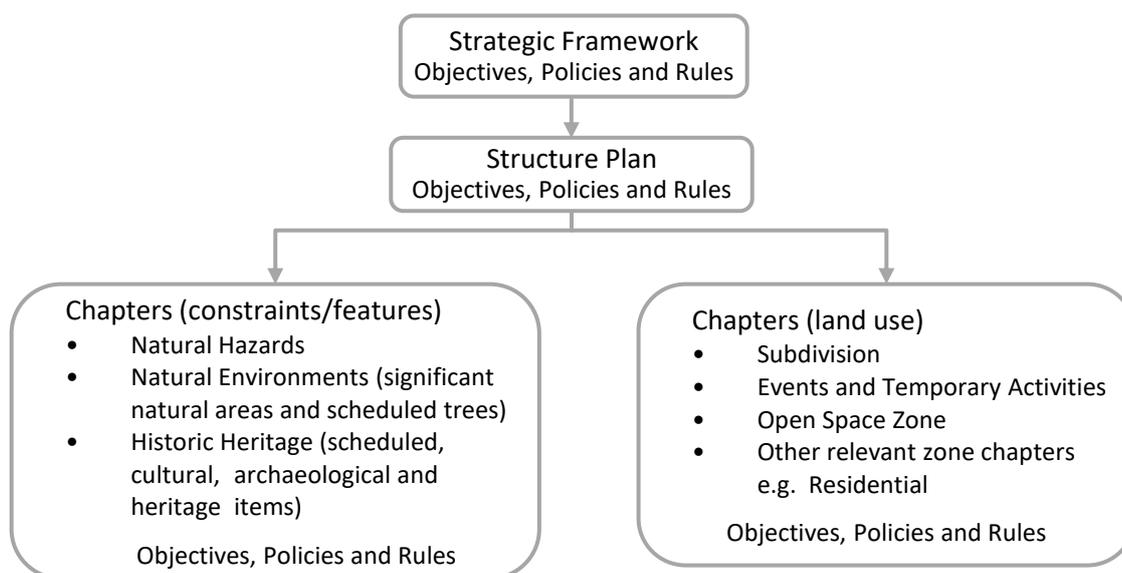


3 Structure Plans

3.1 Purpose

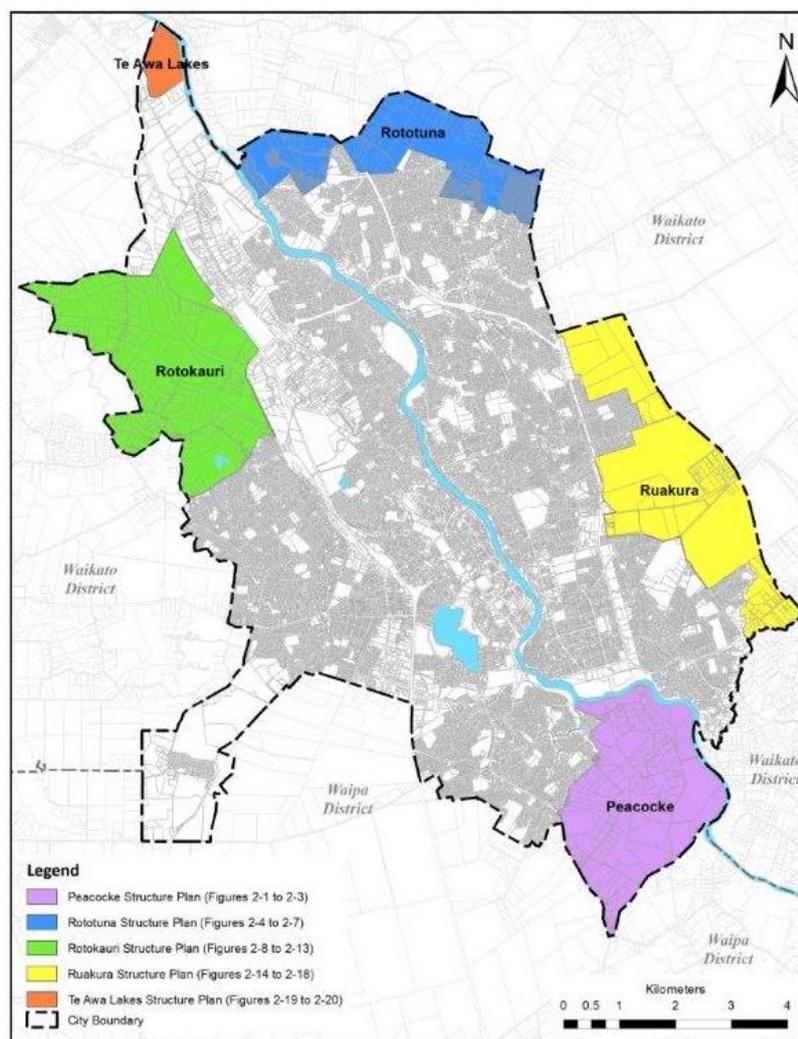
- a) This chapter contains objectives and policies relating to current Structure Plan areas (refer to Volume 2, Appendix 2). It also provides objectives, policies and guiding principles for any future Structure Plans which are predominantly within greenfield areas. This chapter must be read in conjunction with other relevant parts such as the Zones chapters.



