LILYDALE QUARRY

COMPREHENSIVE DEVELOPMENT PLAN

Prepared by:
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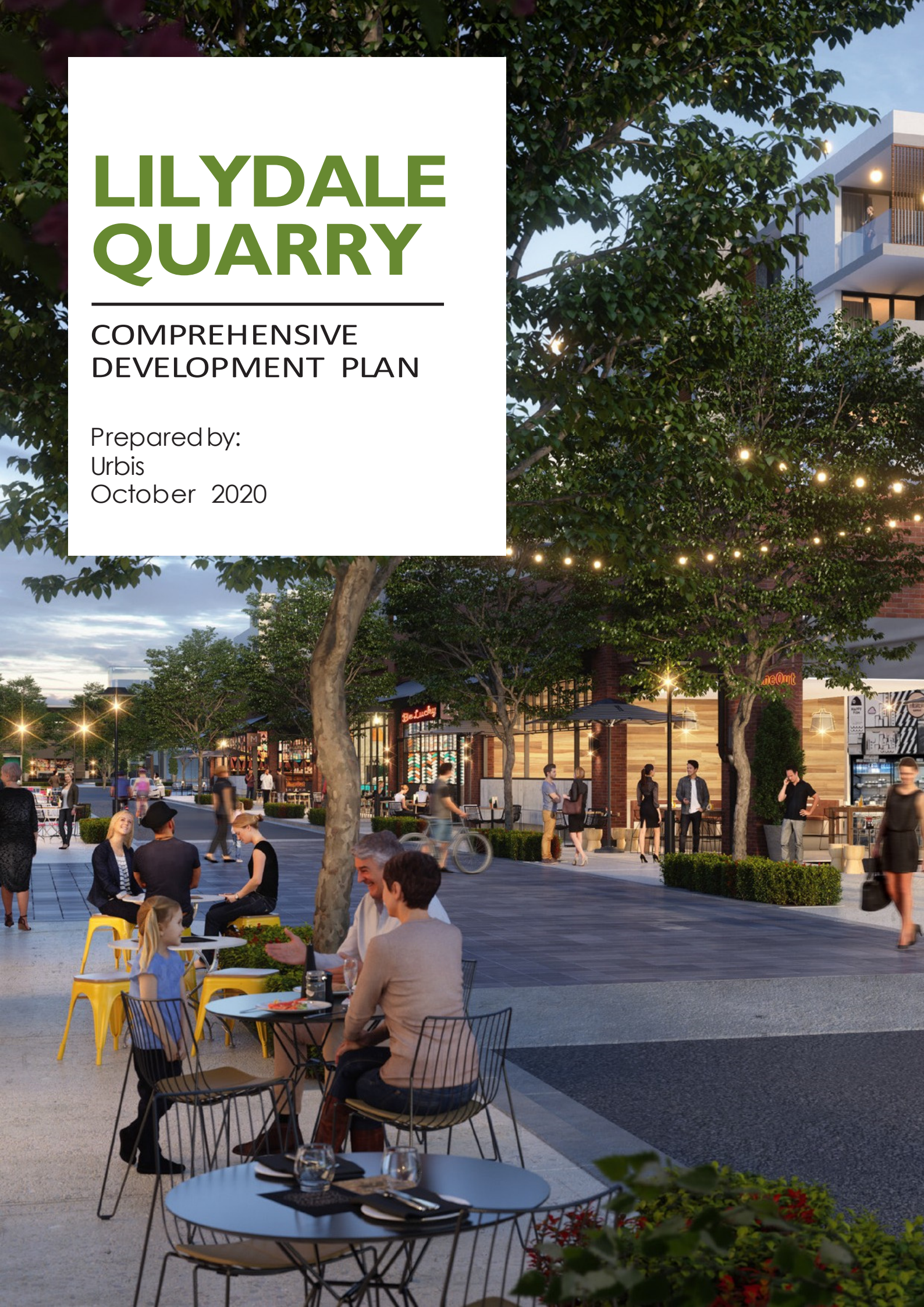
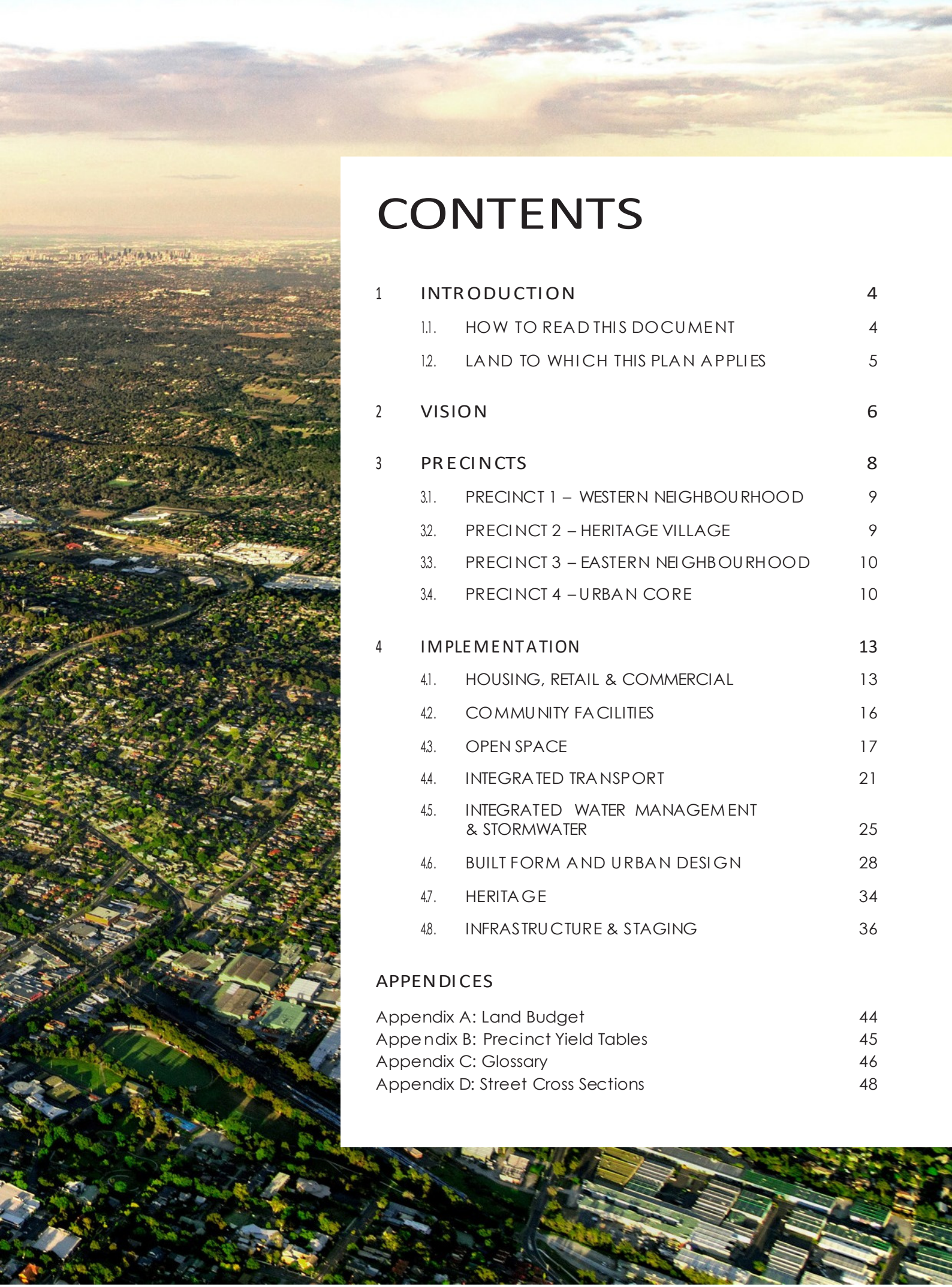
October 2020





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INTRODUCTION

The former Lilydale Quarry Comprehensive Development Plan (CDP) is a long-term plan to facilitate the redevelopment of the former Lilydale Quarry Stage 2 land. The CDP is informed by State planning policy, the Planning Policy Framework (as set out in the Shire of Yarra Ranges Planning Scheme), and relevant local policies prepared by Yarra Ranges Shire Council.

The CDP supports the Planning Scheme ordinance including the Comprehensive Development Zone Schedule 1 (CDZ1). It is a higher-order planning document that sets out the broad vision, objectives and requirements for the future development of the site.

The CDP is supported by:

- An **Infrastructure Contributions Agreement**, a binding agreement between the landowner and Yarra Ranges Shire Council pertaining to the delivery of essential infrastructure to support the development of the site over the coming years.
- A **Conservation Management Plan**, which informs decision-making around heritage matters and provides guidance on how the site's past should be appropriately managed in the context of new development.
- A **Heritage Interpretation Strategy**, which establishes a recommended approach to the interpretation of cultural heritage values associated with the former Lilydale Quarry.
- **Integrated Water Management and Stormwater strategies**, which collectively set out the approach with respect to the supply of water, the removal of wastewater and the management of stormwater runoff for the Lilydale Quarry site.
- An **Integrated Transport Plan**, which provides clear direction for the establishment of an integrated transport network at Lilydale Quarry.
- A **Sustainability Framework**, which outlines an outcomes-based approach to provide both flexibility and focus to the sustainability objectives against which future development options can be evaluated.

The CDP is intended to provide a framework to guide the redevelopment of the site. The CDP's implementation will include the detailed plans to be prepared by the proponent, and approved by the Responsible Authority in advance of development. The Schedule to the CDZ provides guidance on how these detailed plans must be prepared.

This approach allows the key parameters to be agreed upfront, while enabling a flexible approach to detailed planning that can respond to the evolving nature of living, working, and construction trends and technologies over the coming decades.

1.1. HOW TO READ THIS DOCUMENT

The CDP is incorporated into the Yarra Ranges Planning Scheme and as such it should be read as part of the Planning Scheme. The CDP is broadly set out in three parts:

- The introduction at Section 1
- The vision for the site and precincts at Sections 2 and 3
- Implementation at Section 4, which articulates how the vision is to be delivered in future planning stages and eventual development outcomes, separated by topic.

The Implementation section contains Objectives, Requirements and Guidelines (ORGs), defined as:

- **Objectives:** high level vision statements that apply to each development theme. Objectives are mandatory, so any development proposal must comply with these statements.
- **Requirements:** matters that must be complied with in the design of a development. Requirements cannot be varied by the issue of a planning permit.
- **Guidelines:** matters that should be considered in precinct planning or the design of a development. If the Responsible Authority is satisfied that an application for an alternative to a guideline satisfies the objectives or requirements of the CDP, then that alternative may be considered.

The ORGs have been drafted to be specific to the former Lilydale Quarry site and context. More general planning requirements that apply across the Shire of Yarra Ranges (and Victoria more broadly) are not included within the CDP as they are covered elsewhere in the planning framework.

~~The CDP has been developed on the basis of a potential future train station being delivered central to the site. Should the new station not proceed, an amendment to the CDP will be required.~~

1.2. LAND TO WHICH THIS PLAN APPLIES

The CDP applies to approximately 143.8 hectares of land known as the former Lilydale Quarry (Stage 2), within the Shire of Yarra Ranges (see Figure 1). Land to the immediate south, known as Stage 1, underwent a separate planning approval process for which a permit has been issued to facilitate development.

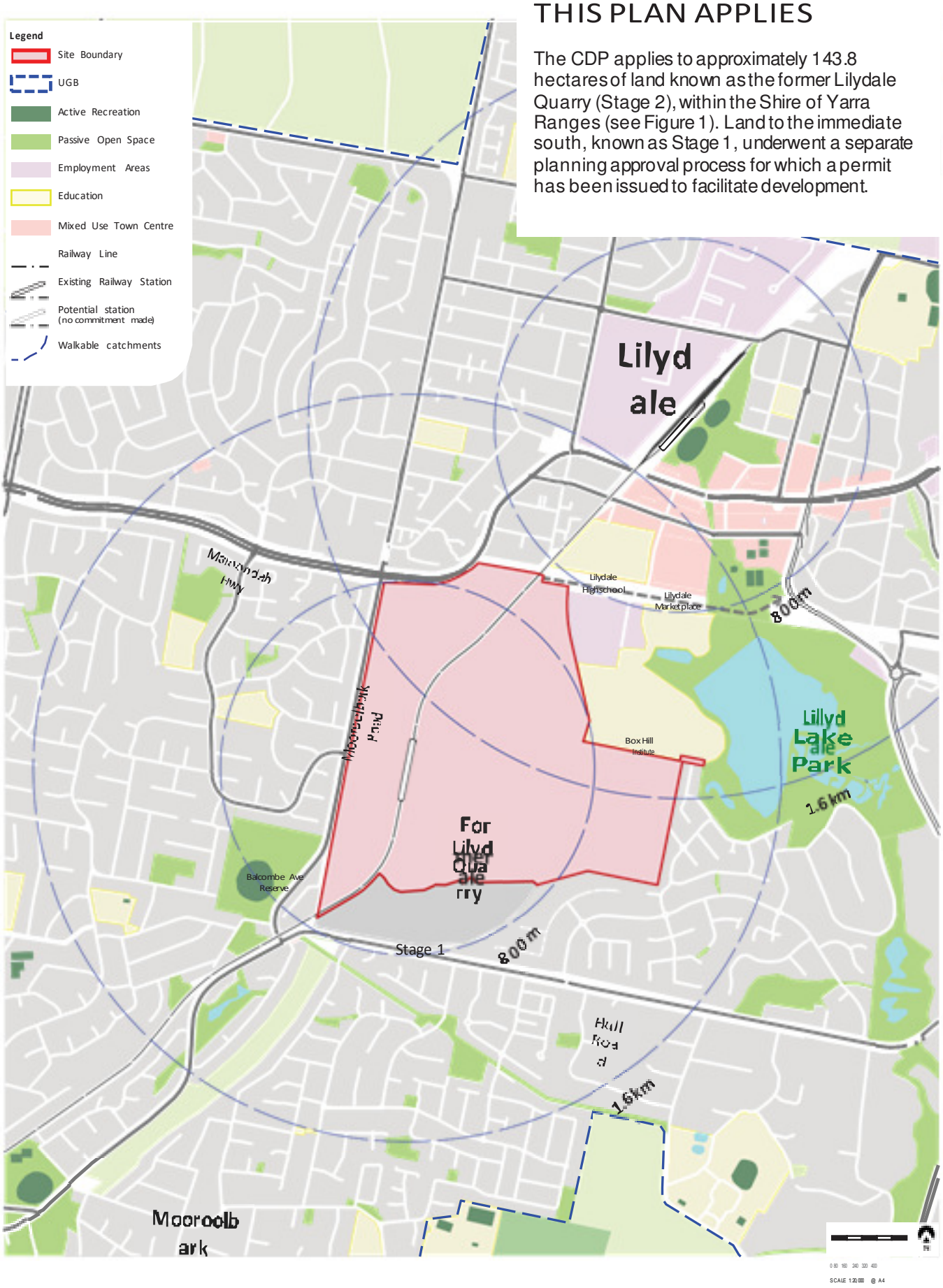

Figure 1: Site Location Plan

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VISION

Lilydale Quarry will become a major new urban renewal precinct with a masterplan that prioritises liveability and sustainability. A true 20-minute neighbourhood, it will provide housing diversity, recreation opportunities, services and transport modes that support the future community and integrate with surrounding neighbourhoods. Designed to achieve high levels of walkability, the development will promote social interaction and encourage healthy, active lifestyles.

This is an unmatched opportunity to transform a major barrier within the existing suburban landscape of Lilydale into a new neighbourhood, which will provide housing diversity and amenities including community facilities, open space and infrastructure to benefit future residents and surrounding areas. The development of the site will enrich Lilydale's place proposition and authenticity by conserving and allowing access to previously inaccessible heritage assets to tell the stories of the area's Traditional Owners, its early colonial settlement, and industrial past.

The vision will be achieved through the following principles:

NEW MIXED-USE URBAN ENVIRONMENT

Creating a vibrant urban neighbourhood by providing a variety of homes types and densities, and a complementary mix of active and social uses to support a modern, connected community.

TRANSIT ORIENTED DEVELOPMENT

Establishing a vibrant focus for community around ~~the~~ a potential future train station with complementary facilities in a local centre, and connecting the whole neighbourhood via a safe, convenient and attractive active transport network.

