Appendix 2 – Proposed Plan Chapters (Chapter 6A Objectives and Policies: Tara-Ika Multi-Zone Precinct and Chapter 15A Rules: Tara-Ika Multi-Zone Precinct) and Structure Plan with recommended changes annotated

6A. TARAIKATARA-IKA MULTI ZONE PRECINCT

The following objectives and policies are to be read in conjunction with the objectives and policies contained within Chapters 1-14 of the Horowhenua District Plan. In the event there is conflict between the objectives and policies in this chapter and those contained within the remainder of the District Plan, the objectives and policies contained within this chapter (Chapter 6A – Taraika Tara-lka) shall apply.

Taraika Tara-lka is a large greenfield site located to the east of the existing urban area of Levin Taitoko/Levin, with the Tararua Ranges forming an impressive backdrop to the area.

Muaūpoko have a very strong and enduring relationship with the Tara-lka area, as it is an area where they have worked, cultivated, hunted and gathered resources for over 1000 years. Tara-lka sits between areas of high cultural association to Muaūpoko, including Punahau (Lake Horowhenua) and the Tararua Ranges, and is therefore part of important physical, ecological, visual and spiritual pathways.

The <u>TaraikaTara-Ika</u> Development Area (<u>TaraikaTara-Ika</u>) totals 470ha and has been master planned to provide a range of housing options and other supportive non-residential activities such as commercial and education activities. The area is expected to accommodate approximately <u>3,500</u>2,500 residential dwellings and will be home to more than 5,000 people. Some of the surrounding environment has already been developed for rural lifestyle purposes.

The land has been identified as a growth area for the Horowhenua District since the Horowhenua Development Plan was prepared in 2008. The land was subsequently rezoned to Greenbelt Residential Deferred with an associated Structure Plan to guide development introduced to the District Plan. Since this time, growth projections for the District have changed significantly with the District's population now expected to grow rapidly. This prompted the decision to consider Tara-lka for a greater density of development than what could occur under a Greenbelt Residential Zoning.

Taraika Tara-lka was considered suitable for additional residential capacity due to a range of factors including:

- The site is very flat and relatively unconstrained in term of risk from natural hazards;
- The site is close to the existing urban area of LevinTaitoko/Levin;
- The site has already been identified as a growth area and has had a level of rural lifestyle development occur under the existing zoning. As such, additional development in this area does not result in a significant loss of rural production land.

As such, the area has been master planned and the land consequently rezoned to enable a variety of different residential and non-residential activities to establish.

TaraikaTara-Ika is made up of the following zones:

- Commercial Zone (Taraika<u>Tara-Ika</u> Precinct)
- Open Space Zone (Taraika Tara-Ika Precinct)
- Residential Zone (Taraika Tara-Ika Precinct)
- Greenbelt Zone (Taraika Tara-Ika Precinct)

Each zone has individual objectives, policies, and rules to ensure development achieves the desired objectives and principles for the area. There are also objectives and policies that apply to all zones within Tara-lka. In addition, the relevant objectives, policies and rules from the existing District Plan chapters and zones will apply. In the case where there are duplicate

provisions, the more specific provision (i.e. <u>TaraikaTara-lka</u> specific provisions) will apply in place of the more general provisions.

Please note that the Horizons Regional Council One Plan also regulates a number of activities associated with subdivision and land development, including but not limited to earthworks, vegetation clearance, and activities near streams with food production value and areas of indigenous biodiversity. Plan users are advised to refer to the One Plan for further information.

ISSUE 6A.1 OVERALL PRINCIPLES FOR DEVELOPMENT IN TARAIKATARA-IKA

Through the Horowhenua Growth Strategy 2040, Council identified that the existing zoning and structure plan for the area previously known just as 'Gladstone Green' was unlikely to accommodate the level of growth anticipated in the District, or deliver the outcomes desired for the area. Furthermore, the resource consent process was considered unlikely to provide sufficient opportunity to deliver an integrated and co-ordinated development at the scale anticipated. As a result, the Taraika Tara-Ika Master Plan was prepared in order to guide and enable residential and other development to ensure that this happens in an integrated and co-ordinated way. This master plan is the basis of the Structure Plan 013 and the following objectives and policies.

ISSUE DISCUSSION

Taraika Tara-Ika is anticipated to become high amenity residential development. However, there is also a risk development could adversely affect the environmental quality and cultural values of the area due to effects arising from increased built form, traffic, and demand for infrastructure and services and pressure on eco-systems.

State Highway 57 separates <u>TaraikaTara-Ika</u> from the rest of the urban area of <u>LevinTaitoko/Levin</u>. The preferred corridor for the Otaki to North of <u>LevinTaitoko/Levin</u> highway is also located in <u>TaraikaTara-Ika</u> (near to existing State Highway 57), creating a risk of severance between <u>TaraikaTara-Ika</u> and the rest of <u>LevinTaitoko/Levin</u>.

Due to the alignment of future and existing state highways, there is a risk that Tara-lka will develop in way that is disconnected from the urban area of Levin_Taitoko/Levin and associated services. Unless addressed, this will have a negative impact on the amenity of the resulting development and the well-being of residents.

As a large greenfield site, TaraikaTara-Ika represents a 'blank' canvas. This presents an opportunity to establish a unique character. However, this also means there is no existing pattern of urban development to follow (for example, lot design and layout, street trees and provision for open space). Without an established urban pattern from adjoining areas to replicate, there is a risk that an incoherent urban form and disconnected structure will follow. This could result inadequate dwelling interaction with the street, adhoc section sizes that affects character and amenity, or establishment of a commercial area in an inappropriate location. It is also possible that future development will not sufficiently consider or prioritise the amenity or functionality of the public realm, resulting in poor quality urban form, inadequate or inappropriate use of street trees and a lack of quality, functional reserve space. The master plan seeks to respond to these risks.

Master planned greenfield development at <u>TaraikaTara-Ika</u> therefore presents an opportunity to achieve the following:

 a connected and integrated future-proof development that represents good urban design and provides a high level of residential amenity;

- encourages a variety in housing choice, including higher density options;
- a development that utilises low impact, sustainable servicing solutions and encourages walking and cycling;
- a development which provides facilities and open space to meet the needs of the community;
- a development that maintains and enhances cultural, heritage, and ecological values of the area.

To achieve the above, it is important that subdivision, development, and land use activities are coordinated to occur in locations and at densities that enable sustainable and efficient use of land and delivery of infrastructure and contribute to a high amenity environment.

It is also important that development at Tara-lka is resilient to the effects of climate change and natural hazards and minimises effects on the natural environment. Both of these considerations require careful stormwater design.

The following objectives and policies seek to respond to the above issue and opportunity.

Objectives & Policies

Objective 6A.1

To achieve an integrated, <u>efficient</u>, and connected development that reflects cultural values and local identity, represents good urban design, is supported by a well connected roading network that supports a range of transport modes and has the facilities, <u>social infrastructure</u>, infrastructure, and amenities necessary to contribute to the health, safety, and wellbeing of residents. This includes:

- Encourage housing at a range of densities;
- Provision for a local-scale commercial centre;
- Access to quality public open space:
- Safe and efficient walking and cycling options;
- Well connected, safe and efficient roading network;
- Design that reflects Muaūpoko cultural values and local history and identity;
- Protection of culturally significant sites;
- -___Environmentally sensitive design;
- Encouraging subdivision and development design to enable energy efficiency and reduced energy consumption;
- Within the Arapaepae Road Special Treatment Overlay, development that is appropriate for the site in terms of scale, access, and compatibility with surrounding land uses.

Policy 6A.1.1

Achieve a well-connected and integrated urban environment by specifying the manner in which primary structure plan features indicated on Structure Plan 013 need to be provided. The manner in which these features need be provided is set out below:

North/South Arterial Roads

- Be provided in a location central to the Tara-lka growth area and be generally straight.

- Be located to provide road frontage to the commercial zone and central open space (including education overlay).
- Be utilised for stormwater management as required.

East/West Arterial Roads

- Be provided in a location central to the Tara-lka growth area and generally straight.
- Be oriented to provide views towards the Tararua Ranges.
- Be located to provide road frontage to the commercial area (on both sides of the road) and to the central open space (including education overlay) and make provision connect directly into LevinTaitoko/Levin.
- Be utilised for stormwater management as required.

Collector Roads

- Be uniformly spaced from the arterial roads.
- East/West collector roads should be oriented to provide views towards the Tararua Ranges.
- North/South collector roads should be located to provide direct connections to the East/West collector roads.
- Be utilised for stormwater management as required.

Strategic Cycleways

- Be located directly alongside arterial or collector roads.
- Be located so that they will (when completed) provide a connection from edge to edge of the Tara-lka growth area in both a North/South and East/West direction.
- Be located to provide connections to and through the commercial zone.
- Be located to provide connections to the education overlay on two sides.
- The northern East/West cycleway should be located so that (when complete) it will provide a connection from Arapaepae Road to the Waiopehu Reserve.

Central Open Space

- The central open space area should be of the general size and shape indicated on the structure plan, located immediately adjacent to the commercial area, and include provision for a primary school.
- Be located directly opposite commercial area.

Maunu Wahine

- Adjoin the Waiopehu Reserve.
- Be of a size and shape that enables Muaūpoko cultural values to be delivered.

Policy 6A.1.2

Achieve a well-connected and integrated urban environment by enabling flexibility in the manner in which secondary features are provided, so long as the following outcomes are delivered:

- Local roads provide the level of connectivity indicated on the structure plan, but with flexibility in respect of location;
- Open spaces are provided in a manner that provide an equal recreation outcome to what is indicated on the structure in respect of size, shape, and access.

Policy 6A.1.3

Subdivision, infrastructure and land development in Taraika Tara-Ika must be consistent with the outcomes sought by Structure Plan 013. Subdivision and land development that does not provide primary structure plan features in the manner shown on Structure Plan 013 deviates from the current or future implementation of the Structure Plan will only be considered where an alternative is proposed that will achieve the following:

- The same or similar level of connectivity within TaraikaTara-Ika;
- The same or similar level of connectivity between the <u>TaraikaTara-lka</u> and the existing urban area of <u>LevinTaitoko/Levin</u>;
- Protection of opportunities for land adjacent to Taraika_Tara-lka in the future;
- Public recreation space of an equivalent functionality as that shown on the Structure Plan and that is within walking distance of a similar number of properties as shown on the Structure Plan;
- A streetscape that maintains an appropriate expression of street hierarchy and consistency of treatment along any Arterial or Collector street Road;

Policy 6A.1.4

Subdivision, and land development and open space reserves in Taraika Tara-Ika will acknowledge, protect, and celebrate cultural values, cultural history Muaūpoko values and history and local identity in the following ways:

- Use of both <u>Māori-Muaūpoko and non-Māori-names, among others,</u> for streets and reserves:
- Protection of culturally significant sites and their values;
- Prioritise use of locally sourced indigenous plants in street and reserve planting;
- Muaūpoko Accidental Discovery and Tikanga Protocol observed during site works.

Policy 6A.1.5

Require development to be designed in a manner that enables passive surveillance of public places (such as parks and roads) from private properties using techniques such as good site layout, restricting fence heights, and landscape treatments that will not obscure key sightlines.

Policy 6A.1.6

Provide for non-residential activities, such as community, recreational, educational and commercial activities, which support the day to day needs of the local community, while avoiding any such non-residential activities of a nature and scale that compete with the Levin Taitoko/Levin Town Centre.

Policy 6A.1.7

Require subdivision layout to ensure street design enables the safe and efficient movement of people, and traffic and public transport, provides a high level of safety and amenity for pedestrians and cyclists, and contributes positively to the public realm.

Policy 6A.1.8

Encourage additional building height where this would contribute to a well-functioning urban environment (for example, increased housing variety), so long as reasonable privacy of neighbouring dwellings is maintained, culturally important views are maintained along Queen Street East and visual dominance and excessive shading beyond the subject site are avoided.

Policy 6A.1.9

Provide for a range of land uses within the Arapaepae Road Special Treatment Overlay to allow flexibility to deliver a context specific response that recognises both the unique attributes of the site and the need to appropriately manage adverse effects and provide an acceptable level of amenity for the proposed activity, including safe and efficient access, and avoiding or minimising reverse sensitivity effects.

Policy 6A.1.10

Require subdivision layout that will enable buildings to utilise energy efficiency and conservation measures.

Policy 6A.1.11

Require ecological areas, transport corridors, stormwater reserves and open space reserves to be designed and managed in a way that protects and enhances habitat for Muaūpoko taonga

Objective 6A.2

Efficient delivery of infrastructure within <u>Taraika Tara-lka</u> will enable development while protecting environmental <u>and cultural</u> values and achieving a high level of residential amenity.

Policy 6A2.1

Make provision within the Taraika Tara-Ika for housing yield of 2,500-3,000at least 3,500 houses.

Policy 6A2.2

Require subdivision and development to be managed, designed and staged to align with the coordinated provision and upgrading of the infrastructure network (including roading network), public open space, streetscape and local service facilities within the TaraikaTara-lka, as

illustrated on Structure Plan 013.

Policy 6A2.3

Avoid subdivision and development that compromises the ability to provide efficient and effective infrastructure networks for the wider Taraika Tara-lka.

Objective 6A.3

Stormwater management in <u>TaraikaTara-Ika</u> will be resilient, <u>culturally sensitive</u> and environmentally sustainable, including:

- Resilient to natural hazards and the likely effects of climate change;
- <u>Incorporating Water sSensitive designDesign;</u>
- ___Minimise adverse effects from changes in the nature (including quality and quantity) of natural flows on downstream ecosystems;
- Avoiding natural areas and ecosystems that are sensitive to modifications to changes in groundwater and surface water levels and flows-

Policy 6A.3.1

Require an integrated approach to managing stormwater from Tara-Ika to ensure the quality and quantity of runoff does not have an adverse effect on Punahau (Lake Horowhenua), the Koputaroa Stream, or other downstream environments.

Policy 6A.3.2

Require stormwater to be retained and disposed of within the Tara-lka Growth Area for up to a 1 in 100 year annual return interval rainfall event (with allowance for climate change), and treated and managed utilising the best practicable option to mitigate the effects of stormwater by including the following:

- (i) limiting the extent of impervious areas;
- (ii) incorporating on-site treatment and disposal of stormwater into subdivision and development design;
- (iii) provision of catchment-wide facilities like wetlands and basins that are efficient and effective from both a construction and maintenance perspective and avoid culturally significant sites.

Policy 6A.3.32

Recognise and provide for the principles of te mana o te wai and the significance to role of Muaūpoko as kaitiaki Kaitiakitanga iwi of of the TaraikaTara-Ika environment and its connection to Punahau (Lake Horowhenua) by working with iwi Muaūpoko to protect the mauri of freshwater within Tara-Ika and to through manage manage stormwater quality and quantity.

Policy 6A.3.43

Require rainwater collection tanks to be provided on all new residential allotments to capture and reuse runoff to mimic, as much as practicable, pre-developed hydrological conditions for the site and promote sustainable use of freshwater resources.

Explanation and Principal Reasons

Large scale greenfield development has the potential to lead to adverse environmental outcomes, particularly when the land is owned by multiple different parties. Without a strong framework to guide growth and development in this area, there is potential for individual subdivisions to progress in a fragmented and disconnected manner. Furthermore, there is a risk that no individual application will make provision for facilities such as open space, supportive commercial activities, or educational activities. Further, individual subdivision applications progressing in an adhoc manner are likely to result in inefficient delivery of infrastructure and limit opportunities for connectivity.

The Structure Plan for the Taraika_Tara-lka is based on the Tara-lka Master Plan. It provides a comprehensive framework to manage growth and development in the Tara-lka, including infrastructure, roads and open space. Subdivision and development is required to be undertaken in accordance with the Structure Plan to ensure efficient use of the land and physical resources. It is important the principles of this Structure Plan are adhered to in order to achieve the development outcomes anticipated for this area.

