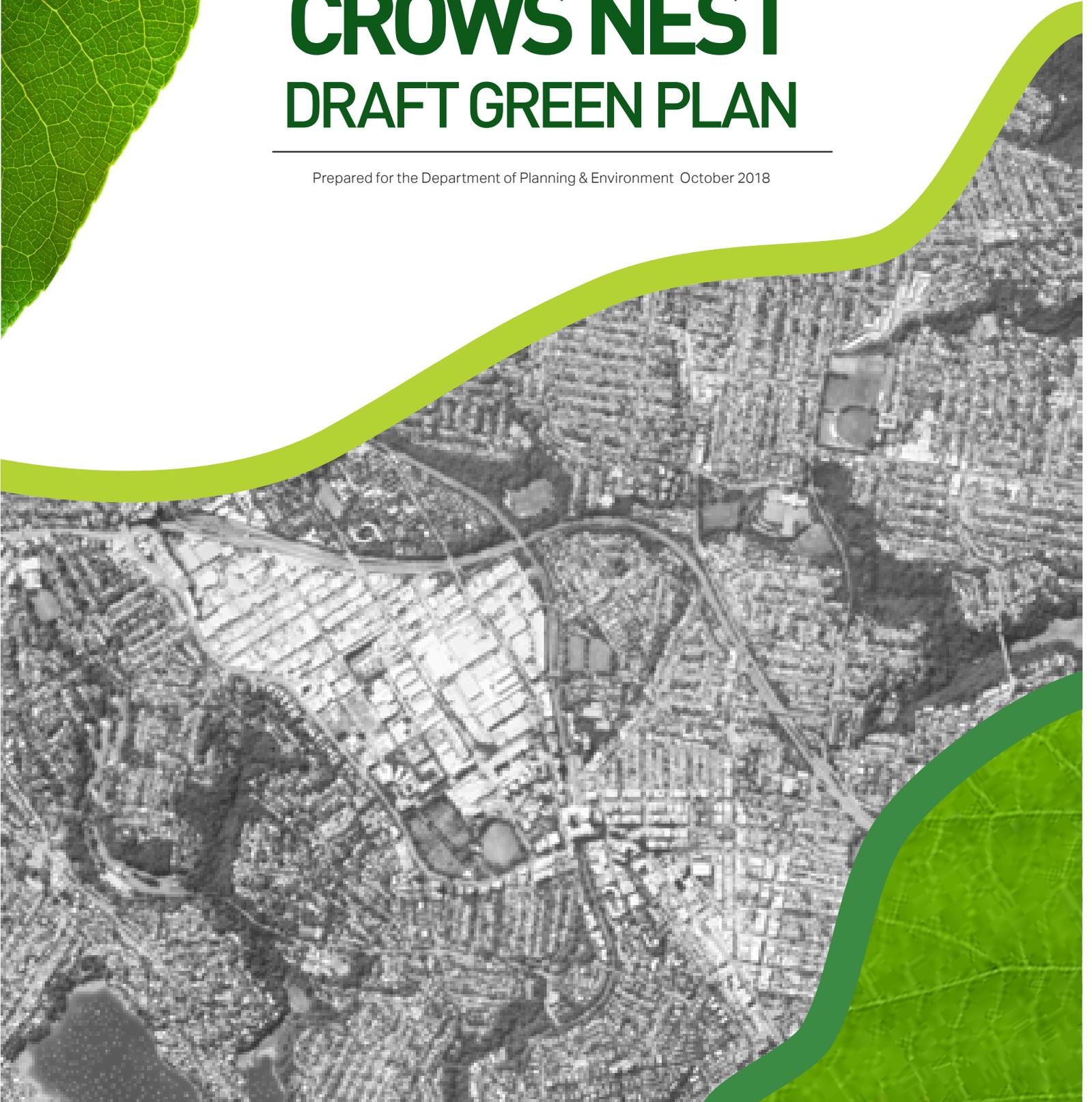
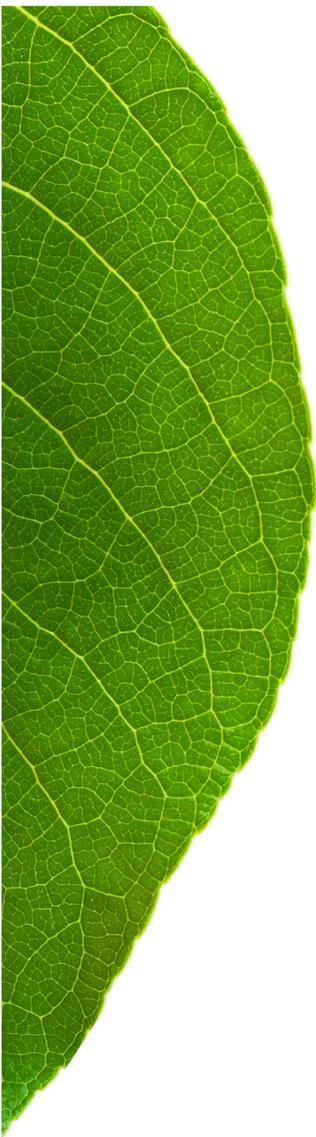