A CONNECTED AND ACTIVE NEIGHBOURHOOD

Supporting active and healthy lifestyles through a mixed-use neighbourhood that brings the daily convenience, social, transportation and education needs of the community within a 20-minute walkable catchment.

PRESERVE THE MEMORY

Celebrating the unique history of Lilydale Quarry to create a distinct local character and place identity.

DIVERSE OPEN SPACES

Designing diversity and variety into public spaces to cater for different users and activities, both active and passive, urban and landscape.

COMMUNITY HEART

Providing a range of spaces and facilities to meet the needs of the community, supporting social interaction, resilience and liveability.

SUSTAINABLE CHANGE

Delivering productivity and sustainability outcomes in all aspects of the new urban form through connected, diverse and enduring communities.

Figure 2: Indicative Framework Plan

Delete "Highway frontage commercial/mixed use" shading and legend

Add line adjacent to Maroondah Highway accompanied by text "Access to Maroondah Highway Prohibited"

Change "TOD Mixed-use area" to "Potential TOD mixed-use area" in legend

3

PRECINCTS

The scale of the site offers an opportunity to create a variety of urban neighbourhoods of diverse character, density and uses to cater for the needs and preferences of different cohorts. This will promote a unique identity and a sense of place for each of the precincts that will make up the site.

Due to the scale of the site and the 15+ year development timeframe, it will be designed and delivered progressively, with the detailed development outcome agreed with the Responsible Authority through subsequent localised planning processes.

The land has been divided into four key precincts, which are subject to detailed planning: Precinct 1 – Western Neighbourhood, Precinct 2 – Heritage Village, Precinct 3 – Eastern Neighbourhood, and Precinct 4 – Urban Core.

Figure 3 illustrates the precinct boundaries. The boundaries of these precincts are indicative only, allowing for some flexibility in the final extent of each as detailed planning progresses. Refer to Appendix B for anticipated yields by Precinct.

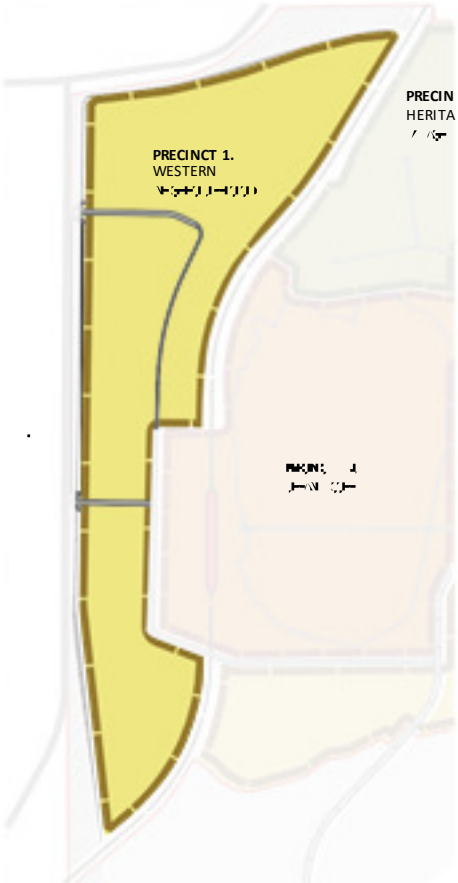
3.1. PRECINCT 1 – WESTERN NEIGHBOURHOOD

The Western Precinct will provide a mix of traditional (detached, small lot and/or dual occupancy) and medium density (terrace/town house and/or low-rise apartment) housing through considered urban design that responds to the sloping topography.

A linear green corridor and signature avenue street will form a legible spine through the precinct, weaving together the northern, central and southern areas. This linear corridor creates a setting for residential housing while also performing a functional role by responding to topographical changes.

~~The northern edge of the precinct will also allow for a commercial mixed use or restricted retail development that responds to the Maroondah Highway frontage, providing an appropriate landmark for this gateway to Lilydale.~~

The Western Neighbourhood will integrate strategic pedestrian connections into the site from Mooroolbark Road.



3.2. PRECINCT 2 – HERITAGE VILLAGE

Development of the Heritage Precinct will support the retention and adaptation of significant built heritage elements within the former limestone processing area and farm area for community, local commercial, tourism and retail uses.

The Heritage Village will be a focus for mixed use activity, which will integrate the site's significant heritage assets with residential uses including townhouses and small to medium-scale apartment buildings, and open spaces.

The history of the site will be celebrated and provide a sense of arrival with the historic gateway at the Melba Avenue entrance to the precinct, supporting the site's strong physical integration with the broader Lilydale township.

A series of distinctive open spaces will frame the heritage village, enabling strong visual connections to the retained industrial structures and historic fabric.

Residential, tourism and creative industry uses will be encouraged to support the activation of the heritage village.

District-scale sport and recreation facilities will be provided in the precinct's north. This focal point for the region will be delivered to support future and surrounding residents and complement nearby community facilities (e.g. Lilydale High School, Box Hill Institute).

3.3. PRECINCT 3 – EASTERN NEIGHBOURHOOD

The Eastern Neighbourhood will deliver a model walkable urban neighbourhood with a mix of traditional (detached, small lot and/or dual occupancy) and medium density (terrace/town house and/or low-rise apartment) housing, focused around a central park and transecting avenue streets.

The Precinct will provide a direct connection to the adjoining Lillydale Lake as well as creating the context for liveable medium density housing along a boulevard street that runs centrally through the neighbourhood.

It will integrate sensitively at interfaces with adjoining residential areas, with deeper lots backing onto the rear boundaries of adjoining properties. A tree retention buffer zone is incorporated within these boundary lots to preserve the green backdrop that the existing homes enjoy.

Medium density housing is anticipated towards the western portion of the precinct, in order to maximise the number of residents in proximity to the potential future train station and the commercial and retail amenities concentrated in the Urban Core.

Healthy active living will be encouraged through proximity of all dwellings to a range of active and passive recreation spaces and active transport infrastructure.

New development will be integrated with surrounding residential areas via pedestrian and cycle links that connect to Sharnalee Court and north-south Rail Trail connections.

An activated frontage and high levels of permeability will be provided to the Box Hill Institute land via the shared boulevard street.

3.4. PRECINCT 4 – URBAN CORE

The Urban Core will deliver vibrant higher density ~~transit-oriented~~ development focused ~~around the potential future train station and~~ around an urban plaza, establishing opportunities for living and working within a walkable catchment. Subject to the state providing a new rail station on the Lilydale Rail line, the Urban Core has the potential to provide for transit-oriented development ~~of the station~~.

The Precinct will provide a diversity of housing typologies, including medium to higher density apartment, mixed use, terrace/town house and live/work opportunities.

Local retail, commercial and community uses will be supported in the Urban Core, which may include an education centre, community meeting spaces, and new civic spaces.

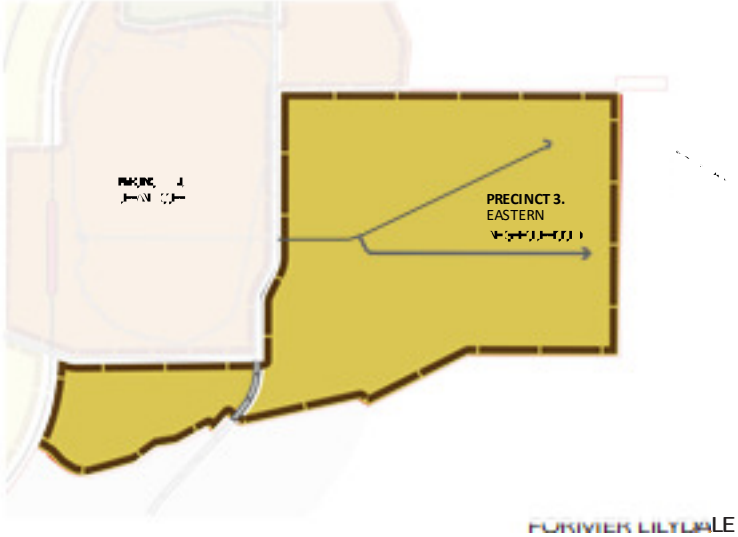
The Escarpment Park at the northern end of the precinct will form an important open space focus within the development, connecting to the site's history with the retained escarpment.

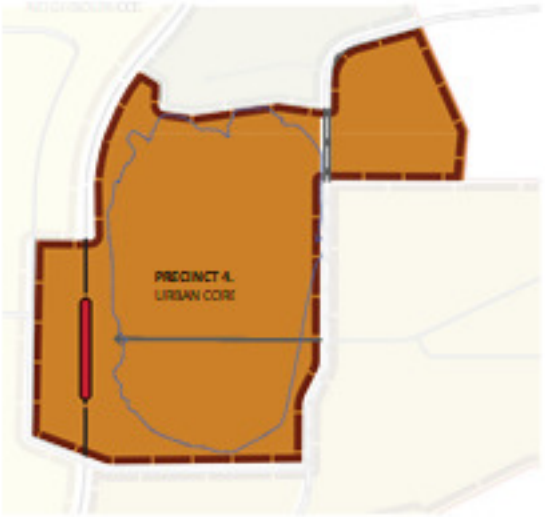
The new Escarpment Park will be linked to the existing Lillydale Lake and Warburton Trail through a safe, off-road shared east-west cycle and pedestrian trail.

Axes of retail and commercial activity will be provided along streets representing key desire lines between major open spaces and transport infrastructure. Each Avenue Street will have a distinctive and unique character defined by changes in the alignment of the streets and strong visual links through a series of urban spaces and experiences.

~~Sustainable transport will be supported with cycle infrastructure at the potential future train station, including secure and undercover cycle storage areas~~.

Pedestrians will be prioritised around ~~the potential future train station and~~ retail areas through traffic calming techniques.




PRECINCT 4:
URBAN CORE

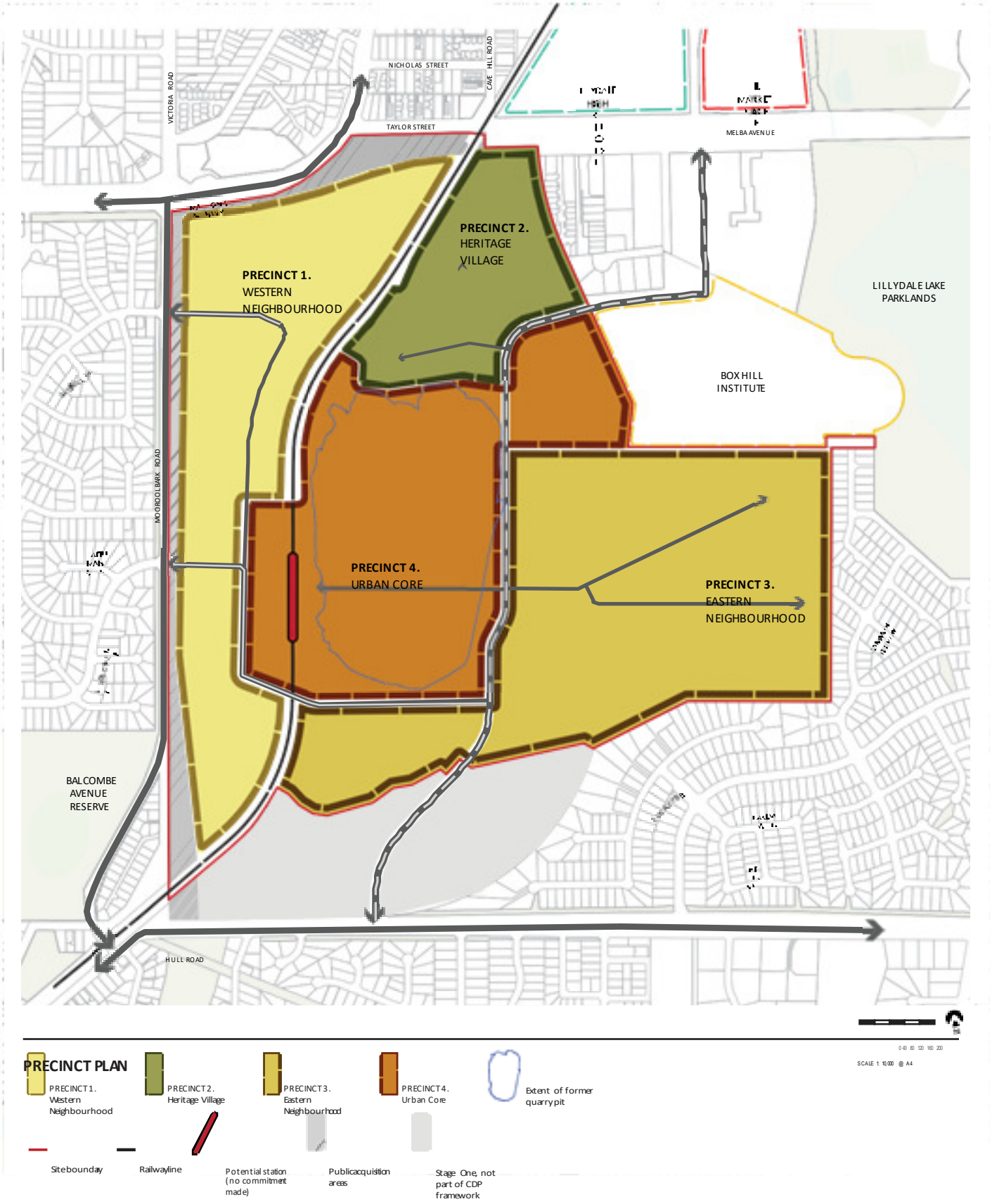


Figure 3: Precinct Plan

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IMPLEMENTATION

4.1. HOUSING, RETAIL & COMMERCIAL

Development at the former Lilydale Quarry will capitalise on the site's unique scale and high amenity location to provide a significant contribution to infill housing in Melbourne's Eastern Region.

The Lilydale Quarry site sits within an established suburban area, surrounded by low-density residential neighbourhoods to the west, south and east, and industrial and commercial development, including Lilydale Activity Centre, to the north. The site benefits from its proximity to Lillydale Lake to the east. The redevelopment of the site will create new links and opportunities for existing residents to access the amenities and infrastructure of the site and conversely for new residents moving into Lilydale Quarry to engage with the community around them.

The town centre within Precinct 4 will provide for everyday needs, while future residents will take advantage of their proximity to the Lilydale Activity Centre for their major retail requirements. ~~The opportunity for restricted retail in the longer term will be provided at the north western corner of the site (Precinct 1).~~

OBJECTIVES	
O1	To develop the site as an exemplar ~~transit-oriented development and~~ 20-minute neighbourhood with the potential to be ~~.~~ transit-oriented subject to the state providing a new rail station in the longer term.
O2	To promote lot and residential typologies that allow for a diversity of households, including affordable housing, throughout the site.
O3	To ~~support~~ maintain the potential for the site to be transit oriented by locating mixed-use development ~~adjacent to the potential future train station,~~ which incorporates retail, commercial, education, community and higher density residential uses within a walkable catchment of the the potential railway station ~~precinct~~site.
O4	To provide for retail and commercial activities on the site, which deliver some local employment and support the future residential community, while complementing the established Lilydale Activity Centre.
O5	To establish the area around the site for a potential future train station in Precinct 4 as a neighbourhood activity centre, the site's primary focus for commercial and retail activity.

REQUIREMENTS	
R1	Each Precinct must provide for a diversity of lot and/or dwelling types that cater for a range of households.
R2	Locate retail and commercial uses to activate the primary pedestrian route between the potential future train station and associated car parking, where appropriate.