Ensuring subdivision and development is aligned with the Structure Plan will help to deliver a quality living environment that is supported by necessary non-residential activities, amenities, and services.

It is also important to recognise cultural history and identity in this area. One way to achieve this is to ensure that streets and reserve names include Māori names chosen by Tangata Whenua.

ISSUE 6A.2 RESIDENTIAL ZONES (TARAIKA TARA-IKA PRECINCT)

The character of the Residential Zone of Tara-Ika is likely to be different to the wider LevinTaitoko/Levin area due to the era of development, housing density expected, integrated master planning approach to development, and the detail of the design principles identified for this area.

It is important <u>TaraikaTara-Ika</u> complements and integrates with the existing residential areas of <u>LevinTaitoko/Levin</u> while providing a different offering (for example, more housing variety).

ISSUE DISCUSSION

The <u>TaraikaTara-Ika</u> residential area needs to develop in a manner that reflects good urban design and form to achieve a high amenity living environment that contributes to the wellbeing of its residents.

At present, there is limited variation in residential housing types available within the District. The predominant housing type available is 'family sized' standalone dwellings on relatively large residential sections, ranging from $400m^2$ - $800m^2$. However, this uniformity of housing type does not fully satisfy the diverse needs of the Horowhenua community. Taraika Tara-Ika offers an opportunity to respond to this by encouraging more variety and improving housing affordability and small lots suitable for smaller dwellings. The following objectives and policies seek to respond to this.

Objectives & Policies

Objective 6A.4

Achieve a high amenity, <u>connected</u>, walkable residential environment with a range of section sizes and housing types, including affordable housing options, in <u>TaraikaTara-Ika</u>.

Policy 6A.4.1

Optimise walkability and encourage choice and a variety of housing types, by providing for higher density residential development near to commercial and community facilities and lower density residential development at the outer edge of TaraikaTara-Ika.

Policy 6A.4.2

Enable and encourage a range of housing types and section sizes in Tara-Ika to meet the variety of needs and preferences in our community, while ensuring a high level of residential amenity and connectivity.

Policy 6A.4.3

Use both minimum and maximum density standards to encourage housing variety and to ensure development occurs at a scale and density consistent with the amenity expected for that particular area.

Explanation and Principal Reasons

Management of the residential environment generally focuses on providing for ongoing use and development in a way that maintains and enhances their character and amenity values. In the case of Tara-lka, the early stages of development will not have an established residential character or amenity to be informed by. Both the Tara-lka Master Plan and Structure Plan 013 outline some of the characteristics of urban form and design that will lead to the creation of a residential character and amenity that is considered appropriate within this particular context. The above objectives and policies, supported by District Plan rules, seek to achieve these outcomes to build and establish a high amenity residential character for Tara-lka.

ISSUE 6A.3 COMMERCIAL ZONE (TARAIKA TARA-IKA PRECINCT)

Given the anticipated population of TaraikaTara-Ika and the proximity of TaraikaTara-Ika to existing residential areas on the eastern side of LevinTaitoko/Levin, the area will likely be supported by a commercial centre in the future. It is important that this is located in the appropriate location to maximise accessibility for the community served, support viability and consequently maximise the benefits this will offer the community. In addition, it is important that the nature and scale of this centre is controlled so as to ensure it offers a high amenity 'focal point' for the community, while not conflicting with the existing LevinTaitoko/Levin town centre.

Issue Discussion

It is important that commercial development in <u>TaraikaTara-lka</u> agglomerates in a highly accessible, central location. If commercial activities and community services establish in an adhoc or sprawling manner, the vibrancy and vitality of the neighbourhood centre will be reduced, limiting the opportunity for it to act as a central point for the community.

The commercial centre will provide an important service to the community, through meeting the daily or weekly needs of the local catchment. This can reduce the need to travel across town and improves the overall experience of living within an area that, due to the distance from the commercial area of LevinTaitoko/Levin and the presence of a State Highway (State Highway 57 in the short term and the Otaki to North of LevinTaitoko/Levin highway in the longer term), would otherwise be underserviced by convenience facilities.

The design and layout of commercial development is important to ensuring a vibrant and attractive centre that the community will want to spend time in. Important considerations include the design of building frontages and the location of carparks. An attractive commercial centre that demonstrates good urban design can also support other types of land uses. This is because quality commercial development can act as an 'attractor' for land uses such as medium density development. This is considered an important relationship to acknowledge and enhance in order to encourage housing variety, as well as to achieve an attractive commercial centre.

In addition to the above, it is important that the Tara-lka commercial centre does not compete with the Levin_Taitoko/Levin town centre, particularly given the proximity of the Tara-lka commercial centre to both existing and proposed State Highways. Therefore, it is important that the nature and scale of this centre is controlled in order to protect the primacy of the Levin_Taitoko/Levin town centre.

Objectives & Policies

Objective 6A.5

Encourage development of a sustainable and attractive local commercial centre that accommodates a variety of compatible land use activities, while protecting the vitality of the Levin Taitoko/Levin Town Centre.

Policy 6A.5.1

Provide for supermarket and/or convenience retail facilities at a scale suitable for the area.

Policy 6A.5.2

Provide for service based commercial activities that support the daily or weekly needs of the local community, so long as nature and scale does not compete with the LevinTaitoko/LevinTown Town Centre.

Policy 6A.5.3

Ensure of the design, nature, and scale of commercial activities contributes positively to the image and overall amenity of the commercial area of Tara-lka.

Policy 6A.5.4

Ensure the development in the commercial zone contributes positively to the amenity of public places (including footpaths and roads) by:

- (a) avoiding blank walls facing the roads;
- (b) providing level access for pedestrians into shops;

- (c) ensuring fascia boards and associated signage are of a consistent size and height;
- (d) avoiding freestanding signs;
- (e) maximising outlook onto streets and public places;
- (f) providing weather protection for pedestrians along the road frontages;
- (g) providing service access, car parking and staff parking away from the frontages;

Policy 6A.5.5

Avoid establishing commercial activities that are of a nature and scale that would detract from the vibrancy and vitality of the LevinTaitoko/Levin Town Centre. Examples of such activities include but are not limited to entertainment activities, hotel/motel accommodation, large format retail and other activities of a type and scale that will compete with the LevinTaitoko/LevinTown Centre.

Explanation and Principal Reasons

Given the anticipated population of <u>TaraikaTara-Ika</u>, it is both likely and desirable for a range of small scale commercial activities to establish.

Commercial centres fulfil both a functional need for residents, thus reducing their need to travel into LevinTaitoko/Levin or other surrounding areas to meet their daily and weekly convenience needs and provide a focal point for the community. This is important as it provides a place for people to meet and interact with both their neighbours and the wider community. This contributes to feelings of safety, social connectedness and wellbeing, which ultimately improves the overall quality and amenity of the surrounding residential environment. However, it is important that the commercial area of Tara-lka does not compete with the vibrancy and vitality of the LevinTaitoko/Levin Town Centre.

In order to achieve these outcomes, the above objectives and policies (and supporting rules in Chapter 15A of the District Plan) seek to control the design of signs and buildings and the nature and scale of residential activities in ensure a high amenity environment that encourages walking, cycling through quality of experience. Controls on the scale and nature of commercial activities allowed to establish within TaraikaTara-Ika will also avoid conflict with adjoining land uses and ensure that LevinTaitoko/Levin 's town centre remains the primary commercial centre in the District.

ISSUE 6A.4 OPEN SPACE ZONE (TARAIKA TARA-IKA PRECINCT)

ISSUE DISCUSSION

Given the size of <u>TaraikaTara-Ika</u> and the number of lots it will accommodate, the development will require open space provision. It is important that the reserve space is provided in the appropriate location and that it is of a functional size and shape.

Objectives & Policies

Objective 6A.6

To provide high quality public open space that is accessible and can be used for a variety of purposes, including stormwater management.

Policy 6A.6.1

Ensure public parks or reserves are distributed through <u>TaraikaTara-Ika</u> to be easily accessible to all residential lots by requiring all subdivision and development to comply with Structure Plan 013.

Policy 6A.6.2

Ensure public parks and reserves are of a size, shape and type that enables a functional and, recreational uses by requiring all subdivision and development to comply with Structure Plan 013.

Policy 6A.6.2

Require public parks and reserves to recognise and celebrate Muaūpoko history and values through design, wayfinding, storytelling, naming, and use of planting.

Policy 6A.6.<u>43</u>

Enable education facilities to establish at a scale that supports the needs of the local community, with limits on scale to protect the amenity of the surrounding environment.

Explanation and Principal Reasons

Open space that can be used for a range of recreational purposes is an important asset for both the wider community and the Tara-lka community. Furthermore, recreation space contributes positively to residential amenity. In addition, recreation space provides opportunity to manage stormwater during heavy rain events and to contributes to the ecology of an area.

It is important that <u>TaraikaTara-Ika</u> is serviced by quality reserve space. As a large greenfield site, there is opportunity to secure land for recreation space early in the land development process, to ensure it is functional, accessible, and of high amenity. The above objectives and policies (and supporting rules in Chapter 15A of the District Plan) seek to secure this outcome.

Methods for Issues and Objectives in Taraika Tara-Ika

District Plan

- A range of zones, supported by a 'Taraika Tara-Ika Precinct', will be identified on the planning maps.
- TaraikaTara-Ika precinct specific rules will be applied, in addition to general zoning rules, to specify how subdivision and development will be managed in order to achieve the above objectives and policies.
- A structure plan will guide subdivision and development in the <u>TaraikaTara-Ika</u> area in order to achieve the above objectives and policies.
- The resource consent process will provide opportunity for appropriate subdivision and development proposals that are not permitted, either because of non-compliance with environmental standards or because of the nature of the non-residential land uses.
- Conditions on resource consents will control the effects of subdivision and development.

Standards expressed as District Plan rules are considered to be the most appropriate and effective method of maintaining minimum standards for the matters over which the Council has jurisdiction. Rules provide certainty for resource users and for neighbours which is

important for community understanding of what environmental quality is expected. The use of a Design Guide is effective in providing guidance on the matters and outcomes for achieving quality medium density developments.

Taraika Tara-Ika Master Plan

The <u>TaraikaTara-Ika</u> Master Plan formed the basis of the above objectives and policies and Structure Plan. The Master Plan provides further detail, assessment, and information that justify the outcomes sought for the <u>TaraikaTara-Ika</u> area.

Long Term Plan/Annual Plan

- Council will undertake amenity improvement work including street planting and traffic management schemes within residential areas. Council will co-ordinate the provision of appropriate infrastructure to support residential development.
- Council will continue to maintain the landscape of streets (berms and sealed surfaces) and areas of public open space throughout the settlements.
- Council will require developers to contribute to the costs of new infrastructure and upgrading, reserves provision, community and recreational facilities and amenity improvements in residential areas.
- Council will require developers to contribute to the costs of new infrastructure and upgrading, reserves provision, community and recreational facilities and amenity improvements through its Development Contributions Policy.

There are a range of non-District Plan methods available to promote a good standard of residential design and development, particularly through the use of Codes and Guidelines, and through Council funded initiatives for community and residential amenities. Development Contributions from residential development will be used in the upgrading and expansion of the District's roads, reserves and other civic amenities and facilities.

Other

- The use of private developer agreements to facilitate infrastructure works and provision of other facilities address in the development contributions policy.
- Engagement with Muaūpoko
- Council will work with <u>iwiMuaūpoko</u>, particularly in regard to stormwater design, reserve design, planting, and street and reserve naming.
- Contractors will be briefed on the tikanga requirements.
- Council and Muaūpoko will co-design an Open Space Design Guide which will include guidance on how to integrate and provide for Muaūpoko relationships and values within Tara-Ika.

15A. TARAIKATARA-IKA MULTI-ZONE PRECINCT

A 'multi-zone precinct' is a tool set out in the National Planning Standards. The National Planning Standards define a 'precinct' as follows:

A precinct spatially identifies and manages an area where additional place-based provisions apply to modify or refine aspects of the policy approach or outcomes anticipated in the underlying zone(s).

Taraika Tara-Ika contains a number of different zones, including Residential, Greenbelt Residential, Open Space, and Commercial. The majority of the current rules and standards contained within these existing zone will apply within Taraika Tara-Ika. However, there are some instances where different rules and standards will be required within Taraika Tara-Ika. Therefore, the respective zone chapter provisions will apply within Taraika Tara-Ika, except as modified by the provisions contained within Chapter 15A. If there is conflict between chapters, the provisions of Chapter 15A will override.

15A.1 PERMITTED ACTIVITIES

The following activities are permitted activities provided activities comply with all relevant conditions in Rule 15A.6 and Chapters 21, 22, 23 and 24.

Note: The permitted activity conditions within the relevant zone chapter for the relevant activity type also apply. Where there is conflict between provisions, the more specific provision (i.e. the provisions of this chapter) apply.

15A.1.1 All Zones

15A.1.1.1 Activities permitted by the underlying zone chapters

- (a) Within the Residential Zone of the <u>TaraikaTara-lka</u> Precinct, activities listed as a permitted activity in Chapter 15 are a permitted activity, provided activities comply with all relevant conditions contained within Chapter 15.
- (b) Within the Greenbelt Residential Zone of the <u>TaraikaTara-lka</u> Precinct, activities listed as a permitted activity in Chapter 18 are a permitted activity, provided activities comply with all relevant conditions contained within Chapter 18.
- (c) Within the Open Space Zone of the <u>TaraikaTara-Ika</u> Precinct, activities listed as a permitted activity in Chapter 20 are a permitted activity, provided activities comply with all relevant conditions contained within Chapter 20.

15A.1.2 Commercial Zone

In the Commercial Zone, the only permitted activities are:

(a) Commercial (excluding entertainment activities) occupying a floor area of up to 250m²

- (b) Retail occupying a floor area of up to 250m²
- (c) Community activities
- (d) Recreation facilities
- (e) Public conveniences
- (f) Open space
- (g) Residential activities above ground floor (i.e. 1st floor or above), or at ground level only where the residential activity does not directly front onto the road boundary (i.e. they are located to the rear of a commercial activity).
- (h) The following types of signs
 - (i) Advertising signs, including public facility or information signs identifying a building, property or business.
 - (ii) Official signs.
 - (iii) Temporary signs.
 - (iv) Signs advertising sale or auction of land or premises.
 - (v) Health and safety signs.
- (i) The following network utilities and energy activities:
 - (i) The construction, operation, maintenance and upgrading of network utilities.
 - (ii) Domestic scale renewable energy devices.
- (j) Temporary activities

15A.2 CONTROLLED ACTIVITIES

The following activities are controlled activities provided activities comply with all relevant conditions in Rules 15A.6 and Chapters 21, 22, 23 and 24. In addition, refer to the relevant zone chapters for matters of control and conditions for controlled activities:

Note: The matters of control contained within the relevant zone chapter for the relevant activity type also apply.

15A.2.1 All Zones

- (a) Within the Residential Zone of the Tara-lka Precinct, activities listed as a controlled activity in Chapter 15 are a controlled activity, provided activities comply with all relevant conditions contained within Chapter 15.
- (b) Within the Commercial Zone of the Tara-lka Precinct, activities listed as a controlled activity in Chapter 17 are a controlled activity, provided activities comply with all relevant conditions contained within Chapter 17.

- (c) Within the Greenbelt Residential Zone of the <u>TaraikaTara-Ika</u> Precinct, activities listed as a controlled activity in Chapter 18 are a controlled activity, provided activities comply with all relevant conditions contained within Chapter 18.
- (d) Within the Open Space Zone of the <u>TaraikaTara-Ika</u> Precinct, activities listed as a controlled activity in Chapter 20 are a controlled activity, provided activities comply with all relevant conditions contained within Chapter 20.

