# 1.1 Purpose and Scope

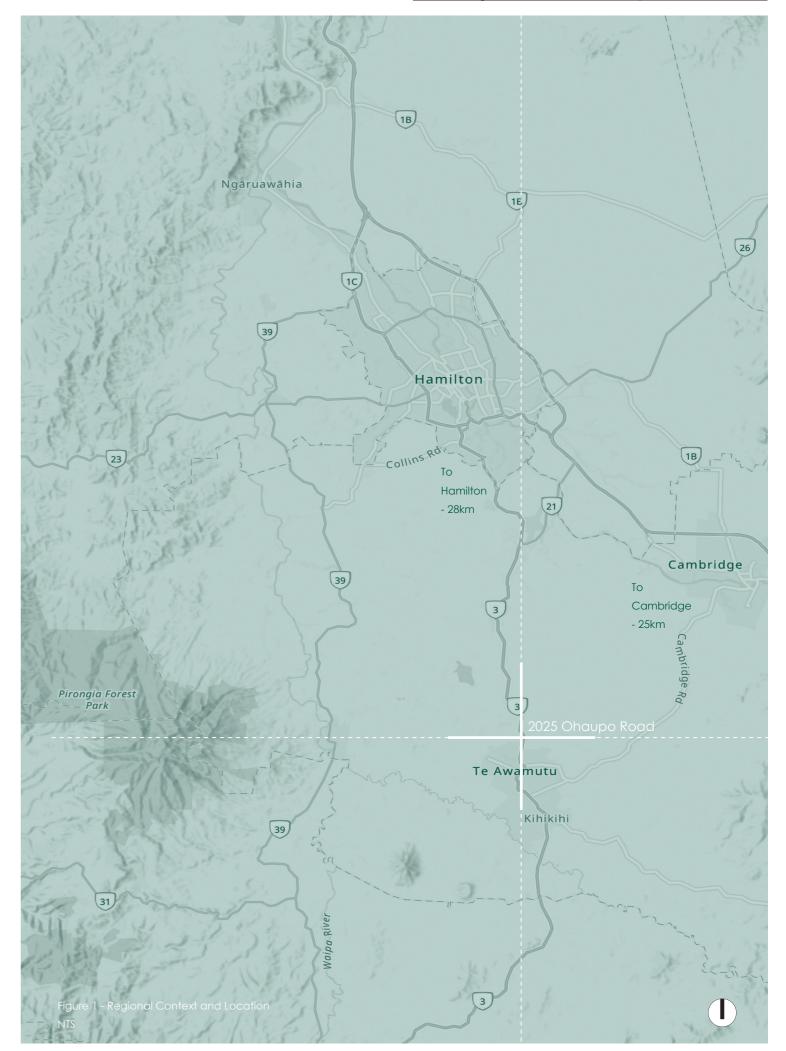
The site is located on the northern urban fringe of Te Awamutu, and bounded to the east by State Highway 3 (Ohaupo Road) to Hamilton.

This Urban Design Statement for the Ohaupo Road Conceptual Structure Plan area is one of a suite of technical reports that has been prepared to support the Ohaupo Road Private Plan Change.

The purpose of the Urban Design Statement is to provide design background to the development of the Conceptual Structure Plan and to support the implementation of the Plan Change. This document identifies urban design considerations relevant to Te Awamutu and the Plan Change area (shown in Figure 2). It is informed by national and local urban design policy and guidance.

Specifically this report seeks to provide the following:

- An understanding and high-level analysis of the site in context to to Te Awamutu, in particular to the existing and planned for movement and landuse patterns of the town;
- An analysis of constraints that impact the urban development of the site, including overlaying the specialists' reports and the issues they have identified that impact spatial outcomes within the site.
- An analysis of the spatial opportunities the site presents in terms of urban development including recommendations from the specialists' reports;
- A recommendation for a conceptual structure plan that illustrates the spatial form outcomes for urban development of the site that reflects the above analysis of the sites' context, its constraints and its potential opportunities.



# 1.2 Site Location and Context

The site is located at 2025 Ohaupo Road, north of Te Awamutu and adajacent to State Highway 3 which connects Te Awamutu to Hamilton. The drive time from the site to Hamilton Central is approximately 27 minutes.

The Site has a reasonable level of connectivity being adjacent to State Highway 3, also known as Ohaupo Road. Given the compact urban form of Te Awamutu, the site is approximately a 25 minute walk from the commercial centre of the town. Sidewalks do not currently exist along the entirety of this route.

Additionally the site is adjacent to the only public bus stop for Route 24 (Te Awamutu to Hamilton Central) within Te Awamutu, aside from the Terminus which is located within the commercial centre of the town. The bus stop is less than one minutes walk from the site, and

takes approximately 48 minutes to travel to Hamilton Central.

There is a current lack of access to public open space and other recreational opportunities within the northern extents of Te Awamutu.

Future cycleway connections are planned within the northern area of Te Awamutu, providing important connections to schools, and to the commercial centre. A connection from the site to the future terminus of these planned cycleways would be beneficial in completing a safe and quality network.



<u>B&A</u>

# 1.2.1 Accessibility

In regards to establishing accessibility principles that promote a well-functioning urban environment, different scales of spatial relationships should be considered.