GUIDELINES	
G1	The indicative yield for residential and non-residential uses for each precinct are outlined in tables 1 to 4.
G2	Retail and commercial uses should be generally located within: • Precinct 4 - Urban Core • Precinct 2 - Heritage Village and/or adjacent to: • the potential future train station • ~~the intersection of Maroondah Highway and Moorolbark Road (in proximity to the potential Lilydale Bypass alignment)~~
G3	Encourage a vertical mix of uses in Precinct 4.
~~G4~~	~~The site at the corner of Moorolbark Road and Maroondah Highway should be used for Restricted Retail, Office or other commercial uses to facilitate an appropriate 'gateway' built form outcome on the approach to Lilydale.~~

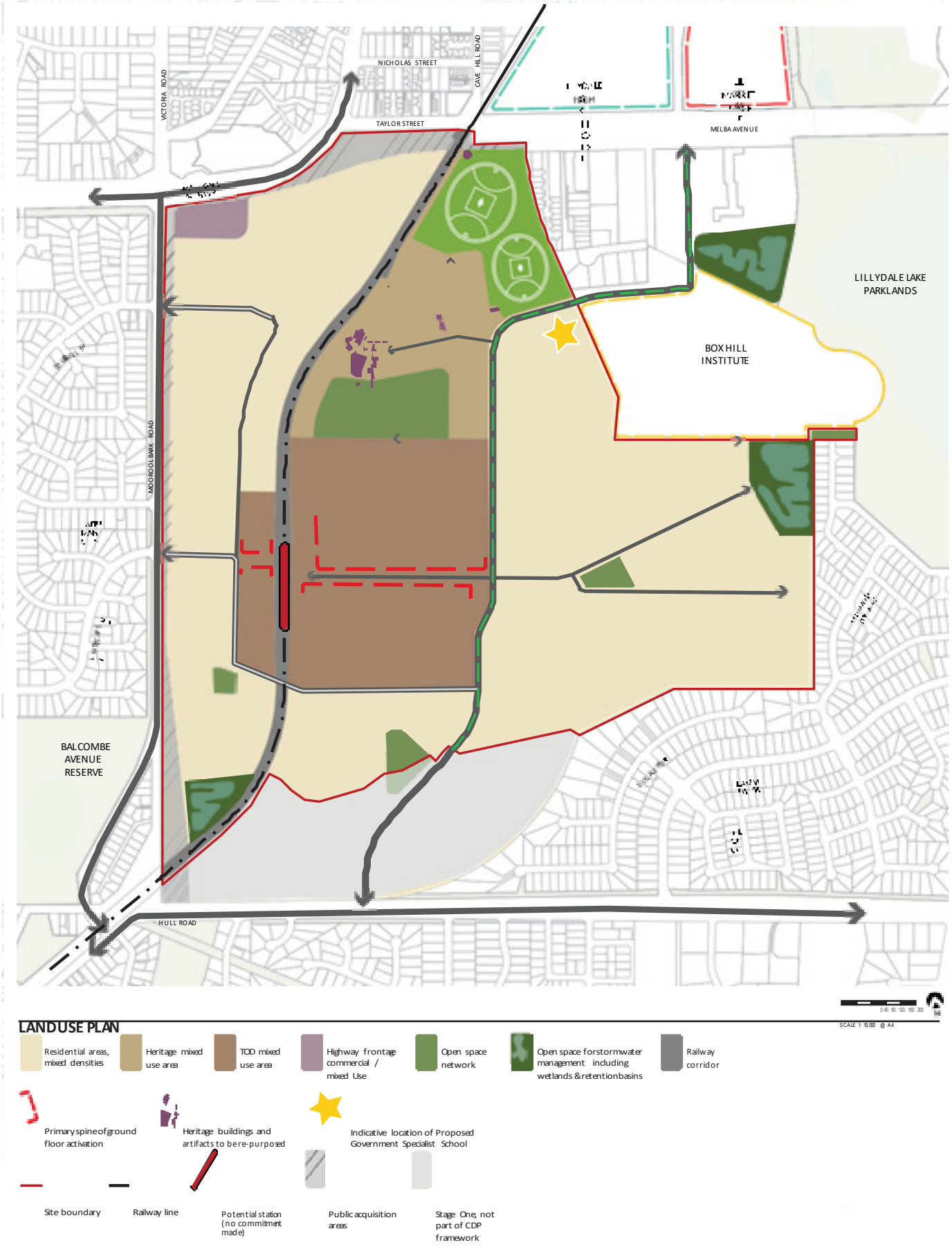


Figure 4: Land Use Plan

Delete "Highway frontage commercial/mixed use" shading and legend

Add line adjacent to Maroondah Highway labelled “Vehicular access to Maroondah Highway prohibited”
Change “TOD mixed use area” to “Mixed Use area (potential TOD)” in legend

4.2. COMMUNITY FACILITIES

The approach to community facility provision at the former Lilydale Quarry will allow for flexibility and adaptability to respond to changes in community needs over time. Delivery of community facilities will be staged as development progresses and need arises, with design and configuration responding to required uses and best practice design at the time.

In spatial terms, community facilities will be generally located within Precinct 2 or Precinct 4, including a Proposed Government Specialist School to be delivered within Precinct 4 if required.

The specific configuration and conceptual design of community facilities will be determined at precinct planning stage, informed by contemporary best practice.

OBJECTIVES	
O6	To ensure that Lilydale Quarry residents have local access to a range of high quality community facilities.
O7	To deliver multipurpose facilities on the site that support residents of all ages, abilities and cultures in order to encourage and support social interaction opportunities and create a sense of place and civic pride.
O8	To deliver flexible community facilities on the site that can be adapted in response to changing community needs, wants and uses.
O9	To ensure that former Lilydale Quarry residents have good access to government and non-government schools.
O10	To co-locate the Proposed Government Specialist School with complementary other community facilities and open space where appropriate.

REQUIREMENTS	
R3	Unless otherwise agreed by the Responsible Authority, at a minimum, community facilities will consist of one multi-purpose community centre to accommodate the following functions: • Neighbourhood house / Flexible meeting rooms / event space • Maternal and Child Health services • 3 year-old and 4 year-old Kindergarten • Childcare services: 0-6 year-old long day care and occasional care Any variation to the above functions should be based on a recent community needs analysis prepared by a suitably qualified professional.
R4	Community facilities must be in proximity to public transport and/or public open space, unless otherwise agreed by the Responsible Authority.
R5	1.9 hectares of land is to be identified in Precinct 4 for a Proposed Government Specialist School, near the proposed active open space and the existing Box Hill Institute. Prior to a permit being issued for subdivision or development within Precinct 4, consultation must be undertaken with the Department of Education and Training to determine the likely demand for education facilities to be generated by the development of the site.
R6	Community facilities must be designed to front and be directly accessed from a public street with the majority of car parking located away from the main entry and designed to respond to *Design for Access and Mobility Standards* (AS 1428).

GUIDELINES	
G5	The community facilities should be located in Precinct 2 (Heritage Village) or Precinct 4 (Urban Core) and should be sited and design to act as local landmarks
G6	Relevant Council plans and strategies such as the *Child and Youth Strategy 2014-2024* and its successors should guide community facility design.
G7	Any private childcare, health, recreational, arts, cultural, retail or similar facility/use is encouraged to locate within Precinct 2 or Precinct 4.
G8	Where multi-purpose community facilities are co-located with a school site, the land allocated for each facility should be appropriately located and configured to maximise the functionality and efficiency of each facility and the benefits of the hub overall.
G9	The Proposed Government Specialist School should be located on a street carrying a local bus service, with a bus stop at the school boundary.
G10	The Proposed Government Specialist School should be well connected to walking and cycling networks to encourage sustainable travel to and from school.

4.3. OPEN SPACE

The site will provide a network of diverse active and passive open spaces, including a two-oval District Sport Complex in the site's north (in proximity to existing community infrastructure assets), in addition to smaller neighbourhood parks, pocket parks and urban plazas. Open spaces will support a diversity of activities to cater for the needs of on-site residents and visitors to the site, forming part of the broader regional network of open space.

Open space will be distributed through the site to maximise accessibility and walkability, with 95% of residents within a five-minute walk of a high-quality open space. Formal open space provision will be complemented by private and communal recreation spaces, accessible areas within the wetland reservations as well as the strategic Rail Trail that traverses the site. Combined with on-site provision, the opportunity to connect to off-site recreation and open space facilities has been identified as a broader community benefit.

The site will support the regional context by focusing on more contemporary open space solutions not readily provided nearby. While still providing a generous provision of open space catering for active recreation, the open space network will also focus on providing passive recreation, social gathering space, event and multi-use environments that are currently underprovided in the regional context.

OBJECTIVES	
O11	To provide open spaces that cater for a broad range of users through a mix of spaces and planting to support both active and passive recreational activities for all ages and abilities.
O12	To complement the existing open space network by providing a diversity of open space opportunities for the region.
O13	To provide an open space network that is capable of adapting to changing conditions, community demographics, diversity, ability and needs over time.
O14	To distribute well-designed and safe public open spaces throughout the site, which serve the needs of future site residents.
O15	To encourage and promote walking and active transport to support healthy living through access to a convenient network of attractive open spaces.
O16	To meet the active recreation needs of the site community through the provision of a District Sport Reserve on the site.

REQUIREMENTS	
R7	The site must provide a range of open spaces that support both passive and active activities.
R8	A minimum 10% of Total Site Area must be provided for unencumbered public open space. This will consist of: • Formal active open space (District Sport Reserve): 4.5% of Total Site Area (minimum) • Passive open space (District Social Recreation Reserve, Neighbourhood Park, plaza spaces, Rail Trail linear park): 5.5% of Total Site Area (minimum).
R9	A District Sport Reserve, as defined in Table 1, must be provided in Precinct 2 to meet the active recreation needs of the site community. The District Sport Reserve will accommodate a competition scale oval and junior competition oval, and associated facilities.
R10	The site must accommodate open space for informal social gathering, performance, festivals, events and social interactions. These sites must be distributed across the site.
R11	A public open space of 0.1 hectares (minimum) must be provided in proximity to the site for the potential future train station, to maintain the potential for ~~forming~~ an urban plaza and public transport gateway to the site. At least 50% of the area of a plaza (as defined by Table 1) must receive a minimum of at least 5 hours of direct sunlight between 9am and 3pm on September 22.
R12	Open space will be distributed so that at least 95% of all dwellings on the site are located within 400 metres walking distance of a local park/open space (or higher order space), within or outside the site.
R13	The Rail Trail open space corridor must be designed to allow connection into surrounding open space, pedestrian and cycling networks.
R14	Open spaces must contain extensive planting – supporting large canopy trees – which are suitable to the functionality of the open space, the site, local climate and floodway conditions. All public landscaped areas must be planted and designed to the satisfaction of the Responsible Authority.
R15	Public open space must receive a minimum of at least 5 hours of direct sunlight between 9am and 3pm on September 22, with the exception of a plaza (as defined by Table 1).
R16	Public space (which may include open space, streets and/or dual-use paths) will be provided along the site boundary with the Box Hill Institute site (as opposed to private lot boundaries) in Precincts 3 and 4.

GUIDELINES	
G11	All open spaces should be designed and developed generally consistent with the detail set out in Table 1.
G12	All public spaces should respond appropriately to the **Design for Access and Mobility Standards** (AS 1428).
G13	Development should be orientated towards open spaces, easements and other public realm to maximise the activation and passive surveillance of these areas, but without 'privatising' such spaces.
G14	CPTED principles, such as enabling passive surveillance, should guide the design of open spaces and associated infrastructure
G15	Landscape design of open spaces should take into consideration the local conditions of each individual space including topographical features, landscape views and sightlines to local landmarks including retained heritage elements.
G16	Open spaces should be designed and developed to enable practical maintenance – this guideline should be applied in the context of meeting the overarching Objectives for the provision of open space.
G17	Public open spaces should be located to maximise solar access and amenity.
G18	Neighbourhood Parks should be located to optimise accessibility for surrounding residents.
G19	Open spaces on the site should be interconnected by pathways, which may be within road reserves.
G20	Identify and use existing biodiversity and natural drainage features in the design of public open spaces.
G21	Water Sensitive Urban Design (WSUD) features, including bio-retention swales, should be incorporated into Boulevard streets, where possible, and associated with open spaces to maximise visual amenity.
G22	Planting arrangements and species selection should ensure bushfire risk is not increased.

Table 1: Open Space Hierarchy

PRINCIPLE	TYPE	NAME / LOCATION	APPROX. SIZE	FUNCTION / ACTIVITIES
Access to active and passive recreational opportunities	District Sport Reserve	Heritage Village Precinct Reserve	6.7* Ha	• Competition standard oval (soccer, cricket or Australian Rules Football) • Junior sports oval • Basketball/netball courts • Associated facilities
	District Social Recreation Reserve	Escarpment Park	3.1* Ha	• Local sport / Junior sport • Informal active recreation • Passive recreation • Events and cultural activities • Heritage quarry batters
Access to active walking and cycling paths	Walking and cycling paths	Rail Trail, cycling and walking network within site	1.38* Ha (rail trail only)	• Active recreation • Commuting and active travel
Access to local open space that provides a range of different experiences	Neighbourhood Park	Hilltop Park	1.4* Ha (Includes land within Stage 1 area)	• Informal active recreation • Passive recreation • Small events and cultural activities
	Retarding Basins / Wetlands	Lillydale Lake Treatment Basin Mooroolbark Rd Retarding Basin (west of railway reserve)	3.7* Ha (combined)	• Wetlands • Drainage detention areas • Passive recreation
	Urban Parks and Plazas	Adjacent to potential future train station and distributed through Precincts 2 and 4	1.7 Ha total, including 0.1 Ha adjacent to potential future train station	• Social activity • Passive recreation • Hardscape and landscaped areas • Interface with commercial and community activities

* Approximate sizes are indicative only, and will be subject to refinement at the planning permit stage.

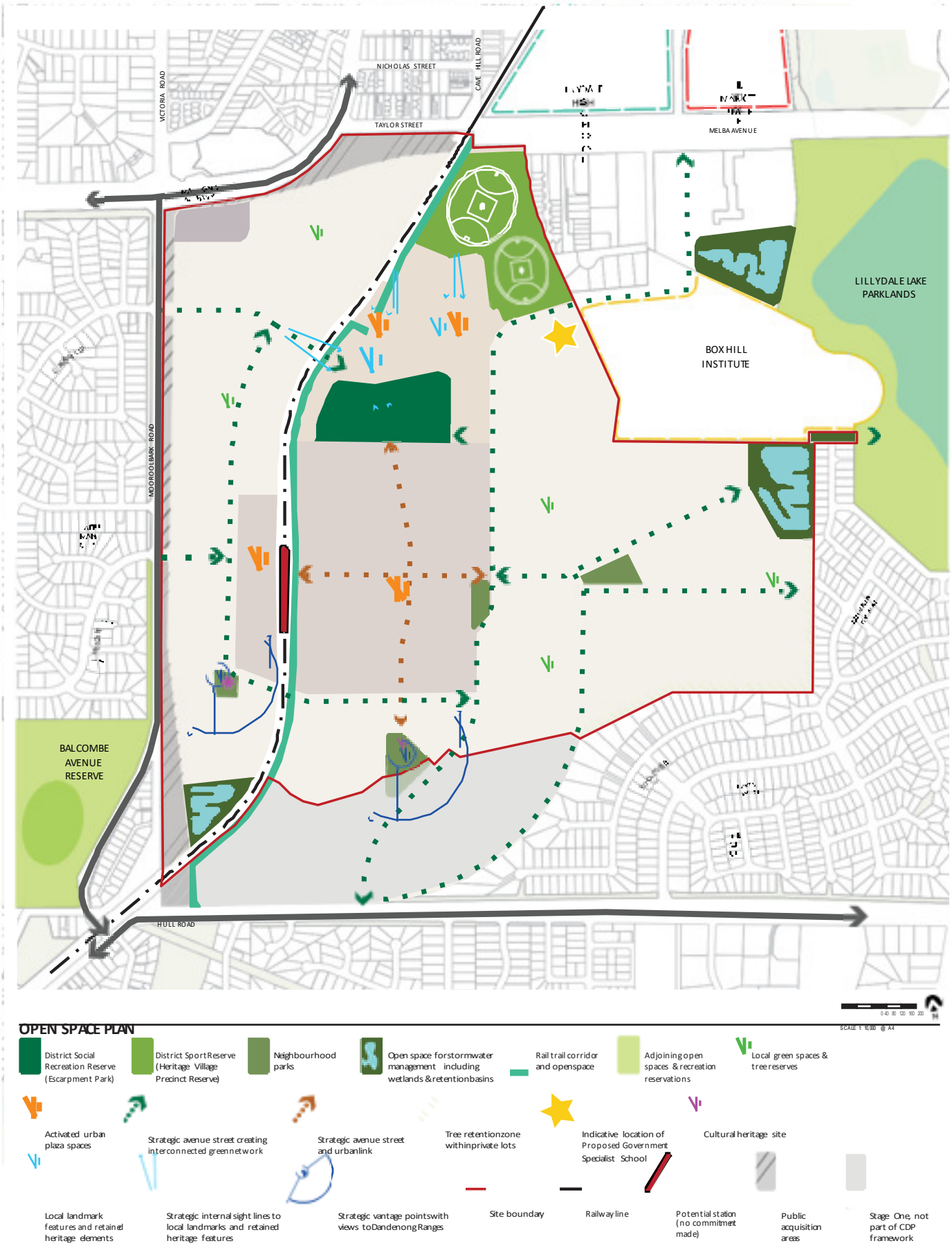


Figure 5: Open Space Plan

Delete shading for “Highway frontage commercial/mixed use”

4.4. INTEGRATED TRANSPORT

Active transport will be prioritised, connecting activity nodes, open spaces, and public transport throughout the site to create a walkable, cycle friendly place, while balancing the need for convenient private vehicle connectivity. Direct active transport connections will be provided to the surrounding network. Facilities for cyclists will be integrated into key destinations, such as the transport interchange at the potential future train station, Precinct 4 Urban Core and Precinct 2 Heritage Village.