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ST LEONARDS CROWS NEST DRAFT GREEN PLAN

Prepared for the Department of Planning & Environment October 2018



Quality Information

Document Name	Reference	Revision	Prepared for	Prepared by	Date	Reviewed by
St Leonards Crows Nest Draft Green Plan	60563041	Draft for Exhibition	Department of Planning and Environment	AECOM	October 2018	Department of Planning and Environment

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1.0 EXECUTIVE SUMMARY

The expected population growth of St Leonards and Crows Nest provides the opportunity to address the demands for open space and recreational activities. The draft St Leonards Crows Nest Plan 2036 (Draft 2036 Plan) provides an opportunity for coordinated cross municipal boundary planning for open space and urban tree canopy cover.

The draft Green Plan provides a framework for the provision of new open space and open space infrastructure, together with an integrated urban tree canopy network and green links.

The open space infrastructure initiatives are identified in this draft Green Plan and classified into one of three categories:

- Committed Initiatives
- Initiatives for Investigation
- Visionary Initiatives

This draft Green Plan process includes:

- Background study of the current urban design context.
- Investigation of current open space and urban tree canopy provision.
- Data collection and analysis of the strategic planning context and existing statutory planning controls.
- Consideration of the proposed changes to zoning, new forecasted dwellings and subsequent population growth.

In assessing the background research, we have identified the following key elements for St Leonards and Crows Nest:

- The Green Plan and guiding principles are built upon and synthesise previous planning strategies with major community needs. The overarching vision will focus on identifying new opportunities for an improved network of open space based on accessibility, quality and safety as key drivers. Moreover the vision will underline the importance of defining structured urban tree canopy coverage to enhance liveability, health and well-being.
- The Open Space Plan in this document proposes

opportunities for improved accessibility, safety and quality of the existing open space. The proposal includes potential acquisition of private lands to improve accessibility to public open space. The definition of green and blue links that will provide water management, biodiversity, streetscape amenity and the enhancement of the Foreshore to Foreshore link.

- The new open space provision will equate to **8.57ha of new open space** with a future population estimate of 26,400 people. This is achieved through initiatives such as providing pedestrian focused streets that are comparable to linear park environments and quality laneway treatments that provide for passive recreation and high quality outdoor experiences.
- The Urban Tree Canopy Plan identifies a new urban tree canopy strategy focusing on public land and following a set of technical assumptions. It investigates the future provision of urban tree canopy coverage that could be achieved by planting new trees on road corridors and on existing and possible future open spaces. The Urban Tree Canopy Plan **proposes a total of 2,038 new trees** to be added to public areas within St Leonards & Crows Nest in order to achieve:
 - 16% tree canopy in the Industrial area
 - 25.7% tree canopy in the Urban area
 - 32.7% tree canopy in the Heritage Residential area

This urban tree canopy is supported by the private urban tree canopy which plays an important role in contributing to the overall urban tree canopy cover.

