and provide approach.

This classification will provide clear direction for each street: whether the street is important for its ability to move people through it, or whether the street is important for its ability to provide a place for people to dwell.



The Vision and Objectives have formed the starting point in which Place has been applied to Boronia.

Applying Place

Each section of road and laneways within the study area was assigned a Place value.

This resulted in most of the core being classified as a P3, with the exception of streets that do not offer any activity or reason to dwell. Outside of the core, streets were categorised based on their level of significance on the Movement and Place scale, that is, on the Municipal (P3), Neighbourhood (P4) or Local (P5) significance.

The classification applied is aspirational and may include some streets or laneways that do not currently exist.

Place classification helps identify streets where the movement function should potentially be reduced, or changed in the mode of transport that provides the access, that is, a higher pedestrian focus.

Areas with a high Place (i.e. P1, P2, P3) are associated with high utilisation of active travel and public transport in accessing these places. The high place influences the desire to walk to the destination.

The outcome sought is creating a street where people want to linger and dwell.

The Place classification within the study area primarily provides P3 around the Town Centre, with other neighbourhood significant land uses being classified as P4

05

Vision & Objectives



- Place**
- P3 - Municipal Significance
 - P4 - Neighbourhood Significance
 - P5 - Local Significance

Note: All of the streets within Boronia are considered to be of Municipal Significance (P3), Neighbourhood Significance (P4) or Local Significance (P5). As such, GTA Consultants has not proposed to classify any streets as P1 (State Significance) or P2 (Regional Significance).

The Vision and Objectives have formed the starting point in which Movement has been applied to Boronia

05

Vision & Objectives

Applying Movement

The Movement function relates to how people travel through, to or within the street. Boronia is dominated by two streets with high movement values – Boronia Road and Dorset Road.

Within the Movement classification is an underlying set of modal priorities which helps establish which modes to prioritise to support either the Movement function, or indirectly the Place aspect.

Boronia is currently dominated by the high movement function associated with cars and trucks. To achieve the Vision and Objectives understanding modal priorities is required.

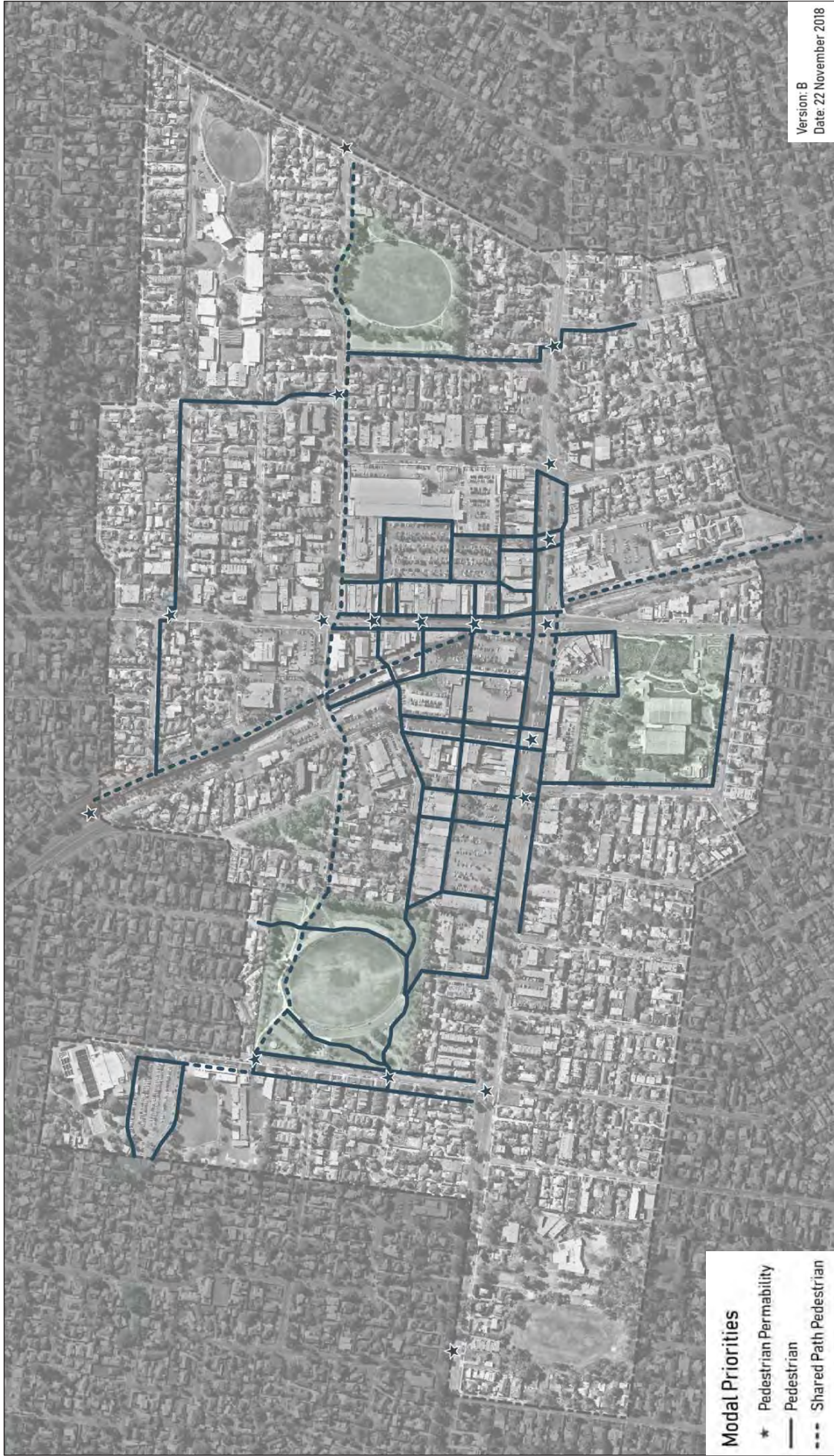
Applying the Modal Priorities

Modal priorities have been allocated to many streets within the study area (except those only performing a local movement function).

- Pedestrian priority was identified first to ensure that in areas of high pedestrian activity, pedestrians would be afforded more amenity, connectivity and legibility and support the Place.
- Bicycle priority was identified second, often complementing the pedestrian network, but providing the connected bicycle network linking key destinations, such as the missing east-west connection, proposed along Boronia Road
- Bus priority was next identified, mostly following the existing bus network, however identifying new areas where the bus network could provide better accessibility within the Activity Centre
- Access priority, that is vehicle accessibility to future car parking, was identified as the shortest route to car parks from the arterial road network
- Through traffic priority has been allocated to the arterial road network, to ensure vehicles not visiting the Boronia Activity Centre do not run within local streets

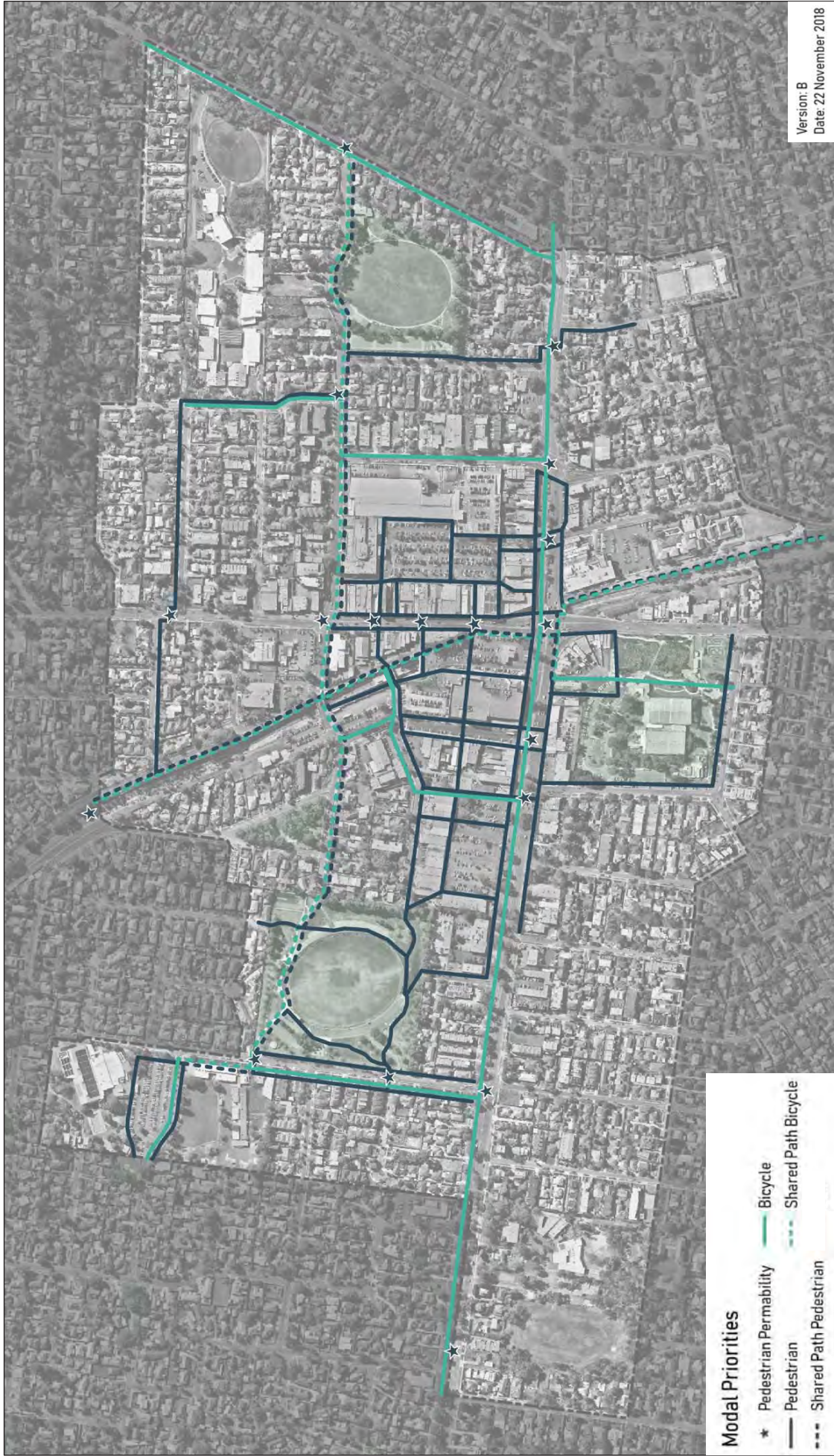
Pedestrian priority ensures that in areas of high pedestrian activity, pedestrians would be afforded more amenity, connectivity and legibility and support the Place.

Vision & Objectives



Bicycle priority provides a connected bicycle network linking key destinations, such as the missing east-west connection, proposed along Boronia Road

Vision & Objectives

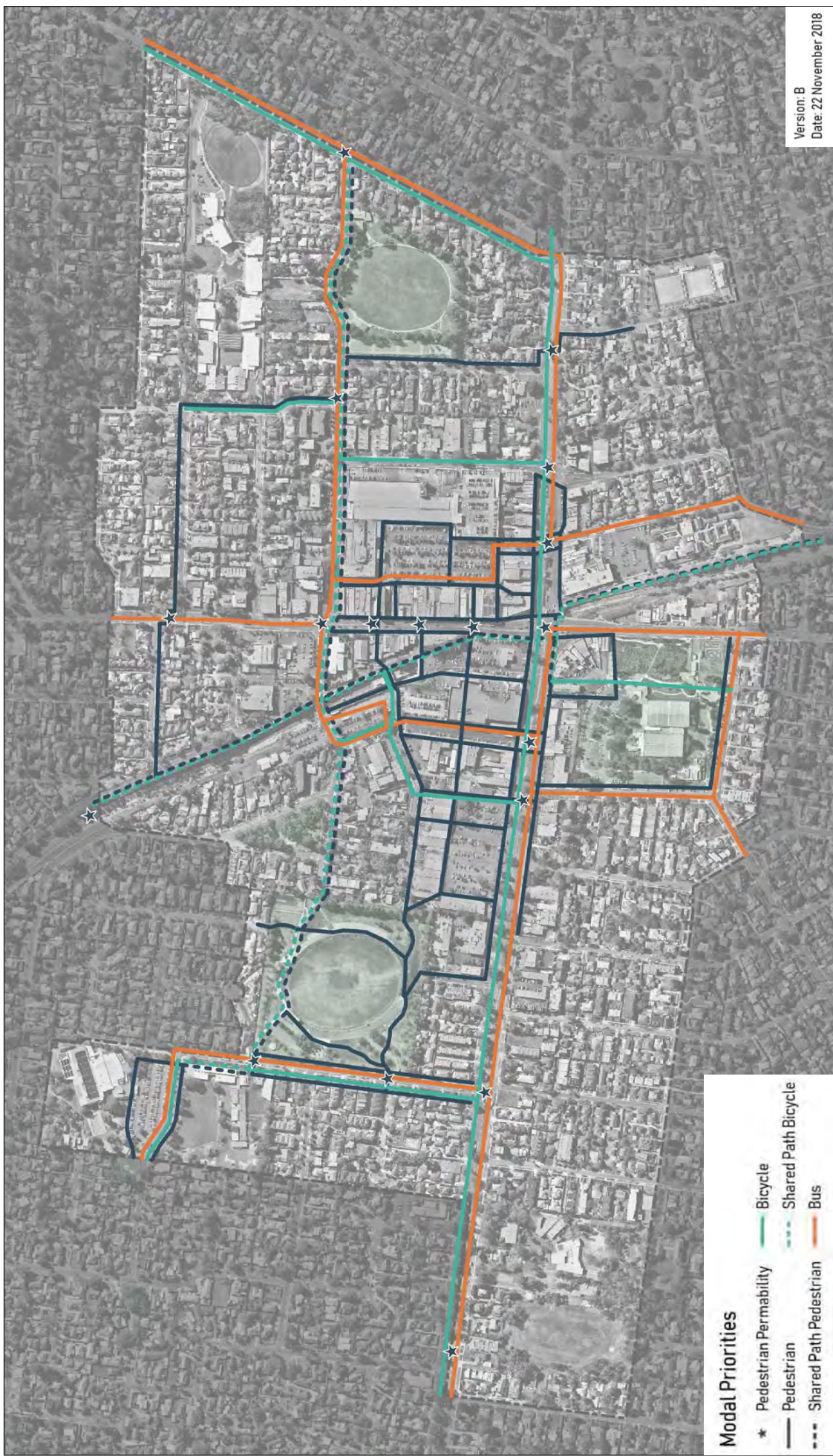


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Bus priority mostly follows the existing bus network, however identifying new areas where the bus network could provide better accessibility within the Activity Centre

05

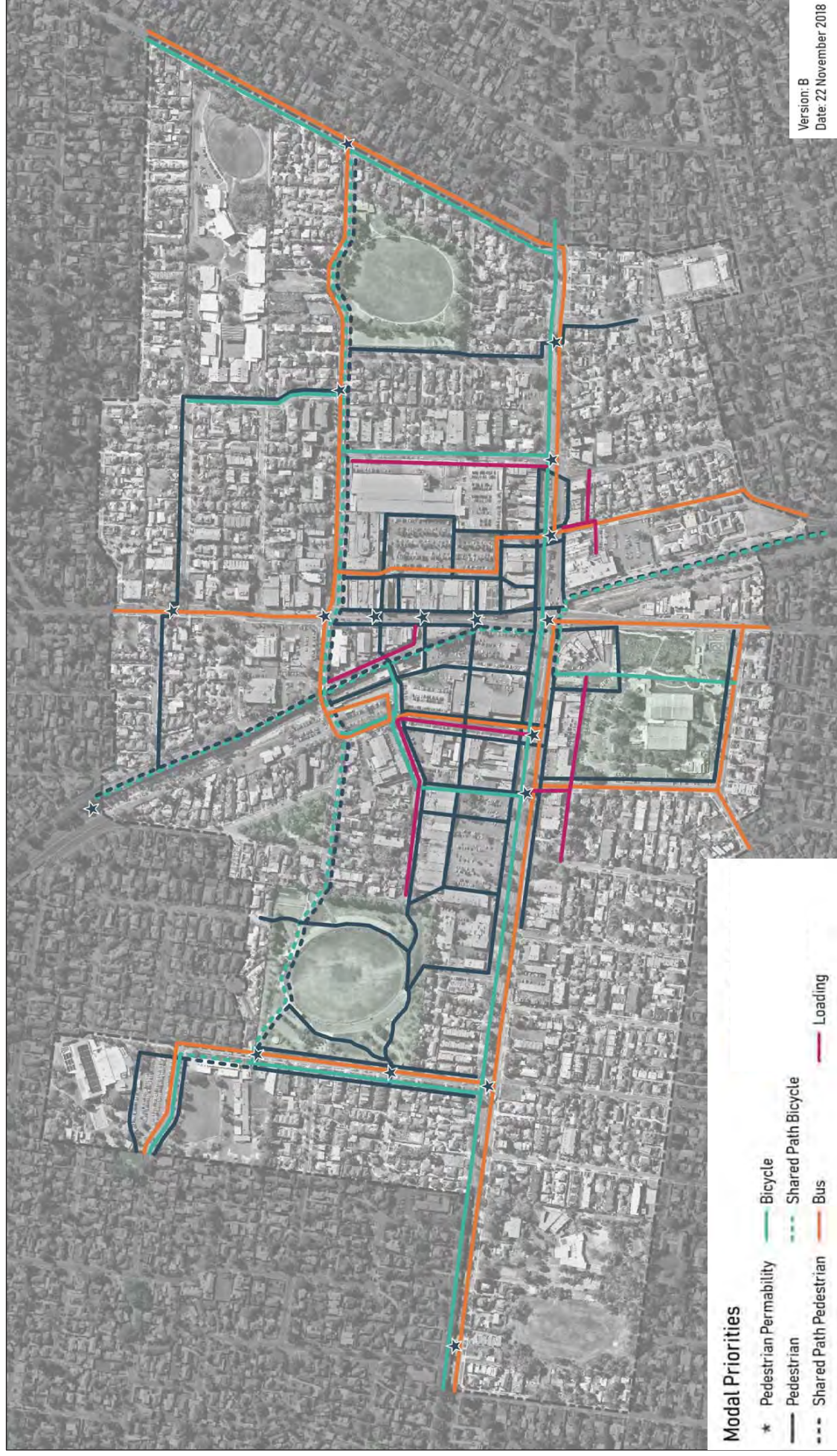
Vision & Objectives



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Loading is required to facilitate the land uses within the Boronia Activity Centre, and key loading routes have been designated to minimise conflict with other modes

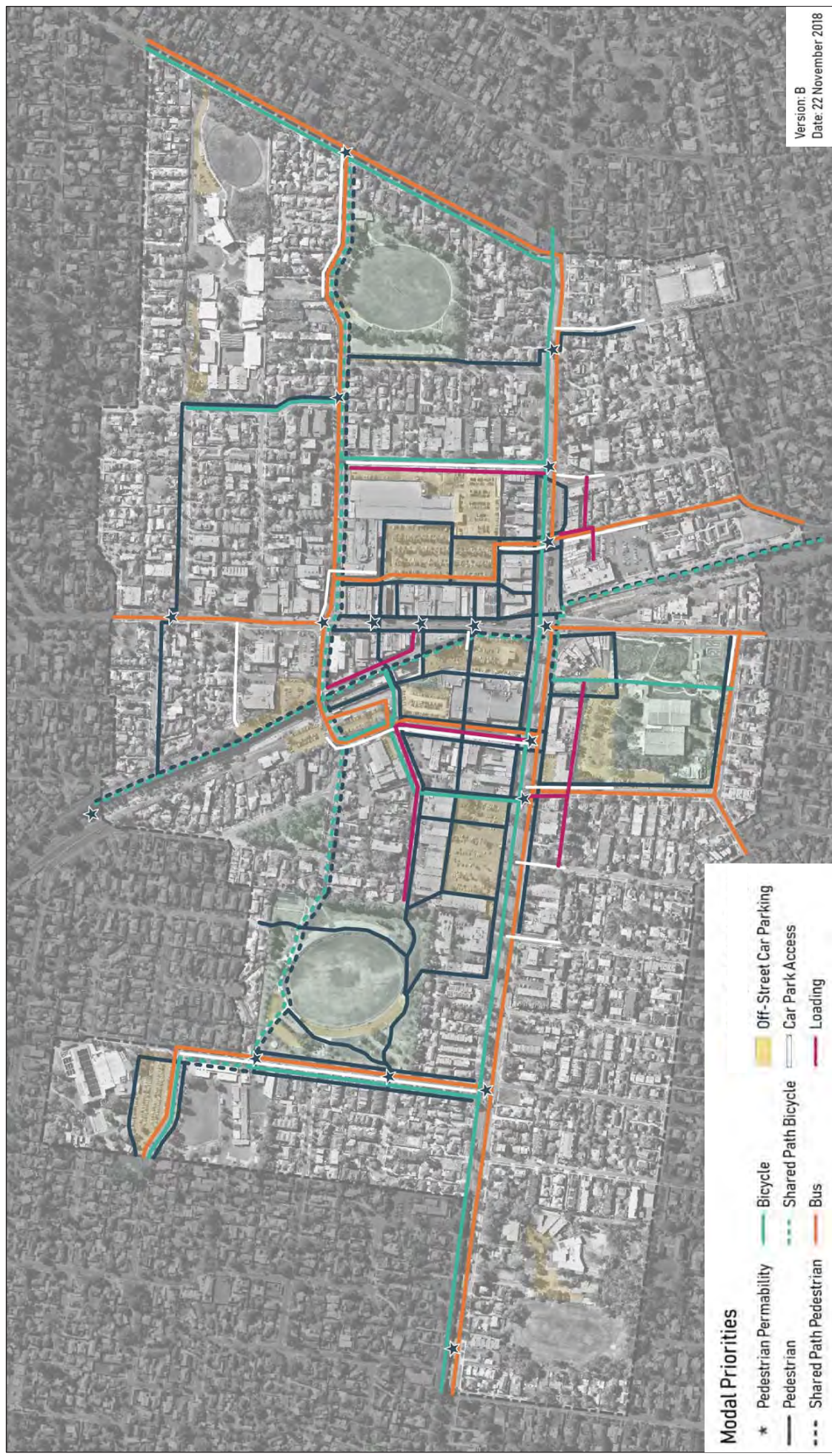
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Vision & Objectives



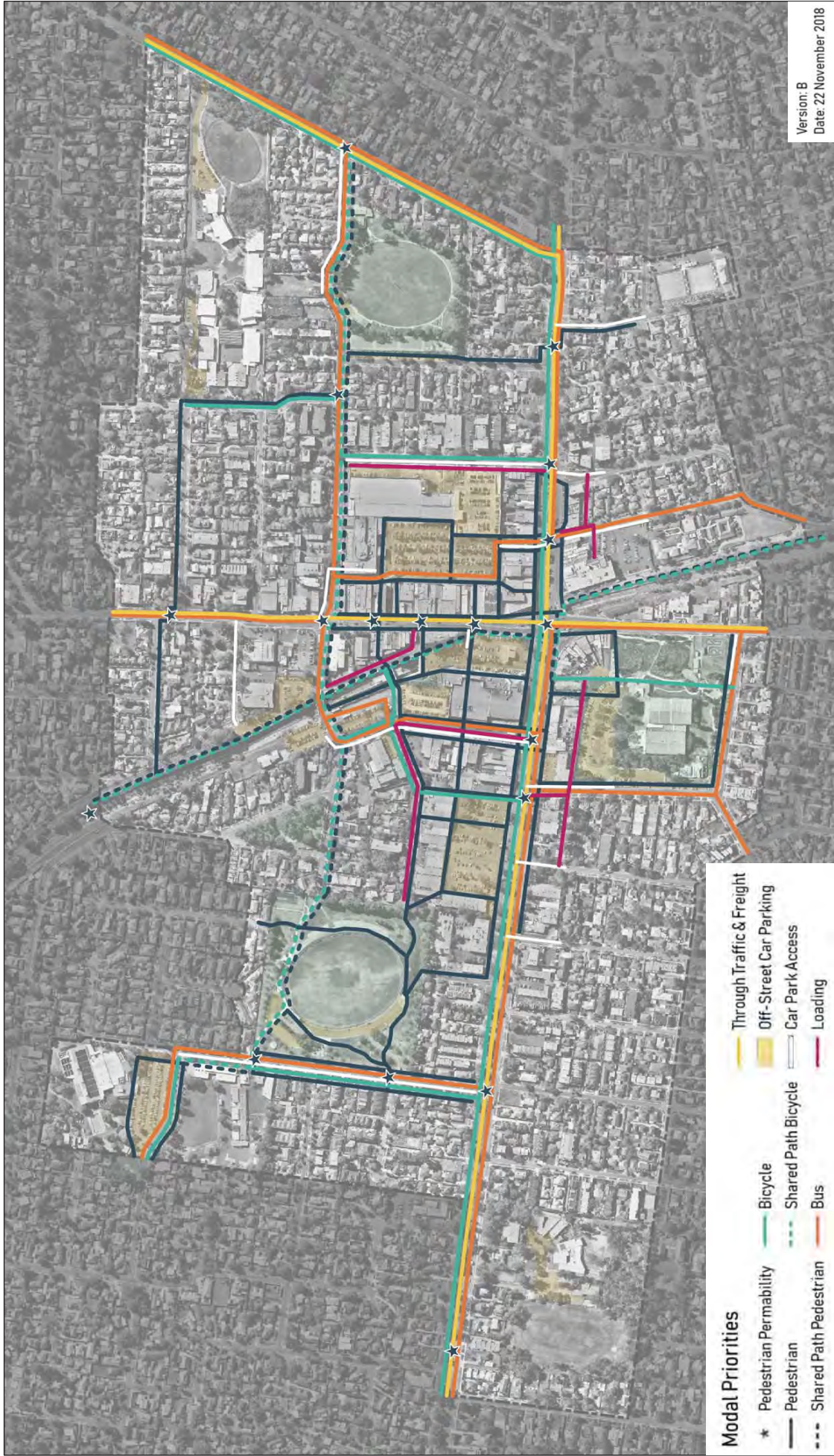
Access to car parks have been identified as the shortest route to car parks from the arterial road network

Vision & Objectives



Through traffic priority has been allocated to the arterial road network, to ensure vehicles not visiting the Boronia Activity Centre do not rat run within local streets

Vision & Objectives



Two land use scenarios were identified to understand how the vision and objectives, and the proposed interventions could look into the future

The Boronia Activity Centre and wider study area is planned to grow and develop. There are two different associated land use scenarios that relate to the type of development and particularly, its density. A higher development rate has an impact on transport in that new residents and workers generate additional movements and trips within, to and from the area.

The City of Knox have provided two growth scenarios:

- Scenario 1: Business as Usual
- Scenario 2: High Growth

These scenarios can both influence the mode splits and can be used to influence mode splits.

Scenario 1: Business As Usual

- Existing scale and nature of development e.g. splitting of blocks, townhouses and small scale apartments
- This type of development distributed across the study area will in all likelihood encourage car use for those outside needing to drive into Town Centre, or drive elsewhere
- Less residential population within Town Centre results in less nightlife activities

- 1,086 new dwellings in the study area, equating to 2,585 new people*



Scenario 2: High Growth

- Focuses growth to the centre with higher growth and development within the Activity Centre
- A population residing within the Town Centre is more likely to walk around to shop, etc
- Higher population within the centre is likely to be accompanied by leisure land uses such as cafes, bars and restaurants

- 2,064 new dwellings in the study area, equating to 4,912 new people*



*Based on the 2016 ABS Census rate of 2.4 people per dwelling within the Boronia Activity Centre.

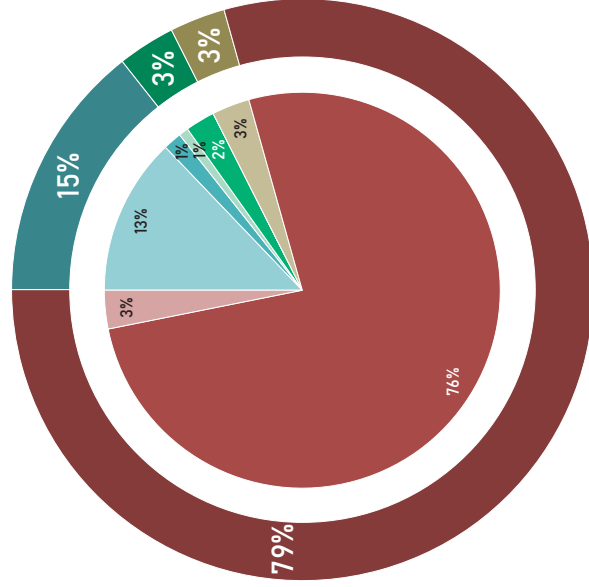
Target mode splits have been identified for residents, with Scenario 1 using existing mode splits (BAU) and Scenario 2 aiming for higher active travel and public transport utilisation

Vision & Objectives

The below graphs demonstrate target mode splits for journey to work for each of the Scenarios.

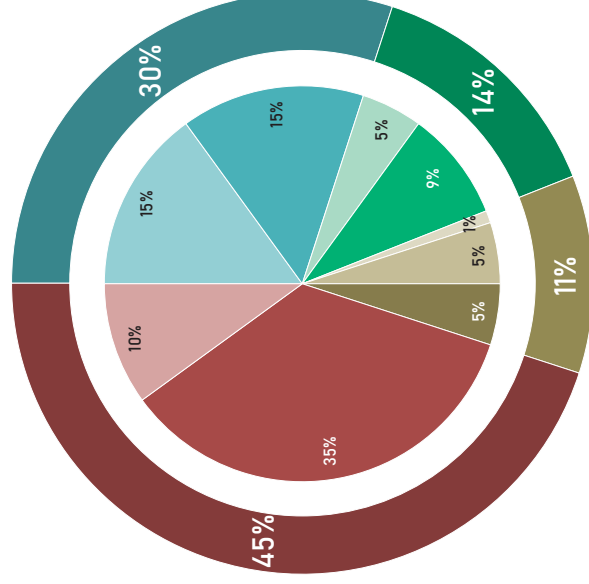
In Scenario 1, both the Town Centre and Neighbourhood areas have the same mode split, which is the existing mode split for the Study Area.

Scenario 1 – BAU
Town Centre & Neighbourhoods

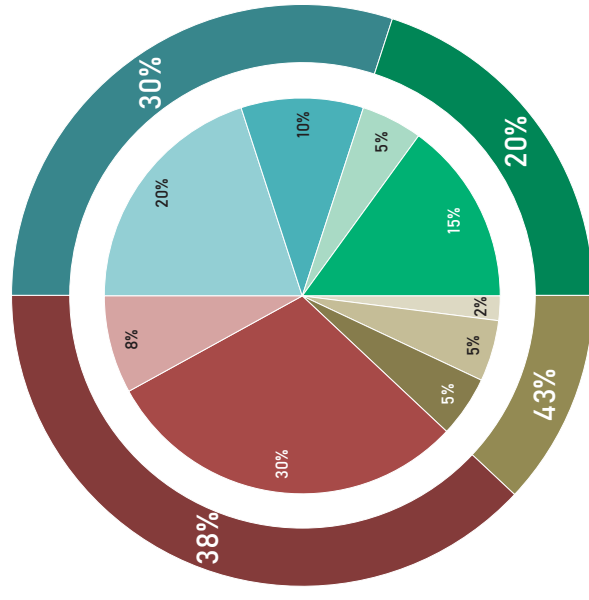


In Scenario 2, the Neighbourhood area has a higher private car mode share, and a greater reliance on the bus, with the Town Centre Area having a higher proportion of people walking to their workplace, and more people taking the train.

Scenario 2 – High Growth
Neighbourhoods Only

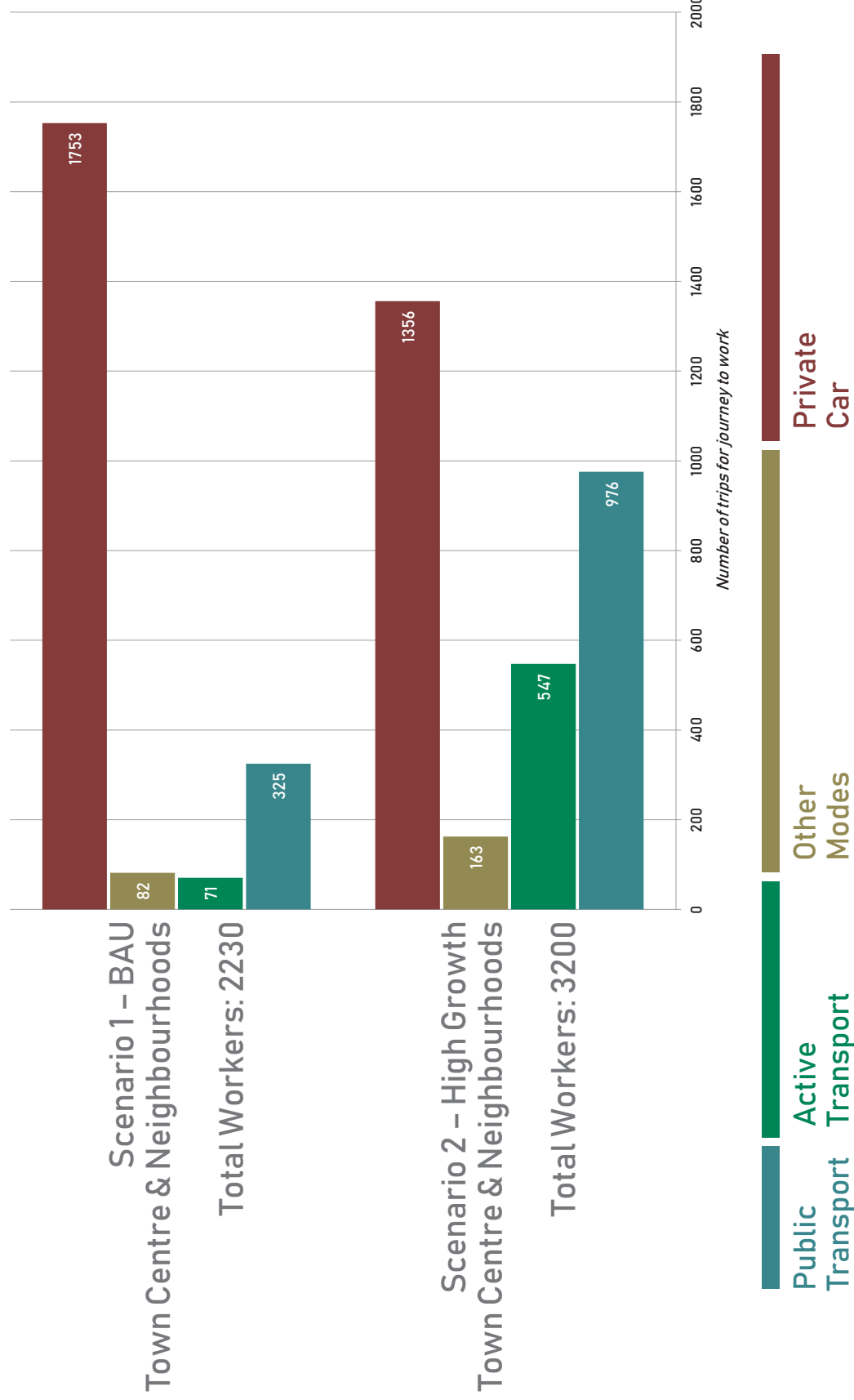


Scenario 2 – High Growth
Town Centre Only



The application of these mode splits on the future population numbers means that fewer people are relying on the private car in the high growth scenario (Scenario 2)

Vision & Objectives



Translating the mode split for work-related trips based on the land use scenarios, the table to the right demonstrates the likely increased demand that the network needs to accommodate by mode.