A grid of cycle paths will be delivered throughout the site, with separated cycle paths to be provided along connector streets, and three crossing points provided for pedestrians and cyclists across the railway line (including one at the potential future train station).

An expanded bus network will leverage the centrally-located potential future train station or provide access to Lilydale Station. A bus capable street network will be provided within the site, linking new development to the potential future train station or Lilydale Station and the broader metropolitan network.

Vehicular access to the site will be provided from ~~Melba Avenue and~~ Hutchinson Street (to the north) and Hull Road (to the south) via the north-south connector road, with multiple access points provided to the west of the site along Mooroolbark Road. ~~Ultimately~~, ~~signalised~~ Signalised intersections will be provided along Mooroolbark Road at Churchill Drive and Landscape Drive and the southern end of the north-south connector road (at Hull Road). Access to Melba Avenue / Hutchinson Street will be provided via a roundabout that will ~~not preclude the provision of future traffic signals should the potential Lilydale Bypass be delivered in the future.~~ that will actively future proof for a signalized intersection or grade separation of a potential future Lilydale Bypass

The boulevard connector street that runs north-south through the development site will ~~be traffic calmed to~~ create a sense of arrival at key destinations and ~~avoid disconnecting~~ seemlessly link Precinct 3 ~~from~~ and Precinct 4. The design of the north-south route will also discourage through-traffic from diverting from surrounding major arterials. A vehicle connection over the railway line will improve accessibly between the east and west.

Attractive, safe and convenient active and public transport options will reduce the extent of car parking provision across the site, particularly in and around the town centre and potential future train station environment.

The Objectives below relate to all modes of transport, whereas the following Requirements and Guidelines are specific to each mode of transport.

Please refer to the **Lilydale Quarry Integrated Transport Plan** (Cardno) for further context and guidance on traffic and transport matters.

4.4.1. Active Transport

OBJECTIVES	
O17	To develop an integrated multimodal transport network that supports the redevelopment of the former Lilydale Quarry as a dense, highly-walkable urban environment affording high levels of transport choice while promoting a shift towards sustainable transport modes.
O18	To prioritise sustainable transport within the development and maximise intermodal connectivity within the Urban Core and in proximity to the potential future train station.
O19	To provide safe and convenient active transport links between where people live and where they work, shop and recreate, integrated with connections outside the site.
O20	To develop a legible and inter-connected vehicle transport network within the site, with public transport that is fully integrated with surrounding areas, including key local and regional employment nodes and activity centres.
O21	To ensure the transport and car parking network is capable of advancing and responding to future trends and technologies.

REQUIREMENTS	
R17	Dedicated cycle paths (separated from pedestrian and vehicular traffic) or shared paths (separated from vehicular traffic) must be provided internally providing access to the potential future train station and Town Centre, and be designed to allow for connection to the external shared/cycle paths as shown in Figure 6.
R18	Activated mixed-use streets in the Urban Core shall be provided as shared zones (pedestrian and cydist priority zones) with streetscape design initiatives to ensure maximum convenience and safety of pedestrians.
R19	A 'Rail Trail' will be provided within the site adjacent to the existing train line, with a design that allows for connections into the broader shared/cycle-path network external to the site.

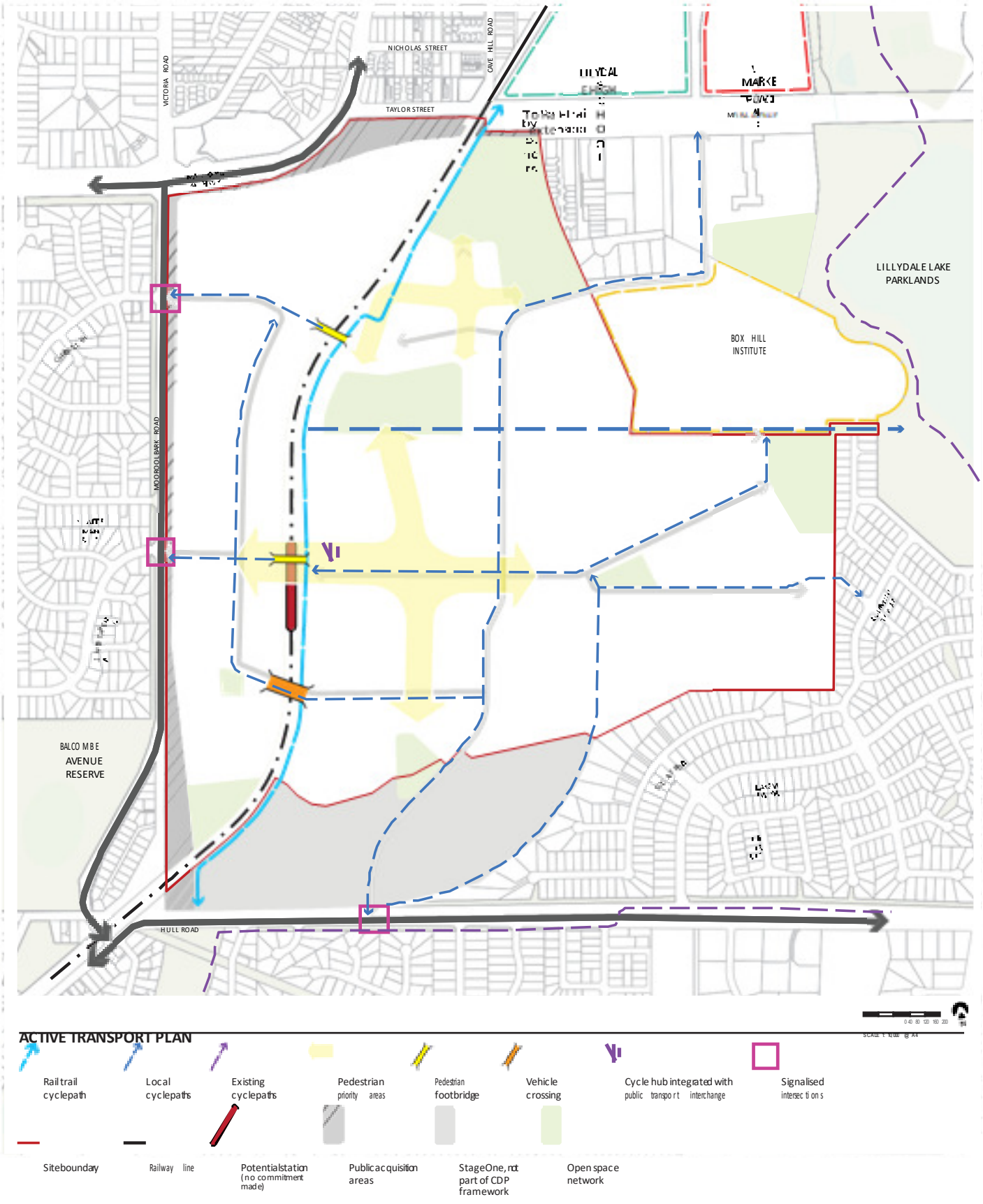


Figure 6: Active Transport Plan

4.4.2. Public Transport

REQUIREMENTS	
R20	The ~~potential~~opportunity to provide a future train station and transport interchange ~~must be located~~ in Precinct 4, central to the site (generally consistent with Figure 7) must be protected until the final stage of development.
R21	Connector streets and boulevard streets must be designed as bus capable roads. 90% of dwellings (at a minimum) will be located within 400 metres of a bus capable road, consistent with Figure 7.
~~R22~~	~~A transport interchange must be provided to service the potential future train station and the TOD, including adequate bus parking bays with shelters, commuter car parking, real-time service information, direct pedestrian access to the station entrance, and appropriate quality bicycle facilities. The design of the transport interchange must be to the satisfaction of the relevant transport authority.~~
R23	Cycle infrastructure should be provided at the potential future train station to encourage active transport, including secure / undercover cycle storage.

4.4.3. Road Network & Car Parking

REQUIREMENTS	
R24	The connections to the external road network must be generally consistent with the Infrastructure Agreement between the landowner and the Council.
R25	An efficient internal local road network must be provided on the site (generally consistent with Figure 7: Movement and Connectivity Plan), which supports safe movement and connectivity to all intersections with the external road network. Local streets must be consistent with street cross sections in Appendix D. Alternative cross sections may be considered if: • Minimum required carriageway dimensions are maintained for the operation of emergency service vehicles and buses (on connector streets and above) • Pedestrian and bicycle performance characteristics are maintained • Minimum road reserve widths for the type of street are maintained.
R26	The road network throughout the site must be appropriately designed to allow emergency services easy access to all parts of the development.
R27	Off-street car parking and loading facilities provided at grade in Precinct 2 and Precinct 4 must be located to the rear of all buildings, or otherwise appropriately screened, as agreed by the Responsible Authority.
R28	At- or above-ground car parking must have a minimum floor to floor height of 3.5 metres to enable future adaptation for alternate uses.

GUIDELINES	
G23	The number of vehicle crossovers to the off-road shared user path alongside the North-South Connector Road should be minimised to reduce the likelihood of potential conflicts between vehicles, cyclists and pedestrians.
G24	Rail crossings should be designed and located to maximise connectivity, minimise ramping required and to minimise the extent of retaining walls and engineered structure required to accommodate level changes.
G25	~~The~~ Any provision of at-grade car parking ~~near~~ for the potential future train station should be limited to ensure priority is given to maximising the residential population that lives within a walkable catchment of the potential future train station. Multi-level decked parking is preferred.
G26	Car parking provision within Precinct 2 and Precinct 4 may be reduced if an appropriate level of active and public transport is available to encourage use of ~~active and public transport~~those modes.
G27	The transport network should be capable of adapting to and providing for new infrastructure to cater for emerging vehicle technology.
G28	Unbundled car parking options should be provided in higher density residential developments in proximity to public transport hubs.

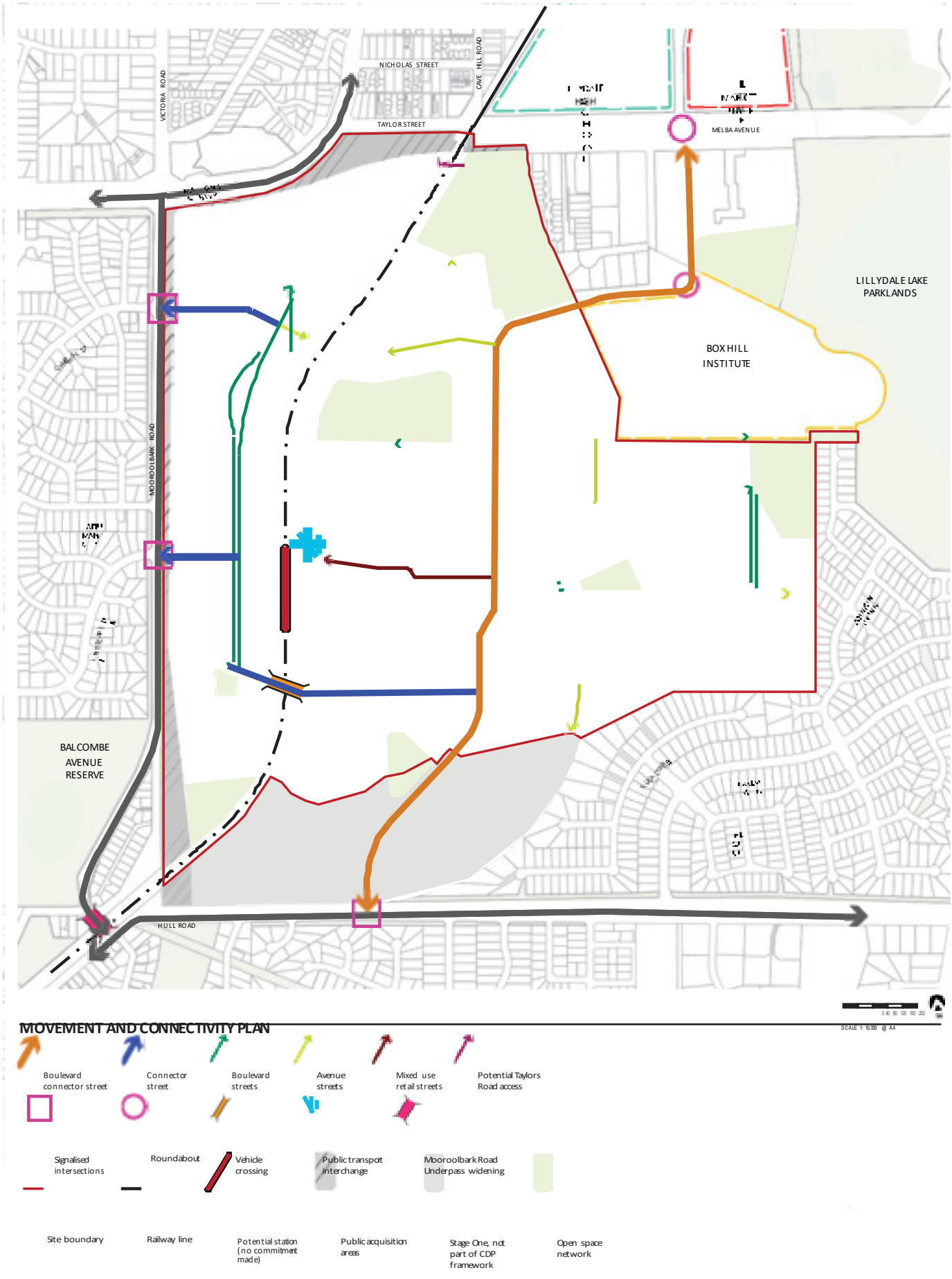


Figure 7: Movement and Connectivity Plan

4.5. INTEGRATED WATER MANAGEMENT & STORMWATER

Integrated Water Management (IWM) applies integrated approaches to water cycle planning that seek to deliver effective urban water management, including water supply, wastewater, flood resilience, urban waterway health, and management of public spaces.

The stormwater system for the redevelopment of the former Lilydale Quarry will be designed to manage minor and major storm events up to and including a 1% Average Exceedance Probability (AEP) storm event to ensure the protection of property and assets from flooding and the safe conveyance of stormwater runoff through the development.

Liveability and resilience will be incorporated into new development throughout the site. This will involve utilising stormwater and potentially groundwater as an asset for the community, while ensuring fundamentals such as flood protection, safety with respect to flow management, and water supply security are maintained. The surface water management for the site will be optimised and designed to achieve multiple benefits for the community and the environment.

Wetlands integrated with the proposed retarding basins will treat the majority of the residential development area and will be the primary WSUD treatment system. The wetlands will include a sediment basin and other facilities based on the requirements of Melbourne Water '**Constructed Wetlands Guidelines**'. Refer to Figure 5 (Open Space Plan) to see the proposed locations of stormwater treatment infrastructure.

Where practical and agreed to by the Responsible Authority, WSUD treatments including vegetated swales, raingardens or other accepted treatments will be constructed within open space areas and Boulevard Streets (where possible) as part of an integrated stormwater system.

Recycled (non potable) water will be mandated for the development and will form an integral part of the water management system. The use of recycled water will extend to all permitted uses within buildings and allotments, including toilet flushing and garden irrigation to specific streetscape, open space and public areas. Similarly, stormwater capture and reuse will be promoted for passive irrigation of streetscapes and open space areas. Potable and non-potable water use and wastewater and stormwater capture, reuse and discharge processes will be managed through the water sensitive design of private and public areas to deliver a reduction in potable water demand and rainwater runoff (compared with Business as Usual).

Refer to the **Lilydale Quarry Integrated Water Management Strategy and Stormwater Strategy** (Incitus) for further context and guidance on the treatment of water through out the site.