15A.3 RESTRICTED DISCRETIONARY ACTIVITIES

The following activities are restricted discretionary activities provided activities comply with all relevant conditions in Rule 15A.7. Refer to Rules 15A.8.2, 15A.8.3 and 15A.8.4 for matters of discretion and conditions for restricted discretionary activities.

Note: The matters of discretion and conditions for restricted discretionary activities contained within the relevant zone chapter for the relevant activity type also apply.

Note: Refer to Chapter 25 for Assessment Criteria as a guide for preparing an assessment of environmental effects to accompany a resource consent application for any of the above activities.

15A.3.1 All Zones

- (a) The subdivision of land that <u>provides primary structure plan features in the manner</u> shown on Structure Plan 013.
- (b) Within the Residential Zone of the <u>TaraikaTara-lka</u> Precinct, activities listed as a restricted discretionary activity in Chapter 15 are a restricted discretionary activity, provided activities comply with all relevant conditions contained within Chapter 15.
- (c) Within the Commercial Zone of the Tara-lka Precinct, activities listed as a restricted discretionary activity in Chapter 17 are a restricted discretionary activity, provided activities comply with all relevant conditions contained within Chapter 17.
- (d) Within the Greenbelt Residential Zone of the <u>TaraikaTara-Ika</u> Precinct, activities listed as a restricted discretionary activity in Chapter 18 are a restricted discretionary, provided activities comply with all relevant conditions contained within Chapter 18.
- (e) Within the Open Space Zone of the <u>TaraikaTara-Ika</u> Precinct, activities listed as a restricted discretionary activity in Chapter 20 are a restricted discretionary, provided activities comply with all relevant conditions contained within Chapter 20.

15A.3.2 Residential Zone

(a) Any development within the Arapaepae Road Special Treatment Overlay noted on Structure Plan 013

15A.3.3 Commercial Zone

(a) Development of new buildings and additions or external alterations to building frontages. (Refer Rule 15A.8.3.1).

- (b) Supermarkets (Refer Rule 15A.8.3.2).
- (c) Drive-through restaurants. (Refer Rule 15A.8.3.3).

15A.4 DISCRETIONARY ACTIVITIES

The following activities are discretionary activities.

Note: Refer to Chapter 25 for Assessment Criteria as a guide for preparing an assessment of environmental effects to accompany a resource consent application for any of the above activities.

15A.4.1 All Zones

- (a) Within the Residential Zone of the <u>TaraikaTara-Ika</u> Precinct, activities listed as a discretionary activity in Chapter 15 are a discretionary activity, provided activities comply with all relevant conditions contained within Chapter 15.
- (b) Within the Commercial Zone of the Tara-lka Precinct, activities listed as a discretionary activity in Chapter 17 are a discretionary activity, provided activities comply with all relevant conditions contained within Chapter 17.
- (c) Within the Greenbelt Residential Zone of the <u>TaraikaTara-Ika</u> Precinct, activities listed as a discretionary activity in Chapter 18 are a discretionary activity, provided activities comply with all relevant conditions contained within Chapter 18.
- (d) Within the Open Space Zone of the <u>TaraikaTara-Ika</u> Precinct, activities listed as a discretionary activity in Chapter 20 are a discretionary activity, provided activities comply with all relevant conditions contained within Chapter 20.
- (e) Any activity not otherwise specified.

15A.4.2 Residential Zones

(a) Any subdivision that does not comply with the restricted discretionary activity conditions (Refer Rule 15A.8.2.1), except where the subdivision is a non-complying activity in accordance with Rule 15A.5.1(a) and/or Rule 15A.5.1(f).

15A.4.3 Commercial Zone

- (a) Commercial activities that do not comply with <u>maximum</u> floor area limits.
- (b) Development of a new building, or additions and/or alterations to existing building frontages that do <u>not</u> comply with the conditions for Restricted Discretionary Activities in Rule 15A.8.3.1

15A.5 Non-Complying Activities

The following activities are non-complying activities.

Note: Refer to Chapter 25 for Assessment Criteria as a guide for preparing an assessment of environmental effects to accompany a resource consent application for any of the above activities.

15A.5.1 All Zones

- (a) Within the Residential Zone of the <u>TaraikaTara-Ika</u> Precinct, activities listed as a non-complying activity in Chapter 15 are a non-complying activity, provided activities comply with all relevant conditions contained within Chapter 15.
- (b) Within the Commercial Zone of the Tara-lka Precinct, activities listed as a non-complying activity in Chapter 17 are a non-complying activity, provided activities comply with all relevant conditions contained within Chapter 17.
- (c) Within the Greenbelt Residential Zone of the <u>TaraikaTara-Ika</u> Precinct, activities listed as a non-complying activity in Chapter 18 are a non-complying activity, provided activities comply with all relevant conditions contained within Chapter 18.
- (d) Within the Open Space Zone of the <u>TaraikaTara-Ika</u> Precinct, activities listed as a non-complying activity in Chapter 20 are a non-complying activity, provided activities comply with all relevant conditions contained within Chapter 20.
- (e) Subdivision or land use activities that <u>do not provide primary features in the manner</u> shown on are not consistent with Structure Plan 013.
- (f) Subdivision that do<u>es</u> not comply with Rule 15A.8.2.2(b)(ii), 15A.8.3.4(b)(ii), 15A.8.4.1(b)(ii), or 15A.8.5.1(b)(ii).
- (g) Any activity that does not comply with Rule 15A.6.1.1 Vehicle Access into Strategic Cycleways.
- (h) Industrial Activities (for the avoidance of doubt, this includes activities in the Arapaepae Road Special Treatment Overlay).
- (i) Large Format Retailing (for the avoidance of doubt, this includes activities in the Arapaepae Road Special Treatment Overlay).

15A.6 CONDITIONS FOR PERMITTED ACTIVITIES

Note: The permitted activity conditions within the relevant zone chapter for the relevant activity type also apply. Where there is conflict between provisions, the more specific provision (i.e. the provisions of this chapter) apply.

The following conditions shall apply to all permitted activities:

15A.6.1 All Zones

15A.6.1.1 Vehicle Access into Strategic Cycleways

(a) No vehicle crossings shall cross a strategic cycleway shown on Structure Plan 013 will be permitted. In such cases, vehicle access to the site shall be via the side roads or rear access lanes shown on Structure Plan 013

15A.6.2 Residential Zones

15A.6.2.1 Rainwater Tanks

- (a) All dwellings shall have a <u>rainwater</u> collection tank permanently connected to internal and external non-potable reuse including toilet flushing, laundry, and outdoor taps. Rainwater tanks must be design and installed as follows:
 - (i) Size of tank:
 - Roof area of 75m² or less minimum 2,000 litre capacity
 - Roof area of 75m² to 200m² minimum 3,000 litre capacity
 - Roof area of more than 200m² minimum 5,000 litre capacity
 - (ii) The roof area to be connected will be the total footprint of the building (excluding freestanding accessory buildings) and 90% of this must be able to freely drain to the tank without need for pumping. Only runoff from roof surfaces is to be collected into the rainwater tanks.
 - (iii) The rainwater tank, plumbing and pump system must be maintained in working condition <u>of over</u> the life of the dwelling.
 - <u>(iv)</u> The public potable water supply shall be adequately protected by installation of a non-return valve.
 - (v) Rainwater tanks are to overflow when full into an on-lot soakage device for stormwater disposal.

Note: Multi-unit dwellings may share an appropriate sized communal tank to be determined at land use or subdivision consent stage.

15A.6.2.2 Maximum Building Height

(a) In the medium density area the maximum height shall be 10 metres.

15A.6.2.3 Integral Garages

(a) Integral garages shall account for no more than 50% of the front façade of the dwelling unless the garage component is recessed back from the main pedestrian entrance to the dwelling by at least 1 metre

15A.6.2.4 Building Setback from Boundaries

Front/Road Boundary

(a) No building shall be located closer than 2 metres from any road boundary, except that a 5 metre long vehicle standing space shall be provided between the road boundary and any structure housing a vehicle where the vehicle takes direct access to the structure from the road.

15A.6.2.5 Daylight Access

(b) Where two dwellings are joined, there shall be no daylight access standard along the shared boundary.

15A.6.2.6 Fencing

- (a) Front Road Boundary
 - (i) Local Roads
 - The maximum height of a fence or wall sited on the boundary or within 2 metres of the boundary shall be no greater than 1.2 metre high.
 - (ii) Collector and Arterial Roads
 - The maximum height of a fence or wall sited on the boundary or within 2 metres from the boundary is 1.5m high
- (b) Boundaries adjoining a public reserve or cycle way
 - The maximum height of a closed style fence or wall sited on the boundary or within 1.2 metre from the boundary is 1m high

Or

- The maximum height of an open pool style or trellis fence or wall sited on the boundary or within 1 metre from the boundary is 1.8m high
- (c) Other Boundaries
 - The maximum height of a fence or wall sited on the boundary or within 1 metre from the boundary shall not exceed 2 metres.
 - Fences perpendicular to the road shall taper downwards towards the road boundary. The taper should commence at least 1.5m from the road boundary and the maximum height of the fence where it meets the road boundary shall be 1.2m high if the road is a local road, or 1.5m high if it is an Aarterial or Ceollector Rroad.

15A.6.3 Commercial

15A.6.3.1 Signs

(a) A maximum of 2 signs will be permitted per frontage in any 2 of the following preferred locations:

- Building façade;
- Verandah fascia;
- Under verandah;
- Side wall;
- Inside the display window.
- (b) Signs in the <u>commercial zone</u> shall be limited to the following sizes

Table 15A-1: Sign Dimensions

Sign Type	Maximum Dimensions
Building Façade	Maximum area 1.2m ² .
Verandah Fascia	Must not extend beyond the fascia.
Under Veranda	Must have a least 2.5m clearance above the ground.
Side Wall	Maximum 8m ² and set back at least 0.5m from corner.
Inside the Display Window	Depth of sign must be no greater than 0.3m and must be either above 2m high or below 0.8m high in relation to ground.

(c) There shall be no remote signage

15A.6.4 Greenbelt Residential

15A.6.4.1 Rainwater Tanks

- (a) All dwellings shall have a rainwater collection tank permanently connected to internal and external non-potable reuse including toilet flushing, laundry, and outdoor taps. Rainwater tanks must be design and installed as follows:
 - (i) Size of tank:
 - Roof area of 75m² or less minimum 2,000 litre capacity
 - Roof area of 75m² to 200m² minimum 3,000 litre capacity
 - Roof area of more than 200m² minimum 5,000 litre capacity
 - (ii) The roof area to be connected will be the total footprint of the building (excluding freestanding accessory buildings) and 90% of this must be able to freely drain to the tank without need for pumping. Only runoff from roof surfaces is to be collected into the rainwater tanks.

- (iii) The rainwater tank, plumbing and pump system must be maintained in working condition over the life of the dwelling.
- (iv) The public potable water supply shall be adequately protected by installation of a non-return valve.
- (v) Rainwater tanks to overflow when full into an on-lot soakage device for stormwater disposal.

Note: Multi-unit dwellings may share an appropriate sized communal tank to be determined at land use or subdivision consent stage.

15A.7 MATTERS OF CONTROL AND CONDITIONS FOR CONTROLLED ACTIVITIES

There are no <u>TaraikaTara-Ika</u> Precinct specific Matters of Control. The matters of control and conditions for controlled activities contained within the relevant zone chapter for the relevant activity type apply.

15A.8 MATTERS OF DISCRETION AND CONDITIONS FOR RESTRICTED DISCRETIONARY ACTIVITIES

Note: The matters of discretion and conditions for restricted discretionary activities contained within the relevant zone chapter for the relevant activity type also apply.

The matters over which Council has restricted its discretion for each restricted discretionary activity, and the conditions for each activity, are detailed below:

15A.8.1 All Zones

15A.8.1.1 Conditions for All Restricted Discretionary Activities

- (i) Stormwater Management (First 199 allotments/housing units within the Taralka Growth Area)Plan
 - a) Stormwater must be retained onsite and discharged to ground within the Tara-Ika Growth area for up to a 1 in 100 year average recurrence interval (ARI) rainfall event (including allowance for climate change modelled increased volumes expected for such evens, (out to 2120-2139) due to climate change)
 - b) All applications for restricted discretionary activities must include a stormwater management plan that sets out how stormwater will be managed via both onsite and centralised treatment and soakage facilities (i.e. wetlands and soakage basins) to achieve the standard in (a) above. in a manner that ensures stormwater is retained and disposed of within the Tara-lka Growth Area for up to a 1 in 100 year average recurrence interval (ARI) rainfall event (with allowance for climate change). The Plan shall be consistent with the more stringent of the Horowhenua District Plan Subdivision and Development Principles and Requirements 2014 and NZS 4404:2010 (Land development and subdivision infrastructure) and shall include the following:

- c) The stormwater management plan required by (b) above shall be consistent with the more stringent of the Horowhenua District Plan Subdivision and Development Principles and Requirements 2014 and NZS4404:2010 (Land development and subdivision infrastructure).
- d) The stormwater management plan required by (b) above shall include the following:
 - The size, design, location and required maintenance of stormwater management devices (e.g. rainwater tanks (for incidental stormwater attenuation only), on-lot soakage, wetlands and soakage basins), including those to be vested with Council.
 - Pre-soakage treatment is required for all runoff from all impervious surfaces excluding roofs and other on-lot impervious areas (patios, shed etc.) but including private driveways and parking areas. The primary method of treatment shall be through centralised end-of-pipe stormwater wetlands that are sized and located to efficiently service the Tara-Ika Growth Area in an integrated manner. Wetlands shall include a high flow bypass into an adjoining/downstream soakage basin for disposal, sized to bypass flows greater than the Water Quality Flow.
 - The stormwater treatment devices (wetlands) shall be sized to accommodate the Water Quality Flow and Water Quality Volume of the contributing catchment, excluding the roof and on-lot impervious areas that are connected to appropriately sized on-lot soakage devices. The contributing catchment includes adjoining development blocks within Tara-lka and must consider the future developed upstream catchment.
 - The stormwater soakage devices shall be sized to provide full retention and disposal discharge to ground of the 1 in 100 year ARI runoff volume (with allowance for climate change) with no overflows to the downstream environment.
- Overland flow paths for the greater than 100-year ARI rainfall event (with allowance for climate change) and proposed mechanisms for managing these. The reduction of runoff volume and flow from on-lot soakage disposal cannot be considered in the sizing calculations for the 100-year ARI overland flow path, in order to ensure sufficient capacity is available during extreme events.
- Calculations undertaken to prepare the stormwater management plan.
 These should be carried out in the following manner:
 - The 12-hour nested design storm specified by Wellington Water in "Reference Guide for Design Storm Hydrology" (2019) shall be applied to Tara-Ika stormwater design calculations.
 - Design storms shall be developed with HIRDS v4 rainfall data (or later version if available) for the development site using the RCP 8.5 (2081-2100) climate change scenario.
 - The soakage rate for each on-lot soakage devices to receive roof runoff from roofs and other impervious areas (excluding driveways and parking areas) shall be determined by carrying out soakage

testing in accordance with Horowhenua District Plan Subdivision and Design Requirements and Principles, with a safety factor of 1.5 applied to the testing results (i.e., divide soakage rate result by 1.5). Evidence of the site-specific soakage testing must be provided, including the suitability of soil layers at the location and depth of the proposed on-lot soakage. In the absence of soakage testing or for the purposes of initial design a soakage rate of 100mm per hour will be applied. Rainwater tank volume shall not be considered in the sizing of on-lot soakage (due to uncertainty about that rainwater tank volume that may be available at any given time.

- The Water Quality Volume (WQV) and the Water Quality Flow (WQF) used to size treatment devices shall be calculated using the method specified in Wellington Water's "Water Sensitive Design for Stormwater: Treatment Device Design Guideline" (2019).
- A process of monitoring, reporting and design revision or either confirm compliance with clause (a) and (b) or otherwise alter the design and management of stormwater to achieve compliance.

