



**B&A**  
Urban & Environmental

**McIndoe  
Urban**

# Neighbourhood Design Statement

Wellsford North Structure Plan

Final 09/03/2023



McIndoe  
Urban

Prepared for

Wellsford Welding Club Limited

Prepared by

Jack Earl, Associate (Barker and Associates)

In association with

Graeme McIndoe, Director (McIndoe Urban)

Document date

09 March 2023

# Contents

<u>5</u>	<b>INTRODUCING WELLSFORD NORTH</b>
6	Purpose and Scope
7	Site Location and Context
10	Understanding the Site
18	Opportunities and Constraints
<u>19</u>	<b>DEVELOPING A VISION</b>
20	Vision
21	Principles
22	Key Moves
<u>23</u>	<b>STRUCTURE PLAN RESPONSE</b>
24	Design Response
26	Structure Plan



Wellsford North

# 1.0

## Introducing Wellsford North

- 1.1 Purpose and Scope
- 1.2 Site Location and Context
- 1.3 Site Understanding
- 1.4 Opportunities and Constraints

# 1.1 Purpose and Scope

This Neighbourhood Design Statement for the Wellsford North Structure Plan (location shown in Figure 1) area is one of a suite of technical reports that has been prepared to support the Wellsford North Structure Plan (“the Structure Plan”).

The purpose of the neighbourhood design statement is to support the implementation of the Structure Plan. This Neighbourhood Design Statement identifies urban design considerations relevant to Wellsford and the Structure Plan area (shown in Figure 2). It is informed by national and local urban design policy and guidance including, but not limited to:

- The New Zealand Urban Design Protocol, Ministry for the Environment, 2005
- The Auckland Plan 2050, Auckland Council, 2018
- The Auckland Unitary Plan Operative in Part, Auckland Council, 2021
- Auckland Design Manual, Auckland Council, online resource
- The Roads and Streets Framework, Auckland Transport, 2020
- Bridging the Gap, NZ Transport Agency, 2013

In particular this report has been prepared in accordance with the Structure Planning requirements set out in Appendix 1 of the AUP.

The Structure Plan is strategically located in an area which is anticipated to undergo transformation and contribute to anticipated growth in northern Auckland. In particular, the Structure Plan area is primarily zoned Future Urban by the Council, identifying the suitability of the land for future urban development.

The purpose of the Future Urban zone is to facilitate the future development of the land for urban purposes in the most efficient and orderly manner possible. The Council has also identified the Wellsford Future Urban area as ‘development ready’ between 2023-2027 in the Future Urban Land Supply Strategy (“FULSS”), therefore urban development in the Structure Plan area is anticipated and generally aligns with the Councils growth strategy.

This Neighbourhood Design Statement provides background and explanation to the proposed Structure Plan and key infrastructure. The Structure Plan supports the commitment of the private developer (Wellsford Welding Club Limited) to a model of sustainable and integrated living, and will help to define a vision and to plan for future growth in Wellsford.

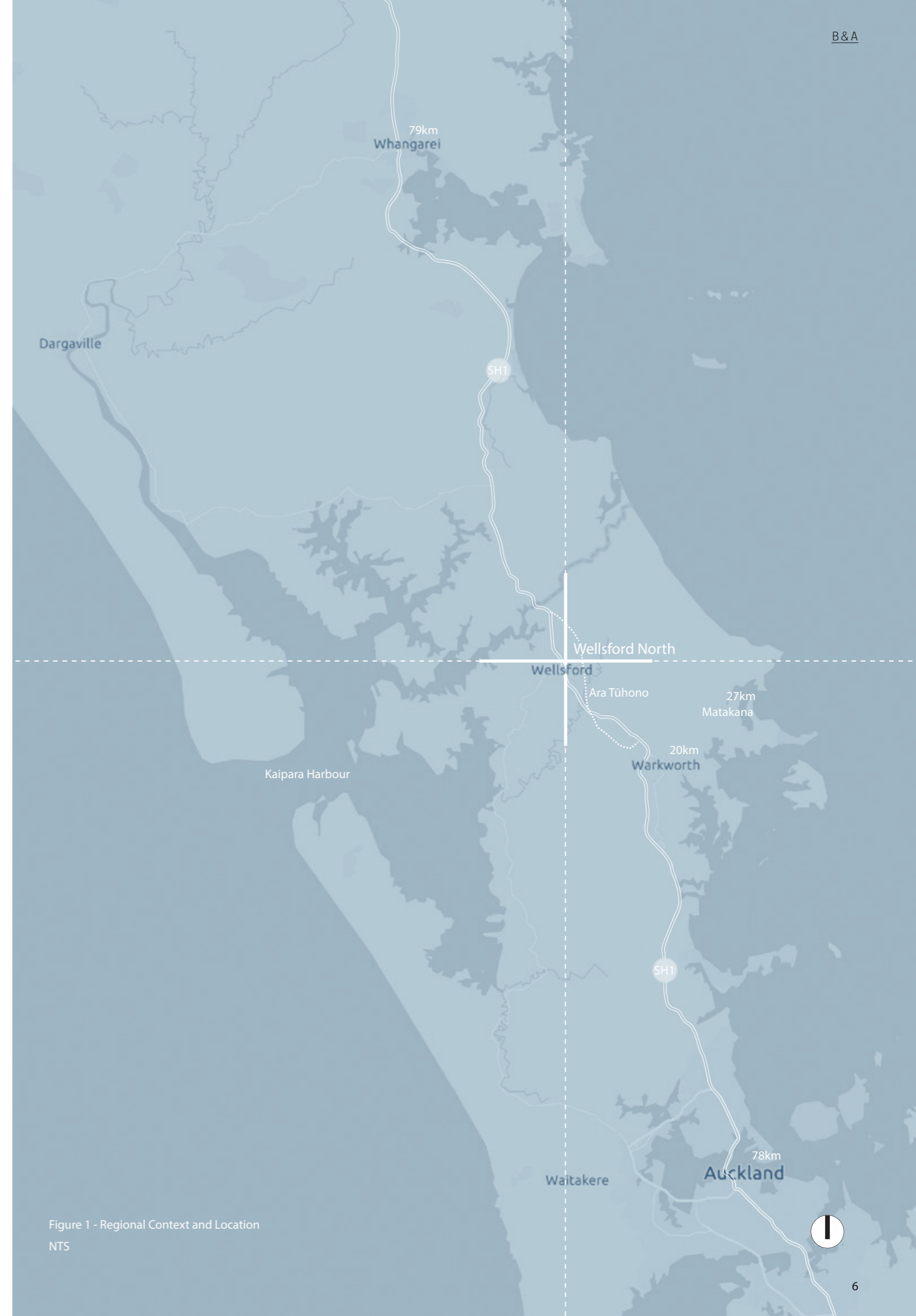


Figure 1 - Regional Context and Location  
NTS

# 1.2 Site Location and Context

## 1.2.1 Wellsford

Wellsford is a rural service town located approximately 80 kilometers north of the Auckland CBD, 80 kilometers south of Whangārei and 20km north of Warkworth, Auckland's northern satellite town. Wellsford currently has a population of approximately 2,000 people based on the most current census data.

Wellsford is able to provide essential services to locals (see Figure 3), whilst Warkworth provides for a wider range of goods, services and job opportunities including larger supermarkets. Wellsford is serviced by a local bus route which connects to Auckland City and the wider public transport network.

The town is essentially a service centre for the surrounding rural economy which during the nineteenth century included kauri saw milling, gum digging, and farming. The construction

of the railway line in 1909 and all-weather roads in the 1930s allowed dairying to intensify and Wellsford to grow.

The town now has also become a service stop for traffic on SH1, being half-way between Auckland and Whangārei. The SH1 is planned to bypass Wellsford, and reduce through traffic to the town. Ara Tūhono, Puhoi to Wellsford is separated into two projects, the first of which is nearly completed, Puhoi to Warkworth. the second phase of the project is the Warkworth to Wellsford section (see Figure 3).

Wellsford is a hill-top town formed around the junction of SH1 and SH16. SH1 is a spine along the main ridge, and side roads follow the radiating spurs. As a consequence of the hilltop location, Wellsford enjoys wide views over the surrounding countryside, as the residential form follows the movement corridors of the ridges and spurs.

The structure plan area is located north of Wellsford Town Centre, as an extension of the existing residential area north.

### Legend

- Business - Light Industry Zone
- Business - Town Centre Zone
- Future Urban Zone
- Open Space - Conservation Zone
- Open Space - Informal Recreation Zone
- Open Space - Sport and Active Recreation Zone
- Residential - Large Lot Zone
- Residential - Single House Zone
- Rural - Countryside Living Zone
- Rural - Rural Production Zone
- Special Purpose - Cemetery Zone

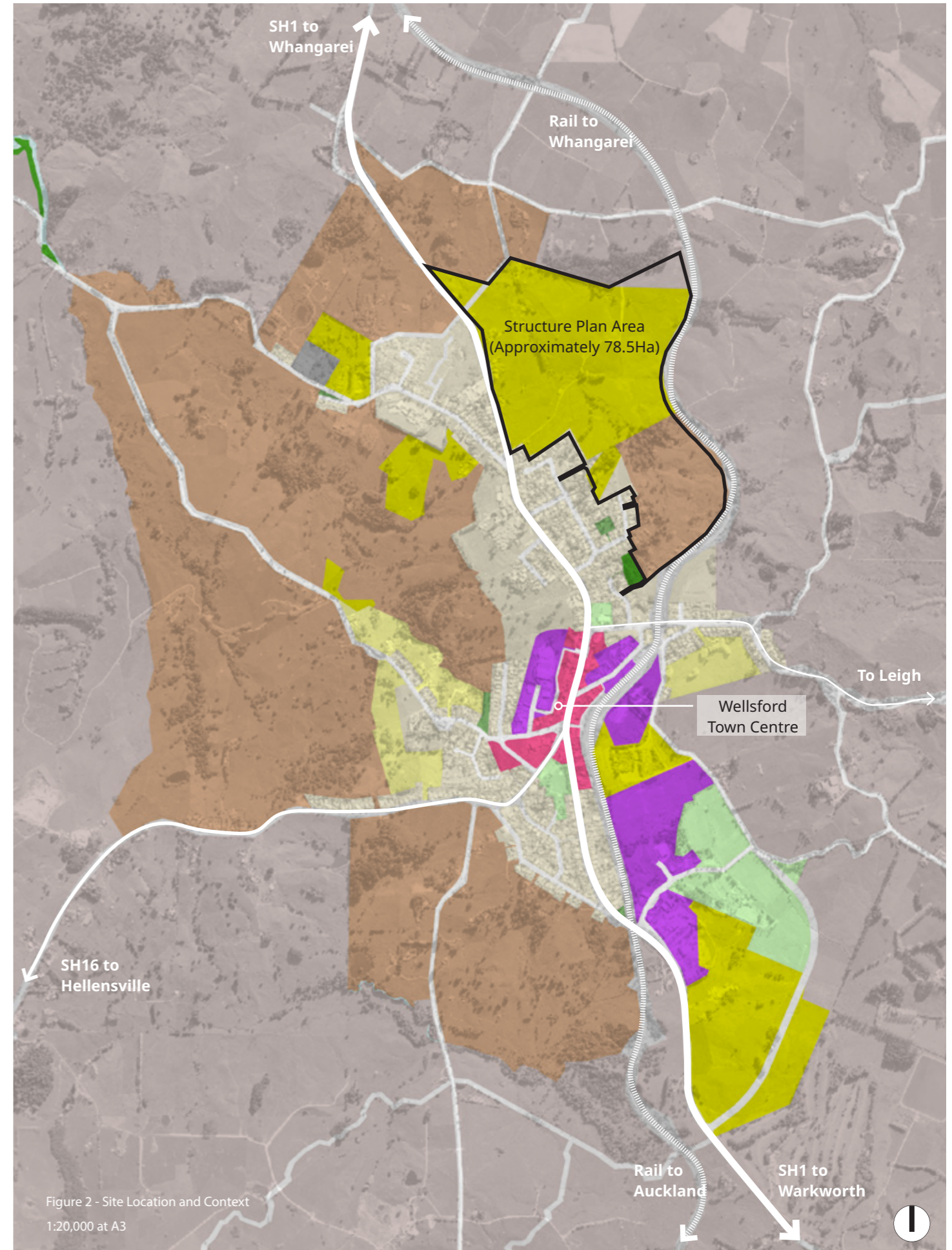


Figure 2 - Site Location and Context  
1:20,000 at A3

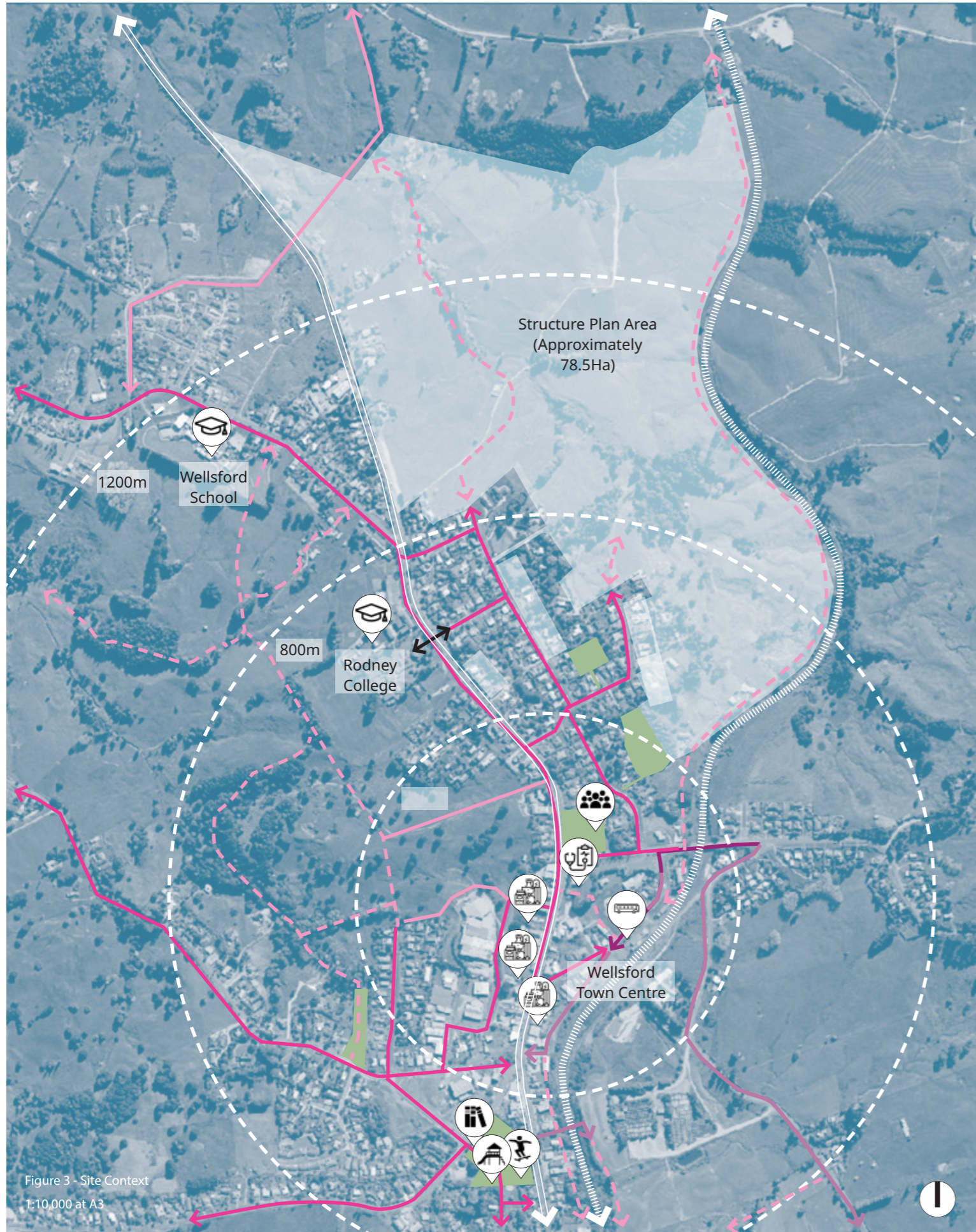


Figure 3 - Site Context  
1:10,000 at A3

## 1.2.2 Local Context

The site adjoins both the SH1 road corridor and the existing residential area to the western boundary. To the sites eastern boundary, the site is held by the rail corridor.