OBJECTIVES	
O22	To deliver a fit-for-purpose water supply system that, where appropriate, reduces reliance on reticulated potable water and enables sustainable, cool, and green urban environments.
O23	To deliver a best practice stormwater management system forming part of an overall integrated water management system that: minimises flood risk and peak flows; contributes to the environmental health of local waterways; and supports engaged and active urban spaces.

REQUIREMENTS	
R29	Stormwater runoff from new development must meet or exceed the performance objectives of the *Best Practice Environmental Management Guidelines for Urban Stormwater (CSIRO, 1999)* – or its successor – prior to discharge to receiving waterways, unless otherwise approved by Melbourne Water and the Responsible Authority.
R30	The stormwater runoff from development must not exceed the runoff generated from the predeveloped site or the capacity of the receiving drainage infrastructure for all events up to and including the 1% Average Exceedance Probability (AEP) storm, to the satisfaction of Melbourne Water and the Responsible Authority.
R31	Appropriate stormwater drainage and treatment infrastructure must be delivered to meet the scale and type of development and the regional context. Natural water management systems must be prioritised, where possible.

REQUIREMENTS	
R32	Development must incorporate main drainage, waterway, retarding basin and wetlands systems infrastructure, as appropriate, in accordance with a stormwater drainage management strategy approved by Melbourne Water and the Responsible Authority. Development staging must provide for the timely delivery of the ultimate drainage infrastructure necessary for the safe and functional development and use of the land. Where this is not possible, development must demonstrate how any interim solution adequately manages flows and treats stormwater generated from the development and how this will enable delivery of the ultimate drainage solution, all to the satisfaction of Melbourne Water and the Responsible Authority.
R33	Development will incorporate a Yarra Valley Water owned, controlled and maintained Recycled Water (non-potable) system that will be implemented further to the availability of key headworks infrastructure by Yarra Valley Water and in sequence with the staging of the development. Recycled water will be mandated for connection and use by all households and will also be available for other uses within the site.
R34	Development will reduce reliance on potable water and enhance the urban environment through the utilisation of fit-for-purpose alternative non potable sources, such as reticulated recycled water, stormwater and groundwater capture and reuse, and other WSUD elements, as appropriate, for use in key road reserves, open space reserves and communal areas, by agreement with the Responsible Authority.

GUIDELINES	
G29	Development should include IWM systems that are designed to contribute to a sustainable and liveable urban environment by: • Protecting and supporting habitat values for local flora and fauna species in external waterways. • Diversifying the water supply using recycled water and reuse of stormwater within private and public areas. • Optimising water use efficiency to reduce reliance on potable water.
G30	A Precinct stormwater management strategy report / plan should demonstrate: • Alignments of key overland flow paths and drainage pipeline/s within road or other reserves to be provided and integrated across property/parcel boundaries to their ultimate discharge point/s • Melbourne Water and the Responsible Authority requirements for freeboard and overland flow paths will be adequately contained within road or other reserves • Measures to prevent litter entering the downstream drainage system including litter traps or other approved devices, as required by the drainage authorities • The staging or sequence for the delivery of the IWM requirements to be provided under the approved Integrated Water Management Strategy, including the ultimate retarding basin and wetlands assets outlined in Table 2.
G31	The design and layout of roads, road reserves, and public open space should optimise water use efficiency and long-term viability of vegetation and public uses using overland flow paths, WSUD initiatives, such as rain gardens and/or locally treated storm water for irrigation, where practical.
G32	Development should have regard to relevant policies and strategies being implemented by the Responsible Authority, Melbourne Water and water retail authority, including any approved Integrated Water Management Plan.

Table 2: Stormwater drainage retardation basins and wetlands (water quality treatment) infrastructure

DESCRIPTION	LOCATION	AREA (HA) *	RESPONSIBILITY FOR DRAINAGE FUNCTION *
Lillydale Lake Retarding Basin	At eastern boundary of site adjacent to Box Hill Institute (Precinct 3)	2.45	Melbourne Water
Mooroolbark Retarding Basin (west of railway reserve)	Near southern end of site / west of railway reserve (Precinct 1)	1.23	Yarra Ranges Shire Council
Melba Avenue Main Drain – Constructed Wetland System	Wedge-shaped parcel of Council owned land, already dedicated to a drainage reserve, within the Lillydale Lake parklands, to east of Technology Drive and south of Melba Avenue Drain	2.3	Melbourne Water

* Notes:

1. Refer to Figure 5 Open Space Plan for drainage basin locations.
2. The areas shown in the table are approximate and subject to review and refinement during the detailed design and approval phases to be undertaken in conjunction with the Responsible Authority and Melbourne Water.
3. The responsibility for drainage function of the assets shown will be subject to review, with the finalisation of maintenance agreement/s between the Responsible Authority and Melbourne Water.

4.6. BUILT FORM AND URBAN DESIGN

Lilydale Quarry will be a high quality, well designed, urban place. It will be a walkable urban environment where a diverse community can enjoy healthy and active lifestyles in a neighbourhood that instils a sense of ownership and pride.

A range of housing typologies will be developed, responding to demand from different market segments and supporting diverse communities. ~~More dense, urban development will support the potential future train station at the centre of the site, in accordance with the principles of Transit Oriented Development.~~ A provision of a future train station by the state has the potential to support higher density development around the site in the form of transit-oriented development.

Medium density terrace and townhouse development typologies will help the activation of open spaces and avenue streets. Appropriate transitions will be provided at site boundaries so that new development blends in sensitively with surrounding neighbourhoods. High levels of liveability will be achieved with housing lots and build types arranged for optimum solar performance.

Key linkages will be designed to maximise pedestrian comfort and walkability, with pause points in local parks and urban plazas.

The walkable urban setting and activated spaces in the urban core and heritage village will bring people together and foster the bonds of community.

OBJECTIVES	
O24	To develop a sense of place through attractive, high quality built form, urban design and streetscapes.
O25	To concentrate higher density residential and mixed-use development close to public transport and services to encourage active transport, promote good public health outcomes, and enhance public transport use.
O26	To ensure that lower scale development is provided as a sensitive interface to existing low density residential development outside the site boundary.
O27	To provide a permeable interface with the Box Hill Institute land.
O28	To provide sustainable buildings and energy efficient homes, designed and constructed to meet the changing needs of occupants across their lifetime.
O29	To deliver liveability through optimum solar performance of lots and built form, including the use of reverse living terrace and townhouses where appropriate.

REQUIREMENTS	
R35	With the exception of land within the Sensitive Residential Interface Zone, all land on the site will be available for higher density development.
R36	On the key mixed-use spine within Precinct 4 (refer to Figure 8), buildings must activate the street edge and reinforce the urban character, where appropriate.
R37	Dwellings adjacent to areas of public open space shall be designed to provide opportunities for passive surveillance with windows and/or balconies facing the open space.
R38	Within the Sensitive Residential Interface Zone (shown on Figure 8), development must consider the established built form pattern. Lots will have a 40 metre minimum depth and a maximum two storey height limit shall apply within the Sensitive Residential Interface.
R39	All residential lots must front (in order of priority where a lot has frontages to multiple elements): • Open space and drainage assets • Boulevard connector streets • Avenue streets • Local access streets

REQUIREMENTS	
R40	~~Commercial or mixed use development at the corner of Maroondah Highway and Mooroolbark Road shall address the corner and respond to the site's location as a gateway to Lilydale.~~Development adjacent to Maroondah Highway must be internally oriented and take vehicular access from boulevard connected streets, avenue streets or local access streets. Vehicular access to Maroondah Highway is prohibited.
R41	Provide for a landscaped embankment and rear lot orientation to the future Lilydale Bypass.
R42	All lots that interface directly with the rail trail cycle path will facilitate passive surveillance while clearly delineating public and private space.

GUIDELINES	
G33	Development should be generally consistent with the built form guidance specified in Table 3. ~~Development of the Maroondah Highway-Mooroolbark Road Commercial Site should be generally consistent with the built form guidance specified in Table 4 and Figure 9.~~
G34	Encourage higher density residential and/or mixed use development within 400 metres of the potential future train station, where appropriate.
G35	Where possible, reduce the impact of driveways and garages along key strategic pedestrian and cycle routes.
G36	Subdivision and buildings should be designed and oriented in line with Crime Prevention Through Environmental Design (CPTED) principles to promote a high level of passive surveillance of streets and other public places, maximising actual and perceived community safety.
G37	Substations and other service infrastructure should generally be integrated into the built form (in commercial development) appropriately screened or, located discretely in open space reserves.
G38	Development abutting the railway line should be consistent with the *"VicTrack Rail Development Interface Guidelines" (2019)*
G39	All mature trees on lots within 10 metres of the southern and eastern boundary of the sensitive residential interface area (as shown on Figure 8) should be retained.

Table 3: Precinct Built Form Guidance

PRECINCT	BUILT FORM CHARACTER	PREFERRED HEIGHT	KEY INTERFACE TREATMENT
Precinct 1: Western Neighbourhood	The Western Neighbourhood will be predominantly low scale and residential in character, with a mix of detached dwellings, townhouses, and low-rise apartment buildings in proximity to the site of Precinct 4's potential future train station. ~~Development at the intersection of Maroondah Highway and Mooroolbark Road must address the site-specific urban design guidelines included within Table 2 and Figure 9.~~	Up to 3 storeys within the area coloured beige on Figure 8 ~~2-4 storeys for the site at the intersection of Maroondah Highway and Mooroolbark Road (the area coloured purple in Figure 8)~~	Lot Access Vehicle access to lots abutting arterial roads and Taylor Street must be provided from service roads, side or rear access lanes, access places or access streets. Direct lot access from Maroondah Highway, Mooroolbark Road and Taylor Street is prohibited **Mooroolbark Road frontage** Development will be setback from the existing alignment of Mooroolbark Road to allow for the future road widening. Lots and built form will be appropriately oriented to mitigate amenity impacts arising from the existing and future Mooroolbark Road environment. **Maroondah Highway frontage** ~~Development will provide an attractive and activated frontage to the corner of Maroondah Highway and Mooroolbark Road, creating a landmark for this gateway to Lilydale.~~ Lots and built form will orient away from ~~the precinct's northern interface~~Maroondah Highway and Taylor Street owing to the significant slope of the land and the proposed alignment of the Lilydale Bypass. **Railway line** Development adjacent to the railway line should address the rail interface considerations provided within the *VicTrack Interface Rail Development Guidelines* (2019) or its successor, where appropriate.
Precinct 2: Heritage Village	Development within the Heritage Precinct will support the retention and adaptation of significant built heritage elements. New built form within the precinct will be designed to sensitively integrate with identified heritage assets. Townhouses and small to medium-scale apartment buildings will be the predominant built form element, and will reference the scale of remnant, heritage significant industrial buildings and structures.	2-6 storeys within the area coloured tan on Figure 8	**Lot access** **Vehicle** access to lots abutting Melba Avenue must be provided from service roads, side or rear access lanes, access places or access streets. Direct lot access from Melba Avenue is prohibited **Railway line** Development adjacent to the railway line should address the rail interface considerations provided within the *VicTrack Interface Rail Development Guidelines* (2019) or its successor, where appropriate. **Quarry pit escarpment** Development in proximity to the quarry pit escarpment will respond sensitively to this recognised heritage element, providing views to the south and, where possible, down to the Escarpment Park below. **Melba Avenue Industrial Estate** Development will screen the back of industrial properties through the incorporation of a landscape buffer or boundary planting.

Precinct 3: Eastern Neighbourhood	The Eastern Neighbourhood will be designed as a model walkable community, with a mix of traditional (detached, small lot and/or dual occupancy) and medium density (terrace/town house and/or low to mid-rise apartment) dwellings.	Up to 3 storeys within the area coloured beige on Figure 8 Maximum height of 2 storeys within Sensitive Interface area coloured light green on Figure 8	**Box Hill Institute land** An east-west Boulevard Street will run along the boundary of the Box Hill Institute land, providing a direct connection to the public transport, food and beverage, and open space offerings within the Urban Core. **Eastern residential interface** The interface between existing residential properties and new development will be sensitively managed through the provision of 40 metre minimum lot depths for lots within the area coloured light green on Figure 8. A tree retention zone, as shown on Figure 5 will be applied to private lots. **Precinct 4: Urban Core** Medium density housing will be encouraged at the interface with the Urban Core to maximise the number of residents within a comfortable walkable catchment of the potential future train station and neighbourhood centre.

PRECINCT	BUILT FORM CHARACTER	PREFERRED HEIGHT	KEY INTERFACE TREATMENT
Precinct 4: Urban Core	The Urban Core will feature the highest built form on the site, owing to its distance from sensitive interfaces and proximity to the potential future train station, retail amenity and the Escarpment Park. The precinct will feature a diversity of housing typologies, including medium to higher density apartment, mixed use, terrace/town house and live/work opportunities.	2-12 storeys within the area coloured brown on Figure 8. Development in the precinct will transition from a lower scale at precinct interfaces to higher forms in the centre of the precinct and in proximity to the potential future train station.	**Railway line** Development adjacent to the railway line should address the rail interface considerations provided within the *VicTrack Interface Rail Development Guidelines (2019)* or its successor, where appropriate. **Box Hill Institute land** Built form adjacent to this interface will be designed to address and activate the Box Hill Institute land.

~~Table 4: Maroondah Highway-Mooroolbark Road Commercial Site Built Form Guidance~~

~~BUILT FORM CHARACTER~~	~~PREFERRED HEIGHT~~	~~PRESENTATION~~
~~The north-eastern corner of the site will provide a landmark building addressing the intersection of Mooroolbark Road and Maroondah Highway, acting as a gateway to the Lilydale Activity Centre.~~ ~~Refer to Figure 9.~~	~~Built form will present as 2-4 storeys, accommodating for the slope of the land~~	~~• Built form will highlight the corner through architectural features, increased height, variation in materials and/or articulation.~~ ~~• Active frontages will be provided to the north and west street interfaces.~~ ~~• The commercial development will provide a buffer between the highway interface and new residential development to the south.~~ ~~• Built form on the site will be oriented and designed to assist in ameliorating amenity impacts (such as traffic noise) to nearby sensitive uses.~~ ~~• Left in-left out vehicle access will be provided from Maroondah Hwy at the eastern end of the site.~~ ~~• Access from within the site may be provided from the south.~~ ~~• Landscaping should contribute to the site's attractiveness and sense of place.~~

Figure 8: Built Form and Urban Design Plan

Delete “Highway frontage commercial/mixed use, 2-4 storey building heigh range” shading and legend
Delete “Activation of main road intersection with commercial /mixed use
Add line and text “Vehicular access to Maroondah Highway prohibited” adjacent to Maroondah Highway