- One scale is the site's location in context to local services, amenities and opportunities.;
- A second scale is the site itself, and what services, amenities and opportunities it provides for; and,
- A third spatial relationship is then how the site leverages its location to the wider local services, amenities and opportunities and provides enhanced connections and access to them.

The plan change area is uniqually located along state highway 3, on the northern edge of the urban area of Te Awamutu. This location includes the following accessibility opportunities:

- Located within close proximity to a bus stop that picks up passengers and connects them to Hamilton Central. The only other bus stop in Te Awamutu is located within the central town area.
- State highway 3 provides a clear and logical connection in the central town area, which is within a 30 minute walking catchment, and within a 10min cycling catchment.
- The site is located within the top 75th percentile of areas within Te Awamutu that can access over 75% of the employment opportunities by bicycle.

#### Legend

Ор

Open Space

Existing cycleway

Future Cycleway Bus route - 24

Bus Terminus

Bus stop

Commercial Zoned land

Secondary School

Composite School (year 1 - 10)

Intermediate School

Primary School

Contributing School (year 1 - 6)

5 minute walking access to a public bus

Top 75th percentile of areas with access to 75% of employment opportunities within Te Awamutu by bicycle - Waka Kotahi Planning and Investment mapping, Access to Social and Economic Opportunities, 2020.



# 1.3.3 Biophysical

The site has a rich underlying ecological layer based on its distinctive topography. 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 ecological areas lead to development and connectivity constraints. Site planning considerations and opportunities include:

- 1. riparian setbacks from waterways and wetlands (minimum 10 meters) planted with local eco-sourced native plants;
- 2. management and enhancement of the Significant Ecological Area (kahikatea remnant);
- 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, associated public open space and ciruclation networks, allowing residents to safely enjoy the recreational potential of these areas.