As Figure 3 illustrates, residential development has been occurring adjacent the site on the western side of SH1. This area is also zoned as Future Growth. Also west of the site are Rodney College and Wellsford School, of which can be accessed from the east without the need of crossing SH1 via a underpass at the end of Tobruk Road.

The site ranges between 800 and 1200m in distance from the town centre. This is depending on route taken, an appropriate walking and cycling distance and includes options of moving along road corridors that are not SH1. As shown in Figure 3, a Greenway cycleway and pedestrian network has been planned for Wellsford. The site is integrated into this network, connecting people to recreational opportunities, the Wellsford bus station, the schools and town centre.

### Legend

- |  |                                 |  |  |
|--|---------------------------------|--|--|
|  | SH1                             |  | Proposed Greenway on non-existing road |
|  | School                          |  | Proposed Greenway, no road             |
|  | Community Centre                |  | Proposed Greenway on existing road     |
|  | Medical Centre                  |  | Priority Greenway on existing road     |
|  | Four Square Supermarket Library |  | Priority Greenway, no formed path      |
|  | Skate Park                      |  | Underpass                              |
|  | Playground                      |  |  |
|  | Public open space               |  |  |
|  | Rail corridor                   |  |  |

Rodney Greenways Plan 2015





Wellsford Town Centre.



Playground and skate park at the Wellsford War Memorial Park.



New development along Tuaraki Drive



SH1 underpass off Kelgray Place through to Rodney College



Entering Wellsford from the north heading along SH1.



View from Armitage Road looking north. Development along Armitage Road began 1950's - 1960's.



View from Armitage Road looking north towards the edge of the site.



Wellsford Library located at the Wellsford War Memorial Park.

# 1.3 Understanding the site

## 1.3.1 Site Description

The site is owned by the Wellsford Welding Club Ltd with the exception of a portion of land to the north-west of the site, which adjoins SH1 and has an existing unformed legal road bisecting through it, and the land directly to the south of the site which adjoins the rail way corridor.

The site is currently being used for pastoral grazing, its rural character reflects this. The area is essentially a small water catchment in the wider area of the Kaipara Harbour catchment. The site falls from the south, west and east boundary's towards a stream corridor the sweeps through the site in a north-western direction. Vegetation within the area mainly follows the waterways, with a mix of poplars, willows and other typical rural stream side exotics with a lower mixture of carex species, flax and juncus along some stream margins.

The central and northern parts of the structure plan area are gently rolling, however the parts to the south east is relatively steep, broken and contains various gullies and watercourses.

A feature of the site is an area of predominantly mature standings of totara trees to the south of the site. This area of vegetation separates the southern and steeper upper catchment of the site, to that of the undulating and more accessible portion of the site to the north. The southern and steeper area features fingers of carex species, flax and juncus species as well as mature totara trees spotted throughout the short gullies.

When viewed from SH1, the site is contained by the rail corridor cut into the undulating pastoral landscape to the east, as far as the horizon framed by Worthington Ridge. Worthington Ridge will screen the proposed Warkworth to Wellsford portion of Ara Tūhono.



Viewpoints - Refer to page 10 for photos



Figure 4 - Site  
1:7,500 at A3





Photo 1 - View looking north from the high point located slightly east of the Monowai Road site entrance.



Photo 3 - View looking west towards the main stream and totara plantings.



Photo 5 - Central area of the site looking south and west along the main waterway.



Photo 2 - View from near the site entrance from Monowai Street looking east across the southern area of the site towards Worthington Ridge.



Photo 4 - View from a central location along the eastern boundary, looking west towards SH1.



Photo 6 - View from 2a Kelgery Place looking north across the site.



Photo 7 - View looking north alongside the railway corridor to the east of the site.



Photo 9 - View looking east towards the railway corridor from the main farm access road located central to the site.



Photo 8 - View looking north west alongside the railway corridor to the east of the site.



Photo 10 - Central area of the site looking north along the main waterway.

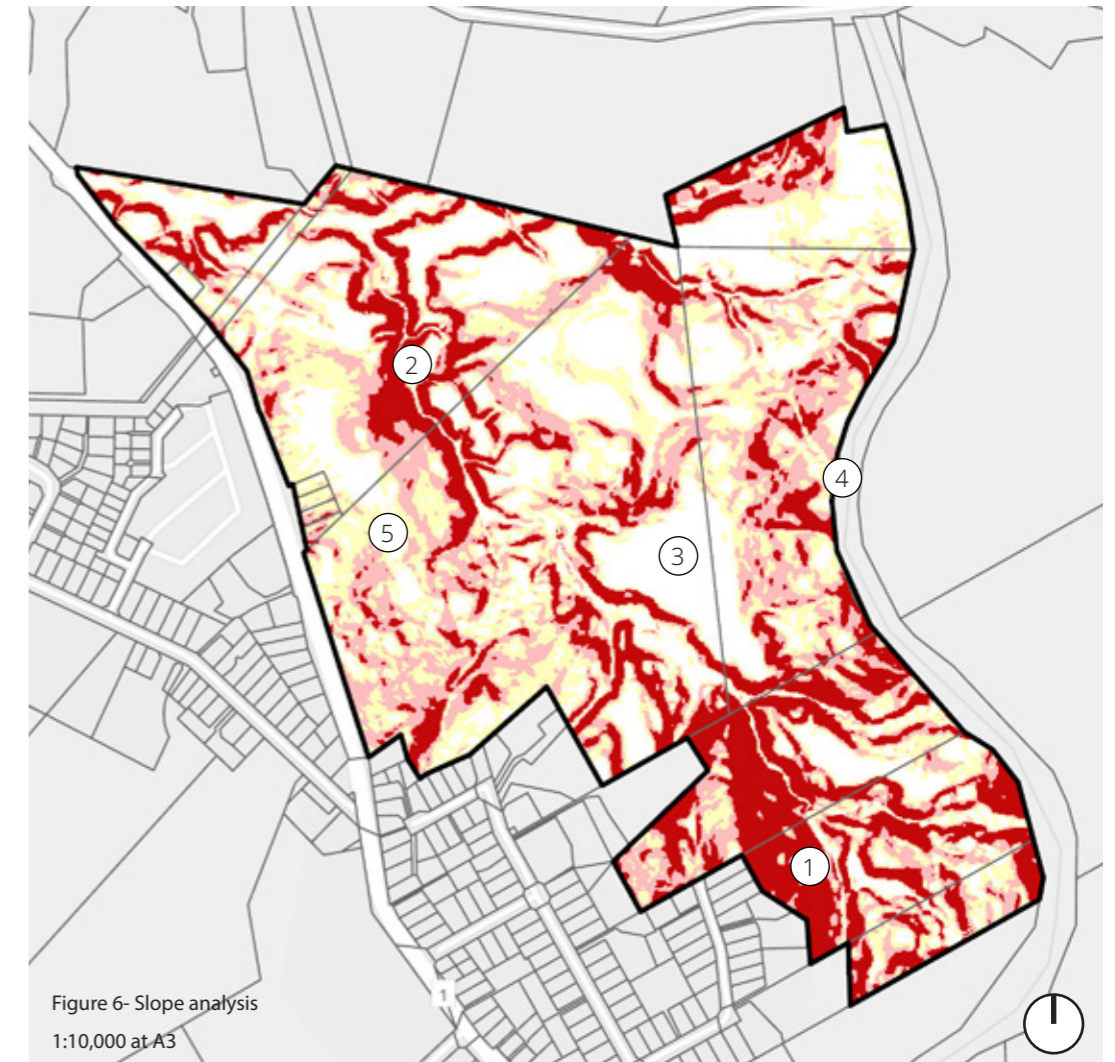
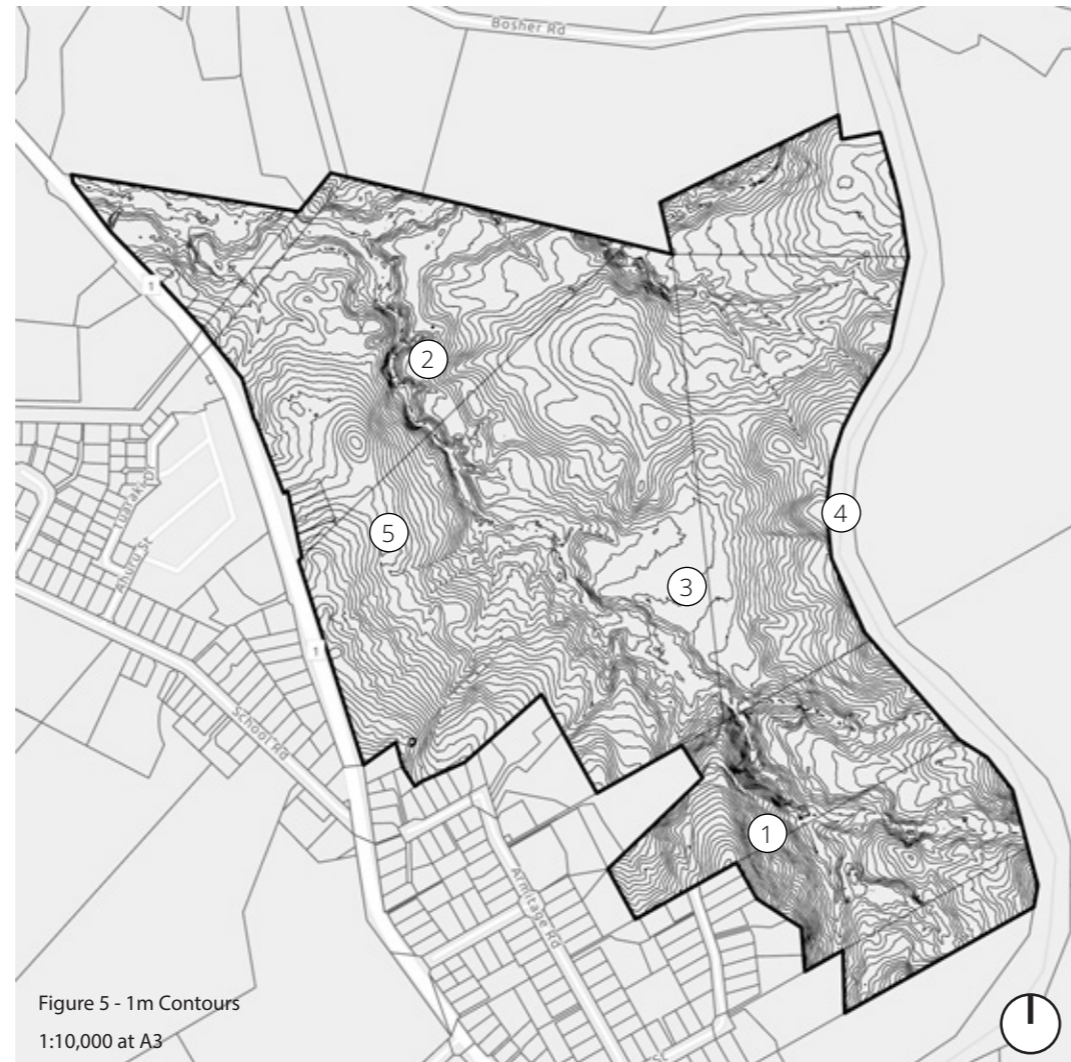
### 1.3.2 Topography and Slope

The site's topography slopes away from SH1, the existing residential area and the rail corridor towards a central waterway that slopes from the head of the valley at the south of the site, towards the north. As figure 4 illustrates, feeding into the central waterway are a number of small gullies with steeper ridges, particularly in the southern portion of the site.

The topography creates a unique sense of space and plays a strong role in determining a site's characteristics in the frame of alignment of streets, housing typologies and types of open spaces.

While these areas provide various development and connectivity constraints, structure planning considerations and opportunities include:

1. large allotments to suit the topography;
2. steep areas to be included within riparian margins to enhance ecological and amenity buffers;
3. flat areas to cater for greater housing densities and for more formalised recreation and open space treatments;
4. high points or hill tops to provide opportunities for public viewpoints; and,
5. alignment of streets to enable housing developments to better respond and work with the existing land-form.