Acceptable design standards for treatment and soakage devices include Wellington Water's "Water Sensitive Design for Stormwater: Treatment Device Design Guideline" (2019), or Auckland Council's "Stormwater Management Devices in the Auckland Region" (2017).

Advice Note: Pre-application meetings with Council are strongly encouraged.

(i)(ii) Stormwater Management (the application that seeks to create 200th additional allotment/housing unit in the Tara-Ika Growth Area)

In addition to the above requirements, the 200th additional allotment/housing unit may not proceed until Council has approved integrated stormwater management plan for the whole Tara-lka Growth area that achieves the outcomes listed above and that takes into account any stormwater management facilities associated with infrastructure projects of regional or national significance that have received RMA approvals.

15A.8.2 Residential Zones

15A.8.2.1 Development within the Arapaepae Road Special Treatment Overlay (Refer to Rule 15A.3.2(a))

- (a) Matters of Discretion
 - (i) Reverse sensitivity effects, including:
 - Noise
 - Vibration
 - Visual
 - Traffic

- (ii) Compatibility with surrounding and anticipated land uses.
- (iii) The measures proposed to achieve an acceptable level of amenity for the proposed activity.
- (iv) Safe and efficient access

(b) Conditions

(i) New buildings or alterations to existing buildings containing noise sensitive activities must be design, constructed and maintained to achieve the indoor design noise levels from Arapaepae Road/State Highway 57 traffic set out in Table 15A-2 below (excludes area not deemed to be habitable spaces as defined by Schedule 1 of the Building Regulations 1992:

Table 15A-2 Indoor Design Limits

Building Type	Occupancy/Activity	Maximum Indoor Design Noise Level L _{Aeq(24h)}	
Residential	Living spaces, sleeping spaces (including visitor accommodation and retirement accommodation) 40dB		
Education	Assembly halls	35dB	
	Conference rooms, drama studios	40dB	
	Lecture rooms and theatres, music studios	35dB	
	Libraries	45dB	
	Sleeping areas in educational facilities	40dB	
	Teaching areas	40dB	
Health	Overnight medical care, wards	40dB	
	Clinics, consulting rooms, theatres, nurses' stations	45dB	
Cultural Buildings	Places of worship, marae	35dB	

Note: This table is informed by NZTAs—Waka Kotahi guidance material on managing State Highway noise. The purpose of this table is simply to specify the noise level standards for different types of activities. It should not be taken as an indication of what types of activities will more broadly be considered acceptable in this location.

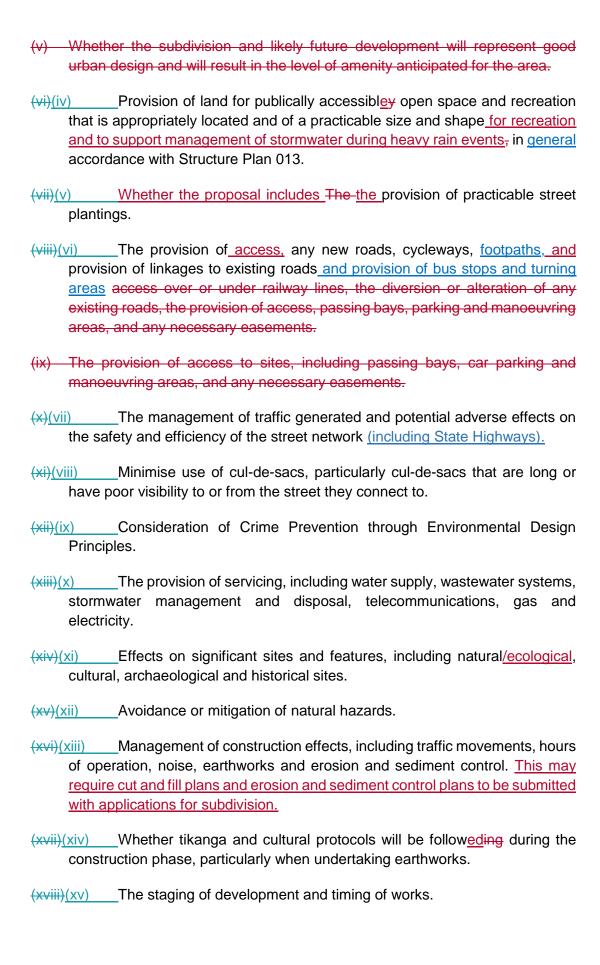
- (ii) If windows must be closed to achieve the design noise levels in (i), the building must be designed, constructed and maintained with a ventilation and cooling system. For habitable spaces a ventilation cooling system must achieve the following:
 - Ventilation must be provided to meet clause G4 of the New Zealand Building Code. Noise from the system must not exceed 30 dB LAeq(30s) when measured 1 m away from any grille or diffuser.
 - The occupant must be able to control the ventilation rate in increments up to a high air flow setting that provides at least 6 air changes per hour. Noise from the system must not exceed 30 dB LAeq(30s) when measured 1 m away from any grille or diffuser.
 - The system must provide cooling controllable by the occupant that can maintain the temperature at no greater than 25°C. Noise from the system must not exceed 30 dB LAeq(30s) when measured 1 m away from any grille or diffuser.
- (iii) A design report prepared by a suitably qualified and experienced acoustics specialist must be submitted with the building consent application for construction or alteration of any building containing a noise sensitive activity in or partly in the Arapaepae Road Special Treatment Overlay.

(c) Non-Notification

- (i) Under section 77D of the RMA, an activity requiring resource consent under Rule 15.7.1 shall not be publicly notified or limited notified, except where:
 - The Council decides special circumstances exist (pursuant to Section 95A(9); or
 - The applicant requests public notification (pursuant to Section 95A(3)(a)

15A.8.2.2 Subdivision (Refer to Rule **15A.3.1(a)**)

- (a) Matters of Discretion
 - (i) Consistency with Structure Plan 013.
 - (ii) For subdivisions within the mMedium dDensity aAarea, consistency with the Medium Density Residential Development Design Guide to the extent the content of the guide relates to subdivision.
 - (iii) The design, and layout and variety of the subdivision, including the size, shape and position of any lot, as well as the future land use and development of each lot. In addition, connectivity and linkages (both within and beyond the subdivision) energy efficiency and conservation, and access to solar energy.
 - (iv) Whether the subdivision contains a variety of lot sizes suitable for the area it is located within.



(xix)(xvi) Compliance with the Council's Subdivision and Development Principles and Requirements (Version: July 2014).

(xvii) The potential effects of the development on the safe and efficient operation, upgrading, maintenance and replacement of existing lawfully established network utilities.

(xx)(xviii) Those matters described in Sections 108 and 220 of the RMA

(b) Conditions

(i) Minimum Allotment Area and Shape

Each allotment shall comply with the following site area and shape factor standards for each settlement set out in Table 15A-3 below.

Table 15A-3: Standards Applying to Subdivision and Residential Dwelling Units

Residential Zone	Minimum Net Site Area	Maximum Net Site Area/Maximum Density	Minimum Shape Factor	Other Requirements	Road Frontage
Medium Density	Attached Units: 150m ²	450m ² .	7m	Maximum street block length: 200m Must include building siting plan.*	All sites must have road frontage for at least 7m
	Detached Units: 225m ^{2*}	450m ^{2*}	10m	Maximum block length: 200m Must include building siting plan.*	
Standard Residential	330m²	-	13m	Maximum block length: 200m	
Low Density Residential	1000m²	-	18m	N/A	

^{*}The siting plan shall show the location, pedestrian entrances, and outdoor living areas for all future dwellings. Although the dwellings do not need to be built prior to s224 being issued, a condition will be imposed on the subdivision requiring the siting plan to be complied with at the time the site is developed <u>unless resource consent is granted for an alternative development.</u> This outcome will be secured by consent notice.

(ii) Structure Plan

- A condition will be imposed on the resource consent of any subdivision that
 creates additional allotments and involves a site/part of a site that contains an
 infrastructure roading asset as indicated by Structure Plan 013 requiring the
 infrastructure roading asset to be constructed and vested with Council to the
 full extent indicated on the Structure Plan.
- A condition will be imposed on the resource consent of any subdivision that creates additional allotments and involves a site/part of a site containing a park or reserve as shown on Structure Plan 013, requiring the site/part of the site containing the reserve to be vested within Council.
- (iii) Water Supply, Wastewater and Other Services

All subdivisions shall comply with the requirements as specified set out in Chapter 24.

(iv) Roads and Access

All subdivisions shall comply with the requirements as specified in Chapter 21.

(v) Network Utilities

There shall be no minimum site area requirements for lots for network utility purposes.

(c) Non-Notification

- (i) Under section 77D of the RMA, an activity requiring resource consent under Rule 15A.8.2.2 shall not be publicly notified or limited notified, except where:
 - The Council decides special circumstances exist (pursuant to Section 95A(9); or
 - The applicant requests public notification (pursuant to Section 95A(3)(a)

15A.8.2.3 Non-Compliance with requirements for Rainwater Tank (Refer Rule 15A.6.2.1)

- (a) Matters of Discretion
 - (i) The potential for increased volume stormwater discharge from the site.
 - (ii) The proposed methods of managing the quality and quantity of storm water discharge from the site. The proposed methods for managing increased demand for water.

15A.8.2.4 Non-Compliance with Integral Garages (Refer Rule 15A.6.2.3)

(a) Matters of Discretion

- (i) The extent to which the integral garage obscures the dwelling from view and/or detracts from the dwelling as the primary feature on the site.
- (ii) The extent to which the integral garage reduces the opportunity for passive surveillance between the dwelling and the streetscape.
- (iii) The extent to which the integral garage detracts from the dwelling as the primary feature on the site.
- (iv)(iii) The effect of the integral garage's position on streetscape character and residential amenity.

15A.8.2.5 Non-Compliance with Fencing (Refer to Rule 15A.6.2.6)

- (a) Matters of Discretion
 - (i) The extent to which the fence reduces the opportunity for passive surveillance and social interaction between public and private space.

15A.8.3 Commercial Zone

15A.8.3.1 New Buildings and Additions/Alterations to Building Frontage (Refer Rule 15A.3.3(a))

- (a) Matters of Discretion
 - (i) Building design and façade treatment should create a high amenity commercial environment that contributes positively to the public realm and enhances pedestrian experience by providing opportunity for interaction between shops front and the street. This includes but is not limited to:
 - Locating main building façades to address the primary street frontage.
 - Providing an interesting and varied building frontage that is not dominated by either featureless facades or glazing.
 - Including horizontal and/or vertical articulation design elements to add visual interest.
 - Designing building frontages that complement any existing adjoining buildings.
 - Locating doorways and entrances to buildings so they are easily identifiable.
 - (ii) The building and site design and layout should prioritise pedestrians over vehicles. This includes but is not limited to:
 - Pedestrian entrances to shops are built right up to the footpath.

- Any onsite carparking, services areas, and storage areas should be located the rear of the building. They should not be located between the street and the pedestrian entrance to the building.
- If carparks, services areas, and storage areas are visible from the street, they should be well screened from the street by landscaping or similar.
- (iii) The provision of verandah that:
 - Provide weather protection to pedestrians
 - Contribute to the overall appearance and pleasantness of the street
- (iv) The application of Crime Prevention through Environmental Design (CPTED) Principles, including:
 - Building design and layout.
 - Use of appropriate planting and landscaping.
- (v) Proposed methods of managing the quality and quantity of stormwater.
- (b) Conditions
 - (i) All buildings in the Commercial Zone (Taraika Tara-Ika Precinct) must comply with the following:
 - No part of any building shall exceed a height of 15 metres.
 - All buildings shall be built to the front road boundary of the site.
 - All building shall be built up to the side boundaries (the boundary which is perpendicular to the primary road frontage).
 - All buildings shall have display windows along the ground floor road frontage. At least 50% of ground floor facade surface shall be display space or transparent window or doors. The minimum window area shall be kept clear and not be boarded up, painted or covered by signage.
 - No building shall have a continuous featureless façade/blank wall on the ground floor road frontage wider than 4 metres. A featureless façade or blank wall is a flat or curved wall surface without any openings, glazing or columns, recesses, niches or other architectural detailing
 - All buildings shall have a maximum ground floor road frontage width for individual tenancies of 15 metres.
 - All building frontages shall have a minimum height of 6 metres.
 - The above standards do not apply to service lane frontages.

- (ii) All buildings in the Commercial Zone (Taraika Tara-Ika Precinct) must contain a verandah and the verandah must comply with the following:
 - A minimum clearance of 2.5 metres directly above the footpath or formed ground surface.
 - A maximum clearance of 4 metres (measured at the base of the verandah fascia) directly above the footpath or from ground surface.
 - Extend for the full length of the building.
 - Extend outwards from the front of the building to the far side of the kerbing less than 450mm, or the verandah extends out 3 metres whichever is the lesser.
 - Provide continuous shelter with any adjoining verandah or pedestrian shelter.

15A.8.3.2 Supermarkets (Refer to Rule 15A.3.3(b))

- (a) Matters of Discretion
 - (i) Whether parking areas, vehicle access and servicing arrangements are designed and located in a manner that protects the visual amenity of the streetscape and pedestrian safety, including the use of landscaping, planting and lighting.
 - (ii) Whether the design and layout of the site and buildings protects the visual amenity of the streetscape and pedestrian safety. For example:
 - The extent of featureless facades.
 - The extent of glazing.
 - The extent of signage.
 - The extent of window displays that prevent visibility into the store from the street.
 - (iii) Whether effects arising from operation (for example, hours, location of service areas, waste disposal) will be compatible with any nearby residential zones.
- (b) Conditions
 - (i) Car parking (as required by Chapter 21) (if chosen to be provided) must be provided to the rear of the building.
 - (ii) The main pedestrian entrance to the supermarket must front the street.

15A.8.3.3 Drive-Through Restaurants (Refer to Rule15A.3.3(c))

(a) Matters of Discretion

- (i) Whether the design and layout of the site and buildings protects the visual amenity of the streetscape and pedestrian safety. For example:
 - The extent of featureless facades.
 - The extent of glazing.
 - The extent of signage.
 - The extent of window displays that prevent visibility into the store from the street.
 - Screening and/or landscaping of equipment, parking and service areas.
 - Whether the location of the drive-through detracts from pedestrian experience by creating a barrier between the building and the footpath.
- (ii) Whether operating effects are compatible with surrounding land uses (particular residential areas). For example:
 - Whether the activity, including parking areas and storage and servicing facilities, is adequately screened to protect the visual amenity of surrounding land uses.
 - Whether the activity, including parking areas and storage and servicing facilities, are located, designed and managed to avoid nuisance effects such as noise and odour on surrounding land uses.
 - The impact of adverse effects arising from the numbers of people and/or vehicles using the site.
 - The effects of the activity's operation on the existing and expected future amenity values of the surrounding area and any mitigation measures proposed.
- (iii) Whether the site is located, designed and laid out in a manner that avoids adverse effects on the safe and effective operation of the roading network, including pedestrians. For example:
 - Whether the nature and scale of vehicle movements associated with the activity will have an adverse effect on road users.
 - Whether the drive through is positioned to provide sufficient off-road queuing space during peak times.
 - Whether the site is designed to allow a free flow of traffic from the road into the parking area.
 - Whether the activity is designed in such a manner that vehicles can manoeuvre on-site in a safe and efficient manner.
 - Whether sufficient vehicle (including service vehicles) and pedestrian access is provided to the site to minimise conflict between pedestrians and vehicles.

(b) Conditions

- (i) The main pedestrian entrance to the restaurant must front the street.
- (ii) Car parking (as required by Chapter 21 if chosen to be provided) must be provided to the rear of the building.