### Legend

Identified wetlands

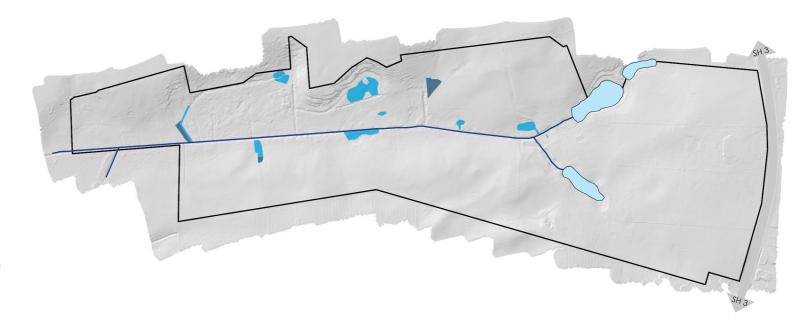
Wet areas

Approximate extent of ponds

 Approximate extent of existing



Figure 8 - Wetlands and drain 1:12,000 at A3



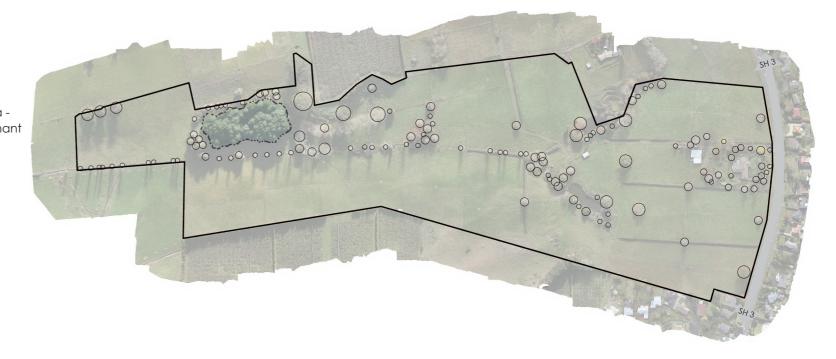
### Legend

Significant
Ecological Area Kahikatea remnant

Existing trees - Majority exotic



Figure 9 - Vegetation 1:12,000 at A3

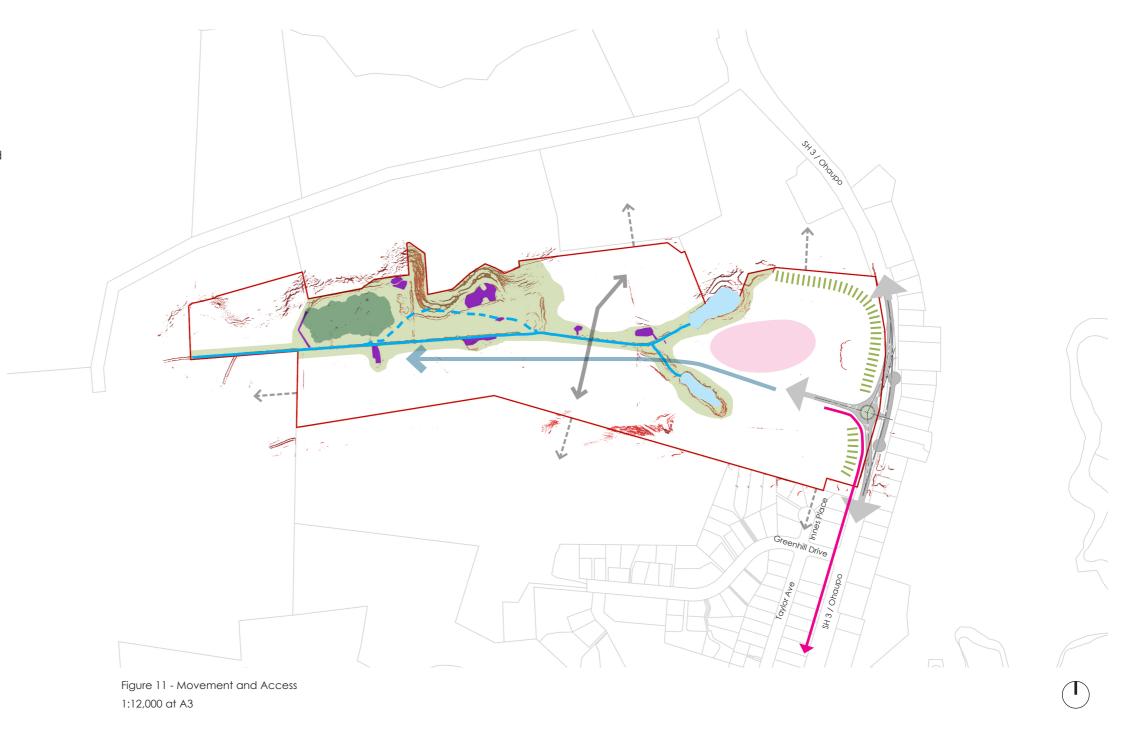


# 1.4 Opportunities and Constraints

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 conceptual site planning.

### Legend

- >25% Slope Avoid and incoporate into an open space network and re-vegetate with native plantings
- Protect and enhance the Significant Ecological Area
- Identified wetlands Protect and incorporate into open space network with a 10m minimum buffer
- Central green spine of open space. Incorporates steep slopes, wetlands and inaccessible areas. Will facilitate pedestrian and cycle opprtunities
- Existing ponds Improve to provide enhanced drainage, ecology and amenity functions
- Opportunity for possible retail use such as a cafe.
  Provides good outlook over the site and open space
- Fixed point for site access to include an upgrade to Ohaupo Road in the form of a roundabout. Provides significant placemaking opportunity as a gateway to Te Awamutu from the north
- Central road to provide legible connection throughout the site. Will frame significant views of Mount Pirongia
- Central north south road connection
- Possible future connections to be allowed for if adjacent sites develop
- Provide upgrades from the site and along Ohaupo Road for pedestrians and cyclists
- Provide a visual separation from Ohaupo Road to the new development to create visual relief and possibly reduce the imapct of traffic noise to future residents
- Existing drain
- Possible realignment of drain and naturalisation including riparian plantings and ecological features



# 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 Ohaupou Road and have framed the key moves that defined spatial arrangments within the conceptual structure plan.



### Integrated and connected

A high level of connectivity allows people to readily access friends and places both within and around the neighbourhood. This provides good internal access with a choice of routes, and excellent multi-modal movement including for people walking or cycling as well as driving. Connections to SH3, the town centre and Hamilton via Public Transport are 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 smaller lots in high amenity locations to slightly larger residential lots in more challenging areas contributes to choice and diversity, while working with the site constraints.



# 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, the Significant Ecological Area, northern aspect, views towards Mt Pirongia, drains and wetlands. 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 Te Aranga Principles

It is intended that consultation is to be on-going throughout this process, and where required, this page will be updated and plans adjusted if necessary.

Design Principal	Description, Attributes and Application <sup>1</sup>	
Mana	The mana of iwi and hapū as Mana Whenua is recognised and respected	
	Attributes:  Recognises Te Tiriti o Waitangi / The Treaty of Waitangi and the Wai 262 Ko Aotearoa Tēnei framework for Treaty Partnerships in 21st Century Aotearoa New Zealand as the basis for all relationships pertaining to development	
	<ul> <li>Provides a platform for working relationships where Mana Whenua values, world views, tikanga, cultural narratives, mātauranga and visual identity can be appropriately expressed in the design of the built environment</li> </ul>	
	<ul> <li>High quality Treaty based relationships are fundamental to the application of the other Te Aranga principles – this principle provides the essential catalyst required to activate the other six principles</li> </ul>	
	Application:  The establishment of high level Treaty-based relationships with Mana Whenua is essential at the outset of planning for development proposals, and should be as early as possible to maximise opportunities for design outcomes	
	■ Important to identify any primary Mana Whenua groups as well as wider Mana Whenua interests in any given development	
	Mana Whenua are involved in whole of project design lifecycle, from ideation to delivery to programming of space and facility.	
Whakapapa	Māori names are celebrated, both traditional and new	
	Attributes:	
	Recognises and celebrates the significance of Mana Whenua ancestral names	
	<ul> <li>Recognises ancestral names as entry points for exploring and honouring tūpuna, historical narratives and customary practises associated with development sites and their ability to enhance sense of place connections</li> </ul>	
	Recognises importance for Mana Whenua of continuing to develop their cultural landscapes through naming of contemporary features	
	Application:  Mana Whenua engagement and research on the use of correct ancestral names, including macrons	
	Recognition and expression of place names through digital and physical interpretation, signage and wayfinding	
	Use of appropriate names to inform design processes and inspire outcomes	
Design Principal	Description, Attributes and Application <sup>1</sup>	
Taiao	The natural environment is protected, restored and/or enhanced	
	Attributes:  Sustains and enhances the natural environment	
	Local flora and fauna which are familiar and significant to Mana Whenua are key natural landscape elements within urban and / or modified areas	
	Natural environments are protected, restored or enhanced to levels where sustainable Mana Whenua harvesting is possible	
	Application:  Re-establishment and thickening of local biodiversity	
	Creating and connecting ecological corridors and webs	
	Planting of appropriate indigenous flora in public places, strategies to encourage native planting in private spaces	
	Selection of plant and tree species as seasonal markers , to provide habitat for all native fauna as attractors of native bird life	
	$\mathbf{I}$	