**Legend**

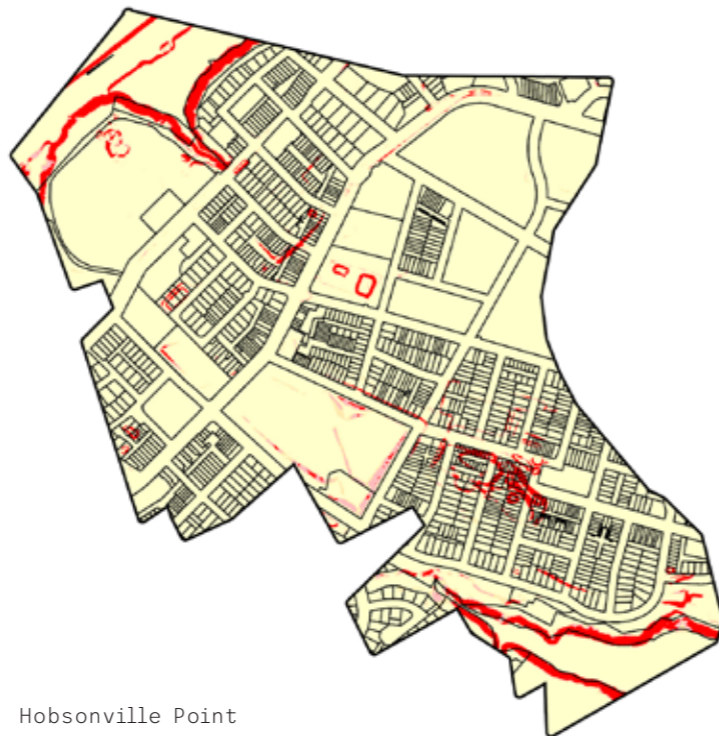
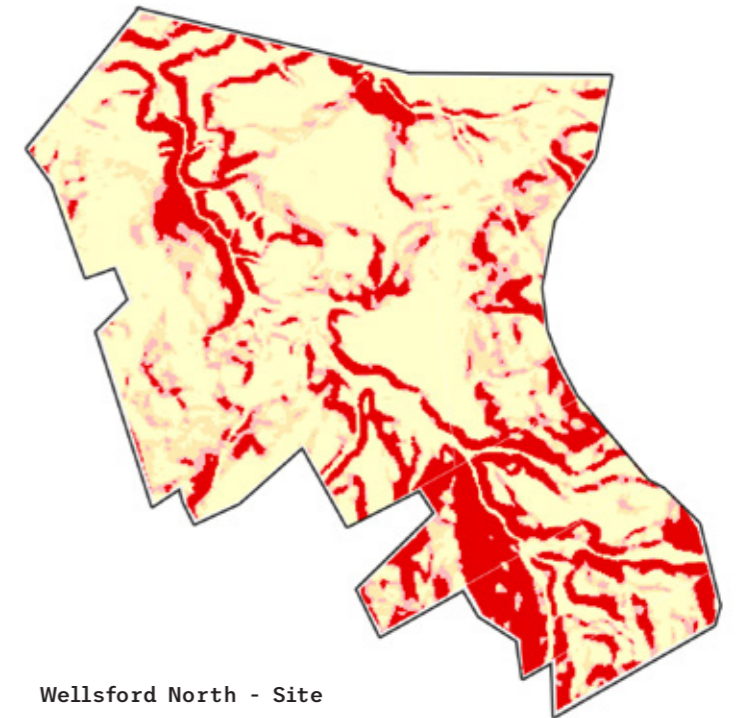
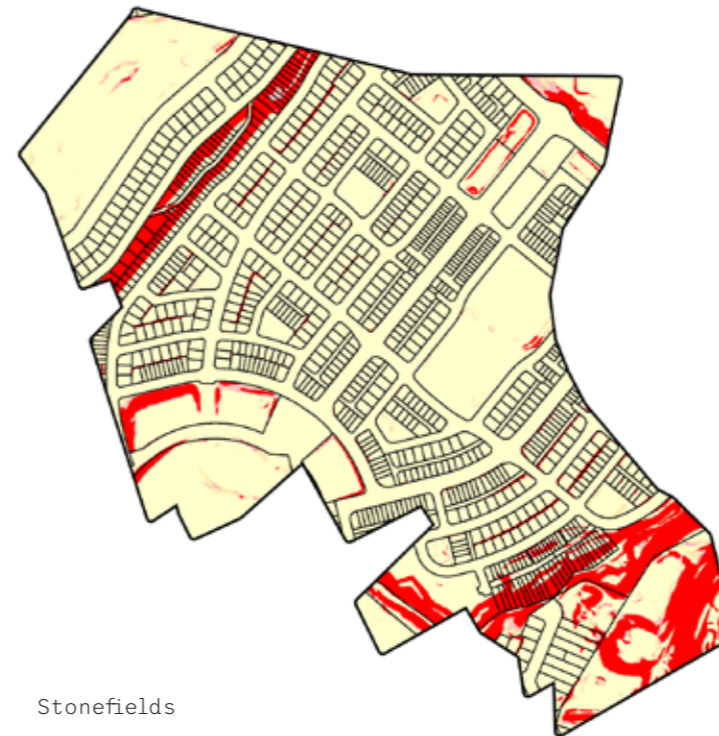
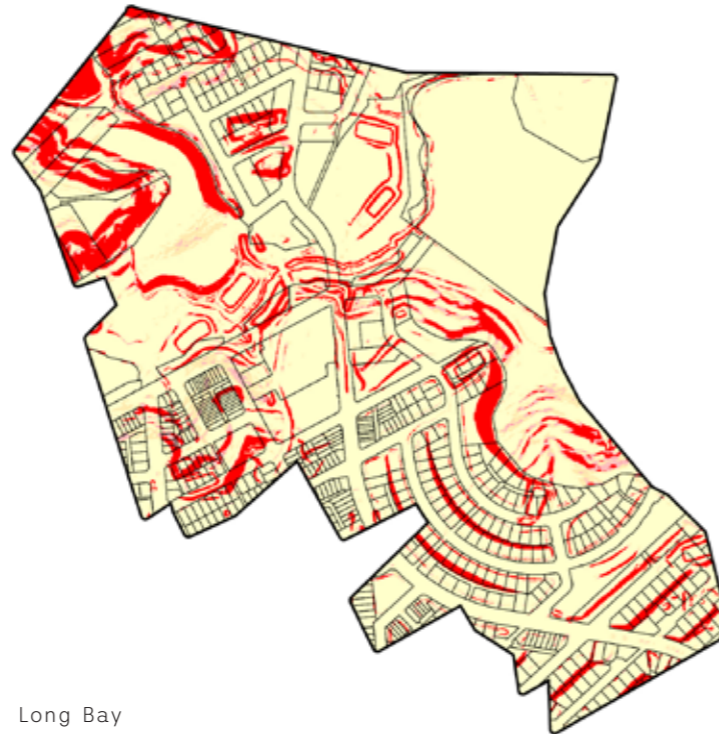
- < 12% Slope
- 12% - 20% Slope
- 20% - 30% Slope
- > 30% Slope

### 1.3.3 Slope and Tissue Analysis

A desktop study was carried out which looked at other greenfield residential developments, the characteristics of slope and how the proposed development patterns, densities and elements responded to the slope.

Some key findings:

1. Steeper areas of slope have been treated with re-vegetated faces, recreational links and overall, greater neighbourhood amenity;
2. Steeper slopes have been terraced, forming building platforms, streets and public open spaces. This allows the opportunity for higher densities of dwellings (medium density);
3. Key connecting roads work with the slope rather than against it creating greater accessibility and reduce the amount of retaining walls against the streetscape;
4. Boggy and wet areas, including wetlands and streams are enhanced. Infrastructure in the form of pathways, roading and bridges are treated as features of the development and sympathetic to these natural areas; and,
5. Terrace housing typologies are used to work with the topography.



**Legend**

- < 20% Slope
- 20% - 25% Slope
- 25% - 30% Slope
- > 30% Slope





The slope and tissue analysis provided the following opportunities for considering how to deal with slope on the Wellsford North Structure Plan:

1. Concentrate the highest density of residential development in the flattest and most open contours;
2. Use difference in slope and aspect to differentiate between distinct character areas;
3. Align key streets along the contours of the slope;
4. Use the natural drainage system and associated steeper slopes to create a well defined green open space network and positive water sensitive urban design outcomes.



### 1.3.4 Biophysical

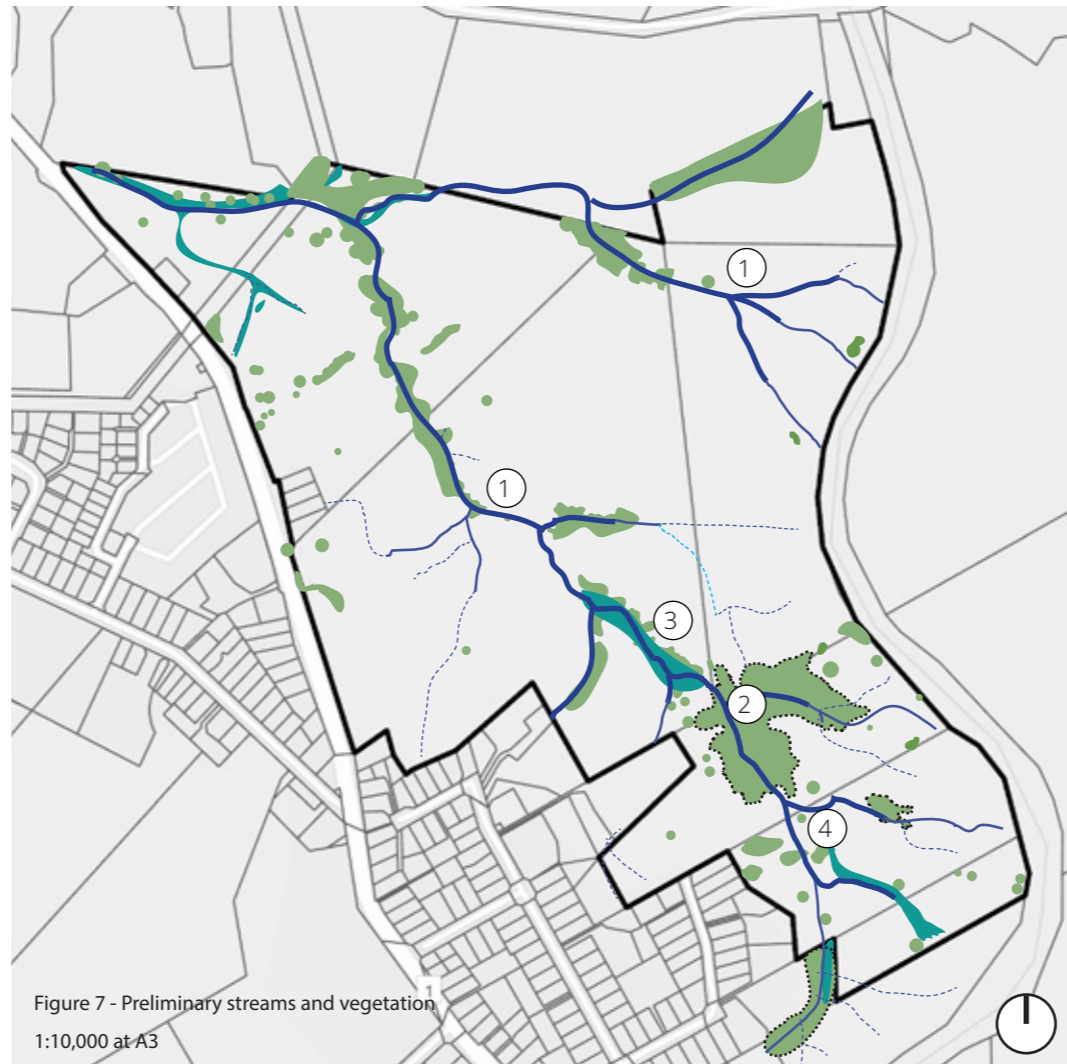
A preliminary, high level ecological investigation has been carried out, and will be developed in more detail in subsequent development related plans.

The site has a rich underlying ecological layer wbased on its distinctive topography. An important part of this narrative is that the site sits within the wider storm-water catchment area of the Kaipara Harbour, and is within the upper area of its own local catchment area. The healthy treatment of water is therefore very important in enabling the rich ecological layer of waterways, wetlands, riparian margins and steep gully systems.

Existing waterways, wetlands and potential flood retention areas lead to development and connectivity constraints. Structure planning considerations and opportunities include:

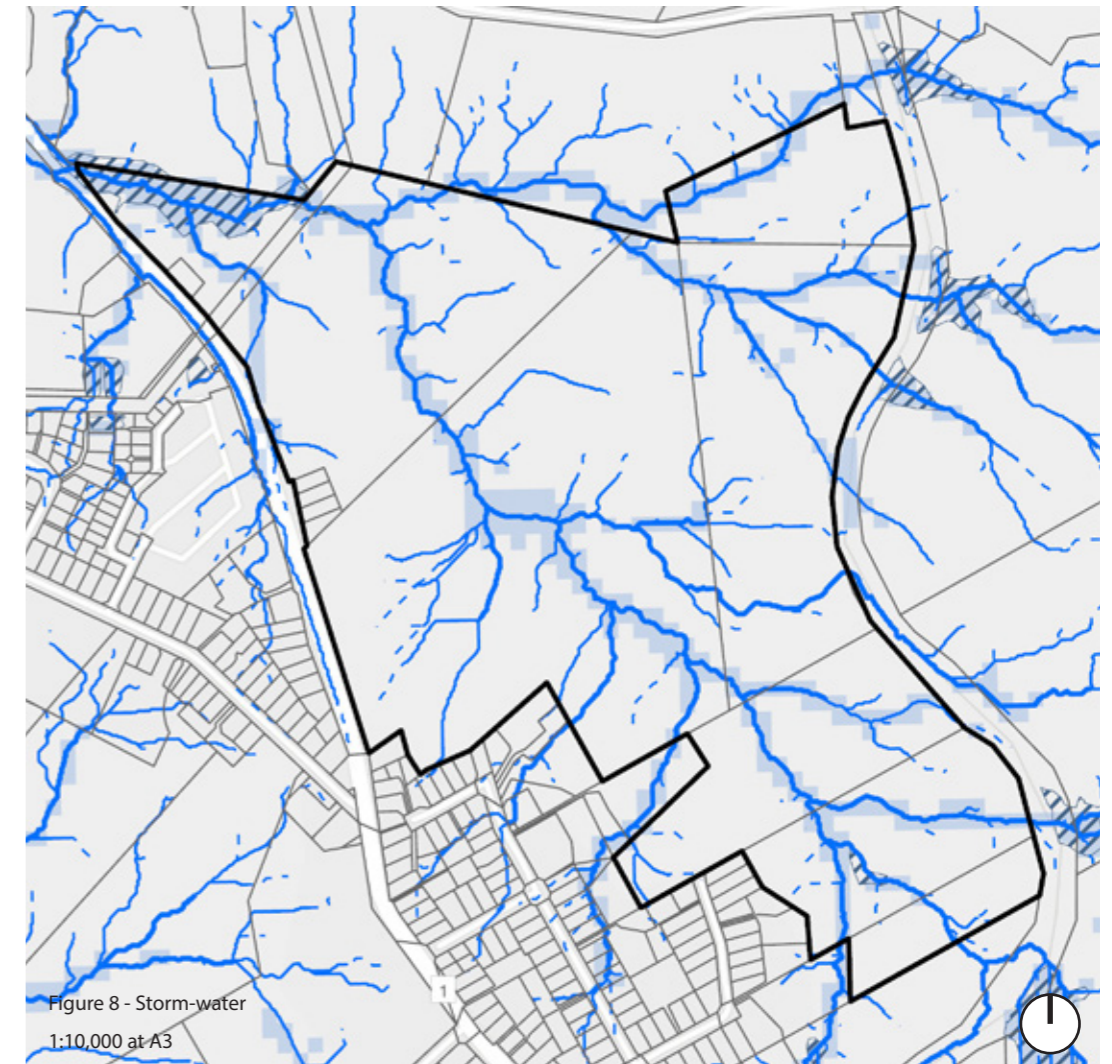
1. riparian setbacks from waterways and wetlands planted with eco-sourced native plants;
2. preservation of the totara area;
3. public open spaces that provide for the treatment, drainage and in some cases retention of storm-water;
4. a connected green network including a legible and safe pedestrian and cycle network reinforced through cultural wayfinding; and,
5. strengthen and enhance the biodiversity of the site.