This approach shows how a denser more centrally based land use option supports non-car use and reduces overall car based trips.

06 Identification of Improvements

06

Improvements

The overall amenity of Boronia Activity Centre could be enhanced by providing a central square as a hub for activity



Dorset Square could become a market square area, offering a pedestrian friendly area, where markets could thrive, children can play and cafes can operate.

Car parking would be relocated underneath (similar to Cato Square, in Prahran)



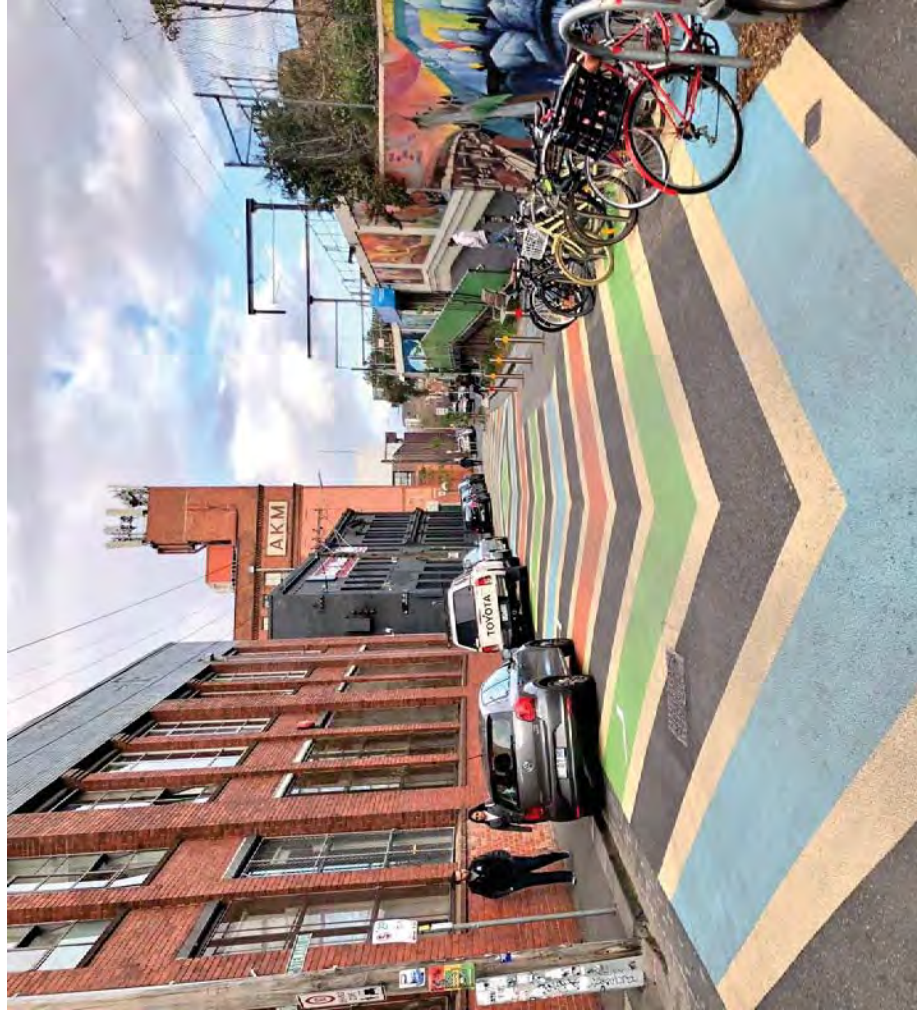
06

Improvements

The environment for pedestrians could be improved by providing greater priority and amenity throughout the area



General improvements to the amenity of the area will increase us of the Activity Centre



Lupton Way could become a shared zone, providing easy and safe pedestrian access for those using the station, but still allowing vehicles to use the space for pick-up and drop off. The shared zone would be low speed and pedestrians would have right of way.

Scramble crossings at Dorset Road / Chandler Road



Raised enhanced pedestrian crossings at Dorset Road

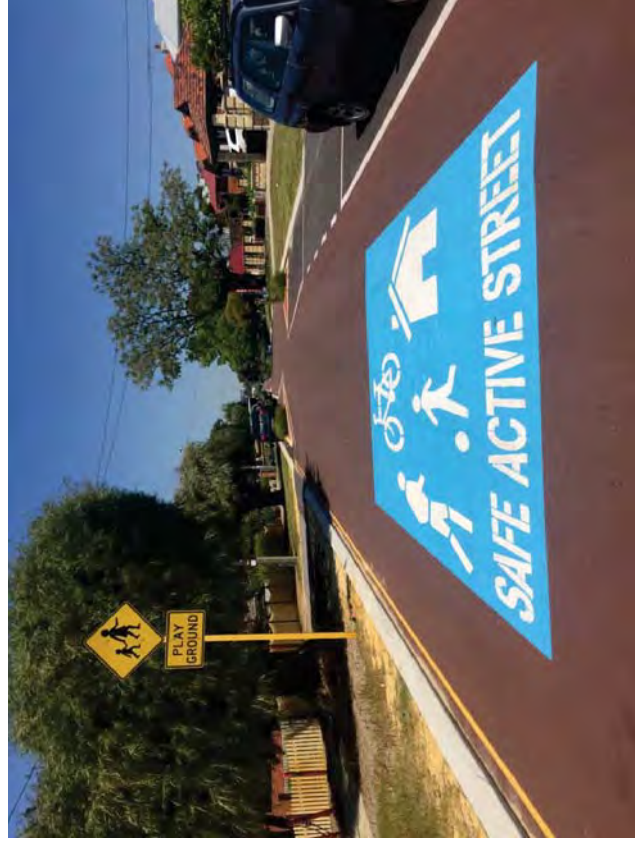
Align West 'Green Spine' would enhance both pedestrian and cyclist accessibility and provide a safe and direct route connecting a number of key destinations within Boronia



A 'Green-Spine' comprising of a shared path along the southern side of Chandler Road and a bicycle boulevard and upgraded footpaths along Genista Avenue. This will provide a safe, inviting and easy option for people to walk and cycle along.

This 'Green-Spine' will connect most of the major destinations within Boronia, including:

- Chandler Park
- Boronia K-12 College
- Boronia Central
- Boronia Railway Station and Bus Interchange
- Boronia Junction
- Tormore Reserve
- Boronia West PS
- Knox Leisureworks



Cyclist safety improvements and filling in the gap in the shared path would provide a more connected cycling network and may reduce the number of crashes in the area

06

Improvements



A segregated bicycle lane along Boronia Road (in both directions) will provide that key missing east-west bicycle link, connecting into The Dandenongs, provide a safer environment for those cycling and reduce conflicts between bikes and cars



Improvements to the existing north-south shared path along the railway line at the Boronia Road / Dorset Road intersection.



The addition of bus priority at intersections and along key roads, and enhancing bus stops could improve reliability, travel times and increase the number of passengers

06

Improvements



Provision of bus priority measures along Erica Avenue



Providing bus priority at key signals within the study area

Enhancing bus stops throughout the area



Providing dynamic parking information may reduce circulation, and ensuring pedestrians have space to walk within car parks will improve the amenity

06

Attachment 6.5.2

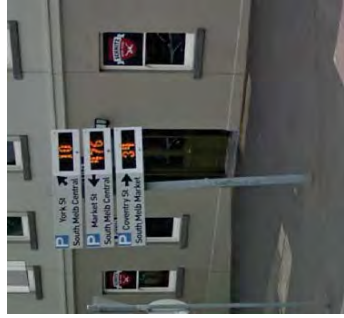
Improvements



Provide shared zones where parking is located, to improve the safety for pedestrians, but not lose any car parking



Improved pedestrian priority throughout car parks will allow people to get to their destination safely once out of the car.



Dynamic parking information may reduce circulation



Conversion of on-street parking in key locations (such as Erica Avenue and along Dorset Road) to Parklets which encourage dwelling on-street at land uses such as cafes

06

Improvements

Ensuring that loading areas are provided, but also allowing for these spaces to be flexible and used by other modes will improve the amenity and flow of the area



Provide flexible loading space that can be used as footpath when unused within Dorset Square and Erica Avenue



Consider provision of combined Bus and Freight Lanes

Announcing the entry to Boronia at each key point and reducing the speeds will notify road users that the Activity Centre is an important place with others using the area

06

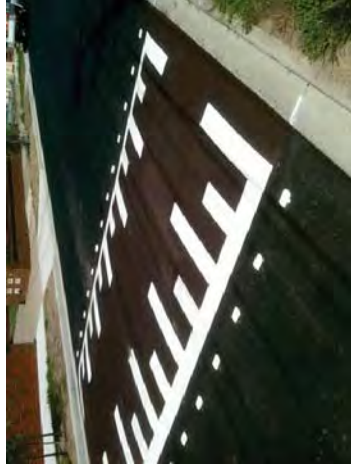
Improvements



Implementing a Gateway Feature on both ends of Boronia Road and Dorset Road to announce entry into the Boronia Activity Centre



Reducing the speed to 40km/hr within the Town Centre and introducing speed control measures on local roads, to improve safety of vulnerable road users, and reduce rat running



Lane Width in Meters	City	Fatality Rate per 100,000 population	Safety Index
2.60 - 2.80	Jakarta, Singapore	3.6 - 6.4	Less safe
2.80 - 3.25	Amsterdam, Berlin, Copenhagen, Paris, Tokyo, Toronto	1.3 - 3.2	Safe
3.25 - 3.60	New Delhi, Mumbai, Knoxville, Greensboro, New York, Sao Paulo	6.1 - 11.8	Unsafe
3.60 and higher	Beijing, Chennai, Fortaleza	20.0 - 27.2	Very unsafe

Source: Fatality rate data from WHO Cities; Safety By Design; Ouyi et al. (2016); Shuk and Schwabes (2019); Lane width data from Masarik Kozm (2015); Melara D et al. (2015)



Reducing lane width to support lower speeds

In order to support the vision and objectives in the longer term, a number of additional infrastructure ideas are recommended for further consideration

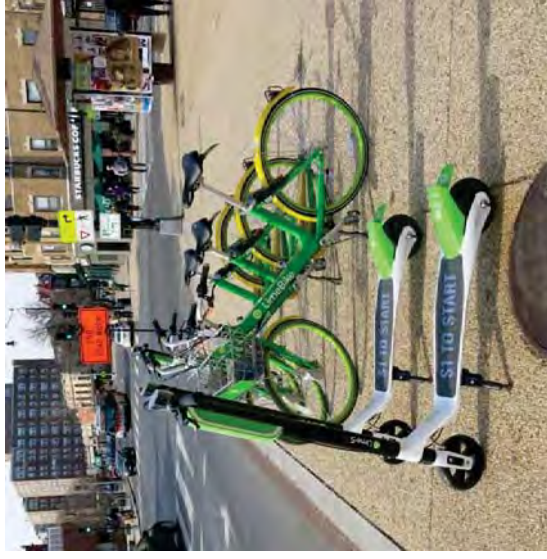
06

Improvements



Providing a Green Bridge over the rail line as part of the Green Spine on Chandler Road

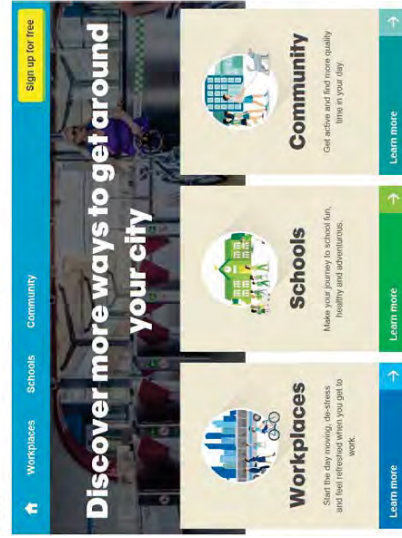
Introduction of dockless bikes and scooters to encourage people to use active travel modes within and around the Centre



They could be placed along the green-spine to encourage more movement along this corridor

They could also be aimed at those that live far away from the centre and drive to it, but to make getting around it much easier

Reducing speeds on local roads within the study area to 30km/hr, starting along roads allocated as pedestrian priority and/or classified as a P3



Behavioural change programs engaging with residents, businesses, schools, etc.

07 Opportunities and Actions

A number of opportunities actions have been identified which could help achieve the various objectives of this strategy

07 Opportunities & Actions

- Chandler Road**
- Development of a 'Green Spine' to facilitate east-west access to the majority of the key destinations within the Activity Centre
- Boronia Road / Dorset Road**
- Reduction of speed to 40 kph permanently
 - Provision of narrower lanes in 40 kph zones
 - Gateway entry sculpture to signify entering the activity centre
- Boronia Road**
- Provision of separated bike lane to improve safety for cyclists
 - New Pedestrian Operated Signals (POS) in key locations (such as at Turner Rd and just west of Park Cres
- Dorset Road**
- Widening of footpaths
 - Removal of on-street parking and introduction of parklets
 - New POS including raised crossing platforms
- Dorset Square**
- Creating a public square for improved amenity and community events
 - Providing Bus access to ensure public transport users are placed in the centre of the activity
- Lupton Way**
- Implementing a shared space where pedestrians have priority, though still facilitating station pick-up and drop off and loading to retail
- Erica Avenue**
- Provision of bus priority along road and at intersection
 - Widening of footpaths and provision of parklets
 - Improved bicycle connectivity
- Chandler Road / Dorset Road**
- Provision of a scramble crossing to improve pedestrian connectivity in line with key desire lines
- Town Centre Wide**
- Reduction of speed to 40kph permanently
 - Implementation of speed humps or other traffic calming measures on local roads to reduce rat running for through vehicles

A number of the proposed interventions should occur within the short-term, while others will require more liaison with key stakeholders prior to implementation

07

Opportunities & Actions

Intervention	Location	Stakeholders	Timeframe	Indicative Capital Cost*
Green-Spine	Chandler Road	n/a	Short	\$2-5 million
Gateway entry sculpture	Boronia and Dorset Roads	VicRoads	Short	\$500,000
Parklets	Dorset Road and Erica Avenue	VicRoads (Dorset Road)	Short	\$5,000 – 15,000 per space
Reduction of speed to 40kph	Throughout Town Centre	VicRoads (on Arterials)	Short	\$50,000 <i>excl. complementary traffic calming</i>
Speed humps on local roads	Local roads within Town Centre	n/a	Short-Medium	\$5,000 – \$8,000 per site
Separated bike lanes	Boronia Road	VicRoads	Medium	\$500,000 per km (two-way)
Widened footpaths	Dorset Road and Erica Avenue	VicRoads (Dorset Road)	Medium	\$600 /sqm
Removal of on-street parking	Dorset Road	VicRoads	Medium	\$70 per sign <i>would occur in conjunction with widening footpaths</i>
Narrowed road lanes	Boronia and Dorset Roads	VicRoads	Medium	<i>would occur in conjunction with widening footpaths and installing separated bike lanes</i>
Shared zone	Lupton Way	VicTrack	Medium	\$100,000
Improved bus priority	Erica Avenue	TFV, PTV and VicRoads	Medium	\$15,000 – \$100,000
New pedestrian operated signals (POS)	Along Boronia Road	VicRoads	Medium-Long	\$200,000 per site
New POS with raised crossing platforms	Along Dorset Road	VicRoads	Medium-Long	\$200,000 per site
Scramble Crossing	Chandler Road /Dorset Road intersection	VicRoads	Long	\$15,000 – \$20,000
Public square (underground parking)	Dorset Square	n/a	Long	\$60-80 million
Re-routed bus access	Dorset Square	PTV	Long	Up to \$4 million

*The above opinion of indicative costs should be considered current to the date of the document only. GTA Consultants cannot provide any form of assurance that the indicative costings provided will not change. The future outcome may vary, and this variation may be material. Any party requiring detailed costing for budgeting, quoting or construction purposes should seek a detailed cost estimate from a suitably qualified quantity surveyor.

More detail around the location of some of these opportunities are provided in the map below

07

Opportunities & Actions

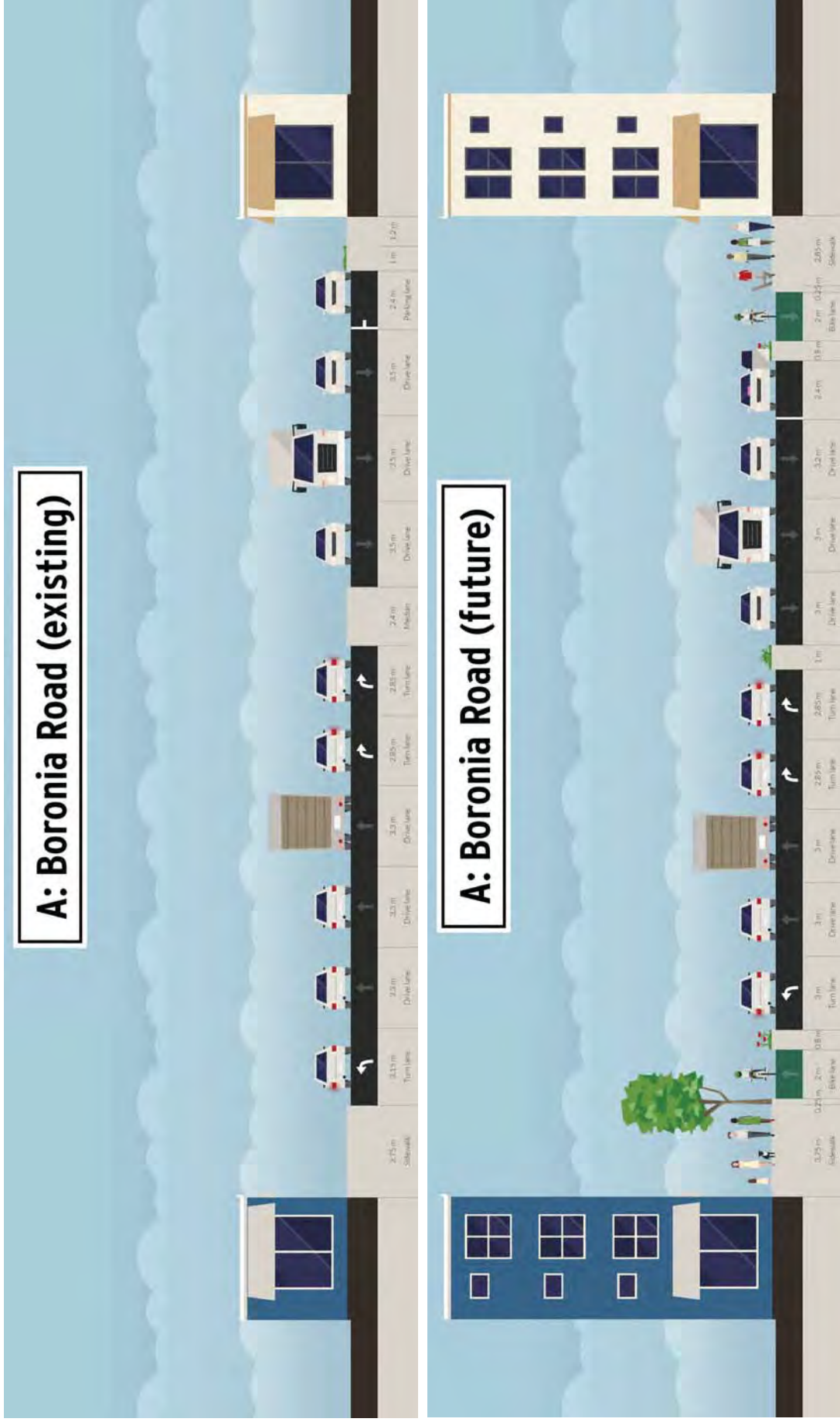
- Interventions**
- Green Spine
 - Shared Path Connection
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 - Bus Priority
 - Realigned Bus Route
 - Bus Priority at Signals
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 - New Pedestrian Operated Signal (POS)
 - New POS and Raised Pedestrian Crossing
 - New Intersection
 - Public Square
 - Scramble Crossing
 - New 40km/hr Zone
 - Removed Parking & Widened Footpath
 - Lupton Way Shared Zone



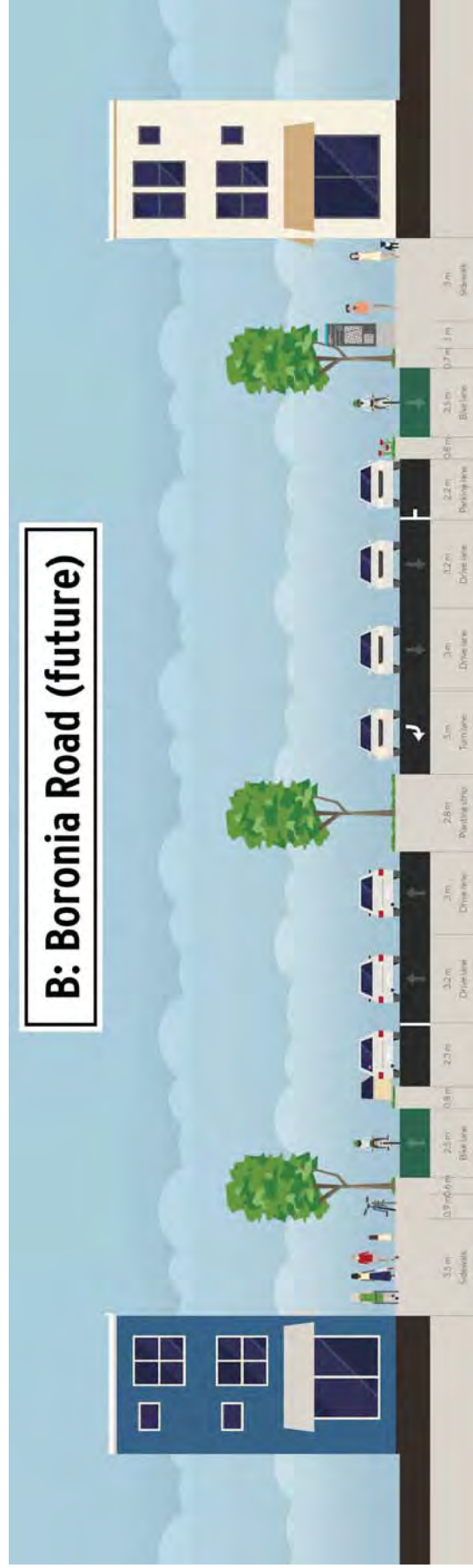
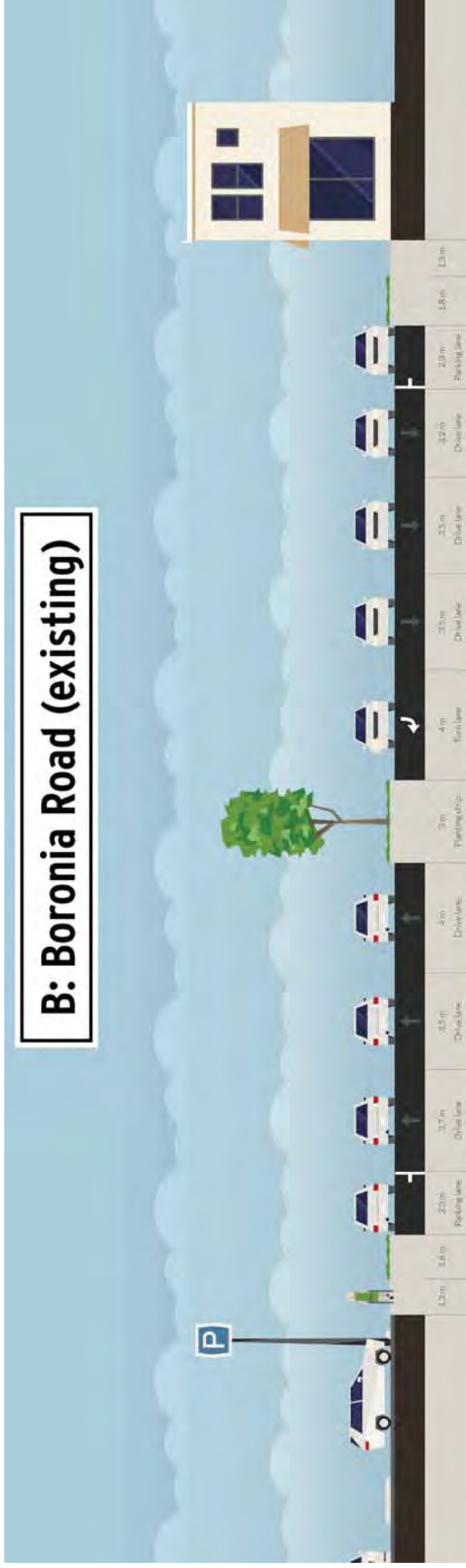
Based on the proposed interventions, a number of existing and future cross-sections have been prepared to show what the future of Boronia could look like



Boronia Road at Dorset Road could provide separated bike lanes on both sides and widened footpaths with street furniture, by only reducing by one through-lane eastbound



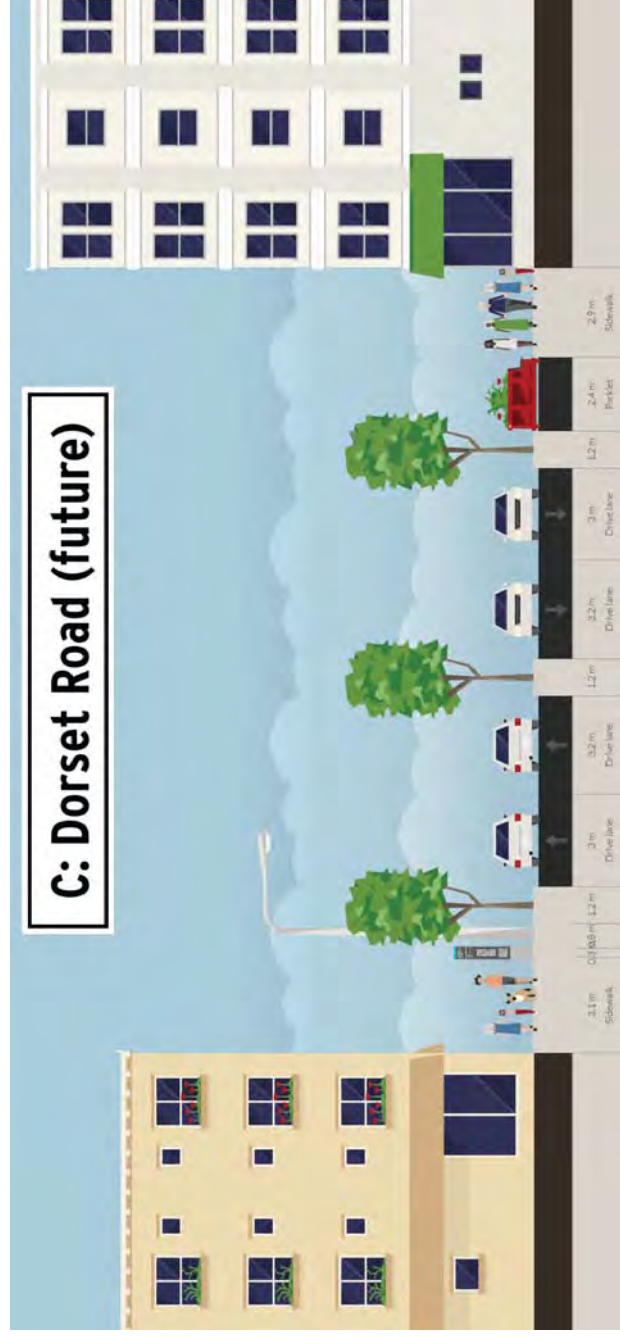
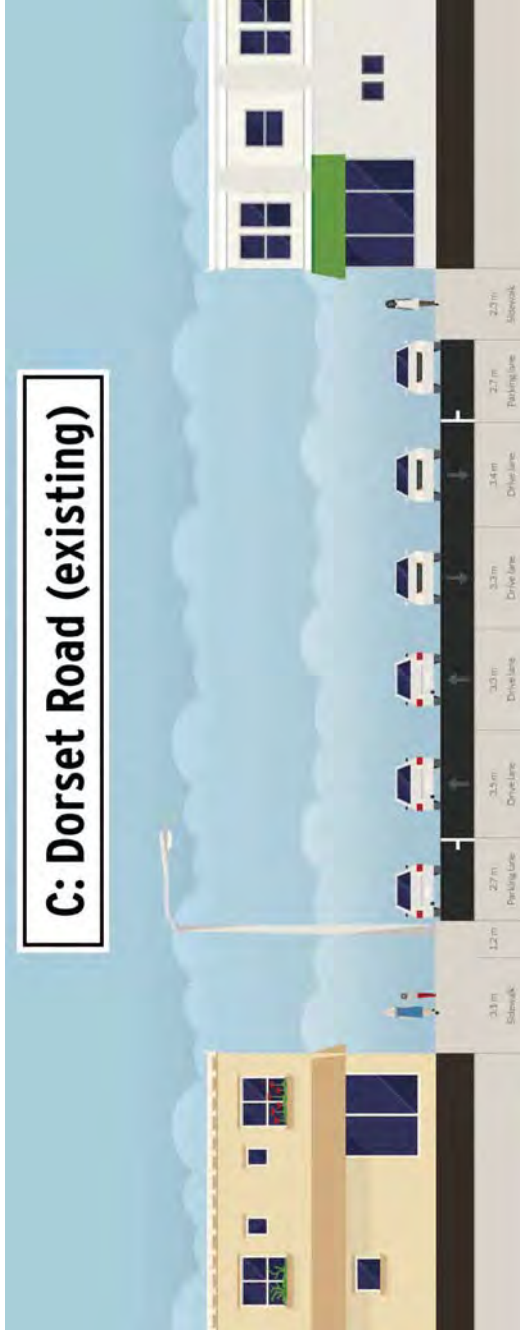
Boronia Road at Boronia Village could see enhanced amenity through the provision of separated bike lanes, wider footpaths and wayfinding signage



Removal of on-street parking, introduction of parklets, widened footpaths and provision of wayfinding could see cafes flourish and more people dwell along Dorset Road

07

Opportunities & Actions

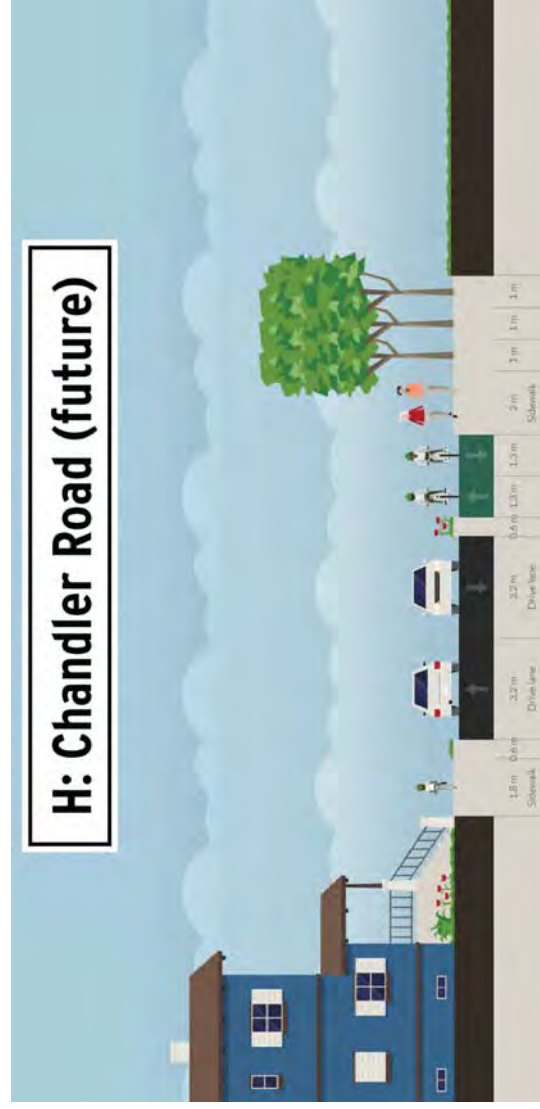
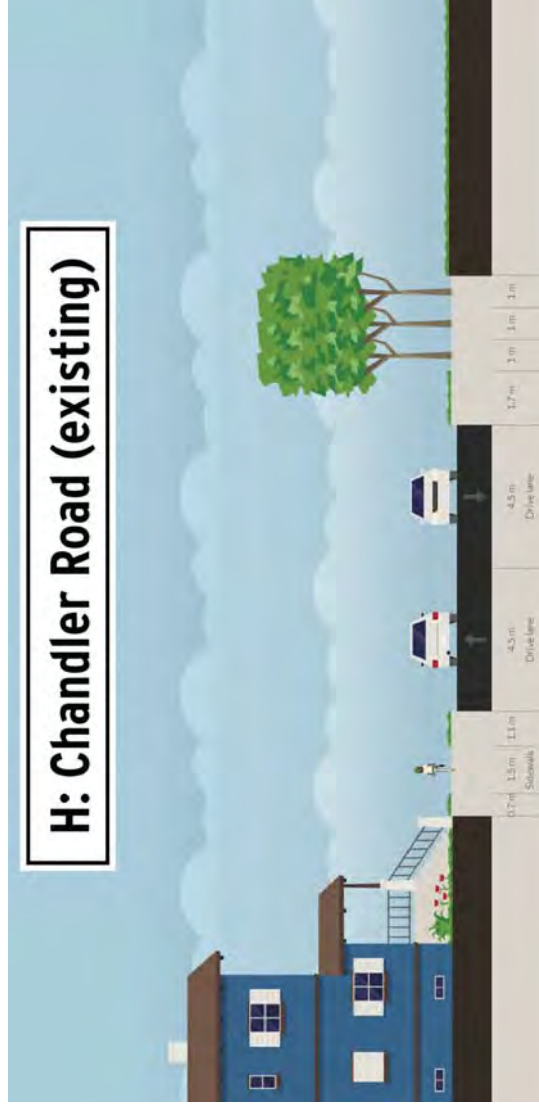