Design Principal	Description, Attributes and Application <sup>1</sup>	
Tohu	Mana Whenua significant sites and cultural landmarks are acknowledged	
	Attributes:  Acknowledges a Māori world view of the wider significance of tohu / landmarks and their ability to inform the design of specific development sites	
	Supports a process whereby significant sites can be identified, managed, protected and enhanced	
	Celebrates local and wider unique cultural heritage and community characteristics that reinforce sense of place and identity, both traditional and contemporary	
	Application:  Recognition of tohu, including wāhi tapu, wāhi tūpuna, maunga, awa, puna, mahinga kai, mahinga mataitai and ancestral kāinga	
	Allows visual connection to significant sites to be created, preserved and enhanced	
	Wider cultural landmarks and associated narratives able to inform building / spatial orientation and general design responses	
	Design, art and heritage trails, digital technologies, physical markers and interpretation boards	
Ahi Kā	lwi/hapū have a living and enduring presence and are secure and valued within their rohe.	
	Attributes:  Mana Whenua live, work and play within their own rohe	
	Acknowledges the post Treaty of Waitangi settlement environment where iwi/hapū living presences can include customary, cultural and commercial dimensions	
	Living iwi/hapū presences and associated kaitiaki roles are resumed within urban areas	
	Application:	
	<ul> <li>Access to natural resources (weaving species, mahinga kai, waterways, etc) facilitates, maintains and /or enhances Mana Whenua ahi kā and kaitiakitanga</li> </ul>	
	Civic/iwi joint venture developments ensure ahi kā and sense of place relationships are enhanced	
	Mana Whenua are involved in ongoing management, programming and occupation of spaces created, particularly public realm	
Design Principal	Description, Attributes and Application	
Te Mana o Te	The mana of iwi and hapū as Mana Whenua is recognised and respected	
Wai	Attributes:	
	Stop further degradation of our freshwater	
	Start making immediate improvements, so water quality improves within five years	
	Reverse past damage to bring our waterways and ecosystems to a healthy state within a generation.	
	Application:	
	The six principles	
	Mana whakahaere: the power, authority, and obligations of tangata whenua to make decisions that maintain, protect, and sustain the health and well-being of, and their relationship with, freshwater	
	Kaitiakitanga: the obligation of tangata whenua to preserve, restore, enhance, and sustainably use freshwater for the benefit of present and future generations	
	Manaakitanga: the process by which tangata whenua show respect, generosity, and care for freshwater and for others	
	Governance: the responsibility of those with authority for making decisions about freshwater to do so in a way that prioritises the health and well-being of freshwater now and into the future	
	<b>Stewardship</b> : the obligation of all New Zealanders to manage freshwater in a way that ensures it sustains present and future generations	
	Care and respect: the responsibility of all New Zealanders to care for freshwater in providing for the health of the nation	



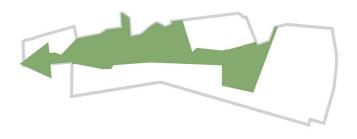




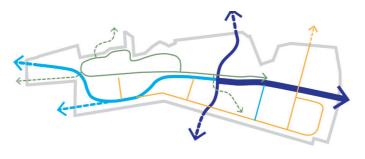


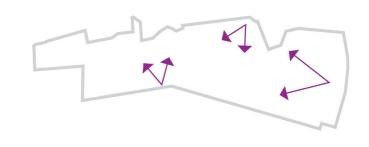
# 2.4 Key Moves

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







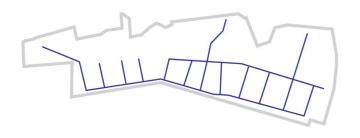


Develop green corridors for a range of functions including drainage, amenity, ecology, recreation, landscape and cultural use.

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 oreintation.

Enable a legible and sympathetic transition of the existing urban form of Te Awamutu and the development through appropriate interface treatments.

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 the area.



# 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 network

An interconnected movement network comprising streets, lane-ways, pedestrian linkages, integration with public transport routes and cycleways is fundamental to achieving a sustainable, and 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 can 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 perceptional safety for users, community cohesion, privacy and openness within neighbourhoods. This is the case where roads interact with the central green corridor.

# 3.1.2 Land use and interfaces

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 conceptual 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 roads, and potential access to the Te Awamutu-to-Hamilton 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 conceptual 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 detached and duplex single story 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 conceptual structure plan encourages a best practice response in residential layout and building design that responds to existing character and landform, 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 conceptual structure plan. Such physical and visual attributes include the Significant Ecological Area, other mature tree plantings that contribute to the rural heritage of the site, the drains, wetlands and existing ponds, the site's steep inaccessible slopes.