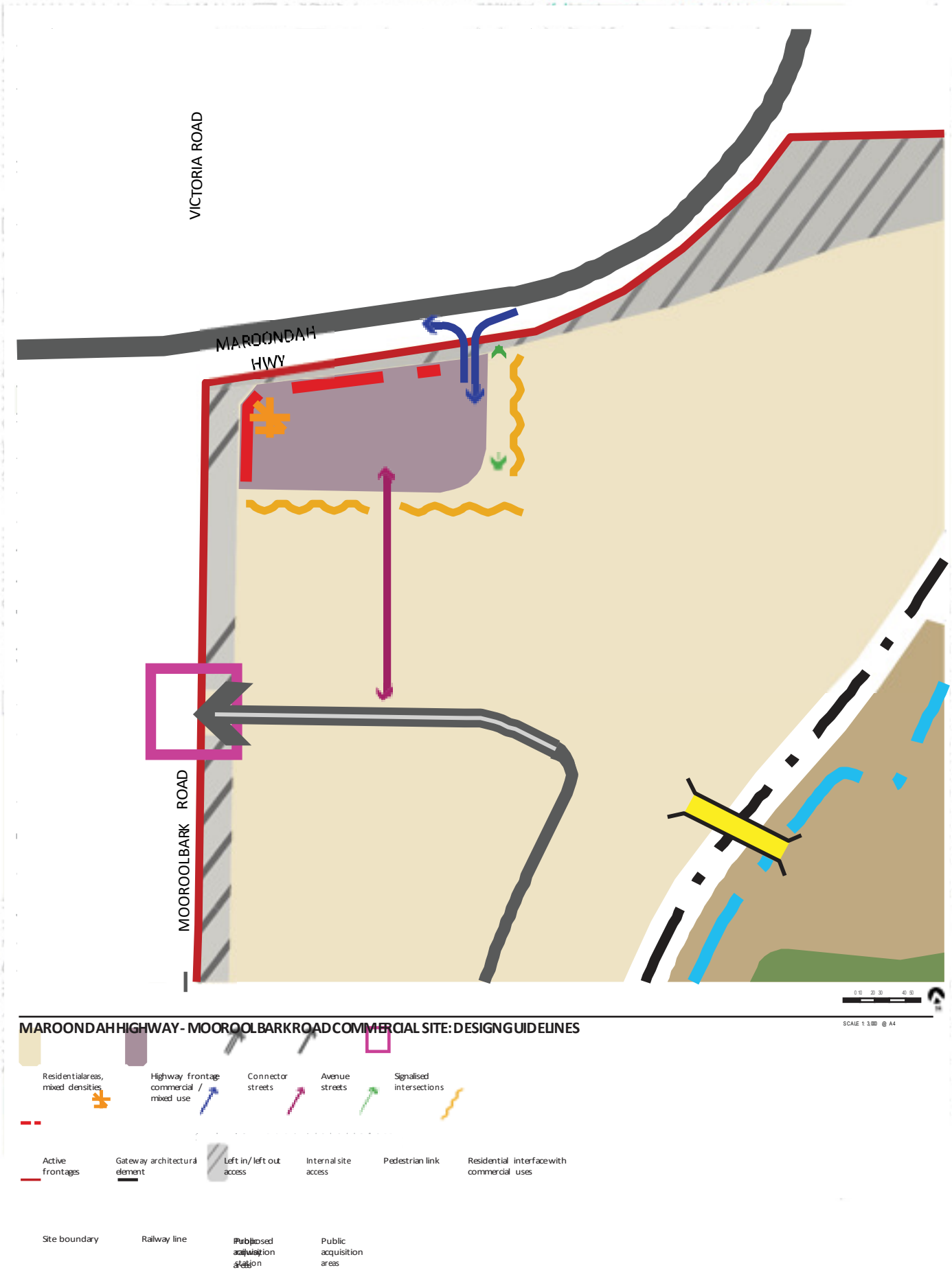


Figure 9: Mooroolbark Road Commercial Site: Design Guidelines

Delete Figure 9: Mooroolbark Road Commercial Site: Design Guidelines

4.7. HERITAGE

The local historical values of Lilydale Quarry (also known as Cave Hill Quarry) and the State-level significance of the built heritage will be appropriately recognised and managed, guided by the **Cave Hill Quarry Conservation Management Plan** (Lovell Chen, 2015).

Extant heritage buildings will be adaptively reused where practical and opportunities for the former use and development of the site to be interpreted in new development and landscape elements will be explored. This will facilitate an ongoing understanding and appreciation of the history and values associated with the place.

A whole of site Heritage Interpretation Strategy (Lovell Chen & Biosis) addresses historic (post contact) heritage and Aboriginal heritage, and establishes a recommended approach to the interpretation of cultural heritage values associated with the former Lilydale Quarry to inform precinct interpretation plans (as required).

OBJECTIVES	
O30	To ensure that the heritage values of Lilydale Quarry are considered and managed in a holistic way, recognising the significance of various elements and as identified in the *Cave Hill Quarry Conservation Management Plan (Lovell Chen, 2015)*.
O31	To ensure that the recognition, protection and adaptive reuse of the historic built form and significant landscape features is in line with its State-level heritage significance.
O32	To ensure an understanding of the site's history and significance is retained and interpreted as part of the site's development.
O33	To capitalise on the unique heritage of the site to deliver a series of unique open spaces, neighbourhoods and places.
O34	To support the reuse and adaptation of significant heritage fabric on the site, for tourism, retail, commercial, residential and community uses.
O35	For development to interpret the four distinct historic character areas comprising the Arrivals, Limestone Processing, Farming and Quarry areas generally consistent with the *Cave Hill Quarry Conservation Management Plan* (Lovell Chen, 2015) and informed by the Lilydale Quarry, former (Kinley) Heritage Interpretation Strategy (Lovell Chen & Biosis, 2020).

REQUIREMENTS	
R43	Retain and adaptively reuse the site's industrial and farming heritage structures for tourism, retail, commercial, residential and community uses, where feasible and appropriate.
R44	Adaptive reuse of historic built form must be in line with its heritage significance and be guided by policy in the *Cave Hill Quarry Conservation Management Plan (Lovell Chen, 2015)*.
R45	Interpretation elements must be generally consistent with *Lilydale Quarry, former (Kinley) Heritage Interpretation Strategy (Lovell Chen & Biosis, 2020)*.
R46	Development within each of the two key heritage zones, the Limestone Processing Precinct and the Farm Precinct (both located in Precinct 2), must be undertaken through a holistic approach to the design and development of the heritage zone, respectively.
R47	New buildings/structures and additions to buildings within the Limestone Processing Precinct (refer to Figure 10) are to be recessive in character and scale to ensure the prominence of significant buildings and the relationships between them.
R48	Landscaping within the Limestone Processing Precinct is to respond to the industrial character of the area. Large grassed areas should be avoided.
R49	Landscaping within the Farm Precinct is to be of a contemporary character that responds to the pastoral qualities of the area.
R50	A visual connection must be retained between the Tunnel entry and the rail line, on the alignment of the former rail siding.

GUIDELINES

G40	The following Principles identified in the *Lilydale Quarry, former (Kinley) Heritage Interpretation Strategy (Lovell Chen & Biosis, 2020)* should be applied to interpretation across the site: • Respect: for Aboriginal people, values and associations: – As related to interpretation at Kinley [Lilydale Quarry], primacy should be afforded to Aboriginal values and associations. • Integration: opportunities for site-wide themes – Themes, stories and motifs with site-wide resonance should be prioritised as the basis for interpretation at Kinley [Lilydale Quarry]. • Authenticity: evidence-based interpretation – Interpretation at Kinley [Lilydale Quarry] should be based on evidence of tangible and intangible cultural heritage values. Refer to the Interpretation Strategy for further guidance with respect to the application of these principles in each Precinct, which should inform the preparation of Precinct Interpretation Plans.

GUIDELINES

G41	Naming of roads and other site components (i.e. public open space) should be based on the site's history and significance, informed by the *Lilydale Quarry, former (Kinley) Heritage Interpretation Strategy (Lovell Chen & Biosis, 2020)*, and in line with 'Naming rules for places in Victoria – Statutory requirements for naming roads, features and localities', 2016 (or its successor), produced by the Office of Geographic Names.
G42	The Limestone Processing Precinct and the Farm Precinct (refer to Figure 10) can be treated differently in heritage terms, reflective of their particular heritage characteristics and the varying levels of heritage sensitivity of the buildings within them
G43	Development in the Farm Precinct should respond to historic patterns of the development in that part of the site.
G44	Aboriginal and post-contact cultural history should be recognised through the design of public places and infrastructure/appropriate interpretive installations. Opportunities should be explored for cultural heritage interpretation trails along public path networks and/or design of local parks proposed in areas of known post-contact cultural history or areas of Aboriginal cultural heritage sensitivity, in consultation with relevant stakeholders.

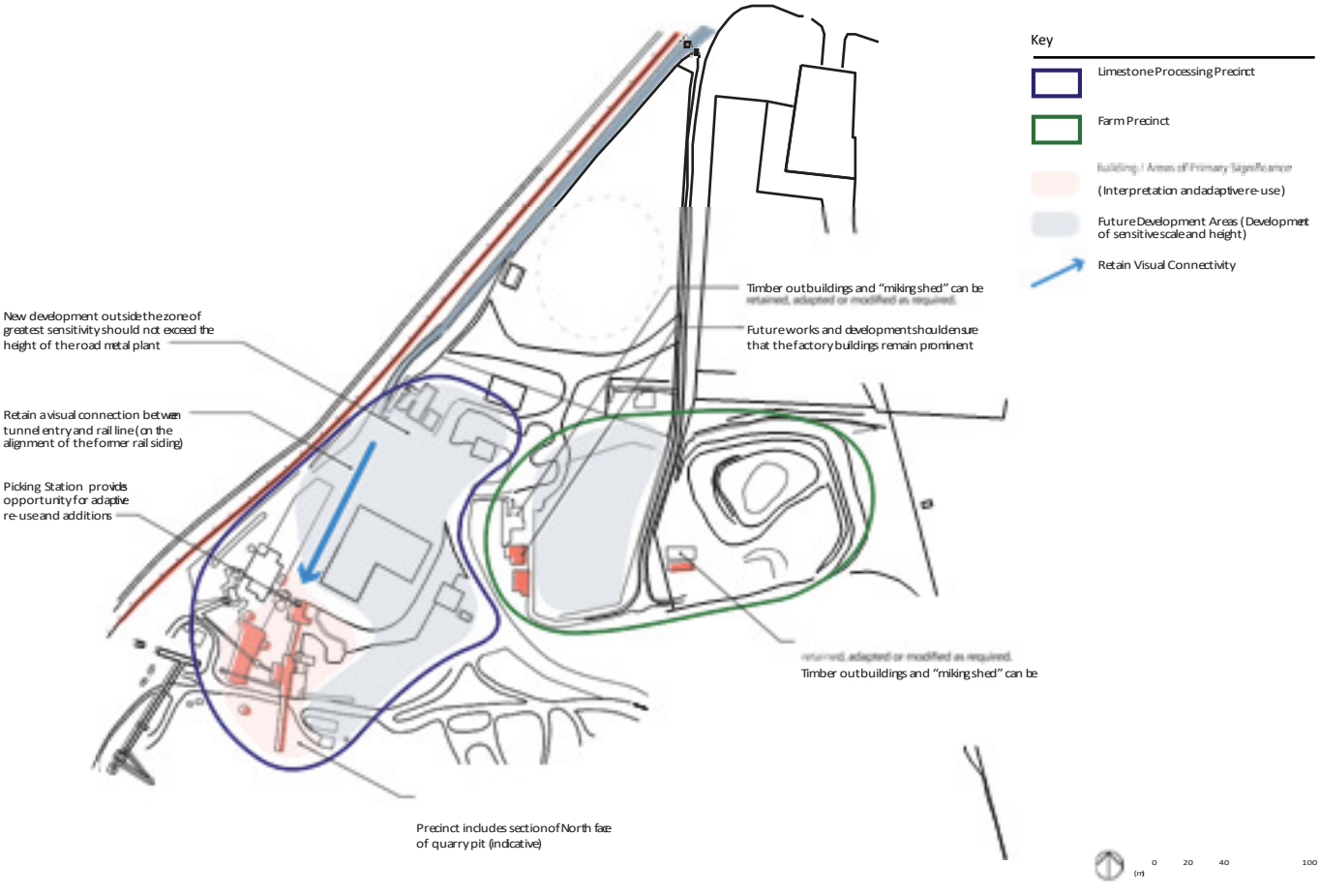


Figure 10 - Heritage Plan (source: Lovell Chen and Roberts Day)

4.8. INFRASTRUCTURE & STAGING

4.8.1. Development Staging

Staging of development will generally be undertaken in accordance with the Indicative Staging Plan (see Figure 11). A logical approach to development has been proposed, which has been informed by the attributes and constraints of the site, as follows:

- Stage 1: Approved. Subdivision and development underway (area not included in the CDP).
- Stage 2: Balance land (143 hectares), which is likely to be delivered generally in accordance with the following order:
  1. **Precinct 1:** The Western Neighbourhood will be developed as the first area of Stage 2, given its location adjoining the existing residential neighbourhoods to the west and relative lack of encumbrances and availability of service infrastructure.
  2. **Precinct 2:** Comprising the Heritage Village Precinct, this area will follow as a logical continuation of the Western Neighbourhood's development front at the north of the site.
  3. **Precinct 3:** The Eastern Neighbourhood currently includes much of the overburden that is currently being used to fill the quarry pit. Once the pit has been filled, much of Precinct 3 will be available for development. Depending on the progress of earthworks, the development of parts of Precinct 1, 2 and 3 may occur concurrently.
  4. **Precinct 4:** The final area of the site to be developed will be the Urban Core, which is reliant on the satisfactory settlement of filled land to accommodate this precinct's anticipated built form and infrastructure.

Figure 11 illustrates the proposed staging of development. This is to be considered indicative only and will be further refined through the planning permit application process. This does not preclude two (or more) precincts from being developed concurrently.

4.8.2. Infrastructure

A range of infrastructure types and items will be required to support the development of the former Lilydale Quarry.

The infrastructure items and services to meet the needs of the development are to be provided through various mechanisms, including:

- Subdivision construction works by developers
- Utility service provider requirements
- An Infrastructure Contribution Agreement
- Capital works projects by Council
- State Government agencies and nongovernment organisations
- Works-in-kind (WIK) projects undertaken by developers on behalf of Council or State government agencies.

The following section sets out the type, quantity and responsibilities for infrastructure delivery.

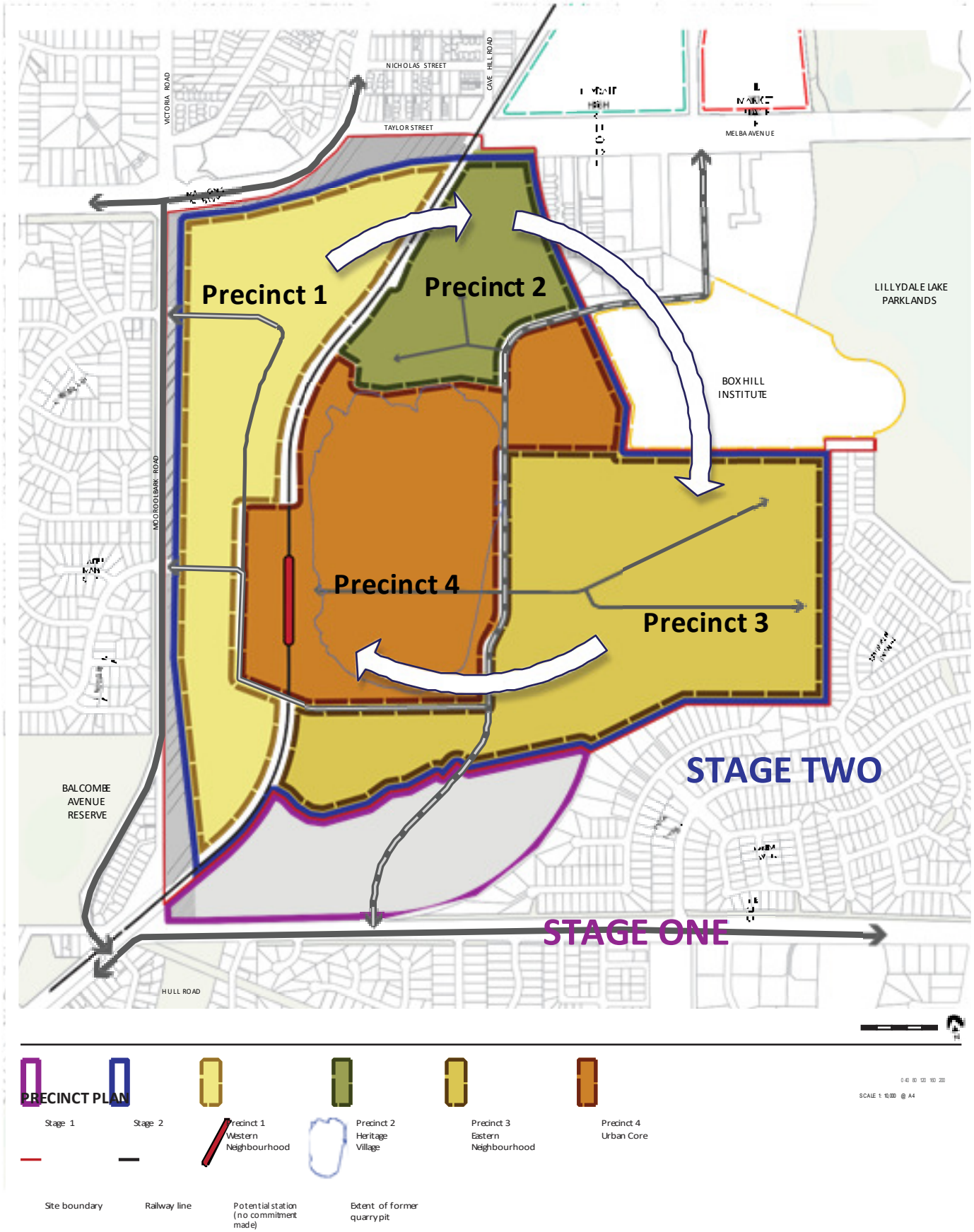


Figure 11: Indicative Staging Plan

OBJECTIVES	
O36	To ensure that development staging is co-ordinated for efficient delivery.
O37	To ensure that first-acting development does not prevent the realisation of cohesive and integrated neighbourhoods.
O38	To deliver infrastructure across the site in a coordinated way that encourages early uptake of sustainable transport options and minimises impacts between adjacent development stages.