New shared bus and freight lanes, along with bike lanes and widened footpaths will improve accessibility along Erica Avenue for those wishing to use active and public transport

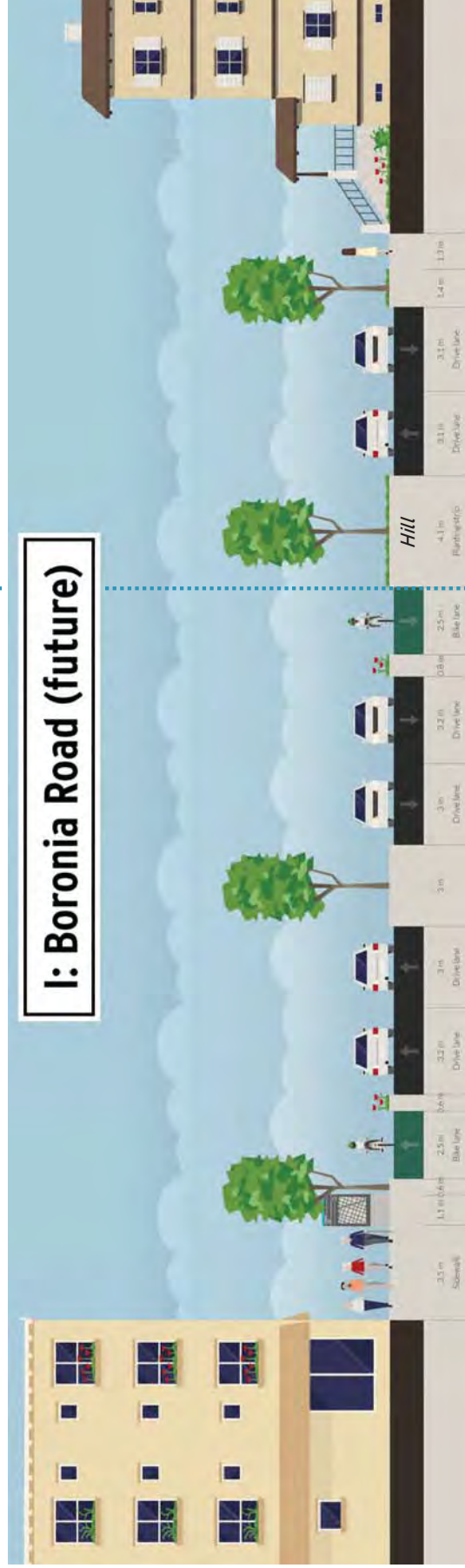
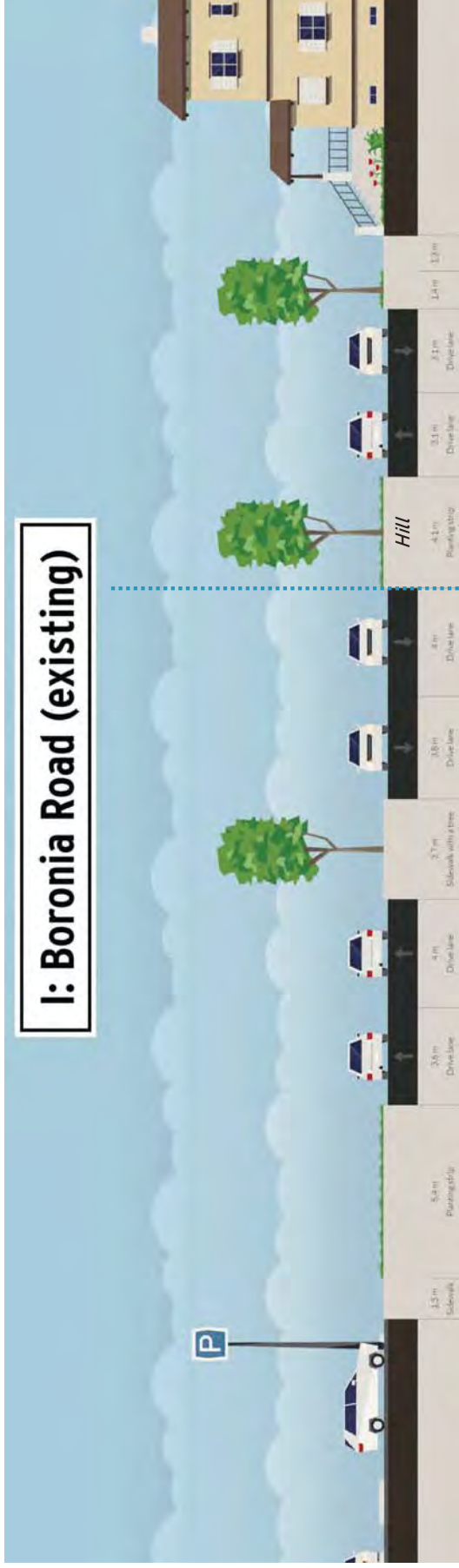
07 Opportunities & Actions



Several significant trees exist on the southern side of Chandler Road next to Chandler Park, though even with these, the road can be narrowed to cater for the Green Spine



Boronia Road east of Floriston Road has ample road space to provide separated bike lanes and wider footpaths, even when considering the existing steep hill on the southern side



This section of Boronia Road involves a steep hill and as such, has not been altered

In addition to the interventions already recommended, several other initiatives are also recommended for future consideration

- Consolidation and reduction of vehicular access to car parks from Dorset and Boronia Road, such as Boronia Village which has four entry/exit locations, which could be reduced to one or two. This will reduce conflicts at entry/exit locations between cars and pedestrians or cyclists
- Relocate and consolidate land uses from the four quadrants into key hubs
- Consolidation of car parks (ideally located along the periphery of the activity centre where people can then walk rather than drive between destinations)
- Relocate the service station from the centre of town and place more suitable land uses in this central location
- Landscape and streetscape enhancements
- Provision of parklets / pocket parks in additional locations across Boronia
- Develop behaviour change program with businesses and key destinations to encourage non-car use.
- Safe Routes to School program to co-ordinate with Green spine
- Advocate with Transport for Victoria for review of bus services

08

Appendices

References

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- Victoria's 30-Year Infrastructure Strategy, 2016, Infrastructure Victoria
- Victorian Infrastructure Plan, 2017, Victorian State Government

Glossary of Terms

08

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ABS	Australian Bureau of Statistics
BAU	Business as Usual
CrashStats	Information about road crashes on VicRoads managed roads in Victoria, provided by VicRoads
Parkiteer	Bike cages located at train stations. They are undercover and secure.
POS	Pedestrian Operated Signals
Shared Path	A path that both pedestrians and cyclists can use
SCC	Strategic Cycling Corridor
Wayfinding	Signage provided to direct users to their destination, and the quickest way to get there

Plans:

Existing Conditions – Study Area and Key Locations

Appendices



Plans: Existing Conditions – Pedestrian Network

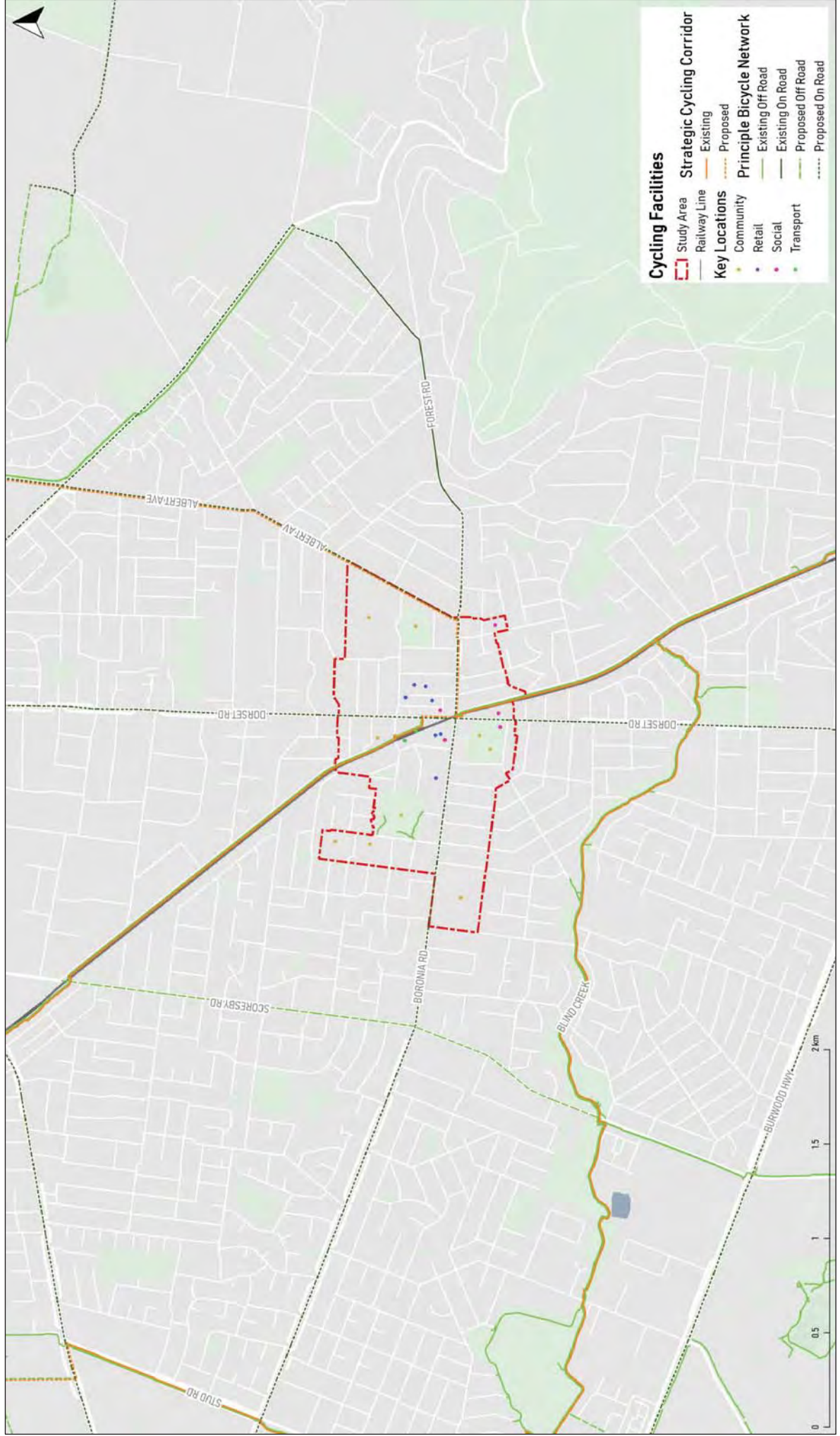
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Plans:

Existing Conditions – Bike Network

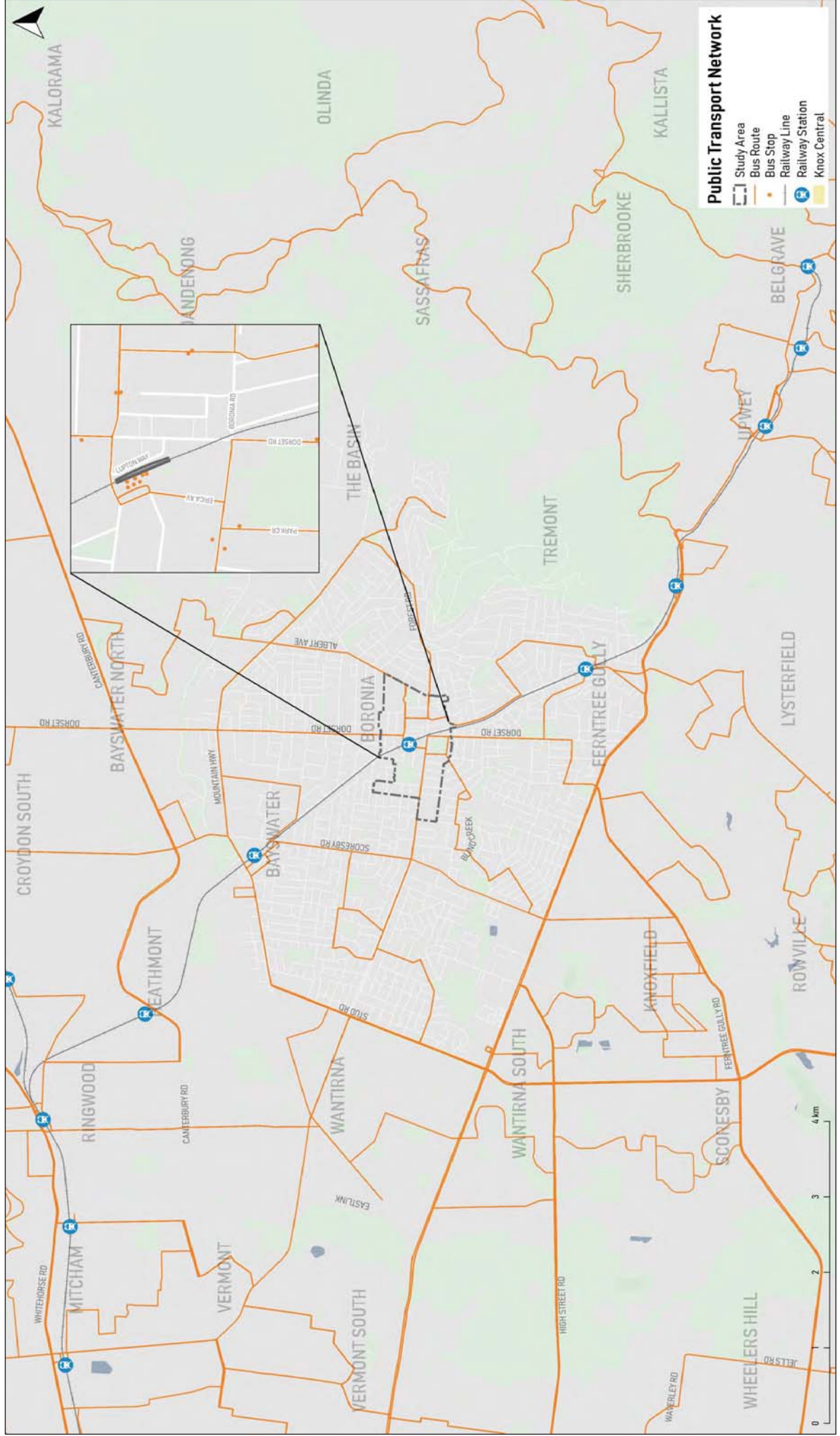
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Plans:

Existing Conditions – Public Transport Network

Appendices



Plans: Existing Conditions – CrashStats

Appendices



Plans:

Existing Conditions – Off-Street Car Parking

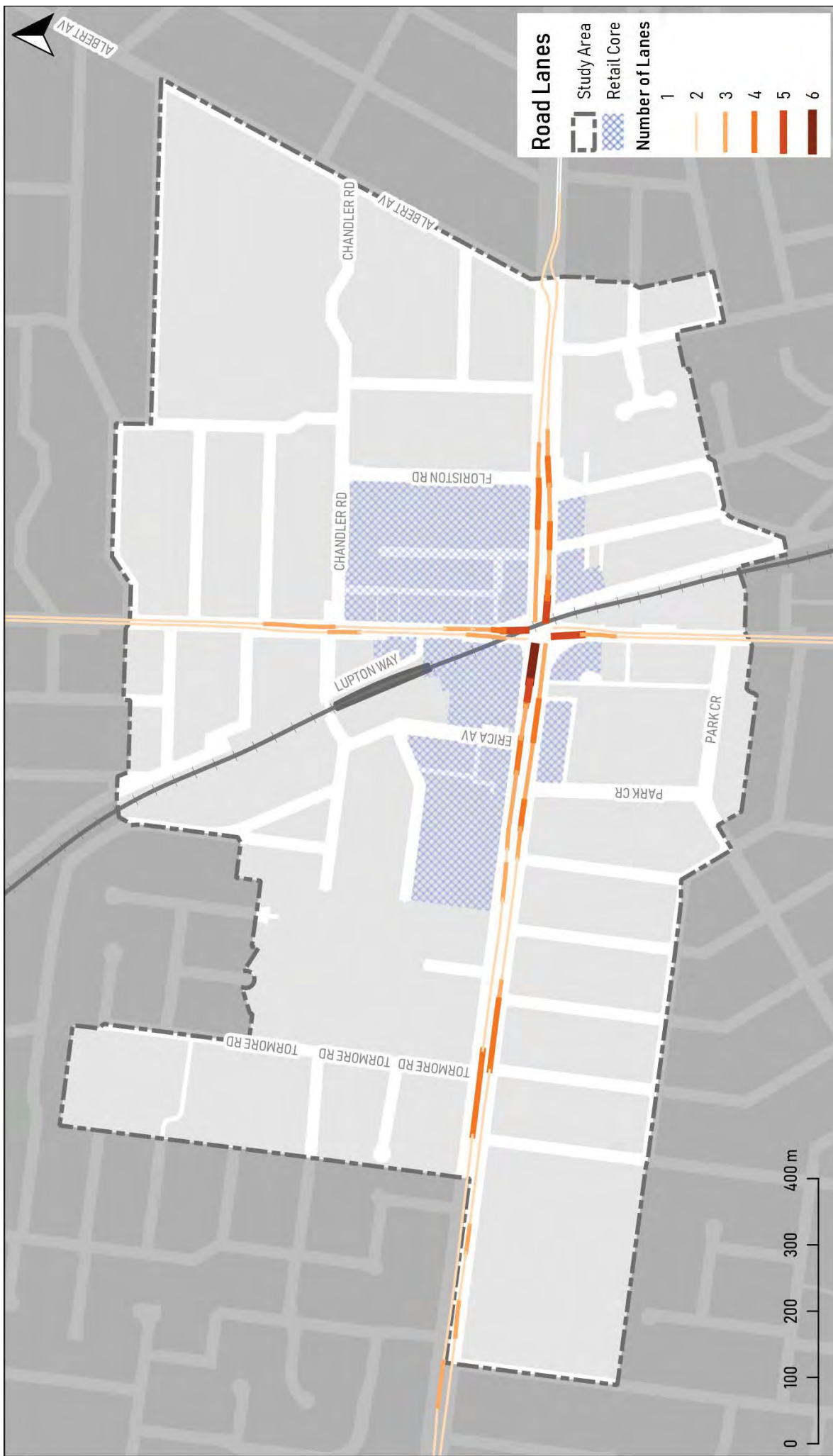
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Plans:

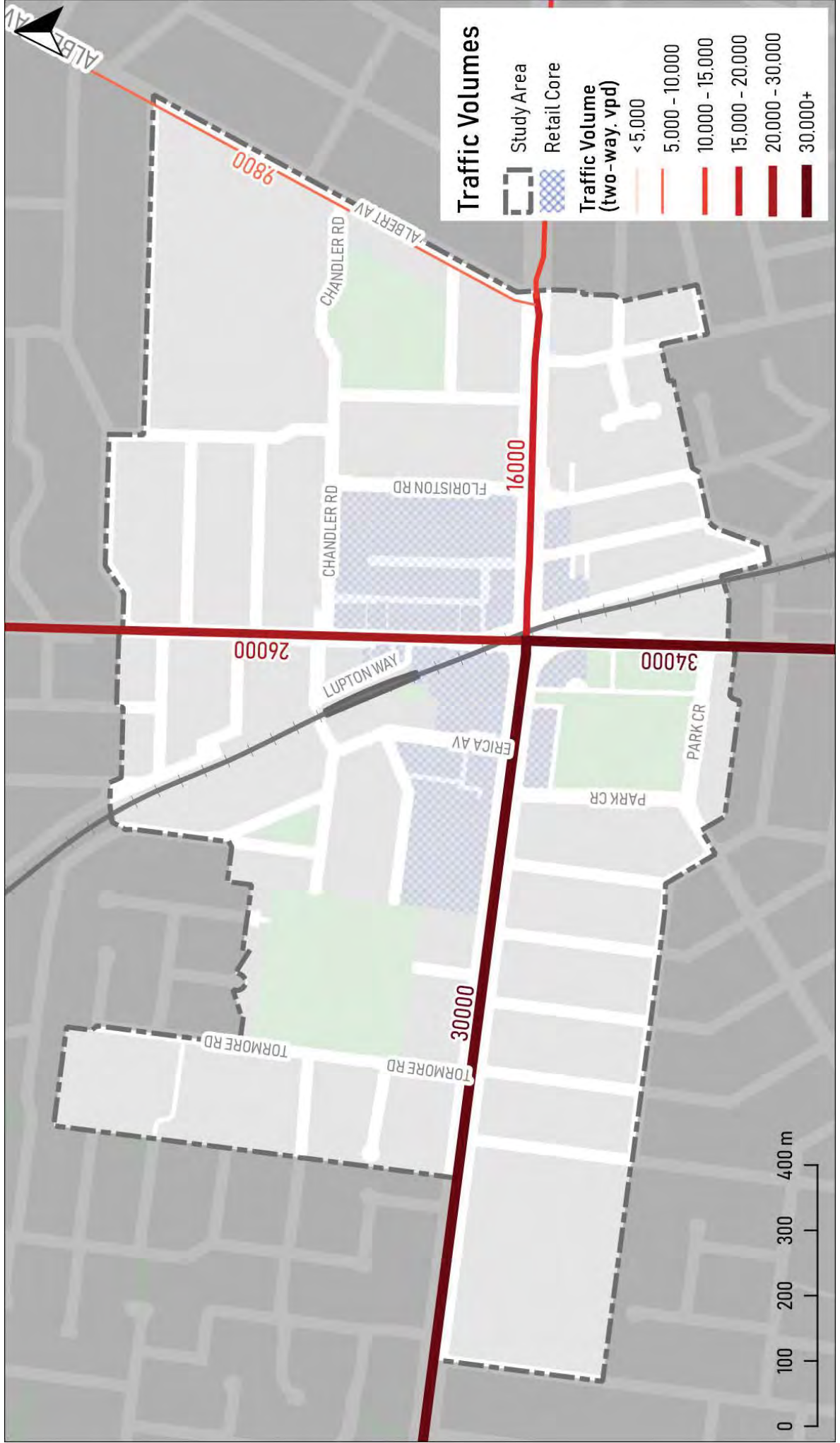
Existing Conditions – Road Lanes

Appendices



Plans: Existing Conditions – Traffic Volumes

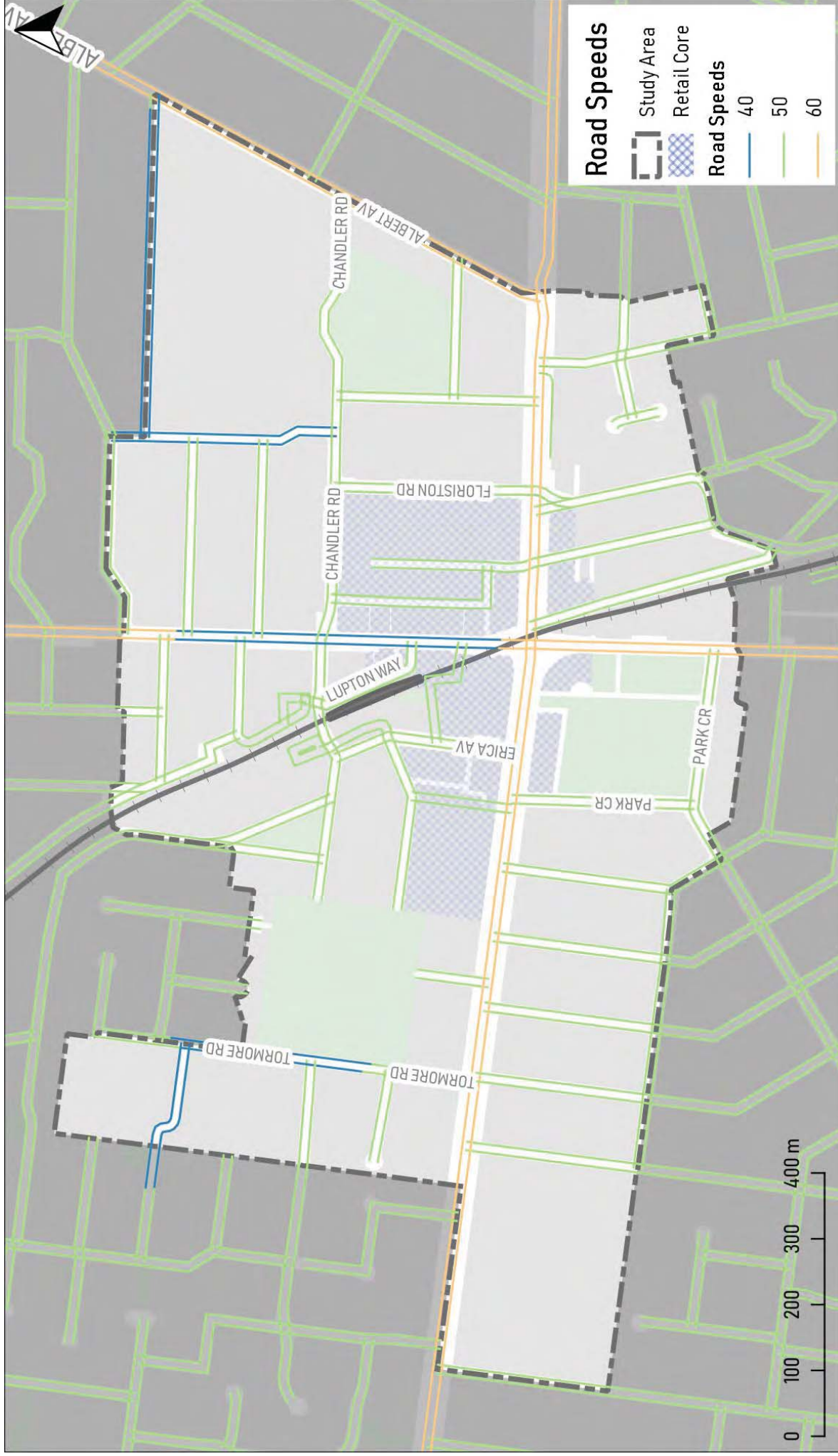
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Plans:

Existing Conditions – Posted Road Speeds

Appendices



Plans:

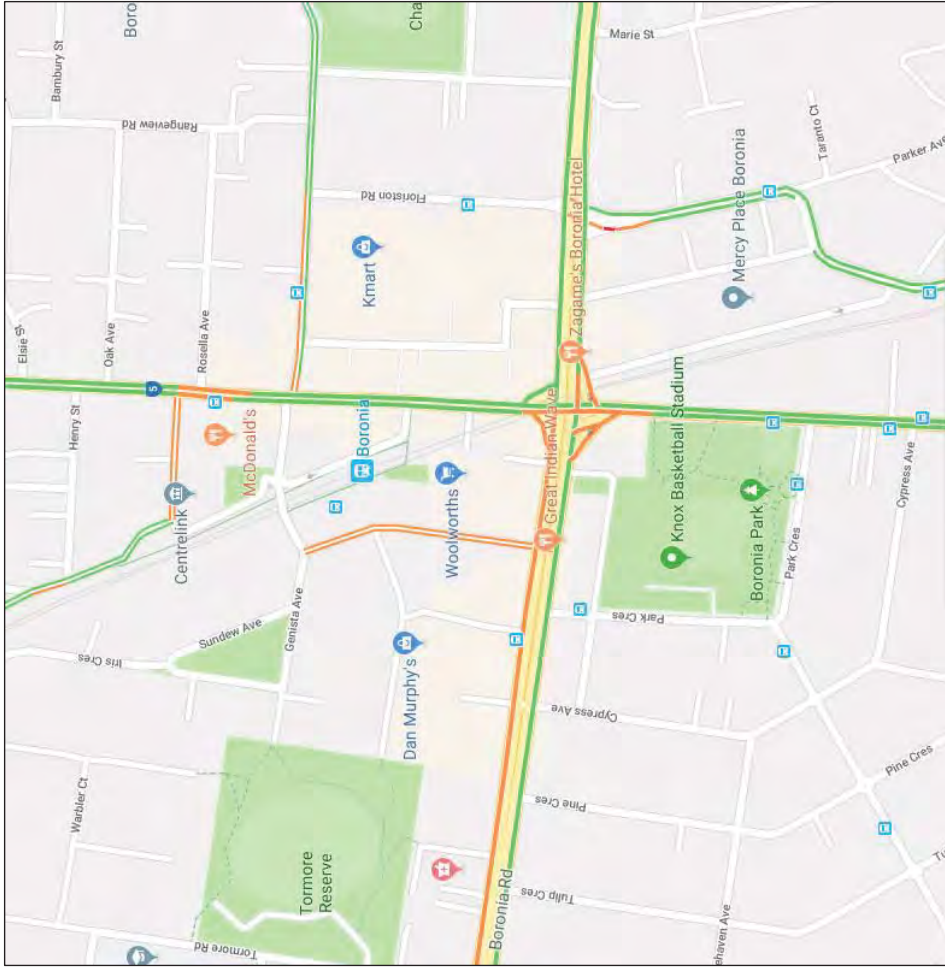
Issues – Public Transport and Active Frontages