- b) A Structure Plan illustrates the proposed layout of a future development area.
- c) The preparation of a Structure Plan is one of the first steps in advancing the development of new urban areas. It illustrates land uses such as residential, commercial, industrial and public open space. Structure plans usually contain broad servicing details such as transport configuration and may include other important key infrastructure features such as Three Waters networks. The level of detail can vary and may also show information such as housing density.
- d) The purpose of a Structure Plan is to plan for the future in an integrated manner by:
- i. Outlining a vision for the future.
 - ii. Setting out where growth can be accommodated and setting out a future land use pattern.
 - iii. Providing for staging of development.
 - iv. Guiding infrastructure planning including transport corridors, Three Waters, community facilities and public open space.
 - v. Identifying the financial feasibility of the development from a Council, Infrastructure provider and landowner perspective.
- e) A Structure Plan has two main parts which must be incorporated into the District Plan:
- i. Guiding principles including objectives and policies specific to the Structure Plan area.

- ii. Map(s) showing the intended pattern of development. This could include information in respect of the following: transport corridor general location and hierarchy, public reserves and links, areas for preservation, protection or restoration/enhancement, development intensities for residential or other activities, if appropriate, and such other matters as may be relevant to or significant for urban development in the area.
- f) The maps or plans are at a high level of information and do not typically go into such detail as individual lot boundaries or the physical form of buildings and structures. Although a Structure Plan indicates future land uses, the rules that control the development of the land are contained in the District Plan zone chapters.
- g) Currently prepared Structure Plans are incorporated into the District Plan. Future Structure Plans should also be incorporated into the District Plan, either through a variation or plan change.

Figure 3.1a: Structure Plan Locality Guide



3.2 Principles

To provide consistency across the City, Structure Plans should adopt the following principles where appropriate:

- a) Outline planning outcomes for each Structure Plan area, for example:

- i. Development suitability, including any land-use constraints and opportunities such as natural hazards, topography, soil type, contamination, heritage, infrastructure, reverse sensitivity constraints.
 - ii. The land uses envisaged in the Structure Plan area.
 - iii. Transport network connections and indicative primary transport corridors.
 - iv. Reserves (the location of these may be fixed or indicative depending on context).
 - v. Other major infrastructure where relevant.
 - vi. How existing features of the area, including amenity, landscape, natural character, ecological values, water bodies, high class soils and view catchments, will be managed.
- b) Include indicative maps that illustrate the broad planning outcomes sought.
 - c) Achieve the dwelling density targets set out in the Regional Policy Statement.
 - d) Provide a high level of connectivity both internally and external to the Structure Plan area.
 - e) Recognise, protect and enhance natural, built and cultural heritage.
 - f) Avoid patterns of land use and development that:
 - i. Puts vulnerable land uses in areas affected by natural hazards; and
 - ii. Exacerbates or creates new natural hazards.
 - g) Integrate seamlessly into the rest of the District Plan by using District Plan mechanisms, including existing:
 - i. Zones.
 - ii. Overlays.
 - iii. Defined terms.
 - iv. Design guides.
 - v. Formatting and style.
 - h) Give effect to the Vision and Strategy for the Waikato River.