REQUIREMENTS	
R51	New development within the site must provide and meet the total cost of delivering the following infrastructure: • Connector streets and local streets • Local bus stop infrastructure (~~where locations have been agreed in writing by~~at locations to be specified by the Head, Transport for Victoria ~~Public Transport Victoria~~) • Landscaping of all existing and future roads and local streets • Intersection works and traffic management measures along arterial roads, connector streets, and local streets (except those projects included in the Former Lilydale Quarry Infrastructure Contributions Agreement) • Local shared, pedestrian and bicycle paths along local roads, connector streets, utilities easements, local streets, waterways and within local parks including bridges, intersections, and barrier crossing points (except those projects included in the Former Lilydale Quarry Infrastructure Contributions Agreement) • Bicycle parking • Appropriately scaled lighting along all roads, major shared and pedestrian paths, and traversing the open space network • Local drainage system and water quality systems • Local street or path crossings of waterways • Infrastructure as required by utility services providers, including water, sewerage, drainage (except where the item is funded through a DSS), electricity, gas and telecommunications.

REQUIREMENTS	
R52	All public open space must be finished to a standard that satisfies the requirements of the responsible authority prior to the transfer of the public open space, including but not limited to: • Removal of all existing disused structures, foundations, pipelines and stockpiles • Clearing of rubbish and environmental weeds and rocks, levelled, topsoiled and grassed with warm climate grass • Provision of water tapping, potable and recycled water connection points • Sewer, gas and electricity connection points to land identified as sports reserves and community facilities • Trees and other plantings • Vehicle exclusion devices (fence, bollards or other suitable methods) and maintenance access points • Installation of park furniture such as barbeques, shelters, rubbish bins, local scale playground equipment, appropriate paving and pedestrian and cycle paths
R53	Any land subject to an Environmental Audit Overlay and transferred to the Responsible Authority must be accompanied by a certificate of environmental audit in accordance with Part IXD of the *Environment Protection Act 1970*.
R54	Development staging must provide for the timely provision and delivery of: • Connector streets • Street links between properties, constructed to the property boundary • Public land areas, including open space reserves • Connection of the on- and off-road pedestrian and bicycle network
R55	Staging will be determined largely by the development proposals on land within the precinct and the availability of infrastructure services. Development applications must demonstrate how the development will: • Integrate with adjoining developments, including the timely provision of road and walking/cycling path connections, to a practical extent • How local open space will be provided in the early stages of development • Provide sealed road access to each new allotment and constructed to a residential standard • Deliver any necessary trunk services extensions, including confirmation of the agreed approach and timing by the relevant service provider.

CI / DI	PROJECT ID	PROJECT SUMMARY	DESCRIPTION	TRIGGERS	DELIVERY RESPONSIBILTY
INTERSECTIONS					
DI	DI-RD-01	Mooroolbark Road and Churchill Drive – new intersection	Construction of a new signalised intersection to provide site access and associated land acquisition within the site.	~~It is assumed that interim access to Precinct 1 (Western Neighbourhood) is to be provided via Taylor Street.~~ ~~If DI-RD-01 is delivered before DI-RD-02, DI-RD-01 is to be constructed prior to the delivery of the 330th dwelling in Precinct 1.~~ ~~If delivered subsequent to DI-RD-02, DI-RD-01 is to be constructed prior to the delivery of the 1,000th dwelling.~~ As specified in the relevant Precinct Integrated Traffic and Transport Management Plan	Developer
DI	DI-RD-02	Mooroolbark Road and Landscape Drive – new intersection	Construction of a new signalised intersection to provide site access and associated land acquisition within the site.	~~It is assumed that interim access to Precinct 1 (Western Neighbourhood) is to be provided via Taylor Street.~~ ~~If DI-RD-02 is delivered before DI-RD-01, DI-RD-02 is to be constructed prior to the delivery of the 330th dwelling in Precinct 1.~~ ~~If delivered subsequent to DI-RD-01, DI-RD-02 is to be constructed prior to the delivery of the 1,000th dwelling.~~ As specified in the relevant Precinct Integrated Traffic and Transport Management Plan	Developer
DI	DI-RD-03	Hull Road/North-South Connector Road intersection upgrade (ultimate)	Construction of the ultimate intersection at Hull Road/North-South Connector Road (to be fully constructed with Stage 1 works).	To be delivered in accordance with the existing agreed commitment reached under the Permit for Stage One.	Developer
DI	DI-RD-04a	Melba Avenue and Hutchinson St intersection – new roundabout	Construction of a new roundabout including associated land acquisition.	The street connection is to be delivered prior to DI-RD-03 exceeding a Degree of Saturation (DoS) of 0.90 in either the morning or evening commuter peak periods.	Developer
DI	DI-RD-04b	Proposed Connector and Proposed Connector intersection – new roundabout	Construction of a new roundabout including associated land acquisition.	The street connection is to be delivered prior to DI-RD-03 exceeding a DoS of 0.90 in either the morning or evening commuter peak periods.	Developer
DI	DI-RD-05	Hutchinson Street and John Street intersection upgrade	Construction of minor upgrade to existing intersection via removal of on-street parking adjacent to intersection, signal phasing and timing optimisation. No land acquisition required.	Once DI-RD-04/09 & DI-RD-10 works are fully delivered, the DI-RD-05 works will be triggered. Thus, DI-RD-05 works are to be constructed concurrently with DI-RD-04/09.	Council
DI	DI-RD-06	Maroondah Highway and Mooroolbark Road intersection upgrade	Construction of upgrade to existing intersection.	As specified in the relevant Precinct Integrated Traffic and Transport Management Plan~~To be constructed prior to the delivery of the 400th dwelling in Precinct 1.~~	Developer by agreement with DoT (TBC)

DI	DI-RD-07a	Mooroolbark Road and Hull Road intersection (subject to feasibility of DI-RD-07b)	Construction of upgrade existing intersection and associated land acquisition.	As specified in the relevant Precinct Integrated Traffic and Transport Management Plan ~~To be constructed prior to the delivery of the final stage within Precinct 1 (Western Neighbourhood).~~	Developer

CI / DI	PROJECT ID	PROJECT SUMMARY	DESCRIPTION	TRIGGERS	DELIVERY RESPONSIBILTY
INTERSECTIONS					
DI	DI-RD-07b	Mooroolbark Road and Hull Road intersection – bridge widening (subject to feasibility)	Works to the existing rail bridge to facilitate proposed road works under DI-RD-07a.	As specified in the relevant Precinct Integrated Traffic and Transport Management Plan~~To be constructed prior to the delivery of the final stage within Precinct 1 (Western Neighbourhood).~~	Developer
DI	DI-RD-08	Hull Road and Swansea Road intersection upgrade	Construction of a minor upgrade to existing intersection to provide for a right turn lane from Hull Road to Swansea Road.	To be delivered prior to the delivery of the first dwelling in any stage east of the railway line (within Precincts 2, 3 & 4).	Council
COLLECTOR AND MAJOR ROADS					
DI	DI-RD-09	North South Connector Road extension	Construction of a new connector road from the site boundary to extent of works of item RD-04a and associated land acquisition.	The street connection is to be delivered prior to DI-RD-03 exceeding a DoS of 0.90 in either the morning or evening commuter peak periods.	Council to provide land in its ownership. Developer to acquire land in other ownership.
DI	DI-RD-10	North South Connector Road	Construction of a new connector road within the site from the northern-eastern Site boundary to the southern Site boundary (Stage 1) and associated land provision.	To be delivered sequentially as adjacent development progresses.	Developer
BRIDGES					
DI	DI-BR-01	East West Road bridge (rail crossing)	Construction of a new road bridge across the rail-line in the southern section of the site.	To be constructed once the delivery of the final stage within Precinct 1 (Western Neighbourhood) is complete and development has commenced in Precinct 4 (Urban Core).	Developer
DI	DI-BR-02	Pedestrian bridge (rail crossing)	Construction of a new pedestrian bridge across the rail-line in the northern section of the site.	As specified in the relevant Precinct Integrated Traffic and Transport Management Plan~~At the time when urban core is fully built out~~.	Developer
DRAINAGE					
DI	DI-DR-01	Drainage works for the Melba Avenue catchment	Construction of drainage works external to the Site on land owned by Council.	When required to meet the drainage needs of the relevant drainage catchment (staged delivery may be suitable).	Land provided by Council at no cost to Developer
DI	DI-DR-02	Drainage works for the Lilydale Lake catchment	Construction of drainage works and associated land provision within the Site.	When required to meet the drainage needs of the relevant drainage catchment (staged delivery may be suitable).	Developer

CI / DI	PROJECT ID	PROJECT SUMMARY	DESCRIPTION	TRIGGERS	DELIVERY RESPONSIBILTY
DRAINAGE					
DI	DI-DR-03	Drainage works for the Hull Road catchment.	Construction of drainage works and associated land provision within the Site.	When required to meet the drainage needs of the relevant drainage catchment (staged delivery may be suitable).	Developer
DI	DI-DR-04	Overland Flow Path to Lilydale Lake.	Construction of an overflow path from the eastern edge of the Site through Box Hill Institute of TAFE site to the Lilydale Lake and associated land acquisition (approx. 35m wide by 100m long).	When required to meet the drainage needs of the relevant drainage catchment (staged delivery may be suitable).	Developer to acquire or agree access to 0.35 ha in other ownership.
OPEN SPACE					
DI	DI-OS-01	Active open reserve	Provision of active open space reserve (6.77ha), including land provision and improvements.	Prior to Statement of Compliance for the lot that creates the 5,000th resident (75% development) in Stage 1 and Stage 2 of Kinley.	Developer
DI	DI-OS-02	Passive open spaces	Provision of passive open space reserves, including land provision (5.81ha) and improvements.	With adjacent stage of subdivision	Developer
DI	DI-OS-03	Civic plazas	Provision of urban space / civic plazas, including land provision (1.7ha) and improvements.	With adjacent stage of subdivision	Developer
DI	DI-OS-04	Rail trail linear open space	Construction of the rail trail linear open space throughout the site, including land provision (1.38ha) and improvements.	With adjacent stage of subdivision	Developer
COMMUNITY FACILITIES					
DI	DI-CF-01	Community facility	Construction of an early years and community facility within the site and associated land provision.	Prior to Statement of Compliance for the lot that creates the 5,000th resident (75% development) in Stage 1 and Stage 2 of Kinley.	Developer

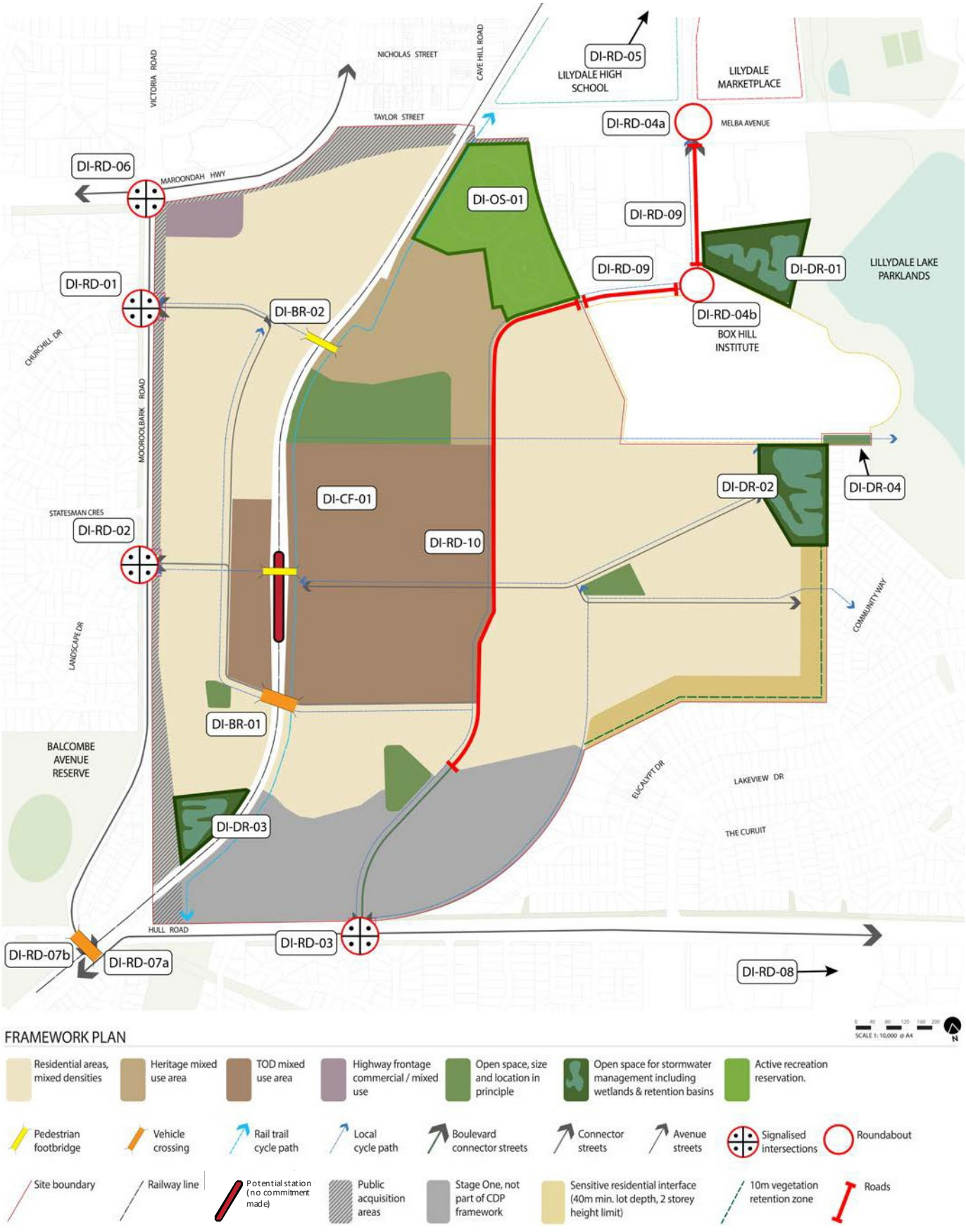


Figure 12: Infrastructure Framework Plan

Delete "Highway frontage commercial/mixed use" shading and legend
Add line and text "Vehicular access to Maroondah Highway prohibited" adjacent to Maroondah Highway
Change "TOD mixed use area" to "Mixed use area (potential TOD)" in legend

APPENDICES

Appendix A:
Land Budget

Appendix B:
Precinct Yield Table

Appendix C:
Glossary

Appendix D:
Street Cross Sections

APPENDIX A - LAND BUDGET

An indicative land use budget has been produced for the development of the former Lilydale Quarry.