15A.8.3.4 Subdivision (Refer to Rule **15A.3.1(a)**)

- (a) Matters of Discretion
 - (i) Consistency with Structure Plan 013.
 - (ii) The design and layout of the subdivision, including the size, shape and position of any lot, including the future land use and development of each lot. In addition, the location of building sites, separation distances, orientation of buildings, and screening/landscape treatment.
 - (iii) The amalgamation of any proposed allotments or balance areas to existing titles of land.
 - (iv) The provision of any access, any new roads, cycleways, footpaths, provision of linkages to existing roads and provision for bus stops and turning areas, access over or under railway lines, the diversion or alteration of any existing roads, the provision of access, passing bays, parking and manoeuvring areas, and any necessary easements.
 - (v) The provision of servicing, including water supply, wastewater systems, stormwater management and disposal, streetlighting, telecommunications and electricity and, where applicable gas.
 - (vi) Provision of reserves, esplanade reserves, esplanade strips and access strips, including connections to existing and future reserves.
 - (vii) Effects on significant sites and features, including natural, ecological, cultural, archaeological and historical sites.
 - (viii) Site contamination remediation measures and works.
 - (ix) Avoidance or mitigation of natural hazards.
 - (x) Management of construction effects, including traffic movements, hours of operation, noise, earthworks and erosion and sediment control. <u>This may</u> require cut and fill plans and erosion and sediment control plans to be submitted with applications for subdivision.
 - (xi) Whether tikanga and cultural protocols will be following during the construction phase, particularly when undertaking earthworks.
 - (xii) Staging of the subdivision.

- (xiii) Compliance with the Councils Subdivision and Development Principles and Requirements (Version: July 2014).
- (xiv) Those matters described in Sections 108 and 220 of the RMA.

(b) Conditions

(i) All lots shall demonstrate compliance with the relevant permitted activity conditions, except no minimum lot area requirement applies.

(ii) Structure Plan

- A condition will be imposed on the resource consent of any subdivision that
 creates additional allotments and involves a site/part of a site that contains an
 infrastructure roading asset as indicated by Structure Plan 013 requiring the
 infrastructure roading asset as indicated by Structure Plan 013 requiring the
 infrastructure roading asset as indicated by Structure Plan 013 requiring the
 infrastructure asset to be constructed and vested with Council to the full extent
 indicated on the Structure Plan.
- A condition will be imposed on the resource consent of any subdivision that creates additional allotments and involves a site/part of a site containing a park or reserve as shown on Structure Plan 013, requiring the site/part of the site containing the reserve to be vested within Council.
- (iii) Water Supply, Wastewater and Other Services

All subdivisions shall comply with the requirements as specified set out in Chapter 24.

(iv) Roads and Access

All subdivisions shall comply with the requirements as specified in Chapter 21.

(v) Network Utilities

There shall be no minimum site area requirements for lots for network utility purposes.

(c) Non-Notification

- (i) Under section 77D of the RMA, an activity requiring resource consent under Rule 15A.8.3.415.7.1 shall not be publicly notified or limited notified, except where:
 - The Council decides special circumstances exist (pursuant to Section 95A(9); or
 - The applicant requests public notification (pursuant to Section 95A(3)(a)

15A.8.4 Open Space Zone

15A.8.4.1 Subdivision (Refer to Rule 15A.3.1(a))

(a) Matters of Discretion

- (i) Consistency with Structure Plan 013.
- (ii) The design and layout of the subdivision, including the size, shape and position of any lot, including the future land use and development of each lot. In addition, the location of building sites, separation distances, orientation of buildings, and screening/landscape treatment.
- (iii) The amalgamation of any proposed allotments or balance areas to existing titles of land.
- (iv) The provision of <u>any access</u>, new roads, cycleways, footpaths, provision of linkages to existing roads, access over or under railway lines, the diversion or alteration of any existing roads, the provision of access, passing bays, parking and manoeuvring areas, and any necessary easements.
- (v) The provision of servicing, including water supply, wastewater systems, stormwater management and disposal, street lighting, telecommunications and electricity and, where applicable gas.
- (vi) Provision of reserves, esplanade reserves, esplanade strips and access strips, including connections to existing and future reserves.
- (vii) Effects on significant sites and features, including natural, ecological, cultural, archaeological and historical sites.
- (viii) Site contamination remediation measures and works.
- (ix) Avoidance or mitigation of natural hazards. (Note: Refer to the "Risks and Responsibilities: Report of the Manawatu-Wanganui Regional Lifelines Project" (No. 2005/EXT/622) prepared by the Manawatu-Wanganui CDEM Group for information about natural hazards that may be relevant to the subject site).
- (x) Management of construction effects, including traffic movements, hours of operation, noise, earthworks and erosion and sediment control. This may require cut and fill plans and erosion and sediment control plans to be submitted with applications for subdivision.
- (xi) Whether tikanga and cultural protocols will be following during the construction phase, particularly when undertaking earthworks.
- (xii) Staging of the subdivision.
- (xiii) Compliance with the Councils Subdivision and Development Principles and Requirements (Version: July 2014).
- (xiv) Those matters described in Sections 108 and 220 of the RMA.
- (b) Conditions

(i) All lots shall demonstrate compliance with the relevant permitted activity conditions, except no minimum lot area requirement applies.

(ii) Structure Plan

- A condition will be imposed on the resource consent of any subdivision that creates additional allotments and involves a site/part of a site that contains an infrastructure asset as indicated by Structure Plan 013 requiring the infrastructure asset to be constructed and vested with Council to the full extent indicated on the Structure Plan.
- A condition will be imposed on the resource consent of any subdivision that creates additional allotments and involves a site/part of a site containing a park or reserve as shown on Structure Plan 013, requiring the site/part of the site containing the reserve to be vested within Council.
- (iii) Water Supply, Wastewater and Other Services

All subdivisions shall comply with the requirements as specified set out in Chapter 24.

(iv) Roads and Access

All subdivisions shall comply with the requirements as specified in Chapter 21.

(v) Network Utilities

There shall be no minimum site area requirements for lots for network utility purposes.

(c) Non-Notification

- (i) Under section 77D of the RMA, an activity requiring resource consent under Rule 15A.8.4.115.7.1 shall not be publicly notified or limited notified, except where:
 - The Council decides special circumstances exist (pursuant to Section 95A(9); or
 - The applicant requests public notification (pursuant to Section 95A(3)(a)

15A.8.5 Greenbelt Residential

15A.8.5.1 Subdivision (Refer to Rule 15A.3.1(a))

- (a) Matters of Discretion
 - (i) Consistency with Structure Plan 013.

- (ii) The design and layout of the subdivision, including the size, shape and position of any lot, as well as the future land use and development of each lot. In addition, connectivity and linkages (both within and beyond the subdivision) energy efficiency and conservation, and access to solar energy.
- (iii) Whether the subdivision contains a variety of lot sizes suitable for the area it is located within.
- (iv) Whether the subdivision and likely future development will represent good urban design and will result in the level of amenity anticipated for the area.
- (v)(iii) Provision of land for publically accessibly open space and recreation that is appropriately located and of a practicable size and shape to support management of stormwater during heavy rain events, in general accordance with Structure Plan 013.
- (vi)(iv) Whether the proposal includes The the provision of practicable street plantings.
- (vii)(v) The provision of anyaccess, any new roads, cycleways, footpaths, provision of linkages to existing roads, access over or under railway lines, the diversion or alteration of any existing roads, the provision of access, passing bays, parking and manoeuvring areas, and any necessary easements.
- (viii) The provision of access to sites, including passing bays, car parking and manoeuvring areas, and any necessary easements.
- (ix)(vi) The management of traffic generated and potential adverse effects on the safety and efficiency of the street network (including state highways).
- (x)(vii) Minimise use of cul-de-sacs, particularly cul-de-sacs that are long or have poor visibility.
- (xi)(viii) Consideration of Crime Prevention through Environmental Design Principles.
- (xii)(ix) The provision of servicing, including water supply, wastewater systems, stormwater management and disposal, telecommunications, gas and electricity.
- (xiii)(x) Effects on significant sites and features, including natural/ecological, cultural, archaeological and historical sites.
- (xiv)(xi) The protection and enhancement of any natural habitat of indigenous species within the subdivision
- (xv)(xii) Avoidance or mitigation of natural hazards.

- (xvi)(xiii) Management of construction effects, including traffic movements, hours of operation, noise, earthworks and erosion and sediment control. This may require cut and fill plans and erosion and sediment control plans to be submitted with applications for subdivision.
- (xvii)(xiv) Whether tikanga and cultural protocols will be following during the construction phase, particularly when undertaking earthworks.
- (xviii)(xv) The staging of development and timing of works
- (xix)(xvi) Compliance with the Council's Subdivision and Development Principles and Requirements (Version: July 2014).
- (xvii) The potential effects of the development on the safe and efficient operation, upgrading, maintenance and replacement of existing lawfully established network utilities.
- (xx)(xviii) Those matters described in Sections 108 and 220 of the RMA
- (b) Conditions
 - (i) Minimum Allotment Area and Shape
 - Each allotment shall comply with the following site area and shape factor standards in Table 15A-4

Table 15A-4: Standards Applying to Subdivision and Residential Dwelling Units

Type of Allotment, or Subdivision	Minimum Area Per Allotment/Site	Minimum Shape Factor	
Greenbelt Residential General Serviced	2000 square metres	20 metres diameter	
Greenbelt Residential General Unserviced	5000 square metres	20 metres diameter	

(ii) Structure Plan

- A condition will be imposed on the resource consent of any subdivision that
 creates additional allotments and involves a site/part of a site that contains an
 infrastructure roading asset as indicated by Structure Plan 013 requiring the
 infrastructure roading asset as indicated by Structure Plan 013 requiring the
 infrastructure asset to be constructed and vested with Council to the full extent
 indicated on the Structure Plan.
- A condition will be imposed on the resource consent of any subdivision that creates additional allotments and involves a site/part of a site containing a park or reserve as shown on Structure Plan 013, requiring the site/part of the site containing the reserve to be vested within Council.
- (iii) Water Supply, Wastewater and Other Services

All subdivisions shall comply with the requirements as specified set out in Chapter 24.

(iv) Roads and Access

All subdivisions shall comply with the requirements as specified in Chapter 21.

(v) Network Utilities

There shall be no minimum site area requirements for lots for network utility purposes.

(c) Non-Notification

- (i) Under section 77D of the RMA, an activity requiring resource consent under Rule 15A.8.5.115.7.1 shall not be publicly notified or limited notified, except where:
 - The Council decides special circumstances exist (pursuant to Section 95A(9); or
 - The applicant requests public notification (pursuant to Section 95A(3)(a)

Information Only

Otaki to North Levin Corridor

Zoning and Overlays

Commercial

Education Overlay

Arapaepae Rd Special Effects Overlay

Medium Density Residential

Residential

Low Density Residential

Greenbelt Residential

Primary Features

Arterial road connections

Collector road connections

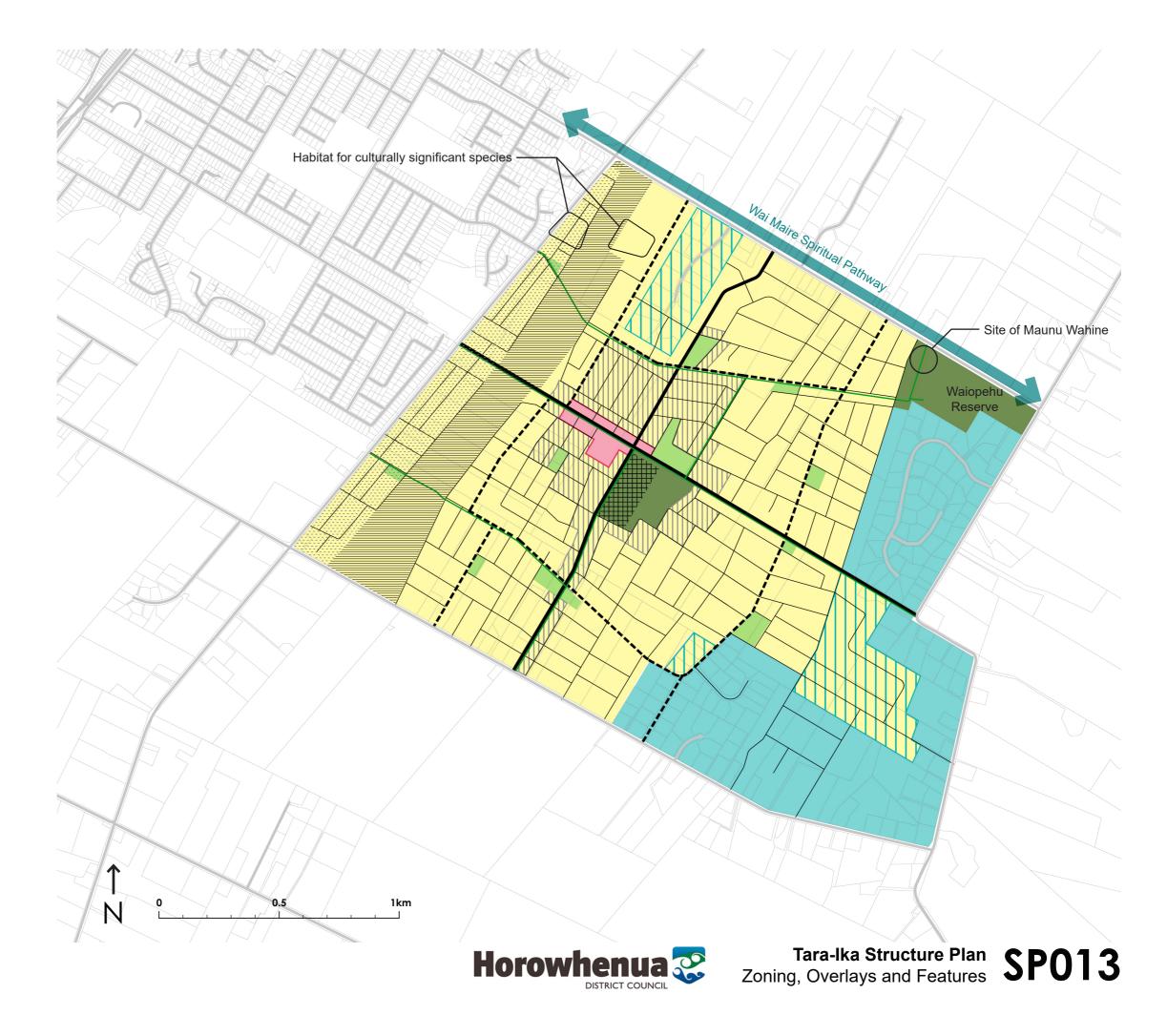
Strategic Cycleways

Primary Reserves

Secondary Features

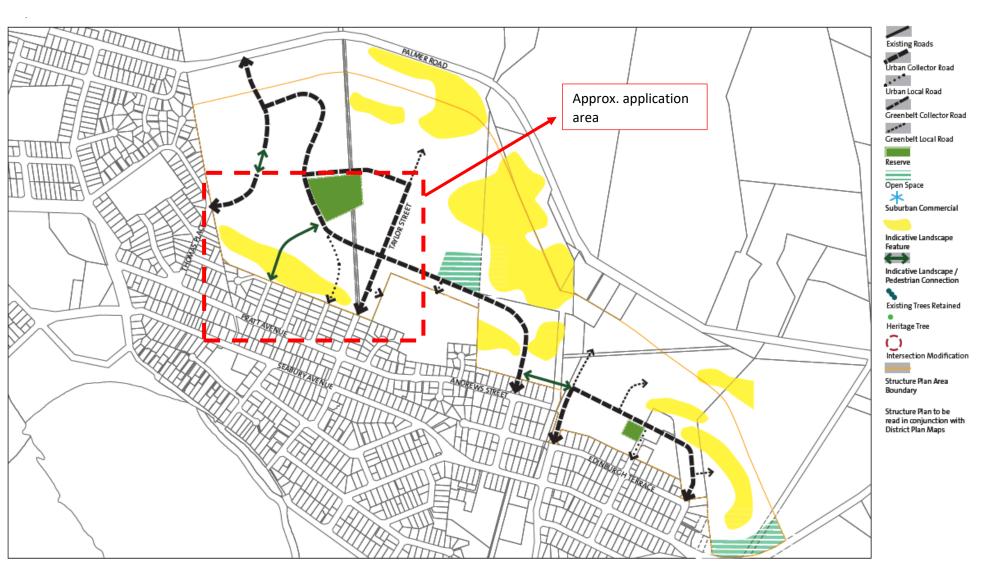
Local roads and laneways

Secondary Reserves



Appendix 3 – Example of Current Resource Consent Application





Horowhenua District Plan

Structure Plan 01
Foxton Beach - Palmer Road, Edinburgh Terrace and Taylor Street | Scale: 1:7500 @ A3

Appendix 4 – Right of Reply – Tim Kelly – Transport

Date: 3 December 2021
Project: Tara-Ika PC4

Subject: Transportation Issues: Comments for Right of Reply

1 Background

The Tara-Ika Plan Change 4 (PC4) hearing was adjourned on 19 November 2021.