Housing development will help provide passive surveillance to the waterways and associated public open space and cirulation networks, allowing residents to enjoy the recreational potential of these areas.



**Legend**

- Artificial stream
- Ephemeral stream
- - - Intermittent stream
- Permanent stream
- Potential wetlands
- Mixed Exotic Vegetation
- Native Vegetation



**Legend**

- Overland flow paths - Auckland Geomaps
- Flood plains - Auckland Geomaps
- ▨ Flood prone areas - Auckland Geomaps



### 1.3.5 Movement and Access

We worked from an early stage with Commute to understand the constraints- and opportunities relating to site access for vehicles and active modes. This information has been captured in Figure 10.

A number of potential points of entry were identified from site visits, investigations by Commute and the Rodney Greenways Plan (2015).

While there are a number of connectivity constraints into and throughout the site. Structure planning considerations and opportunities in response to these constraints include:

1. providing a main vehicle point of access off SH1 which will connect directly to the centre of the structure plan;
2. upgrading to the existing road network surrounding the site where needed;
3. enabling an important part of the route of the proposed Rodney Greenway Plan;
4. enabling pedestrian and cycleway connections into and through the site;
5. considering existing site connections to influence the sites street network and its circulation;
6. forming the unformed legal road; and,
7. forming a landscape buffer between SH1 traffic and noise, and new development.



**Legend**

- SH1
- Existing farm tracks
- Underpass
- Unformed Legal Road
- Transmission line
- Proposed Greenway on non council land
- Proposed Greenway, no formed path
- Proposed Greenway on existing road



















**Legend**

- Concentration of previous accidents (CAS data)
- Primary site access
- Access off SH1 best located towards northern area
- Road network and road layout design to encourage vehicles to use primary access
- Improvements will be needed including enhanced sight lines, speed and turning controls
- Possible secondary site access
- Improvements needed at 80degree corner

# 1.4 Opportunities and Constraints

The site investigations and information gathering stage, including gaining feedback, advice and insights from other technical experts, has helped to understand site constraints and to respond with a range of opportunities for structure planning.

### Legend

-  Steep slope constraints could allow for larger allotments, integrated into riparian setbacks, native plantings to prevent soil erosion or be managed as cut for fill in other areas on the site where appropriate.
-  Waterway and setback requirement constraints enable a green corridor for drainage, amenity, ecological, cultural and recreational functions.
-  Main site circulation could follow existing farm tracks which take the path of least resistance against the steeper slopes. Follow the contours where practicable.
-  Site access points could include main access from SH1, formation of the unformed legal road, access off Monowai Street to be traffic calmed.
-  Transmission line could provide for a native planting buffer. Area could extend further north to provide for wetland and storm-water treatment area.
-  Landscape buffer of mounding and native planting to provide amenity, privacy and mitigate any noise effects from SH1.
-  Transition from existing residential into the site by providing reasonable interfaces such as medium to lower density residential.
-  Main focal point park could include play, provide for storm-water retention, "kick-around" space and picnic space.
-  Centre could provide small (1000m2) supermarket, cafe and small shops.
-  Highest site density.
-  Lowest site density.
-  ① Protect podocarp forest area.
-  ② Access for pedestrian and cyclists only
-  ③ Future proof access only.
-  ④ Could include Greenways planned route as buffer to rail corridor.
-  ⑤ Reform unformed legal road.

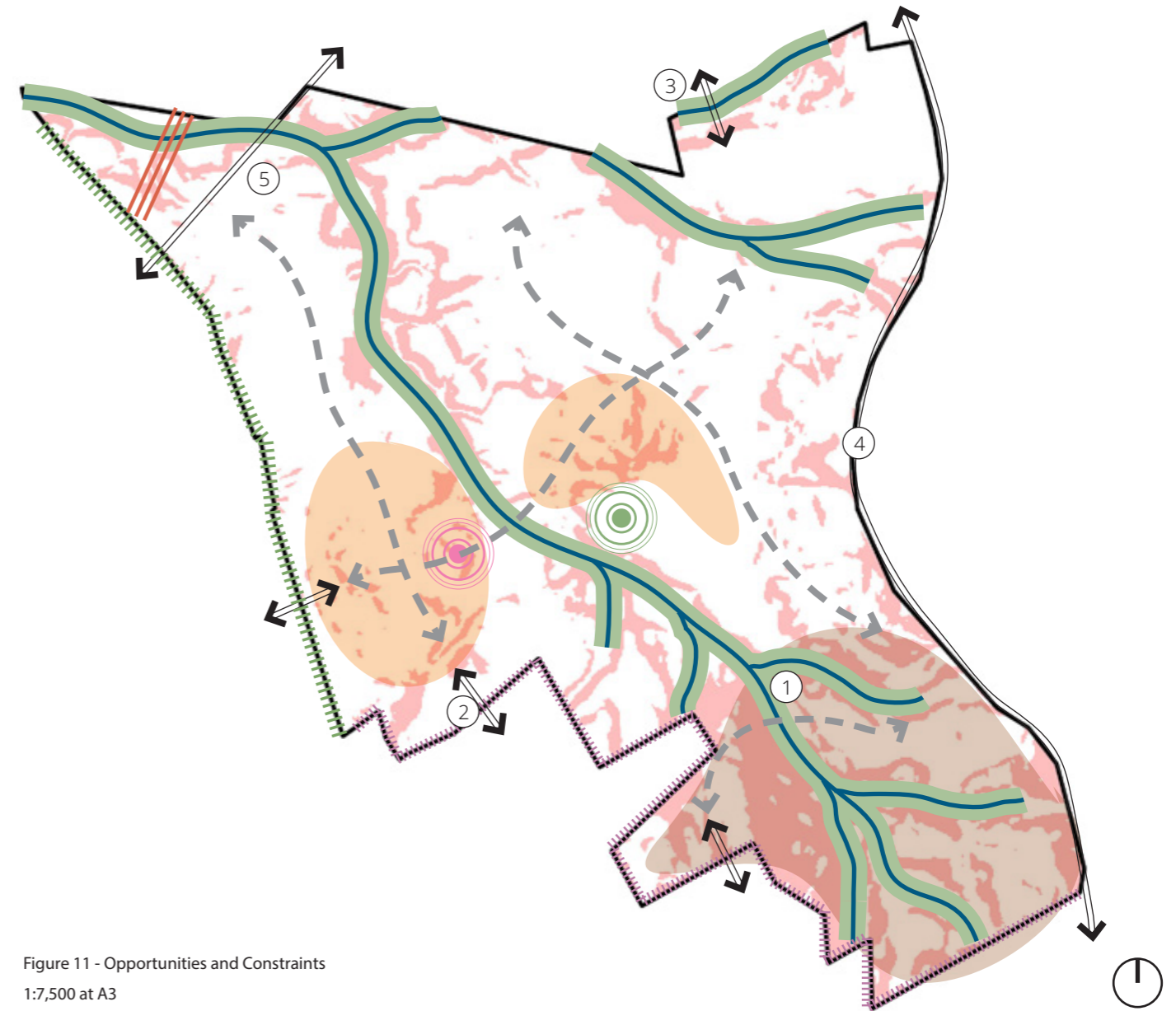


Figure 11 - Opportunities and Constraints  
1:7,500 at A3

# 2.0

## Establishing a Vision

- 2.1 Vision
- 2.2 Principles
- 2.2 Key moves

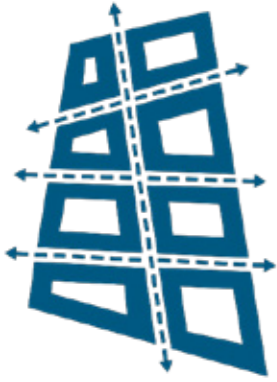
## 2.1 Vision

*Wellsford North is a place for everyone, a healthy, resilient and thriving community for future generations.*

*A place of abundance, diversity and connectedness, it is shaped by the land and interwoven into the existing fabric of Wellsford.*

## 2.2 Principles

The principles are shaped by the opportunities and constraints of the site, and its surrounding context. The principles provide a road map to realising the vision for Wellsford North and have framed the key moves and structure plan response in line with AUP Appendix 1 guidelines.



### Integrated and connected

A high level of connectivity allows people to readily access friends and places both within and around. This provides good local access with a choice of routes, and excellent multi-modal movement including for people walking or cycling as well as driving. Connections to SH1, the schools across it and to the town centre are critically important.



### Diversity and choice

Facilities that allow for social interaction including recreational use open spaces will be a focus for community to develop upon. A range of lot sizes from small urban lots in high amenity locations to large rural residential lots in challenging and relatively inaccessible areas contributes choice and diversity.



### Quality public realm

A fit-for-purpose, safe and readily maintainable network of open space that provides a variety of recreational opportunities for the community, is readily accessible to all and meets Council open space expectations.



### Environmentally responsive

Designing urban areas so they reduce the impacts of urban activities on the environment – such as treating storm-water, improving energy and water efficiency and reducing carbon emissions – makes these areas more sustainable.



### Landscape Character

The site has a recognised landscape character, established by significant and mature trees, gully systems, northern aspect and streams. Subdivision elements will be spatially organised to enhance, maintain and protect landscape elements, views within, into and out of the site area creating a unique sense of place.

## 2.3 Key Moves

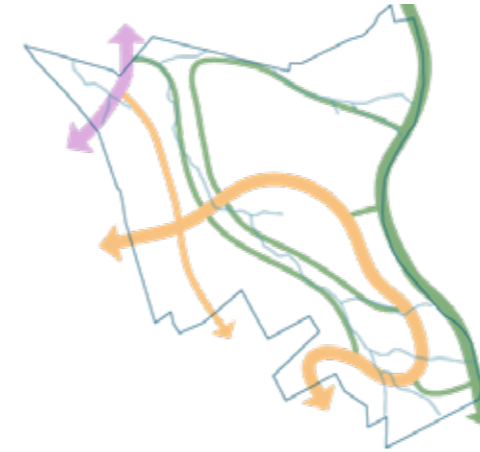
The key moves embody the principles and vision set out for Wellsford North, and enable a spatial arrangement of the structure plan that responds to the opportunities and constraints of the site.



**Develop green corridors for a range of functions including drainage, amenity, ecology, recreation, landscape and cultural use.**



**Respond to and design with the contours and aspect of the land.**



**Provide for legible, safe and accessible movement corridors for people of all ages and abilities.**



**Optimise views of the landscape and its elements within and out of the site.**



**Align streets and blocks to provide a high level of connectivity and a diversity of accessible housing types with good solar orientation.**



**Enable a legible and sympathetic transition of the existing urban form of Wellsford and Wellsford North.**



**Provide a spatial arrangement that supports a water sensitive urban design approach to the management of storm-water.**



**Define a vibrant and walkable community heart for both existing and future residents of Wellsford.**



# 3.0:

## Structure Plan Response

3.1 Design Response

3.2 Structure Plan



## 3.1 Design Response

The design response is made up of a number of layers and testing of various scenarios which together form the basis of the structure plan, namely:

- Movement;
- Built form and land use;
- Landscape and views;
- Public realm and open space



### 3.1.1 Movement

An interconnected movement network comprising streets, lane-ways, pedestrian linkages and cycleways is fundamental to achieving a sustainable, high quality neighbourhood. Connectivity within the movement network provides a choice of routes and convenience for walking and cycling, and provides access for residents without vehicles including those unable to drive.

Well designed pedestrian routes will ensure residents and visitors easily access dwellings, activities and facilitate connections to the open spaces and other facilities that are part of the development. It will also aid wayfinding through a legible roading structure.

Streets have a large role in determining the character and ultimately the urban form of a subdivision. Road widths, cycleways, footpath styles, planting and berm width and location can all be used to deliver variety, identity, interest and safety into neighbourhoods.

The location of roads and their relationship to housing and open space can impact on both the actual safety and perceptual safety for users, community cohesion, privacy and openness within neighbourhoods. This is the case where roads interact with the central green corridors.

### 3.1.2 Built form and Land use

Successful places are those that can cater for the ability of people to meet a range of daily needs within an easy walking distance. The structure plan considers a range of spatial decisions including landforms, open spaces and their linkages, density of development, the location and size of a neighbourhood centre, proximity to existing residential development, existing schools and roads, and potential access to the Wellsford public bus stop. All of which help to inform the preferred location for future land-uses and the form that those land uses take.

The structure plan will provide for a variety of housing types which will cater for the full life cycle needs and future resilience of the community. This includes a mix of single, double and triple story dwellings comprising both detached and duplex / terrace typologies as well as larger lot alternatives.

Where built form is located adjacent to open space, housing will be designed to address this space and incorporate principles of crime prevention through environmental design (CPTED). The structure plan encourages a best practice architectural response in residential layout and building design that responds to existing character and land-form, maximises safety outcomes, enables good solar access, clearly defines public and private boundaries, provides consistent lot dimensions and avoids rear lots.

### 3.1.4 Landscape and Views

Key physical and visual landscape attributes identified through the site analysis are proposed to be retained, enhanced and / or mitigated through the spatial arrangement and relationships imposed by the structure plan. Such physical and visual attributes include the patches of totara trees, other mature tree plantings that contribute to the rural heritage of the site, the stream and its riparian margins, high points in the site's land-form particularly along the railway corridor, the site's gullies, wetlands and steep inaccessible slopes.

A landscape buffer is proposed along SH1, providing visual relief and setback of future development when viewed from the SH1 corridor, while containing the site against the spur that the SH1 flows along when viewed from the eastern faces. The same is proposed against the railway corridor in the form of a planted buffer and proposed cycleway, containing the site along the eastern boundary, well below the Worthington ridge-line when viewed from the western faces and SH1.

To achieve a development that is visually integrated with its surroundings and enhances the existing landscape attributes of the site, incorporation of key landscape and visual recommendations will mitigate any potential negative visual effects and assist with a positive outcome.

### 3.1.5 Public Realm and Open Space

A high quality public realm and open spaces are important elements of any successful neighbourhood. Public open spaces provide opportunities for recreation and social contact, act as visual relief within urban landscapes, and can express cultural and ecological values.

Open spaces within the Wellsford North structure plan are a significant driver for the spatial arrangement of the movement network, land uses, and built form. The open spaces are organised and connected through the site's existing streams, wetlands, gullies and mature trees, enhancing the sites sense of place and unique character. This approach also provides for the opportunity to enable a water sensitive urban design approach.

Public streets will be located adjacent to the open spaces to enhance its use, its access and wider neighbourhood place-making and safety qualities within the urban environment.

# 3.2 Structure Plan

A collaborative urban design approach with planning and engineering has driven the development of the structure plan, with the aim of providing an appropriate place making framework to guide the future development of the site.

A comprehensive analysis of the existing environment's qualities, features and characteristics informed the identification of appropriate opportunities and constraints. This, in turn has informed the development of the structure plan which indicates key structural elements of movement and land use as well as specific road cross sections, open space and other place making recommendations.