A landscape buffer is proposed along SH 3, providing visual relief and setback of future development when viewed from the SH 3 corridor. The same is proposed along the southern boundary interface with adajcent horticultural landuse in the form of a planted buffer and adjacent proposed roadway. This buffer may also provide a stormwater conveyance function.

# 3.1.5 Ecology and Open Space

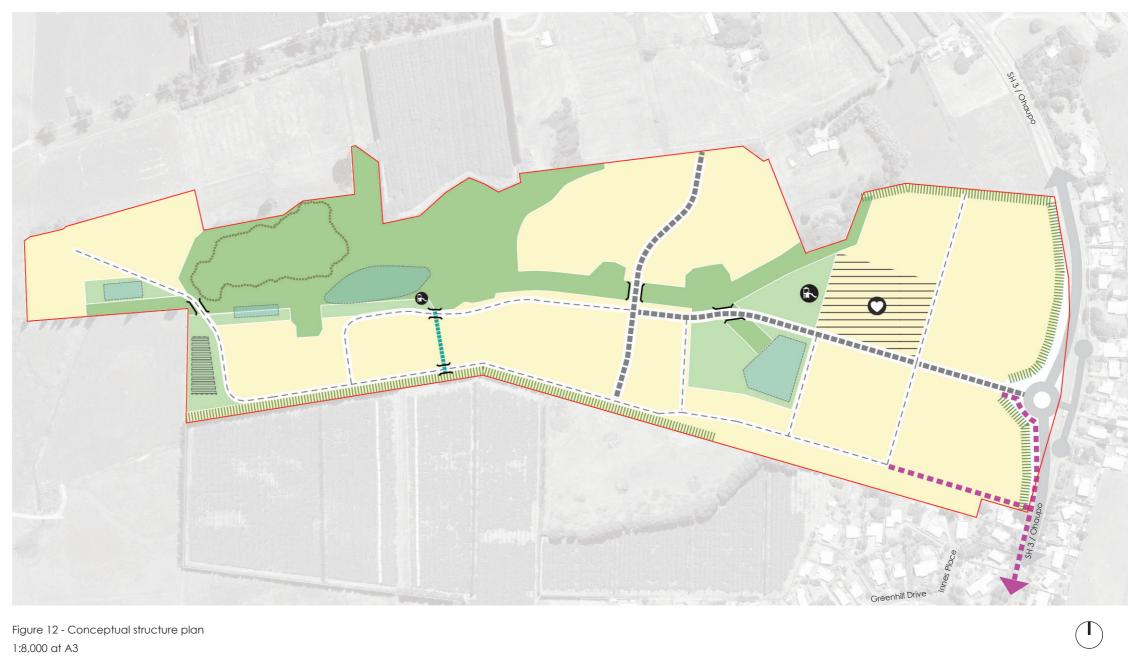
The high-quality provision of public open spaces are important elements of any successful neighbourhood. Public open spaces provide opportunities for recreation and social contact, act as visual relief within urban landscapes, and can express cultural and ecological values.

Open spaces within the conceptual 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 drains, wetlands, Significant Ecological Area and steep slopes, enhancing the sites sense of place and unique character. This provision of public open space also provides for the opportunity to enable a water sensitive urban design approach.

# 3.1 Conceptual Structure Plan

A collaborative urban design approach with planning and engineering has driven the development of the conceptual 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

Indicative general residential (Approximately



Indicative ecological

Indicative open

Indicative stormwater pond

Indicative waste water

Significant Ecological Area

Indicative play

Landscape buffer (5

Indicative Collector Road

---- Indicative Local

Indicative conveyance swale

Indicative culvert / bridge

Pedestrian and cycle connections to and along Ohaupo Road to Greenhill



Stage	Approximate Area
Stage 1.	8.9 Ha
Stage 2.	5.2 Ha
Stage 3.	1.4 Ha
Stage 4.	4.6 Ha
Stage 5.	2.4 Ha
Stage 6.	3.3 Ha











FOR INFORMATION ONLY

### 3.2.1 Movement and Access

The movement network proposed in the conceptual 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 movement options. 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;
- Inclusion of water sensitive design devices to aid low impact development;
- Gateways to signal change in speed environment and/or land use;
- Opportunity for sculptural and / or cultural interpretation installment at the proposed roundabout to define a northern Te Awamutu "gateway";
- 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.