2.0 SETTING THE SCENE

2.1 INTRODUCTION

This draft Green Plan has been prepared to guide the planning and design of open space and urban tree canopy for St Leonards and Crown Nest. The feedback received from the local community and from North Sydney, Lane Cove and Willoughby Councils during development of the draft Local Character Statement underlines the high importance of the provision of open space and the expansion of the urban tree canopy for residents in this area.

This draft Green Plan will set the foundation for future decisions to be made, strengthening the open space network and providing for the recreation needs of the community now and into the future. The draft Green Plan will also promote the expansion of the private urban tree canopy.

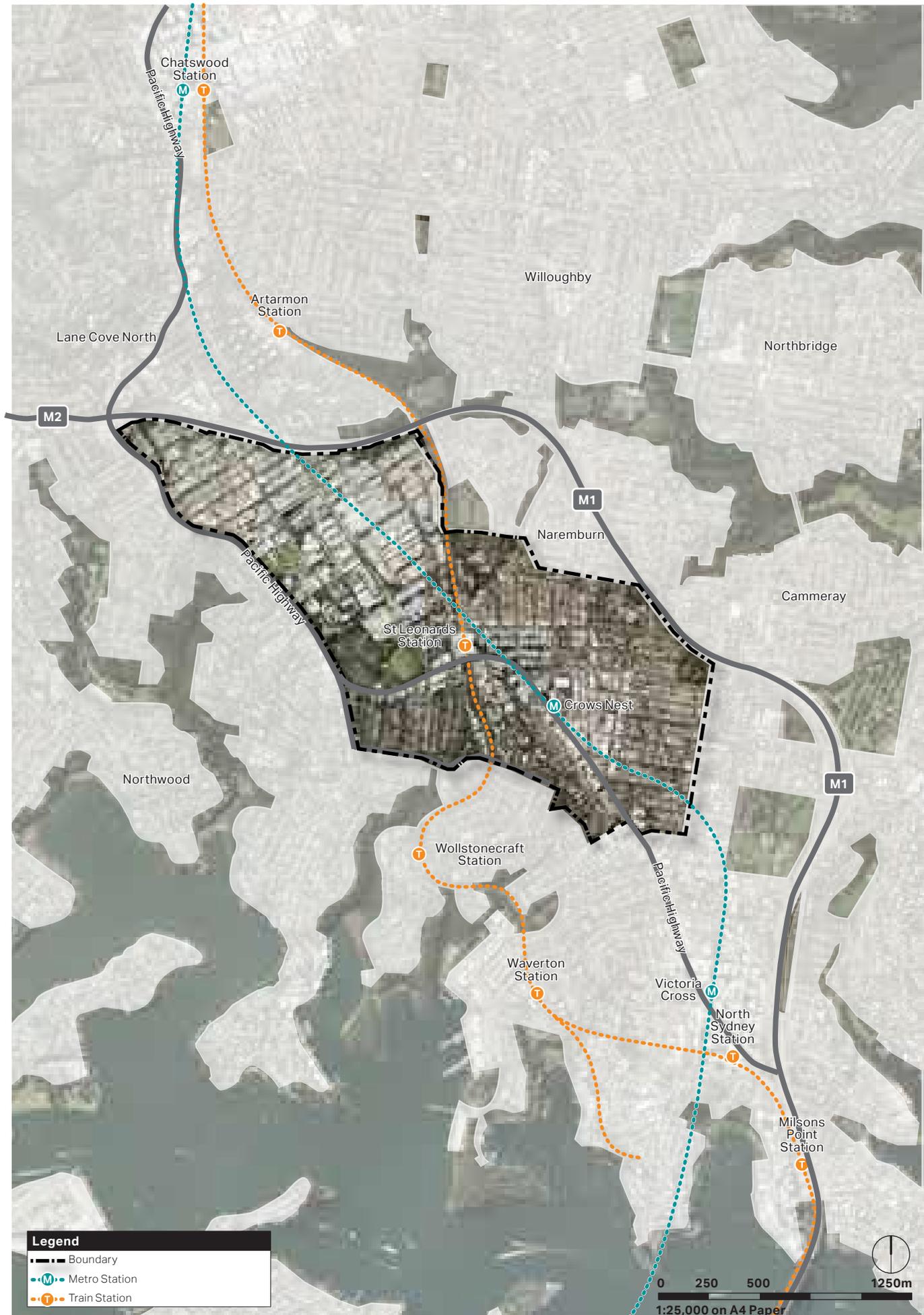


Figure 1: Aerial photo of St Leonards and Crows Nest (Source: AECOM, 2018)