3.3 Objectives and Policies: Structure Plans

When consent is required for subdivision and/or development within a Structure Plan area, the proposal must consider where relevant the objectives and policies below and any objectives and policies specific to that Structure Plan area (refer to 3.4 to 3.7).

Objective	Policies
<p>3.3.1 Optimised, long-term, positive environmental, economic, social and cultural effects of greenfield development.</p>	<p>3.3.1a Development should be in general accordance with the relevant Structure Plan.</p>
	<p>3.3.1b Development of Structure Plan areas should aim to achieve:</p> <ul style="list-style-type: none"> i. An overall residential density of 16 dwellings per hectare (excluding transport corridors).
	<p>3.3.1c The design of development should provide population densities that support safe efficient passenger transport and opportunities for walking and cycling.</p>
	<p>3.3.1d Interim land use and development including low density residential development should not compromise the integrity and viability of the land use pattern for the relevant Structure Plan.</p>
<p>Explanation</p>	
<p><i>The Regional Policy Statement sets dwelling density targets, derived from Future Proof. These will be achieved by managing lot sizes and subdivision yields in Structure Plan areas. Future commercial and industrial land requirements are also identified in the Regional Policy Statement. The targets exclude the Large Lot Residential Zone.</i></p> <p><i>Structure Plans are a mechanism for achieving the future land uses and density targets as set out in the Regional Policy Statement and Future Proof.</i></p> <p><i>Activities such as land use and subdivision need to be managed in the interim. There is the potential for these to undermine the ability of the Structure Plan area to be implemented.</i></p>	
Objective	Policies
<p>3.3.2 New urban development is appropriately serviced and properly integrated to minimise City network impacts.</p>	<p>3.3.2a The use of land for urban development will not be allowed unless appropriate infrastructure is provided for and the servicing of this land will maintain the efficiency and sustainability of regionally significant existing and planned infrastructure.</p>

	<p>3.3.2b New development is able to be adequately serviced in terms of Three Waters and transport infrastructure.</p>
	<p>3.3.2c Development is co-ordinated with the provision of infrastructure and social infrastructure.</p>
	<p>3.3.2d Staging and sequencing is in general accordance with any staging indicated on the relevant Structure Plan.</p>
Explanation	
<p><i>Infrastructure must be planned in advance of development. Infrastructure includes Three Waters and transport networks, as well as social infrastructure such as libraries and community halls. Infrastructure must be provided not only to service one development but must be of an appropriate size to integrate with the existing and future infrastructure networks.</i></p> <p><i>Council's Long Term Plan or Annual Plan sets out the programme for providing infrastructure to service growth. Where a developer wishes to pursue development ahead of Council's programmes, a Development Agreement will need to be entered into with Council to ensure that the infrastructure is provided in a way which is efficient and sustainable from a city-wide perspective. In these cases it is anticipated that developers will bear the full costs of infrastructure provision.</i></p> <p><i>This approach will enable growth in areas that are not funded for infrastructure to be funded by developers under Development Agreements between all parties. The reason for Council's approach is due to its inability and the inability of other infrastructure providers to invest in infrastructure necessary to support the development of the growth cells all at once. This will enable the sustainable management of growth for the social and economic well-being of the community and meeting the needs of future generations.</i></p>	
Objective	Policies
<p>3.3.3 Effective and integrated management of Three Waters so as to sustainably manage the impact of development on the City's natural and physical resources.</p>	<p>3.3.3a Three Waters will be managed in accordance with the relevant Integrated Catchment Management Plan.</p> <p>3.3.3b Integrated Catchment Management Plans shall be developed to determine how to manage Three Waters in an effective and integrated manner including by:</p> <ul style="list-style-type: none"> i. Minimising the effects of urban development on downstream receiving waters. ii. Managing the run-off from the different relief and soil types in an integrated manner.