### Legend

- Structure plan extent
- Property Boundary
- Indicative Lifestyle Living
- Indicative Lower Density Residential
- Indicative Medium Density Residential
- Indicative Village Centre
- Ecological Areas / Open Spaces
- Main Collector Road
- Local Streets
- Greenway Cycleway
- 10m Landscape Buffer
- P Indicative Playground
- P Indicative Village Centre Public Space
- S Existing Schools

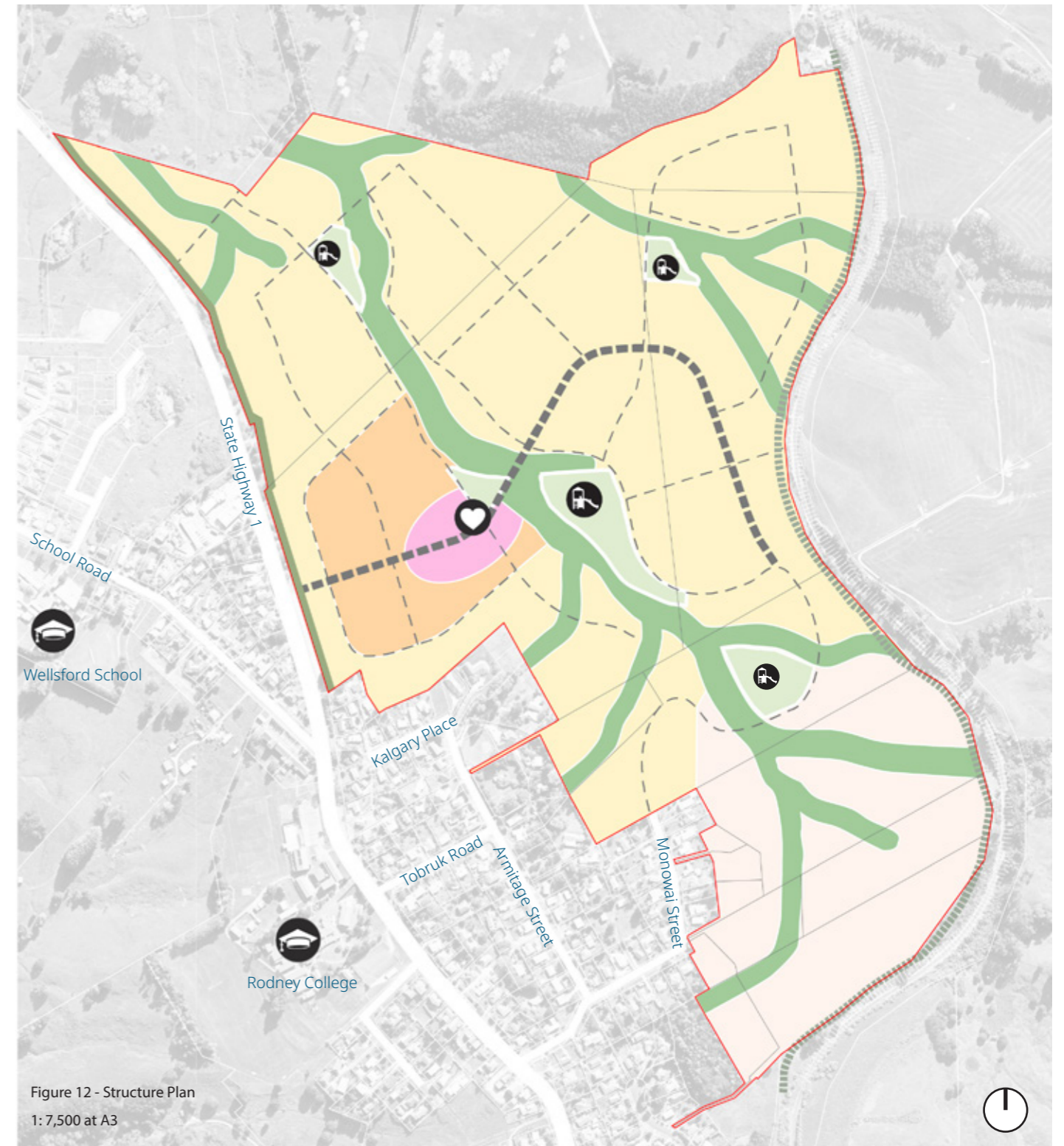


Figure 12 - Structure Plan  
1: 7,500 at A3



### 3.2.1 Density

The structure plan adopts the principle of fostering diversity and choice which will provide for a number of neighbourhoods with differing characteristics. Differences in density is one way to achieve this. In considering different distributions of density across the site area, a number of considerations are taken into account while being sympathetic to the impacts of character, amenity and access requirements.

Such considerations include:

- The steepness of slope and the aspect of the slopes faces including potential for views
- The proximity of an area to the Village Centre, the entry and exit points to the main SH1 intersection
- The proximity of an area to Rodney College and Wellsford School via the SH1 underpass via Tobruk Road
- The proximity of an area to the proposed Village Park
- The transition of density from the existing neighbourhoods of Monowai Street and Armitage Road into the proposed neighbourhoods of the structure plan
- The proximity of an area to the proposed main road and proposed cycleways

**Legend**

-  Structure plan extent - Approximately 78.5Ha
-  Property Boundary
-  Indicative Lifestyle Living - Approximately 13.5Ha
-  Indicative Lower Density Residential - Approximately 30Ha
-  Indicative Medium Density Residential - Approximately 4.5Ha
-  Indicative Village Centre - Approximately 0.9Ha
-  Ecological Areas / Open Spaces - Approximately 13Ha
-  Main Road - Approximately 2.4Ha
-  Secondary Road - Approximately 12.6Ha
-  Greenway Cycleway - Approximately 0.8Ha
-  10m Landscape Buffer - Approximately 0.8Ha
-  Indicative Playground
-  Indicative Village Centre Public Space
-  Existing Schools

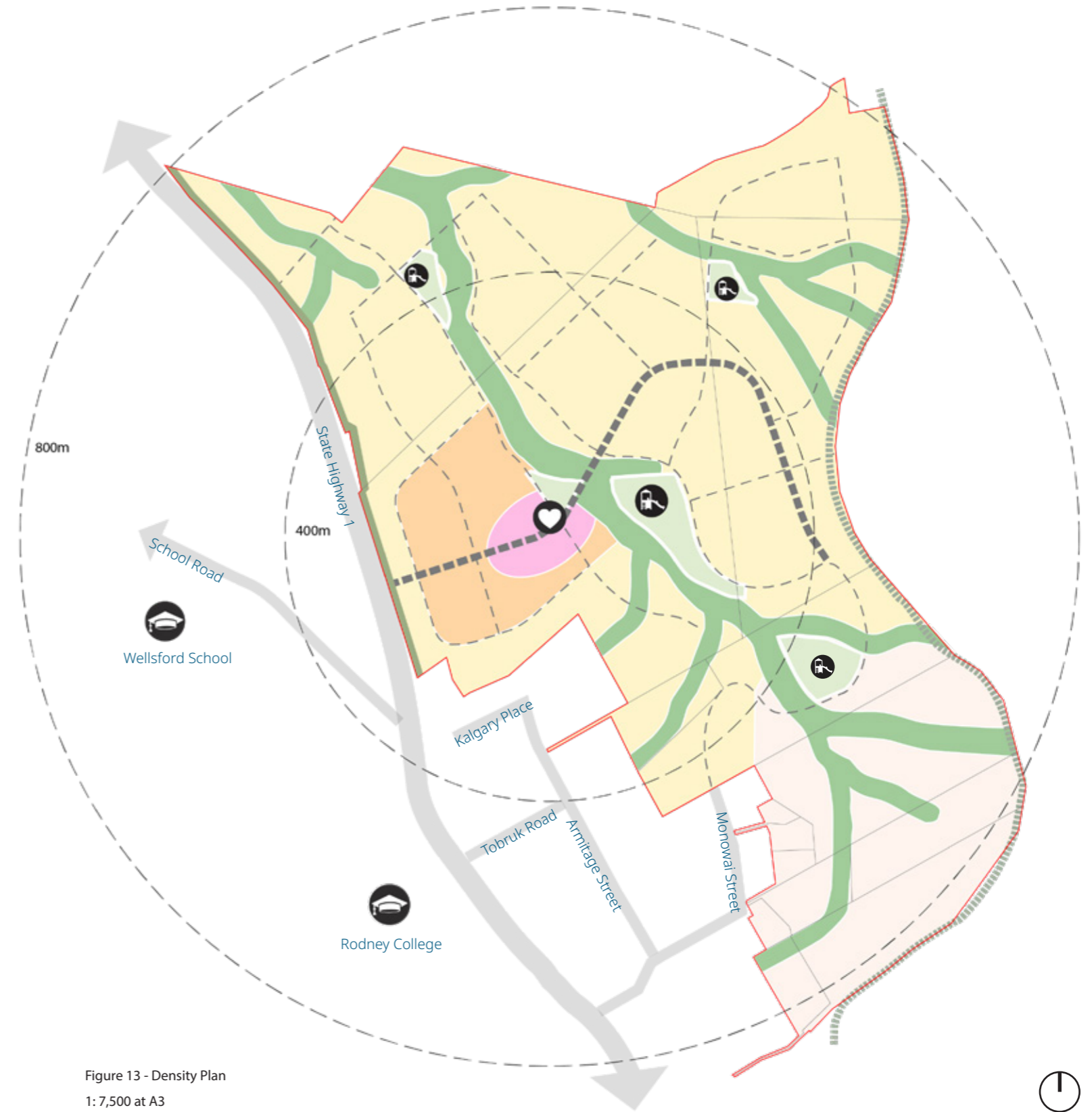


Figure 13 - Density Plan  
1: 7,500 at A3





Village Centre



Duplex typology



Duplexs outlooking open space



Countryside Living and gully planting



Stand alone houses alongside gully plantings



Terrace apartments



Detached housing



Stand alone houses outlooking oipen space

### 3.2.3 Movement

The movement network proposed in the Structure Plan provides a connected and integrated movement system which supports residential development, contributes to character and promotes walking and cycling through a range of street typologies. The proposed movement pattern responds to the following transport design principles:

- A clear/easily understood movement hierarchy with a range of street typologies appropriate to function;
- Roads with significant planting that visually establishes their place at the top of the internal road hierarchy;
- A well connected and walkable neighbourhood promoting direct access to shops, schools, open spaces and a cycleway that connects to the Wellsford Bus Stop and Town Centre;
- Inclusion of water sensitive design devices to aid low impact development;
- Gateways to signal change in speed environment and/or land use;
- Streets which contribute positively to the character of the development with integrated street trees and other plantings; and,
- A high degree of connectivity to promote walking and cycling as an alternative mode of transport.

**Legend**

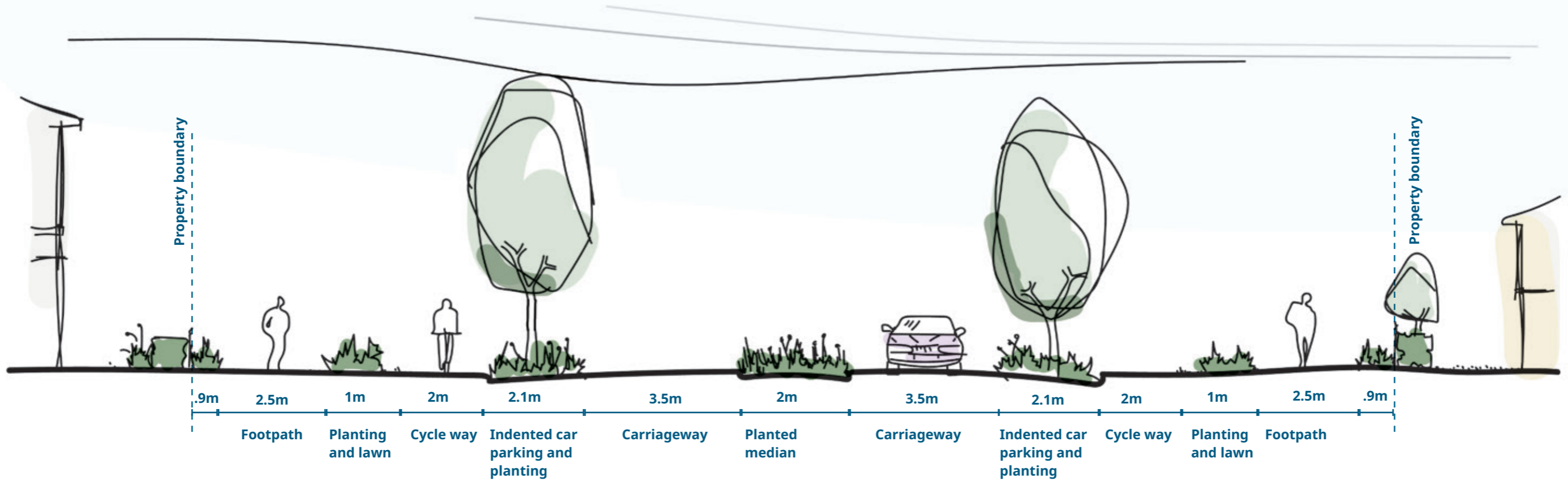
- Structure plan extent
- Property Boundary
- Main Collector Road
- Local Streets
- Cycleway provisions (Existing network upgrades)
- Cycleway on-road (Monowai Street Access)
- Cycleway grade separated (Main road)
- Cycleway (Secondary Road)
- Open space pedestrian and cycle linkages (Key linkages)
- Wellsford Greenways Cycle Link (To Wellsford Bus Stop and Town Centre)