Appendices

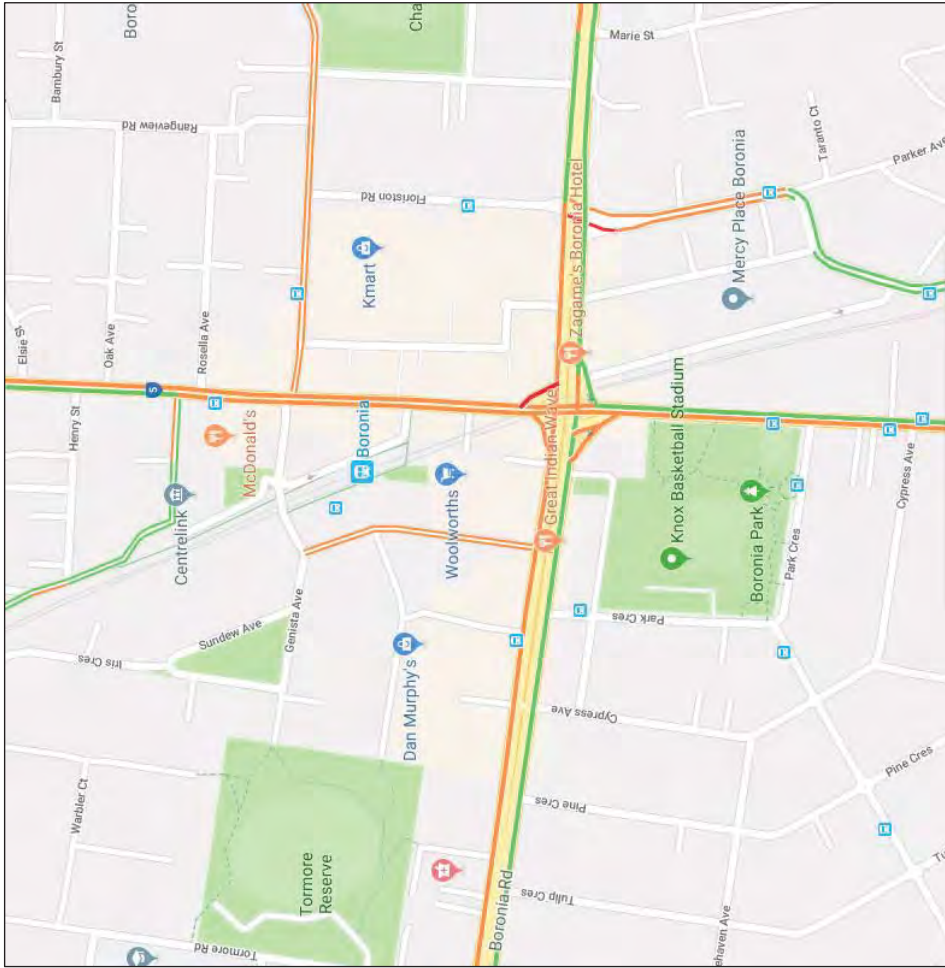


Plans: Issues – Road Network Capacity

Appendices



Typical Thursday at 8am

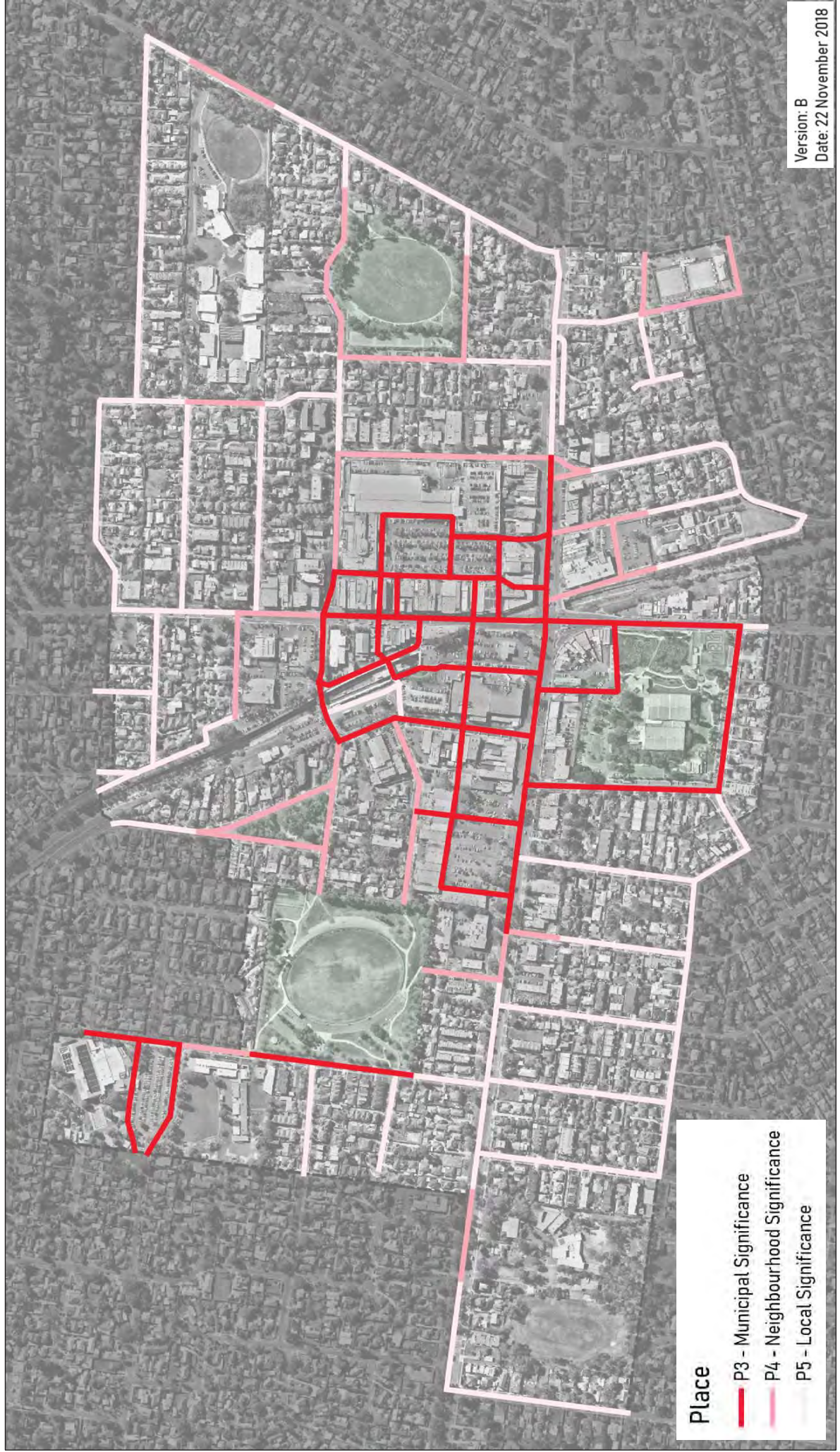


Typical Thursday at 6pm

Plans:

Movement and Place – Place Network

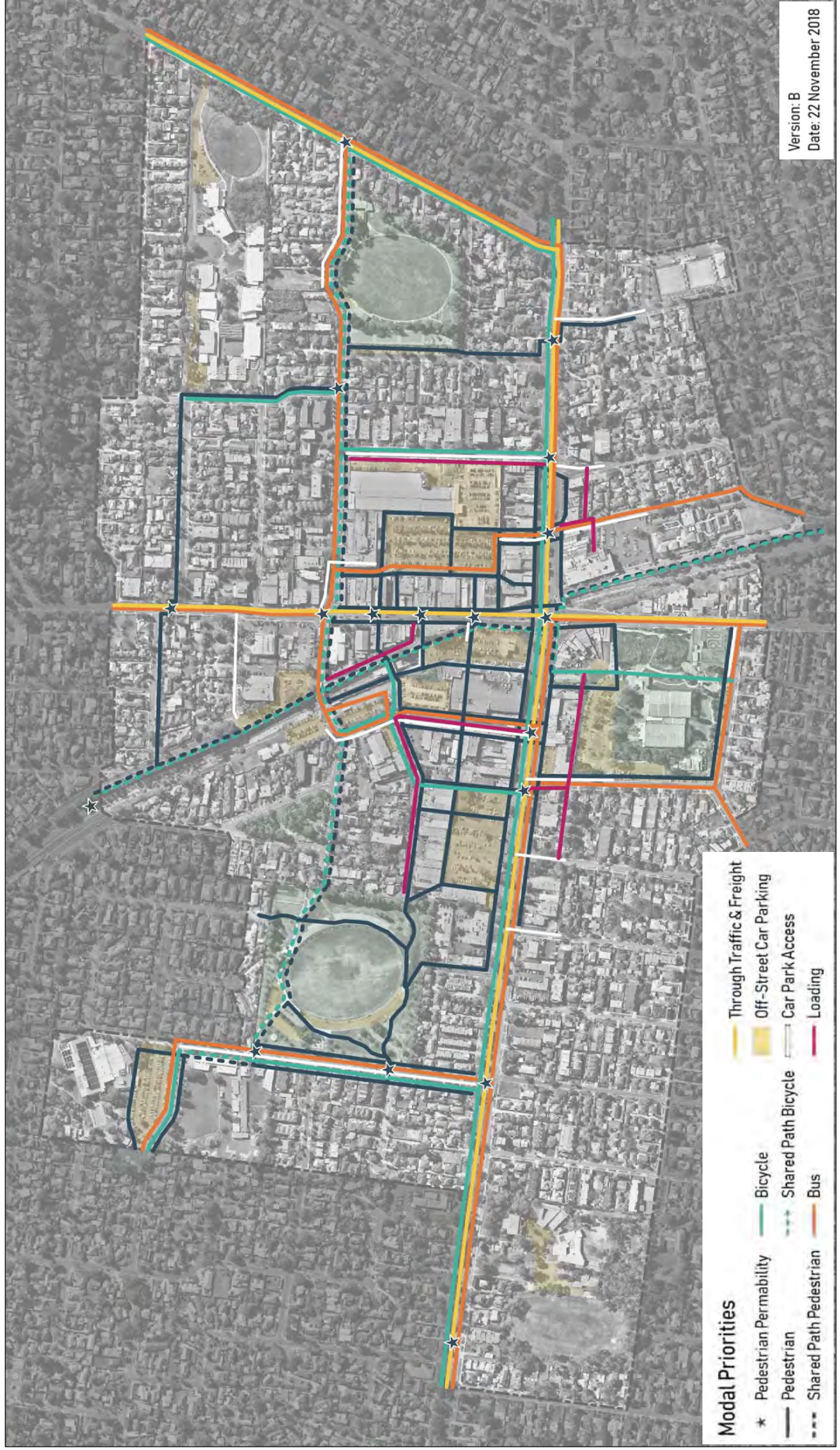
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Plans:

Movement and Place – Modal Priorities

Appendices



Plans:

Interventions

Appendices

- Interventions**
- Green Spine
 - Shared Path Connection
 - Separated Bike Lane
 - Bus Priority
 - Realigned Bus Route
 - Bus Priority at Signals
 - Gateway
 - New Pedestrian Operated Signal (POS)
 - New POS and Raised Pedestrian Crossing
 - New Intersection
 - Public Square
 - Scramble Crossing
 - New 40km/hr Zone
 - Removed Parking & Widened Footpath
 - Lupton Way Shared Zone





BORONIA - ECONOMIC DEMAND, LAND AND SITE OPTIONS ANALYSIS



Prepared for Knox City Council

Final Report

November 2017



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1.0 INTRODUCTION

1.1 Project Context

Boronia is a sub-regional centre in outer eastern Melbourne, accommodating a mix of uses including approximately 40,000 sqm of retail space. The service offer in the centre is geared to convenience services and food.

The centre is located near the foothills of the Dandenong Ranges and has significant attributes including rail and road connections to other centres including central Melbourne and views to the Dandenong Ranges.

The centre has significant capacity for growth and change, in terms of land area and potential floorspace capacity and in terms of expanding the service offer to include other retail uses, night time activities, community services and other employment uses.

Figure 1 - Boronia Study Area



The building height control framework for the area is scheduled to expire in December 2019. In order to establish a framework beyond this date, Knox City Council is required to undertake a review of the Boronia Structure Plan in the context of new policies and zones such as Plan Melbourne and reforms to residential zones.



The Boronia Renewal Project has been developed to provide this information and to generate broader outcomes in the area. The Boronia Renewal Project “aims to provide a coordinated, practical place-based approach to regenerating Boronia.”

The broader Boronia Renewal Project seeks to deliver improvements and upgrades to the private and public realms including hard infrastructure assets - such as streetscape, public spaces and built form - and soft infrastructure, including services delivered by Council and other organisations.

A key desired outcome is to positively influence social outcomes and civic pride amongst the existing community via the provision of services, jobs and affordable housing.

Another feature of the project is to respond to the needs of new residents that are moving into the area. Significant residential development has occurred in the suburb over the past decade.

A focus of the project is to explore the retail and commercial environment in the context of perceived stagnation and high vacancy rates.

The project will also identify Boronia’s investment and partnership structures in the context of Council’s service and infrastructure delivery role.

These project threads will be based on an overarching vision that adopts a multi-disciplinary approach to achieving outcomes for Boronia.

1.2 This Report

Within the context of the Boronia Renewal Project, Council seeks expert advice in relation to Economic Demand, Land and Site Options Analysis. This report provides:

- Economic, property and planning analysis;
- Development capacity estimates; and
- Development take-up projections to inform the Boronia Renewal Project.

This report intends to inform policy directions for the centre including building heights, zoning changes and strategic directions regarding Council assets.

This report is structured as follows:

- Section 2 Policy and Research Context;
- Section 3 Existing Conditions;
- Section 4 Economic and Demographic Profile;
- Section 5 Property Market Context;
- Section 6 Development Capacity Scenarios;
- Section 7 Housing Projections;
- Section 8 Retail and Commercial Projections;
- Section 9 Community Services Projections;
- Section 10 Feasibility Considerations;



- Section 11 Design Considerations;
- Section 12 Possible Development Take-Up; and
- Section 13 Strategies to Facilitate Outcomes.



2.0 POLICY AND RESEARCH CONTEXT

2.1 Introduction

Background research and policy analysis has been compiled by Knox City Council in the report Draft Land Use & Planning Background Report (October 2017). A brief summary of the policies contained in this report is provided below.

2.2 Plan Melbourne

Plan Melbourne 2017-2050 nominates Boronia as a Major Activity Centre “which gives communities access to a wide range of goods and services, provide local employment and support local economies and the development of 20-minute neighbourhoods including housing, particularly at higher densities.”

Plan Melbourne principles and directions relate to strengthening jobs and investment, delivering housing closer to jobs and public transport, increasing the supply of social and affordable housing and choice and diversity of housing, creating 20 minute neighbourhoods and strengthening community participation in planning.

2.3 2006 Boronia Structure Plan

The 2006 Structure Plan for the centre identified areas for retail and commercial consolidation and for intensification of uses. Apartment housing was considered an appropriate use, particularly above shops.

The Structure Plan set a height limit of two to three storeys in residential areas and up to four storeys in commercially zoned areas in order to protect views to the Dandenong Ranges from the centre and surrounds.

2.4 Planning Scheme

Boronia is a major centre with a broad range of retail, commercial, office and community uses that serve a large residential community. The centre is set amongst the foothills of the Dandenong Ranges. The centre has access to a public transport interchange including a train station and multiple bus routes. Housing opportunities include villa units, townhouses and apartments. Apartment opportunities also exist above active commercial ground floor uses within the centre.

Strategic directions are nominated as follows:

- Increase the scale and level of activity, while ensuring development is well designed and respects Boronia's unique setting amongst the foothills of the Dandenong Ranges. This includes protecting views towards the Dandenong Ranges.
- Support a broad range of retail, commercial and community uses within the centre to service the local area, which respects its landscape setting and character including



height. Provide opportunities for residential and mixed use activity within the commercial environs.

- Support land use and development within the Boronia Activity Centre to be consistent with Clause 21.10-3 and relevant zone and overlay provisions.
- Direct large entertainment and retail uses serving a regional catchment into Knox Central, Bayswater, Boronia, and Rowville activity centres.
- Promote mixed uses and higher density housing in activity centres to increase local living opportunities and the vitality of centres, consistent with structure plans and the Knox Housing Strategy 2015.
- Support appropriate non-residential uses in residential areas on the periphery of activity centres, where they can provide a buffer between business and residential uses.
- Discourage non-residential uses which operate until late at night in residential areas where late night commercial activity does not currently exist.

Clause 22.06 Boronia Activity Centre states:

- Boronia currently suffers from a limited retail mix and a lack of investment in buildings within the commercial area. High vacancy rates exist within the centre, and there is considerable escape expenditure to other centres.
- A lack of variety of land uses exists within the Activity Centre, including a lack of variety of housing types available.
- Opportunities for higher density development have been identified within the centre to benefit from close proximity to social services and infrastructure.
- Poor connectivity and separation of activity areas is exacerbated by a dominance of vehicular movement through the centre, and poor pedestrian connections between areas of interest. There is a need for improvements for non-motorised and public transport.
- There is a need for provision for community gathering places and focal points within the Centre.
- The Centre is provided with exceptional views to the Dandenong Ranges, surrounded by the landscaped setting of the foothills, which are highly valued by the local community. Future development should be designed to sensitively respond to Boronia's unique setting within the foothills of the Dandenong Ranges.

2.5 Housing Strategy and Residential Zones

The introduction of new residential zones by the State Government (and Garden Area Provisions) and the development of the Knox Housing Strategy have contributed to a changing planning environment for residential development. This includes policy to facilitate increased density in and around Boronia whilst the new Garden Area Provisions potentially reduce floorspace and dwelling yields on some lots.



2.6 Land for Business Project

Knox Council is currently undertaking a Land for Business project which investigates future demand for employment-generating uses in the municipality.

The report states that there is likely to be a significant overall shortfall of business land within the next 20 years in the City of Knox unless additional land is zoned for business purposes and existing business land is developed and used differently.

The report nominates possible strategic directions as follows:

- Encourage retail and mixed use development in Boronia Activity Centre;
- Ensure that floorspace growth for retail, office and other employment uses is facilitated;
- Investigate how efficient use of land could be facilitated; and
- Encourage growth in professional services in Boronia and other Activity Centres.

Boronia Renewal Project

Potential future land use directions for Boronia have been identified in the text boxes below.

Note that these points were drafted on the basis of data pre-dating the release of the 2016 Census and as such will be revisited for currency by Knox City Council.

Comments regarding Dorset Road do not yet include VicRoads feedback.

Strengths
■ Presence of fixed rail and good public transport access to jobs and services.
■ Sense of ownership and community among the residents.
■ Large lot sizes in residential areas improves the viability of medium density housing development by allowing more dwellings on a block.
■ Strong demand for medium density residential development, particularly along the Belgrave railway line.
■ Large critical mass - 40,327 sqm of existing retail floorspace, and 10,000 sqm of existing commercial floorspace.
■ Boronia’s population and commercial catchment is growing due to ‘natural’ increases, including approximately 1,200 new dwelling approvals since 2008.
■ Diversity in supermarket choice - Coles, Woolworths and soon an Aldi supermarket.



Weaknesses

- Low to moderate commercial and retail demand.
- Fragmented activity centre structure - It is unclear whether Dorset Road has created this sense of division, or whether the convenience function of Boronia means that visitors only access the shops they need. The lack of cross-trips across the centre may then be attributed more to the lack of retail mix than physical form of the centre.
- Commercial growth hampered by low-moderate average disposable income?
- Future apartment developments constrained by lack of larger sites.
- Crime and safety perceptions in the centre, particularly around confined, underground development surrounding the railway station.

Opportunities

- Strong, continuing demand for land for residential development. Various studies commissioned by Council project for an additional 1,668 to 2,622 dwellings based on existing population forecasts and the current strategic and planning framework for Boronia.
- Evidence of continuing demand for commercial land across Knox.
- Extension of Dorset Road (Council’s highest priority road upgrade) may result in greater catchment size for Boronia’s commercial areas.
- Bicycle access should be improved as knowledge and signposting of cycleways is poor.

Threats

- Extension and widening of Dorset Road may result in further division of the Activity Centre’s built form.
- Broader trends in the decline of manufacturing and a shift in retail from the ‘high street’ to stand-alone shopping centres, particularly the expanded Knox City and Eastland shopping centres.
- State Government planning reform may dictate minimum heights across the centre.

Source: Knox City Council 2017



2.7 Summary

Policy and strategy settings for the Boronia Activity Centre are generally aligned at State and Local Government levels.

Aspirations include creating a more vibrant CBD-style mixed use environment based on business, jobs and services in the core of the centre along with higher density housing and transport services that do not rely heavily on cars.

A variation in policy relates to the level of development that is expected to be provided. The 2006 Structure Plan limits the scale of development in the Centre whereas State policy places more weight on delivering economic, housing and transport outcomes over specific built form directions.

A key plank of policy is to ensure that capacity for ongoing retail, commercial and community services growth and change can be facilitated in the future along with housing growth.

3.0 EXISTING CONDITIONS

3.1 Site Area

The Boronia Activity Centre comprises approximately 959,581 sqm of property site area (excluding public domain areas such as roads).

The land use composition of sites and current zoning is shown in the figures below.

Figure 2 - Land Use Designation

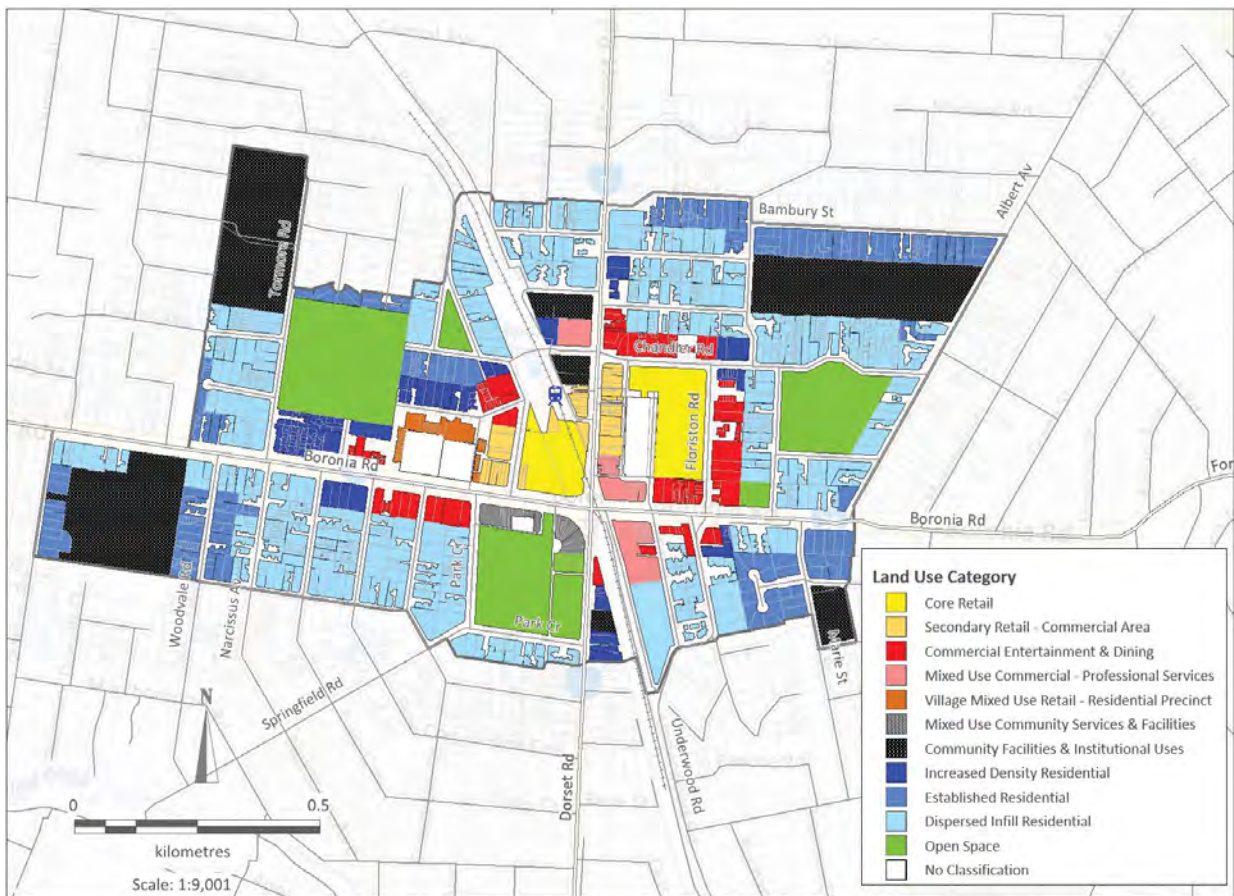
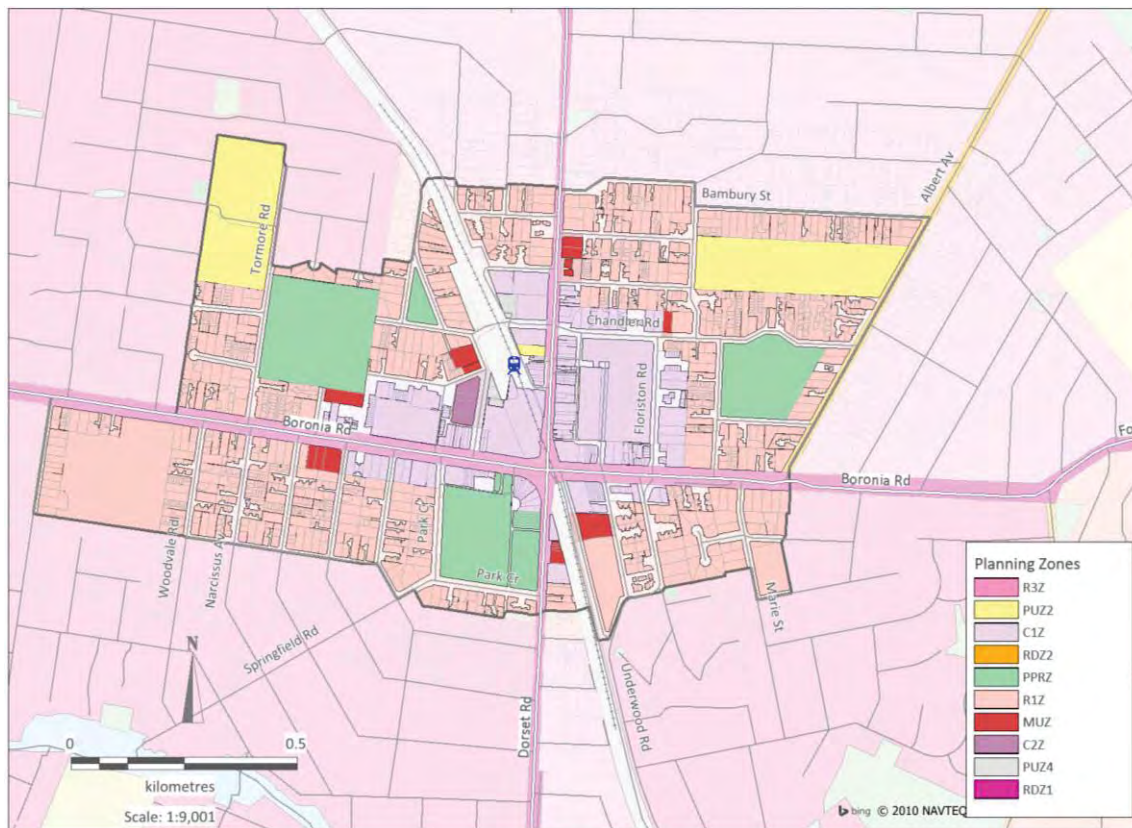


Figure 3 - Zoning (as at October 2017)

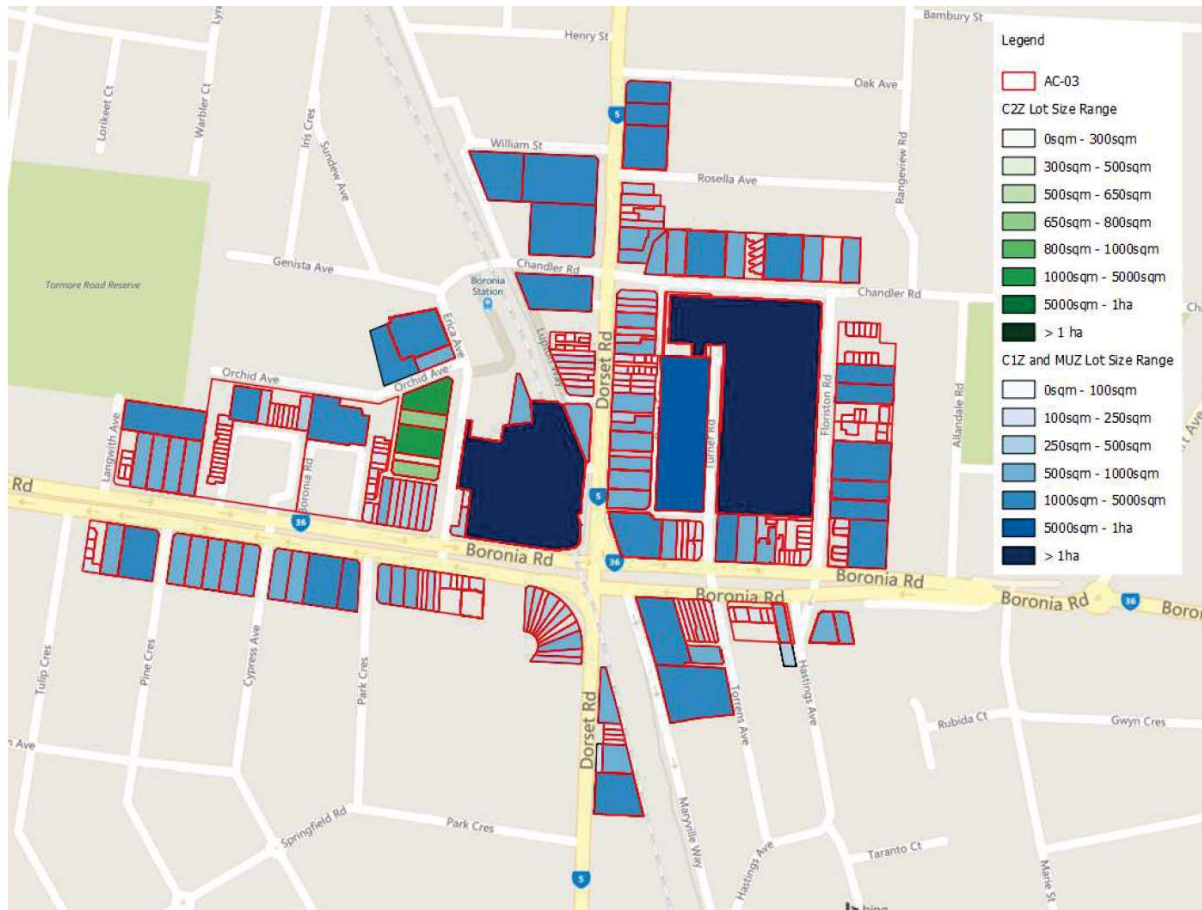


Source: Knox City Council



A close up of lot size patterns in the core of the Activity Centre is shown in the figure below. The Centre has large sites in and around the core.

Figure 4 - Lot Size in Activity Centre Core



Source: Knox City Council



3.2 Floorspace and Properties

Boronia has approximately 92,200 sqm of business (non-residential) floorspace within 429 properties.

Retail (58,900 sqm) and commercial (office) (20,900 sqm) are the primary land use activities. Other notable uses include a range of community services.

Major businesses and other land uses in the Centre include:

- Kmart (Dorset Square);
- Coles (Dorset Square);
- Woolworths (Boronia Village);
- Dan Murphy's (Boronia Village);
- Zagames Bistro;
- Knox Basketball Stadium (note that Knox City Council has resolved to decommission Boronia Basketball Stadium and replace it with a new major facility in Wantirna South);
- Boronia Library;
- Boronia Ten Pin Bowling;
- Boronia Train Station; and
- An Aldi supermarket is planned to be added to the Centre in the near future.

Table 1 - Floorspace Profile

Broad Land Use Description	Floorspace SQM	Count of Properties	Average Size SQM
Residential	151,780	1,454	104
Retail	58,866	281	209
Commercial	20,828	126	165
Community Services	4,400	7	629
Special Care Residential	3,681	2	1,841
Café / Restaurant*	2,243	2	1,122
Health	1,175	5	235
Other	747	5	149
Mixed Use	240	1	240
Total	243,959	1,883	130
Total Excluding Residential	92,180	429	215

*Data for Café / Restaurant is likely to be under-reported in the dataset. Café / Restaurant activity is likely to be counted within the Retail category.

Source: Knox City Council



A more detailed breakdown of selected uses is shown below. This shows that the Centre has:

- A mix of housing types including apartments and townhouses;
- A significant stock of small speciality retail stores (268 properties) and offices (126 properties); and
- About 14,600 sqm of major retail uses.

Table 2 - Detailed Profile of Selected Land Uses

Broad Land Use Description		Floorspace SQM	Count of Properties	Average Size SQM
Residential				
	Flat / Apartment	34,115	406	84
	Townhouse, Villa or Semi-Detached	84,193	818	103
	Detached Home	33,472	230	146
Retail				
	Shopfront Retail	41,212	268	154
	National Company Retail	14,559	4	3,640
	Bottle Shop Licensed Liquor Outlet	3,030	3	1,010
	Fuel Outlet Garage Service Station	65	1	65
Café / Restaurant*				
	Tavern / Licensed Club or Restaurant*	2,000	1	2,000
	National Company Restaurant*	243	1	243
Commercial				
	Office Premises	20,828	126	165
Community Serv.				
	Indoor Sports Centre / Gymnasiums	2,053	1	2,053
	Indoor Sports Grounds / Complex	1,150	1	1,150
	Halls and Service Clubrooms	569	2	285
	Day Care Centre for Children	338	1	338
	Unspecified Public Education and Health	149	1	149
	Civic Buildings	141	1	141
Health				
	Health Surgery	733	3	244
	Community Health Centre	318	1	318
	Health Clinic	124	1	124

*Data for Café / Restaurant is likely to be under-reported in the dataset. Café / Restaurant activity is likely to be counted within the Retail category.

Source: Knox City Council

The Boronia Activity Centre has been defined into quadrants based on Dorset and Boronia Roads. The data is shown in the table below and indicates that approximately:

- 47% of business activity is located in the north-east quadrant;
- 31% in the north-west quadrant;



- 11% in the south-east quadrant; and
- 10% in the south-west quadrant.

In terms of residential floorspace, the figures are (approximately):

- 38% of residential floorspace is located in the north-east quadrant;
- 27% in the north-west quadrant;
- 29% in the south-east quadrant; and
- 9% in the south-west quadrant.

Table 3 - Floorspace by Activity Centre Quadrant

Broad Land Use Description	Floorspace SQM			
	North East	North West	South West	South East
Residential	56,951	41,498	40,128	13,202
Retail	33,324	18,676	3,762	3,103
Commercial	9,569	6,729	3,305	1,225
Community Services	149	3,241	479	531
Special Care Residential	0	0	293	3,388
Café / Restaurant	0	243	0	2,000
Health	0	0	1,175	0
Other	286	0	0	461
Mixed Use	240	0	0	0
Total	100,519	70,387	49,143	23,910
Total Excluding Residential	43,568	28,889	9,014	10,708

Source: Knox City Council

3.3 Summary

The Boronia Activity Centre comprises approximately:

- 959,581 sqm of property site area including large sites in and around the core of the Activity Centre;
- 92,200 sqm of business (non-residential) floorspace within 429 properties including a significant stock of small speciality retail stores (268 properties) and offices (126 properties);
- Retail (58,900 sqm) and commercial (office) (20,900 sqm) are the primary land use activities. Other notable uses include a range of community services;
- Major businesses and other land uses in the Centre include a discount department store, major supermarkets, bistro and community facilities; and
- The business activities are mainly clustered north of Boronia Road with a bias to the east of Dorset Road.



4.0 ECONOMIC AND DEMOGRAPHIC PROFILE

4.1 Introduction

This section provides a brief analysis of socio-economic and employment patterns in Boronia, including trends in population and dwelling numbers, resident incomes, household type and structure.

Employment data by industry is shown for the Boronia Activity Centre boundary. Social and demographic data relates to the suburb boundary (which is larger than the Activity Centre boundary).

4.2 Jobs in Boronia Activity Centre

The Boronia Activity Centre is estimated to accommodate approximately 2,500 jobs, representing 4.4% of the municipal total.

The main sector is Retail Trade, with other significant sectors being Health Care & Social Assistance, Professional, Scientific & Technical Services and Accommodation & Food Services.

Compared to the City of Knox, the Boronia Activity Centre has relative strengths in:

- Arts & Recreation Services (4.6 times the municipal emphasis);
- Rental, Hiring & Real Estate Services (3.1);
- Financial & Insurance Services (2.3);
- Retail Trade (2.0);
- Information Media & Telecommunications (1.7);
- Professional, Scientific & Technical Services (1.7);
- Accommodation & Food Services (1.6);
- Public Administration & Safety (1.5); and
- Health Care & Social Assistance (1.4).