	<ul style="list-style-type: none"> iii. Sustaining groundwater levels in peat soils as far as practicable. iv. Safeguarding and enhancing the natural functioning and ecological health of freshwater bodies and areas of indigenous vegetation, water features and habitats. v. Retaining a hydrological cycle close to the pre-development hydrological cycle as far as practicable. vi. Maintaining stormwater discharge from the catchment to at or below pre-development levels. vii. Incorporating Low Impact Urban Design and Development (LIUDD) principles. viii. Identifying and incorporating appropriate water-sensitive techniques. ix. Recognising social, economic, environmental and cultural objectives for the catchment.
Explanation	
<p><i>Integrated Catchment Management Plans allow the collective consideration of all Three Waters.</i></p> <p><i>Managing the stormwater effects of future subdivision, use and development is critically important. A full Integrated Catchment Management Plan should be prepared iteratively with the development of each Structure Plan.</i></p> <p><i>Effective management of stormwater will maintain or improve the quality of the stormwater entering the receiving environment. This means maintaining flow regimes, re-vegetating riparian margins, minimising the potential for contaminants to enter water bodies, reducing flows into stormwater networks through the adoption of low-impact stormwater design, and ensuring groundwater levels are maintained.</i></p>	
Objective	Policies
<p>3.3.4 An integrated and efficient pattern of land use and transportation so as to sustainably manage the impact of development on existing and planned transport infrastructure.</p>	<p>3.3.4a Integrated Transport Modelling is undertaken for all Structure Plan areas.</p>
	<p>3.3.4b Movement routes are integrated with surrounding neighbourhoods and existing and planned transport networks.</p>
	<p>3.3.4c Enable connectivity with other undeveloped adjoining sites.</p>
	<p>3.3.4d The transport network supports efficient passenger transport and opportunities for walking and cycling.</p>

	<p>3.3.4e Environmental impacts of building new transport corridor infrastructure are minimised.</p>
	<p>3.3.4f Opportunities for improved safety, accessibility, connectivity and efficiency within the transportation network are provided.</p>
<p>Explanation</p>	
<p><i>Integrated Transport Modelling, utilising the Waikato Regional Transportation Model, is an essential component of the Structure Plan process and land uses and the transport network should be developed iteratively, each informing the other. This modelling should inform any future Integrated Transport Assessment required in structure plan areas.</i></p> <p><i>The transport system must cater for movement into the Structure Plan area from other parts of the City, as well as movement within the Structure Plan area itself.</i></p>	
<p>Objective</p>	<p>Policies</p>
<p>3.3.5 Compatible buildings and activities.</p>	<p>3.3.5a Adverse effects of activities near zone boundaries are managed through setbacks, building design, and landscaping.</p>
	<p>3.3.5b Sensitive land uses avoid adverse effects on and from regionally significant infrastructure and regionally significant industry.</p>
	<p>3.3.5c Development to avoid adverse effects on the safe, efficient and effective operation and use of existing or planned infrastructure.</p>
<p>Explanation</p>	
<p><i>This objective recognises the importance of managing both structures and activities at the interface of different land uses. This can be managed by zones through setbacks, design of buildings, and landscaping.</i></p> <p><i>These policies recognise the need to manage residential and other sensitive land uses around regionally significant infrastructure and industry, existing and proposed. The purpose is to manage the effects that sensitive activities and structures can have on the infrastructure, and the adverse effects that the infrastructure and industry can have on sensitive uses.</i></p> <p><i>Regionally significant industry is defined in the Waikato Regional Policy Statement.</i></p>	