Minute 5 of the independent hearing panel dated 23 November 2021 identified issues from the hearing which the panel consider require further investigation and response by HDC as part of its Right of Reply.

The purpose of this document is to provide information relating to the identified transportation issues. Comments are also provided in relation to other issues arising at the hearing, where it is considered these would assist the hearing panel.

2 Issue: Staging Provisions

At the hearing, questions put by the panel to the Waka Kotahi (**WK**) witnesses indicated some surprise that staging provisions were not being requested.

There is agreement between HDC and WK that a mechanism is required to ensure that the traffic demands associated with development do not 'get ahead' of the capacity of the available infrastructure, most significantly the $\bar{O}2NL$ project.

The provisions of PC4 require that all subdivision will have Restricted Discretionary Activity (RDA) status. Rule 15A.8.1.2(a) defines the applicable matters of discretion, which includes:

(x) The management of traffic generated and potential adverse effects on the safety and efficiency of the street network.

In my view, this signals a clear intent to review the potential traffic impacts of each application, in the context of the most up-to-date information regarding the status of upgrades to the roading network which is available at the time. In my view, this would achieve the objective of staging the development.

The only disagreement between WK and HDC relates to the degree to which this provision needs to more explicitly define the aspects to be considered. In my view, a consideration of both local and state highway conditions, including aspects such as safety, volumes, delays and level of service is implicit in this requirement. In contrast, the planning evidence of Ainsley Mcleod of WK proposes more explicitly-stated assessment requirements for the state highway network. I do not consider such an explicit requirement to be necessary. In this regard, I note that the HDC planning officer (Lauren Baddock) proposes a compromise in the form of a modification of the proposed provisions which I consider to be a pragmatic solution.

3 Issue: Collector Road Adjacent to Prouse Property

The structure plan identifies a Collector road (running broadly SW/NE) adjacent to the Prouse property.

In their written submission and material presented to the hearing, the Prouse family has suggested that this road should be downgraded to a 'local' road standard in order to 'reduce impact on the heritage setting'.

In my view, the designation of a road as a 'collector' or 'local' primarily relates to its intended functionality in the network, in particular the extent to which the road is expected to carry through traffic or service a high level of adjacent development.

In this case, the road will be the primary connection between Queen Street East and the development area, and I consider its intended status as a 'collector' road to be appropriate.

While a 'local' road would have a narrower cross-section, the level of traffic activity attracted to the road will be primarily governed by its location and potential convenience to users. I note that the usage of this road will be affected by connectivity provided elsewhere, most especially the east-west spine road, the form of connection to Arapaepae Road and any future extension of Liverpool Street.

For these reasons, I do not support the request of the Prouse family for this road to have 'local' road status.

4 Issue: Spine Road Crossing of O2NL

I was unaware until the hearing that a possibility existed of the spine road not being connected across the Ō2NL alignment.

In my view, this would be contrary to the stated objectives for the development, as this would be more isolated from the established urban edge of Levin. The area of development between $\bar{O}2NL$ and Arapaepae Road would also be isolated from the 'parent' development area.

Furthermore, this would have consequences for levels of traffic demand on Queen Street East and Tararua Road, which have not been subject to modelling and assessment.

For these reasons, I object to any possibility of this connection not being formed.

5 Issue: Spine Road Intersection with Arapaepae Road

There is agreement that safety is the paramount consideration and that the ability to provide a safe intersection form will be governed by the status of the Ō2NL project since this will affect the volumes of through traffic using Arapaepae Road.

I do not consider that a 'left-in/left-out' solution would be acceptable at this location because this would introduce the possibility of U-turn manoeuvres with obvious safety implications.

In the ITA, I indicated that a roundabout would be the preferred option at this location, as this would allow full connectivity to be provided while also offering flexibility to connect to a possible extension of Liverpool Street (subject to the necessary approvals). I also noted that, because this would increase the number of movements turning right out of Meadowvale Drive, it would need to be considered as part of a wider package of measures to ensure the safety and efficiency of Arapaepae Road.

I agree with Mr Peet that traffic signals would be inappropriate for the semi-rural environment at this location (although I acknowledge that these could be a better solution for pedestrian and cycle movements).

6 Issue: Liverpool Street Extension

In my view, such a connection would be beneficial in transportation terms, because this would offer a more direct and appropriate route for traffic when compared to the alternative utilising Meadowvale Drive.

However, I emphasise that any extension of Liverpool Street is not a part of the PC4 proposal and development of Tara-Ika is not dependent on this.

7 Issue: PC4 Effects without Ō2NL

There is agreement that, although the Ō2NL project remains subject to designation and funding processes, it is likely to proceed with a planned opening date of 2029. I would hope that the recent multi-fatality incident at Kuku would focus WK upon accelerating this programme.

Despite this, the project is not part of the consented baseline and it is appropriate to consider the performance of the road network for scenarios without it in place (even though these may be considered to be less likely).

From our evidence, myself and Mr Peet are in apparent disagreement regarding the potential effects of development traffic associated with PC4 without the Ō2NL project in place. I indicated (paragraph 35 of

my evidence) that the effects could be accommodated but Mr Peet indicates that effects are likely, referencing plots showing delays to side road traffic within the SH1 corridor in central Levin.

I don't disagree that some additional delays would be experienced by side road traffic, although I am sceptical that the extent of delays shown in the plots would actually occur. This is because the SATURN model is unable to account for a number of behavioural responses by drivers to congestion (primarily changing the time, frequency, destination or even mode of travel). As a result, delays tend to be overestimated by the model.

I also note that the model results presented include allowance for other areas of development (for example, on the southern side of Tararua Road) which are subject to their own plan change processes and so which should not strictly be included within the assessment.

Also, the plots all relate to conditions in 2039, some 10 years after the Ō2NL project is programmed to be open to traffic.

In my view, the 'without $\bar{O}2NL$ ' scenario results are largely hypothetical, not only because $\bar{O}2NL$ is likely to proceed (and well before 2039) but also because the application (and purpose) of the RDA matters of discretion would preclude a situation in which significant development occurred at Tara-Ika prior to the $\bar{O}2NL$ project being in place.

8 Issue: Direct Access to Arapaepae Road

There is agreement with WK that safety and to a lesser extent capacity are the over-riding considerations regarding the future of the Arapaepae Road environment. More specifically, there is also agreement that the frequent of local road accesses onto Arapaepae Road indicated on the Structure Plan should be discouraged.

In this regard, one of the recommendations of the ITA was that 'frequent intersections between local roads within the development and Arapaepae Road should be avoided in preference to access at fewer locations where safety can be controlled'.

in my view, the need to review the safety of any accesses is implicit in the proposed RDA matters of discretion. WK has proposed wording which more explicitly addresses this matter, which I am happy to accept.

9 Issue: Strategic Cycleways and Crossings

I support the proposed rule which would prevent the formation of driveways across strategic cycleways.

As a trustee of the Nelson Tasman Cycle Trails Trust, I am aware of reported issues along the cycle trails for which we are responsible (most significantly, the Great Taste Trail). A recurring issue relates to the degree of discomfort cyclists feel when using trail sections which cross driveways and a number of incidents have been reported. Even a perception of a safety issue can discourage cycling uptake and for a new development, I consider we should be implementing design solutions which achieve a cycle-friendly environment to maximise the uptake of alternatives to private car use.

10 Issue: Ō2NL Status

Mr Peet provided a description of the Ō2NL project and its expected timing. As he described, the alignment of the route is now reasonably fixed. It should be noted, however, that some aspects of the connectivity of the route to the local road network are still 'fluid', most significantly a possible diversion of Queen Street East to intersect with Arapaepae Road further to the north, the connection of the western end of Tararua Road to (the existing) State Highway 1 and the provision of an intersection in the Kuku / Manakau area. Such aspects will affect the pattern and volumes of movements on the road network and emphasise the need for a robust mechanism to review the potential effects of subdivision with the benefit of more finalised details of the project.

Appendix 5 – Right of Reply – Daniel Males and Graeme McIndoe – Urban Design and Landscape					

Evidence in reply for HDC Urban design and landscape

Witnesses

Graeme McIndoe HDC, Urban Design

Dan Males HDC, Urban Design and Landscape

Date 9 December 2021

Background matters

- 1. The non-statutory masterplan which informs the structure plan should be read together with our detailed responses below.
- 2. Existing subdivisions (dwellings along Tararua Road, Redwood Grove, Pohutukawa Drive) and the O2NL corridor have never been included in any yield calculations.

Criticality of E/W arterial connecting to Arapaepae Road Spatial planning intentions and rationale

- 3. Considering the overall layout of Levin, a connection to Arapaepae Road on the alignment of Liverpool Street is a central plank of the logic of the Tara-Ika structure plan. This is with full understanding of the complication of achieving the connection west from Arapaepae Road to Liverpool Street. The driving neighbourhood planning intentions for Tara-Ika are:
 - a. Tara-lka is developed as an extension of Levin, not as a standalone community, ensuring no isolated pockets are created.
 - b. Allow residents at the eastern parts of Levin to readily access the services at a local neighbourhood centre in Tara-Ika.
 - c. Provide external connectivity for good local access and multi-modal movement.
 - d. Integrate with existing areas to the west of Arapaepae Rd including local connections to and from Waiopehu College from the central and southern parts of Tara-Ika.
 - e. Develop a logical and coherent interconnected network of streets and movement links for easy navigation and wayfinding.
- 4. An interconnected and coherent urban structure is one of the fundamentals of good neighbourhood planning and the Liverpool Street alignment allows connection into the wider urban structure of Levin: Liverpool Street (which becomes Mako Mako Road north of SH1) and Queen Street are the principal east-west streets that extend fully across Levin. The Tara-lka neighbourhood is centred on Liverpool Street, so from a whole of Levin spatial structure planning perspective, Liverpool Street provides the logical alignment for connected growth extension, as recognised by both the masterplan and the structure plan. (Refer to figure 1 below.)

5. East-west connection to Arapaepae Road on the alignment of Liverpool Street allows a Liverpool Street connection to be established in the future. Should immediate connection though to Liverpool Street not be made, there is no need for further alternative connection west of Arapaepae as these are already planned for and/or in place. Tara-Ika would connect to Arapaepae Road on the main east-west connector aligned on Liverpool Street and from there connection would be to Perth Street in the south and via the existing street connection at Meadowvale Drive in the north. Both of those connections are shown on the masterplan.

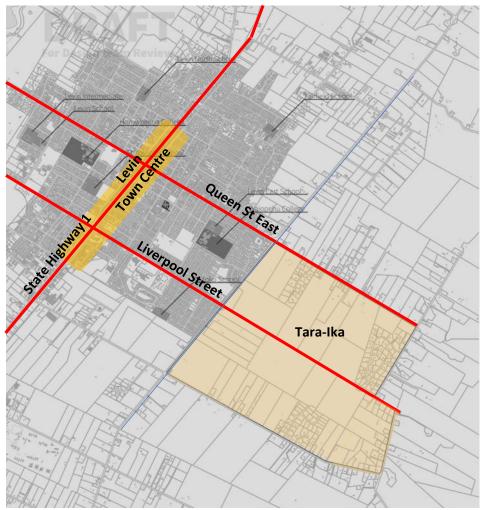


Figure 1: Cross-town connectors: Queen Street East at top, Liverpool Street/Mako Mako Road alignment through the centre of Tara-Ika

Realising a Liverpool Street connection

- 6. It is worth noting that this connection is not only a vehicular link. The Liverpool Street alignment provides a key viewshaft to the Tararua Ranges, in addition to micro mobility, cycle, walking and service connections to Arapaepae Road and Levin.
- 7. Achieving a full connection from Arapaepae to Liverpool Street is a matter of ongoing work outside the boundary of the plan change area. In the long term, a more or less direct connection to Liverpool Street should be made. However, the existing road reserve that connects to Strathmore Ave. does allow for multiple options for connection and road alignments.



Figure 2: Context for a future Liverpool Street connection to the west of Arapaepae Road

8. Planning connections in a situation such as this must always consider the relation to activity around (ie Rangeview and other residents), and design the connection accordingly. Relevant methods include careful choice of alignment, and a carefully designed landscaped edge. This is a matter that should the project proceed, would be undertaken in consultation with Rangeview residents, other affected parties and the wider community in that area. This would not necessitate 'carving through the houses' in the Rangeview Village, or potentially even crossing their land. From what has been known since work started on this project, a viable solution would actively avoid undue disruption. As highlighted above there is scope for minor offsets and other detailed design measures to ensure the connection can be worked around existing sensitive facilities, such as the Rangeview Villas.

Relationship to the O2NL expressway

9. The proposed O2NL expressway has the potential to sever Tara-Ika from the rest of Levin. While decisions about the design and function of the highway are the responsibility of Waka Kotahi/NZTA, the planning of Tara-Ika seeks to minimise the impact of this, including providing roading connections at Tararua Road, Queen Street, and Liverpool Street, and walking and cycling overbridges between these. Waka Kotahi NZTA have not explicitly submitted in opposition to these connections.

Waka Kotahi/NZTA's guidelines

- 10. Waka Kotahi's urban design guidelines identify the importance of connectivity and avoiding severance. 'Bridging the Gap' NZTA Urban Design Guidelines (2013) notes: "Roads can sever communities or separate community facilities from their catchment area. Where this happens, roads can have enduring social and economic effects." (page vii) 'Bridging the Gap' also identifies 10 urban design principles, four of which are relevant to considering the east-west connection to Arapaepae Road on the alignment of Liverpool Street:
 - a. 3.3 Integrate transport and land use
 - b. 3.4 Contribute to good urban form
 - c. 3.6 Avoid severing communities

d. 3.7 Maintain local connectivity .. "local road, pedestrian and cycle connections across and along the highway especially where such links provide access to community facilities." An identified aim: "provide connectivity across the road corridor, especially where the road runs between or through urban or recreational areas."

In considering street design and planning at the level of detail, the draft Aotearoa Urban Street Planning and Design Guide (Waka Kotahi NZTA, 28 September 2021) identifies connectivity and avoiding severance as being important for walkability.

Expert witnesses for NZTA on the importance of the east-west axis

11. NZTA have stated no commitment for a bridge or overpass on the Liverpool Street alignment over the O2NL. Mr Lister in response to questioning from the Commissioners advised that "As long as there's a connection over, the east-west link is the most important." In response to questioning, Mr Peet signalled the absence of consideration of providing a connection across the O2NL corridor towards Liverpool Street in some of his analysis, but advised that the central east-west spine is the right thing to do.