2.2 THE EXISTING LANDSCAPE

St Leonards and Crows Nest has a variety of land uses and characters. This includes industrial areas, a health and education locale, areas of high density living and heritage neighbourhoods. This built form is complemented with a landscape character defined by natural bushland, tree lined streets and open spaces enjoyed by the local community.

A well-established urban tree canopy reinforces the leafy character of the area. This is attained through the distribution of evergreen natives and deciduous exotic trees. Plane (*Platanus* sp) trees are located throughout the area particularly along the Pacific Highway and within the heritage residential zone. Native species (*Eucalyptus* sp., *Callistemon* sp.) are predominantly in the industrial zone and adjacent to the area's parks and drainage corridors.

The topography of the area is undulating to the east with steeper valleys to the south. It is defined by the predominant ridge line along the Pacific Highway that continues to the northern suburbs of Sydney. While these undulations offer views across valleys to the north and south, the topography limits the accessibility and usability for the community due to steep terrain and open spaces that have significant ground level changes.

There are no Endangered Ecological Communities, while biodiversity corridors connect across the area through a network of overland flow paths, drainage lines and nearby creeks including Gore Creek, Berry Creek and Flat Rock Creek. Regional cycle and pedestrian connections are provided through on-road and off-road networks with an opportunity to establish a foreshore-to-foreshore link.

There are seven distinctive landscape character zones. These include:

- Industrial (Infrastructure and Manufacturing)
- Health and Education
- Commercial
- Mixed Commercial and Residential
- Low Density Residential
- Low Density Heritage Residential
- Ridgeline

The Industrial (Infrastructure and Manufacturing) zone consists of large format service and industrial land uses with minimal pedestrian amenity. Blocks are long and buildings are bulky that isolate pedestrians and inhibit connectivity to adjacent streets. The streetscapes are generally wide, encouraging higher reliance on car mobility with minimal walkability. Urban Tree Canopy in the streets is patchy and disconnected with varied tree maturity.

The Health and Education zone consists of a range of building heights that vary in character. Pedestrian connectivity is limited due to the privatisation of the public domain. Open spaces in this zone include some semi-private plazas and a large multifunctional open space to the south (Gore Hill Oval). The Gore Hill Cemetery contributes to the existing urban tree canopy in this area.

The Commercial zone is characterised by tall buildings and undulating topography, consisting of a high density commercial core spreading along a portion of the Pacific Highway and bound by mixed use and residential on adjacent sides. The open spaces include civic plazas used by workers during lunch breaks however these spaces are dispersed and disconnected. The streetscape lacks urban tree canopy cover and the narrow verge widths result in low pedestrian amenity.

The Mixed Commercial and Residential zone provides a distinct character providing a pedestrian focused network of streets and public spaces. The tall heights of buildings cause undesirable wind corridors to areas of the public domain.

The Low Density Residential zone consists of smaller sized blocks and features narrow streets with wide verges on both sides of the carriageway providing high pedestrian amenity and walkability. These streets are complemented with street tree planting.

The Low Density Heritage Residential zone consists of primarily low rise detached houses within a heritage conservation boundary. While similar to the Low Density Residential area, the heritage residential zone has established smaller lots and a higher proportion of dwellings to land area, resulting in higher site coverage. This is an added challenge for delivery of additional private urban tree canopy.

The Ridgeline zone is defined by the Pacific Highway, providing a distinct landscape with a urban tree canopy that reflects the local character and view corridors. The highway's ridge location and curved alignment frames a series of landscape vistas and an array of land uses. Despite the open vistas to Gore Hill Oval and Cemetery, the overall highway has limited open space and recreation facilities. In addition, due to its arterial nature, the highway limits connectivity.