This shows that the Centre has a clear recreation, business services and human services focus within the municipality.

Compared to Greater Melbourne, the Boronia Activity Centre has relative strengths in:

- Arts & Recreation Services (2.9 times the metropolitan emphasis);
- Retail Trade (2.3);
- Rental, Hiring & Real Estate Services (2.3);
- Accommodation & Food Services (1.4); and
- Health Care & Social Assistance (1.3).

Table 4 - Job Provision by Industry Sector, Boronia AC, Knox (C), Greater Melbourne

Industry Sector	Boronia Activity Centre	Knox (C)	Greater Melbourne
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	Jobs	Share	Jobs	Share	Share
Retail Trade	646	26.0%	7,441	13.3%	11.1%
Health Care & Social Assistance	388	15.6%	6,172	11.1%	11.6%
Professional, Scientific & Technical Services	227	9.1%	3,053	5.5%	9.6%
Accommodation & Food Services	207	8.3%	2,848	5.1%	6.0%
Arts & Recreation Services	137	5.5%	665	1.2%	1.9%
Education & Training	126	5.1%	3,181	5.7%	8.5%
Other Services	117	4.7%	2,401	4.3%	3.7%
Public Administration & Safety	107	4.3%	1,605	2.9%	5.5%
Financial & Insurance Services	97	3.9%	955	1.7%	5.2%
Rental, Hiring & Real Estate Services	93	3.7%	666	1.2%	1.6%
Construction	87	3.5%	4,102	7.4%	6.2%
Administrative & Support Services	68	2.7%	1,444	2.6%	3.3%
Manufacturing	63	2.5%	12,569	22.5%	11.4%
Wholesale Trade	57	2.3%	6,240	11.2%	5.3%
Information Media & Telecommunications	48	1.9%	592	1.1%	2.4%
Transport, Postal & Warehousing	14	0.6%	1,469	2.6%	4.9%
Agriculture, Forestry & Fishing	0	0.0%	78	0.1%	0.5%
Electricity, Gas, Water & Waste Services	0	0.0%	279	0.5%	1.0%
Mining	0	0.0%	47	0.1%	0.2%
Total	2,482	100%	55,807	100%	100%

Source: REMPLAN 2016/2017 data

4.3 Population and Dwellings

The resident population of Boronia is estimated at approximately 23,470 residents in 2017. Between 2011 and 2017, Boronia added 1,927 new residents (net) or approximately 320 persons per year. This represents an average annual growth rate of 1.4% and compares with 0.7% growth in the broader municipality.

Broadly, an additional 884 dwellings (net) have been developed to accommodate the increase in resident population during this time.

In the 19-year period from 2017 to 2036, a further 3,640 persons (net) are expected to live in Boronia; this represents an additional 190 persons per year. This will necessitate the development of approximately 1,730 new dwellings during that period.

These population and dwelling trends are shown in the table below.

Table 5 - Population Trends, Boronia, 2011-2036

Area	2011	2017	2026	2036	Change 2011-17	Change 2017-36
Boronia						
Population	21,544	23,471	25,186	27,114	+1,927	+3,643



Dwellings	9,010	9,894	10,716	11,622	+884	+1,728
City of Knox						
Population	154,619	161,291	174,008	184,821	+6,672	+23,530
Dwellings	56,701	60,719	67,008	72,462	+4,018	+11,743

Source: .id Consulting (May 2014)

4.4 Age Structure

Boronia's resident population is changing as reflected by the data shown in the table below. In the five years to 2016, Boronia experienced a significant increase in young families as indicated by increases in the young workforce age group (25 to 34 years) and the babies and pre-schoolers age category (0 to 4 years).

This demographic shift is likely to reflect the attractiveness of Boronia as a location to raise a family due to available of services and jobs, transport options and relatively affordable housing.

Other trends include the ongoing aging of the baby boomer population, with many of these residents typically seeking to downsize from larger housing stock during their later years.

Table 6 - Age Structure Trends, Boronia, 2011-2016

Service age group (years)	2011		2016		Change 2011 to 2016
	No.	%	No.	%	
Babies and pre-schoolers (0 to 4)	1,275	6%	1,485	7%	+210
Primary schoolers (5 to 11)	1,517	7%	1,661	8%	+144
Secondary schoolers (12 to 17)	1,313	6%	1,282	6%	-30
Tertiary education and independence (18 to 24)	1,937	9%	1,746	8%	-191
Young workforce (25 to 34)	3,160	15%	3,545	16%	+384
Parents and homebuilders (35 to 49)	4,319	21%	4,500	20%	+181
Older workers and pre-retirees (50 to 59)	2,726	13%	2,684	12%	-43
Empty nesters and retirees (60 to 69)	2,295	11%	2,616	12%	+321
Seniors (70 to 84)	1,919	9%	2,157	10%	+238
Elderly aged (85 and over)	422	2%	499	2%	+77
Total	20,886	100%	22,178	100%	+1,292

Source: ABS Census of Population and Housing, 2011 and 2016



4.5 Education

The table below show a change has been underway in the qualifications of the population in Boronia over the five years to 2016 and this is likely to be brought about by an influx of qualified residents rather than a significant change in the qualifications of the 2011 population. Approximately 3,400 residents hold a Bachelor or higher degree and this has risen significantly from 2011 when approximately 2,200 residents were educated to that level.

Overall, 45% of the Boronia population aged 15 and over held no qualifications in 2011 and this share has reduced to approximately 41% in 2016.

Table 7 - Education Trends, Boronia, 2011-2016

Qualification level	2011	%	2016	%	Change 2011-2016	% Change
Bachelor Degree level and above	2,183	13	3,426	19	+1,243	6
Advanced Diploma and Diploma level	1,499	9	1,921	11	+422	2
Vocational	4,108	25	3,562	20	-546	-5
No qualification	7,600	45	7,370	41	-230	-4
Not stated	1,621	10	1,613	9	-8	-1
Total	17,011		17,892		+881	

Source: ABS Census of Population and Housing, 2011 and 2016

4.6 Occupation

In terms of the occupations of residents, Boronia generally has a lower share of 'white-collar' occupations, such as managers and professionals, compared with the broader municipality. However it is in these occupations that growth over the five years to 2016 has been the most pronounced, providing a strong indication that the area is continuing to gentrify. Boronia has a higher proportion of 'blue collar' professions than Knox City, most notably Technicians and Trades Workers (18% compared with 15% in 2016), however this gap is closing.

Table 8 - Occupation Trends, Boronia, 2011-2016

Occupation	2011			2016		
	Boronia		Knox City	Boronia		Knox City
	No.	%	%	No.	%	%
Professionals	1,819	17%	22%	1,988	18%	21%
Technicians and Trades Workers	2,001	19%	14%	1,925	18%	15%
Clerical and Administrative Workers	1,724	16%	14%	1,634	15%	16%
Community and Personal Service Workers	1,028	10%	9%	1,202	11%	10%
Managers	962	9%	13%	1,108	10%	12%
Labourers	1,049	10%	9%	1,072	10%	8%
Sales Workers	988	9%	10%	1,065	10%	11%



Machinery Operators And Drivers	723	7%	6%	684	6%	6%
Total	10,294	100%	100%	10,678	100%	100%

Source: ABS Census of Population and Housing, 2011 and 2016

4.7 Individual Incomes

Individual income levels in Boronia are typically lower than the City of Knox average, as identified in the table below. The data in part reflects the lower share of the working population occupied as higher-paid managers and professionals, and the ‘tipping point’ in the data is the \$1,500 per week benchmark. Boronia is under-represented in the over \$1,500 per week income bracket compared with the broader municipality.

Table 9 - Weekly Individual Income, Boronia, 2016

Weekly gross income brackets	No.	%	City of Knox %
Negative Income/ Nil income	1,440	7.9%	10.5%
\$1 - \$149	774	4.2%	5.1%
\$150 - \$299	1,321	7.2%	6.8%
\$300 - \$399	1,536	8.4%	8.0%
\$400 - \$499	1,754	9.6%	7.9%
\$500 - \$649	1,538	8.4%	7.6%
\$650 - \$799	1,625	8.9%	8.0%
\$800 - \$999	1,840	10.0%	9.1%
\$1,000 - \$1,249	1,804	9.8%	9.4%
\$1,250 - \$1,499	1,180	6.4%	6.4%
\$1,500 - \$1,749	842	4.6%	5.1%
\$1,750 - \$1,999	498	2.7%	3.4%
\$2,000 - \$2,999	607	3.3%	4.4%
\$3,000 or more	129	0.7%	1.8%
Not stated	1,451	7.9%	6.3%
Total (of persons aged 15+)	18,348	100%	100%

Source: ABS Census of Population and Housing, 2016



4.8 Households by Type

A summary of households in Boronia by Household Type is shown in the table below.

The information shows that growth is occurring in the couples with children household category, which reflects the influx of families moving into the Boronia area. The data also shows an increase in lone person households possibly due to the availability of smaller dwelling types such as apartments.

Again, these trends highlight the socio-demographic change that is underway in Boronia, and is a pointer for the type of residential market that will continue to grow in the area.

Table 10 - Households by Type Trends, Boronia, 2011-2016

Households by type	2011		2016		Change 2011 to 2016
	No.	%	No.	%	
Couples with children	2,295	27%	2,520	28%	224
Couples without children	2,144	26%	2,140	24%	-5
One parent families	1,168	14%	1,086	12%	-82
Other families	100	1%	77	1%	-23
Group household	280	3%	286	3%	6
Lone person	2,183	26%	2,376	27%	193
Other not classifiable household	173	2%	356	4%	183
Visitor only households	51	1%	33	0%	-19
Total households	8,398	100%	8,876	100%	478

Source: ABS Census of Population and Housing, 2011 and 2016

4.9 Dwelling Structure

Between 2011 and 2016, an increasing share of occupied private dwellings in Boronia consisted of medium-density housing, involving mainly townhouses and unit developments. During this five-year period the total growth in the stock of medium-density housing was approximately 510 dwellings, indicative of the growing popularity of smaller, lower-maintenance housing stock in the area.

While the urban renewal process is slowly occurring in the established parts of Boronia, as shown by a minor decline in the share of separate detached dwellings, approximately 250 new separate dwellings were added to Boronia's housing stock over the past five years.

Over the five-year period from 2011 to 2016, the share of occupied private dwellings consisting of high-density housing (i.e. flats and apartments in three storey and larger blocks) decreased, most likely due to classification anomalies in the Census data.

**Table 11 - Dwelling Structure Trends, Boronia, 2011-2016**

Dwelling type	2011		2016		Change 2011 to 2016
	No.	%	No.	%	
Separate house	6,815	77%	7,067	74%	252
Medium density	1,838	21%	2,352	25%	514
High density	256	3%	126	1%	-130
Caravans, cabin, houseboat	0	0%	3	0%	2
Other	3	0%	0	0%	-3
Not stated	0	0%	19	0%	19
Total Private Dwellings	8,913	100%	9,567	100%	654

Source: ABS Census of Population and Housing, 2011 and 2016

4.10 Summary

The Boronia Activity Centre accommodates approximately 2,500 jobs, with Retail Trade being the main industry sector. Other significant sectors are Health Care & Social Assistance, Professional, Scientific & Technical Services and Accommodation & Food Services.

Compared to the City of Knox, the Boronia Activity Centre has relative strengths in recreation, business services and human services.

The resident population of Boronia (suburb) has grown at an average annual growth rate of 1.4% compared with 0.7% for the municipality. Projections suggest continue growth in the future.

Traditionally, the population of the area has been defined and by an ageing population with a lower income and skills profile but recent changes have brought in a new demographic into the area including families with children and lone person households.

The education and occupation status of residents is increasing, likely as a result of new residents holding higher education levels and white collar occupations.

This demographic shift is likely to reflect the attractiveness of Boronia as a location to raise a family due to available of services and jobs, transport options and relatively affordable housing.

The retail and services market may be able to capitalise upon these changes as demand for services in the area changes over time.



5.0 PROPERTY MARKET CONTEXT

5.1 Introduction

This section of the report analyses the property market in Boronia. A review of property databases has provided an insight into sale and rental prices for a range of development types in the area. These factors inform the selection of development formats, property attributes desired by the market and prices that could be achieved for finished properties tested for feasibility testing.

5.2 Melbourne Market Overview

The Melbourne residential market has been experiencing relatively strong capital growth in recent times, with demand from both owner occupiers and investors. Historically low interest rates, first home buyer incentives and strong population growth have been key factors underpinning the ongoing demand, which are forecast to sustain positive price growth in the short term.

Price prospects vary according to location, and according to product type. Demand for detached dwellings, and a relative shortage of supply of detached dwellings is consistent with the strong capital growth in recent times. Fears of an oversupply in the Melbourne apartment market have been present for a number of years however, recent strong net in-migration - notably of international students, combined with a slowdown in new apartment commencements have led BIS Oxford Economics to revise their projection of an apartment surplus of 20,000 units by 2020 to a forecast of a deficit of apartments of 2,000 over the same period.

Despite this, capital growth going forward is expected to be more muted. The potential for increases to interest rates, caution in lending to investors mean that the likely outcome over the medium term is more subdued capital growth and increased competition between development sales. Delivering quality stock has been highlighted as an important aspect for developers to consider in planning new developments that stand out from the competition. While constraints on price growth will be most concentrated in the apartment sector, there is likely to be an impact on house prices.

5.3 Boronia Market Overview

Boronia is located in the City of Knox. The suburb is 32 kilometres to the east of Melbourne CBD. The suburb is bisected by the Belgrave Railway line, with Boronia Road aligned east to west and Dorset Road running north-south through the Activity centre. Suburbs surrounding Knox are predominantly residential suburbs such as Bayswater to the north, Ferntree Gully to the south, and Wantirna South the west. Retail centres in Boronia include the Boronia Junction Shopping Centre, Boronia Village to the west at the junction of Stud Road and Boronia Road, and Dorset Square.



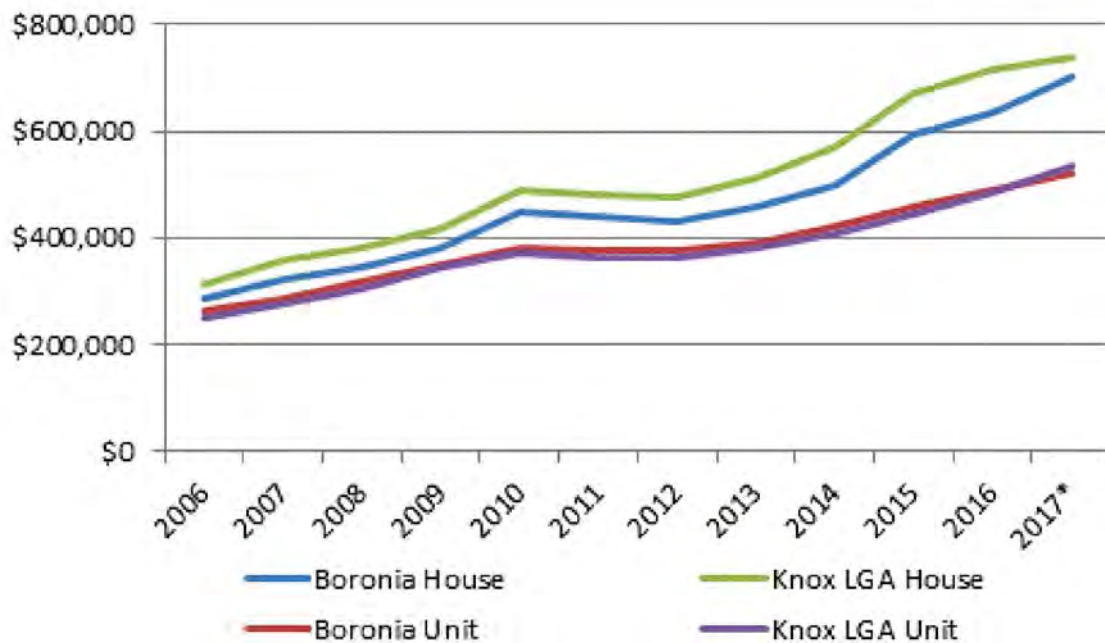
Access to the Melbourne CBD is city is available on the Belgrave line, with peak hour services at 9 minute intervals taking 44 minutes to travel to Melbourne Central. Local bus services connect Boronia with Croydon, Bayswater, and Glen Waverley.

5.4 Residential Market

The median house price in Boronia of \$653,000 ranked as the 263rd highest in Victoria¹. Over the year to August 2017, the median house price in Boronia increased by \$152,000 - an annual growth rate of over 10%. Median unit prices at \$485,000² were the 117th highest in Victoria, having increased by 9.2% - or \$41,000 over the year.

Over the 10 year period to September 2017, median house price growth in Boronia has been strong with an average annual growth rate of 7.4%. Price growth has been more muted for units at 5.1%³. House price growth has outperformed the broader LGA, while unit prices have tracked below those of Knox.

Figure 5 - House and Unit Price Trends, Selected Areas



Source: Valuer General Victoria, RPData, HillPDA Research and Analysis

5.5 Residential Apartment and Townhouse Market

The relative affordability of Boronia house prices has been one of the main factors driving a movement of purchasers from the inner-eastern Melbourne suburbs to those in the outer suburbs, while the relative affordability of houses has constrained price growth in the unit market.

¹ Real Estate Institute of Victoria 2017

² RPData, HillPDA Research & Analysis 2017



³ Valuer General Victoria, RPData 2017

Knox City Council data shows that Boronia has experienced a disproportionately large amount of medium density development as compared with the rest of Knox.

Recent years has seen some residential development in the area with new apartments and units either completed or under construction from 2012 amounting to nearly 600 residential units. The largest of these developments is the project under construction at 2 Floriston Road, Boronia which will comprise 28 residential units once completed in early 2018. Other significant projects in the area included the development at 3 Chandler Road, which brought 25 one and two-bedroom apartments over four levels.

The table below demonstrates new and recent developments for apartments and units in Boronia with indicative asking prices and prices achieved for pre-sales where applicable.


Table 12 - Residential Apartment and Townhouse Developments, Boronia

3 Chandler Road, Boronia				
Bedrooms	Square metres (Internal)	Price (\$)	\$/sqm Internal	
1 bed	55	\$355,000	\$6,420	
2 bed	73	\$450,000	\$6,130	
3 bed	92	\$525,000	\$5,706	
Comments	53 apartments: 1 x 1 bedroom, 10 x 2 bedrooms, 2 x 3 bedrooms			
31-39 Erica Avenue, Boronia				
Bedrooms	Square metres (Internal)	Price (\$)	\$/sqm Internal	
2 bed	55	N/A	N/A	
Comments	45 apartments: one, two and three bedrooms			
8 Roy Court, Boronia				
Bedrooms	Square metres (Internal)	Price (\$)	\$/sqm Internal	
3 bed	130	\$720,000	\$5,540	
Comments	Three brand new dwellings			




14 Zeising Court, Boronia				
Bedrooms	Square metres (Internal)	Price (\$)	\$/sqm Internal	
3 bed	160	\$810,000	\$4,735	
Comments	3 townhouses, with 2 bathrooms and two car garages, due for completion early 2018.			
1 & 3/1 Tulip Crescent, Boronia				
Bedrooms	Square metres (Internal)	Price (\$)	\$/sqm Internal	
3 bed	166	\$675,000	\$4,066	
Comments	6 three bed, two bathroom townhouses with two parking spaces per unit			
13/4 Floriston Road, Boronia				
Bedrooms	Square metres (Internal)	Price (\$)	\$/sqm Internal	
2 bed	67	\$380,000	\$5,671	
Comments	2 bed apartments one bathroom with one parking spaces			
1/32 Bambury Street, Boronia				
Bedrooms	Square metres (Internal)	Price (\$)	\$/sqm Internal	
3 bed	173	\$495,000	\$4,066	
Comments	5 two bed one / two bathroom townhouses with single garage per unit			
204/5 Woodvale Rise, Boronia				
Bedrooms	Square metres (Internal)	Price (\$)	\$/sqm Internal	
2 bed	72	\$444,950	\$6,180	
Comments	15 unit development two bed one / two bathroom apartments with two car spaces per unit			

206/8 Tulip Crescent, Boronia			
Bedrooms	Square metres (Internal)	Price (\$)	\$/sqm Internal
2 bed	72	\$449,950	\$6,250
Comments	16 units: One and two bed, one/two bathroom apartments with one/two car spaces		



1/20 Bambury Street, Boronia			
Bedrooms	Square metres (Internal)	Price (\$)	\$/sqm Internal
3 bed	192	\$670,000	\$3,490
Comments	4 three and four bed, two bathroom townhouses with double garage per dwelling		



Source: HillPDA Research & Analysis 2017

Recent sales data of apartments, units and townhouse in the Boronia area are summarised in the following table.

Table 13 - Residential Apartment / Unit and Townhouse Sales, Boronia

Address	Beds	Baths	Car	Sale price	Sale date	Floor area	Comment	\$/SQM
104/3 Chandler Road, Boronia	2	1	1	\$405,820	Sep-17	60	Apartment	\$6,764
4/11 Allandale Road, Boronia	2	2	1	\$420,000	Oct-15	68	Apartment	\$6,176
106/1 Oak Avenue, Boronia	1	1	1	\$335,000	Jul-17	55	Apartment	\$6,091
7/43 Chandler Road, Boronia	2	2	1	\$490,000	Jul-17	80	Townhouse	\$6,125
1/10 Oak Avenue, Boronia	3	2	2	\$755,000	Jun-17	146	Townhouse	\$5,171
9/317 Dorset Road, Boronia	3	2	2	\$606,000	Jul-17	122	Townhouse	\$4,967
3/5 Narcissus Avenue, Boronia	2	2	1	\$520,000	Mar-17	106	Townhouse	\$4,906
1/21 Rankin Road, Boronia	3	2	2	\$688,000	May-17	145	Townhouse	\$4,745
5/265 Scoresby Road, Boronia	3	2	2	\$651,000	May-17	152	Townhouse	\$4,283
13/57 Chandler Road, Boronia	2	1	0	\$400,000	Jul-17	95	Townhouse	\$4,211
1/37 Aubrey Grove, Boronia	3	3	2	\$588,888	Sep-16	142	Townhouse	\$4,147
1/20 Bambury Street, Boronia	3	2	2	\$670,000	Jun-17	192	Townhouse	\$3,490
3/953 Mountain Highway, Boronia	3	2	2	\$680,000	Jul-17	91	Villa Unit	\$7,473
2/15 Aubrey Grove, Boronia	3	2	2	\$635,000	Feb-17	95	Villa Unit	\$6,684
3/22 Central Avenue, Boronia	2	1	1	\$586,600	Jul-17	94	Villa Unit	\$6,240
3/87 Albert Avenue, Boronia	3	2	2	\$610,000	Jul-17	140	Villa Unit	\$4,357

Source: HillPDA; RP Data



In analysing the array of data received across developments in the Boronia area, the achievable values per square metre for apartment sales are summarised to be \$6,000 to \$7,000/sqm.

Townhouses sold in Boronia were all two to four bedrooms. The internal size of sold properties identified ranged from 95 sqm to 200 sqm. Smaller townhouses located with good access to the activity centre can achieve values per sqm at the lower end of this range, although the majority of townhouses sized around the 150 sqm mark achieve from \$4,000 to \$5,000/sqm. Rates per square metre are lower for larger townhouses with recent sales of townhouses in the 200 sqm range approaching \$2,800 to \$3,500/sqm.

Apartment units are provided with at least one car parking space with larger apartments (2+ bedrooms) demanding two spaces or additional car parking spaces and storage cages available at additional cost. Townhouse developments are provided with one to two car parking spaces.

5.6 Retail and Office Market

The non-residential property market in Boronia and surrounds is characterised by retail premises in shopping strip locations or retail tenancies in shopping centres. Recent sales of retail and commercial premises are shown in the table below.

Office premises typically have street frontages and uses can include healthcare providers and function as quasi retail spaces. Instances of stand-alone office developments were identified in Wantirna South and Bayswater. Sales achieved for office space ranged from \$1,700/sqm up to \$3,300/sqm. Asking prices for listed retail properties range from \$4,500 to \$5,900/sqm.

Table 14 - Retail and Commercial Sales, Boronia and Surrounds

Address	Use	Area	Floor area measure	Sale Price	Sale Date	\$/SQM
20 The Mall, Wantirna	Retail	260	GFA	\$1,530,000	Feb-17	\$5,885
6/255 Dorset Road, Boronia	Retail	86	GFA	\$495,000	Jan-17	\$5,756
7/255 Dorset Road, Boronia	Retail	53	GFA	\$305,000	Aug-16	\$5,755
9/249 Stud Road, Wantirna	Retail	40	GFA	\$220,000	Jun-16	\$5,500
272 Boronia Road, Boronia	Retail	105	GFA	\$480,000	Aug-16	\$4,571
4/426 Burwood Highway, Wantirna South	Office	105	GFA	\$1,100,000	Dec-16	\$10,476
2/333 Wantirna Road, Wantirna	Office	160	GFA	\$515,000	Jun-15	\$3,219
77b Boronia Road, Boronia	Office	64	GFA	\$200,000	Dec-16	\$3,125
8/5-7 Chandler Road, Boronia	Office	51	GFA	\$155,000	Aug-17	\$3,039
3/12 Floriston Road, Boronia	Office	74	GFA	\$215,000	Apr-16	\$2,905
19/653 Mountain Highway, Bayswater	Office	114	GFA	\$315,000	Mar-17	\$2,763
6/653 Mountain Highway, Bayswater	Office	77	GFA	\$205,000	Aug-16	\$2,662
15/653 Mountain Highway, Bayswater	Office	150	GFA	\$375,000	Nov-16	\$2,500
4/173 Boronia Road, Boronia	Office	69	GFA	\$165,000	Nov-16	\$2,391
91A Boronia Road, Boronia	Office	85	GFA	\$190,000	Jun-13	\$2,235
5/4 Macquarie Place, Boronia	Office	172	GFA	\$320,000	Apr-17	\$1,860



3/173 Boronia Road, Boronia	Office	91	GFA	\$160,000	Nov-16	\$1,758
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Source: HillPDA; RP Data

5.7 Development Pipeline

There are 74 apartment and unit developments at early planning stages with a varying degree of commitment to proceed in the area. Should all of these committed developments proceed, an additional 840 new dwellings would be built in Boronia by the end of 2020. Cumulatively these developments would represent approximately \$240 million worth of development in Boronia. An extract of the results of the analysis of development activity is shown in the table below.

Table 15 - Residential Development Pipeline, Boronia, October 2017

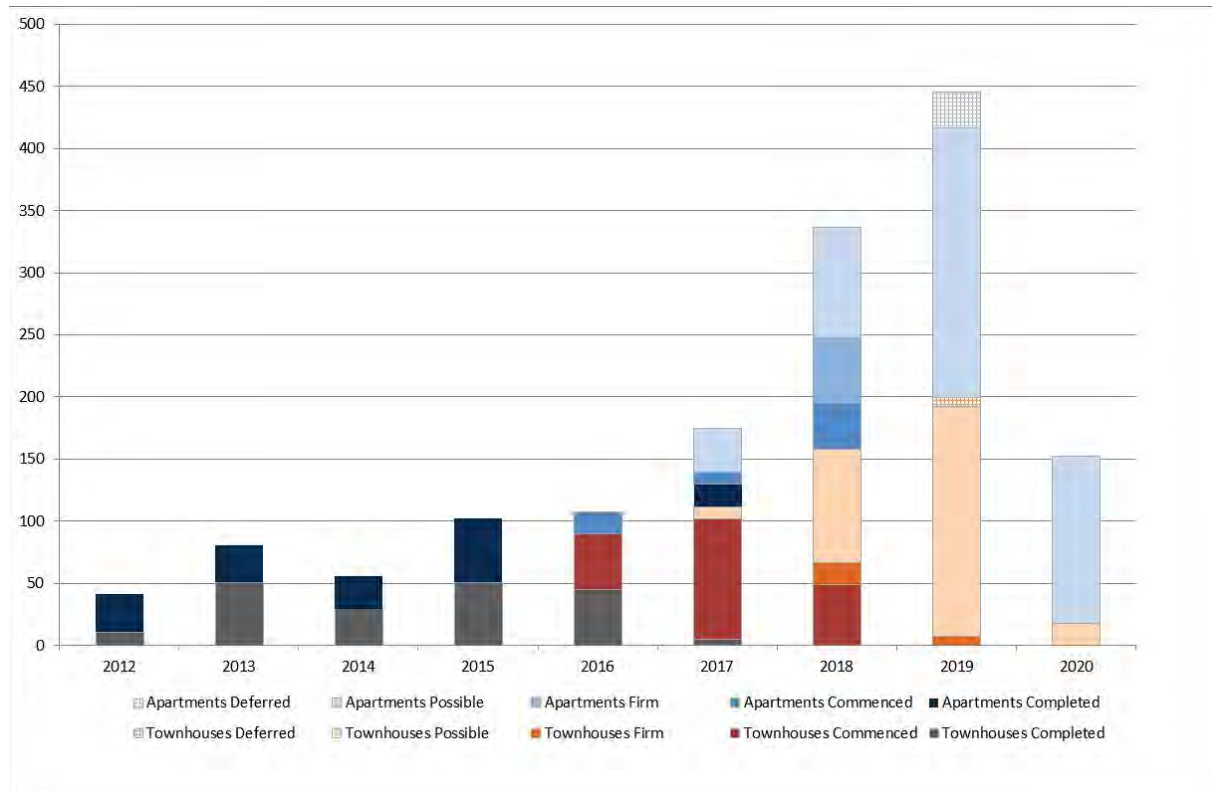
Project Title	Address	Project Stage	Units	Detail
Floriston Road Apartments Building	2 Floriston Road	Commenced	28	3 storey apartment building - 28 apartments, ground level car park & landscaping.
Chandler Road Apartments	3 Chandler Road	Commenced	25	3 storey apartment building - 25 apartments with ground level car park & landscaping.
Oak Avenue Apartments	1 Oak Avenue	Commenced	18	3 storey apartment building - 18 apartments & basement car park.
Sundew Avenue Units	18 Sundew Avenue	Completed	9	9 x 2 storey townhouses. Car park & landscaping.
Sundew Avenue Apartments	6 Sundew Avenue	Completed	18	
Tulip Crescent Apartments	11 Tulip Crescent	Completed	16	
Chandler Road Townhouses	43 Chandler Road	Commenced	15	15 double storey townhouses.
Bambury Street Apartments	8 Bambury Street	Commenced	15	2 storey building - 15 apartments, basement car park.
Tulip Crescent Apartments	8 Tulip Crescent	Commenced	15	
Boronia Road Residential Development	312 Boronia Road	Commenced	14	11 townhouses & 3 apartments. 3 x two bedroom units, 7 x three bedroom units, 4 x four bedroom units.
Laurel Avenue Townhouses	4-6 Laurel Avenue	Commenced	12	12 townhouses.
Laurel Avenue Units	1 Oak Avenue	Completed	12	
Woodvale Road Apartments	2 Woodvale Road	Commenced	12	2 storey building - 12 apartments & basement car park.
Boronia Road Townhouses	189-191 Boronia Road	Commenced	12	Twelve 2 storey townhouses, car park & landscaping.
Chandler Road Apartments	1 Chandler Road	Commenced	12	3 storey building - 12 apartments, car park & landscaping.
Tormore Road Apartments	17 Tormore Road	Commenced	10	2 storey building - 10 apartments.

Source: Cordell Connect, HillPDA Research & Analysis 2017

The development pipeline of apartments and townhouses over recent years and into the near future is shown in Figure 6 below and in Table 16. The data indicates that the number of units completed has been oriented towards townhouse units, with these accounting for 64% of all units developed over the period. Looking ahead, apartments are expected to account for the majority of all units (60%) developed over the period to 2020.