Figure 14 - Movement  
1: 7,500 at A3

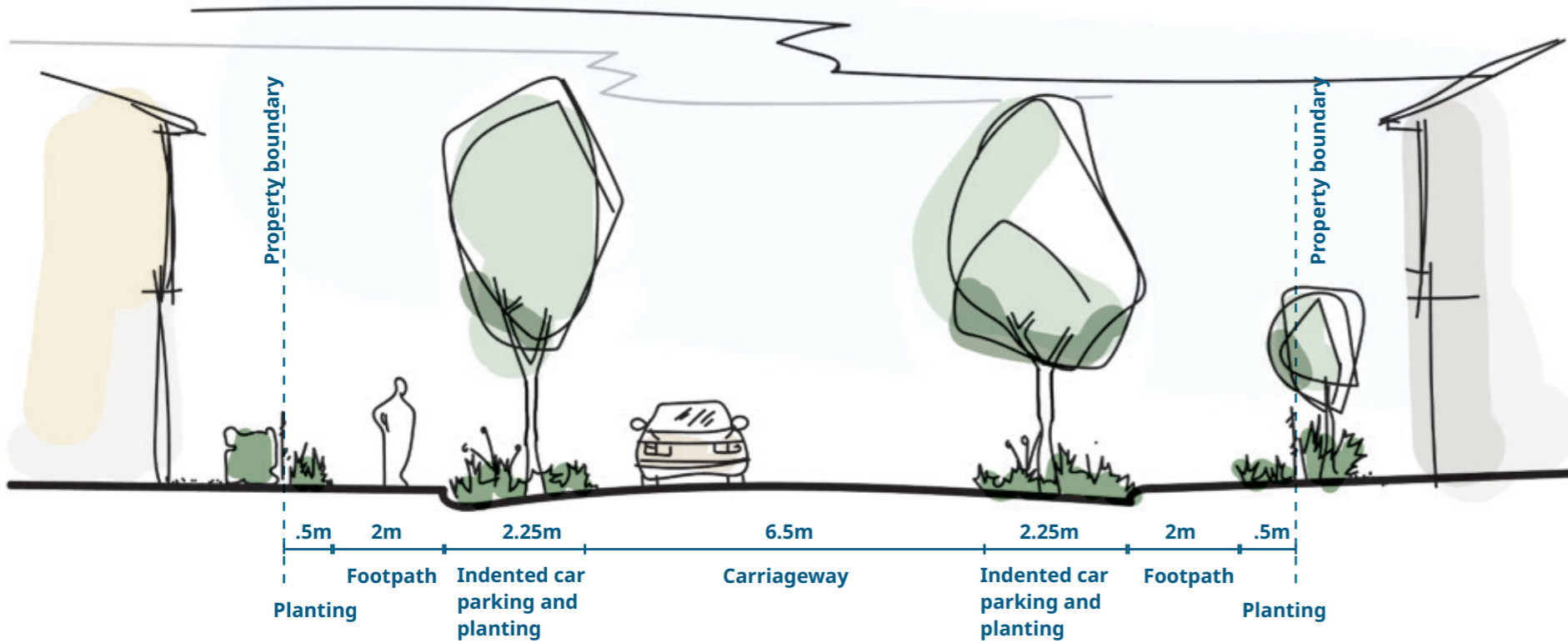
### 3.2.3.1 Main Road Example - 26m

Scale: 1:100 (A3)



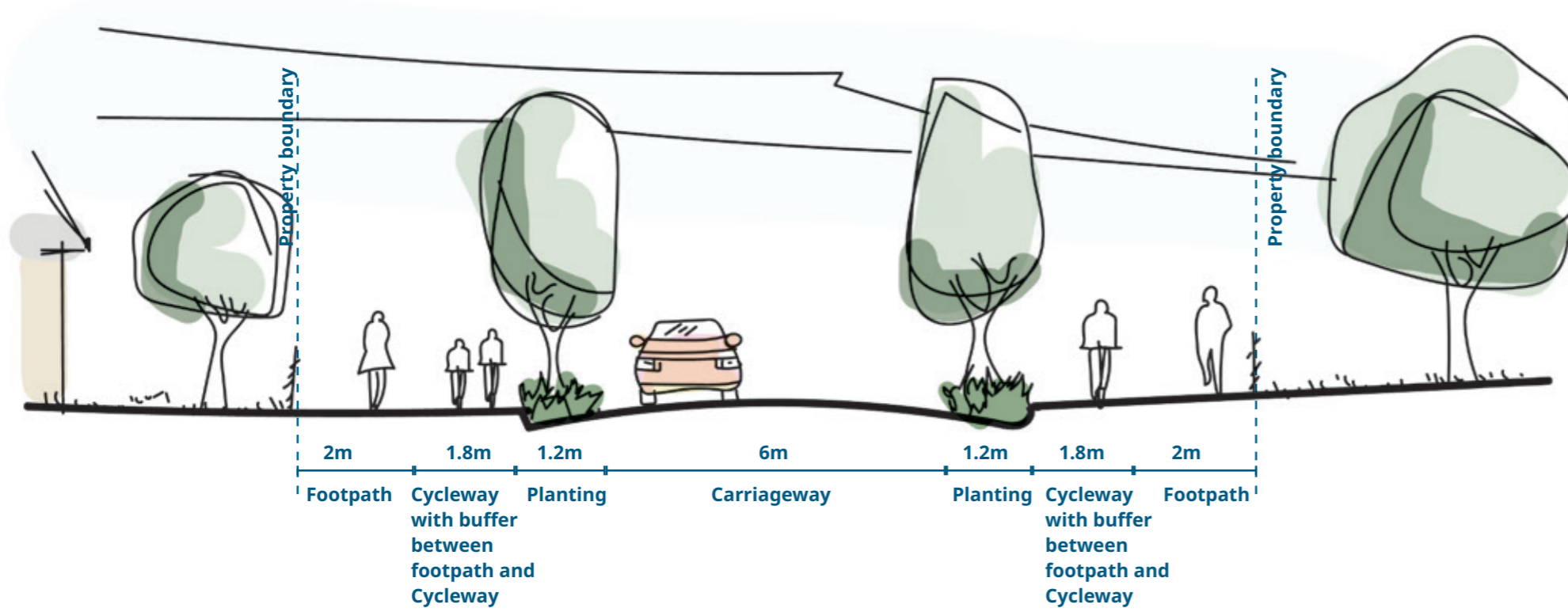
### 3.2.3.2 Secondary Road Example - 16m

Scale: 1:100 (A3)



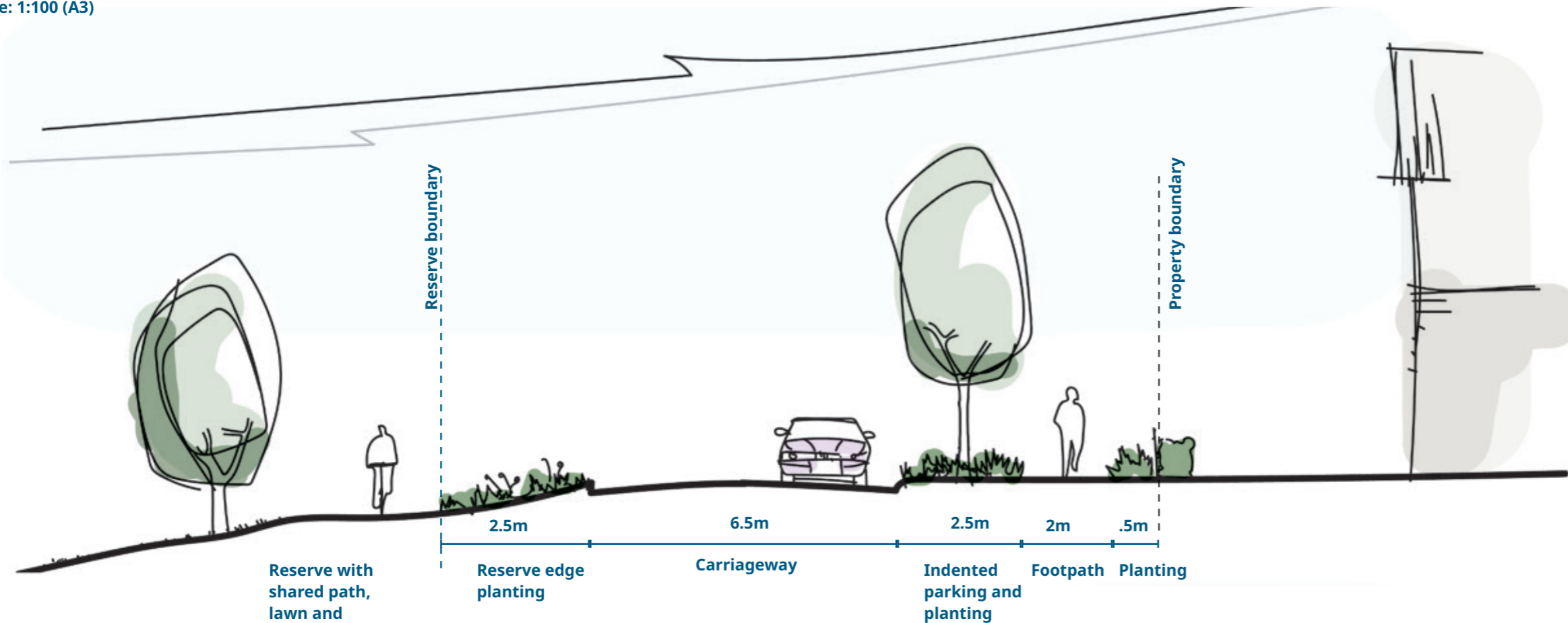
### 3.2.3.3 Secondary Road Cycle Example - 16m

Scale: 1:100 (A3)



### 3.2.3.4 Secondary Road Open Space Edge Example - 14m

Scale: 1:100 (A3)



### 3.2.4 Public Realm and Open Space

Landscape character is recognised as a key structure plan component with the ability to contribute significantly to the identity and character of future development.

The open space network of the Structure Plan includes a variety of open spaces with varying functions which together fulfill the needs of future residents for active and passive recreation. They also provide visual relief and outlook and character for new, sometimes higher density, development. Open space components include:

- Totara Grove which is retained as a stand of natural bush with high ecological value. This area provides for outlook amenity and vegetative character;
- A network of smaller neighbourhood parks to provide for both active and passive recreation and a focus for social interaction. A larger park located centrally and opposite the Village Centre to accommodate larger activities;
- A civic space associated with the Village Centre, reinforcing the community heart of the gateway precinct;
- Green streets with significant tree planting for amenity and outlook;
- Pedestrian and cycle connections including a proposed Greenway Cycle link into Wellsford Town Centre and will also provide for recreation; and,
- Any storm-water attenuation areas to be incorporated into wider open space system.

Elements of the structure plan that respond to this include:

**Legend**

- Structure plan extent
- Property boundary
- 10m Landscape Buffer
- Ecological Area
- Recreational Amenity Area
- Indicative Village Park
- Indicative Neighbourhood Park
- Indicative Civic Space in Village centre
- Proposed Greenway Link
- Main Collector Road
- Local Streets
- Totara Grove
- Existing Conservation Zone

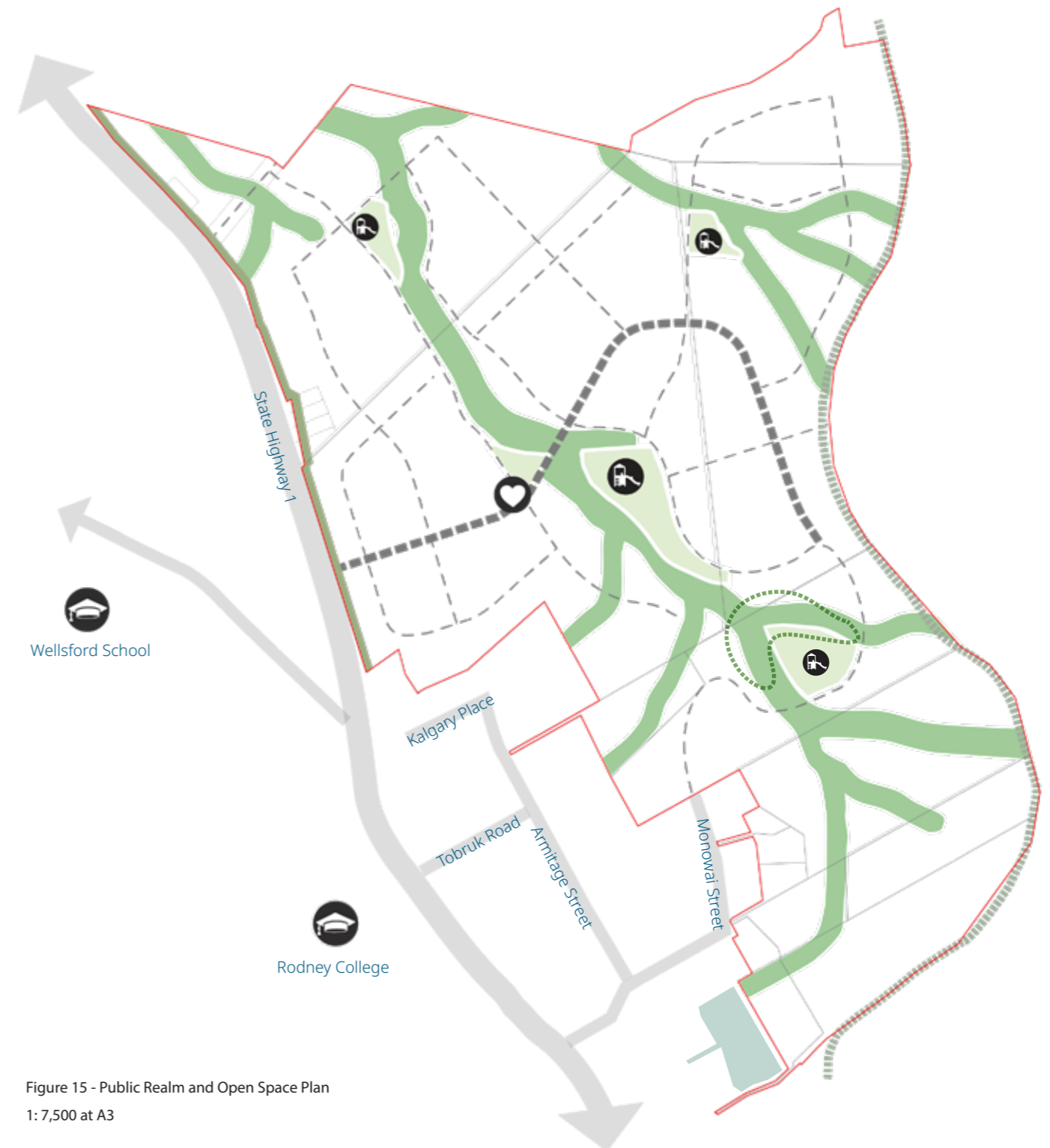


Figure 15 - Public Realm and Open Space Plan  
1: 7,500 at A3







Stream edge and ecology



Park treatments



Informal play opportunities (Te Māra Hūpara)



Formal play opportunities



Wetland and storm-water management treatments



Civic space opportunities



Streetscape treatments



Pedestrian and Cycle access

### 3.2.5 Boundary Interfaces

The management of interfaces has been identified as a key structure plan response in order to ensure future development integrates with its context. Five interfaces have been identified with respect to implications for future development, including:

- Railway line
- State Highway 1
- The northern rural boundary
- Armitage Road and Monowai Street communities
- The steep southern boundary

These interfaces are identified on the structure plan in order to ensure appropriate design responses and residential amenity as well as prevent any negative impacts on adjacent activity.

**3.2.5.1 Railway line** - It is proposed to incorporate the proposed Greenway plan's cycleway path on non council owned land within the structure plan. This will provide a cycleway buffer between the rail corridor and the proposed residential community which absorbs some of the steeper slopes, provide lookout points, create a visual buffer and may help to reduce noise of any trains.

**3.2.5.2 State Highway 1** - A 10m wide landscaped buffer is proposed between the State Highway and the proposed residential area of the structure plan. This will create a visual buffer, absorb some of the steeper slopes and may help to reduce perceptions of traffic noise. The buffer will also provide a gateway into Wellsford from the north and will be of a high quality.