Objective	Policies
<p>3.3.6 Development responds to land suitability including topography, landscape, natural features, soil type, natural hazards, heritage features, adjoining land uses.</p>	<p>3.3.6a The loss of significant vegetation is minimised.</p>
	<p>3.3.6b Large-scale earthworks and modifications to landforms are avoided where possible to ensure development retains features of the landscape identified on structure plans.</p>
	<p>3.3.6c Road layouts adjacent to identified natural features recognise and retain their natural form where practicable.</p>
	<p>3.3.6d The scale and quantum of development and land use type recognises land characteristics and suitability and adjoining land uses.</p>
<p>Explanation</p>	
<p><i>Topographical features, significant vegetation, natural features such as soil type, flood hazard, heritage features, bank stability, river and gully systems, adjoining land uses should be identified through the Structure Plan process. Structure planning should acknowledge and appropriately respond to such features.</i></p>	
Objective	Policies
<p>3.3.7 A range of well-connected, functional public open spaces.</p>	<p>3.3.7a The location and size of public open spaces is provided in accordance with Council's Open Space Plan.</p>
	<p>3.3.7b Recreational activities are considered for co-location with:</p> <ul style="list-style-type: none"> i. Multifunctional stormwater management. ii. Walkways and cycleways. iii. Cultural and heritage sites. iv. Significant Natural Areas.
	<p>3.3.7c Promote appropriate and improved access to the Waikato River to better enable sporting, recreational, and cultural opportunities.</p>
<p>Explanation</p>	
<p><i>Public open space is usually indicative on Structure Plan maps, and exact sizes and locations will be determined at the time of subdivision consent. The Hamilton City</i></p>	

Open Space Plan, September 2013 sets out a 50-year strategic direction for Hamilton's parks and open spaces. The Open Space Plan presents a series of goals, priorities and an action plan that responds to the needs, challenges and opportunities facing Hamilton's open spaces.

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3.4 **Peacocke** [see Operative District Plan](#)

3.5 **Rototuna** [see Operative District Plan](#)

3.6 **Rotokauri** [see Operative District Plan](#)

3.7 **Ruakura** [see Operative District Plan](#)

3.7.5 Provisions in Other Chapters

The provisions of the following chapters apply to activities within this chapter where relevant.

- Chapter 4: Residential Zone
- Chapter 8: Knowledge Zone
- Chapter 10: Ruakura Logistics Zone
- Chapter 11: Ruakura Industrial Park Zone
- Chapter 15: Open Space Zones
- Chapter 20: Natural Environments
- Chapter 21: Waikato River Corridor and Gully Systems
- Chapter 22: Natural Hazards
- Chapter 23: Subdivision
- Chapter 24: Financial Contributions
- Chapter 25: City-wide
- Volume 2, Appendix 1: District Plan Administration

3.8 Te Awa Lakes

The Te Awa Lakes Structure Plan area is approximately 62ha and is bounded by the Waikato River, the Waikato Expressway, Te Rapa Road, and Hutchinson Road. It lies at the northern gateway to Hamilton.

Vision

- a) Development of the Te Awa Lakes Structure Plan Area is guided by the following:

- i. Enabling the establishment of a regionally significant tourist destination comprising an adventure park, short stay accommodation and tourism/cultural facilities.
- ii. Creating a comprehensively designed residential development to support an active community, integrated with the adventure park.
- iii. Providing appropriate commercial and community facilities to provide services to the local community and visitors.
- iv. Creating an attractive northern urban gateway to Hamilton City.
- v. Achieving innovative and efficient repurposing of a site that has been heavily modified by sand quarrying.
- vi. Integrating the development with the Waikato River, and the Te Awa River Ride path, through open spaces, public access and sensitive residential development.

3.8.1 Objectives and Policies

<u>Objective</u>	<u>Policies</u>
<u>3.8.1.1</u> <u>Enable development of a tourist and recreational attraction in a regionally strategic location.</u>	<u>3.8.1.1a</u> <u>Allocate an area of land sufficient for a range of recreational/leisure activities in a highly visible location with ready access from the Waikato Expressway.</u>
	<u>3.8.1.1b</u> <u>Utilise land contours and geotechnically difficult land areas from the previous sand quarrying activity for adventure park and recreational/leisure activities.</u>
	<u>3.8.1.1c</u> <u>Manage any adverse noise or visual effects from the recreational/leisure activities on the neighbouring residential area to achieve acceptable amenity.</u>
<u>3.8.1.2</u> <u>Establish a high quality medium density urban residential environment.</u>	<u>3.8.1.2a</u> <u>Encourage higher densities in areas of high amenity close to lakes and open spaces.</u>
	<u>3.8.1.2b</u> <u>Create a well connected open space network with public access to the Waikato River.</u>
	<u>3.8.1.2c</u> <u>Use high quality design and landscaping to create an attractive and distinctive gateway into Hamilton.</u>
	<u>3.8.1.2d</u>