Figure 6 - Residential Development Pipeline, Boronia, 2012-2020



Source: CordellConnect

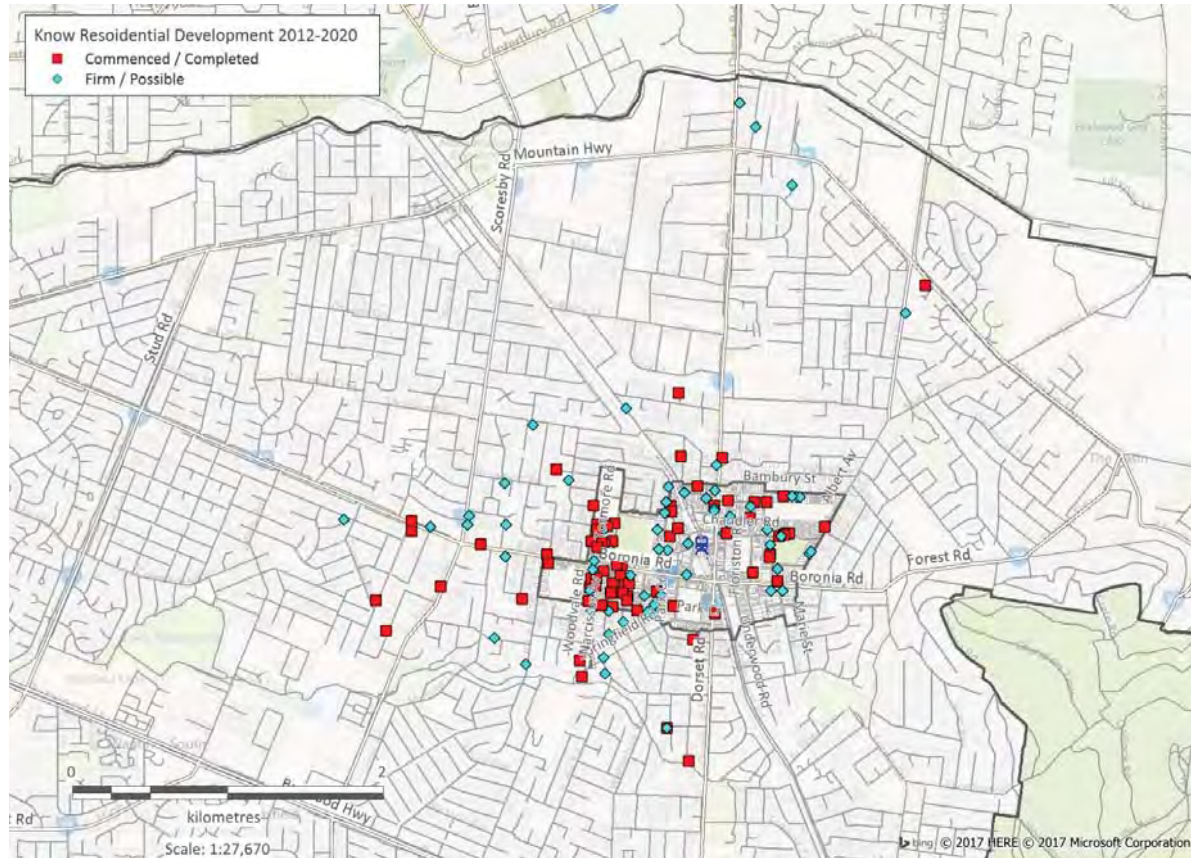
Table 16 - Townhouse and Apartment Developments, Boronia, 2012-2020

Dwelling Type/Stage	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total Townhouses Completed	11	51	30	51	45	5	0	0	0
Townhouses Commenced	0	0	0	0	45	97	49	0	0
Townhouses Firm	0	0	0	0	0	0	18	8	0
Townhouses Possible	0	0	0	0	0	10	91	185	18
Townhouses Deferred	0	0	0	0	0	0	0	7	0
Total Townhouses	11	51	30	51	90	112	158	200	18
Total Apartments Completed	31	30	26	52	0	18	0	0	0
Apartments Commenced	0	0	0	0	18	10	37	0	0
Apartments Firm	0	0	0	0	0	0	53	0	0
Apartments Possible	0	0	0	0	0	35	89	217	135
Apartments Deferred	0	0	0	0	0	0	0	29	0
Total Apartments	31	30	26	52	18	63	179	246	135
Total Townhouse/Apartment Units	42	81	56	103	108	175	337	446	153

Source: CordellConnect

The map below identifies locations where residential has occurred or is planned to occur over the period 2012-2020. Note this map takes a wider spatial scale of the study area to encompass the surrounding suburbs.

Figure 7 - Boronia Residential Development, Status of Development, 2012-2020



Source: CordellConnect

The map identifies locations where residential has occurred or is planned to occur and the number of units that have been developed or are planned to be developed in the study area over the period 2012-2020.

Figure 8 - Boronia Residential Development, Size of Development, 2012-2020



Source: CordellConnect

Commercial development activity in Boronia over recent years is shown in Table 6 below. Of the sectors identified, commercial, retail and industrial sectors account for a broadly comparable amount of development by value, with each sector accounting for \$5.8 million, \$5.6 million and \$4.2 million of development from 2013 to 2019 respectively. In this analysis, the commercial activity is entirely accounted for by development activity in the medical / health sector, with three projects focussing on addition and alterations to existing facilities with the remaining commercial project being the construction of a new medical centre.

Retail development undertaken and proposed for Boronia consists of refurbishment, alterations and upgrades to existing improvements, including the Boronia Mall Shopping Centre, and retailers including Coles and Kmart.

Mixed use development in the development pipeline accounts for the majority of building works by value. However, the units accounted for in these proposed developments have been accounted for in our analysis of the residential development pipeline, with the commercial component of mixed use schemes accounting for a small part of the total development by value. Collectively the mixed use schemes propose a total of seven shops, one medical centre and two cafes/restaurants, in addition to the estimated 110 dwellings to be provided.

**Table 17 - Value of Non-Residential Development Activity and Pipeline, Boronia, 2013-2019**

Sector	2013	2014	2015	2016	2017	2018	2019
Commercial	0	\$200,000	0	0	\$5,450,000	\$200,000	0
Retail	0	0	0	\$1,400,000	0	\$4,000,000	\$200,000
Industrial	\$950,000	\$500,000	0	0	\$900,000	\$1,200,000	\$600,000
Mixed Use	0	0	0	0	\$400,000	\$3,500,000	\$16,600,000

Source: CordellConnect

5.8 Summary

The relative affordability of Boronia house prices has been one of the main factors driving a movement of purchasers from the inner-eastern Melbourne suburbs to those in the outer suburbs, while the relative affordability of houses has constrained price growth in the unit market.

The achievable values per square metre for apartment sales in Boronia are generally in the range of \$6,000 to \$7,000/sqm, while the majority of townhouses sized around the 150 sqm mark achieve from \$4,000 to \$5,000/sqm.

Approximately 840 new apartment and unit dwellings are in various stages of the development process in Boronia, the largest of which is a 28 unit three storey building in Floriston Road.

The non-residential property market in Boronia and surrounds is characterised by retail premises in shopping strip locations or retail tenancies in shopping centres. Asking prices for listed retail properties range from \$4,500 to \$5,900/sqm.

Retail development undertaken and proposed for Boronia largely consists of refurbishment, alterations and upgrades to existing improvements, including the Boronia Mall Shopping Centre, and retailers including Coles and Kmart.

Office premises typically have street frontages and uses can include healthcare providers and function as quasi retail spaces. Instances of stand-alone office developments were identified in Wantirna South and Bayswater. Sales achieved for office space ranged from \$1,700/sqm up to \$3,300/sqm.

Local commercial development activity is entirely focused on the medical / health sector, with three projects focussing on addition and alterations to existing facilities with the remaining commercial project being the construction of a new medical centre.



6.0 DEVELOPMENT CAPACITY SCENARIOS

6.1 Introduction

Development capacity scenarios have been developed by Knox City Council for the purposes of concept testing. The scenarios use existing conditions as a benchmark and test medium and high change options.

6.2 Overview of Scenarios

Scenario 1: Current development context - This is the existing zone and building height control model, which is shown to provide a benchmark for analysis purposes. Building heights range up to four storeys in the commercial core.

Scenario 2: Medium Change - This provides for increased supply of residential and commercial land and relaxation of building height controls to accommodate development intensification. Building heights range up to six storeys in the commercial core.

Scenario 3: High Change - This scenario contemplates a more flexible land use and development outcome, with emphasis on supporting greater development intensification with a view to maximise support for economic development and leverage Council assets. Building heights range up to eight storeys in the commercial core.

The scenarios that scale-up development seek to increase population within the catchment of the Centre with a view to supporting economic development while improving the feasibility of local service provision.

The three scenarios are shown in the figures below.

Figure 9 - Development Scenario 1 (Current Development Context)

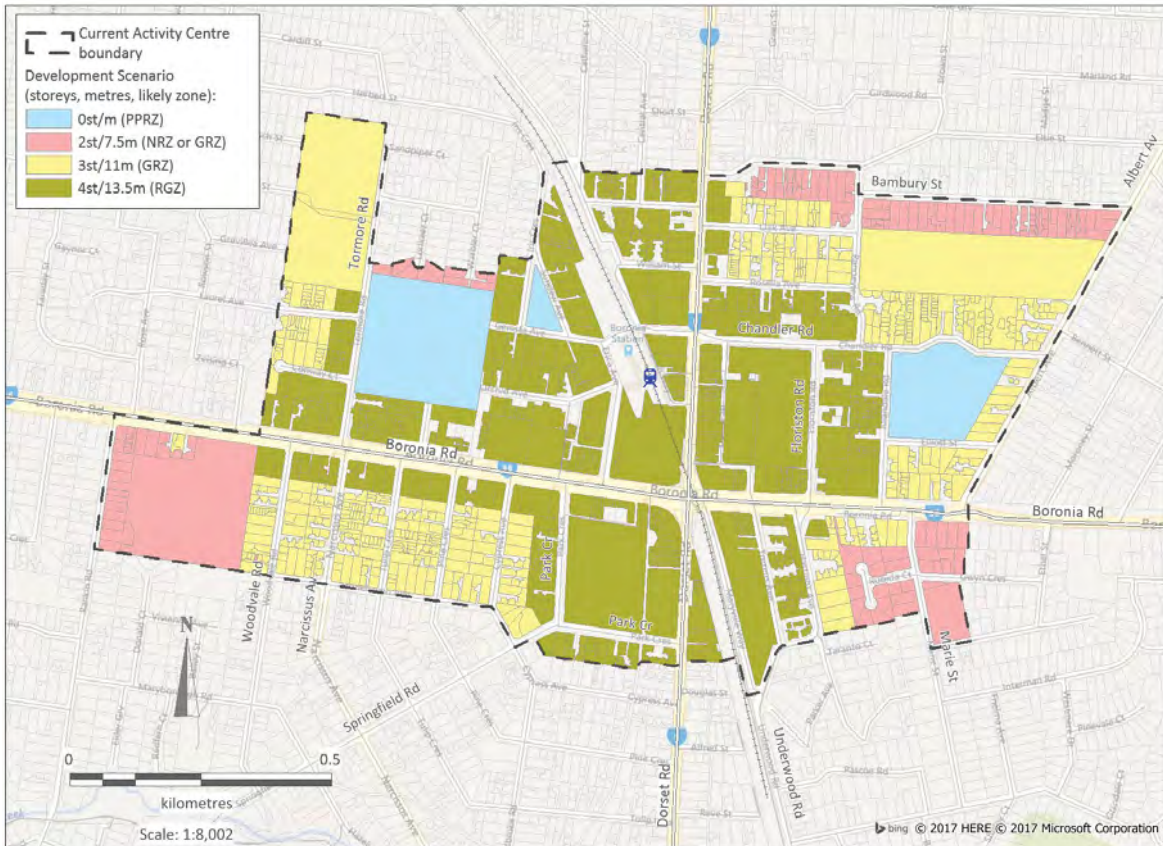


Figure 10 - Development Scenario 2 (Medium Change)

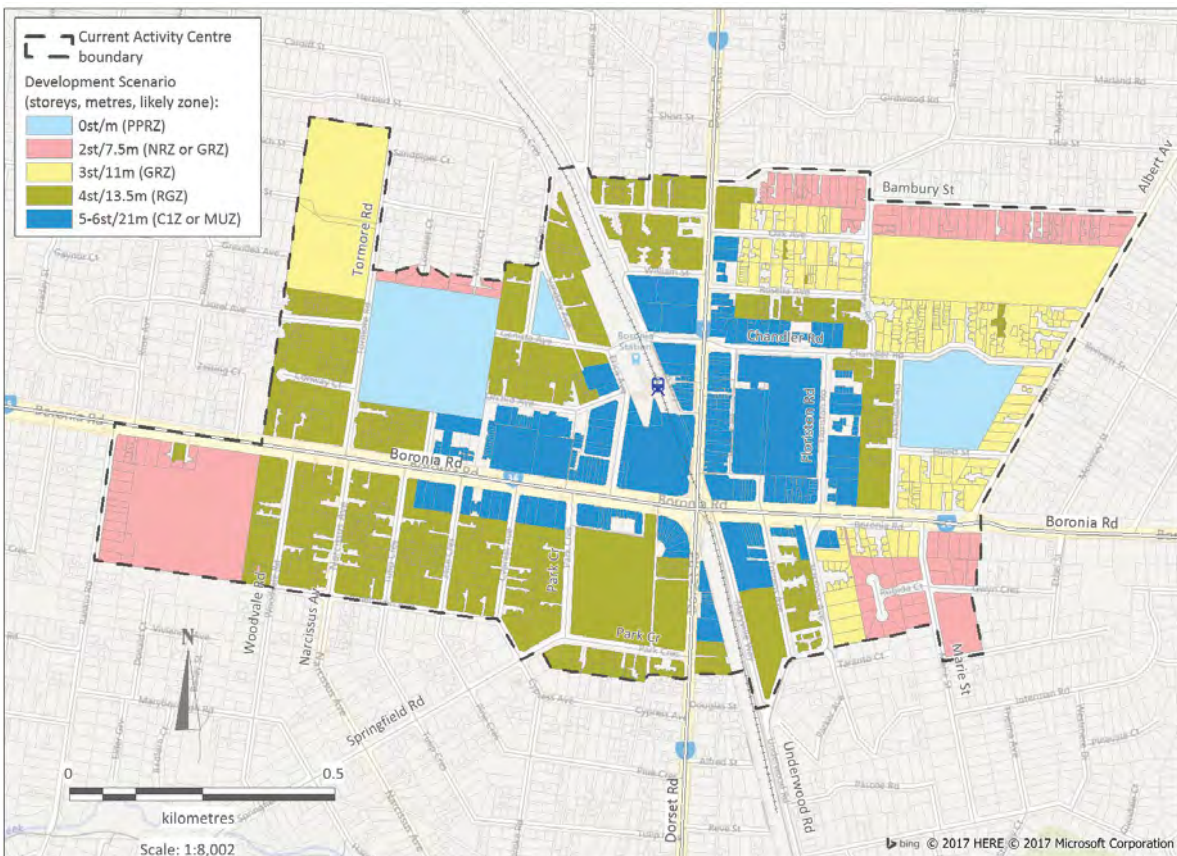
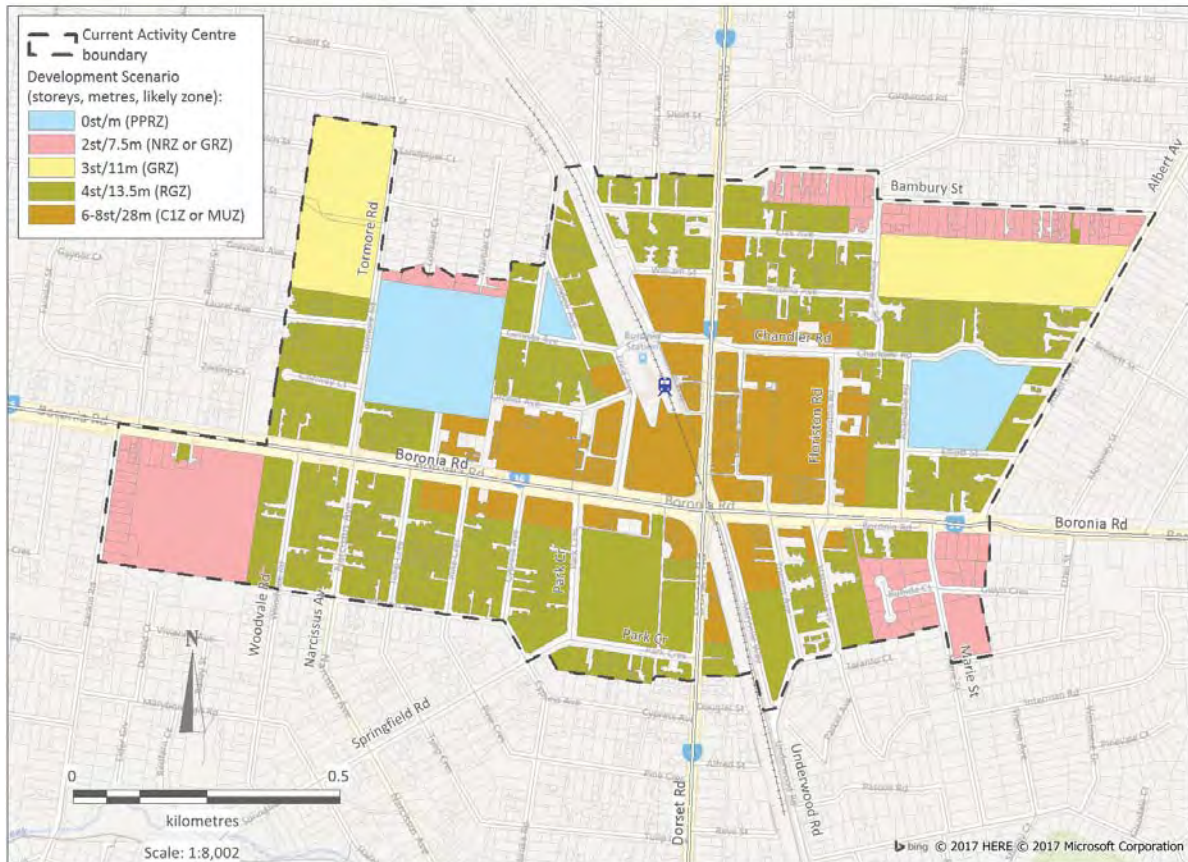


Figure 11 - Development Scenario 3 (High Change)



6.3 Method for Estimating Development Capacity

Plot ratios have been used in the calculation of the total development capacity of the activity centre that have been generated on an understanding that residential and mixed-use development types are somewhat different and provide differing development capacities that reflect the typical lot sizes, setback arrangements and spatial requirements for residential, commercial office and retail space.

Residential Areas Assumptions:

- Areas currently zoned Residential Growth Zone (RGZ), General Residential Zone (GRZ) or Neighbourhood Residential Zone (NRZ) will continue to remain exclusively residential in use and are not forecast to accommodate significant scale retail uses.
- Change in these areas will be incremental due to the small lot sizes, existing development (and redevelopment) patterns, the need for some lot consolidation to enable larger development and the need to continue to manage existing neighbourhood character and landscape character.
- Typical building footprints in these areas (under any scenario) will continue to cover approximately 50% of total site areas to accommodate building front, rear and side building setbacks necessary under Clause 56 of the Knox Planning Scheme, respond to



existing vegetation and to accommodate additional vegetation as part of protecting neighbourhood character.

- The plot ratios that have been used reflect the application of current design requirements in residential zones which include open space, garden area, building setback, natural ventilation and other requirements contained within Clause 55:
 - 2 storeys - 1.0 plot ratio
 - 3 storeys - 1.5
 - 4 storeys - 1.8

Mixed Use Areas Assumptions:

- Areas currently zoned Commercial Zone (C1Z) or Mixed Use Zone (MUZ) will continue to accommodate retail, community and commercial office uses (particularly throughout the ground floor level of buildings), and provide greater residential use capacity above ground level in any scenario.
- Change in these areas will be a mix of incremental and more substantial change due to the range of lot sizes, and existing redevelopment patterns, with the need for some lot consolidation to enable larger development. Neighbourhood character in these areas is already changing, and at its core has always had an 'urban' character that generally locates buildings to the street (with zero setback to provide shopfronts) and typically covering the entire site with built form and surface car park.
- Typical building footprints in these areas (under any scenario) will continue to cover approximately 90% of total site areas, accommodating only negligible areas for vehicle access and manoeuvring, pedestrian links (where appropriate) and occasion small plaza spaces and/or areas necessary for drainage, water sensitive urban design or other services.
- The plot ratios that have been used reflect the application of typical design requirements in high-density, mixed use development which include private open space provision, building setback, natural ventilation and other requirements contained within Clause 55 and Clause 58:
 - 4 storeys - 3.2 plot ratio
 - 6 storeys - 4.5
 - 8 storeys - 4.8
- Ground floor areas of buildings in these areas will generally be used for retail, community or commercial office uses irrespective of uses which exist on upper floor levels.



6.4 Development Capacity Analysis

A site-by-site assessment of development capacity has been undertaken based on the location of properties in accordance with the three scenarios.

Sites that are unlikely to be developed have been taken out of the analysis of additional development capacity (such as parks and schools).

A plot ratio has been applied to remaining sites in order to estimate gross floorspace potential taking into account typical property setbacks and building heights (by scenario).

The results are shown in the summary tables below and summarised as follows:

- Approximately 537,000 sqm (53.7 ha) of site area is deemed developable for the purpose of this analysis;
- Scenario 1 Current development context provides for capacity of approximately 1,030,700 sqm of gross floorspace development;
- Scenario 2 Medium Change provides for capacity of approximately 1,219,100 sqm of gross floorspace development; and
- Scenario 3 High Change provides for capacity of approximately 1,315,200 sqm of gross floorspace development.

Table 18 - Site Analysis for Capacity Testing

Site Analysis	Site Area SQM
Sites Excluded	
Knox Leisureworks	28,321
Boronia West Primary School	21,221
St Josephs Primary School	50,198
Tormore Reserve	54,490
Genista Aven Reserve	4,478
Boronia Park	39,885
Chandler Park	31,763
Boronia K-12 College	51,577
Total Excluded	281,932
Sites Included	
NE1 - Mixed Use	92,709
NE2 - Residential	29,592
NE3 - Residential	57,680
NE4 - Residential	27,992
NE5 - Residential	4,335
NE6 - Residential	41,452
NE TOTAL	253,760
NW1 - Residential	53,722
NW2 - Residential	6,651
NW3 - Residential	24,106
NW4 - Mixed Use	74,643



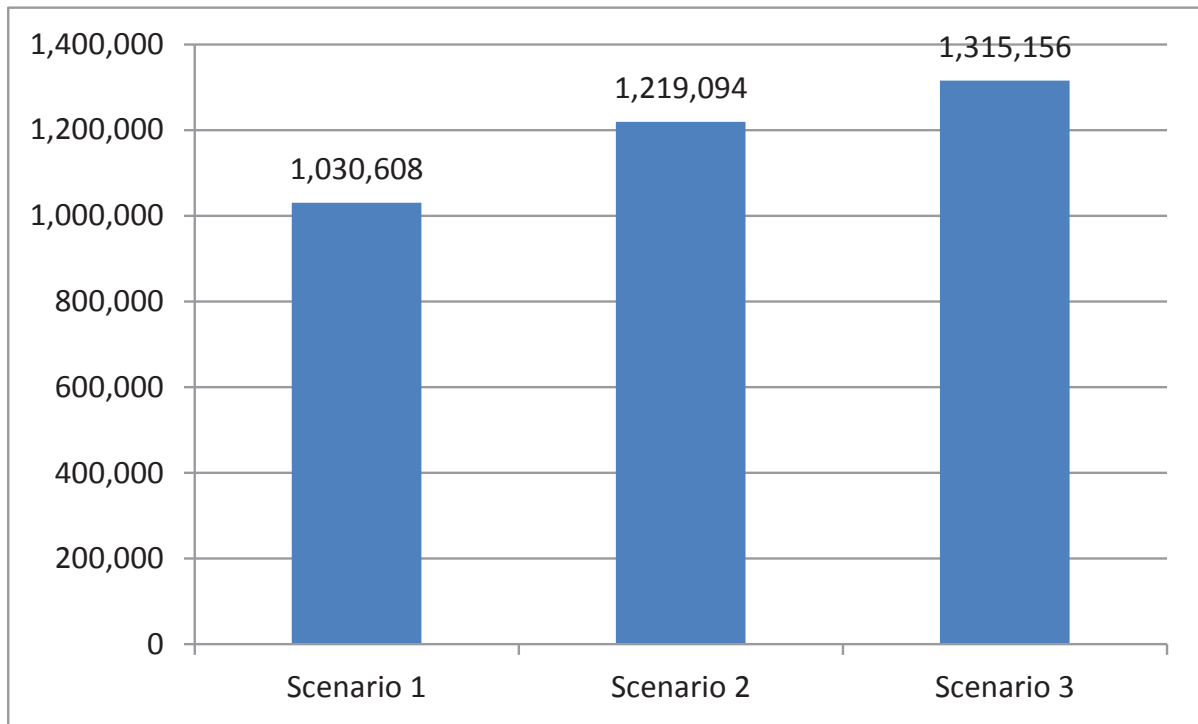
NW5 - Residential	18,289
NW6 - Residential	22,650
NW TOTAL	40,939
SE1 - Mixed Use	15,611
SE2 - Residential	21,651
SE3 - Residential	15,603
SE4 - Residential	32,817
SE TOTAL	85,682
SW1 - Residential	15,440
SW2 - Residential	118,124
SW3 - Mixed Use	23,040
SW TOTAL	156,604
ACTIVITY CENTRE TOTAL	536,986

Table 19 - Gross Floorspace Capacity by Scenario (SQM)

Precincts	Scenario 1	Levels	Scenario 2	Levels	Scenario 3	Levels
NE1 - Mixed Use	296,668	4	417,190	6	463,545	8
NE2 - Residential	53,266	4	53,266	4	53,266	4
NE3 - Residential	86,520	3	86,520	3	103,824	4
NE4 - Residential	41,989	3	41,989	3	50,386	4
NE5 - Residential	7,803	4	7,803	4	7,803	4
NE6 - Residential	41,452	2	41,452	2	41,452	2
NE TOTAL	527,698		648,219		720,275	
NW1 - Residential	88,642	3/4	96,700	4	96,700	4
NW2 - Residential	6,651	2	6,651	2	6,651	2
NW3 - Residential	43,391	4	43,391	4	43,391	4
NW4 - Mixed Use	238,859	4	335,896	6	373,217	8
NW5 - Residential	32,921	4	32,921	4	32,921	4
NW6 - Residential	40,770	4	40,770	4	40,770	4
NW TOTAL	73,690		73,690		73,690	
SE1 - Mixed Use	49,954	4	70,248	6	78,053	8
SE2 - Residential	38,972	4	38,972	4	38,972	4
SE3 - Residential	23,405	3	23,405	3	28,086	4
SE4 - Residential	32,817	2	32,817	2	32,817	2
SE TOTAL	145,148		165,442		177,928	
SW1 - Residential	15,440	2	15,440	2	15,440	2
SW2 - Residential	194,905	3/4	212,623	4	212,623	4
SW3 - Mixed Use	73,728	4	103,679	6	115,199	8
SW TOTAL	284,072		331,743		343,263	
ACTIVITY CENTRE TOTAL	1,030,608		1,219,094		1,315,156	



Figure 12 - Gross Floorspace Capacity by Scenario (SQM)



6.5 Summary

Development capacity scenarios have been developed by Knox City Council for the purposes of concept testing. The scenarios use existing conditions as a benchmark and test medium and high change options that scale-up development in order to increase population within the catchment of the Centre with a view to support economic development and improve the feasibility to provide local services.

The analysis suggests that approximately 537,000 sqm (53.7 ha) of total site area is appropriately zoned for development in the Centre, noting that this figure does not differentiate between occupied and vacant land.

Theoretically, based on an absolutely maximum development scenario, the current development context provides for capacity of approximately 1,030,700 sqm of gross floorspace development.

Scenario 2 Medium Change increases capacity to approximately 1,219,100 sqm and Scenario 3 High Change provides for approximately 1,315,200 sqm of gross floorspace development.



7.0 HOUSING PROJECTIONS

7.1 Introduction

This section of the report provides housing and population projections for the Boronia Activity Centre. Two scenarios are provided: a Base Housing Projection and a High Growth Housing Projection. The projections have been developed for the purpose of this report only.

7.2 Method

The approach used to develop dwelling and population projects was as follows:

An audit of houses was provided for the Boronia Activity Centre based on Council's rates database to determine the total stock of dwellings by type (i.e. separate houses, townhouses / semi-detached and apartments).

The 2016 population estimates for the Centre have been based on Remplan data.

The Base Housing Projection uses Forecast ID trends for the suburb of Boronia and apportions anticipated dwelling change in and out of the Boronia Activity Centre based on observed development trends from Cordell Connect construction data. The change in housing preference is drawn from the construction database to plot a forward trend of dwelling type in the Centre.

The High Growth Housing Projection is based on an extrapolation of observed trends in the Cordell Connect construction data over the last three years. This is not capped to the Forecast ID trends.

For both scenarios the population ratio per dwelling is held constant throughout the data period to estimate potential future population.

The capacity of the Centre to absorb the projections was checked with reference to Council's rates database and the development capacity estimates.

7.3 Housing Projection Results

The Boronia Activity Centre is estimated to accommodate around 1,574 dwellings and 2,333 residents at the current time. Approximately 29% of the current dwellings are apartments.

Construction data shows that around 73% of dwellings constructed in the suburb of Boronia in recent years have occurred within the Activity Centre. The same data also shows that more recent construction is moving towards apartments in emphasis. In the forecast data, it is assumed that apartments will increase to between 39% and 41% of the Activity Centre dwelling stock by 2036.

**Table 20 - Housing and Population in the Boronia Activity Centre, 2016 / 2017**

Housing and Population	2016 / 2017	Share
Apartment	452	28.7%
Townhouse / Semi-Detached / Villa	906	57.6%
Separate House	216	13.7%
Total Dwellings	1,574	100.0%
Households (at 96.2% Occupancy Rate)	1,514	
Population (as at 2016)	2,333	
Average Household Size	1.54	

The following two tables show the forecast results for the period 2016 to 2036 by five year intervals.

Under the Base Housing Projection, housing stock is expected to increase to approximately 3,000 units, accommodating a population of around 4,400 residents.

Under the High Growth Housing Projection, housing stock is expected to increase to around 5,500 units, accommodating a population of approximately 8,200 residents.

Table 21 - Base Housing Projections

Year	2016	2021	2026	2031	2036
Townhouses / House	1,122	1,371	1,525	1,693	1,885
Apartment	452	663	794	937	1,099
Total Dwellings	1,574	2,034	2,319	2,630	2,984
Population	2,333	3,015	3,438	3,898	4,423
<i>Townhouses / House</i>	<i>71.3%</i>	<i>67.4%</i>	<i>65.8%</i>	<i>64.4%</i>	<i>63.2%</i>
<i>Apartments</i>	<i>28.7%</i>	<i>32.6%</i>	<i>34.2%</i>	<i>35.6%</i>	<i>36.8%</i>

Table 22 - High Growth Housing Projections

Year	2016	2021	2026	2031	2036
Townhouses / House	1,122	1,649	2,173	2,709	3,251
Apartment	452	899	1,344	1,799	2,259
Total Dwellings	1,574	2,549	3,517	4,508	5,510
Population	2,333	3,778	5,213	6,681	8,167
<i>Townhouses / House</i>	<i>71.3%</i>	<i>64.7%</i>	<i>61.8%</i>	<i>60.1%</i>	<i>59.0%</i>
<i>Apartments</i>	<i>28.7%</i>	<i>35.3%</i>	<i>38.2%</i>	<i>39.9%</i>	<i>41.0%</i>



The projections are shown in the figures below.