Figure 2: St Leonards & Crows Nest Existing Character Zones (Source: AECOM, 2018)



2.3 WHAT THE COMMUNITY TOLD US

The St Leonards and Crows Nest community expressed strong interest in the retention and improvement of existing open space and the provision of more high quality Green Space during the community engagement run by the Department of Planning and Environment in March 2018. This community consultation informed the objectives relating to landscape in the draft Local Character Statement and this draft Green Plan.

Key recommendations that will influence the future planning and design of the open spaces and landscape include:

- More open spaces for community gathering such as: weekend markets, children’s play areas and laneways with shops and cafés.
- Preservation of the “village atmosphere”, retaining the human scale and family-oriented character of the neighbourhood.

- Improved existing open spaces with cafés, outdoor fitness equipment, more bench seats and playgrounds.
- Added green spaces in St Leonards’ higher density areas.
- Improved urban tree canopy to protect biodiversity, encourage walking
- Enhanced pedestrian & cycle accessibility to train station
- Improved quality & connection of cycle paths
- Improved amenity along Pacific Highway, including street tree planting.

The Local Character Statement Principle is...	How the Green Plan Responded...
Identify opportunities for more open space, particularly around Crows Nest and St Leonards station.	<ul style="list-style-type: none"> • Improving and expanding existing open space at Hume Street Park and Lithgow Street • Open space initiatives for Investigation in the next 10 – 20 years. • Aspirational open space options with timelines greater than 20 years
Improve tree canopy, particularly along busy streets to increase the sense of connection to the natural environment.	<ul style="list-style-type: none"> • Additional street tree planting on the majority of streets including Pacific Highway and along the sunny side of Oxley Street, Mitchell Street and Chandos Street
Design new development to fit in with the varied topography of the area.	<ul style="list-style-type: none"> • Proposing open space in locations that can utilise the existing topography to gain optimal usage • Drafting a green vision statement and principles that guide the future of the area by providing a place for people with high quality spaces at a human scale
Improve connections to surrounding green spaces to enable more choice and use of other open spaces.	<ul style="list-style-type: none"> • Better access to open space through identification of walkability gaps • Improved quality of journey for pedestrians along identified connections and existing links • Improved streetscape environments that support pedestrian movement, comfort and safety