B&A

Figure 13 - Movement 1:8,000 at A3

### Legend

Indicative collector road and on-road separated

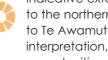
---- Indicative local

Indicative off-road

Indicative pedestrian and cycle connections to and along Ohaupo Road to

Indicative conveyance swale alongside road





Indicative extents that could contribute to the northern gateway entrance to Te Awamutu and include cultural interpretation, signage and artwork opportunities

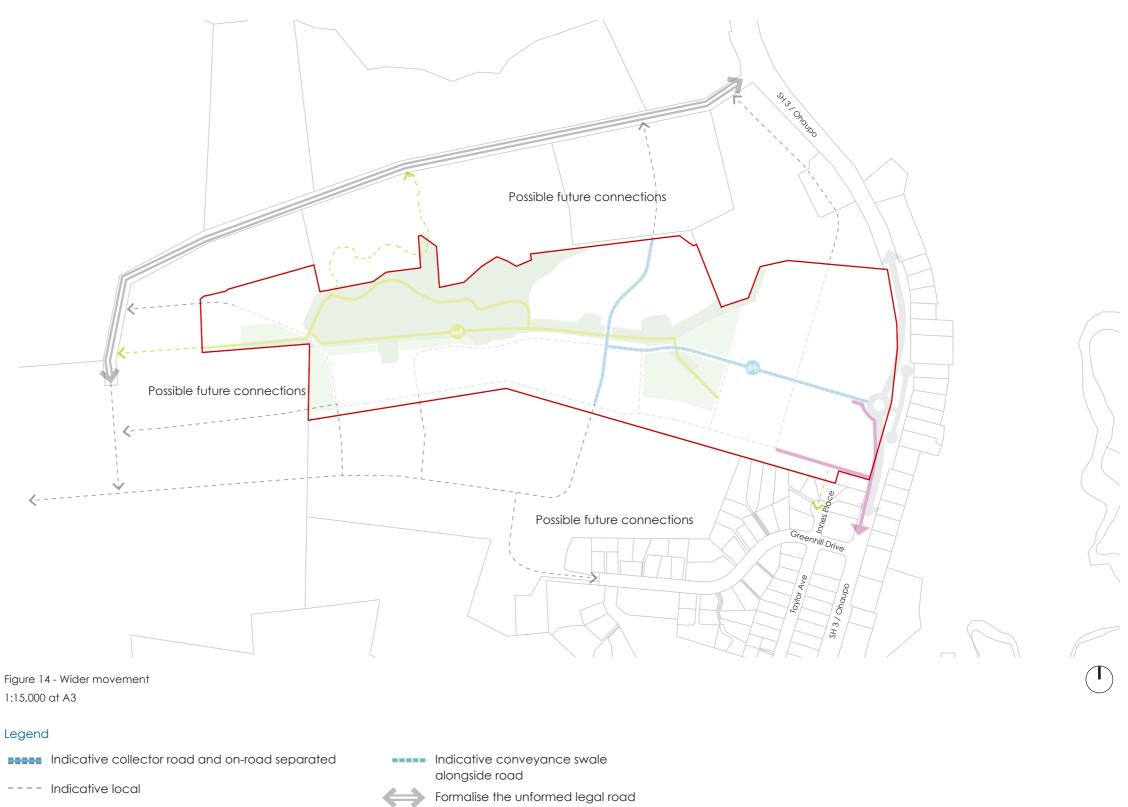
# 3.2.2 Wider Movement and **Access Considerations**

While considering the internal roading, walking and cycling connections, the surrounding land parcels have been taken into consideration.

An opportunity exists for the urban development of the area to be bound by the unformed legal road to the north and west of the site. This unformed legal road gives context to how future connections from the Ohaupo Road site could connect in the future, enabling a compact, and integrated urban form.

Additionally, located to the south of the site is Greenhill Drive which could also be connected and integrated into the future development of the area.

While not the focus of this design statement, having an awareness of, and providing the flexibility for such connections is important.