Figure 13 - Base Housing Projections

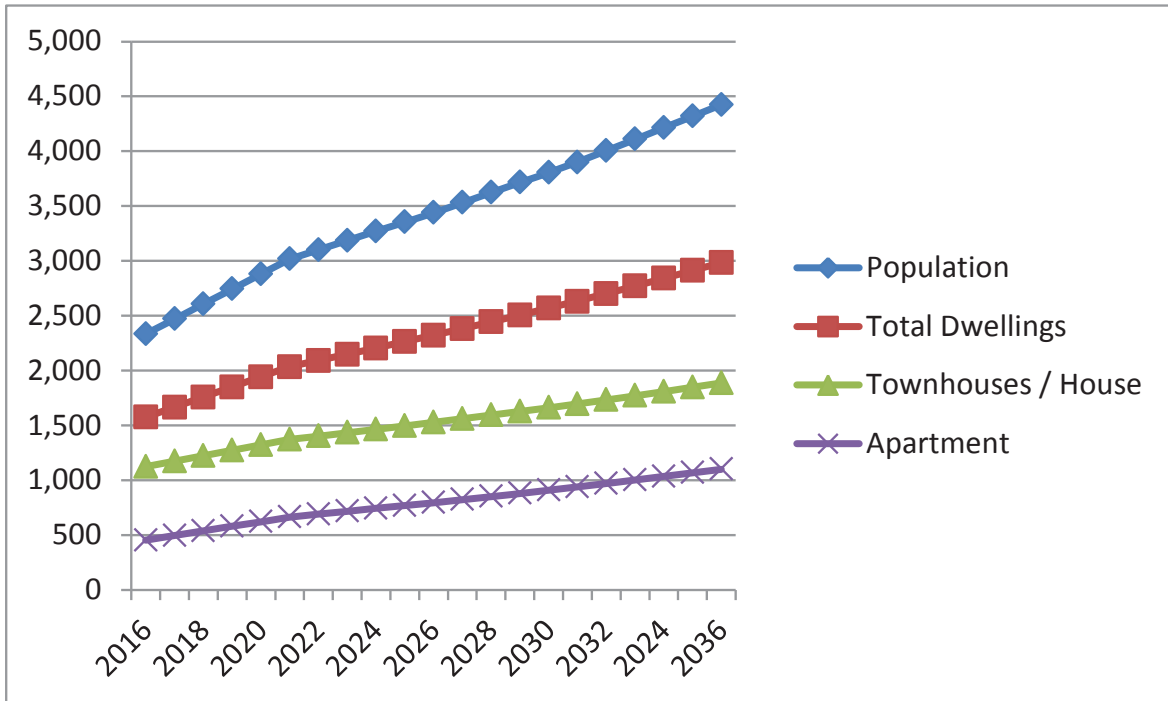


Figure 14 - Share of Housing Type, Base Housing Projections

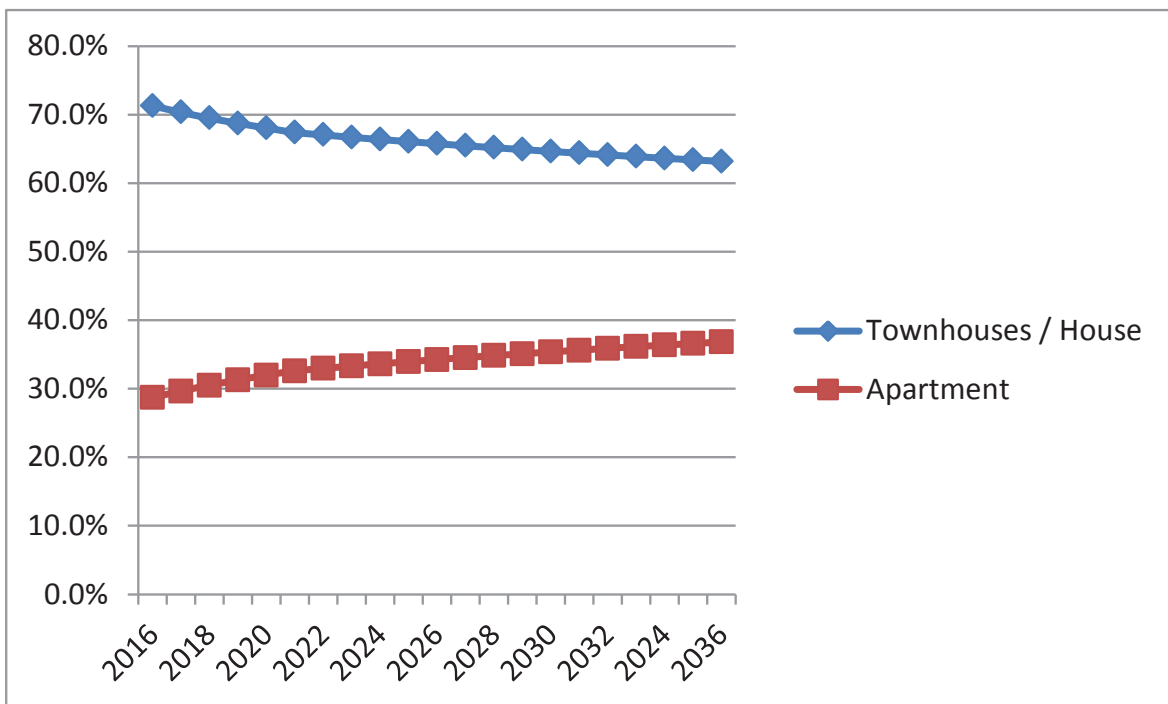




Figure 15 - High Growth Housing Projections

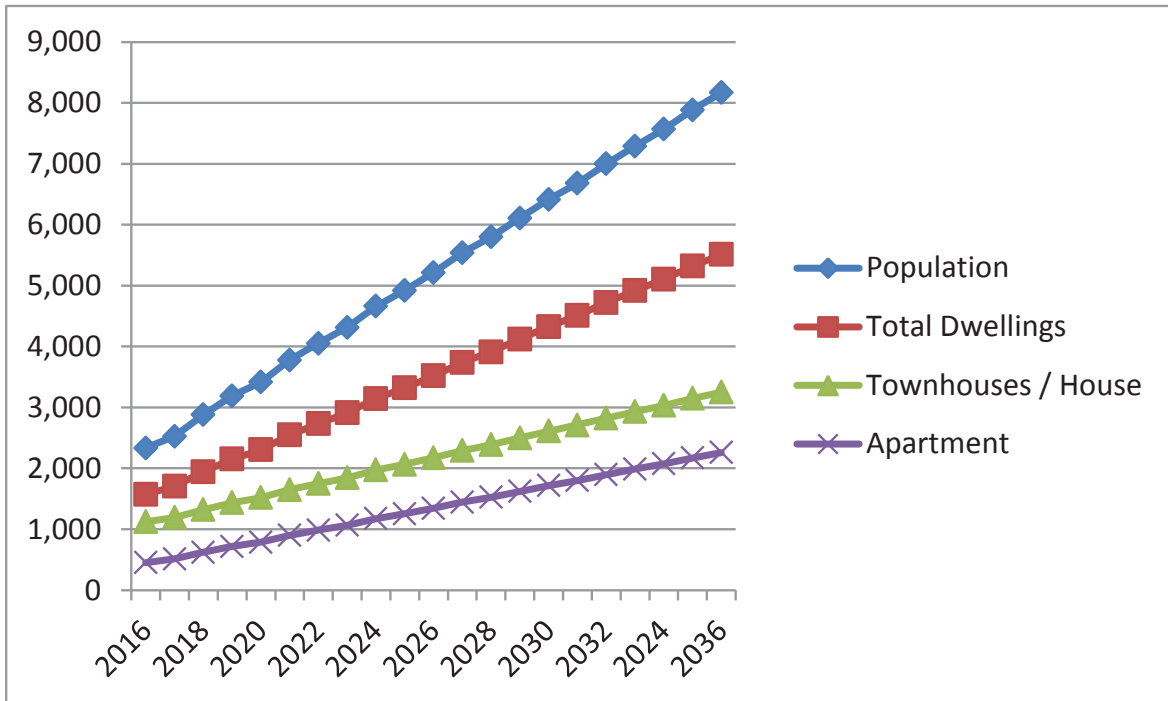
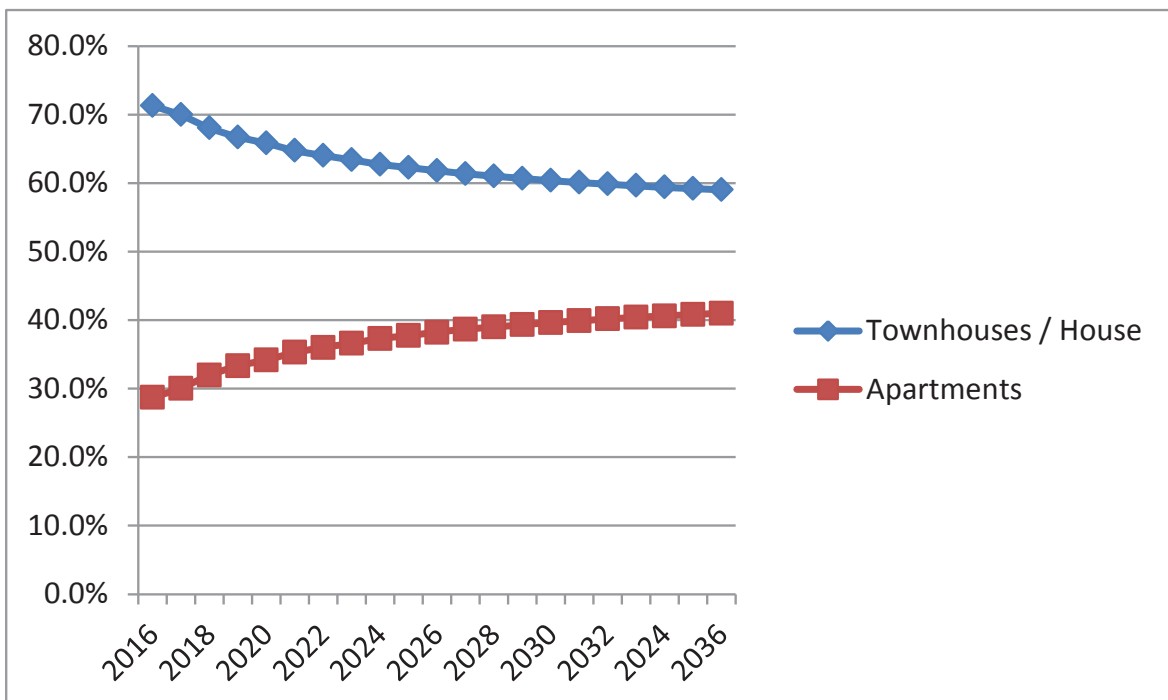


Figure 16 - Share of Housing Type, High Growth Housing Projections





7.4 Summary

The Boronia Activity Centre accommodates approximately 1,574 dwellings and 2,333 residents at the current time. Approximately 73% of dwellings constructed in the suburb of Boronia have occurred within the Activity Centre in recent years.

About 29% of the current dwellings in the Activity Centre are apartments however in forecasting it is assumed that apartments will increase to between 39% and 41% of total dwelling stock by 2036.

Under the Base Housing Projection, housing stock is expected to increase to around 3,000 units, accommodating a population of 4,400 residents.

Under the High Growth Housing Projection, housing stock is expected to increase to approximately 5,500 units, accommodating a population in the order of 8,200 residents.

Based on trends, it is anticipated that townhouses will continue to absorb a significant stock of land in the Activity Centre.

8.0 RETAIL AND COMMERCIAL PROJECTIONS

8.1 Introduction

This section of the report provides an assessment of retail and commercial floorspace demand potential over time, focusing on the data points of existing conditions (2016 as the base data year), 2026 and 2036. The analysis is undertaken on the basis of the main retail commodity groups and major shop and office types.

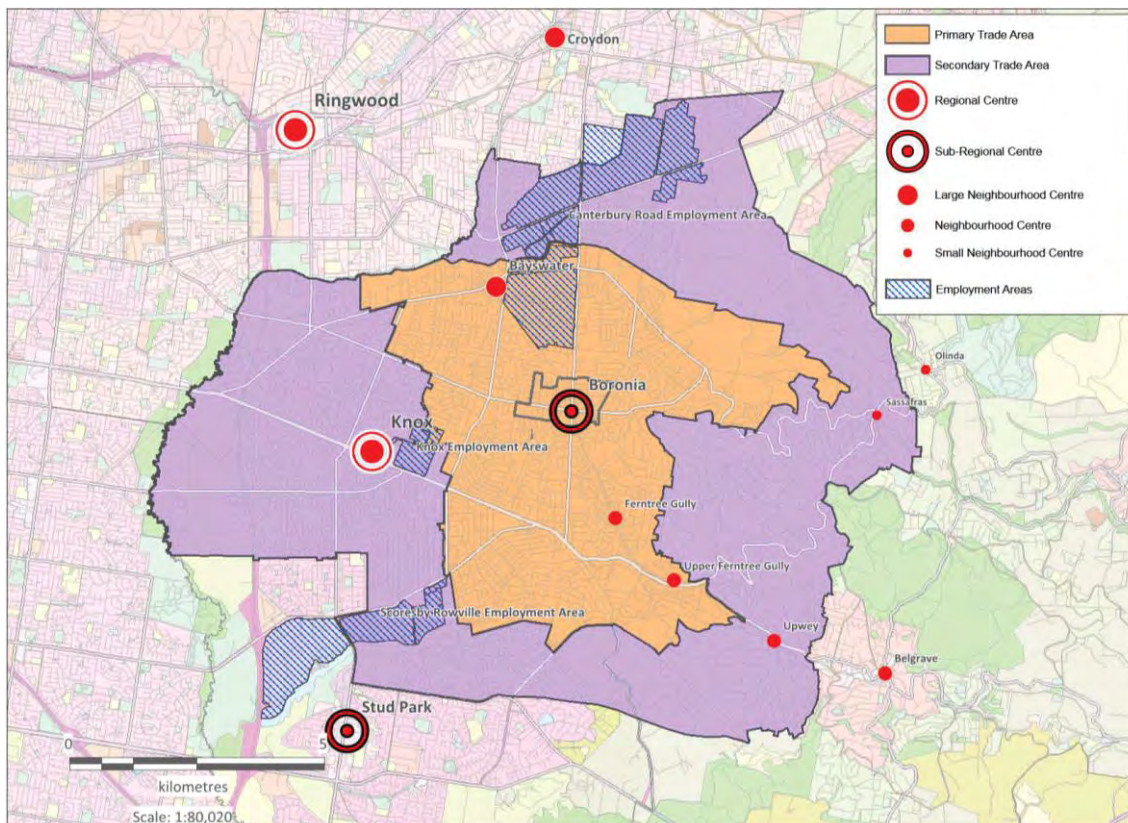
8.2 Trade Area and Competitive Context

The figure below shows the assessed trade area for Boronia Activity Centre. The Trade Area is defined by major urban features such as road networks and movement barriers and the location and role of other retail centres.

The Primary Trade Area is defined to include Boronia, Bayswater, The Basin, Ferntree Gully and Upper Ferntree Gully.

The Secondary Trade Area is defined to include Wantirna, Wantirna South, Knoxfield, Rowville (North), part of Lysterfield, Bayswater North, Kilsyth South and part of Yarra Ranges Shire. Some trade would also be obtained from beyond the Main Trade Area.

Figure 17 - Trade Area and Competitive Context





Centres in the region perform regional, sub-regional, neighbourhood and local roles.

Boronia is a sub-regional centre. Activity is framed by major regional centres including Knox Central to the south-west and Ringwood to the north-west of Boronia. Bayswater and Croydon are major neighbourhood centres and a number of local centres are scattered across the region.

8.3 Population and Retail Spending

MarketInfo and HillPDA data was used to identify population in and spending patterns from the Trade Area sectors. This takes into account the demographic and spending profile of the population at a small area level. Population projections were sourced from id consulting forecasts at the suburb level to 2036.

The Primary Trade Area is estimated to have around 69,300 residents at 2016. The population in the area is forecast to grow to approximately 78,600 by 2036.

The Secondary Trade Area is estimated to have around 78,800 residents at 2016. The population in the area is forecast to grow to approximately 90,400 by 2036.

Table 23 - Population Projections by Trade Area Sector

Trade Area / Year	2016	2021	2026	2031	2036
Primary Trade Area	69,243	72,058	73,911	76,196	78,596
Secondary Trade Area	78,720	83,663	85,927	87,791	90,385
Total Trade Area	147,963	155,721	159,838	163,987	168,981

Source: HillPDA and forecast ID

The level of per capita retail spending for Trade Area residents is shown in the table below. This shows that average retail spending is around \$13,000 per person per annum and this figure is expected to rise to \$16,200 per person by 2036.

Table 24 - Retail Spending Per Capita (\$2016)

Year	2016	2021	2026	2031	2036
Food & Groceries	\$4,527	\$4,782	\$5,051	\$5,335	\$5,635
Liquor Take-Away	\$649	\$686	\$724	\$765	\$808
Take-Away Food	\$755	\$798	\$842	\$890	\$940
Apparel	\$1,349	\$1,425	\$1,505	\$1,589	\$1,679
Homewares & Manchester	\$299	\$316	\$334	\$353	\$373
Bulky Goods	\$2,204	\$2,328	\$2,458	\$2,597	\$2,743
Other Goods	\$1,763	\$1,862	\$1,967	\$2,078	\$2,195
Personal Services	\$376	\$397	\$419	\$443	\$468



Liquor Consumed On Premises	\$275	\$291	\$307	\$324	\$342
Pubs, Clubs, Restaurants	\$812	\$857	\$905	\$956	\$1,010
Total	\$13,009	\$13,741	\$14,513	\$15,329	\$16,191

Source: MarketInfo and HillPDA

Retail spending per person has increased over time in real terms, at a long term trend rate of 1.1%. This growth, in addition to population growth in the Trade Area, translates into additional retail expenditure being generated from the area.

The table below shows the level of spending being generated from the Primary Trade Area in 2016 and over time. As at 2016, the Primary Trade Area generated \$904m in retail sales and supported around 165,000 sqm of retail space across the retail economy. Boronia Activity Centre captures a share of this spending and floorspace.

By 2036, the Primary Trade Area is expected to generate approximately \$1.28b in retail spending and support around 227,000 sqm of retail space, representing an increase of 61,900sqm from the demand levels in 2016.

Table 25 - Primary Trade Area Retail Spending (\$m2016) and Supportable Floorspace (SQM)

Year	2016	2021	2026	2031	2036
Food & Groceries	\$314.76	\$345.97	\$374.82	\$408.13	\$444.66
Liquor Take-Away	\$45.13	\$49.60	\$53.74	\$58.52	\$63.75
Take-Away Food	\$52.50	\$57.70	\$62.51	\$68.07	\$74.16
Apparel	\$93.77	\$103.07	\$111.66	\$121.59	\$132.47
Homewares & Manchester	\$20.81	\$22.87	\$24.78	\$26.98	\$29.40
Bulky Goods	\$153.21	\$168.40	\$182.45	\$198.66	\$216.44
Other Goods	\$122.60	\$134.75	\$145.99	\$158.96	\$173.19
Selected Personal Services	\$26.14	\$28.73	\$31.13	\$33.89	\$36.93
Liquor Consumed On Premises	\$19.13	\$21.02	\$22.78	\$24.80	\$27.02
Meals in Pubs, Clubs, Restaurants	\$56.43	\$62.02	\$67.19	\$73.17	\$79.71
Total	\$904.46	\$994.15	\$1,077.05	\$1,172.77	\$1,277.73

Year	2016	2021	2026	2031	2036
Supermarkets & Grocery Stores	27,139	29,830	32,318	35,190	37,169
Specialty Food Stores	6,458	7,098	7,690	8,373	8,844
Fast-Food Stores	6,549	7,199	7,799	8,492	8,969
Restaurants, Hotels and Clubs	15,111	16,609	17,994	19,593	21,347
Department Stores	18,061	19,852	21,507	23,418	24,735
Clothing Stores	13,600	14,949	16,195	17,635	18,626
Bulky Goods Stores	45,768	50,306	54,501	59,345	62,682
Other Personal & Household Goods	24,712	27,162	29,427	32,043	33,844
Selected Personal Services	7,468	8,209	8,894	9,684	10,551
Total Retailing	164,866	181,214	196,325	213,774	226,767



The same data is shown below for the Secondary Trade Area. This indicates a trend of growth across the larger trade area.

Table 26 - Secondary Trade Area Retail Spending (\$m2016) and Supportable Floorspace (SQM)

Year	2016	2021	2026	2031	2036
Food & Groceries	\$357.55	\$401.37	\$435.40	\$469.86	\$510.94
Liquor Take-Away	\$51.26	\$57.55	\$62.43	\$67.37	\$73.25
Take-Away Food	\$59.63	\$66.94	\$72.62	\$78.36	\$85.21
Apparel	\$106.52	\$119.57	\$129.71	\$139.98	\$152.22
Homewares & Manchester	\$23.64	\$26.54	\$28.79	\$31.06	\$33.78
Bulky Goods	\$174.04	\$195.37	\$211.94	\$228.71	\$248.70
Other Goods	\$139.26	\$156.33	\$169.59	\$183.01	\$199.01
Selected Personal Services	\$29.69	\$33.33	\$36.16	\$39.02	\$42.43
Liquor Consumed On Premises	\$21.73	\$24.39	\$26.46	\$28.55	\$31.05
Meals in Pubs, Clubs, Restaurants	\$64.10	\$71.95	\$78.06	\$84.23	\$91.60
Total	\$1,027.42	\$1,153.33	\$1,251.14	\$1,350.15	\$1,468.19

Year	2016	2021	2026	2031	2036
Supermarkets & Grocery Stores	30,829	34,607	37,541	40,512	42,790
Specialty Food Stores	7,336	8,235	8,933	9,640	10,182
Fast-Food Stores	7,439	8,351	9,059	9,776	10,326
Restaurants, Hotels and Clubs	17,165	19,268	20,902	22,557	24,529
Department Stores	20,516	23,030	24,983	26,960	28,476
Clothing Stores	15,449	17,342	18,813	20,302	21,443
Bulky Goods Stores	51,990	58,361	63,311	68,321	72,162
Other Personal & Household Goods	28,071	31,511	34,184	36,889	38,963
Selected Personal Services	8,484	9,523	10,331	11,149	12,123
Total Retailing	187,278	210,229	228,058	246,106	260,994

8.4 Performance of Boronia Activity Centre

An estimate of market share of Boronia Activity Centre is 25% of the Primary Trade Area spending and around 10% of Secondary Trade Area spending.

This broad estimate is made on the basis that the Centre has approximately 55,000 sqm of net lettable space that is used for the above commodity groups and that the Centre generates turnover of about \$350m per annum at the current time. This is a preliminary estimate only.

8.5 Potential Growth Opportunities

On the basis of this estimate there is potential for the Centre to grow its market share from within its Trade Area. Other growth opportunities can be generated from anticipated future growth in the market of the Trade Area.



The most likely future pattern of activity is continuation of current sub-regional and lower order roles with growth supported by a growing population (including real spending growth per capita).

The projections of opportunities for the period 2016-2036 are shown below. In round terms the analysis suggests underlying demand for retail space in Boronia Activity Centre could increase by around 20,000 sqm (rounded) to 2036. This assumes static market share.

The estimates are factored up if increased market share is assumed. A figure around 30,000 sqm additional retail demand to 2036 is possible under such an assumption.

Table 27 - Indicative Retail Demand in Boronia Activity Centre 2016-2036

Retail Sector	Potential Floorspace (sqm)
Supermarkets & Grocery Stores	4,200
Restaurants, Hotels and Clubs	2,600
Speciality Retail (Various)	13,300
Department Stores	900
Total Retailing	21,000

It is noted that an Aldi supermarket is proposed to be established in the Centre in the near future.

8.6 Online Retail

The impact of online retail is taken into account by existing market share estimates in the analysis shown above; that is, by current floorspace that is supported by the trade area in relation to trade area spending.

The impact of online retail on shopfronts may be starting to plateau and, if so, no significant impact on the above projections would be felt. If an additional impact was made it is assessed that it may cap growth potential of floorspace by up to 10% for the retail format types.

8.7 Commercial Office Floorspace

The commercial office market is sub-servient to retail activity in the Boronia Activity Centre. Activities include local and regional catchment serving finance, accounting and professional services and local agents.

As a general rule, this pattern is expected to continue over time however it is possible that major office facilities could be established in the Centre beyond trend based growth. This could include public sector offices as the primary candidate for major change in the area.

At the current time, office space accounts for approximately one-third of the retail commodity groups noted above. On that basis, office sector demand is expected to grow by around 7,000 to 10,000 sqm to 2036, plus any major developments that may occur.



8.8 Meeting the Demand

An issue for the study area is that the core retail area generally offers small shopfronts, many of which are dated in terms of quality of facilities. Boronia has a large number of low quality, small shopfronts.

Redevelopment is difficult where there is fragmented ownership of shops. Owners that do want to invest can be dis-incentivised if other surrounding properties do not redevelop or refurbish as well.

Moreover, many new retail formats tend to seek space around the 500 sqm to 2,000 sqm range, particularly in sectors like clothing. Such retailers also seek to locate in the prime location of a centre.

A range of strategies should be considered when seeking to retain or grow market share in a growth context. This includes ensuring maintenance or improvement of:

- Having appropriately sized space in locations demanded by retailers, such as ground level space in the core retail precincts north of Boronia Road;
- Providing a high amenity pedestrian-oriented environment that offers a unique and enjoyable experience, including reducing the negative impact of high traffic speeds on Dorset and Boronia Roads;
- Providing modern amenities and facilities such as quality public meeting spaces (plazas and open space), public toilets and free Wi-Fi technology; and
- Improving accessibility (via all modes of transport) and ease of movement within the Centre.

8.9 Summary

Boronia Activity Centre is a sub-regional centre that serves a Trade Area of around 148,000 people (Primary and Secondary Trade Area combined). The population in the Trade Area is expected to increase to 169,000 by 2036. This growth will present Boronia Activity Centre with opportunities for growth and change. In addition to this growth, the Centre has potential to increase its market share from within its Trade Area.

In other words, the Centre has potential to generate more activity from a 'growing pie' and from increasing its 'share of the pie'.

In round terms, underlying demand for retail space in Boronia Activity Centre could increase by around 20,000 sqm to 30,000 sqm 2036. Sectors of demand are likely to include Supermarkets & Grocery Stores, Restaurants, Hotels and Clubs and Speciality Retail (various).

The commercial office market is also expected to grow by around 7,000 to 10,000 sqm to 2036, in sectors like catchment-serving finance, accounting, professional services and local agents. Commercial office development beyond this range could also occur, most likely driven by large public sector offices.



Demand potential can be realised by providing space for retail and office uses and ensuring customer demand is maintained and improved. Strategies include:

- Having appropriately sized space in locations demanded by retailers;
- Providing a high amenity pedestrian-oriented environment;
- Providing modern amenities and facilities; and
- Improving accessibility to and within the Centre.



9.0 COMMUNITY SERVICES PROJECTIONS

9.1 Introduction

This section of the report reviews potential community facility needs in the Activity Centre, suburb and surrounding subregion. The review considers demand generated for local facilities by the immediate area (defined as the Boronia Activity Centre), the local area (defined as the suburb of Boronia), and demand generated for district and regional facilities by the surrounding subregion (defined as Boronia, Bayswater, Ferntree Gully, Upper Ferntree Gully and The Basin combined). The analysis provides a guide to potential facility needs at a preliminary assessment level.

9.2 Population by Service Age Cohorts

Population by age data at the suburb and subregional levels was obtained from the Forecast ID data set for 2016 to 2036. The data for the Activity Centre was estimated by applying cohort shares at the suburb level to projected population levels for the Activity Centre area. This provides a guide to the possible future age structure of the population in the relevant areas.

The selected service age cohorts are:

- 0 to 4 years (indicative pre-primary school age);
- 5 to 11 years (indicative primary school age);
- 12 to 17 years (indicative secondary school age);
- 18 to 24 (indicative young adult and tertiary education age);
- 25 to 64 (indicative primary worker age);
- 65 to 79 (indicative retiree age); and
- 80 and over (indicative primary aged care age).

The results for the Activity Centre, suburb and subregion are shown in the two tables that follow.

The Boronia Activity Centre had around 2,300 residents in 2016 and this is projected to grow to approximately 4,400 residents by 2036 under a low growth scenario and around 8,200 residents under a high growth scenario.

The projection suggests growth in all service age cohorts including relatively strong growth in retiree age and pre-primary age cohorts to 2036.

The broader Boronia suburb is forecast to increase from 23,100 residents in 2016 to approximately 25,200 residents in 2026 and around 27,100 residents in 2036. Strong growth is anticipated for the 0-17 year age groups while around 1,850 new residents are likely to be in the 25-64 year age cohort over the coming 20 years.



The subregion is expected to grow from approximately 69,200 residents in 2016 to approximately 73,900 in 2026 and 78,600 in 2036. Relative high growth is expected in the over 65 age cohorts.

Table 28 - Population by Age Projections, Boronia Activity Centre, 2016-2036

Age Cohort	Boronia AC - Low Scenario			Boronia AC - High Scenario		
	2016	2026	2036	2016	2026	2036
0 to 4	150	221	280	150	335	517
5 to 11	177	270	341	177	409	630
12 to 17	137	207	269	137	314	496
18 to 24	208	286	374	208	434	691
25 to 64	1,261	1,815	2,335	1,261	2,752	4,311
65 to 79	293	450	555	293	683	1,026
80 and over	107	189	269	107	286	496
Total Population	2,333	3,438	4,423	2,333	5,213	8,167

Source: Derived from Forecast id Online (May 2014) and HillPDA 2017

Table 29 - Population by Age Projections, Suburb and Subregion, 2016-2036

Age Cohort	Boronia			Subregion		
	2016	2026	2036	2016	2026	2036
0 to 4	1,486	1,619	1,717	4,508	4,697	4,964
5 to 11	1,745	1,976	2,091	5,601	6,084	6,378
12 to 17	1,357	1,515	1,647	4,496	4,878	5,158
18 to 24	2,059	2,095	2,294	6,123	6,102	6,607
25 to 64	12,464	13,297	14,313	37,459	38,976	41,244
65 to 79	2,893	3,300	3,405	8,246	9,429	9,764
80 and over	1,055	1,384	1,648	2,810	3,745	4,485
Total Population	23,059	25,186	27,115	69,243	73,911	78,600

Source: Derived from Forecast id Online (May 2014) and HillPDA 2017

9.3 Existing Facility and Service Provision

Previous research undertaken for Council indicates that Boronia is generally well served with access to a wide range of community services and facilities to meet existing needs. It is noted however that facilities offered are disparate, operate in isolation and do not reflect best practice standards in community service and facility planning.

The traditional model of community service provision, with separate services in separate venues, is losing relevance and effectiveness through changing values and preferences and the overwhelming need for Council and other service providers to deliver more cost effective, integrated and efficient services and facilities.



Over the next 20 years, the expected increases in population across all age cohorts, changing socio-economic conditions in Boronia, combined with ageing infrastructure and outdated service delivery models suggests that there are opportunities in both time and place for a change in the delivery of community services and facility provision to respond to local needs in Boronia.

The opportunity to investigate the consolidation of a range of community facilities and services was a key recommendation of Council's report as many of the existing facilities will require significant financial investment in either upgrading and / or construction of new facilities if the services currently provided in those facilities are to continue to be delivered.

9.4 Indicative Facility Demand

Indicative community facility benchmarks were reviewed to further explore potential demand for facilities in the local area for local scale facilities for the time period 2016 and 2036 based on the service age cohort figures shown earlier.

The results are shown in the table overleaf, ranked in order of indicative additional need for the period 2016 and 2036.

It should be noted that these benchmarks are identified for the purpose of providing an order of magnitude guide to the potential level of facilities that may need to be allocated in the Boronia area for community services activities. The analysis does not provide a definitive list of priority service or facility needs. More detailed research and analysis and consultation with services providers and user groups would be required to generate such a list.

The benchmarks show how many facilities of a particular type may be demanded by the growth in population between 2016 and 2036. That is, a score of 1.0 suggests one additional facility may be needed by 2036. The analysis does not take into account current over or under-supply of facilities due to lack of data on that subject.

Nevertheless, the benchmarks suggest growth in the local and subregional population may generate additional demand for (in round terms):

- Community gardens and local open space;
- Up to approximately 2 kindergarten / preschool facilities (nominally 1,000 sqm each);
- Up to approximately 2 childcare centres (nominally 1,000 sqm each);
- Up to approximately 1 maternal and child health centre (nominally 1,000 sqm);
- Up to approximately 1 community centre (nominally 2,500 sqm); and
- A host of other local facilities based on the subregional population growth including:
 - Medical Centre (General Practitioner Clinic) - around 1,000 sqm;
 - Art Gallery - around 2,500 sqm; and



- Potentially schools at both primary and secondary levels although capacity in existing local schools is not known and as such this is subject to verification.

The above listed items could represent a significant demand on land and floorspace in the vicinity of the Boronia Activity Centre. It is noted that increasingly Council is moving towards providing multi-use facilities which co-locate services such as kindergarten, community centre and maternal and child health. Likewise, generalist community spaces, such as those in a neighbourhood house or occasional care, can accommodate activities such as programs for older people, youth programs and be available as meeting spaces for community groups.

While many items listed in the table below indicate only a partial requirement would be generated over the coming 20 years, consideration could be given to the construction of a new multipurpose community facility which satisfies several uses and forms the core of an integrated and accessible community hub in Boronia.

The results provide a guide to potential need only for the purposes of assessing potential opportunities for Boronia Activity Centre over time. As noted, more detailed local area assessment is required to confirm and detail these findings.

Table 30 - Indicative Local Facility Needs, 2016-2036

Item	Change 2016-2036	Unit
<u>Boronia AC - Low Scenario</u>		
Community Garden	1.0	garden beds
Kindergarten / Pre School	0.7	facilities
Childcare Centre	0.5	facilities
Maternal and Child Health Centre	0.3	facilities
Community Centre	0.3	facilities
Medical Centre (General Practitioner Clinic)	0.3	facilities
Government Primary School (P-6)	0.2	schools
Art Gallery	0.2	facilities
Government P9 Primary & Middle School	0.2	schools
Neighbourhood House	0.2	facilities
Senior Citizens Centre	0.2	facilities
<u>Boronia AC - High Scenario</u>		
Community Garden	2.9	garden beds
Kindergarten / Pre School	1.8	facilities
Childcare Centre	1.5	facilities
Maternal and Child Health Centre	0.9	facilities
Community Centre	0.8	facilities
Medical Centre (General Practitioner Clinic)	0.7	facilities



Government Primary School (P-6)	0.7	schools
Art Gallery	0.6	facilities
Government P9 Primary & Middle School	0.6	schools
Neighbourhood House	0.6	facilities
Senior Citizens Centre	0.6	facilities
Youth Centre	0.4	facilities
Branch Library	0.4	facilities
Non-Govt. Primary School	0.3	schools
Boronia Suburb		
Community Garden	2.0	garden beds
Kindergarten / Pre School	1.2	facilities
Childcare Centre	1.0	facilities
Community Centre	0.6	facilities
Maternal and Child Health Centre	0.6	facilities
Medical Centre (General Practitioner Clinic)	0.5	facilities
Government Primary School (P-6)	0.5	schools
Government P9 Primary & Middle School	0.5	schools
Art Gallery	0.5	facilities
Neighbourhood House	0.4	facilities
Senior Citizens Centre	0.4	facilities
Youth Centre	0.3	facilities
Branch Library	0.3	facilities
Non-Govt. Primary School	0.2	schools
Subregion		
Community Garden	4.7	garden beds
Kindergarten / Pre School	2.3	facilities
Childcare Centre	1.9	facilities
Community Centre	1.3	facilities
Medical Centre (General Practitioner Clinic)	1.2	facilities
Maternal and Child Health Centre	1.1	facilities
Government Primary School (P-6)	1.1	schools
Government P9 Primary & Middle School	1.1	schools
Art Gallery	1.0	facilities
Neighbourhood House	0.9	facilities
Senior Citizens Centre	0.9	facilities
Youth Centre	0.7	facilities



Branch Library	0.6	facilities
Non-Govt. Primary School	0.5	schools

The same indicative benchmarking approach was used to examine facilities of district and regional scale, based on demand by the local and subregional population over time. The results are shown in the table below.

The results are ranked in order of indicative additional need for the period 2016 and 2036. Additional demand may be focused on the following facility types (in round terms):

- Nearly 240 residential aged care beds (equivalent to nominally 10,400 sqm of floorspace);
- Between 1 and 5 place of worship (i.e. church or similar); and
- Approximately 1 additional post office.

In terms of regional facilities which may be considered for relocation into the Boronia Activity Centre, Council's municipal offices could potentially provide residents and others visitors with a more convenient location for interaction, and would make Council's existing offices at Burwood Highway in Wantirna South available for commercial sale, lease or development.