2.4 PEDESTRIAN AND CYCLE NETWORK

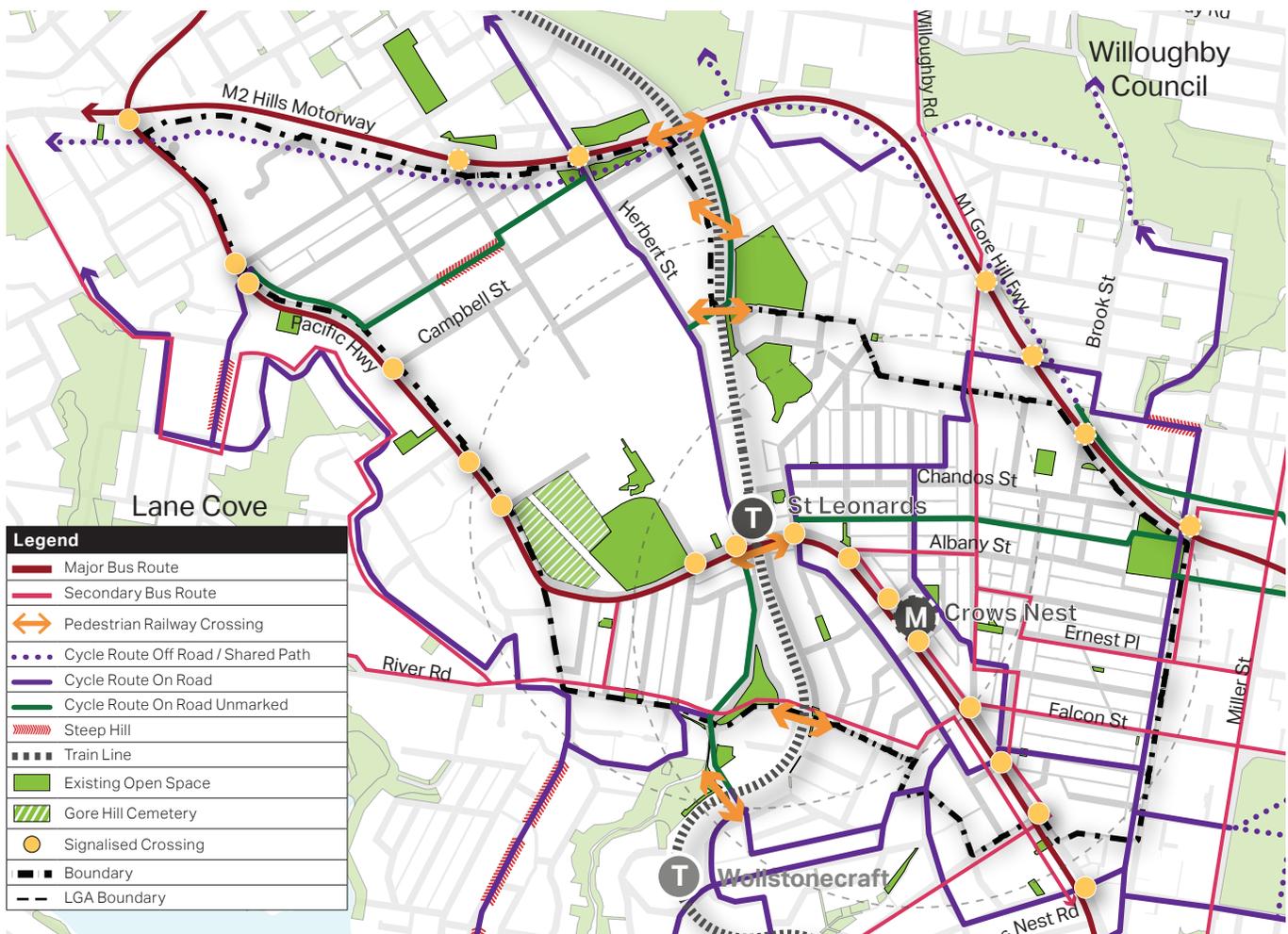


Figure 3: Pedestrian & Cycle Network (Source: AECOM, 2018)

Delivering continuous, user friendly local and regional cycleways along with quality footpaths promotes active and healthy living essential for the well being of the community.

Major roads are collectors for the major bus routes heading to the Sydney CBD and to Chatswood. More localised bus routes cross Crows Nest residential areas connecting to surrounding suburbs.

Off-road bicycle paths run along the M2 Hills Motorway - M1 Gore Hill Freeway. A network of on-road bicycle paths cross the site along the rail line and travels through Crows Nest residential area and toward the southern portion of the area. The majority of paths are situated on relatively flat topography, with the exception of short sections within the industrial zone. Steeper sections of the path network are located near the surrounding creek areas and the harbour edges.

There is good accessibility to local & regional public transportation and regional cycle infrastructure.

The rail corridor creates a barrier and affects internal circulation for bicycles and pedestrians. The few rail crossings do not form part of the arterial road network and are inadequate in providing a safe shared pedestrian, bike and vehicle experience.

2.5 NATURAL FEATURES



Figure 4: Natural Features (Source: AECOM, 2018)

The area is characterised by a combination of landforms:

- A prominent ridge line that extends along the North Shore areas of Sydney passes through the area. The Pacific Highway runs along this ridge.
- There are steep valleys heading south towards Sydney Harbour, with gentler slopes toward the east.
- The fairly flat area in the north west makes this portion of the area the most suitable for industrial developments.
- Flat Rock Creek in the north and Berry Creek in the south are fed by an open drainage channel.

This distinct natural structure sets the basis for a varied natural environment.

Moreover the area, located upon the ridge, will play a strategic role as regional green connector within two valleys and for the endangered ecological communities within its proximities. There is an opportunity to connect Sydney and Middle Harbours through the expansion of the existing corridors.

Vegetation has been identified by OEHL as any of the following types of indigenous vegetation:

- Trees (including any sapling or shrub, or any scrub),
- Understorey plants,
- Groundcover (being any type of herbaceous vegetation),
- Plants occurring in a wetland