LAND BUDGET	AREA (HA)	% OF SITE AREA	% OF NDA+POS
Site Area	**143.81**	**100.0%**	
Encumbered Land			
Public Acquisition Areas	5.73	4.0%	
Retention Basin & Wetlands	3.68	2.6%	
CHMP Reservation	0.04	0.0%	
Gross Developable Area	**134.37**	**93.4%**	
Active recreation	6.77	4.7%	5.2%
Passive open space[1]	5.81	4.0%	4.4%
Urban Parks / Civic PlazA	1.70	1.2%	1.3%
Rail Trail Linear Open Space	1.38	1.0%	1.1%
Total POS	*15.67*	*10.9%*	*11.9%*
North-south connector road	3.01	2.1%	
Net developable area	**115.69**	**80.4%**	

Source: Lilydale Quarry Draft Concept Plan Land Budget and Yield Analysis Summary Table, Roberts Day, 14 October 2020;

1. Includes Major Parkland, Neighbourhood Parkland, Local Park.

APPENDIX B - PRECINCT YIELD SUMMARY TABLE

PRECINCT	DWELLINGS	NON-RESIDENTIAL
1 – Western Neighbourhood	600 dwellings ~~(approx.)~~ To be revised in consideration of deletion of non-residential uses) A mix of: • Conventional density (detached and semi-detached housing) • Medium density (town houses)	~~Mixed use / commercial (Maroondah Highway – Moorooolbark Road commercial site):~~ • ~~Approx. 1.3 hectares~~
2 – Heritage Village	200 dwellings (approx.) A mix of: • Medium density (town houses) • Higher density (low-rise apartment buildings)	Mixed use / commercial uses throughout heritage precinct built form, including office and food and drink premises Retail floorspace (Shop): approx. 1,000 sqm leasable floor area
3 – Eastern Neighbourhood	900 dwellings (approx.) A mix of: • Conventional density (detached and semi-detached housing) • Medium density (town houses)	-
4 – Urban Core	1,300 dwellings (approx.) A mix of: • Medium density (town houses) • Higher density (low and mid-rise apartment buildings)	~~TOD~~ Neighbourhood Activity Centre: • Approx. 4.2 hectares, including: supermarket and speciality retail (approx. 5,000 sqm leasable floor area), car parking, office, and food and drink premises Provision for Proposed Government Specialist School: • Approx. 1.9 hectares

Note: the dwelling and non-residential yield figures referenced in the table above are indicative only. Indicative precinct yields may be exceeded subject to further assessment at the planning permit stage.

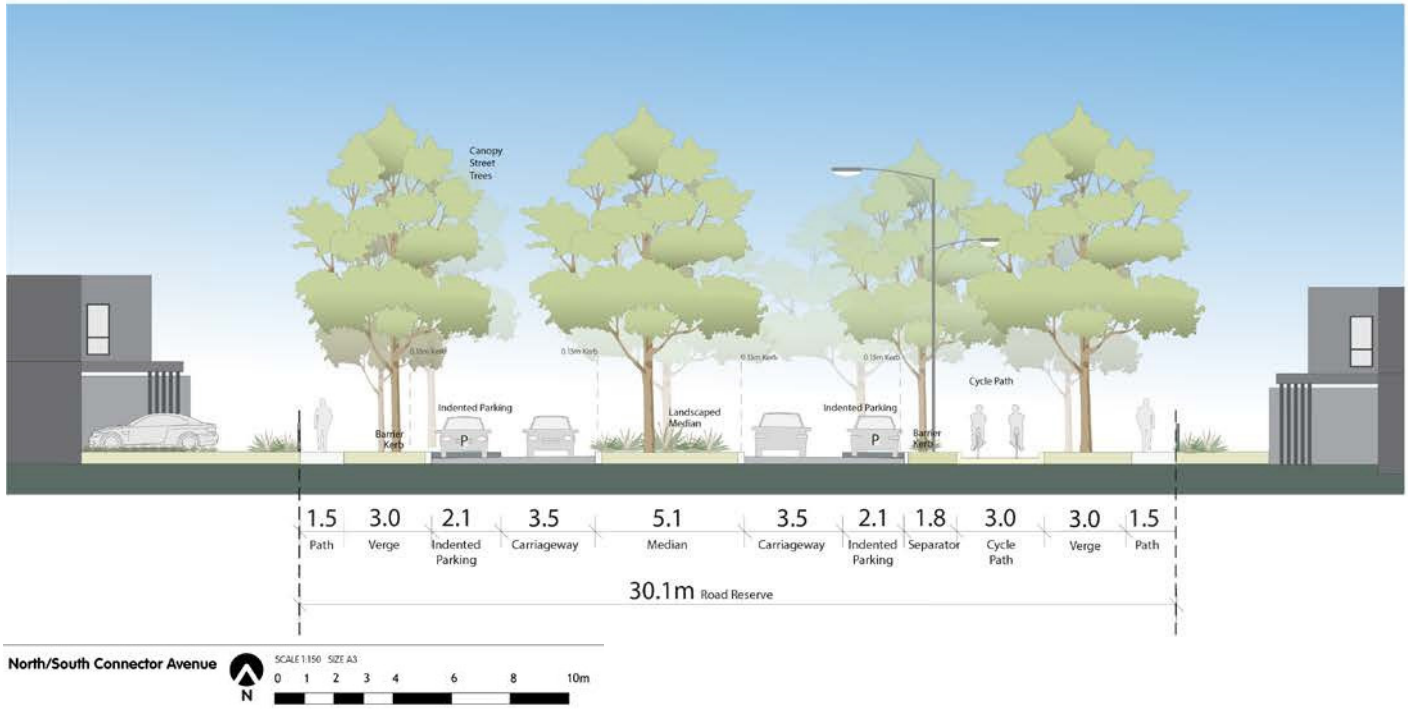
APPENDIX C - GLOSSARY

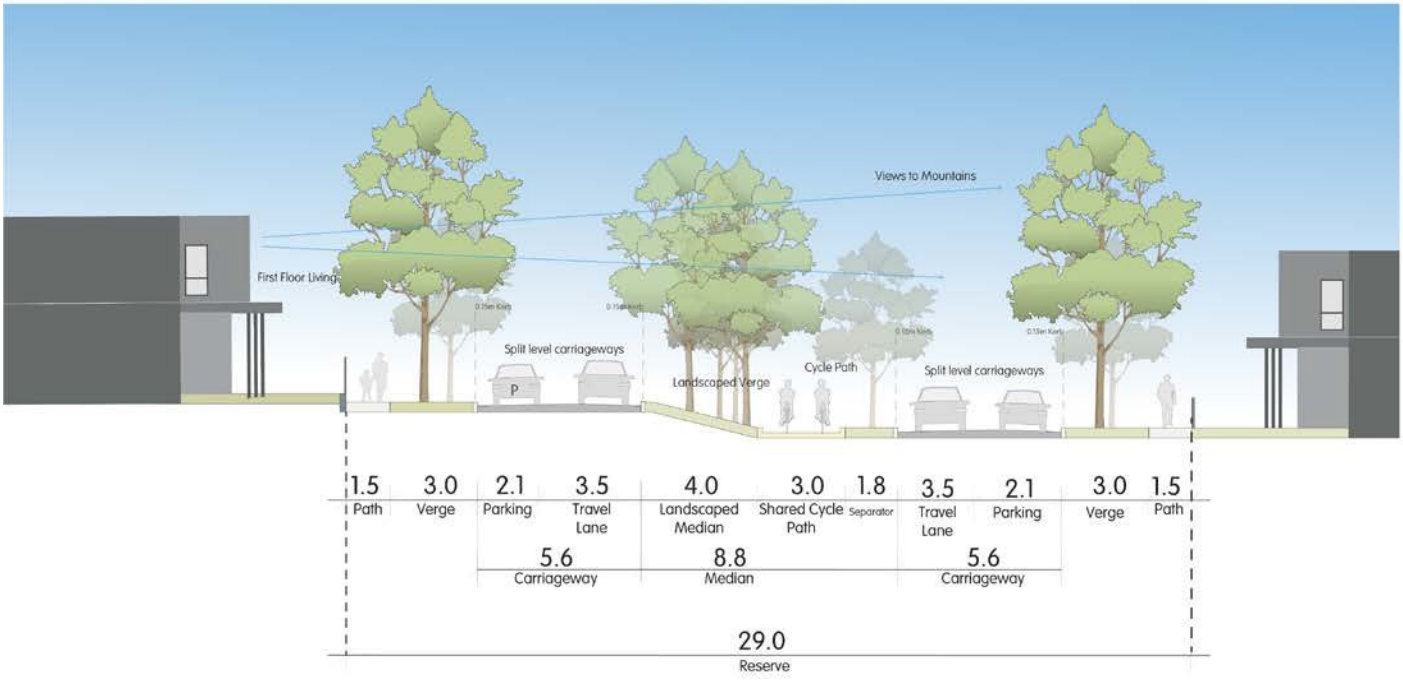
Activity Centre	Activity centres are community hubs where people shop, work, meet, relax and often live. They range in size, from local neighbourhood shopping strips to centres that include universities and major regional shopping malls. In this CDP, Activity Centre refers to existing centres outside the former Lilydale Quarry site (e.g. Lilydale Major Activity Centre, Mooroolback Activity Centre).
Arterial Road	A higher order road providing for high volumes (over 12,000 vehicles per day) at relatively high speeds (60 km/h or higher) typically used for inter-suburban journeys and linking to freeways, and identified under the Road Management Act 2004. All declared arterials are managed by the state government. In this CDP, Maroondah Highway and Mooroolbark Road are declared as Arterial Roads and Taylors Road and Melba Avenue will become arterial roads in the long term when developed as the Lilydale Bypass. There are no arterial roads within the subject site.
Avenue Street	Similar in function to a local access street for vehicles with volumes in the order of 2,000 to 3,000 vehicles per day, but will provide a wider verge to accommodate increased landscaping and active transport links. Shown in Appendix D Street Cross Sections as Avenue St.
Box Hill Institute Land	Box Hill Institute is a vocational and higher education provider with a campus located to the northeast of and sharing a boundary with the subject site.
Boulevard Connector Street	Similar in function to a connector street, but designed to cater for higher volumes than a typical connector road (7,000 to 12,000 vehicles per day), while not necessitating arterial road status. Central delineation will provide a dual carriageway, with one traffic lane in each direction, with indented on-street parking and a separated dedicated bike path. Shown in Appendix D Street Cross Sections as North/South Connector Avenue.
Boulevard Street	A higher order local access street that will provide key residential linkages. Similar in function to an avenue street. The road reserve of boulevard streets are proposed to comprise of a cross section similar to a boulevard connector street, with a dedicated cycle path possibly provided in the central landscaped median. Shown in Appendix D Street Cross Sections as Boulevard Street.
Co-Location	Adjoining land uses to enable complementary programs, activities and services and shared use of resources and facilities. For example, the co-location of schools and active open space.
Community Infrastructure	Infrastructure provided by government or non-government organisations to accommodate a range of community support services, programs and activities. This includes facilities for education and learning (e.g. government and non-government schools, universities, adult learning centres); early years (e.g. preschool, maternal and child health, childcare); health and community services (e.g. hospitals, aged care, doctors, dentists, family and youth services, specialist health services); community (e.g. civic centres, libraries, neighbourhood houses); arts and culture (e.g. galleries, museums, performance space); sport, recreation and leisure (e.g. swimming pools); justice (e.g. law courts); voluntary and faith (e.g. places of worship) and emergency services (e.g. police, fire and ambulance stations).
Connector Street	A lower order road providing for low to moderate volumes (3,000 to 7,000 vehicles per day) and moderate speeds (i.e. 50 km/h), linking local streets to the arterial network managed by the relevant local council. Shown in Appendix D Street Cross Sections as Connector St.
Heritage Village	A hub of social and cultural activity, this compact mixed-use quarter celebrates the heritage artefacts and built form re-purposing elements for active uses including food and beverage destinations and creative industries.

APPENDIX C - GLOSSARY (continued)

Higher Density Housing	Housing with an average density of around 75-125 dwellings per net developable hectare (e.g. apartments).
Housing Density (Net)	The number of dwellings divided by net developable area.
Infrastructure Contributions Agreement	Document that sets out the contributions expected from each individual landowner to fund the provision of works, services and facilities in relation to the development of land in the area to which the plan applies.
Land Budget Table	A table setting out the total site area, net developable area and constituent land uses proposed within the site.
Linear Open Space Network	Corridors of open space, mainly along waterways that link together, forming a network.
Local Access Street	Lower order streets providing access to individual properties in the local area, with localised pedestrian and cycle movements. Volumes and speeds are low, in the order of under 2,000 vpd and 30 – 50 km/h.
Lot	A part (consisting of one or more pieces) of any land (except a road, a reserve, or common property) shown on a plan, which can be disposed of separately and includes a unit or accessory unit on a registered plan of strata subdivision and a lot or accessory lot on a registered cluster plan.
Medium Density Housing	Housing with an average density of around 35-50 dwellings per net developable hectare (e.g. townhouses).
Native Vegetation	Plants that are indigenous to Victoria, including trees, shrubs, herbs, and grasses.
Net Developable Area	Total amount of land within the Precinct that is made available for development of housing and employment buildings, including lots and local streets. Total Precinct area minus community facilities, schools and educational facilities and open space, arterial roads and encumbered land. Small local parks defined at subdivision stage are included in net developable area.
Principal Public Transport Network	A high-quality public transport network that connects Principal and Major Centres, and comprises the existing radial fixed-rail network, extensions to this radial network and new cross-town bus routes.
Public Open Space	Land that is set aside in the framework plan for public recreation or public resort, or as parklands, or for similar purposes. Incorporates active and passive open space.
Quarry Pit	Site of former quarrying activity, a pit at the centre of the site, currently in the process of being back-filled to development standards.
Sporting Reserves	Land set aside for the specific purpose of formal/organised club-based sports.
Town Centre	The mixed-use, urban quarter adjacent to the potential future train station in Precinct 4 will provide higher density living in a range of apartment and townhouse forms. A mixed-use main street will form the commercial spine of the Town Centre providing the site's focus for local business, services, commercial and retail-based employment and social interaction. A compact urban plaza will define the heart of the Town Centre.

APPENDIX D - Street Cross Sections





Boulevard Street

SCALE 1:150 SIZE A3

N

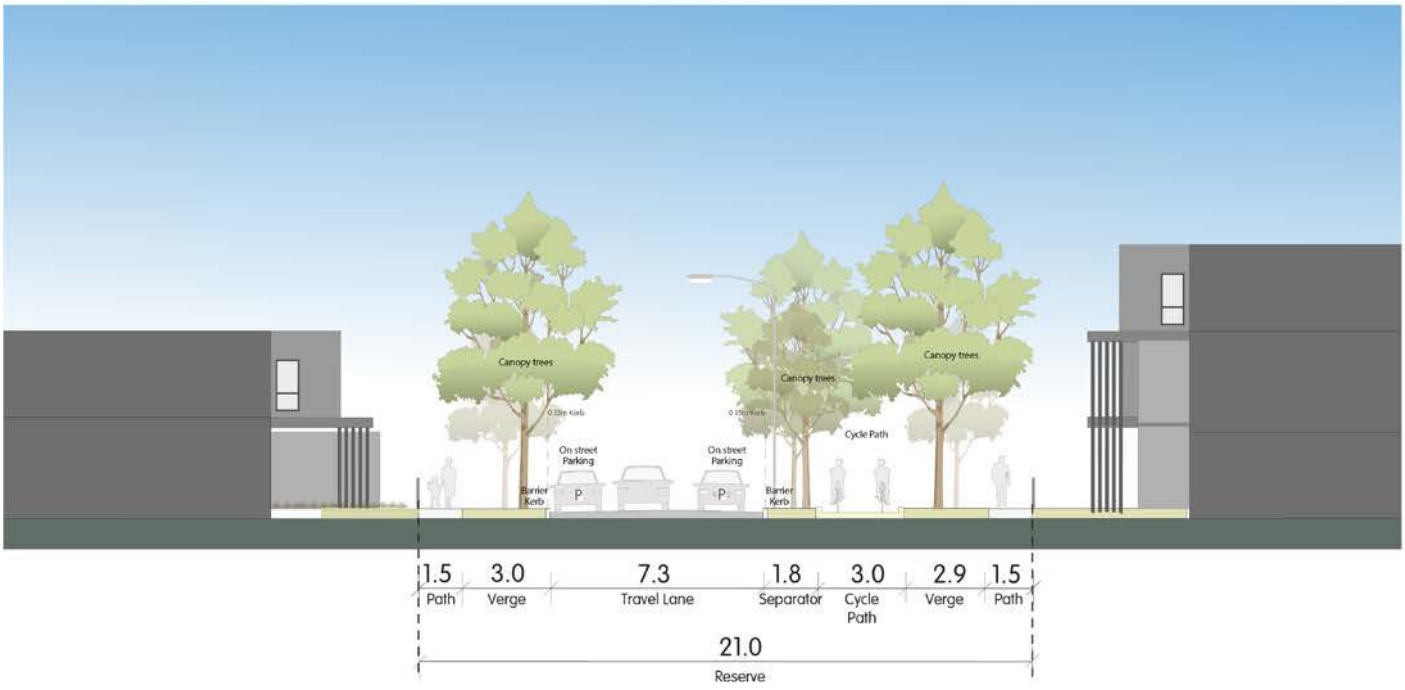
0 1 2 3 4 6 8 10m

Boulevard Street - Alternative

SCALE 1:150 SIZE A3

N

0 1 2 3 4 6 8 10m



Avenue St with Cycle Path

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