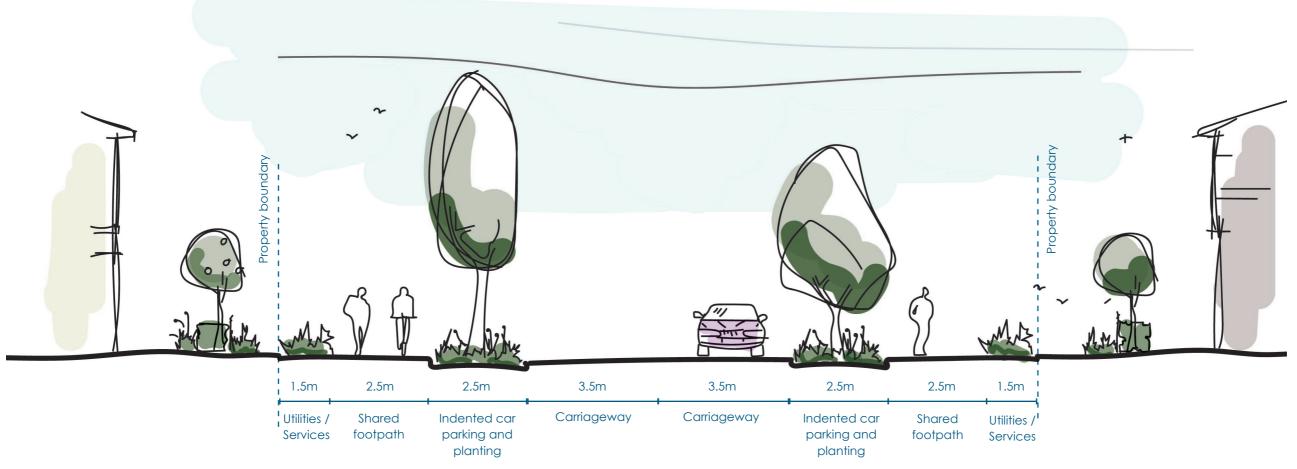
### Legend

Indicative off-road

 Indicative pedestrian and cycle connections to and along Ohaupo Road to

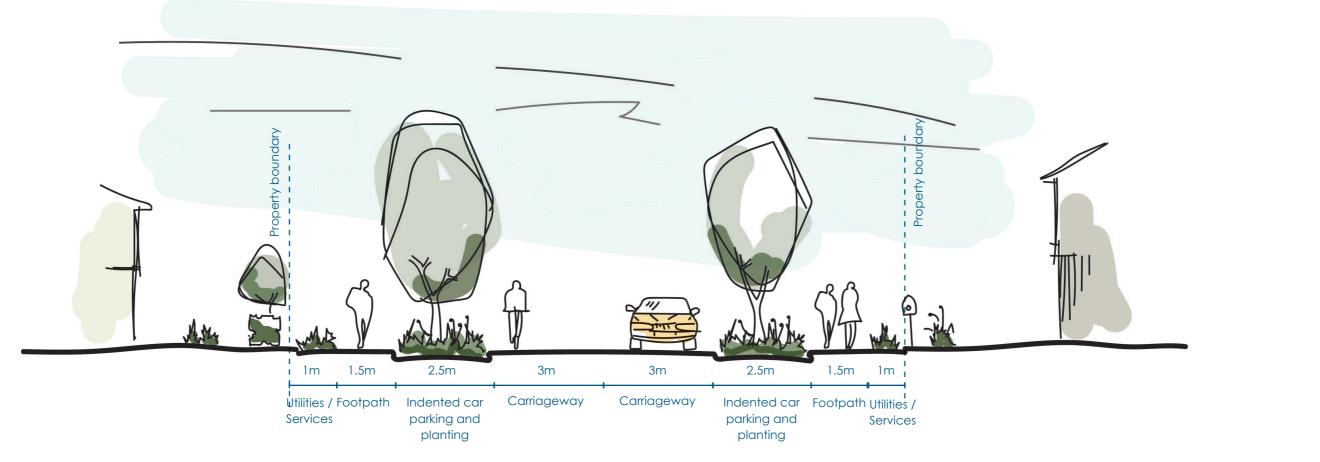
# 3.2.2.1 Indicative Collector Road Example - 20m

Scale: 1:100 (A3)



# 3.2.2.2 Indicative Local Road Example - 16m

Scale: 1:100 (A3)



# 3.2.3 Open Space and Landscape

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

The open space network of the conceptual 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 development. The open space design intent includes:

- Significant Ecological Area which is retained as a stand of natural bush with high ecological value. This area provides for outlook amenity and vegetative character and will be integrated into the wider open space network;
- 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 and formal play opportunities;
- 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;
- Landscape buffers along specific interfaces to provide visual containment, manage possible effects to local amenity and help to mitigate possible noise from State Highway 3 / Ohaupo Road;
- Pedestrian and cycle connections including a proposed cycle and pedestrian link along Ohaupo Road and will also provide for recreation; and,
- Any storm-water attenuation areas to be incorporated into wider open space network.

Legend

Ecological area

Indicative open

investigated further

Significant Ecological Area - This area could be greatly increased to include wetlands and will be

• Any gateways or pouwhenua which celebrate the community's cultural significance.



||||||||||| Landscape buffer

Indicative play

Indicative conveyance swale

### 3.2.4 Infrastructure

### Stormwater

The following design philosophy's have been a focus throughout the development of the Stormwater Management Plan:

- Consideration of water sensitive design objectives to consider stormwater management in parallel with the ecology of a site, best practice urban design, and community values; and,
- Give effect to Te Mana o te Wai by prioritising the health and well-being of the receiving water bodies and freshwater ecosystems by designing a stormwater management system that protects the receiving environment from the effects of the development.

It is intended that other development related infrastructure will have a positive urban design interface with its surrounding environment. This could include landscape buffers for visual separation, attractive planting mixes, quality fencing treatments, quality architecture styles and materials where needed and in keeping with the future development character.

It is also intended that such space for other development infrastructure provides where practicable, co-benefits to the public realm. These co-benefits could include pedestrian and cycleway movements, seating, attractive landscape plantings, ecological functions and open spaces.

Such infrastructure is intended to be in keeping with the future character of the site, and integrated within the public realm and open space of the site.