**3.2.5.3 The Northern Rural Boundary** - The northern boundary of the structure plan interfaces rural zoned land and has been aligned with a local stream. A riparian landscaped buffer is proposed which separates and delivers a visual transition between the proposed residential area from the existing rural land.

**3.2.5.4 Armitage Road and Monowai Street communities** - It is proposed that as a transition from the existing neighborhood of the Armitage Road and Monowai Street area, that lower residential density typologies are utilised to enable a softer change of residential character and to absorb some of the steeper slopes along this edge.

**3.2.5.5 The steeper Southern Boundary** - Similar to the interface detailed in 3.2.5.4, this transition includes lower density development to provide a softer change of character between the proposed countryside living area and the existing rural land use and to absorb some of the steeper slopes of the structure plan area.

**Legend**









	Structure plan extent		The northern rural boundary interface
	Property boundary		Armitage Road and Monowai Street communities interface
	Ecological Area		The steep southern boundary interface
	Railway line interface		
	State Highway 1 interface		

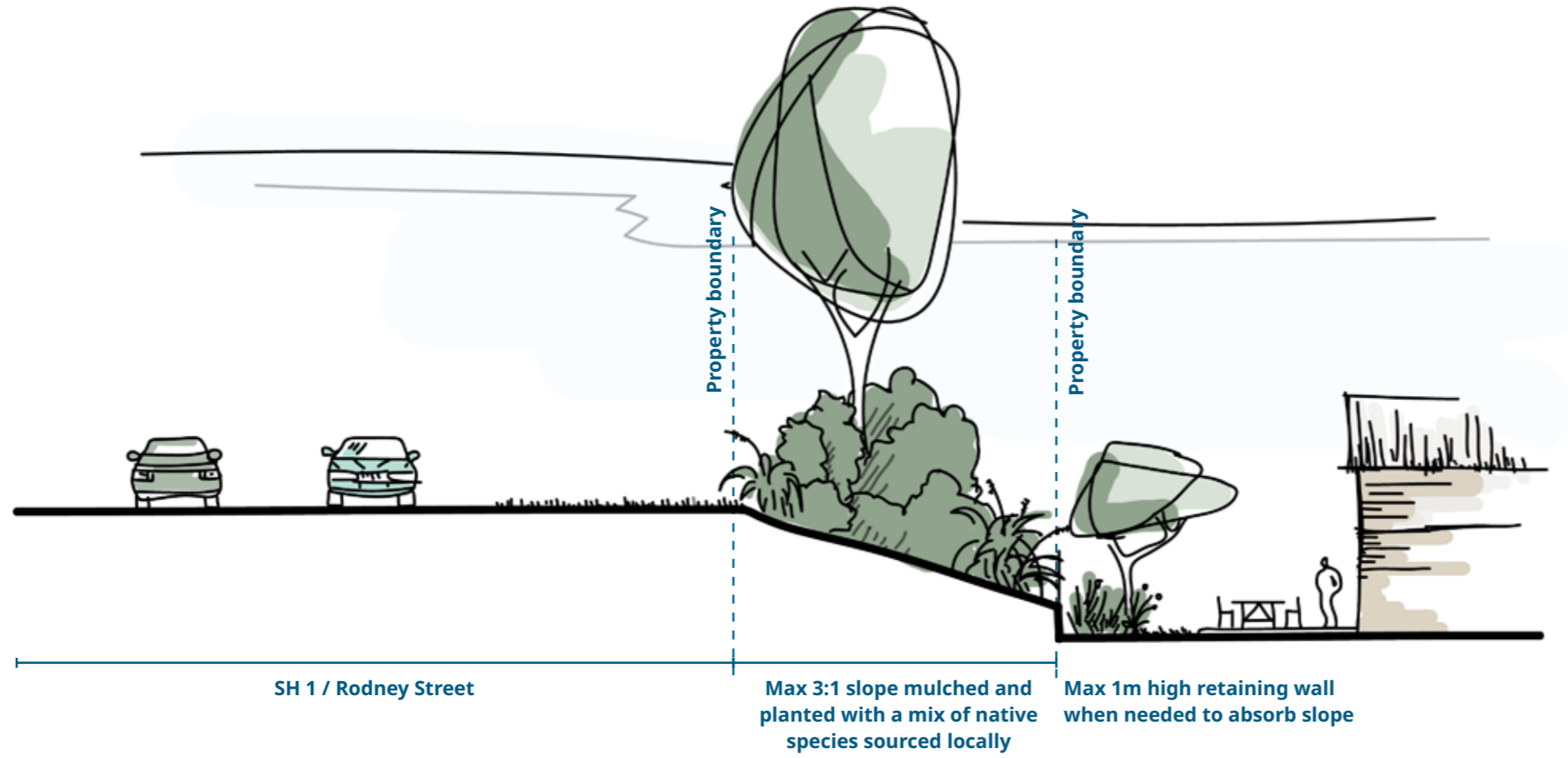


Figure 16 - Interfaces Plan  
1: 7,500 at A3



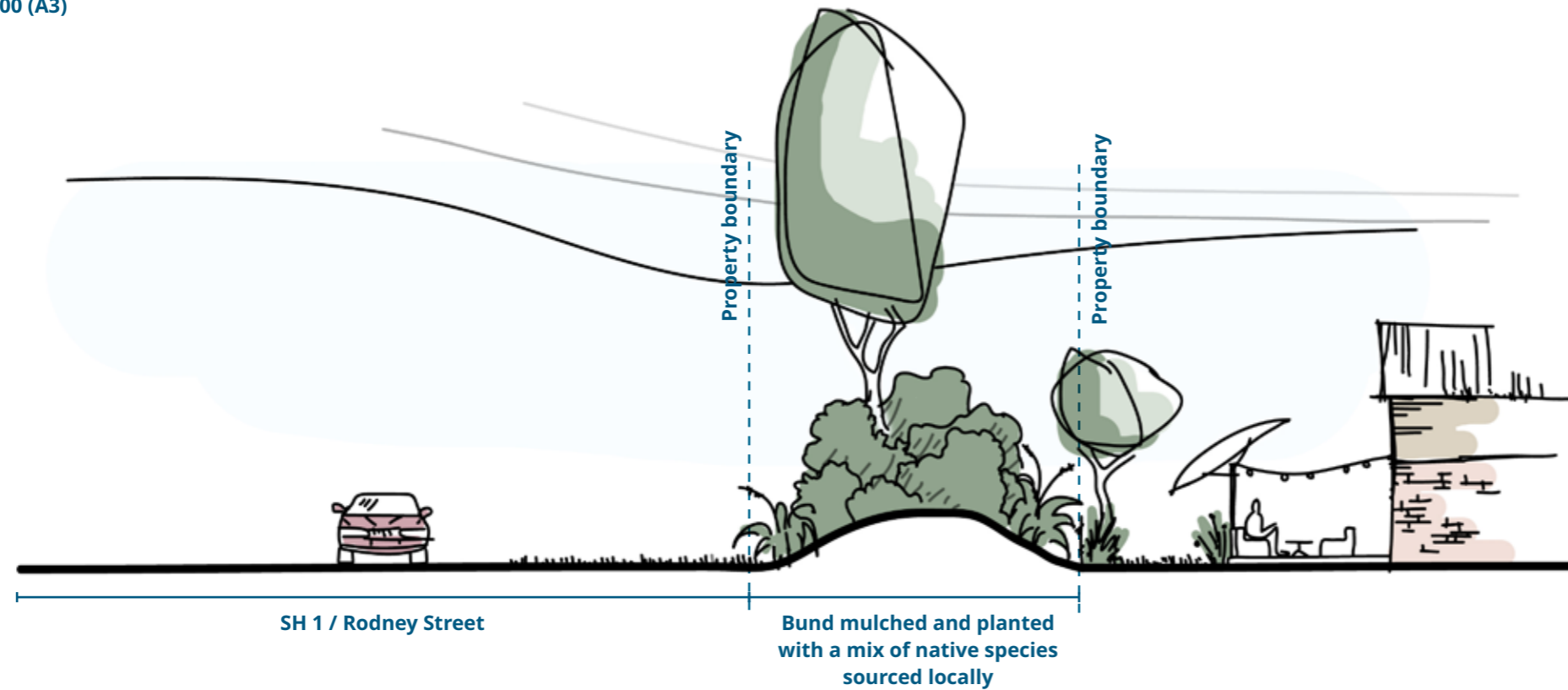
### 3.2.5.1 State Highway 1 Interface - Sloped

Scale: 1:200 (A3)



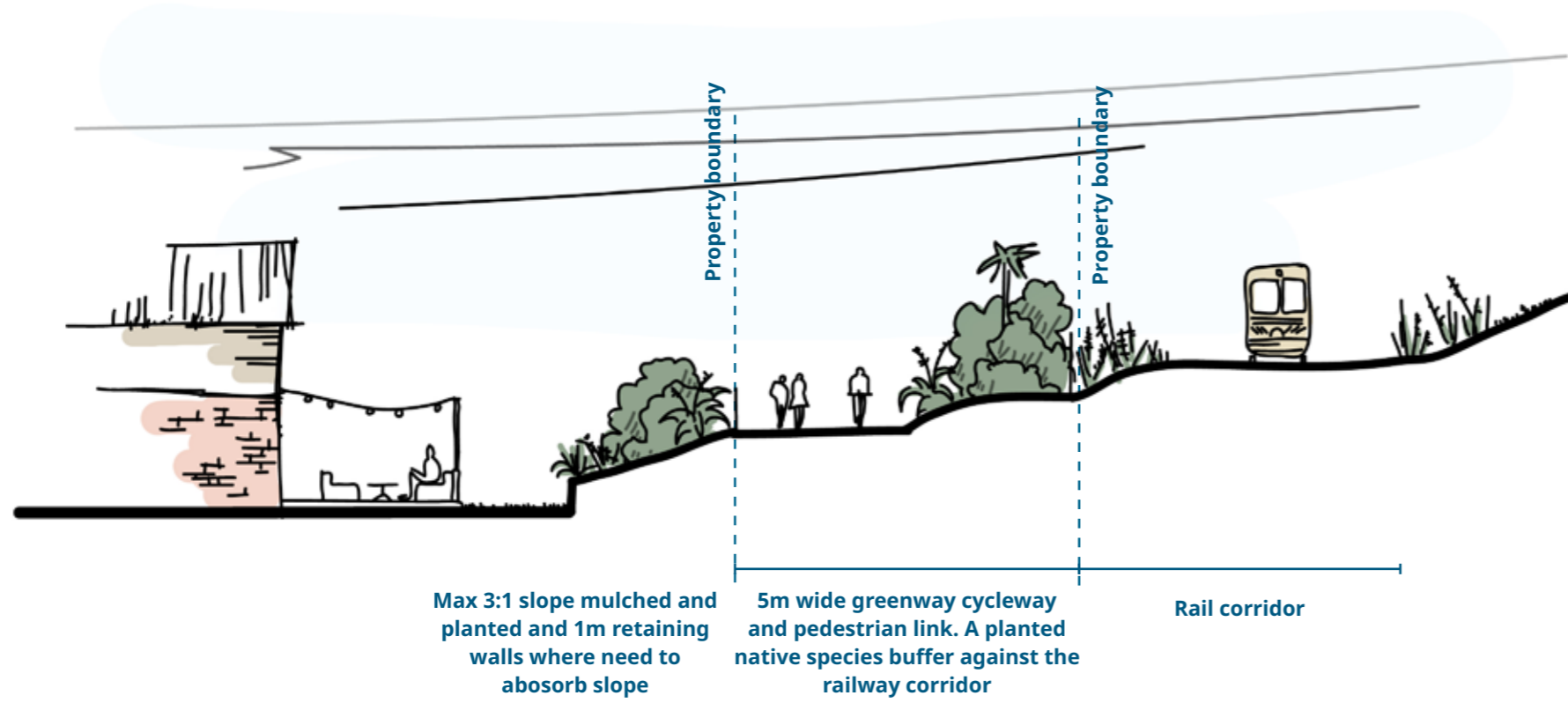
### 3.2.5.2 State Highway 1 Interface - Bund

Scale: 1:200 (A3)



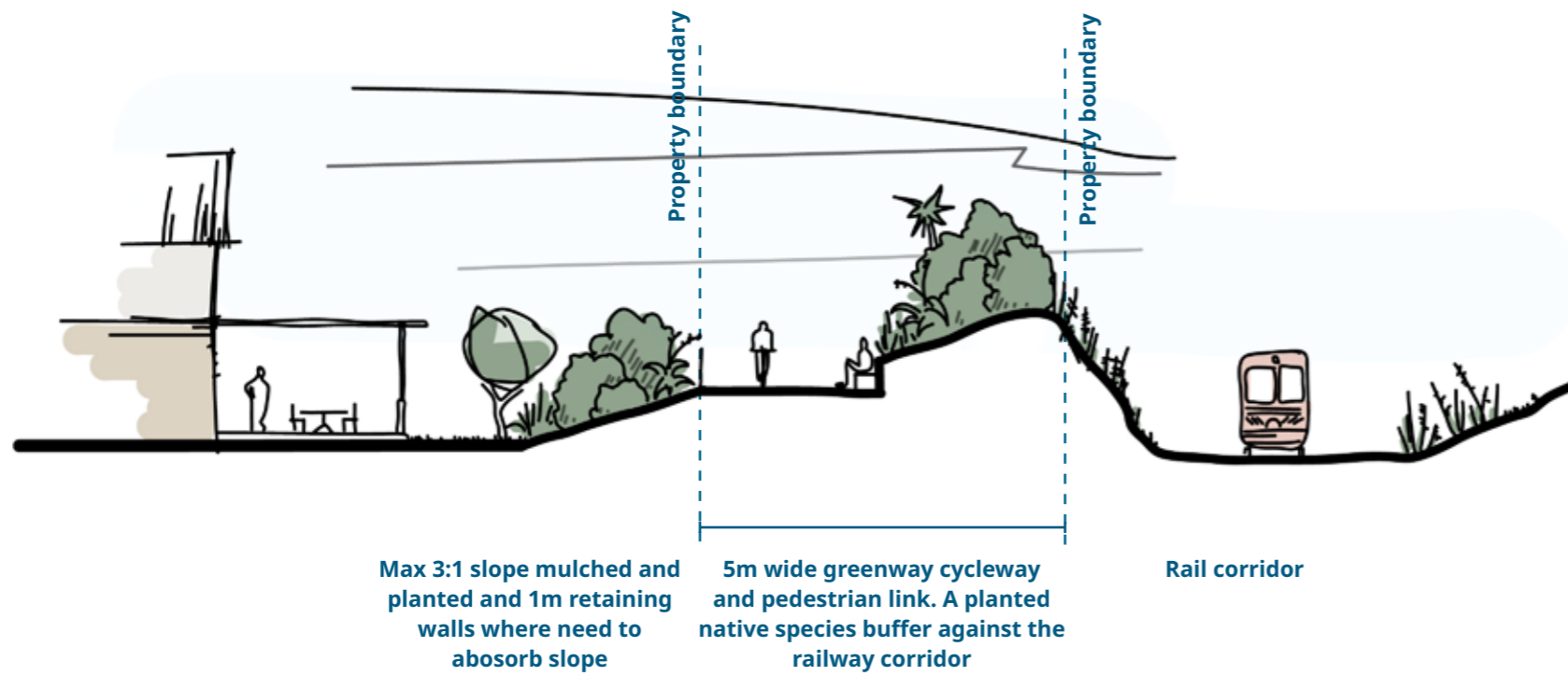
### 3.2.5.4 Railway Interface Example 1

Scale: 1:200 (A3)



### 3.2.5.4 Railway Interface Example 2

Scale: 1:200 (A3)



## 3.2.6 Village Centre

A local retail centre is proposed to provide for daily convenience needs of both future residents and existing residents within walking distance of their homes. It will also help to create a community heart for the development and provides local employment opportunities. It is intended that small scale / boutique shops establish in a cluster in line with the following outcomes:

- Small scale retail to provide a range of daily convenience and specialty stores, including a small neighbourhood supermarket / superette
- Retail activities which front / address the street with doors and glazing
- Car parking provided to help support viability of shops but located away from key public areas
- Appropriate and consistent signage that reflects local character
- Provides local employment opportunities
- Potential to integrate residential as a supplementary and complementary use. This is important as it will add to the intensity of development, to choice of house type, and may be necessary if the whole zone can't be filled with commercial activity.