	<u>Incorporate water bodies into the development as amenity and recreational features.</u>	Proposed Plan Change 2 - Te Awa Lakes Private Plan Change
<u>3.8.1.3</u> <u>Provide additional serviced residential land capacity in a timely manner.</u>	<u>3.8.1.3a</u> <u>Utilise the existing water, wastewater and roading infrastructure for development within a short timeframe to meet Hamiltons short term housing needs.</u> <u>3.8.1.3b</u> <u>Provide a range of housing choices to support a diverse and active community.</u>	

3.8.2 Structure Plan Components

This section provides an explanation of the main land use elements to achieve the vision described in 3.8a). These elements are incorporated in land use zones and overlays as shown on the Planning Maps.

3.8.2.1 Adventure Park

This area is a proposed regional destination adventure park. This provides for a range of outdoor and indoor recreation activities with a core of water based activities. A lake in the same location as an existing waterbody will be used as a cable ski lake with a further opportunity for an adjoining waterbody to be used as an aqua park. The adventure park is located adjacent to Te Rapa Road where it is highly visible and access can be shared with the service centre slip lane and Hutchinson Road through the mixed use area. This allows the second eastern connection to Hutchinson Road to primarily accommodate residential demands, separate from the adventure park traffic. This area will be zoned Major Facilities and a Concept Development Consent will need to be approved before any development.

3.8.2.2 Adventure Park Visitor Accommodation

This area is comprised of short stay accommodation with the objective to support the regional need for visitor accommodation. It is likely to be resort-style accommodation. The central location of the site to a number of key tourist destinations in the central North Island is strengthened by the close proximity to the Waikato Expressway and combination with the proposed regional destination of adventure park, tourist and cultural hub.

The Adventure Park Visitor Accommodation precinct is also located within the Major Facilities Zone generally between the permanent residential land uses and the Adventure Park. This forms a visual and aural buffer between the two elements spatially as well as physically to transition informally from the major recreation/leisure facility to residential.

3.8.2.3 Mixed Use

The mixed use area contains the existing service centre and an adjoining mixed use block directly to the east. This area consolidates retail functions to the south west of the landholding utilising the direct connection to and from Hutchinson Road and Te Rapa Road and provides a buffer, along with

a collection of rural/lifestyle blocks, to the Fonterra site to the south. It will include neighbourhood shops of a size and scale to service residents and visitors plus small scale offices and service industries.

Vehicular traffic will be encouraged to utilise the existing service centre and the mixed use block will serve the Te Awa Lakes community's needs and offer opportunity for live-work type units.

An existing gas easement bisects the mixed use block restricting the development potential over it. Opportunity for building frontage to the street network has been retained by positioning the block so the gas easement alignment passes through the centre where carparking, lane access or courtyards can be employed preserving the public realm quality to the street.

3.8.2.4 Medium Density Residential

The residential area consists of a medium density residential zoning in order to deliver a number and range of dwelling types to provide the needed capacity. High quality design will be achieved through a series of Land Development Plan approvals, based on eighteen separate Land Development Plan areas within the area. Each Land Development Plan area has a dwelling yield target, with a total target of 892 dwellings (plus or minus 10%), as shown on the Land Development Plan Area figure (Figure 2-20).

The blocks are typically orientated in a north-south direction allowing for east-west lots that will receive good solar access.

The street orientation and block sizes form a legible, fine grain urban fabric that encourages dwellings to have strong street frontage and provide, in combination with the open space network, a high level of permeability through the landholding. Alternative paths and greater choice are created in this movement network improving interest, directness and user safety while encouraging active healthier lifestyles.