Table 31 - Indicative District and Regional Facility Needs, 2016-2036

Item	Change 2016-2036	Unit
<u>Boronia AC - Low Scenario</u>		
Residential Aged Care	29.6	beds
Place of Worship (Church or Similar)	1.0	facilities
Post Office	0.3	facilities
<u>Boronia AC - High Scenario</u>		
Residential Aged Care	77.2	beds
Place of Worship (Church or Similar)	2.9	facilities
Post Office	0.8	facilities
Community Health Centre (eg. Maternal, Youth, Counselling, Disability)	0.2	facilities
Small Sports and Leisure Centre	0.2	facilities
Government Senior Secondary School (10-12)	0.2	schools
Arts Centre (Gallery + Studio)	0.2	facilities
Free Basketball Courts	0.2	courts
Government Secondary School (7-11)	0.2	schools
Ambulance	0.2	facilities
Fire Station	0.2	facilities
Multipurpose Community Centre	0.2	facilities
Non-Govt. Secondary School	0.2	schools
<u>Boronia Suburb</u>		
Residential Aged Care	82.2	beds



Place of Worship (Church or Similar)	2.0	facilities
Post Office	0.5	facilities
Government Senior Secondary School (10-12)	0.2	schools
Small Sports and Leisure Centre	0.2	facilities
Community Health Centre (eg. Maternal, Youth, Counselling, Disability)	0.2	facilities
Government Secondary School (7-11)	0.2	schools
Subregion		
Residential Aged Care	236.5	beds
Place of Worship (Church or Similar)	4.7	facilities
Post Office	1.2	facilities
Government Senior Secondary School (10-12)	0.4	schools
Small Sports and Leisure Centre	0.4	facilities
Community Health Centre (eg. Maternal, Youth, Counselling, Disability)	0.4	facilities
Government Secondary School (7-11)	0.3	schools
Arts Centre (Gallery + Studio)	0.3	facilities
Free Basketball Courts	0.3	courts
Non-Govt. Secondary School	0.3	schools
Fire Station	0.3	facilities
Ambulance	0.3	facilities
Multipurpose Community Centre	0.3	facilities
Tertiary TaFE Satellite Campus	0.2	facilities
District Performing Arts Centre	0.2	facilities
Central Library	0.2	facilities
Police Station	0.2	facilities
Small Aquatic Centre	0.2	facilities
Active Recreation Reserve	0.2	reserves
Large Sports and Leisure Centre	0.2	facilities

9.5 Summary

The local area and broader subregional population is growing across all services age cohorts. In the area around the Boronia Activity Centre relatively strong growth is expected in the retiree age and pre-primary age cohorts to 2036. This changing population age dynamic has implications for the provision of community facilities and services over the coming 20 years.

Previous work undertaken by Council confirmed that Boronia's community is currently reasonably well provided with a range of local services and facilities, though many facilities are ageing and will require significant investment if they are to remain fit for purpose.

On the demand side, the expected population growth in the Activity Centre area and in the broader subregional area (predominantly Boronia's surrounding suburbs) are key drivers for



infrastructure needs such as local open space, community gardens, kindergarten / preschool facilities, childcare centre, maternal and child health care and community centre uses, art gallery and medical centres. The potential to explore the establishment of new municipal offices in the Boronia Activity Centre could also be explored.

The preference for combined facilities means that potential exists for the construction of a new multipurpose community facility which forms the core of an integrated and accessible community hub in Boronia.



10.0 FEASIBILITY CONSIDERATIONS

10.1 Introduction

This section of the report provides a property economics assessment of three development concepts for two typical sites in the study area. The assessment is undertaken from a developer's perspective, with a view to test for financial feasibility in order to provide insights into the likely take-up of alternative options for the example site.

10.2 Example Site 1

It is assumed Example Site 1 is an underutilised retail site located in the core of the Activity Centre. The site is assumed to be 372 sqm in area and comprises 288 sqm of floorspace that was constructed some 40 years ago. The assumed value of the property is \$840,000.

Three development scenarios are nominated for testing:

- Scenario 1 comprises a 4 level building with retail at ground floor, 12 residential apartments on upper floors and 21 basement car spaces (this assumes dispensation is provided for parking provision).
- Scenario 2 comprises a 6 level building with retail at ground floor, 16 residential apartments on upper floors and 27 basement car spaces (with dispensation).
- Scenario 3 comprises an 8 level building with retail at ground floor, 21 residential apartments on upper floors and 34 basement car spaces (with dispensation).

The scenarios are shown in the table below.

Table 32 – Example Site 1 and Indicative Development Scenarios

Example Site 1	Underutilised Retail Site		
Land Use	Retail		
Site Area SQM	372		
Zone	C12		
Construction Year	1977		
Gross Floorspace SQM	288		
Assumed Market Value	\$840,000		
Scenario	Scenario 1	Scenario 2	Scenario 3
Levels	4	6	8
Gross Floorspace SQM	1,189	1,486	1,784
GFA Ground Level	334	334	334
GFA Upper Levels	855	1,152	1,449
NLA Ground Level	284	284	284
NLA Upper Levels	726	979	1,232
NLA Total	1,011	1,263	1,516
Retail	284	284	284
Residential	726	979	1,232
Residential Units	12	16	21
Total Car Parks	21	27	34



10.3 Example Site 2

It is assumed Example Site 2 is a redundant community hall site. The site is located in the core of the Activity Centre and is assumed to be 1,346 sqm in area and comprises 640 sqm of floorspace.

The site is zoned for public use and would require rezoning before development. The site has no market value as it is not available for market exchange. It is assumed Council obtains state government 'fast track' rezoning to apply an appropriate zone (such as Commercial 1 zone) before it is sold for development.

Three development scenarios are nominated for testing:

- Scenario 1 comprises a 4 level building with retail at ground floor, 44 residential apartments on upper floors and 76 basement car spaces (this assumes dispensation is provided for parking provision).
- Scenario 2 comprises a 6 level building with retail at ground floor, 59 residential apartments on upper floors and 99 basement car spaces (with dispensation).
- Scenario 3 comprises an 8 level building with retail at ground floor, 74 residential apartments on upper floors and 122 basement car spaces (with dispensation).

The scenarios are shown in the table below.

Table 33 – Example Site 2 and Indicative Development Scenarios

Example Site 2	Large Community Site		
Land Use	Halls and Service Clubrooms		
Site Area SQM	1,346		
Zone	PUZ6		
Construction Year	1965		
Gross Floorspace SQM	640		
Assumed Market Value	TBD		
Scenario	Scenario 1	Scenario 2	Scenario 3
Levels	4	6	8
Gross Floorspace SQM	4,306	5,383	6,459
GFA Ground Level	1,211	1,211	1,211
GFA Upper Levels	3,095	4,172	5,248
NLA Ground Level	1,029	1,029	1,029
NLA Upper Levels	2,631	3,546	4,461
NLA Total	3,660	4,575	5,490
Retail	1,029	1,029	1,029
Residential	2,631	3,546	4,461
Residential Units	44	59	74
Car Parks Retail	10	10	10
Car Parks Residential	66	89	112
Total Car Parks	76	99	122



10.4 Method

The focus of the analysis is to determine the value of the site from a developer's perspective.

It is assumed that the land owner for the relevant site sells land via a sales and marketing campaign. It is assumed a developer buys the land and is able to obtain zoning and permits for the nominated option.

It is assumed that the developer will seek to develop the site for a short term return by selling the finished components of the development as soon as possible post-construction.

The method selected for feasibility testing is discounted cash flow (DCF) analysis of project revenue and costs over time to identify the best performing option.

The best performing option is the one that delivers the highest residual land value (RLV). Residual land value is calculated from the subtraction of project costs and target profit from project revenue.

DCF is an appropriate method when project timelines extend beyond one year and thus time value of money considerations are included in the analysis. The Estate Master model is used for this evaluation.

The modelling generates various measures of performance including internal rate of return (IRR), development profit and residual land value (RLV). IRR is the compound interest performance of the investment during the life of the project. It is calculated on the project as a whole and on the equity contribution of the developer. The IRR is compared to a target rate of return (or discount rate), which is used to discount future values to present values and generate a Net Present Value (NPV) estimate.

The target or required profit margin depends on the level of risk in the project but is typically around 18% for mixed use apartment projects.

Construction costs have been sources for the scenario using construction cost guides. Allowance has been made for site preparation, basement and building construction and external works.

Allowances for contingencies, finance costs, taxes and charges and marketing and selling costs have been made.

Possible income from sale of the finished properties has been estimated based on the value rates shown in the market research section of this report.



10.5 Results

The results are summarised in the table below. Key indicators are Project Internal Rate of Return (IRR) and Residual Land Value (NPV).

As noted above, projects of this nature will generally need to achieve an 18% return. Also, the residual land value (RLV) of the site (i.e. the price a developer can pay for the site) must be higher than the value of the site as it currently exists, otherwise the developer will not be able to outbid buyers that seek to use the property in its current form.

Example Site 1

Under the Example Site 1 Scenario 1 concept, the project is close to the target IRR and the RLV is marginally below the current estimated value of the property as a dated retail facility. The concept is marginal and developers are likely to seek other higher value projects elsewhere. This situation could change in the future if the property market for new shops and apartments continues a growth trend.

Under the Example Site 1 Scenario 2 concept – which requires a 6 level building - a strong IRR result is generated (approximately 24%) and the RLV is above the existing use value (at \$1.02m). Under this conceptual testing process, this is a viable project and warrants more detailed examination. The difference between this concept and Scenario 1 is the additional development yield that can be delivered on the site.

The Example Site 1 Scenario 3 concept – which requires an 8 level building – delivers a similar result to the Scenario 2 concept in both IRR and RLV.

This suggests that for this particular site, given the particular cost and income assumptions used, a project in the 6 to 8 level scale is likely to be viable.

The results will vary with changes in site attributes and market conditions. As a general rule, as the property market for new shops and apartments strengthens (i.e. prices increase), the higher density concepts tend to perform better.

Key variables in driving the feasibility results are:

- Yield of units and yield of floorspace matched to market demand and prices being achieved;
- Land use mix, which favours residential units and ground level retail (with prices being superior to commercial office space from a financial perspective); and
- An optimal number of car parks that helps deliver maximum market values from properties but does not over-supply such space and drive up the cost base of projects for no or little additional revenue.



Table 34 – Indicative Feasibility Results, Example Site 1

Example Site 1		Underutilised Retail Site 4 Levels		Underutilised Retail Site 6 Levels		Underutilised Retail Site 8 Levels	
Scenario		Scenario 1		Scenario 2		Scenario 3	
Units		13 Units		17 Units		22 Units	
Gross Building Area		1,189 GBA		1,486 GBA		1,784 GBA	
Site Area		372 SQM		372 SQM		372 SQM	
Revenues							
Gross Sales Revenue		\$6,388,880		\$8,087,715		\$9,624,412	
Less Selling Costs		-\$210,833		-\$266,895		-\$317,606	
NET SALES REVENUE		\$6,178,047		\$7,820,820		\$9,306,806	
TOTAL REVENUE (before GST paid)		\$6,178,047		\$7,820,820		\$9,306,806	
Less GST paid on all Revenue		-\$580,807		-\$735,247		-\$874,947	
TOTAL REVENUE (after GST paid)		\$5,597,239		\$7,085,573		\$8,431,859	
Costs							
Land Purchase Cost		\$924,000		\$924,000		\$924,000	
Land Acquisition Costs		\$55,130		\$55,130		\$55,130	
Construction (inc. Construct. Contingency)		\$4,027,844		\$5,071,251		\$6,174,794	
Professional Fees		\$349,596		\$434,790		\$524,898	
Statutory Fees		\$46,074		\$47,124		\$48,235	
Project Contingency (Reserve)		\$86,312		\$108,453		\$131,870	
Land Holding Costs		\$4,983		\$5,153		\$5,472	
Interest Expense		\$55,171		\$69,882		\$86,198	
TOTAL COSTS (before GST reclaimed)		\$5,549,185		\$6,715,858		\$7,950,672	
Less GST reclaimed		-\$509,299		-\$619,006		-\$734,257	
TOTAL COSTS (after GST reclaimed)		\$5,039,887		\$6,096,852		\$7,216,416	
Performance Indicators							
Gross Development Profit		\$557,352		\$988,722		\$1,215,444	
Breakeven Date for Cumulative Cash Flow		Jun-19		Jun-19		Aug-19	
Discount Rate (Target IRR)		18.00%		18.00%		18.00%	
Net Present Value		-\$24,278		\$199,256		\$207,589	
Date of Commencement		Oct-17		Oct-17		Oct-17	
Project Internal Rate of Return (IRR)		17.12%		23.85%		22.79%	
Residual Land Value (NPV)		\$817,753		\$1,023,185		\$1,030,806	
Peak Debt Exposure		\$2,477,021		\$3,071,294		\$3,651,723	
Date of Peak Debt Exposure		Feb-19		Feb-19		Feb-19	
Breakeven Date for Project Overdraft		Mar-19		Apr-19		Apr-19	
Total Equity Contribution		\$2,651,980		\$3,136,756		\$3,694,252	
Peak Equity Exposure		\$2,651,980		\$3,136,756		\$3,694,252	
IRR on Equity		16.80%		22.09%		20.63%	
Yield Analysis							
Uses		Qty	SqM	Qty	SqM	Qty	SqM
Residential		12	363	16	490	21	632
Retail		1	284	1	284	1	284
TOTAL		13	647	17	774	22	916



Example Site 2

Example Site 2 is a bigger site and has a higher cost base for commencement compared to Site 1. Development returns can be higher with a bigger project where market prices are strong enough to cover base costs and deliver increasing profit per unit added.

Using the prices adopted - which is approximately \$390,000 per unit or \$6,500 per sqm for apartments, and assuming about \$5,000 per sqm for the retail space - project feasibility can be achieved at this site under the two bigger development scenarios.

Example Site 2 Scenario 3 achieves a 22.4% IRR and RLV at \$2.6m.

Example Site 2 Scenario 2 achieves an 18.9% IRR and RLV at \$2.1m.

The Scenario 1 option does not deliver enough density to make the project viable given the input assumptions used for the subject site in the market area.

As noted above in relation to Example Site 1, optimising development yield, land use mix and car park provision drives the results.



Table 35 - Indicative Feasibility Results, Example Site 2

Example Site 2		Large Community Site 4 Levels		Large Community Site 6 Levels		Large Community Site 8 Levels	
Scenario		Scenario 1		Scenario 2		Scenario 3	
	Units	45 Units		60 Units		75 Units	
	Gross Building Area	6,588 GBA		8,351 GBA		10,114 GBA	
	Site Area	1,346 SQM		1,346 SQM		1,346 SQM	
Revenues							
	Gross Sales Revenue	\$22,937,605		\$29,074,575		\$35,211,557	
	Less Selling Costs	-\$756,941		-\$959,461		-\$1,161,981	
	NET SALES REVENUE	\$22,180,664		\$28,115,114		\$34,049,575	
	TOTAL REVENUE (before GST paid)	\$22,180,664		\$28,115,114		\$34,049,575	
	Less GST paid on all Revenue	-\$2,085,237		-\$2,643,143		-\$3,201,051	
	TOTAL REVENUE (after GST paid)	\$20,095,427		\$25,471,971		\$30,848,525	
Costs							
	Land Purchase Cost	\$2,200,000		\$2,200,000		\$2,200,000	
	Land Acquisition Costs	\$132,000		\$132,000		\$132,000	
	Construction (inc. Construct. Contingency)	\$15,962,132		\$20,150,777		\$24,336,791	
	Professional Fees	\$1,353,418		\$1,695,610		\$2,037,587	
	Statutory Fees	\$150,382		\$163,603		\$176,815	
	Project Contingency (Reserve)	\$341,405		\$430,469		\$519,476	
	Land Holding Costs	\$12,198		\$12,280		\$12,333	
	Finance Charges (inc. Line Fees)	\$10,768		\$10,768		\$10,768	
	Interest Expense	\$209,323		\$258,562		\$307,764	
	TOTAL COSTS (before GST reclaimed)	\$20,371,626		\$25,054,068		\$29,733,535	
	Less GST reclaimed	-\$1,874,717		-\$2,313,095		-\$2,751,209	
	TOTAL COSTS (after GST reclaimed)	\$18,496,909		\$22,740,973		\$26,982,326	
Performance Indicators		1		2		3	
	Gross Development Profit	\$1,598,519		\$2,730,997		\$3,866,199	
	Breakeven Date for Cumulative Cash Flow	Jul-19		Jul-19		Jul-19	
	Discount Rate (Target IRR)	18.00%		18.00%		18.00%	
	Net Present Value	-\$412,039		\$105,220		\$624,798	
	Date of Commencement	Oct-17		Oct-17		Oct-17	
	Project Internal Rate of Return (IRR)	13.87%		18.87%		22.39%	
	Residual Land Value (NPV)	\$1,620,608		\$2,096,880		\$2,575,264	
	Peak Debt Exposure	\$9,336,803		\$11,462,783		\$13,587,407	
	Date of Peak Debt Exposure	Feb-19		Feb-19		Feb-19	
	Breakeven Date for Project Overdraft	Apr-19		Apr-19		Apr-19	
	Total Equity Contribution	\$9,485,870		\$11,688,604		\$13,890,003	
	Peak Equity Exposure	\$9,485,870		\$11,688,604		\$13,890,003	
	IRR on Equity	12.34%		17.29%		20.77%	
Yield Analysis		1		2		3	
	Uses	Qty	SqM	Qty	SqM	Qty	SqM
	Residential	44	2,631	59	3,546	74	4,461
	Retail	1	1,029	1	1,029	1	1,029
	TOTAL	45	5,543,890	60	5,546,796	75	5,548,895



10.6 Other Council Land

Council could consider utilising its land for development. Council has a number of land holdings including car parks, community facilities and open space.

Given these sites are not typically available for market exchange, they have no existing market value as such.

Council can therefore test various options for sites it deemed surplus to needs or alternatively capable of multiple uses, such as the existing community use plus new development activity.

The value of the site to Council will be driven by the development concept allowed on the site plus any conditions that would attach to the development. Examples include:

- Redevelopment of Council car parks with replacement of public car parking on site or at another location; and
- Redevelopment of ageing community facilities and development of new facilities by the developer as a condition of development.

As an example, Boronia Park is approximately 8,730 sqm in site area and could theoretically accommodate a large urban development project that includes provision of new community facilities.

Using half of the site for development could yield over 10,000 sqm of development in a multi-level configuration (say up to 4 levels). The value of the site could be in the vicinity of \$5m to \$10m depending in the concept.

10.7 Summary

Two example sites were selected to test the current state of development economics within Boronia Activity Centre. Example Site 1 is a dated retail facility on a 372 sqm site. Example Site 2 is a redundant 1,346 sqm community site.

Three development scenarios have been tested for the sites, all having basement car parking, retail at ground floor and residential apartments on upper floors. The scenarios increase scale from 4 levels to 6 levels and to 8 levels.

Given the current market context for properties in the area and the cost to deliver the concepts, the lowest scale developments do not trigger development viability against financial return and site value benchmarks. The higher density concepts of 6 to 8 levels do trigger viability benchmarks.

This analysis suggests that the current building height controls that apply to the Centre have had an impact on limiting redevelopment viability in the Activity Centre.

In addition to changing development controls to facilitate redevelopment in the Centre, Council could consider utilising its land for development, such as car parks, community facilities and open space. Development concepts could be structured to facilitate private



sector development on Council land whilst also including conditions for provision of new community facilities in addition to a financial return.



11.0 DESIGN CONSIDERATIONS

11.1 Introduction

The testing of the development scenarios have been based on a range of possible centre-wide outcomes based on the application a range of built form heights nominated by Council across the activity centre from a two-storey residential typology at the periphery of the centre through to a maximum of an eight-storey mixed use typology within the core of the activity centre.

11.2 Residential Areas Typologies

Whilst purely residential development of a range of heights is already relatively well-established in the activity centre area, the typology of development can provide vastly different development capacities within the study area.

A two-storey height limit can accommodate anything from two larger dwellings (a dual occupancy or duplex model) through to ten two-bedroom apartments in a low-rise apartment model, on a typical 750 square metre lot.

Whilst the latter may come with additional development costs (such as basement car parking) it also provides a substantially larger local population to support the activity centres' retail and commercial uses.

On larger sites, in addition to the pure population-related metrics, the more modest townhouse or villa unit typology typically creates larger areas of paved surfaces retaining less space for landscape, and often create undesirably long driveways and remote front doors that can create unsafe, poorly lit or poorly seen front doors that are not directly visible from public streets.

Figure 18 - Dual Occupancy/Duplex Typology Delivering 2 Dwellings on a Typical Residential Lot



Figure 19 - Two Storey Apartment Typology Delivering 8 Dwellings on a Residential Lot





11.3 Mixed Use Areas Typologies

At the core of the activity centre are areas that accommodate commercial, retail, community and other 'active' uses that form the basis of the 'activity' in the activity centre.

Within these areas typologies that accommodate residential use on the ground floor and / or introduce front setbacks, or side and rear setbacks are detrimental to the longer term functioning and development of the centre.

Whilst townhouse redevelopment has occasionally been approved in these types of areas in other centres as a form of 'urban renewal' making use of under-utilised commercially zoned land, the consequences are often negative to the centre, immediately felt and, most concerning, continue in perpetuity.

Building typologies in mixed use areas that are exclusively residential in nature, and take the form of townhouse development typically have the following effects:

- Discontinuity of activity centre street-level uses - interruptions in ground floor uses causing parts of the centre to no longer attract visitors or be functionally connected with other areas;
- Discontinuity of the public realm - ground level residential uses are setback from streets to provide privacy and amenity for residential occupants and in turn introduce poor natural surveillance and landscape outcomes within activity centre streetscape;
- Car parking interruptions - ground level garaging for townhouses introduce additional crossovers and driveways across footpaths and in some cases garage doors facing the street;
- Residential amenity impact concerns - residential amenity expectations of townhouse residents grow to mirror residential street residents with regard to street parking, noise, and fumes reducing activity centre flexibility and core purpose; and
- Built form precedent - townhouse and villa unit built forms introduce a suburban scale expectation for surrounding development even where maximum heights are clearly articulated resulting in significant side and rear setbacks which reduce the ability for future development to accommodate a range of potential land uses that can be vitally important for activity centre renewal (this may include large format commercial office spaces for key tenants or specialised retail spaces such as supermarkets).
- 'Locked in' development patterns - should future activity centre growth or expansion be desired, the tenure of residential land typically make future changes to these areas difficult or impossible.

In the below townhouse typology within an activity centre, the shopfronts are replaced with setbacks and garage doors, which creates a disconnect between the existing far end of the centre from the core.

Figure 20 - Townhouse Typology Within An Activity Centre



Mixed use, high density typologies (of any height) in mixed use areas provide a number of benefits to activity centres that townhouse forms cannot. This includes:

- Maintenance of shopfront streets - ground floor uses continue and contribute to the activity in streets and extend or 'reconnect' with existing and future areas of street-level activity;
- Maintenance of streetscapes - frontages built on the property boundary to streets with canopies over footpaths continue the shaping of the public realm in a way that facilitates pedestrian connectivity and provides an urban interface with the street;
- Provision of street level use flexibility - shopfronts maintain the viability for a full range of retail uses as well as medical, community, office or other uses that generate activity and visitations; and
- Mixed use compatibility - both commercial office and residential use above ground level retail use are compatible with each other, typically access via separate lift cores if within the same development but provided with pedestrian access from the main street frontage and vehicle access from the rear or side frontage.



The below mixed use development maintains street level shopfronts, canopies and minimised residential use at ground level.

Figure 21 - Mixed Use Development Maintaining Street Level Shopfronts



The below mixed use development with provision of multiple street level retail tenancies provides a flexible floorplate to accommodate a range of uses or even one large single retail use.

Figure 22 - Mixed Use Development with Provision of Multiple Street Level Retail Tenancies





11.4 Summary

Whilst building height controls can provide more certainty over the scale of development, inappropriate building typologies can potentially undermine the redevelopment of an activity centre through the erosion of its mixed use potential.

In particular, this is of critical importance in the core commercial and mixed use zone areas that already contain a mix of uses, typically the largest range of site types and key land holdings.

Whilst development expediency may create short-term opportunities to transform underutilised sites, redeveloping these with smaller scaled developments that include residential uses reduces the likelihood of future redevelopment.

Development that would introduce ground level residential uses should be wholly avoided as they potentially not only reduce the potential of the subject site, but also reduce the viability of more intensive and mixed use outcomes on adjacent sites and reducing the whole activity centre's redevelopment prospects.



12.0 POSSIBLE DEVELOPMENT TAKE-UP

12.1 Introduction

This section provides a summary of existing conditions and the various development projections listed in previous report sections.

12.2 Summary of Existing Conditions and Projections

A brief summary of the existing conditions review is shown below.

Table 36 - Summary of Existing Conditions

Topic	Summary
Policy Directions	<ul style="list-style-type: none"> ■ Policy supports Boronia Activity Centre to be a more vibrant CBD-style mixed use environment. Building height / development density is to be confirmed.
Existing Conditions	<ul style="list-style-type: none"> ■ Boronia Activity Centre comprises approximately: <ul style="list-style-type: none"> – 959,581 sqm of property site area. – 92,200 sqm of business (non-residential) floorspace within 429 properties ■ Retail (58,900 sqm) and commercial (office) (20,900 sqm) are the primary land use activities. ■ Major land uses include a discount department store, major supermarkets, bistro and community facilities. ■ The business activities are mainly clustered north of Boronia Road with a bias to the east of Dorset Road.
Economic Profile	<ul style="list-style-type: none"> ■ The Activity Centre accommodates approximately 2,500 jobs, with Retail Trade being the main industry sector. ■ Other significant sectors are Health Care & Social Assistance, Professional, Scientific & Technical Services and Accommodation & Food Services.
Demographics	<ul style="list-style-type: none"> ■ The resident population of Boronia (suburb) has grown at 1.4% p.a. ■ The local population is diversifying and gentrifying.
Property Market	<ul style="list-style-type: none"> ■ Relative housing affordability in a metropolitan context in tandem with good access to jobs and services is driving demand and change. ■ The location has a significant housing (townhouse and apartment) development pipeline.



<p>Development Capacity</p>	<ul style="list-style-type: none"> ■ Approximately 537,000 sqm (53.7 ha) of site area zoned for development. ■ The current development context provides for theoretical capacity of approximately 1,030,700 sqm of gross floorspace development. ■ Scenario 2 Medium Change increases theoretical capacity to approximately 1,219,100 sqm and Scenario 3 High Change provides for approximately 1,315,200 sqm of gross floorspace development. ■ Achieving theoretical capacity potential depends on site availability and development viability.
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A brief summary of the development projections is shown below. This considers insights from the feasibility and design sections.

The higher projections noted below are unlikely to be achieved without change to planning controls to facilitate larger scale projects including use of strategic sites for major projects (as opposed to lower density projects such as townhouses).

The feasibility analysis suggests higher yield is required to facilitate development viability in the core of the centre.

Public sector investment will drive community service / facility provision but there may be opportunities to leverage from major projects to provide some facilities for the community.



Table 37 - Summary of Development Projections

Sector	Current (rounded)	Base Projection to 2036	High Growth Projection to 2036	Notes
Housing	1,600 dwellings	+1,400 dwellings	+3,900 dwellings	<p>The higher housing projection would maximise site and infrastructure use, would accommodate more apartment living and support and create demand for local services and jobs.</p> <p>The new population will also support growth of new businesses including small and medium scale businesses.</p>
	(2,300 residents)	3,000 dwellings in 2036	5,500 dwellings in 2036	
		(4,400 residents in 2036)	(8,200 residents in 2036)	
Retail	58,900 sqm retail	+20,000 sqm retail	+30,000 sqm retail	<p>Sectors of demand are likely to include Supermarkets & Grocery Stores, Restaurants, Hotels and Clubs and Speciality Retail (various).</p>
		78,900 sqm retail in 2036	88,900 sqm retail in 2036	
Commercial (Office)	20,900 sqm office	+7,000 sqm office	+10,000 sqm office	<p>The commercial office market is also expected to grow in sectors like catchment serving finance, accounting, professional services and local agents.</p> <p>Commercial office development beyond this range could also occur, most likely driven by large public sector offices.</p>
		27,900 sqm office in 2036	30,900 sqm office in 2036	
Community Services	<ul style="list-style-type: none"> ■ Boronia's community is well provided with a range of local services and facilities, though many facilities are ageing and will require investment. ■ Service demand may be focused in local open space, community gardens, kindergarten / preschool facilities, childcare centre, maternal and child health care and community centre uses, art gallery and medical centres. ■ The potential to explore the establishment of new municipal offices in the Boronia Activity Centre could be explored. ■ The preference for combined community facilities could be explored. 			



13.0 STRATEGIES TO FACILITATE OUTCOMES

13.1 Introduction

A number of overarching strategies are nominated for consideration below. These are presented in six themes and related potential policy directions.

13.2 Themes and Directions

Theme 1: Make Best Use of Core Activity Centre Sites

Given the range of opportunities that will be presented to Boronia Activity Centre over the coming decades, a key policy direction is to ensure that sites are not under-developed as investment occurs. New investment that delivers a relatively low level of development and land use activity, particularly in the core of the Centre, will potentially represent a missed opportunity to deliver more jobs, services and activity to the Centre.

This is especially important on major sites, including Council land, land adjacent to the rail line (including the potential for future decking over the rail line) and large sites in the centre that have a low development yield.

The key private sector demand drivers are likely to be retail and housing developments. Investment proposals should be leveraged to deliver, where possible, mixed use outcomes that maximise the use of land.

Possible Directions:

- Increase height limits to 6 and 8 levels in the core of the Activity Centre.
- Use policy and controls to discourage / prohibit low density development in the core of the Activity Centre.
- Develop an 'active' street frontages policy and control framework for the core of the Centre (for retail shops and offices at street level). Development that would introduce ground level residential uses should be avoided in the core of the Centre.
- Investment proposals should be leveraged to deliver, where possible, mixed use outcomes that maximise use of land (e.g. housing and offices in addition to supermarket and major store developments; or small shop and office space included in apartments projects).

Theme 2: Make Best Use of Strategic Residential Sites

A risk exists that townhouse developments will consume sites that could otherwise accommodate higher density development, and thus limit opportunities presented by population growth and change in the Activity Centre.



Possible Directions:

- Investigate a change in zones to increase height limits to 4 levels on strategic sites in the periphery of the Activity Centre.
- Support site consolidation on strategic sites in the periphery of the Activity Centre.
- Use policy and controls to discourage / prohibit low density townhouse development on strategic sites and the periphery of the Activity Centre.

Theme 3: Support Investment with Infrastructure and Urban Amenity Improvements

Investment can be facilitated and supported by public domain investments that deliver improved infrastructure, service and amenity outcomes in the Centre. Potential opportunities include improving street level amenity and integration in the Centre, improving technology services and renewing community services infrastructure.

Possible Directions:

- Explore ways to minimise the negative impact of traffic speeds on Boronia and Dorset Roads in the Centre via traffic calming and urban design treatments that support pedestrian movement and street level activity.
- Explore the redevelopment and renewal of community services and facilities in the Centre such as via a new multipurpose community facility. This could consider services like kindergarten / preschool facilities, childcare centre, maternal and child health care and community centre uses and art gallery.
- Explore provision of amenities and facilities such as quality public meeting spaces (plazas and open space), public toilets and free Wi-Fi technology in the Centre.
- Explore the potential for establishing a new municipal office complex in Boronia Activity Centre that includes community facilities such as library, meeting rooms and shared office space.

Theme 4: Maximise Opportunities from the New Population

The demographic profile of Boronia is changing, driven by an influx of a more diverse and educated population. The new population increases demand for local services and also increases the capacity of the workforce to support new business growth including new small businesses and home-based businesses.

Possible Directions:

- Explore the opportunity for establishing a co-share office facility in the Centre for new business start-ups (e.g. 'The Commons' in South Melbourne).
- Review policies to support home-based businesses and small office / home office developments.



Theme 5: Evolution and Renewal of Retail Space

The core of the Activity Centre was developed three to five decades ago using a traditional small shopfront development format. The wider retail economy has changed over time to provide new retail formats including larger format spaces for a wide range of stores. This has occurred in the broader retail system and within the Activity Centre, which has accommodated new large-format supermarkets, chemist and liquor stores for example. This has made redundant some of the smaller shopfronts, particularly those that do not have good exposure to trade. There is an opportunity to redevelop such sites however the main challenge is in consolidating titles to create a parcel that is suitably sized for contemporary development formats.

Possible Directions:

- Explore the viability of acquiring sites for redevelopment. This could involve Council / Development Victoria purchase of fragmented land holdings, site preparation (title change, planning controls changes, and other 'de-risking') and sale to the development market under expression of interest.
- Develop Council land that is surplus to needs or has potential for mixed use development. Seek to include and integrate surrounding underutilised sites (if any exist).
- Explore the viability of establishing a food and goods market in the Centre, to be facilitated on underutilised sites.

Theme 6: Infrastructure Funding Tools to Support Centre Renewal

Opportunity exists to explore the use of infrastructure funding tools to support Centre investment and renewal. This could include consideration of a Special Rates and Charge Scheme, Development Contributions Plan and Density Bonus Scheme.

An example of a density bonus scheme is the City of Melbourne plot ratio provisions. A base floorspace ratio of 18:1 is used in a defined central city area with discretion to agree to a floorspace bonus if built form parameters are met and an appropriate "public benefit" is provided to share added value. The model used is: Additional Floorspace = Extra Commercial Value = 10% Public Share = Value of Benefit. The public benefit could be negotiated as public open space and laneways on site, public space in the building, affordable housing in the building or some other agreed benefit.

The negotiated density bonus system has been used in New South Wales for many years. Each site in the state has a floorspace ratio (FSR) and in some cases it is possible for developers to negotiate with the relevant council a higher FSR subject to a public benefit being provided. A typical model is to calculate the increase in land value as a result of the additional floorspace with the council negotiating up to 50% of the increase in land value as a contribution, which



is executed by a Voluntary Planning Agreement. The contribution can be a cash payment to be spent on an agreed facility in the area.

If such approaches are considered, a balance must be struck between being able to collect a sufficient income stream to deliver public domain investments versus not unduly impacting on development economics.



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MELBOURNE

Suite 114, 838 Collins Street

Docklands VIC 3008

t: +61 3 9629 1842

f: +61 3 9629 6315

e: melbourne@hillpda.com

SYDNEY

Level 3, 234 George Street

Sydney NSW 2000

GPO Box 2748 Sydney NSW 2001

t: +61 2 9252 8777

f: +61 2 9252 6077

e: sydney@hillpda.com

WWW.HILLPDA.COM