Location and definition of the commercial centre

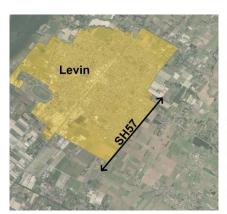
- 12. The centre must be where it is readily accessible from the wider neighbourhood around, and that means at the crossing of the main east-west and north-south axes. Location just to the west of that central crossing places the centre where it will serve as many people as possible on their way to and from the Levin Town centre via the east-west arterial.
- 13. The location and extent described on the structure plan follows design investigations in the preceding masterplanning phase, with these informed by expert advice from Mr Cullen. The area and location of the commercial centre were calibrated to take into account the expected commercial demand and the potential layout of streets around. Location primarily on the south side of the street allows for a high amenity north facing street and retail edge. It is anticipated that a supermarket located on the corner of the block may be one of the earlier occupiers of this area.
- 14. Considering a hypothetical situation with street connections across the O2NL aligning with Perth Street in the south and Meadowvale Drive in the north but with no street connection across the O2NL on the Liverpool Street alignment, we consider that the Tara-Ika neighbourhood centre would remain where it currently is in order to ensure ready accessibility to the majority of Tara-Ika.

Definition of the zone boundaries

15. Certainty on location and boundaries is desirable to ensure clustering and concentration in a single location, and to avoid substitution of residential in the optimal location which may preclude development of a viable centre. The space is generous, enables commercial but does not prohibit residential as part of the mix.

Arapaepae Special Treatment Overlay – can a reasonable residential outcome be delivered?

- 16. A reasonable residential outcome can be delivered as the width of the area between Arapaepae Road and the edge of the proposed O2NL corridor is around 165m south of the Liverpool Street alignment.
 - a. This is sufficiently wide for residential development. North of Liverpool the strip varies between 165m and 60m wide, and is 150m wide at the mid-point between the alignment of Liverpool Street and Meadowvale Drive.
 - b. These block dimensions readily allow between four and two rows of lots as described in the residential layout on the masterplan and seen with dashed lines on the structure plan. The masterplanning shows how this works with an arrangement of lots, including in some places lanes to avoid any driveway connections to Arapaepae Road. This is but one approach, and multiple other layouts are possible here.
 - c. For comparison on suitability, the 600m long strip of residential Thorndon to the west of the Wellington Urban Motorway between Harriet Street north to Park Street is around 150m wide. This residential area entirely within 150m from the edge of the carriageway.
- 17. There is currently residential next to the 100kmh, Arapaepae Road. Prior to construction and commissioning of any O2NL, Arapaepae Road continues as a state highway, and acoustic amenity is provided for with the proposed Overlay. There will not be both a state highway to the west of this area and the O2NL expressway to the east. Should the O2NL proceed and Arapaepae Road becomes an urban arterial rather than a state highway this area becomes an extension of the existing residential area of Levin. Refer to figure 3 below:





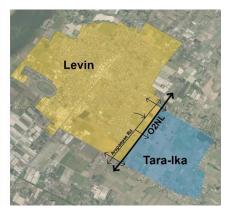


Figure 3: Residential extension east of Arapaepae Road with potential O2NL in place

- 18. The left-hand image shows the current situation with SH57 forming a boundary to urban Levin. The centre image shows Tara-Ika in place with the Arapaepae Road Special Effects Overlay. The right-hand image shows how, should the O2NL proceed, the urban area of Levin extends across a 'detuned' Arapaepae Road to the O2NL. The Overlay may remain in place but is not shown in this image.
- 19. Being connected to the Tara-lka neighbourhood centre by the connections shown on the structure plan, the majority of this area it is quite suitable for residential development. However, the southernmost quarter of this between Tararua Road and the proposed secondary road connection some 500m to the north is up to 1.8km from the proposed neighbourhood centre, and is likely to be vehicle dependant. It might remain as residential and if so, a cost-discount could be expected given the distance from services and close proximity to both the O2NL and its proposed interchange.

20. This strip is not anticipated to be commercial and should not be considered for commercial without confirming that such use would not compromise the success and vitality of existing commercial zones within Levin. Being close to the provisional proposed O2NL and interchange it may however be suitable for industrial use.

Waka Kotahi / NZTA request that individual developers construct noise walls

- 21. From an urban design perspective, noise bunds/walls or any other landscape elements related to the future O2NL should be designed as a whole-of corridor design and implemented by Waka Kotahi NZTA once that corridor is known.
- 22. A piecemeal development-by-development approach to noise screening as proposed by Waka Kotahi NZTA would result in a fragmented and variable edge to the O2NL corridor and would be an extremely poor urban design outcome. Building individual noise barriers removes the opportunity for integrated solutions, that is, including modified landform and planting solutions that may provide additional cultural, visual, townscape and ecological benefits.
- 23. Neither is such a fragmented piecemeal approach consistent with Waka Kotahi's own published guidance for corridor design which supports 'design continuity' and 'corridor-wide urban design strategies'. (Waka Kotahi NZTA Bridging the Gap Urban Design Guidelines, pages 14, 19).

Corridor-wide urban design strategies recognise that:

- road users will experience the various segments of a highway corridor in succession and their travel experience should be seamless and logical rather than reflecting the arbitrary boundaries of the individual projects within a corridor
- while the corridor design should be unified, local circumstances may affect the form, function and character of part of a corridor and may warrant a different treatment from the rest of the corridor
- designing each segment of a corridor separately may be costly, visually incoherent and confusing for road users.

(Page 19 Waka Kotahi NZTA Bridging the Gap) While this text relates to large scale corridor planning, the same principle applies to the detail of the edges of the corridor.

- 24. The piecemeal approach to addressing traffic noise proposed by Waka Kotahi is flawed in other ways:
 - a. It would require Tara-Ika to turn its back on the O2NL corridor with the walled backs of lots at the corridor edge. Our masterplanning studies show that while some lots might back onto than O2NL corridor, others might face the corridor across intervening streets. That would enable the landscaped corridor of the O2NL to be both a buffer strip and a visual asset. Walls would preclude that sense of space and visual amenity.
 - Wall preclude the informal surveillance over the landscaped space which is important for public safety on any path/cycleway that may be part of the O2NL corridor.
 - c. A further complication is that a first-mover developer may construct such a noise wall on the basis of the initially predicted O2NL boundaries. Any further development of residential land between this and the O2NL would also require noise walls which could lead to a layering of noise walls and a doubly flawed outcome.

Flexibility of the structure plan

- 25. To achieve coordinated and integrated neighbourhood planning, it is essential that the main connections, roads and infrastructure are provided as shown. The risks of not describing these key elements is disconnection between adjacent landholdings and failure to provide well-distributed services and infrastructure. However, we note that:
 - a. there should be some scope for minor adjustment in the precise location and/or shape of elements identified in the structure plan to address technical issues that may arise or site conditions that may be discovered during further design development; and
 - b. the precise shape and layout of the local streets is also able to be modified and by extension that should include any public open spaces bounded by these streets. Local streets are not 'pinned down' by the structure plan, although the principle of an interconnected network is.
- 26. The structure plan can be this precise because it is based on future growth scenario testing and detailed masterplanning investigations. This approach was robust as it was undertaken over many months, involved developing, testing and refining multiple options, and was worked through by multiple specialist consultants and with stakeholders and landowners. That included detailed studies on addressing stormwater and ecology which are described at pages 22 and 23 of the masterplan. The final masterplan then became the base for the structure plan. Subsequent masterplan refinement studies have also addressed the shape and location of the open spaces and integrated stormwater design (Figure 4 below). That underlying work on detailed masterplanning in our opinion gives certainty in the suitability of the structure plan.

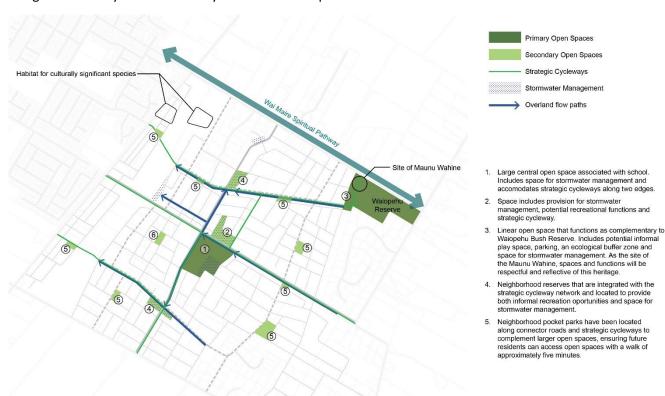


Figure 4: Open space and stormwater network

Accommodating a high voltage electricity corridor

- 27. There was considerable discussion around the scope for the structure plan to accommodate the Electra electricity distribution corridor. It is worth noting that in the future this will form part of a significantly increased electrical distribution network within Tara-Ika. While this corridor itself is unlikely to be part of a local network, significant new electrical networks will be constructed within the area, providing opportunities for realignment and/or undergrounding of the Electra cables.
- 28. As background, the structure plan and the non-statutory masterplan which informs it are both aspirational and looks towards the long-term future.

 Therefore, a high voltage electricity corridor is not shown. However, this corridor was considered in planning (and described in analytical drawings) at the time.
- 29. Should the corridor continue to be required in the long term, the optimal solution is to run along the expressway corridor or underground in concert with providing infrastructure for Tara-Ika itself. (We note also Mr Turner's support for undergrounding and the visual and amenity benefits of doing so.)
- 30. While the structure plan would remain unchanged, the masterplan could be modified to accommodate the electricity corridor by re-aligning some local streets.
- 31. Our initial review demonstrates that 7.5 ha of land is directly affected by a 37m easement (refer to figure 5 for location, alignment and example of typical detail). Several local streets are aligned with the corridor and allowing for no-build zones on large lots, based on the current masterplan around 162 sections would be affected. However with some reconfiguring around 60-70 residential lots would be lost by allowing for a specific corridor. The corridor may also be in a mid-block location. It could run over deep or very large private lots with the no-build setback areas running through these. This mix of methods allows multiple masterplan options.
- 32. In considering Tara-Ika as a whole, should the lines remain overground, it is likely that all of the above approaches would be used. How such a solution would be delivered would be worked through with current landowners and with Electra. The structure plan would not need to be modified.



Figure 5: Indication of the impact / integration of a high voltage electricity corridor through Tara-Ika

Roading layout in relation to property boundaries (refer Minute 5, issue 4. n)

- 33. The question is: "If a fixed approach to roading layout is to be taken, should they be aligned to property boundaries. Alternatively, if more discretion were to be provided could they remain in their current positioning on the Structure Plan."
- 34. Throughout the design process significant work was undertaken to ensure layout achieved efficient street and block layouts based on individual land ownership and development staging scenarios (refer figure 6 below). Therefore, the layout of arterial and collector roads on the structure plan, and local roads on the masterplan all took into account property boundaries.



Figure 6: Landownership and layout testing developed as part of a landowner consultation December 2018

35. The December 2018 landowner and layout testing assessed yield, individual landowner access and the potential implication on delivery. This work and subsequent investigations in servicing also informed the roading hierarchy. In addition to the logic for locations as set out in section 1 of the masterplan specific locations were refined to ensure an efficient relationship to landowner boundaries with roads located to with full lot depth increments from boundaries.

Connections over strategic cycleways

- 36. Mr Cook (Para 38) indicates urban design and connectivity concerns with effectively banning vehicle access from lots across the cycleways. We disagree as:
 - a. Cyclists expect to encounter vehicles at road crossings and intersections which are inherently designed for visibility from directions of approach and ride accordingly. Private vehicle crossings in random locations will not be as visible, or expected and therefore introduce a safety risk, and downgrade the convenience and utility of the cycleway.
 - b. There is connectivity via streets and PC4 allows scope to adjust the location of local streets and the shape of blocks.
- 37. Figure 7 below illustrates the hierarchy of controls as set out in the Health and Safety at Work Regulations. Essentially this means of classification can also be applied to other health and safety and risk management scenarios including cycle networks to ensure safety issues are removed or minimised.

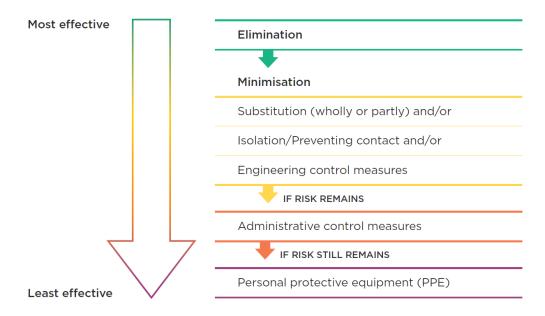


Figure 7: risk management (from https://www.worksafe.govt.nz/topic-and-industry/hazardous-substances/managing/risk-management/)

- 38. By removing driveways crossing the strategic cycleways we eliminate the risk at that conflict point and therefore do not need to implement engineering control measures.
- 39. While there can be problems precluding vehicle access across new cycleways where retrofitting a neighbourhood, at a greenfield site such as Tara-lka any potential problems can be 'designed out' from Day 1. This eliminates a safety risk and the masterplan shows how that can readily be achieved.

Maunu Wahine

40. Follow the hearing adjournment on Friday 19th of November 2021 HDC and Dan Males met with Siobhan Karaitiana on the 29th November via teams. Local subsequently produced the following diagram (Figure 8 below) which shows a 2 hectare area and indicates how that area might accommodate a range of cultural, recreational and ecological initiatives.



Figure 8: Introduction of a larger area including the Maunu Wahine refuge

41. This includes a central 'secluded open space' of 5,000m² which we consider to be generously scaled. For comparison, an area of 5,000m² is similar to the large open spaces that are part of some culturally significant large city parks. Figure 9 below shows from left to right Wellington's Waitangi Park, the north-east quadrant of Palmerston North's Te Marae o Hine/The Square and Pukeahu, the National War Memorial Park, also in Wellington.

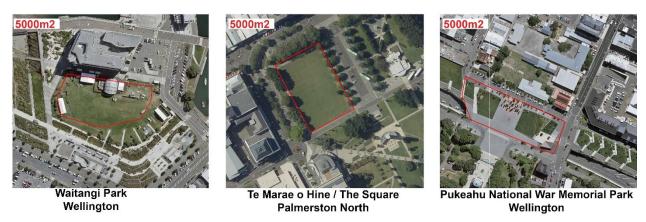


Figure 9: A 5000m² area outlined in red over existing well known parks of cultural significance.

Could the Prouse collector road be downgraded from a UD perspective

- 42. The Prouse's request the road which extends through their site to connect to Queens Street East become a local road. This should be retained as a 'collector' as:
 - A collector road here is desirable for neighbourhood connectivity, allowing residents in the north-western section of Tara-Ika to access Queen Street East and from there the Levin town centre in a reasonably logical and efficient manner.
 - b. Collector road status gives the necessary certainty on a connection being provided, and that this connection is reasonably direct and in an agreed location. It therefore should be relatively straight and direct in the general location described in the plan, and greater certainty on configuration is required than that possible with 'local road' status. (This is drawn with a centreline 40m from the boundary, so the edge of the road corridor would be 31.5m from the boundary, very close to the 30m requested by the Prouse's.)
 - c. It will be used as a collector, so should be designed for that use.
 - d. Collector roads also provide a wider corridor for essential underground service infrastructure.