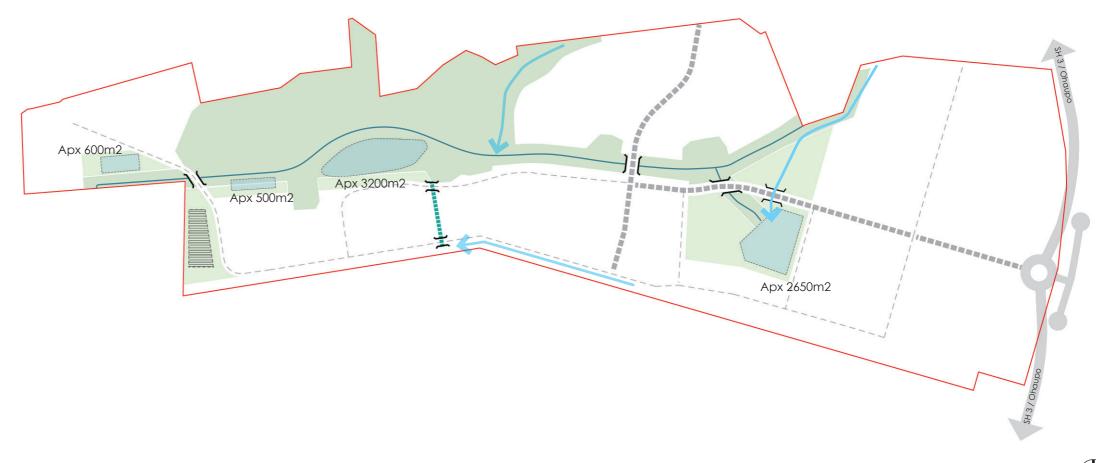


Figure 16 - Infrastructure 1:8,000 at A3

### Legend

Indicative stormwater pond
Indicative waste water pump
Indicative conveyance



Indicative swales

Indicative culvert / bridge

 Indicative and possible realignment of the existing drain into a naturalised stream

# 3.3 Conceptual Structure Plan Response

### Movement

Issue	Implications for Conceptual Structure Plan	Design Intent
Access off SH3	No existing access in the area off SH 3 other than the existing driveway access. Sightlines along SH3 restrict the location of an access point. Options for a new intersection are limited.	Access proposed onto a point along SH3 that has a reasonable level of visibility from on coming traffic. Presents opportunity for place-making within the roundabout design to convey a gateway into Te Awamutu to the north. Opportunity could present significant cultural identity.
Future access off the unformed legal road	An unformed legal road exists and could provide a connection from the conceptual structure plan area to the north. Is sepearated by multiple alotments.	Consider what proposed road alignments could connect to the unformed legal road and to other wider connections in the future but not make the movement network dependable on accessing it.
Cycle and pedestrian access towards Te Awamutu	The only possible access to Te Awamutu Town Centre is currently via SH3. This is not catering for people of all ages and abilities to use alternative transport options safely.	Opportunity to provide a pedestrian and cycleway connection along \$H3 and would extend to Greenhill Drive, providing a connection into the Te Awamutu Town Centre. Additionally, enhance the pedestrian connections from the site to the existing bus stop, which has access to Hamilton.
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 Conceptual 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 to reduce possible visual effects.	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. Integrate steeper slopes into riparian edges and ecological areas. Manage retaining wall heights.
Mature vegetation	Retaining mature trees including the Significant Ecological Area to provide immediate amenity, sense of scale, bio-diversity 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.	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. Protect and enhance the Significant Ecological Area.
Waterways and wetlands	Limits the spatial arrangement of residential land-use and movement networks. Set backs of these areas needed for protection. Such arrangements may 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 3	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 conceptual 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 from SH3, improve site access intersections, and provide a landscape buffer and / or setbacks to residential lots.
Southern rural boundary	Visual change in landscape.	Achieve transition with retention of existing vegetation, rural character streets along spurs and proposed landscape plantings and setbacks. May also function as a stormwater conveyance device such as a swale.
Northern rural boundary	Visual change in landscape.	Landscape buffer and riparian plantings along steep slopes.
Southern residential boundary	Visual change in landscape.	Ensure proposed residential "backs" onto the existing residential interface. Should include careful consideration of proposed earthworks to reduce possible retaining wall impacts and fencing considerations.

### 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 site access, open space and Village Centre. Opportunities for lower density and countryside living further west.
-	Non-Residential land-use	Neighbourhood scale Village Centre to provide for daily convenience needs to promote a walkable neighbourhood and active modes of transport.
-	Open space / ecological areas	Open space and ecological areas to ensure retention / protection of mature trees, retention / protection of Significant Ecological Area and riparian ecosystems. Neighbourhood parks to provide local recreational opportunities. Multi-functional spaces to accommodate stormwater attenuation areas as well as informal recreational opportunities, cultural and ecological values.
		Proposed provision of connecting a shared-path facility along state highway 3 towards the Te Awamutu centre and connecting into planned-for cycle paths, will provide a critical infrastructure that ensures for the safe and efficient movement of active modes to and from the site. The proposed re-location of a public transport stop to be located within the roundabout scheme will be supported by direct pedestrian linkages into the site. These to key moves improve accessibility from and to the site using alternative modes of transport, connecting future residents to social, economic and employment opportunities.
-	Well-functioning Urban Environments	The site proposes a village centre which would be located centrally and accessed from within the site by a number of on street and off street pedestrian and cycle linkages. It is envisioned that such commercial uses could include a coffee shop, and also connect with, and service the needs of existing residents in the surrounding neighbourhood. A high-quality linear network of public open space is to be created including the retention and enhancement of waters ways, wetlands, their riparian margins and a stand of mature kahikatea trees and native vegetation. This open space will provide for not only the proposed community, but the existing community which currently lacks access to quality open space for recreational and passive recreational uses.
		From an urban design perspective this proposal meets the criteria related to providing for well-functioning urban environments under Policy 1 of the NPD-UD. In particular, it is supported by providing a range of housing opportunities, good accessibility for all people to meet their social, economic, and health and wellbeing needs, and by providing alternative, well-connected and safe forms of transport that support a possible reduction in greenhouse gas emission.



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