Proposed residential dwellings are separated from the expressway by a 40m landscape setback in addition to acoustic building treatment to reduce the effects of expressway traffic noise. A walking and cycle connection through this setback provides a parallel off street route to the lake, neighbourhood park, river and Te Awa River Ride path.

Within this area clusters of higher density are likely to be established in close proximity to the mixed use area, the spine road, lake and key open space areas such as the stormwater reserve in the existing gully which will provide a high quality outlook. The Land Development Plan approach will provide flexibility in the size and location of these higher density clusters.

3.8.2.5 River Interface

This area overlooks the Waikato River and esplanade reserve which has a minimum width of 20 metres. The Te Awa River Ride path is located on the esplanade reserve. This development is to be of a lower density to reduce the perceived bulk of the built edge when viewed from across the river and from the river. This land will be zoned Medium Density Residential with a River Interface Overlay. It is also included in the Land Development Plan Areas (Figure 2-20). The River Interface Overlay requires a minimum lot size of 1000m² with a typical depth of 40m to encourage homes to be set back further from the river.

Regular breaks in the block are proposed connecting the street and open space network with the esplanade reserve, improving legibility, movement, directness, choice and encouraging community interaction with the Waikato River. These regular breaks will also further reduce the perceived bulk of the built edge along the river frontage.

3.8.2.6 Tourism and Cultural

An extension to Hutchinson Road provides access and frontage opportunity for a tourism and cultural hub near the river. This area adjoins the mixed use block extending the public attractions the length of Hutchinson Road and capitalising on the direct access from Te Rapa Road. Its extent is likely to be flexible as some of the activities may also occur in the mixed use area and it will be subject to the same Business Zone.

The proximity to the river positions the tourism and cultural facilities as a gateway to Hamilton by both land and water from the north where a showcase of regional attractions can take place and a connection to other riverside cultural institutions is made.

3.8.2.7 Main Lake

This area includes the main linear lake that extends through the residential areas and the stormwater wetland in the north. The location and orientation of this water body has been influenced by the previous quarrying activity and land contour that exists within the Structure Plan area to provide an amenity and recreational resource.

Starting at the northern end of the Structure Plan area the top of the lake is positioned in the foreground of views into the site from the southbound lanes of the Waikato Expressway. This gateway experience is the first glimpse of Hamilton City for travellers heading south.

The main lake is to be fed principally by site stormwater through stormwater treatment devices. The lake is to have informal recreation functions encouraging community activity and providing a safer alternative to the river.

3.8.3 Proposed Movement Network

The creation of a masterplanned greenfield development of 62ha size with single ownership, provides the opportunity to comprehensively design for and deliver multi-modal transport options. Within the new community the layout of the street network and the open space network has been designed to promote walking and cycling. The proposal provides a well-connected fine grain block pattern to encourage slow speeds and allow for legible connections for the community and visitors to key features of the development.

Vehicle access to the mixed use and adventure park areas is achieved via the slip lane on Te Rapa Road and two access points on Hutchinson Road. The slip lane was constructed as part of the service centre along with the first 150m of the eastern connection from Hutchinson Road.

The proposed western connection from Hutchinson Road, in conjunction with the slip lane, will primarily service mixed use and adventure park activities. This western connection aligns with the gas easement in the adventure park area providing the opportunity to extend vehicle access into the adventure park over this, therefore efficiently utilising the land.

The residential community will be serviced via local and neighbourhood roads connecting into a main spine road that joins the existing eastern connection to Hutchinson Road. It is anticipated that this will be the primary route into and out of the Structure Plan area for the residents. By providing alternative accesses for the differing land uses the demand is shared over the network and conflict between them minimised.

Separated on road cycling is proposed from Hutchinson Road along the eastern collector road into the residential development. This crosses a proposed vehicle bridge over the main lake and terminates at the River Interface. On road cycling will take place on the smaller scale local and neighbourhood streets.

A parallel walking and cycling network is created off street providing a comfortable alternative to the street network. A setback landscape strip along the north western boundary, an open space edge to the western side of the lake and the esplanade reserve create corridors for walking and cycling trails to move through the site. Mid block connections to these main corridors create a high level of permeability and legibility throughout the Structure Plan area.