### 3.2.7 Residential Neighbourhoods

In order to address the varied constraints and opportunities across the structure plan area, a number of residential neighbourhoods have been identified. This approach encourages a diversity, a sense of identity and divides the structure plan area into perceptually different neighbourhoods each with a distinct character and offers a different living environment. There are seven proposed neighbourhoods in the structure plan including:

1. Rodney Rise and Village Centre

This neighbourhood will determine the first impression of much of the Wellsford North structure plan area from the main State Highway 1 access. Key outcomes sought are a village centre that reflects the rural heritage of the site, provides a connection through to Armitage Road, take advantage of the north-eastern views of the stream and wider landscape and respond to steep slopes by utilising larger section sizes and incorporating areas into the ecological spine.

The intention of the neighbourhood is to establish a legible entrance off State Highway 1, create a civic heart within the structure plan area and provide for a range of residential housing types at a higher density to that of the wider area whilst integrating with the natural features of the landscape.

2. Totara Grove

Totara Grove provides access from Monowai Street into the Wellsford North structure plan area from the south and serves as a secondary access. This neighbourhood is defined by its integration with the natural land-form of spurs, gully's, streams, wetlands and existing native plantings including a "grove" of mature totara trees. Key outcomes include the retention of existing totara trees, providing for riparian margins around streams and wetlands, development to work with the natural forms and features of the landscape and provide public access along riparian margins and connections to the railway cycleway.

The intention of this neighbourhood is to provide a lifestyle living alternative and to integrate developments with the landscape while providing a clear and legible secondary site entrance that restricts vehicle speeds and movement.

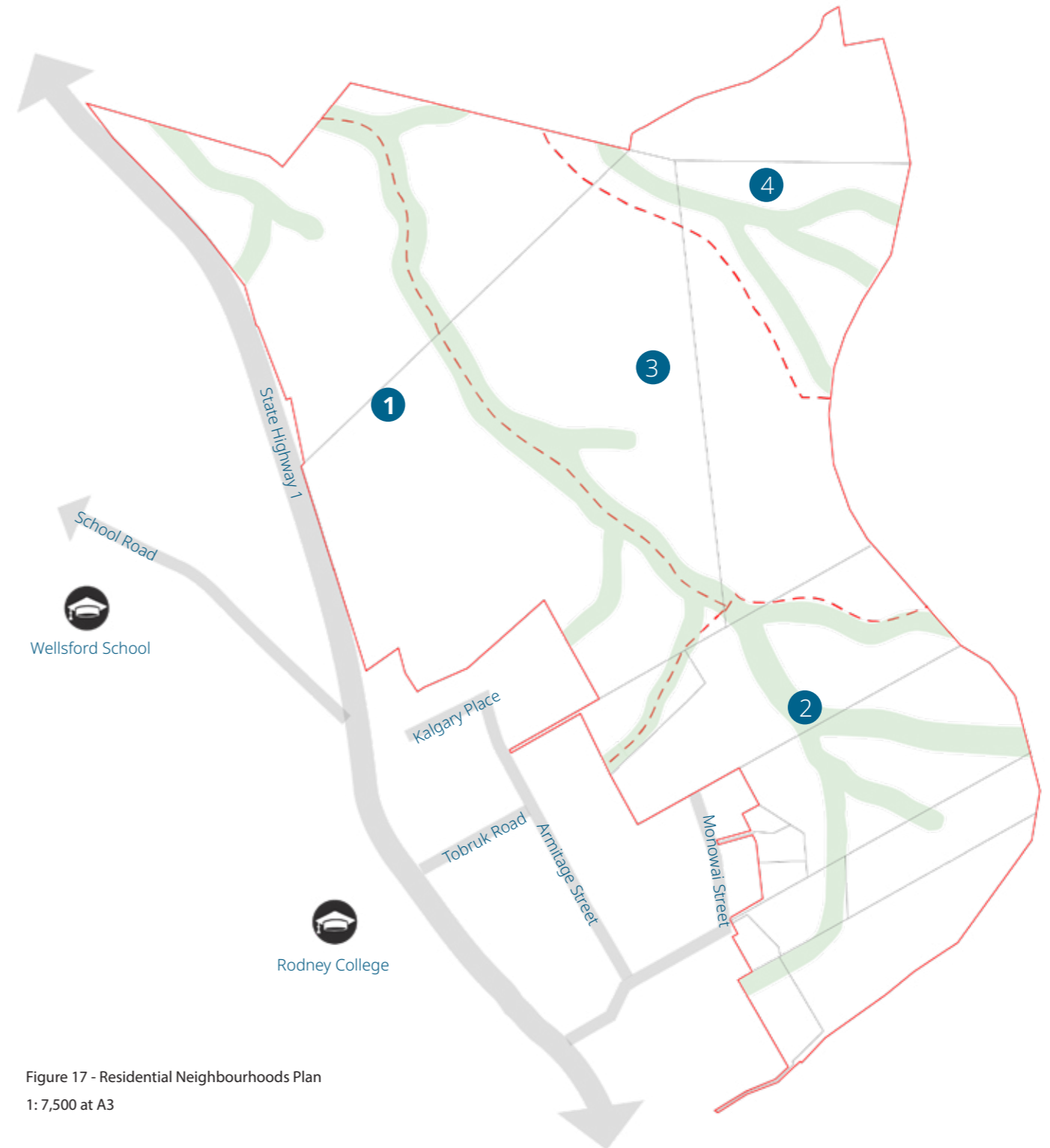


Figure 17 - Residential Neighbourhoods Plan  
1: 7,500 at A3

3. Eastern Rise

The Eastern Rise provides access from the Wellsford North structure plan area onto the proposed Greenways cycleway that connects to the Wellsford Town Centre alongside the Railway corridor and provide a high-quality open space alongside the stream. Key outcomes sought include providing a clear connection from the proposed Greenway cycleway, through to the central public open space and onto the Village Centre, respond to the main road connection through appropriate housing typologies and density.

The intention of this neighbourhood is to provide an appropriate edge treatment / interface to the railway corridor, access to Wellsford Town Centre via a cycleway and to provide recreational opportunities along the stream corridor.

4. The Streams

The Streams responds to the natural land-form and is framed by a stream along the northern boundary of the structure plan area. Key outcomes sought include a positive connection and interface with the proposed Greenway cycleway, riparian margins, tree planting and public access along the streams, provide for a well connected and safe neighbourhood park and provide for the integration of possible future connections north of the site.

The intention of this neighbourhood is to respond and integrate with the natural land-form and landscape features and provide access to the Greenways cycleway.



Totara Grove



Village Centre - Farm yards



Eastern Rise - Railway boundary



The Streams

## 3.2.8 Yield Estimate

The residential yield is taken from the proposed residential land-use types outlined in the structure plan and is used to help to anticipate the outcomes of the plan. These figures are estimates only as development will occur over a long period of time and will respond to the changes in market demand and opportunity.

These estimates are derived from a high-level desktop study and based on professional experience only.

### 3.2.8.1 General Assumptions

- No allowance of space has been made for roads, lane-ways or public open space other than what is shown on the structure plan;
- Average allotment areas (m<sup>2</sup>) have been applied across the residential land types, however it is anticipated that in responding to the principles and vision of the structure plan, that further master-planning may provide a greater variety of allotment sizes and typologies of housing.

### 3.2.8.1 Estimate

	Area (Ha)	Possible Average Allotment Size	Possible Yield
Indicative Lower Density	30.3	400	757
Indicative Medium Density	5	200	250
Indicative Countryside Living	13.5	3000	45
<b>Possible Total Yield</b>	<b>48.8</b>	<b>-</b>	<b>1052</b>



## 3.2.8 Structure Plan Response

### Movement

Issue	Implications for Structure Plan	Recommendations
Access off SH1	No existing access in the structure plan area off SH1. Sightlines along SH1 restrict the location of an access point. An unformed legal road exists along the northern area of the site. Options for a new intersection are limited.	Access proposed along the alignment of a small spur in the landform of the structure plan area, along an existing main farm track and onto a point along SH1 that has a reasonable level of visibility from on coming traffic.
Access off Monowai Street	Difficult to access given steep slope constraints. If connected to the wider vehicle movement network, it could provide a rat run if road typologies don't deter vehicle speeds and volumes. Impacts on existing streetscape environment of Monowai Street, upgrades to footpaths and road width possible.	Use traffic calming devices and a narrower road typology to lessen the impacts on the landform (earthworks and retaining). Restrict vehicles to the one road access point by not providing other connections to the wider site for vehicles. Provide pedestrian and cycle links to this access point however.
Access off the unformed legal road	Unformed legal road exists and could provide a connection from the structure plan area to the north. Is surrounded by waterways, wetlands and steep slopes.	Provide one vehicle connection to the unformed legal road but not make the movement network dependable on accessing it.
Alternative access to Wellsford Town Centre	The only possible access to Wellsford Town Centre is via SH1. This is not catering for people of all ages and abilities to use alternative transport options safely.	Opportunity to incorporate the Rodney Greenway's planned cycleway connection along the railway corridor on non-council land and would connect into the Wellsford Town Centre via the Wellsford bus stop, which has access to Auckland.
Unformed internal access	Gives potential to develop a connected internal movement network	Indicative pedestrian and cycle movements included on the structure providing for the safe and legible movement around the site, and to the structure plan area access points. Provide for a range of road typologies that add character, identity and a clear roading hierarchy.

### Public realm and open space

Issue	Implications for Structure Plan	Recommendations
Steep slopes	Impacts access, movement networks and the overall spatial arrangement of land uses. Also impacts storm-water management, soil erosion and potential loss of existing vegetation. Retaining walls may be needed and will need to be managed.	Movement networks, block orientations and open space to respond in a sensitive manner to the existing landform. Larger allotment sizes associated to areas with steeper slopes, and retained as rural character or countryside living. Integrate steeper slopes into riparian edges and ecological areas. Manage retaining wall heights.
Mature vegetation	Retaining mature trees provide immediate amenity, sense of scale and connection to the rural heritage of the site. Can result in potential loss of yield. Restricts the movement network. Compatibility of some of the mature trees with residential landuse such as shelter belts restricting sight-lines, shading and limb fall. Retention of landscape character. Ongoing ownership and management of large exotic tree species.	Larger residential allotments around high value trees to encourage their retention. Groupings of trees to be located within public open space areas. Removal of some trees (shelter belts) to maximise yield. Select removal of undergrowth, riparian margins and larger mature trees to improve CPTED related outcomes, maintenance outcomes and overall ecological value. Promote the incorporation of green corridors and fingers into the development layout for linkages to provide recreational, ecological, landscape and amenity benefits.
Waterways and wetlands	Limits the spatial arrangement of residential land-use and movement networks. Set backs of these areas needed for protection. Can influence aspect and solar orientation of developments.	Opportunity to create a cohesive, well-connected and extensive open space network with high ecological values. Apply Water Sensitive Urban Design principles including values related to ecology, culture, landscape amenity, recreation and drainage.

## Boundary Interfaces

Issue	Implications for Structure Plan	Recommendations
State Highway 1	The current environment and associated amenity of this corridor are not consistent with residential development. Future residents likely to be sensitive to effects arising from the road in its current form. The structure plan could be responsive to this existing environment, it could also be used to drive a change to the existing environment.	Restrict property access, improve site access intersections, and provide a landscape buffer and / or setbacks to residential lots.
Railway corridor	Limits connectivity along the entire eastern boundary of the structure plan area. Some visual and aural impacts on future development.	Opportunity to incorporate the Rodney Greenway's Planned cycleway connection along the railway corridor on non-council land and would connect into the Wellsford Town Centre via the Wellsford bus stop to Auckland. Could include a landscape buffer and take advantage the potential views from numerous high points along the eastern boundary.
Existing Armitage Road and Monowai Street community	Potential for increased traffic. Visual change of landscape from rural to suburban. Existing population to assist with the viability of non-residential land-uses.	Restrict vehicle access from the structure plan site on to Armitage Road but include a pedestrian and cycle link. Transition from the adjoining boundary with landscape buffers and lower residential density allotments. Deter vehicles and vehicles speeds from Monowai Street into the central areas of the structure plan area by making other routes easier and quicker for vehicle movement.
Southern rural boundary	Visual change in landscape.	Achieve transition with larger allotment sizes, retention of existing vegetation, rural character streets along spurs and proposed riparian planting around streams and wetlands.
Northern rural boundary	Visual change in landscape.	Landscape buffer and riparian plantings along streams.
Transmission line	Visual and aural impacts on future development	Landscape buffer and open space provision.

## Residential

Issue	Implications for Structure Plan	Recommendations
-	Residential land-use	A range of housing typologies to promote a mixed community. Higher density typologies to maximise land resource within proximity to schools, access, open space and Village Centre. Opportunities for lower density and countryside living.
-	Non-Residential land-use	Neighbourhood scale Village Centre to provide for daily convenience needs to promote a walkable neighbourhood.
-	Open space / ecological areas	Open space and ecological areas to ensure retention / protection of mature trees and riparian ecosystems. Neighbourhood parks to provide local recreational opportunities. Multi-functional spaces to accommodate storm-water attenuation areas as well as informal recreational opportunities, cultural and ecological values.



Artist Impression Only - Looking north along the green corridor from the village centre.



# B&A

Urban & Environmental

09 375 0900 | [admin@barker.co.nz](mailto:admin@barker.co.nz) | [barker.co.nz](http://barker.co.nz)

PO Box 1986, Shortland Street, Auckland 1140

Whangarei | Napier | Christchurch | Auckland | Wellington | Queenstown | Hamilton | Kerikeri