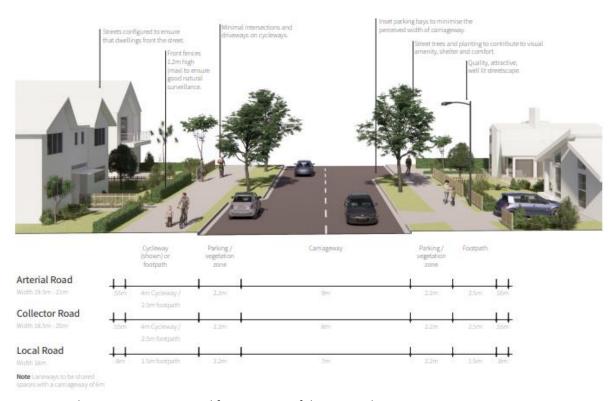


Figure 10: Road cross-sections extracted from page 12 of the masterplan

- 43. Figure 10 (from page 12 of the masterplan) identifies the width of the collector road which, because it does not include a cycleway is 18.5m wide. This is similar to the 16m width of a local road. The cross-sectional differences are:
 - a. the footpaths are 2.5m rather than 1.5m wide;
 - b. the carriageway of the collector at 7m is 1m wider than a local road; and
 - c. the verge at the edge of a collector is 0.55m rather than the 0.8m for a local road.
- 44. We consider the 18.5m wide collector cross-section is appropriate in this location and provides for a high amenity street environment. Generously wide footpaths are important along this route as it provides a walking link to and from the town

- centre via Queen Street East, and the 2.2m wide zone each side of the carriageway provides for street trees and parking if required.
- 45. We acknowledge the information regarding habitat for culturally significant species, and that this will require mitigation through the consenting and development of the road connection and subdivision in this area. This is all subject to the resource consent process, which requires assessment of ecological effects.

Signed

Graeme McIndoe

Dan Males

Appendix 6 – Michael Cullen, Urbacity – Commercial Center Expert

URBACITY

15 November 2021

Lauren Baddock District Plan Lead Horowhenua District Council

Dear Lauren,

We understand that requests seek the Council to consider alternatives to the Liverpool Street extension across Arapaepae/State Highway 57.

The success of urban centres such as that proposed for Tara-Ika is a function of accessibility via networks most connected to everywhere else within a centre's catchment.

Liverpool Street is the most connected street within the adjoining Levin east community. It integrates the Levin east community with Tara-Ika via the future Tara-Ika Village Centre.

The Liverpool Street extension is an integral part of reducing the potential for Tara-ika to be an enclave.

Any connection that is less direct than the primary Liverpool Street spine will reduce the level of integration, thereby reducing the role and capacity of the village centre. Furthermore, the Levin east community is/was an integral part of the catchment for the proposed Village Centre. Removing or reducing accessibility to this community will reduce the effective catchment for the centre. This means that the effective catchment is smaller, and centre development will occur later in the evolution of Tara-Ika.

The corridors of Liverpool Street (which becomes Mako Mako Road north of SH1) and Queen Street are the principal east-west streets that extend fully across Levin. The Tara-Ika neighbourhood is centred on Liverpool Street. From a whole of Levin spatial structure planning perspective, Liverpool Street provides the only logical alignment for connected growth extension, as recognised by both the master plan and the structure plan.

Should an immediate connection to Liverpool Street not be made, there is no need for further alternative connection west of Arapaepae as these are already planned for. In the short term, Tara-Ika would connect to Arapaepae Road on the main east-west connector aligned on Liverpool Street and from there, connections would be to Perth Street in the south and Meadowvale Drive in the north. Both of those connections are on the master plan.

Considering a hypothetical situation with street connections across the O2NL aligning with Perth Street in the south and Meadowvale Drive in the north, and no street connection across the O2NL on the Liverpool Street alignment, we consider that the Tara-Ika village centre would remain as currently shown on the plans.

We would not support splitting the centre into two smaller centres. This will result in a competitive role between the centres and the loss of the capacity for a single centre to be a

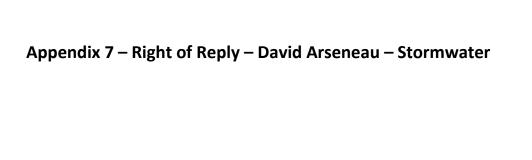
meaningful social destination. The two centres would act as little more than "top up" retail locations, and unlike the one centre approach, Tara-Ika residents would be forced to travel to Levin Town Centre for most everyday items.

Moving the centre away from the Liverpool Street extension will not offset the catchment access issues. The centre is in the optimum position concerning internal accessibility within Tara-Ika.

In the long term, a direct (as possible) connection to Liverpool Street should be made. This is one of the fundamentals of good planning, noting that there is scope for minor offsets and other detailed design measures to ensure it can be worked around existing sensitive facilities, such as the Rangeview Villas.

Michael Cullen

Sydney



IN THE MATTER of the Resource Management Act

1991 (**RMA**)

AND

IN THE MATTER of a hearing by the Horowhenua

District Council on Proposed Plan Change 4: Taraika Growth Area to the Horowhenua District Plan.

RIGHT OF REPLY OF DAVID ARSENEAU ON BEHALF OF HOROWHENUA DISTRICT COUNCIL

Stormwater Management Specialist

10 December 2021

1. BACKGROUND

- 1. I produced a statement of evidence dated 10 October 2021 on behalf of Horowhenua District Council related to the stormwater management approach for the proposed development area encompassed by Plan Change 4 (Tara-Ika).
- Subsequently, I engaged in formal expert conferencing with the stormwater experts representing Waka Kotahi and James McDonnell Limited, resulting in a Joint Witness Statement dated 16 November 2021, which was provided to the Independent Hearing Panel.
- 3. I will consider those documents read and will not restate key points in this document, except as needed to address further questions from the Independent Hearing Panel or to address points raised by other submitters.

2. RESPONSE TO QUESTIONS RELATED TO STORMWATER FROM THE INDEPENDENT HEARING PANEL

- 4. The Independent Hearing Panel provided a list of outstanding questions following the adjournment of the Plan Change 4 Hearing on 19 November 2021; this list is contained in Minute 5 dated 23 November 2021.
- 5. Minute 5 included several questions related to the stormwater aspects of Plan Change 4, summarised below with responses in following paragraphs:
 - a. How is an overarching Stormwater Management Plan triggered?

- b. Should there be a generic blue layer shown on the Structure Plan?
- c. Should there be a less precise green layer to enable more flexibility in the stormwater response?
- d. Should there be constraints on the amount of subdivision and development enabled as a restricted discretionary activity until such time as an overall Stormwater Management Plan for the entire site is agreed?

6. How is an overarching Stormwater Management Plan triggered?

- a. The requirement to have in place an overarching integrated Stormwater Management Plan (SMP) for the Plan Change 4 area is proposed to be triggered by a set level of residential lots being constructed, in this case 200 lots. This represents a reasonable level of initial development that can proceed in the short term, noting that all development will require a sitespecific SMP as part of subdivision consent.
- b. The specific Plan Change provision to realise this should be outcome-driven rather than allocated to a specific responsible party, in order to provide landowners with a pathway to approval if Horowhenua District Council is unable or unwilling to produce the integrated SMP themselves. Suggested wording is described in Section 4 of this document, as well as in the Reporting Officer's Right of Reply.

7. Should there be a generic blue layer shown on the Structure Plan?

a. Acknowledging the discussion that has occurred around the notified Structure Plan and Plan Change provisions regarding activity status, I consider that a generic "blue layer" showing indicative locations for stormwater management features on the Structure Plan could be done on condition that they be listed as "secondary features" as outlined in the Council Officer's right of reply. These indicative locations would align with the "blue layer" already shown in the Tara-Ika Master Plan. However, I do not consider that locating stormwater management areas on the structure plan is critical to the successful implementation of the Plan Change provisions; in fact, I believe it has a much stronger potential to cause unnecessary administrative burden for applicants if the optimal location for stormwater management area varies from the structure plan. These optimal locations cannot be identified at the Plan Change stage as they are dependent on detailed site development planning and earthworks design, as discussed during the Hearing statement of Mr Darcy Brittliff.

8. Should there be a less precise green layer to enable more flexibility in the stormwater response?

- a. The "green layer" as shown on the notified Structure Plan was not intended to be wholly integrated with stormwater management features. There are several critical functions that are fulfilled by open/green spaces that are mutually exclusive to many aspects of stormwater management, primarily in the recreational amenity space. For example, one would not locate a child's playground in the middle of a treatment wetland. However, the Tara-Ika Master Plan did assume that at least some portion of the indicated green spaces would have a secondary stormwater management function, and in these cases flexibility is required to achieve an optimal outcome. Identifying locations of green spaces not associated with stormwater management purposes is outside the scope of my expertise but is covered in the Reporting Officer's Right of Reply.
- 9. Should there be constraints on the amount of subdivision and development enabled as a restricted discretionary activity until such time as an overall Stormwater Management Plan for the entire site is agreed?
 - a. This question is largely addressed through the proposed trigger for the integrated SMP, described in paragraph 6 above. Up to 200 lots can be developed in the time where an integrated/overall SMP is not yet in place, noting however that all subdivision in the Plan Change 4 area requires a site-specific SMP for approval.

3. RESPONSE TO SUBMITTER PRESENTATIONS DURING HEARING

- During the course of the Hearing from 17 through 19 November 2021, several stormwater-related issues and comments were made by submitters that will be considered by the Independent Hearing Panel. I have not exhaustively addressed each submitter in this document, considering that many have been addressed through direct questioning from the Panel, instead I focus on key points from the following submitters:
 - a. Waka Kotahi, related to consideration of the proposed future Ō2NL expressway in the SMP for Plan Change 4, and the need for a "Plan B" stormwater management plan
 - b. James McDonnell Limited, related to maintenance of existing flows to downstream watercourses
 - c. Muaūpoko Tribal Authority, related to matters raised in their legal statement dated 18 November 2021

11. Response to Waka Kotahi

- a. The management of stormwater effects from the Plan Change 4 area, as described in the proposed Plan Change provisions and to a suitable and acceptable level of service, will be achieved within the development area without reliance on the Ō2NL expressway corridor. This level of service is most typically defined as "hydraulic neutrality", or the control of post-development peak flows to pre-development levels. Plan Change 4 proposes to adopt a stormwater level of service well in excess of standard "hydraulic neutrality" through extensive soakage and runoff volume control.
- b. The proposed Ō2NL expressway is located at the downstream end of the Plan Change 4 area and extends for the entire cross-catchment width of the development area, intercepting existing stormwater flow paths. As such, Ō2NL will necessarily have to consider and accommodate stormwater flows from the development area, again at a suitable and acceptable level of service, i.e., hydraulic neutrality. The enhanced level of service proposed through Plan Change 4 will reduce runoff flows to Ō2NL in most instances below hydraulic neutrality, but the possibility of conveying runoff up to the pre-development peak flow must be accommodated in the Ō2NL expressway.
- c. Dr McConchie expressed the need for Plan Change 4 to have a "Plan B" stormwater management approach in the event that the on-site soakage is less effective than anticipated. I believe this mater is addressed through the Joint Witness Statement, items 10 (k) and 10 (l), which clarifies the performance standard for stormwater management areas and requires consideration of soakage failure.

12. Response to James McDonnell Limited

- a. The remaining item of disagreement from the stormwater Joint Witness Statement relates to the maintenance of current/pre-development flows into downstream watercourses. This issue can be evaluated in a number of ways, but for the purpose of the Plan Change the two primary aspects to consider are:
 - Maintenance of pre-development peak flows for all ARI rain events as being a typically acceptable level of service for subdivision, in line with the conventional definition of hydraulic neutrality
 - ii. Maintenance of ecological base flows to support aquatic life in downstream watercourses
- b. The first point, related to the typical approach of allowing pre-development peak flows to continue to be discharged from a development site, is considered not appropriate in this case

due to the nature of the two potential receiving systems downstream of the Plan Change 4 area: Lake Horowhenua to the northwest and the Koputaroa Stream to the north/northeast. Discharge of stormwater to Lake Horowhenua is a non-complying activity under Rule 13-9 of the Horizons Regional Council One Plan. The Koputaroa watershed currently experiences significant flooding issues associated with the interaction of the Koputaroa Stream and Manawatū River, Horizons Regional Council has indicated high resistance to receiving more runoff, particularly from outside of the existing catchment area where Plan Change 4 is located. For both of these outlets, holding back as much stormwater as possible is beneficial for the systems as a whole.

- c. The second point, related to maintaining ecological base flows, considers the continuation of low flows/baseflows during small rain events or during dry periods to support downstream watercourses. There are several factors that can be itemised that would indicate the need to continue these baseflows is low for Plan Change 4:
 - i. Only a portion of runoff from the Plan Change 4 area is currently directed to a downstream watercourse (shown as the yellow arrow in Figure 1)
 - ii. Overland flows from Plan Change 4 are directed along Queen Street to Lake Horowhenua (shown as the large blue arrow in Figure 1); this is supported by the assessment of overland flow routes in the Plan Change 4 area that was completed as part of the preliminary stormwater management plan for Tara-Ika (GHD, 2020), and shown in Figure 2
 - iii. Considering the favourable soakage conditions throughout the Plan Change 4 area, it is unlikely that any significant runoff would occur during smaller rain events, or that there would be any contribution of baseflows during dry periods; rather, there is the potential that promoting soakage in the development area will contribute to shallow groundwater discharge into the downstream watercourse as baseflow
 - iv. Other areas will continue to contribute runoff and baseflow to this drain, specifically road drainage from SH57 and Queen Street; as well, these sources are expected to currently be the primary sources of flow to the drain
 - v. There is only a short stretch of drain from the Queen Street discharge point to where the drain joins with additional catchment areas (approximately 300 metres), limiting the potentially impacted length of drain
 - vi. Runoff from Tara-Ika has not traditionally flowed into the Koputaroa Catchment, and removing that diversion has benefits for both downstream landowners and iwi

d. Considering these points, the currently proposed stormwater performance criteria to retain and soak all runoff up to the 100-year ARI rain event, including the effects of climate change, should be maintained.

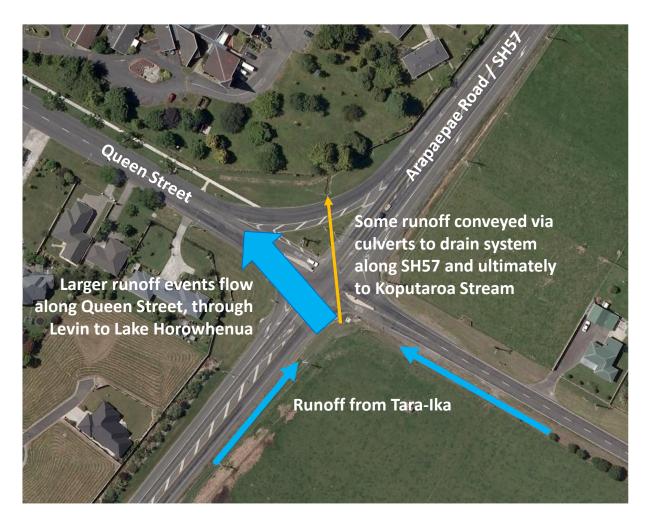


Figure 1 Runoff routing diagram for existing conditions at Queen Street/SH57 intersection



Figure 2 Existing overland flow routes around the Queen Street/SH57 intersection

13. Response to Muaūpoko Tribal Authority

- a. The MTA legal statement submitted to the Independent Hearing Panel noted several concerns regarding the proposed stormwater provisions, including:
 - i. Would prefer the stormwater management areas to be clearly identified on the structure plan, but are working with HDC to be more integrated in the stormwater planning and design process
 - ii. Suggested amendments to the wording of provisions related to rainwater tanks to clarify their role only for incidental stormwater attenuation; I do not oppose these amendments
 - iii. Suggested amendments to the wording of provisions clarifying how climate change is to be accounted for in the stormwater management plans; I suggest alternative

wording to change any instance of "with allowance for climate change" to read "incorporating the effects of climate change using the RCP 6.0 scenario to the 2081-2100 time horizon in the NIWA HIRDS v4 database, or equivalent future iteration", or to define "with allowance for climate change" as such elsewhere in the Plan Change

4. CONCLUSION

14. The s42A report, my stormwater technical evidence, the stormwater joint witness statement, statements made at the hearting and this right of reply evaluate submissions and evidence presented at the hearing, and in general nothing has been raised that has given me reason to further amend my recommendations beyond that already detailed.

David Christopher Arseneau 10 December 2021