Transport assessments have confirmed that traffic generated from the Structure Plan area principally travels to and from the Hamilton Central City, and follows a number of routes, dispersing its effects. The roading network is capable of accommodating the effects except that;

- The Hutchinson Road/Te Rapa Road roundabout will need to be upgraded to accommodate full development of the Structure Plan area.
- The McKee Street/Te Rapa Road intersection will require signalisation by 2021 regardless of the Structure Plan. However full Structure Plan traffic generation is likely to exacerbate these capacity issues and bring forward the need to upgrade.
- Hutchinson Road will need to be upgraded to a minor arterial standard.

The thresholds for upgrading of these two intersections are likely to be reached when traffic generation from the Structure Plan area in either the AM or PM peak reaches 480 vehicles per hour. The development of the Structure Plan area will be subject to a series of Land Development Consents and Concept Development Consents and these will require Integrated Transport Assessments that will enable assessment and implementation of the road and intersection upgrades when this threshold is reached. A Private Developer Agreement (PDA) between the developer and the Council will allocate financial responsibility for the upgrades.

The Framework Plan (Figure 2-19 in Volume 2, Appendix 2) illustrates the proposed movement network, open space network and other key design features.

3.8.4 Proposed Infrastructure

Water and wastewater services were installed to the site in 2014 when the service centre was developed and 30 ha of industrial development was approved. Those services were designed to service industrial development of the whole site. Similarly, a stormwater consent was obtained from Waikato Regional Council to collect, treat and dispose of stormwater from the whole site to the Waikato River. This stormwater consent has been varied to allow for the Te Awa Lakes land use mix. It is intended to utilise the capacity in this existing infrastructure to service the Structure Plan area.

Capacity is available for the required water flows with residual pressures exceeding the minimum requirements. The development is not expected to affect the water network within the City and

existing water reticulation to the site is large enough to supply the development in the 2021 models with capacity left over.

Capacity is available for wastewater within the Far Western Interceptor for flows from the development. As the development progresses and flows increase a second wastewater rising main from the site to the Interceptor will be required. The second main will be required once the existing main reaches capacity which will be when the development reaches a full time people equivalent of around 2,475; approximately 50% of the total development.

The stormwater management strategy for the site addresses quantity (extended detention for erosion protection), quality (water quality volume for stormwater treatment), primary conveyance and secondary conveyance systems for overland flows. A toolbox of at source and centralised methods will be implemented to meet the land use requirements and the level of service expectations of the landowners, asset owners and end users. An integrated treatment train approach to treat the water quality volume (WQV) is proposed. This may include at source treatment services such as raingardens followed by a central wetland. In terms of extended detention volume (EDV) all runoff will be conveyed to the recreational lakes which will then discharge to the Waikato River via the existing consented stream outlet. Therefore the provision of EDV will be integrated into the stormwater management system, and in particular the design of the lakes, to protect the receiving environment from erosion.

The secondary system will be an overland flow path that largely utilises the road reserves to allow for conveyance of a 100 year rainfall event to the lakes.

3.9 Rules

3.9.1 All land use and development within the Te Awa Lakes Structure Plan area shall be in accordance with:

- a) The Te Awa Lakes Structure Plan as set out in Section 3.8 of this Chapter; and
- b) Te Awa Lakes Structure Plan area figures in Volume 2, Appendix 2, Figures 2-19 and 2-20.

3.9.2 Provisions in Other Chapters

The provisions of the following chapters apply to activities within this chapter where relevant:

- Chapter 2: Strategic Framework
- Chapter 4: Residential Zones
- Chapter 15: Open Space Zones
- Chapter 17: Major Facilities Zone
- Chapter 19: Historic Heritage
- Chapter 21: Waikato River Corridor and Gully Systems
- Chapter 22: Natural Hazards
- Chapter 23: Subdivision

- [Chapter 24: Financial Contributions](#)
- [Chapter 25: City-wide](#)
- [Volume 2, Appendix 1: District Plan Administration](#)

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